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NOTE :

The contractor is advice to verify the documents mentioned in the Index in token of such verification.

TENDER NOTICE

- 1) Online Submitted Percentage Rate/Item Rate Tender in B-1 form are invited from contractors registered in appropriate class by Govt. of Maharashtra. The name of work, estimated cost, earnest money, security deposit, time limit etc. are as under:

Sr. No.	Name of work	Estimated Cost In Rs.	Tender Fees In Rs.	Earnest Deposit In Rs.	Time In Contractor Months
1	Construction of Boys Hostel for Dayanand Science College collaboration By RUSA, Mumbai & Dayanand Education Society, Latur	14589168.00	15000/-	170000/-	9 MONTHS
2	Electrical Estimate of Boys Hostel for Dayanand Science College collaboration By RUSA, Mumbai & Dayanand Education Society, Latur	668440.00			

- 2) Tender form, conditions of contract, specifications and contract can be Download on www.mahatender.gov.in in the period of 29/03/2022 to 26/04/2022 and will be opened on 27/04/2022 the same day if possible, in the presence of such intending tenderers or his/their authorized representatives who may present at that time. Tenders sent by post shall be sent in good time by registered post and must reach by the above time and date. For late delivery or no delivery by postal authority, the Department will not be responsible.
- 3) The offer shall be valid for 90 days from the date of opening of the Tender.
- 4) The eTender forms will be sold only online over the website www.mahatender.gov.in to the registered contractors of appropriate category production Tender copy can see over college authorized website www.dscllatur.org tender forms can also available at Office of Principal, Dayanand Science College, Latur.
- 5) The tenderer if firm or company shall in their forwarding letter mention the name of all the partners of the firm or the company [as the case may be] and the name of the partner who holds the power of attorney if any, authorizing him to conduct transaction on behalf of the firms or company.
- 6) Right is reserved to revise or amend the contract documents fully or part thereof prior to the date notified or amended for the receipt of tender. Such deviations/ amendments if any shall be communicated in the form of corrigendum or by a letter as may be considered suitable.
- 7) Right is reserved to reject any or all tenders, without assigning any reasons therefore, the decision for acceptance of tenders will rest with the
- 8) No alternative designs will be accepted for this work.
- 9) No suggestion/conditions will be accepted for this work.
- 10) The tender notice shall form a part of the contract agreement.


Signature of Consultant
Mr. Shanteshwar Barbade
S.D. Barbade
Civil
Consulting Engineer & Valuer,
LATUR

FORM OF TENDER

(Letter issued by tenderer on letterhead)

Dear Sirs,

With reference to the Tender invited by you for the work of Construction of Boys Hostel for Dayanand Science College for Dayanand Education Society, Latur I / We do hereby offer to perform, provide, execute, complete and maintain the works in conformity with the Drawings, specifications, special conditions of Tender, Article of Agreement, conditions of contract and bill of questions (BoQ) for the sum of Rs. 1,45,89,168.00 (Rs. One Crore Forty Five Lakhs Eighty Nine Thousand One Hundred Sixty Eight) at the respective rates mentioned in the Bills of quantities for the work of construction of boys hostel and Electrical Estimate of Rs. 6,68,440.00 (In words six lakh sixty eight thousand four hundred forty Rupees and zero paise only)

I / We have satisfied myself/ ourselves as to the location of site, examined the Drawings and read the conditions of contract, special conditions, general conditions, Article of Agreement and the specifications etc. and I/ We, understand that the works are to be completed within Nine calendar months. I/ We, agree to finish the whole of the works within Nine calendar months from the date of the commencement of the work order, fully understanding that time will be the essence of contract.

I / We understand that you are not bound to accept the lowest or any Tender you may receive.

Yours faithfully,

Signature of the
Contractor.

Address :-

Place :

Dated :

Signature of Consultant
Mr. Shanteshwar Barbade

Shanteshwar Barbade
Consultant Civil Engineer
Latur

NOTICE TO CONTRACTOR

Messers : To whomever it may concern / Contractor

**Project Construction of Boys Hostel for Dayanand Science College
Colabration with RUSA and Dayanand Education Sociaty, Latur**

Reference : RUSA /2021-22/2153

Dated : 24 March 2022

On behalf of our clients,

We have pleasure inviting you, tender for the aforesaid work. Online tenders should be address to Principal Dayanand Science College, Latur and Process over online over the portal www.mahatender.gov.in Physical documents sent to above address office of Principal, Dayanad Science College, Latur - 413512 to the above address not later than Hrs.11.30 am on 27/4/2022

Drawing and Design may be inspected in our office or Architect's office on any working day during normal working hours. Tenderers will not be permitted to take any Drawing out of the office.

The tenderer must obtain for himself on his own responsibility and at his own expense, all the information which may be necessary for the purpose of failing this tender and for entering into a contract for the execution of the same and must examine the Drawings and inspect the site of the work and acquaint himself with all local conditions and matters prevailing there to.

Each of the tender document is required to be signed by the person or persons submitting the tender in token of his / their having acquainted himself / themselves with the general conditions, special conditions, conditions of contract etc as laid down. Any tender with any of the documents not so signed will be rejected.

The Tender form must be filled in English and all the entries must be hand written in Ink. If any of the documents is missing or not signed, the tender shall be considered invalid.

Neither erasures nor over writings shall be made in the price schedule or any where in the Tender documents, every correction shall be made by crossing the pen a cross the incorrect or unrequired portion and writing the correct or required portion above. Any corrections shall bear the dated initials of the Tenderer. The intending tenderer shall deposit Of Rs 1,70,000/- by Online Only against the EARNEST MONEY DEPOSIT (EMD) , as a guarantee of good faith which amount shall be forfeited as liquidated damages in the event of any waive, refusal or delay in signing the contract. The deposit of the unsuccessful tenderers will be returned without interest immediately after a decision is taken regarding the award of the contract. The Earnest Money of the successful tenderer will be adjusted towards Security Deposit. A Tender not accompanied by Earnest Money Deposit will not be considered.

The successful tenderer shall have to pay, half the Security Deposit of Rs.3,20,000/- and balance amount of Security Deposit will be recoverable through Running Accounts Bill.

Signature of Consultant
Mr. Shanteshwar Barbade

S. U. Barbade
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In the event of failure of the tenderer to pay cash security deposit within 10 days (unless extended in writing by the Employer) from the date of receipt of notice (sent by Registered Post) of acceptance of his tender, the amount of Earnest Money shall be forfeited, and the acceptance of his tender, shall be considered as withdrawn. Except that in the event of the notice of acceptance of the tender not being issued within 90 days of the date of opening of tenders, the tenderer shall have the opinion (to be intimated in writing in good time before the expiry of 90 days period) of withdrawing his tender, in which case the Earnest Money should be refunded in full. All the tenders shall be kept open for 90 days from the date of opening of the tenders.

The successful tenderer shall be bound to enter in to the contract by signing an agreement in accordance with the agreement and conditions of the contract.

In addition to the money paid under para 8 and 9 above, and as further security for the due fulfilment to the contract, FIVE PERCENT of the value of the work done will be deducted from each payment to the contractor and held as retention amount. On the Architect's certifying to the completion of the work the contractor would be paid FIFTY PERCENT of the retention and the remaining FIFTY PERCENT will be retained for a further period of twelve months after the completion certificate is issued by the Architect.

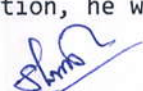
All compensation or other sum of money payable by the contractor to our clients under the terms of this contract may be deducted from the Security Deposit or from any sum or sums that may be or may become due to the contractor on any account what ever and in the event of the Security Deposit being reduced by reason of any such deductions the contractor shall, within 15th days of being asked to do so, make good in cash or cheque any sum or sums which may have been deducted from this Security Deposit.

Our clients are not concerned with any rise or fall in the prices of any materials. The rates quoted including any enhanced labour rates etc. which may be enacted from time to time by the State or Central Government. Under no circumstances shall our clients be held responsible for compensation or loss to the contractor due to any increase in the cost of labor or materials.

The rate quoted by the contractor shall include all eventualities such as heavy rain, sudden floods etc. which cause damage to the executed work or which may may totally wash out the work. Until the completion certificate is issued by the Architects to the contractor, our clients will not be responsible for such damage or wash out of the construction work.

In case where same items of work is mentioned at one or more places in the schedule of quantities the lowest of the rates quoted by the contractor for item shall be taken for the payment of this item. Time is the essence of the contract. The work should be completed in NINE calendar months from the date of the work order issued to the contractor to commence the work. The successful contractor will have to give a schedule of various items of work to be done so that the work gets complete within the stipulated time.

If the contractors fails to complete the work by the scheduled date of completion or within any sanctioned extended date of completion, he will have to pay Rs.10000 [Rs.Ten Thousand] per week as


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liquidated damages for each work, beyond the date the works remain incomplete.

In case of B-1 Tender, the tenderer shall enter in the blank space on Page No. _ of this tender form under para "Tender for the work" the percentage in figures and words and score out one of the words "below/above" as necessary under his attestation. In case there is difference between percentage written in figures and words, the lowest offer will be taken as final.

In case of B-2 Tender, the contractor should quote rates in Rupees and paise both in words and figures. The amount of each item should also be worked out by him and requisite total given. The contractor should particularly note the units on which the rates are based. In case of difference between the rates, written in figures and words the rates adopted by the contractor for working out the total amount of the item, shall be taken as correct. In other cases the correct rate would be that which is lower. All the columns in the schedule should be filled in by ink.

The following information shall be submitted by the tenderer along with the submission of Tender:

A list of other work of similar type and magnitude carried out by the submission of this Tender.

A list of other works tendered for and in hand as on the date of submission of this Tender.

A list of details of plant immediately available with the tenderer for use on this work.

A list of details of Technical personnel with the tenderer. Certificate of registration as approved contractor in the appropriate class or true copy duly attested by Gazetted Officer.

An upto date and valid Income Tax clearance certificate in original or true copy thereof duly attested by Gazetted Officer.

In case of partnership firm, attested copy of partnership deed and power of attorney should be attached.

The quantities contained in the schedule are only approximate. The work actually carried out and done will be measured from time to time for which payment will be made subject to the terms and conditions of the contract.

The right is reserved to revise or amend the contract documents prior to the date notified for the receipt of tenders or extended date. Such deviations, amendments or extensions, if any shall be communicated in the form of corrigendum by letter or/and by notice in Newspapers as may be considered suitable.

Our clients do not bind themselves to accept the lowest or any tender and reserve themselves the right to accept or reject any or all tenders in whole or in part, without assigning any reasons for doing so.

This notice inviting tender shall form part of the agreement.

Yours faithfully,

Signature of the
Contractor.

(Letter issued by tenderer on letterhead)

Address :-

Place :

Dated :

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Signature of Consultant
Mr. Shanteshwar Barbade

MANNER OF SUBMISSION OF TENDER AND ITS ACCOMPANIMENTS

Tender to be submitted in two separate sealed envelope. Tenderer shall submit the tender and documents in two sealed envelopes as below :-

ENVELOPE NO.1 (TECHNICAL DOCUMENTS)

The first envelope clearly marked as Envelope No.1 shall contain the following documents:

- o A Online Receipt of depositing earnest money.
- o Contactor / Organization Shops/Establishment Registration Certificate duly self-attested
- o Contactor / Organization PAN Card duly self-attested
- o Contactor / Organization GST Certificates duly self-attested
- o Contactor / Organization Last 03 Years ITR duly self-attested
- o Contactor / Organization Last 03 Years Audit Report duly self-attested
- o Contactor / Organization Last Months GSTR-1 and GSTR3B Files Final Copy duly self-attested
- o Turnover Certificate and Bid Capacity Certificated issued by CA with valid UDIN No.
- o Certificate of registration as approved contractor in the appropriate class with Govt. Deptt./ Govt. of Maharashtra Or true copy duly self-attested.
- o An upto date and valid Income Tax clearance in original or true copy there-of duly self-attested.
- o A list of other work of similar type and magnitude carried out by the contractor.
- o A list of other works tendered for and in hand as on the date of submission of this Tender.
- o A list of details of Technical personnel with the tenderer.
- o A list of details of plant immediately available with the tenderer for use on this work.
- o Contactor / Organization self-declaration on Rs. 100 Bond Paper for non- black listed by any govt. of Maharashtra / India or any govt. organization duly self-attested
- o Various Required Statements as demanded in tender documents.

ENVELOPE NO.2 (TENDER BoQ)

The second envelope clearly marked as Envelope No.2 shall contain only the BoQ as per tender download fill appropriate Percentage rte for Items as per abstract and upload online over etender portal www.mahatender.gov.in .

The Tenderer should quote his office on Schedule B of the tender as item Rates or percentage of Estimated Rates at the appropriate place of tender documents, to be submitted only in Envelope No.2 He should not quote this offer any where directly or indirectly in Envelope No.1. The contractor shall quote for the work as per details given in the main tender.

SUBMISSION OF TENDER

The two sealed envelope No.1 and 2 shall be again put together in one common cover and sealed. This sealed cover shall be marked on the left hand top hand corner, Tender for the work. (Mentioned in Schedule-B)

The full name and address of the tenderer and the name of the authorized agent delivering the sealed cover containing the tender shall be written on the bottom left hand cover. If submitted by post, the sealed envelope marked as above, shall be enclosed in another cover properly addressed and shall be sent by Registered Post Acknowledgement due. The date and time for receipt of envelope containing tender shall strictly in all cases. The tenderers should ensure that their tender is received by the Deptt. before the expiry of the

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Validate

Print

Help

Percentage BoQ

Tender Inviting Authority: Principal, Dayanand Science, College, Latur

Name of Work: Proposed Construction of Boys Hostel for Dayanand Science College Funded by RUSA, Mumbai & Dayanand Education Society, Latur on Sy. No. 58, Khadgaon, Latur. (Maharashtra)

Contract No: 02382-222929

PRICE SCHEDULE						
(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)						
Sl. No.	Item Description	Quantity	Units	Estimated Rate in Rs. P	TOTAL AMOUNT Without Taxes in Rs. P	TOTAL AMOUNT In Words
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
1	2	4	5	6	53	55
1.1	Construction Work for Boy's Hostel at Dayanand Science College, Barshi Road, Latur Estimation of Proposed Construction of Boys Hostel for Dayanand Science College Funded by RUSA, Mumbai & Dayanand Education Society, Latur on Sy. No. 58, Khadgaon, Latur. (Maharashtra) Ground and First Floor. Detail Abstract Sheet - (I) as per PWD - SSR 2021-2022 estimate given in tender Documents	1.0	Job	14589168.00	14589168.00	INR One Crore Forty Five Lakh Eighty Nine Thousand One Hundred & Sixty Eight Only
1.2	Electrification Work for Boy's Hostel at Dayanand Science College, Barshi Road, Latur Estimated cost Providing E.I. in Work for Boy's Hostel Dayanand Science College At. Barshi Road, Latur Ground and First Floor. Detail Abstract Sheet - (II) as per DSR 2021-2022 estimate given in tender Documents	1.0	Job	668440.00	668440.00	INR Six Lakh Sixty Eight Thousand Four Hundred & Forty Only
Total in Figures					15257608.00	INR One Crore Fifty Two Lakh Fifty Seven Thousand Six Hundred & Eight Only
Quoted Rate in Figures					0	INR Zero Only
Quoted Rate in Words					INR Zero Only	

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date and time. No delay on account of any cause will be entertained for the late receipt of tender. Tender offered or received after the time limit is over, will either not be accepted and if inadvertently accepted, will not be opened and shall be returned to the tenderer unopened.

OPENING OF TENDERS ON THE DATE SPECIFIED IN THE TENDER NOTICE FOLLOWING PROCEDURE WILL BE ADOPTED FOR OPENING OF THE TENDER

ENVELOPE NO.1

First of all, Envelope No.1 of the tender will be opened to verify its contents as per requirements. If the various documents contained in this envelope do not meet the requirements of the Department a note will be recorded accordingly by the tender opening authority and the said tenders Envelope No.2 will not be considered for further action but the same will be recorded.

ENVELOPE NO.2

This envelope shall be opened immediately after opening of Envelope No.1 only if contents of Envelope No.1 are found to be acceptable to the Department, the tendered rates in Schedule-B or percentage above / below the Estimated rates shall then be read out.

ACCEPTANCE OF TENDER

Acceptance of tender will rest with the who reserves the right to reject any item of tender or a tender or all tenderers without assigning any reasons thereof. The tenderer whose tender may be accepted shall have to pay cash security deposit and enter into regular B-1 percentage rate tender by completing the contract documents within 15 days of being notified to do so and shall abide by all the rules and regulations and special conditions embodied there-in. In the event of failure of the tenderer to sign the agreement within the stipulated time the earnest money paid by him shall be liable for forfeiture to Deptt. and the acceptance of the tender shall liable to be considered as withdrawn.

SPECIAL CONDITIONS

A schedule of probable quantities in respect of each work and a specification accompany these special conditions. The schedule of probable quantities is liable to alterations by omitting, deductions at the discretion of the Architects. Each Tender should contain not only the rates but also the value of the each items should be total in order to show the aggregate value of the entire Tender. All corrections in the Tender schedule shall be duly attested by the dated initials of the Tenderer. Corrections which are not attested may entail the rejection of the tender. The Employers does not undertake to carry out the whole of the work as shown on the plans and taken in the schedule of quantities and reserves the right to modify the same or any part thereof. The contractor shall not be allowed any compensation or damages for the work which is so dropped or cancelled by the Employer.

The tender must obtain for himself on his own responsibility and at his own expenses all the information which may be necessary for the purpose of making a Tender and for entering into a contract and must examine the Drawings and must consider and inspect the site of the work and acquaint himself with all local conditions, means of access to the work, nature of the work, and all matters appertaining thereto.

The rates quoted in the tender shall include all charges for double scaffoldings centering materials, water and meter charges, temporary plumbing, cost of cistern, hire for any tools and plants, sheds for materials, making out and the clearing of site and watering the concrete as mentioned in the specifications. The rates quoted by the tenderer in the schedule of probable

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quantities will be deemed to be for the finished work to be measured in site. The rates shall be inclusive of Sales Tax, Octroi duty, Works Contract Tax, or any other duty levied by any Government of Maharashtra or Public Bodies. The rates shall be firm and shall not be subject to variations.

Rates for items which are not included in schedule of quantities shall be settled by the Architects.

The calculations made by the Tenders should be based upon probable quantities of the several of work which are furnished for the Tender's convenience in the schedule of quantities, but it must be clearly understood that the contract is not a lump sum contract that neither the probable value of the entire Tender will form part of the contract and that the Employer or the Architects do not in any way assure the Tenderer or guarantee that the said probable quantities are correct or that the work would correspond thereto.

Tenders will be considered only from recognized Building contractors. Each Tenderer shall submit with his Tender, a list of Building schemes of like nature he has executed giving details as to their magnitude and cost, the proportion of the work done by the contractor in it and the time within which works were completed.

Special attention of the Tenderer is drawn to the alternative items in the schedule of probable quantities, the rates and amount of these alternative items shall be duly filled in and the Tenderer is informed that his Tender will not be considered unless the rates are given for these items. The Architect reserve the right to adopt any of the alternative items, either in scrutinizing and deciding upon the tenders or later when the works are being executed.

The contractor shall carry out all the R.C.C. work strictly in accordance with the Drawings, details & instructions of the Architects and the Structural Engineer, changes have to be made in the R.C.C. design, the contractor shall carry out the same without any extra charges. The Architect's decision in such cases shall be final and shall not be open to arbitration.

Figured dimensions are in all cases to be accepted in preference to scaled sizes. Large scale details take precedence to scaled size. Large scale details take precedence over small scale drawings. In case of discrepancy the contractor is to ask for explanation before proceeding.

The Architect reserves the right of altering the Drawings and nature of the work and adding to or omitting any item of work or having portions of the same carried out departmentally or otherwise and such alternations or variations shall be carried out without the prejudice to the contract.

The contractor shall give all notices and pay all fees and shall comply with all Acts and Regulations for the necessary execution of contract. The contractor himself shall meet the Employer or the Architect or his representative whenever required and so informed by the Employer or the Architects.

The contractor shall arrange for supply and maintain a continuous supply of potable quantity of water to the site of work and pay all expenses in connection therewith. If necessary he shall make arrangements for sufficient storage of water as directed by the Architect. The contractor shall allow the use of water for other work on the site done by other contractor if any.

The contractor shall make arrangement for and maintain, at his own expenses sufficient service of Electric light and power as shall be deemed necessary by the Architects.

The contractor shall at his expenses provide for all necessary storage on the site or in specified area for all materials belonging to him, other sub contractor or the Employer such as steel, timber, cement, lime, tiles, doors and windows and such other material which are likely to deteriorate by the action of the sun, rain or other natural causes due to exposure in the open, either in the compound or in the stores in such a manner that all such

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materials tools etc. shall be duly protected from damage by weather or other cause. All the storage sheds shall be erected to the satisfaction of the Architect. Particular care shall be taken in Building the store for cement, which shall be completely water proof and provided with a raised wooden floor as also arrangement for locking it. On completion of the contract all the storage sheds shall be cleaned away and the whole compound left in good condition unless otherwise directed the Architect. by

The contractor is to construct and maintain proper benches at the intersection of all main walls in order that the lines and levels may be accurately worked at all times. These benches will consist of pairs of sag wood posts of minimum 3" dia driven in to the ground at suitable distance as directed, the sops to be checked and connected with battens of adequate length into which will be driven wire nails along the centre lines of columns and walls, inside and outside faces of foundations trenches etc. in order that lines can be stretched between the benches and the accurate intersection of foundation trenches, centre lines of walls, columns etc. may be clearly indicated.

The contractor shall provide and maintain at his own expense electrically or mechanically driven pumps and/or other plant to the satisfaction of the Architect for the above purpose until the Building are handed over. The contractor shall arrange for the disposal of any accumulated water to the satisfaction of the Architect and of the local authorities.

The whole of the work will be thoroughly inspected by the contractor and all deficiencies and defects put right. On completion of such inspection, the contractor shall inform the Architect in writing that he has finished the work and it is ready for the Architect's inspection. On completion the contractor shall clean all Windows and doors including cleaning and oiling of all their hardware inside and outside all floors, stair cases and every part of the Building. He will leave the entire Building neat and clean and ready for immediate occupation and to the complete satisfaction of the Architect.

The contractor on starting the work shall furnish to the Architect a programme for carrying out the work stage by stage in stipulated time. The record showing the progress of work weekly shall be maintained.

The contractor must not assign the contract. He should not sublet any portion or the contract except with the written consent of the Architects.

The contractor shall carry out all the R.C.C. work strictly in accordance with the Drawings, details and instructions of the Architects and the Structural Engineer, changes have to be made in the R.C.C. design, the contractor shall carry out the same without any extra charges. The Architect's decision in such cases shall be final and shall not be open to arbitration.

The contractor will be responsibility for the safety and the structural soundness of the Building during progress of all the work, and for a further period of 12 months from the date of issue of certificate of completion of work by the Architect. Any defects in workmanship or materials during the time of works progressing or the maintenance period shall replaced or made good by the contractor at his own cost as provided in the contract.

EXCESS IN QUANTITIES

For executing any quantity in excess over the quantity specified in the tender, the contractor should be authorized by the Architect in writing.

With asking the contractor to execute such excess quantity, the Architect should inform the contractor, in writing specifically that the payments in excess of the quantities specified in the tenders will be made only after getting approval from the appropriate authority.

R.C.C. Consultants have been appointed by the Architects on behalf of the owner, but shall be paid by the Contractor at rate of Nil% of the cost of the total R.C.C./Structural steel work.

Signature of Consultant
Mr. Shanteshwar Barbade

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Consulting Engineer & Valuer,
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GENERAL CONDITIONS

1. DEFINITIONS

The term "At own cost" shall mean that the contractor shall at his own cost furnish material and labour to complete the item of works to which the term is applied. Rates of various items in the schedule of quantities shall be inclusive of such item.

"As indicated" shall mean as indicated in any of the contract documents,

"As Directed" shall mean as directed by the Employer or Architects.

"The Owner/Employer" shall mean PRINCIPAL DAYANAND SCIENCE COLLEGE, LATUR

"Architects" shall mean SHNATESHWAR BARBADE AND ASSOCIATES, Ramakrishna, Opp. Parijat Hall, Near ICICI Bank, AUSA Road, Latur_ or their authorized representatives.

"Bills [or schedule] of quantities" shall mean the list of items giving the quantities and description of work compared in this contract. The rates in the Bills of quantities shall apply in assessing the value of the work as carried out.

"Day work" shall mean the method of valuing work on the basis of the time spent by the workman, the materials used and the plant employed.

"Price Cost" [or the initials 'P. C.'] shall mean the net sum entered in the Bills of quantities by the quantity surveyors provided to cover the cost of or others for specific articles of materials to be supplied or work to be done.

"Site" shall mean the site of the contract works as shown bounded Red on the site plan attached hereto including any buildings and erections thereon and any other land adjoining thereto [inclusive] as aforesaid allotted by the Employers for the contractor's use.

"This Contract" shall mean the Articles of Agreement, there conditions, the special conditions, the priced schedule of quantities, the specifications, the Appendix and the Drawings etc.

"Act of Insolvency" shall mean any Act of Insolvency as defined by the Presidency Towns Insolvency Act of the Provincial Insolvency Act or any amending statute.

"Notice in writing" or written notice shall mean a notice in written, types or printed characters sent unless delivered, personally or otherwise proved to have been received by registered post to the last known private or business address or registered office of the addressee and shall be deemed to have been received, when the ordinary course post it would have been delivered.

"Provisional Sum" shall mean any sum or money fixed by the Employer and include in the Bills of the quantities to provide for work not otherwise included therein or for unforeseen contingencies arising out of the contract. It is intended to expend, either wholly or in part, under the Employers direction and at his discretion in accordance with the conditions of contract.

"Virtual Completion" shall mean the work is in opinion of Architects, has been completed.


Signature of Consultant
Mr. Shanteshwar Barbade

S. U. Barbade
B. E. Civil
Consultant Engineer & Valuer,
LATUR

"Schedule of Basic Price" shall mean the schedule in which the contractor can insert the basic prices of the materials upon which his tender has been computed.

"Certificate of Architect" shall mean the clear certificate regarding the value of work done by the contractor in accordance with the contract and duly verified and measured by Architect.

2. PRELIMINARIES

The documents comprising in the contract shall be:

Tender Notice
Form of Tender (Letter from the contractor)
Notice to contractor
Special conditions
General conditions
Conditions of contract
Articles of Agreement
Schedule-A : Regarding supply of materials
Schedule-B : Schedule of quantities to be executed by the contractor.
Detailed specifications of various works
Drawings

3. SITE OF WORK

The site of the works is at Dayanand Education Society, Latur Dayanand Science College, and Latur.

4. ASCERTAINED AND LIQUIDATED DAMAGES

Pay the sum indicated in the Appendix to the conditions of contract as ascertained and liquidated damages for each week or part of a week that the works, remain in completed after the contract date for completion.

5. ANNOYANCE TO NEIGHBOUR

To everything possible so as to cause lesar inconvenience to the occupants of neighboring properties, if any, for this purpose allow for following directions of executing any works which in the opinion of the Architects, are at any time considered necessary.

6. TREASURE TROVE TEC.

Handover to the Architect and treasure trove, coins or objects of antiquity which may be found on the site.

7. SUBLETTING

Do not sublet to other persons any part of the works without the consent in writing of the Architect.

8. PROTECTIVE CLOTHING


Provide all necessary protective clothing for the operatives. Keep at site a First Aid Box.

9. TEMPORARY ROADS

Provide and maintain all necessary temporary roads to the satisfaction of the Architects.

DRINKING WATER FACILITIES AND LAVATORIES

Provide at suitable places covered drinking water accommodation for workers. Drinking water shall be provided in earthen pots or glass purchased from the company. Distribution of glass jars to workers all over the


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works will not be permitted, storage of which shall be restricted to confined spaces only. Provide adequate closet & sanitary accommodation for all workmen on site in addition to similar facilities already existing on site. These shall be in accordance with the rules and regulations in the local and public authority. Separate latrines shall be provided for men and women. Maintain the same in good working order and properly disinfected.

11. DUMPY LEVEL AND THEODOLITE

Maintain at all times a good Dumpy level and a the dolomite at site in perfect working condition to enable the Architects to check the lines and level of work.

12. SAMPLES

Submit samples at own cost of all materials properly to be used for approval and as directed by the Architects. Samples will not be returned to the contractor.

13. TESTING OF WORKS AND MATERIALS

Arrange to test materials and / or portions of the works at own cost if required by the Architects in order to prove their soundness and efficiency if in the opinion of the Architects, after any such test the work of portion of works is found to be defective or unsound it shall be pulled down and re-executed at own cost. Remove defective materials from site forthwith.

14. MACHANICAL PLANT

Besides the provision made in condition of contract provide to maintain in working order the power driven equipment during the construction of the works as indicated.

15. DIMENSIONS

Figured dimensions are to be taken in reference to scaled, large scale details supersede small scale, and all dimensions shall be checked by the contractor and discrepancies referred to the Architects.

16. KEEPING FOUNDATIONS AND WORKS FREE FROM WATER


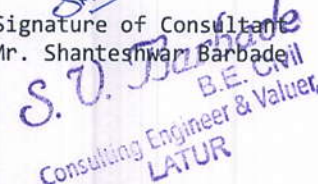
Provide and maintain at own cost electrically or other power driven pumps and / or other plant for keeping foundation and works free from water. Continue to do so until the building are handed over to the owner, arrange for disposal of water to accumulate to the entire satisfaction of the Architects and the local authorities.

17. CONTRACTOR TO PROVIDE NOTICE BROAD

Provide if required two Notice Boards on proper supports each 10' x 6' high positions approved by the Architects. All for painting and lettering stating the name of the work, name of the Employer, name of Architects, name of the contractor. All letters except that name of the work shall be in letters not exceeding 2" in height and all to be approved by the Architects.

18. PROTECTION, WATCHING AND LIGHTING

Properly cover up and protect all works throughout the duration of works until completion particularly masonry, arises moulding steps terrazzo, or special floor finishing, stair cases and balustrades, doors and frames, plaster angles, lighting and sanitary fitting glass, paint work and all finishes, the contractor shall provide all necessary temporary lighting required during the progress of the work and suitable night lighting for the proper protection of the works. No night work shall be done without the permission of the Architect and when permitted adequate lighting shall be provided at the contractor's expenses. The contractor shall also provide and pay the wages of all Gatekeepers and watchman, for the effective protection of


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the works and materials at site. The Architects reserves the right to appoint such persons to be paid by the contractor.

19. VOUCHERS AND ORIGIN OF MATERIALS

Furnish the Architects with original voucher on request to prove that the materials are as specified. All material incorporated in the works shall be new and of the best quality obtainable. The Architects shall be the sole judge as to materials are suitable for use in the works.

20. RUBBISH

Keep site clean and tidy at all times to the approval of the work. Clear away all rubbish from time to time and on completion.

21. ACCESS TO WORKS

No Employee of the contractor, other than those authorized by the Architects shall be allowed to live on the site. Proper and convenient means of access to all parts of the works shall be maintained at all time for the Employer and his representative or other persons authorized by him.

22. STORES ON SITE

Keep store book with (i) all folios numbered in ink, and (ii) all entries in ink to show materials received, issued for use on site and the balance left over from time to time (iii) Allow the Employer free access of store book at all times.

23. VARIATION ORDERS

Obtain "Variation Order" for items and rates not covered by the schedule of quantities within seven days of verbal or otherwise instruction from the Employer or the Architects.

24. SUB CONTRACTORS

The contractors shall as soon as practicable before the execution of the contract notify the Employer in writing of the sub contractor if any.

Nothing contained in the contract, documents shall create any contractual relationship between the sub contractor & the Owner / employer.

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S T A T E M E N T No.I

Details of the works of similar type and magnitude of the work carried out by the Tenderer.

Sr. No.	Name of work	Place and State	Tendered Cost	Time in which Completed	Date of completion	Principal features

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S T A T E M E N T No. II

Details of the works of similar type and magnitude of the work carried out by the Tenderer

Sr. No.	Name of work and place	Work in hand		Anticipated Date Of completion		Work tendered for		Stipulated Period of Completion	Remarks
		Tendered cost	Cost of Remaining work.			Estimated Cost	Dt. When decision is expected		

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STATEMENT No. III

Details of Plant immediately available with the Tenderer for use on the work of construction.

Sr. No.	Name of Equipment	No. of Units	Kind of Make	Capacity	Age and condition	Present condition	Remarks
A	Excavation, Drilling and Grouting Equipment.						
B	Crushing, concreting and Hoisting Equipment						
C	Transporting Equipment.						
D	Pumping workshop and Misc. Equipment						

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STATEMENT No. IV

Details of Technical Personnel with the Tenderer.

Sr. No.	Designation	Name	Qualification	Professional experience and details of works carried out.	Remarks

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DECLARATION OF THE CONTRACTOR
(On Letter Head)

I hereby declare that I have made myself thoroughly conversant with the local conditions regarding all construction material (such as stone, sand, surkhi, murum etc.) and labour on which I have based my rates for this work, which are inclusive of all leads and lifts involved. The specifications and leads etc. of works have been carefully studied and understood by me before submitting this Tender. I undertake to use only the best materials approved by the Architects or his duly authorized assistant before starting the work and abide by his decision.

I hereby undertake to pay the Laborers engaged on the work as per Minimum Wages Act. 1948 as amended from time to time and applicable to the zone concerned.

Signature of Contractor

Signature of Consultant
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**APPENDIX HERE IN BEFORE REFERRED TO
(Subject to at the time of AOC contract)**

- 1] Defects liability period : 6 month
- 2] Date of commencement :
- 3] Date of completion :
- 4] Insurance :
- 5] Agreed liquidated damages :
at the rate of per week
- 6) Period of final measurements :
- 7) Value of work for interim :
Certificate
- 8) Retention percentage :
- 9) Instalment after virtual :
Completion
- 10) Period for honoring payment :
of Bills.
- 11) Rate for interest for delayed :
Payment percent per annum

Signature of Contractor

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F O R M - B-1

PERCENTAGE RATE TENDER AND CONTRACT FOR WORKS

GENERAL RULES AND DIRECTIONS FOR THE GUIDANCE AND CONTRACTORS.

All works proposed to be executed by contract shall be notified in a form of invitation to tender pasted on a board hung up in the office of the Employer and signed by the Employer.

This form will state the work to be carried out as well as the date of submitting and opening tenders, and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the tender and the amount of the Security Deposit to be deposited by the successful tenderer and the percentage, if any to be deducted from bills. It will also state whether a refund of quarry fees, royalties, octroi dues and ground rents will be granted. Copies of the specifications, designs and drawings estimated rates scheduled rates and any other documents required in connection with the work shall be signed by the Employer for the purpose of identification and shall also be open for inspection by contractors at the office of the Employer or Architect office during office hours.

In the event of the tender being submitted by a firm, it must be signed separated by each partner thereof, or in the event of the absence of any partner, it shall be signed on his behalf by a person holding a power of attorney authorizing him to do so.

The contractor shall pay along with the tender the sum of Rs.137000/- as and by way of Earnest Money by cash only.

In the event of his tender being accepted subject to the provision of sub clause (iii) below, the said amount of Earnest Money shall be appropriated towards the amount of Security Deposit payable by him under conditions of General Conditions of contract.

If, after submitting the tender, the contractor withdraws his offer or modifies the same or if, after the acceptance of his tender the contractor fails or neglects to furnish the balance of Security Deposit without prejudice to any other rights and powers of the Deptt. Hereunder, or in law, Deptt. Shall be entitled to forfeit the full amount of the Earnest Money deposited by him.

In the event of his tender not being accepted, the amount of Earnest Money deposited by the contractor shall, unless it is prior thereto forfeited under the provisions of sub. clause (iii) above, be refunded to him on his passing receipt therefore.

Receipts for payments made on account of any work, when executed by a firm, should also be signed by all the partners except where the contractors are described in their tender as a firm in which case the receipt shall be signed in the name of the firm by one of the partners, or by some other person having authority to give effectual receipts for the firm.

All work shall be measured not by standard measure and according to the rules and customs of the Deptt. and without reference to any local custom. Under no circumstances shall any contractor be entitled to claim enhanced rates for items in this contract.

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TENDER FOR WORKS

<p>I / We hereby tender for the execution, for the Principal Dayanand Science College, Latur (herein before and hereinafter referred to as Deptt.) of the work specified in the underwritten Memorandum within the time specified in such Memorandum at percent below/above the estimated rates entered in schedule-B (Memorandum showing items of work to be carried out) and in accordance in all respect with the specifications, designs, drawings and instructions, in writing referred to in Rule-1 hereof and in Clause-12 of the annexed conditions of contract and agree that when materials for the work are provided by the Deptt. such materials and the rates to be paid for them shall be as provided in Schedule-A hereto.</p>	<p>In figures as well as in words</p> <p>(Fill Percentage rate less / Excess in BoQ)</p>
<p>MEMORANDUM</p>	
<p>(a) General Description</p>	<p>(a) If several sub works are included they should be detailed in separate list.</p>
<p>(b) Estimated Cost : Rs. 14589168/-</p>	<p>Contruccion</p>
<p>(c) Tender Fees Money : Rs. 15000/-</p>	<p>(c) The amount of Earnest Money to be deposited shall be in accordance with provision of paras 206 & 207 of M.P.W. Manual.</p>
<p>(d) Security Deposit : Rs.320000/-</p>	<p>(d) This deposit shall be accordance with para 213 & 214 of the M.P.W. Manual.</p>
<p>(e) Emd 170000/-</p>	<p>(e) This percentage where no Security Deposit is taken, will Very from 5 percent to 10 per-cent according to the require-ments of the case, where Secu-rity Deposit is taken, see note to Clause I of condition of contract</p>
<p>(e) Percentage, if any, to be deducted from bills so as to make up the total amount required as Security Deposit by the time, half the work as measured by the costs, as done. Percent</p>	<p>(f) give schedule where necess-ary showing dates by which the various items are to be completed.</p>
<p>(f) Time allowed for the work from date of written order to commerce. Calender Months.</p>	<p>(f) give schedule where necess-ary showing dates by which the various items are to be completed.</p>

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I/We agree that the offer shall remain open for acceptance for a minimum period of 120 days from the date fixed for opening the Tender.

Contractor's Signature

Signature of contractor before
Submission of Tender

Address

Dated the days of 2022

Signature of
(Witness)

Signature of Witness
to contractor signature

Address

Occupation

Amount to be specified
(in words and figures)

The above tender is hereby
Accepted by me

Dated the days of 200

Signature of the officer
by whom accepted

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CONDITIONS OF CONTRACT

CLAUSE - 1 : SECURITY DEPOSIT

After finalization of Tender contractor shall pay 5% sum towards Security Deposit in two terms. Initial Security Deposit at 2.5% of the accepted cost of contract shall be paid in cash or by Demand Draft only immediately before issue of works order and remaining 2.5% amount will be deducted through Running Accounts Bill for works done.

In the event of failure on the part of contract in remitting initial Security Deposit within a period of Ten days or extended period if any from the date of finalization of tender, amount lodged towards Earnest Money Deposit will be forfeited to Department without assigning any reason forthwith.

The Security Deposit lodged by a contractor shall be refunded after the expiry of three months from the date on which the final bill is paid or after expiry of the date up to which contractor has agreed to maintain the work in good order, whichever is later.

CLAUSE - 2 : COMPENSATION FOR DELAY

Time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned from the date on which the order to commence work is given to the contractor. The work shall through the stipulated period of the contract be proceeded with all due diligence (time being deemed to be the essence of the contract on the part of the contractor) and the contractor shall pay as compensation an amount equal to one percent or such smaller amount as the Architects (whose decision in writing shall be final) may decide of the amount of the estimated cost of the whole work as shown by the tender for every day that the work remains uncommenced or unfinished after the proper dates. And further to ensure good progress during execution of the work, the contractor shall be bound in all cases in which the time allowed for any work exceed one month to complete.

%	of the work in	%	of the time.
%	of the work in	%	of the time.
%	of the work in	%	of the time.

NOTE The quantity of the work to be done with in a particular time to be specified above shall be fixed and inserted in the blanks space kept for the purpose by the circumstances of each case and abide by the programme of detailed progress laid down by the Architects. The following proportion will usually be bound suitable.

In	%	%	%	of the time
reasonable	1/6	%	%	of the total value of the work to be done.
progress of				
earth work				
- do - of				
masonry				
work.	1/10	4/10	8/10	- Do -

In the event of the contractor failing to comply with this conditions he shall be liable to pay as compensation an amount equal to one percent or such smaller amount as the Architects (whose decision in writing shall be final) may decide of the said

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estimated cost of the whole work for every day that due quantity of work remains incomplete provided always that the total amount of compensation to be paid under the provisions of this clause shall not exceed 10 per cent of the estimated cost of the work as shown in the tender.

CLAUSE - 3 : ACTION WHEN WHOLE OF SECURITY DEPOSITS FORFEITED

In any case in which under any clause or clauses of this contract that the contractor shall have rendered himself liable to pay compensation amounting to the whole of his Security Deposit (whether paid in one sum or deducted by installments) or in the case of abandonment of the work owing to serious illness or death of the contractor or any other clause, the Architects on behalf of the Department shall have power to adopt any of the following courses, as he may deem best suited to the interest of the Department.

To rescind the contractor (for which rescission notice in writing to the contractor under the hand of Architects shall be conclusive evidence) and in that case the Security Deposit of the contractor shall stand forfeited and be absolutely at the disposal of the Department.

To carry out the work or any part of the work departmentally debiting the contractor with the cost of the work, expenditure incurred on tools and plant and charges on additional supervisory staff including the cost of work charged establishment employed for getting unexecuted part of the work completed and crediting him with the value of the work done departmentally in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Architects as to the costs and other allied expenses so incurred and as to the work so done departmentally shall be final and conclusive against the contractor.

To order that the work of the contractor be measured up and to take such part thereof as shall be unexecuted, out of his hands and to give it to another contractor to complete, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory staff including the cost of work charged and the cost of the work executed by the new contract agency will be debited to the contractor and at the work done or executed through the new contractor shall be credited to the contractor in all respects and in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Architects as to all the cost of the work and other expenses incurred as aforesaid for or in getting the unexecuted work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor. In case the contract shall be rescinded under clause (a) above, the contractor shall not be entitled to recover or be paid, any sum for any work therefore actually performed by him under this contract unless and until the Architect shall have certified in writing the performance of such work and the amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified in the event of either of the courses referred to in clause (b) or (c) being adopted and the cost of the work executed departmentally or through a new contractor and other allied expenses exceeding the value of such work credited to the contractors, the amount of excess shall be deducted from any money due to the contractor by Department under the contract or otherwise howsoever or from his Security Deposit or the sale proceeds thereof provided, however that the contractor shall have no claim against Deptt. even if the certified value of the work done departmentally or through a new contractor exceeds certified cost of such work and allied expenses, provided always that whichever of the three courses

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mentioned in clauses (a), (b) or (c) is adopted by the Eng./Architects, the contractor shall no claim to compensation for any loss sustained by him by reason of his having purchased or procured into any materials, or entered into any engagements or mae any advance on account of or with a view of the execution of work or the performance of the contract.

CLAUSE - 4 : ACTION WHEN THE PROGRESS OF ANY PARTICULAR PORTION OF THE WORK IS UNSATISFACTORY.

If the progress of any particular portion of the work is unsatisfactory the Architects shall notwithstanding that the general progress of the work is in accordance with the conditions mentioned in Clause 3 be entitled to take action under Clause 4 (b) after giving the contractor 10 day's notice in writing. The contractor shall have no claim for compensation for any loss sustained by him owing to such action.

CLAUSE - 5 : CONTRACTOR REMAINS LIABLE TO PAY COMPENSATION IF ACTION

NOT TAKEN UNDER CLAUSES 3 AND 4

In any case in which any of the powers conferred upon the Architects by Clauses 3 and 4 hereof shall have become exercisable and the same shall not have been exercised the non exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall not withstanding be exercisable in the event of any future case of default by the contractor for which under any clauses or clause hereof he is declared liable to pay compensation amounting to the whole of his Security Deposit and the liability of the contractor for past and future compensation shall remain unaffected in the event of the Architects taking action under sub clause (a) or (c) of clause 4 he may, if so desires, take possession of all or any tools plant, materials and stores, in or upon the works or procured by him and intended to be used for execution of the work or any part thereof, paying or allowing for the same in account at the contract rates, or in the case of contract rates not being applicable at current market rates to be certified by the Architects whose certificate thereof shall be final. In the alternative, the Architects may after giving notice in writing to the contractor or his clerk of the work, foreman or other authorized agent require him to remove such tools, plants, materials or stores from the premises within a time to be specified in such notice and in the event of the contractor failing to comply with any such requisition, the Architects may remove them at the contractor's expense or sell them by auction or private sale on account o the contractor and at his risk in all respect, and the certificate of the Architects as to the expense of any such removal and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor.

CLAUSE - 6 : EXTENSION OF TIME

If the contractor shall desire an extension of the time for completion of work on the ground of his having unavoidably hindered in its execution or on any other ground, he shall apply in writing to the Architects before the expiry of the period, stipulated in the tender or before the expiration of 30 days from the date on which he was hindered as aforesaid or on which the cause for asking for extension occurred, whichever is earlier and the Architect, if in his opinion, there were reasonable ground for granting an extension grant such extension as he thinks necessary or proper, the decision of the Architects in this matter shall be final.

In case of delay in handing over the land require for the work due to unforeseen cause the contractor shall not be entitled for any compensation whatsoever from Department on the ground that the machinery or labour was for

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certain period retained idle, contractor may however apply for extension for time limit which may be granted on the merit of the same.

The contractor will not have any claim in case of delay by the Department of removal of tree or shifting raising removing of telegraph, electrical lines (over head or under ground) other structure if any which may come in the way of work. However suitable extension can be granted to cover such delay.

CLAUSE - 7 : FINAL CERTIFICATE

On the completion of the work the contractor furnished with a certificate by the Architects of such completion, but no such certificate shall be given nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall have been executed, all scaffolding, surplus materials and rubbish, and shall have cleaned off, the dirt from all wood work, doors windows walls, floor or other part of any building in or upon which the work has been executed, or of which he may have had possession for the purpose of executing the work, nor until the work shall have been measured by the Architects in charge or where the measurements have taken by his subordinate until they have received approval of the Architects, the said measurements being binding and conclusive against the contractor. If the contractor shall fail to comply with the requirements, of this clause as to the removal of scaffolding, surplus materials and rubbish and cleaning of dirt on or before the date fixed for the completion of the work the Architects may at the expenses of the contractor, remove such scaffolding, surplus materials and rubbish, dispose of the same as he thinks fit and clean off such dirt as aforesaid and the contractor shall forthwith pay the amount of all expenses so incurred, but shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

CLAUSE - 8 : PAYMENTS ON INTERMEDIATE CERTIFICATE TO BE REGARDED AS ADVANCE

No payment shall be made for any work, estimated to cost less than Rs. One thousand till after the whole of the work shall have been completed and a certificate of completion given. But in the case of works estimated to cost more than rupees one thousand, the contractor shall, on submitting a monthly bill therefore, be entitled to receive payment proportionable to the part of the work then approved and passed by the Architect whose certificate of such approval and passing of the sum of payable shall be final and conclusive against the contractor. All such intermediate payments shall be regard as payments by way of advance against the final payments only, and not as payments for work actually done and completed, and shall not preclude the Architect from requiring bad, unsound imperfect or unskillful work to be removed or taken away and reconstructed or re-erected, nor shall any such payment be considered as admission of the due performance of the contract or any part thereof in any respect or the accruing of any claim, nor shall it conclude, determine, or affect in any way the powers of the Architects as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary of affect the contract. The final bill shall be submitted by the contractor within the one month of the date fixed for the completion of the work, otherwise the Architect certificate of the measurement and of the total amount payable for the work shall be final and binding on all parties.

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**CLAUSE - 9 : PAYMENT AT REDUCED RATES ON ACCOUNT OF ITEMS OF WORK
NOT ACCEPTED AS COMPLETED TO BE AT THE DISCRETION OF THE ARCHITECT**

The rates for several items of works Est. to cost more than Rs. 1,000/- agreed to within shall be valid only when the item concerned is accepted as having been completed fully in accordance with the sanctioned specifications. In cases where the items of work are not accepted as so completed the Architect in charge may make payment on account of such items at such reduced rates as he may consider reasonable in the preparation of final or on account bills.

CLAUSE - 10 : BILLS TO BE SUBMITTED MONTHLY

A bill be submitted by the contractor each month on or before the date fixed by the Architect or Engineer for all work executed in the previous month and the Architect or Engineer shall take or cause to be taken the requisite measurement for the purpose of having the same verified and the claim, so far as it is admissible, shall be adjusted, if possible, within ten days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid, the Architect or Engineer may depute a subordinate to measure up the said work in the presence of the contractor or his duly authorized agent whose countersignature to measurement list shall be sufficient warrant, and the Architect or Engineer may prepare a bill from such list which shall be binding on the contractor in all respects.

CLAUSE - 11 : BILLS TO BE ON PRINTED FORMS

The contractor shall submit all bills on the printed forms to be had on application at the office of the Architect or Engineer. The charges to be made in the Bills shall always be entered at the rates specified in the tender or in the case of any extra work ordered in pursuance of these conditions, and not mentioned or provided for in the tender, at the rates hereinafter provided for such work.

CLAUSE - 12 : STORES SUPPLIED BY DEPTT.

If the specification or estimate of the work provides for the use of any special description of materials to be supplied from the store of the Department or if it is required that the contractor shall use certain stores to be provided by the Architect or Engineer (such material & stores, and the prices to be charged therefore as hereinafter mentioned being so far as practicable for the convenience of the contractor but not so as in any way to control the meaning or effect of this contract specified in the schedule of memorandum hereto annexed). The contractor shall be supplied with such materials and stores as may be required from time to time to be used by him for the purpose of the contract only, and the value of the full quantity of the materials and stores so supplied shall be set off deducted from and sums than due, or thereafter to become due to the contractor under the contractor or otherwise, or from the security deposit or the proceeds thereof, if the security deposit is held in Deptt securities, the same or sufficient portion thereof shall in that case be sold for all purposes. All materials supplied to the contractor shall remain the absolute property of Deptt and shall on no account be removed from the site of the work and shall at all times be open to inspection by the Architect or Employer. Any such materials unused and in perfectly good condition at the time of completion or determination of the contract shall be returned to Department store, if the Architect or Engineer so required by a notice in writing given under his hand, but the contractor shall not be entitled to return any such materials except with consent of the Architect or Engineer and he shall have no

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claim for compensation on account of any such material supplied to him as aforesaid but remaining unused by him for any wastage in or damage to any such materials.

CLAUSE - 12 A : All store of controlled materials such as cement, steel etc., supplied to the contractor by Deptt. Should be kept by the contractor under lock and key and they will be accessible for inspection by the Architect or Employer or his agent at all times.

CLAUSE - 13 : WORKS TO BE EXECUTED IN ACCORDANCE WITH SPECIFICATIONS, DRAWING, ORDERS ETC.

The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner, and both as regards materials and every other respect in strict accordance with specifications. The contractor shall also confirm exactly, fully and faithfully to the designs, drawings and instruction in writing relating to the work signed by the Architect or Engineer and lodged in his office and to which the contractor shall be entitled to have access for the purpose of inspection at such office or on the site of the work during office hours. The contractor will be supplied one certified copy of the accepted tender along with the work order free of cost.

CLAUSE - 14 : ALTERNATIONS IN SPECIFICATIONS & DESIGNATIONS TO INVALIDATE CONTRACTS.

The Architect or Engineer shall have power to make any alternations in or additions to the original specifications, Drawing, Designs and instructions that may appear to him to be necessary or advisable, during the progress of the work, and the contractor shall be bound to carry out the work in accordance with any instructions in this connection which may be given to him in writing signed by the Architect and such alteration shall not invalidate the contract, and any additional work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work, and at the same rates as are specified in the Tender for the main work. And if the additional and altered work includes any class of work for which no rate is specified in this contract, then such class of work shall be carried out at the rates entered in the Schedule of Rates of the District or at the rates mutually agreed upon between the Architect or Engineer and the contractor, whichever are lower. If the additional or altered work, for which no rate is entered in the schedule of rates of the District as ordered to be carried out before the rates are agreed upon then the contractor shall, within seven days of the date of receipt by him of the order to carry out the work, inform the Architect or Engineer of the rate which is his intension to charge for such class of work, and if the Architect or Engineer does not agree to this rate he shall by notice in writing be at liberty to cancel his order to carry out such class of work and arrange to carry out in such manner as he may consider advisable provided always that if the contractor shall commence work or incur any expenditure in regard thereto before the rates shall have been determined as lastly herein before mentioned then in such case he shall only be entitled to be paid in respect of the carried out or expenditure incurred by him prior to the date of the determination of the rate as aforesaid according to such rate as shall be fixed by the Architect. In the event of dispute, the decision of the Architect or Employer will be final.

EXTENSION OF TIME IN CONSEQUENCE OF ADDITIONS OR ALTERNATION

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The time limit for the completion of the work shall be extended in the proportion that the increase in its cost occasioned by alternations or additions bears to the cost of the original contract work, and the certificate of the Architect or Engineer as the such proportion shall be conclusive.

CLAUSE - 15(1): NO CLAIM TO ANY PAYMENT OR COMPENSATION FOR ALTERNATION IN THE RESTRICTION OF WORK

If at any time after the execution of the contract documents the Engineer shall for any reason what so ever (other than default on the part of the contractor for which the Deptt. Is entitled to rescind the contract) desires that the whole or any part of the work specified in the tender should be suspended for any period or that the whole or part of the work should not be carried out at all he shall give to the contractor a notice in writing of such desire and upon the receipt of such notice the contractor shall forthwith suspend or stop the work wholly or in part required, after having due to the appropriate stage at which the work should be stopped or suspended so as not to cause any damage or injury to the work already done or endanger the safety thereof provided that the decision of the Architect or Engineer as to the stage at which the work or any part of it could have been safely stopped or suspended shall be final and conclusive against the contractor. The contractor shall have no claim to any payment or compensation whatsoever by reason of or in pursuance of any notice as aforesaid on account of any suspension, stoppage or curtailment except to the extent specified hereinafter.

Where the total suspension of work ordered as a aforesaid continued for a continuous per road exceeding 90 days the contractor shall be at liberty to withdraw from the contractual obligations under the contract so far as it pertains to the unexecuted part to the work by giving at 10 day's prior notice in writing to the Architect or Engr. Within 30 days of the expiry of the said period of 90 days, of such intention and requiring the Architect or Engr. to record the final measurements of the work already done and to pay final bill. Upon giving such notice the contractor shall be deemed to have been discharged from his obligation to complete the remaining unexecuted work under the contractor. On receipt of such notice the Architect or Engineer shall proceed to complete the measurement and make such payment as may be finally due to the contractor within a period of 90 days from the receipt of such notice in respect of the work already done by the contractor. Such payment shall not in any manner prejudice the right of the contractor to any further compensation under the remaining provisions of this clause.

Where the Architect or Engineer required the contractor to suspend the work for period in excess of 30 days at any time or 60 days in the aggregate the contractor shall be entitled to apply the Architect or Engineer within 30 days of the resumption of work after such suspension for payment of compensation to the extent of pecuniary loss suffered by him in respect of working machinery rendered idle on the site or on the account of his having and to pay the salary of wages of labour engaged by him during the said period of suspension provided always that the contractor shall not be entitled to any claim in respect of any such working machinery, salary or wages for the first 30 days whether consecutive or in the aggregate of such suspension or in respect of any suspension whatsoever occasioned by unsatisfactory work or any other default on his part. The decision of the Architect or Engineer in charge in this regard shall be final and conclusive against the contractor.

NO CLAIM TO COMPENSATION ON ACCOUNT OF LOSS DUE TO DELAY IN

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SUPPLY OF MATERIALS BY DEPTT.

In the event of Any total stoppage o work on notice from the Architect or Engineer under Sub Clause (i) in that behalf:

Withdrawal by the contractor from the contractual obligations to complete the remaining unexecuted work under Sub Clause (2) on account of continued suspension of work for a period exceeding 90 days.

Curtailment in the quantity of item or items originally tendered on account of any alternations, omission or substitutions in the specifications, drawings, designs or instructions under clause 14 (1) where such curtailment exceeds 25% in quantity and the value of the quantity curtailed beyond 25 percent at the rate for the item specified in the tender is more than Rs.5,000/- It shall be open to the contractor, within 90 days from the service of

(i) the notice of stoppage of work or

(ii) the notice of withdrawal from the contractual obligations under the contract on account of the continued suspension of work or

(iii) notice under clause 4 (1) resulting in such curtailment to produce to the Architect or Engineer satisfactory documentary evidence that he had purchased or agreed to purchase materials for use in the contracted work before receipt by him of the notice of stoppage. Suspension or curtailment & require the Deptt. To take over on payment such material at the rates determined by the Architect or Engineer provided however such rates shall in no case exceed the rates of which the same required by the contractor. The Deptt. shall thereafter take over he material so offered. Provided the quantities offered are not in excess of the requirements of eh unexecuted work as specified in the accepted tender and are of quality and specifications approved by the Architect or Engineer.

CLAUSE - 15 : A: NO CLAIM TO COMPENSATION ON ACCOUNT OF LOSS DUE DELAY IN SUPPLY OF MATERIALS B DEPTT.

The contractor shall not be entitled to claim any compensation from Deptt. For the loss suffered by him on account of delay by Deptt. In the supply of materials entered in Schedule-A where such delay is caused by :

Difficulties relating to the supply of Railway Wagons

Force Majeure Act of God Act of enemies of the State of any other reasonable cause beyond the control of Deptt. In the case of such delay in supply of materials Deptt. Shall granted such extension of time for the completion of the work as shall appear to the Architect or Engineer to be reasonable in accordance with the circumstances of the case. The decision of the Architect or Engineer as to the extension of time shall be accepted as final by the contractor.

CLAUSE - 16 : TIME LIMIT FOR UNFORSEEN CLAIM

Under no circumstances whatever shall be contractor be entitled to any compensation from Deptt. on any account unless the contractor shall have submitted a claim in writing to the Architect or Engineer in charge within one month of the cause of such clam occurring.

CLAUSE - 17 : ACTION AND COMPENSATION PAYABLE IN CASE OF BAD WORK

If at any time before the Security Deposit is refunded to the contractor, it shall appear to the Architect or Engineer in charge or hi subroutine in charge of eh work, that any work has been executed with unsound, imperfect or unskilled workmanship or with materials of inferior quality or that any materials or articles provided by him for execution of the work are unsound or of a quality inferior to that contracted for, or are otherwise not in accordance with the contract, it shall

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be lawful for the Architect or Engineer in charge to intimate this fact in writing to the contractor and then notwithstanding the fact that the work, materials or articles complained of may have been inadequately passed, certified and paid for the contractor shall be bound forthwith to rectify, or if so required, shall remove the materials articles so specified and provide other proper and suitable materials or articles at his own charge and cost, and in the event of his failing to do so within a period to be specified by the Architect or Engineer in charge in the written intimation aforesaid, the contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimate for every day, not exceeding ten days during which the failure so continuous, and in the event of any such failure as aforesaid the Architect or Engineer in charge may rectify or remove and re-execute the work or remove and replace the materials or articles complained of as the case may at the risk and expense in all respects of the contractor. Should the Architect or Engineer in charge consider that any such inferior work or materials as described above may be accepted or made use of, it shall be within his discretion be accept the same at such reduced rates as the may fix therefore.

CAUSE - 18 : WORK TO BE OPEN TO INSPECTION

All works under or in course of execution or executed in pursuance of the contract shall at all times be open to inspection and supervision of the Architect or Engineer in charge and his subordinates, and the contractor shall at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Architect or Engineer in charge and his subordinate to visit the work shall have been given to the contractor, either himself to present to receive orders and instructions or have responsible agent duly accredited in writing present for that purpose. Orders given to the contractor's duly authorized agent shall be considered to have the same force and effect as if they had been given to the contractor himself.

CLAUSE - 19 : NOTICE TO BE GIVEN BEFORE WORK IS COVERED UP

The contractor shall give not less than five day notice in writing to the Architects or Engineer in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured, and correct dimensions thereof taken before the same is so covered up or placed beyond the reach of measurement, and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the Architect or Engineer in charge or his subordinate in charge of the and if any work shall be covered up or placed beyond the reach of measurement without such notice having been given or consent obtained, the same shall be uncovered at the contractor's expense, and in default thereof no payment or allowances shall be made for such work or for the materials with which the same was executed.

CLAISE - 20 : CONTRACTOR LIABLE FOR DAMAGE DONE AND FOR IMPERFECTION FOR THREE MONTHS AFTER CERTIFICATE

If during the period of Twelve months from the date of completion as certified by the Architect or Engineer in charge pursuance to clause 7 of the contract of Twelve months after commissioning the work, whichever is earlier in the opinion of the Architect or Engineer, the said work is defective in any manner whatsoever, the contractor shall forthwith on receipt of notice in that behalf from the Architect or Engineer duly commerce execution and completely carry out at his costs in every respect all the work that may be necessary for rectifying and setting

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right the defects specified therein strictly in accordance with and in the manner prescribed and under the supervision of the Architect or Engineer. In the event of the contractor failing or neglecting to commence execution of the aid rectification work within the period prescribed therefore in the said notice and / or to complete the same as aforesaid as required by the said notice the Architect or Engineer may get the same executed and carried out departmentally or by any other agency at the risk on account and at the cost of the contractor. The contractor shall forthwith on demand pay to the Deptt. the amount of such costs, charges and expenses sustained or incurred by the Deptt. of which the certificate of the Architect or Engineer shall be final and binding on the contractor. Such costs, charges and expenses shall be deemed to be arrears of land revenue and in the event of the contractor failing or neglecting to pay the same on demand as aforesaid without prejudice to any other rights and remedies of the Deptt. the same may be recovered from the contractor as arrears of land revenue. The Deptt. shall also be entitled to deduct the same from any amount which may then be payable or which may thereafter become payable by the Deptt. to the contractor either in respect of the said work or any other work whatsoever, or from the amount of the Security Deposit retained by the Deptt.

CLAUSE - 21 : CONTRACTOR TO SUPPLY PLANT, LADDERS, SCAFFOLDING

The contractor shall supply at his own cost all material (except such special materials, if any as may, in accordance with the contract, be supplied from the Deptt. stores) plant, tools, appliances, implements ladders, cordage, tackle scaffolding and temporary works requisite or proper for the proper execution of the work whether, in the original altered or substituted form, and whether included in the specification or other documents forming part of the contract on referred to in these conditions or not and which may necessary for the purpose of satisfying or complying with the requirements of the Architect as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with the carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of the setting out works and counting, weighting and assisting in the measurement or examination at any time and from time to time of the work or the material failing which the same may be provided by the Engineer in charge at the expense of the contractor and the expense may be deducted from any money due to the contractor under the contract or from his security deposit or the proceeds of sale thereof, or of a sufficient portion thereof. The contractor shall provide all necessary fencing and lights required to protect the public from accident, and shall also be bound to bear the expenses of defence of every suit, action or other legal proceeding, that may be brought by any person for injury sustained owing to neglect of the above precautions, and to pay any damages and cost which may be awarded in any such suit, action or proceeding to any such person, or which may with the consent of the contractor's to paid for compromising any claim by such person.

The contractor shall provide suitable scaffolds and working platforms, gangways and stairways and shall comply with the following regulations in connections therewith: Suitable scaffolds shall be provided for workmen for all work that cannot be safely done from a ladder or by other means.

A scaffold shall not be constructed, taken down or substantially altered, except : Under the supervision of a competent and responsible persons, and

As far as possible by competent workers possessing adequate experience in this kind of work.

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All scaffolds and appliances connected therewith and all ladders shall : be of sound materials be of adequate strength having regard to the loads and strains to which they will be subjected, and be maintained in proper condition. Scaffolds shall be so constructed that no part thereof can be displaced in consequence of normal use. Scaffolds shall not be overloaded and so far as practicable the load shall be evenly distributed. Before installing lifting gear on scaffolds special precautions shall be taken to ensure the strength and stability of the scaffolds. Scaffolds shall be periodically inspected by a competent person. Before allowing a scaffold to be used by his workmen the contractor shall, whether the scaffold has been erected by his workmen or not, take steps to ensure that it complies fully with the regulations herein specified. Working platforms, gangways and stairways shall : be so constructed that no part thereof can sag unduly or unequally. be so constructed and maintained, having regard to the prevailing conditions as to reduce as far as practicable risks of persons tripping or slipping, and be kept free from any unnecessary obstruction.

In the case of working platforms, gangways working places and stairways at a height, exceeding 3 Mtr, (To be specified) every working platform and every gangway shall be closely boarded, unless other adequate measures are taken to ensure safety. every working platform and gangway shall have adequate width, and every working platform, gangway, working place and stair way shall be suitably fenced. Every opening in the floor of a building or in a working platform shall, except for the time and to the extent required to allow the excess of persons or the transport or shifting of materials, be provided with suitable means to prevent the fall of persons or material. When persons are employed on a roof where there is a danger of falling from a height exceeding 5 Mtr. suitable precautions shall be taken to prevent the fall of persons or materials (To be prescribed). Suitable precautions shall be taken to prevent persons being struck by articles which might fall from scaffolds or other working places. Le means of access shall be provided to all working platforms and other working places. The contractor will have to make payment to the Lubourers as per Minimum Wages Act amended from time to time. The contractors shall comply with the following regulations as regards the Hoisting Appliances. Hoisting machines and tackle, including their attachments, anchorages and supports shall: be of good mechanical construction, sound material and adequate strength and free from patent defects, and be kept in good repair and in good working order. Every rope used in hoisting or lowering materials of as a means of suspension shall be of suitable quality and adequate strength and free from patent defect. Hoisting machines and tackle shall be examined and adequately tested after erection on the site and before use and re-examined in position at intervals to be prescribed by the Department. Every chain, ring, hock, shackle, swivel and pulley block used in hoisting or lowering materials or as a means of suspension shall be periodically examined. Every crane driver or hoisting appliance operator shall be properly qualified. No person who is below the age of 18 years shall be in control of any hoisting machine, including any scaffold which or give signals to the operator. IN the case of every hoisting machine and of every chain, ring, hook, shackle swivel and pully block used in hoisting or lowering or as a means of suspension the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to in the preceding regulation shall be plainly marked with the safe working load.

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In the case of hoisting machine having a variable safe working load each safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any hoisting machine or of any gear referred to in regulation 7 above shall be loaded beyond the safe working load except for the purpose of testing. Motors, gearing, transmissions, electric wiring and other dangerous parts hoisting appliance shall be provided with efficient safeguards. Hoisting appliance shall be provided with such means as will reduce to a minimum the risk of the accidental descent of the load. Adequate precautions shall be taken to reduce to minimum the risk of any part of a suspended load becoming accidentally displaced.

CLAUSE-22 : MEASURE FOR PREVENTION OF FIRE The contractor shall not set fire to any standing jungle, trees, brushwood or grass without a written permit from a Architect or Engineer. When such permit is given, and also in all cases when destroying cut or dug up trees, brush wood, grass etc. by fire, the contractor shall taken necessary measures, to prevent such fire spreading to or otherwise damaging surrounding property. The contractor shall make his own arrangements for drinking water for the labour employed by him and provide sanitary and other arrangement.

CLAUSE-23 : LIABILITY OF CONTRACTOR FOR ANY DAMAGE DONE IN OR OUTSIDE WORK AREA.

Compensation for all damages done intentionally or unintentionally by contractor's labour whether in or beyond the limits of Deptt. property including any damage caused by the spreading of fire mentioned in Clause 22 shall be estimated by the Architect or Engineer - in charge or such other officer as he may appoint & the estimates of the Architect or Engineer in charge subject to the decision of the Architect or Engineer on appeal shall be final and the contractor shall be bound to pay the amount of the assessed compensation on demand failing which, the same will be recovered from the contractor as damages in the manner prescribed in Clause-1 or deducted by the Architect or Engineer in charge from any sums that may be due or become due from Deptt. to contractor under the contract or otherwise. The contractor shall bear the expense of defending any actual or other legal proceedings that may be brought by any persons for injury sustained by him owing to neglect of precaution to prevent the life and he shall pay any damages, and cost that may be awarded by the Court in consequence.

CLAUSE-24 : EMPLOYMENT OF FEMALE LABOUR

The Employment of female labourers on works in neighbourhood or soldier's barracks should be avoided as far as possible.

CLAUSE-25 : WORK ON SUNDAY

No work shall be done on Sunday without the sanction in writing of the Architect or Engineer in charge.

CLAUSE-26 : WORK NOT TO BE SUBLET. CONTRACTOR MAY BE RESCINDED AND SECURITY DEPOSIT FORFEITED FOR SUBLETING IT WITH OUT APPROVAL OR FOR BRIBING A PUBLIC OFFICER OR IF CONTRACTOR BECOMES INSOLVENT.

The contractor shall not be assigned or sublet without the written approval of the Architect or Engineer in charge. And if the contractor shall assign or sublet his contract attempt so to do, or become insolvent or commence any proceedings to get himself adjudicated and insolvent or make any composition with his creditors, or

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attempt so to do or if bribe gratuity, gift, loan, perquisite, reward of advantage pecunary or otherwise shall either directly or indirectly be given, promised, or offered by the contractor or any of his servants or agent, to any public officer or person in the employ of Deptt. in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the

Architect or Engineer in charge may there upon by notice in writing rescind the contract, and the Security Deposit of the contractor shall thereupon stand forfeited and be absolutely at the disposal of the Deptt. and the same consequences shall ensue as if the contract had been rescinded under Clause 3 hereof and in addition the contractor shall not be entitled to recover or be aid for any work therefore actually performed under the contract.

CLAUSE-27 : SUM PAYABLE BY WAY OF COMPENSATION TO BE CONSIDERED AS REASONABLE COMPENSATION WITHOUT REFERENCE TO ACTUAL LOSS

All sum payable by contractor by way of compensation under any of these conditions shall be considered as a reasonable compensation to be applied to the use of Deptt. without reference to the actual loss or damage sustained, and whether any damage has or has not been sustained.

CLAUSE-28 : CHANGES IN THE CONSTITUTION OF FIRM TO BE NOTIFIED

In the case of tender by partners, any change in the constitution of a firm shall be forthwith notified by the contractor to the Architect or Engineer in charge for his information.

CLAUSE-29 : DIRECTION AND CONTROL OF THE ARCHITECT OR ENGINEER

All works to be executed under the contract shall be executed under in all respect of the Architect or Engineer, who shall be entitled to direct at what point or points and in what manner they are to be commenced and from time to time carried on.

CLAUSE-30 : DECISION OF THE ARCHITECT OR ENGINEER SHALL BE FINAL

Except where otherwise specified in the contract and subject to the powers delegated to him by the Deptt. under the code, rules, then in force, the decision of the Architect or Engineer shall be final, conclusive and binding on all parties of the contract upon all questions relating to the meaning of the specifications, Designs, Drawings and instructions herein before mentioned and as to the quality of workmanship, or materials used on the work, or as to any other question, claim, right, matter or thing what so ever, in any way arising out of or relating to the contract Designs, Drawings, specifications, estimates, instructions, orders of these conditions, or otherwise concerning the works or the executing, or failure to execute the same, whether arising, during the progress of the work, or after the completion or abandonment thereof.

CLAUSE-31 : ACTION WHERE NO SPECIFICATION

In the case of any class of work for which there is no specification as is mentioned in Rule 1 such work shall be carried out in accordance with the Divisional specifications, and the event of there being no Divisional specification, then in

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such case the work shall be carried out in all respect in accordance with all instructions and requirements of the Architect or Engineer in charge.

CLAUSE-32 : DEFINITION OF WORK

The expression 'works' or 'work' where used in these conditions, shall unless there be something in the subject or context repugnant to such construction, be constructed to mean the works contracted to be executed under or in virtue of the contract whether temporary or permanent and whether original, altered, substituted or additional.

CLAUSE-33 : CONTRACTOR'S PERCENTAGE WHETHER APPLIED TO NET OR GROSS AMOUNT OF BILL

The percentage referred to in the tender shall be deducted from added to the gross amount of the bill before deducting the value of any stock issued.

CLAUSE-34 : REFUND OF QUARRY FEES AND ROYALTIES

All quarry fees, royalties, octroi dues and ground rent for stacking materials, if any should be paid by the contractor, who will however, be entitled to a refund of such of the charges as are permissible under the rules on obtaining a certificate from the Architect or Engineer in charge that the materials were required for use on Deptt. work.

CLAUSE-35 : COMPENSATION UNDER THE WORKMAN COMPENSATION ACT

The contractor shall be responsible for and shall pay any compensation to his workmen payable under the workmen's Compensation Act, 1923 (VIII of 1923) (hereinafter called the said Act) for injuries caused to the workmen. If such compensation is payable/paid by the Deptt. as principal under sub section [1] of section - 12 of the said Act on behalf of the contractor, it shall be recoverable by Deptt. from the contractor under sub section [2] of the said section. Such compensation shall be recovered in the manner laid down in Clause-1 above.

CLAUSE-35(A) : The contractor shall be responsible for and shall pay the expense of providing medical aid to any workmen who may suffer abodily injury as a result of an accident. If such expenses are incurred by Deptt. the same shall be recoverable from the contractor forthwith and be deducted without prejudice to any other remedy of Deptt. from any amount due or that may become due to the contractor.

CLAUSE-35(B) : The contractor shall provide all necessary personal safety equipment and first aid apparatus available of the use of persons employed on the site, shall maintain the same condition suitable for immediate use at any time and shall comply with the following regulations in connection therewith :

The workers shall be required to use and equipment so provided by the contractor and the contractor shall take adequate steps to ensure proper use of the equipment by those concerned. When work is carried on in proximity to any place where there is risk of drowing, all necessary steps shall be taken for the prompt reuse of any person in damages. Adequate provision shall be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

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CLAUSE-35(C) : the contractor shall duly comply with the provisions of "The Apprentices Act, 1961" (III of 1961) the rules made there under and the orders that may be issued from time to time under the said Act and the said Rules and on his failure or neglect to do so he shall be subject to all the liabilities and penalties provided by the said Act and said Rules.

CLAUSE-36 : CLAIM FOR QUANTITIES ENTERED IN THE TENDER OR ESTIMATES

Quantities shown in the tender are approximate and no claim shall be entertained for quantities of work executed being either more or less than those entered in the tender or estimate.

Quantities in respect of the several items shown in the tender are approximate and no revision in the tendered rate shall be permitted in respect of any of the items so long as subject to any special provision contained in the specifications prescribing a different percentage of permissible variation in the quantity of the item does not exceed the tender quantity by more than 25 percent and so long as the value of the excess quantity beyond this limit at the rate of the items specified in the tender is not more than Rs.5,0000/-

The contractor shall, if ordered in writing by the Architect or Engineer to do so, also carryout any quantities in excess of the limit mentioned in sub clause(i) hereof on the same conditions as and in accordance with the specification in the tender and at the rates

(i) derived from the rates entered in the current schedule of rates and in the absence of such rates,

(ii) at the rate prevailing in the Market, the said rates being increased or decreased as the case may be by the percentage which the total tendered amount bears to the estimated cost of the work as put to tender based upon the schedule of rates applicable to the year in which the tenders were invited (for the purpose of operation of this clause, this cost shall be taken to be the cost of the work as put to tender). This clause is not applicable to extra items : Claims arising out of reduction in the tendered quantity of any item beyond 25 percent will be governed by the provision of clause 15 only when the amount of such reduction beyond 25 percent at the rate of the item specified in the tender is more than Rs.5,0000/- only. This reduction is exclusively of the reductions mentioned in Clause No.2, 1, 4 of work and site condition.

There is no change in the rate if the excess is less than or equal to 25 percent. Also there is no change in the rate if quantity of work done is more than 25 percent of the tendered quantity, but the value of the excess work at the tender rates does not exceed Rs.5,0000/-

The quantity to be paid at tender rate shall include : Tendered quantity plus, 25 percent excess of the tendered quantity or the excess quantity of the value of Rs.5,0000/- at the tendered rate whichever is more.

CLAUSE-37 : CLAIM FOR COMPENSATION FOR DELAY IN STARTING THE WORK

No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land or in the case of clearance works, on account of any delay in according sanction to estimate. No compensation shall be allowed for any delay in the execution of the work on account of water, standing in borrow pits or compartment. The rates are inclusive for hard or cracked soil, excavation in mud, sub soil, water standing in borrow pits and no claim for an extra rate shall be entertained unless otherwise expressly specified.

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CLAUSE-38 : WAGES TO THE SKILLED AND UNSKILLED LABOURERS ENGAGED BY THE CONTRACTOR

The contractor are bound to pay the labours as per the minimum wages act 1948 applicable to Zone in accordance to orders issued in Govt. P.W. Circular No.NWS-10/ dated 5-12.58 Any change in the types of the zones shall not entitled contractor any claim.

CLAUSE-39 : TAXES

The tendered rates shall be inclusive of all taxes / as applicable by SSR guidelines and cesses and shall also be inclusive of the Tax leviable in respect of works contract under the provision of GST Tax on transfer of property in goods

CLAUSE-40 : AGREEMENT FEE

The contractor shall have to execute the agreement of contract on a stamp paper of Rs.10 and will have pay the stamp duty charges of the value of the 2 percent of the total Security Deposit.

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ARTICLES OF AGREEMENT

ARTICLES OF AGREEMENT made this _____ day of _____ 2022 BETWEEN Principal Dayanand Science College, Latur, Maharashtra (Hereinafter called "The Employer") of the ONE PART.

_____ and

(_____ or whose Registered Office is situated at _____)

(Hereinafter called "The Contractor") of the OTHER PART.

WHEREAS the Employer is desirous of construction of Boys Hostel for Dayanand Science College, Latur in S. No. / Gat No.58 at Khadgaon, latur and has caused Drawings and specifications describing the works to be done to be prepared By Shanteshwar Barbade and Associates, Latur his Architects and WHEREAS the said Drawing numbered to inclusive, the specification and or the schedule of quantities have been signed by or on behalf of the parties hereto AND WHEREAS the contractor has agreed to execute upon and subject to the conditions setforth herein (HEREIN AFTER) referred to as "The said conditions" the works shown upon the said Drawings and/or described in the said specifications and include in the said schedule of quantities at the rates therein soforth amounting to the sum of therein arrived at or such other sum as shall become payable thereunder [hereinafter referred to as "The said Contract Amount"] NOW IT IS HEREBY AGREED AS FOLLOWS In consideration of the said contract amount to be paid at the times and in the manner set forth in the said conditions, the contractor shall upon and subject to the said conditions execute and complete the works shown upon the said Drawings and described in the said specification and / or the scheduled of quantities.

The Employer shall pay the contractor the said contract amount or such other sum as shall become payable at the times and in the manner hereinafter specified in the said conditions.

The term "The Architects" in the said conditions shall mean said, M/s Shanteshwar Barbade and Associates, Latur - Architects or, in the event of his death or ceasing to be the Architects for the purpose of this contract, such other person as shall be nominated for the purpose of the contract, such other person as shall be nominated for that purpose by the Employer, not being a person to whom the contractor shall object or reasons considered to be sufficient by the Arbitrator mentioned in the said conditions provided always that no person subsequently appointed to be Architect under the contract shall be entitled to disregard or over rule any previous decision or approval of direction given or expressed by the Architect for the time being.

The said conditions, special conditions, special conditions, Appendix, standard specifications and all the papers attached hereto shall be respectively read and construed as forming part of this agreement, and the parties hereto shall respectively abide by, submit themselves to the conditions and perform the agreements on their part respectively in such conditions contained.

The term R.C.C. Specialized refers to the name of Shanteshwar Barbade and Associates, Latur as mentioned above or persons as may be appointed by the Architect for the purpose.

The plans, agreement and documents mentioned herein shall from the basis of this contract.

This contract is neither a fixed lump-sum contract nor a piece work contract, but is a contract to carry out the work in respect of the entire Building to be paid for according to actual measured quantities at the rates contained in the schedule of rates and probable quantities or as provided in the said conditions. The Employer through the Architect reserves to himself the right of altering the Drawings and nature of the work of adding to or omitting any items of work or having portions of the same carried out without prejudice to this contract. The time shall be considered as of the essence of the Agreement and contractor hereby agrees to commence the work soon after the site is handed over to him as provided for in the said conditions and to complete the entire work within Nine calendar months subject nevertheless to the provisions for extension of time. The said conditions shall be read and constructed as forming part of this agreement and the parties hereto will respectively abide by the submit themselves to conditions and stipulations and perform the Agreements on their parts, respectively in such conditions contained.

All disputes arising out or in any way connected with this Agreement shall be deemed to have arisen in _____ and only the Court at _____ shall have jurisdiction to determine the same.

The several parts of this contract have been read to us and fully understood by us.

AT WITNESS our hands this _____ day of _____ 20_____

Signed by the Contractor : _____
(The contractor with Address)

in the presence of (1) _____
(2) _____

Signed by the Employer : _____

(The Employer with Address)
in the presence of (1) _____
(2) _____

SCHEDULE - A

Schedule showing (Approximately) the materials to be supplied from the Departmental Stores for work contracted to be executed and preliminary and ancillary works and the rates at which they are to be charged for:

Particulars of Materials	Unit	Rates at which the materials will Be charged to the contractor.		Place of Delivery
		In Fig.	In Words	
Cement Mild Steel Reinforcement Tor Steel Structural Steel		Nil (Not applicable)		

NOTE : The issue of materials by the Department under Schedule-A of this contract will be subject to the following conditions.

All the materials shall be made available for delivery on working days only during working hours, to be arranged mutually by the contractor between himself and the Store Keeper/ Engineer, who so ever shall issue the same. The material shall be made available at the place of delivery mentioned in Schedule-A of Tender.

The contractor shall submit periodically as well as on completion of work an account of all materials issued to him in a manner as directed by Architect/Engineer in charge. The contractor shall also furnish an account of previous materials issued, before placing demand for further materials. In addition, a separate register shall be maintained on site for recording daily item wise cement consumption of cement issued to them and also item wise consumption of other materials issued under Schedule-A as directed. This shall be signed daily by the contractor or his representative and representative of Architect or Engineer in charge.

The quantities in Schedule-A are approximate and may vary according to actual and bonafied use as certified by the Architect or Engineer in charge.

All the materials mentioned in Schedule 'A' required for the work shall be taken from the Department only. The materials from other source in lieu of the materials in Schedule 'A' shall not be allowed except under written permission from the Architect or Engineer. In such case, certificate for its quality shall be produced by the contractor and sample of such materials shall be tested from any Government Laboratory by the contractor at his own cost and the test results be supplied to the Department. The materials not conforming to the required standard shall be removed at once from the site of the work by the contractor at his own cost.

The rates mentioned in Schedule-A are inclusive of Sales Tax and storage charges.

After issue of any material for use on bonafied Deptt. work to contractor if the Architect or Engineer-in-charge ascertains on any particular date that the portion of such supplies becomes surplus to the requirement of the work, the date of ascertainment will be taken as the date for sale for the purpose of payment of sales tax on such portion and recovered from the contractor as per rules.

The contractor shall not use cement and other materials under Schedule 'A' in items other than as per this tender except for such ancillary small items as are connected with and absolutely necessary for execution of this work as may be decided by the Architect or Engineer.

All steel issued under Schedule 'A' which remains surplus with the contractor after use in the work, shall be returned to the Department. Generally, only full length

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bars in lengths supplied by the Department shall be taken back by the Department. However, the Architect or Engineer-in-charge may at his discretion, take back bars of particular diameter in any other lengths approved by him, if same are required for use in Deptt. work. The rates for repayment of the surplus acceptable materials returned by the contractor at the godown of issue, shall be at the prevailing market rates or the rates charged to the contractor, excluding the element or storage charges or issue rates excluding the element of storage charges at the time of return, whichever is lower. The quantity of such surplus steel as is not acceptable to the Department may be disposed of by the contractor in any manner he likes and the cost thereof shall entirely be borne by the contractor. However in cases in which the materials issued to a contractor become surplus owing to change in the design of the work after materials were issued to the contractor, the materials should be taken back from the contractor at the same rates, at which they were supplied to him by Deptt. provided, the materials, at the time of taking over, were not actually needed and are serviceable.

The contractor shall construct shed as per direction of the Architect or Engineer in charge of the work for storing the materials issued to him by the Department and provide double locking arrangements, but of which one lock shall be with inch arge of Departmental person and materials shall be taken for use in presence of the Departmental person only. The contractor shall make his own arrangement for the safe custody of the materials which are supplied to him by the Department.

All steel issued under Schedule-A which remains surplus with the contractor after use in the work shall be returned to the Department.

Mild Steel/Tor Steel bars shall be issued to the contractor on actual weightment. However for the purpose of payment, the weight of steel bars used on the work shall be calculated on the basis of standard weight per unit length vide Table B 10:13 of standard specification Book 1972 Edition by B&C Deptt. Hence claims on account of difference in actual weight and calculated in the basis of standard weight per unit length shall not be entertained.

The charges for conveyance of materials from the place of delivery to the site of work and the actual spot on work site shall be entirely borne by the contractor. No claims on this account shall be entertained.

If surplus materials after completion of the work are not returned by the contractor, recovery of such materials at the penal rate of twice the issue rate of these materials shall be made from the contractor. Sales Tax and General Tax on the cost of surplus materials which are not returned, shall also be recovered by from the contractor as decided by the Architect or Engineer. However, it is clear that if any surplus material returned, is in unserviceable or damaged conditions, the same will not be accepted. In such case the cost will be recovered from the contractor as started above in the clause.

Empty asphalt drums will have to be returned to Deptt. In case of non return of empty asphalt drums, recovery at Rs.50.00 (Rs. Fifty only) per drum will be charged to the contractor.

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**Estimation of Proposed Construction of Boys Hostel for
Dayanand Science College of Dayanand Education Society, on Sy.
No. 58, Khadgaon, Latur. (Maharashtra)**

**General Abstract Sheet SCHEDULE 'B'
PWD SSR - 2021 - 22**

1	Boys' Hostel Construction Work	Amount In Rs.
	a) Ground Floor	8492052
	b) First Floor	6097115
2	Boys' Hostel Electrical Work	668440
	TOTAL	15257608

Boys' Hostel Construction Work (Abstract - I)

Estimation of Proposed Construction of Boys Hostel for Dayanand Science College Funded by
RUSA, Mumbai & Dayanand Education Society, Latur on Sy. No. 58, Khadgaon, Latur.(Maharashtra)

Abstract Sheet as per PWD - SSR 2021-2022

Ground Floor

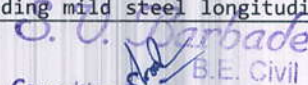
Sr. No.	Particulars	SSR Item No. & Page No.	Qty.	Rate	Unit	Amount
1	Excavation for foundation in hard murum including removing the excavated material upto adistance of 50 m. beyond the building area stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering (including and strutting) etc. Completed. (Lift upto 1.50 Meters)	SSR Item No. 21.06, Page No. 115	192.16	212.00	Cum	40737.92
2	Excavation for foundation in Soft rock and boulders including removing the excavated material upto adistance of 50 m. beyond the building area stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering (including and strutting) etc. Completed. (Lift upto 3.00 Meters)	SSR Item No. 21.14, Page No. 116	96.08	402.00	Cum	38624.16
3	Providing & Laying in situ cement concrete in 1:3:.6 of trap/granite/quartzite/gneiss metal for foundation and bedding including bailing out water , form work , compacting, finishing if required and curing etc. completed.(3.40 bag/cum)Spec. Bd. E.1 Page No. 287.	SSR Item No. 24.01, Page No. 131	21.08	5538.00	Cum	116741.04
4	Providing & Laying in situ cement concrete in M-20 of trap/ granite/quartzite/ geeiss metal for reinforced cement concrete work in foundation like raft, grillages, strip foundation and footings of reinforced cement concrete columns and steel stanchion including bailing out water, form work,	SSR Item No. 25.11, Page No. 133	106.92	6666.00	Cum	712728.72

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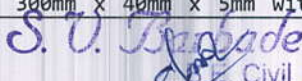
	compacting, finishing curing etc. completed.(Excluding steel reinforcement and structural steel) (7.60 bag/cum) Spec. No. : Bd. F. 3 Page No. 298.					
5	Providing & Costing in situ Cement concrete M-20 of trap/granite/ quartzite/ gneiss metal for reinforced cement concrete Columns as per detailed design and drawings or as directed including centering, form work, compacting finishing the formed surfaces with cement mortar 1:3 prop. of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. Completed.(Excluding reinforcement) (7.60 bag/cum) Spec. No. : Bd. F.5 Page No. 300. (Below Plinth Beam)	SSR Item No. 21.31, Page No. 134	13.78	12987.00	Cum.	178960.86
6	Excavation for foundation in hard murum including removing the excavated material upto a distance of 50 m. beyond the building area stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering (including and strutting) etc. Completed.(Lift upto 1.50 Meters) (Plinth Beam)	SSR Item No. 21.06, Page No. 115	31.30	212.00	Cum	6635.60
7	Providing & Costing in situ Cement concrete M-20 of trap/granite/ quartzite/ gneiss metal for reinforced cement concrete beams and Lintels as per detailed design and drawings including centering, form work, compacting roughening the surfaces with special finishing to be provided and curing etc. Completed.(Excluding reinforcement) (7.60 bag/cum) Spec. No. : Bd F. 3. Page No. 300. (Only Plinth Beam)	SSR Item No. 25.50, Page No. 135	27.19	11483.00	Cum.	312222.77
8	Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in foundation and plinth of inner walls / in plinth of external walls including bailing out water manually, striking joints on unexposed faces and watering complete. (Steps Only)	SSR Item No. 28.01, Page No. 146	26.41	4757.00	Cum.	125632.37
9	Filling in plinth & floor with approved excavated materials in 15 cm to 20 cm. Layers including watering and compaction etc. Completed. Spec. No. : Bd. A. 10 Page No. 262.	SSR Item No. 21.36, Page No. 117	87.00	113.00	Cum	9831.00
10	Filling in plinth and floors with contractors material/brought from outside and approved by Engineer incharge in layers of 15 cm to 20 cm including watering and compaction etc. complete	SSR Item No. 21.37, Page No. 117	201.00	550.00	Cum	110550.00
11	Providing second class Burnt Brick masonry with conventional / Indian Standard type bricks in cement mortar 1:6 in Foundation and Plinth including striking joints, raking out joints, watering and scaffolding complete. Spec. No. : Bd.G.5 Page No. 315	SSR Item No. 27.01, Page No. 144	18.23	7343.00	Cum.	133862.89
12	Providing & Laying in situ cement concrete in 1:3:.6 of trap/granite/quartzite/gneiss metal for foundation and bedding including bailing out water , form work , compacting, finishing if required	SSR Item No. 24.08, Page No.	45.30	5538.00	Cum	250871.40

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	and curing etc. completed.(3.40 bag/cum)Spec. Bd. E.1 Page No. 287.	131				
13	Providing & Costing in situ Cement concrete M-20 of trap/granite/ quartzite/ gneiss metal for reinforced cement concrete Columns as per detailed design and drawings or as directed including centering, form work, compacting finishing the formed surfaces with cement mortar 1:3 prop. of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. Completed.(Excluding reinforcement) (7.60 bag/cum) Spec. No. : Bd. F.5 Page No. 300. (Above Plinth Level to Fisrt Slab)	SSR Item No. 25.31, Page No. 134	26.25	12987.00	Cum.	340908.75
14	Providing & Costing in situ Cement concrete M-20 of trap/granite/ quartzite/ gneiss metal for reinforced cement concrete beams and intels as per detailed design and drawings including centering, form work, compacting roughening the surfaces with special finishing to be provided and curing etc. Completed.(Excluding reinforcement) (7.60 bag/cum) Spec. No. : Bd F. 3. Page No. 300. (Only First Slab)	SSR Item No. 25.50, Page No. 134	21.40	11483.00	Cum.	245736.20
15	Providing & Costing in situ Cement concrete M-20 of trap/granite/ quartzite/ gneiss metal for reinforced cement concrete Slab and Landing steps as per detailed design and drawings including centering, form work, compacting roughening the form surfaces if special finish is to be provided and curing etc. Completed.(Excluding reinforcement) (7.60 bag/cum) Spec. No. : Bd F. 8. Page No. 302. (First Slab)	SSR Item No. 25.70, Page No. 135	60.66	13943.00	Cum.	845782.38
16	Providing & Costing in situ Cement concrete M-20 of trap/granite/ quartzite/ gneiss metal for reinforced cement concrete Chajja as per detailed design and drawings including centering, form work, compacting roughening the surface if special finish is to be provided and curing etc. Completed.(Excluding reinforcement) (7.60 bag/cum) Spec. No. : Bd F. 9. Page No. 303.	SSR Item No. 26.05, Page No. 136	1.89	13111.00	Cum.	24779.79
17	Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C.pilecaps,footings,foundations,slabs,beams columns,capopies,staircase,newels,chajjas,lintels,sp ardis,copings,fins,arches etc.as per detailed designs, drawings and schedules.including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.	SSR Item No. 26.33, Page No. 139	16.85	71778.00	M.T.	1209459.30
18	Providing second class Burnt Brick masonry with conventional / Indian Standard type bricks in cement mortar 1:6 in superstructure including striking joints, raking out joints, watering and scaffolding complete. Spec. No. : Bd.G.5 Page No. 315	SSR Item No. 27.05, Page No. 144	87.52	7570.00	Cum.	662526.40
19	Providing second class Burnt Brick masonry with conventional / Indian Standard type bricks in cement mortar 1:4 in half brick thick wall including mild steel longitudinal reinforcement of	SSR Item No. 27.06, Page No.	80.46	1023.00	Sqm	82310.58


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	2 bars of 6 mm. diameter at every third course, properly bent and bounded at ends including scaffolding, raking out joints, watering complete. Spec. No. : Bd.G.7 Page No. 316	144				
20	Providing internal cement plaster 12 mm. thick in two coats in cement mortar 1:4 without neeru finish to to concrete, brick surface, in all positions including scaffolding and curing complete. Spec. :Bd.L .4 Page No. 368 (Only Ceiling)	SSR Item No. 32.04, Page No. 153	307.00	264.00	Sqm	81048.00
21	Providing internal cement plaster 20 mm. thick in two coats in cement mortar 1:4 without neeru finish to to concrete, brick surface, in all positions including scaffolding and curing complete. Spec. :Bd.L .4 Page No. 368	SSR Item No. 32.07, Page No. 153	1022.00	366.00	Sqm	374052.00
22	Providing sand faced plaster externally in cement mortar using khasalia/ kasaba or similar type of 15 mm. thick in cement mortar 1:4 using waterproofing compound at 1 Kg. per cement bag, curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 10 mm. thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc. complete. Spec. :Bd.L .7 Page No. 367	SSR Item No. 32.11, Page No. 153	303.09	599.00	Sqm.	181550.91
23	Providing and fixing in position (as per 1868 / 1982) Aluminium sliding window of three tracks with rectangular pipe 95 x 38.10 x 0.90 mm at weight 0.637 Kilogram / Running metre. with window frame bottom track section 92 x 31.75 x 1.30 mm at weight 1.070 Kilogram / Running metre . Top and side track section 92 x 31.75 x 1.30 mm at weight 0.933 Kilogram / Running metre. The shutter should be of bearing bottom 40 x 18 x1.25 mm at weight 0.417 Kilogram / Running metre. Inter locking section 40 x 18 x 1.10 mm at weight 0.469 Kilogram / Running metre. and handle and top section 40 x 18 x 1.25 mm at weight 0.417 Kilogram / Running metre. As per detailed drawings and as directed by Engineer incharge 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 and aluminium mosquito net shutter with stainless steel jail with all required screws and nuts etc., complete. With powder coating without box	SSR Item No. 39.43, Page No. 185	40.50	5157.00	Rgm	208858.50
24	Providing and fixing in position powder coated aluminium louvered windows / ventilator of various sizes with powder coating as per detailed drawing and specifications including aluminium frames 80 x 38 mm x 1.22 mm box type , 5 mm thick sheet glass louvers, of approved quality etc. complete.	SSR Item No. 39.68, Page No. 188	3.96	3107.00	Rgm	12303.72
25	Providing and fixing frame with / without ventilator of size as specified with Country cut teak wood for doors and windows including chamfering, rounding, rebating, iron holdfast of size 300mm x 40mm x 5mm with oil painting, etc.	SSR Item No. 39.01, Page No. 178	1.58	183164.00	Cum	289399.12


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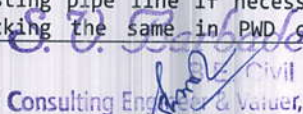
	complete					
26	Providing and fixing solid core flush door in single leaf 35 mm. thick, decorative types, of exterior grade, as per detailed drawing approved face 1.00 mm thick laminate on both face with/ without glazing and venetians in the positions shown on the drawings or as directed, all necessary beads, mouldings and lipping, aluminium Or Stainless Steel fixtures and fastening with brass mortise lock chromium plated handles on both sides and finishing with French polish/ waxing complete. (without door frame) Spec. No. : Bd.T. 34 Page No. 499	SSR Item No. 39.09, Page No. 179	49.14	2824.00	Sqm	138771.36
27	Providing and fixing mild steel grill work for windows, ventilators, etc. 15 Kilogram / Square Metre as per drawing including fixture necessary welding and painting with one coat of anticorrosive paint and two coats of oil painting complete.	SSR Item No. 40.02, Page No. 192	52.46	1507.00	Sqm	79057.22
28	Providing and laying vitrified mirror / glossy finish tiles decorative type having size 590 mm to 605 mm x 590 mm to 605 mm of 8 to 10 mm thickness and confirming to IS. 15622 - 2006 (group Bla) of approved make, shade and pattern for flooring in required position laid on a bed of 1 : 4 cement mortar including neat cement float, filling joints, curing and clearing etc. complete.	SSR Item No. 33.40, Page No. 159	349.65	1155.00	Sqm	403845.75
29	Providing and laying ceramic tiles having size 30 cm. x 60 cm. confirming to corresponding I.S. for dado and skirting in required position with readymade adhesive mortar of approved quality on plaster of 1:2 cement mortar including joint filling with white / colour cement slurry cleaning curing etc. complete.	SSR Item No. 33.27, Page No. 158	90.30	1270.00	Sqm	114681.00
30	Providing and laying matt finish ceramic tiles of having size 30 cm x 30 cm confirming to I.S. 15622 / 2006 (group DII -A) and 7 to 8 mm 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.	SSR Item No. 33.24, Page No. 158	19.92	1157.00	Sqm	23047.44
31	Providing and applying plastic emulsion paint of approved quality, colour and shade to new surface in three coats including scaffolding, preparing the surface. (Including primer coat) etc. complete.	SSR Item No. 36.11, Page No. 167	1329.67	70.00	Sqm	93076.90
32	Providing and applying two coats of exterior acrylic emulsion paint confirming to corresponding I.S. of approved manufacture and of approved colour to the plastered surfaces including cleaning, preparing the plaster surface, applying primer coat, scaffolding if necessary, and watering the surface for two days etc complete.	SSR Item No. 35.25, Page No. 165	303.09	240.00	Sqm.	72741.60
33	Providing and applying two coats of lead/ zinc base oil paint/ bituminous paint of approved colour to new structural steel work and iron work in building including preparing scaffolding if	SSR Item No. 35.04, Page No.	52.46	85.00	Sqm	4459.10


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	necessary cleaning and preparing the surface (excluding primer coat)complete. Spec. No. :Bd.O. 3 Page No. 404	164				
34	Providing and laying telephone black / Amba White / Cadbury brown / Ruby red / Ocean Brown granite stone of 18 to 20 mm thick for door 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.	SSR Item No. 33.68, Page No. 161	120.42	4354.00	Sqm	524308.68
35	Providing and fixing machine cut machine polished 18 mm to 20 mm thick telephone black / Amba White / Cadbury brown / RBI red / Ocean Brown granite stone for treads and risers of steps and staircases of approved colour and shade with full moulding and three grooved line for the treads on bed of 1:4 Cement mortar including float filling joints with neat cement slurry curing polishing and cleaning etc. complete.	SSR Item No. 33.35, Page No. 158	28.50	4136.00	Sqm	117876.00
36	Providing and fixing Orissa type colour glazed earthen ware 625 x 450 mm. w.c. pan including trap, C.I. soil and vent pipe up to the out side face of wall including 100 mm.dia. C.I. plug, bend, 15mm. thick 10 litre PVC flushing cistern with all necessary pipe connection etc. Complete.	SSR Item No. 42.35, Page No. 202	4.00	9229.00	No.	36916.00
37	Providing and fixing European type white glazed earthen ware water closet pan with UPVC seat and lid with chromium plated brass hinges and rubber buffers including UPVC and vent pipe up to the out side face of wall 10 litre enamelled low level flushing cistern with fittings pipe stop tap brackets for fixing cistern 32 mm dia. UPVC flush pipe with fittings and clamps, 20 mm dia. UPVC over flow pipe, mosquito proof couplings G.I. chain and pulley, with water Jet and fitting including cutting and making good to the wall sand floors testing etc. complete. (prior approval of sample and brand by Engineer is necessary before use)	SSR Item No. 43.19, Page No. 210	2.00	10753.00	No.	21506.00
38	Providing and fixing Coloured glazed with bottle trap earthenware Wash Hand Basin of 55 x 40 cm. size including cold water pillar taps, brackets, rubber plugs and brass chain, stop tap, chromium plate bottle trap and necessary pipe connections including UPAC waste pipe and trap up to the out side face of the wall, making good the damaged surface, testing etc. complete.	SSR Item No. 41.72, Page No. 199	5.00	4805.00	No.	24025.00
39	Providing and fixing 15 cm rigid PVC Nahani trap including PVC grating, bend, connecting piece of UPVC pipe up to the out side face of wall, making the good damaged surface and testing etc. complete (Prior approval of sample and brand by Engr.is necessary before use)	SSR Item No. 43.18, Page No. 210	11.00	533.00	No.	5863.00
40	Providing and fixing on walls / ceiling / floor 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.55, Page No. 204	35.00	246.00	Rgm	8610.00


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41	Providing and fixing on walls / ceiling / floor 20 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.56, Page No. 204	50.00	285.00	Rgm	14250.00
42	Providing and fixing on walls / ceiling / floor 25 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.57, Page No. 204	40.00	336.00	Rgm	13440.00
43	Providing and fixing on walls / ceiling / floor 32 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.58, Page No. 204	5.00	320.00	393	1600.00
44	Providing and fixing on walls / ceiling / floor 50 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.60, Page No. 204	10.00	683.00	Rgm	6830.00
45	Providing, laying and fixing P.V.C. pipe of 15 mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.21, Page No. 201	150.00	77.00	Rgm	11550.00
46	Providing, laying and fixing P.V.C. pipe of 20 mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.22, Page No. 201	50.00	115.00	Rgm	5750.00
47	Providing, laying and fixing P.V.C. pipe of 25 mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete	SSR Item No. 42.23 Page No. 201	40.00	145.00	Rgm	5800.00
48	Providing, laying and fixing P.V.C. pipe of 40 mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete	SSR Item No. 42.25, Page No. 202	30.00	281.00	Rgm	8430.00
49	Providing, laying and fixing P.V.C. pipe of 50 mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed	SSR Item No. 42.26, Page No. 202	25.00	417.00	Rgm	10425.00


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	etc. complete.					
50	Providing and fixing screw down 15 mm dia. wheeled stop tap of brass including necessary sockets/union nut complete	SSR Item No. 41.43, Page No. 197	6.00	468.00	No.	2808.00
51	Providing and fixing screw down for 20 mm dia. wheeled stop tap of brass including necessary sockets /union nut complete.	SSR Item No. 41.44, Page No. 197	5.00	605.00	No.	3025.00
52	Providing and fixing screw down for 25 mm dia. wheeled stop tap of brass including necessary sockets /union nut complete.	SSR Item No. 41.45, Page No. 197	2.00	785.00	No.	1570.00
53	Providing and fixing screw down for 50 mm dia. wheeled stop tap of brass including necessary sockets/ union nut complete.	SSR Item No. 41.48, Page No. 197	2.00	1798.00	No.	3596.00
54	Providing , laying and fixing ,jointing Eco- drain 110 mm SN 8 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees, coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete.	SSR Item No. 43.30, Page No. 211	40.00	333.00	Rgm	13320.00
55	Providing , laying and fixing ,jointing Eco- drain 160 mm SN 4 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees , coupler, etc, jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete	SSR Item No. 43.31, Page No. 211	19.00	522.00	Rgm	9918.00
56	Providing and fixing P.V.C. Rain water pipes of 110mm outer diameter and having wall thickness of 2.2 to 2.7 mm confirming to I.S. 13592-1992 including proper rainwater receiving recess with P.V.C. plug, bend, necessary fittings, such as, offsets, shoes, including fixing the pipe on wall using approved wooden cleats projecting 25mm to 40mm from face of wall a fixing with clips of approved quality and number ,filing the joint using rubber gasket with solvent cement and properly resting the shoe of pipes on C.C. or masonry blocks, including necessary scaffolding and maintenance for 3 yrs. for any leakages or dislocations of pipes. All the P.V.C. fittings and additional 2 piece socket clips shall be got approved from engineer in charge etc. complete	SSR Item No. 42.87, Page No. 207	20.00	502.00	Rgm	10040.00
57	Providing and fixing chromium plated towel rod 16 mm dia and 75 cm. in length including all accessories complete	SSR Item No. 42.31, Page No. 202	5.00	272.00	No.	1360.00
58	Providing and fixing 450 mm x 550 mm size superior type Belgium mirror with 16 mm dia. nickel plated	SSR Item No.	3.00	787.00	No.	2361.00


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	towel rod etc. complete.	42.20, Page No. 201				
59	Providing and constructing granite kitchen platform with fixing of stainless steel sink 600 mm x 450 mm size as per detailed drawing including vertical both side polished kadappah stone 25 to 30 mm thick supports with kadappah top 35 to 40 mm thick and polished granite 16 to 20 mm top with side strips of granite at front and both sides of platform raised with two vertical granite supports 15 cm height and top granite of 75 x 40 cm including cutting, opening for sink of required size in kadappah as well as granite etc. complete. (Platform top size 5.00 m x 0.60 m and height is 0.75 m)	SSR Item No. 41.78, Page No. 199	1.00	9675.00	No.	9675.00
60	Providing and fixing 15cm x 10cm salt glazed stoneware gully trap in cement concrete 1:4:8 outside the building including cast iron grating in the sink, connecting glazed stoneware pipe, brick masonry chamber with cast iron lid and cast iron grating for the gully trap.	SSR Item No. 42.02, Page No. 200	5.00	1374.00	No.	6870.00
61	Providing and constructing Brick Masonry Inspection Chamber 90cm x 45cm x 90cm including 1:4:8 cement concrete foundation 1:2:4 cement concrete channels half round G.S.W.pipes, Brick Masonry, plastering from inside and with frame fixed in cement concrete with R.C.C. Cover medium duty 140Kilogramwith frame etc complete	SSR Item No. 42.13, page No. 200	6.00	9330.00	No.	55980.00
62	Providing and fixing C.P. Angular stop cock with wall flange of approved make continental including necessary sockets/union nut etc. complete.	SSR Item No. 42.79, page No. 206	3.00	2671.00	No.	8013.00
63	Providing and fixing C.P. Two way BIB cock of approved make continental including necessary sockets/union nut etc. complete	SSR Item No. 42.80, page No. 206	3.00	1342.00	No.	4026.00
64	Providing and fixing C.P. pillar cock long neck with aerator of approved make including necessary sockets/union nut etc. complete.	SSR Item No. 42.82, page No. 206	6.00	1338.00	No.	8028.00
65	Providing and fixing C.P. BIB cock with wall flange of approved make including necessary sockets/ union nut etc. complete.	SSR Item No. 42.83, page No. 206	8.00	1061.00	No.	8488.00
Ground Floor Estimate Total Rs.						8492052.43

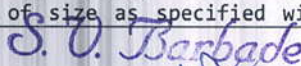
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Sr. No.	Particulars	SSR Item No. & Page No.	Qty.	Rate	Unit	Amount
1	Providing & Costing in situ Cement concrete M-20 of trap/granite/ quartzite/ gneiss metal for reinforced cement concrete Columns as per detailed design and drawings or as directed including centering, form work, compacting finishing the formed surfaces with cement mortar 1:3 prop. of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. Completed.(Excluding reinforcement) (7.60 bag/cum) Spec. No. : Bd. F.5 Page No. 300. (Above First Slab)	SSR Item No. 25.31, Page No. 134	26.25	12987.00	Cum.	340908.75
2	Providing & Costing in situ Cement concrete M-20 of trap/granite/ quartzite/ gneiss metal for reinforced cement concrete beams and lintels as per detailed design and drawings including centering, form work, compacting roughening the surfaces with special finishing to be provided and curing etc. Completed.(Excluding reinforcement) (7.60 bag/cum) Spec. No. : Bd F. 3. Page No. 300. (Only Second Slab)	SSR Item No. 25.50, Page No. 135	21.40	11483.00	Cum.	245736.20
3	Providing & Costing in situ Cement concrete M-20 of trap/granite/ quartzite/ gneiss metal for reinforced cement concrete Slab and Landing steps as per detailed design and drawings including centering, form work, compacting roughening the form surfaces if special finish is to be provided and curing etc. Completed.(Excluding reinforcement) (7.60 bag/cum) Spec. No. : Bd F. 8. Page No. 302. (First Slab)	SSR Item No. 25.70, Page No. 135	60.66	13943.00	Cum.	845782.38
4	Providing & Costing in situ Cement concrete M-20 of trap/granite/ quartzite/ gneiss metal for reinforced cement concrete Chajja as per detailed design and drawings including centering, form work, compacting roughening the surface if special finish is to be provided and curing etc. Completed.(Excluding reinforcement) (7.60 bag/cum) Spec. No. : Bd F. 9. Page No. 303.	SSR Item No. 26.05, Page No. 136	1.89	13111.00	Cum.	24779.79
5	Providing and fixing in position H.Y.S.D. bar reinforcement of various diameters for reinforced cement concrete pile caps, footing, foundations, slabs, beams, columns, canopies, stair case, newels, chajjas, lintels, pardis, copings, fins, arches etc.as per detailed designs, drawings and schedules including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete. Spec. No. : Bd.F.17 Page No. 306	SSR Item No. 26.33, Page No. 139	12.25	71778.00	M.T.	879280.50
6	Providing second class Burnt Brick masonry with conventional / Indian Standard type bricks in cement mortar 1:6 in superstructure including striking joints, raking out joints, watering and scaffolding complete. Spec. No. : Bd.G.5 Page No. 315	SSR Item No. 27.05, Page No. 144	87.52	7570.00	Cum.	662526.40
7	Providing second class Burnt Brick masonry with	SSR Item	80.46	1023.00	Sqm	82310.58

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	conventional / Indian Standard type bricks in cement mortar 1:4 in half brick thick wall including mild steel longitudinal reinforcement of 2 bars of 6 mm. diameter at every third course, properly bent and bounded at ends including scaffolding, raking out joints, watering complete. Spec. No. : Bd.G.7 Page No. 316	No. 27.06, Page No. 144				
8	Providing internal cement plaster 12 mm. thick in two coats in cement mortar 1:4 without neeru finish to concrete, brick surface, in all positions including scaffolding and curing complete. Spec. :Bd.L .4 Page No. 368 (Only Ceiling)	SSR Item No. 32.04, Page No. 153	307.00	264.00	Sqm	81048.00
9	Providing internal cement plaster 20 mm. thick in two coats in cement mortar 1:4 without neeru finish to concrete, brick surface, in all positions including scaffolding and curing complete. Spec. :Bd.L .4 Page No. 368	SSR Item No. 32.07, Page No. 153	1022.00	366.00	Sqm	374052.00
10	Providing sand faced plaster externally in cement mortar using khasalia/ kasaba or similar type of 15 mm. thick in cement mortar 1:4 using waterproofing compound at 1 Kg. per cement bag, curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 10 mm. thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc. complete. Spec. :Bd.L .7 Page No. 367	SSR Item No. 32.11, Page No. 153	303.09	599.00	Sqm.	181550.91
11	Providing and fixing in position (as per 1868 / 1982) Aluminium sliding window of three tracks with rectangular pipe 95 x 38.10 x 0.90 mm at weight 0.637 Kilogram / Running metre. with window frame bottom track section 92 x 31.75 x 1.30 mm at weight 1.070 Kilogram / Running metre . Top and side track section 92 x 31.75 x 1.30 mm at weight 0.933 Kilogram / Running metre. The shutter should be of bearing bottom 40 x 18 x1.25 mm at weight 0.417 Kilogram / Running metre. Inter locking section 40 x 18 x 1.10 mm at weight 0.469 Kilogram / Running metre. and handle and top section 40 x 18 x 1.25 mm at weight 0.417 Kilogram / Running metre. As per detailed drawings and as directed by Engineer incharge 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 and aluminium mosquito net shutter with stainless steel jail with all required screws and nuts etc., complete. With powder coating without box	SSR Item No. 39.43, Page No. 185	40.50	5157.00	Rgm	208858.50
12	Providing and fixing in position powder coated aluminium louvered windows / ventilator of various sizes with powder coating as per detailed drawing and specifications including aluminium frames 80 x 38 mm x 1.22 mm box type , 5 mm thick sheet glass louvers, of approved quality etc. complete.	SSR Item No. 39.68, Page No. 2188	3.96	3107.00	Rgm	12303.72
13	Providing and fixing frame with / without ventilator of size as specified with Country cut	SSR Item No.	1.58	183164.00	Cum	289399.12


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	teak wood for doors and windows including chamfering, rounding, rebating, iron holdfast of size 300mm x 40mm x 5mm with oil painting, etc. complete	39.01, Page No. 178				
14	Providing and fixing solid core flush door in single leaf 35 mm. thick, decorative types, of exterior grade, as per detailed drawing approved face 1.00 mm thick laminate on both face with/without glazing and venetians in the positions shown on the drawings or as directed, all necessary beads, mouldings and lipping, aluminium Or Stainless Steel fixtures and fastening with brass mortise lock chromium plated handles on both sides and finishing with French polish/ waxing complete. (without door frame) Spec. No. : Bd.T. 34 Page No. 499	SSR Item No. 39.09, Page No. 179	49.14	2824.00	Sqm	138771.36
15	Providing and fixing mild steel grill work for windows, ventilators, etc. 15 Kilogram / Square Metre as per drawing including fixture necessary welding and painting with one coat of anticorrosive paint and two coats of oil painting complete.	SSR Item No. 40.02, Page No. 192	52.46	1507.00	Sqm	79057.22
16	Providing and laying vitrified mirror / glossy finish tiles decorative type having size 590 mm to 605 mm x 590 mm to 605 mm of 8 to 10 mm thickness and confirming to IS. 15622 - 2006 (group Bla) of approved make, shade and pattern for flooring in required position laid on a bed of 1 : 4 cement mortar including neat cement float, filling joints, curing and clearing etc. complete.	SSR Item No. 33.40, Page No. 158	349.65	1155.00	Sqm	403845.75
17	Providing and laying ceramic tiles having size 30 cm. x 60 cm. confirming to corresponding I.S. for dado and skirting in required position with readymade adhesive mortar of approved quality on plaster of 1:2 cement mortar including joint filling with white / colour cement slurry cleaning curing etc. complete.	SSR Item No. 33.27, Page No. 158	90.30	1270.00	Sqm	114681.00
18	Providing and laying matt finish ceramic tiles of having size 30 cm x 30 cm confirming to I.S. 15622 / 2006 (group DII -A) and 7 to 8 mm 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.	SSR Item No. 33.24, Page No. 158	19.92	1157.00	Sqm	23047.44
19	Providing and applying plastic emulsion paint of approved quality, colour and shade to new surface in three coats including scaffolding, preparing the surface. (Including primer coat) etc. complete.	SSR Item No. 36.11, Page No. 167	1329.6 7	70.00	Sqm	93076.90
20	Providing and applying two coats of exterior acrylic emulsion paint confirming to corresponding I.S. of approved manufacture and of approved colour to the plastered surfaces including cleaning, preparing the plaster surface, applying primer coat, scaffolding if necessary, and watering the surface for two days etc complete.	SSR Item No. 35.25, Page No. 165	303.09	240.00	Sqm.	72741.60
21	Providing and applying two coats of lead/ zinc	SSR Item	52.46	85.00	Sqm	4459.10

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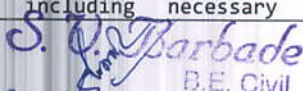
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	base oil paint/ bituminous paint of approved colour to new structural steel work and iron work in building including preparing scaffolding if necessary cleaning and preparing the surface (excluding primer coat)complete. Spec. No. :Bd.O. 3 Page No. 404	No. 35.04, Page No. 164				
22	Providing and laying telephone black / Amba White / Cadbury brown / Ruby red / Ocean Brown granite stone of 18 to 20 mm thick for door 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.	SSR Item No. 33.68, Page No. 161	120.42	4354.00	Sqm	524308.68
23	Providing and fixing machine cut machine polished 18 mm to 20 mm thick telephone black / Amba White / Cadbury brown / RBI red / Ocean Brown granite stone for treads and risers of steps and staircases of approved colour and shade with full moulding and three grooved line for the treads on bed of 1:4 Cement mortar including float filling joints with neat cement slurry curing polishing and cleaning etc. complete.	SSR Item No. 33.35, Page No. 158	24.45	4136.00	Sqm	101125.20
24	Providing and fixing Orissa type colour glazed earthen ware 625 x 450 mm. w.c. pan including trap, C.I. soil and vent pipe up to the out side face of wall including 100 mm.dia. C.I. plug, bend, 15mm. thick 10 litre PVC flushing cistern with all necessary pipe connection etc. Complete.	SSR Item No. 42.35, Page No. 202	4.00	9229.00	No.	36916.00
25	Providing and fixing European type white glazed earthen ware water closet pan with UPVC seat and lid with chromium plated brass hinges and rubber buffers including UPVC and vent pipe up to the out side face of wall 10 litre enamelled low level flushing cistern with fittings pipe stop tap brackets for fixing cistern 32 mm dia. UPVC flush pipe with fittings and clamps, 20 mm dia. UPVC over flow pipe, mosquito proof couplings G.I. chain and pulley, with water Jet and fitting including cutting and making good to the wall sand floors testing etc. complete. (prior approval of sample and brand by Engineer is necessary before use)	SSR Item No. 43.19, Page No. 210	1.00	10753.00	No.	10753.00
26	Providing and fixing Coloured glazed with bottle trap earthenware Wash Hand Basin of 55 x 40 cm. size including cold water pillar taps, brackets, rubber plugs and brass chain, stop tap, chromium plate bottle trap and necessary pipe connections including UPAC waste pipe and trap up to the out side face of the wall, making good the damaged surface, testing etc. complete.	SSR Item No. 41.72, Page No. 199	4.00	4805.00	No.	19220.00
27	Providing and fixing 15 cm rigid PVC Nahani trap including PVC grating, bend, connecting piece of UPVC pipe up to the out side face of wall, making the good damaged surface and testing etc. complete (Prior approval of sample and brand by Engr.is necessary before use)	SSR Item No. 43.18, Page No. 210	10.00	533.00	No.	5330.00
28	Providing and fixing on walls / ceiling / floor 15 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc.	SSR Item No. 42.55,	35.00	246.00	Rgm	8610.00

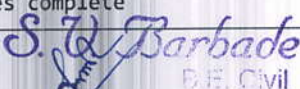
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	complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Page No. 204				
29	Providing and fixing on walls / ceiling / floor 20 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.56, Page No. 204	50.00	285.00	Rgm	14250.00
30	Providing and fixing on walls / ceiling / floor 25 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.57, Page No. 204	40.00	336.00	Rgm	13440.00
31	Providing and fixing on walls / ceiling / floor 32 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.58, Page No. 204	5.00	393.00	Rgm	1965.00
32	Providing and fixing on walls / ceiling / floor 50 mm dia. CPVC pipe with necessary fittings, remaking good the demolished portion etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.60, Page No. 204	10.00	683.00	Rgm	6830.00
33	Providing, laying and fixing P.V.C. pipe of 15 mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.21, Page No. 201	150.00	77.00	Rgm	11550.00
34	Providing, laying and fixing P.V.C. pipe of 20 mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.22, Page No. 201	50.00	115.00	Rgm	5750.00
35	Providing, laying and fixing P.V.C. pipe of 25 mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.23 Page No. 201	40.00	145.00	Rgm	5800.00
36	Providing, laying and fixing P.V.C. pipe of 40 mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation, trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	SSR Item No. 42.25, Page No. 202	30.00	281.00	Rgm	8430.00
37	Providing, laying and fixing P.V.C. pipe of 50 mm dia. with fittings such as bends, tees, reducers, clamps, etc. including necessary excavation,	SSR Item No. 42.26,	25.00	417.00	Rgm	10425.00


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	trench filling etc. complete. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Page No. 202				
38	Providing and fixing screw down 15 mm dia. wheeled stop tap of brass including necessary sockets/union nut complete	SSR Item No. 41.43, Page No. 197	6.00	468.00	No.	2808.00
39	Providing and fixing screw down for 20 mm dia. wheeled stop tap of brass including necessary sockets /union nut complete.	SSR Item No. 41.44, Page No. 197	5.00	605.00	No.	3025.00
40	Providing and fixing screw down for 25 mm dia. wheeled stop tap of brass including necessary sockets /union nut complete.	SSR Item No. 41.45, Page No. 197	2.00	785.00	No.	1570.00
41	Providing and fixing screw down for 50 mm dia. wheeled stop tap of brass including necessary sockets/ union nut complete.	SSR Item No. 41.48, Page No. 197	2.00	1798.00	No.	3596.00
42	Providing , laying and fixing ,jointing Eco- drain 110 mm SN 8 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees, coupler, etc., jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete.	SSR Item No. 43.30, Page No. 211	45.00	333.00	Rgm	14985.00
43	Providing , laying and fixing ,jointing Eco- drain 160 mm SN 4 Nu- Drain Upvc pipes or of equivalent make, manufacture as per EN 13476 or equivalent as per I.S.15328 with fittings such a bends, tees , coupler, etc., jointing with rubber lubricant including necessary excavation, trench refilling with selective excavated material etc. complete	SSR Item No. 43.31, Page No. 211	19.00	522.00	Rgm	9918.00
44	Providing and fixing P.V.C. Rain water pipes of 110mm outer diameter and having wall thickness of 2.2 to 2.7 mm confirming to I.S. 13592-1992 including proper rainwater receiving recess with P.V.C. plug, bend, necessary fittings, such as, offsets, shoes, including fixing the pipe on wall using approved wooden cleats projecting 25mm to 40mm from face of wall a fixing with clips of approved quality and number ,filing the joint using rubber gasket with solvent cement and properly resting the shoe of pipes on C.C. or masonry blocks, including necessary scaffolding and maintenance for 3 yrs. for any leakages or dislocations of pipes. All the P.V.C. fittings and additional 2 piece socket clips shall be got approved from engineer in charge etc. complete	SSR Item No. 42.87, Page No. 207	20.00	502.00	Rgm	10040.00
45	Providing and fixing chromium plated towel rod 16 mm dia and 75 cm. in length including all accessories complete	SSR Item No. 42.31, Page No.	5.00	272.00	No.	1360.00


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46	Providing and fixing 450 mm x 550 mm size superior type Belgium mirror with 16 mm dia. nickel plated towel rod etc. complete.	SSR Item No. 42.20, Page No. 201	5.00	787.00	No.	3935.00
47	Providing and fixing C.P. Angular stop clock with wall flange of approved make continental including necessary sockets/union nut etc. complete.	SSR Item No. 42.79, page No. 206	3.00	2671.00	No.	8013.00
48	Providing and fixing C.P. Two way BIB cock of approved make continental including necessary sockets/union nut etc. complete	SSR Item No. 42.80, page No. 206	4.00	1342.00	No.	5368.00
49	Providing and fixing C.P. pillar cock long neck with aerator of approved make including necessary sockets/union nut etc. complete.	SSR Item No. 42.82, page No. 206	6.00	13338.00	No.	80028.00
50	Providing and fixing C.P. BIB cock with wall flange of approved make including necessary sockets/ union nut etc. complete.	SSR Item No. 42.83, page No. 206	9.00	1061.00	No.	9549.00
First Floor Estimate Total Rs.						6097115.10

Ground Floor Estimate Total Rs.	8492052
First Floor Estimate Total Rs.	6097115
Grand Total	14589168

Boys' Hostel Electrification Work (Abstract - II)

Name of Work : Providing E. I. in Boy's Hostel for Danayand Science College At. Barshi Road, Latur

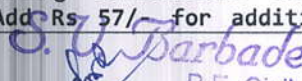
ESTIMATE

(DSR Year - 2021-2022)

Sr. No.	Description of Itmes	Rate	Qty.	Unit	Amount
1	Supplying and erecting UPVC reinforced flexible conduit 25 mm in dia. conforming to I.S. with required number of couplings, PVC bushes, check nuts etc. complete.(1-2-2)	90.00	12	Mtr.	1,080.00
2	Supplying and erecting PVC trunking (PVC casing-n-capping) of size 32 mm with accessories on wall/ceiling as per	45.00	765	Mtr.	34,425.00

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	specification No: WG-MA/CON. (1-2-11)				
3	Supplying and erecting PVC trunking (PVC casing-n-capping) of size 40 mm with accessories on wall/ceiling as per specification No: WG-MA/CON. (1-2-12)	68.00	70	Mtr.	4,760.00
4	Supplying & erecting mains with 1x1.5 sq.mm F.R copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG-MA/BW (1-3-1)	19.00	1094	m	20,786.00
5	Supplying & erecting mains with 2x1.5 sq.mm F.R copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG-MA/BW (1-3-1)	38.00	492	m	18,696.00
6	Supplying & erecting mains with 2x2.5 sq.mm F.R copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places. as per specification No: WG-MA/BW (1-3-3)	57.00	602	m	34,314.00
7	Supplying & erecting mains with 2x4 sq.mm F.R copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places. as per specification No: WG-MA/BW (1-3-5)	78.00	78	m	6,084.00
8	Supplying & erecting mains with 2x10 sq.mm F.R copper PVC insulated wire laid in provided conduit/trunking/inside pole/Bus bars or any other places as per specification No: WG-MA/BW (1-3-9)	180.00	78	m	14,040.00
9	Supplying and erecting ISI mark modular type switch 6A / 10A duly erected on provided plate and box with wiring connections complete. (1-8-1)	70.00	129	Each	9,030.00
10	Supplying and erecting ISI mark modular type switch 16A duly erected on provided plate and box with wiring connections complete. (1-8-2)	94.00	43	Each	4,042.00
11	Supplying and erecting ISI mark modular type 3 pin 6A multi sockets with safety shutter, duly erected on provided plate and box with wiring connections complete. (1-8-10)	113.00	129	Each	14,577.00
12	Supplying and erecting ISI mark modular type 3 pin 6 / 16A multi socket with safety shutter, duly erected on provided plate and box with wiring connections complete. (1-8-11)	166.00	43	Each	7,138.00
13	Supplying and erecting ISI mark modular type (two module) electronic step regulator for fan, duly erected on provided plate and box with wiring connections complete. (1-8-23) Note: Add Rs 57/- for additional two module	368.00	42	Each	15,456.00


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	box with double mounting plate if required. (1-8-23)				
14	Supplying and erecting ISI mark modular type blanking plate one module, duly erected on provided plate & box. (1-8-24)	19.00	36	Each	684.00
15	Supplying and erecting ISI mark modular type indicator lamp, duly erected on provided plate and box with wiring connections complete. (1-8-12)	64.00	43	Each	2,752.00
16	Wiring for plug on board with Switch socket, copper wiring and earthing as per specification No: WG-PW/SW (1-9-13)	102.00	41	Point	4,182.00
17	Point wiring in PVC trunking (casing-capping) with 1.5 sq.mm (2+1E) FR grade copper wire, modular type switch, earthing and required accessories as per specification No: WG-PW/SW (1-9-25)	464.00	189	Point	87,696.00
18	Supplying and erecting CRCA /die-cast aluminium powder coated housing LED panel light (slim edge-lit) square / round shape suitable for 19 to 24 W with provision for plane front frame with translucent cover fixed to the housing complete. (2-1-9)	1672.00	15	Each	25,080.00
19	Supplying & erecting LED 20W tube light fitting (4 feet) with aluminium housing, heat sink, integrated HF electronic driver complete. (2-1-23)	926.00	79	Each	73,154.00
20	Supplying and erecting bulkhead fitting suitable for upto LED upto 12W fixed on wall. As per specification no. FG-IDF/BHF (2-2-5)	235.00	21	Each	4,935.00
21	Supplying and erecting ding dong / electronic musical type call bell with heavy duty coil suitable to operate on 230V A.C. supply erected on polished double wooden block/sunmica block of suitable size (2-4-13)	131.00	17	Each	2,227.00
22	Supplying and erecting LED street light fitting suitable for above 75W - 90W lamp, including lamp, with PF > 0.95 class IP 65 and above housing of pressure die cast aluminium alloy and heat sink extruded aluminium complete per specification No. FG-ODF/FLS2. (2-5-7)	7487.00	8	Each	59,896.00
23	Supplying and erecting street light Wall bracket made from 40 mm. dia 'B' class G.I. pipe 1.2 m in total length complete as per specification no. FG-BKT/WB (2-9-4)	712.00	8	Each	5,696.00
24	Supplying & erecting 5W-7W, 230V integral type LED Lamp suitable for B-22/E-27 base. (2-10-10)	140.00	15	Each	2,100.00

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25	Supplying & erecting 10-12W, 230V integral type LED Lamp suitable for B-22/E-27 base. (2-10-11)	230.00	21	Each	4,830.00
26	Supplying and erecting exhaust fan medium duty 230 V A.C. 50 cycles 225 mm. 1400 RPM with condenser complete erected in position with necessary materials. Fan motor with moisture proof treatment and 'E' class insulation. (2-12-15)	1718.00	9	Each	15,462.00
27	Supplying and erecting five star rated energy saving Ceiling fan 230 V A.C. 50 cycles 1200 mm complete erected in position as per specification no. FG-FN/CF (2-12-21)	2042.00	42	Each	85,764.00
28	Supplying & fixing anchor type fastener fan hook, with 2 nos. of 10 mm dia x 75 mm long with necessary materials for ceiling fan. (2-13-2)	99.00	42	Each	4,158.00
29	Providing recess in brick wall suitable for erection of exhaust fan up to 450mm. sweep complete with grouting of nut, bolts, plastering and colour washing to match the colour of the wall for the wall thickness of 225 mm. (2-13-11)	370.00	9	Each	3,330.00
30	Supplying & erecting 22 SWG G.I sheet metal cawl sector shaped with 25 x 25 x 3 (mm) angle iron frame, metal mesh to avoid birds entry with necessary material, suitable for exhaust fan of 300 mm as per specification no FG-FAS/MSC (2-13-14)	1012.00	9	Each	9,108.00
31	Supplying, erecting & marking SPMCB 6A to 32A, C-series (for motor/power) in provided distribution board as per specification no. SW-SWR/MCB (5-3-2)	165.00	30	Each	4,950.00
32	Supplying, erecting & marking SPMCB 6A to 32A, B- series (for lighting) in provided distribution board as per specification no. SW-SWR/MCB (5-3-3)	164.00	30	Each	4,920.00
33	Supplying, erecting & marking DPMCB 40A to 63A, B- series (for lighting) in provided distribution board as per specification no. SW-SWR/MCB (5-3-9)	622.00	16	Each	9,952.00
34	Supplying, erecting & marking TPMCB 40A to 63A in provided distribution board as per specification no. SW-SWR/MCB (5-3-15)	977.00	8	Each	7,816.00
35	Supplying, erecting & marking FPMCB 40A to 63A in provided distribution board as per specification no. SW-SWR/MCB (5-3-17)	1298.00	4	Each	5,192.00
36	Supplying & erecting triple pole and neutral distribution board (TPNDB) with door surface/ flush mounted SPMCB of 12 poles, on iron /GI frame (horizontal busbar type) as per specification no. SW-SWR/MCBDB (5-4-7)	2163.00	4	Each	8,652.00

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37	MCB Enclosures (5.4.23) Supplying & erecting CRCA sheet metal one way enclosures suitable for DP MCB /TP MCB /FP MCB erected on angle iron/GI frame complete.	361.00	16	Each	5,776.00
38	Supplying & erecting triple pole and neutral distribution board (TPNDB) with door surface/ flush mounted suitable for 3 pole MCCB as incomer & outgoing SP MCB (12 poles) or TP MCB of 4 ways (12 poles) on iron/ GI frame. (vertical busbar type) as per specification no. SW-SWR/MCBDB1 (5-4-25)	5890.00	1	Each	5,890.00
39	Supplying & erecting triple pole and neutral distribution board (TPNDB) with door surface/ flush mounted suitable for 3 pole MCCB as incomer & outgoing SP MCB (24 poles) or TP MCB of 8 ways (24 poles) , on iron/ GI frame. (vertical busbar type) as per specification no. SW-SWR/MCBDB1 (5-4-26)	6982.00	1	Each	6,982.00
40	MCCB 03 Pole (5.5.1) Providing & erecting 3 Pole MCCB upto 100A, 415V, with short circuit rating 25 kA (Ics=100% of Icu),adjustable thermal (overload) setting and fixed magnetic setting with provided leads, provision for installation of shunt/ UV/ trip alarm contact and MCCB should have phase barriers both sides, in provided enclosure on iron /GI frame as per specification no. SW-SWR/MCCB	4771.00	2	Each	9,542.00
41	Supplying, erecting & terminating XLPE armoured cable 4 core 25 sq. mm. aluminium conductor with continuous 5.48 sq. mm. (12 SWG) G.I. earth wire complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL (7-1-30)	236.00	18	m	4,248.00
42	Plate Earthing (9.1.1) Providing earthing with galvanized iron earth plate size 60 x 60 x 0.6 cm complete with all materials, testing & recording the results as per specification no. EA-EP	4238.00	4	Each	16,952.00
43	Supplying and erecting GI earth wire of high purity of different sizes used for earthing or any other purposes on wall with necessary G. I. Clamps fixed on wall/cable/ conduit with screws in an approved manner. (9-2-5)	149.00	14	Kg.	2,086.00
Total Rs.					668,440.00

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DETAILED SPECIFICATION OF VARIOUS WORKS.

NOTE : (1) Concrete, Steel, Paints etc. shall confirm to the I.S.I. except otherwise specified, The mode of measurement shall generally follow IS-1200 (Revised) along with other applicable parts except otherwise specified.

SECTION - A

EXCAVATION IN SOFT STRATA & HARD STRATA

The excavation shall be carefully done to the levels, shapes and dimensions as shown in figures on the Drawings or as required by the Architect to receive bed concrete should any of the excavation be taken down below the proper levels the contractor shall fill in such excavation if so instructed by Architect at his own expenses with M-100 concrete, well rammed in position until it is brought upto the proper level. Filling in with excavated material will not be allowed for this purpose, however the Architect's design shall be final in such cases.

If the foundation pits and trenches are made broader or longer than that shown on drawings the extra breadth and length shall be filled in with earth, rammed hard after the foundation are built. The contractor shall at his own expense and without extra charge, make provision for all shorting, strutting, pumping, dredging or bailing out water. The foundations shall be kept free from water while the work is in progress. The contractor shall also remove such portions of boulders or rock, as are required to make the bottom of the foundations horizontal and level. The foundations shall be inspected and passed by the Architect before any filling work is commenced.

The excavated useful stuff shall be used for filling up the sides of the foundations and between the plinth walls in layers not exceeding 23 cm., properly rammed and watered. All surplus earth left over shall be either spread or deposited on the site as required by the Architect or shall be carted away at places directed by the Architect. However, contractor would be paid for this work as per the Tender Rate.

MODE OF MEASUREMENT AND PAYMENT

The measurements of work shall be exact length, width and depth of the foundations according to and as shown on the Drawings of the Architect and the depth shall be measured vertically. It shall be paid per Cubic Metre, and the work shall be measured as per Drawings only. Any excavation shall include labour for excavation, spreading or stacking the excavated stuff within a radius of 15 Mtr on site of work. No extra shall be allowed for planking and strutting or shorting of sides of excavation provided for preventing the sides from sliding.

EXCAVATION IN ROCK

Cutting in rock shall be done either by blasting or chiseling, as directed, to the required widths, depths and lengths. As far as possible the beds should be made in level.

MODE OF MEASUREMENT

Rock excavation shall be measured by working out levels before and after excavation, measured from a permanent Bench Mark. The rates shall be per Cubic Metre. In case of small work of rock excavation the measurements of excavated rock shall be made with stacks which shall be made with the soils without leaving any voids and the rate shall be per Unit of one Cubic Metre. All excavation shall be done as per Drawings and to the required width, breadth and depth. A deduction of

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20% shall be made in measurements for voids if work is measured by stack measurements. The spils of rock excavation will be the property of the Employer. Contractor has to obtain necessary permission in writing for blasting from the concerned Govt. Authorities/ parties if required, before commencement of blasting work and during execution. However, Employer may make use of the good offices in giving necessary assistance to contractor in obtaining such permission, if so desired by the contractor. Contractor has to pay all the necessary fees for obtaining such permission for blasting.

SECTION - B

Note : Wastage : The contractor shall allow in his rates for all wastages in all materials, used or to be used for this work by him.

STONE

Stone for rubble masonry shall be the best of its kind, sharp angles and free from flakes, of quality approved by the Architect. Stone for cut stone work or masonry work shall be the best of its kind, sound, durable, free from flows, cracks, veins, crystals, minerals, salt, cavities or other defects and it shall be of uniform texture. No earthly discoloured or weathered or water born stones shall be used. All stones shall be laid on their natural beds and properly bounded in te work. It shall be from a quarry approved by the Architects. Stones should conform to relevant I.S. specifications.

SAND

Sand to be used to concreting shall be clean and of approved quality and from approved places by Architect, free from salt, dust or other impurities. It shall be washed with clean water, if required, before use. Screened sand shall be used for plaster and masonry work. Sand should conform to I. S. specifications. No extra chares shall be paid for washing or screening or wastage of sand.

METAL

Metal for concrete in foundation work shall not be larger than 40 mm. gauge or smaller than 25 mm. and should be free from all dust or earthy substances and of stone approved by the Architects. Flat stone chippings shall be rejected. Meta for R.C.C. work No.1 may be 6 mm. to 12 mm. and No.2 may be 12 mm. to 20 mm. size (Coarse aggregate in R.C.C.) The larger aggregate (No.2) shall pass through 25 mm dia meter mesh but not through 12 mm. dia mesh. The smaller aggregate (No.1) shall pass through 12 mm. dia mesh but not through 5 mm. dia mesh. Metal No.3 for plains cement concrete may be 40 mm. to 25 mm. and shall pass through 40 mm. dia mesh but not through 25 mm. dia mesh. The crushing strength of the metal shall be as per I.S. specifications. All metal shall be as per I.S. specifications. All metal shall be of approved quality by the Architect.

NEERU

Neeru shall be made cut of the best quality materials. The lime shall be reduced to fine powder by grinding in a mortar mill with 160 turns. The neeru shall be kept moist until used and no more than that can be consumed in a week shall be prepared at a time. Before using the neeru, it should be prepared at a time. Before using the neeru, it should be tested to see that there are no unslaked particles,

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and it should be got approved from the Architect. 'Sagol' if it is of quality approved by the Architects shall be used in place of neeru. Neeru shall be sieved with fine saive before mixing with water.

LIME

The best quality of hydraulic lime from a locality approved y the Architects, properly burnt, shall be slaked with fresh water on the site and used on works. The lime shall be free from unburnt kankar, ashes and other impurities including salt. Lime should conform to I.S. specifications.

BRICKS

Bricks shall be well burnt of a quality approved y the Architects, free from lumps or grit, well burnt, sound, hard and with sharp edges and shall give a ringing sound when struck with a mellet. They should be of uniform size. No brick after 24 hours immersion in water shall absorb water more than 15% of its weight. The size of bricks shall be as per standard practices and approved by the Architects. The bricks should conform to I.S. specifications.

TIMBER

Timber shall be of best quality teak wood or as specified in the schedule of quantities, of the best descriptions, perfectly dry, well seasoned, free from sap wood, sound, straight, free from large and loose knots, cracks, shakes and other defects and any appearance of rot. It shall be of a quality approved by the Architects. Ply wood shall be of standard make and approved by the Architects.

MILD STEEL, TOR STEEL, STRUCTURAL STEEL ETC.

All steel work shall comply with the Indian Standard specifications for structural steel as well as that for reinforcement. The surfaces shall be free from rust. All steel shall be tested and hall be of Tata's or other equivalent manufacturers and approved by Architects. All steel should conform with the latest IS-226 and IS-432 as applicable. All steel shall be tested in Laboratory before putting it in use and test results shall be submitted to the Architect for approval. If test results are not upto the standard, then Architects may reject the steel. Reinforcing bars and rods 6 mm. or higher in dia meter, shall be supplied by the Employer if possible and the rates and place of delivery metioned in Schedule-A of the Tender documents.

The Bars and Rods shall be supplied according to the available lengths and the supply shall be at the rate stipulated in Schedule-A of the Tender documents. The contractor shall place firm indents of his monthly requirements not less than three months in advance. The contractor shall be responsible for all consequences that may arise of his failure to comply with these requirements of the procedure that may be laid therefore.

The contractor shall make suitable arrangements for storage of steel supplied by the Employer. The Employer's representative shall have the authority at all times to inspect the storage arrangements and to suggest modifications and improvements if any, and the contractor shall comply with the same.

The storing arrangement shall be such as to afford convenience of the inspection and check of materials, Bars of the same size, lengths, shape and grade shall be assembled in stack and marked distinctly.

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The contractor shall at all times maintain proper records showing the basis of indents, the receipts and the utilization of the steel supplied by the Employer and these shall at all times be open for inspection by the Architects. The steel bars shall be issued on the basis of weight of steel. The weight shall be arrived at the measuring the lengths of the bars and multiplying by same by the standard weights as per until length given in the Table below, for any other sizes not included in the Table, standard weights as per the manufacturers catalogue shall be used. The lengths shall be measured to the nearest ten cms. Any fractions of less than 5 cms. Being neglect and fractions of 5 cms. or above taken as 10 cms.

T A B L E
Sections rolled in Metric System

Bars of diameter In mms.	Weight in Kg. per Running Metre
6	0.22
10	0.62
12	0.89
16	1.58
20	2.47
22	3.00
25	3.87
28	4.8
32	6.8
36	8.0
40	9.9

GLAZING

Unless otherwise specified the glazing shall be parent, flattened sheet glass of India Make of the best quality, plain or ground. It shall weight 7.5 Kg/M2 (24 ozs per Sq.Ft.) upto a size of 60 cm. x 60 cm. and above that size 10 kg/M2 (32 ozs. Per Sq.Ft.). In case of non actinic glass it shall be of Pilkington (India) make of thickness not less than 3 mm. Glazing shall be of quality approved by the Architects.

PAINTS

Base : These shall be of the best white lead, red lead, zinc white proxide of iron of best approved make.

Varnishes : The oil shall be double boiled linseed oil and shall appear, when filled in a glass tube, pale and clear liquid. It shall taste sweet with very little odour and shall dry quickly and firmly. It shall be of Godrej, Blundell and Spence or of other quality approved by the Architects.

Solvents shall be spirits of turpentine.

Pigments : These shall be of selected tints and approved make, Paints should conform to I.S. specifications.

MARBLE MOSAIC TILES (MM TILES)

The Tiles shall be of 250 mm x 250 mm size with a thickness ranging from about 22 mm to 25 mm. The chips incorporated, in the coloured cement must be marble chips, but before they are so incorporated they must be washed free of all dust. The size of the chips shall vary from 6 mm to 3 mm. The top layer of the marble mosaic

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tile must not be less than 6 mm thick. It must be made compact to vibrating each tile before pressure is applied to the tile. Tile sand cement mix shall be in the proportion of the one part of cement to three part of sand. The mix must be made in a mixing machine. The wetting process during the mix must be through in order to ensure maximum strength. The minimum time for curing is 7 days. The colour must be permanent and fast to the action of alkali, light and weather. It should be chemically inert and must the colour contain any adulterant likely to cause such actions. Lead and zinc compounds shall not be used. Pigments containing more than 2.5% water soluble matter, carbon pigments and mineral blacks particularly of the ground coal type shall not be used. The Architects reserve the right to inspect the Tiles in Factory if they so desire. Tiles shall be of quality approved by the Architect.

FOR MARBLE TERRAZO TILES

Except for size of Marble Chips which in this case shall be 12 mm to 6 m. these Tiles shall be like Mosaic Tiles.

SECTION - C CEMENT CONCRETE AND MORTAR LIME MORTAR

Mortar shall be composed of one part of lime and two parts of sand, measured in wooden boxes. Lime and sand shall conform to relevant specifications given in section (B). The mortar shall be ground in a mechanical mortar mill with 200 turns. The mortar shall be kept moist and protected from sun, rain and dust. Mortar of more than 7 days old shall not be used and before use the mortar shall be matured for 24 hours. Lime mortar should conform to I.S. specifications. Surkhi shall be added without any extra as instructed by the Architects.

CEMENT CONCRETE FOR FOUNDATION WORKS

All cement concrete for foundations shall have the mix as specified on the Drawings or as per written instructions of the Architects. If hand mixed, cement, sand and metal shall be accurately gauged using 10% extra cement and thoroughly mixed on a platform by being turned over atleast, twice dry and twice wet. Water shall be added gradually and no more shall be used than necessary to sufficiently wet the materials. It should be deposited gently in the trenches in horizontal layers of not more than 15 cm. thick and gently leveled by suitable rammers. No more concrete shall be mixed than can be used within half an hour. After laying, the concrete shall be kept wet for the required curing period. Rate shall be per Cubic Metre.

NOTE - Hand mixing will only be allowed if the total quantity of work is very small. Concrete should conform to I.S. Specifications.

PROPORTIONS

The various mixes of concrete, in the various parts of the work specified on the Drawings shall be accurately followed. The quantity of water used shall be the minimum required for workability and shall be varied as required to suit humidity and the moisture content of the aggregate and sand and to produce concrete having the specified slump.

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DESIGN OF CONCRETE MIXES

If the concreting is to be done either on volumetric basic or by weight batching, then in such cases the contractor has to submit the design mix along with the test results for such specified concrete mix, to the approval of the Architects. However, for normal curing such test results shall be submitted after a period of 7 days curing and 28 days curing, after casting of concrete cubes, as specified for design mix. Testing of concrete cubes shall be done in the Laboratories approved by the Architects. If a particular or specified design mix does not give satisfactory results, then the contractor has to make the variations in design mix in such a way that the design mix gives the desired results for that specified mix, subject to the approval of the Architects to such results. If design mix is to be used then it must be got approved by the Architects prior using the same in item.

MANIPULATION AND WORKMANSHIP

Mixing : An approved mechanical batch mixer shall be used. The mixer and mixing platform shall be suitably protected from wind and rain. The aggregate and cement shall be first mixed dry and then after addition of water. Mixing shall be carried out until the concrete is of even colour and consistent throughout. The mixing of concrete of different mixes shall not be allowed to be carried out at one time, by the same mixer.

REINFORCED CONCRETE

Aggregates for reinforced concrete shall be of stone metal sharp, clean and angular approved by the Architects, shingle will not be allowed. Cement concrete for reinforced concrete work and / or plain cement concrete work, unless otherwise specified, shall consist of M-80, M-100, M-150, M-200, M-250, M-300, M-350, M-400 or such mixes as the Architect will direct from time to time during construction work.

MIXING

The aggregate and sand shall be washed of all dust and silt before using. The materials shall be accurately measured and mixed as per approved design mix by the Consultants in a machine thoroughly or as on volumetric basis. The concrete shall have a specific slump.

When proportions are specifically required by weight, they shall be mixed so.

CONSISTENCY

The consistency of the concrete shall be determined at all times by means of a slump cone test, the slump for concrete in the various members shall not exceed the following :

1]	Precast work	-	35 mm slump
2]	Footings and Roads	-	30 mm slump
3]	Columns	-	50 mm slump
4]	Walls (R.C.C.)	-	50 mm slump
5]	Floor Slab	-	40 mm slump
6]	Beams and Lintels	-	50 mm slump

The slump tests shall be carried out as per I.S.I. Care should be taken to ensure that a representative sample is taken.

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STRENGTH

Ordinary concrete mix on volumetric basis shall have the crushing strength as per IS-456 specifications. Ordinary concrete mix shall have minimum cement bags per cu.m. as given below:

No.	Concrete Grade	Concrete mix	Minimum Cement Bags / M3
1	M - 75	1:4:8	3.40 Bags.
2	M - 100	1:3:6	4.40 Bags.
3	M - 150	1:2:4	6.27 Bags.
4	M - 200	1:1.1/2:3	8.08 Bags.
5	M - 250	1:1:2	9.90 Bags.

TEST

The contractor shall as and when directed by - the Architects cast 15 cm (6") cubes of the concrete of approved design mix being used in the work and after curing shall get then tested. The cost of all testing shall be borne by the contractor. Forms for such test cubes shall be provided by the contractor. The test results for such concrete cubes shall be submitted by contractor to Architects for approval. Concrete mix for shell roof shall be controlled concrete M-200. The design mix shall be approved and tested from recognized Laboratory.

PLACING OF CONCRETE

Concrete shall be placed in moulds within 15 minutes of its being mixed with water. Mechanical vibrator shall be used while laying concrete for walls, slabs, columns and means, footings etc. for carrying up concrete, a mechanical power driven hoist shall be used, if so required by the Architects/Eng.

FORM WORK (General)

Shuttering shall be either of hard wooden planks 37 mm. thick or ply wood shuttering of 30 mm thickness or of steel plates stiffened by angle iron and all approved by Architects/Eng. All shuttering work shall be supported on battens, beams, props and wedges and properly cross braced together so as to make the form work sufficiently rigid, strong and stable to support the wet concrete and workers. It should not yield on working and laying concrete. Beams for centering shall be carried and supported on the floor P.C.C. with double wedges underneath and supported at intervals with props.

Props shall be either T.W. ballies of sufficient strength and length or A.C. props, Ballies props shall rest on double wedges placed over wooden sole planks of minimum 37 mm thickness so as to facilitate tightening and casing of the centering and shuttering work.

Shuttering shall be kept clear of wall bearing or column bearing and made to rest on cross beams or battens. The shuttering shall have smooth and even surface and its joints shall be close tight and shall not permit leakage of cement slurry or water. Foam oil shall be applied to the inner faces of shuttering work which will be coming in contact with concrete work, to prevent adherence of concrete to shuttering materials.

All shuttering and centering work shall be removed as specified. All shuttering and centering work shall be removed slowly and carefully without any jarks of vibrations in such a way that no part of concrete is damaged and disturbed. The contractor shall apply all necessary centering (false work) including planks, props, bracing, nails etc. and all necessary labour, plant and machinery etc. for fixing centering of accurate size and shape for the various members of concrete is as also the labour and tools required for striking the same.

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Forms shall be carefully examined to see that they are truly vertical and horizontal and the joints properly closed. When forms are to be reused they should be carefully examined before such reuse, properly aligned and have all open joints repaired and coated with a separator.

Centering and props for the various R.C.C. members shall be fixed in a workman like manner and shall be approved by the Architects or Engineers. They shall be of such sizes as the Architects or Engineer think fit and proper. The centering shall be removed only after permission to that effect has been obtained from the Architects or Engineers props shall not be less than 75 mm dia on top and shall be supported on wedges and planks. Planks shall not be less than 25 mm thick. The centering planks, runners and props shall be of such dimensions as are required by state calculations to be approved by the Architects or Engineers. For special type of work complete Drawings showing arrangement of centering shall be submitted, if demanded by the Architects or Engineers.

The area of form work coming in contact with specified concrete work shall only be measured for payments, if there is separate item for providing form work for concrete work, in the Tender.

Centering Table

The minimum period for keeping the centering in position for curing, after laying the materials, shall be as follows:

Name of work	Centering	Watering
Slab in general	10 Days	Water shall be impounded on slabs by making 1 M x 1 M. ponds by bunds of cement Mortar. Column shall be wrapped with a jute cloth.
Single slab	Upto the completion Of the story above.	Beams shall also be so converted with jute cloth. All concrete to be kept wet for a minimum period if 20 days.
Under side of Beams and Lintel bottoms.	20 Days	
Vault Roof slab flat slab.	20 Days	
Side of the beams	2 Days	
Side of the column	2 Days	
Side of the lintels	3 Days	
Coping sides	2 Days	
Shell Roof	As per the instructions given in Drawing.	

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COVER TO REINFORCEMENT

Cover to reinforcement shall be in accordance with that indicated on the R.C.C. Drawings and shall be maintained by the use of precast cubes or cover blocks, of the size equal to the cover specified, or by mild steel bar spacers (equal in diameter to the cover specified). These will not be measured and paid separately.

BENDING AND PLACING REINFORCEMENT

The reinforcement bar shall be mild steel / for steel as specified and shall conform to relevant specifications given in section [B]. It shall be accurately bent cold to the shapes shown on the R.C.C. Drawings and all bends shall conform to the details supplied. The reinforcement shall be built up exactly as shown on the detailed Drawing and supported so as to give correct cover. All inter sections of bars shall be secured tightly with binding wires. Stirrups shall be secured tightly to the bars which they embrace and shall be kept from the faces of the concrete of the distance shown on the Drawings.

The iron bars shall be free from scale or rust and shall be properly brushed and not painted. They shall be of diameters specified and bent to shapes as dimensioned and placed in position shown on the plans & ends shall be hooked, the hook being eight times the Dia M. of the bars. No splicing shall be allowed in short members. Where there is splicing, the bars shall overlap for tension and for compression as per Drawings but excluding the hooked ends. They shall be bound together by binding wires. The reinforcement shall be approved and measured by the Consultants or their Engineers before concreting is started. The concrete shall be worked round the reinforcement and well vibrated. For consolidation of concrete in columns, beams, walls, & slabs, Mech. Immersion vibrators shall be used. Where concrete is measured excluding steel only that steel actually in concrete shall be measured, but no allowance shall be made for wastage. Binding wire, laps or welding if any, steel used for maintaining reinforcement in position shall not be measured. Laps other than those shown on Drawings will not be measured & paid separately, but contractor has to provide the laps as shown in Drawing. The rate shall be inclusive of all.

COPING AND SILLS

Reinforced or plain cement concrete copings and sills shall be of the full thickness of the walls or will be as of specified thickness and width and of specified concrete mix and finished and moulded as per Design and Drawings. They shall be reinforced as per Design. While casting the coping, the concrete shall be vibrated properly. Concrete mix shall be as specified on Drawings.

LINTELS

These shall be of dimensions as shown on the Drawings and shall have a minimum bearing equal to the depth of the lintels on both sides of the opening unless otherwise directed. The centering shall not be nailed to the door or window frames. The concrete mix shall be as specified on the Drawing.

BEAMS AND SLABS

The cover below the lowest bar in beams shall be 25 mm. or the diameter of the thickest bar whichever is more and cover for bars in slab shall be 20 mm. or as shown on Drawings. The work of filling in beams and slabs shall be completed in one operation as far as possible. If concreting is to be stopped permission shall be obtained from the Architects or Engineers and it shall be stopped at the centre of the beam or wall as the case may be, for the slabs in a vertical plane and at right angles to the direction of beams, or as directed. After the forms are struck, the surface shall be properly picked & hacked immediately and a mixture of sand and cement dashed against the surface making the surface true in one plane. The surface shall then be plastered with sand and cement mortar and finally finished smooth with a fine coating of neeru. The visible edges of beams and columns shall not be knife

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sharp but shall be finished as per Design and cornices, if any at the junction of slabs and beam or walls shall also be finished as per Design. The surface then shall receive two coats of white wash.

MODE OF MEASUREMENTS AND PAYMENT

The rate for all R.C.C. members shall be exclusive of steel as reinforcement and finishing unless otherwise specified. Columns shall be measured in Cubic Metres of the actual work done between columns. Slabs shall be measured in between columns. Slabs shall be measured in Square Metre as of specified thickness, and of specified mix or in M3 as shown on the Drawings.

Chajjas and canopies shall be measured in Sq. Metre clear of walls and of specified thickness and of specified concrete mix. If the facia form or a drop or pardi has been provided. It shall be measured in Square Metre separately and paid under pardi item. Lintels shall be measured in Cubic Metres for actual length provided. The sizes of all R.C.C. members shall be measured exclusive of finishing and as per dimensions on Drawings.

Steel reinforcement bars shall be measured and shall be paid as the weight in Kg. of the actual quantity of steel reinforcement placed in structure arrived at by measuring the length of the bars multiplied by the standard weight per Unit length for particular diameter of the bar given in relevant para of Section (B).

In case of deformed bars the weight per Unit length for bar of specified diameter will be as shown in the manufactured catalogue. This shall include quantity of laps, hooks and bends.

The cost of wire used for tying reinforcement steel chairs and angles etc. shall be deemed to be included in the rate of the item of reinforcement and shall not be paid for separately.

SECTION - D STONE MASONRY

RUBBLE AND CEMENT MORTAR MASONRY

Stone, Sand and Cement used shall Conform to the relevant specifications given in Section (B). Mirror shall be as specified in item.

All stones shall be laid on their natural beds and properly bonded in the work. No hollow spaces shall be left.

Inter spaces shall be filled with mortar and stone chips driven in and not with only mortar. Work shall be in plumb and joints broken vertically. Bond stones not less than the width of the wall or 68 cms. in length shall be provided 1.5 M. c/c staggered in every course. The height of the courses shall not exceed 38 cms. Work shall be well watered thrice a day for 20 days after completion. When the work is stopped for the day or on holidays or when upto the full height, tables shall be formed on the surface and kept full of water. At least 35% mortar shall be used in walls.

MODE OF MEASUREMENT AND PAYMENT

The measurement shall be the actual cubical contents of the masonry after deducting all openings, beams, columns, etc. as is applicable. No deduction will, however be made in the cubical contents for khandki facing. No extra charge shall be allowed for bond stones.

DRY RUBBLE PACKING OR SOLING

It shall be 23 cms. thick unless otherwise specified and shall be hand packed with stone from approved quarries and the interstices filled in tight with small chips and hard murum and watered and rammed hard. The work shall be measured in Square Metre as per work executed.

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SECTION - E
BRICK MASONRY
CEMENT MORTAR

Cement mortar shall be normally composed of one parts of cement to six parts of sand unless otherwise specified, the ingredients shall be accurately gauged by measure and shall be well and evenly mixed together dry on a platform, care being taken not to add more water than is required. No mortar that has begun to set shall be used. Where a different preparation is specified that shall be the proportion used in that particular place. Contractor at his own expenses shall be required to test the cement mortar, if found necessary and the test result shall be submitted to the Architects or Engineers for approval.

BRICK WORK

Brick work is to be carried out with all necessary setbacks, projections, cuttings footings etc. which are shown on Drawings and in strict conformity with them. All uneven, irregular and bad brick work shall be demolished if deemed necessary by the Architects or Engineers and rebuilt at contractor's risk and cost.

All joints of brick work to be plastered or pointed shall be properly raked out to a depth of 12 mm as the work proceeds. In no case, mortar which has set shall be removed from joints by hammering, chiseling or in a manner as to cause no damage to the bricks, but shall be raked out with a suitable metal tool before the mortar sets.

Every brick shall be thoroughly soaked in water before using, till bubbles cease to come up. No broken bricks shall be used except as closers. The courses shall be truly horizontal and the work strictly in plumb, joints, shall be broken vertically and they shall not exceed 12 mm. in thickness. The brick work shall not be raised by more than 10 courses per day. Tables shall be formed at every eleventh course and kept full of water. The bricks shall be laid in English bond.

In bricks arches or other circular work, the brick shall be shaped to slope joints radiating correctly to the centre, from front to back of walls and not more than 12 mm. thick. The face bricks shall be of uniform colour and have sharp arrises. The work shall be well watered three times a day for 10 days and afterwards twice a day 21 days. The brick to be used in work shall conform to I.S. specifications. Good quality locally available bricks can also be used if approved by the Architects or Engineers. The work shall be protected during the rains as directed.

MODE OF MEASUREMENT AND PAYMENT

The rate of brick work shall be inclusive of all necessary scaffolding, centering, watering and cutting of bricks for circular work, arches, corbels, projections etc. The measurement of work shall be the produce of length, height and thickness. Deduction shall be made for all openings, lintels, beams and columns occupying the full thickness of the walls. The work shall be paid per unit of one Cubic Metre or Square Metre as given in schedule of quantities.

BRICK PARTITIONS (Reinforced)

Brick partitions shall be of $\frac{1}{2}$ brick width or brick on edge when so specified. Partitions of $\frac{1}{2}$ brick thickness shall have one R.C.C. M-150 bonding layer, 2 layers high and of full width. It shall be reinforced with 4 numbers of 6 mm. Dia. M.S. bars with stirrups of 6 mm Dia. M.S. bars at 200 mm c/c. Cement mortar used for masonry will be 1:6 or as specified and when there are doors in such partitions the bend will be on top of such door.

For bricks on edge partitions separate specifications will be indicated in the job description, in schedule of quantities. $\frac{1}{2}$ " brick partitions will be measured in Sq. Meter without plaster. No allowance shall be made for concrete band or shuttering.

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Reinforcement will be measured and paid separately, under M.S. reinforcement item for R.C.C. pardi.

FAIRFACE

All 115 mm, 125 mm, 350 mm and 450 mm walls will be built fairfaced on the side only. All walls of greater thickness shall be built exception with fairface to both sides.

SECTION - F

PLASTER

CEMENT PLASTER (Neeru)

Cement shall be thoroughly mixed dry with sand in the proportion of one to four or as specified. Water shall then be added gradually to make the mixture homogeneous. No more cement mortar shall be mixed than that can be used within half an hour. The joints between the stones or bricks will be racked out to a depth of 12 mm. and the surfaces shall be thoroughly watered and the mixture of sand and cement applied evenly on all surfaces to be plastered. The surface shall be finished with a thin layer of neeru. The plaster work shall be kept thoroughly wet for a period of seven days. The item shall be paid per Sq. Metre. Local sand if approved by the Architect or Engineer can also be used for plaster work.

The rate shall include jambs, coves at the junction of walls ceiling and beams and all corners. Deductions for opening, doors, windows, etc. shall be made as per I.S. specifications.

SAND FACED CEMENT PLASTER

All surfaces shall be cleaned of all dust and dirt and the brick work thoroughly watered. The backing coat shall be 12 mm. thick of cement plaster in the ratio of 1:4 and a finishing coat 6 mm. thick consisting of grey cement and sand shall be applied on the surface. After curing this first coat sufficiently, a finishing coat 6 mm. thick consisting of grey cement and sand of approved quality in c.m. mix (1:3) shall be applied and finished to desired texture. Local sand if approved by the Architects or Engineers can also be used for sand faced cement plaster. The average plaster thickness shall be 16 mm. to 20 mm.

The mode of measurement shall be the same as per cement plaster, and deductions shall be made as per I.S. specifications.

CEMENT POINTING

Mortar shall be racked out of the joint to a depth of 12 mm. Dust shall be brushed out of the joints and wall well wetted. Pointing shall be done with cement and sand mixed in equal proportion or as per proportion specified. The joints of the pointed work shall be neatly finishing as directed and shall be kept wet till the cementing material has set and become hard. Curing shall continue for a minimum period of seven days.

The item will be paid per Square Meter. Deductions shall be made as per I.S. specifications, Local sand can be used for this work if approved by the Architect or Engineer.

ROUGH CAST CEMENT PLASTER

All joints shall be racked out as for cement plaster. Cement shall be thoroughly mixed dry with sand and gravel to pass through 6 mm. (1/4) mesh but not through 1.5 mm. (1/6") in the proportion of 1 part of cement, 2 parts of sand and 1 part of gravel. Water shall be gradually added to make the mixture homogeneous. No more mixture shall be prepared than what cement be used within half an hour. The mixture shall be dashed against the surface to a thickness of 20 mm. and finished level. The mode of measurement shall be the same as for cement plaster, curing shall continue

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for a minimum period of seven days. Deductions shall be made as per I.S. specifications. Average thickness of plaster work shall be 20 m.m.

TERRACO FINISHING (Spray Plaster)

The work of finishing to interior building surfaces shall be done by Spray Plaster of Terrace. It is a ready made mix plaster which replaces neeru finishing, putty primer and also reduces paint assumption. If the Item of Terraco finishing included in the schedule of quantities, following procedure shall be adopted.

The spray plaster should be applied one dry surface only. Before spray plastering, the work of common type of plastering should be done without neeru and left the surfaces for complete drying. When surfaces where spray plastering is to be applied became dry, then only the spray plaster shall be applied on cement plaster likewise the application before painting the wall. Before applying the spray plaster, the dust, dirt and foreign matter should be brushed away. So also any ridges and form old should be removed suitably. The work of spray plastering shall be done in two coats. However, the work of finishing should be done up to the satisfaction of the Architects or Engineers.

SECTION - G TIMBER WORK CARPENTRY WORK

Timber shall be properly planned in a workman like manner. Joints shall be true and fit properly and of the kind directed by the Architects or Engineers. All timber when embedded in masonry shall be coated with two coats of oil paint two days prior to erection. All exposed faces of the timber shall receive primer coat of red or yellow earth mixed with water, The wood surfaces shall be cleaned properly before applying oil paint.

If directed all timber shall be treated against white ants by application of a specified patent chemical.

The rate of wood work shall include the cost of sawing, planning, jointing, framing labour and materials for hoisting and fixing in position and all workmanship for fixing and supply of all straps, bolts, nails, spikes, keys, wedges, pins, screws, etc. necessary for the framing and fixing. Joints and portions inserted in the masonry shall be measured.

The work for doors, windows, ventilators, cupboards, TW partitions shall be measured in Square Metre and outside to outside of frame work including shutters, panels, glazing etc.

All teak wood work in curved places shall be measured as the smallest pieces cut of which the work may be put.

JOINERY

Door and Window frames shall be of 125 mm x 75 mm of 150 mm x 65 mm. size or of such dimensions as directed by the Architects or Engineers. They shall be properly framed and morticed and tenoned together and set in masonry by means of iron hold fasts. The visible surfaces shall be smooth and even. The parts hidden in the masonry shall be well oil planted. The frames shall be rebated 12 mm. on one side (if the shutters are on one side) and the full thickness of the shutter are on one side and the full thickness of the shutter shall be moulded as per design on the other side of the frame shall be rebated on both sides. During the progress of the works, the frames shall be protected from injury by necessary boxing.

Hardware and iron mongery shall be fixed to the shutters in a workman like manner to the satisfaction of the Architects and Engineers. The rates of the various

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items of journey work shall include the cost of fixing of the fixtures and fastenings.

PANELLED SHUTTER DOOR

The frame and shutters shall be of well seasoned teak as specified. The styles and rails shall be of thickness and width as specified, moulded and morticed together in a workman like manner. Styles and top, bottom lock and frieze rails shall be of widths and mouldings as per Drawings. Each panel shall be of thickness as specified. The measurements shall be in Square Metres from out side to outside of frames and shall be paid per Square Metre. The rate shall include the cost of frames, shutters and hold fasts fittings, painting, polishing etc. as directed.

FLUSH DOOR SHUTTER

These shall be of 30 mm thick as directed by the Architect or Engineer with teak or other venner on both faces or as directed and shall be of approved make.

The work shall be measured in Square Metre. From out side of frames and shall be paid per Square Metre. The rate shall include cost of frame, shutters and hold fasts, fittings, painting, polishing etc. as directed.

GLAZED DOORS AND SHUTTERS

These shall be similar to paneled shutters and as shown on Drawings. Such parts as are directed shall be glazed with sheet or ground glass weighing 7.5 Kg/M2 or non actinic glass as specified. Styles and rails in the glazed shutters shall be rebated 12 mm. to receive the glass. Such bars shall be moulded and rebated and mitered. Glass panes shall be fixed by means of Teak beads and putty.

The work shall be measured in the same way as per paneled doors. The price per Square Metre shall include supply and fixing of glazing and heads, except where otherwise stated in the schedule of quantities. The rate shall include cost of frame shutters and hold faste, painting etc.

FIXED LOUVERS WITH FRAMES

Fixed louvers shall be 200 mm wide or as shown on Drawing and of 7.5 kg./M2 of glass of approved quality, the slope shall be such as shall not allow direct vision in a horizontal direction, or as specified on Drawings. The work shall be measured in Square Metre inclusive of frames and hold fasts and shall be measured from outside to outside of frames and shall be paid per Square Metre.

TIMBER AND GLAZED PARTITIONS

Partitions shall be partly paneled and partly glazed as specified on Drawings. Teak wood members of the partitions shall be as specified. They shall be fixed to the Door by means of iron clamps rigidly fixed to the floor slab and the work shall be carried out and completed as per Drawings supplied by the Architects or Engineers. The upper portion shall be glazed with 4 mm. thick plain glass as per Drawings. The material for panels and glazing shall be as specified in Drawings. The work shall be measured in Square Metre and shall be paid in Unit of Square Metre.

HARDWARE FOR DOORS AND WINDOWS

These shall be of the good quality and as approved by the Architect or Engineer, for the items concerned and shall be secured in position with brass screw. No screw shall be driven by hammer or similar tool. All cuttings into the work shall be of required shape and size and no over cutting is allowed. Contractor has to

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supply the samples of various fixtures and fitting to the Architect or Engineer for approval before fixing them to particular items. All these samples shall be exhibited in the Architect's or Engineer's office or sit office. Hardware will not be paid separately unless otherwise specified.

SECTION - H

M. S. DOORS AND WINIDOWS

Steel doors and windows shall be with standard sections and sizes as mentioned on the Drawings. They shall be of approved make. They shall comply with I.S. 1038:1959. Windows and ventilators shall be of rolled mold steel sections 25 mm wide (1.5 Kg/M) and Doors of 35 mm. wide sections (Approx. 2.55 Kg/M) or as specified in the Drawings.

The frames shall be in one plane, joints shall be mitred and welded on butt welding machines, Glazing bars shall be tennoned and riveted. The inter section of T bars should have 'Fenestre' joints.

The sections shall be given anti-rust treatment (by pickling) before shop coat of paint is applied. Final coats of paints shall be as specified. Glass panels to Doors and Windows shall be fixed by means of teak and bends putty, glazing to sky light shall be fixed as per Manufacturer's specifications. These shall be measured from outside to outside and shall be paid per Sq. Mtr. The rate shall include storing, handling and fixing in position.

WROUGHT IRON AND STEEL WORK

All W. I. and steel work shall comply with specifications and design. The manufacturer shall be as approved by the Architects or Engineers.

Grill work and grill gates shall be as per the Architect's or Engineer's Design. Collapsible gates will be of mid bar type, made out of 20 mm channels and will be top hung with ball bearings and will have locking arrangements as specified.

Roller shutter will be of approved make, the rolling slates being in one place. They shall be provided with a cylindrical hood at top to enclose the shutter when it is opened.

Weld mesh grills and grill gates shall be as per design. Weld mesh used therein shall be as specified. The steel enclosing frame shall consist of such sections, as are specified in the Drawing. All joints shall be properly welded.

All the W.I. and steel work, mentioned in this section shall receive a shop coat of red lead paint before erection on site.

In the case of grill work, grill gates, collapsible gates, or welded mesh grill and failing, the work shall be measured in Square Metre for supply and fixing and shall be paid per Square Metre including painting, fitting etc.

Rolling shutter shall be measured as per openings provided in masonry work for fixing the same.

In the case of steel work in trusses, purlins and other fabricated work, the work shall be measured by weight of actual work done and shall be paid per Tonne. Detailed specifications specified on Drawings or as per directions from Architects or Engineers. The rate shall be inclusive at one coat of primary red oxide paint.

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SECTION - I
PAINTING
PAINTING

Where the term "Paint" or "Painting" or "to be painted or Colour Wash or White Wash" etc. is used in specifications or in Bill of quantities it includes scrapping, cleaning, and painting or colour washing or distempering or white washing as the case may be, all to the satisfaction of the Architects or Engineers.

PRIMING

Neither any shop coat of paint herein specified for any priming coat shall be considered as a cost of paint for the purpose of these specifications. PUTTY : Putty shall be composed of best quality of whiting mixed with double boiled linseed oil properly kneaded to workable consistency.

OLD PAINT

Surfaces to be painted shall be dry, free from dust and dirt and rubbed smooth by means of sand paper or pumices stone to the satisfaction of the Architect or Engineer. The paint shall be mixed in proportion as per manufacturer's specifications and driers and pigments shall be carefully added as and when required. Alternately mixed paints of approved quality and shade may be used. The primary coat shall be of white zinc and double boiled oil only and shall be applied evenly. After the primary coat is applied and perfectly dried, all holes, cracks, etc. shall be filled in with putty and the surfaces are prepared. Then a second coat of paint with the addition of the pigment shall be carefully applied as and when required. When the work is to be varnished, the varnish shall be best varnish mixed with turpentine if required and evenly applied in required number of coats. The rate shall be per Sq.M. and deductions shall be as per I.S. specifications.

OLD BOUND DISTEMBER

All plaster surface shall be thoroughly cleaned and shall receive 3 coats as specified below: First, a coat of prime shall be applied, after the primary coat of white lime wash is properly scraped off, the second and the third coat shall be applied with oil bound distember of approved tint and quality, mixed with water as per Manufacturer's specifications. If after these operations, the work is not done to the satisfaction of the Architect or Engineers then one more coat shall be applied without extra cost till the work is executed to the satisfaction of the Architect/Engineer.

DRY DISTEMBER WASH / COLOUR WASH

All plastered surfaces shall be thoroughly cleaned and shall receive coats of dry distember / colour wash. At first, white lime wash shall be evenly applied and scraped off when dry. A first coat of prime size shall then be applied. Second and third coats shall be of dry distember or of colour wash of approved quality in mixed with water as per manufacturer's specifications. In case the work is not done to the Architect's or Engineer's satisfaction, one or more coats shall be applied without extra cost until the work is executed to the satisfaction of the Architects or Engineers. All the painting work shall be measured in Square Metre for actual work done including all soffits, jambs, sills, walls, plastering surfaces, etc. and shall be paid per Sq.M. All deductions shall be as per I. S. specifications.


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FRENCH POLISH

The wood work shall be first cleaned and scraped thoroughly with glass paper. It will then be painted with a 'filter' composed of whiteing and methylated spirit and again clean with glass paper. A thin coat of French-polish shall be applied until the finishing is done to the satisfaction of the Architects or Engineers.

WAX POLISH

The work shall be done in the same way as for French polish with the exception that wax polish will be used instead of French polish.

MODE OF MEASUREMENT AND PAYMENT

The oil paint & French and wax polish work will be measured in Sq. Metre from outside of the framing as follows:

- (a) Fully glazed partition Windows or Door - Square Area of 1 face only.
- (b) Half paneled and half glazed. - 1 ½ times the Area of one face
- (c) Fully paneled - Twice the Area of one face

NOTE : The work mentioned in this section shall be measured separately only in case it is distinctly so specified in the schedule of quantities.

SECTION - j

SPECIFICATION FOR VARIOUS TYPES OF FLOORING, ROUGH SHAHABAD FLOORING MACHINE CUT

Rough shahabad stones of 35 mm. thickness shall only be allowed for use in flooring. The stones shall be hard, sound, free from veins, cracks, etc. The stones shall be truly rectangular in shape after the edges are cut by machine. Floor shall have a uniform joint of not more than 3 mm.

The sub-floor or base shall be cleaned of all dirt and loose material and well wetted without forming any pools of water on the surface. Lime mortar (1:3) shall be prepared in the mixing mill on pan. It shall be laid and compacted to a reasonable true plain surface by screed batens to the required level. The cement float will be spread over the area and the stone shall laid in lime and level. The stones after placing in the position shall be gently dashed against the adjoining stones. This will fill the voids in the joints. Any surplus slurry on the joint shall be wiped clean before its setting. The surface shall be kept wet for a period of 14 days (Fourteen) days.

KOTA FLOORING / KADAPPA

Stone slabs of kota tiles shall be hard, sound, durable, resistant to wear with a thickness of 24 mm to 30 mm. The stone shall be machine polished but dressed with hand tools and shall be of uniform colour and texture. The tiles will be laid on cement mortar (1:6) with 2.50 cms. thick cement paste. Care shall be taken while fixing the tiles, so as not to leave any hollows in floor and joints. Where necessary, the tiles will be laid with necessary slopes for the even flow of water. All the smealing of the cement slurry or mortar shall be cleaned immediately. The edges of the adjoining tiles shall in one plane. The curing shall be done as per instructions of Architects or Engineers.

KOTA DADO / KADAPPA

The tiles to be used as described in the specifications of kota flooring. The cement plaster of about 20 mm. in C. M. (1:4) shall be applied to the part of the

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wall where dado is to be fixed first. Before fixing, the back of the stone slabs, shall be covered with a paste of cement. The slab shall be pressed on the wall and gently tapped by wooden mallet to bring it in line and level. The joints shall not exceed 1.5 mm. Final polishing may be done by rubbing. The top of dado shall be joined neatly with the plaster above as directed. Materials brought for work shall conform to the approved samples.

Cement mortar (1:6) shall be evenly and smoothly spread over the base with the help of screed pattern to proper level or slope. The thickness of the bedding shall not be less than 12 mm or more than 20 mm. in any one plane. The tiles shall be laid on the bedding when it is still plastic but has become sufficiently stiff to offer a fairly firm cushion for the tiles.

The tiles before use shall be soaked in water for 2(Two) hours. Cement grout of required consistency shall be read over the bedding mortar for an area that can be covered within half an hour. The edges of the tiles shall be smeared with neat white cement slurry and fixed in the grout one after the other, each tile being well pressed and gently tapped with a wooden mallet. There shall be no hollows in beds and joints. The joints shall not exceed 1.50 mm. The joints shall be grouted with a slurry of white cement. The surplus cement grout and other dirt shall be cleaned at the end of days work. The surface shall be kept wet continuously for a period of 14 days.

CERAMIC TILE DADO WORK

Material used will be the same as that used for ceramic tile flooring. Cement plaster in C. M. (1:6) shall be applied to the part of the wall where dado work is to be done. The thickness of the bedding shall not be less than 12 mm. or more than 20 mm. in any one place. The tiles before use shall be soaked in water for 2 hours. Tiles shall be fixed when the cushioning mortar is still plastic and before it gets very stiff, the back of tiles shall be covered with a thin layer of neat cement paste and the tile is pressed in the mortar and gently tapped by wooden mallet. The joints shall be filled with white cement slurry. The joints shall not exceed 1.5 mm. The surplus cement grout shall be cleaned before it sets. The surface shall be kept wet for a period of 14 (Fourteen) days.

M. M. TERRAZO FLOORING

Tile samples shall be got approved before used. Materials brought for work shall confirm to the approved samples.

Lime mortar (1:6) shall be evenly and smoothly spread over the base with the help of screed battens to proper level. The thickness of the bedding shall not be less than 12 mm. or more than 20 mm. in any one place. The tiles will be laid on a cement float. The joints of the tiles shall be filled with matching coloured cement slurry. Then the floor shall be kept wet for a period of 14 days. Polishing will be done in three coats by rotary machine, so as to get a smooth, clean and polished surface.

SPARKTECT TILES

The sparktect tiles shall be used for flooring. These tiles shall be fitted likewise Mosaic, Kota or Marble on the flooring. These tiles shall be fitted in wall also as per the fitting procedure. The sparktect tiles need not to be soaked in the water before its use like glazed tiles.

MARBLE/GRANITE/DHOLPUR CLADDING

Providing fixing marble/granite/dholpur stone on wall with single coat plaster in plumb line made rough to adhere the plaster dabbing on the stone back. Fixing the

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stone tiles or slabs with use of the material like ferrafix etc. with filling the joints with the similar colour cement material with curing complete.

MARBLE FLOORING AND LINING

The marble shall be as approved by the Architects or Engineer. The exposed surface of marble shall be polished or otherwise as specified and shall be free from scratches and other defects. The marble shall be machine cut, machine polished (if specified) free from cracks or flakes and uniform in colour. The edges shall be straight and square. The marble shall be bedded in lime/cement sand mortar with cement floated. The joints shall be laid with fine invisible joint or otherwise as instructed. The contractor shall also take care to match grains of the marble, if instructed. Marble for treads and risers shall be in one piece upto 5' length. The thickness shall be as per the Architect's or Engineer's instructions. Marble linings to walls, columns and the like shall be fixed with copper clamps & hooks. The clamp shall be 25 x 50 x 100 mm. girth, one end turned down and grouted into mortice in marble and other end built into wall, mortices shall be carefully cut and thoroughly grouted.

Whenever the marble is exposed to weather, the vertical faces must be well bonded to the base by applying glue and aggregate as per the Architect's or Engineer's instructions. The exposed edges and mouldings shall be protected by means of timber nosing.

MODE OF MEASUREMENT AND PAYMENT

All types of tiles as above shall be measured on Square Meter basis and shall be paid at until rate as agreed per Square Meter of tiles fixed.

SECTION - K SPECIFICATION FOR

WATER PROOF POLISH OAT OR RADSPAK WATER PROOFING

The water proofing liquid should contain epoxy resin and locker only. These two liquids should mix in a equal proportion and stirred well before applying on any dry surface. On mixing the liquid in well manner, it should be applied with a painting brush on dried surface which required to get the water proof. The aforesaid liquid is colourless. The liquid can be applied on a parapet top for preventing leakages or seepage of wall on outside so also on terrace flooring, tile flooring joints on Terrace slab; Toilet sunk slab, or Toilet flooring. The liquid should be applied as above for prevention of leakages after curing period of lab or concrete work. It is important that application should be on dry and clean surface. However, such type of work should be done upto the satisfaction of Architects or Engineer in charge of the work.

SECTION - L

DRAINAGE, SEWAGE, WATER SUPPLY AND STORM WATER DRAINAGE

The contractor will be wholly responsible for any extra excavation done by him below the required levels as directed. Extra width of excavation will be required at the place of joints, for the facility of work of caulking the joints. This extra excavation in width and depth will not be paid in any item. Bailing out of water should be properly carried out by the contractor at his own cost. Electric, diesel pumps or manual labour can be used for the purpose. The final bed of the foundation, after the excavation is completed shall be got approved by the contractor from the Architect or Engineer before the concrete is laid.

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PROVIDING AND LAYING C. I. PIPES

All the pipes to be taken into use shall be cleared and brushed clear off rust and painted at both spigot and socket ends.

Before the pipes are lowered and laid in trenches the contractor shall see that the bedding is plain of the surface is brought to uniform grade and leveled with the help of cross sight rails and boning staff and approved in advance by at least 3 days by the Architects or Engineers.

The contractor shall provide and fix and maintain cross sight rails and boning staff whenever required until the time of completion without any extra claim for cost etc. and which shall be considered inclusive in the rates for excavation etc.

Temporary bench marks shall be provided by the contractor if called upon at a minimum distance of every 30 Mt. without any claim for extra cost. The bench marks shall be either of stone masonry or mass concrete.

Materials used for jointing such as hemp etc. shall be got approved in advance from the Architect or Engineer.

No jointing operations shall be started unless the grade and levels are approved by the Architects or Engineers.

Under no circumstances the C.I. pipes and other water mains will be laid on rock bedding without murum cushioning.

The murum cushioning of a depth of $\frac{1}{3}$ rd the dia Mtr. or 15 cm. whichever is greater as specified shall always be provided in all formation with the rate of laying pipe line unless as item for murum bedding is provided for separately in the tender.

All obstacles such as electric wires, water and sewer main, manholes, natural drainage culverts, storm water drain etc. coming in the way shall carefully be looked after and any damage be prevented to the same. Any work of removing, repairing and re-doing such structures or obstacles in the progress of laying pipe lines etc. should be carried by the contractor without any claim for extra cost unless previously approved by the Architects or Engineers.

The contractor shall allow for wastage breakage in cost of pipes at his own cost whenever the item is for providing and laying pipe lines.

Pipes shall be laid in reasonably dry trenches and under no circumstances on slushy murum bedding.

The contractor shall make own arrangements for the obtaining permission for storing and stacking of pipes etc. on the road from the land owners whether it belongs to any other Govt. Department or Municipal or private land owner.

LEADING AND JOINTING

All the jointing work shall be carried out by the contractor after giving a due intimation in advance and in the presence of Architect or Engineer.

Lead joints after having being poured into, shall be chiseled on and caulked to give a tapered shape not a flushed shape.

All jointing material shall be supplied by the contractor himself and shall be of quality duly approved. The rope used for S/S and collar joints shall be of the best quality, clean hemp or spun yarn, free from dirt and knots and $\frac{1}{12}$ inch thicker in dia Mtr. Than the annular space. The habak point shall be of approved quality.

RUBBER GASKET JOINTS

Before assembling the joint the spigot of the one pipe and the interior of the socket of the adjacent pipe should be thoroughly cleaned. The gasket should be wiped clean before fixing it in the socket. All care should be taken that the gasket is not twisted while placing in inside the socket, at the same time it fits evenly

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around the circumference of the socket. The outer surfaces of the gasket should be applied with a thin film of lubricant. The approved quality of lubricant shall be supplied by the contractor at his own cost. The pipe to be jointed should be supported centrally by the tackle used for laying and balance just clear of the trench bottom. The spigot of the pipe should be aligned and entered carefully into the adjacent socket until it makes contact with the gasket.

JOINTING C. I. FLANGE PIPE & SPECIALS INCLUDING VALVES

The flanges of the pipes to be jointed shall be got abutting each other keeping required space for inserting rubber insertion of specified size in such a way that bolt holes of both the ends to be jointed come in line with each other. Rubber insertion not less than 5 mm. thick shall be 3 ply rubber insertion of specified thickness and of tough, durable and approved quality. The nuts and bolts to be used shall be standard steel hexagonal nuts of approved quality and shall be of adequate length. Following are the specified sizes :

Diameter of Special	Diameter of Bolt
24 cms. diameter	1.5 cms.
25 cms. to 30 cms. diameter	2.0 cms.
45 cms. and above diameter	2.15 cms.

Steel washers should be used with every nut and bolt. Uneven projection due to casting defects of the flanged shall be removed by filling and made flush with the face of the flange. In exceptional cases if the holes of the two flanges are not concentric then the contractor shall drill the holes wherever necessary. Rubber insertion of specified thickness shall be cut with out side diameter being equal to that of flange without any projection and shall be exactly circular in shape. The concentric circle equal to the inside diameter of the pipe will then be cut out so as not to protect inside pipe. During cutting care shall be taken not to injure the material of packing.

HYDRAULIC TEST

Every part of the pipe line with special must stand the specified hydraulic test to the satisfaction of the Architects or Engineers. The hydraulic test pump with the required piping etc. shall be arranged for the contractor. The contractors shall make his own arrangements for the water required for testing purposes.

If called upon, the contractor have to maintain the pipe full of water until the time of handing over to the Employer. After the test to the satisfaction of the Architects or Engineers, the operation of filling the trenches shall be taken in hand only after the written permission of the Architects or Engineers.

SPECIFICATION FOR PROVIDING AND LAYING AND JOINTING AC/ P.V.C. PIPES WITH COUPLERS/ C.I.D. JOINTS/ SOLVENT CEMENT GENERAL

The item pertains to providing and laying A.C./P.V.C. pipes of all classes of specified diameter with CID. joints/solvent cement as specified in the item for water supply including collar, socketed bends, socketed tee, socket cross, socket and spigot tapers cap, plug, duck foot bends, excavation, laying pipes and back filling.

This item shall be subject to the general specification.

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MATERIALS

The diameter of the A.C./P.V.C. pipes specified in the wording of the item shall be the diameter of the bore of the pipes and the pipes shall conform to I.S. 1536 - 1967 or I.S. 1537 - 1960. All the fittings (specials) shall conform to I.S. 1538 - 1960. The pipes and fittings shall have sockets and or spigot as shown in the Drawings, specified in the special provisions or necessary for the work.

EXCAVATION

Before starting excavation of the trench, sight rails shall be fixed on the alignment of the pipe line at an interval of 30 m. and at every change of grade and direction at a definite and as far as practicable uniform height above the invert of the pipes the centre line being clearly marked on each rail. The width of the trench shall be at least 30 cm. (about 12") wider than the socket of the pipe so as to allow room for ramming the refilled material under and at the sides of the pipe.

The depth shall be such that the pipe shall have a clear cover of at least 75 cm. The trench shall be excavated through all strata met with. When it is necessary and ordered by the Consultant in writing, the sides shall be shorted or sloped, otherwise, they shall be as vertical as possible. The rate shall include shorting and provision of slopes.

In case rock is met with, it shall be excavated 15 cm. more than the required depth for providing cushioning by chiseling and line drilling unless blasting is permitted in writing by the Consultant. Special precautions shall have to be taken in blasting as ordered by the Consultants.

Dewatering of the trench, if required, shall be done without separate claims. The bed shall be even and to the correct grade and line in all cases. The trench shall be barricaded and warning boards fixed. Red lights shall be hung at right time at sufficiently close intervals to indicate the danger and a Chowkidar employed to see that the lights are properly burning. The contractor shall be solely responsible for any accidents due to any default in barricading, sign posting or red lights and shall bear the consequences.

In case of excavation across a road, permission of road authorities shall be obtained for the excavation of the road surface which shall be made good and restored to the original condition by the contractor at his own cost. At all road crossings, the trench shall be excavated only for half the width of the road and pipe laid. The other half shall be excavated only after backfilling over the laid pipe and marking it suitable for the traffic. At all road crossing, the pipes shall be laid below the crust of the road.

All pipes, cables, service lines etc. met with during the excavation shall be carefully protected and supported. Any damage done shall be made good by the contractor at his own cost.

LAYING

The pipes shall be laid out along the side of the trench, each pipe in its proper position for laying, with an extra pipe after every 20 to allow for cutting if necessary whether the trench crosses a road or place where such distribution is inadmissible the pipes shall be stacked in heaps at each end, sufficient to fill in the length. Small pipes below 100 mm diameter may be stacked in heaps at every 30 m.

As far as possible, pipes shall be laid straight in rising or falling gradient. It should be possible to empty the pipe readily and completely.

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In case of rock bed, murum bedding of 15 cm. shall be provided before laying pipe. The C.I.D. Joints/Coupler joints shall be made and paid separately. The P.V.C. pipes shall be jointed with solvent cement and shall be aid under this item only. At the end of each day's work, the open end shall be suitably plugged.

BACK FILLING

After making the joints, and testing the pipe line to ensure leak proof joints, the trench shall be refilled in layers and manually rammed. The excavated stuff shall be used in filling, such that the filling shall correspond to the original natural layers. The filling shall be kept raised by about 8 cm. per meter of the depth of trench for subsequent settlement. In the case of trench in rock, a bedding and cushioning of murum shall be provided on the sides and top of the pipe. Any surplus excavated stuff shall be disposed off satisfactorily without causing nuisance.

ITEM TO INCLUDE

Supply of A.C./P.V.C. pipes of specified type and diameter and fittings such as socket, collar, socketed bends, socketed cross, socket and spigot layers, cap and solvent cement for joining of P.V.C. pipes.
Excavating trench including laying out, setting up sight rails, ramming soft bed, providing and ramming murum cushioning in rock excavation, shoring sloping, dewatering if required, protecting and refilling trench, after laying the pipe and making good excavated road surface.
Laying pipes including cutting where necessary and waste.
All necessary labour, materials and use of tools and equipment to complete the item satisfactory.

MODE OF MEASUREMENT AND PAYMENT

The contract rate shall be for one meter or pipe laid including all fittings, Making up C.I.D./ Coupler joint paid for separately. For P.V.C. pipes the item includes joining also. Cutting and waster will not be paid for separately. The length shall be measured net on the straight and curves along the centre line over the pipes and fitting correct upto one cm.

DRAINAGE SPECIFICATIONS

STONEWARE OF HUME PIPE DRAIN LINE

The S.W. or Hume pipes should be of approved Design and of standard quality. The joints to be made (spigot and socket or collar as the case may be) by dashing 2 or 3 standards of tarred gasket which should be filled afterwards with neat C.M.(1:2) and wiped out clean. The line should be perfectly straight and true to the required grade or slope.

Before filling the excavated trenches, the pipe line should be tested for standard hydraulic test to the entire satisfaction of the Architects or Engineers. The item includes laying the pipe line on rammed and consolidated foundations jointings, testing and railing the excavated trenches after completion of work. The trench is to be filled with hard murum for 30 mm, above the pipes and the rest should be filled with ordinary excavated stuff. The trenches to be filled in 2 layers, if any leakage is found it should be immediately removed.

B. B. MASONRY CHAMBERS

The chamber shall excavated to the depth required for the foundation below the invert of the drain pipe, at the site of the pit and shall be of required size.

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Foundations shall be (1:3:6) c.c. wall to be in 25 cm. brick work in C.M. (1:6) walls and bottom to be internally plastered with a 20 mm. thick plaster thickness in cement and sand (1:3) finished with neat cement. At the bottom of each pit, a channel of full width and depth of pipe drain is to be constructed of cement concrete plastered with 25 cm. Coating of cement and (1:3). Similar curved channels are to be constructed of cement concrete plastered with 2.54 coating of cement and sand (1:3). Similar curved channels are to be construction in the pits to be given a gradient of 1 in 30. All cement work to be watered for 15 days after completion. The rate shall be including excavating, base concreting, B.B. Masonry, inside plastering, fixing of gully trap, fixing of C.I. frame and cover or concrete cover fixing, benching etc. complete. The C.I. frame and cover should be got approved before fixing.

S.W. SEWER TRAP CHAMBER

Specifications same as per above Item. The item includes providing and fixing sewer trap of size specified in the memorandum with C.I. frame and cover of required size or precast R.C.C. cover as specified. The cover shall be fixed neatly on the top of chamber in C.M. (1:6). The cover shall be of required weight and size either round or rectangular as required C.I. steps shall be provided in the sewer traps chamber.

C. I. VENT PIPE

Providing and fixing 10 cm. dia G.I. pipe ventilator with screen cover of mosquito wire gauge, with burnt brick masonry in cement mortar in proportion 1:6. Ventilator includes the construction of cement concrete foundation and pillar of 45 x 45 x 60 cm. as per instructions. The pillar should be plastered on all sides and should be watered for 10 days, 10 cm. dia G.I. pipe of 4.5 Metres height should be fitted in the pillar with mosquito gauge at the top end.

PROVIDING AND LAYING DRAINAGE LINES

The sewer shall be to the alignment and gradient shown on the places and sections and also actually on site. The socket end of pipes shall always face upstream of sewage flow.

The sewer shall run in perfectly straight lines between manholes as shown on plans.

The alignment and gradient of each pipe shall be checked by means of boning rod and sight rail and of the invert will be tested by means of straight edge regularly. The pipes before being laid shall be thoroughly cleaned, specially at the inside of the pipes.

No extra rate will be paid for cutting pipes to make up and adjust length in alignment between manholes. After sufficient time has been allowed for the joints to set, before filling the trench, the joints of pipes must be proved water tight by filling the pipes with water to the level of 2 meters above the top of the highest pipe in the length to be tested heading the water up for a period of testing. No portion of pipe shall under any circumstances be covered up until inspected and passed by the Architect or Engineer.

The water test is made by inserting plug at the lower end of each length and a right angled bend at the top brought into position and made tight with clary. The air bubbles having escaped after the first filling, water is again added to completed fill the pipe. If the water level does not fall more than 13 mm. in a length of 9 m. the joints may be regarded as satisfactory. All testing apparatus are to be brought and fixed by the contractor at his costs.

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PROVIDING AND FIXING R. C. C. SADDLE BLOCKS

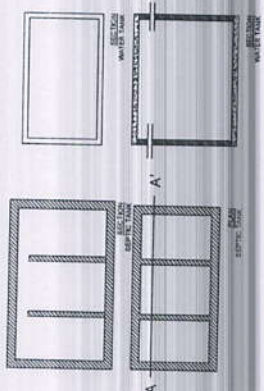
R.C.C. Saddle block of size (100 x 60 cm.) clear and 15 cm. thickness and these must be fixed in position and fixed in base in C. M. (1:6) Rate to include providing foundation for these blocks, curing etc. complete. The blocks will have to be cast on site as approved by the Architects or Engineers. The curing tank must be constructed and blocks cured for 21 days. The reinforcement will be 12 mm. dia at 15 cm. c/c both ways.

PROVIDING AND FIXING STEEL BARS

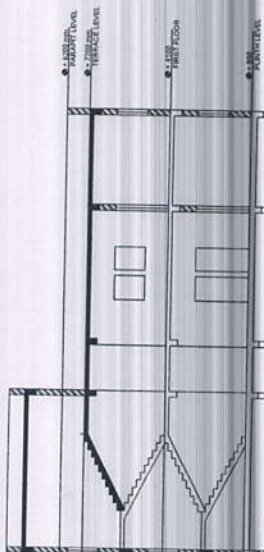
Steel bars should be provided and fixed in position according as required and as per instructions. The payment will be done on M. T. basis.

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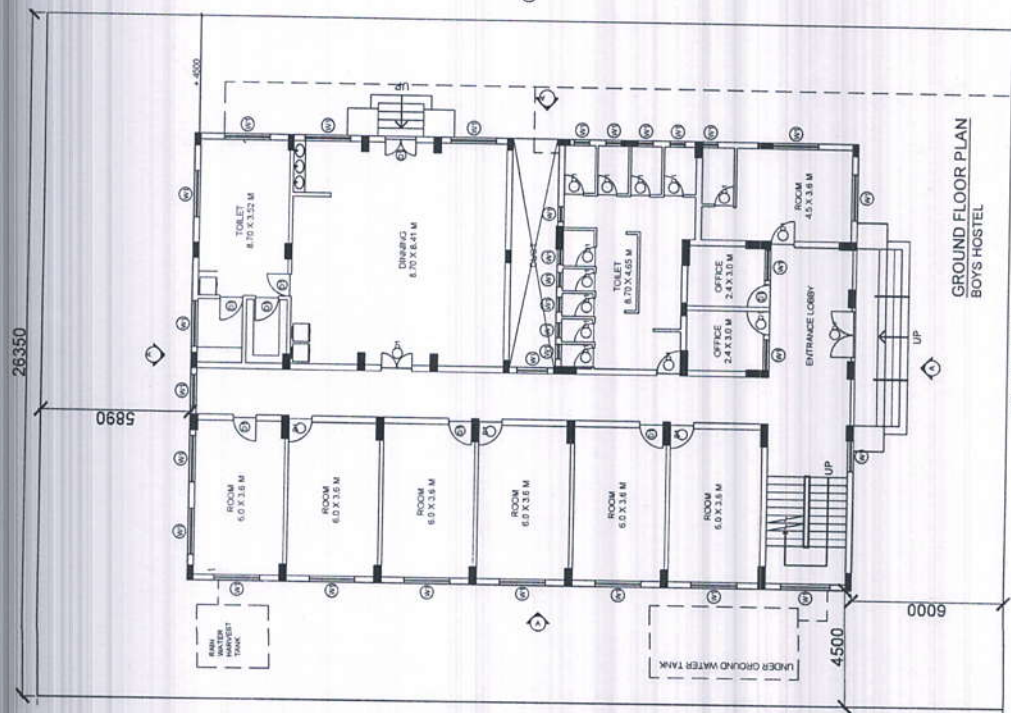
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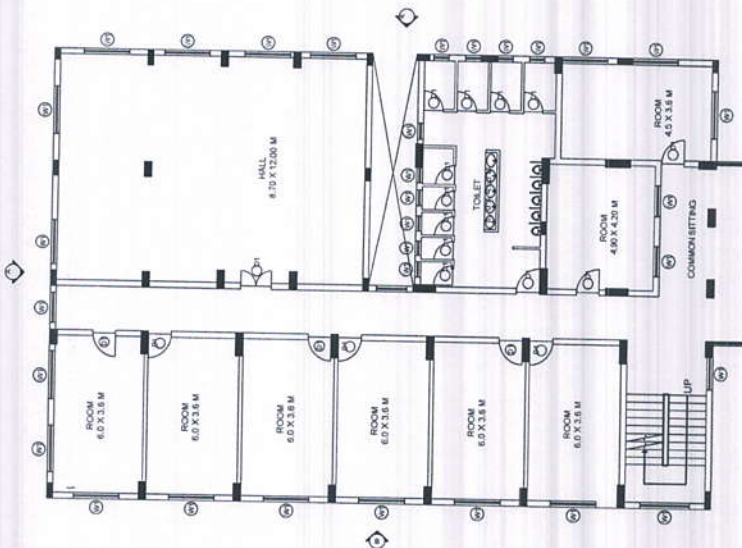
SECTION XX'
BOYS HOSTEL



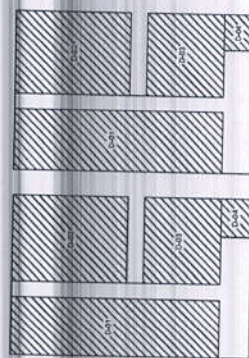
SECTION YY'
BOYS HOSTEL



GROUND FLOOR PLAN
BOYS HOSTEL



FIRST FLOOR PLAN
BOYS HOSTEL



Polygon	LENGTH	WIDTH	Area
D-01	22.73	6.46	146.83
D-02	12.53	9.2	115.26
D-03	8.83	9.2	81.23
D-04	4.00	3.38	13.52
Total	→	→	438.74

Polygon	LENGTH	WIDTH	Area
D-01	22.73	6.46	146.83
D-02	12.53	9.2	115.26
D-03	8.83	9.2	81.23
D-04	4.00	3.38	13.52
Total	→	→	438.74

AREA STATEMENT

AREA OF PLOT 84800.00 SQ.M
A- EXISTING STRUCTURE 58445.62 SQ.M
B- PROPOSED STRUCTURE 876.00 SQ.M
B/U ON GROUND FLOOR 438.74 SQ.M
B/U ON FIRST FLOOR 438.74 SQ.M

TOTAL BUILT UP 59341.42 SQ.M
F.S.I 0.70

BRIEF SPECIFICATIONS

R.C.C. FRAME STRUCTURE
FOUNDATION UP TO 1.5 M
STRATA EXTERNAL WALLS
0.23 M THK INTERNAL WALL
0.115 M THK
EXTERNAL SAND FACED
PLASTER INTERNAL NEERU
PLASTER EXTERNAL
ALL ROOMS W/ DOORS AND
ALL WINDOWS

LEGEND

PLOT BOUNDARY SHOWN IN THK BLACK
EXISTING WORK SHOWN IN THK YELLOW
PROPOSED WORK SHOWN IN THK RED
RAIN WATER HARVESTING SHOWN IN THK DOTTED RED
RAIN WATER HARVESTING SHOWN IN THK DOTTED BLUE

NO. DATE

REVISIONS

APPLICANTS/OWNER SIGN

NAME OF OWNER

Dayanand Education Society,
Latur

PROJECT TITLE

Proposed Hostel Dayanand Science College
at Barshi Road, Latur, Dst: Latur

ARCHITECT AND ENGINEER



**Shanteshwar Barbade
& Associates**

O Architect O Structural Consultant O Govt. Approved Valuer
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NORTH



DATE : 28-12-21 DRAWING NO:

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