

TENDER DOCUMENT
(Technical Bid Part II)

**RENOVATION WORKS FOR DRINKING WATER FACILITY &
TOILET BLOCKS**

AT

DAULAT RAM COLLEGE

UNIVERSITY ENCLAVE, UNIVERSITY OF DELHI, DELHI-110007



PART-A
(TECHNICAL BID)

Architects
M/s SPACE ACE

ARCHITECTS & INTERIOR DESIGNERS
V-20A/05 DLF CITY-III, GURGAON,
HARYANA - 122002

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Total No. of Pages Technical Bid : 56

RENOVATION WORKS FOR DRINKING WATER FACILITY & TOILET BLOCKS

AT
DAULAT RAM COLLEGE

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2. DETAILS OF TENDER

1. Details of work to be done : Civil /Electrical/Plumbing
2. Form of contract : Percentage rate on pre priced Schedule of quantities.
3. Approximate estimated cost including civil, sanitary & electrical work : Rs. 73.30 Lacs
3. Earnest money : Rs.1,46,600/- (i.e 2% of the estimated cost of work) in form of demand draft in Favour of **DAULAT RAM COLLEGE** Payable at Delhi in a separate sealed Envelope.
4. Period of contract / time Of completion : 60 DAYS
5. Last date and time for Receiving of sealed tender : 27th oct 2015 by 3:00 P.M at DAULAT RAM COLLEGE, UNIVERSITYENCLAVE (UNIVERSITY OF DELHI) DELHI-110007
6. Place and date of opening : 27th oct 2015 by 3:00 P.M at At DAULAT RAM COLLEGE, UNIVERSITYENCLAVE (UNIVERSITY OF DELHI) DELHI-110007

M/s Space Ace

V-20, A/05. DLF, Phase-III, Gurgaon, Haryana-122002.

Mob: 9312650035

3.SUMMARY OF SALIENT FEATURES

- | | | |
|----------------------------------------------|---|-------------------------------------------------------------------------------------------------------------------|
| 1. Type of Contract | : | Item rate basis |
| 2. Validity of offer | : | 60 days from the date of opening of tender. |
| 3. Earnest Money Deposit | : | Rs.1,46,600/- by demand draft only. |
| 4. Date of commencement of work at site | : | Within 7 days from the date of issue of letter of Intent |
| 5. Mobilization advance | : | No mobilisation advance shall be paid. |
| 6. Period of completion | : | 60 days from the date of issue of letter of Intent |
| 7. Interim Payments | : | Once in fifteen days |
| 8. Minimum value of work for running bills . | : | Rs. 18.32 Lacs |
| 9. Period of honouring of certificates | : | 15 days from the date of issue of certificate of payment by the Architect. |
| 10. Retention Money | : | 5% to be retained(including security deposit) and to be released after the completion of defect liability period. |
| 11. Defect Liability period | : | 12 (Twelve) calendar months from the date of issue of virtual completion certificate by the Architect. |
| 12. Liquidated Damages | : | 1.0% of contract amount for every Fortnight, maximum up to 5% of total contract value. |
| 13. Language for Communication | : | English |
| 14. Insurance, Custom | : | To be provided and paid by contractor |

Duties & taxes, work
Contract tax, sales tax,
service tax , vat and all taxes

15. Assignment & Subletting : Not allowed .
16. Rates of B.O.Q's items : Include item complete in all respects.
1. Period of submitting final bill by contractor : One month from the date of completion
18. water and electricity charges : @0.25% for each will be deducted from the final bill .
19. Labour cess : @1% from each bill would be deducted
20. T.D.S : @2% would be deducted from each bill

Signed this _____ date _____ 2015

Signature of contractor
with date and seal

4. ELIGIBILITY CRITERIA :

1.1 MINIMUM PRE-QUALIFICATION CRITERIA:

1.1.1 Pre-Qualification will be based on bidders' meeting all the minimum criteria for pre-qualification and other criteria regarding their work experience, personnel and equipment capabilities and financial position as demonstrated by their responses in the forms attached to the Letter of Application.

1.1.2 The following is the minimum criteria for Pre-Qualification:

- (i) Average Annual Financial Turnover during the last three financial Years ending in march 2015 should be minimum 80% of the estimated cost of project every year.
- (ii) The contractor should have done civil works comprising of renovation of toilets including civil, sanitary & electrical works in Govt. reputed institutions, Govt. colleges, universities, Public Sector Undertakings for atleast:

One similar work of minimum 80% value of the estimated cost in last 3 financial years

Or

Two similar works each of minimum 50% value of the estimated cost in last 3 financial years

Or

Three similar works each of minimum 40% value of the estimated cost in last 3 financial years

5.NOTICE TO CONTRACTORS

M/s -----

PROJECT: RENOVATION WORKS FOR DRINKING WATER FACILITY & TOILET BLOCKS AT DAULAT RAM COLLEGE.

Dear Sirs,

1. The **DAULAT RAM COLLEGE**, Delhi takes the pleasure in inviting you to participate for the aforesaid work,
2. Sealed tender should be addressed to the **Principal, Daulat Ram College, University Enclave (University of Delhi), Delhi-110007.**
3. The tenders are required to submit their offer in sealed packet.
4. The clarification if any may be obtained from the Architect, **M/s SPACE ACE, V-20, A/05, DLF Phase-III, Gurgaon, Haryana-122002 (09312650035)** on any working day during office working hours.
5. 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 filling this tender and for entering into contract for the execution of the same and must examine the drawings and inspect the site of the work acquaint himself with all local conditions and matters pertaining thereto.
6. Each of the tender documents is required to be signed by the person or persons submitting the tender in token of his/their having acquainted himself/themselves with all the conditions/specifications, as laid down. Any tender with any of the document not so signed may be rejected.
7. Any additions and alternations made filling the tender must be attested by initial of the tenderer. Over-writing of figures is not permitted. Failure to comply with either of these conditions will render the tender void. No advice or any change in rates or conditions after submission of the tender will be entertained.
8. The tenderers shall deposit with **DAULAT RAM COLLEGE** payable at Delhi Rs.1,46,600/- by Demand Draft only as the Earnest Money which amount shall be forfeited in the event of any refusal or delay in signing- the Contract. The deposit of the unsuccessful tenderers will be returned without any interest, after a decision is taken regarding without any interest, after a decision is taken regarding the award of the Contract. The Earnest Money of the successful tenderer will be adjusted towards retentions money. Any tender not accompanied by the requisite Earnest Money in Demand Draft will not be considered and shall stand rejected. It may be noted that conditional Tender May be liable to be rejected.
9. The first part shall consist of Earnest Money Deposit, Letter of offer from the Tenderer and the Letter indicating unconditional acceptance of the Tender conditions in totality. The Tenderers should all note that they are not required to disclose their quoted price in

the Technical Bid. The First part of the Technical Bid will have EMD and the second part will consist of the documents issued to them i.e. Notice to Contractors, Agreement Form, General Conditions, Special Conditions, Appendix, Specifications, Corrigendum issued if any (The tenderers shall not make any correction/alteration on these un priced documents) including price bid, the part II will also contain items listed in clause 2.9 regarding deployment of persons, PERT chart, Eligibility criteria etc. The Part I & II should be clearly indicated on the envelopes. The Part I shall be opened First and if found in order Part II shall be opened same day.

10. Envelope marked as Technical Bid & Financial Bid shall be put in separate large envelope of adequate size and sealed clearly subscribing that it is the Tender for **Renovation Works for Drinking water and Toilet Blocks** it shall be marked to **Daulat Ram College** and must be sealed.
11. Within 10 (ten working) days of the receipt of intimation from the **DAULAT RAM COLLEGE** of the acceptance of his/their tender, the successful tenderers shall be bound to implement the Contract by signing agreement in accordance with the terms and conditions of the contract attaching herewith, but the work order or the written acceptance by the **DAULAT RAM COLLEGE** of tender will constitute a binding agreement between the **DAULAT RAM COLLEGE** and the **CONTRACTORS** so tendering whether such formal contract is or not subsequently entered into.
12. All compensations or others of money payable by the Contractor to **DAULAT RAM COLLEGE** under the terms of this contract may be deducted from the retention money or from any sum that may be or may become due to the Contractor on any account whatsoever and in the event of the retention money being reduced by reason of- any such deductions the Contractor shall within 7 days of being asked to do so make good in cash or cheque any sum or sums which have been deducted from his retention money.
13. In case, where the same item of work is mentioned at more than one place in the Schedule of quantities the lowest of the rates quoted by the Contractor for the item shall be taken for the payment of this item.
14. Time is the essence of the Contract. The work should be completed in 60 days from the date of issue of the work order to the Contractor to commence the work.
15. If the contractor fails to complete the work by the schedule date of completion or within any sanctioned extended time, he will have to pay liquidated damages for the period that work remains incomplete as per clause of the attached 'General Conditions of Contract.
16. The quantities contained in the Schedule are only approximate. The work as actually carried out and done will be measure up from time to time, for which payment will be made subject to the terms and conditions of the Contract.
17. The Tenderers are advised to note that NO MOBILISATION ADVANCE shall be released to the contractor for commencing the work.
18. Tender shall be valid for period of **60 days** from the due date of its submission to **DAULAT RAM COLLEGE**. However, **DAULAT RAM COLLEGE** is not bound to accept the lowest or any tender and reserves the right to accept or reject any or all tenders either in whole or in part, without assigning any reason for doing so. The alongwith their tender.

PRINCIPAL,
DAULAT RAM COLLEGE

**M/s SPACE ACE
V-20, A/05, DLF, PHASE-III
GURGAON, HARYANA-122002.
MOB: 09312650035**

6. LETTER INVITING TENDER

To, -----

SUB: - RENOVATION WORKS FOR DRINKING WATER FACILITY & TOILET BLOCKS AT DAULAT RAM COLLEGE

Dear Sir,

1.0 Sealed item rate tenders are invited for the subject work as detailed below:

A copy of tender document with one set of drawings is enclosed for submitting your offer.

**Name of work : RENOVATION WORKS OF DRINKING WATER
FACILITY & TOILET BLOCKS AT DAULAT RAM
COLLEGE.**

1. Time for completion of the work : 60 days
2. Approximate estimated cost including civil, sanitary and electrical works : Rs. 73.30 Lacs
2. Earnest Money Deposit : Rs.1,46,600/- by demand draft
favour of DAULAT RAM COLLEGE, DELHI only

Important: In case the contractor withdraws his offer within the validity period of the tender, the earnest money deposited along with tender shall stand forfeited.

Tenders to be submitted : PRINCIPAL
DAULAT RAM COLLEGE,
UNIVERSITY ENCLAVE
(UNIVERSITY OF DELHI), DELHI-110007.

5. Last date for submission of tender : 27-10-2015 (UPTO 3:00 P.M)

6. Date & time for opening of technical Bid document: 27-10-2015 (UPTO 4:00 P.M)

2.0 Your attention is invited to "Instructions to Tenderers" attached herewith for strict Compliance.

CONDITIONAL OFFER

- 3.0** Any tenders who proposes alterations to any of the conditions, specifications laid down in the tender documents or proposes any new conditions, whatsoever will be liable to be rejected
- 4.0** In case any tenderers, inspite of clause 3.0 above proposes any new conditions or proposes alteration to any condition / specifications, which will have financial effect if the condition/alteration are not accepted then at the financial effect plus or minus shall be indicated by the tenderer against each such condition/alteration proposed by the tendered for with drawl of the condition/alteration, alongwith his tender offer. No financial effect shall be considered after opening of tender
- 5.0** Owner reserves the absolute right to accept / reject any or all tenders without assigning any reason.
- Kindly acknowledge the receipt of this letter with all enclosures and confirm that you will submit your order by due date
- 6.0** Architect reserves the right to increase or decrease the quantity given in the tender. The quantities and drawing given are tentative and can vary and Change as per working drawings supplied for construction/furnishing.

For & on behalf of

PRINCIPAL,
DAULAT RAM COLLEGE

7. INSTRUCTIONS TO TENDERERS

1.0 LOCATION

The site is located in **Daulat Ram College(Academic Block), University Enclave(Universirty of Delhi), Delhi-110007**. The tenderer is advised to inspect the site to ascertain the nature of site, access thereto, location, facilities for procurement of material and working: labour rates prevalent in the area, all matters affecting the rates and execution of the work. The tenderer shall be deemed to have full knowledge of the site and drawings whether or not he actually inspects them. Tenderers must get acquainted with proposed work and study drawings, designs, specifications, conditions of contract and other conditions carefully before tendering. No request of any change in rates or conditions for want of information on any particular point shall be entertained after receipt of the tenders.

2.0 SUBMISSION OF TENDER

- 2.1 You are request to quote strictly as per the terms and conditions, specifications, standards given in the tender document and not to stipulate any deviations.
- 2.2 Addenda to this document if issued prior to submission of the tender must be signed and submitted along with the tender document. The tenderer should write clearly revised quantities in "Schedule of Rates" of Tender Document and should price the work based on the revised quantities when amendment for quantities are issued in addenda.
- 2.3 Tenderers must return all the documents and drawings issued to them, while submission of their tender duly stamped and signed.

2.4 ALL PAGES TO BE INITIALLED

All signatures in tender documents shall be dated as well. All pages of tender documents shall be initialled at the low right hand corner or signed wherever required in the tender papers by the tenderer or by a person holding power of attorney authorising him to sign on behalf of the tender before submission of tender. A copy of registered document evidencing power of attorney shall have to be submitted with tender.

2.5 RATES TO BE IN FIGURES AND WORD

The tender shall quote in English both in figures as well as in words the rates and amounts tendered by him in the schedule of rates of each item in such a way that interpolation is not possible. The amount for each item should be worked out and entered and requisite totals given of all items both in figures and in words. The tendered amount for the work shall be entered in the tender and duly signed by the tenderer. The owner shall have the right to carry out arithmetical corrections and the unit rate quoted in words shall be considered for calculations and arriving at the contract sum.

2.6 CORRECTIONS OF ERASURES

All corrections and alterations in the entries of tender papers should be signed in full by the tenderers. Corrections with white fluid and overwriting are not permitted

- 3.0** Any printing or typographical errors / omission in tender document shall be referred to the architect and their interpretations regarding correction shall be final and binding on contractor.

4.0 TRANSFER OF TENDER DOCUMENTS

A transfer of tender document purchased by one intending tenderer to another is not Permitted.

5.0 EARNEST MONEY

The tenderer must pay the amount of Earnest Money as mentioned in the Letter Inviting Tender.

5.1 The Earnest Money of the unsuccessful tenderers will-be refunded within a month's time of opening of financial bid without any interest.

5.2 The EMD of successful tenderer(s) will be retained till the completion of the work.

5.3 The EMD shall be forfeited if the tender either fails to start the work within a period of 10 (Ten) calendar days or fails to execute the agreement within 30 days after the receipt of letter acceptance of tender or the Letter of intent

6.0 VALIDITY

Tenders submitted by tenderers shall be remain valid for acceptance for a period of Two calendar months from the date of opening of the tender.

7.0 ADDENDA

Addenda to the tender documents may be issued prior to the date of opening of the tenders to clarify documents or to reflect modifications to the design or contract terms or specifications or quantities.

7.1 All addenda issued by the architect shall become part of the tender documents. Tenders shall be opened at the fixed date & timings indicated in the tender forwarding letter, in presence of those tenderes who have submitted tenders & may be present.

8.0 RIGHT TO ACCEPT OR REJECT TENDER

The acceptance of a tender will rest with the Architect who do not bind themselves to accept the lowest tender and reserve to themselves the absolute authority to reject any or all the tender received without assigning any reason thereof.

9.0 TIME SCHEDULE

The time allowed for carrying out the job is 60 days to be reckoned from the date of letter of intent.

10.0 The drawings issued alongwith tender documents are to give fair idea of type of works and for the purpose of bidding only. Working drawings for the purpose of execution of work at site shall be issued to the successful tender only after issue of the work order.

11.0 PRESENTATION

Contractors invited for negotiations shall be required to make a presentation regarding achieving quality, timely completion & safety regulations.

12.0 Contractor shall quote rates in full rupees, not in fractions

13.0 SIGNING OF THE CONTRACT

The successful tender shall be required to execute agreement on stamp paper of appropriate value in the Performa attached with this tender document within 10 days from the date of receipt of the notice of acceptance of tender or letter of intent. All cost involved therein shall be borne by the contractor. In the event of failure on the part of the successful tenderer to sign the agreement within the above-stipulated period, the earnest money will be forfeited and acceptance of the tender shall be considered as cancelled.

- 14.0** On acceptance of the tender, the tenderer shall furnish the names, addresses and work experience of his accredited representatives who would be responsible for taking instructions from the architect.

8. TENDER FORM:

Principal
Daulat Ram College (University Enclave)
University Of Delhi,
Delhi-110007.

SUB: - RENOVATIONS WORKS FOR DRINKING WATER FACILITY & TOILET BLOCKS IN DAULAT AT RAM COLLEGE.

Dear Sir,

With reference to the tender invited by you for the above proposed work, I / we write this after having:

1. Examined the designs, drawings, details, specifications, schedule of quantities, instruction to tenderers, draft agreement and the conditions of contract annexed thereto (hereinafter called the documents) relating to Interior work
2. Visited and examined the site of the proposed work and,
3. Acquired the requisite information as affecting the tender.

I / We undersigned, hereby offer to execution the proposed work in the given time frame working as per condition of site. in strict accordance with the contract documents for the consideration to be calculated in terms of the priced schedule of quantities. I / We undertake to complete the whole of the works as per the attached schedule from the date of issue of an intimation by you that our tender has been accepted. I / We further undertake that on failure subject to the conditions of the contract relating to extension of time, I / We shall pay the agreed 'Liquidated Damages to the Employer the sum named in the Appendix to the conditions of contract, as Liquidated Damages for the period during which the work shall remain incomplete.

I/We hereby deposit with you as earnest money of Rs.1,46,600/- carrying no interest and I / We do hereby agree that this sum shall be forfeited in the event of employer accepting my / our tender and I / we fail to take up the contract when called upon to do so.

I / We further agree to the deduction of 10% from the 'Interim Payment' towards the 'Retention Money' will be returned as per the relevant clauses in the Agreement

Thanking You,

Yours faithfully

(Name of the partners of the firm)

Or

Name of the persons having power -of -Attorney to sign to contract.

9. Security Deposit

Total Security Deposit: -

The Total Security Deposit on the contract is calculated as under

a) 10.00% on the estimated cost of work including EMD amount.

1.1 Total Security Deposit shall comprise of

- a) Earnest Money Deposit
- b) Retention money deposit

1.2 Earnest Money Deposit (EMD)

The EMD shall be accepted in demand draft only in favour of **Daulat Ram College** Payable at Delhi.

1.3 Retention money

The retention percentage (i.e. deduction from interim bill) shall be 10% of the gross Value of each interim bill

- . To be paid after completion of defect liability period.

10. GENERAL CONDITIONS OF CONTRACT

1.0 INTERPRETATIONS:

In constructing these conditions and the specifications schedule of quantities and contract agreement, the following words to shall have the meaning herein assigned them except where the subject or context otherwise requites:

- (a) "Employer" shall mean **Daulat Ram College** and shall include its assignees and successors.
- (b) "Contractor" shall mean M/s_____ and shall include his / their heirs, legal representatives, assignees and successors.
- (c) "Works" contract. Shall mean the works to be executed in accordance with the
- (d) "Contract" shall mean the Articles of Agreement, the General Conditions, Special Conditions, the Appendix, the Schedule of Quantities, particular specifications and drawings attached hereto and duly signed.
- (e) "Contract Price" shall mean the sum named in the tender subject to such additions there to or deductions there from, as may be made under the provision hereinafter contained.
- (f) "Site" shall mean the sum of work **Daulat Ram College, (Academic Block) (University of Delhi), University Enclave, Delhi-110007**. On which the works are to be executed or carried out and any other premises provided by the Engineer-in Charge/Architect for the purpose of the contract.
- (g) "Drawings" shall mean the drawings referred to in the Schedule of Quantities, Specifications and any modifications of such drawings approved in Writing, by the Architect and such other drawings as may from time to time be furnished or approved in writing by the Architect.
- (h) Engineer-in Charge/Architect shall mean Architect of project.
- (i) "Notice in Writing" or written notice shall mean a notice in writing, typed or printed matter 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 in the ordinary course of post it should have been delivered.
- (j) "Act of Insolvency" shall mean any act of Insolvency as defined by Law.
- (k) "Net Prices" if in arriving at the Contract amount the contractor shall have added to or deducted-from the total of the items in the tender any sum either as a percentage or otherwise, then the net price of any items ill the tender shall be the sum arrived at by adding to or deducting from the actual figure appearing in the tender as the price of that item a similar percentage or proportionate sum.
Provided always that in determining the percentage or proportions of the sum so added or deducted by the contractor, the total amount of any Prime cost items and Provisional sums of money shall be deducted from the total amount of the Tender. The expression "net rates" or "Net Prices" when used with reference to the contract or amount shall be held mean rates or prices so arrived at.
- (l) "Virtual Completion" shall mean that the proposed site is in the opinion of the Architect, fit for occupation.
- (m) The "Final Certificate" in relation to a work means the certificate regarding the satisfactory compliance of the various provisions of the contract by the contractor, issued by the Architect after the period of liability is over.

(n), The "Tender" means the tender submitted by the Contractor for acceptance by the **Daulat Ram College**.

(o) The "Sub-Contractor" means any person or firm or company (other than the Contractor) to whom any part of the work has been entrusted by the Contractor with the written consent of the Engineer-in-Charge/Architect.

2.0 SCOPE OF CONTRACT:

The Contractor shall carry out and complete the said civil, plumbing & electrical works comprising of false ceiling, painting, civil including miscellaneous, electrical works and modification / addition to existing provision complete in every respect in accordance with Contract and with the directions of and to the satisfaction of the Architects and the employer. The Architects may in their absolute discretion and from time to time, issue further drawings and/or written instructions, details, directions and explanations which are hereafter collectively referred to as "Architect's Instructions" in regard to:

- a) The variations or modifications of the design quality or quantity of works or the addition or omission or substitute of any work.
- b) Any discrepancy in the drawings or between the Schedule of Quantities and/or drawings and/or Specifications.
- c) The removal or re-execution or any works executed by the Contractor.
- d) The removal from the site of any material brought there on by the contractor and the Substitution of any other material there from.
- e) The dismissal from the works of any person / persons employed there upon.
- f) The opening up for inspection of any work covered up.
- g) The amending and making good of any defects under clause "Removal of Improper Work and Material".

The Contractor shall forthwith comply and fully execute any work comprised in such Architect's Instructions provided always that verbal instruction. Directions and explanations given to the Contractor or his representative upon the works by the Architects shall, if involving a variation, be confirmed in writing by the Contractor within 3 days and if not dissented from in writing within further 3 days by the Architect. Such shall be deemed to be the Architect's instructions within the scope of the contract.

If compliance with the Architect's instructions as aforesaid involved work and/or expense and/or loss beyond that contemplated by the Contract. Then unless the same were issued owing to some breach of this contract by the Contractors. The Employer shall pay to the Contractor on the Architect's Certificate, the price of the said work (as an extra to be valued as herein after provided) and/or expense and/or loss.

3. DRAWINGS AND SPECIFICATIONS:

The Works shall be carried out to the entire satisfaction of the Employer and the Architect, in accordance with the signed drawings and specifications and such further drawings and details as may be provided by the Architect, and in accordance with such written instructions, directions and explanations as may from time to time be given by the Architect, whose decision as to the sufficiency and Quality of the work and materials shall be final and binding upon all parties. If the work shown on any such further drawings or

work that may be necessary to comply with any such instructions, directions or explanations, be in the opinion of the Contractor extraction that comprised in or reasonably to be inferred from the contract he shall before proceeding with such work, give notice in writing to this effect to the architect, and in the event of the Architect agree to the same in writing, the Contractor shall be entitled to an allowance in respect of such extra work. If the Architects and the Contractor fail to agree as to whether or not there is an extra, then, if the Architect decided that the Contractor is to carry out the said work, the contractor shall do so and the Question whether or not there is any extra, and if 80, the amount thereof, shall failing agreement, be settled by Arbitration as hereinafter provided, but such reference shall in no way delay the fulfilment of this contract.

No drawing shall be taken as in itself an order for variation unless. In addition to the Architect's signature, it bears express words stating that it is intended to be such an order or bears a remark express words stating that it is intended to be such an order or bears a remark "GOOD FOR CONSTRUCTION". No Claim for payment for extra work shall be allowed unless the said work shall have been executed under the provisions of clause 8 (Authorities, Notices, Patent Rights and Royalties), or by the Authorities or directions in writing of the Architect as herein mentioned.

One complete set of contract document including the signed drawings and signed specifications and the Employer both to the Architect and to the Contractor shall furnish schedule of quantities. The Architect or Employer shall furnish within such time as he may consider reasonable, one copy of any additional drawing which may be considered necessary for the execution of any part of the work. Such copies shall be kept at the works and the Architect or his representative shall, at all reasonable times have access to the same and shall be returned to the Architect by the Contractor before the issue of the Final Certificate. The contract shall remain in the custody of the Employer, and shall be produced by him at his office as and when required by the Contractor or by the Architect.

4. SCHEDULE OF QUANTITIES:

The Schedule of Quantities unless otherwise stated shall be deemed to have been prepared in accordance with the method of measurements specified in the particular specifications and shall be considered to be approximate. The employer does not undertake to carry out the whole of work as shown in the drawings 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 complete actions or damages for the work so omitted or cancelled by the employer. Each tender item should be filled in with the rates and amounts in separate columns and all the sections should be totalled up in order to show the aggregate value of the entire tender. The rates should be filled both in figures and words for each item and in case of discrepancy the rates filled in words shall be considered as correct for the evaluation of tender amount. The initials of the tenderers shall duly attest all corrections in the tender Schedule. Corrections, which are not attested, may entail the rejection of tender.

5. SUFFICIENCY OF SCHEDULE OF QUANTITIES:

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the prices stated in the Schedule of Quantities and/or the Schedule of Rate and Prices, which rates and prices shall cover all their obligations under the contract, and all matters and things necessary for the proper completion of the works.

6. ERRORS IN SCHEDULE OF QUANTITIES:

Should any error appear in the Schedule of Quantities, other than in the Contractor's prices and calculations, it shall be rectified and such rectification shall not vitiate the contract but shall constitute a variation of the Contract and be dealt with as an authorised extra or deduction.

7.CONTRACTOR TO PROVIDE EVERYTHING NECESSARY

The contractor shall provide everything necessary for the proper execution of works according to the true intent and meaning of the drawings, General conditions; specifications and Schedule of Quantities taken together whether the same may or may not be particularly shown or described therein, provided that the same can reasonably be inferred there from and if the Contractor finds any discrepancy in the drawings or between the drawings, general conditions, specifications and Schedule of Quantities. he shall immediately refer the same in writing to the Architect, who shall decide in consultation with the employer which shall be followed and their decisions shall be final and binding in the matter.

The Contractor shall supply, fix and maintain at his own cost, during the execution of any works, all necessary centring; scaffolding, staging, planking, strutting, hoarding, watching and lighting by nights as well as by day required not only for the proper execution and protection of the said works, but also for the protection of the public and the safety of any adjacent roads, streets, collars, vaults, pavements, walls, houses, building all other erections, matters or things. The Contractors shall take down and remove any or all such centering, scaffolding, staging, planking, strutting, etc. as occasion shall require or when ordered so to do and shall fully reinstate at his own cost and make good all the matters and things disturbed during the execution of the works to the satisfaction of the Architects.

8. AUTHORITIES. NOTICES, PATENT, RIGHTS AND ROYALTIES:

The contractor shall conform to the provisions of the statutes relating to the works, and to the Regulation and bye-laws of any local authority, and or any water, lighting and other Companies and / or Authorities with whose systems and the executed works building proposed to be connected, and shall before making any variation from the drawings or specifications. That may be necessitated, by so conforming give to the Architects written notice with a copy to the Employer specifying the variations proposed to be made and the reason for the making it and apply for instruction thereon. In case, the contractor shall not within ten days receive such instructions, he shall proceed with the work conforming with the provisions regulations or bye-laws in Question.

The Contractor shall bring to the attention of the architect all notices required by the said acts, regulations or bye-laws to be given to any Authority, and pay to such Authority or to any Public Officer all fees that may be properly chargeable in respect of the works and lodge the receipts with the Architect/Employer.

The Contractor shall indemnify the Employer against all claims in respect of patent rights designs, trade marks or name of other projected rights in respect of any work or material used for or in connection with the works or temporary works and from and against all claims, demands, proceedings damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. The Contractor shall defend all actions arising from such claims, and shall himself pay all royalties, license fees, damages, cost and charges of all and every sort that may be legally incurred in respect thereof

9. MATERIAL AND WORKMANSHIP TO CONFORM TO DESCRIPTION:

All materials and workmanship shall, as far as procurable be of the respective kinds specified in the Schedule of Quantities and/or specifications and in accordance with the Architects instructions and the Contractor shall upon the request of the Architect's furnish to them all invoices, accounts, receipts and the other vouchers to prove that the materials comply therewith. The contractor shall at his own cost arrange for and / or carry any test of any materials which the Architect or Employer may require.

It will always be the responsibility of the Contractor to select and obtain all materials of good quality from the manufacturers without having any manufacturing defect there.

10. THE SETTING OUT

The Contractor shall at his own expense set out the works accurately in accordance with plans and to the complete satisfaction of the Architect. The Contractor shall be solely responsible for the true and perfect setting out of the same and for the correctness of the positions, levels, dimensions, and alignment of all parts thereof. If at any time any error in the respect shall appear during the progress or on completion of any part of the work. The Contractor shall at his cost rectify such error if called upon to do so to the satisfaction of the Architect and the Employer. The Architect and/or his representatives shall from time to time inspect the work. But such inspections shall not exonerate the Contractor in any way from his obligations to remedy any defects at his own cost which may be found exist at any stage of the work or after the same is completed.

11. The Contractor shall be solely responsible at all times for the use of good quality materials and for doing good workmanship even though the, Architects have failed to bring to his notice during their inspection of works about use of the some defective materials, and bad workmanship during the execution of the works and after completion of the works. In all cases of faulty execution and finish of the works due to use of faulty, defective and interior materials, used in the works. And due to their bad workmanship Contractor shall be liable for the payment towards damages to the Employer as ascertained by the Architect and/or he shall have to rectify the same works at his cost.

12. OPENING UP WORKS:

The Contractor shall notify the Architect in writing for their inspections of such works/, items to ensure that the same is executed as per specifications or which required to be' measured before covering/concealing the same. After notifying the Architect, he shall await instructions, which shall be given within five (5) days of receipt of such notice. If the Contractor covers up the work, before he has up notified to reinstate all work that may subsequently be, at any time, damaged, on account of any defect or insufficiency of the specifications. The Contractor shall at the request of the architect, within such time as the Architect so desires, open up for inspection any such work, and should the contractor refuse or neglect, to comply with such request, the Owner, through the Architect may employ other workmen to open up the same. If the said work has been covered up in contravention up of the Architect's instructions, or if, on being opened up. it be found in accordance with the drawings and specifications, or the instructions of the Architect, the expenses of such other workmen shall be borne by and recoverable from the contractor, or may be deducted from any amount due or which may become due to the contractor. If the work has been covered up after being approved by the Architects representatives and is uncovered subsequently and be found in accordance with the said drawings and specifications and instructions, then the expenses aforesaid shall be borne by the Employer and be added to the contract sum provided always that in the case of any urgent work so opened up and requiring immediate attention, the Architect shall within five (5) days after receipt of the written notice from the Contractor that the work has been opened, make or cause the inspection thereof to be made, and at the expiration of such time if such inspection shall not have been made, the contractor may cover the same and shall not be required to open it up again, except at the expense of Employer.

13. CONTRACTOR'S SUPERINTENDENCE & REPRESENTATIVE ON WORKS:

The contractor shall give all necessary personal superintendence during the execution of the works and so long thereafter as the Architect may consider it necessary until the expiration of the "Defects Liability period" as stated in the contract. The Contractor shall meet the Architect or their/his representatives whenever required and so informed by the Architect.

The contractor shall maintain and the represented on site, at his own cost at all times while the work is in progress, by an experienced and qualified Civil Engineer\architect, approved by the Architect and who must thoroughly understand all the trades entailed and be constantly in attendance while the men are at work. The contract's Engineer appointed at the site shall not be removed from the work without the written consent of the Architects. Any directions explanations, instruction or notices given by the Architect to such representative shall be deemed to be given to the contractor and shall be binding as such on the contractor.

14. DISMISSAL OF WORKMEN

The contractor shall on the request of the Architect immediately dismiss from the works any person employed thereon who may, in the opinion of the Architect, be unsuitable or incompetent or who may misconduct himself and such person shall not again be Employer or allowed on the works without the permission of the Architect as the case may be. The Architects shall not enter into correspondence for stating the reason for dismissal of such workman.

15. ACCESS TO WORKS:

If any work is to be done at a place other than the site of works, the Contractor shall obtain the written permission of the Architects and the Owner for doing so.

The Architect, the Owner and any person authorised by them shall at all reasonable times have access to the works and/or to the workshops, factories or other places where item / items of work are being prepared or manufactured for the contract and also to any place where the materials are lying or from which they are being obtained. The contractor shall give every facility to Architect and the Owner and their representative for inspection and examination and cost of the materials and workmanship. No person unless authorised by the Architect or the Owner, except the representatives the Public authorities shall be allowed on the works at any time.

16. ASSIGNMENT OF SUB LETTERING:

The works included in the Contract shall be executed by the Contractor and the contractor shall not directly or indirectly transfer, assign or underlet the Contract or any part share thereof or interest therein except as mentioned in clause 18 below, without the written consent of the employer and no undertaking shall relieve the contractor from the full and entire responsibility of the Contract or from active superintendence of the works during their progress.

17. SUB-CONTRACTORS

All Specialists, Merchants, Tradesmen and others executing any work of supplying and or fixing any goods for which prime cost prices or provisional sums are included in the Schedule of Quantities and /or Specifications, who may be nominated or selected by the architect are hereby declared to be subcontractors employed by the contractor, are herein referred to as nominated subcontractors.

No nominated subcontractors shall be employed on in connection with the works against whom the contractor shall make reasonable objection or (save Where the Architects and Contractors otherwise agree) who will not enter into a contractor providing:

a) The nominated sub-Contractors shall indemnify the contractor/Owner against the same obligations in respect of the sub -contract as the contractor is bound under this contract for performance of his obligations with the Owner.

b) The nominated sub -contractors shall indemnify the contractor against claims in respect of any negligence by the sub-contractor, his servants or agents or any misuse by him or them of any scaffolding or other plant, the property of the contractor or under any

workman's compensation Act in force.

- c) Payment shall be made to the nominated sub-contractor within 15 days of receipt of the Architect's Certificate, provided that before any Certificate is issued, the Contractor shall upon request furnish to the Architect proof that an nominated sub- Contractor's account included in the previous certificates have been duly discharged. If however the Owner is called upon to make such payments, the same may be done upon a Certificate of the Architect and deduct the amount thereof from sums due or which may become due to the Contractor.

18. VARIATIONS NOT TO VITIATE CONTRACT

The Contractor shall when directed in writing by the Architect omit from or vary works shown upon drawings or described in the Specifications or included in the priced Schedule of Quantities, but the Contractor shall not make any alterations or additions to or omissions from the works or any deviations from the provisions of the Contract without such authorisations or direction in writing from the Architects.

No. Claim for any thing extra shall be allowed unless it shall have be executed by the authority of the Architects as herein mentioned any such extra is hereinafter referred to as an authorised extra. No variations, i.e. additions, omissions or substitutions shall vitiate the contract.

The rate of items not included in the bill of quantities shall be settled by the Architects in accordance with the provisions of clause 21, hereof.

MESUREMENTS OF WORKS:

The Architects may from time to time intimate the Contractor that they require the works to be measured jointly and the contractor shall forthwith attend or send a qualified agent to assist the Architects or his representatives in taking such measurements and calculations and to furnish all particulars or give all assistance required by either of them.

Should the contractor not attend or neglect or omit to send such an agent then the measurements taken by the Architect shall be taken to be correct measurements of the works- The measurements. Unless otherwise stated, shall be taken in accordance with the 'method of measurements' mentioned in the particular specifications. In case of any dispute arises in the 'Method of measurements' then the final decision given by the Architects regarding the method of measurement shall be

Taken to be correct and final by the Contractor and the Employer. The contractor or his agent may at the time of measurement take such notes and measurements as he may require.

All authorised extra works, omissions and all variations made without the Architect's knowledge, if substantially sanctioned by him in writing shall be included in such measurements.

20. PRICES FOR EXTRAS ETC. ASCERTAINMENT OF

Should it be found after the completion of the works from measurements taken (in accordance with the previous paragraph) that any of the quantities or amounts of works thus ascertained are less or greater than the quantities or amounts specified for the works in the priced Schedule of Quantities and/or tender or that any variations, is made, the valuation of such quantities, amounts or variations, unless previously or otherwise agreed upon, shall be made in accordance with the following rules:

- a) The net rates or prices in the original tender shall determine the valuation of the extra work, where extra work is of a similar character and executed under similar conditions as the work period therein.

b) The net price of the original tender shall determine the valuation of the items omitted, provided if omissions vary the conditions under which any remaining items of work are carried out the prices for the same shall be valued under (c) thereof.

c) Where extra works are not of similar character and/or executed under similar conditions as aforesaid or where the omissions vary, the conditions under which any remaining items of work are carried out or if the amount of any omission or additions relative to the amount of the whole of the Contract works or to any part thereof shall be such that in the opinion, of the Architects the net rates or price contained in the priced Schedule of quantities or tender or for any item of work involves loss or expense beyond that reasonably contemplated by the Contractor or is by reason of such omission or addition rendered unreasonable or inapplicable, the Architect shall fix such other rates or prices based on CPWD RATES, except as in (d) herein below, may think reasonable and proper, which shall be final and binding on the Contractor,

d) In case of furniture items, the minor changes / modifications in the design shall not be considered as deviation, and no price adjustment shall be made against the rates agreed to as per the Schedule of Quantities of the contract. For major change in the design of any item of the furniture, the deviation shall be priced by the Architects as Extra, as per (c) above. However the decision of the Architects whether the charge / modification in the design of furniture items is minor or major, shall be final and binding on the contractor.

The measurements and valuations in respect of the Contract shall be completed within 1 (ONE) months of the virtual completion of the Contract.

"The contractor shall bring to the notice of the Architect all the rates of the extra items before the execution of the work of each such extra items, and the same shall be charged reasonably. In case of any dispute the Architects decision shall be accented as final".

21. UNFIXED MATERIAL

When any materials intended for the works shall have been placed at site by the contractor, such materials shall not be removed there from (except for the purpose of being used on the works) without the written authority of the architect and when the contractor shall have received payment in respect of any Certificate in which the Architect shall have stated that he has taken into account the value of such unfixed materials on the works such materials shall become the property of the employer and the contractor shall be liable for any loss or damage to any such materials. The payment certified against value of any unfixed materials shall not in any way exonerate the contractor from his obligation for the supply of good, quality materials, which may be found to exist at any stage of work even after the same is completed.

22. REMOVAL OF IMPROPER WORK AND MATERIAL

The Architects shall during the progress of the works, have power to order in writing from time to time the removal from the works, within such reasonable time/ times, as may be specified in the order, of any materials which in the opinion of the Architect are not accordance with the specifications or the instructions of the Architect, and the substitution of proper materials and the removal and proper re-execution of any work, which has been executed with materials or workman ship, not in accordance with the drawings and specification or instructions, and the contractor shall forthwith carry out such orders at his own cost, In case of default on the part of the contractor to carry out such orders, the employer shall have to employ and pay other persons to carry out the same and all expense consequent thereon or incidental thereto shall be borne by the Contractor, and shall be recovered or may be deducted by the Architects/Employer from any money due or may become due to the contractor

In lieu of correcting work not done in accordance with the contract, the Architect may allow such work to remain and in that case may make allowance for the difference in value together with such further allowance for damage to the employer, as his option may be reasonable.

23. Defects After Completion

Any defect, shrinkage, warping, settlement or other faults which may appear within the 'Defects Liability Period' of 12 (twelve) calendar months after the virtual completion of the work arising in the opinion of the Architect, from materials or workmanship not in accordance with the contract, shall upon the directions and writing of the Architect and within such reasonable time as shall be specified therein, be amended and made good by the contractor at his own cost and expenses and in case of default, the Employer may employ and pay any other person to amend and make good such defect shrinkage, settlements or other faults and all damages. Loss and expenses consequent thereon or incidental thereto shall be made good and borne by the contractor and such damage, loss and expenses shall be recoverable from the contractor by the Employer or may be deducted by the employer upon the Architect's certificate in writing from any money due or that may become due to the contractor. or the Contractor deduct from any money due to the contractor a sum, to be determined by the architect equivalent to the cost of amending such works and in the events of the amount retained being insufficient, revise the balance from the Contractor.

24. CERTIFICATE OF VIRTUAL COMPLETION:

The Contractor shall intimate in writing to the Architects as and when the works are complete in all respects in order to enable the Architect to intimate the Employer to take possession of the same. The works shall not be considered as virtually completed, until the Architects have carried in writing that the same have been 'Virtually completed'.

The defects liability period shall commence from the date of such Virtual Completion Certificate.

25. OTHER PERSONS ENGAGED BY THE EMPLOYER:

The employer reserves the right to use the premises and any portions of the site for the execution of any work not included in this contract which he may desire to have carried out by other persons, and the Contractor is to allow all reasonable facilities for the execution of such work, but is not required to provide any plant or materials for the execution of such work, except by special arrangement with the employer. Such work shall be carried out in such a manner as not to impede the progress of the works included in the Contract, and the Contractor shall not be responsible for any damage or delay which may happen to or be occasioned by such work. .

26. INSURANCE IN RESPECT OF DAMAGE TO PERSONS AND PROPERTY:

The contractor shall be responsible for all injury to persons. Property or things and for all structural and decorative damage to property which may arise from operation or neglect or default of himself or any Sub-Contractor or of any of his or a Sub- Contractor's employees, whether such injury or damage may arise from carelessness, accident or any other cause whatever in any way connected with the carrying out of this Contract. The Contractor shall report serious accidents to any person working at site including visitors whenever occurring at site of the work, to the Architects / Employer. This clause be held to include, inter alia any damage to buildings, whether immediately adjacent or otherwise, any damage to roads, streets, footpaths, bridges, or ways otherwise any damages caused to the buildings and works forming the subject of this contract by frost or other inclement weather. The Contractor indemnify the Employer and hold him harmless in respect of all and any expenses arising from any such injury or damage to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any Acts of

Governments or otherwise, and also in respect of any award of compensation or damages consequent upon such claim.

The Contractor shall make good all damages of every sort mentioned in this clause, so as to deliver up the whole of the Contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.

The contractor shall indemnify the employer against all claims which may be made against the employer by his employees or by any member of the public or other third party in respect of anything which may arise in respect of the works or in consequence thereof and shall at his own cost, effect and maintain until the Virtual Completion of the contract with an approved office, a policy of Insurance in the joint names of the employer and the contractor against such risks and deposit such Policy or Policies with the architect on the signing of the contract. The contract shall also indemnify the employer against all claims which may be made to the Employer whether under the workmen's compensation Act or any other Statute in force during the currency of this contract or at Common Law in respect of any employee of the Contractor or of any Sub- Contractor and shall at his own expense effect and maintain until the Virtual completion of the Contract, with an approved office a Policy of Insurance in the joint names of the employer and the Contractor against such risks and deposit such policy or policies with the Architects from time to time, during the currency of contract. In default of the contractor insuring the premiums paid from any money due or which may become due to the contractor.

The contractor shall be responsible for anything which maybe excluded from the Insurance Policies above referred to and also for all other damages to any property arising out of and incidental to the negligent or defective carrying out of this contract how ever such damage may be caused.

The contractor shall also indemnify the employer in respect of any costs, charges or expenses arising out of any claim or proceeding and also in respect of any award or compensation of damages arising there from.

The employer shall be at liberty and is hereby empowered to deduct the amount of any damages. Compensations, costs, charges and expenses arising or occurring from or in respect of any such claims or damages from any sums due or to become due to the Contractor against his pending or future bills.

27 FIRE INSURANCE

a) The Contractor shall at the time of signing the contract insure the works and keep them insured until the virtual completion of the contract, against loss or damage by fire and all natural calamities and against all other risks in an office to be approved by the Employer in the joint names of the Employer and Contractor (the name of the former being placed first in the policy) for the full amount of the contract and for further sum if called upon 'to do so by the Architect, the premium of such further sum being allowed to the Contractor as an authorised extra.

Such policy shall cover the property of the employer only, and shall not cover any property of the Contractor or of any sub-contractor or employees. The contractor shall deposit the policy and receipts for the premiums with the Employer within 10 days from the date of signing the Contract. In default of the Contractor insuring as provided above. The employer on his behalf may so insure and may deduct the premiums paid from any money due or which may become due to the contractor. The Contractor shall as soon as the claim under the policy is settled, or the work reinstated by the Insurance Office should they elect to do so proceed with all due diligence with the completion of the works in the same manner as though the fire had not occurred and in ask respects under the same conditions of contract. The Contractor in case, of rebuilding or reinstatement after fire, shall be entitled to such

extension of time for completion as the architect deems fit.

b) The amount so due as aforesaid shall be the total value of the works duly executed and of the contract materials and goods delivered upon the site for use in the works upto and including a date not more than seven days prior to the date of the said Certificate less the amount to be detained by the Employer (as hereinafter provided) and less any installments previously paid under this clause. Provided that such Certificates shall only include the value of the said materials and goods as and from time as they are reasonably properly and not prematurely brought upon the site and then only if property stored and /or protected against weather.

28. PAYMENT OF WAGES OF LABOUR BY THE CONTRACTOR

The contractor shall pay to the labour engaged by him in connection with work directly or indirectly through sub-contractors, wages not less than the minimum fixed by the appropriate Governments Authorities under minimum wages Act, 1946, as amended and shall duly and properly comply with or ensure compliance with, a legislation laws, rules or regulations relating to the Employment of labour. The Contractor shall be liable for any damages or loss caused to the Owner by violation of the provisions of this clause. A violation of this clause shall also be deemed to be a breach of Contract. If the employer is called upon to make any payment towards wages etc. of the labour employed by the Contractor, the same will be done from the outstanding payments against pending or future bills of the Contractor.

29. TIME DELAY AND EXTENSION OF TIME

Time is the essence of the Contract. The Owner and the Contractor in consultation with the Architects shall agree upon work progress chart. The chart shall be prepared in direct relation to the time stated in the Contract or the works order for completion of the individual items thereof and/or the Contract or Works order as a whole. It shall indicate the forecast of the dates of commencement and completion of the various trade processes or sections of the work and shall be amended as may be required by agreement between the architects and the Contractor within the limitations of time imposed in the Contract. If the works be delayed:

- i) By force majeure, or
- ii) By reasons of abnormally and bad weather
- iii) By reason of serious loss or damage by fire or
- iv) By reason of civil commotion local combination of workmen or strike or lock-out effecting any of the trades employed on the work or
- v) By reason of delay on the part of nominated sub-contractor, wherein the Contractor has, in the opinion of Architect, taken all practicable steps to avoid, or reduce, or
- vi) By reason of delay on the part of contractor or trademen engaged by the owner in executing works not forming part of the Contract or
- vii) By reason of proceeding taken or threatened by or dispute with adjoining or neighbouring owners or public authorities arising otherwise, than through the Contractor's own default, or

viii) By reason of any other cause which in the absolute discretion of Owner is beyond contractor's control then in any such case the Owner may make fair and reasonable extension after obtaining Architect's advice in the completion dates of individual items or groups of items of work for which separate periods of completion are mentioned in the contractor or works order as applicable.

Upon the happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to the architects with a copy to Owner but shall nevertheless use constantly his best endeavour to prevent or make good the delay and shall do all that may reasonably be required to the satisfaction of the Architect to proceed with the works. Extension of time shall be granted.

30. LIQUIDATED DAMAGES:

If the Contractor fails to complete the works by the time stipulated in the tender document or within any extended time certificate under provision of the Contract, and if the Architect shall certify in writing on or before the date of issue of the Certificate for the last payment to which the contractor may become entitled here under that the works could reasonably have been completed by the said date or within the said extended time, then the contractor shall pay or allow the Owner the sum stated in appendix as beyond the date of completion or extended time, as the case may be, during which the works shall remain unfinished subject to a maximum amount stated in appendix towards liquidated damages and such damages may be deducted from any moneys due or which may become due to the Contractor from the pending and further bills. The deduction of such sums shall not, however, absolve the Contractor of this responsibility and obligations to complete the work in its entirety.

31. FAILURE BY CONTRACTOR TO COMPLY WITH ARCHITECTS INSTRUCTION:

If the Contractor after receipt of writing notice from the Architect requiring compliance with such further drawing and/or Architect's instructions, fails within seven days to comply with the same, the Architect may employ and pay other persons to execute any such work whatsoever as may be necessary to give effect thereto and all costs incurred in connection therewith shall be recoverable from the Contractors by the Owner on a Certificate by the Architect as a debit or may be deducted by him from any moneys due or which may become due to the Contractor.

32. If there are any discrepancies omission and errors in meaning or the actual contents of each item of Schedule of Quantities and other conditions of all the tender documents. the reasoning, the opinion and decision given by the Architect shall be taken as final and binding on both parties without any further appeal.

33. SUSPENSION OF WORKS:

If the Contractor, except on account of any legal restraint upon the Owner preventing the continuance of the works or on account of any of the causes mentioned in the Clause "Extension of Time", shall suspend works or in the opinion of the Architects, shall neglect fail to proceed with due diligence in the performance of his part of the Contract or if he shall more than once make default in the respects mentioned in clause 23 (removal of improper work and materials), the Owner through the Architect shall have the power to give notice in writing to the Contractor requiring that the works be proceeded within a reasonable manner, and with reasonable dispatch, such notice shall not be unreasonably given and must signify that it purports to be a notice under the provisions of this clause and must specify the acts or defaults on the part of the Contractor upon which it is based. After such notice shall have been given, the Contractor shall not remove the site of works or from any ground contiguous there to any plant or materials belonging to him which shall have been placed thereon for the purpose of the work and the Owner shall have lien upon such plants and materials to subsist from date of such notice being given until the notice shall have been complied with. Provided always that such Lien shall not under any circumstance subsist after the expiration of 30 (thirty) days from the date of such notice given, unless the Owner shall have entered upon and taken possession of the works and site as hereinafter

provided.

If the Contractor shall fail seven days after such notice has been given, to proceed with the works as therein prescribed, the Owner may enter upon and take possession of works and site, and of all such plants and materials thereon intended to be used for the works, and the Owner shall retain and hold a been upon all such plants and materials until the work shall have been completed under powers hereinafter conferred upon him.

if the Owner shall exercise the above power, he may engage any other person to complete the works and exclude the Contractor his agents and servants from entry upon or access to the same, except that the Contractor or any person appointed in writing may have access at all times during the progress of the works to inspect, survey and measure the works. Such written appointments or a copy thereof shall be delivered to the Architects before the person appointed comes on to the works and the Owner shall take such steps as in the opinion of the Architect may be reasonably necessary for completing the works, without undue delay of expense using for that purpose the plant and materials above mentioned in so far so they are suitable and adapted to such use.

Upon the completion of the works, the Architect shall certify the amount of the expenses properly incurred consequent and incidental to the default of the Contractor as aforesaid and in completing the works by other persons.

Should the amount so certified as the expenses properly incurred be less than the amount which should have been due to the Contractor upon the Completion of the works by the him. the difference shall be paid to the Contractor by the Owner should the amount of the former exceed the latter, the difference shall be paid by the Contractor to the Owner. The Owner shall not be liable to make any further payments or compensations to the Contractor for or on account of the proper use of the plant for the completion of the works under the provision herein before mentioned other than such payments as is included in the Contract.

After the works shall have been so completed by persons other than the contractor, under the provisions herein before contained, the Architect shall give notice to the contractor to remove his plant and all surplus materials as may not have been used in the completion of the works from the site. If such plant and materials are not removed within a period of 15 days after the notice shall have been given, the Owner may remove and sell the same, holding the proceeding loss the cost of the removal and sale to the credit of the Contractor. The Owner shall not be responsible for any loss sustained by the Contractor from he sale of the plant and materials etc. in the event of the Contractor not removing it after notice.

34. PRIME COST AND PROVISIONAL SUMS:

- a) Where 'Prime Cost (P.C.) prices or provisions sums of money are provided for any goods or works in the specifications or Schedule of Quantities, the same are exclusive of any trade discounts, or allowances, discount for cash or profit which the Contractor may require and for carriage and fixing.
- b) All goods or work for which prime cost prices or provisional sums of money are provided may be selected or ordered from any manufacturers or firms, at the discretion of the Architect.
- c) The Owner reserves to himself the right of paying directly for any such goods or work and the Architect may deduct the said prices or sums from the amount of the Contract. Should any good or works for which prune cost prices or provisional sums are provided or portions of same shall not be required, such prices or sums, together with the profits allowed for the same and such additional amount as the contractor may have allowed for carnage and fixing will be deducted in full from the amount of the Contract. Whether the goods be ordered by the Contractor or otherwise the Contractor shall, at his own cost fix the same, if called upon to do so, and the Contractor shall also receive and sign for such goods and be responsible for their safe custody as and from the date of their delivery upon the works.
- c) In case in which provisional quantities of materials are contained in the Contract, the Contractor shall provide such materials to such amounts or to greater or lesser amounts as the Architect shall direct in writing at the net rates at which he shall have priced such items in his Schedule of Quantities. Should, however, any such items be entirely omitted, which omissions shall be at the Architect's discretion, no profit on such items shall be allowed to the Contractor.

- d) No Prime cost sum or sums (or any portion thereof) shall be included in any certificate for payment to the Contractor until the receipted accounts relating to them have been produced by the Contractor to the Architect. Such accounts shall show all discounts and any sum or sums in respect of such discounts shall be treated as a trade discount. Provided always, that should the Contractor in lieu of producing such receipted accounts, request the Architect in writing to issue a certificate on the Owner for such sum or sums due either on account or in settlement to a sub-contractor direct, the Architect shall, upon satisfying himself that the sub-contractor is entitled to the same, to issue the certificate and sum or sums be deducted from the amount of the Contractor, at the settlement of accounts and any profit or sum to which the Contractor is properly entitled, in respect of such sub-contract, and which is in conformity with the terms of contract as though the amount of such certificates, to the sub-contractor had been included in a certificate drawn in favour of the Contractor.
- e) If the Contractor neither produces the receipt nor give authority to the Architect to issue a certificate in favour of such sub-contractor direct, the Architect may upon giving the Contractor seven days notice in writing of his intention to do so, issue to the sub-contractor such certificate direct to the Owner and obtain a receipt from the sub-contractor which receipt shall be deemed a discharge for the amount, of such certificate as thought, given by the contractor. In such event, the Contractor shall not be allowed any profit he may have added in the Schedule of Quantities upon such subcontract,
- f) The exercise of the option referred to herein-before by the Contractor and the issue of Certificate, as before described to sub-contractor upon the Contractor's request or the issue to the sub-contractor direct of certificates by the Architect, shall not, however, relieve the Contractor from any of the liabilities in respect of insufficient, faulty or incomplete work of the sub-contractor for which he may be liable under the terms of the contract.
- g) If any provisional items are provided for work of a nature usually carried out by the Contractor in the ordinary course of their business, the Owner shall give the Contractor an opportunity of tendering for the same without prejudice to the Owner's right to reject the lowest or any tender.

35. CERTIFICATES AND PAYMENTS:

The Contractor shall be paid by the Owner from time to time, by instalments under Interim Certificates to be issued by the Architect on the bills submitted by the Contractor in the Performa prescribed by the Owner on account of the work executed when in the opinion of the Architect, work to the approximate value, named in the Appendix as 'Value of Work for Interim Certificates (or less at the reasonable discretion of the Architects) has been executed in accordance with this Contract.

The Payment shall, however, to a retention of the percentage of such value named in the Appendix hereto mentioned as 'Retention Percentage until the total amount, retained shall reach the sum named in the appendix as 'Total Retention Money' after which time the instalments shall be upto the full value of the work subsequently so executed. The Architects may in their discretion include such amount, as they may consider proper on account of materials delivered upon the site by the Contractor for use in the work.

And when the works have been virtually completed and the Architect shall have certified in writing that they have been completed. The Contractor shall be paid by the Owner in accordance with the Certificate to be issued by the Architect the sum of money named in the Appendix as 'Installment after Virtual Completion', being a part of the said Total Retention Money.

The Contractor shall be entitled to the payment of the final balance in accordance with the final certificate to be issued in writing by the Architect at the expiration of the period referred to as 'The Defects Liability Period' in the Appendix hereto from the date of Virtual Completion or as soon after the expiration of such period as the works shall have been finally completed and all defects made good according to the true intent and meaning hereof, whichever shall happen, provided always that the issue by the Architect of any certificate during the progress of the works or at or after the completion shall not relieve the Contractor from his liabilities in cases of fraud, dishonesty or fraudulent concealment relating to the works or materials or any matter dealt with in the certificate, and in case of all defects and insufficiency in the works or materials which reasonable examination would not have disclosed. No certificate of the

Architect shall of itself be conclusive evidence that any works or materials to which it relates are in accordance with the contract.

The Architect shall have power to withhold any Certificate if any works or any parts thereof are not being carried out to his satisfaction. The Architect may be any certificate makes any correction in any previous certificate, which shall have been issued by him.

All efforts shall be made so that invariably the payment upon the Architect's Certificates are made within the period named in the Appendix as Period of Honouring of Certificates after such certificates have been delivered to the Owner. Notwithstanding the aforesaid, the Owner shall have a right to withhold payment of pending of future bills of the Contractor if there is any demand from his workers for payment of wages etc. which he is legally bound to pay, and adjust, the same against such bills and release the balance amount, if any, to him.

36. NOTICE IN WRITING:

Written Notices for the Employer, the Architect, or the Contractor may be served personally or otherwise proved to have been received or sent by registered post to the last known place of abode or business of the party to whom the same is to be given or in the case of a Company or Corporation, Notices may be served at or sent by registered post to the Registered Offices of the Company or Corporation.

Any notice sent by registered post shall be deemed to be served at the time, when in the ordinary course of post it would be delivered.

37. For any dispute as regards valuing, the final amount to be paid to the contractor in connection with the Contractor's final bill, amount and value of the all authorised extra items, the decisions of the Architects shall be considered as absolute, final and binding to both the parties without any further appeal.

38. That the responsibility of procuring various items of materials which will require to be incorporated in the works will be that of the Contractor. No material for incorporation of the work including Cement shall be issued to the Contractor by the Owner.

39. The Contractor shall indemnify the Owner against any loss caused (at any time during the execution of the said works, or during the Defects liability Period after completion of the said works), on account of defective workmanship in works and on account of use of the materials which are not as per Specification in the said works referred to in this Contract, even though they received the payments from the Owner against the same works.

40. TERMINATION OF CONTRACT BY THE OWNER:

If the Contractor being an individual or a firm, commit any act of insolvency, or shall be adjudged an Insolvent or being an Incorporated Company shall have an order for compulsory winding up made against it or pass an effective resolution for winding up voluntarily or subject to the supervision of the Court and of the Official Assignee of the Liquidator in any such acts of insolvency or winding up shall be unable within seven days after notice to him requiring him to do so, to show to the reasonable satisfaction of The Architect that he is able to carry out and fulfil the Contract, And to give security thereof, if so required by the Architect.

Or if the contractor (whether an individual, firm, or Incorporated Co.) shall suffer execution to be issued. Or shall suffer any payment under this contract to be attached by or on behalf of any of the creditors of the Contractors.

Or shall assign or sublet this Contract without the consent in writing of the Owner first obtained.

Or shall charge or encumber this contract or any payments due, or which may be due to the Contractor there under

Or if the Architect shall certify in writing to the Owner that the contractor

- i) Has abandoned the Contract, or
- ii) Has failed to commence the works, or has without any lawful excuse under these conditions suspended the progress of the works for 15 days after receiving from the Architect written notice to proceed, or
- iii) Has failed to proceed with the works with such due diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or
- iv) Has failed to remove materials from the site or to pull down and replace work within the time limit as specified by the Architects, after receiving the written notice from them that the said materials or work were condemned and rejected by the Architect under these conditions, or
- v) Has neglected or failed persistently to observe and perform all or any of the acts, matters or things by this contract to be observed and performed by the Contractor for 7 days after written notice shall have been given to the Contractor requiring the Contractor to observe or perform the same,
- vi) Has to the detriment of good workmanship or in defiance of the Architect's instructions to the contrary sublet any part of the contract or if the Architects are of the opinion, which opinion shall be final and binding on the Contractor, that the contractor is not proceeding with the work with due diligence or in a proper and workman like work and suspends the progress of works for 15 days after receiving from the Architects written notice to proceed.

Then and in any of the said cases the owner with the written consent of the Architect may not withstanding any previous waiver after giving 7 days notice in writing to the contractor determine the contract but without here in affecting the powers of the Architect or the obligation and liabilities of the Contractor the whole of which shall continue in force as full as if the Contract had not been so determined and as if the works subsequently executed had been executed by or on behalf of the Contractor.

And further, the Owner under instructions of the Architect, by his Agents, or servants may enter upon take possession of the works and all plants, tools, scaffoldings, sheds. Machinery and materials lying upon the premises or the adjoining lands or roads, and use the same as his own property or may employ the same by means of his own servants and workmen in carrying on and completing the works or by employing any other contractors or other persons to complete the works and the Contractor shall not in any way interrupt, or do any act, matter or thing to prevent or hinder such other contractor or other persons or persons employed for completing and finishing or using the materials and plant for the works. When the works shall be completed or as soon thereafter as convenient, the Architect shall give a notice in writing to the Contractor to remove his surplus material and plants etc. and should the contractor fail to do so, within a period of 15 days, after receipt thereof by him, the Owner shall sell the same by public auction and shall give credit to the contractor for the amount realized. The Architect shall thereafter ascertain and certify in writing under his hand that {if anything) shall be due to payable to or by the owner for the value of the said plant and materials so taken possession by the Owner and the expense or loss which the Owner shall have been put to in procuring the works to be completed, and the amount, if any owing to the contractor and the amount which shall be so certified shall thereupon be paid by the owner to the contractor or by contractor to the Owner as the case may be and the certificate of the Architect shall

be final and conclusive between the parties.

41. MATTERS TO BE FINALLY DETERMINED BY THE ARCHITECT:

The Architect's decision opinion, direction certificate (except for payment) with respect to all or any of the matters mentioned under clause 2,7,21. 23. 24. 32 33. 38 & 41 as hereof and as to the exercise by him under clauses 12 of the right to have any works opened up (which matters are herein referred to as the excepted matters) shall be final and conclusive and binding on the parties hereto. Any other decision, direction, certificate or valuation of the Architect or any refusal of the Architect to give and of the same shall be subject to the right of Arbitration and review in the same way in all respects (including the provision as to opening the reference) as if it were a decision of the Architects under the following Clause.

42. URGENT REPAIRS:

If by reason of any accident or failure or other event occurring to in or in connection with the works or any part thereof, either during the execution of the works or during the defects liability period, any remedial or other work for repair shall, in the opinion of the Employer's authorized person be urgently necessary for security and safety of life and property and the Contractor is unable or unwilling at once to do such work or repair the Employer may by his own men or other agency do such work or repair as the Employer's authorized person may consider necessary. If the work or repair so done by the Employer is weak, which in the opinion of the Employer's authorized person the Contractor was liable to do at his own expense under the contract, all costs and charges properly incurred by the Employer in so doing on demand be paid by the Contractor to the Employer from any monies due or which may become due to the Contractor and redo the work to specification provided always that the Employer's authorized person or his representative (as the case may be) shall as soon after the occurrence of such emergency as may be reasonably practicable, notify the Contractor thereof in writing.

43. SETTLEMENT OF DISPUTES AND DIFFERENCES:

All disputes and difference of any kind whatsoever arising out of or in connection with this contract shall be amicably settled by mutual discussion and conciliation between Employer and Contractor. There shall not be any arbitration under the Arbitration and Conciliation Act, 1996 or any other Act or Law.

44. SERVICE OF NOTICE TO CONTRACTOR:

Any notice to be given to the Contractor under the terms of the contract shall be served by sending the same by post to or leaving the same at the address of the Contractor as shown on the tender form.

44 a. Service of Notice on Employer

Any notice to be given to the Employer under the terms of the contract shall be served by sending the same by post to or leaving the same at the Employer's registered office.

45. PRICES ARE FIRM AND NOT SUBJECT TO ANY VARIATION:

All rates and prices in this contract are firm for the entire period of contract. No price escalation or de-escalation or adjustment to the contract price or rates of item shall be made in respect of any increase or decrease after the submission and/or acceptance of tender, in the prevailing market rates of labour or materials etc on account of any reason, statutory or otherwise, which may result in an increase or decrease of the cost in carrying out the work. The accepted agreement rates for various items are taken as including all the above and firm for the entire period of contract.

All liabilities that may arise due to any statutory increase in the cost of labour and/or material shall be borne by the Contractor till the entire completion of work and nothing extra shall be paid.

11. SPECIAL CONDITIONS OF CONTRACT

1. INSPECTION OF DRAWINGS:

Before filling in the tender, the contractor will have to check up all the drawings and Schedule of Quantities, and will have to get an immediate clarification if any from the Architect/Engineer- in-Charge feels is vague or uncertain. No claim for damages or compensation will be entertained on this account.

2. CONTRACTOR TO VISIT SITE:

Each tenderer must before submitting his tender, visit the site of works so as to ascertain the physical site conditions and prices, availability and quality of materials according to specifications before submitting the tender. Lift will not be used for Labourer/Construction materials.

3. EXECUTION OF WORK:

The whole of the work as described in the Contract (including the Schedule of Quantities, the Specifications, General / Special Conditions and all drawings, pertaining thereto) and as advised by the Engineer-in-Charge/Architect from time to time is to be carried out and completed in all its parts to the entire satisfaction of the Engineer-in-Charge/Architect. Any details of execution, which may not have been definitely referred to in this contract, but which are usual in interior works and essential to the work, are deemed to be included in this contract. Rates quoted in the Schedule shall be inclusive of all freights, taxes, such as octroi, Sales Tax, Royalties, work contract tax etc., as well as transportation, so as to execute the contract as per the rules and regulations of local bodies, and Government of India.

The rates quoted in the tender should include all charges for: -

- a) Labour, maintenance, Fixing, carrying, Cleaning, making good, hauling, watering etc.
- b) Plant, Scaffolding, frame work, English ladders, ropes, nails, spikes, tools, materials and workmanship protection from weather, shuttering, temporary supports, Platform etc.
- c) AH temporary canvas, lights, barricades etc. The Engineer-in-Charge/Architect will be the sole judge in deciding as to the suitability of the tools or plants that might be brought to the site of works by the Contractor for the proper execution of the work.

4. SITE MEETINGS:

A senior representative of the Contractor shall attend weekly meeting at works site and in addition meetings as arranged by the Engineer-in-Charge/Architect to discuss the progress of the work and sort out problems, if any, and ensure that the work is completed in stipulated time.

5. SECURITY:

The Contractor shall ensure that only authorized persons or materials shall enter or leave the works site. The contractor shall also make his own arrangements for the protection and safety of his materials and equipment at site including premises with fixtures provided therein.

6. ACCESS FOR INSPECTION:

The Contractor shall provide at all times during the progress of the works, proper means of access and the necessary attendants as directed for the inspection or measurement of the works by the Engineer-in-Charge/Architect or their representative.

7 OFFICES, STORES ON THE SITE:

a) The Contractor shall be allowed to provide separate site office for his staff for all necessary stores on site in a specified area for all materials such as timber, cement and other such materials, which are likely to deteriorate by the action of sun, rain and the due to exposure, in such a manner that all such materials shall be protected from damage by weather or any other cause. All such stores and offices shall be cleared away and the ground left, in good and proper order on completion of this contract.

b) All materials which are stored on site such as bricks, timber, plywood, boards, metal, sand etc. shall be stacked in such a manner as to facilitate rapid easy checking of quantities of such materials.

c) The safety and security of all materials brought at site shall be the sole responsibility of the Contractor. The materials against which an advance has been paid by the owner shall be carefully stored at site by the contractor. They shall not be removed from the site without the written permission of the Owner and shall be used in the contract work only.

8 NOTICES:

The Contractor shall give all notices and pay all fees and shall comply with all acts and regulations for the successful completion of the contract works, as per the rules and regulations of appropriate authorities.

9. FACILITIES TO OTHER CONTRACTORS:

The contractors shall give full facilities and co-operation to all other Contractors working at site, if any, as directed by the Engineer-in-charge/Architect and shall so arrange this program of work as not hinder the progress of other works. The decision of the Engineer-in-Charge/Architect on any point of dispute between the various contractors shall be final and binding on all parties concerned.

10. PREPARATION OF BUILDING WORKS IN OCCUPATION & USE ON COMPLETION:

On completion of the work, the contractor shall inform the Engineer-in-Charge/Architect in writing that he has finished the work and it is ready for the Engineer-in-Charge's/Architect's inspection. The Contractor shall oiling if necessary of all hardware, inside and outside, all floors, staircases and every part of the building. He will leave the entire building neat and clean ready for occupation in all respects and to the entire satisfaction of the Engineer-in-Charge/Architect.

11. CLEARING OF SITE OF WORKS:

The contractor shall clear the site of works as per the instructions of the Engineer-in-Charge/Architect. The site works shall be cleaned of all materials sheds etc.. belonging to the Contractor. The site shall be delivered in a clean and neat condition as required by the Engineer-in-Charge/Architect within a period of one week after the job is completed. In case of failure by the Contractor, the Engineer-in-Charge/Architect will have to get the site cleaned at the risk and costs of the Contractor.

12. WORKS EXECUTED BEYOND NORMAL WORKING HOURS:

If the contractor engages workmen to work beyond normal working hours, he shall do so with the prior approval of Engineer-in-Charge/Architect and provide and maintain at his own cost sufficient lights to enable the work to proceed satisfactorily without any danger. Approaches to the site of work also shall be sufficiently lighted by the Contractor. No extra cost claim would be entertained for the above.

13. WORK ON HOLIDAYS / SUNDAYS:

The Contractor workmen may be allowed to work on Sundays/Holidays subject to the prior permission of the same by the Engineer-in-Charge/Architect. No extra cost claim would be entertained for the above.

14. SPECIFICATIONS:

All work shall be carried out as described in the tender item and with the C.P.W.D. Specifications laid therein, unless otherwise stated. If not covered as above, I.S. codes specifications shall be followed in that order. For patented products, the manufacturer's specifications and instructions shall be followed. For any discrepancy in various specifications, Engineer-in-Charge's/Architect's decision shall be final and binding on both the parties. In case there are no laid down specifications, Architects specifications and instructions for that particular item shall be followed.

15. MEASUREMENT TO BE RECORDED BEFORE WORK IS COVERED UP:

The contractor shall assist in taking the measurements by the Engineer-in-Charge's/Architect's representatives, before covering up or otherwise placing beyond reach each of measurements any, item of work. Should the contractor neglect to do so the same shall be uncovered at the Contractor's expense and if found to be executed in default of specifications/requirements, no payment or allowance shall be made for such work and Contractor shall have to remove and re-do the same at his own cost.

16. DIMENSIONS:

Figured dimensions in all cases shall be accepted in preference to scaled size. Large-scale details shall take precedence over small-scale drawing. In case of discrepancy, the contractor shall seek the clarifications from the Engineer-in-Charge / Architects before proceeding with the work.

17. TESTING OF WORKS AND MATERIALS:

The Contractor shall be required by the Engineer-in-Charge/Architect to arrange to test materials and portions of the works at his own cost in order to prove their soundness and efficiency. These tests should be carried out at the approved Institutions as directed. If after such test the work or portions as of the works are found to be defective or unsound the Contractor shall if ordered by the Engineer-in-Charge/Architect pull down and re erect the same at his own cost.

18. INFORMATION TO BE SUPPLIED BY THE CONTRACTOR:

The Contractor shall submit to the Engineer-in-Charge/Architect every week as per the Form; -

- a) Detailed industrial statistics regarding the labour employed by him daily.
- b) The list of technically qualified persons employed by him for the execution of the work.
- c) The total quantity and quality of materials used for the works and supplied to site.
- d) A weekly progress report.
- e) Special incidents at site, if any.
- f) Whether the work is progressing according to Schedule. If not, what are the hitches and the remedial measures.

19. TYPOGRAPHIC OR CLERICAL ERRORS:

The Engineer-in-Charge's/Architects clarifications regarding partially omitted particulars or typographical or clerical errors shall be final and binding on the Contractor.

20. PROGRAMME:

The time schedule for carrying out the work stage by stage, in the stipulated time shall be drawn by the Architects in consultation with the Engineer-in-Charge/Architect and the Contractor. The Contractor shall follow strictly the approved time schedule, incorporating change, if any, with the approval of the Engineer-in-Charge to ensure the completion of the work in stipulated time. A graph or chart on work shall be maintained showing the progress periodically. The contractor shall submit to the Engineer-in-Charge/Architect a weekly progress report stating the number of skilled and

Unskilled labourers employed on the works, working hours done quantity of cement used, place, type and quantity of work one during the period.

The Contractor must inform the Engineer-in-Charge/Architect 10 days in advance of all working drawings and details required by him from time to time. The Contractor shall strictly adhere to the approved programme and arrange for the materials and labour etc., accordingly.

Despite repeated instructions, if the Contractor fails to show satisfactory progress of the work, the Engineer-in-Charge/Architect may take suitable action as deemed fit without prejudice to any terms and conditions of this contract.

21. VARIATION:

Quantities mentioned in the Schedule of Quantities included in the contract are subject to any variation as per actual site conditions and as directed by the Engineer-in-Charge/Architect for the scope of work. No compensation shall be payable to the Contractor on this account.

22. BRICKS:

Ordinary bricks used in the work shall be kiln burnt first quality locally available bricks, as approved by the Architects.

23. CEMENT:

Cement will be procured by the Contractor in the open market of approved first quality and stacked in a proper way at site so that it does not get damaged or spoiled. He will maintain proper record of cement received at site and consumed daily to the satisfaction of the Engineer-in-Charge/Architect.

24. APPROVAL OF MATERIALS BY ARCHITECTS:

Wherever "Approved Materials" are mentioned in the Contract, the Contractor shall get the same approved by the Engineer-in-Charge/Architect prior to its use. The contractor shall keep one set of sample of materials approved by the Engineer-in-Charge/Architect for its ready reference with the Engineer-in-charge/Architect at site of work and shall ensure that the materials incorporated in the works strictly conform to the sample approved already.

All other materials for use in the work shall be got approved by the Engineer-in-Charge/Architect before placing order / procurement.

25. WATER:

Water shall be made available to the Contractor free of cost at a point each floor of the premises and the Contractor shall have to make his own arrangements for carriage / storage of water. The Contractor will not be permitted to use / store water in the existing toilets in the premises at various floors. **(For use of water 0.25%, from the final total bill would be deducted)**

26. ELECTRICITY:

The Engineer-in-Charge/Architect shall make available electricity at the site of work to the Contractor. **(For use of electricity 0.25%, from the final bill would be deducted)**

Temporary light points required in working area will be provided by the Contractor at his own cost in consultation with the Engineer-in-charge/Architect at site. The tender rates shall be quoted accordingly by the contractor.

27. DAMAGES TO THE PREMISES / STRUCTURE ETC. :

Damages caused to the premises / fixtures and services provided therein during execution of work, shall be made good by the Contractor at his own cost to the entire satisfaction of the Engineer-in-Charge/Architect. Any damage to the existing structures in the complex including roads, staircase, lawns, trees, verb stones, flooring etc., during the progress of work by the Contractor's workmen vehicles shall be made good by the contractor at his own cost. Lifts will not be used by labourers and for transporting materials.

The Contractor shall ensure that his workmen do not create nuisance in the area of hamper with the normal working of the premises / complex.

28. INCOME TAX: (TDS)

Income tax at source will be deducted as per rules on all payments made to the Contractors.

29. STATUTORY REGULATIONS:

The whole of the work including electrical / plumbing / sanitation is to be complied with as per the requirements and byelaws of the relevant statutory authorities.

30. WORKMANSHIP:

Quality of materials and workmanship shall conform strictly to tender specifications and Contractor will ensure that the quality of work is appropriate to the specifications and the work is done to the satisfaction of the Engineer-in-Charge/Architect with strict control on the materials, workmanship and supervision.

31. ESCALATION:

The rates quoted in the tender shall be firm and shall not be subject to any escalation till the completion of work due to increase in the prices of materials, labour wages sales Tax etc.for any reasons, whatsoever.

32. ELECTRICIAN:

The contractor shall maintain at site-licensed electrician to ensure that the electrical work is earned out properly and no accident takes place. The electrician will work in close coordination with the Engineer-in-Charge/Architect.

33. PROVIDENT FUND AND E.S.I.S.

The contractor shall bear full liability for payments under provident fund and employees State Insurance Scheme and other labour laws for his workers and staff.

12. TECHNICAL SPECIFICATIONS

I. GENERAL

The measurement of the works executed shall be as per IS-1200 (latest) or as given along with the item.

This specifications is for work to be done, items to be supplied and materials to be used in the works as shown and defined in the drawings and described herein, all as specified and to the entire satisfaction of the Employer/Architect.

The workmanship is be of highest standards. Use of specialised tradesmen in all respects of the work, and allowance must be made in the rates for so doing.

The materials and items to be provided by the Contractor shall be the best of their respective kinds as approved by the Employer/Architect and in accordance with any samples which may be submitted for approval and in accordance with the specifications. Where materials or products are specified in this specification and/or bill of quantities by the name of the manufacturer or the brand, trade name of catalogue reference, the contractor will be required to obtain the approval of the Employer/ Architect before using the materials and also produce all invoices, vouchers or receipted accounts for any materials if called upon to do so by the Employer/Architect. Samples of all materials are to be submitted to the Employer/Architect for their approval before the contractor orders or delivers in bulk to the site, samples, together with their packing's, are to be provided free of charge by the contractor and should any materials be rejected they will be removed from the site of work at the contractor's own expense. All samples will be retained by the Employer/Architect for comparison with materials which will be delivered at site subsequently. Also, the contractor will be required to submit specimen finished of colours, fabrics, etc., for the approval of the Employer/Architect before proceeding with the works.

1.0 TEAK WOOD / CEDAR WOOD / EUROPEAN STEEM BEECH

The teak wood should be of the best quality available in India such as CP Teak, Burma Teak or Malabar Teak. It should be free from saps, knots, warps, cracks and other defects. All woodwork shall be planned neatly and truly finished to the exact dimensions. All joints shall be neat and strong, truly and accurately fitted and glued before being fitted together. All exposed wood shall be melamine polished and should be of 1st quality.

1.1 Timber is to be of the best of its kind, properly seasoned, of mature growth free from wormholes, saps, wraps, cracks and other defects.

2.0 PLYWOOD

Plywood should be equal or superior quality as laid down in is 303-1989 premium quality, resin bonded, weather proof, close grained suitable for veneering, painting, polishing or bonding plastic laminate.

A "strip of solid cedar wood glued or detailed as shown in Architect's drawings shall lip exposed edges of plywood. The thickness shall be as mentioned in the drawings. The contractor shall obtain the approval for the preference of the

brand name from the Employer/Architect as per the approved list.

The samples collected randomly cut from each of the boards selected shall be subjected to the tests specified as under:

a) Glue Adhesion: Plywood when tested in accordance with IS 1734 (Part 4): 1983 shall have an average and a minimum individual shear strength not less than as specified in the respective IS code.

b) Water Resistant test: The plywood when tested in accordance with IS 1734 (Part 6): 1983 shall have an average and min. individual shear strength not less than as specified in the respective IS code.

c) Moisture Content test: The plywood when tested in accordance with IS 1734 (Part 1) L 1983 shall have a moisture content not less than 5% and not more than 15%.

d) Procedure of Edge Straightness: The straightness of the edges and ends of plywood shall be verified against a straightedge not less than the full length of the plywood. If the edges on the end of the plywood is convex, it shall be held against the straightedge in such a way as to give approx. equal gap at each end. The largest gap between the straight edge and the edge shall be measured to the nearest millimeter and record.

e) Procedure for square ness: The square ness of plywood shall be checked with a 1200mm x 1200mm square, by applying one arm of the square to the plywood. The maximum width of the gap shall be recorded.

Each plywood shall be legibly and indelibly marked or stamped with the following:

Indication of the source of manufacture Year of manufacture
Batch No. and type of grade.

3.0 LAMINATE

Laminate shall be of the brand, catalogue surface finish, colour as specified and approved by the Employer/Architect. Plastic laminates must not be applied to timber with moisture content of more than 12% and a temperature of less than 6 degree C. The bonding agent shall be an approved adhesive, used in strict accordance with the manufacturer's instructions. Rubber based adhesives shall in no case be used.

4.0 NAILS, SPIKES & BOLTS

Nails, spikes and bolts shall be of the best quality galvanized mild steel or wrought iron and of lengths and weights approved by the Employer/Architect. Nails shall comply with IS 1959-1960 or equivalent approved quality sample. Bolts heads shall comply with B.S. 1494. Brass screws where specified shall comply with B.S. 1210. Wire staples shall comply with B.S. 1494 or equivalent. The contact surfaces of dowels, tenons, wedges etc., shall be glued with an adhesive complying with the requirements of one of the following I.S. Specifications or such approved adhesive, C.P. brass/steel screws of Nettle fold make.

5.0 GLUE

Where glued joinery and carpentry work is likely to come into contact with moisture, the glue shall be waterproof. The use of animal glues will not be

permitted.

6.0 TIMBER

Timber is to be cut to the required sizes and lengths as soon as practicable after the works are begun and stored under cover, so that the air circulates freely around it. Any portions that warps or develops shakes or other defects thereafter, are to be framed and finished in a proper and workman like manner. In accordance with the detailed drawings, weight where required and fitted with all necessary metal ties, bolts, screws, etc.

Templates, boxes and moulds shall be accurately set out rigidly constructed so as to remain accurate during the time they are in use.

Timber shall be wrought on all sides, free from large knots, splayed as required. plugged and fixed to walls, etc. at 1'-6" centers with G.I. screws and fastners.

Wood plugs are to be cut on the twist. Patent wall plugs or plastic filling may be used in lieu of wood plugs with the approval of the Employer/Architect.

The counters, shelving etc. shall be constructed of plywood as described and specified, properly housed, grooved, tongued, glued, blocked and screwed together, and entirely to the satisfaction of the Employer/Architect.

7.0 JOINERY

Joinery is to prepared immediately after the placing of the-contract, framed up. bonded and wedged up. Any portions that warp or develop shakes or other defects are to be replaced before wedging up.

The entire work is to be framed and finished in a proper and workman like manner, in accordance with the detailed drawings, and fitted with all necessary metal ties, straps, bells, screws, glue etc. as required. Running bonded joints are to be cross tongued with teak/cedar tongues and where over 1" thick, double cross tongued with teak/cedar tongues. Joiner's work generally is to be finished with fine glass prepared surfaces unless otherwise specified. Should joints in joiner's work open, or other defects arise within the period stated for defects liability period in the contract, and the cause thereof be deemed by the Employer/Architect to be due to unseasoned timber or faulty or bad workmanship, such defective joinery shall be taken down, refitted, redecorated and/or replaced if necessary and any work disturbed shall be made good at the Contractor's expense. The Contractor shall be responsible for providing and maintaining any boxing or other temporary coverings required for the protection of dressed or finished work if left unprotected till the final handover. Contractor is to clean out all shaving, cut ends and other waste from all parts of the works before coverings or in fillings are constructed.

The hardware throughout shall be of approved manufacturer and brand name, well made and equal in every respect to the samples to be deposited with the Employer/Architect. The contractor may be required to produce and provide samples from many different sources before the Employer/Architect are able to make a decision and the contractor should allow in his rates for doing so.

Aluminum fittings shall have powder coated satin chrome or anodised finish, of 20-22 micron (min.) thickness unless otherwise specified and shall be suitable for their intended purposes.

Screws are to match the finish of the article to be fixed, and to be round or flat headed or countersunk as required.

Cover up and protect the brass and bronze surface with a thick grease or other suitable protective material, renew as necessary and subsequently clean off and clear away on completion.

8.0 GLAZIER

All glass to be of approved manufacture complying with IS 3548 -1966 or as per approved quality and sample, to be of the qualities specified and free from bubbles, smoke waves, air holes and other defects.

Polished plate glass shall be 'glazing glass' (G.G.) quality. That for mirrors shall be 'Silvering quality' (S.Q.) conforming to IS 3438-1965 or as per approved samples and quality. The compound for fixing glazing to metal is to be a special non-hardening compound manufactured for the purpose and of a brand and quality approved by the Employer/ Architect.

In Cutting glass, proper allowance be made for expansion. Each square of glazing to be in one whole shoot.

On completion, clean all glass inside and out, replace all cracked, scratched or broken panes and leave in good condition to the satisfaction of the Employer/Architect.

For any location the largest possible size of glass is to be used i.e. with minimum joints, unless otherwise mentioned in the drawings. Location of joints in glass are to be to the entire satisfaction of Architect/Employer.

9.0 PAINT AND POLISHING

All material required for the works shall be of specified and approved manufacture, delivered to the site in the manufacturer's containers with the seals, etc., unbroken and are to be clearly marked with the manufacturers name or trademark with a description of the contents and colour. All materials are to be stored on the site to the works.

Spray painting with approved machines will be permitted only if written approval has been obtained from the Employer/Architect prior to painting. No spraying will be permitted in the case of priming coats nor where the soiling of adjacent surface is Likely to occur.

The nozzle and pressure to be so operated as to give an even coating throughout to the satisfaction of the Employer/Architect. The paint used for spraying is to comply with the specifications concerned and is to be specifically prepared by the manufacturer for spraying. Thinning of paint made for brushing will not be allowed.

10.0 Wood preservative: All unexposed surface of timber framing; backs of door frames, cup board framing, grounds etc. are to be treated with salignum or other equal approved impregnating wood preservative. All woodwork is also to be treated with fire retardant paint and antitermite treatment.

All brushes, tools, pots, kettles etc. used in carrying out the work shall be clean and free from foreign matter and are to be thoroughly cleaned out before being used with a different type or shade of material.

All iron or steel surface shall be thoroughly scrapped and rubbed down with wire brushes and shall be entirely free from rust, mill scale, etc. before applying the

priming coat.

Surfaces of new woodwork, which shall be painted, are to be cleaned down, knotted and stopped for the approval of the Employer/Architect.

Surfaces of new woodwork which shall be painted are to be cleaned down to remove dirt, grease etc. Minor areas of defective paint shall be removed by scraping back to a firm edge and the exposed surface toughed in with primer as described and stopped with putty.

Where woodwork has been previously painted or polished and is to be newly polished, the existing finish shall be completely removed by scraping, burning off or rubbing down as required.

Surfaces of previously painted metal which shall be painted are to be cleaned down and flatted down as described in surfaces of previously painted woodwork. Minor areas of defective paint and rust and loose scale shall be removed completely by chipping, scrapping and wire brushing back to the bare metal and toughed in with primer as described.

13. GENERAL SPECIFICATION

GENERAL

The Contractor is advised to study all the drawings in details including the intent of the design. All clarifications necessary should be sought by the Contractors, prior to filling in the tender.

All the work shall be carried out in best workmanship like manner and wherever, specifications for any item are not given, the relevant Indian Standard Institution specifications shall be applicable.

Generally, the make as approved in the list of approved makes and materials shall be insisted upon, except for any reason valid and appropriate in the opinion of both Architect and Employer. No. Extra cost is liable to be entertained for any variations in the basic cost of material.

MATERIALS

Ply/Block Board/Particle Board to be Phenol Formaldehyde bonded, (Boilling Water resistant) as per respective Indian Standard. BIS No. 303: 1989.

All commercial ply or block board shall be as per preferred make. All exposed ply block board edges shall have lipping of as directed.

When ply/teak board is used for panelling, partitions, furniture etc. the same shall be of straight matching grains only. (Group Match to 6 ply)

SCREWS

All screws shall be of best quality chromium plated brass or steel screws of nettle fold make.

PROCEDURE OF WORK

The contractor shall arrange the operations that are convened and agreed to ply the Architect/Employer. He shall adhere to the time schedule presented by him and agreed to by the Architect/Employer and shall complete ail works allotted to him in time, giving best workmanship to construction/manufacturing jobs to the entire satisfaction of the Architect/Employer.

BUILT /N JOINERY

Where joinery work is specified to be built-in, it shall be the responsibility of the contractor to ensure that the joinery works are set in plumb and true in Sine and shall not be damaged or displaced by subsequent operations.

PROTECTION OF WORK

The contractor shall he responsible for the temporary erection of doors and closing of openings necessary for the protection of the work during progress. He shall also provide

and maintain any other temporary covering required for the protection of finished / unfinished wood work that may be damaged during the progress of the work if left unprotected and at his own expenses. .

MAKE GOOD DEFECTIVE WORK

The contractor shall be responsible for the shrinkage or warping or any other defects, which may appear in any joinery work. All deductive damaged work shall be taken down and renewed or repaired to the satisfaction of the Architect/Employer without any extra charges.

BRICK WORK

Bricks shall be of class designation - 75 of standard specifications as per approved sample and shall be laid in 1:3 cement sand mortar (1 cement 3 coarse sand.) Cement to be used shall be of approved make and sand shall be sharp, clean, free from organic and foreign matters. Bricks shall be fully soaked in clear water for a period of 12 hrs. Prior to use. Bricks shall be well-bonded and laid in true level and plumb. Mortar joints shall not exceed 6mm in thickness and joints shall be fully filled with mortar. All joints should be raked and faces of wall cleaned at the end of each day's work. The brickwork shall be kept wet for atleast 10 days after laying.

PLASTERING

Joints of brickwork shall be raked out to a depth of 18mm and the surface of the wall shall be washed and kept wet for two days before plastering. The cement, plaster shall be of 1:4 (1 cement: 4 coarse sand) proportion of 12mm thickness to be applied in three coats finished to true smooth and uniform surface by float and trowel. The work shall be tested frequently with a straight edge and plumb U C O BANK Curing shall be started as soon as the plaster has hardened sufficiently not to be damaged when watered. The plaster shall be kept wet for atleast 10 days. Any defective plaster shall be cut out in rectangular shape and replaced.

FALSE CEILING

Neat, cutting in false ceiling for provision of light fittings, AC supply and return grills shall be left and all the such openings shall be provided with additional frame work. The false ceiling shall be in complete level and edges in perfect alignment. . As per manufacturer's specifications. IS: 2095 - 1982 and 2542 - 1981

FLOORING

It shall be laid with minimum possible joints with recommended adhesive in required quantity.

REJECTION /WASTAGE

All rejections and wastage in process and in final stages, will be to the contractor's account.

PAINTING, OIL/ENAMEL /PLASTIC EMULSION ETC.

Ready mixed oil paints. flat oil paint, plastic emulsion paint, ready mixed synthetic enamel paint, aluminium paint etc. shall be brought in original containers and in sealed tins. If for any reasons a thinner necessary, the brand and quality of the thinner recommended by the manufacturer or as instructed by the architect shall be used. The surface shall be prepared as specified and a coat of approved primer shall be applied. After 24 hours drying , approved or specified quality paint shall be applied evenly and smoothly. A filler putty coating may be given to give a smooth finish. Each coat shall be allowed to *dry* out thoroughly and then lightly rubbed down with sand paper and cleaned of dust before the next coat is applied. The number of coats shall be as specified in the item and if the finish of the surface is not uniform additional coat as required shall be applied to get good uniform finish at no extra cost. After completion no hair mark from the brush or clothing of paint, puddles in the corners of panels, endless of the moulding etc. shall be cleaned off from stains. When the final coat is applied the surface shall be roiled with a roller or textured to a special texture finish as approved by the architect as per sample to be prepared before start, of work.

Spectrum spray coat plaster/paint to be applied over the prepared surface i.e. finished in POP. The coat to be applied as per the specification of the manufacturers.

. Primer of following **materials** to be applied:

- a) Wood work: White or pink wood primer
- b) Steel work: Red oxide zinc chromates

Mode of measurement of painting on following material shall be as follows:

- a) *Wood Work:*

For melamine polish on woodwork no separate measurement shall be made. All items of woodwork include the cost of polishing.

- b) *Walls:*

For 2 or more coats of wall emulsion paint (applied with roller) the surface area shall be measured.

- c) *Steel work:*

For 2 or more coats of enamel paint applied with brush. All items inclusive of paint work except existing windows.

- tl) *Dry Distemper* : IS 427 : 1965

14. PARTICULAR SPECIFICATIONS

1. No extra payment for making neat cut outs of any sort for electrical fittings.
2. For all doors anodised adjustable doorstoppers, door closers locks shall be provided with necessary screws and bolts *etc.* of Hettich/Haffle or equivalent. The cost for the same shall be as specified in bill of Quantities and shall be paid as per relevant item.
3. All items shall be including sales tax/royalty / transportation / centering / shuttering *etc.* No facility for issue of any form whatsoever of any kind will be given.
4. All electrical switches and sockets to be located as per drawing or as instructed by the Architect. The cost of fittings shall be paid in relevant item.
5. The contractor shall be responsible for removing malba from the site to a place permitted by the Municipal authorities every 48 hours and cleaning the site regularly. Cost of removal of malba transportation, loading, unloading *etc.* (upto any lead) is deemed to be included in the relevant item of demolition / construction.
6. Contractors shall prepare the sample of each item as per nomenclature. He should get it approved from the Architect before execution of work. Material supplied must be strictly in conformity with the samples approved by the Architect.
7. The working general shall be carried out as per C.P.W.D. specifications (latest) unless otherwise specified in the nomenclature of the individual item or in particular specifications.
8. Before start of work the contractor shall submit the programme of execution of work and get it approved by the Architect and shall strictly adhere to the same for timely completion of work.
9. The entire work shall be carried out in close co-ordination/ co-operation with all other agencies working in the building and its surroundings. The contractor shall not be entitled to any compensation on account of temporary stoppage of work, if any, due to other construction activities. The contractor is required to stack his material in such a way that all works at site can progress without any difficulty. Nothing extra will be paid on this account.

10. The contractor shall make necessary arrangement for watch and ward and protection against any theft or damage to all the items during their execution and after completion till these are taken over by the Employer / Architect. He shall also provide and maintain temporary covering required for the protection of finished items at his own cost and no claim shall be entertained on this account.

11. Any damage to the building, furniture, fittings articles or any existing work caused by the contractor or his workmen during execution of work shall be made good by the contractor at his own cost failing which the same shall be got made good at the cost and, risk of the contractor. The decision of the Architect shall be final in this regard.

12. The contractor shall maintain in good condition all works during execution till completion of entire work.

13. Rejected items / material shall be removed by the contractor within 3 days of rejection at his own cost and nothing extra shall be paid on this account, failing which the same shall be got removed at his cost and risk by the Employer.

14. The decorative laminated mica sheets/block boards / ply boards shall have joints at the junctions of the two units only or as mentioned in the drg. and no intermediate or other joints shall be permitted.

15. The woodwork shall not be painted or covered with any treatment unit the same is approved by the Architect.

16. The samples of all materials and fittings required for execution of the work shall be got approved from the Architect before execution of the work.

17. At the discretion of Architect samples of all materials so supplied will be got tested from the laboratory approved by Architect. The cost of its packing, handling transportation and cost of testing will be borne by the Contractor. No claims of whatsoever kind on this account shall be entertained.

18. All usable materials from dismantling to be stacked at safe place, jointly measured and to be kept in safe custody / security by the contractor.

19. In case of any dispute regarding specifications of materials, dimensions, size and shape and brand names of the materials, the decision of the Architect shall be final and binding.

20. Rates quoted are for finished item of size / shape as specified in relevant item and drgs. All incidental charges of any kind including cartage, storage, cutting and wastage etc. shall be borne exclusively by the contractor and nothing extra shall be paid to him on this account.

21. No payment will be made to the contractor for damage caused by rain or other natural calamities during the execution of the work and no claim whatsoever will be entertained on this account. The contractor shall be required to safe guard all the materials against any such calamity.

22. Nothing extra shall be paid for making holes walls / RCC members etc. for fixing work and making good the same to restore the original surface of the building.

23. Unless otherwise specified in the Schedule / Bill of quantities the rates tendered

by the contractor shall include the cost of all labour, material and other inputs, cartage and lift upto any floor level of the buildings, royalty or any other tax incidental charges involved in complete execution of work and nothing extra shall be payable on this account.

24. The drawings will be read in correlation / conjunction with specification of item and variance if any shall be brought to the notice of the Architect prior to submission of tender by the tenderer(s) or else the decision of the Architect shall be final and binding.

15. SPECIAL CONDITIONS & SPECIFICATIONS FOR ELECTRICAL WORKS

1. The work shall be carried out in accordance with General Specifications for Electrical Works (Part 1 - Internal - 1994 and Part II External -1994) as amended upto date. All installations shall comply with the requirements of Indian Electricity Rules 1956 as amended upto date.
2. All materials to be arranged by the contractor for use in the work shall be of approved make and shall be as per relevant Indian Standard Specifications. Where it is mandatory to use I.S. Marked materials, the same shall be arranged by the contractor accordingly.
3. Bad workmanship is liable to be rejected in toto.
4. The Contractor/his supervisor will be bound to sign the site order book and to carry out the instructions given therein.
5. The contractor shall get the approval of the Architect or his authorised representative regarding the route of conduits, No. of runs, diameter of conduits. No. and size of wires, location of pull boxes, route of cables in ground/ wall for all works covered herein.
6. The contractor shall employ the technical staff as per clause 36 III of the contract documents for electrical works separately, during the execution of work.
7. All repairs & patchwork, if any, shall be neatly carried out to match with the original finish and to the entire satisfaction of the Architect. Any damages to the building due to execution of work shall have to be made good immediately by the contractor at his own cost.
8. The contractor shall make his own arrangement at his own cost for all general and special electrical tools and plants required for electrical work. Entire safety precautions during installation shall be taken as per relevant B.I.S., and CPWD specifications.
9. Adopter boxes, wherever used, shall be of not less than 16 SWG M.S. Sheet.
10.
 - a. The telephone conduits and fire alarm conduits shall be laid with G.I. fish wires kept pulled in for pulling of atleast 1000 mm extra at ends.
 - b. Main Junction box for telephone conduit system shall be mounted at a height so that the top of box does not exceed 1.65 metres from the floor level and in a suitable location for working by the staff.
 - c. Sockets, base, boxes, conduits, cable glands, ducts and all other materials not included elsewhere but required for the work shall be provided by the contractor.
11. It will be the contractor's responsibility to get the electrical installation works inspected by the Local Statutory Authorities, Fire Officer and such other officials. No extra payments/claims are allowable on this account.
12. The contractor shall obtain and pay for all permits, licences and certificates for approval required by all relevant authorities and organizations. All work of the contractor shall conform to the requirements of local codes.

13. The work shall be carried out as per Regulations and in best workmanlike manner, by licensed persons. The names of licensed persons working in the installation shall be furnished to the Architect prior to the commencement of the work.

14. It is brought to the attention of the contractor that:

- a. All electrical portable tools should be either 240 volts double insulated or 50 volts via Transformer.
- b. The contractor has to supply all necessary ladders/steps which must be in good safe condition.
- c. Entire safety precautions during installations shall be taken as per relevant B.I.S. and C.P.W.D. Specifications.

15. Sub-Distribution boards shall be equipped with miniature circuit breaker. Miniature circuit Breakers shall have adequately sized terminals for the out-going leads. Distribution boards shall have adequately rated phase and neutral bus bars of high conductivity electrolytic Aluminium with adequately sized terminals or clamps for the incoming conductors.

Sub-Distribution Board shall have an earth bar with necessary number of terminals for connecting the earth continuity conductors associated with the various circuits supplied from the board. Each distribution board shall have a circuit schedule pasted or otherwise permanently fixed inside the cover stating the designation and details of the circuits controlled and the rating of the miniature circuit breakers. The Board shall be constructed of sheet steel and provided with removable conduit entry plate at top with gasket door arrangement.

16 All Electrical works shall be carried out along with the progress of Interior works. Any debris due to electrical works shall be removed and the site shall be cleared by the Contractor as soon as the work is completed.

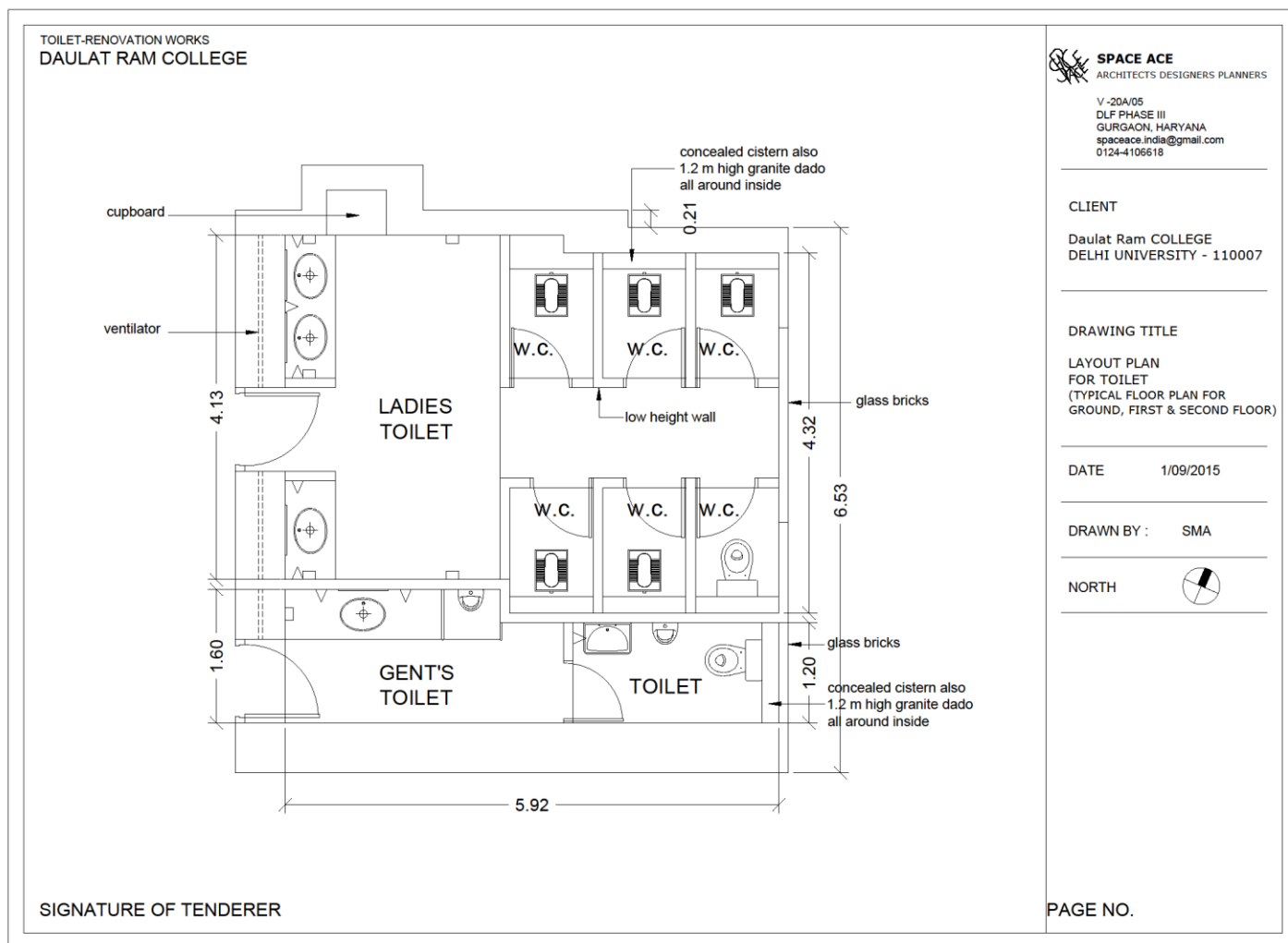
17 The circuit wiring and wiring- for~ the point wiring can run in the same conduit. The circuit shall be measured from SDB to the switch board in that circuit irrespective of whether the neutral conductor is taken to the switch box.

**16. LIST OF APPROVED MAKE MATERIALS
(SAMPLES TO BE CHECKED AT CONTRACTOR'S COST)**

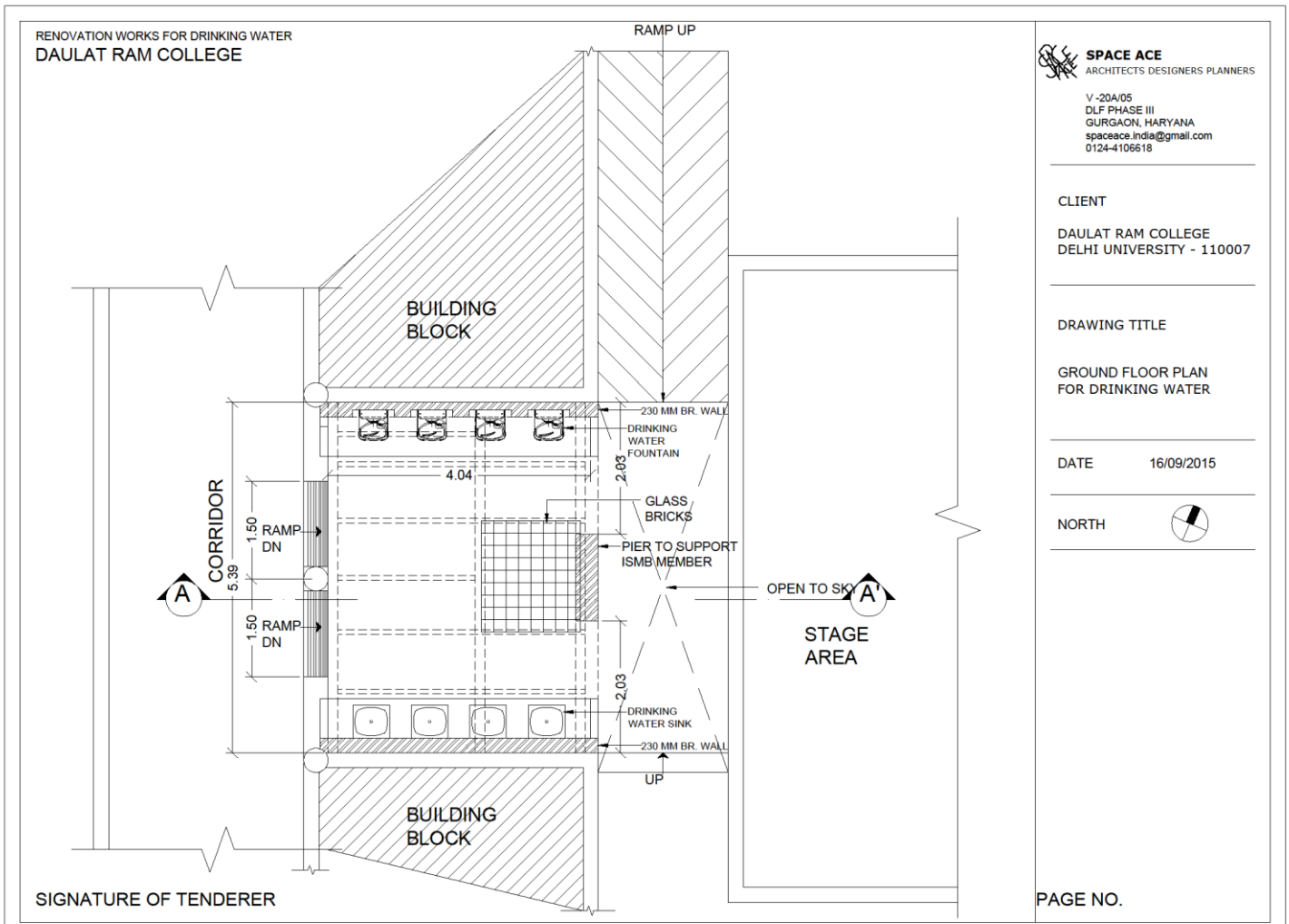
Material	Approved Make/Brand
Laminated sheet (1.0 mm thick)	Formica/ Greenlam /Merino
Comm. Board / Flush Door Shutter / Plywood	Duro/Green/Century/Archid
Brass/ Powder Quoted Hardware Fittings	Ebco/ Hettich/ Doorset/ Haffele
Paints/Distemper/Arcylic/Enamel/Plastic	Asian / Shalimar / ICI / Nerolac / Berger
Exhaust Fan	GEC/Crompton Greaves
Polish	MRF/Asian Paints /Nerolac
Ceramic Tiles/vitrified homogeneous glazed tiles.	Kajaria / Nitco/HR Johnson/Somany/Marbonite/Asian
Glazing (Clear)/Mirror	St. Gobain/Indo Asahi/Modi float
Sanitary Ware	Parryware/Hindware,Cera/ Parryware
C.P Fittings	Jaguar /Hindware/Cera
Geyser	AO Smith/ Jaguar/BEE 4 star rating /Racold BEE 4 star rating
Stainless Steel sink	A.M.C/ Diamond/ Nirali/Jyoti/ Neelkanth
C.I. Pipe	NECO / HEPCO
PVC Pipe	Prince / Supreme / Finolex
Nahani Trap	NECO / HEPCO
G.I. Pipe	TATA / Jindal Hissar / Surya Prakash
Bends	Unik/ RBrand/ Zoloto
SRFC Covers	K.K Manhole
Toilet accessories	Jaguar/ ESS
C.P Floor Jali	Chilly/ Entuoco
Gate Valve/Butterfly Valve/Ball Valve	Leader/ AIP/ Sant
Aluminum Sections	Indal/Jindal/ Hindalco
False ceiling	India Gypsum/ Lafarge/ St.Gobain
Glue	Fevicol / Vemicol
M.s pipes/plates/flats/angle	Sail/HSL/ Equivalent
PVC water tank	Sintex/ Frontier
Door locks	Godrej/ Dorset/ dorset
Door closer	Godrej/ Dorma/ Dorset/ DC 2000 (Sterling Bombay)
Push Button Starter	BE/ Kirloskar/ KSB/ Siemens/ L&T
Submersible Pump	BE/ Kirloskar/ KSB/ Siemens
Electric Motor	Crompton / BE/Kirloskar/ KSB/ Siemens
Switch, sockets (Modular type) and its plate and boxes.	Legrand (Mosiack) / MK(Wrap Round) / Clipsal(opale) / Siemens
MS conduit (ISI Mark)	BEC/ Steel Kraft/ AKG / Atul
Cables	Delton / Finolex / Skytone/ Lapp/ Grandlay
MCBs 10 KA, Isolator, MCB DBs & MCCB	Siemens/ ABB/ Schneider/ L&T/ GE/ Legrand
Bakelite sheet 2.8 mm thick (I.S.I.)	Super Hylem / Formica
PVC conduit (ISI Mark)	BEC / Polycab / AKG

17. LAYOUT DRAWINGS

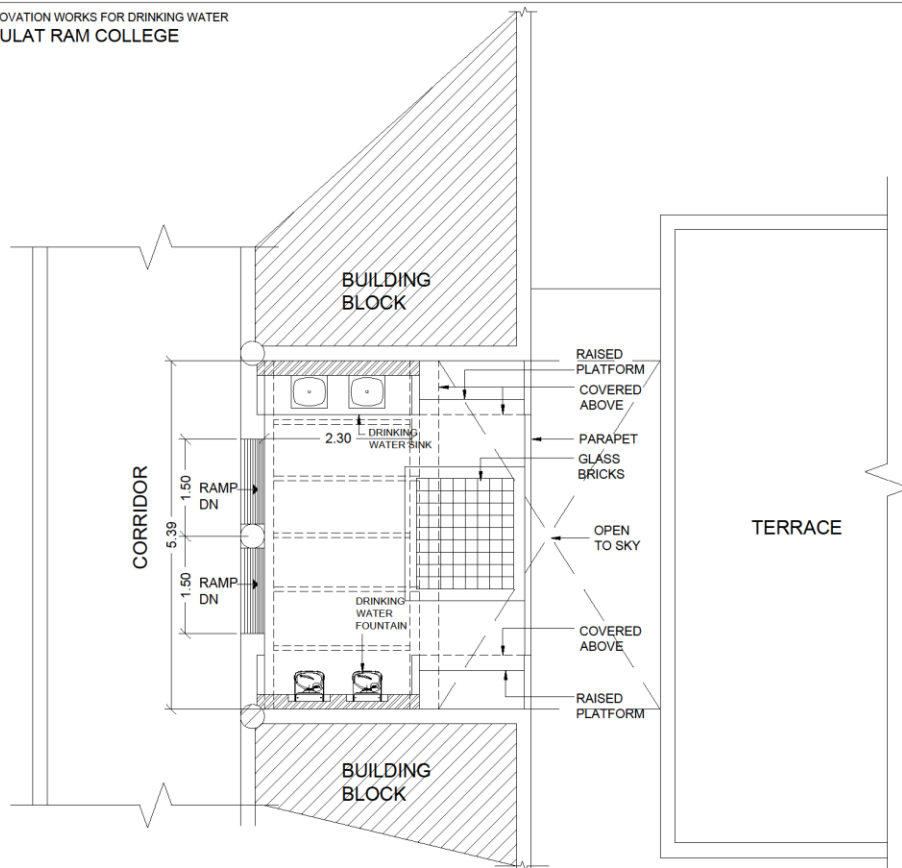
DRAWINGS FOR RENOVATION WORKS FOR DRINKING WATER FACILITY



DRAWINGS FOR RENOVATION WORKS FOR TOILET BLOCK



RENOVATION WORKS FOR DRINKING WATER
DAULAT RAM COLLEGE



SIGNATURE OF TENDERER

SPACE ACE
ARCHITECTS DESIGNERS PLANNERS

V-20A/05
DLF PHASE III
GURGAON, HARYANA
spaceace.india@gmail.com
0124-4106618

CLIENT

DAULAT RAM COLLEGE
DELHI UNIVERSITY - 110007

DRAWING TITLE

FIRST FLOOR PLAN
FOR DRINKING WATER

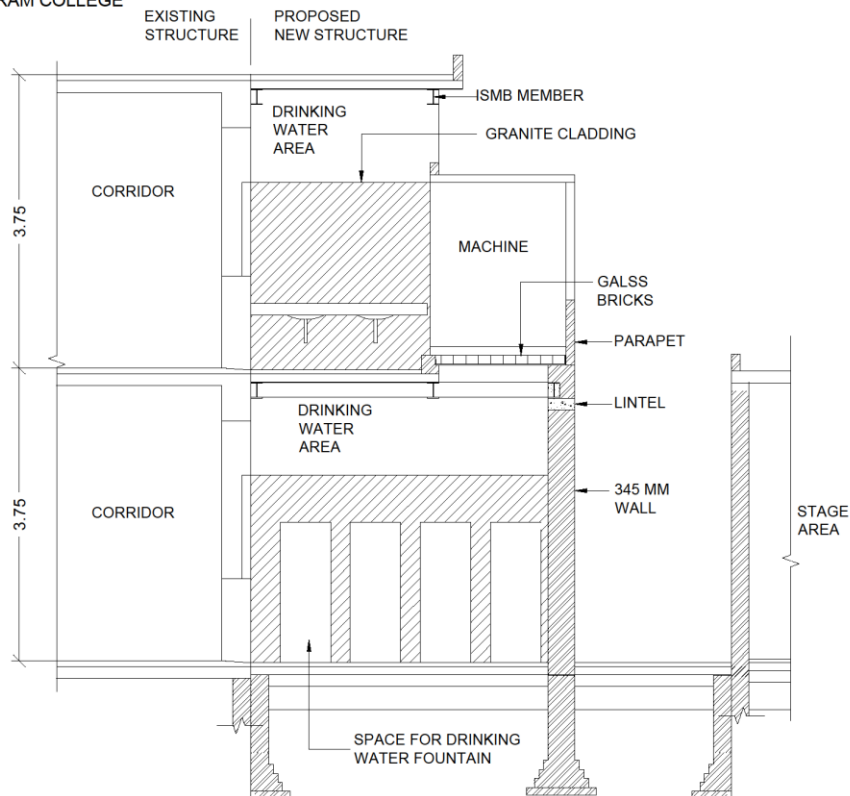
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RENOVATION WORKS FOR DRINKING WATER
DAULAT RAM COLLEGE



SIGNATURE OF TENDERER

SPACE ACE
ARCHITECTS DESIGNERS PLANNERS

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CLIENT

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DRAWING TITLE

SECTION
DRINKING WATER

DATE 16/09/2015

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