

**THE ORIENTAL INSURANCE COMPANY LIMITED**  
Regional office, Fourth Floor, IDA Building, 7, Race Course Road, Indore 452003  
Phone No. 0731- 2549080, 2549084

**TENDER FOR CIVIL & ENGINEERING WORKS**

Renovation of Flats at MIG & HIG Bhopal.

**Architects:**

**D. VYAS & ASSOCIATES,  
1C SITABAG COLONY, DHENU MARKET  
OPP. AGRAWAL SWEETS,  
INDORE- 452003**

Tender Submitted by:

**(Name and Complete Address of the bidder)**

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**Name of contact person of bidder:.....**  
**Mobile Number of the contact person of bidder:.....**  
**Telephone Number of the bidder along with the STD code.....**  
**Email-id of the bidder.....**  
**Alternate Email-id of the bidder (if any).....**

Copyright: D. Vyas & Associates, Indore

Issued To,  
M/s. ....  
.....  
.....

**The Oriental Insurance Company Limited**  
**Regional office, Fourth Floor, IDA Building, 7, Race Course**  
**Road, Indore 452003**

**Notice Inviting Tender (NIT)**  
**NIT No IND/ 2015/ 01 - Dated 22/05/2015**

PROPOSED Renovation of flats & other allied Work at MIG & HIG, Bhopal

Completion Period 6 months including rainy season.  
ESTIMATED COST OF THE WORK RS. Approx. 28.88. LACS

The **Oriental Insurance Co. Ltd** invites from eligible contractors / firms empanelled with Central Govt. / state Govt., /PSUs/ Municipal corporation / Development Authorities / PSU Companies or PSU insurance Company in appropriate category (with presently valid tenure) and must have executed & completed successfully at-least one project of similar nature of value equivalent to the estimated cost of tender. Such valid contractor in good standing will have to quote their % rates for the execution of the above mentioned work in the schedule enclosed in the tender form. The rates to be quoted on estimated rates mostly based on CPWD Building Works DSR 2014 and CPWD DSR electrical 2014 (both updated till date)

**on % rate** above / below basis. The rates must be inclusive of all Taxes and levies including Service Tax. The service tax amount shall be reimbursed after depositing the proof of paid challan & details of the Service Tax paid by the contractor. The contractor will show the service tax amount in each bill. Any missing or unforeseen items will be paid only on the CPWD DSR 2014 rates and the tender premium or discount offered by the tenderer in this tender. Such additional items shall not be value of more than 10 % the this tender value with prior written approval and permission of the owner.

1. Blank tender form

A) **In person: can be purchased, on working days only, from our office, during from 11/06/2015 to 02/07/2015 (11 am to 5.00 pm)** by depositing a demand draft ONLY issued by nationalized bank of **Rs. 2236/-(Rupees Two Thousand Two Hundred Thirty Six Only) favoring 'The Oriental Insurance Co. Ltd'** payable at Indore as **non refundable** cost of tender form. The written request letter to issue blank tender form should have all details contact address, telephone numbers, mobile number and email address and alternate email address. Please write your firm's name and address on the back of the Demand Draft. SHRI N.V.SATYANARYANA, REGIONAL MANAGER, (Tel. Number 0731-2549080) can be contacted for any matter in this regard.

- B) If intending contractor wishes to obtain the blank tender form by post (upto the 02/07/2015 date only ) then they should send **additional amount RS. 100/-** as Speed post charges (Total cost including postage Rs.2336/-, (Two Thousand three Hundred Thirty Six Only)). The request letter as per A) above is required along with the draft. The company will not be responsible in any manner due to postal delay in any manner. Any postal delay is sole risk and responsibility of the intending contractor to demand the blank tender by post.
- C) The blank Tender form can be downloaded from the company's website: <http://www.orientalinsurance.org.in> the neatly printed all the pages of tender form on NEAT **A4 size white paper** should be used. The COMPLETELY filled such tender form must be sent along with a **separate** bank draft of **Rs. 2236/- (Rupees Two Thousand Two Hundred Thirty Six Only)** favoring **'The Oriental Insurance Co. Ltd'** payable at Indore (of dated between 11/06/2015 and 26/06/2015 only) **as non refundable** cost of tender form. This draft should also be kept along with the earnest money demand draft in the envelope No. 1. Draft of letter date will be rejected.

2. The quotation duly neatly filled in, **signed & sealed on each page** should be addressed in a sealed covering envelope to the Chief Regional Manager, The Oriental Insurance Company Limited Regional office, Fourth Floor, IDA Building, 7, Race Course Road, Indore 452003

So as to reach not later than **3:00PM on 02/07/2015** (Last date of submission) either by registered post or by speed post. The tender can also be submitted in the Sealed Tender Box Kept at the office of the Chief Regional Manager Oriental Insurance Co. Ltd., Regional office, Fourth Floor, IDA Building, 7, Race Course Road, Indore 452003

3. Properly Filled in Tender documents will be submitted in sealed envelopes marked as hereunder.

***“COVERING ENVELOPE of PROPOSED Renovation work of Flats at MIG & HIG, BHOPAL- NOT TO BE OPENED BEFORE 03/07/2015”***

Sealed Envelope No1 & Sealed Envelope No 2 Will be kept in Covering Envelope.

The contractors / firms shall be issued one of the blank tender document and they will return both parts of tender documents including drawings The Filled in tender documents, supportive documents and Earnest Money shall be kept in a sealed envelope. All the pages of tender documents shall be duly signed & seal as following:

**A. Envelope No. 1 technical Bid:** The envelope No. 1 shall contain EARNEST MONEY DEPOSIT (E.M.D.) in the shape of a crossed Demand Draft of **RS 29000/-**, Only (Rupees Twenty Nine Thousand Only) dated between 11/06/2015 to 02/07/2015 of any Nationalised Bank drawn in favor of “The Oriental Insurance Company Limited, Indore” Regional office, Fourth Floor, IDA Building, 7, Race Course Road, Indore 452003. This

envelope will also contain the details of certificate of empanelment in appropriate class or higher with the departments mentioned above in this NIT. The intending contractor will also place the certificate of completion certificate from such authority of building work of equivalent amount of the estimated cost of this NIT. All the self signature required copied of certificate of valid registration with authorities, Service Tax, TIN Number, PANCARD, Last Three years Income Tax Return, Profit and Loss account, Balance sheets etc should be attached. Failing to submit all the requirement of envelope No. 1 the envelope No. 2 may not be opened and the bid will be summarily rejected. The date of opening of ENVALOPE No.2. may be decided on a later date as to scrutinize the technical bid, the information will be displayed on the notice board and will be given on email to the bidders (whose email ids are provided in the technical bid). The Envelope No.1 shall be super scribed boldly as:

***“ENVELOPE NO.1: Technical Bid: EARNEST MONEY & Eligibility certificates FOR PROPOSED Renovation work of Flats at MIG & HIG, BHOPAL ”***

**B. Envelope No. 2 Financial Bid. :** The Envelope No. 2 shall contain Filled in Tender document of the tender document (Tender document 0 to 68 pages + 27 pages of BOQ + drawings) .This envelope shall be super scribed as:

***“ENVALOPE 2: Financial Bid: Tender for PROPOSED Renovation work of Flats at MIG & HIG, BHOPAL”***

There should not be any correction / overwriting in filling the financial BID. However, all the correction / overwriting signed by the tenderer, if any. No white fluid eraser etc. shall be allowed in the entire financial BID.

No additional Commercial or technical conditions / comments / deliberations(s) of any sort having any impact on the tender amount shall not be written on any part of document / Bid / envelope etc.

It is suggested that the quotation be sent by speed post so as to reached this office on or before the due date and time. There will be no liability of the company for any postal delay whatsoever.

4. The Tenders will be opened at **3.30 pm on 03/07/2015** (date of opening) in the presence of such of the tenderers or their authorized representatives, whosoever wishes to remain present. The date and time of the opening of the tender can be changed at the Company’s discretion. The financial bid will be opened after the scrutiny of Technical Bid.

Tender document without earnest money shall NOT be opened and shall be deemed rejected. Decision of the “Regional Manager Oriental Insurance Company Limited Regional office, Fourth Floor, IDA Building, 7, Race Course Road, Indore 452003. to this effect shall be final and binding to all tenderers and without appeal. No correspondence in this regard will be entertained.

**A few of important terms and conditions of the quotation/ tender are as under:**

5. Unsealed tender will not be accepted. All the Pages shall be signed and should bear the seal of the firm affixed along with the signature on each page. Tenders submitted Late on account of any reason(s), whatsoever, and sent by

telegraphic or FAX or by email shall not be accepted and shall be rejected there and then.

6. Tender with the corrections and/or overwriting will be liable to be rejected if they are not initialed for authentication. All rates should be in words and in figures. No whitener should be used.
7. Only the tenders which are complete in all respects with all information and contents/ documents required will be taken into consideration.
8. The related plan of flat's Drawings can be seen in the office of the RM, Regional office during the days of purchase of tender document in the office hours. The rates in the tender to be quoted should be all inclusive. Conditional tenders will not be accepted. The Rates should include all tax, duties etc.
9. (A) Contractor has to engage reliable skilled workers and shall follow all labor laws and acts and shall go in for insurance for all risks at his own cost.  
(B) On completion of work rubbish etc. shall be removed as directed and site shall be made neat, clean and intact. The colour shades mentioned in the tender are tentative. Company may change any shade of equivalent make as per company's choice. The use of Gattoo /sleeper packing wood is strictly not allowed as finished product of supply; however these woods can be utilized for construction in scaffolding and shuttering etc. The contractor should not use paint on lipping and moldings.
10. The tenders shall remain open for acceptance by the company for a period of ninety days from the date of opening of the tender which period may be extended by the mutual agreement and the tenderer can not cancel or withdraw their offer during this period.
11. The contractor shall whose tender is accepted shall take up the work in hand immediately and complete it within stipulated days from the date of the work order.
12. The contractor shall visit the site before tendering to acquaint themselves thoroughly with all the matters concerning the timely execution of the work. They should also be well conversant with the rates of Local Taxes and other rates and charges of the Government royalty charges etc. which are to be entirely borne by them.
13. Materials to be used shall be strictly according to the specifications for work conforming to relevant Bureau of Indian Standards and of Makes/ Brands as approved. Sample of all the materials to be used shall be got approved from the Company before use.
14. The Company reserves the right to reject/allot/accept any tender/quotation or accept any part or parts of tender(s)/ quotation(s) offered without assigning any reasons. The quantities mentioned in the tender are tentative and estimated only. Payment of Bill will be made for exact quantity used at site. The major quantity increase at site should be approved in written from company before execution.
15. No request for advance will be entertained by the Company. The Company may consider the request for running payment for the work not less than

Rs.10.00 lac (Except Final Bill) but no advance against the materials will be payable while making running account payments.

16. All works should be started simultaneously and as directed by the Company's Engineer / representative(s) at site.
17. The Earnest Money in the form of Demand Draft will have to be deposited along with the tender form which will be released 30 days after the date of opening except to those whose tender is found lowest or recommended for acceptance.
18. The contractor should take actual measurements of the work and submit them along with the running bill or the final bill. The Company will verify the measurement before making payment of the bill. The billing quantities should match with the verified quantities sheet.
19. If the contractor fails to complete the work by time period as specified in the clause above or within any reasonable extended time given by the Company, the contractor shall pay or allow the Company the sum at a rate of Rs. 0.5% of the tender amount per day and a maximum of 5% as Liquidated Damages for the period during which the said works shall so remain incomplete and the Company may deduct such damages from any moneys due to the contractors.
20. The Company will recover from the contractors the charges for the electricity and water, if arranged by the Company on actual basis. But company has no intention to provide them. The contractors will make their own arrangement for stay of their workers and they will not be permitted to stay in Company premises.
21. 10% of the amount of the running bill including earnest money will be deducted and kept as retention amount until the work is finally completed and approved by the Company's Engineer / representative(s).
22. If the work is not done as per the specifications, the Company will have the right to get the defects rectified by them or deduct the amount considered reasonable by the Company's Representative (s).

Final measurements of the work should be taken by the contractor only after completion of the work to the satisfaction of the Company's representatives /Engineer. The Final bill should be submitted within a month on satisfactory completion of the work as above. The item rates shall remain Firm Till completion of entire work and 0will not be subject to any increment / escalation in rates / cost etc on any material / labor / tax etc. or whatsoever ground(s).

23. 50% retention money will be released on completion of work and balance 50 % will be released after 6 months of maintenance period (defects liability period) or may be adjusted if the repairs/ maintenance are carried out by the company.
24. Please return this NIT in original in the sealed envelope along with the declaration mentioned below .For details, please read entire tender document carefully.

25. All contractors are required to provide their email address for further fast communications. An email address would be required for a successful bidder within 3 days of award of work. All the intending contractors / bidding firms shall furnish a list of **their relatives working with** the COMPANY or ARCHITECTS along with their Designation and Address of posting failing which will be deemed as that no relatives of the contractor working with the company..
26. Canvassing related to tender is strictly prohibited and the tender submitted by the contractors who resort to canvassing shall be liable for rejection.
27. **Time of execution is essence of this contract.**
28. **Important Information:** The scope is mostly outer part of the flats and stair area and very a few works inside the flats. Bidders are advised to Kindly see the site and site conditions first before filling the tender rates. The Ground floor shops belonging to other owners are in running conditions. The scope is also includes harmony and permissions of the respective shop owners as their work is also not gets much affected during the works. Only the works related to the SOR will be paid and Non SOR items will not be entertained as claims. The cost of Stamp duty and all Govt. Taxes etc. for the agreement will be born by the contractor. The rates are inclusive of all taxes.
29. For any other information & Technical Clarification, Intending contractors may contact our architects M/s D. Vyas & Associates, 1c Siatbag Colony, Dhenu Market, Opp. Agrawal Sweets, Indore- 452003 on any working day during their contact hours 5 pm to 6:30 pm only .

**Regional Manager,  
The Oriental Insurance Company Limited,  
Regional office, Fourth Floor, IDA Building,  
7, Race Course Road, Indore 452003.**

Declaration

We have understood all the above conditions. If we fail to start/or execute the work within the stipulated period of time our earnest money/ retention money may be forfeited.

To,  
**The ORIENTAL INSURANCE COMPANY LIMITED,**  
Regional office, Fourth Floor, IDA Building, 7, Race Course Road, Indore 452003

Dear Sir,

Having examined the drawings, specifications, designs, schedule of quantities, and other conditions relating to the works specified in the General Conditions hereafter set out and having visited and examined the site of the works specified in the said general conditions and having acquired the requisite information relating hereto as affecting the Tender, I/we hereby offer to execute the works specified in the said General / special condition within the time specified in the said Conditions / Notes, at the rates mentioned in the attached Schedule of Quantities and in accordance, in all respects, with the specifications, designs, drawings and instructions and with such materials as are provided for, by and in all respects in accordance with such conditions so far as they may be applicable.

- a) I/We hereby undertake to do all extra or varied works which may be ordered as part of the contract upon the terms provided in the Conditions /Notes / BOQ/ Drawings etc.
- b) I/We hereby undertake to complete the whole of the work in the required time from the date of handing over the site to me/us and agree to pay the penalty as specified in the General / special Conditions / notes etc. , in case I/we fail to complete the works within the stipulated time period.
- c) I/We agree with the Liquidated Damages stated in the Appendix hereto & agree that the same represents a Fair Value of the loss to be suffered by THE ORIENTAL INSURANCE COMPANY LIMITED in case work is not completed within scheduled Time. I/We confirm that the period & percentage as referred in the Appendix hereto, to which we give our consent and agree to abide by the time.
- d) I/We agree to abide by this tender for the period of four months from opening of Tender or extension thereof as required by the Employer, from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the Expiry of that period.
- e) If this tender is accepted, I/We undertake to enter into and execute at our cost, when called upon by the employer to do so, a contract agreement on the prescribed form and submit the performance guarantee as per the appendix to the general conditions of this tender document. Unless and until a format of Agreement is prepared and executed, this tender together with your written acceptance thereof shall constitute a binding of contract between us.
- f) I/We understand that if our tender is accepted, we are to be jointly and severally responsible for the due performance of contract.
- g) I/We understand that you are not bound to accept the lowest or any tender, which you may receive and may reject any or all Tenders without assigning any reason, whatsoever.

Yours faithfully,

Signature of the Contractor with stamp

Place:

Date :

**Encl:**

- 1) Notice Inviting Tender (NIT)
- 2) Important Notes / General & Special Conditions.
- 3) Earnest Money: In the form of Demand Draft
- 4) Price Bid in the form of % rate on estimates based on CPWD DSR 2012 Civil & Electrical Both (incorporating cost index & service Tax)
- 5) Specifications
- 6) Layout Plans of the flats



## ARTICLES OF AGREEMENT

This agreement is made on .....day of .....20....., between:

1. THE ORIENTAL INSURANCE COMPANY LIMITED, Regional office, Fourth Floor, IDA Building, 7, Race Course Road, Indore 452003 herein after called “The Employer” on the one part.

2. ...., hereinafter called “The Contractor” on the other part.

And whereas the Employer is desirous to get executed the work of Proposed ..... of ....., THE ORIENTAL INSURANCE COMPANY LIMITED, SITE Vijay Nagar Indore (Hereinafter Called “the work”) & has caused the drawings, bills of cost showing & describing the work to be done under the direction of M/s D.Vyas and Associates, Indore.

And whereas the contractor has supplied the Employer with a fully priced copy of the said bills of cost (which copy is hereinafter referred to as “the contract bills”) and whereas the said drawings (hereinafter referred to as “the Contract Drawings”) and contract Bills have been signed by or on behalf of the parties hereto; and whereas the contractor has deposited a sum of Rs. ....(Rs.....Only) with the Employer for due performance of this agreement along with letter of acceptance dated ..... dated by the Contractor for the execution, completion and maintenance of the work, now this Agreement Witnessed as follows :

In this agreement words and expressions shall have the same meaning as are respectively assigned to them in the said conditions of contract hereinafter referred to: The following documents shall be deemed to form and to read construed as part of this contract, viz,:

1. Original Tender Documents
2. Relevant correspondence & all letters forming part of contract & referred to in acceptance letter.
3. Acceptance Letter.
4. Bill of Quantities (Financial Bid)
5. Contract drawings, and
6. Time and progress chart.

The aforesaid documents shall be taken as complementary & mutually explanatory to/of one another, but in case of any ambiguity or discrepancy, the latest document issued by THE ORIENTAL INSURANCE COMPANY LIMITED shall prevail over on earlier document.

In consideration of the payment to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby consents with the Employer to execute, complete & maintain the work in conformity in a respect with the provisions of the contract.

The Employer hereby covenants to pay the contractor in consideration of the execution, completion maintenance of items of works such sums as shall become payable hereunder at the time(s) and in the manner prescribed in the said conditions and said priced schedule of quantities/Bill of cost/financial bid prescribed this contract.

In Witness whereof the parties hereto have caused their respective common seals to be hereunto set the respective hands and seals with the day, month and year here above written.

**Signed & Sealed and delivered by the:**

Sign .....

Sign.....

(Name .....)

(Name .....)

**Seal  
(On behalf of the Contractor)**

**Seal  
(on behalf of the Employer)**

**Date**

**Place**

**Witness:**

**1. Sign**  
**Full Name** .....  
**Address:**

**2. Sign**  
**Full Name**.....  
**Address:**

## Appendix

1. Section I : IMPORTANT NOTES
2. SECTION II : DEFINITIONS OF TERMS
3. SECTION III : APPLICABLE CODES & SPECIFICATIONS
4. SECTION IV : GENERAL CONDITIONS OF CONTRACT
5. SECTION V : SPECIAL CONDITIONS OF CONTRACT
6. SECTION VI : Technical Specifications
7. SECTION VII: Tentative BOQ:
  - A) For Building works
  - B) For Electrical Work
  - C) For Boundary Wall
8. SECTION VIII : DRAWINGS

## SECTION I: IMPORTANT NOTES

1. The bidder must sign & affix rubber stamp on each page of this tender including the drawings etc. Tender should mention all inclusions (including all taxes / levies etc) in price. The above document shall be taken as complementary and mutually explanatory of one another but in case of ambiguities or discrepancies, shall take precedence in the order given below- The discrepancies should also be informed to the consultants and prior clarity should be obtained not delaying the work.

Price bid

Specifications (Technical)

Drawings

Special conditions of Contract

General conditions of Contract

Instructions to Tenderer

The tender documents are not transferable.

Site Visit

The tenderer must obtain himself on his own responsibility and his own expenses all information and data, which may be required for the purpose of filling this tender document, and enter into a contract for the satisfactory performance of the work. The tenderer is requested satisfy himself regarding the availability of water, power, material, labour, the law and order situation, climatic conditions local authorities requirement, traffic regulations etc.

2. All the tender papers will become the part of contract between THE ORIENTAL INSURANCE COMPANY LIMITED & the successful bidder to whom the work would be awarded.

3. The bidder should immediately deposit the unused tender form, if not opting for this bid, stating the reason for doing so, failing which the name of the bidder may be removed from the empanelment of approved contractors list maintained at the **ORIENTAL INSURANCE COMPANY LIMITED, Indore (MP)**

4. No materials like cement / reinforcement etc. will be supplied by the owner for execution of work.

5. Water & electricity will not be provided to the contractor, however, THE ORIENTAL INSURANCE COMPANY LIMITED may assist in the taking connection on own name by paying the deposit charges but actual bill of consumption will be borne by the contractor with all additional liability due to misuse or over use of the connection or breaking any govt. rules/law.

6. All legal liability /penalty during the execution of work will be borne by the contractor. This will be discontinued if unauthorized use is found at the site. Any irregularity in these supplies shall not be responsibility of THE ORIENTAL INSURANCE COMPANY LIMITED and no claims for the extension of time limits, extra payments or any other claim on this ground shall be entertained.

7. Conditional Tenders shall not be accepted.

8. The contractor shall obey all the instructions laid in the provisions of respected IS Codes unless specified. The written instruction / drawing specification will prevail.

9. Time is the essence of this Bid. This is a time bound project, hence no extension of time period will be granted beyond the time allotted for the completion in any circumstances.

10. The Bidder has to ask at least 10 days in advance for any structural, architectural Details or clarification in the drawings in writing, if it is not available at the work-site / with THE ORIENTAL INSURANCE COMPANY LIMITED. The measurement sheets will be prepared in No., Length, Breadth, Height / depth, Quantity, Unit Formats as required in the Govt. works. The measurements will be taken jointly in presence of THE ORIENTAL INSURANCE COMPANY LIMITED representative / Consultant representative / Contractor. The verified measurement sheet will be computerized by the contractor and submitted along with bills /invoices in three copies. Two copies sent to the consultant and one copy directly to THE ORIENTAL INSURANCE COMPANY LIMITED. The contractor MUST sign & affix seal of firm on each page of the bill /invoice and its enclosures viz. copy of site measurement sheet / computerized form of measurement sheet / copy of written approvals of necessary changes / change in the material (s). Failing the laid procedure for bill processing will not attract the bill approval form consultants' end. The contact hours for bill processing work are limited to Friday 5 pm to 7 pm only. The contractors are requested to contact in these timings only.

11. No escalation, reimbursement / refund on variation in the prices of material & labor wages will be paid in any circumstances.

12. The bidder shall provide testing Report from A class electrical license contractor at the necessary time and must before the handover for use of premises.

13 The bidder shall keep coordination / harmony in work as well as behavior with all allied agencies / contractors working at the site. This should be followed strictly.

14. The award of work can be split in two or more contractors in the items displayed / non-displayed in this tender. The bidder will accept any amount of work in this regard without any dispute.

15. Bidder on award of full /Part work, shall submit within 3 days a construction-time-bound-schedule-chart (PERT Chart etc.) to the Architect satisfying them the plan.

16. The measurement patterns etc. as specified or described by the Architect shall be final. Measurements will be preferably in meters.

17. The rates include the element of testing of samples of various Material brought by the contractors for use on the work as well as other test as described in the specifications. Failure to conduct any of the test or not up to the prescribed frequency would invite the following consequences. The Engineer incharge may reject the work. But if in his opinion the work can be accepted despite the aforesaid shortcoming, then he may do so, subject to the condition that he makes a recovery of Rs. 2000/- (Rupees Two Thousand Only) for each of the default.

18. If any item of the work is found to be sub-standard but if the engineer-in-charge is of the opinion that the same is structurally adequate and can be accepted at the reduce rates, then in such cases he may do so subject to final approval of technical authority / consultant.

19. Time Allocated for the entire completion is mentioned in NIT.

20. THE ORIENTAL INSURANCE COMPANY LIMITED can assign full / part work to any bidder. Part work can be given to two or more contractors. THE ORIENTAL INSURANCE COMPANY LIMITED reserves the right to select / or reject any or all tender without assigning any reason which will be not disclosed.

21. The quoted rates shall be on **percentage - rate** basis on Estimates prepared on CPWD DSR 2012 updated till date for CIVIL Works and CPWD Electrical DSR 2012 updated till date (with provision of cost index & service tax). The quantities in the schedule of Quantities approximately indicate the total extent of the work but may vary to any extent and may be even be omitted thus altering value of the works. No claim shall be entertained on this account. The rates shall be inclusive of all materials, labour, transportation charges, etc. The rates quoted shall be deemed to be for the finished work to be measured at site.

22. The contractor shall carry out any item of works necessary for the completion of the works even though such items may not have been included in the Schedule of Quantities. The rates for such items shall be worked out or derived from similar quoted items, wherever possible, or on the basis of actual costs involved for materials, labour and 15% overheads and profits.

23. The rates quoted shall be inclusive of all taxes, direct or indirect, duties levied by the Government or concerned public body. No claim in respect of increase or variation in such taxes or duties shall be entertained during or after completion of works.

24. All the materials and workmanship shall so far as procurable is of the respective kinds described in the Schedule of Quantities and/or specifications and in the accordance with Architect's instructions. The Architect shall, during the progress of the work have power to order removal from the works within such reasonable time or times as may be specified in the order, of any materials which in the opinion of Architect are not in accordance with the Specifications or instructions of the Architect, the substitution or proper materials and removal and re-execution of any work with materials or workmanship not in accordance with the Drawings and Specifications or instructions and the contractor shall forthwith carry out such order at his own cost, entirely to the satisfaction of the Architect & THE ORIENTAL INSURANCE COMPANY LIMITED.

25. Earnest Money - Deposit (EMD)

The tenderers are requested to submit the Earnest Money as stated in the NIT in the form of Demand draft of Banker's cheque /FD in favor of "THE ORIENTAL INSURANCE COMPANY LIMITED, Indore" drawn on any nationalized Bank in India.

EMD in any other form other than as specified above will not be accepted. Tender not accompanied by the EMD in accordance with above para shall be rejected.

No interest will be paid on the EMD.

EMD of unsuccessful tenderer will be refunded within 30 days of award of Contract form the place of submission of tender.

EMD of successful tenderer will be retained as a part of security deposit.

#### 26. Initial Security Deposit

The successful tenderer will have to submit a sum equivalent to 2% of contract value less EMD. By means of Demand Draft drawn in favor of THE ORIENTAL INSURANCE COMPANY LIMITED state on its back the purpose of amount and address of contractor within a period of 15 days of acceptance of tender. No tender shall be considered unless the EMD is so deposited in the required form. No interest shall be paid on this EMD. The EMD of the unsuccessful tenderer shall be refunded soon after the decision to award the contract is taken without interest. The EMD shall stand absolutely forfeited if the tenderer revokes his tender at any time the period when he is required to keep his tender open acceptance by THE ORIENTAL INSURANCE COMPANY LIMITED or after it is accepted by THE ORIENTAL INSURANCE COMPANY LIMITED the contractor fails to enter into a formal agreement or fails to pay the initial security deposit as stipulated or fails to commence the work within the stipulated time.

#### 27. Security Deposit

Total Security deposit shall be 5% of contract value. Out of this 2% of contract value in the form of initial security deposit which includes the EMD. Balance 3% shall be deducted from the running account bill of the work at the rate of 10% of the respective running account bill i.e., deduction from each running bill account will be 10% till total 3% of contract value is reached. 50% of the total security shall be paid to the contractors on the basis of Architect's certifying the virtual completion. The balance 50% would be paid to the contractors after the defects liability period as specified in the contract.

No interest shall be paid to the amount retained by THE ORIENTAL INSURANCE COMPANY LIMITED as Security Deposit / Retention Money.

#### 28. Retention Money

Besides the ISD as deposited by the contractor in the above said manner the retention money shall be deducted from the running account bill at the rate of 10% of the gross value of work done by the contractor and claimed in each bill provided the total security deposit i.e. the ISD plus Retention Money shall both together not exceed 5% of contract value. 50% of the total security deposit shall be refunded to the contractor with out any interest on issue of Virtual Completion certificate by the Architect/Consultant. The balance 50% of the total security deposit shall be refunded to the contractors without interest within fifteen days after the end of defects in accordance with the conditions of contract including site clearance.

#### 29. Signing of Contract Documents

The successful tenderer shall be bound to implement the contract by signing an agreement and conditions of contract attached herewith immediately and maximum within 15 days from the receipt of intimation of acceptance of his tender by THE ORIENTAL INSURANCE COMPANY LIMITED. However, the written acceptance of the tender by THE ORIENTAL INSURANCE COMPANY LIMITED will constitute a binding agreement between THE ORIENTAL INSURANCE COMPANY LIMITED and successful tenderer whether such formal agreement is subsequently entered into or not.

#### 30. Completion Period

Time is essence of the contract. The work should be completed in all respects in accordance with the terms of contract within a period as stated in NIT days from the date of handing over the site/ award of work.

### 31. Validity of Tender

Tenders shall remain valid and open for acceptance for a period of 90 days from the date of opening price bid. If the tenderer withdraws his/her offer during the verdict period or makes modifications in his/her original offer which are not acceptable to THE ORIENTAL INSURANCE COMPANY LIMITED without prejudice to any other right or remedy THE ORIENTAL INSURANCE COMPANY LIMITED shall be at liberty to forfeit the EMD.

### 32. Rate & Prices

In case of item rate tender

The tenderers shall quote their rates for individual items both in words and figures in case of discrepancy between the rates quoted in words and figures the unit rate quoted in words will prevail. If no rate is quoted for a particular item the contractor shall not be paid for that item when it is executed.

The amount of each item shall be calculated and the requisite total is given. In case of discrepancy between the unit rate and the total amount calculated from multiplication of unit rate and the quantity the unit rate quoted will govern and the amount will be corrected.

The Tenderers need not quote their rates for which no quantities have been given. In case the tenderers quote their rates for such items those rates will be ignored and will not be considered during execution.

The tenderers should not change the units as specified in the tender. If any unit is changed the tenders would be evaluated as per the original unit and the contractor would be paid accordingly.

The tenderer should not change or modify or delete the description of the item. If any discrepancy is observed he should immediately bring to the knowledge of the Architect/THE ORIENTAL INSURANCE COMPANY LIMITED.

Each page of the BOQ shall be signed by the authorized person and cutting or overwriting shall be duly attested by him.

Each page shall be totaled and the grand total shall be given.

### 33. Language

The language in which the contract documents shall be drawn shall be in English.

### 34. Errors, Omissions & Discrepancies

In case of errors, omission and/or disagreement between written and scaled dimensions on the drawings or between the drawings and specifications etc. the following order shall apply-

Between scaled and written dimension (or description) on a drawing, the latter shall be adopted.

Between the written or shown description or dimensions in the drawings and the corresponding one in the specification the former shall be taken as correct.

Between written description of the item in the specifications and descriptions in bills of quantities of the same item, the former shall be adopted.

In case of difference between rates written in figures and words, the rate in words shall prevail.

Between the duplicate/ subsequent copies of the tender, the original tender shall be taken as correct.

### 35. Scope of Work

The contractor shall carry out complete and maintain the said work in every respect in strict accordance with this contract and with the directions of and to the satisfaction of THE ORIENTAL INSURANCE COMPANY LIMITED to be communicated through the Architect/Consultant. The Architect/Consultant at the directions of THE ORIENTAL INSURANCE COMPANY LIMITED from time to time issue further drawings and/or written instructions, details, directions and explanations which are hereafter collectively referred to as Architect/Consultant's instructions in regard to the variation or modification of the design, quality or quantity of work or the addition or omission or substitution of any work. Any discrepancy in the drawings or between the BOQ and/or drawings and/or specifications. The removal from the site of any material brought thereon by the contractor and any substitution of

any other materials therefore the removal and/or re-execution of any work executed by him. The dismissal from the work of any person employed/engaged thereupon.

#### 36. Letter of Acceptance

Within the validity period of the tender THE ORIENTAL INSURANCE COMPANY LIMITED shall issue a letter of acceptance either directly or through the Architect by registered post or otherwise. Depositing the address of the contractor as given in the tender to enter into. The contractor should also enquire about the status of the letter from THE ORIENTAL INSURANCE COMPANY LIMITED.

#### 37. Contract Agreement

On receipt of intimation of the acceptance of tender from THE ORIENTAL INSURANCE COMPANY LIMITED/Architect the successful tenderer shall be bound to implement the contract and within fifteen days thereof he shall sign an agreement in a non-judicial stamp paper of appropriate value. The cost of stamp duty will be born by the contractor.

#### 38. Ownership of Drawings

All drawings, specification and copies thereof furnished by THE ORIENTAL INSURANCE COMPANY LIMITED through its Architect/Consultant are the properties of THE ORIENTAL INSURANCE COMPANY LIMITED. They are not to be used on other work. The architect's work is sole copyright of architect's property.

#### 39. Detailed Drawings and Instructions

THE ORIENTAL INSURANCE COMPANY LIMITED through its Architect/Consultant shall furnish with reasonable promptness additional instructions by means of drawings or otherwise necessary for the proper execution of the work. All such drawings and instructions shall be consistent with the contract documents, true developments thereof and reasonably inferable therefrom. The work shall be executed in conformity therewith and the contractor prepare a detailed programme schedule indicating therein the date of start and completion of various activities on receipt of the work order and submit the same to THE ORIENTAL INSURANCE COMPANY LIMITED through the Architect/Consultant.

#### 40. Copies of Agreement

Two copies of agreement duly signed by both the parties with the drawings shall be handed over to the contractors.

#### Materials, Appliances & Employees

Unless or otherwise specified the contractor shall provide and pay for all materials, labour, water, power tools, equipment transportation and any other facilities that are required for the satisfactory execution and completion of the work. Unless or otherwise specified all materials shall be new and both workmanship and materials shall be best quality. The contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the work assigned to him. Workman whose work or behavior is found to be unsatisfactory by THE ORIENTAL INSURANCE COMPANY LIMITED/Architect/Consultant he shall be removed from the site immediately.

#### 41. Permits, Laws & Regulations

Permits & licenses required for the execution of the work shall be obtained by the contractor at his own expenses. The contractor shall give notices and comply with the regulations, laws, and ordinances rules, applicable to the contract. If the contractor observes any discrepancy between the drawings and specifications, he shall promptly notify THE ORIENTAL INSURANCE COMPANY LIMITED in writing under intimation of the Architect/Consultant. If the contractor performs any act, which is against the law, rules and regulations he shall meet all the costs arising therefrom and shall indemnify THE ORIENTAL INSURANCE COMPANY LIMITED any legal actions arising therefrom.

#### 42. Setting out work

The contractor shall set out the work and shall be responsible for the true and perfect setting out of the same and for the correctness of the positions, levels, dimensions and alignment of all parts thereof any error in this respect shall appear during the progress of the works, irrespective of the fact that the layout had been approved by the Architect/Consultant the contractor shall be responsible for the same and shall at



his own expenses rectify such error, if so, required to satisfaction of THE ORIENTAL INSURANCE COMPANY LIMITED.

#### 43. Protection of works & Property

The contractor shall continuously maintain adequate protection. Of all his work from damage and shall protect THE ORIENTAL INSURANCE COMPANY LIMITED's properties from injury or loss arising in connection with contract. He shall make good any such damage, injury, loss, except due to causes beyond his control and due to his fault or negligence.

He shall take adequate care and steps for protection of the adjacent properties. The contractor shall take all precautions for safety and protections of his employees on the works and shall with all applicable provisions of Govt. and local bodies safety laws and building codes to prevent accidents, or injuries to persons or property on, about or adjacent to his place of work. The contractor shall take insurance covers as per clause at his own cost. The policy may be taken in joint names of the contractor and THE ORIENTAL INSURANCE COMPANY LIMITED and the original policy may be lodged with THE ORIENTAL INSURANCE COMPANY LIMITED.

#### 44. Inspection of work

THE ORIENTAL INSURANCE COMPANY LIMITED/ Architect/Consultant or their representatives shall at all reasonable times have free access to the work site and/or to the workshop, factories, or other places where materials are lying or from where they are obtained and the contractor shall give every facility to THE ORIENTAL INSURANCE COMPANY LIMITED, Architect/Consultant and their representatives necessary for inspection and examination and test of the materials and workmanship. No person unless authorized by THE ORIENTAL INSURANCE COMPANY LIMITED/ Architect/Consultant except the representative of public authorities shall be allowed on the work at any time. The proposed work either during its construction stage or its completion can also be inspected by the Chief Technical Examiner's organization a wing of Central Vigilance Commission.

#### 45. Assignment & Subletting

The whole work included in contract shall be executed the contractor and he shall not directly entrust and engage or indirectly transfer, assign or underlet the contract or any part or share thereof or interest therein without the written consent of THE ORIENTAL INSURANCE COMPANY LIMITED through the Architect and no undertaking shall relieve the contractor from the responsibility of the contractor from active superintendence of the work during its progress.

#### 46. Quality of Workmanship & Test

All materials and workmanship shall be best of the respective kinds described in the contract and in accordance with Architect/Consultant instructions and shall be subject from time to time to such tests as the Architect/Consultant may direct at the place of manufacture or fabrication or on the site or an approved testing laboratory. The contractor shall provide such assistance, instruments, machinery, labour and materials as are normally required for examining measuring sampling and testing any material or part of work before incorporation in the work for testing as may be selected and required by the Architect/Consultant.

#### 47. Samples

All samples of adequate numbers, size, shades & pattern as per specification shall be supplied by the contractor without any extra charges. If certain items proposed to be used are of such nature that samples cannot be presented or prepared at the site detailed literature/ test certificate of the same shall be provided to the satisfaction of the Architect/Consultant. Before submitting the sample/ literature the contractor shall satisfy himself that the material/ equipment for which he is submitting the sample/ literature meet with the requirement of tender specification. Only when the samples are approved in writing by the Architect/ Consultant the contractor shall proceed with the procurement and installation of the particular material/ equipment. The approved samples shall be signed by the Architect/Consultant for identification and shall be kept on record at site office until the completion of the inspection/ comparison at any time. The Architect/ Consultant shall take reasonable time to approved sample. Any delay that might occur in approving the samples for reasons of its not meeting the specifications or other discrepancies inadequacy in furnishing samples of best qualities from various manufacturers and such other aspects causing delay on the approval of the materials/ equipment etc. shall be to the account of the contractor.

#### 48. Cost of Tests

The cost of marking any test shall be borne by the contractor if such test is intended by or provided for in the specification or BOQ.

**49. Costs of tests not provided for**

If any test is ordered by the Architect/ Consultant which is either

If so intended by or provided for or ( in the cases above mentioned ) is not so particularized, or though so intended or provided for but ordered by the Architect/ Consultant to be carried out by an independent person at any place other than the site or the place of manufacture of fabrication of the materials tested or any Government/ Approved laboratory, then the cost of such test shall be borne by the contractor.

**50. Obtaining information related to execution of work**

No claim by the contractor for additional payment shall be entertained which is consequent upon failure on his part to obtain correct information as to any matter affecting the execution of the work nor any misunderstanding or the obtaining incorrect information or the failure to obtain correct information relieve him from any risks or from the entire responsibility for the fulfillment of contract.

**51. Contractor's Superintendence**

The contractor shall give necessary personal superintendence during the execution of the works and as long, thereafter, as the Architect/ Consultant may consider necessary until the expiry of the defects liability period, stated hereto.

**52. Quantities**

The bill of Quantities ( BOQ ) unless or otherwise shall be deemed to have been prepared in accordance with Indian Standard Method of Measurements and quantities. The rate quoted shall remain valid for variation of quantity against individual item to any extent subject to maximum variation of the contract value by 25%. All the amount paid under 19, 20 hereof as well as amounts of prime cost and provisions sums, if any, shall be excluded.

**Variation Exceeding 25% ;** The items of work executed in relation to variation exceeding 25% shall be paid on the basis of provisions of clause 21 (e) hereof.

**53. Works to be measured**

The Architect/ Consultant may from time to time intimate to the contractor that he required the work to be measured and the contractor shall forthwith attend or send a qualified representative to assist the Architect in taking such measurements and calculations and to furnish all particulars or to give all assistance required by any of them. Such measurements shall be taken in accordance with the mode of measurements detailed in the specifications. The representative of the Architect/ Consultant shall take joint measurements with the contractor's representative and the measurements shall be entered in the measurement book. The representative or his authorized representative shall sign all the pages of the measurement book in which the measurements have been recorded in taken of his acceptance. All the corrections shall be duly attested by both representatives. No over writing shall be made in the M Book should the contractor not attend or neglect or omit to depute his representative to take measurements then the measurements recorded by the representative of the Architect/ consultant shall be final. All authorized extra work, omissions and all variations made shall be included in such measurement.

**54. Variations**

No alteration, omission or variation in writing by the Architect/ Consultant shall vitiate the contract. In case the ORIENTAL INSURANCE COMPANY LIMITED/ Architect/ Consultant thinks proper at any time during the progress of works to make any alteration in, or additions to or omissions from the works of any alteration in the kind or quality of the materials to be used therein, the Architect/ Consultant shall give notice thereof in writing to the contractor or shall confirm in writing within seven days of giving such oral instructions the contractor shall alter to, add to, or omit from as the case may be in accordance with such notice, but the contractor shall not do any work extra to or make any alterations or additions to or omissions from the works or any deviation from any of the provisions to the contract, stipulations, specifications or contract drawing without previous consent in writing of the Architect/ Consultant and the value of such extras, alterations, additions or omissions shall in all cases be determined by the Architect/ Consultant and the same shall be added to or deducted from the contract value as the case may be.

**55. Valuation of variations**

No claim for an extra shall be allowed unless it shall have been executed under the authority of the Architect/ Consultant with the concurrence of the ORIENTAL INSURANCE COMPANY LIMITED as herein mentioned. Any such extra is herein referred to as authorized extra and shall be made in accordance with the following provisions-

The net rates or prices in the contract shall determine the valuation of the extra work where such extra work is of similar character and executed under similar conditions as the work priced herein.

Rates for all items, wherever possible should be derived out to the rates given in the priced Quote.

The net prices of the original tender shall determine the value of the items omitted, provided if omissions do not vary the conditions under which any remaining items of works are carried out, otherwise the prices for the same shall be valued under sub-clauses ( c ) hereunder.

Where the extra works are not of similar character and/or executed under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items or works are carried out, then the contractor shall within 7 days of the receipt of the letter of acceptance inform the Architect/ Consultant of the rate which he intends to charge for such items for work, duly supported by analysis of the rate or rates claimed and the Architect/ Consultant shall fix such rate or prices as in the circumstances in his opinion are reasonable and proper. Based on the market rate.

Where extra work cannot be properly measured or valued the contractor shall be allowed day work prices at the net rates stated in the tender or the BOQ or, if not, so stated then in accordance with the local day work rates and wages for the district, provided that in either case, vouchers specifying the daily time ( and if required by the Architect/ consultant ) the workman's name and materials employed be delivered for verifications to the Architect/ consultant at or before the end of the week following that in which the work has been executed.

It is further clarified that for all such authorized extra items where rates cannot be derived from the tender, the contractor shall submit rates duly supported by rate analysis worked on the " market rate basis " for material, labour, hire/ running charges of equipment and wastages etc. plus 15% towards establishment charges, contractor's overheads and profit. Such items shall not be eligible for escalation.

#### **56. Final Measurement**

The measurement and valuation in respect of the contract shall be completed within six months of the virtual completion of the work.

#### **57. Virtual Completion Certificate (VCC)**

On successful completion of entire works covered by the contract to the full satisfaction of THE ORIENTAL INSURANCE COMPANY LIMITED, the contractor shall ensure that the following works have been completed to the satisfaction of THE ORIENTAL INSURANCE COMPANY LIMITED-

Clear the site of all scaffolding, wiring, pipes, surplus, materials, contractor's labour, equipment & machinery.

Demolish, dismantle and remove the contractor's site office, temporary works, structures including labour sheds/camps & constructions and other items and things whatsoever brought upon or erected at the site or any land allotted to the contractor by THE ORIENTAL INSURANCE COMPANY LIMITED and not incorporated in the permanent works.

Remove all rubbish, debris etc. from the site and the land allotted to the contractor by THE ORIENTAL INSURANCE COMPANY LIMITED and shall clear, level and dress, compact the site as required by THE ORIENTAL INSURANCE COMPANY LIMITED.

Shall put THE ORIENTAL INSURANCE COMPANY LIMITED in undisputed custody and possession of the site and all land allotted by THE ORIENTAL INSURANCE COMPANY LIMITED.

Shall hand over the work in a peaceful to THE ORIENTAL INSURANCE COMPANY LIMITED.

All defects/ imperfections have been attended and rectified as pointed out by THE ORIENTAL INSURANCE COMPANY LIMITED to the full satisfaction of THE ORIENTAL INSURANCE COMPANY LIMITED.

Upon the satisfactory fulfillment by the contractor as stated above, the contractor shall be entitled to apply to the Architect/ Consultant is satisfied of the completion of the work. Relative to which the completion certificate has been sought, the Architect/ Consultant shall try within fourteen (14) days of the receipt of the application for virtual completion certificate, issue a VCC in respect of the work for which the VCC has been applied.

This issuance of a VCC shall be without prejudice to THE ORIENTAL INSURANCE COMPANY LIMITED's rights and contractor's liabilities under the contract including the contractor's liability period nor shall the issuance of VCC in respect of the works or work at any site be construed as a waiver of any right or claim of THE ORIENTAL INSURANCE COMPANY LIMITED against the contractor in respect of works or work at the site and in respect of which the VCC has been issued.

#### **58. Work by other Agencies**

THE ORIENTAL INSURANCE COMPANY LIMITED/ Architect/ Consultant reserves the rights to use premises and any portion of the site for execution of any work not included in the scope of this contract which it may desire to have carried out by other persons simultaneously and the contractor shall not only allow but also extend reasonable facilities for the execution of such work. The contractor however shall not be required to provide any plant or material for the execution of such work except by special arrangement with THE ORIENTAL INSURANCE COMPANY LIMITED. Such work shall be carried out in such manner as not to impede the progress of the works included in the contract.

#### **59. Insurance of works**

Without limiting his obligations and responsibilities under the contract the contractor shall insure in the joint names of THE ORIENTAL INSURANCE COMPANY LIMITED and the contractor against all loss of damages from whatever cause arising other than the excepted risks, for which he is responsible under the terms of contract and in such a manner that the ORIENTAL INSURANCE COMPANY LIMITED and contractor are covered for the period stipulated I case --- of GCC and also covered during the period or maintenance for loss or damage arising from a cause, occurring prior to the commencement of the period of maintenance and for any loss or damage occasioned by the contractor in the course of any operations carried out by him for the purpose of complying with his obligations under clause.

The work for the time being executed to the estimated current contract value thereof, of such additional sum as may be specified together with the materials for incorporation in the works at their replacement value.

The constructional plan and other things brought on the site by the contractor to the replacement value of such constructional plant and other things.

Such insurance shall be effected with an insurer and in terms approved by THE ORIENTAL INSURANCE COMPANY LIMITED which approval shall not be unreasonably withheld and the contractor shall whenever required produce to the Architect/ Consultant the policy if insurance and the receipts for payment of the current premiums.

#### **60. Damage to persons and property**

The contractor shall, except if any so far as the contract provides otherwise indemnify THE ORIENTAL INSURANCE COMPANY LIMITED against all losses and claims in respect of injuries or damages to any person or material or physical damage to any property whatsoever which may arise out of or in consequence of the execution and maintenance of the works and against all claims proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto except any compensation of damages for or with respect to;

The permanent use or occupation of land by or any part thereof.

The right of THE ORIENTAL INSURANCE COMPANY LIMITED to executed the works or any part thereof on, over, under, in or through any lands.

Injuries or damage to persons or properties which are unavoidable result of the execution or maintenance of the works in accordance with the contract.

Injuries or damages to persons or property resulting from any act or THE ORIENTAL INSURANCE COMPANY LIMITED their agents, employees or other contractors not being employed by the contractor or for or in respect of any claims, proceedings, damages, costs, charges and expenses in respect thereof or in relation thereto or where the injury or damage was contributed to by the contractor, his servants or agents such part of the compensation as may be just and equitable having regard to the extent of the responsibility of THE ORIENTAL INSURANCE COMPANY LIMITED, their employees, or agents or other employees, or agents or other contractors for the damage or injury.

Contractor to indemnify THE ORIENTAL INSURANCE COMPANY LIMITED

The contractor shall indemnify THE ORIENTAL INSURANCE COMPANY LIMITED against all claims, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the provision sub-clause of this clause.

Contractor's Superintendence

The contractor shall fully indemnify and keep indemnified THE ORIENTAL INSURANCE COMPANY LIMITED against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claim made. Under or action brought against THE ORIENTAL INSURANCE COMPANY LIMITED in respect of such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expenses to settle any dispute or to conduct any litigation that may arise there from, provided that the contractor shall not be liable to indemnify THE ORIENTAL INSURANCE COMPANY LIMITED if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Architect/ Consultant in this behalf.

Third Party Insurance

Before commencing the execution of the work the contractor but without limiting his obligations and responsibilities under clause of GCC shall insure against his liability for any material or physical damage, loss or injury which may occur to any property including that of THE ORIENTAL INSURANCE COMPANY LIMITED, or to any person, including any employee of THE ORIENTAL INSURANCE COMPANY LIMITED, by or arising out of the execution of the works in the carrying out of the contract, otherwise than due to the matters referred to in the proviso to clause thereof.

Minimum Amount of Third party Insurance

Such insurance shall be affected with an insurer and in terms approved by THE ORIENTAL INSURANCE COMPANY LIMITED which approval shall be reasonable withheld and for at least the amount stated below. The contractor shall, whenever required, produce to the Architect/ Consultant the policies of insurance cover and receipts for payment of the current premiums. The minimum insurance cover for physical property, injury, and death is Rs. 5 lacs per occurrence with the number of occurrence limited to four. After each occurrence contract will pay additional premium necessary to make insurance valid for four occurrences always.

Accident or Injury to Workman

THE ORIENTAL INSURANCE COMPANY LIMITED shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any injury to any workmen or other person in the employment of the contractor or any sub-contractor, save and except an accident or injury resulting from any act or default of THE ORIENTAL INSURANCE COMPANY LIMITED or their agents, or employees. The contractor shall indemnify and keep indemnified THE ORIENTAL INSURANCE COMPANY LIMITED against all such damages and compensation, save and except as aforesaid, and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

Insurance against accidents etc. to workmen

The contractor shall insure against such liability with an insurer approved by THE ORIENTAL INSURANCE COMPANY LIMITED during the whole of the time that any persons are employed by him on the works and shall, when required, produce to the Architect/Consultant such policy of insurance and receipt for payment of the current premium. Provided always that, in respect of any persons employed by any sub-contractor the contractor's obligation to insure as aforesaid under this

sub-clause shall be satisfied if the sub contractor shall have insured against the liability in respect of such manner that THE ORIENTAL INSURANCE COMPANY LIMITED is indemnified under the policy but the contractor shall require such sub-contractor to produce to the Architect/Consultant when such policy of insurance and the receipt for the payment of the current premium.

Remedy on contractor's failure to insure :

If the contractor fails to effect and keep in force the insurance referred to above or any other insurance which he may be required to effect the terms of contract, then and in any such case THE ORIENTAL INSURANCE COMPANY LIMITED may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by THE ORIENTAL INSURANCE COMPANY LIMITED as aforesaid from any amount due or which may become due to the contractor, or recover the same as debt from the contractor.

Without prejudice to the other rights of THE ORIENTAL INSURANCE COMPANY LIMITED against contractors. In respect of such default, the employer shall be entitled to deduct from any sums payable to the contractor the amount of any damages costs, charges and other expenses paid by THE ORIENTAL INSURANCE COMPANY LIMITED and which are payable by the contractors under this clause. The contractor shall upon settlement by the insurer of any claim made against the insurer pursuant to a policy taken under this clause, proceed with due diligence to rebuild or repair the works destroyed or damaged. In this event all the monies received from the insurer in respect of such damage shall be paid to the contractor and the contractor shall not be entitled to any further payment in respect of the expenditure incurred for rebuilding or repairing of the materials or goods destroyed or damaged.

#### 61. Commencement of Work

The date of commencement of the work will be reckoned as the date of handing over site or fifteen days from the date of issue of letter of acceptance of the tender by THE ORIENTAL INSURANCE COMPANY LIMITED whichever is later. The contractor shall strictly adhere to the approved timeline chart of activity. Any excuse or deviation in the activity flow must be approved by the owner in writing.

#### 62. Time for Completion

Time is essence of the contract and shall be strictly observed by the contractor. The entire work shall be completed within a period of time specified in the NIT . If required in the contract or as directed by the Architect/Consultant, the contractor shall complete certain portions of work before completion of the entire work. However the completion date shall be reckoned as the date by which the whole work is completed as per the items of the contract.

#### 63. Extension of Time

If, in the opinion of the Architect/Consultant, the work be delayed for reasons beyond the control of the contractor, the Architect/Consultant may submit a recommendation to THE ORIENTAL INSURANCE COMPANY LIMITED to grant a fair and reasonable extension of time for completion of work as per the terms of contract. If the contractor needs an extension of time for the completion of work or if the completion of work is likely to be delayed for any reasons beyond the due date of completion as stipulated in the contract, the contractor shall apply to THE ORIENTAL INSURANCE COMPANY LIMITED through the Architect/Consultant in writing at least 30days before the expiry of the scheduled time and while applying for extension of time he shall furnish the reasons in detail and his justification if any, for the delays. The Architect/Consultant shall submit their recommendations to THE ORIENTAL INSURANCE COMPANY LIMITED in the prescribed format for granting extension of time. While granting extension of time the contractor shall be informed the period in excess of original stipulated period and duly sanctioned extension of time by THE ORIENTAL INSURANCE COMPANY LIMITED the provision of liquidated damages as stated under clause shall become applicable. Further the contract shall remain in force even for the period beyond the due date of completion irrespective whether the extension is granted or not.

#### 64. Rate of Progress

Whole of the materials, plant and labour to be provided by the contractor and the mode, manner and speed of execution and maintenance of the works are to be of a kind and conducted in a manner to the satisfaction of the Architect/Consultant should the rate of progress of the work or any part thereof be at

any time be in the opinion of the Architect/Consultant too slow to ensure the completion of the whole of the work by the prescribed time or extended time for completion the Architect/Consultant shall thereupon take such steps as considered necessary by the Architect/Consultant to expedite progress so as to complete the works by the prescribed time or extended time. Such communications from the Architect/Consultant neither shall relieve the contractor from fulfilling obligations under the contract nor will he be entitled to raise any claims arising out of such direction.

#### 65. Work during nights and holidays

Subject to any provision to the contrary contained in the contract no permanent work shall save as herein provided be carried on during the night or on holidays without the permission in writing of the Architect/Consultant, save when the work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the work in which case the contractor shall immediately advise the Architect/Consultant. However the provisions of the clause shall not be applicable in the case of any work which becomes essential to carry by rotary or double shifts in order achieve the progress and quality of the part of the works being technically required/ continued with the prior approval of the Architect/consultant at no extra cost to THE ORIENTAL INSURANCE COMPANY LIMITED. All work at night after obtaining approval from competent authorities shall be carried out without unreasonable noise and disturbance.

#### No compensation or restriction of work

If at any time after acceptance of the tender THE ORIENTAL INSURANCE COMPANY LIMITED shall decide to abandon or reduce the scope of work any reason whatsoever and hence not required the whole or any part of the work to be carried out. The Architect/Consultant shall give notice in written to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the work fully but which he did not derive in consequence of the foreclosure of the whole or part of the work.

Provided that the contractor shall be paid the charges on the cartage only of materials actually and bonafide brought to the site of the work by the contractor and rendered surplus as a result of the abandonment, curtailment of the work or any portion thereof and then taken back by the contractor, provided however that the Architect/Consultant shall have in such cases the option of taking over all or any such materials at their purchase price or a local current rate whichever is less.

In case of such stores having been issued from THE ORIENTAL INSURANCE COMPANY LIMITED stores and returned by the contractor to stores, credit shall be given to him at the rates not exceeding those at which were originally issued to the contractor after taking into consideration and deduction for claims on account of any deterioration or damage while in the custody of the contractor and in this respect the decision of Architect/Consultant shall be final.

#### 66. Suspension of work

The contractor shall, on receipt of the order in writing of the Architect/Consultant (whose decision shall be final and binding on the contractor) suspend the progress of works or any part thereof for such time and in such manner as Architect/Consultant may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of following reasons.

On account any default on the part of the contractor, or

For proper execution of the works or part thereof for reasons other than the default of the contractor, or

For safety of the works or part thereof

The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Architect/Consultant

If the suspension is ordered for reasons above.

The contractor shall be entitled to an extension of the time equal to the period of every such suspension. No compensation whatsoever shall be paid on this account.

Action when the whole security deposit is forfeited

In any case in which under any clause or clauses of this contract, the contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit the Architect/Consultant shall have the power to adopt any of the following course as they may deem best suited to the interest of THE ORIENTAL INSURANCE COMPANY LIMITED.

To rescind the contract ( of which rescission notice in writing to the contractor by the Architect/Consultant shall be conclusive evidence) and in which case the security deposit of the contractor shall be forfeited and be absolutely at the disposal of THE ORIENTAL INSURANCE COMPANY LIMITED.

To employ labor paid by THE ORIENTAL INSURANCE COMPANY LIMITED and to supply materials to carry out the work, or any part of the work, debiting the contractor with the cost of the labour and materials (the cost of such labour and materials as worked out by the Architect/Consultant shall be final and conclusive against the contractor) and crediting him with the value of the work done, in all respects in the same manner and at the same manner and at the same rates as if it had been carried out by the contractor under the terms of this contract the certificate of Architect/Consultant as to the value of work done shall be final and conclusive against the contractor.

To measure up the work of the contractor, and to take such part thereof as shall be unexecuted, out of his hands, and to give it to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor, if the whole work had been executed by him (of the amount of which excess the certificates in writing of the Architect/Consultant shall be final and conclusive) shall be borne by original contractor and may be deducted from any money due to him by THE ORIENTAL INSURANCE COMPANY LIMITED under the contract or otherwise, or from his security deposit or the proceeds of sale thereof, or sufficient part thereof.

In the event of any of above courses being adopted by THE ORIENTAL INSURANCE COMPANY LIMITED the contractor shall have no claim to compensation for any loss sustained by reasons of his having purchase or procured any material or entered into any engagements or make any advance on account of, or with a view to the execution of the work or the performance of the contract and in case the contract shall be rescind under the provision aforesaid, the contractor shall not be entitled to recover or to be paid any sum or any work thereto for actually performed under this contract, unless, and until the Architect/Consultant will have certified in writing the performance of such work and the value payable in respect thereof, and he shall only be entitled to be paid the value so certified.

68. Owner's right to terminate the contract

If the contractor being an individual or a firm commit any 'Act of insolvency' or shall be adjusted an insolvent or being an incorporated company shall have an order for compulsory winding up voluntarily or subject to the supervision of Govt. and of the Official Assignee of the liquidator in such acts of insolvency or winding up shall be unable within seven days after notice to him to do so, to show to the reasonable satisfaction of the Architect/Consultant that he is able to carry out and fulfill the contract, and to give security therefore if so required by the Architect/Consultant.

Or if the contractor (whether an individual firm or incorporated company) shall suffer execution to be issued or shall suffer any payment under this contract to be attached by or on behalf of any of the creditor of the contractor.

Or shall assign or sublet this contract without the consent in writing of THE ORIENTAL INSURANCE COMPANY LIMITED through the Architect/Consultant or shall charge or encumber this contract or any payment due to which may become due to the contractor there under.

Has abandoned the contract; or

Has failed to commence the works, or has without any lawful excuse under these conditions suspended the progress of the works for 14 days after receiving from THE ORIENTAL INSURANCE COMPANY LIMITED through the Architect/Consultant written notice to proceed, or  
Has failed to proceed with the works with such diligence and failed to make such due progress as would enable the works to be completed with in the time agreed upon, or has failed to remove the materials from the site or to pull down and replace work within seven days after written notice from THE ORIENTAL INSURANCE COMPANY LIMITED through the Architect/Consultant that the said materials were condemned and rejected by the Architect/Consultant under these conditions; or has neglected or failed persistently to observe and perform all or any of the acts, matters or things by this contract to be observed and performed by the contractor for seven days after written notice shall have



been give to the contractor to observe or perform the same or has to the detriment of good workmanship or in defiance of THE ORIENTAL INSURANCE COMPANY LIMITED's or Architect/Consultant's instruction to the contrary subject any part of the contract. Then and in any of said cases THE ORIENTAL INSURANCE COMPANY LIMITED and or the Architect/Consultant, may not withstanding any previous waiver, after giving seven days notice in writing to the contractor, determine the contract, but without thereby affecting the powers of THE ORIENTAL INSURANCE COMPANY LIMITED or the Architect/Consultant or the obligation and liabilities of the contractor the whole of which shall continue in force as if the contract had not been so determined and as if the works subsequently had been executed by or on behalf of the contractor. And, further THE ORIENTAL INSURANCE COMPANY LIMITED through the Architect/Consultant their agents or employees may enter upon and take possession of the work and all plants, tools, scaffoldings, materials, sheds, machineries lying upon the premises or on the adjoining lands or roads or roads use the same by means of their own employees or workmen in carrying on the completing the work or by engaging any other contractors or persons to complete the work and the contractor shall not in any was interrupt or do any act, matter or thing to prevent or hinder such other contractor or other persons employed for completing and finishing or using the materials and plant for the works.

When the works shall be completed or as soon thereafter a convenient THE ORIENTAL INSURANCE COMPANY LIMITED or the Architect/Consultant shall give a notice in writing to the contractor to remove his surplus materials and plants and should the contractor fails to do so within 14 days after receipt thereof by him THE ORIENTAL INSURANCE COMPANY LIMITED sell the same b public auction after due publication, and shall adjust the amount realized by such auction. The contractor shall have no right to question any of the acts of THE ORIENTAL INSURANCE COMPANY LIMITED incidental to the sale of the materials etc.

#### 69. Certificate of Payment

The contractor shall be entitled under the certificates to be issued the Architect/Consultant to the contractor within 15 working days from the date of certificate to the payment from THE ORIENTAL INSURANCE COMPANY LIMITED from time to time. THE ORIENTAL INSURANCE COMPANY LIMITED shall recover the statutory recoveries other dues including the retention amount from the certificate of the payment.

Provided always that the issue of any certificate by the Architect/Consultant during the progress of works or completion shall not have effect as certificate of satisfaction or relieve the contractor from his liability under clause.

The Architect/Consultant shall have power to withhold the certificate if the work or any part thereof is not carried out to their satisfaction.

The Architect/Consultant may be any certificate make any corrections required in previous certificate. THE ORIENTAL INSURANCE COMPANY LIMITED shall modify the certificate of payment as issued by the Architect/Consultant from time to time while making the payment.

The contractor shall submit interim bills only after taking actual measurements and properly recorded in the M books.

The contractor shall not submit interim bills when the approximate value of work done by him is less than Rs One lac rupees and the minimum interval between two such bills shall be one month.

The final bill may be submitted by contractor within a period of one month from the date of virtual completion and Architect/Consultant shall issue the certificate of payment within a period of two months. THE ORIENTAL INSURANCE COMPANY LIMITED pay the amount within a period of three month from the date of issue of certificate provided there is no dispute in respect of rates and quantities.

The contractor shall submit the interim bills in the prescribed format with all details.

#### 70. Settlement of Disputes & Arbitration

All disputes or differences of any kind whatsoever which shall at any time arises between the parties hereto touching or concerning the works or the execution of maintenance thereof. This contract or the rights touching or concerning or concerning the works or the execution or maintenance thereof the construction remaining operation or effect thereof or to the rights or liabilities of the parties or arising out of or in relation thereto whether during or after determination, foreclosure or breach of the contract within (other than those in respect of which the decision of any person is by the contract expressed to

be final and binding) shall after written notice by either party to the contract to; other of them and to the appointing authority who shall be appointed for this purpose by THE ORIENTAL INSURANCE COMPANY LIMITED 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 appointing authority will send within thirty days of receipt by him the written notice aforesaid to the contractor a panel of three names of persons who shall be presently unconnected with the organization for which the work is executed. The contractor shall on receipt by him of the names as aforesaid select any one of the persons named to be appointed as a sole arbitrator and communicate his/her name to the appointing authority within thirty days of receipt by him of the names. The appointing authority shall thereupon without any delay appoint the said person as the sole arbitrator. If the contractor fails to communicate such selection as provided above within the period specified, the appointing authority shall make the selection and appoint the selected person as the sole arbitrator. If the appointing authority fails to send to the contractor the panel of three names as aforesaid within the period specified, the contractor shall send to appointing authority a panel of three names of three persons who shall be unconnected with either party. The appointing shall on receipt by him of the names as aforesaid select any of the persons named and appoint him as sole arbitrator within 30 days of receipt by the entitled to appoint one of the persons from the panel as the sole arbitrator and communicate his name to the appointing authority.

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

The work under the contract shall however continue during the arbitration proceedings and no payment due to payable to the contractor relating to the disputed items shall be withheld on account of such proceedings.

The arbitrator shall be deemed to have entered on the reference on the date he issues notice to both parties fixing the date of first hearing.

The arbitrator from time with the consent of the parties enlarges the time for making and publishing the award.

The arbitrator shall give a separate award in respect of each dispute or difference referred to him. The arbitrator shall decide each dispute in accordance with terms of the contract and give a reasoned award. The fees, if any, of the arbitrators shall if required to be paid before the award is made and published, be shared equally by both parties.

The award of the arbitrator shall be final and binding on both parties.

Subject to aforesaid the provisions of the arbitration act 1940 or any statutory modification or re-enactment thereof and the rules made there under, and the time in force shall apply to the arbitration proceeding under this clause.

In all cases where the amount of the claim is in dispute is Rs One lac and above the arbitrator shall give reasons for the award.

If is also a term of contract that if the contractor does not make any demand for arbitration in respect of any claim(s) within 90 days of receiving intimation from THE ORIENTAL INSURANCE COMPANY LIMITED that the bill after verification is passed for payment of a lesser amount or otherwise the contractor's right under this agreement to refer to arbitration shall be deemed to have been forfeited and THE ORIENTAL INSURANCE COMPANY LIMITED shall be relieved and discharged of their liability under this agreement in respect of this claim(s). further it is agreed that for the purpose of this clause such notice is deemed to been received by the contractor with two days of posting of the letter by THE ORIENTAL INSURANCE COMPANY LIMITED or delivered by hand immediately after receipt thereof by the contractor whichever is earlier. Further a letter signed by the officials of THE ORIENTAL INSURANCE COMPANY LIMITED the letter was posted to the contractor shall be conclusive.

Water Supply

The contractor shall make his own arrangement for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions:

That the water used by the contractor shall be fit for construction purposes to the satisfaction of the Architect/Consultant.

The contractor shall make alternative arrangement for the supply of water if the arrangement made by the contractor for procurement of water in the opinion of the Architect/Consultant is unsatisfactory.

The contractor shall construct temporary well/ tube well in THE ORIENTAL INSURANCE COMPANY LIMITED land for taking water for construction purposes only after obtaining permission in writing from THE ORIENTAL INSURANCE COMPANY LIMITED. The contractor has to make his own arrangement for drawing and distributing the water at his own cost. He has to make necessary

arrangements. To avoid any accidents or damages caused due to construction and subsequent maintenance of the wells. He has to obtain necessary approvals from local authorities, if required, at his own cost. He shall restore the ground to its original condition after wells are dismantled on completion of work or hand over the well to THE ORIENTAL INSURANCE COMPANY LIMITED without any compensation as directed by the Architect/Consultant.

#### Power Supply

The contractor shall make his own arrangement for power and supply/distribution system for driving plant or machinery for the work and for lighting purpose at his own cost. The cost of running and maintenance of the plants are to be included in his tender prices. He shall pay all fees and charges required for the power supply and include the same in his tendered rates and hold the owner free from all such costs. He has to obtain necessary approval from the appropriate authorities, if required.

#### 71. Treasure trove etc.

Any treasure trove, coin or object antique which may be found on the site shall be the property of THE ORIENTAL INSURANCE COMPANY LIMITED and be handed over to THE ORIENTAL INSURANCE COMPANY LIMITED immediately.

#### 72. Method of measurement

Unless otherwise mentioned in the schedule of quantities or in mode of measurement, the measurement will be on the net quantities or work produced in accordance with up to rate. Rules laid down by the Bureau of Indian Standards. In the event any dispute/ disagreement the decision of the Architect/Consultant shall be final and binding on the contractor.

#### 73. Maintenance of Registers

The contractor shall maintain the following registers per the enclosed proforma at site of work and should produce the same for inspection of THE ORIENTAL INSURANCE COMPANY LIMITED/ Architect/Consultant whenever desired by them. The contractor shall also maintain records/ registers as required by the local authorities/ Govt. form time to time.

Price variation adjustment for all material including labour in partial modification of the provision made elsewhere in this contract regarding the quoted rate being not subject to any variations price adjustments to the value of work payable to the contractor at tendered rates shall be paid towards variation in the prices of materials and labour in the manner specified hereunder. If after the written order to commence the work and during the operating period of this contract including any authorized extensions of the original stipulated period of completion.

Immediately on award of contract, the contractor shall register with the appropriate authority obtain Sales Tax / VAT Registration No. etc. and in no case later than the submission of his first running bill.

The successful tenderers may also note that THE ORIENTAL INSURANCE COMPANY LIMITED reserves the right to deduct Sales tax or any other legal TAX on works contract applicable and to be levied under relevant Act, from the bills and amount due to them from THE ORIENTAL INSURANCE COMPANY LIMITED and remit the same directly to the Government in case they are not submitting the proof/ evidence of having paid the Sales Tax on work executed under this contract.

#### 74. Force Majeure

Neither contractor nor THE ORIENTAL INSURANCE COMPANY LIMITED shall be considered in default in performance of their obligation if such performance is prevented or delayed by events such as but not to war, hostilities revolution, riots, civil commotion, strikes, lockout, conflagrations, epidemics, accidents, fire, storms, floods, droughts, earthquakes or ordinances or any act of god or for any other cause beyond the reasonable control of the party affected or prevented or delayed. However a notice is required to be given within 30 days from the happening of the event with complete details, to other party to the contract, if it is not possible to serve a notice, within the shortest possible period without delay.

As soon as the cause of force of majeure has been removed the party whose ability to perform its obligations has been affected, shall notify the other of such cessation and the actual delay incurred in such affected activity adducing necessary evidence in support thereof.

From the date of occurrence of a case of force majeure obligations of the party affected shall be suspended during the continuance of any inability so caused. With the cause itself and inability

resulting there from having been removed, the agreed time of completing of the respective obligations under this agreement shall stand extended by a period equal to the period of delay occasioned by such events.

Should one or both parties be prevented from fulfilling the contractual obligations by a state of force majeure lasting to a period of 6 months or more the two parties shall each other to decide regarding the future execution of this agreement.

#### 75. Local Laws, Acts, Regulation

The contractor shall strictly adhere to all prevailing labour laws inclusive of contract labour (regulation and abolition act of 1970) and other safety regulations. The contractor shall comply with the provision of all labour legislation including the latest requirements of all the acts, laws, any other regulations that are applicable to the execution of the project.

- i. Minimum wages Act 1948 (Amended)
- ii. Payment of wages act 1963 (Amended)
- iii. Workmen's compensation Act 1923 (Amended)
- iv. Contract labour regulation and abolition Act 1970 and central rules 1971 (Amended)
- v. Apprentice Act 1961 (Amended)
- vi. Industrial Employment (standing order ) Act 1946 (Amended)
- vii. Personal injuries (Compensation insurance) Act 1963 and other modifications.
- viii. Employees provident fund and miscellaneous provisions Act 1952 and amendment thereof
- ix. Shop and establishment Act
- x. Any other Act or enactment relating thereto and rules framed there under from time to time.

#### Accidents

The contractor shall immediately on occurrence of any accident at or about the site on in connection with the execution of the work report such accident to the Architect/ Consultant. The contractor shall also such report immediately to the competent authority whenever such report is required to be lodged by the law and take appropriate actions thereof.

## SECTION II : DEFINITIONS OF TERMS.

### -1.0 -DEFINITIONS:

Contract means the documents forming the tender and the acceptance thereof (or award of work) and the formal agreement executed between THE ORIENTAL INSURANCE COMPANY LIMITED (Client) and the contractor, together with the documents referred therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Architect/ THE ORIENTAL INSURANCE COMPANY LIMITED and all these documents taken together shall be deemed to form one contract and shall be complementary to one another.

-1.1 -"Employer" or "THE ORIENTAL INSURANCE COMPANY LIMITED" or "Purchaser" or "owner" shall mean **THE ORIENTAL INSURANCE COMPANY LIMITED**, having their **Office At Regional office, Fourth Floor, IDA Building, 7, Race Course Road, Indore 452003** on whose behalf the enquiry is issued by the Consultant and shall include his/their legal representative(s), successor(s), assign(s) as well as his/their authorized officer(s).

-1.2 - "Tenderer" shall mean the firm/party/company who quotes against an enquiry.

-1.3 -'Contractor'/Fabricator' shall mean the successful tenderer whose tender has been accepted by the Employer and on whom the order is placed by Employer and shall include his heir's, assign(s), legal representative(s).

-1.4 -'Consultant' or 'Architect shall mean **D.VYAS & ASSOCIATES**, and their duly authorized representative (s).

-1.5 -'Engineer' or 'THE ORIENTAL INSURANCE COMPANY LIMITED Engineer' shall mean the Project Officer/Project Engineer or his authorized representative, who is appointed/nominated by the employer / consultant to supervise and be in charge of the work at site to issue necessary instructions in writing.

-1.6 -'Contract' shall mean the order, associated specification articles of agreement, conditions including other documents agreed upon between employer and contractor and duly signed.

-1.7 -'Contract Price' shall mean the prices referred to in the agreement, if there is a formal agreement or the price agreed to be the value of the order if there is no formal agreement.

-1.8 -'Specification' shall mean, collectively, all the terms and stipulations contained in those portions of the contract known as General Conditions, and any modifications as may be made or to be made pertaining to the method and manner of performing the work or to the quantities and qualities of the materials to be furnished under this contract.

-1.9 -"Drawings" shall mean, collectively, the drawings referred to in the Contract, and also altogether new and/or such supplementary drawings as the Consultant may issue from time to time as also revised drawings.

-1.10 -Wherever in this Contract the words Directed, Ordered, Required, Designated, Considered necessary, prescribed or words of like imports are used, it shall be understood that the direction, order, requirement, designation, permission or prescription etc. of the Consultant/Employer is intended. Similarly the words Approval, Approved, Acceptable, Satisfactory or words of like import, shall mean approved by or acceptable or satisfactory to the Consultant/Engineer unless another meaning is plainly intended.

-1.11 -"Month" shall mean calendar month.

"Week" means seven consecutive days.

"Day" means a calendar day beginning and ending at 00 hrs and 24 hrs respectively.

-1.12 -"Sub-Contractor" shall mean the person named in the contract undertaking a part of the work or any person to whom a part of the Contract has been sublet with the consent in writing of Engineer.

-1.13 -"Site" shall mean the actual place of the proposed project as detailed in the specification on any other place where work is to be executed under the contract.

-1.14 -"Plant", "Equipment", "Work" or "Works" shall mean respectively the goods to be supplied and services to be provided by the Contractor under the contract.

-1.15 -"Notice in Writing" or "Written Notice" shall mean a notice in writing sent (unless delivered personally or otherwise proved to have been received) by registered post to the last known private or business address of the addressee and shall be deemed to have been received.

-1.16 -"Letter of Intent" shall mean employer's letter conveying his acceptance of the tender.

- -1.17 -"Date of Commencement" or "Effective date of contract" shall be counted from the next day from the date of placing the Letter of Intent or from date of handing over the site whichever is later.
- -1.18 -"Act of Insolvency" shall mean any act of insolvency as defined by Presidency Towns Insolvency Act or Provincial Insolvency Act or any amending statute.
- -1.19 -"Engineer's Instructions" shall mean any drawings, and/or instructions oral and/or in writing details, directions and explanations, issued by Engineer/consultant from time to time.
- -1.20 -"Final Completion" shall mean when the work included in the contract has been completed in all respects as per the specifications, drawings, directions and the site has been cleared including the removal of labor camps, and all other facilities put up by the contractor for the execution of contract.
- -1.21 -The "Appointing Authority" for the purpose of arbitration shall be the Chairman and Managing Director or any other person so designated by the owner.
- -1.22 -"Construction Equipment" means all machinery, plant, apparatus, parts, appliances, instruments, articles, and things required for erection, construction and completion of the work required for the project or any portion thereof and the operation thereof, including maintenance items, spare parts and initial supplies required for performance of the work.
- -1.23 -"Supervision" will mean the successive control and directions given by Employer or their authorized representative in relation to contract work.
- -1.24 -"Running Account Bill" { R A } shall mean a Bill for the payment of 'on account' to the Contractor.
- -1.25 -"Schedule of Rates" shall mean the Schedule of Rates annexed to the Acceptance of Tender and shall include any remuneration payable to the Contractor for any work, determined in accordance with the conditions herein.
- -1.26 -"Final Completion Certificate" shall mean the final certificate issued by the Engineer.
- -1.27 -"Temporary Works" means temporary construction of every kind in and around site required during execution completion and maintenance of the works by the Contractor at their own cost and risks.

### SECTION III : APPLICABLE CODES & SPECIFICATIONS

The following specifications, standards and codes are made a part of this contract document. All standards, specifications, codes of practice referred to herein shall be the latest editions/revisions including all applicable official amendments, revisions & all relevant parts. In case of discrepancy between the enclosed specification and those referred to herein, the former shall govern:

#### IS: CODES-DESCRIPTION

##### Excavation and Earthwork:

IS-3764-Safety code for excavation work.

IS:783-Code of Practice for laying of concrete pipes.

IS:3385-Code of practice for measurement of civil engineering works.

IS:2720-Determination of Water Content / Dry Density

##### Concrete and Allied Works:

12269 -Ordinary Portland cement (M43 & M 53 grade).

IS-8042-White Portland cement

IS-1489-Portland-Pozzolana cement.

IS-383 -Coarse and fine aggregates from natural sources for concrete.

IS-2386-Methods of test for aggregates for concrete.

IS-2430 -Methods of sampling of aggregates for concrete.

IS-4925 -Concrete batching and mixing plant.

IS-10262 -Recommended guidelines for concrete mix design.

IS-456 -Code of practice for plain and reinforced concrete.

IS-1199 -Method of sampling and analysis of concrete.

IS-516 -Methods of test for strength of concrete.

IS-3370 -Code of practice for concrete structures for the storage of liquids.

IS-2571 -Code of practice for laying in-situ cement concrete flooring.

IS-2645 -Integral cement waterproofing compounds.

IS-2204 -Code of practice for construction of reinforced concrete shell roof.

IS-2210 -Criteria for design of reinforced concrete structures and folded plates.

IS-4990 -Plywood for concrete shuttering work.

IS-1786 -High strength deformed steel bars and wires for concrete reinforcement.

IS-1566 -Hard drawn steel wire fabric for concrete reinforcement.

IS-432 -Mild steel and medium tensile steel bars and hard drawn steel wire for concrete reinforcement.

IS-1521 -Method for tensile testing of steel wire.

IS-1608 -Method of tensile testing of steel products.

IS-2502 -Code of practice for bending and fixing of bars for concrete reinforcement.

IS-2571 -Code of practice for welding of mild steel plain and deformed bars for reinforced concrete construction.

IS-8989 -Safety code for erection of concrete framed structures.

IS-3696 -Safety code for scaffolds and ladders.

IS:3558-Use of Immersion Vibrators for Consolidating Concrete.

IS:2506-Screed Board Concrete Vibrators.  
IS:1489-Portland Pozzolana Cement (PPC)  
IS:3550-Method of Test for Routine Control for Water used in Industry.  
IS:8112-Ordinary, Portland Cement (OPC) Grade 43 Cement.  
IS:5816-Method of Test for Splitting Tensile Strength of Concrete Cylinders.  
IS:5525-Recommendation for detailing of reinforcement in concrete works.  
IS:4634-Method of Testing Performance of Batch-type Concrete Mixers.  
IS-280 -Mild steel wire for general engineering purposes.

▶ Masonry Work :

IS-1077 -Common burnt clay building bricks.  
IS-2212 -Code of practice for brick work.  
IS :2645 -Integral cement water proofing compounds.  
IS:2116 -Sand for Masonry Mortars  
IS :2394 -Code of practice for application of lime plaster finish.

▶ Plastering and Pointing :

IS-1542 -Sand for plaster.  
IS-1661 -Code of practice for application for cement and cement lime plaster finishes

▶ Doors, Windows and Ventilators :

IS-4021 -Timber door, window and ventilator frames.  
IS-1003 -Timber paneled and glazed shutters.  
IS-2191 -Wooden flush door shutters (cellular and hollow core type).  
IS-2202 -Wooden flush door shutters (solid core type).  
IS-2338 -Code of practice for finishing of wood and wood based materials.  
IS-5248 -Teak log for production of sliced veneers.  
IS-1038 -Steel doors, windows and ventilators.  
IS-1361 -Steel windows for industrial buildings.  
IS-4351 -Steel door frames.  
IS-1948 -Aluminum doors, windows and ventilators.  
IS-1949 -Aluminum windows for industrial buildings.  
IS-1081 -Code of practice for fixing and glazing of metal (steel and aluminum) doors, windows and ventilators.  
IS-2835 -Flat transparent sheet glass.  
IS-6248 -Metal rolling shutters and rolling grills Painting.  
IS:3548 -Glazing in building.  
IS:1477 -Painting of ferrous metals in buildings.  
IS:3548 -Glazing in building.  
IS:4020 -Methods of tests for wooden flush doors : Type tests.  
IS:5807 -Method of test for clear finishes for wooden furniture.

▶ Painting :

IS-2395 -Code of practice for painting, concrete, masonry and plaster surfaces.



IS-1477 -Code of practice for painting of ferrous metals in buildings.

IS-9954 -Pictorial surface preparation standards for painting of steel surfaces.

IS-5410 -Cement paint, color as required.

IS-427 -Distemper, dry, color as required.

IS-218 -Creosote oil for use as wood preservatives.

IS:2933 -Specification for enamel, synthetic, exterior, type - II.

IS:348 -Specification for French Polish.

IS:428 -Specification for distemper, oil emulsion color.

IS:2338 -Finishing of wood and wood based materials.

IS:2339 -Aluminum Paints for general purposes, in dual containers.

IS:2932 -Specification for enamel, synthetic, exterior, type - I.

▶ Sanitary, Water supply and Drainage Works :

IS-2556 -Vitreous Sanitary appliances (Vitreous china).

IS-5329 -Code of practice for sanitary pipe works above ground for buildings Cast iron brackets and supports for wash basins and sinks.

IS-5961 -C.I. gratings for drainage purposes.

IS-1230 -C.I. rain water pipes and fittings.

IS-554 -Dimensions for pipe threads where pressure tight joints are made on threads.

IS-778 -Copper alloy gate, globe and check valves for waterworks purposes.

IS-781 -Cast copper alloy screw-down bid taps and stop valves for water services.

IS-774 -Flushing cisterns for water closets and urinals.

IS-2064 -Code of practice for selection, installation and maintenance of sanitary appliances.

IS-9872 -Pre-cast concrete septic tanks.

IS-2470 -Code of practice for installation of septic tanks.

IS-458 -Concrete pipes.

IS-783 -Code of practice for laying of concrete pipes.

IS:407 -Brass tubes for general purposes.

IS:4984 -High density polyethylene pipes for potable water supplies.

IS:3589 -Electrically welded steel pipe for water, gas and (220 mm to 2000 mm nominal diameter).

IS:2501 -Copper tubes for general engineering purposes.

IS:2065 -Water supply in buildings.

IS:1537 -Vertically cast iron pressure pipe for water, gas and sewage.

IS:1536 -Centrifugally cast (Spun) iron pressure pipes for water, gas and sewage.

IS:1239 -Specification for mild steel tubes and mild steel tubular and other wrought steel pipe fittings (10 mm to 15 mm nominal diameter) .

IS:1172 -Basic requirements for water supply, drainage and sanitation.

IS:1172 -Basic requirements for water supply, drainage and sanitation.

IS:1239 -Mild steel tubes and Mild steel tubular and other wrought steel pipe fittings.

IS:1536 -Centrifugally cast (Spun) iron pressure pipes for water, gas and sewage.

IS:1726 -Cast iron manhole covers and frames intended for use in drainage works.

IS:1742 -Building drainage.

IS:2527 -Code of practice for fixing rain water gutters and down pipes for roof drainage.

IS:2548 -Plastic water-closet seats and covers.

IS:3589 -Electrically welded steel pipe for water, gas and sewage (200 mm to 2000 mm nominal diameter).

IS:5219 -'P' & 'S' traps. (Part I).

▶ Structural Steel Works :

IS-2062 -Structural steel Grade A

IS:1161 -Carbon steel for pipes, grade YST-25

IS-800 -Code of practice for use of structural steel in general building construction.

IS-11384 -Code of practice for composite construction in structural steel and concrete.

IS-806 -Code of practice for use of steel tubes in general building construction.

IS-7215 -Tolerances for fabrication of steel structures.

IS-1852 -Rolling and cutting tolerances for hot rolled steel products.

IS-7318 -Approved test for welders when welding procedure approval is not required

IS :1364-Precision and semi-precision hexagonal bolts, screws, nuts and lock nuts (diameter 6 to 39 mm).

IS :919 -ISO systems of limits and fits.

IS :817-Manual metal arc welding.

IS :801 -Use of cold formed light gauge steel structural members in general building construction.

IS :8500 -Structural Steel (Medium &High Strength qualities)

IS :5624 -Foundation Bolts.

IS :3757 -High Strength Structural Bolts.

IS :3613 -Acceptance tests for wire flux combinations for submerged-arc welding.

IS-7205 -Safety code for erection of structural steel work.

▶ Roofing and Ceiling :

IS-1742 -Code of practice for building drainage.

IS-2527 -Code of practice for fixing rain-water gutters and down pipes for roof drainage.

▶ General :

IS-1200 -Method of measurement of buildings and civil engineering works.

IS-2974 -Code of practice for design and construction of machine foundations.

IS-4326 -Code of practice for earthquake resistant design and construction of buildings.

IS-875 -Code of practice for structural safety of buildings - Loading standards. IS :513 -Cold Rolled low carbon steel sheets & strips

IS-1322 -Bitumen felts for waterproofing and damp proofing.

## **SECTION IV : GENERAL CONDITIONS OF CONTRACT.**

1.0 The Contractor will make his own arrangements to lift the material to the site at first floor & necessary floor.

### **2.0 -INTERIM AND FINAL PAYMENT**

#### **2.1 -Mode of Payment**

2.1.1 -The Contractor shall submit monthly running bills in quadruplicate along with necessary measurement sheets. The Contractor shall not be entitled for a payment of the running bill amounting less than Rs.10,00,000/- (Rupees Ten Lac only) except for final bill.

2.1.2 -Normally the payment of running bills will be made within 15 (fifteen) days after the date of approval of the payment at site by the Project Manager/Site Engineer. The formality on contractor's part should be complete in all respect for timely payment.

2.2 -Payment of Contractor's Bill Payment will be made after making necessary deductions as stipulated elsewhere in the contract documents of materials, security deposit or any money due to the Owner etc. Payment due to the Contractor shall be made by the Owner by Crossed Account Payee Cheque forwarding the same to registered office or the notified office of the Contractor. In no case will Owner be responsible if the cheque is mislaid or misappropriated by unauthorized person/persons, in all cases, the Contractor shall present his bill duly pre-receipted on proper revenue stamp. All payments shall be made in Indian Currency.

2.3 -All interim payments shall be regarded as payments by way of advance against final payments only and not as payments for work actually done and completed.

2.4 -The Consultant/Engineer may by any certificate make any correction or modification in any previous certificate which has been issued by him and payments shall be regulated and adjusted accordingly.

2.5 -In case work is nearly suspended or in case only unimportant progress has been made or in case it is apparent that the contractor is about to forfeit his contract or that the money yet payable to him will not complete his contract, the employer may at his discretion withhold payments due to the Contractor.

2.6 -The final bill shall be submitted by the Contractor within 4 weeks of the date of 'Final Completion' of the work.

2.7 -For final payment where in the opinion of the Engineer, the work covered by this contract has been completed, the Contractor shall prepare a final abstract showing the total amount of work done by the Contractor and its value under and according to the terms of this Contract. From the total value thus arrived at, all previous payments, dues, if any from the contractor under any terms of this contract shall be deducted and remainder shall be paid by the employer to the Contractor within 6 weeks after the date of Consultant's certificate for final payment.

### **3.0 -PROVISIONAL ACCEPTANCE OF PORTIONS OF THE WORK SHALL NOT CONSTITUTE A WAIVER.**

3.1 -Provisional acceptance of sections of the work for the purpose of equipment erection, piping, electrical work and similar usages by the employer and interim payment for such work or parts of work shall not constitute a waiver of any portion of this contract and shall not be construed so as to prevent

the engineer from requiring replacement of defective work that may become apparent after the said provisional acceptance.

#### 4.0 -DELAY AND EXTENSION OF TIME.

4.1 -The time allowed for carrying out the work shall be strictly followed and deemed to be the essence of contract on the part of the contractor.

4.2 -Contractor agrees that the work shall be commenced and carried on in the order of precedence as may be directed by the Consultant. The progress of work shall be checked at regular intervals and percentage progress achieved shall be commensurate with the time elapsed. Contractor shall submit to engineer progress reports every fortnight indicating time progress of work.

4.3 -If the contractor desires an extension of time for completion of work on the grounds of his having been unavoidably hindered in its execution he shall apply in writing to the Engineer/Employer within 7 days of the date of such hindrance. The Employer shall authorize such extension of time as may in his opinion be necessary and proper.

4.4 -If any untoward or extraordinary circumstances should arise beyond the control of the Contractor, which in the opinion of the Consultant should entitle the Contractor to a reasonable extension of time, such extension may be granted, without releasing the Contractor from any of his obligations.

#### 5.0 -LIQUIDATED DAMAGES FOR DELAY

5.1 -If the Contractor fails to execute, complete and deliver the work within the specified time, he shall pay to the Employer as and by way of penalty at the rate of 1% ( one percent) of the total value of the contract for each week's delay OR part their of agreed beyond the date of completion specified in the contract, provided that the amount to be paid under this clause shall not exceed five percent of the total value of the contract.

5.2 -Employer may without prejudice to any other method of recovery deduct the amount of such damages from security deposit or any money due or may become due to the contractor.

#### 6.0 -STATUTORY OBLIGATIONS

6.1 -Contractor shall conform to the provisions of any Act of Legislature, relating to the works and of the Regulations and By-laws of any Authority.

6.2 -Contractor shall arrange to give all notices required by the said Acts, Regulations, By-laws to any authority or any public officer, pay all fees that may be payable in respect of the works and lodge the receipt with the Engineer.

#### 7.0 -INFRINGEMENT OF PATENTS

7.1 -Contractor shall assume all liability and fully indemnify and save harmless the Employer from and against all claims, suits, proceedings, damages, losses, expenses, royalties arising from any infringements real or claimed, of any patent embodied or used in the performance of this contract provided that the contractor shall not be liable to indemnify the employer, if the infringement of patent is the direct result of an order passed by the Employer.

#### 8.0 -ASSIGNMENT

8.1 -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 sublet the contract. No sub-contract shall be made by the contractor, without the approval of the Engineer/Consultant.

## 9.0 -CHANGES IN CONSTITUTION

9.1 -Where the Contractor is a partnership firm, the previous approval in writing of the Employer shall be obtained before any change is made in the constitution of the firm.

9.2 -When the contractor is an individual or a Hindu undivided family concern such approval shall likewise be obtained before the contractor enters into any partnership agreement, where under the partnership firm would have the right to carry out the work hereby undertaken by the contractor.

## 10.0 -SAFETY, DAMAGES TO PERSONS AND PROPERTY INSURANCE IN RESPECT OF :

10.1 -Contractor shall pay particular attention to ensure safety of his staff and workmen and others in the vicinity and shall be responsible for any loss of life, injury to persons due to negligence or any other cause whatever in any way connected with the carrying out of this contract excepting natural causes.

10.2 -Contractor shall take all precautions necessary and shall be responsible for the safety of the work. Contractor shall be responsible for all injury to persons, animals, trees, or things and for all damages to structural, plant, fittings, material and/or decorative part of the property, which may arise from operations or neglect of himself or any of his approved sub-contractor's employees, whether such injury or damage arise from carelessness, accident, defective carrying out of this contract or any other cause whatever in any way connected with the carrying out of this contract.

10.3 -Contractor shall indemnify the employer against all claims which may be made against the Employer by any member of the public, or other third party in respect of anything which may arise in respect of the works or in consequence thereof and shall at his own expenses arrange to effect and maintain until the final completion of the Contract, with an approved Policy of Insurance in the joint names of the Employer and the Contractor and deposit such Policy/Polices with the Engineer. Contractor shall also indemnify the Employer against all claims which may be made upon the Employer whether under the Workmen's Compensation Act or any other statute in force or any other common law during the currency of this contract.

10.4 -Employer, with the concurrence of the Consultant shall be at liberty and is hereby empowered to deduct the amount arising or accruing in respect of any claim, damage, compensation, costs, charges and expenses from any sum due or to become due to the Contractor.

## 11 -Delay on the part of Owner/Engineer/Consultant.

11.1 -If any delay in execution/completion of the contract occurs due to the reasons outside the contractor's scope like delay due to non-availability of drawings, stoppage of work by the engineer etc. legitimate extension of the time limit will be allowed but no compensation of any kind whatsoever (like payments for over stay etc.) will be given by the Owner.

## 12.0 -SUSPENSION

12.1 -If the Contractor, except on account of any legal restraint upon the Employer preventing the continuance of the work, shall suspend or neglect the works or fail to proceed with due diligence in the performance on his part of the contract the Employer and/or Consultant shall have the power to give notice in writing to the Contractor requiring that the work be proceeded within a reasonable manner and with reasonable dispatch. After such notice shall have been given the Contractor shall not be at liberty to remove from the site of the works any plant or materials belonging to him which shall have

been placed thereon for the purpose of the works and the Employer shall have lien upon all such plant and materials.

13.0 -TERMINATION OF CONTRACT BY EMPLOYER.

13.1 -If the Contractor commits a breach of any terms of this contract or any Act of Insolvency or shall be adjudged as Insolvent or shall make an assignment or composition for the benefit of the greater part in number or amount of his creditors or (being an Incorporated Company) shall have an order made against him or pass an effective resolution for winding up either compulsorily or subject to the supervision of the Court or voluntarily or if the official assignee of the contractor shall repudiate the contract/or if the official assignee or liquidator in such acts of Insolvency or winding up shall be unable, within seven days after notice to him requiring him to do so, to show to the reasonable satisfaction of the Employer/Consultant, that he is able to carry out and fulfill the contract and if required by the Employer to give security thereof, if the Engineer shall certify, writing, to the Employer, that in his opinion the Contractor,

- has abandoned the Contract, or
- has failed to commence the works, or has without any lawful excuse under these conditions suspended the progress of the works for 14 days after receiving from the Engineer written notice to proceed; or
- has failed to remove materials from the site or to pull down and replace the work within seven days after receiving from Engineer written notice that the said materials or work were condemned and rejected by the Engineer under these conditions; or
- has neglected or failed persistently to observe and perform all or any of the acts, matters or things by this Contract to be observed and performed by the Contractor for seven days after written notice shall have been given to the contractor requiring the Contractor to observe or perform the same; or
- has to the detriment of good workmanship or in defiance of the Engineer's instructions to the contrary sub-let any part of the Contract.

-Then in any of the said cases the Employer with the written consent of the Consultant may notwithstanding any previous waiver, after giving seven days notice in writing to the Contractor, determine the Contract, but without hereby affecting the powers of the Consultant or 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. In such case the 'Security Deposit' of the contractor shall stand forfeited. And further the Employer, under advice of the Consultant, by his Agents or servants may enter upon and take possession of the works and all plant, tools, scaffoldings, sheds, machinery, power operated tools and steel, cement and other materials lying upon the premises or the adjoining lands or roads, and use the same as his own property or may employ the same by means of his own servants and workman in carrying on and completing the works or by employing any other contractor or other person or persons to complete the works and the Contractor shall not in any way interrupt or do any act, matter or thing to prevent or hinder such other contractor or other persons employed for completing and finishing or using the materials and plant for the works. When the works shall be completed or as soon thereafter as convenient the Engineer shall give a notice in writing to the Contractor to remove his surplus materials

and plant, and should the Contractor fail to do so within a period of 14 days after receipt thereof by him the Employer shall sell the same by public auction and shall give credit to the Contractor for the amount realized. The Engineer shall thereafter ascertain and certify in writing under his hand what (if anything) shall be due or payable to or by the Employer for the value of the plant and materials so taken possession of by the Employer and the expense or loss which the Employer shall have been put to in procuring the works, to be so completed, and the amount if any, owing to the Contractor and the amount which shall be so certified shall thereupon be paid by the Employer to the Contractor or by the Contractor to the Employer, as the case may be, and the Certificate of the Engineer shall be final and conclusive between the parties.

13.2 -When the contract is so terminated the Contractor shall in no case whatsoever, have any claim to compensation, for any loss sustained by him.

14 -If Contractor is prevented or delayed from performing any of its obligations under this Agreement by Force Majeure, then Contractor shall notify Owner the circumstances constituting the Force Majeure and the obligations performance of which is thereby delayed or prevented, within seven days of the occurrence of the circumstances.

14. -Should the Parties be prevented from fulfillment of their contractual obligation by reasons as per Article 14.1 lasting for a period of fifteen days, the Parties shall consult each other, in the presence of the consultant to decide the course of action to be followed.

## **SECTION V : SPECIAL CONDITIONS OF CONTRACT.**

### **-GENERAL**

1.1-These special conditions of Contract supplement the Instructions to Tenderers and General Conditions of Contract. Where provisions of these Special Conditions are at variance with General Conditions, these special conditions shall prevail.

### **2.0 -CONSTRUCTION PROGRAM**

2.1 -Contractor shall strictly adhere to the Construction Schedule furnished by the Employer/Consultant. Prior to the commencement of work, the Contractor shall discuss with the Consultant the Construction sequence and program to achieve completion of work as scheduled.

To contact Consultants office: The Consultants office contact hours are strictly restricted to 5 pm to 6:30 pm only. All telephonic / mobile / personal contact etc. should be done during these time hours only. All required drawings etc. / clarity / further details in drawings / discrepancies in site & drawing conditions should be brought to the notice during the contact hours only. All day time inquiries will not be entertained. The written confirmations of decisions are mandatory prior to execution. It will be entirely contractor's duty to collect the drawings from the consultant's office.

### **3.0 -SITE ESTABLISHMENT**

3.1 -Contractor shall provide all huts, stores, tarpaulins and other covers for accommodation of his staff, workmen and materials. All materials likely to deteriorate in the open shall be stored under suitable cover.

3.2 -Contractor will not be provided with any residential accommodation for his staff and workmen. The Contractor is required to make his own arrangement for the same, inside the Employer's land.

3.3 -The Security of the Contractor's equipment and materials is his own responsibility. Contractor shall record all materials brought to site, with Employer.

3.4 -Contractor shall erect one temporary godown before starting the work, having a minimum capacity of one week's cement requirement.

3.5 -Contractor to provide temporary free site office to clients/Consultants representative. Approximate size shall be taken as 10 to 15 sq. mt.

### **4.0 -SERVICE AVAILABLE FROM EMPLOYER**

4.1 -Water for construction purpose will not be supplied. Further supply of water at various locations will be the responsibility of the Contractor, however if water is freely available at the site by the builder it will be allowed to use.

4.2 deleted

4.3 -Recommendations to authorities where required will be made by the Employer but the responsibility for the supply of the material shall be that of the contractor. The surplus material thus obtained, by the recommendations of the Employer, if in the opinion of the Consultant/Engineer are likely to be useful to the Employer, shall be returned to the employer in good conditions at the original cost paid for if so desired by the Employer.

### **5.0 -DRAWINGS AND SPECIFICATIONS**



5.1 -The drawings and specifications are to be considered complimentary to each other. Should any discrepancy appear or should any misunderstanding arise as to the meaning and interpretation of the specification or drawings or quality of materials or workmanship, the same shall be referred to the Engineer whose decision shall be final. Interpretation involving financial liabilities will be subject to prior approval of the Employer/Consultant.

5.2 -The list of bid drawings is given in this tender document. These drawings are meant for Tenderer's guidance only. Other supplement drawings will be furnished to the Contractor during the progress of the work to supplement the bid drawings.

#### 6.0 -SECURITY RULES

6.1 -Contractor shall strictly follow and adhere to Security Rules prescribed by the Employer.

#### 7.0 -USE OF EXCAVATION MATERIAL

7.1 -Contractor shall not sell, consume or otherwise dispose of from site any excavated material. All such materials shall be disposed of in the manner directed by the Engineer/Employer.

7.2 -All objects of value or antiquity found on site shall remain the property of the Employer and such findings shall immediately be reported to the Employer.

#### 8.0-LABOUR RELATIONS

8.1 -Contractor is to keep advised the Employer of any labor disputes arising on this project.

#### 9.0 -USE OF WORKS PENDING COMPLETION

9.1 -Employer shall be at liberty at any time to put into beneficial use the whole or any part of the work, he may desire to use, pending completion and taking over the same. If the Engineer certifies that items to be completed are important notwithstanding anything contained in this Contract, taking over certificates shall not be issued. Such possession or use shall not be deemed as acceptance of any contract.

#### 10.0 -INSPECTION AND TEST ON COMPLETION

10.1 -Contractor shall furnish without additional charge promptly all facility, labor and material necessary for safe and convenient inspection of material/work during the progress of work. All inspection by Engineer shall be performed in such a manner as not to unnecessarily delay the work.

10.2 -On completion of work and not later than expiry of the maintenance period thereafter, Engineer shall make such examination and tests of the work as may seem to him possible, necessary or desirable. Contractor shall furnish cost of any material, labor which may be required therefore and shall facilitate in every respect all operations required by Engineer in making such examination and tests.

#### 11.0 -PLAN OF OPERATIONS

-Before commencing the works the Contractor shall apply to the Engineer for his approval.

- General information of all constructional, pumping, washing of sand and aggregate, excavating, piling, haulage, erection and other plant and equipment.

- Order in which the Contractor proposes to execute the temporary and permanent works to be indicated by diagrams and descriptions. This will be subject to adjustment and approval by the Engineer.

- Any other item of specific relevance to the Contract if requested by the Engineer.

The Contractor shall depute a technically qualified supervisor. The contractors' labor should not directly talk to the owner / Architect / Engineer at the site or at the office. They can only interact in presence of contractor and / or supervisor, if needed. The Contractor shall submit a weekly site status report compulsory on every Monday between the dates of start till the certified date of completion. The report shall be submitted to the owner personally. One copy should be sent to the consultant engineer / architect' office. The report should reach at both offices on Monday itself positively. Failing in submission of report will be taken seriously and will be treated as violation of contract terms. A penalty equivalent to the delay in work will be imposed. Further delay in report

submission will attract termination of contract and all the losses will be recovered from the contractor. The contractor shall submit as built drawings along with the completion certificate. The as built drawings shall reflect the General electrical layout, reflected ceiling /UPS/ Epbox / LAN wiring layout.

Remaining special conditions:

1. Dimension and levels

All dimensions and levels shown on the drawings shall be verified by the contractor on the site and he will be held responsible for the accuracy and maintenance on the site and he will be held responsible for the accuracy and maintenance of all the dimensions and the levels. Figured dimensions are in all cases to be accepted and no dimension shall be scaled. Large-scale details shall take precedence over small-scale drawings. In case of discrepancy the contractor shall ask for clarification from the Architect/ Consultant before proceeding with the work.

2. Notice of Operation

The contractor shall not carry out any important operation without the consent writing from the Architect/ Consultant.

3. Construction Records

The contractor shall keep and provide to the Architect/ Consultant full and accurate records of the dimensions and positions of all new work and any other information necessary to prepare complete drawings recording details of the work as constructed.

4. Safety of adjacent structures and trees

The contractor shall provide and erect to the approval of the Architect/ Consultant such supports as may as required to project effectively all structures and protective guards to trees which may be endangered by the execution of the works or otherwise take such permanent measures as may be required by the Architect to protect the trees and structure.

5. Temporary works

Before any temporary works are commenced the contractor shall submit at least 7days in advance to the Architect/ Consultant for approval complete drawings of all temporary works he may require for the execution of the works. The contractor shall carry out the modifications relating to strength, if required by the Architect/ Consultant may require in accordance with the conditions of contract at his own cost. The contractor shall be solely responsible for the quality of the permanent works resulting from the arrangement eventually adopted for their execution.

6. Temporary Roads

The contractor shall provide access roads to the site from nearest main road at no extra cost and as directed by the Architect/ Consultant. The contractor shall also responsible for proper maintenance of this access road and would take all care to see that existing services, if any, are maintained in working order at his own cost. The laying and maintaining the temporary roads within the area shall be the contractor's responsibility and the contractor shall take such measures that are necessary and as directed by the Architect/ Consultant.

7. Water, Power & Other Facilities

The rate quoted by the contractor shall include all expenses that are required for proving all the water required for the work and the contractor shall make his own arrangements for the supply of good quality water suitable for his contraction and good quality drinking water for their workers. If necessary the contractor has to sink tube well/ open well and bring water by means of tankers at his own cost for the purpose. THE ORIENTAL INSURANCE COMPANY LIMITED will not be liable to pay any charges in connection with the above.

8. The rate quoted in the tender shall include the expenses for obtaining and maintaining power connections and shall pay for the consumption charges.

The contractors for other trades directly appointed by THE ORIENTAL INSURANCE COMPANY LIMITED shall be entitled to take power and water connections from the temporary water and power supply obtained by the contractor. However the concerned contractor shall make their own arrangements to draw the supply and pay directly the actual consumption charges at mutually agreed rates between them. All municipal charges for drainage and water connection for construction purpose shall be borne by the contractor and charges payable for permanent

connection, if any, shall be initially paid by the contractor and THE ORIENTAL INSURANCE COMPANY LIMITED will reimburse the amount on production of receipts. THE ORIENTAL INSURANCE COMPANY LIMITED as well as the Architect/ Consultant shall give all possible assistance to the contractors to obtain the requisite. Permission from the various authorities, but responsibility for obtaining the same in time shall be of the contractor.

#### 9. Office Accommodation

The contractor shall provide and maintain all necessary offices, workshops, stores, shelters, sanitary facilities, canteens and other temporary structures for themselves in connection with the work at the site at their own cost after getting the approval from the Architect/ Consultant. A site office for the use of THE ORIENTAL INSURANCE COMPANY LIMITED/ Architect/ Consultant shall be provided by the contractor at his own expenses. All temporary building and facilities as mentioned above shall be removed on completion of the work or at any other earlier date as directed by the Architect/ Consultant.

#### 10. Facilities for contractor's employees

The contractor shall make his own arrangement for the housing and welfare of his staff and workmen including adequate drinking water facilities. The contractor shall also make his own arrangements at his own cost for transport where necessary for his staff and workmen to and from site of work at his own cost.

#### 11. Lighting of works

The contractor shall at all times provide adequate and approved lighting as required for the proper execution and supervision and inspection of work.

#### 12. Fire Fighting Arrangements

The contractor shall provide suitable arrangement for fire fighting at his own cost. For this purpose he shall provide requisite number of fire extinguishers and adequate number of buckets, some of which are to be always kept filled with sand and some with water. These equipments shall be provided at suitable prominent and easily accessible places and shall be properly maintained.

Any deficiency in the fire safety or unsafe condition shall be corrected by the contractor at his own cost and to the approval of the relevant authorities. The contractor shall make the following arrangements at his own cost but not limited to the following :

- a) Proper handling, storage and disposal of combustible materials & waste.
- b) Work operations which can create fire hazards.
- c) Access for fire fighting equipments.
- d) Type, number and location of containers for the removal of surplus materials and rubbish.
- e) Type, size, number and location of fire extinguishers or other fire fighting equipments.
- f) General house keeping.

#### 13. Site Order Book

A site order book shall be maintained at site for the purpose of quick communication between the Architect/ Consultant. Any communication relating to the works may be conveyed through. Record in the site order book. Such a communication from one party to the other shall be deemed to have been adequately served in terms of contract. Each site order book shall have machine numbered pages in triplicate and shall be carefully maintained and preserved by the contractor and shall be made available to the Architect/ Consultant as and when demanded. Any instruction which the Architect/ Consultant may like to issue to the contractor or the contractor may like to bring to the Architect/ Consultant two copies of such instructions shall be taken from the site order book & one copy will be handed over to the party against proper acknowledgement & second copy will be retained for their record.

#### 14. Temporary Fencing/ Barricading

The contractor shall provide & maintain a suitable temporary fencing/ barricading & gates at his cost to adequately enclose all boundaries of the site for the protection of the public & for the proper execution & security of the work & in accordance with the requirement of the Architect/ Consultant and regulation of local authorities. These shall be altered, relocated & adopted from time to time as necessary & removed on completion of the work.

#### 15. Site Meetings

Site meeting will be held to review the progress & quality evaluation. The contractor shall depute a senior representative along with the site representative and other staff of approved of sub contractors and suppliers as required to the site meetings & ensure all follow up actions. Any additional review meeting shall be held if required by the Architect/ Consultant.

16. Disposal of Refuse

The contractor shall cart away all debris, refuse etc. arising from the work from the site & deposit the same as directed by the Architect/ Consultant at his own cost. It is the responsibility of the contractor to obtain from the local authorities concerned to the effect that all rubbish arising out of contractor's activities at the contraction site or any off-site activities borrow pit has been disposed off.

17. Contractor to verify site measurements

The contractor shall check & verify all site measurements whenever requested by other specialist's contractor or other sub-contractors to enable them to prepare their own shop drawings & pass on the information with sufficient promptness as will not in any way delay the works.

18. Displaying the name of the work

The contractor shall put up a name board of suitable size as directed by the Architect/ Consultant indicating their in the name of project & other details as given by the Architect/ Consultant at his own cost & remove the same on the completion of work.

19. Bar Bending schedule

The contractor shall prepare a detailed bar bending schedule of all reinforced concrete works and got them approved by the Architect/ Consultant well in advance.

20. As built drawings

For the drawings issued to the contractor by the Architect/ Consultant. The Architect/ Consultant will issue two sets of drawings to contractor for the item for with same changes have been made. From the approved drawings as instructed by THE ORIENTAL INSURANCE COMPANY LIMITED / Architect/ Consultant. The contractor will make the changes made on these copies and return these copies to the Architect/ Consultant for their approval. In case any revision is required for the corrections are not properly marked the Architect/ Consultant will point out the discrepancies to the contractor. The contractor will have to incorporate these corrections &/or attend to discrepancies either on the copies as directed by the Architect/ Consultant & resubmit to him for approval. The Architect/ Consultant will return duly approved by him.

21. For the drawings prepared by the contractor.

The contractor will modify the drawings prepared by him wherever the changes are made by THE ORIENTAL INSURANCE COMPANY LIMITED/ Architect/ Consultant. And submit to copies of such modified drawings to the Architect/ Consultant for approval. The Architect/ Consultant will return one copy of the approved drawing to the contractor.

22. Approved make

The contractor shall provide all materials from the list of approved makes at his own cost & also appoint the specialized agency for the water proofing, anti-termite, Aluminum doors & windows & any make/agency within the approved list as given in the tender after inspection of the sample/ Mock up.

23. Procurement of Materials

The contractor shall make his own arrangements to procure all the required materials for the work. All wastages and losses in weight shall be to the Contractor's account.

24. Excise Duty, Taxes, Levies etc.

The contractor shall pay and be responsible for payment of all taxes, duties, levies, royalties, fees, cuss or charges in respect of the works including but not limited to sales tax, tax on works contract excise duty, and octopi, payable in respect of materials, equipment plant and other things required for the contract. All the aforesaid taxes, duties, levies, fees and charges shall be to the contractor's account and THE ORIENTAL INSURANCE COMPANY LIMITED shall not be required to pay any additional or extra amount on this account. Variation of taxes, duties, fees, levies etc. if any, till completion of work shall be deemed to be included in the quoted rates and no extra amount on this account. Variation of

taxes, duties, fees, levies etc. if any, till completion of work shall be deemed to be included in the quoted rates and no extra claim on this account will in any case be entertained. If a new tax or duty or levy or cess or royalty or octopi is imposed under as statute or law during the currency or contract the same shall borne by the contractor.

25. Acceptance of tender

THE ORIENTAL INSURANCE COMPANY LIMITED shall have the right to reject any or all tenders without assigning any reason. They are not to bound to accept the lowest or any tender & the tenderer or tenderers shall have no right to question the acts of THE ORIENTAL INSURANCE COMPANY LIMITED. However, adequate transparency would be maintained by THE ORIENTAL INSURANCE COMPANY LIMITED.

### SAFETY CODE

1. First aid appliance including adequate supply of sterilized dressing and cotton wool shall be kept in a readily accessible place.
2. an injured person shall be taken to a public hospital without loss of time, in cases where the injury necessitates hospitalization.
3. suitable and strong scaffolds should be provided for workmen for all works that cannot safely be done from the ground.
4. no portable single ladder shall be over 8 meters in length. The width between the side rails shall not be less than 30cm. when a ladder is used an extra mazdoor shall be engaged for holding ladder.
5. the excavated material shall not be placed within 1.5meters of the edge or the trench or half of the depth of trench whichever is more. All trenches and excavations shall be provided with necessary fencing and lighting.
6. Every opening in the floor of a building or in a working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one meter.
7. No floor, roof or other part of structure shall be show over loaded with debris of materials as to tender it unsafe.
8. Workers employed on mixing and handling material such as asphalt, cement mortar or concrete and lime mortar shall be provided with protective footwear & rubber hand-gloves.
9. Those engaged in welding work shall be provided with welder's protective eye shields and gloves.
10. (I) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.  
(ii) Suitable facemasks should be supplied for use by the workers when the paint is applied in the form of spray or surface having lead paint dry rubbed and scrapped.
11. Overalls shall be supplied by the contractor to the painters and adequate facilities shall be provided to enable the working painters to wash during the periods of cessation of work.
12. Hoisting machines and tackle used in the works, including their attachments, anchorage and supports shall be in perfect condition.

The ropes used in hoisting or lowering material or as a means of suspension shall be of durable quality and adequate strength and free from defects. These instructions mentioned above should be compliance in addition to the standard safety codes.

PROFORMA OF SITE ORDER BOOK

Name of the work .....

Date of commencement .....

Sr. No.	Remarks/ instructions of the site engineer/ Architect	Dated initials of Site engineer/ Architect	Initial of the contractor for having received the instructions	Actions taken with date	Dated initial of the Site Engineer	Remarks of the Architect PMC/ CC officials
1	2	3	4	5	6	7

PROFORMA FOR APPLICATION BY CONTRACTOR FOR EXTENSION OF TIME

1. Name of the contractor
2. Name of the work as given in the agreement
3. Agreement WO
4. Tender amount
5. Date of commencement of work
6. Period allowed for completion as per agreement
7. Date of completion as per agreement
8. Period for which extension of time has been given

Dated                      Month                      Year  
1<sup>st</sup> extension vide THE ORIENTAL INSURANCE COMPANY LIMITED's  
Letter No.

2<sup>nd</sup> extension vide THE ORIENTAL INSURANCE COMPANY LIMITED's  
Letter No.

3<sup>rd</sup> extension vide THE ORIENTAL INSURANCE COMPANY LIMITED's  
Letter No.

Reasons for which extensions have been previously given (copies of the previous  
application should be attached )

Period for which extension is applied for the reasons thereof including hindrances,  
time for extra work assigned, if any etc.

Signature of contractor

## **SECTION VI :**

**All the 'technical specifications' refers to the general specification for CIVIL / electrical works issued by the CPWD, Government of India. However some guiding technical specifications are described below. But the CPWD specifications will be given preference any other specification(s).**

### **PART I**

#### **TECHNICAL SPECIFICATION FOR INTERIOR WORKS**

##### **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 Consultants.

The workmanship is to be the best available and of a high standard, use must be made of special tradesmen in all aspects of the work and allowance must be made in the rates for so doing.

The material and items to be provided by the Contractor shall be approved by the Consultants in accordance with any samples which will be submitted for approval by Contractor and generally in accordance with the Specifications of Indian Standards. Also if products are specified in the Specifications and /or bill of Quantities with brand, trade name or catalogue reference, the Contractor will be required to obtain the approval of the Consultants before using alternative brands. The Contractor shall produce all invoices, Vouchers or receipts for any material if called upon to do so by the Consultants.

Samples of all materials are to be submitted to the Consultants for approval before the Contractor orders or deliver the materials at site. Samples together with 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 Client/Consultants 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 Consultants before proceeding with the work. The Contractor shall be responsible for providing and maintaining and boxing required for the protection of dresses of finished work if left unprotected. He is also to clean out all shelveings, out ends and other waste from all parts of the works before in-fillings are done.

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

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.

Only first class workmanship will be accepted. The contractor shall maintain uniform quality and consistency in workmanship throughout.

Any discrepancy in the specifications mentioned herewith and in the schedule of quantities and the drawings must be brought to the Architects notice immediately.

##### **2. Joinery :**

2.1.1 Joinery is to prepared immediately after the placing of the Contract framed up, bonded and waged up. Any portions that are warped 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 workman-like manner in accordance with the detailed drawings wrought and where ever required, fitted with all necessary metal ties, straps, belts, screws, glue etc. Running beaded joints are to be cross-tongued. Joiners work generally to be finished with fine sand / glass paper.

2.1.2 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 tendons should fit the mortises exactly.

2.3 Nailed or glued butt joints will not be permitted, except exceptional cases with approval of Consultants.

Where screws shown on a finished surface, those will be sunk and the whole plugged with a MDF board/ plug of the same MDF board/ matching wood and grain of the finished surfaces will be neatly punched and the hole filled with MDF board filler to match the colour.

Should joints in joiner's work open, or other defects arise within the period stated for defect liability inch contract and the clause thereof be deemed by the Consultants to be due to 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.



Nails, spikes and bolts shall be of lengths and weights approved by the Consultants. Nails shall comply with IS 1959-60 or equivalent approved quantity sample. Brass headed nails are to comply with B.S. 1210. Wire staples shall comply with B.S.1494 or equivalent

The contact surface of dowels tenons, wedges etc; shall be glued with an approved adhesive.

Where glued, joinery and carpentry work is likely to come into contact with moisture, the glue shall be waterproof.

#### **HARDWARE & METALS :**

The hardware through out shall be of approved manufacture or supplier well made and equal to in every respect to the samples to be deposited with the Consultants. The Contractor may be required to produce and provide samples from many different source before the Client/Consultants taken decision and he should allow his rates for doing so.

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 client and Consultants before the Contractor procures it at site of work.

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

The Contractor should cover up and protect the brass and bronze surfaces with a thick grease or other suitable protective material, renew as necessary and subsequently clean off away on connection.

Aluminum and stainless steel shall be approved manufacture and suitable for its particular application. Generally, the surface of aluminum shall have an anodized finish and both shall comply with samples approved by the Consultants. All stainless steel sheets shall be 304 s.s. Japan or equivalent with gauge as specified but not thinner than 16 G.

All steel, brass, bronze, aluminum and stainless steel articles shall be subjected to a reasonable test for strength, if so, required by the Client/Consultants at the Contractor's expense.

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.

Chromium plating shall be in accordance with relevant I.S. Standard or as per approved specification for normal outdoor conditions and shall be on a base material of copper or brass.

#### **GLAZING**

All glass to be approved manufacturer complying with IS-3548-1996 as per approved specification for normal outdoor conditions and shall be on a base material of copper or brass or as specified in the schedule of guarantee.

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.

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 Client/Consultants.

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 PAINT AND POLISHERS :**

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

Spray painting with approved machines will be permitted only if written approval has been obtained from the Client/Consultants prior to painting. No spraying will be permitted in the case of coats not where the soiling of adjacent surface is likely to occur. The nozzle and pressure to be so operated as to give an even coating through to the satisfaction of the Client Consultants. The used for spraying is to comply paint 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.

Wood preservative shall be So lignum or other equal and approved impregnating wood preservative and all concealed MDF board work shall be treated with wood preservative.

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 before applying the primary coat.

All iron or steel surfaces be thoroughly scraped and rubbed with wire brushes and shall be entirely free from rust, mill scale etc. before applying the primary coat.

Surfaces of new MDF board/ plywood work to be painted are to be rubbed down, cleaned to the approval of the Consultants.

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 surface shall be flattened down with 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 a primer and stopped with putty. Where MDF board work has been previously painted or polished and is to be newly polished or painted, scrapping, burning off or rubbing down is to be done to a firm edge and the base surface is to be touched in with primer & stopped with a suitable putty.

Surfaces of previously painted metal which is to be painted shall be cleaned down and flattened down as described in 5.7 above. Any rust and loose scale shall be removed completely by chipping, scraping, wire brushing, or rubbing with abrasive paper to the bare metal and touched in with primer as described.

**SECTION VI : PART II - A - TECHNICAL SPECIFICATION  
{ MISCELLANEOUS }**

**I.1 -DEMOLITION AND DISMANTLING**

**I.1.1 -General**

-The specification provides for the complete removal of the existing structure except such portions as may be required for, permitted to be left in place as shown on the drawing or as directed by the Engineer clearing the site, sorting out useful materials and stacking them neatly within a lead of 100 m.

**I.1.2 -Preliminaries**

-If necessary and directed by the Engineer the contractor shall have to erect screens of canvas or other suitable materials and/or to water the structure and area to avoid the nuisance of dust before and during dismantling. Care shall be taken to see that dismantling is done in such sequence and manner as to prevent all avoidable damage to usable materials and any damage to nearby property or injury to life. In case of structures which are to be removed for re-erection all members shall be properly match-marked with paint. The pins, nuts, plates, structural steel members, timbers, etc. shall be similarly marked for identification of their position in the entire assembly. All machined surfaces, pin holes, pins etc shall be coated with grease. An inventory of all possible serviceable materials shall be kept on record and signature of the contractor obtained in token of his acceptance. Any doubt or non-agreement with the same shall be reported by the contractor before starting the removal. Portions required to be kept intact shall be clearly marked before starting dismantling. The contractor shall be responsible for the construction and maintenance of adequate barriers, watchmen and/or lights at the ends of portions of the road, closed by construction and provide necessary diversion to the satisfaction of the Engineer at his (Contractor's) cost.

**I.1.3 -Dismantling and removal**

-The structure shall be dismantled carefully and the materials removed without causing damage to the serviceable materials to be salvaged, the part of the structure to be retained and any properties or structures nearby. Any avoidable damage to articles to be salvaged and part of the structure to be retained and, any damage to nearby property or structure shall be made good by the contractor without extra claims. The contractor shall be responsible for any injury to the workers or the public. Where existing building is to be extended or otherwise incorporated in the new work, only such part or parts of the existing structure shall be removed as are necessary to provide a proper connection to the new. The connecting edges shall be cut, chipped and trimmed to the required lines and grades without weakening or damaging the part of the structure to be retained. Gas cutting, if required, may be resorted to with the written permission of the Engineer. In such a case gas cutting shall be carried out as directed and specified by the Engineer. All gas cutting operations shall be finished before the new construction is commenced. Equipment or methods which might damage members, portions of the structure to be preserved or adjacent construction or structure shall not be used. If sewers or drains are removed or disturbed, the contractor shall at once remove the foul matter. If sewers or drains have to be temporarily removed, the contractor shall provide temporary passage for the flow and re-do the sewer or drain without extra claims.

**I.1.4 -Disposal**

-All the materials obtained from the removal of the structure shall be the property of employer and useful materials shall be stacked neatly in such a manner as to avoid deterioration and in places directed by the Engineers within a lead of 100m. Different categories of materials shall be stacked separately. Unless otherwise provided, excavated materials shall be used in backfilling excavation made in removing the structure, in constructing embankment or otherwise disposed of as directed within 100m free of cost. Non-useful materials shall be wasted by the contractor without causing any damage or inconvenience.

**I.1.5 -Final Clearance**

-All rubbish shall be cleared off the site and the ground left clean and clear. Any damage caused during the operation shall be made good.

**I.1.6 -Responsibilities**

-The contractor shall be responsible for:

- i -Maintaining a register of the salvaged materials.
- ii -Keeping intact the portion not to be removed.
- iii -Avoidable damage to serviceable articles to be salvaged during dismantling, conveyance and stacking.
- iv -Stacking neatly and safe custody of the salvaged materials till handing over to the employer.

- v -Disposal of unserviceable materials and its consequences.
- vi -Damages to nearby property and injury to workers and public due to his operations.

#### I.1.7 -Item to include

- 1 -All labor, materials, use of equipment, tools and plant required for completing the job satisfactorily. 2 - Erecting and removing screens and watering when necessary and directed.
- 3 -Marking the structure suitably.
- 4 -Opening register of salvaged materials.
- 5 -Providing adequate barricades, signs, lights etc.
- 6 -Removal of the structures.
- 7 -Diverting the existing drains, road, etc. temporarily and redoing the same. 8
- Stacking serviceable materials.
- 9 -Wasting unserviceable materials.
- 10 -Clearing site on completion.
- 11 -Compensation for damaged properties or injuries to persons.

#### I.2 -GLAZE WORK

##### I.2.1 -General

-The specification covers glaze work including the type of glasses, putty, method of fixing the glass in wooden or steel frames, partitions etc.

##### I.2.2 -Glass

-All glasses shall be of the best quality, free from specks, bubble smokes, veins, air holes, blisters and other defects. The kind of glass shall be as mentioned in the item and or as shown in the detailed drawings. The thickness of glass panes shall be uniform.

##### I.2.3 -Workmanship

-All glasses shall be cut accurately to fit easily in to the rebates and to be well puttied and as directed. Glazier's putty shall be made of pure whiting and raw linseed oil and to be used fresh except to metal windows and doors where metal beading hardening agent like litharge shall be used.

##### I.2.4 -Items to include

- i -Providing and fixing the type of glass as specified including cutting and waste. ii - Cleaning the glazed work.
- iii -Repairing of any work damaged during glazing.
- iv -All labor, material, scaffolding and equipments required to carryout the item.

#### I.3 -STONEWARE PIPES

##### I.3.1 -General

-Stoneware pipes shall be of best quality stoneware free from air blows, fire blisters, cracks and other imperfections and the surface external and internal shall be smooth and perfectly glazed. Thickness of the pipes shall be uniform throughout.

##### I.3.2 -Socket

-The depth of socket should not be less than 1.1/2 inches for all pipes under 9 inches in diameter, 2 inches for 9 inch and 12 inch pipes and 2.1/2 inches for all sizes over 12 inches. The internal diameter of the socket should be sufficiently large to allow a joint of 1/4 inch all around the outside of the pipe intended to enter it, so that a caulking of tarred gasket may be inserted.

#### I.4 -WOODEN PLANKS

##### I.4.1 -General

-Wooden planks should be of best teak wood boards thoroughly seasoned and of the greatest length procurable. Planks should be 32mm thick and from 100mm to 150mm in width.

##### I.4.2 -Workmanship

-All planks should be tongued and grooved or tongued and ploughed as specified and directed. The planks should be jammed together, as they are being laid by flooring cramps. No gaps and cracks should be present. All wood work should be coated with two coats of bitumen paint over a coat of wood primer.

#### I.5 -FALSE CEILING

I.5.1 -False ceiling should be either with 4mm thick AC. sheets 12mm thick thermo Cole or 16 gauge aluminum sheets or 12 thick Nova teak perforated sheet as per specification and/or as per detailed drawing. Materials should be uniform and free from cracks.


##### I.5.2 -Workmanship

-False ceiling material should be clipped with pins in block grid pattern. Frame work should be of aluminum tee sections of specified size. All M.S. Suspenders of specified size should be painted with one coat of approved oil paint. Openings should be provided in the false ceiling or lighting fixtures with aluminum frames as per detailed drawing. Opening should also be provided with teakwood frames for air conditioning ducts. All joints should be sealed to ensure no leakages.





**SECTION VI : PART II**  
**TECHNICAL SPECIFICATION**  
**{ P L A I N & R E I N F O R C E D C O N C R E T E }**


 -GENERAL SCOPE :


 -This specification deals with cement concrete, plain or reinforced, for general use, and covers the requirements for concrete materials, their storage, handling, grading, mix design, strength and quality requirements, pouring at all levels, protection, curing, finishing and other misc. work. The Contractor shall furnish all labor, materials and equipments, and plan and finish all structural concrete and miscellaneous items complete as indicated in the drawings. The provision of IS:456-2000 shall be complied with unless permitted otherwise by engineer in charge in writing. For liquid retaining structures the relevant clauses of IS:3370 shall be complied with.


 - MATERIALS :


 - Water :


 -Water, fit for drinking is fit for concreting. Before commencing the trial mix design, and in course of the work whenever the source of water changes, or whenever there is in the opinion of the Engineer reason to suspect a change in water quality, the contractor shall get the water to be used for mixing, tested in an approved laboratory. The water in general shall comply with the following requirements :

 -Water to be used for mixing and curing concrete shall be clean, fresh and free from organic or inorganic matter in solution or suspension in such amount as may impair the strength or durability of concrete or steel. Water which is potable is normally considered satisfactory for concrete mixing. Sea water or water from excavations shall not be used. In case of doubt suitable checks shall be made using distilled water as the basis for comparison.

 -Where water can be shown to contain an excess of acid, alkali, sugar or salts, the Engineer may refuse to permit its use. As a guide the following concentrations represent the maximum permissible values :

 - To neutralize 200 ml sample of water, using phenolphthalein as an indicator, it should not require more than 2 ml of 0.1 Normal NaOH. The details of test shall be as given in Part 13 of IS:3025.

 To neutralize 200 ml sample of water, using methyl orange as an indicator; it should not require more than 10 ml of 0.1 HCL, the details of test shall be as given in Part 19 of IS:3025.

 Percentage of solids when tested in accordance with IS:3025 shall not exceed the following :

**MAXIMUM PERMISSIBLE LIMITS OF SOLIDS**

**SOLIDS-LIMIT**


Organic -200 mg/l


Inorganic -3000 mg/l


Soleplate (as SO<sub>4</sub>) -500 mg/l

Chlorides (as CL) -1000 mg/l

Suspended matter -2000 mg/l

 The pH value of water shall be between 6-10.

 - Cement :

 -The cement shall be ordinary Portland cement with 7 days strength not less than 220 kg/cm<sup>2</sup> and 28 days strength of 430 Kgs/cm<sup>2</sup> { M43 GRADE } unless otherwise specified, conforming to IS 8112-1989. It shall be delivered at site in sealed bags or cement tankers marked with manufacturer's name and trade brand. The concrete mix proportions shall be used on the weight of cement bags as delivered at the Mixer and not on their theoretical weight. The contractor should allow in his rates for losses in weight of cement bags in transit and handling. Fly ash conforming to Grade 1 of IS:3812 may be used as part replacement of ordinary Portland cement provided uniform blending of cement is ensured. In general following types of cements may be used on works if required.

CEMENT TYPE-CONFORMING TO:


M43 GRADE OPC-IS: 8112


M53 GRADE OPC-IS: 12269


PORTLAND SLAG CEMENT-IS: 455


PORTLAND POZZOLANA CEMENT-IS: 1489

SULPHATE RESISTING CEMENT-IS: 12330


 -Storage :

 -The contractor shall follow accepted good practice in handling and storing cement. Cement may be stored on site in moisture proof bulk containers which shall be equipped with venting arrangements. Cement delivered in bags shall be stored off the ground by at least 15 cm in dry, well ventilated, weather-proof/water proof sheds, arranged in separate consignments as received from the manufacturer so that consumption of cement is ensured in the order of receipt. i.e. "First in First out" { FIFO } Rule. The stacks of cement shall be such that there is easy access for proper inspection and identification. The bags shall be piled not more than 15 bags per pile. Each stock of cement shall be covered with tarpaulin or thick polyethylene sheets. Cement bags in storage for more than 3 months shall be retested before use.

 -Testing :

 -Tests shall be carried out on cement delivered to the site for fineness, initial and final setting time and compressive strength (IS 4031) and the results should be approved by the Engineer before use. Samples shall be taken immediately on receipt of cement at site. Engineer may specify other forms of sampling and tests, if in his opinion the cement is of doubtful quality. The cost of such additional tests shall be borne by the Contractor, if cement is supplied by him.

 -FINE AGGREGATES (SAND) :


 -Fine aggregate except as noted above, and for other than light weight concrete shall consist of natural or crushed sand conforming to IS:383. The sand shall be chemically inert, clean, sharp, hard, strong and durable and shall be free from dust, vegetable substances, adherent coating, clay, alkali, organic matter, mica, salt or other deleterious substances, which can be injurious to the setting qualities, strength & durability of concrete. Fine aggregates shall be chemically inert. Beach sand shall

not be used. Machine made sand will be acceptable, provided the constituent rock / gravel composition shall be sound/hard, dense, non organic, uncoated and durable against weathering and approved by Engineer. Sand shall be prepared for use by screening & washing to remove all objectionable foreign matter while separating the sand grains to the required size fractions. Washing shall be done at least one day before using it in concrete. The percentage limits of impurities in Fine Aggregate shall not exceed the limits given in IS:383-1970. Silt % in fine aggregates shall not exceed 5%. Unless otherwise directed or approved, the grading of fine aggregate shall be within the limits indicated in IS:383-1970. The sand shall have a fineness modulus neither less than 2.2 nor more than 3.2 (the fineness modulus is determined by sum, divided by 100, of the cumulative percentage mass which is retained on each of the following sieve.

4.75 mm -1.18 mm -600 micron -300 micron -150 micron

Fly ash conforming to Grade 1 of IS:3812 may be used as part replacement of fine aggregates provided uniform blending of fly ash is ensured.

#### -COARSE AGGREGATES :

 -Coarse aggregate for concrete, except as noted above and for other than light weight concrete shall conform to IS:383-1970. This shall consist of natural or crushed stone and gravel, and shall be clean, free from elongated, flaky or laminated pieces, adhering coatings, clay lumps, coal residue, clinkers, slag, alkali, mica, organic matter or other deleterious matter. The specific gravity of aggregates shall not be less than 2.6. The aggregates retained on 4.75 mm ARE sieve shall be termed as coarse aggregates. Coarse aggregates shall be chemically inert. Coarse aggregate shall be either in single size or graded. In both cases, though grading shall be within the limits specified in table 1 of IS:383-1970. The nominal maximum size of coarse aggregate should be as large as possible within the limits specified but in no case greater than 1/4 th of the minimum thickness of member, provided that the concrete can be placed without difficulty so as surround all reinforcement thoroughly & fill the corners of the form. For most work 20 mm aggregate is suitable. For heavily reinforced concrete members as in the case of ribs of main beams, the nominal maximum size of aggregate should usually be restricted to 5 mm less than the minimum clear distance between the main bars or 5 mm less than the minimum cover to the reinforcement whichever is smaller. Sampling & testing of aggregates shall be as per IS:516 & IS:2386 (Part 1 to 8). The contractor shall follow accepted good practice for the storage of aggregates. The aggregates before stacking shall be free from earth & foreign matter. The aggregates shall be stacked on clean level ground.

#### -CONCRETE GRADES :


##### -GRADES OF CONCRETE

GROUP-GRADE DESIGNATION-F C K {N/MM<sup>2</sup>}

ORDINARY-M 10-10


-M 15-15

-M 20-20

 FCK is characteristic compressive strength of 150 mm concrete cube @ 28 days.



 -NOMINAL MIX CONCRETE :

 -Nominal mix concrete may be used for concrete of M 20 or lower. The following proportion of materials can be used on weight basis.

PROPORTION FOR NOMINAL CONCRETE

GRADE-MIX-W/C RATIO

M 5-1:5:10-1.2


M 7.5-1:4:8-0.90

M 10-1:3:6-0.70

M 15-1:2:4-0.65

M 20-1:1.5:3-0.60

 -MIX DESIGN :

 -Concrete Mix Design shall conform to IS:10262, IS: 383, SP 23 & IS: 456-2000. The contractor shall be entirely responsible for the design of the concrete mixes. The design is however to be approved by the Engineer before commencing any concreting in the works. The contractor shall make trial mixes using samples of coarse aggregates; sand, water and cement, typical of those to be used in the laboratory. The mix shall be designed to produce the grade of concrete having the required workability & the characteristic strength not less than desired grade. The target mean strength of concrete mix should be equal to the characteristic strength + 1.65 x standard deviation. Mix design done earlier not prior to one year may be considered adequate for later work, provided there is no change in source & the quality of the materials. The standard deviation for each grade of concrete shall be calculated, separately. The total number of samples required for calculation of standard deviation shall not be less than 30. Each sample consists of average of 3 cube tests. The individual variations should not be more than  $\pm 15\%$  of the average. If more, the test results of the sample are invalid. Where sufficient test results for a particular grade of concrete are not available, the value of initial standard deviation given in the following table may be assumed. As soon as the results of samples are available, actual calculated standard deviation shall be used in mix design.

ASSUMED STANDARD DEVIATION {N/MM<sup>2</sup>}

STANDARD DEVIATION-GRADE DESIGNATION

3.5-M 10

-M 15

4.0-M 20

The values of assumed standard deviation are valid for good concrete quality control at site, in case of average quality control the above values of standard deviations shall be increased by 1 N/MM<sup>2</sup>. In case Portland Pozzolana Cement is supplied in place of OPC, no deviation either in rate or Schedule of Work will be entertained on this account. The mix design should be based on the use of Portland Pozzolana Cement. Contractor shall furnish the cement content assumed for various mixes for approval by the engineer within one (1) week after award of contract. In all cases the contractor shall make trial cubes from each consignment of cement and test the same before actually using in the work. Whenever there is a significant change in the quality of any of the ingredients of concrete, the Engineer

may at his discretion order the carrying out of fresh trial mixes. All costs for trial mixes and tests shall be to the Contractor's account and held to be included in the contract rates. When the proportions of a concrete mix have been approved by the Engineer, the Contractor shall not vary the quality or source of the materials or the mix without the written approval of the Engineer. If the water quantity has to be increased in special cases, cement also is increased proportionately to keep the ratio of water to cement same as adopted in trial mix design for each grade of concrete. No extra payment for the additional cement will be made. To keep the water-cement ratio to the designed value, allowance shall be made for the moisture contents in both fine and coarse aggregates and determination of the same shall be made as frequently as directed by the Engineer-in-Charge. The determination of moisture contents shall be according to IS:2386 (Part 3). Contractor shall exert proper quality control at the various stages of concrete production and placement, as frequently as the

**SECTION VI :**  
**TECHNICAL SPECIFICATION { MASONRY WORK }**

**-D.1 -BURNT BRICK MASONRY FIRST CLASS IN LIME/CEMENT MORTAR**

-D.1.1 -Materials: Bricks shall be first class, of uniform size, shape and color conforming to IS:1077 and must be well burnt so as to give a clear ringing sound when struck. They shall be clean, whole and free from flaws, cracks, stones or lumps of any kind, especially lime. They shall have sharp edges and angles and even surfaces and shall be round and hard to resist compression. They shall be from a source to be approved by the Engineer. No brick after immersion in water for 24 hours shall absorb water more than 15 percent of its weight. The bricks shall be homogenous in texture and shall not show any signs of efflorescence. First class bricks shall have a minimum compressive strength of 35 kg/cm<sup>2</sup>. Bricks having crushing strength less than 25 kg/ sq cm will not be accepted.

- -Cement Mortar

- -Cement and sand shall be mixed in specified proportions, sand being measured in measuring boxes. The proportions will be by volume on the basis of 50 kg. bag of cement being equal to 35 liters (about 1.2 CFT). The mortar may be hand mixed or machine mixed. The mortar so prepared shall be used within 30 minutes. Only such quantity of mortar shall be prepared as can be used within 30 minutes. The mortar remaining unused after that period or mortar which has partially hardened or other-wise damaged shall not be re-tampered or remixed. It shall be destroyed or thrown away.

**-D.2 -CONSTRUCTION DETAILS**

- -Soaking - All bricks shall be immersed in water for two hours before being put in to the work so that they will be saturated and will not absorb water from the mortar. The surfaces should be just moist but not too wet at the time of laying.

- -Bats - No bats or cut bricks shall be used in the work unless absolutely necessary around irregular openings or for adjusting the dimensions of different courses and foreclosures.

- -Laying - The bricks shall be laid in mortar to line level and shapes on the plans, slightly pressed, thoroughly bedded in mortar and all joints shall be properly flushed and packed with mortar so that they will be completely filled with mortar and no hollows left anywhere. All courses shall be laid truly horizontal and all vertical made truly vertical. Vertical joints in one course and the next below shall be staggered. Fixtures, plugs, frames, etc. if any, shall be built in at places shown in the plans while laying the course only and not later by removal of bricks already laid.

- -Joints - Joints shall not exceed 10mm (about 3/8") in thickness and this thickness shall be uniform throughout. The joints shall be raked out not less than 10mm (about 3/8") deep when the mortar is green where pointing plaster is to be done. Otherwise joints shall be struck flush with the face at the time of laying.

- -Uniform raising - Brickwork shall be carried out regularly in all cases where the nature of work will admit, not leaving any part 60 mm (about 2 ft.) lower than another, but where building at different levels is necessary, the brickwork shall be stopped so as to give later a uniform level and effectual bond.

-D.2.1 -Scaffolding

- -The contractor shall take all measures to ensure the safety of the work and working people. Proper scaffolding shall be provided to allow easy approach to every part of the work.

-D.2.2 -Watering

- -The brick work shall continuously be kept well watered for 10 days after laying. Brick work when laid shall be initially protected against hot sun if necessary by wet sacking or straw of similar absorbent material. At no time during the curing period shall the mortar be allowed to dry.

-D.2.3 -Final finish

- -If the brick work is not be plastered, the face, after pointing is properly cured, shall be washed down and all stains and adhering mortar lumps removed. Put long holes, etc. shall be solidly filled in the interior with cement concrete 1:4:8 and the face with bricks to match adjoining work.

-D.2.4 -Bad work - Should be mortar perishes i.e. become dry or powdery through neglect of watering or masonry be hollow or the work not done according to plan and specification, the work shall be pulled down and rebuilt at contractor's expense.

-D.2.5 -Item to include - (a) All labor, materials, scaffolding use of tools, equipment curing and other items incidental to the satisfactory completion of brick masonry.

-D.2.6 -Measurement and payment - The contract rate shall be for a unit of one M3 of brick masonry fully completed, battered, tapered and curved portions shall be measured net. Dimensions shall be measured and quantity of individual items worked out correct to two places of decimals of a meter and a M3 respective. No deduction shall be made for (1) end of dissimilar materials like girders, beams, lintels, rafters etc. up to 1000sq.cm. (about 1 sqft) in section and (2) opening up to 0.1 M2. (about 1 sqft) in face area. When the brick work is to be plastered, measurements will be exclusive of plaster. Half bricks wall shall be measured in M2.

**TECHNICAL SPECIFICATION  
{ PLASTERING & POINTING }**

**E.1 -Plastering**

-Plastering concrete, stone, or brick masonry surface in cement mortar of specified proportion and specified thickness including scaffolding, curing etc. complete as directed.

-E.1.1 -Materials - Cement Mortar - Cement mortar shall have the proportion of cement to sand as mentioned in the drawings or in the schedule of quantities.

-E.1.2 -Scaffolding - shall be as per D.2.1. E.1.3 Preparatory work - All joints in the face work that are to be plastered shall be raked out to depth equal to not less than the width of the joints or as directed, when the mortar in the joints is still green. All dirt, soot, oil, paint or any other material that might interfere with satisfactory bond shall be removed. The surface to be plastered shall be scrubbed with fresh water and kept wet for 6 hours prior to plastering.

-E.1.4 -Plastering - Long straight edges shall be freely used to ensure a perfectly plain and even surface. All corners must be finished to their true angle or rounded as directed.

-E.1.5 -

-a- Plaster in one coat - Plaster shall be laid on with some what more than the required thickness and pressed and leveled with a flat wooden rule or float to required thickness. The average finished thickness of plaster shall be rubbed smooth after floating it with a thick coat of pure Portland cement slurry while the base coat is still fresh. If NEERU finish is specified, floating with neat cement will not be required.

-b- Cement plaster in two coats - When plaster is to be laid in two coats, the average thickness of first coat of plaster is generally 10mm (about 1/2") on brick work and 20mm (about 3/4") on rubble masonry. The first coat is applied as per E.1.5a but the surface is not floated or polished but roughened to give a key to the second coat of plaster. Before the first coat hardens, it shall be combed in wavy lines about 12mm (about 1/2") apart and 3mm (about 1/8") deep. The first coat shall be kept damp for at least 2 days immediately following its applications. It shall then be allowed to become thoroughly dry. Before starting to apply the second coat, the surface of the first coat shall be damped evenly. The finishing coat shall be of such thickness as to make the total average finished thickness equal to the required plaster thickness as per item. The finished surface shall be true and even and present a uniform texture throughout and all joining marks shall be eliminated.

-E.1.6 -Watering and Curing - All plaster work shall be kept damp continuously for a period of 10 days.

-E.1.7-Bad work - should the mortar of the plaster perish through neglect of watering or for any other default and if the work is not done as specified above, the plaster shall be removed and redone at the Contractor's expense.


-E.1.8 -Item to include - Erecting, dismantling and removing the scaffolding, all labor materials and equipment incidental to complete the plastering dewatering if necessary, raking out joints, cleaning, wetting, providing mortar, toweling and watering.


-E.1.9 -Mode of Measurement and Payment - The contract rate shall be per square meter of plastering of specified thickness. All work shall be measured in square meter. Dimensions shall be


measured and quantity worked out correct up to two places of decimals in meter and square meter respectively. For further mode of measurement of plaster, refer Addendum-I.


 -E.2 -Cement Pointing


- -Cement pointing with mortar of specified proportion to stone masonry or brickwork including raking out joints, watering etc. complete.

 -E.2.1 -Materials - Mortar for pointing shall be of the specified mix and be as per specification No. E.1.1.


 -E.2.2 -Scaffolding - Scaffolding to be as per specification No. D.2.1. For mode of measurement, refer Clause under "Plaster".


 -E.2.3 -Construction details


-a-  The joints in the masonry shall be raked out to a depth not less than the width of the joint or as directed, when the mortar is green. The joints are to be brushed clean of dust and loose particles with a stiff brush. The area shall then be washed and the joints thoroughly wetted before pointing is commenced.

-b-  The raked out joints shall be filled with mortar of the specified mix and required consistency and well pressed and rubbed smooth and pointing shall be done as specified on the drawing.

 -E.2.4 -Water - The pointed face shall be kept continuously wet for 10 days after initial set.

 -E.2.5 -Bad work - should the mortar perish or deteriorate through neglect of watering or any other default and if the work is not done neatly and as specified above, the pointing shall be removed and redone at the expense of the contractor.

 -E.2.6 -Items to include - Cement pointing shall include erecting and removal of scaffolding, all labor materials and equipment incidental to complete the pointing, dewatering if necessary, raking out joints, cleaning, wetting, filling with mortar, toweling, pointing and watering.

 -E.2.7 -Measurement and Payment - The contract rate shall be for a unit of one square meter of cement pointing. The dimensions of individual measurement shall be correct up to a centimeter and quantity calculated correct to two places of decimals of a square meter.

TECHNICAL SPECIFICATION  
{ STRUCTURAL & TUBULAR STEEL }

L.1 GENERAL

This specification covers the supply, fabrication, transportation to site & erection of structural steel work & tubular structures for the structures consisting of columns, beams, trusses, bracings, runners, gantry girders, monorail lifting beams, rails, anchor bolts, brackets, hangers, gussets, staircases, ladders, hand railings, chequered plates, M.S. gratings etc.

Structural Steel Work & Tubular Structures:

Structural steel work shall be in accordance with IS: 800, IS: 806 unless specifically mentioned otherwise in the specification.

SCOPE:

The supply, fabrication and erection of the structural and tubular steel structure consists of accomplishing of all jobs herein enumerated including furnishing nuts, oxygen and acetylene gases, oil for cleaning, supply of supervisory personnel for fabrication, erection work including skilled, semi-skilled and unskilled labor force, equipment for arc welding, gas cutting etc. and all types of erection tools and appliances such as lifting tackles, cranes, derricks, transportation equipment & other materials & equipment adjunct to the work of such quantity and quality as specified to execute the work according to the drawings, specifications, relevant codes etc. in an expeditious and workman-like manner. X-Ray and Radiography testing of structural steel is not envisaged.

L.2 Materials

All structural and tubular steel shall conform to IS 2062 grade A and IS 1161 YST-24 respectively. The use of equivalent or higher grade materials will be considered in very special cases, subject to prior approval in writing. Mild steel nuts and bolts shall be made from steel of round bar quality and not from rivet bars. All bolts and nuts shall be made in accordance with relevant IS specification and unless shown or specified otherwise are to be hexagonal. Maker's Test certificate shall be made available to the Engineer's representative when called for. Welding electrodes shall conform to IS: 814 and IS:815. Washers shall be made of steel to IS:2062 tapered and square or plain and round, to suit the section.

L.3 Deleted.

L.4 Fabrication and Workmanship

Fabrication shall be in accordance with IS:800, IS:816 and IS: 806. All smithy work shall be clean and sound and the metal shall not be burnt or injured in any way.

Flattened Ends:

In tubular construction, the ends of the tube may be flattened or otherwise formed to provide for welded or bolted connections, provided that the methods adopted for such flattening do not injure the material. The change of the section shall be gradual.

Sealing of Tubes:

When the end of a tube is not automatically sealed by virtue of its connections by welding to another member, the end shall be properly and completely sealed. Before sealing, the inside of the tube should be dry and free from loose scale. No drifting shall be allowed except for bringing together several parts forming a member but the drifts must not be driven with such

force as to disturb or damage the metal about the holes. All nuts are to fit tight and washers shall be used where necessary.

Particular care must be taken to ensure free expansion and contraction wherever provided for in drawings & specifications. The method of fabrication and assembly shall be in accordance with the best accepted practice. Unless otherwise specified or noted, all work shall be installed and/or erected true to lines and planes with vertical lines plumb & horizontal lines level.

Items embedded in Concrete or Masonry:

Structural steel items such as shear channels, plates and similar installations shall be fabricated and installed as shown on the drawings and field measurement shall be taken before embedding in concrete/masonry wherever required.

Steel plates:

Steel plate items shall be fabricated of the materials sizes and thickness and installed at locations as indicated on the drawings and shall be furnished complete with anchors and fastenings.

Marking and Dispatching:

The work shall be dispatched in such portions as may be found convenient for erection or as ordered by the Engineer and shall be unloaded and stacked only in the allotted space. All the delivered items shall be suitably packed to be protected from any damage during transportation and handling.

Painting:

a Primer Coat of painting on steel work:

The whole of steel work except where encased in concrete & excepting edges and adjacent surface areas to be field welded before being dispatched from Contractor's shop shall be dry and after being thoroughly cleaned free from rust, mill scale dust etc. to the satisfaction of the Engineer & shall be given one coat of red oxide zinc chromate paint. Paint shall be applied by brush and not by cloth or rags. Surfaces which are to be held in contact by riveting or bolting shall be painted before assembly and the parts brought together while still wet. Unless specified otherwise, all surfaces inaccessible after riveting or intermittent welding shall be given two coats of red oxide zinc chromate paint. The first coat shall be dry and hard before the second coat is applied. Galvanized iron or steel work shall not be painted.

b Field Painting

Field painting shall be limited to touching up after erection. After assembly and erection all surfaces requiring 'touch up' shall receive a coat of brush applied red oxide zinc chromate paint.

L.5 Erection & Setting up:

Erection shall be started only after permission is obtained from the Employer/ Consultant. The contractor shall satisfy himself about the levels, alignment, etc. of the foundation well in advance, before starting his erection. Minor chipping etc will be carried out by the contractor at his cost. The positioning and leveling of the frame work, aligning and plumbing of the stanchions and fixing every member of the structure shall be in accordance with relevant drawings. The contractor shall be responsible for the suitability, safety and capability of all plant and equipment used for erection. The contractor shall, as contingency of the contract, provide all necessary assistance which the Engineer may require for checking the setting out. The contractor shall take care to see component parts fit correctly and according to the distinguishing match marks. All members must be so formed that they may be accurately assembled without being unduly packed, strained or forced into position and when built, shall be true and free from any twist, kink, buckle or open joints between component pieces. Failure in this respect involves the rejection of the defective members. Greatest accuracy is to be observed to facilitate erection at site and all corresponding parts must be made interchangeable. Screwed end of the tie rods and anchor bolts or machined surfaces shall be efficiently protected from injury during transit.

Welding:



a Qualifications for Welders:

All welding operations shall be carried out by skilled welders who shall satisfy the requirements of IS:7318 (Part I & Part II). Qualifying test for metal arc welders engaged in welding structure other than pipes.

b Electrodes:

Electrodes complying with IS:814. Covered electrodes for metal arc welding of mild steel of British Standard 639 "Covered Electrodes for Metal Arc Welding" shall be used.

c Workmanship:

Welding of mild steel shall be in accordance with IS:816 'Code of Practice for use of Metal welding under General Construction in Mild Steel. 'Welders shall work under constant competent supervision in a properly organized manner with quality welding sets and with suitable electrodes all to the approval of Engineer and to his satisfaction. Special attention should be given to a suitable sequence of welding to keep the internal stresses within admissible limits.

Inspection:

The Engineer and his authorized representatives shall have free access at all reasonable times to all places where the work is being carried out and shall be provided by the Contractor at the contractor's expense with all the necessary facilities and labor for inspection during fabrication and erection. The Engineer and his authorized representative shall be at liberty to reject in whole or part of any work or material that does not conform to the terms of these specifications, and may order the same to be removed, replaced or altered at the expense of the contractor.

Painting of Structural and Tubular steel structure after Erection:

All structural & tubular structures to receive one coat of red oxide zinc chromate before erection and two coats of synthetic enamel of approved quality and shade after erection. The job shall be carried out in workman-like manner. All corners shall be painted carefully. The painting operation shall conform to IS:1477 (Part I & Part II). Before painting, all the loose scales and dust shall be removed. The color coat shall be laid evenly, properly with brushes of approved quality and make. Each coat of color shall be allowed to dry thoroughly before the next is laid on. No hair marks from the brush shall be left on the work.

L.6 Measurement

The rate for structural and tubular steel structure shall allow for use of steel solid sections or built up sections out of rolled steel sections as per the designs & details. The rate also includes the preparation of fabrication drawings by the contractor for review by the Employer/Consultant. Actual structural steel work going in the job shall be measured and paid for with following points considered:

- 1 No allowance shall be made for rolling margins for rolled sections.
- 2 No deductions will be made for bolt holes in the members.
- 3 No extras of any nature shall be paid for welding rods or site bolt connections and bolts & nuts.  
The contractor's rate should include for the above.
- 4 Weight of steel plates for each thickness shall be calculated separately on the basis of smallest rectangle enclosing the shape provided. No deductions shall be made for skew cuts in rolled steel sections.

L.7 GALVANIZING OF STRUCTURAL STEEL:

General:

This specification covers the supply of zinc and other materials, labor, tools, plant, equipment and everything necessary to hot dip galvanize the steel structural items in accordance with IS:2629, IS 4736 and IS 4759. The bolts & nuts shall be galvanized in accordance with IS: 5358. All materials after fabrication has been completed and accepted, shall be clear of rust, loose scales, dirt, oil, grease and other foreign substances, which are likely to interfere with

galvanizing process or with the quality and durability of zinc coating. Galvanizing work shall not be sublet without prior approval of Owner. Contractor shall furnish sufficient quantity of appropriate paint, free of cost, for repairing galvanized surfaces damaged in transit.

**Workmanship:**

The galvanized surface shall consist of a continuous and uniformly thick coating of zinc, firmly adhering to the surface of steel. The finished surface shall be clean and smooth and shall be free from defects like discolored patches, bare spots, un-evening of coating, loosely attached globules, spiky deposits, blistered surfaces, flaking or peeling off etc. The presence of any of these defects noticed on visual or microscopic inspection shall render the material liable for rejection. The weight of zinc coating shall be minimum 610 grams/M<sup>2</sup> for structural members and 400 grams/M<sup>2</sup> for bolts, nuts, washers etc. The uniformity for coating shall be tested in accordance with IS 2633. The minimum numbers of one-minute dips for uniformity test shall be as follows:

Steel shapes and plate : 6

Bolts, nuts and similar hardware: 4

All material which has been warped by galvanizing process shall be straightened by rolling or pressing. Material shall not be hammered or otherwise straightened in a manner that will injure the protective coating. If in the opinion of Owner/Consultant the material has been harmfully bent or warped in the process of galvanizing or fabrication, such defects shall be cause for rejection. Finished materials shall be dipped into the solution of dichromate or approved equivalent after galvanizing so as to prevent formation of patches of 'white rust' during storage or transport.

**Repair of Galvanizing:**

Materials on which galvanizing has been damaged shall be stripped with acid and re-galvanized, unless, in the opinion of owner/consultant, the damage is local and can be repaired by zinc spraying or by applying a coating of galvanizing repair compound, where re-galvanizing is required, any member which becomes damaged after having been dipped twice shall be rejected. Contractor shall furnish four copies of all test reports carried out in shop to the owner. The cost of all such test and reports shall be borne by the contractor.

**Payment:**

The weight of actual, completed structure shall be calculated from the approved drawings for different items of work. No allowance in weight will be made for weight of zinc added due to galvanizing. Contractor shall submit to the owner relevant material list containing weight of each item. Weight of member made out of standard rolled sections such as joists, channels, angles, etc. shall be based on standard IS book weight, without deducting for holes, notches, bevel cuts etc. Where a component consists of cut joist or channel, full weight of rolled section shall be considered only if more than half the depth of the section is used otherwise only half the sectional weight shall be considered for calculation of weight of component. Full weight of bolts, nuts, washers, spring washers, step bolts and other accessories shall be taken into account in calculating the weight of completed structure.

Format of *Request of Contractor for issue of virtual completion letter:*

**Undertaking by the contractor:**

We hereby certify that we have completed the Civil/Interior/Electrical work as per the tender submitted by us and strictly obeying and adhering drawings and specification and other conditions / notes for the site.

We solemnly swear that the information given by us is true to best of our knowledge and belief and we have not hide / concealed any fact regarding the work. We are solely responsible for any in fault / misleading /hide of any fact and information if found in the future.

Signature of the Contractor  
Seal of the firm  
Date

To, Date:  
The Office In charge,  
THE ORIENTAL INSURANCE COMPANY LIMITED, Indore

Sub: Issue of satisfaction report for virtual completion certificate

Sir;

We have completed the Civil/Interior/Electrical work as per the tender submitted by us and strictly obeying and adhering drawings and specification and other conditions / notes. We request you to kindly check at you and by your staff for the completion of the work at your end.

Thanking you.

Seal and signature of the contractor

**Office In charge Report for completion of the work:**

Name of the Contractor.....  
Work of Civil / Interior / Electrical .....  
Date of Start of Work .....  
Date of Finish of work .....  
Comments of the Branch Manager / authority regarding the work  
.....  
.....

....  
We state that the above mentioned contractor has virtually completed the work and in my opinion the virtual completion certificate can issued to them. The works of defects list have been also completed at the site.

Signature of Official  
THE ORIENTAL INSURANCE CO. LTD  
Date :

NOTE. BIDDER TO QUOTE THEIR TENDER ON THIS SHEET CAREFULLY. THERE MUST BE NO OVERWRITING/ USE OF WHITENER ETC.

-----Financial Bid-----

TENDER FOR WORKS

I/We do hereby tender for the execution for THE ORIENTAL INSURANCE COMPANY LIMITED of the work specified in the under written memorandum within the time specified in such memorandum at

.....% (in figures)

..... (in WORDS)

percent **above/ below** the rates of estimates prepared mostly on basis of CPWD CIVIL WORKS DSR 2014 and ELECTRICAL DSR 2014 (including cost index & service tax) both updated till date and in accordance in all respects with the specification, designs, drawings and instructions including NIT and with such materials as are provided for, by and in all other respects in accordance with such conditions so far as applicable.

MEMORANDUM

- a) General Description:- **TENDER *Renovation work of Flats at MIG & HIG COLONY, Bhopal,***
- b) Estimated Cost: - Rs. 28.88 LACS approx.
- c) Earnest Money :- RUPEES THIRTY EIGHT THOUSAND ONLY
- d) Security Deposit: 5% of Project cost
- e) Percentage if any to be deducted from running bills for security deposit: 10% of running bills.
- f) Time allowed for completion of the work from the date of issue of written order to commence Six months including rainy season.

Should this tender be accepted? I/We hereby agree to abide by and fulfill all the terms and provisions of the said conditions of contract annexed hereto, so for as applicable or in default thereof to forfeit and pay to THE ORIENTAL INSURANCE COMPANY LIMITED or his successors in office the sums of money mentioned, in the said conditions.

Signature and Seal of firm of bidder

Date:  
Place:

**Oriental insurance corporation ltd.****Schedul of Rates for Renovation/ Misc. works of HIG 11 at BHOPAL**

The quantities shown in The BOQ/ Estimates are very tentative, indicative and approximate however, the final quantities shall be measured from the actual site measurements.

SN	Item No	Items	Unit	Qty	Rates	Amount
1	15.56	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	sqm	152.25	21.04	
2	13.6	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on new work	Sqm.	595.35	84.48	
3	13.4	Distempering with dry distemper of approved brand and manufacture ( two or more coats ) and of required shade on new work, over and including priming coat of whitening to give an even shade.	sqm	147.00	71.99	
4	13.46	finishing walls Acrylic Smooth exterior paint of required shade:				
	13.46.1	New work ( two or more coat applied @ 1.67 ltr/10 sqm over and including base coat of water proofing cement paint applied @ 2.2 kg/ 10 sqm )	sqm	331.80	94.45	
5		Providing and fixing Chlorinated polyvinyl chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings this includes jointing of pipes & fittings with one step CPVC solvent cement trenching, refilling & testing of joints complete as per direction of Engineer in-charge.				
		External work				
	18.9.1	15 mm nominal outer dia pipes	meter	15.75	150.75	
6		Providing and fixing G. I. pipe complete with G.I. fittings and clamps, including cutting and making good the walls etc.				
	18.10.3	25 mm dia. Nominal bore	meter	26.25	319.19	
7	15.12	Dismantling, door, winow and clerestory window (steel or woob) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
	15.12.1	Of area 3 sq metres and below	each	50.00	149.28	
8	14.5	renewing glass panes, with putty and nails wherever necessary				
	14.5.1	Float glass panes of thockness 4 mm	sqm	8.40	724.85	

SN	Item No	Items	Unit	Qty	Rates	Amount
9	21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
	21.1.1	For fixed portion				
	21.1.2.2	Powder coated aluminium ( minimum thickness of powder coating 50 micron )	kg	168.00	457.29	
10	12.41	Providing and fixing on wall face un plasticised Rigid PVC Rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion for soil and wast pipes single socketed pipes for working pressure of 4 kg / sq cm ( 12.74.3 110 mm diameter				
	12.41.2	110 mm diameter	meter	26.25	243.10	
11	12.42	providing and fixing on wall face un plasticised Rigid - PVC moulded fittings / accessories for un plasticised Rigid PVC Rain water pipes conforming to IS : 13592 Type A including jointing with with seal ring conforming to IS : 3582 leaving 10 mm gap for thermal expansion				
	12.42.5	Bend 87.5°				
a	12.42.5.2	110mm bend	each	6.00	169.54	
	12.42.6	Shoe (Plain)				
b	12.42.6.2	110 mm shoe	each	6.00	309.69	
	12.42.4	Single tee without door				
c	12.42.4.2	110x110x110 mm	each	12.00	260.84	
d	12.42.4.1	75 x 75 x 75	each	7.00	204.96	
12A	15.1	Demolishing lime concrete manually/ by mechanical means and disposal of material within 50 metres lead as per direction of Engineer-in-charge.	cum	10.76	327.06	
12	15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in charge.				
	15.2.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	cum	17.85	936.84	
13	15.4	demolishing R.C.C.Work manually by mechanical means Including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in - charge.	cum	4.20	1366.69	

SN	Item No	Items	Unit	Qty	Rates	Amount
14	non dsr	Providing & fixing chicken mesh as per ISI specification and in the required with 50mm long bombay nails on vertical and horizontal junctions of RCC and brick wall including scaffolding and all lead and lift etc. complete before plastering up to 10 meter height	sqm	105.00	164.76	
15	13.6	20 mm cement plaster of mix :				
	13.6.1	1:4 (1 cement: 4 coarse sand)	sqm	452.55	254.02	
16	13.16	6 mm cement plaster of mix :				
	13.6.1	13.16.1 1:3 (1 cement : 3 fine sand)	sqm	36.75	141.36	
17	15.23	dismantling tile work in floor and roof laid in cement mortar including stacking material within 50 metres lead.				
	15.23.1	For thickness of tiles 10 mm to 25 mm	sqm	4.20	29.59	
18	17.1	providing and fixing water closet squatting pan (indian type W.C. pan ) with 100 mm sand cast iron P or S , 10 litre low level white P.V.C. flushing cistern with manually controlled device ( handle lever ) conforming to IS : 7231 with all fittings and fixtures complete including cutting and making good the walls and floors wherever required				
	17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests.	each	2.00	3560.54	
19	9.1	Providing wood work in frames of doors, window, clerestory windows and other frames, wrought framed and fixed position :				
	9.1.2	Sal Wood	cum	0.53	79294.22	
20	9.21	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters :				
	9.21.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	sqm	32.55	1821.15	
21	non dsr	Brick work with M.S. Bricks of class designation 40 in superstructure above plinth level up to floor ii level in all shape sand size in :				
		6.4.1 cement mortar 1:4 (1 cement : 4 sand )	cum	5.25	3966.88	
22		Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire up to floor two level including all wastage etc. complete.				
	5.22.4	Hot rolled deformed bars	kilogram	210.00	71.47	
23	5.1	providing and laying in position specified grade of reinforced cement concrete ( with 20 mm nominal size graded stone aggregate ) excluding the cost of centering, shuttering, finishing and reinforcement - all work up to plinth level :				
	5.1.1	5.1.1 M 20 Nominal mix	cum	2.10	8175.09	

SN	Item No	Items	Unit	Qty	Rates	Amount
24		Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32mm C.P. brasswaste of standard pattern, brass pillar taps,32mm C.P. brasswaste of standard pattern,				
	17.7.1	White Vitreous China Wash basin size 630x450 mmwith a pair of 15mm C.P. brass pillar taps.	Each	2.00	2446.40	
25	11.36	Providing and fixing 1st quality ceramic glazed wall tile conforming to IS : 15622 (thickness to be specified by the manufacturer ) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer - in -charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 ( 1 cement : 3 coarse sand ) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	sqm	42.00	878.01	
26	11.37	Providing and laying ceramic glazed floor tiles 300x300 mm ( thickness to be specified by the manufacturer ) of 1st quality conforming to IS : 15622 of approved make in colour such as white, ivory, grey, fume Red Brown, laid on 20 mm thick cement Mortar 1:4 ( 1 cement : 4 Coarse sand ) including pointing the joints with white cement and matching pigment etc. complete.	sqm	11.55	824.23	
27	11.41	Providing and laying Polished vitrified floor tiles in different sizes ( thickness to be specified by the manufacturer ) with water absorption's less than 0.08% and shades, laid on 20 mm thick cement mortar 1:4 ( 1 cement : 4 coarse sand ) including grouting the joints with cement and matching pigments etc complete.				
	11.41.2	Size of tile 60cm x 60cm	sqm	136.50	1475.46	
28	22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.				



SN	Item No	Items	Unit	Qty	Rates	Amount
		b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand ) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. d) Finishing the surface with 20 mm thick				
		jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge :				
	22.7.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	sqm	86.10	1069.43	
29	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, ISI : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	per litre	2100.00	7.61	

SN	Item No	Items	Unit	Qty	Rates	Amount
30	12.29	Providing and fixing false ceiling with 12 mm thick plain/ semi perforated or with design ceiling tiles of BWP type phenol formaldehyde synthetic resin bonded pressed particle board conforming to IS:3087, finished with a coat of aluminium primer on both sides & edges, including two coats of synthetic enamel paint of approved quality on exposed face, fixed to a grid made out of anodised aluminium (with 15 micron anodic coating) Tsections 35 x15x1.5 mm size main runners, cross runners 23.5x19x1.5 mm fixed to main runners placed 600 mm centre to centre both ways so as to form a grid of 600 mm square. The frame work shall be suspended from ceiling by level adjusting hangers of 6 mm dia M.S rod fixed to roof slab by means of ceiling cleats and dash fastener. The suspenders shall be placed 600 x 1200 mm centre to centre including fixing to the frame with C.P brass screws and applying a priming coat of zinc chromate yellow primer (aluminium frame work shall be paid separately).	SQM	17.85	682.29	
31	10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	KG		77.61	
<b>A</b>	<b>Point Wiring</b>					
30	1.10	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required.				
	1.10.1	Group A	Point	49.00	543.61	
	1.10.2	Group B	Point	16.00	613.92	
	1.10.3	Group C	Point	5.00	753.50	
31	1.11	Wiring for twin control light point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required.	Point	6.00	808.07	
32	1.12	Wiring for light/ power plug with 2X4 sq. mm FR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No 4 sq. mm FR PVC insulated copper conductor single core cable for loop earthing as required.	Metre	158.00	170.01	
<b>B</b>	<b>Circuit Wiring</b>					

SN	Item No	Items	Unit	Qty	Rates	Amount
33	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required				
	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	Metre	210.00	111.24	
	1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	Metre	157.50	137.48	
	1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Metre	73.50	170.01	
34	1.18	Supplying and drawing following pair 0.5 sq mm FR PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.18.1	1 Pair	Metre	52.50	14.69	
35	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	Metre	73.50	29.38	
<b>C</b>	<b>Conduit in Concealed System</b>					
36	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
	1.21.1	20 mm	Metre	26.25	55.62	
	1.21.2	25 mm	Metre	26.25	68.21	
<b>D</b>	<b>Modular Boxes/ Plate</b>					
37	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	1.24.1	5/6 amps switch	Each	21.00	808.07	
	1.24.3	15/16 amp switch	Each	11.00	808.07	
	1.24.4	3 pin 5/6 amp socket outlet	Each	11.00	808.07	
	1.24.5	6 pin 15/16 amp socket outlet	Each	11.00	808.07	
	1.24.6	Telephone socket outlet	Each	13.00	808.07	
	1.24.7	TV antenna socket outlet	Each	8.00	808.07	
	1.24.8	Bell push	Each	4.00	808.07	
38	1.25	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	11.00	808.07	
39	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Each	21.00	24.14	
40	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.				
	1.27.1	1 or 2 Module (75mmX75mm)	Each	4.00	808.07	
	1.27.2	3 Module (100mmX75mm)	Each	1.00	808.07	
	1.27.3	4 Module (125mmX75mm)	Each	5.00	808.07	
	1.27.4	6 Module (200mmX75mm)	Each	5.00	808.07	
	1.27.5	8 Module (125mmX125mm)	Each	3.00	808.07	

SN	Item No	Items	Unit	Qty	Rates	Amount
41	1.33	Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.	Each	11.00	808.07	
42	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 volts, complete as required.	Each	2.00	808.07	
43	5.4	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Set	1.00	4711.99	
<b>E MCCBs, ISOLATORS, MCBs, RCBOs, MCB DBs</b>						
44	2.3	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.3.8	2 + 12 way / 14 way, Double door	Each	1.00	808.07	
45	2.10	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.1	Single pole	Each	5.00	177.36	
	2.10.2	Single pole and neutral	Each	5.00	808.07	
	2.10.5	Triple pole and neutral	Each	1.00	930.85	
46	2.8	Supplying and fixing following way prewired TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required.(But without MCB/ RCCB/ Isolator)				
	2.8.5	4 way (4 + 12), Double door	Each	1.00	7720.73	
<b>F SOR Items</b>						
47	33.1	Supplying of XLPE insulated power cable ( conforming IS 7098)1100 Volt grade/ heavy duty power cable conforming IS 1554-1100 Voltage grade, 2 core/ 3 <sup>1/2</sup> core/ 4 core ISI marked with Alu. Stranded/ solid conductor				
	33.1.6	<b>ARMOURED 3 1/2 CORE</b>				
	33.1.6.1	25sqmm(XLPE)	Metre	42.00	808.07	

SN	Item No	Items	Unit	Qty	Rates	Amount
48	26.32	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections.				
	26.32.1	Ceiling Fan (Energy Saver 50 W)-1200 mm Sweep	Each	10.50	808.07	
49	26.36	Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fastners etc. complete finished and as required.				
	26.36.1	300mm sweep 900 RPM	Each	1.00	808.07	
50	30.13	Providing recess in brick wall suitable for erection of exhaust fan upto 450 sweep complete with grouting of nut bolt, plastering and colour wash to match the colour of wall.				
	30.13.1	For wall thickness upto 9"	Each	1.00	808.07	
51	26.58	Supplying, fixing & testing of approved make of T- 5 lamp channel luminaire with epoxy white powder coated CRCA sheet steel housing with reflector cover with necessary materials connection etc. complete as required (with lamp )				
	26.58.1	T - 5 Lamp 1 X 28 watt	Each	16.00	1049.44	
52	26.23	Supplying, Fixing and Testing of Compact Fluorescent Lamp (CFL) with inbuilt electronic ballast ISI marked of approved make as required as per specification				
	26.23.1	5 Watt	Each	16.00	117.54	
				TOTAL		

### **Oriental insurance corporation ltd.**

#### **Schedul of Rates for Renovation/ Misc. works of HIG 40 AT- BHOPAL**

The quantities shown in The BOQ/ Estimates are very tentative, indicative and approximate however, the final quantities shall be measured from the

Sl. No	Item No	Items	Unit	Qty	Rates	Amount
1	15.56	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	sqm	104	21.04	
2	13.6	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on new work	Sqm.	595	84.48	
3	13.4	Distempering with dry distemper of approved brand and manufacture ( two or more coats ) and of required shade on new work, over and including priming coat of whitening to give an even shade.	sqm	147	71.99	
4	13.46	finishing walls Acrylic Smooth exterior paint of required shade:				

SN	Item No	Items	Unit	Qty	Rates	Amount
	13.46.1	New work ( two or more coat applied @ 1.67 ltr/10 sqm over and including base coat of water proofing cement paint applied @ 2.2 kg/ 10 sqm )	sqm	332	94.45	

SN	Item No	Items	Unit	Qty	Rates	Amount
5	18.9	Providing and fixing Chlorinated polyvinyl chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings this includes jointing of pipes & fittings with one step CPVC solvent cement trenching, refilling & testing of joints complete as per direction of Engineer in-charge.				
		External work				
	18.9.1	15 mm nominal outer dia pipes	Mtr	15	150.75	
6	18.10	Providing and fixing G. I. pipe complete with G.I. fittings and clamps, including cutting and making good the walls etc.				
	18.10.3	25 mm dia. Nominal bore	Mtr	24	319.19	
7	15.12	Dismantling, door, window and clerestory window (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
	15.12.1	Of area 3 sq metres and below	each	49	148.23	
8	14.5	renewing glass panes, with putty and nails wherever necessary				
	14.5.1	Float glass panes of thickness 4 mm	sqm	8	724.85	
9	21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
	21.1.1	For fixed portion				
	21.1.2.2	Powder coated aluminium ( minimum thickness of powder coating 50 micron )	kg	168	457.29	
10	12.41	Providing and fixing on wall face un plasticised Rigid PVC Rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion ( i ) single socketed pipes				
	12.41.2	110 mm diameter	Mtr	26	243.10	
11	12.42	providing and fixing on wall face unplasticised Rigid - PVC moulded fittings / accessories for unplasticised Rigid PVC Rain water pipes conforming to IS : 13592 Type A including jointing with with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion				
	12.42.5	Bend 87.5°				
a	12.42.5.2	110mm bend	each	5	169.54	

SN	Item No	Items	Unit	Qty	Rates	Amount
	12.42.6	Shoe (Plain)				
b	12.42.6.2	110 mm shoe	each	5	309.69	
	12.42.4	Single tee without door				
c	12.42.4.2	110x110x110 mm	each	12	260.84	
d	12.42.4.1	75 x 75 x 75	each	7	204.96	
12A	15.1	Demolishing lime concrete manually/ by mechanical means and disposal of material within 50 metres lead as per direction of Engineer-in-charge.	cum	11	327.06	
12	15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in charge.				
	15.2.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	cum	18	936.84	
13	15.3	demolishing R.C.C.Work manually by mechanical means Including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in - charge.	cum	4	1366.69	
14	13.6	Providing & fixing chicken mesh as per ISI specification and in the required with 50mm long bombay nails on vertical and horizontal junctions of RCC and brick wall including scaffolding and all lead and lift etc. complete before plastering upt 10meter height	sqm	105	164.76	
15	13.6	20 mm cement plaster of mix :				
	13.6.1	1:4 (1 cement: 4 coarse sand)	sqm	422	254.02	
16	13.16	6 mm cement plaster of mix :				
	13.6.1	13.16.1 1:3 (1 cement : 3 fine sand)	sqm	15	141.36	
17	15.23	dismantling tile work in floor and roof laid in cement mortar including stacking material within 50 metres lead.				
	15.23.1	For thickness of tiles 10 mm to 25 mm	sqm	4	29.59	
18	17.1	providing and fixing water closet squatting pan (indian type W.C. pan ) with 100 mm sand cast iron P or S , 10 litre low level white P.V.C. flushing cistern with manually controlled device ( handle lever ) conforming to IS : 7231 with all fittings and fixtures complete including cutting and making good the walls and floors wherever required				
	17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests.	each	1	3560.54	
19	9.1	Providing wood work in frames of doors, window, clerestory windows and other frames, wrought framed and fixed position :				
	9.1.2	Sal Wood	cum	1	79294.22	
20	9.21	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or crossbands and face veneers on both faces of shutters :				
	9.21.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	sqm	32	1821.15	



SN	Item No	Items	Unit	Qty	Rates	Amount
21	non dsr	Brick work with M.S. Bricks of class designation 40 in superstructure above plinth level up to floor ii level in all shape sand size in :				
		cement mortar 1:4 (1 cement : 4 sand )	cum	5	3966.88	
22	5.22	Reinforcement for R.C.C. work including straightenong, cutting, bending, placing in position and binding including cost of binding wire up to floor two level including all wastage etc. complete.				
	5.22.4	Hot rolled deformed bars	Kg	210	71.47	
23	5.1	providing and laying in position specified grade of reinforced cement concrete ( with 20 mm nominal size graded stone aggregate ) excluding the cost of centering, shuttering, finishing and reinforcement - all work up to plinth level :				
	5.1.1	1:1:2 (1 cement : 1 coarse sand : 2 graded stone aggregate 20 mm nominal size)	cum	2	8175.09	
24	17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32mm C.P. brasswaste of standard pattern, brass pillar taps,32mm C.P. brasswaste of standard pattern,				
	17.7.1	White Vitreous China Wash basin size 630x450 mmwith a pair of 15mm C.P. brass pillar taps.	Each	1	2446.24	
25	11.36	Providing and fixing 1st quality ceramic glazed wall tile conforming to IS : 15622 (thickness to be specified by the manufacturer ) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer - in -charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 ( 1 cement : 3 coarse sand ) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	sqm	42	878.01	
26	11.37	Providing and laying ceramic glazed floor tiles 300x300 mm ( thickness to be specified by the manufacturer ) of 1st quality conforming to IS : 15622 of approved make in colour such as white, iviry, grey, fume Red Brown, laid on 20 mm thick cement Mortar 1:4 ( 1 cement : 4 Coarse sand ) including pointing the joints with white cement and matching pigment etc. complete.	sqm	12	824.23	
27	11.41	Providing and laying vitrified floor tiles in different sizes ( thickness to be specified by the manufacturer ) with water absorption's less than 0.08% and shades, laid on 20 mm thick cement mortar 1:4 ( 1 cement : 4 coarse sand ) including grouting the joints with cement and matching pigments etc complete.				
	11.41.2	Size of tile 60cm x 60cm	sqm	137	1475.46	

SN	Item No	Items	Unit	Qty	Rates	Amount
28	22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.				
		b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand ) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. d) Finishing the surface with 20 mm thick				
		jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge :				
	22.7.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	sqm	86	1069.43	
29	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, ISI : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	per litre	2100	7.61	

SN	Item No	Items	Unit	Qty	Rates	Amount
30	12.29	Providing and fixing false ceiling with 12 mm thick plain/ semi perforated or with design ceiling tiles of BWP type phenol formaldehyde synthetic resin bonded pressed particle board conforming to IS:3087, finished with a coat of aluminium primer on both sides & edges, including two coats of synthetic enamel paint of approved quality on exposed face, fixed to a grid made out of anodised aluminium (with 15 micron anodic coating) Tsections 35 x15x1.5 mm size main runners, cross runners 23.5x19x1.5 mm fixed to main runners placed 600 mm centre to centre both ways so as to form a grid of 600 mm square. The frame work shall be suspended from ceiling by level adjusting hangers of 6 mm dia M.S rod fixed to roof slab by means of ceiling cleats and dash fastener. The suspenders shall be placed 600 x 1200 mm centre to centre including fixing to the frame with C.P brass screws and applying a priming coat of zinc chromate yellow primer (aluminium frame work shall be paid separately).	SQM	25	7.61	
31	10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	KG	116	77.61	
<b>A</b>	<b>Point Wiring</b>					
30	1.10	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required.				
	1.10.1	Group A	Point	48	543.61	
	1.10.2	Group B	Point	16	613.92	
	1.10.3	Group C	Point	5	753.50	
31	1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.	Point	6	808.07	
32	1.12	Wiring for light/ power plug with 2X4 sq. mm FR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No 4 sq. mm FR PVC insulated copper conductor single core cable for loop earthing as required.	Metre	158	170.01	
<b>B</b>	<b>Circuit Wiring</b>					
33	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required				
	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	Metre	210	111.24	

SN	Item No	Items	Unit	Qty	Rates	Amount
	1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	Metre	158	137.48	
	1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Metre	74	170.01	
34	1.18	Supplying and drawing following pair 0.5 sq mm FR PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.18.1	1 Pair	Metre	53	14.69	
35	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	Metre	74	29.38	
<b>D</b>	<b>Conduit in Concealed System</b>					
36	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
	1.21.1	20 mm	Metre	26	55.62	
	1.21.2	25 mm	Metre	26	68.21	
<b>E</b>	<b>Modular Boxes/ Plate</b>					
37	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	1.24.1	5/6 amps switch	Each	21	85.00	
	1.24.3	15/16 amp switch	Each	11	116.49	
	1.24.4	3 pin 5/6 amp socket outlet	Each	11	82.91	
	1.24.5	6 pin 15/16 amp socket outlet	Each	11	157.42	
	1.24.6	Telephone socket outlet	Each	13	99.70	
	1.24.7	TV antenna socket outlet	Each	8	98.65	
	1.24.8	Bell push	Each	4	116.49	
38	1.25	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	11	298.04	
39	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Each	21	24.14	
40	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.				
	1.27.1	1 or 2 Module (75mmX75mm)	Each	4	174.21	
	1.27.2	3 Module (100mmX75mm)	Each	1	183.65	
	1.27.3	4 Module (125mmX75mm)	Each	5	204.64	
	1.27.4	6 Module (200mmX75mm)	Each	5	260.26	
	1.27.5	8 Module (125mmX125mm)	Each	3	301.19	
41	1.33	Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.	Each	11	45.13	
42	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 volts, complete as required.	Each	2	64.02	

SN	Item No	Items	Unit	Qty	Rates	Amount
43	5.4	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Set	1	4711.99	
<b>I</b>	<b>MCCBs, ISOLATORS, MCBs, RCBOs, MCB DBs</b>					
44	2.3	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.3.8	2 + 12 way / 14 way, Double door	Each	1	1410.45	
45	2.10	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.1	Single pole	Each	5	177.36	
	2.10.2	Single pole and neutral	Each	5	462.80	
	2.10.5	Triple pole and neutral	Each	1	930.85	
46	2.8	Supplying and fixing following way prewired TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required.(But without MCB/ RCCB/ Isolator)				
	2.8.5	4 way (4 + 12), Double door	Each	1	7720.73	
<b>Q</b>	<b>SOR Items</b>					
47	33.1	Supplying of XLPE insulated power cable ( conforming IS 7098)1100 Volt grade/ heavy duty power cable conforming IS 1554-1100 Voltage grade, 2 core/ 3 <sup>1/2</sup> core/ 4 core ISI marked with Alu. Stranded/ solid conductor				
	33.1.6	<b>ARMOURED 3 1/2 CORE</b>				
	33.1.6.1	25sqmm(XLPE)	Metre	42	243.47	
48	26.32	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections.				
	26.32.1	Ceiling Fan (Energy Saver 50 W)-1200 mm Sweep	Each	11	1511.19	

SN	Item No	Items	Unit	Qty	Rates	Amount
49	26.36	Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fastners etc. complete finished and as required.				
	26.36.1	300mm sweep 900 RPM	Each	1	2603.66	
50	30.13	Providing recess in brick wall suitable for erection of exhaust fan upto 450 sweep complete with grouting of nut bolt, plastering and colour wash to match the colour of wall.				
	30.13.1	For wall thickness upto 9"	Each	1	119.64	
51	26.58	Supplying, fixing & testing of approved make of T- 5 lamp channel luminaire with epoxy white powder coated CRCA sheet steel housing with reflector cover with necessary materials connection etc. complete as required (with lamp )				
	26.58.1	T - 5 Lamp 1 X 28 watt	Each	16	1049.44	
52	26.23	Supplying, Fixing and Testing of Compact Fluorescent Lamp (CFL) with inbuilt electronic ballast ISI marked of approved make as required as per specification				
	26.23.1	5 Watt	Each	16	117.54	
				TOTAL		

**Oriental insurance corporation ltd.**

**Schedul of Rates for Renovation/ Misc. works of MIG 73, at BHOPAL ,**

The quantities shown in The BOQ/ Estimates are very tentative, indicative and approximate however, the final quantities shall be measured from the actual

Item No	Measurements	Items	Unit	Qty	Rates	Amount
1	15.56	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	sqm	19.00	21.04	
2	13.6	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade: Two or more coats on new work	Sqm.	281.05	84.48	
3	13.4	Distempering with dry distemper of approved brand and manufacture ( two or more coats ) and of required shade on new work, over and including priming coat of whitening to give an even shade.	sqm	78.00	71.99	
4	13.46	finishing walls Acrylic Smooth exterior paint of required shade:				
	13.46.1	New work ( two or more coat applied @ 1.67 ltr/10 sqm over and including base coat of water proofing cement paint applied @ 2.2 kg/ 10 sqm )	sqm	100.10	94.45	

SN	Item No	Items	Unit	Qty	Rates	Amount
5	18.9	Providing and fixing Chlorinated polyvinyl chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings this includes jointing of pipes & fittings with one step CPVC solvent cement trenching, refilling & testing of joints complete as per direction of Engineer in-charge.				

SN	Item No	Items	Unit	Qty	Rates	Amount
		External work				
	18.9.1	15 mm nominal outer dia pipes	meter	5.00	150.75	
6		Providing and fixing G. I. pipe complete with G.I. fittings and clamps, including cutting and making good the walls etc.				
	18.10.3	25 mm dia. Nominal bore	meter	7.00	319.19	
7	15.12	Dismantling, door, winow and clerestory window (steel or woob) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
	15.12.1	Of area 3 sq metres and below	each	18.00	148.23	
8	14.5	renewing glass panes, with putty and nails wherever necessary				
	14.5.1	Float glass panes of thockness 4 mm	sqm	7.00	724.85	
9	21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
	21.1.1	For fixed portion				
	21.1.2.2	Powder coated aluminium ( minimum thickness of powder coating 50 micron )	kg	82.50	457.29	
10	12.41	Providing and fixing on wall face un plasticised Rigid PVC Rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion ( i ) single socketed pipes				
	12.41.2	110 mm diameter	meter	13.00	243.10	
11	12.42	providing and fixing on wall face un plasticised Rigid - PVC moulded fittings / accessories for un plasticised Rigid PVC Rain water pipes conforming to IS : 13592 Type A including jointing with with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion				
	12.42.5	Bend 87.5°				
a	12.42.5.2	110mm bend	each	2.00	169.54	
	12.42.6	Shoe (Plain)				
b	12.42.6.2	110 mm shoe	each	2.00	309.69	
	12.42.4	Single tee without door				
c	12.42.4.2	110x110x110 mm	each	5.00	260.84	
d	12.42.4.1	75 x 75 x 75	each	5.00	204.96	



SN	Item No	Items	Unit	Qty	Rates	Amount
12A	15.1	Demolishing lime concrete manually/ by mechanical means and disposal of material within 50 metres lead as per direction of Engineer-in-charge.	cum	26.16	327.06	
12	15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in charge.				
	15.2.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	cum	5.50	936.84	
13	15.3	demolishing R.C.C.Work manually by mechanical means Including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in - charge.	cum	2.20	1366.69	
14	non dsr	Providing & fixing chicken mesh as per ISI specification and in the required with 50mm long bombay nails on vertical and horizontal junctions of RCC and brick wall including scaffolding and all lead and lift etc. complete before plastering up to 10 meter height	sqm	27.50	164.76	
15	13.6	20 mm cement plaster of mix :				
	13.6.1	1:4 (1 cement: 4 coarse sand)	sqm	106.60	253.96	
16	13.16	6 mm cement plaster of mix :				
	13.6.1	13.16.1 1:3 (1 cement : 3 fine sand)	sqm	8.25	141.36	
17	15.23	dismantling tile work in floor and roof laid in cement mortar including stacking material within 50 metres lead.				
	15.23.1	For thickness of tiles 10 mm to 25 mm	sqm	1.65	29.59	
18	17.1	providing and fixing water closet squatting pan (indian type W.C. pan ) with 100 mm sand cast iron P or S , 10 litre low level white P.V.C. flushing cistern with manually controlled device ( handle lever ) conforming to IS : 7231 with all fittings and fixtures complete including cutting and making good the walls and floors wherever required				
	17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests.	each	1.00	3560.54	
19	9.1	Providing wood work in frames of doors, window, clerestory windows and other frames, wrought framed and fixed position :				
	9.1.2	Sal Wood	cum	0.38	79294.22	
20	9.21	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters :				
	9.21.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	sqm	17.00	1821.15	
21	NON DSR	Brick work with M.S. Bricks of class designation 40 in superstructure above plinth level up to floor ii level in all shape and size in :				
		6.4.1 cement mortar 1:4 (1 cement : 4 sand )	cum	1.50	3966.88	

SN	Item No	Items	Unit	Qty	Rates	Amount
22	5.22	Reinforcement for R.C.C. work including straightenong, cutting, bending, placing in position and binding including cost of binding wire up to floor two level including all wastage etc. complete.				
	5.22.4	Hot rolled deformed bars	kilogram	100.00	71.47	
23	5.1	providing and laying in position specified grade of reinforced cement concrete ( with 20 mm nominal size graded stone aggregate ) excluding the cost of centering, shuttering, finishing and reinforcement - all work up to plinth level :				
	5.1.1	5.1.1 M 20 Nominal mix	cum	1.00	8175.09	
24	17.7	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32mm C.P. brasswaste of standard pattern, brass pillar taps,32mm C.P. brasswaste of standard pattern,				
	17.7.1	White Vitreous China Wash basin size 630x450 mmwith a pair of 15mm C.P. brass pillar taps.	Each	1.00	2446.40	
25	11.36	Providing and fixing 1st quality ceramic glazed wall tile conforming to IS : 15622 (thickness to be specified by the manufacturer ) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer - in -charge in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 ( 1 cement : 3 coarse sand ) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with pigment of matching shade complete.	sqm	13.00	878.01	
26	11.37	Providing and laying ceramic glazed floor tiles 300x300 mm ( thickness to be specified by the manufacturer ) of 1st quality conforming to IS : 15622 of approved make in colour such as white, iviry, grey, fume Red Brown, laid on 20 mm thick cement Mortar 1:4 ( 1 cement : 4 Coarse sand ) including pointing the joints with white cement and matching pigment etc. complete.	sqm	2.50	824.23	
27	11.41	Providing and laying Polished vitrified floor tiles in different sizes ( thickness to be specified by the manufacturer ) with water absorption's less than 0.08% and shades, laid on 20 mm thick cement mortar 1:4 ( 1 cement : 4 coarse sand ) including grouting the joints with cement and matching pigments etc complete.				
	11.41.2	Size of tile 60cm x 60cm	sqm	47.50	1475.46	
28	22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment.				

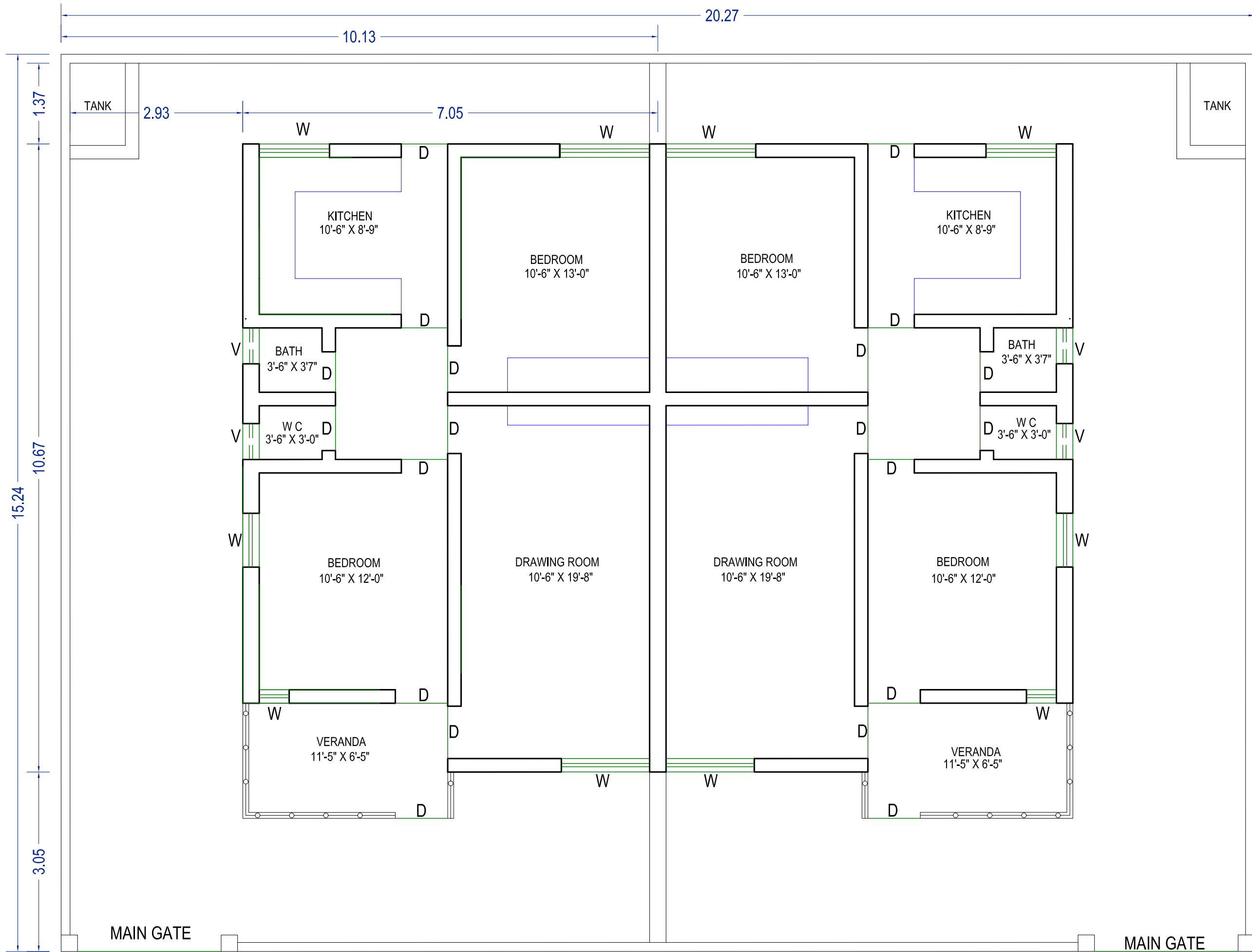
SN	Item No	Items	Unit	Qty	Rates	Amount
		b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand ) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. d) Finishing the surface with 20 mm thick				
		jointless cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer-in-Charge :				
	22.7.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	sqm	78.00	1069.43	
29	18.48	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, ISI : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	per litre	2000.00	7.61	
30	12.29	Providing and fixing false ceiling with 12 mm thick plain/ semi perforated or with design ceiling tiles of BWP type phenol formaldehyde synthetic resin bonded pressed particle board conforming to IS:3087, finished with a coat of aluminium primer on both sides & edges, including two coats of synthetic enamel paint of approved quality on exposed face, fixed to a grid made out of anodised aluminium (with 15 micron anodic coating) Tsections 35 x15x1.5 mm size main runners, cross runners 23.5x19x1.5 mm fixed to main runners placed 600 mm centre to	SQM	6.00	682.29	

SN	Item No	Items	Unit	Qty	Rates	Amount
		centre both ways so as to form a grid of 600 mm square. The frame work shall be suspended from ceiling by level adjusting hangers of 6 mm dia M.S rod fixed to roof slab by means of ceiling cleats and dash fastener. The suspenders shall be placed 600 x 1200 mm centre to centre including fixing to the frame with C.P brass screws and applying a priming coat of zinc chromate yellow primer (aluminium frame work shall be paid separately).				
31	10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	KG	45.00	77.61	
<b>A</b>	<b>Point Wiring</b>					
32	1.10	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required.				
	1.10.1	Group A	Point	23.00	543.61	
	1.10.2	Group B	Point	5.00	613.92	
	1.10.3	Group C	Point	3.00	753.50	
33	1.11	Wiring for twin control light point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required.	Point	2.00	808.07	
34	1.12	Wiring for light/ power plug with 2X4 sq. mm FR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No 4 sq. mm FR PVC insulated copper conductor single core cable for loop earthing as required.	Metre	40.00	170.01	
<b>B</b>	<b>Circuit Wiring</b>					
35	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required				
	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	Metre	75.00	111.24	
	1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	Metre	100.00	137.48	
	1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Metre	25.00	170.01	
36	1.18	Supplying and drawing following pair 0.5 sq mm FR PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.18.1	1 Pair	Metre	25.00	14.69	

SN	Item No	Items	Unit	Qty	Rates	Amount
37	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	Metre	25.00	29.38	
<b>C Conduit in Concealed System</b>						
38	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
	1.21.1	20 mm	Metre	25.00	55.62	
	1.21.2	25 mm	Metre	25.00	68.21	
<b>D Modular Boxes/ Plate</b>						
39	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	1.24.1	5/6 amps switch	Each	10.00	85.00	
	1.24.3	15/16 amp switch	Each	5.00	116.49	
	1.24.4	3 pin 5/6 amp socket outlet	Each	5.00	82.91	
	1.24.5	6 pin 15/16 amp socket outlet	Each	5.00	157.42	
	1.24.6	Telephone socket outlet	Each	6.00	99.70	
	1.24.7	TV antenna socket outlet	Each	3.00	98.65	
	1.24.8	Bell push	Each	1.00	116.49	
40	1.25	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	4.00	298.04	
41	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Each	10.00	24.14	
42	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.				
	1.27.1	1 or 2 Module (75mmX75mm)	Each	2.00	174.21	
	1.27.2	3 Module (100mmX75mm)	Each	1.00	183.65	
	1.27.3	4 Module (125mmX75mm)	Each	3.00	204.64	
	1.27.4	6 Module (200mmX75mm)	Each	3.00	260.26	
	1.27.5	8 Module (125mmX125mm)	Each	2.00	301.19	
43	1.33	Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.	Each	5.00	45.13	
44	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 volts, complete as required.	Each	1.00	64.02	
45	5.4	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Set	1.00	4711.99	
<b>E MCCBs, ISOLATORS, MCBs, RCBOs, MCB DBs</b>						

SN	Item No	Items	Unit	Qty	Rates	Amount
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	2.3.8	2 + 12 way / 14 way, Double door	Each	1.00	1410.45	
47	2.10	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.1	Single pole	Each	10.00	177.36	
	2.10.2	Single pole and neutral	Each	4.00	462.80	
	2.10.5	Triple pole and neutral	Each	1.00	930.85	
48	2.8	Supplying and fixing following way prewired TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required.(But without MCB/ RCCB/ Isolator)				
	2.8.5	4 way (4 + 12), Double door	Each	1.00	7720.73	
<b>F</b>	<b>SOR Items</b>					
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	33.1.6.1	25sqmm(XLPE)	Metre	20.00	243.47	
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	26.32.1	Ceiling Fan (Energy Saver 50 W)-1200 mm Sweep	Each	4.00	1511.19	
51	26.36	Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fastners etc. complete finished and as required.				
	26.36.1	300mm sweep 900 RPM	Each	1.00	2603.66	
52	30.13	Providing recess in brick wall suitable for erection of exhaust fan upto 450 sweep complete with grouting of nut bolt, plastering and colour wash to match the colour of wall.				

SN	Item No	Items	Unit	Qty	Rates	Amount
	30.13.1	For wall thickness upto 9"	Each	1.00	119.64	
53	26.58	Supplying, fixing & testing of approved make of T- 5 lamp channel luminaire with epoxy white powder coated CRCA sheet steel housing with reflector cover with necessary materials connection etc. complete as required (with lamp )				
	26.58.1	T - 5 Lamp 1 X 28 watt	Each	6.00	1049.44	
54	26.23	Supplying, Fixing and Testing of Compact Fluorescent Lamp (CFL) with inbuilt electronic ballast ISI marked of approved make as required as per specification				
	26.23.1	5 Watt	Each	3.00	117.54	
				TOTAL		



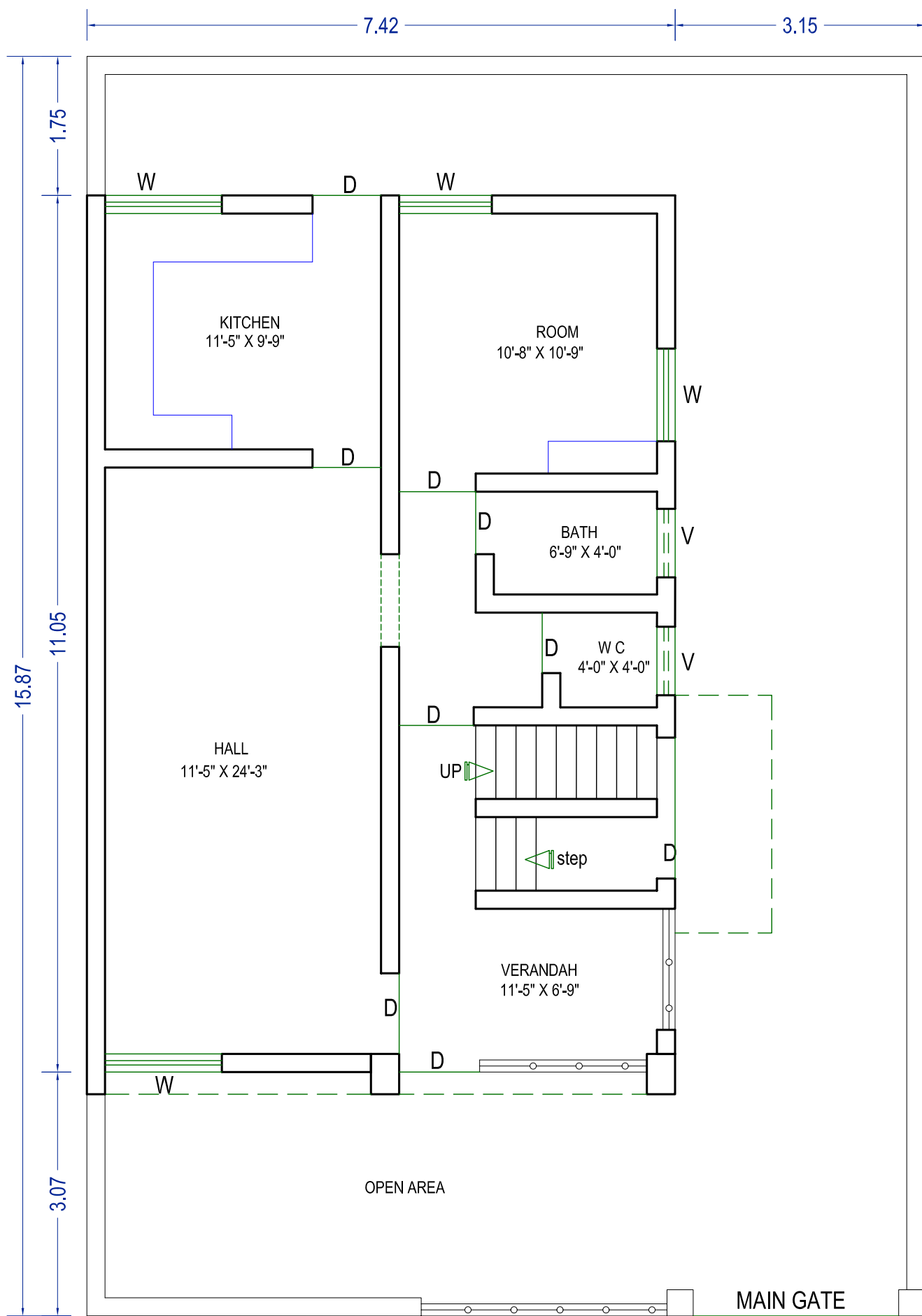
© D. VYAS & ASSOCIATES <small>ALL DIMENSIONS SHALL BE CHECKED AND CO-RELATED WITH RELEVANT DRAWING AT SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF D.V.A</small>	Date	No.	REVISIONS

Title  
**GROUND FLOOR PLAN  
73,74, MIG AT - BHOPAL**

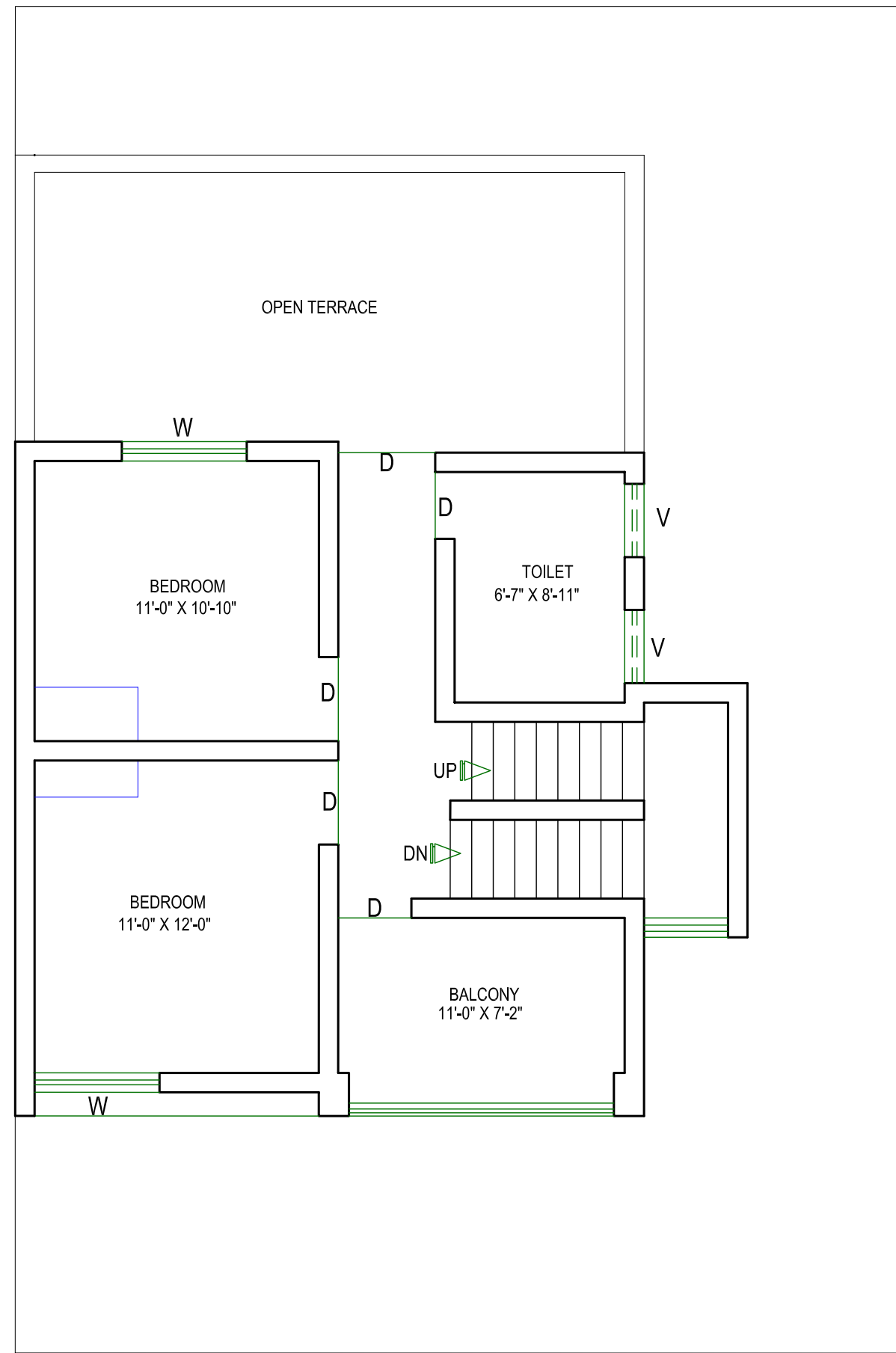
S.S.R.	Client	SCALE:	NORTH 
Check	ORIENTAL INSURANCE, BHOPAL	NTS	
Date	PROJECT :	Drawing.No.	
22-2-13	ORIENTAL INSURANCE, BHOPAL		

**D.VYAS AND ASSOCIATES**  
ARCHITECTS . ENGINEERS. INTERIOR DESIGNERS.VALUERS . PLANNERS  
1-C SITA BAG, DHENU MARKET , OPP. AGRAWAL SWEETS, INDORE  
PH:NO.- 0731-2430300 ,3043447 [O] MOBILE-98270-26726





GROUND FLOOR



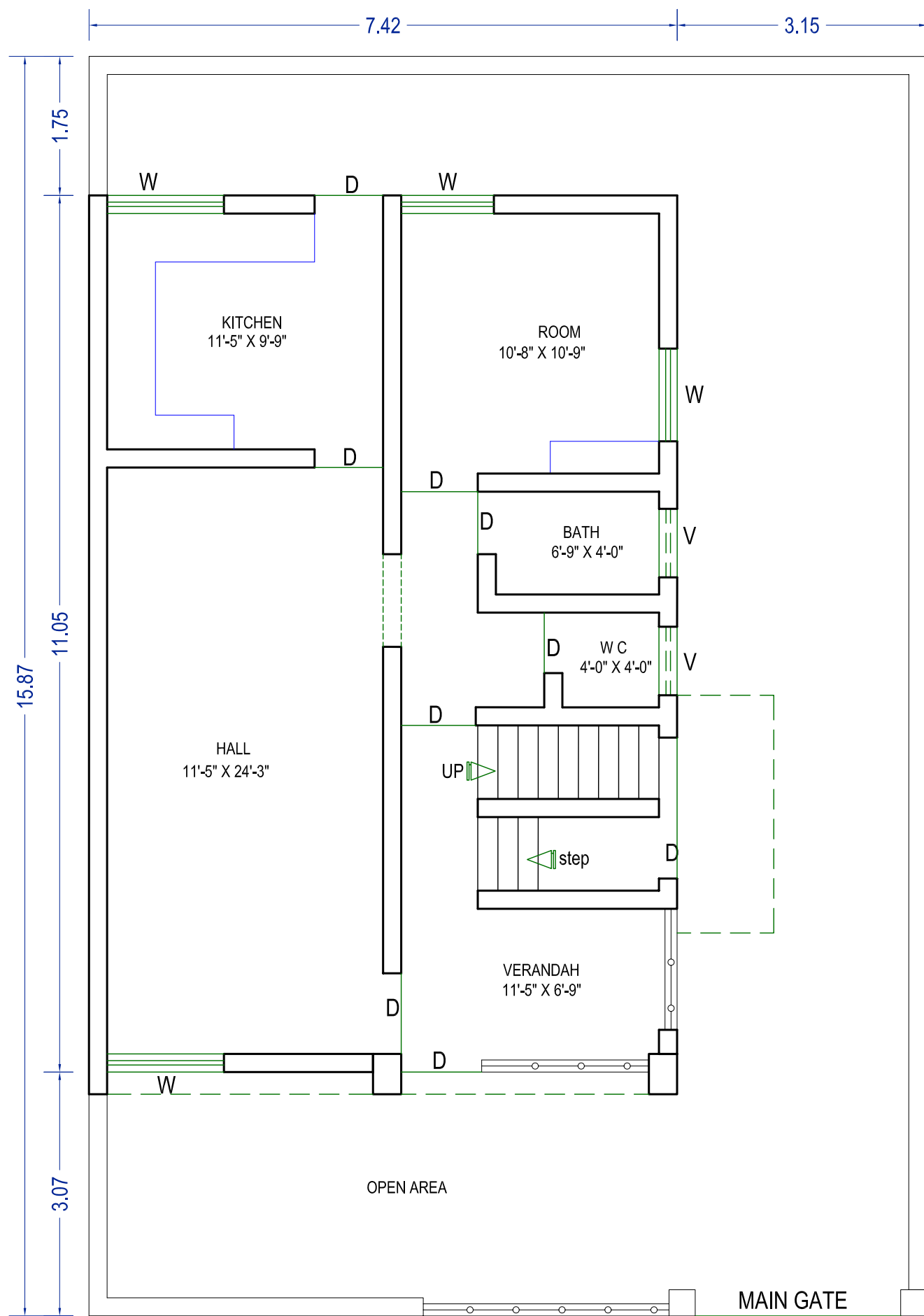
FIRST FLOOR

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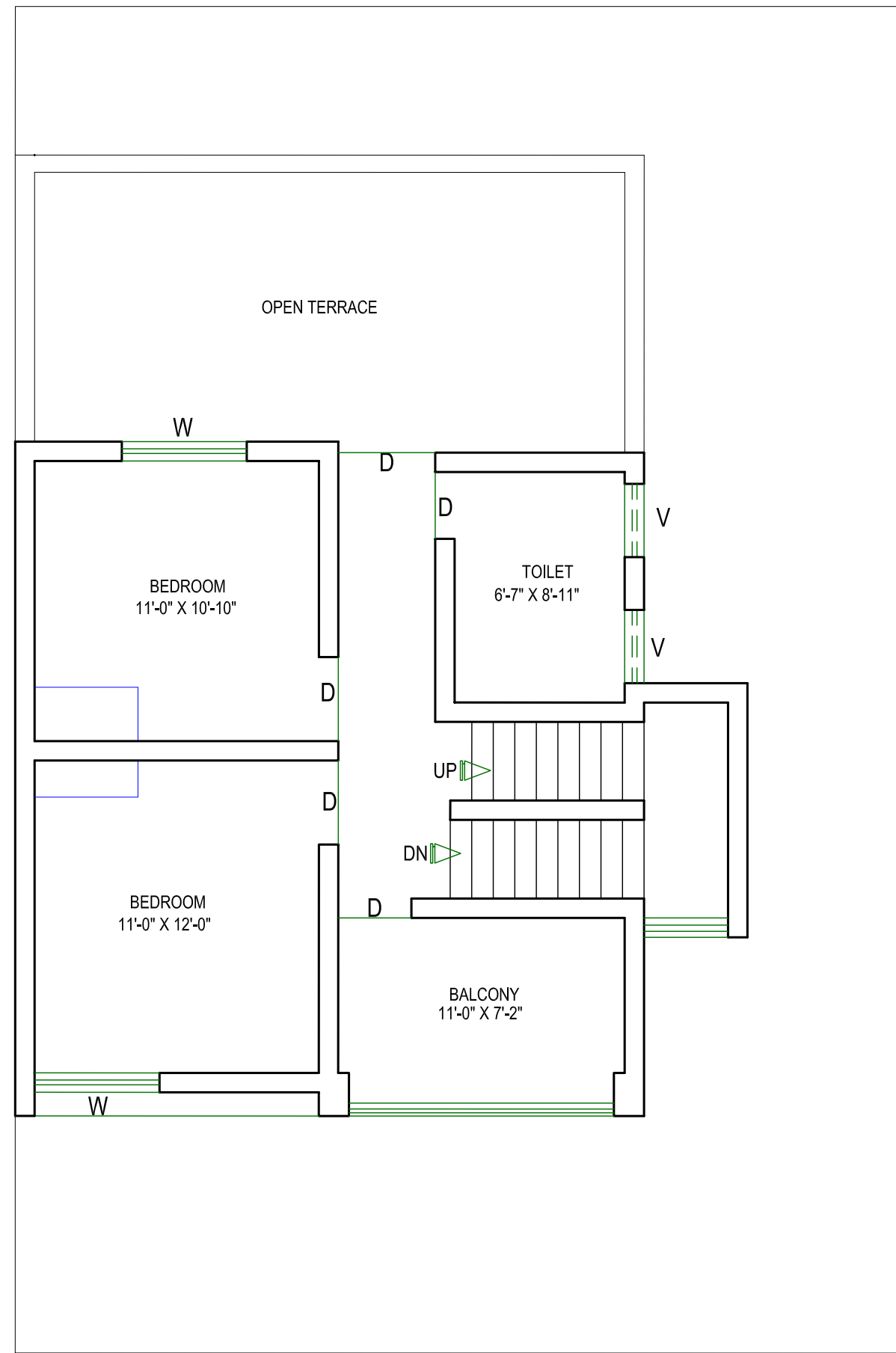
Title  
**GROUND FLOOR & FIRST FLOOR  
40-HIG, AT BHOPAL**

S.S.R.	Client	SCALE:	NORTH 
Check	ORIENTAL INSURANCE, BHOPAL	NTS	
Date	PROJECT :	Drawing.No.	
22-2-13	ORIENTAL INSURANCE, BHOPAL		

**D.VYAS AND ASSOCIATES**  
ARCHITECTS . ENGINEERS. INTERIOR DESIGNERS.VALUERS . PLANNERS  
1-C SITA BAG, DHENU MARKET , OPP. AGRAWAL SWEETS, INDORE  
PH:NO.- 0731-2430300 ,3043447 [O] MOBILE-98270-26726



GROUND FLOOR



FIRST FLOOR

© D. VYAS & ASSOCIATES <small>ALL DIMENSIONS SHALL BE CHECKED AND CO-RELATED WITH RELEVANT DRAWING AT SITE. ANY DISCREPANCY SHALL BE BROUGHT TO THE NOTICE OF D.V.A</small>	Date	No.	REVISIONS

Title <b>GROUND FLOOR &amp; FIRST FLOOR          11-HIG, AT BHOPAL</b>
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S.S.R. Check Date 22-2-13	Client ORIENTAL INSURANCE, BHOPAL PROJECT : ORIENTAL INSURANCE, BHOPAL	SCALE: NTS Drawing.No.	NORTH 
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