



बैंक ऑफ महाराष्ट्र
Bank of Maharashtra
भारत सरकार का उद्यम
एक परिवार एक बैंक

पुणेपूर्वअंचलकार्यालय, पुणे
PUNE EAST ZONAL OFFICE, PUNE
568, केसरीवाड़ा, दूसरीमंज़िल, नारायणपेठ, पुणे- 411030
568, Kesariwada, 2nd Floor, Narayanpeth, Pune-411030
टेली./TELE: 020-24459184/24514007
ई-मेल/E-mail: gad_per@mahabank.co.in

प्रधानकार्यालय: लोकमंगल, 1501, शिवाजीनगर, पुणे-5
Head Office: LOKMANGAL, 1501, SHIVAJINAGAR, PUNE-5



एक कदम स्वच्छता की ओर
'स्वच्छता अभियान'
की सफलता हेतु हम प्रतिबद्ध हैं

TENDER DOCUMENT

VOLUME I - TECHNICAL BID

PROJECT: - PROPOSED CIVIL AND INTERIOR FURNISHING WORK OF ZONAL OFFICE OF PUNE EAST ZONE FOR BANK OF MAHARASHTRA.

SITE: - BANK'S OWN PREMISES AT HADAPSAR I.E., HADAPSAR, PUNE

Architect : Narendra Sardeshpande & Associates

43, "Shreekul", Ground Floor, United Western Housing Society, Near Tathawade Garden, Karvenagar, Pune-411 052, Tel No.(020)-2545 4297, E-mail : nsapune1@gmail.com

A. NOTICE INVITING TENDER

Sealed tenders on item rate basis are hereby invited from **contractors** to execute the **CIVIL AND REPAIRING & INTERIOR FURNISHING WORKS** for **ZONAL OFFICE OF PUNE EAST ZONE, BANK OF MAHARASHTRA AT HADAPSAR I.E., PUNE**

1. Tender copies can be downloaded from Bank's website or collect from Architect's office between 10 AM to 2 PM and 2.30 PM to 5.30 PM **from 12th March 2019 to 27th March 2019**. Any query in respect of tender will be clarified in the Architect's office at above place; with prior appointment.
2. The late tenders shall be rejected including postal / courier delays.
3. Tender Specifications dully filled-in, signed and sealed should be addressed & submitted to: **our office at Bank of Maharashtra, Pune East Zone, 568 - Kesari Wada, Narayan Peth, Pune.**
4. Sealed tenders will be accepted before 5.30 PM on **27th March 2019**, at Bank of Maharashtra, Pune East Zone, **568 - Kesari Wada, Narayan Peth, Pune 411 030**

Opening Date of Technical Bid- 28.03.2019

Opening of Price Bid- 02.04.2019

5. The client, **BANK OF MAHARASHTRA**, Pune reserves the right to reject or accept any one or all tenders without assigning any reasons whatsoever.
6. E.M.D. will be accepted only in the form of DD drawn on Nationalized bank & shall be submitted in separate envelope as per directions.
7. Tender Fees of **Rs.2,000.00 (Non-Refundable)** should be paid in the form of DD in favour of the Architect – **NARENDRA SARDESHPANDE & ASSOCIATES** at the time of submission of Tender Documents.
8. The Earnest Money Deposit will be forfeited in the event of any evasion, refusal or delay on the part of the bidder to sign and execute the Contract on acceptance of his tender. The Earnest Money Deposit will be refunded to the bidders whose tenders are not accepted.

NOTES:-

1. The Owner reserves the right to reject the lowest or any tender without assigning any reason for the same.
2. All the rates quoted in the tender shall be inclusive of all taxes (except GST), levies, duties, transportation charges, wastage, Octroi, LBT etc; and shall remain firm till the completion of Work. No escalation of prices will be payable for what-so-ever reasons.
3. The bidder whose tender has been accepted shall within Five days of the intimation of acceptance of tender, submit the stamp paper of required value to the Architect for entering into agreement. Bidder's failure to comply with these conditions within the time, shall give right to the Employer to revoke acceptance of the tender and forfeit his earnest money without any further notice to the bidder.

4. The decision of the Employer will be given within 8 Days from the date of receiving the tenders within which period the terms of the tender will be binding on the bidder. The earnest money will be returned to the unsuccessful bidder within a reasonably short period. If the bidder, after intimation to him, fails to collect his earnest money deposit within three years of date of intimation, the amount will be automatically forfeited.
5. No additions or alterations shall be made in the Drawings, the Specifications, Schedule of Quantities, the conditions of contract and the tender by the bidder and, if made, such tender is liable to be rejected. In case of the successful tender, any such additions and alterations made by the bidder will be treated as null and void. If the bidder wants to put any condition, he must mention them on a separate letter attached on the top of the tender form.
6. The tenders shall be valid for a period not less than 90 days after the date of opening of the Price Bid.
7. This tender Notice shall form part of the Contract.
8. **The tender to be submitted, as two envelopes duly sealed and super scribed as-**

ENVELOPE NO. 1 – Technical Bid (Volume I)

It should contain following:-

- a. Notice Inviting tender.
- b. EMD
- c. Form of Tender
- d. Articles of Agreement
- e. General conditions of Contract.
- f. Special conditions of Contract.
- g. Proforma for various applications.
- h. General Specifications
- i. Technical Specifications
- j. Technical qualification & organization details of bidder. (pre-qualification bid)

ENVELOPE NO. 2 – Price Bid (Volume II)

It should contain following:-

- a. Priced Bill of Quantities only.

PROCEDURE FOR SUBMITTING TENDERS : -

1. All drawings & tender papers should be duly signed.
2. Both the envelopes should be super scribed with envelope no., type of bid & subject with site name.
3. If the contents in Envelope 2 (technical bid) are found ok & satisfactory then only Envelope 1 (Price bid) will be open.

Thanking you,

Yours truly,

Dy. Zonal Manager , Pune East Zone

B. APPENDIX: TIME SCHEDULE

1	Period of Completion	: 45 (Forty Five) DAYS INCLUDING HOLIDAYS, SUNDAYS
2	Defects Liability Period (DLP)	: 12 (Twelve) months from the date of Completion of work
3	Date of Commencement	: As per the work order
4	Liquidated Damages for Delay	: As per the work order
5	Period of final measurement	: 30(Thirty) days.
6	Value of work for Interim Certificate	: Minimum of Rs. 10.00 (ten) lakhs
7	Period of honoring interim Certificate	: Total 15 working days. 7 working days for Architect to certify and another 7 working days for Bank to make payment.
8	Period of honouring Final Certificate	: 30(Thirty) working Days.
9	Retention Money	: 8% of Interim Bill amount subject to the ceiling of the total security deposit
10	Total Security Deposit (Maximum)	: 5% of total tender amount
11	Initial Security Deposit including EMD	: 2% of Contract sum
12	Earnest Money	: Rs. 77,600.00
13	Tender validity period	90 days

SIGNATURE OF THE CONTRACTOR.

C. INSTRUCTIONS FOR BIDDER

1. The details of work to be carried out and its scope are given in the specifications and Bill of Quantities in these documents, which also indicate a brief description of the project where work is to be executed. The bidders are advised to study the same carefully before tendering and they shall be deemed to have fully acquainted themselves with the same.
2. The bidders in their own interest, are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders in respect of the site conditions including but not restricting to the following which may influence or affect the work or cost thereof under the contract.
 - a. Site conditions including access to the site, existing and required roads and other means of transport/communication for use by him in connection with the work.
 - b. Requirement and availability of land and other facilities for his enabling works, stores and workshops etc.
 - c. Ground conditions including those bearing upon transportation, disposal, handling and storage of material required for the work or obtained there from.
 - d. Source and extend of availability of suitable materials including water etc. and labour (skilled and unskilled), required for work and Laws & Regulations governing their use and employment.
 - e. Geological, meteorological, topographical and other general figures of the site and its surroundings as are pertaining to and needed for the performance of the work.
 - f. The limit and extent of surface and sub surface water to be encountered during the performance of the work, the requirement of drainage and pumping.
 - g. The type of equipment and facilities needed preliminary for and in the performance of the work, and for successful completion of work.
 - h. All other information pertaining to and needed for the work including information as to the risks, contingencies and other circumstances which may influence or affect the work or the cost thereof under this contract.
3. The bidders should note the information, if any, regards to the site and local conditions, as contained in these tender documents has been given merely to assist the Bidders and is not warranted to be complete.
4. The Bidders should note and bear in mind that the BANK shall bear no responsibility for the lack of acquaintance of the site and other conditions or any information relating thereto, on their part. The consequences of the lack of any knowledge, as aforesaid, on the part of the bidders shall be at their risk and cost and no charges or claims

whatsoever consequent upon the lack of any information, knowledge or understanding shall be entertained or payable by the Bank.

5. Immediately on receipt of the Tender Documents from the Bank, but at least three days prior to the date fixed for opening of envelope no.1 of tender, the Bidder may submit in writing any tender enquiry on matters where clarifications or additional information is desired. If considered appropriate, the Bank reserves the right to issue addendum(s) / amendment(s) to any condition/ specifications/schedules of all bidders before the date of submission. Tenders submitted by the tender shall be deemed to cover the effect of such addendum(s)/ amendment(s) issued and such addendum(s)/ amendment(s) duly signed by the Bidders shall be submitted along with the tenders.
6. The Tender should be submitted in the prescribed form and the same should be signed as laid down here under:
 - a. If the Tender is submitted by an individual, it shall be signed by the Proprietor with his full name and full name of his firm with its current business address.
 - b. If the Tender is submitted by proprietary firm, it shall be signed by the proprietor with his full name and full name of his firm with its current business address.
 - c. If the Tender is submitted by a firm in partnership, it shall be signed for and on behalf of the firm by all the partners of the firm about their full names and current business address, or by a partner holding the power of attorney by the firm for signing the tender, in which case, a certified copy of the partnership deed and current business address of all the partners of the firm shall also accompany the tender.
 - d. All witnesses and sureties (if any) shall be person of status and their full names, occupations and address shall be stated below their signature. All signatures affixed on each page in the tender will be dated.
7. The Earnest Money deposit without any interest will be returned to the unsuccessful bidders only after Validity period / award of work.
8. The Bidders should quote for all the items of work as given in Bill of Quantities. The rates shall be written both in words and in figures. Bidder shall also show cost of each item in total of each sub head and the grand total of the whole contract. Corrections, if any shall be made by crossing out initialing dating and rewriting.
9. The acceptance of a tender will rest with the Bank, which does not bind itself to accept the lowest tender, and reserves to itself the authority to reject any or all of the tenders received without the assignments of any reasons. All tenders in which any of the prescribed conditions are not fulfilled or are incomplete, in any respect are liable to be rejected.
10. All item rates shall be quoted on the proper form of the tender alone.

11. An item rate tender containing percentage "below / above will be summarily rejected. However where a bidder voluntarily offers a rebate for payment without a stipulated period, this may be considered.
12. On acceptance of tender the name of the accredited representative (s) of the Contractor who would be responsible for taking instructions from the Employer / Architect shall be communicated to the Employer / Architect.
13. Special care shall be taken to write the rates in figures as well as in words, and the amounts in figures only, in such a way that misinterpretation is not possible. The total amount should be written both in figures and in words. In case of figures, the words 'Rs' should be written before the figure of rupees and words 'P' after the decimal figures e.g. Rs. 2.15 P and in case of words, the word Rupees should precede and the word 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the words 'only' it should invariably be up to two decimal places. While quoting the rates in the bill of quantities, the word 'only' should be written closely following the amount and it should not be written in the next line.
14. The Bank does not bind itself to accept the lowest tender but it may accept any tender and reserves to itself the right of accepting the whole or any part of tender and the bidder shall be bound to perform the same at the rates quoted.
15. The Bank also reserves the right to accept the tender in full or in parts and that the tender shall have no claim for revision of rates or other conditions if the tender is accepted in parts.
16. The tender for work shall remain open for acceptance for a period of 90 days from the date of opening of Envelope no. 2 of the tenders. If any bidder withdraws his tender before the said period, then the Bank shall be at liberty to forfeit his Earnest Money Deposit. The Earnest Money Deposit of the bidder whose tender is accepted shall be forfeited in full in case he does not start the work by the stipulated date mentioned in the award letter.
17. It will be obligatory on the part of the bidder to tender and sign the tender documents for all the component parts and that after the work is awarded, he will have to enter into an agreement for each component with the competent authority of Employer.
18. The "Notice Inviting Tender" and this "Instructions for Bidders" shall form part of the Tender Documents.

D. FORMS OF TENDER
(Blanks must be filled in by the bidder)

To,
The Dy. Zonal Manager,
PUNE EAST ZONE,
Bank of Maharashtra,
568-Kesari Wada, Narayan Peth, Pune - 411 030

Respected sir,

With reference to the tender invited by M/S. **NARENDRA SARDESHPANDE AND ASSOCIATES** on behalf of you for the **Proposed Civil and Repairing + Interior Furnishing Work of Zonal Office of PUNE EAST ZONE, Bank of Maharashtra at HADAPSAR I.E., PUNE**

I/We do hereby offer to execute the work under the Contract at the respective **item rate basis** mentioned in the schedule of quantities.

I/We have examined and studied carefully the site of the proposed works, all the Drawings, Schedule of Quantities, Specifications and conditions of contract and I/We agree to comply whole of work within respective time limits mentioned in the tender; from the date of getting the intimation from you that our tender has been accepted and upon receiving the possession of the site.

I/We further undertake that on failure subject to the conditions of contract relating to extension of time; I/We shall pay damages to the Employer the sum named in Appendix to the condition of the Contractor/Supplier as Liquidated damages for the period during which the Work shall remain incomplete.

I/We have deposited as earnest money an amount of Rs. **(Rs. 77,600.00)** _____ by D.D. No. _____ on _____ bank in your favour (to be handed over along with tender documents), which amount is not to bear any interest and I/We do hereby agree that this sum shall be forfeited, in the event of accepting my/our tender & I/We fail to start the work under the Contract & execute the Contract documents when call upon to do so.

I/We do agree to pay **5%** of the total value of the work done as security amount.

I/We do agree that my/our tender shall stand disqualified in the event of –

- a. Failure to submit the tender in specified time and date.
- b. Any page of this tender is found missing.
- c. Any page of this tender form is not signed by us in token of acceptance.
- d. The rates and/or amounts in the Schedule of Quantities are not filled in figures as well as in words in English and all erasures are not counter signed.

I/We have read the notes attached herewith and do agree to the same.

Thanking you,

Yours truly,

Signature & Seal of the Contractor

E. ARTICLES OF AGREEMENT

ARTICLES OF AGREEMENT made on the _____

Between _____ (hereinafter referred to “**the Contractor**”) of the one part And **The Dy. Zonal Manager, PUNE EAST ZONE, Bank of Maharashtra** hereinafter referred to as “**the Employer**” (which term shall mean and include its successors in interest and permitted assignees) of the other part; WHEREAS the Drawings and specifications and the Priced Scheduled of Quantities have been signed by or on behalf of the parties hereto and WHEREAS the Contractor has agreed to execute upon and subject to the conditions set forth herein (herein after referred to as “**the said conditions**”) the work shown upon “**the said Drawings**” and described in “**the said Specifications**” and “**the said Priced Schedule of Quantities**” at rates mentioned in the Priced Schedule of Quantities (herein after referred to as “**Contract rates**”) and WHEREAS the Contactor has deposited Rs. _____ (Rs. _____ only.) as Security Deposit for the due performance of the agreement.

NOW IT IS HEREBY AGREED AS FOLLOWS:

1. In consideration of the payments to be made to the Contractor as hereinafter provided he shall upon and subject to the said Conditions execute and complete the works shown upon the said Drawings and such further detailed drawings as may be furnished to him by the said Architects and described in said Specification and the said Priced Schedule of Quantities.
2. The Employer shall pay the Contractor such sum as shall become payable hereunder at Contract rates in the manner specified in the said conditions.
3. The within plans, agreement and documents above mentioned shall form the basis of this contract, which for the time being as mentioned in the conditions of contract in reference to all matters of dispute as to the material workmanship or account and as to the intended interpretation of Clause of this Agreement or any other documents attached hereto shall be final and binding on both parties and may be made a Rule of Court.
4. The said Contract comprises the building/buildings/roads/drawings work mentioned hereinbefore and all subsidiary work connected therewith within the same site as may be ordered to be done from time to time by the said Architects or the Employer even though such works may not be shown on the Drawings or described in the said Specifications of the Priced Schedule of Quantities.

5. The Employer reserves to himself the right of altering the Drawings and nature of the Work and of adding to or omitting any items of work or of having portions of the same carried out departmentally or otherwise and such alterations or variations shall be carried out without prejudice to this contract.
6. The said conditions shall be read and constructed as forming part of this Agreement and the parties hereon will respectively abide by and submit themselves to the condition and stipulations and performs the agreement as their parts respectively.
7. All disputes arising out of or in any way connected with this Agreement shall be deemed to have arisen in Pune and only the Courts in Pune shall have jurisdiction to determine the same.
8. The term or "The Architect" in the said conditions shall mean **M/S. NARENDRA SARDESHPANDE AND ASSOCIATES – 43,"Shreekul", Flat No. 2, Ground Floor, United Western Housing Society, Near Tathawade Garden, Karvenagar, Pune-411 052**, or in the event of their death ceasing to be the Architect for the purpose of this contract, such other person as the Employer shall nominate for that purpose, not being a person to whom the Contractor shall object for reasons considered to be sufficient by an Arbitrator appointed in accordance with the said conditions. Provided always that no person subsequently appointed to be the Architect under this contract shall be entitled to disregard or over rule any certificates or opinion or decision or approval or instruction given or expressed by or the Architect for time being.
9. The term "Consultants" refers **M/s. NARENDRA SARDESHPANDE & ASSOCIATES**", Pune or in the event of their ceasing to be the consultants for this project, such other person or persons as by be appointed by the Architect with approval of the Employer.
10. The contract is based on Item Rate Basis.
11. The time shall be considered as the essence of this contract and the Contractor hereby agrees to commence the work soon after the site is handed over to him or from next day after the date of normal Work Order as provided for into the said conditions whichever is later & to complete the entire work within **FORTY FIVE DAYS** subject nevertheless to the provisions for extension of time.

12. All payments by the Employer under this contract will be made only at PUNE as per the Architect's certificate AND the Client's certificate.

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

Witness our hands this day of , 2019.

Signed by the said presence of

Employer.

Contractor.

F. GENERAL CONDITIONS OF CONTRACT

Except where provided for in the description of the individual Items in the schedule of quantities and in the specification and under the direction of employer/Architect.

1. INTERPRETATION

In constructing these conditions, the specifications, the schedule of quantities, quotation and Agreement, the following words shall have the meaning herein assigned to them except where the subject or context otherwise requires.

2. CLIENT/EMPLOYER

The term Client/Employer shall denote **PUNE EAST ZONE, Bank of Maharashtra, 568-Kesari Wada, Narayan Peth, Pune - 411 030** and any of its employee's representative authorized on their behalf.

3. ARCHITECTS

The term Architects shall denote **NARENDRA SARDESHPANDE & ASSOCIATES** whose office is situated at **43, "SHREEKUL", Flat No. 2, Ground Floor, United Western Housing Society, Near Tathawade Garden, Karvenagar, Pune – 411 052.** Or in the event of his/their ceasing to be the Architect for the purpose of this Contract such person as the employer shall nominate for the purpose.

4. CONTRACTOR

The term Contractor shall mean

.....

.....

.....

(Name and Address of the contractor and his/their legal representative, assign and successors.)

5. SITE

The site shall mean where the works are to be executed and as shown in layout plan as mentioned in quotation document elsewhere.

6. DRAWINGS

The works is to be carried out in accordance with drawings, specifications the schedule of quantities and any further drawings which may be supplied or any other instructions, which may be given by the Architect, during execution of the work.

All drawings relating to the contractor together with a copy of schedule of quantities are to be kept at site and the Employer/ Architect shall be given access to such drawings or schedule of quantities whenever necessary.

In case any detailed drawings/"Farma" are necessary contractor shall prepare detailed drawings/"Farma" and / or dimensional sketches there for have it confirmed by the Employer /Architect prior taking up the work.

The contractor shall ask in writing for all clarifications on matters occurring drawings, specifications and schedule of quantities or to additional instructions at least 7 working days ahead from the time when it is required for implementation so that the Employer may be able to give decision thereon.

1. "The works" shall mean the work to be executed or done under this contract.
2. "Act of Insolvency" shall mean the presidency town Insolvency Act or in provincial Act or any amending status.
3. "The Bill of Quantities" is schedule of quantities shall mean the bill of quantities as specified and forming part of this contract.
4. "Priced Bill of quantities" shall mean the Bill of quantities duly priced with the accepted quoted rates of the contractors.

7. SCOPE

The work consists of Interior/furnishing in accordance with the "drawings" and bill of quantities. The civil, electrical, sanitary plumbing, Interior/ furnishing works etc, Within the scope of this quotation. It includes furnishing all materials, labour, tools and management necessary for and incidental to the construction and completion of work during its progress and upon completion, shall confirm to the lines, elevation and grades as shown on the drawings furnished by the Employer / Architect. Should any details essential for efficient completion of the work be omitted from the drawings and specifications it shall be the responsibility of the Contractor to inform the Employer/Architect and to furnish and install such detail with the Employer's /Architect's concurrence, so that upon completion of the proposed work the same will be acceptable and ready for use.

Employer/Architects may in their absolute discretion issue further drawings and /or written instructions, details, directions, and explanations which are hereafter collectively, referred to us "the Employer /Architect's instructions" in regard to:

1. The variation or modifications of the design quality or works or the additions or omission or substitution of any work.
2. Any discrepancy in the drawings or between the schedule of quantities and/or drawings and/or specification.
3. The removal from the site of any defective materials brought thereon by the contractor and the substitution of any other material thereof.
4. The demolition removal and /or re execution of any work executed by the contractor/s.
5. The dismissal from the work of any persons employed thereupon.
6. The opening up for inspection covered up.
7. The rectification and making good of any defects under clauses herein after mentioned and those arising during the maintenance period (retention period).

8. CONTRACTOR SHALL VISIT THE SITE

Intending Contractor shall visit the site and works himself thoroughly acquainted with the local site condition, nature and requirement of the works, facilities of transport conditions, effective labour and materials, access and storage for materials and removal of rubbish. The Contractor shall provide in their quotation for cost of carriage, freight and other charges as also for any special difficulties and including police restrictions for transport etc. for proper execution of the work as indicated in the drawings. The successful Contractor will not be entitled to any claim of compensation for difficulties faced or losses incurred on account of the Employer or the Architect.

9. QUOTATIONS

The entire set of quotation papers issued to the Contractor should be submitted full priced and also signed on the last page together with initials on every page initials/ signature will indicate the acceptance of quotation papers by the Contractor.

The schedule of quantities shall be filled in as follows:

1. The "Rate" column to be legible filled in English Figure.
2. Amount column to be filled in for each item and the amount for each sub head as detailed in the "Bill of Quantities".
3. All corrections are to be initiated.
(In case of any errors/ omission in the quoted rates,)
4. Only one rate should be quoted for each item(s).

No modifications, writing or corrections can be made in the quotation papers by the Contractor, but may at his option offer his comments or modifications in a separate sheet in envelope.

The employer reserves the right to rejected the lowest or any quotation and also to discharges any or all quotations for each sections or to split up and distributed any item of work to any firm or firms, without assigning any reason.

The Contractor should note that the quotation is strictly on the item rate basis and their attention is drawn to the fact that the rates for each and every item should be correct, work able and self supporting. If called upon by the Employer /Architect detailed analysis of all the rates shall be submitted by the Contractor. The Employer /Architect shall not be bound to recognize the contractor's analysis.

The works will be paid for as "measures work" on the basis of actual work done and not as "lump sum" contractor.

All items of work described in the bill of quantities are to be deemed and paid as complete works in all respects and details including preparatory and finishing works involved, directly related to and reasonably detectable from the drawings, specifications bill of quantities and no further extra charges will be allowed in this connection. In case of lump sum charges in the quotation in respect of any item of works, the payment of such items of work will be made for the actual work done on the basis of lump charges as will be assessed to be payable by the Employer /Architect.

The Employer has power to add to, omit from any work as shown in the drawings or described in specifications or included in the bill of quantities and intimate the same in writing but no addition, omission or variation shall be made by the Contractor without authorization from the Employer. No variation shall vitiate the contractor.

10. AGREEMENT

The successful contractor may be required to sign agreement as may be drawn up to suit local conditions and shall pay for all stamps and legal expenses thereto.

11. PERMITS AND LICENCES

Permits and licenses for release of materials which are under Government control will be arranged by the contractor. The employer will render necessary assistance, sign any form or applications that may be necessary.

It may be clearly understood that no compensation or addition charges can be claimed by the contractor for non receipt of controlled materials in due time on this account or according to his own requirements.

The contractor shall at his own cost arrange for storage shed adequate for taking delivery and storing, transporting etc. of all materials including those under government control are to be included by the Contractor in his quoted rates.

The Employer /Architect shall be indemnified against all Government or legal actions for thefts or misuse of controlled materials in the custody of the contractor.

12. GOVERNMENT AND LOCAL RULES

The contractor shall confirm to the provisions of all local Bye Laws and Acts relating to the Regulations etc. of the Government and Local Authorities and of any company with whose system the structure is proposed to be connected. The contractor shall give all notice required by said Act, Rules, Regulations and Byelaws etc and pay all fees payable to such authority /authorities for execution of the work involved. The cost, if any shall be deemed to have been included in his quoted rates, taking into account all liabilities for licenses, fees for footpath encroachment and restorations etc. and shall indemnify the Employer /Architect against such liabilities and shall defend all actions from such claims or liabilities.

13. TAXES AND DUTIES

The Contractor must include in their quotation prices quoted for all duties royalties, Value Added Tax, Contract tax, Turnover Tax, trade Tax etc.

Against any other taxes or local charges applicable No extra claim on this account will in any case be entertained. Only GST will be paid extra as per prevailing rates.

14. OTHER PERSONS ENGAGED BY THE EMPLOYER

The employer reserves the right to execute any part of work included in this contract or any work which is not included in this contract by other agency or persons and contractor shall all responsible facilities for the execution of such work. The main contractor shall extend all cooperation in this regard.

15. RETENTION MONEY/ SECURITY DEPOSIT

Retention money shall be deducted from progressive running bill of the gross value of each running bill. The total security deposit will be retained money for the defect liability period.

The retention money i.e. the total security deposit will be refunded to the contractor 14 days after the end of defect liability period provided he has satisfactorily carried out all the work and attended to all defects in accordance with the conditions of contract. No interest is allowed on retention money.

16. CONTRACTOR TO PROVIDE EVERYTHING NECESSARY

The contractor shall provide everything necessary for proper execution of the work according to the intent and meaning of the drawing, schedule of quantities and specifications taken together whether the same may or may not be inferred there from and if the contractor finds any discrepancies therein he the Employer shall on no account be responsible for the be expenses incurred by the contractor for hired ground or fresh water obtained from elsewhere.

The rates quoted against individual items will be inclusive of everything necessary to complete the said items rates quoted against individual items will be inclusive of everything necessary to complete the said items of work within the contemplation of the contract and beyond the unit price no extra payment will be allowed for specific items, if any, stipulated in the quotation document.

The contractor shall supply, fix and maintain at his own cost, for the execution of any work, all tools, tackles machineries and equipments and all the necessary centering, scaffolding staging, planking, timbering, strutting, shoring pumping, fencing, barding, watching, and lighting by night as well as by day required not only for the proper execution and protection of the said work but also for the protection of public and safety of any adjacent roads, streets, walls, house, buildings all other erections, matters, and things and the contractor shall take down and remove any or all such centering, scaffolding, planking, timbering, strutting, shoring etc. as occasion shall be required or

when ordered so to do and shall fully reinstate and make good all matters and things disturbed during the execution of works to the satisfaction of the Employer/ Architect.

The contractor shall at all times give access to works employed by the Employer or any men employed on the building and to provide such parties with proper sufficient and if required, special scaffolding, special hoists and ladders and provide them with water and lighting and leave or make any holes, grooves etc. in any work, where directed by the employer as may be required to enable such work to lay or fix pipes, electrical wiring, special fitting etc. The quoted rates of the Contractor shall include all these above-mentioned contingent works.

17. TIME OF COMPLETION, EXTENSION OF THE TIME AND PROGRESSIVE CHART

- a) **TIME OF COMPLETION:** The entire work is to be completed in all respects within stipulated period as specified. The work shall be deemed to be commenced within **5** working days from the date of issue of work order. **Time is the essence of the contractor and shall be strictly observed by the Contractor.** The work shall not be considered as complete until the Employer/ Architect have certified in writing that this has been completed and the Defects liability Period shall commence from the date of such certificate.
- b) **EXTENSION OF TIME:** If in the opinion of the Employer /Architects the works be delayed (a) by reason of any exceptionally inclement weather or (b) by reason of instructions from the Employer in consequence of proceedings taken or threatened by or disputes, with adjoining or neighboring client/ Employers or (c) by the works, or delay, of other contractors or tradesman engaged or nominated by the Employer and not referred to in the specification or (d) by reason of authorized extra and additions or (e) by reason of any combinations of workmen or strikes or lock out affecting any of the building trades or (f) from other causes which the Employer at the Completion of the time allowed for the contract shall make fair and reasonable extension of time for completion in respect therefore in the event of the employer failing to give possession of the site upon the day specified above the time of completion shall be extended suitably. In case of such strikes or lock outs as are referred to above, the Contractor shall, immediately give the Employer to proceed with the works and on his doings so that it will be ground of consideration by the Employer to proceed with the works and on his doings so that it will be ground of consideration of the Employer for an extension of time as above provided. The

decision of the employer as to the period to be allowed for an extension of time for completion hereunder (which decision shall be final and binding on the contractor) shall be promulgated at the conclusion of such strike or lock outs and the Employer shall then in the event of an extension being granted, determine and declare the final completion date. The provision in clause 14 with respect to payment of liquidated damages shall, in such case, be read and constructed as if the extended date fixed by the Employer were substituted for and the damage shall be deducted accordingly.

- c) **PROGRESS OF WORK:** During the period of work execution of work the contractor shall maintain proportionate progress on the basis of a program chart approved by the Architect immediately before commencement of work.

18. **PENALTY/ LIQUIDATED DAMAGES**

Should the work be not completed to the satisfaction of the Employer/ Architect within the stipulated period, the contractor shall be bound to pay to the Employer a sum calculated as **0.15% of tender amount** per week or part thereof. Subject to a ceiling of **10%** of the accepted contracted sum by way of Penalty/ liquidated damages. **In addition to the above mentioned Penalty/ liquidated damages there will be penalties on missing mile stones.** This mile stone penalties will be **0.15%**(of Total work order value) per day. The mile stones for penalty will be as per project schedule issued and agreed by the contractor before starting the project.

19. **TOOLS, STORAGE OF MATERIALS, PROTECTIVE WORKS AND SITE OFFICE REQUIREMENTS.**

The contractor's representative and staff shall be available at site all reasonable hours to receive instruction notices or communications.

All drawings maintained on the site are to be carefully mounted on boards of appropriate size.

The contractor shall provide at his own cost provide all artificial light required for the work and to enable other contractors to complete the work within specified time.

The contractor shall not fix or place any placard or advertisement of any description or permit the same to be fixed or placed in or upon any boarding, gantry building structure other than those approved by the Employer.

20. **PROTECTIVE MEASURES**

The contractor from time to time of being placed in possession of the site must suitable arrangements for watching, lighting, and protecting the work, the site and the surrounding property by day by night on Sunday and other holiday at his own cost.

Contractor shall indemnify the employer/Architect against all possible damaged to the building, roads, or members of the public in course of execution of the work.

The Carpenters shall provide necessary temporary enclosures, gates, entrance etc. for protection of the work and materials and for altering and adopting the same as may be required and removing on completion of the works and making good all works disturbed at his own cost.

The carpenters and the super visors on the works shall carry with them always one meter or two meter steel tape, a measuring tape of 30 meter, a spirit level, a plumb bob gauge and a square and shall check Employer/ Architect will use any or all measuring instruments or tools belonging to the contractor s as he choose for checking the works executed or being executed in the contract.

The contractor should cover in his rate for making provisions for all reasonable facilities for the use of his scaffolding, tools and plant etc. by other contractors for their work.

21. NOTICE AND PATIENTS OF APPROPRIATE AUTHORITY AND OWNERS

The contractor shall confirm to the provisions of any Acts of the Legislature relating to the work, and to the regulations and Bye Laws of the any authorities, and / or any water, lighting and other companies and /or authorities with whose systems the structures were proposed to have connection and shall before making any variation from the drawings or specifications that may be associated to so confirm, give the Employer /Architect written notices specifying the variations proposed to be made and the reasons for making them and apply for instructions there on. The Employer/ Architect on the receipt of such intimation shall give a decision within a reasonable time. The contractor shall arrange to give all notices required for by the said Acts, Regulations Bye laws to be given to any authorities, and to pay such authority or to the public officer all fees that may be properly chargeable in respect of the work and lodge the receipts with the Employer.

The contractor shall indemnify the employer /architect against all claims in respect of patent rights, royalties, damages to buildings, roads or members of public in course of the work and shall defend all actions arising out from such actions, costs and expenses.

22. CONTRACTOR IMMEDIATELY TO REMOVE ALL OFFENSIVE MATTERS.

All soil, filth or other matters of any offensive nature taken out of any trench, sewer, drain cesspool or other place shall not be deposited on the surface but shall be at once carted away by the contractor to place provided by him at his own cost.

23. ACCESS

Any authorized representative of the Employer shall at all reasonable times have free access to the works and/ or the workshop, factories or other place where materials are being prepared or manufactured constructed for the work and also to any place where the materials are lying or from where they are being obtained, and the contractor shall give facility to the Client / Employer or their representative necessary for the inspection and examination and the test materials and workmanship . Except the representative of the Employer /Architect no person shall be allowed at any time without the written permission of the employer.

24. MATERIALS WORKMANSHIP, SAMPLES, MOCK-UP OF ITEMS, TESTING OF MATERIALS.

All the works specified and provide for in the specifications or which may be required to be done in order to perform and complete any part thereof shall be executed in the best and most workmanlike manner with materials of the best and approved quality of the respective kinds in accordance with the respective kinds in according to such other additional particulars contained in and implied by the specifications and as represented by drawings or according to such other additional particulars and instructions as may from time to time be given the Employer /Architect during the execution of the work and to his entire satisfaction.

If required by the Employer / Architect the contractors shall have to carry out tests on the materials etc. and workmanship in approved materials testing laboratories or as prescribed by the Employer /Architect at his own cost to prove that the materials etc. under test confirms to the relevant IS standards or as specified in the specifications. The necessary changes for transporting testing etc. shall have to be borne by the contractor. No extra payment on this account should in any case be entertained.

Contractor at his own cost should erect mock- up of items suggested/ requested by Client /Architect during execution of work and also modify as per Client /Architects instruction. And only after finalization of the mock-up contractor should execute the work.

All the materials (except where otherwise described) stores and equipment required for the full performance of the work under the contract must be provided through normal channels and must include charge for import duties, sales tax/ Value Added Tax, octroi and other charges and must be the best of its kind available and the contractors must be entirely responsible for the proper and efficient carrying out of the work. The work must be done in the best workman like manner. Samples of all the materials to be used must be submitted to the Employer/ Architects when so directed by the Architects and written approval from the Employer /Architect must be obtained prior to placement of order.

During the inclement weather the contractor shall suspend concreting and plastering, painting and polishing for such time as the Employer /Architect may direct and shall protect from injury all the works when in course of execution. Any damage (during construction) to any part of the work for any reason due to rain, storm or neglect of contractor shall be rectified by the contractor in an approved manner at no extra cost.

Should the work be suspended by reason rain, strike, lock outs, or any other cause, the contractor shall take all precautions necessary for the protection of work and at his own expenses and shall make good any damage arising from any cause, all new work and supply all temporary doors, protection to windows, and any other requisite protection for the execution of the work whether by himself or special traders men or sub contractor and any damage caused must be made good by the contractor at his own expenses.

25. CONTRACTOR'S EMPLOYEES

The contractor shall employ technically qualified and competent supervisors for the works who shall be available through out the working hours to receive and comply with instructions of the employer /Architects. The contractor shall employ in connection with the work persons having the appropriate skill or ability to perform efficiently.

No labour below the age of Eighteen years and who is not an Indian National shall be employed on the work.

No labour supplied by the contractor to be engaged on the work on day work basis either wholly or partly under order or control of the Employer or his representative shall be deemed to be person employed by the contractor.

The contractor shall comply with the provisions of all labour legislation including the requirements of:

1. The Payment of wages Act
2. Employer's Liability Act.
3. Workman's Compensation Act.
4. Contractor Labour (Regulation & Abolition) Act'1970 and central Rulse1971
5. Apprentices Act 1961
6. Minimum Wages Act.
7. Any other Act or enactment relating there to and rules framed there under from time to time.

The contractor shall keep the employer /Architect saved harmless and indemnified against claims if any of the workmen and all costs and expenses as may be incurred by the employer in connection with any claim that may be made by any workmen.

The contractor shall comply at his cost with the order of requirements of any Health officer of the state or any Local authority or of the Employer regarding the maintenance of proper environmental sanitation of the area where the contractor's labour are housed or accommodated, for the prevention of small pox, cholera, plague, typhoid, alaria and other contagious disease. The contractor shall provide, maintain, and keep in good sanitary conditions adequate sanitary accommodation and provide facilities for pure drinking water at all times for the use of men engaged on the works and shall be taken by the contractors to prevent nuisance of any kind on the workers or the lands adjoining the same.

The contractor shall arrange t provide first aid treatment to thee labour engaged in the work. He shall within 24 hours of the occurrence of any accident at or about the site or in connection with execution of the works, report such accident to the employer and also to then competent authority where such is required by the law.

26. DISMISSAL OF WORKMEN

The contractor shall on the request of the employer immediately dismiss from work any person employed there on by him, who may in the opinion of the Employer be unsuitable or incompetent or who may misconduct him self. Such discharge shall not be on the basis of any claim for compensation or damages against the employer or any of their officer or employee.

27. ASSIGNMENT

The whole of 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 or interest therein nor shall take a new partner, without written consent of the employer and no subletting shall relive the contractor from the full and entire responsibility of the contract or from active superintendence of the work during their progress.

28. DAMAGE TO PERSONS AND PROPERTY DAMAGE INSURANCE ETC.

The contractor shall be responsible for all injury to the work workmen to persons, animals or things and for all damages to the structural and/or decorative part of property which may arise from the operations or neglect of himself or any sub contractor or of any of his or a sub contractor's employees. Whether such injury or damage arise from carelessness, accident or any other cause whatever in any way connected with carrying out of this contract.

The clause shall be held to include inter alia, any any damage to buildings whether immediately adjacent to or otherwise and any damage to roads, street's footpaths, or ways as well as damages caused to the buildings and the works forming the subject of this contract by rain, wind, other inclemency of weather. The contractor shall indemnify the employer and hold harmless in respect of all and any expenses arising from such injury or damage any acts of compensation or damages Consequent upon such claim.

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

The contractor shall affect the insurance necessary and indemnify the employer entirely from all responsibility in this respect. The insurance must be placed with a company

approved by the Employer and must be effected jointly in the name of the contractor and the employer and the policy lodged with the latter. The scope of insurance is to include damage or loss to the contract itself till this is made over in complete state Insurance is compulsory and must be effected from very initial stage. The contractor shall for any thing, which may exclude from damage to any property arising out incidents, negligence of defective carrying out of this contract.

The Employer shall be at liberty and is hereby empowered to deduct the amount of any damages, compensation, costs, charges and expenses arising or accruing from or in respect of any such claim or damages from any sums due or to become to the contractor.

29. INSURANCE

Unless otherwise instructed the contractor shall insure the works and keep them insured until the virtual completion of the contract against loss or damage by fire and /or earthquake, flood. The insurance must be placed with a company approved by the Employer, in the joint names of the Employer and the contractor for contract sum.

The contractor shall deposit the policy and receipt for premiums paid with the employer within 7 days from the date of issue of work order unless otherwise instructed in default of the contractor insuring to provide above, the Employer on his behalf may so insure and may deduct the premium paid 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 then work reinstated by the insurance company should they elect to do so, proceed with due diligence with the completion of the works in the same manner as though the fire has not occurred and in all respect under the conditions of the contract. The contractor in case of rebinding or reinstating after fire shall be entitled to extension of time for completion as the employer may deem fit.

30. ACCOUNTS RECEIPTS AND VOUCHERS

the contractor shall, upon the request of the employer furnish them with all the invoices, accounts, receipts and other vouchers that may require in connection with the work under this contract. If the contractor shall use materials less than what is required under this contract, the value of the difference in the quantity of the materials he was required to use and that he actually used shall be deducted from his dues. The decision of the employer / Architect shall be final and binding in the contractor as to the amount of materials the contractor is required to use for any work under this contract.

31. DEFECTS AFTER COMPLETION

The contractor shall make good at his own cost and to the satisfaction of the employer all defects, shrinkage, settlements or other faults which may appear within 12 months after completion of the work. In default the employer may employ and other persons to amend and make good such damages, losses and expenses consequent thereon or incidental there to shall be made good and borne by the contractor and such damages, loss and expenses shall be recoverable from him by the employer or may be deducted by the employer in lieu of such amending such works and in the event of the amount retained being insufficient recover that balance from the contractor from any amount retained under clause no: 11 by the employer together with any expenses the employer may have incurred in connection therewith.

32. CONCEALED WORK

The contractor shall give due notice to the employer /Architect whenever any work is to be buried in the earth, concrete or in the bodies of walls, above false ceiling, concealed in conduits behind paneling or otherwise becoming inaccessible later on, in order that the work may be inspected and correct dimensions taken before such burial in default whereof the same shall at the opinion of the Employer/ Architect be either opened up for measurement at the contractor's cost and no payment may be made for such materials. Should any dispute or differences arise after the execution of any work as to measurements etc or other matters, which cannot be conveniently tested or checked, the notes of the Employer/ Architects shall be accepted as correct and binding on the contractor.

33. SUSPENSION

If the contractor except on account of any legal restraints upon the Employer preventing the continuance of the work or in the opinion of the Employer shall neglect or fail to proceed with due diligence in the performance of his part of the contract or if he shall more than once make default, the Employer shall have the power to give notice in writing to the contractor requiring the work to be proceeded within a reasonable manner and with reasonable dispatch, such notice purport to be a notice under this clause.

After such notice shall have been given the contractor shall not be at liberty to remove from the site of the works or from any ground contiguous thereto any plant or materials to subsist from the date of such notice being given until the notice shall have been

compiled with. If the contractor fails to start work within seven days after such notice shall have been given to proceed with the works as therein prescribed, the employer may proceed as provided in the following clause (termination of Contract by Employer)

34. TERMINATION OF CONTRACT BY THE EMPLOYER

If the contractor being a company go into liquidation whether voluntary or compulsory or being a firm shall be dissolved or being an individual shall be adjusted insolvent or shall make an assignment or a composition for the benefit of the greater part, in number of his creditors or shall enter into a deed or arrangement with his creditors or if the Official Assignee in solvency or the contractor in solvency shall repudiate the contract or if receiver of the contractor's firm appointed by the reasonable satisfaction of the employer that he is able to carry out and fulfill the contract and if so required by the employer to give reasonable security therefore or if the contractor shall suffer execution to be issued or shall suffer any payment under this contract to be attracted by or on behalf of and of the creditors of the contractor or shall assign, charges or workmanship in carrying on the works or shall in the opinion of the employer not exercise such due diligence and make such due progress as would enable the work to be completed within due time agreed upon and shall fail to proceed to the satisfaction of the employer after three clear days notice requiring the contractors so to do shall have been given to the contractor so to do shall have been given to the contractor as hereinafter mentioned or shall abandon the contract then and in any of the said cases the Client/Employer may notwithstanding previous waiver determine the contract by a notice in writing to the effect as hereinafter mentioned but without thereby effecting the powers of the employer of the obligations and liabilities of the contractor the whole of which shall continue in force as fully 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 (without thereby creating any trust in favor of the contractor) further tools, scaffolding, sheds, machinery, steam and other power utensils and materials lying upon premises or the adjoining lands or roads and sell 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 contractor's or other person or person to complete the work and the contractor shall not in any way interrupt the other or do any act matter of thing to prevent or hinder such other contractors other person or employed from completing and finishing or using the materials and plants for the works when the works shall be completed or as soon thereafter as conveniently may be the employer shall give notice in writing to the contractor to remove his surplus materials and plants and should the contractor fail to do so within a period of 14 days after receipt by him the

employer may sell the same by Public Auction and shall give credit to the contractor for the amount so realized. Any expenses or losses incurred by the employer in getting the works carried out by other contractor shall be adjusted against the amount payable to the contractor by way of selling his tools and plants or due on account of work carried out by the contractor prior to engaging other contractor or against the Security Deposits.

35. ARBIRATION. (ACT: IARC-1996)

All disputes or difference of any kind whatsoever which shall at anytime arise between the parties here to touching or Concerning the works or execution or maintenance thereof this contract or the construction remaining operation or effect thereof or to the right or liabilities of the parties or arising out of or in relation thereto whether during or after determination fore closure or branch of the contract (other than those in respect of which the decision of any person is by the other of them and to the Employer hereinafter mentioned be referred for adjudication to a sole Arbitrator to be appointed as herein after provided.

For the purpose of appointing the sole arbitrator referred to above. The Employer will send within thirty days of receipt of the notice to do the contractor a panel of three names of person who shall be presently unconnected with the organization for which the work is executed.

The contractor shall on receipt of the names as aforesaid, select any one of the person of the persons name top be appointed as sole Arbitrator and communicate his name to the employer within thirty days of the of receipt of the names. The employer shall thereupon without delay appointed the said person as the Sole Arbitrator. if the contractor fails to communicate such selection as provided above within the period specified, the competent authority should make the selection and appoint the selected person as the Sole Arbitrator.

If the Employer fails to send to the contractor the panel of three names as aforesaid within the period specified, the contractor shall send to the employer a panel of three names of persons who shall all be unconnected with either party. The employer shall on receipt of the named as aforesaid select any one of the person names and appoint him as the Sole Arbitrator. If the employer fails to select the person and appoint him as the Sole Arbitrator within 30 days of the panel and inform the contractor accordingly, the contractor shall be entitled to appoint one of the persons from the panel as the Sole Arbitrator and communicate his name to the Employer.

If the Arbitrator so appointed is unable or unwilling to act resigns his appointment or vacates his office due to any reason whatsoever another Sole Arbitrator shall be appointed as aforesaid.

G. SPECIAL CONDITIONS

1. RATE ONLY ITEMS, EXTRA ITEMS AND QUANTITIES EXCEEDING THE QUOTED QUANTITIES:

For all the above- mentioned items a variation order (regarding specifications, quantities and rates) signed by the Client/Employer's Representative has to be immediately obtain before procurement and execution. No payments will be entertained without the written variation Order signed by Client / Employer. The onus shall be on the Contractor to obtain such prior written variation order from the Client/Employer's Representative.

The extra item rates will be derived through the analysis and format for rate analysis will be- material cost +5% wastage, 2% transport, loading, unloading etc. + labour (30% in case of carpentary work) + paints or other + contractor profit15% + taxes. The rate can also be derived from existing quoted item rate if extra item is similar or addition/ deduction to the quoted item in contract.

2. The Client/Architect has a right to alter the nature of work and to add or omit any items of work or to have the option of the same carried out without prejudice to this contract.

3. **WORK TO BE CARRIED OUT BY LICENSED PERSONS/ FIRM:**

Any special service installations included in the scope of the Work, shall only be carried out by technically competent person holding valid licenses. The contractor shall not without the written consent of Client/ Architects assign the agreement or sublet any portion of works.

4. **REFERENCE DRAWINGS:**

The Contractor shall maintain on the Site one set of all the Drawings issued to him for reference.

5. **TESTING OF INSTALLATIONS:**

All installation shall be tested as specified, in the presence of the architect. The Contractor shall also perform all such tests as may be necessary and required by the local authorities to meet Municipal and other byelaws, regulations in force. The Contractor shall provide all labavour, equipment, and materials etc., required for the performance of the tests.

6. **SITE INFORMATION:**

All information, levels and dimension given in the quotation drawings relating to site conditions are given in good faith; the contractor shall, however, make his own independent inquiries and verify the same. Any claims for extras on account of any deviations or incorrectness of above referred information, levels etc., shall be considered as inadmissible.

7. **SITE INSTRUCTION FILE:**

The Contractor shall maintain a Site instruction file or Triplicate book at the Site office. All instruction received from the Architect and the Client/Employers Representative relating to the Work shall be retained in the file.

8. **PHOTOGRAPHS:**

Besides submitting progress charts, reports, etc., the Contractor shall submit progress photographs as directed by Project Manager/ The Architect/ The Client, every week.

9. PROFESSIONAL INTEGRITY AND TEAM SPIRIT:

It is the intent of Client/ Employer and the Project Manager that this Project will be executed in a spirit of teamwork and full professional integrity. The Contractor shall fully co-operate with all agencies concerned to fulfill this objective.

10. QUALITY ASSURANCE AND CONTROL PROGRAMME:

The Contractor shall establish an effective quality control system at the site and implement the same through an independent team consisting of the Contractor's Representative and qualified and experienced engineers and technical personnel to enforce quality control on all items of the Work and the Project at all stages.

11. FIRE PRECAUTIONS:

The Contractor shall take all precautions and preventive measures against fire hazards at the site and shall assume full responsibility for the same.

12. DRILLING, CUTTING ETC:

All cutting and drilling of walls or other elements of the building for the proper entry/installation of inserts, boxes, equipment, etc. shall be carried out using electrically operated tools only. Manual drilling, cutting, chiseling, etc. shall not be permitted. **No structural member shall be cut or chased without the written permission of the Architect/Client/Employer. Cutting and drilling of structural members shall be carried out using vibration free diamond wire sawing and diamond drilling only with prior permission from the Architect/Client/Employer.** The Costs for procurement and using such equipment are deemed to be included in the Contract and no extra costs will be paid.

13. BILLING :

The contractor shall submit the bills for payments along with detailed statement showing the actual works carried out different heads of items in the format specified by the clients/ the Architect. Bills submitted in any format other than that specified below by the clients shall not be considered.

BILL FORMAT

Quoted item No.	Description of item (At least 2 lines)	Units	Quoted Quantity	Executed Quantity	Rate	% work done	Amount

The contractor should mention details of net payments received till the bill date. Each bill / Invoice should be as per various applicable tax regulation and should also have all applicable tax registration numbers.

NOTE: ALL QUANTITIES IN THE BILL SHOULD BE IN CUMULATIVE.
ALL MEASUREMENTS SHOULD BE IN THE ORDER OF QUOTATION SEQUENCE.
AND STRICTLY IN THE BELOW MENTIONED FORMAT ONLY.

MEASUREMENT FORMAT

Quotation item No.	Description of item & Location against each Measurement taken	Nos.	Length	Breadth / width	Height	Quantity	Remarks

Each invoice / bill should be submitted in hard and soft copies in duplicate to the architect.

The format of invoice / bill in soft copies should be same as mentioned above and should be done in

Microsoft Excel. (Only one file should be created with different worksheet for the invoice and measurement.)

14. INSURANCE

The contractor shall ensure that workmen employed by him for execution of work are suitably covered against Workmen Compensation Act and that all liabilities arising out of workmen Compensation Act, ESIS and other legislative enactment applicable to such works and workmen shall be to the Contractor's account.

15. Wherever required, the Client/Architects shall instruct for supply of items if erection of mock up, as the case may be, and upon approval of the same, the items shall be fabricated and completed by the Contractor (with or without modifications as the Architects shall instruct). No extra amount will be paid regard shall be final and binding.

16. In case the local authorities such as ward office raise objections about debris disposal etc. the contractors shall solve the matter at their end, without involving or putting financial liability on the Clients. However the Client will make necessary arrangement for stacking the debris temporarily before disposal.
17. Figured dimensions are in all cases to be followed and in no case should they be scaled. Large scale details take precedence over small scale drawings. In case of any ambiguity, conflict of interpretation, generally the provisions giving more vigorous interpretation shall prevail and the Architects decision in this regard shall be final and binding.
18. **The Architect will not certify any application for payment to any contractor if there are:**
- Defective items of work still uncorrected.
 - Any claims or liens filed against the contractor for failure to pay materials , labour on sub-contract amount due or reasonable evidence that indicates probable filing of such claims.
 - Damage to another contractor.
 - A reasonable doubts that the contract cannot be completed for the balance than unpaid.

When the works are complete in all respect, the contractor shall intimate in writing to the Architect and the Client to enable the Client to take the possession of the same. The work shall not be considered virtually complete until the Clients and the Architect have jointly inspected the work and certified in writing that this has been completed.

19. QUANTITY OF WORK TO BE EXECUTED

The quantities shown in bill of quantities are intended to cover the entire work indicated in the drawings but Employer reserves the right to execute only a part or the whole or any excess there of without assigning any reason therefore.

20. DATUM

All levels shown in the drawings are to be strictly adhered to subject to final Confirmation by the Employer/ Architect.

21. CLEARING SITE AND SETTING OUT WORKS

The contractors shall set the works and shall be responsible for the true and perfect setting out of the work and for the correctness of the positions, levels, dimensions and alignments of all parts thereof. If at any time, any error shall appear during execution of any part of the work, the contractor shall at his own expenses rectify such error to the satisfaction of the employer /Architect. The contractor shall further set out works to the alternative positions at the site until one is finally approved and the rates quoted in his quotation should include for this and no this account will be entertained.

22. REMOVAL OF IMPROPER WORK

The employer shall during the progress of the work have to order in writing time to time the removal from the work within such reasonable time to time as may be specified in the order of any materials which in the opinion of the employer/Architect are not in accordance with specifications or instruction, the substitution or proper re execution of any work executed with materials or workmanship not in accordance with the drawings and specification or instructions. In case the contractor refuses to comply with the order the Employer shall have the power to employ and other agency to carry out then work and all expenses consequent thereon or incidental thereto as certified by the Employer/ Architect shall be borne by the contractor or may be deducted from any money due to the contractor from his liability in respect of unsound work or bad materials. No certificate which may be given by the Architect shall relieve the contractor from his liability in respect of unsound work or bad materials.

23. MEASUREMENTS

Before taking any measurements of any work the Employer/ Architect shall give notice to the contractor. If the contractor fails to attend at the measurements after such notice or fails countersign or to record difference within a week from the date of measurements taken by the Employer /Architect's is final and binding on the contractor and the contractor shall have no right to dispute the same.

24. PAYMENTS

The contractor in the from prescribed by the Employer /Architect shall prepare all bills. Numbers of interim bill are as stated in Instructions to tenders:

The RA Bill should be based on item rates and will be paid on actual work done on site (% of work done).

Materials delivered on site and advanced paid for materials will not included in RA bills. The advance payment will be deducted from RA Bill nn prorata basis.

The bills in proper forms must be duly accompanied by detailed measurements in support of the quantities of the work done and must deductions for all previous payments, retention money etc.

The Employer /Architect shall issue a certificate after due scrutiny of the contractor's bill stating the amount due to the contractor from the employer and the contractor shall be entitled to payment thereof within the period of honoring certificates named in these documents.

The amount stated in an interim certificate should be total value of work properly executed less the amount to be retained by the Employer.

The employer will deduct retention money. The refund of retention money will be made as specified in these general conditions of contract elsewhere.

All the interim payments shall be regarded as payments by way of advance against the final payment only and not as payment for work actually done and completed and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and taken and reconstructed or erected or be considered as an admission of the due performance of the contract or any part there-of in any respect pr the accruing of any claim nor shall, it concluded determine or effect in anyway the power of the Employer under these conditions or any of them as to the final settlement and adjustments of the accounts or otherwise or in any other way or effect the contract. The final bill shall be submitted by the contractor within one week of the date fixed for completion of the work or of the date of certificate of completion furnished by Architect/Employer and payment shall be made within three months.

25. FINAL PAYMENT

The final bill shall be accompanied by a certificate of completion from the Employer/ Architects. Payment of final bill shall be made after deduction of Retention money as specified elsewhere in these conditions, which sum shall be refunded after the completion of the Defect Liability Period after receiving the Employer's/ Architects Certificates that the contractor has rectified all defects to the satisfaction of the

Employer/ Architect. The acceptance of payment of the final bill by the contractor would indicate that he will have no further claim in respect of the work executed.

26. PREPARATION OF WORKS FOR OCCUPATION AND USE ON COMPLETION

The whole of the work will be thoroughly inspected by the contractor and deficiencies and defects put right. On completion the contractor shall inform the employer /Architect that he has completed the work and it is ready for inspection.

On completion of the contractor shall clean all windows and doors including the clearing and oiling if necessary, of all hardware inside and outside all floors, staircase and every part of the Premises. He will leave the entire Premises/ furniture neat and ready for immediate occupation/ use and to the satisfaction of the Client /Employer.

27. CLEANING OF SITE.

On completion of the works the contractor shall away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind and leave the whole of the works clean and in workmanlike conditions to the satisfaction of the Employer /Architect. The contractor should clean site for debris and other waste material on daily basis and keep the environment healthy, no extra payment will be made on that account.

28. ESCALATION:

The rate quoted shall be firm throughout the tenure of contractors (including extension of time, any granted) and will not be subject to any fluctuation due to increase in cost materials, labour, taxes, octroi, or any other new taxes, levies etc.

29. IDLE LABOUR

Whatever the reasons may be, no claim for idle labour, additional establishment cost of hire and labour charges of tools and plants would be entertained under any circumstances. ***Delay due to non-availability of labour at any point of time during execution will be at contractors account and client will not entertain any claim (extension of time period) for the same.***

H. MODE OF MEASUREMENTS

1. CONVERSION.

For conversion of inches to feet, the resultant figure shall be taken up to two digits after decimal point.

Third digit shall not be taken into account.

2. MEASUREMENT

The Area shall be measured in square meter or square feet.

The Running Length shall be measured in running meter or running feet.

Sr. No.	Items	Mode of Measurement
A	CIVIL WORK	
1	Flooring	Flat area measurement of floor. In case of Irregular the measurements will be done as per installed area and wastage will not be considered.
2	Brick Wall	Flat area measurement of elevation – Length of wall multiplied by its height.
3	Windows / Grills	Clear area over one face inclusive of frame shall be measured. Hold fasts and portions embedded in masonry or flooring shall not be measured.

4	Staircase flooring	Running length of the Tread – Per running length shall include cost of Tread & Riser.
5	Cladding	Flat area measurement of elevation. The gross area cladded will be measured. No deduction will be made for gaps up to one centimeter between the panels. No separate measurements will be done for irregular shapes.
6	Flush door	Flat area measurement of elevation.
7	Windows Cills	Running length of the Cill.
8	Pantry Platform	Running length of platform measured at center.
B	FURNITURE WORK	
1	Wooden Partition	Flat area measurement of elevation. NOTE: <i>The partition height shall be measured up to bottom of false ceiling and framing members/ ply going above shall not be measured.</i>
2	Wall Paneling / Boxing	Flat area measurement of elevation: The gross area paneled will be measured. No deduction will be made for gaps up to one centimeter between the panels. No separate measurements will be done for irregular shapes.
3	Entrance Door	Number of unit. / sqft / Sqm.
4	Storage Unit	Flat area measurement of elevation
5	Tables	Number of units / running length
6	Counter / Working platform	Running length of platform measured at center
7	False Ceiling	Flat area measurement only – no running length measurement if the width/ is less than 1'0" i.e. 300 mm.
8	Center / Counter Table	Number of unit
9	Sofa /Seating Unit	Running length of seating unit measured at center
10	Display / Pin-up Boards	Flat area measurement of elevation.
11	Vertical Blinds	Flat area measurement of elevation.
12	Carpet	The actual area covered by the carpet shall be measured. No extra shall be allowed for wastage.
13	Wall Painting	Flat area measurement, openings to be deducted, jambs to be added. In any case the measurements will not be done in Rft / Rmt.

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Important Note: Before Quotation contractor should Clarity the mode of measurement discrepancies. No correction and claim will be entertained afterwards. In case of extra items contractor should get the approval for mode of measurements before quotation of rate.

I. LIST OF APPROVED NOMINATED MANUFACTURES/ SUB-CONTRACTORS/ BRANDS.

Note:

- a. All materials shall be of the 1st quality. Among approved brands, **selection of Brand shall be done as per Clients / Architects choice.**
- b. Wherever the contractor proposes to use equivalent makes (i.e. other than specified) the same shall be approved by the Clients / Architects. Any additional work done before prior approval of the expenditure and time; shall be solely on contractor's account and no claims whatsoever shall be entertained, in this regards.
- c. Deduction in item rates will be done if architect or client selected the material who's price is less than the specified basic rates. If material is not available contractor should mention the alternate make and submit the deviation statement.
- d. Contractor should check the availability of material in market (for required quantity) before quoting the rates and if the material is not available contractor should mention the alternate make and submit the deviation statement.

Sr. No.	MATERIALS	APPROVED MANUFACTURER /	Code No. / Basic rates	COLOURS / REMARKS.
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		BRAND		
<u>A</u>	<u>FURNITURE ITEM</u>			
1	Plywood	Century / Duro / Greenply / Orient / Kit Ply / Uniply / Samrat / Woodgard		
2	MDF Board	Green ply (uttranchal), Archid (uttranchal), Merino		
3	Wood based Particle Board (Exterior grade only)	Associate / Action / Tesa / Kenwood		
4	Gypsum Board – Partition / Paneling	India Gypsum Co. Ltd.		
<u>B</u>	<u>FINISHES</u>			
1	Laminates	Royale touch / Formica / Green lam / Sunmica		Cedar & Palm Beach
2	Veneer (decorative plywood)	Green ply industries / Archid / Century	Rs. 60 per Sft.	
<u>C</u>	<u>HARDWARE</u>			
1	Door Closer	Image classic / Godrej		
2	Floor Springs	Omega, ACS		
3	Locks	Ebco / Godrej/ Links / Vijayan		
4	Point fittings, Fixing screws	Savex- Oliver series		
	Patch fittings	Polo		
5	Drawer Channels	Telescopic – Ebco / Godrej / Efficient		
6	Handles	S.S 304 GRADE BRUSH FINISH		
7	Auto closing Hinges for shutters	Mepla/ Hafele.		
8	“W”& “Z” Hinges for shutter	Heavy- Brass hinges &S.S hinges		
9	Butt Hinges for Door	Heavy – Brass hinges/ S.S higes		

10	CPU Trolley	Ebco, Innofitt		
11	Keyboard tray with Mouse pad	Ebco, Innofitt		
12	Screws	G.K.W., Nettle fold.		
13	Adhesives	Fevicol SH, Araldite of Ciba- Geigy, FalcoFix		
<u>D</u>	<u>OTHER</u>			
1	Acoustical Tile			
2	Aluminium Composite Panels	Eurobond, Alstrong, Altobond		
3	Float Glass	Modi, Asahi, Saint Gobain		
4	VERTICAL / roller Blinds	Parrytex / Vista		
5	Tapestry	Vimal- Harmony / Raymond / Classic fabrics.		
<u>E</u>	<u>CIVIL ITEMS</u>			
1	Ceramic Floor tiles	Nitco / Asian / Kajaria	Rs. 50 per sft.	
2	Vitrified Floor tiles	Jhonson / Asian / Kajaria / RAK (1 st quality)	Rs. 60 per sft.	
3	Ceramic Dado tiles	Nitco / Asian / Kajaria	Rs. 60 per sft.	
4	Waterproofing compound	Aceproof of A.C.C, CICO		
5	G.I. Pipes	Tata "B" class or equivalent		
6	PVC pipes	Kisan / Prince / Finolex make.		
7	Epoxy based waterproofing	Hindustan Ciba- Geigy Ltd.,		
8	Cement	Rajashree, Ambuja, Ultratech-Birla.		
9	Sand for plastering etc.	Confirming to I.S.1542 obtained from riverbed.		
10	Sanitary fitting			
A	Wall mounted closet	Parryware / Cera	Rs. 12,0000	Ivory / white
B	Wash basin	Parryware / Cera	Rs. 3000.00	Ivory / white

C	Urinal's	Parryware / Cera	Rs. 5000.00	Ivory / white
D	Orissa pan	Parryware / Cera	Rs. 5000.00	Ivory / white
E	Anglo Indian w.c with cover	Parryware / Cera	Rs. 10,000.00	Ivory / white
11	Taps	Jaquar - continental		
12	Stainless Steel Sinks	Frankie /Nirali		
13	Aluminium Windows / Doors	Jindal /Indal make sections of approved guage.		
14	Mosaic Tiles			
15	Granite	Sindoor red		
<u>F</u>	<u>FALSE CEILING</u>			
1	Gypsum Board – Ceiling / Partition/ Panelling	India Gypsum Co. Ltd.		
2	Modular Ceiling	Armstrong /AMF/ Hunter Douglas/ Nitobo.		
<u>G</u>	<u>PAINT</u>			
3	Fire Retardant Paint.			
4	Paint	I.C.I/ (Dulex- duco), Asian Paints, Nerolac.		
5	Textured Paint	Novatech, Joutun, Nitco, Heritage, Spectrum		

WOOD WORK

Timber used shall conform to specifications described under Materials, Doors, Windows, Ventilators, walls, Paneling, False Ceiling, etc., shall be in accordance with Architect's drawing in every detail and all joiner's work shall be accurately set out, framed and finished in a proper workman-like manner, frames of doors, windows and ventilators etc. and shutter styles and rails shall be best solid teak of quality specified in the schedule of quantities. The scantlings shall be accurately planed smooth, rebates, rounding and mouldings shall be made as shown on the drawings, patching or plugging of any kind shall not be allowed. Joints shall be simple, neat and strong. Framed joints shall be coated with suitable adhesive like glue or synthetic resin before the frames are put together. All mortice and tenon joints shall be fit and fully and accurately without wedging or filling. The joints shall be pinned with hard wood or bamboo pins of 10 mm. to 12 mm. dia. or rust resisting star shaped metal pins 8 mm. after the frames are put together and pressed in position by means of press. The frames are put together and pressed in progress of work by suitable boxing. All portions of timber abutting against or embedded in masonry or concrete shall be treated against termites by giving a coat of any approved wood preservative.

Unless otherwise specified all doors frames shall have six M.S. flat holdfasts and window frames shall have four holdfasts shall be provided to the ventilators, if directed. Size of holdfasts shall be 30 mm. x 40 mm. x 6 mm. M.S. flat bent to shape worth fish tail end and it shall be fixed to frame with sufficient number of screws as directed. When door / window frames are to be fixed to R.C.C. column or R.C.C. wall, holdfasts shall be substituted by suitable arrangements such as coach crews, rawl bolts etc., to secure frames to R.C.C. column or R.C.C. wall as directed by the Architect.

Frames and shutter shall not be painted or erected before being approved by Architect.

Paneled Shutter :

Panels shall be of pattern and size as shown on the drawings or as directed by Architect. Solid teak wood panels shall be in one piece wherever possible. Where two or more pieces

are permitted, they shall be of equal width. Panels shall be framed into grooves made in styles and rails to the full depth of groove and faces shall be closely fitted to sides of groove.

Where panels specified are block board, it shall be solid core with teak internal lipping and of approved make.

Partly paneled and partly glazed shutter shall be similar to paneled shutters except that such parts as are directed shall be glazed with plain or ground glass as specified. Styles and rails shall be rebated 12 mm. to receive glass. Sash bars shall be moulded and rebated and mitered on sides to receive the glass which shall be fixed with putty and beads.

Hardware Fittings :

Unless otherwise specified all hardware fittings and fixtures shall be supplied by the employer free of charge. However, the cost of fixing fittings shall be included in the rate quoted. The fixing shall be done in the best workman-like manner in accordance with the manufactures specifications. The Contractor shall be held responsible for working of all moving parts dependent on proper fixing. He will also be responsible for any breakage due to negligence during fixing or lack of protection before the building is handed over. The Contractor shall also take delivery of all hardware fittings etc., as and when supplied and arrange for safe storage etc.

Hardware required for fixing false ceiling, wall paneling etc., shall be arranged by the Contractor at his cost. Apart from the hardware fittings required for the joinery items, the Contractor shall have to fix all other items of hardware fittings to be supplied by the employer viz. coat / picture hooks, numerals, letters to denote buildings, hanging rods etc., as directed by the Architects.

Painting and polishing of wood work shall be as per specifications under respective heads.

Flush Doors :

All flush doors shall be solid core unless otherwise specified. It shall conform to the relevant specifications of I.S. 2202 and shall be obtained from approved manufactures. The finished thickness of the shutter shall be mentioned in the items. Face veneers shall be of the pattern and colour approved by the Architect and an approved sample shall be deposited with the Architect for reference.

The solid core shall be wood laminae prepared from battens of well seasoned and treated good quality wood having straight grains. The battens shall be of uniform size of about 2.5 cm. width. These shall be properly glued and machine pressed together, with grains of each piece reversed from that of adjoining one. The longitudinal joints of the battens shall be staggered and no piece shall be less than 50 cm. in length. Alternatively, the core shall be of solid teak particle board. Edges of the core shall be lipped internally with 1st Class teak wood battens of 4 cm. (1.5") minimum depth, glued and machine pressed along with the core.

The core surface shall then have two or three veneers firmly glued on each face. The first veneer (called cross band) shall be laid with its grains at right angles to those of the core and the second and the third veneers with their grains parallel to those of the core. The under veneers shall be of good quality, durable and well seasoned wood. The face veneers shall be of minimum 1 mm. thickness and of well matched and seasoned 1st class teak, laid along with grains of the core battens. The combined thickness of all the veneers on each face shall not be less than 4 mm. Thermosetting synthetic resin conforming to I.S. 303 or moisture-proof plywood grade MPF.I. shall be used in manufacture.

In addition to internal lipping all doors shall have external lipping all round.

STEEL DOORS, WINDOWS, VENTILATORS

ROLLING SHUTTER, M.S. GRILLES ETC.

Steel used in the manufacture of rolled steel sections shall not have more than 0.060 per cent of sulphur and 0.065 per cent of phosphorus. The carbon content shall not exceed 0.30 per cent and shall be of weldable quality. In all other respects, the rolled steel sections shall conform to I.S. 226-1955 and I.S. 1977-1962.

Frames shall be square and flat. Both the fixed and openable frames shall be constructed of sections which have been cut to length, mitred and electrically welded at corners. Subdividing bar units shall be tenoned and rivetted into the frames. All frames shall have the corners welded to a true right angle and welds shall be neatly cleaned off. Couplings, moulding and weather bar shall be provided as directed by the Architects.

Outer frames shall be provided with fixing holes centrally in the web of the sections and fixing screws and lugs shall be used for fixing the frame to masonry. Mastic cement shall be used for making the joints watertight.

Hinges shall be strong projecting type. If directed friction type hinges shall be used in which case windows shall not be fitted with peg stays.

Projecting type hinged shutter shall be fitted with bronze or brass peg stays, 30 cm. long with peg and brackets welded / rivetted to the frame or as stated under item.

All windows shall be provided with handles of brass or bronze or otherwise as stated under them.

Top hung ventilators shall be fixed with plain hinges rivetted / welded to the fixed frame. A brass or bronze peg stay 30 cm. long as in windows shall be provided or as stated under item.

Center hung ventilators shall be hung on two pairs of brass or leaded tin bronze cup pivots rivetted to the inner and outer frames of the ventilators to permit the ventilators to swing through an angle of approximately 85. The opening position of the ventilator shall be so balanced to keep it open at any desired angle under normal weather conditions. A bronze spring catch shall be fitted in the center of the top bar of the ventilator for the operation of the ventilator. This spring catch shall be secured to the frame with brass screws and shall close into a mild steel malleable iron catch plate rivetted or welded to outside of the outer ventilator frame bar. A brass cord pulley wheel in mild steel or malleable iron brackets shall be provided along with card eye.

The windows and ventilators shall be painted. All the steel surfaces shall be thoroughly cleaned free of rust, scale or dirt and millscale by picking or phosphating and before erection painted with one coat of approved primer and after erection painted with two finishing coats of synthetic enamel paint of approved shade and quality.

Glazing of specified thickness shall be provided on the outside of frames and unless otherwise specified, metal beading of approved shape, and section shall be used for fixing glasses. Special metal sash putty of approved make shall be used, if directed.

Rolling Shutters :

Shall be of approved manufacture suitable for fixing in the position ordered i.e. outside, inside, on or below lintel or between jambs. Shutters upto 12 sqm.(130 Sq.ft.)in area shall be manually operated or Push Up type while bigger sizes shall be of reduction gear type mechanically operated chain or handles.

These shall be consist of 8 gauge or as specified with 75 mm. (3") M.S. laths of best quality mild steel strips machine rolled and straightened with an effective bridge depth of 16 mm. (5/8") and shall have convex corrugation. These shall be interlocked together throughout their entire length with end locks. These shall be mounted on specially designed pipe shaft.

The spring shall be of approved make coiled type. These shall be manufacture from tested high tensile spring steel wire or strip of adequate strength to balance the shutters in positions. The spring pipe, shaft etc., shall be supported on strong M.S. or malleable cast iron brackets.

Both the side guides and bottom rail shall be jointless and of single piece of pressed steel.

Top cover of shaft, spring etc., shall be of the same material as that of lath.

For rolling shutter with wicket-gate, night latch shall be provided free of cost.

The shutter and cover etc., shall be painted with one coat of anti-corrosive paint and two coats of synthetic enamel paint of approved quality and shade.

Collapsible Steel Gate :

It shall consist of vertical double channels at 10 cm. centers. The sizes of channels T-Section for top and bottom shall be as approved by the Architects. The gate shall be provided with necessary bolts, nuts, locking arrangements, stoppers and brass handles on both sides. The gate shall be painted with one coat of anti-corrosive paint before erection and two coats of synthetic enamel paint of approved quality and shade.

Wrought Iron Grilles :

Grilles shall be manufactured as per drawings and the welded joints shall be smooth. The grilles shall be painted with one coat of anti-corrosive paint before fixing and two coats of synthetic enamel paint of approved quality and shade.

Aluminium Doors, Windows, Ventilators & Partitions etc. :

These shall be obtained from approved and established manufactures and shall be of Aluminium alloy conforming to I.S. 733 and sections shall generally conform to I.S. 1948. These shall be fabricated as per the details drawings,

Frames for windows, ventilators etc., shall be square and flat. Both fixed and openable frames shall be constructed of section which have been cut to length, mitred and welded at corners. Sub-dividing bars shall be tenoned and rivetted into the frames. All frames shall have corners welded to a true right angle. For side hung shutters, hinges shall normally be of projecting type made of Aluminium alloy and rivetted / welded to frames. Handles, peg stays etc., or approved quality Aluminium or its alloy conforming to IS Specifications.

All types of shutters shall be fabricated, supplied and fixed as specified in the IS:1948. The rate shall include supplying and fixing all fittings and fixtures required for proper and safe operation.

The doors shall be fabricated by using standard aluminium alloy extruded sections as specified in IS:1948. The rate shall include supplying and fixing all fittings and fixtures including approved locking arrangement as directed.

All aluminium fabricated work shall be anodised to the British Standard 1616:1961 to give an anodised film of 25 microns.

The Contractor shall take care to stack the fabricated frames etc., on site under cover. They shall be handled with care, stacked on edge on level bearers and supported evenly. Before erecting, the frames coming in contact with concrete, masonry, plaster or dissimilar metals shall be coated with a coat of Zinc Chromate conforming to IS:104-1950. The Contractor shall cover all anodised finish work with a thick layer of clear transparent lacquer based on methacrylates or cellulose butyrate to protect the surface from wet cement during installation. This coating shall be removed on completion. Before handing over, the aluminium work shall be washed with mild solution of non-alkali soap and water.

Glazing :

Glazing shall be approved specially quality glass of specified thickness and unless otherwise directed it shall be provided the exterior with metal beading.

PAINTING

General:

Wherever scaffolding is necessary, it shall be double scaffolding.

The surface shall be thoroughly brushed free from mortar droppings and foreign matter. All steel work shall be cleaned of loose rust, mill scales etc. so as to expose the original surface. All broken edges, cracks, loose plaster and wavy surface shall be brought up either by patch plaster work or by plaster of paris.

All materials viz., dry distemper, oil bound distemper, oil paint, flat oil paint, synthetic enamel paint, plastic emulsion paint, cement primer, red lead and other primers and metallic paints shall conform to respective I.S. specifications and shall be obtained from approved manufactures. All paints shall be brought on site in sealed tins in ready mixed form and shall be applied direct with the addition of thinner, if recommended by the manufacturers.

White Washing:

White wash shall be prepared from lime slaked on spot, mixed and stirred with sufficient water to make a thin cream. This shall be allowed to stand for 24 hours and shall be screened through clean cloth. Four kg. gum dissolved in hot water shall be added to each cubic meter of the cream (115 gm. per cft.).

Blue shall be added to give required whiteness. The approximate quantity of water to be added in making cream shall be five liters per kg. of lime.

White wash shall be applied in specified coats by using flat brushes or spray pumps. Each coat shall be allowed to dry before next coat is applied. If additional coats than what have been specified, are necessary to obtain uniform and smooth finish, it shall be given at no extra cost.

The finished dry surface shall not show any signs of cracking and peeling nor shall it come off readily on the hand when rubbed.

If directed by the Architects one coat of chalk and glue shall be applied before application of white / colour wash at no extra cost.

ColourWash :

Colour wash shall be prepared by adding mineral colours not affected by lime to white wash. No colour wash shall be done until a sample of the colour wash to the required tint or shade has been got approved from the Architects. Colour wash shall be applied as specified under white wash.

Dry Distemper :

Shade shall be got approved from the Architects before application of distemper.

The surface shall be prepared as specified earlier. A primer coat using approved primer or sizing shall be applied. Distemper prepared as per manufacturer's directions shall be applied and each coat shall be allowed to dry before subsequent coat is applied. The finished surface shall be free from chalking when rubbed, even uniform and shall show no brush marks. If additional coats are necessary, they shall be given at no extra cost.

Oil Bound Distemper:

The surface shall be prepared as specified above. A primer coat of either cement primer or any approved distemper primer shall be applied.

After the primer coat has dried, the surface shall be lightly sand papered and dusted to make it smooth to receive distemper.

Distemper shall be prepared as per the directions of the manufacturer and conforming to shade approved. It shall be applied in specified coats, taking care to allow for drying of each coat before subsequent coats are applied.

Water-proof Cement Paint / Sand-tex matt Paint:

The surface shall be prepared as specified above and thoroughly wetted with clean water before water-proof cement paint is applied.

The paint shall be prepared strictly as per manufacturer's specifications and in such quantities as can be used up in an hour of its mixing, as otherwise the mixture will set and thicken, affecting flow and finish.

The paint thus prepared shall be applied on clean and wetted surface with brush or spraying machine. The solution shall be kept stirred during the period of application. It shall be applied on the surface which is on the shady side of the building so that the direct heat of the sun on the surface is avoided. The completed surface shall be watered after the day's work. Number of coats shall be as specified in the item.

Painting – Oil / Enamel / Plastic Emulsion etc. :

Ready mixed oil paint, flat oil paint, plastic emulsion paint, ready mixed synthetic enamel paint, etc., shall be brought in original containers and in sealed tins. If for any reason thinner is necessary, the brand and quantity of thinner recommended by the manufacturer or as instructed by the Architect shall be used. The surface shall be prepared as specified above 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. Number of coats

shall be as specified in the item and if the finish of the surface is not uniform, additional coats as required shall be applied to get good and uniform finish at no extra cost. After completion no hair marks from the brush or clogging of paint puddles in the corners of panels, angles or mouldings etc., shall be left on the work. The glass panes, floor etc. shall be cleaned of stains.

When the final coat is applied, if directed, the surface shall be rolled with a roller or if directed, it shall be stippled with a stippling brush.

POLISHING AND VARNISHING

French Polishing :

French spirit polish shall be of an approved make conforming to IS:348. If it has to be prepared on site, the polish shall be made by dissolving 0.7 kg. of best shellac in 4.5 liters of methylated spirit without heating. To obtain required shade pigment may be added and mixed.

Surface shall be cleaned. All unevenness shall be rubbed down smooth with sand paper and well dusted. Knots, if visible, shall be covered with a preparation of red lead and glue. Resinous or loose knots and gaps shall be filled with season timber pieces and make level with rest of the surface. Holes and indentations on surface shall be filled with putty made of whiting and linseed oil. Surface shall be give a coat of filler made of 2.25 kg. of whiting in 1.5 liter of methylated spirit. When it dries, surface shall again be rubbed down perfectly smooth with sand paper and wiped clean.

Piece of clean fine cotton cloth and cotton wool made into shape of pad shall be used to apply polish. The pad shall be moistened with polish and rubbed hard on the surface applying the polish sparingly but uniformly and completely over the entire surface. It shall allowed to dry and another coat applied in the same way. To give finishing coat, the pad shall be covered with a fresh piece of clean fine cotton cloth, slightly dampened with methylated spirit and fubbed lightly and quickly with a circular motion, till the finish surface attains uniform texture and high gloss.

Wax Polishing :

Wax polish shall either be prepared on site or obtained readymade from market. Polish made on the site shall be prepared from a mixture of pure bees wax, linseed oil, turpentine oil and varnish in the ratio of 2:1.5:1:1/2 by weight. The bees wax and the

boiled linseed oil shall be heated over a slow fire. When the wax is completely dissolved the mixture shall be cooled till it is just warm, and turpentine oil and varnish added to it in the required proportions and the entire mixture is well stirred.

Surface shall be prepared as described under French polishing except that the final rubbing shall be done with sand paper which has been slightly moistened with linseed oil.

Mixture or polish shall be applied evenly, with a clean cloth pad in such a way that no blank patches are left, and rubbed continuously for half an hour. When the surface is quite dry a second coat shall be applied in the same manner and rubbed continuously for an hour or until the surface is dry. Final coat shall then be applied and rubbed for two hours or more if necessary, until the surface has assumed a uniform gloss and is quite dry showing no sign of stickness when touched. Gloss of the polish depends on the amount of rubbing, therefore rubbing must be continuous and with uniform pressure and frequent change in direction.

Varnishing :

Surface shall be prepared as described above. After preparation of surface, two coats of clean boiled linseed oil shall be applied at sufficient interval of time. After the linseed oil has dried two coats of varnish obtained from approved manufacturer shall be applied at sufficient interval of time. If the surface fails to produce the required gloss an additional coat shall be applied without any extra cost.

TECHNICAL SPECIFICATIONS FOR INTERIOR MATERIALS

1. GENERAL

This specification is for work to be done, item to be supplied and materials to be used in the works as shown and defined on the drawings and described herein, all under the supervision and to the satisfaction of the Competent Authority.

Competent authority means Architects / Engineer in charge.

- 1.1 The workmanship is to be the best and of high standard, use must be made of special trades men in all respects of the work and allowances must be made in the rates for doing so.
- 1.2 The materials and items to be provided by the contractor shall be approved by the Competent Authority in accordance with any samples which will be submitted for approval by Contractor and generally in accordance with the Specifications. Also if products are specified in the catalogue reference, the contractor will be required to obtain the approval of the Competent Authority before using a materials. The Contractor shall produce all invoices, vouchers or receipts for any material if called upon to do so by the Competent Authority.
- 1.3 Samples of all materials are to be submitted to the Competent Authority for approval before the Contractor orders or delivers the materials at site. Samples together with the their packing are to be provided free of charge by the Contractor and should any materials be rejected, they will be removed from the site at the Contractor's expense. All samples will be retained by the Competent Authority for comparison with materials, which will be delivered at the site. Also, the Contractor will be required to submit specimen finishes of colours, fabrics etc. for the approval of the Competent Authority before proceeding with the work.
- 1.4 The contractor shall be responsible for providing and maintaining and boxing or other temporary coverage required for the protection of dresses or finished work if left unprotected. He is also to clean out all shelving's, out ends and other waste from all parts of the works before coverings or in-fillings are constructed.

- 1.5 Templates, boxes and moulds shall be accurately set out and rigidly constructed so as to remain accurate during they are in use.
- 1.6 All unexposed surface of timber e. g. false ceiling, backing fillets, backs of door frames, cupboard framing, grounds, etc. are to be treated with two coats of approved timber preservative before fixing or converging.
- 1.7 Only first class workmanship will be accepted. Contractor shall maintain uniform quality and consistency in workmanship throughout.

2. JOINERY:

- 2.1 Joinery is to be prepared immediately after the placing of the contract, framed up, bonded and waged up. Any portions that are wrapped or found with other defects are to be replaced before wedging up. The whole of the work is to be framed and finished in a workmen-like manner in accordance with the detailed drawings wrought and wherever required, fitted with all necessary metal ties, straps, belts, screws, glue etc. Running beaded joints are to be cross-tongued with teak wherever 1(1/2) thick double cross tongued. Joiners work generally to be finished with fine sand/glass paper.
- 2.2 **Joints:** All joints shall be standard mortise and tenon, dowel, dovetail, and cross-halved. Nailed or glued butt joints will not be permitted, screws, nails etc. will be standard iron or wire of oxidized nettle fold tenon should fit the mortises exactly.
- 2.3 Nailed or glued butt joints will not be permitted except in exceptional cases with approval of Competent Authority.
- 2.4 Where screws shown on a finished surface, those will be sunk and the whole plugged with a wood plug of the same wood and grain of the finished surfaces will be neatly punched and the hole filled with wood filler to match the colour.
- 2.5 Should joints in joiner's work open, or other defects arise within the period stated for defect liability in the contract and the clause thereof, be deemed by the Competent Authority to be due such defective joinery shall be taken down, and refilled, redecorated and/or replaced if necessary and any work disturbed shall be made good at the Contractor's expense.
- 2.6 Nails spikes and bolts shall be of lengths and weights approved by the Competent Authority. Nails shall comply with is 1959-1960 or equivalent approved quality sample. Brass-headed nails are to comply with B. S. 1210. Wire staples shall comply with B. S. 1494 or equivalent.
- 2.7 The contact surface of dowels, tennons wedges etc., shall be glued with an approved adhesive.
- 3 Where glued, joinery and carpentry work is likely to come into contact with moisture, the glue shall be waterproof.

3.0 HARDWARE AND METALS:

The hardware throughout shall be of approved manufacture or supplier well made and equal to in every respect to the samples to be deposited with the Competent Authority. The contractor may be required to produce and provide samples from many different sources before the Competent Authority takes decision and he should allow his rates for doing so.

- 3.1** Fittings generally shall be brass oxidized, unless otherwise specified and shall be suitable for their intended purpose. In any case, it will have to be approved by Competent Authority before the Contractor procures it at site of work.
- 3.2** Screws are to match the finish of the article to be fixed, and to be round or flat headed or counter sunk as required.
- 3.3** The contractor should cover up and protect the brass and bronze surfaces with a thick grease or other suitable productive material, renew as necessary and subsequently clean off away on connection.
- 3.4** Aluminium and stainless steel shall be of approved manufacture and suitable for its particular application. Generally, the surface of aluminium shall have an anodized finish and both shall comply with the samples approved by the Competent Authority. All stainless steel sheets shall be 304 S. S. Japan or equivalent with gauge as specified but not thinner than 16G.
- 3.5** All steel, brass, bronze, aluminium and stainless steel articles shall be subjected to a reasonable test at the Contractor's expense.
- 3.6** All brazing and welds are to be executed in a clean and smooth manner rubbed down and left in the flattest and tidiest way, particularly where exposed.
- 3.7** Chromium plating shall be in accordance with I. S. Standard or as per approved specification for normal outdoor conditions and shall be on a base material of copper or brass.

4.0 GLAZIER:

- 4.1** All glass to be of approved manufacturer complying with IS 3548-1966 as per approved quality and sample to be of the selective qualities specified and free from bubbles, smoke, air holes and other defects.
- 4.2** Polished plate glass shall be "glazing glass" (G. G.) quality and that for mirrors shall be "silvering quality" (S.G.) conforming to IS 3438-1965 or as per approved sample and quality.
- 4.3** The compound for glazing to metal is to be a special non-hardening compound manufactured for the purpose and of a brand and quality approved by the Competent Authority.
- 4.4** While cutting glass, proper allowance be made for expansion. Each square of glazing to be in one whole sheet. On completion of work clean all glass inside and cut, replace all cracked scratched and broken panes and leave in good condition.

5.0 PAIN AND POLISHES:

- 5.1** All material required for the works shall be of specified and approved manufacturer, delivered to the site in the manufacturer's container's name or trade mark with a description of the contents and colour. All materials are to be stored on the site.
- 5.2** Spray painting with approved machines will be permitted only if written approval has been obtained from the Competent Authority prior to painting. No spraying will be permitted in the case of priming coats nor where the soiling of adjacent surfaces is likely to occur. The machine and pressure to be so operated as to give an even coating throughout to the satisfaction of the Competent Authority. The paint used for spraying is to comply generally with the specification concerned and is to be specially prepared by the manufacturer for spraying. Thinning of paint made for brushing will not be allowed.
- 5.3** Wood preservative shall be Solignum or other equal and approved impregnating wood preservative and all concealed woodwork shall be treated with wood preservative.
- 5.4** 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 class of materials.
- 5.5** All iron or steel surfaces shall be thoroughly scraped and rubbed with wire brushes and shall be entirely free from rust, mill scale etc. before applying the priming coat.
- 5.6** Surfaces of new wood work which to be painted are to be rubbed down, cleaned, down to the approval of the Competent Authority.
- 5.7** Surfaces of previously painted woodwork which are to be painted are to be cleaned down with soap and water, detergent solution or approved solvent to remove dirt, grease etc. Whilst wet the surfaces shall be flattened down with a suitable abrasive and then rinsed down and allowed to dry. Minor areas of defective paint shall be removed by scraping back to a firm edge and the exposed surface touched in with primer as described and soaked with putty. Where woodwork has been previously painted or polished and it is to be newly polished, with scraping, burning off or rubbing down and making surface properly.
- 5.8** Surfaces of previously painted metal which shall be painted are to be cleaned down and flattened down as described in surfaces of any rust and loose scale shall be removed completely by chipping, scraping and wire brushing back to the bare metal and touched in with primer as described.

5.0 UPHOLSTERY:

- 5.1** This will be of first class standard workmanship with webbing, no-sag springs, coiled springs, padding and filling as specified on drawing. Covering fabrics will be seen, tufted, and corded as shown on the drawing and as approved by the Competent Authority.
- 5.2 Cushion Vents:** Brass "cushion Vents" should be installed at the back or under side of seat cushions (especially those covered in leather vinyl plastic or very tightly woven fabric) to allow air to escape easily and to prevent torn seams.

5.3 Materials: Finished timber shall be of the type specified. Furnishing fabrics, colour, pattern, substance to be as specified, no variations of this will be permitted unless with prior approval of the Competent Authority.

6.0 POLISH:

6.1 French polish:The basic material shall be shellac dissolved in mentholated spirit.

Preparation:

The timber must be well sanded and cleaned and the grain filled with grain filler. Any staining must be done before applying the polish.

Equipment:

The polishing rubber the most important implement in French polish shall consist of a pad of cotton wool, which acts as a reservoir for the polish, and a cover of soft white linen of cotton fabric, similar to a well-worn handkerchief which acts as a fitter. The rubber must never be dipped into the polish; it should be charged by pouring the polish on to the pad with the cover removed.

Application:

Work evenly over the surface with a slow figure-of-eight motion until the timber is coated with a thin layer of polish. The object is to apply a series of thin coats, allowing only a few minutes for drying between the coats. When a level and even-bodied surface is obtained the work is ready for the second stage i.e. spiriting off.

Allow the work to stand for at least eight hours, then take a fresh rubber with a double thickness of cover material and charge it with mentholated spirit. The object of spiriting off into and remove the rubber marks and to give the brilliance of finish.

Finally, work in the direction of the grain and continue until the surface is free from smears and rubber marks then leave to harden off.

6.2 Wax polish:

Wax polish shall contain silicones and driers. A good silicon wax is to be used not a creamy or spray. The timber shall be sealed first with another finish such as Ron seal, before applying wax.

Application:

Apply coat of the sealer by brush or cloth direct to the unfilled timber, working it well in and finishing evenly with the grain. Allow to dry thoroughly then sand lightly with fine abrasive

paper. Apply a heavy coat of wax by cloth on flat surfaces, with a stiff brush. Work it well into the timber and finish off by stroking with the grain before leaving to harden. Leave for four hours before rubbing up with a soft brush. Finally, buff the grain with a soft cloth.

6.03 Transparent Coloured Polyurethane (Melamine)

This shall be applied where natural grain of the wood is required to show. Polyurethane gives tough surface which resist chipping, scratching and boiling water.

Application:

Clean off all grease and wax with an abrasive and white spirit, this should not be applied in humid conditions. Apply the first coat, preferably of clear hard glaze with a cloth pad. Leave this to dry for at least six hours, then apply further coats with a paintbrush. If you wait for longer than 24 hours between coats, rub down the previous coat with fine glass paper or a medium grade of steel wool. Obtain a matt finish, if required, by giving a final coat of clear Reseal Matt coat.

7.0 TIMBER:

7.1 Only seasoned Teakwood to be used.

7.2 Use of Rose wood wherever specified.

7.3 All the wood shall be properly seasoned, natural growth and shall be free from worm holes, loose or dead knots or other defects, saw die square and shall not suffer warping, splitting or other defects.

7.4 The moisture content shall not exceed 12%.

7.5 All internal frame work shall be treated with approved wood preservative.

7.6 All wood brought to site should be clean shall not have any preservative or other coating/covering.

7.7 All rejected decayed, bad quality wood shall be immediately removed from site.

7.8 All wood brought to site must be stacked-stored properly as per instructions.

8.0 PLYWOOD:

- 8.1** Plywood/medium density fibre board/teak practical board/ Veneer shall be as specified in the approved list of manufacturers shall be used.
- 8.2** Commercial ply shall conform I. S. I. 303 of approved make.
- 8.3** Marine plywood shall generally conform to generally I. S. 303 BWR or unless specified I.S.710-1980(BWP).
- 8.4** Particle board (only exterior grade) shall be phenol formaldehyde bonded and generally conform to I. S. 3087-1965.
- 8.5** Only 3mm to 4mm thick straight-grained groups matching approved veneers shall be used. No extra claim will be entertained for veneer if found of extra thickness.