

Bharat Heavy Electricals Limited
High Pressure Boiler Plant
Tiruchirappalli – 620 014. India
Civil Engineering Department (Township)

TENDER DOCUMENT (PRICE BID)

Name of work : Construction of Administrative building including water supply, sanitary, internal electrification & allied works for Power Plant Piping Unit near Thirumayam in Pudukottai Dt. (Tamilnadu)

Tender Notice No. : Township 01 / 11

Tender Schedule No. : T 02 / 11

Period of Contract : 9 Months

Issued to :



BHARAT HEAVY ELECTRICALS LIMITED
(A Government of India Undertaking)
Unit : TIRUVERUMBUR, BOILER PROJECT, P.O.
TIRUCHIRAPALLI - 620 014.

CIVIL ENGINEERING DEPARTMENT

NOTICE INVITING TENDER

01. Name of Work : **Construction of Administrative building including water supply, sanitary, internal electrification & allied works for Power Plant Piping Unit near Thirumayam in Pudukottai Dt. (Tamilnadu)**
02. Estimated Cost : **----**
03. Earnest Money Deposit : **Rs.2,00,000/-**
04. Completion Time : **Nine (9) Months**
(From the date of commencement of the work which will be reckoned from the date of handing over of the site to the Contractor)
05. Cost of Tender Document : **Rs.750/-** (including Sales Tax)
This amount will not be refunded under any circumstances
06. Last Date for Receipt of Tenders : **09.30 Hrs. on 04.03.2011**
07. Date of Tender Opening : **10.00 Hrs. on 04.03.2011**
08. Maintenance Period : **6 (Six Months from the date of actual completion of the entire work and handing over to Bharat Heavy Electricals Limited)**

Tender document contains **238** pages in Qualification Bid and **80** pages in Price Bid including Bill of Quantities, Drawing etc.

Issued to Messrs. / Thiru :

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ISSUING OFFICER

CONTRACTOR

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ACCEPTING OFFICER

**BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPPALLI – 620 014**

CIVIL ENGINEERING DEPARTMENT (TOWNSHIP)

PREAMBLE

1. The scope of work includes **Construction of Administrative building including water supply, sanitary, internal electrification & allied works for Power Plant Piping Unit near Thirumayam in Pudukottai Dt. (Tamilnadu)**
2. The tender value excludes cost of cement, reinforcement steel & structural steel which will be supplied by BHEL at free of cost. The representative of the contractor has to complete all the formalities at BHEL ,Trichy and accompany with the vehicle carrying the materials to the site of work at Thirumayam. Other free issue materials by BHEL are indicated in Schedule B of the Price bid document.
3. Time is the essence of the contract. Being a time bound project with capital expenditure, the contractor should make all efforts to complete the work in time. Even though the overall completion period is indicated as **9 months**, the buildings and other works shall be completed progressively and handed over as per agreed split up schedule.
4. The tenderers are advised to visit the plant area near Thirumayam in Pudukottai (Dt.) and get themselves acquainted with the site conditions before submitting the offer
5. **The following eligibility criteria shall be complied to fulfil the Qualification Bid:-**
 - a. The tenderer should have EPF, PAN, Service Tax New Registration No., proof of having submitted IT return for the last three years, Profit & Loss account and balance sheet certified by the auditor.
 - b. Average annual value of Civil construction works completed in the last three years should be at least Rs 383 lakhs
 - c. During last seven years should have successfully completed works either
 - i. Three similar works each not less than Rs 510 lakhs.
or
 - ii. Two similar works each not less than Rs 638 Lakhs.
or
 - iii. One similar work not less than Rs 1021 Lakhs.
 - d. Latest Solvency (obtained within 6 months) from nationalized / scheduled banks shall be produced for at least Rs 510 Lakhs
 - e. The tenderer should have completed one RCC framed structure building work for a value of Rs 383 Lakhs in the last three years
6. The works executed in the own name of the tenderer only will be considered for eligibility criteria. The nominated committee may also visit the works executed by the contractor to ascertain the nature of work before qualifying.
7. BHEL reserves its right to reject the tender on account of unsatisfactory past performance by the present tenderer in another project / sister unit awarded under different enquiry.
8. Dissimilar / irrelevant works will not be considered for eligibility criteria.

CONTRACTOR

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ACCEPTING OFFICER

9. Documentary evidences (Xerox copies - attested) for turnover, works experience, P.F, & Sales Tax registration etc., all as indicated & required in the tender document should be furnished without which it will not be taken into account.
10. The value works mentioned above excludes cost of cement, reinforcement steel and structural steel. However if the value furnished by the tenderer includes the above materials, then the tenderer has to furnish the cost of the same separately. If it is not furnished, the materials cost will be presumed as follows: -

Civil & structural works combined	- 50 %
Civil works alone	- 35 %
Structural works including cloaking items	- 70 %
Other minor maintenance works	- 20 %
11. The norms for qualification with prescribed score are attached in the Qualification Bid Document. Evaluation will be done accordingly. Minimum score required for qualification is 60.
12. Tender Value is only approximate and liable for variation without entitling the tenderer to any compensation, till the total value of contract vary by more than 20% (twenty percentage).
13. Quoted rate shall be firm throughout the contract period of **9 months** and no cost escalation is allowed on any account.
14. The item rate offered is for finished item of works and shall provide for the complete cost towards fuel, tools, tackles, plant & machinery, temporary works, labour, materials, levies, taxes, transport, lay-out, repairs, rectifications, maintenance till handing over, supervision, labour colonies, establishment, services, roads, revenue expenses, overheads, profits & all other incidentals etc., complete. **However if the service tax is applicable for this contract work and free issue materials, the same will be extra and will be reimbursed on production of valid document proof for having paid service tax by the contractor.**
15. **The contractor has to comply with the provisions of "Building and other construction workers act 1996 (Regulation of Employment and condition of services) . The contractor has to bear 1 % cess towards BOCW act 1996 for the total value of the contract. The contractor is required to deposit the cess, within one month / before raising subsequent running bill (whichever is earlier) ,for the payment received from BHEL and submit the documentary evidence after which only BHEL will process the subsequent running bill for payment.**
16. Some changes are likely in the quantities furnished as well as in the layout, design and specifications of the work. The rates quoted shall be deemed to be inclusive of all such contingencies.
17. The contractor should submit the mix design for RCC for different mix of concrete for different grade of cement at his cost through reputed institution.
18. The contractor should use only weigh batch for all reinforced cement concrete works (controlled concrete). The tenderer is advised to install concrete mini batching plant at site considering the quantum of concrete work involved.
19. Usually, working hours are limited to day time only. In emergency cases to carryout works during nights, it may be done so with the specific prior permission of BHEL. In such case, it is to be carried out in the presence of BHEL officials or their authorized persons.

20. The work shall be carried out as per drawings released then and there, Civil Engineering Department Work & Safety procedure, AWS / BIS specifications, standard code of practice and as per the instructions of Engineer-in-charge. The brief description of items of work is given in the bill of quantities provided in the Price Bid. **Tenderer has to quote rates both in figures and in words for all the items given in the Bill of Quantities provided in the Price Bid. (From page No. 16 to 68).**
21. For any item of work not covered in Bill of Quantities, the rate will be arrived at based on the conditions given in BHEL General Conditions of Contract in force.
22. **The contractor has to furnish the security deposit, as per Clause 13 of Tender Notice, attached in the Price Bid if the work is awarded. Also it is to be noted that after award of work the contractor has to furnish 50 % of security deposit before the commencement of work.**
23. The contractor should bring the construction earth moving machineries like Poclain, Paver, Road Roller, JCB etc., as and when required for the work without any delay. Also required number of the following tools & Plants / instruments shall be made available always at site for the works.
- Precise Levelling instruments and theodolite.
 - Full load mixture machine / mini batching
 - Petrol / Kerosene driven vibrator/ mechanical vibrator
 - Cube moulds
 - Inter carting vehicle (tractor, hand trolley etc)
 - Hydra cranes
 - Power operated winches
 - Mobile / Hydraulic crane
 - Welding machine etc.
 - Platform lift capable of reaching 18m height
24. The contractor has to arrange sufficient number of lorries to collect & transport the surplus earth, construction debris generated, etc. at site. Otherwise BHEL would clear the debris at the contractor's risk and cost.
25. The contractor has to execute any item of work irrespective of the quantity available in the tender without any reservation till the contract value does not vary more than 20%.
26. Since the responsibility for the quality, workmanship and accuracy of any work being carried out under this contract lies with the contractor, the contractor should ensure that no work is done without the presence of contractor's representative at the work spot. The contract should arrange for surveying construction site at his own cost.
27. Statement of completed works with detailed measurements along with material reconciliation statements shall be submitted by the contractor in the last week of every month for processing bill.
28. The decision of Engineer-in-charge shall be final and binding on the contractor regarding clarification of items in this tender schedule.
29. The works contract to be entered into with the successful tenderer will be governed by the BHEL Revised General Conditions of Contract in force.
30. The contractor shall strictly adhere to various labour laws in force.
31. The contractor has to submit the list of machineries to be deployed exclusively for this work, organization chart of their set up for the works and any change thereafter in the organization set up shall have the prior approval of BHEL.

32. The contractor should submit the programme for the completion of work and the list of machineries and site personnel to be deployed for the work along with tender.
33. The contractor should establish his own site office, for which vacant land will be allotted on specific request for which the rent will not be collected. No land will be provided towards labour colony.
34. The contractor should establish his own site office, fabrication yard, handling facility, storage facility to stock about 200 MT of cement etc., for which vacant land will be allotted on specific request for which the rent will not be collected.
35. The contractor is required to carry out construction activities as directed by the department officials. It is required to engage certain minimum strength of staff for effective supervision of works as indicated below:

Site in-charge / Construction Manager	-	1 No.
Planning Engineer and coordinator	-	1 No.
Qualified Surveyor	-	1 No.
Civil Engineer (Graduate in Civil Engineering)	-	3 Nos.
Electrical Engineer	-	1 No.
Supervisor/Engineer (Diploma Holder)	-	4 Nos.
Supporting Technical Staff	-	10 Nos

In addition to the above, Quantity surveyors have to be engaged to prepare measurements and submit the bills.

36. Adequate number of Quality Engineer and qualified Safety Engineer should be deployed at site. Experienced Engineers / Supervisors are to be engaged in Railway and water supply works.
37. To safeguard the persons working at height in roof, wall etc., sufficient number of Industrial Safety nets shall be provided at tenderer's cost in appropriate level and locations. The working hand including Supervisors, Engineers should wear the personal protective items and safety measures such as helmets, safety belts, shoes, etc., before entering into working place.
38. The tenderer has to deploy adequate labour of required categories such as Unskilled, Skilled, Mason, Carpenter, Plumber, Welder, Fitter, Mistry, Technically experienced, etc. so as to execute the works simultaneously in all areas of work. The Technical persons with experience shall have to produce valid certificate for verification.
39. Expertised labour only to be engaged for specialized items of work like laying of ceramic tiles, marbles, cuddapah slabs, granite slabs and false ceiling, partition, wall paneling, architectural finishing etc. and work experienced persons shall be engaged for fabrication, water supply, railway track laying and aligning works, sewerage system work, etc.
40. The contractor shall follow norms of BHEL security system for movement of men & materials within the complex.
41. Exclusive Stores personnel should be engaged who would co ordinate with department official for clearance and collection of BHEL supplied materials required for works.

42. Separate non-technical persons should be engaged for arranging daily gate passes for labours and vehicles entry in all the gates of Factory Complex.
43. The tenderer shall carry out health performance test at his cost for all the workmen engaged in the work through a registered medical practitioner and produce certificate on demand.
44. It shall be the responsibility of the contractor to see that the workmen do not utilize the departmental canteen facilities. Contractor has to make his own arrangements to provide refreshment for the workmen.
45. All the works shall be executed as per the standard specifications as provided in TNBP / BIS.
46. All the materials to be used in the work and the nature of work shall conform to the respective TNBP & BIS and National Building Organisation, Standard Specifications forming part of "ALL INDIA STANDARD SCHEDULE OF RATES" specifications and shall be got approved by the Engineer-in-charge before actual incorporation in the work.
47. The contractor should maintain proper accounts for cement, reinforcement steel and structural steel sections and other materials if any supplied by this dispatching and these should be available at the site of work for verification and check by the Officials of this Organisation at any time.
48. All materials brought by the Contractor for incorporation in the work shall be got inspected and approved by the Engineer-in-charge before they are incorporated in the work. All the structural works including fabrication, erection etc., are subjected to inspection and clearance by Third Party Agency fixed by BHEL.
49. The contractor should use only the materials of brand and quality as approved by BHEL.
50. All materials and consumables brought by the contractor should have manufacturer's certificate.
51. All tools and plants including jack hammer with silencer & bits, rock drilling machine, etc., required for all the works covered under this contract will have to be brought by the contractor.
52. All safety measures are to be followed during execution of work, particularly during blasting and only licensed blaster should be engaged for this purpose. Sufficient care shall be taken by the contractor during excavation to avoid damages to the buried pipe lines, cables and other infrastructure like railway lines if any etc. Controlled blasting including muffling can be carried out with prior permission from safety department.
53. Contractor's materials and tools & plants shall have to be brought inside factory with proper invoice / voucher and make necessary entry in the security gate. They should maintain proper record for tools and plants, materials, etc., brought inside the factory complex.
54. The contractor should extend full co-operation with the third party agencies engaged, if any by BHEL to adhere the Quality Control Procedures ensuring quality.
55. The contractor should extend full co-operation to the other contractors who may be doing other works in the same areas to enable them to execute their portions of work without any delay or difficulty.
56. With regard to specifications not covered by the General and Special Conditions of Contract, those contained in the Tamil Nadu Building Practice Standard Specifications or other specifications approved by Bharat Heavy Electricals Limited, shall apply.

57. The Contractor will have to make his own arrangements for water without any extra claims.
58. On the written request from the contractor **Electrical energy required for the work may be given by this organization at any one point at the site of work at free of charges.** The approximate power requirement shall have to be indicated while submitting the tender. BHEL does not accept any liability whatsoever for non-supply, delay in supply or failure of supply of electrical energy. Contractor shall ensure that there is no wastage of electrical energy otherwise supply is liable to be stopped at contractor's risk and cost. The contractor shall make leak proof / fire proof shed and provide control panel board of required capacity and lay the required cables at their own cost for further distribution. The contractor has to mobilize DG set of suitable capacity at the contractor's own cost for uninterrupted progress of the work in case of non availability of power from the grid.
59. The contractor should be in a position to make his own arrangement for compressed air without any extra claim for the uninterrupted operation of jack hammer with silencer
60. Purchase preference policy if applicable will be extended to CPSE bidders subject to other terms & conditions as provided in the office memorandum issued by DPE. The tenderer has to furnish copy of Government circular for claiming purchase preference.
61. Tenderers are requested to furnish the duly filled in E format attached as separate sheet along with a cancelled cheque leaf to accept Electronic fund transfer / R T G S transfer for any payment from BHEL, Trichy.
62. The main work order may further be split in too few sub work orders. The process of billing, material tallying and submission of completion reports will be according to the individual sub work orders.
63. Bank Guarantee format can be obtained after award of work in case of successful tenderer.
64. No advance / mobilization advance will be given.
65. LD / Penalty clause is applicable as per General Conditions of Contract in force.
66. BHEL reserves its right to accept / reject any or all the tenders without assigning any reasons.
67. Also BHEL reserves its right to finalize the contract through reverse auction for which only qualified tenderers will be provided with necessary documents containing reverse auction rules, terms and conditions for this purpose.

INSTRUCTIONS TO TENDERERS

1. The tender is open to all Contractors. The Contractors not borne on the approved list of contractors of this Organisation must submit the following testimonials simultaneously with their tenders.
 - i. A Certificate to establish that the tenderer is an independent contractor working on his own
 - ii. At least two certificates from responsible Officers of Government of Firms of repute, regarding the tenderer's capacity to undertake and carryout the work tendered for or similar work satisfactorily.

NOTE :

- a) Copies of testimonials unless attested by a Gazetted Officer will not be accepted
- b) Non – Submission of the above testimonials simultaneously with the tenders may result in the tender being rejected
2. The tenders should be accompanied by a list of contracts already held by the contractor at the time of submitting the tender and giving the following particulars
 - a) Value of each contract
 - b) The balance value of work to be done on the same
3. The tenderer is advised to obtain the tender documents in person or by a messenger duly authorized to do so. The BHARAT HEAVY ELECTRICALS LIMITED will not under any circumstances accept responsibility for the non – receipt of delay in the receipt of the tender documents by the tender.
4. Rate for each item of the tender schedule should be quoted in FIGURES and in WORDS. In case of any difference in the rates quoted in figures and in words, the lower of the two rates will be taken as the tendered rate. Unit rate quoted shall be the basis for arriving the total value of the tender. The total amount for every item shall be arrived by multiplying the unit rate with the quantity indicated for that item. In case of any arithmetic deviation is noticed in the total amount, the same will be corrected and evaluated by taking unit rate as basis and multiplying with the quantity indicated.
5. Rate quoted shall include all royalties, terminal taxes, Octroi duties, Central or Provincial Excise Tax, Sales Tax, BOCW cess and any other taxes leviable under the State or Central Government rules. The Bharat Heavy Electricals Ltd., will not entertain any claim whatever in this respect. **However if the service tax is applicable for this contract work including free issue materials, the same will be extra and will be reimbursed on submission of the documentary evidence for having paid service tax by the tenderer.**
6. Should a tender find discrepancies or omissions in the drawings or any of the tender documents or should be in doubt as to their meaning, he should at once address the authority inviting the tender for clarification. Every endeavor is made to avoid any error which can materially affect the basis of the tender but the successful tenderer shall take upon himself to provide for the risk of any error which may be subsequently by discovered and shall make no subsequent claim on account thereof.

7. Tenders submitted by post should be sent "Registered Post with Acknowledgement due". These should be posted with due allowance for any delay in postal delivery. Tenders received after the due date and time of opening, tenders are liable to be rejected.
8. Where the tender called for covers only the building work and excludes internal services such as sanitary and water supply installations, electrification etc., the building contractor will have to leave pockets, holes, etc., as required for other works and will have to phase his work to ensure smooth progress of the work of the other agencies also as directed by the Engineer – in – charge.
9. Where the tender schedule contains special items of work such special floor finishes, foam concrete for insulation, special water proofing treatment to roofs etc., it will be entirely at the discretion of the Project Authorities to allot these items of work to other contractors specialized in these works. In such cases, the main building Contractor will have to tender all necessary co-operation to the agencies involved so as to ensure the smooth progress of all work.
10. The contractor's responsibility under this contract shall commence from the date of receipt of the LOI by the tenderer. The scheduled period of completion for this work will be as mentioned in page No. 02, and the Contractor will have to plan his work accordingly.
11. Generally, the maintenance period for any work under BHEL Organisation will be SIX (6) MONTHS .

12. Earnest Money Deposit:

Earnest Money is to be paid by each tenderer to ensure that the tenderer does not refuse to execute the work after it is awarded to him. Shall also be furnished in the form of Pay Order or Demand Draft in favour of BHEL, EMD in any other form will not be accepted. The rate of earnest money deposit shall be as under:

Works costing up to Rs. 2 lakhs	NIL
Works costing more than Rs.2 lakh and up to Rs. 5 lakhs	Rs. 10,000/-
Works costing more than Rs.5 lakhs and up to Rs.10 lakhs	Rs. 20,000/-
Works costing more than Rs.10 lakhs and up to Rs.20 lakhs	Rs. 40,000/-
Works costing more than Rs.20 lakhs and up to Rs.30 lakhs	Rs. 60,000/-
Works costing more than Rs.30 lakhs and up to Rs.50 lakhs	Rs. 1,00,000/-
Works costing more than Rs.50 lakhs and up to Rs.100 lakhs	Rs. 1,50,000/-
Works costing more than Rs.100 lakhs	Rs. 2,00,000/-

One time EMD will also be Rs.2 Lakh.

EMD by the Tenderer will be forfeited if,

- a) After opening the tender, the tenderer revokes his tender within the validity period or increases his earlier quoted rates.
- c) The tenderer does not commence the work within the period as per LOI / Contract. In case the LOI / contract is silent in this regard then within 15 days after award of contract.
- c) EMD given by all unsuccessful tenderers shall be refunded normally within fifteen days of acceptance of award of work by the successful tenderer.
- d) EMD shall not carry any interest.

13. Should a tenderer or a contractor on the list of approved Contractors have a relative, or in the case of a firm or Company of contractors any of its share holders or shareholder's relative, employed in a gazetted capacity in the Engineering Department of the Bharat Heavy Electricals Limited, the authority inviting tenders shall be informed of this fact at the time of submission of the tender, failing which tender, may be disqualified or if such fact subsequently comes to light, the contract may be rescinded in accordance with the relevant provisions in the General Conditions of Contract.
14. If tenderer expires after the submission of his tender or after the acceptance of his tender the BHEL may, at their discretion, cancel such tender. If a partner of a firm expires after submission of tender or after the acceptance of the Tender, BHEL may cancel such Tender at their discretion unless the firm retain its character.
15. The Bharat Heavy Electricals Limited will not be bound by any power of attorney granted by the tenderer or by changes in the composition of firm made subsequent to the execution of the contract. They may however dispatch such power of attorney and changes after obtaining proper legal advice the cost of which will be chargeable to the contract concerned.
16. If the tenderer deliberately gives wrong information in his tender or creates conditions favourable for the acceptance of his tender, the Bharat heavy Electricals Limited, reserves the right to reject such tender at any stage. Also BHEL reserves its right to finalize the contract through reverse auction for which only qualified tenderers will be provided with necessary documents containing reverse auction rules, terms and conditions for this purpose.
17. Words importing the singular number shall also be deemed to include the plural number and vice versa where the context so requires.
18. The expenses for completing and stamping the agreement shall be paid by the contractor.
19. The General and special conditions are complementary to each other and where they are conflict the Special Conditions shall prevail. In regard to matters not covered by the General and Special Conditions of Contract, those contained in the Tamil Nadu Building Practice Standard Specifications or other specifications approved by the Bharat Heavy Limited, Shall apply.
20. Tenderers shall not increase their quoted rate in case the Bharat Heavy Electricals Limited, negotiates for negotiation for reduction of rate. Such negotiation shall not amount to cancellation or withdrawal of the original offer and the rate originally quoted shall be binding on the tenderers for a period of three months from the date of opening of tenders.
21. Canvassing in any form in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection
22. All contractors will have to produce copy of Income tax Return for the last three years along with their tenders. Those Contractors whose income is not taxable will be required to give an affidavit of their income on the prescribed form.

TENDER NOTICE

NAME OF WORK : Construction of Administrative building including water supply, sanitary, internal electrification & allied works for Power Plant Piping Unit near Thirumayam in Pudukottai Dt. (Tamilnadu) .

1. SEALED TENDERS for the above noted work are hereby invited from contractor experienced in works of similar kind and magnitude. Tenders will be received by ADDL.GEN. MANAGER / CIVIL / TOWNSHIP Bharat Heavy Electricals Limited, Tiruchirappalli – 620 014. up to **09.30 Hrs** on **04.03.2011** and will be opened on the same day at **10.00** hrs. at the Office of the ADDL. GENERAL MANAGER / CIVIL / TOWNSHIP in the presence of such of those tenderers. Or their agents who may choose to attend.
2. TENDER FORMS and other particulars regarding the proposed work can be obtained on any working day from 8.00 A.M. to 4.30 P.M. up to **02.03.2011** on payment of the prescribed sum of **Rs.750/-** per set (including Sales Tax) Amount nor refundable.
3. TENDERS must be submitted in sealed covers and should be addressed to **DY.MANAGER/CIVIL/PLANNING (TOWNSHIP)** with full name and address of the tenderer and the name of work being noted on the cover
4. All entries in the tender documents should be in one ink. Erasers and over writings are not permitted. All cancellations and insertions should be duly signed by the tenderer concerned.
5. TENDERERS should fill in all the required particulars in the blank spaces provided for this purpose in the tender documents and also sign each and every page of Tender Documents including the drawings attached there to before submitting their tender.
6. UNIT rate should be quoted in figures as well as in words with reference to each item and for all the items shown in the attached schedule. These rates shall be for the finished work in site. Amount of each item and the total page by page and also the grand total amount of the whole contract should be filled in by the tenderers. Unit rate quoted shall be the basis for arriving the total value of the tender. The total amount for every item shall be arrived by multiplying the unit rate with the quantity indicated for that item. In case of any deviation is noticed in the total amount, the same will be corrected and evaluated by taking unit rate as basis and multiplying with the quantity indicated.
7. QUANTITIES shown in the attached schedule are only approximate and are liable to variation without entitling the contractors to any variation in the Quoted rates till the total value of the Contract does not vary by more than 20% (twenty percent)
8. In quoting their rates, the tenderers are advised to take account all factors including any fluctuations in the market rates etc. No claim will be entertained on this account after acceptance of the tender or during the currency of the contract.
9. Before tendering, the tenderers are advised to inspect the site of work and its environments and be well acquainted with the actual working and other prevalent conditions position of materials and labour, General and Special Conditions of Contract. Instructions to tenders, drawings and Specifications and all other documents which form part of the Agreements to be entered into.

10. Quoted rate shall be firm throughout the contract period of **9 months** and no cost escalation is allowed on any account.
11. In the event of tender being submitted by firm the tender must be signed separately and legibly by each partner or member of the firm or in their absence, by the person holding the power of attorney on behalf of the firm concerned in the latter case a copy of the power of attorney duly attested by a Gazetted Officer must accompany the tender.
12. Every tender must be accompanied with EMD for the amount as specified in Page No. 02 in any of the form mentioned in Para 12 of the "Instruction to Tenderers". This Earnest Money will be refunded to the unsuccessful tenderers within fifteen days of finalisation of the award of work. In case of the successful tenderer, the Earnest Money will be retained as part of the Security Deposit for satisfactory completion of the work in accordance with Clause 16 of the General Conditions of Contract

NOTE: Cheques, Currency Notes and Money Orders will not be accepted in lieu of the deposit receipt referred to above

13. Security Deposit

13.1 Security Deposit should be collected from the successful tenderer.

The rate of Security Deposit will be as below:

Up to Rs. 10 lakhs	10%
Above Rs. 10 lakhs up to Rs.50 lakhs	Rs.1 lakh + 7.5% of the amount exceeding Rs. 10 lakhs.
Above Rs. 50 lakhs	Rs.4 lakhs + 5% of the amount exceeding Rs. 50 lakhs.

The security Deposit should be collected before start of the work from the contractor.

13.2 Security Deposit may be furnished in any one of the following forms

- i) Cash (as permissible under the Income Tax Act)
- ii) Pay Order, Demand Draft in favour of BHEL.
- iii) Local cheques of scheduled banks, subject to realization.
- iv) Securities available from Post Offices such as National Savings Certificates, Kisan Vikas Patras etc.

(Certificates should be held in the name of Contractor furnishing the security and duly pledged in favour of BHEL and discharged on the back).

- v) Bank Guarantee from Scheduled Banks / Public Financial Institutions as defined in the Companies Act subject to a maximum of 50% of the total security deposit value. The balance 50% has to be remitted either by cash or in the other form of security. The Bank Guarantee format should have the approval of BHEL.
- vi) Fixed Deposit Receipt issued by Scheduled Banks / Public Financial Institutions as defined in the Companies Act. The FDR should be in the name of the contractor, A/C BHEL, duly discharged on the back.
- vii) Security deposit can also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of the Security Deposit should be collected before start of the work and the balance 50% may be recovered from the running bills.

- viii) EMD of the successful tenderer shall be converted and adjusted against the security deposit.
- ix) The security deposit shall not carry any interest.

NOTE: Acceptance of Security Deposit against Sl. No. (iv) and (vi) above will be subject to hypothecation or endorsement on the documents in favour of BHEL. However, BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.

14. Unless the contractor whose tender is accepted signs the Contract Agreements and makes the necessary security deposit specified in Para 13 above within Seven days of the date of the order directing him to do so the amount of Earnest Money Deposit already deposited by him will be forfeited and acceptance of his tender withdrawn.
15. After tender opening if tenderer revokes his tender or increases his earlier quoted percentage / rate or after acceptance of his tender does not commence the work in accordance with the instruction of the Engineer-in-charge, the Earnest Money deposited by him will be forfeited and acceptance of his tender withdrawn. If only a part of the work included in the tender had been awarded to the tenderer, the amount of Earnest Money to be forfeited will be based on the value of the contract so awarded.
16. The Bharat Heavy Electricals Limited reserved the right to reject any or all the received or accept any tender or part thereof without assigning any reason thereof. In the case acceptance of part of tender, time for completion may also be reduced to the extent considered appropriate by the Accepting Authority. Also BHEL reserves its right to finalize the contract through reverse auction for which only qualified tenderers will be provided with necessary documents containing reverse auction rules, terms and conditions for this purpose.
17. Conditional and Un witnessed tenders, tender containing absurd rates and amounts tenders which are incomplete or otherwise considered defective and tenders not in accordance with the tender conditions laid down by the Accepting Officer are liable to be rejected.
18. Tenders not submitted on the prescribed form are liable to be rejected
19. The work must be completed within a period as mentioned in page No.2.
20. The Chairman / General Manger / Deputy General Manager / Deputy Manager / Senior Engineer shall be Accepting Officer, herein after referred to as such for the purpose of this contract.
21. This tender notice shall be deemed to form an integral part of the contract to be entered into for this work.
22. The tenderers are advised to go through the condition stipulated in Tender document & code of conduct for 'Health & Safety of Contract Labourer' in details. Any violation thereof will invite punitive action being taken against them. While quoting the rate all the above factors are to be taken into account.

ISSUING OFFICER

SHEDULE 'A'

LIST OF WORKS AND PRICES

NAME OF WORK: Construction of Administrative building including water supply, sanitary, internal electrification & allied works for Power Plant Piping Unit near Thirumayam in Pudukottai Dt. (Tamilnadu) .

DETAILS & QUANTITIES of each item of work shown in the BILL OF QUANTITIES are only approximate. They are given as a guide for the purpose of tendering only and are liable to variation and alteration of the Competent Authority. The work under each item as executed shall be measured and priced at the corresponding rate quoted by the contractor in the BILL OF QUANTITIES

Sl.No.	Description of work / supplied	Total amount of work / supplies (in figures and words)		Period of contract
		Rs.	Ps.	
1.	Construction of Administrative building including water supply, sanitary, internal electrification & allied works for Power Plant Piping Unit near Thirumayam in Pudukottai Dt. (Tamilnadu) .			9 MONTHS

BILL OF QUANTITIES

Sl. No.	Appx. Qty.	Description of work	TNBP No.	Rate (Both in Unit fig & Words)	Amount	
					Rs.	Ps.

AS PER SEPARATE SHEETS ATTACHED CONTAINING 53 PAGES

FROM SERIAL No. **16 to 68**

CONTRACTOR

15

ACCEPTING OFFICER

**BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPPALLI- 620 014**

BILL OF QUANTITIES

NAME OF WORK: Construction of Administrative building including water supply, sanitary, internal electrification & allied works for Power Plant Piping Unit near Thirumayam in Pudukottai Dt. (Tamilnadu)

PART A - CIVIL WORKS

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
1		Earthwork excavation for foundation in soils given below up to 2m depth ,including removal of slush where ever necessary , timbering, shoring, strutting, dewatering and depositing the surplus earth within the compound in places shown by the Engineer in Charge with all leads and lifts and clearing and levelling the site etc., complete complying with the standard specification, drawings and as per the directions by the Engineer in Charge.			
a	1100	All types of soil except rock		CUM	
b	300	Ordinary rock		CUM	
c	100	Hard rock (blasting prohibited)		CUM	
d	200	Hard rock (requiring blasting)		CUM	

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CONTRACTOR

16

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
2		Earthwork excavation for foundation in soils given below up to 2m to 4m depth including removal of slush where ever necessary, timbering, shoring, strutting, dewatering and depositing the surplus earth within the compound in places shown by the Engineer in Charge with all leads and lifts and clearing and levelling the site etc., complete complying with the standard specification, drawings and as per the directions by the Engineer in Charge.			
a	1000	All types of soil except rock		CUM	
b	400	Ordinary rock		CUM	
c	120	Hard rock (blasting prohibited)		CUM	
d	120	Hard rock (requiring blasting)		CUM	
3	2210	Refilling with excavated earth with existing soil in layer of not more than 15cm thick wall rammed and consolidated etc., inclusive of conveyance of earth within the site complying with standard specifications and as per the directions of Engineer in Charge.		CUM	

CONTRACTOR

17

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
4	15000	Surface dressing of the ground including removing trees, vegetation and making surface leveled and disposal of rubbish outside and surplus earth to be conveyed within the factory premises or unobjectionable place upto a maximum of 1.00 Km as per the directions by the Engineer in Charge.		SQM	
5	50	Bailing or pumping out water from trenches, foundations etc., at all depths wherever necessary in the event of extraordinary occurrences as directed by Engineer in-charge and as per standard specifications.		HP/HR	
6	3260	Supplying and filling with approved quality of river sand in foundations and basement, in layer of not more than 15 cm thick including watering, ramming, consolidating and dressing etc., complete, complying with standard specifications and drawings and as per the directions by the Engineer in Charge.		CUM	
7	500	Plain Cement Concrete of mix 1:4:8 (one cement, four sand & eight course aggregate) using hard broken granite stand jelly of 20mm gauge for foundation leveling course including shuttering dewatering wherever necessary and laid in layers of not more than 15cm thick complete complying with standard specifications and drawings and as per the directions by the Engineer in Charge.		CUM	
8	2600	Providing and laying 50mm thick Damp Proof Course in PCC 1:2:4 mix with 20 mm size aggregate and water proofing compound of CICO / IMPERMO / ACCOPROOF as per manufacturer specification/ recommendation		SQM	

CONTRACTOR

18

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
9	2470	Providing anti-termite treatment including diluting and injecting Neem base solution chlorpyriphos / Lindane /Biflex TC any other approved brand with Ec 20% with 1% Concentration- 1.70 litre/10 RM and creating a continuous barrier under and alround the column pits, wall trenches, basement excavation, top surface of plinth filling, junction of wall and floor, along the external perimeter of building, expansion joints, over the top surface of consolidated earth on which apron is to be laid, surroundings of pipes and conduits etc., complete as per specification Plinth area of building at ground floor only shall be measured for payment.		SQM	
10		Constructing brick masonry in cement mortar 1:5 (one cement and five sand) in foundation and superstructure using country brick of size 83/4" x 4 1/2" x2 3/4" of approved quality & strength of 50 kg/SQM complying with standard specification and drawings and as per the directions by the Engineer in Charge. Second class ground moulded)			
a	300	Up to Basement level (Foundation)		CUM	
b	190	Ground floor (superstructure)		CUM	
c	160	First Floor (superstructure)		CUM	

CONTRACTOR

19

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
d	151	Second Floor (superstructure)		CUM	
e	151	Third Floor (superstructure)		CUM	
f	85	Fourth Floor (superstructure)		CUM	
g	60	Fifth Floor (superstructure)		CUM	
11		Supplying and erecting centring for sides and soffits including support and strutting up to 3.50m height for plain surfaces with all cross bracings using mild steel sheet of 90cm x 60cm and stiffened with welded mild steel angle of size 25mm x 25mm x 3mm for boarding (country wood) joists of size 10cm x 6.5cm (spaced at about 90cm c/c and supported by casuarinas props 10cm to 13cm dia spaced 75cm c/c complete complying with standard specification.			
a	3087	Beams and Slabs Horizontal, Footing, Foundation, column etc.- Up to Basement level		SQM	

CONTRACTOR

20

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
b	645	For Columns – Vertical - Ground Floor		SQM	
c	2633	Beams and Slabs Horizontal-Ground floor		SQM	
d	660	For Columns – Vertical - First floor		SQM	
e	2950	Beams and Slabs Horizontal - First floor		SQM	
f	730	For Columns – Vertical - Second floor		SQM	
g	2880	Beams and Slabs Horizontal - Second floor		SQM	
h	1000	For Columns - Vertical - Third floor		SQM	

CONTRACTOR

21

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
i	2800	Beams and Slabs Horizontal - Third floor		SQM	
j	90	For Columns – Vertical - Fourth floor		SQM	
k	190	Beams and Slabs Horizontal - Fourth floor		SQM	
l	50	For Columns – Vertical - Fifth floor		SQM	
m	210	Beams and Slabs Horizontal - Fifth floor		SQM	

CONTRACTOR

22

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
12		Supplying and erecting centering for circular column including support and strutting upto 7.5m height for curved surfaces with all cross bracings using mild steel sheet stiffened with welded mild steel angle of size 25mm x 25mm x 3mm for boarding (spaced at about 90cm c/c and supported by casuarinas props 10cm to 13cm dia spaced 75cm c/c complete complying with standard specification.			
a	30	For Circular Columns in Foundation and basement		SQM	
b	30	For Circular Columns upto 7.5m ht.		SQM	
c	35	Circular Columns (above 7.5 mt ht) -Second floor		SQM	
d	42	Circular Columns (above 15 mt ht) - Third floor		SQM	

CONTRACTOR

23

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
13		Providing and laying in position machine batched, machine mixed and machine vibrated design mix of reinforced cement concrete of specified grade for structural elements using 10 to 20 mm hard broken granite stone jelly, excluding cost of centring, shuttering, finishing and reinforcement but including admixtures in recommended proportions (as per IS:9103) to accelerate, retard setting of concrete, improve workability without impairing strength and durability, all as per directions of Engineer-in-charge. M-20 Grade reinforced cement concrete.			
a	1210	All work in foundation, basement and up to Ground floor.		CUM	
b	480	First floor		CUM	
c	510	Second floor		CUM	
d	560	Third floor		CUM	
e	60	Fourth Floor		CUM	

CONTRACTOR

24

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
f	40	Fifth Floor		CUM	
14	1050	Providing and laying integral cement based water proofing for toilet floors of average 100mm thick cleaning RCC slab and applying neat cement slurry, brickbat coba with water proofing compound of approved make finishing smooth, making half round vata at the junction of wall, slab & curing etc, complete.		SQM	
15	1060	Water proofing on top of chhaja with 25mm thick PCC 1:1.5:3 with 6mm and down size stone aggregate mixed with water proofing compound of approved make, finishing smooth, making half round vata at the junction of chhaja and wall, curing etc., complete.		SQM	
16		Brick partition wall 11.5 cm thick in cm 1:3 using 83/4" x 4 1/2" x2 3/4" II class country bricks including plastering both the surfaces in cm 1:5, 12mm thick on both sides etc., complete complying with standard specification.			
a	200	Ground floor		SQM	
b	550	First Floor		SQM	

CONTRACTOR

25

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
c	780	Second Floor		SQM	
d	775	Third Floor		SQM	
17	500	Straightening, cutting, bending, placing in position of MS/CTD bars and binding with MS binding wires of 18/20 gauge etc. for reinforcement of RCC works. Rate includes cover blocks, cost of binding wire , labour etc. complete. MS/CTD bars will be supplied by BHEL at free of cost.		MT	
18	11530	Wall plastering with cement mortar 1:5 mix (one cement and five sand) 15mm thick for inside and exposed surface of walls at all height and depths above or below plinth level including scaffolding, curing etc., complete complying with standard specifications and as per the directions by the Engineer in Charge.		SQM	
19	15100	Plastering for R.C.C. exposed works such as columns, beams, ceiling & sunshade and other concrete surfaces with 6mm thick plaster with cement mortar 1:3 (one cement and three sand) at all height and depths above or below plinth level, complying with standard specifications and drawings and as per the directions by the Engineer in Charge.		SQM	

CONTRACTOR

26

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
20	26630	White washing two coats with best quality janathacem including cost and other incidental charges etc., complete complying with standard specifications.		SQM	
21	5765	Providing and applying 2 coats (first coat with brush and final coat with Roller) of acrylic emulsion paint of approved and standard company make and shade on all the interior surfaces & heights to give an even shade including primer and full putty after thoroughly brushing the surface free from mortar dropping and other foreign matter and also including preparing the surface even and sand papered smooth etc, all material and labour complete.		SQM	
22	5765	Providing and applying 2 coats of acrylic anti fungal dust resistant & anti algal exterior emulsion paint of full patty (weathercoat) or approved and equivalent make and shade to all the exterior surfaces over a coat of primer as per manufacturer's specifications including providing necessary scaffolding, curing, etc. complete. If additional coats are required to obtain uniform finish, the same shall be carried out at no extra cost and as per the directions by the Engineer in Charge.		SQM	

CONTRACTOR

27

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
23	140	Providing and fixing aluminium frames with panel door with 25 micron powder coated (approved shade) aluminium section 9219 of INDAL 50x45x2.5mm or approved equivalent make and infilling panel of 10mm thick both side pre-laminated particle board of approved make. Aluminium Door section of INDAL or equivalent make with the following section: a) Main frame on all sides - 9221-101.5x44.45x2.5 of weight 1.975 kg/mtr b) Shutter vertical frame-9202-50x44.5x2.5 of weight 1.202 kg/mtr c) Shutter top frame - 9201-50x44.5x2.5 of weight 1.2299 kg/mtr d) Shutter middle frame - 9129-50x45x2.5 of weight 1.292kg/mtr e) Shutter bottom frame - 9200-100x44.5x2.5 of weight 1.974 kg/mtr f) Door handle - 5140-100x30x2.5 of weight 0.988 kg/mtr g) Glazing clip - 4660-17.8x17.6x1.3 of weight 0.169kg/mtr. The rate quoted includes all necessary furniture fittings.		SQM	
24	1750	Supplying and fixing of 4mm thick Aluminium Composite Panel made by "EUROBOND, ALSTRONG, TIMEXBOND or approved equivalent brand and 0.25mm skin and PVDF Coated and includes 50mm x 25mm x 1.05kg/m of Aluminium extrusion with necessary "L" angles fixing with necessary accessories with the 3mm x1.80mm spacer tape with Dow Corning 789 Silicon sealant and span size suitable to site including barriers made by MS Pipe of 3 nos. in vertical in between floors and beams to support ACP cladding including scaffolding & complete finishing in elevation up to 20m height.		SQM	

CONTRACTOR

28

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
25	4	Supplying and fixing of automatic door with DORMA make CS85 Automatic Operator fixed on the steel girder (Girder fixing) or beam /wall with necessary accessories with 10mm clear toughened glass made by SAINTGOBAIN/AIS/MODI or any other approved equivalent brand for the maximum openable size up to 2000mm x 2100mm. including required scaffolding and complete finishing.		SET	
26	1800	Supplying and fixing Frameless Glass partition using DORMA make Spider Fittings fixed on 15mm thick Toughened Fin Glass to suite the site condition for the height of Fin glass up to 3000mm along with Façade glass of 12mm thick clear toughened glass made by SAINT GOBAIN/AIS/MODI or any other approved equivalent brand with fixed head M12 bolts the maximum height of façade glass up to 7000mm and joints of glass should be filled with Dow Corning 789 Silicon weather sealant and bottom of glass to be inserted into floor up to 30mm including scaffolding and complete finishing.		SQM	
27	90	Supplying and fixing of Frameless glass Door made by DORMA Uni light Patch Fittings or its equivalent with 12mm clear toughened glasses, patch fittings, floor springs made by SAINT GOBAIN/AIS or any other approved equivalent with 300 or 600mm handle and the maximum size of double door is 2000mm x 2400mm and complete finishing		SQM	

CONTRACTOR

29

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
28	160	Supplying and fixing of pergolas as per Architect's design out of Homogeneous water proof wood, which is pre-finished with multi coats of formaldehyde-free acrylic lacquer and UV curing.(Typical model enclosed)		CFT	
29	350	Supplying and fixing of UPVC Fenesta Windows made by "FENESTA" series 1500 extrusion or any other approved equivalent brand, width up to maximum 000mm with one open able shutter with the size of 400mm and height upto 1400mm, the clear glass thickness of 5mm with including multi point locks, necessary anchor fasteners, EPDM Gasket, etc and 85 % of width to be fixed and complete finishing etc.		SQM	
30	190	Supplying and fixing of Luxalon 84R sun or any other approved equivalent brand metal louver system out of Roll formed aluminium panels of 84mm wide (coil coated with UV and scratch resistant Luxacote or equivalent coating) and fixed with angle stingers including scaffolding and complete finishing etc.		SQM	
31	1100	Providing vertical drops, fins, facias etc., for the following thickness with 1:2:4 cement concrete using 6 mm granite stone chips for inner core applied on chicken mesh and neatly plastered with cement mortar 1:4, 12mm thick on both faces, finishing, curing etc., complete. Rate includes cost of all materials and labour but excluding fabrication charges for reinforcement.		SQM	

CONTRACTOR

30

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
32	360	Weathering course with brick jelly in slaked lime shall be laid in single layer over R.C. slab the proportion of brick jelly and lime shall be 32:12.5 well beaten with wooden beaters so as to get an average thickness of 80mm and also to get the required slope etc., complete complying with standard specification.		CUM	
33	2500	Terrace flooring with one course of pressed tiles 23cmx23cmx20mm laid in cement mortar 1:3, 20mm thick mixed with water proof compound 2% by weight of cement used including all materials, labour and all by works etc., complete complying with standard specifications, drawings and as per the directions by the Engineer in Charge.		SQM	
34	8410	Providing and fixing granite slabs 18mm to 25mm thick in flooring minimum size of 2.4x1m in floors of approved colour, shade, quality, free from cracks, warpage, fissures and flakes with straight edges and perfect corners fixed at right angles as per the design and pattern over a bedding of 20mm thick 1:5 cement mortar and neat cement slurry and finishing the joints neat with white cement mixed with coloured pigments to match the colour of tiles, properly cured, finished in all respects, etc. complete and as per the directions of the Engineer in Charge. a) Brown coloured Indian Granites Tan, b) Sapphire, c) Sabre d) Diamond e) Desert, f) Chestnut brown, g) Copper Bilk, h) New Mahogany, i) Indian Juparana, j) Cates Eye, k) Paradise, l) Yellow Gibrana m) English Teak		SQM	

CONTRACTOR

31

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
35	1220	Providing and fixing polished granite slabs 18mm to 25mm thick in skirting minimum size of 2.4 x 0.15 of following colour, shade and quality, free from crack fissures and flakes with straight edges & perfect corners fixed at right angles as per the design and pattern with neat cement mortar 1:4 , 12 mm thick and finishing the joint with white cement mixed with matching colour pigment. The skirting shall project only 6mm from the wall and job includes chipping the wall for fixing the skirting and making good the same after fixing the skirting etc complete and as per the directions of the Engineer in Charge.. a) Brown coloured Indian Granites Tan, b) Sapphire, c) Sabre d) Diamond e) Desert, f) Chestnut brown, g)Copper Bilk, h)New Mahagony, i) Indian Juparana,j) Cat's Eye, k)Paradise,l)Yellow Gibrana m) English Teak		RM	
36	1100	Supply and fixing concrete tile of Eurocon make or any other approved brand and approved shade of 20mm thickness for flooring including providing 20mm thick 1:5 cement mortar bed and a floating coat of neat cement slurry, finishing the joints with white cement mixed with matching colour pigment, cleaning the surface with diluted sulphuric acid etc. complete.		SQM	

CONTRACTOR

32

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
37	520	Providing, fixing and dadoing in walls of granite slabs 18mm to 25mm thick minimum size of 2.5x1m of approved shade and free from cracks, warpage, fissures & flakes with straight edges & perfect corners fixed at right angles as per the design and pattern over a bedding of 20mm thick 1:5 cement mortar and neat cement slurry and finishing the joints neat with white cement mixed with coloured pigments to match the colour of tiles properly cured finished in all respects, etc. complete as per the directions by the Engineer in Charge. a) Brown coloured Indian Granites Tan, b) Sapphire, c) Sabre d) Diamond e) Desert, f) Chestnut brown, g)Copper Bilk, h)New Mahagony, i) Indian Juparana,j) Cates Eye, k)Paradise,l)Yellow Gibrana m) English Teak		SQM	
38	1380	Providing, fixing and dadoing of granite tiles 10mm to 12mm thick in walls minimum size of 600x300mm of approved shade & free from cracks, warpage, fissures & flakes with straight edges & perfect corners fixed at right angles as per the design and pattern over a bedding of 1:5 cement mortar, 20 mm thick and neat cement slurry and finishing the joints neat with white cement mixed with coloured pigments to match the colour of tiles properly cured finished in all respects, etc. complete as per the directions by the Engineer in Charge.. a) Brown coloured Indian Granites Tan, b) Sapphire, c) Sabre d) Diamond e) Desert, f) Chestnut brown, g)Copper Bilk, h)New Mahagony, i) Indian Juparana,j) Cates Eye, k)Paradise,l)Yellow Gibrana m) English Teak		SQM	

CONTRACTOR

33

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
39	30	Providing and fixing polished Granite urinal partition plate of approximate size size of 1200 x 550 x 20 mm including cutting in masonry/concrete surface to required corner size rounded of fixing the division plate on the granite slab by means of SS clamps, nuts & bolts, polishing all exposed surface etc all complete as directed by Engineer in Charge. a) Brown coloured Indian Granites Tan, b) Sapphire, c) Sabre d) Diamond e) Desert, f) Chestnut brown, g)Copper Bilk, h)New Mahagony, i) Indian Juparana,j) Cates Eye, k)Paradise,l)Yellow Gibrana m) English Teak		EACH	
40	21	Supplying and fixing of polished machine cut Granite for table top of wash basin of required size and colour .The scope includes fixing the granite slab on the concrete slab by means of SS clamps, nuts & bolts, polishing and nosing at edges all exposed surface etc all complete as directed by Engineers In Charge. a) Brown coloured Indian Granites Tan, b) Sapphire, c) Sabre d) Diamond e) Desert, f) Chestnut brown, g)Copper Bilk, h)New Mahagony, i) Indian Juparana,j) Cates Eye, k)Paradise,l)Yellow Gibrana m) English Teak		SQM	
41	800	Providing and fixing UPVC Rain water down fall pipes 110mm OD (6 kg/sqcm) of approved make (ISI marked) with necessary specials of approved make (ISI marked) including cost of all materials etc., complete as per standard specification		RM	

CONTRACTOR

34

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
42	430	Supplying and fixing of safety bars made up of stainless steel pipes of 304 grade 18 gauge minimum 100mm diameter hand rails 1.20 m ht with matt finish or mirror finish with horizontal bars of minimum 400mm centre to centre and vertical bars at 1.5 m centre to centre for safety purposes inside as suggested by the Engineer in Charge over any surface including bending, chamfering ,cladding, fixing with necessary beadings, Tig welding, gladding and polishing complete.		SQM	
43	75	Supplying and fixing in position of staircase balusters with stainless steel handrail up to 0.9m height 'A' type railing 40mm x 40mm square section tube 16 gauge 304 grade materials with polishes, edges rounded off, glass fixing panels in between, railing top with 2" dia, 16 gauge stainless steel pipe, fixing over marble (or) granite 12mm stair H bolt Nut and Holes, chemical fixing including cost and conveyance of all materials fixing in position, complete with standard specifications.(Typical Model enclosed)		RM	
44	80	Supply & fixing Godrej or any approved equivalent make six lever lock (cylindrical)/Round Head) including all necessary hardware etc.,		EACH	
45	80	Supply and fixing door closer of hardwin / everite / shutwell make size no.2.		EACH	
46	2000	Supply & fixing MS fan hooks with to shape with hooked ends in RCC slab during laying of concrete and exposing after de shuttering including painting the exposed portion.		EACH	

CONTRACTOR

35

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
47	8000	Providing and fixing suspended interior false ceiling using India Gypsum board up to 4 m height from floor level which includes providing and fixing GI perimeter channels of size 0.55mm thick having flange of 30mm and web of 27mm along perimeter of ceiling, screw fixed to the brick wall/partition with the help of nylon sleeves and screws at 510mm centers. The suspending GI intermediate channels of size 45mm each from the soffit at 1220mm centers with ceiling angle of width 25mmx10mm thick fixed to soffit with GI cleat and steel expansion fasteners. Ceiling section of 0.55mm thick having knurled web of 51.5mm and two flanges of 26mm each with lips of 10.5mm are then fixed to the intermediate channels with the help of connecting clips and in direction perpendicular to intermediate channels at 457mm centers, 12.5mm tapered edge POP sheet is then fixed to the ceiling section width 25mm dry wall screws at 230mm centers finally. All the joints are to be filled and finished to match with the above. The scope includes providing one coat of suitable primer and two coats of plastic emulsion paint of approved shade, necessary cornicing and making necessary opening for the lights and finishing the same after fixing of lights .		SQM	

CONTRACTOR

36

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
48	675	Providing and fixing suspended exterior water proofing false ceiling using India Gypsum board upto 7.5 m height which includes providing and fixing GI perimeter channels of size 0.55mm thick having flange of 30mm and web of 27mm along perimeter of ceiling, screw fixed to the brick wall/partition with the help of nylon sleeves and screws at 510mm centres. The suspending GI intermediate channels of size 45mm each from the soffit at 1220mm centres with ceiling angle of width 25mmx10mm thick fixed to soffit with GI cleat and steel expansion fasteners. Ceiling section of 0.55mm thick having knurled web of 51.5mm and two flanges of 26mm each with lips of 10.5mm are then fixed to the intermediate channels with the help of connecting clips and in direction perpendicular to intermediate channels at 457mm centres, 12.5mm tapered edge POP sheet is then fixed to the ceiling section width 25mm dry wall screws at 230mm centres finally. all the joints are to be filled and finished to match with the above. The scope includes providing, one coat of suitable primer and two coats of plastic emulsion paint of approved shade , necessary cornicing and making necessary opening for the lights and finishing the same after fixing of lights.		SQM	
49	110	Providing and fixing in position of 25 mm thick bitumen impregnated fibre board conforming to IS:1838 including cost of bitumen solution primer of approved brand and quality , bitumen sealing compound of grade 'A' in expansion joints all as per the direction of Engineer in Charge.		SQM	
50	1	Providing and filling in position of bitumen mix filler of proportion 80 Kg of hot bitumen, 1 Kg of cement and 0.25 cubic metre of coarse sand for expansion joints.		CUM	

CONTRACTOR

37

ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
51	80	Supplying and fixing 40mm UPVC pipe (ISI marked) with necessary specials (ISI marked) exposed on walls 'B' class		RM	
52	25	Supplying and fixing coloured (pastel colour) vitreous china European type water closet comprising of the following accessories including cutting and making good the walls & floors wherever required complete as directed by Engineer In Charge or equivalent and as per the direction of Engineer In Charge. A) Coloured (pastel colour) vitreous china pedestal type (Wall Mounted Cascade Model) European water closet of Model Cascade Parryware(C8446), Cera (canoe) or Hindware(190531) - make as per the direction of Engineer In Charge. B) Supplying & Fixing concealed cistern with push plate chromium colours - Parryware(C8136), Hindware(F850008) & Jaquar (1091) including necessary plumbing connection to EWC as per the direction of Engineer In Charge. C) 15mm NB CP inlet connection with Brass unions at the ends. D) Commander make or equivalent matching colour polypropylene seat cover with necessary brass hinges and rubber bushes etc., E) 15mm NB brass angle valve as per ISI of approved brand as per the direction of Engineer In Charge. F) WC connector with neoprene rubber.		EACH	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
53	12	Supplying and fixing coloured (pastel colour) vitreous china Orissa Pan type water closet comprising of the following accessories including cutting and making good the walls & floors wherever required complete as directed by Engineer In Charge or equivalent and approved by the Architect or Departmental officers. A) Coloured (pastel colour) vitreous china 580mm orissa pan water closet of Parryware(0123) or Hindware(20004) - make P or S trap. B) Supplying & Fixing concealed cistern with push plate chromium colours Parryware(C8136),Hindware(F850008)& Jaquar (1091) including necessary plumbing connection to IWC of matching colour parryware make model with necessary fittings, brackets, screws etc., all complete. C) 32mm PVC flush pipe 10Kg/sq.cm quality of approved length with necessary fittings, clamps etc., D) 15mm NB CP inlet connection with Brass unions at the ends. E) 15mm NB brass angle valve as per ISI of approved brand as per the direction of Engineer In Charge. F) WC connector with neoprene rubber.		EACH	
54	42	Supplying and fixing coloured (pastel colours) vitreous china flat back large Auto Flush type gents urinal (with concealed sensor) or equivalent and as per the directions of Engineer in Charge. Parryware(8097/98) or Hindware(60007) with CP flush valve, cp pipe connection, CP waste coupling, CP Brass bottle trap, 32mm UPVC waste line of required length, CP spreader unit and extension pipe etc., all complete as per the direction of Engineer In Charge.		EACH	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
55	24	Supplying and fixing coloured (pastel colours) vitreous china flat back large Auto Flush type ladies urinal (with concealed sensor) or equivalent and as per the directions of Engineer in Charge. Parryware(0572-squatting type) or Hindware(60003-squatting type) Jaquar(51077-sensor flushing valve for urinals) with CP flush valve, cp pipe connection, CP waste coupling, CP Brass bottle trap, 32mm UPVC waste line of required length, CP spreader unit and extension pipe etc., all complete as per the direction of Engineer In Charge		EACH	
56	45	Providing and fixing coloured Counter Top Oval type wash basin of Parryware(C8418) oval of Hindware(10017) including the following accessories: - a) Providing and fixing Sensor Faucet Sensor pillar cock of Jaquar make (51011). b) All other fillings like waste coupling, bottle trap, stop cock etc., from Clarion Range of Jaquar.		EACH	
57	125	Providing and fixing bevelled edge mirror of superior glass of 5mm thick of size upto 2.4mx1.2m of BELGIUM GLASS saint gobain, modiguard, warrior or any other approved equivalent brand and as per the directions of Engineer in Charge, 6mm wooden plywood & cleats or with wooden beads or with adhesive allround of specified size and shampere and directed by engineer in charge fixed with wooden plugs with CP brass screws and cup washers etc all complete as directed by engineer in charge		SQM	
58	24	Providing and fixing readymade bath tap single lever bath shower mixer Parryware, Hindware(F130012) & Jaquar(5075) exposed equivalent and as per the directions of Engineer in Charge.		EACH	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
59	66	Providing and fixing readymade CP brass soap tray Parryware(9935),Hindware(F815003) & Jaquar (7731) near wash basin and bath rooms with CP brass screws or equivalent and as per the directions of Engineer in Charge.		EACH	
60	24	Providing and fixing CP brass towel rail of 20mm dia and 600mm long including all accessories Parryware(9948), Hindware(F815008) & Jaquar (7781)or equivalent and as per the directions of Engineer in Charge as brackets (coloured), fixed and anchoring etc., complete as directed.		EACH	
61	45	Providing and fixing CP towel ring minimum (300 dia) mounted on walls including all accessories Parryware, Hindware(F815002) & Jaquar (7721), fixed and anchoring etc., complete and as per the directions of Engineer in Charge.		EACH	
62	24	Providing and fixing Health Faucet of Parryware(T9929G1),Hindware(F160001) &Jaquar (563)or equivalent and as per the directions of Engineer in Charge.		EACH	
63		Providing and fixing in position CP brass single lever stop cocks and bib cocks Parryware, Hindware(F130002) & Jaquar (7037) of heavy type ISI marked as per the directions of Engineer in Charge			
a	36	15mm dia single lever stop cock		EACH	
b	66	15mm dia bib cocks		EACH	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
64	84	Providing and fixing PVC floor nahani trap with cockroach protection of self cleansing design conforming to IS specs with 100mm inlet,75mm outlet and 150mm CP hinged grating of 6mm thick with rim. Rate shall include making all necessary leak proof connections etc.,		EACH	
65	35	Supplying and fixing of 150 x 150 mm pastel coloured toilet paper holder of Parryware(9950), Hindware(F815006) & Jaquar (7751) or equivalent and as per the directions of Engineer in Charge at required position and elevation as directed. Rate to include making good the chases in walls after fixing the above.		EACH	
66	25	Supplying and fixing of concealed pulling type hand wash paper holder of size (app.) or equivalent and as per the directions of Engineer in Charge at required position and elevation as directed. Rate to include making good the chases in walls after fixing the above.		EACH	
67	15	Providing and constructing inspection chambers of size 450 x 450 x 600 mm with 230mm thick brick masonry in 1:5 cement mortar, excavation, 75mm thick PCC 1:4:8 bed, plastering with neat cement finish, providing 12mm thick MS plate cover with 35x35x6 angle stiffener and 50x50x6 angle frame etc., complete.		EACH	
68	35	Supplying and fixing of gate valve 25mm dia of approved brand and quality (ISI marked)		EACH	
69	5	Supplying and fixing of gate valve 40mm dia of approved brand and quality (ISI marked)		EACH	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
70	5	Supplying and fixing of gate valve 80mm dia of approved brand and quality (ISI marked)		EACH	
71	3	Supplying and fixing of gate valve 150mm dia of approved brand and quality (ISI marked)		EACH	
72	680	Supplying and fixing of 40mm GI pipe concealed 'B' class of approved brand and quality (ISI marked)		RM	
73	200	Supplying and fixing of 80mm dia UPVC pipe 4 Gauge of approved brand and quality (ISI marked)		RM	
74	220	Supplying and fixing of 150mm dia UPVC pipe 4 Gauge. of approved brand and quality (ISI marked)		RM	
75	65	Supplying and fixing of R Brand 25mm GI angle valve (wheel) of approved make and quality (ISI marked)		EACH	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
76	36	Supplying and fixing of 5 " shower rose with shower arms of length of minimum 250 mm Parryware, Hindware(F160010) & Jaquar (7489) or equivalent and as per the directions of Engineer in Charge		EACH	
77	100	Supplying and laying 4 " dia GI pipes 'C' class including specials of approved brand including dry riser for provision of fire hydrant on external walls and inside trenches as per standard specification and as per the instructions of Engineer in-Charge. The rate includes all labour charges incidental charges, cost of GI pipes and specials, cutting and making good the walls and floors etc complete. Provision shall be provided for fixing the double way fire hydrant valves. Earthwork excavation for trenches and refilling will be paid separately.		RM	

TOTAL - A

(RUPEES ONLY)

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PART B - ELECTRICAL WORKS

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
1		Supply and Wiring for the following light points with 3 run 1.5 sq.mm PVC insulated copper conductor 1100 volts grade stranded flexible FRLS wires of approved make in concealed or surface mounted 25 mm dia 2 mm thickness MS Conduit including providing and fixing of 6 amps single pole modular type flush mounted switch of approved quality colour make & design in 2 mm thick GI box and earthing of fixtures and all accessories			
a	350	One Light Point control by one switch (avg 8 meter)		POINT	
b	65	Two Light Point control by one switch (avg 15 meter)		POINT	
c	150	Three Light Point control by one switch (avg 18 meter)		POINT	
d	40	Two Way Light Point control by Two switch (avg 15 meter)		POINT	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
2	50	Supply and Wiring for the Ceiling fan points with 3 run 1.5 sq.mm PVC insulated copper conductor 1100 volts grade stranded flexible FRLS wires of approved make in concealed or surface mounted 25 mm dia 2 mm thickness MS Conduit including providing fan hook box, 6 amps switch and 100 watts electronic step type fan regulator of approved make in GI box and earthing the fan and all accessories		POINT	
3	10	Supply and Wiring for the Ex fan points with 3 run 1.5 sq.mm PVC insulated copper conductor 1100 volts grade stranded flexible FRLS wires of approved make in concealed or surface mounted 25 mm dia 2 mm thickness MS Conduit including providing and fixing of 6 amps single pole rocker operated flush mounted switch of approved quality colour make & design in 2 mm thick GI box and earthing of fixtures and all accessories		POINT	
4		Providing and fixing of following PVC insulated copper conductor 1100 volt grade stranded flexible FRLS wire in including providing and fixing of 25 mm (or suitable size) dia 2 mm thickness MS conduits concealed or surface mounted making connections where ever required to complete the installation.			
a	40	5 Run. 120 sq.mm PVC insulated copper conductor 1100 volts grade stranded (For UPS outgoings)		RM	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
b	120	5 Run. 120 sq.mm PVC insulated copper conductor 1100 volts grade stranded (For UPS outgoings)		RM	
c	200	4 Run. 4 sq.mm 2 run 2.5 sq.mm PVC insulated copper conductor 1100 volts grade stranded FRLS wires (Three Phase circuits)		RM	
d	3000	2 Run. 4 sq.mm 1 run 2.5 sq.mm PVC insulated copper conductor 1100 volts grade stranded FRLS wires (power circuits)		RM	
e	7500	3 Run. 2.5 sq.m PVC insulated copper conductor 1100 volts grade stranded flexible FRLS wires (Lighting Circuits)		RM	
f	4500	3 Run. 2.5 sq.m PVC insulated copper conductor 1100 volts grade stranded flexible FRLS wires (computer Circuits)		RM	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
g	1500	3 Run. 1.5 sq.m PVC insulated copper conductor 1100 volts grade stranded flexible FRLS wires (additional length of wiring in point wiring)		RM	
5	80	Supply and Wiring for 250 volts single phase and neutral 1 no 16/6 amps 3 pin sockets and 1 no 16 amps switch of approved make and design in 2 mm thick GI box with grid plates, earthing and all accessories. (sockets in common area)		POINT	
6	450	Supply and Wiring for 250 volts single phase and neutral 1 no 16/6 amps 3 pin sockets and 1 no 16 amps switch of approved make and design in 2 mm thick GI box with grid plates, earthing and all accessories. (Computer Raw power)		POINT	
7	450	Wiring for 250 volts single phase and neutral 3 nos 6 amps 5 pin sockets and 1 no 16 amps switch of approved make and design in 2 mm thick GI box with grid plates, earthing and all accessories. (computer socket)		POINT	
8	100	Supply and Wiring for 250 volts single phase and neutral 1 no 6 amps 5 pin sockets and 1 no 6 amps switch of approved make and design in 2 mm thick GI box with grid plates, earthing and all accessories. (sockets at lighting boards)		POINT	

CONTRACTOR

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
9	175	Supply and Wiring for 250 volts single phase and neutral 1 no 6 amps 5 pin sockets and 1 no 6 amps switch of approved make and design in 2 mm thick GI box with grid plates, earthing and all accessories. (sockets for indoor A/C)		POINT	
10		Supplying & laying of following 1100 volt grade XLPE insulated PVC sheathed aluminium conductor armoured cables as per specification in existing trenches, cable trays, ducts, over bed of sand, clamped to wall with suitable clamps including, saddles fixing bolts, connecting testing and commissioning.			
a	100	3.1/2 core 185 sq. mm.		RM	
b	25	3.1/2 core 95 sq.mm		RM	
c	50	3.1/2 core 70 sq. mm		RM	
d	50	3.1/2 core 50 sq. mm		RM	
e	50	3.1/2 core 35 sq. mm		RM	
f	50	4 core 25 sq. mm		RM	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
g	50	4 core 16 sq. mm		RM	
h	50	4 core 10 sq. mm		RM	
11		Supplying & laying of following 1100 volt grade PVC insulated sheathed copper conductor armoured cable as per specification in existing trenches, cable trays ducts over bed of sand, clamped to wall with suitable clamps, including fixing bolts, connecting testing and commissioning.			
a	600	4 core 16 sq. mm.		RM	
b	600	4 core 10 sq.mm		RM	
c	3000	3 core 10 sq.mm		RM	
d	500	3 core 4 sq.mm		RM	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
e	500	3 core 2.5 sq.mm		RM	
12		Cable end termination of the following XLPE insulated PVC sheathed aluminium/copper conductor armoured cables of 1100 volt grade including supplying and fixing of bimetallic crimping lugs, double compression glands with earthing.			
a	8	3.1/2 core 185 sq. mm-aluminium cable.		EACH	
b	2	3.1/2 core 95 sq. mm-aluminium cable		EACH	
c	4	3.1/2 core 70 sq. mm-aluminium cable		EACH	
d	4	3.1/2 core 50 sq. mm-aluminium cable		EACH	
e	4	3.1/2 core 35 sq. mm-aluminium cable		EACH	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
f	40	4 core 25 sq. mm-aluminium cable		EACH	
g	40	4 core 16 sq. mm-aluminium cable		EACH	
i	60	4 core 16 sq. mm. copper cable		EACH	
j	40	4 core 10 sq.mm copper cable		EACH	
k	55	3 core 10 sq.mm copper cable		EACH	
l	60	3 core 4 sq.mm copper cable		EACH	
m	60	3 core 2.5 sq.mm copper cable		EACH	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
13		Cable Trays with rungs at 300 mm C/C ,made out of Galvanized Iron, of required mechanical strength, to be installed in approved manner, with grip bolts and anchor bolts- as fasteners, rigid GI angle-iron supports fixed at 600 mm C / C.The trays must have adequate Web-depths to carry the number of cables and / or conduits as needed at site,- Tray prices to include all accessories like Bends, Tees, Jointing plates, Clamps and U-shaped GI Channel Supports for Heavy and wide trays.			
a	200	100 mm Wide Cable Trays		RM	
b	300	150 mm Wide Cable Trays		RM	
c	600	300 mm Wide Cable Trays		RM	
d	400	450 mm Wide Cable Trays		RM	
e	150	600 mm Wide Cable Trays		RM	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
14	1500	MS support for cable tray		KG	
15		Design, fabrication, assembling, supply, installation, testing and commissioning of following distribution panels suitable for 415V, 3 phase, 50 Hz, 4 wire power supply system. Panels shall be fabricated out of 2 mm thick CRCA sheet steel in cubical formation, compartmentalized in ForCUMb Construction, floor mounted, free standing and shall be dust and vermin proof. 3 mm thick cable gland plate, shall be provided both at the top and the bottom of the panel. All outgoing feeders shall have suitable range of followings All incoming as well as outgoing feeders shall have pad locking facility. 415 / 110 V suitable rating control transformer shall be provided for aux. Control supply & suitable danger board shall be provided.			
a	1	UPS Incomer Panel with the accessories mentioned below 400 amps TPN MCCB 50kA lcs with thermal settings with following accessories for incoming - 1 No R,Y,B Phase indicating light through 415 /110 V PT, Primary / Secondary of PT's shall be protected by 2 amps MCB's. - 1 No Electronic multi data meter of accuracy class-I, with 3 Nos. 400/5 amps 15VA CTs to measure and display the following electrical quantities :a. Real Time, b. Total active energy (KWH/MWH), c. power factor, d. Current ,e. Voltage ,f. Frequency - 1 No Bus bar : 400 amps TPN (50 kA) Copper bus bars with colour coded heat shrinkable insulating sleeves - 1 Set 250 amps TPN MCCB 25kA lcs with thermal settings - 3 sets 125 amps TPN MCCB 25kA lcs with thermal settings - 3 sets		SET	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
b	1	A/C Main Panel with all the accessories listed below Incoming Air Circuit Breaker : 1000 amps 3 pole 50 kA electrically operated fully drawout type air circuit breaker with built in microprocessor based release unit for protection and measurement as per specification and with following accessories : Phase indicating light through 415 /110 V PT, Primary / Secondary of PT's shall be protected by 2 amps MCB's. - 3 sets. Breaker ON / OFF / TRIP indicating lights with control MCB's.- 1 set Under voltage release - 1 set 24 V DC Shunt trip coil - 1 set Under voltage relay with timer (27) - 1 set Over voltage relay with timer (59) - 1 set Breaker control switch - 1 set Electronic multi data meter of accuracy class-I, with 3 Nos. 630/5 amps 15VA CTs to measure and display the following electrical quantities :a. Real Time, b. Total active energy (KWH/MWH), c. power factor, d. Current ,e. Voltage ,f. Frequency - 1 No bus bars :1500 amps TPN (50 kA) Aluminium bus bars with colour coded heat shrinkable insulating sleeves - 1 set outcomers : 400 amps TPN MCCB 35kA lcs with thermal settings -4 No, 200 amps TPN MCCB 25kA lcs with thermal settings- 2 No,125 amps TPN MCCB 16kA lcs with thermal settings-2 No		SET	

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Sl No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
c	1	Lighting Panel with all the accessories listed below Incomers :200 amps TPN MCCB 25 kA lcs thermal settings with following accessories: R,Y,B Phase indicating light through 415 /110 V PT, Primary / Secondary of PT's shall be protected by 2 amps MCB's. For EB & DG side Electronic multi data meter of accuracy class-I, with 3 Nos. 315/5 amps 15VA CTs to measure and display the following electrical quantities : a. Real Time, b. Total active energy (KWH/MWH), c. power factor, d. Current ,e. Voltage ,f. Frequency - 1 No Bus bars :200 amps TPN (36 kA) Copper bus bars with colour coded heat shrinkable insulating sleeves - 1 set Outcomers : 63 amps TPN MCCB 16 kA lcs with thermal settings - 8 No		SET	
d	1	UPS Synchronising Panel with all the accessories listed below Incomers :250 amps TP+2N MCCB 25 kA lcs thermal settings with following accessories: R,Y,B Phase indicating light through 415 /110 V PT, Primary / Secondary of PT's shall be protected by 2 amps MCB's. For EB & DG side Electronic multi data meter of accuracy class-I, with 3 Nos. 160/5 amps 15VA CTs to measure and display the following electrical quantities : a. Real Time, b. Total active energy (KWH/MWH), c. power factor, d. Current ,e. Voltage ,f. Frequency - 2 No Bus Bars : 250 amps TP+2N (25 kA) Copper bus bars with colour coded heat shrinkable insulating sleeves - 1 No Outcomers : 125 amps TP+2N MCCB 16 kA lcs with thermal settings - 4 No 63 amps TP+2N MCCB 16 kA lcs with thermal settings - 4 No		SET	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
e	4	UPS Raw Power Panel ,A/C Indoor unit panel (Ground Floor),A/C Ground Floor Panel,Lift Panel (Terrace Floor) with all the accessories listed below Incomer : 160 amps TPN MCCB 25 kA lcs thermal settings with following accessories: R,Y,B Phase indicating light through 415 /110 V PT, Primary / Secondary of PT's shall be protected by 2 amps MCB's. For EB & DG side a. Electronic multi data meter of accuracy class-I, with 3 Nos. 315/5 amps 15VA CTs to measure and display the following electrical quantities : a. Real Time, b. Total active energy (KWH/MWH), c. power factor, d. Current ,e. Voltage ,f. Frequency - 1 No Bus bars :200 amps TPN (36 kA) Copper bus bars with colour coded heat shrinkable insulating sleeves - 1 No out comers :63 amps TPN MCCB 16 kA lcs with thermal settings - 6 Nos		SET	
f	4	UPS Outgoing Panel with all the accessories listed below incomer : 125 amps TP+2N MCCB 16 kA lcs thermal settings with following accessories: R,Y,B Phase indicating light through 415 /110 V PT, Primary / Secondary of PT's shall be protected by 2 amps MCB's. For EB & DG side a. Electronic multi data meter of accuracy class-I, with 3 Nos. 125/5 amps 15VA CTs to measure and display the following electrical quantities : a. Real Time, b. Total active energy (KWH/MWH), c. power factor, d. Current ,e. Voltage ,f. Frequency - 1 No bus bar :100 amps TP+2N (25 kA) Copper bus bars with colour coded heat shrinkable insulating sleeves - 1 Set out comer : 40 amps DP MCB (D- curve) 16 kA lcs with thermal settings - 12 set		SET	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
g	3	AC Floor Panel (1, II and III Floors) with all the accessories listed below incomers :400 amps TPN MCCB 35kA lcs with thermal settings Electronic multi data meter of accuracy class-I, with 3 Nos. 400/5 amps 15VA CTs to measure and display the following electrical quantities :a. Real Time, b. Total active energy (KWH/MWH), c. power factor, d. Current ,e. Voltage ,f. Frequency - 2 No bus bars :400 amps TPN (36 kA) Copper bus bars with colour coded heat shrinkable insulating sleeves - 1 set out comers :100 amps TPN MCCB 16 kA lcs with thermal settings - 4 set 63 amps TPN MCCB 16 kA lcs with thermal settings - 8 set		SET	
16	1	Supply, installation, testing and commissioning of 200 amps four pole, 3 phase, 415 V On Load Change Over with operating handle in 2 mm thick CRCA sheet steel enclosure of approved make design and painted with approved paint shade on the wall / panel.		EACH	
17		Supply, installation, testing and commissioning of the following Final distribution boards fabricated out of 1.6 mm thick Factory made sheet steel , double door construction, powder coated with approved shade and partitions to segregate phases. Approved lockable covers with padlocking arrangement for each phase, recessed in wall or surface mounted final distribution boards with earthing of the following description:			
a	4	Type A (lighting Feeder DB-MCB-B-curve) :4 way TPN DB, 1 No. 63 amps FP MCB as incomer, 4 Nos.40 amps DP MCB's as out goings with separate neutral link for each phase.		EACH	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
b	18	Type B (Floor lighting DB-MCB-B-curve) :12 way SPN DB, 1 No. 40 amps FP RCBO's of 30 mA leakage current as incomer and 10 Nos 6 amps SP MCB as out goings with neutral and earth link.		EACH	
c	4	Type C (UPS Raw power DB-MCB-C-curve) :6 way 7 segment DB, 6 Nos. 6 amps SP MCB's per phase with 3 Nos. 32 amps DP RCBO's of 30 mA leakage current and 1 no. 40 amps 4 pole MCB as incomer with separate neutral link for each phase.		EACH.	
d	4	Type D (A/C indoor Unit DB-MCB-C-curve) :8 way 7 segment DB, 8 Nos. 10 amps SP MCB's per phase with 3 Nos. 40 amps DP RCBO's of 30 mA leakage current and 1 no. 40 amps 4 pole MCB as incomer with separate neutral link for each phase.		EACH.	
e	4	Type E (lift DB-MCB-C-curve) : 4 way TPN DB, 1 No. 32 amps FP MCB, 4 Nos. 16 amps SP MCB's, 4 Nos. 6 amps SP MCB's, for phase and 1 no. 40 amps 4 pole RCBO 100mA as incomer with separate neutral link for each phase.		EACH.	
f	40	Type F (ups DB-MCB-D-curve) : 12 way SPN DB , with 1 no 40 Amps DP RCBO'S of 30 ma leakage current (HPI type) as incomer and 8 nos 6 amps SP MCB as outgoings with neutral and earth link		EACH.	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
g	30	Type G (ac outdoor unit DB-MCB-C-curve) : 12 way SPN DB Hensel make Poly corbonte IP 66 Box with 1 no 63 Amps FP RCBO'S of 100 ma leakage current with earth link		EACH.	
h	10	20A metal socket with 20A Double pole MCB for controlling the outgoing with supply of suitable painted sheet steel box		EACH	
i	10	32A metal socket with 32A Four pole MCB for controlling the outgoing with supply of suitable painted sheet steel box		EACH	
j	5	63A metal socket with 63A Four pole MCB for controlling the outgoing with supply of suitable painted sheet steel box		EACH	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
18	4	Design, fabrication, assembling, wiring, supply, installation, testing and commissioning of Automatic control panels with capacitors, fabricated out of 14 gauge CRCA sheet steel in cubicle compartmentised, free standing, floor mounted, dust and vermin proof with reinforcement of suitable size, angle iron, channel, 'T' sections and / or flats wherever necessary. Cable gland plates shall be provided on top as well as at the bottom of the panels. Panels shall be treated with all anticorrosive process before powder coating as per specifications and final approved shade. 2 Nos. earthing terminals shall be provided for all distribution panels. Panels shall be suitable for 415V, 3 phase, 4 wire, 50 HZ supply system. Lifting hooks shall also be provided in case of large panels. Galvanised hardwares with zinc passivation shall be used in fabrication of panels. The system shall be provided with automatic & Manual mode similar or equivalent to Data make APFC panels. It shall provide rated 60 KVAR with 8 stage & suitable rating of capacitors, as per specification. The panel shall also comply with following : 200 Amps TPN fixed type MCCB incomer with 25KA breaking capacity to be provided : Microprocessor APFC controller shall continuously monitor all three phases and displays various Electrical Parameters like voltage, input current, capacitive current, KVA demand, KW, Power Factor, self diagnostic error code indication with printout facility of the above with RS 232C port. Controller should mounted on the front side of the panel. MCB^s fuse and links of the proper rating to be used for grouping the capacitor banks. Necessary control and firing card with proper wiring and lugs of the required rating to be provided. LED indication for number of capacitor banks 'ON'. LED indication of Power Factor lagging or leading. The APFC system shall be provided with following : Capacitor automatic control panel (50 KVAR)		SET	

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SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
19	2	63 Amps FP fixed type MCB incomer with 10KA breaking capacity to be provided as detailed below Microprocessor APFC controller shall continuously monitor all three phases and displays various Electrical Parameters like voltage, input current, capacitive current, KVA demand, KW, Power Factor, self diagnostic error code indication with printout facility of the above with RS 232C port. Controller should be mounted on the front side of the panel. MCCB ^s fuse and links of the proper rating to be used for grouping the capacitor banks. Necessary control and firing card with proper wiring and lugs of the required rating to be provided. LED indication for number of capacitor banks 'ON'. The APFC system shall be provided with following : Capacitor automatic control panel (30 KVAR)		SET	
20		Supply and fixing of following bare copper /GI tapes / wires including all necessary fixing accessories and effecting connections as per specifications.			
a	200	25 x 3 mm thick copper tape.		RM	
b	200	25 x 1.5 mm thick Copper tape.		RM	
c	200	8 SWG Copper wire		RM	

CONTRACTOR

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ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
d	600	10 SWG Copper wire		RM	
21	2	Providing and laying of 300 x 300 x 2.0 mm thick tined copper plate electrode, with 2 Nos 25 x 3 mm copper strips from earth plate electrode to inspection chamber, 40 mm dia medium class GI pipe, CI funnel with 20 gauge GI wire mesh, masonry chamber 600 x 450 mm with concrete base C I heavy duty / chequered plate manhole cover with frame painted with bitumastic paint and packing with mixture of charcoal and common salt around plate electrode including digging of pit up to permanent moisture level and as per soil condition but not less than 3 meters and back filling as required.		EACH.	
22	4	Providing and laying of earth electrode to inspection chamber, 40 mm dia medium class GI pipe, CI funnel with 20 gauge GI wire mesh, masonry chamber 600 X 450 mm with concrete base CI manhole cover with frame painted with bitumastic paint and packing with mixture of charcoal and common salt around plate electrode including digging of pit up to permanent moisture level but not less than 3 meters and back filling as required.		EACH.	
23		Supply and laying of following 1100 volts grade PVC insulated sheathed copper conductor unarmoured cable including copper thimbles, fixing hardware as required.			
a	30	Single core 16 sq.mm Green colour cable		RM	

CONTRACTOR

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ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
b	30	Single core 10 sq.mm Green colour cable		RM	
c	30	Single core 6 sq.mm Green colour cable		RM	
24	1	Supply of Early Streamer Emission (ESE) Lightning protection Air terminal - should comply with NFC - 17-102 standards. The Air terminal should be capable to collect the ambient electric field and to should emit the upward streamer with the defined Gain in time.		EACH	
25	1	Supply of GI pipe fabrication support structure providing with suitable base plate, should have provision for Guy wire clamping system, termination arrangement for the Down-Conductor		EACH	
26	1	Supply of Lightning Flash counter working electro mechanically without any power supply. Equipment should count lightning strokes of 0.4KA to 150 KA.		EACH	
27	50	Supply and Installation of 25 x 3mm copper down conductor with suitable mounting accessories. The mounting clamps should be conductive material.		RM	

CONTRACTOR

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ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
28	2	Supply of maintenance free Earth enhancing Chemical compound type Helita TERECE earthing with copper bonded steel rod with minimum 1.8 mts long and suitable termination clamps.		EACH	
29	1	Installation, Testing and commissioning of the ABB Helita - Pulsar or equivalent Early Streamer Emission Lightning protection Air terminal, Mounting support, Down-conductor and Maintenance-free earthing system. The Installation should be strictly followed as per the Manufacturer's Instructions.		LS	
30		Supply and Installation of the following lighting fixtures with all fixing accessories etc. as required.			
a	150	Fluorescent lighting fixtures Philips TMC501 1xTLD36W with 36 watt fluorescent lamp or approved equal in quality and design.		EACH.	
b	140	Compact Recess mounted luminaries mirror optical type Philips FBS 450 2xPLL36W EBT D6 DF -OR with 36 watt CFL or approved equal in quality and design.		EACH.	
c	20	Compact Recess mounted luminaries mirror optical type Philips FBS 450 3xPLL36W EBT D6 DF -OR with 36 watt CFL or approved equal in quality and design.		EACH.	

CONTRACTOR

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ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
d	750	Compact Recess mounted luminaries mirror optical type Philips FBS 085 1xPLC/4P 18W EBWHFM RG-FR with 18 watt CFL or approved equal in quality and design.		EACH.	
e	90	Compact Recess mounted luminaries mirror optical type Philips FBS 085 2xPLC/4P 18W EBWHFM RG-FR with 18 watt CFL or approved equal in quality and design.		EACH.	
f	40	Surface mount lighting fixtures Philips Lotus FCS5 18 2X11W or Equivalent approved in quality and design with 11 watt CFL lamps.		EACH.	
g	10	Recessed down lighter suitable for MBS205 1xCDMTD 150W IC 240 or equivalent approved in quality and design with 150 W CDMT lamp		EACH	
h	25	Recessed down lighter suitable for LBX110/1XALU- 11150W or equivalent approved in quality and design with 50 W Halogen lamp		EACH	
i	50	48" dia sweep ceiling fan without regulator of approved make complete with all accessories.		EACH	

CONTRACTOR

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ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
j	10	9" dia Ex- fan of approved make complete with all accessories.		EACH	
31		Providing and fixing in position the following 2 mm PVC conduits concealed or exposed as called for including all accessories i.e. bends, junction boxes, outlet boxes with cover plates of approved make and design.			
a	1000	20 mm dia conduit		RM	
b	1500	25 mm dia conduit		RM	
32	3000	Supply, Laying of 2 pair telephone cable run through Existing PVC conduit		RM	
33	15000	Supply, Laying of CAT 6 Computer cable run through Existing PVC conduit		RM	
34	150	Supply, Fixing of telephone jack with moulded front GI enclosure with all accessories.		POINT	

CONTRACTOR

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ACCEPTING OFFICER

SI No	Quantity	Description of work	Rate in Rs (both in figures and in words)	Unit	Amount in Rs
35	900	Supply, Fixing of Computer jack with moulded front GI enclosure with all accessories.		POINT	

TOTAL - B

(RUPEES ONLY)

NOTE:-

1. Service Tax will be extra if applicable for this contract. Service Tax paid by the contractor with respect to this work will be reimbursed by BHEL on production of documentary evidence for having paid the service tax.
2. The period of contract is Nine months. The contractor is required to plan accordingly and complete the work in time.
3. The contractor has to comply with the provisions of "Building and other construction workers act 1996 (Regulation of Employment and condition of services)". The contractor has to bear 1 % cess towards BOCW act 1996 for the total value of the contract. The contractor is required to deposit the cess, within one month / before raising subsequent running bill (whichever is earlier), for the payment received from BHEL and submit the documentary evidence after which only BHEL will process the subsequent running bill for payment.

CONTRACTOR

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ACCEPTING OFFICER

SCHEDULE 'B'

1. The following materials will be issued FREE of cost to contractor at PPP Unit / BHEL near Thirumayam, Pudukkottai (Dt) (TamilNadu)

Sl.No	Name of Material
1	Cement
2	M.S Rounds, CTD Bars & Structural Steel

2. It will be the responsibility of the Contractor to submit his demands for the above stores in writing at least seven days in advance of the actual requirement.
3. Issue of materials is subject of the availability at the place of issue cited above, items of materials to be issued by BHEL which are not available at the time of indenting by the contractor may be supplied by BHEL after necessary procurement. The contractor shall not be entitled to any claim of compensation for delay in the supply of materials by BHEL under any circumstances.
4. Contractor shall have to receive the materials as soon as they are issued to him to the site of work at his own cost.
5. The steel materials if issued will be in random lengths and sizes as stocked by the BHEL and the cost of all cutting, conversion, substitution and fabrication as well as wastage shall have to be borne by the Contractor.
6. The contractor shall from time to time render proper account of all materials issued to him by BHEL. If he fails to do so, no further issue of materials will be made to him and he will be held responsible for any delay in the execution of the work which may occur on this account.
7. Any material issued at free of cost to the contractor, the contractor will have to make good at his own cost any loss or damage to any part or whole of the items issued to him as above. All wastage within the premises limits as fixed by BHEL will be charged for at the prescribed issued rates of BHEL. Excess wastage will be charged for at punitive rates which will be 100% higher than the issue rates.
8. All surplus materials in good condition which are not returned to the BHEL Stores as also quantities of materials consumed in excess of the max. Permissible limit as fixed by BHEL shall be charged for at punitive rates.

The decision of the Senior Engineer / Dy. Manager / Manager as to the extent to which materials have been rendered surplus or consumed in excess of the actual requirements shall be final and conclusive and binding on the contractor.

SCHEDULE 'C'
ISSUE OF TOOLS AND PLANTS TO CONTRACTORS

Sl.No.	Qty.	Particulars	Details of BHEL Crew Supplied	Hire Charges Per unit Per Day	Place Issue	of	Remarks
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.....Nil.....

- a. Machineries shall not be operated over time without the written permission of the Sr. Engineer / Dy. Manager / Manager.
- b. All Coolies, Watermen etc., required in addition to BHEL crew mentioned in column 4 above shall be arranged by the contractor at his own expense.

SCHEDULE 'D'

NOTE: All Drawings are to be signed by the Contractor as well as the officer entering into contract.

SL.No.	DRAWING NUMBER	DESCRIPTION
1	PPPU:ADMIN:001	Layout of Plant
2	PPPU:ADMIN:002	Ground & First ,Second & Third Floor Plan
3	PPPU:ADMIN:004	Elevation & Section
4	-----	Typical model of Balustrade & Wooden Pergolas

SCHEDULE 'E'
LEAD STATEMENT

Sl.No	Name of Material	Name of Source	Lead Particulars
1	Cement	Will Be supplied at PPP Unit - BHEL	
2	M.S Rounds,CTD Bars , Structural Steel		
5	Broken Stones RR Stones etc	Paralimalai	10 km
6	Sand	Koodalur	18 km
7	Brick and Gravel	Kadiyapatti	6 km
8	Lime	Thirumayam	1 km

C.A.....Date
(To be used in conjunction with BHE Ltd., General Conditions of Contract)

AUTHORITY TO TENDER

Tender Notice No. **Township 01 / 11** Office of the
BHARAT HEAVY ELECTRICALS LIMITED c / CIVIL / TOWNSHIP
TIRUCHY – 14.

Tender Schedule No. **T 02 / 11**

Item rate tender for work required Construction of Administrative building including water supply, sanitary, internal electrification & allied works for Power Plant Piping Unit near Thirumayam in Pudukottai Dt. (Tamilnadu) .

Messrs / Mr.

.....of.....

are / is hereby authorized to tender for the above work. The Tender is to be delivered at the Office of the ADDL.GEN. MANAGER/ CIVIL /TOWNSHIP Bharat Heavy Electricals Limited Unit, Thiruverumbur, Tiruchirappalli – 620 014, **up to 09.30 hrs. on 04.03.2011** addressed to the DY.Manager / Civil / Planning (Township), BHEL. Tiruverumbur, Tiruchirapalli – 620 014 superscribing the name of work as mentioned above.

Any correspondence concerning this tender should be addressed as indicated above quoting the Tender Notice, Schedule No. and other relevant particulars.

BHARAT HEAVY ELECTRICALS LIMITED DO NOT BIND THEMSELVES TO ACCEPT THE LOWEST OR ANY TENDER.

Issuing Officer with
Designation

Contract Agreement No.....

TENDER

To

The Addl. General Manager/Civil/ Township
Bharat Heavy Electricals Limited
Unit : Tiruverumbur
TIRUCHIRAPPALLI – 620 014.

I / We hereby offer to carry out the **Construction of Administrative building including water supply, sanitary, internal electrification & allied works for Power Plant Piping Unit near Thirumayam in Pudukottai Dt. (Tamilnadu) .**

I / We hereby carefully perused the following documents connected with the above noted work and agree to abide by the same.

- 1.Specifications (General & Particular)
- 2.Drawings
- 3.Schedule 'A', 'B', 'C', 'D' & 'E'
- 4.BHE Ltd., General & Special Conditions of Contract, Tender Notice and Instructions to Tenders attached hereto.

I / We forward herewith the sum of Rs.....as Earnest Money, which shall be refunded should this tender be rejected. I / We further agree to deposit such sum which along with the sum of Rs.....mentioned above shall make up 50% of the fully Security Deposit for this work as provided for under conditions of the BHARAT HEAVY ELECTRICALS LIMITED General Conditions of Contract.

I / We further agree to execute all the work referred to in the said documents upon the terms & conditions contained or referred therein and as detailed in Schedule 'A' and Bill of Quantities annexure thereto and to carry out such deviations as may be ordered, vide conditions 6 of the BHEL Ltd., General Conditions of Contract up to a maximum of 20% of the tendered amount of Rs.....

I / We further agree to refer all disputes, as required by condition 62 of the General conditions of Contract to the sole arbitration of an Officer, to be appointed by the General Manager, B.H.E Ltd., in his sole discretion whose decision shall be final and binding.

WITNESS

Signature of the Contractor

Date :

1.

2.

CONTRACTOR

ACCEPTING OFFICER

GENERAL SUMMARY

1. (a) Net Cost of works or building etc., from Schedule 'A' Rs.

2. Provisional sum Rs.

.....

Total Rs.

.....

Rupees.....

.....

.....

Shri..... in the

capacity of has been

duly authorized by me / us to sign the tender for and on behalf of

.....

(in block letters)

Date :

SIGNATURE OF CONTRACTOR

Witness :

Postal Address :

1.....
Address

Telephone No.

2.
Address

CONTRACTOR

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ACCEPTING OFFICER

..... alterations have been made in the Tender Document and as evidence that these alterations were made before the execution of contract agreement, they have been initialed by the Contractor and the

.....
.....

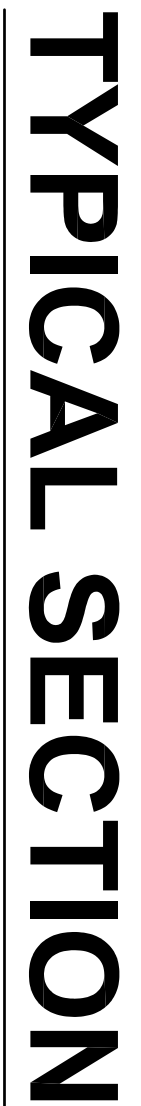
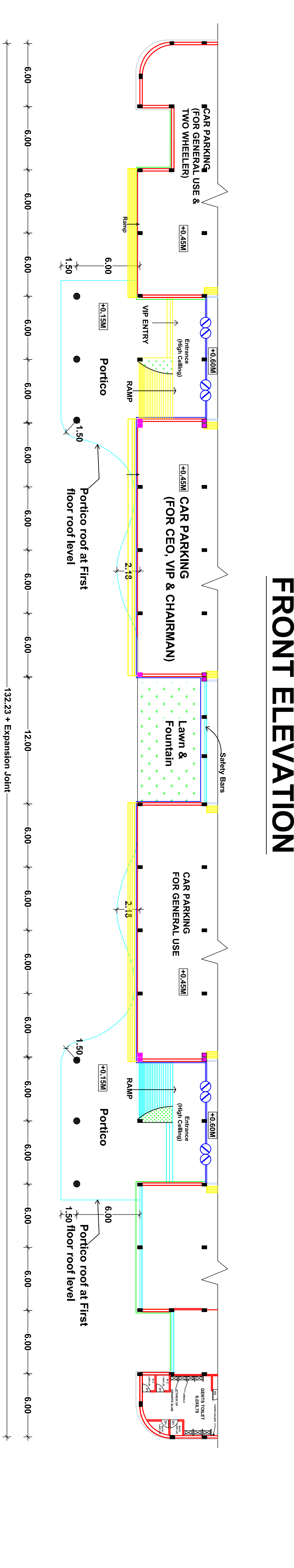
.....the said officer is hereby authorized to sign and initial on my behalf the documents forming part of this contract (Number of alternation in figures and words to be given here)

The above tender is accepted by me on behalf of the Bharat Heavy Electricals Limited, Unit: Thriuverumbur, Tiruchirappalli – 620 014. for a sum of Rs.....
.....

.....at the rates as indicated in Schedule 'A'.(Bill of Quantities)

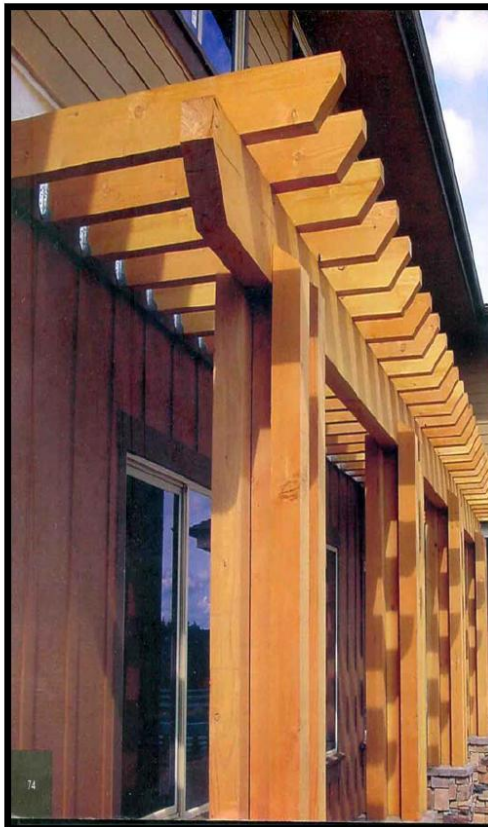
SignatureDate.....

Designation

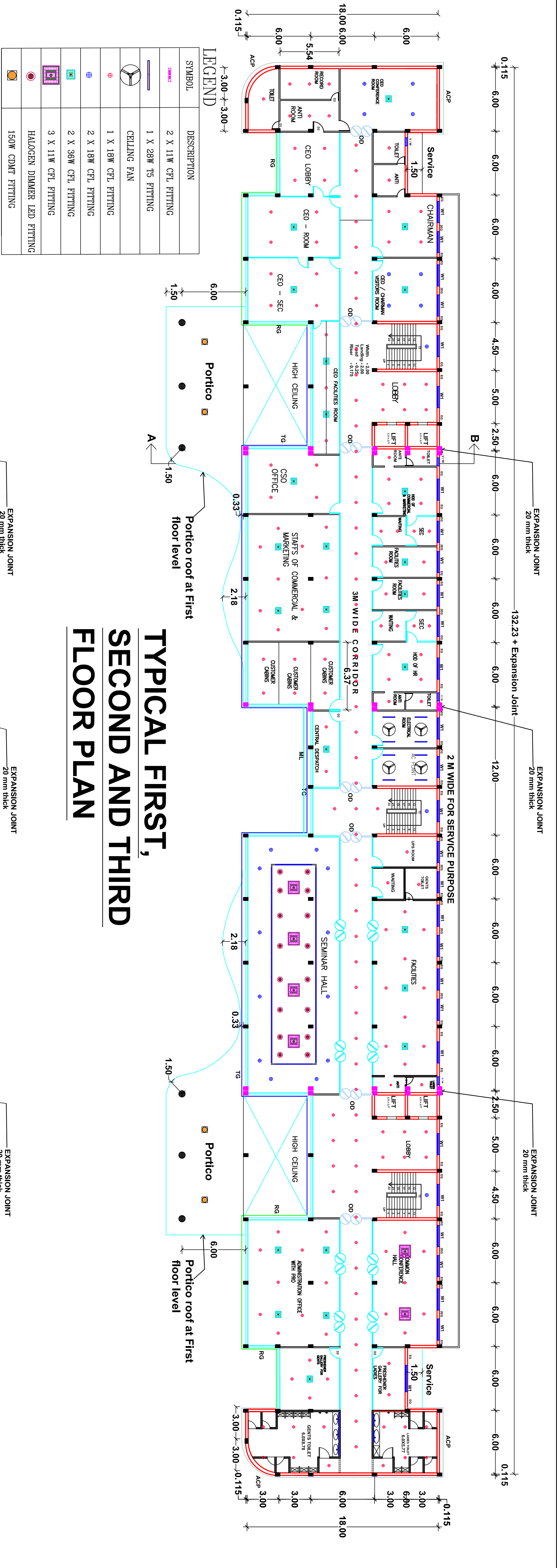




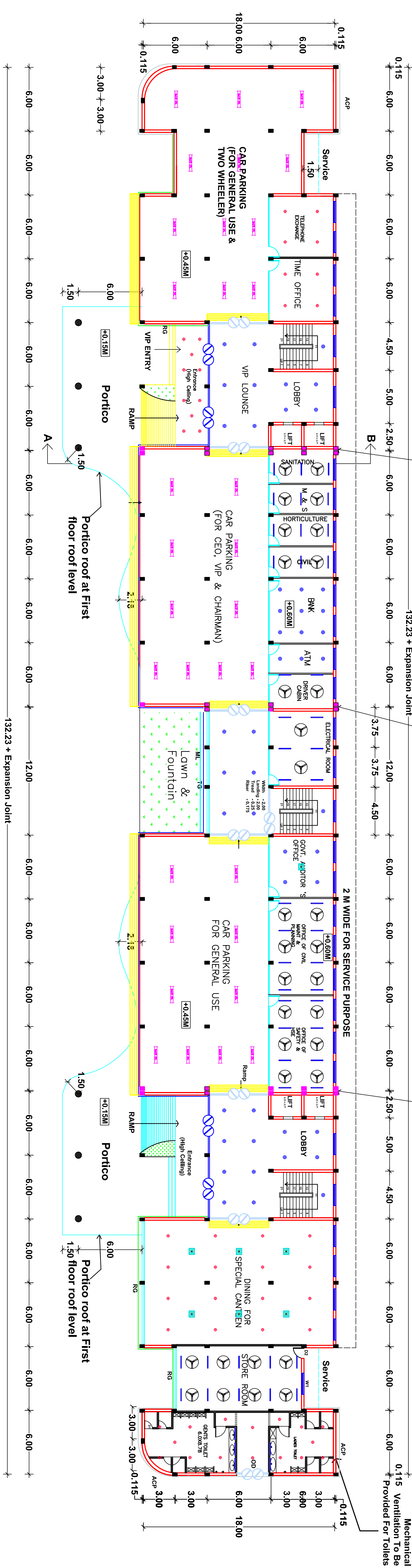
TYPICAL MODEL OF BALUSTRADE



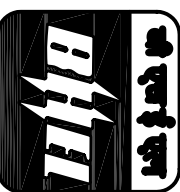
TYPICAL MODEL OF WOODEN PERGOLAS



TYPICAL FIRST, SECOND AND THIRD FLOOR PLAN



GROUND FLOOR PLAN



BHARAT HEAVY ELECTRICALS LIMITED

TIRUCHIRAPPALLI - 620 014.

TAMILNADU, INDIA.

GENERAL NOTES:-

ALL DIMENSIONS ARE IN METERS.
DIMENSIONS ARE TO BE READ AND
NOT MEASURED.
IN CASE OF DOUBT, PLEASE
CONSULT THE DESIGN OFFICE.
IN CASE OF DISCREPANCY, PLEASE
CONTACT THE
ARCHITECT'S OFFICE.

DRAWING REFERENCE

* 9" WALL
DOOR #
ELEVATION TOUGHENED
GLASS
* UPVC WINDOW
* VENTILATOR
SAFETY BARS
* ACP PANEL

* AUTOMATIC ENTRANCE
DOOR #
ELEVATION TOUGHENED
GLASS
* ORDINARY ENTRANCE DOOR
INTERNAL WOOD /
GLASS PARTITION
(PATCH)
* REFLECTIVE GLASS

SCHEDULE OF JOINERY

D1 DOOR 0.76 x 2.13
D2 DOOR 1.00 x 2.13
W1 WINDOW 2.50 x 1.40
V1 VENT 2.50 x 0.60
V2 VENT 0.76 x 0.60

STATION FORMAT :

DRAWING TITLE :
ARCHITECTURAL DRAWING AND ELECTRICAL
LIGHT POINT LAYOUT - GROUND, FIRST, SECOND
AND THIRD FLOOR PLAN

DRAWING No : PPPU:ADMIN:002

REV:ND:

(FOR TENDER PURPOSES ONLY)