

**TENDERS SHALL BE SUBMITTED /DROPPED IN
TENDER BOX AT SECURITY CONTROL ROOM**

**B H A R A T H E A V Y E L E C T R I C A L S L T D
CORPORATE R & D DIVISION, VIKASNAGAR
HYDERABAD-500093**

TEL : (040) 2388 2110 & 2377 4494

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TENDER NOTICE NO.: CL/18/2011-12 DATED: 01/03/2012

- | | |
|--|---|
| 1 Name of work: | Civil Infrastructure facilities for COE-ATS in ITL first floor in BHEL R&D Lab Complex. |
| 2 Earnest Money Deposit (EMD): | Rs. 1,50,000.00 |
| 3 Time of completion: | Eight (8) Months |
| 4 Maintenance period: | Twelve months |
| 5 Last date of receipt of tenders: | 04-04-2012 (14.30 Hrs) |
| 6 Tender Opening Date/Time: | 04-04-2012 (14.45 Hrs) |
| 7 Cost of tender documents (Including S.T.): | Rs. 500.00 |

Name & Address of the contractor/Agency:

EMD PARTICULARS -----

TENDERING PROCESS

- A. Tender box is at Security Control Room for submitting Tenders.

- B. Tenders would be received in two-part system.
 - 1. **Technical bid (First sealed envelop / cover)**
 - 2. **Price bid (Second sealed envelop / cover)**

- C. Tender opening

On the day of opening, only technical bids (first envelop) would be opened. The technical offers would be evaluated for compliance to technical requirements and terms and conditions of contract. Gaps if any would be clarified from the vendor during technical scrutiny. Un-acceptable offers would be rejected without any notice. On scrutiny and acceptance of the technical bids, price bids of accepted parties only, would be considered for opening. Date of opening of price-bids will be intimated to the qualified parties, separately.

The technical-bid consists of technical schedules requiring documentary proof. In case the contractor/agency has not satisfied all the conditions along with documentary proof, the tender will be rejected.

Technical and price bids must be in two separate covers, clearly marked as "**Technical-bid**" and "**Price-Bid**". The tender/ item number for which offer is submitted shall also be clearly written on top of the covers. Common or mixed tenders (with both technical and price bids in one envelop or technical-bid containing prices offered as in one part bid), if received will be **rejected**. The technical-bid shall also include **un-priced price-bid** to indicate **true style** in which price-bid has been submitted. All pages of the price-bid document shall be signed and stamped by the tenderer at the bottom of the page.

In case of tender application and tender documents downloaded from website, the tenderer shall pay cost of tender documents and EMD for item of work for which he is tendering, separately by means of **two separate Demand Drafts** (in favor of **Accounts Officer, BHEL R&D Vikasnagar, Hyderabad 500 093**) one towards cost of tender documents and second towards EMD. Both DD's shall be enclosed along with the Technical-bid. Demand drafts issued, latest on last date of receipt of tenders will be accepted.

TECHNICAL- BID

(First Three pages along with necessary Documents and EMD should be submitted as Technical Bid)

Name of the contractor:	
Name of work :	
Tender Notice No & Date:	
Item No. :	
Details of DD/Cash paid for tender documents	
DD / Cash receipt No. (for EMD)	
DD / Cash receipt No. (for cost of tender documents)	
Particulars of experience/credentials:	
Completion certificate for same nature of job during the last three years (at least one work) valued at >50 % of estimated value.	
Turnover (>50 % of Estimated Value, EV) in any year of previous 3 years for each item of work.	
Civil Contractor Class Registration: With Local PWD/ CPWD/ Railways/ MES / Any Unit of BHEL and other PSU in Hyderabad (Certificate copy to be enclosed)	
ESI NO. (Copy to be enclosed)	
PF-CODE NO. (Copy to be enclosed)	
PAN NO. (in case not available, proof of having applied with acknowledgement from concerned authorities)	
Service Tax No.	
APGST/VAT/TIN NO. (incase applied for, proof of having applied with acknowledgement from concerned authorities).	

NOTE:

1. Tenders without PAN, PF No., APGST/VAT/TIN, Service Tax, etc will be rejected.
2. Technical-bids will be scrutinised on opening of Technical-bid. Incase the agency has not satisfied all the above conditions with documentary proof the offer will be rejected and price-bid will not be opened.
3. Incase of a registered firm, all the documents shall be in the name of the firm. However in case of sole proprietor or individuals, documents in favour of sole proprietor or individual is acceptable.
4. Tenderer presently working with BHEL R&D should submit requisite documents, even though such documents are submitted by them in previous contracts.
5. All the columns shall be filled with proper information.
6. The contractors are requested to sign on all pages in the documents.
7. **Penalty:** Time is the essence of the contract, if the contractor fails to complete the work within stipulated time, the contract is liable to pay at a rate of 0.50 % of the contract value per week, subject to a maximum penalty of 10% of the contract value.

We/ I agree to above conditions and certify that the particulars given are correct.

Signature of Contractor/s

Seal

Date:

TENDER DOCUMENT

TENDER NOTICE .CL/18/2011-12 DATED : 01/03/2012
NO.

DATE & TIME OF CLOSING OF SALE OF 03-04-2012 14 : 00 HRS
TENDER DOCUMENTS

DATE & TIME OF SUBMISSION OF 04-04-2012 14-30 HRS
TENDER

DATE & TIME OF OPENING TENDER 04-04-2012 14 : 45 HRS

COST OF TENDER DOCUMENT : Rs.500/-

EARNEST MONEY DEPOSIT (EMD): Rs.1,50,000.00

NAME OF WORK : **Civil infrastructure for COE-ATS in ITL first floor in BHEL
R&D Lab Complex.**

ISSUED TO: _____

DATE: -----

EMD PAID VIDE DD/ CR/ BC/ NO:

Rs:

TENDER POSITION:

CLX:

DATED:

FMX



BHARAT HEAVY ELECTRICALS LTD
CORPORATE R&D, VIKASNAGAR,
HYDERABAD – 500 093.

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ISSUING OFFICER



BHARAT HEAVY ELECTRICALS LTD
CORPORATE R&D, VIKASNAGAR,
HYDERABAD – 500 093.

TENDER NOTICE

1. NO.CL/18/2011-12 Dt.01/03/2012, Sealed Tenders are invited by DGM (PROJECTS), Bharat Heavy Electricals Ltd., Corporate Research & Development Division, Vikas Nagar, Hyderabad-93 (close to HAL Complex, Balanagar) up to 14-30 Hours on 04-04-2012 for the work of

Civil Infrastructure of COE-ATS in ITL first floor
in BHEL R&D Lab Complex

2. The CPWD Standard Specification and other documents relating to the contract such as additional specifications, drawing descriptive specification sheet regarding materials etc, can be seen on all working days between 9:00 AM and 1:00 PM in the Office of the DGM (PROJ).
3. Tender forms and other particulars regarding the proposed work can be **obtained** at the office of the DGM (PROJ) on any working day from 9:00AM to 1:00 PM up to 03-04-2012 on payment of the prescribed sum of Rs.500.00 (Rs. Five hundred only) per set, not refundable.
4. The Tenders will be opened by the DGM (PROJ) Bharat Heavy Electricals Ltd., Corporate Research & Development Division on the date and at the place aforementioned. The Tenderers or their agents are expected to be present at the time of opening of the Tenders.
5. Tenders submitted shall be without any over writing or corrections. On opening the Tender BHEL shall attest over writings or corrections, if any, in the presence of the participant (parties) present at the time. The Tender should not be modified and shall be on prescribed form and obtained from the Office of the DGM (PROJ).
6. Tenders must be submitted in sealed covers (one for each bid) addressed to DGM (PROJ), Bharat Heavy Electricals Ltd, Corporate R & D, Vikasnagar, Hyderabad-500 093. The name of the Tender and the name of the work shall be indicated the top of the cover/envelop.
7. If the Tender is made by an individual, it shall be signed with his full name and address. In case of a private firm/company, empowered officer/ executive shall sign indicating his name, post and address. Documentary evidence shall be provided for his authority giving details of all the partners. If the tender is made by a corporation, it shall be signed by duly authorized Officer who shall produce satisfactory evidence of his authorization.
8. Each Tender must pay as Earnest Money, a sum of Rs.1,50,000/- (Rs. One lakh Fifty thousand Only) as Earnest money deposit (EMD). The earnest money prescribed for this work may be offered in the form of a Pay order or demand Draft, drawn in favour of Account Officer BHEL R&D, Vikasnagar, Hyderabad -500 093.
9. The Earnest Money will be retained in the case of the successful tenderer and can be converted to part of security Deposit for the due performance of the contract. EMD and SD

will not carry any interest. Deposits will be dealt with as provided in the conditions attached to the tender.

10. The Earnest Money will be refunded to the unsuccessful/ technically rejected tenderer after the intimation of rejection.
11. The tenderer shall make himself or his representative available at the office of the DGM (PROJ) for tender related clarifications as per written/oral intimation to him.
12. The successful tenderer shall make him self available at the office of DGM (PROJ.) for preparation of contract documents like contract agreement on written/oral intimation. Failure to do so shall entail forfeiture of the EMD.
13. EMD by the Tenderer will be forfeited as per Tender Document if:
14. After opening the tender, the revokes his tender within the validity period or increased his quoted rates.
15. The tenderer does not commence the work the period as per LOI/Contract. In case the LOI/contract is silent in this regard then within 15 days after award of contract.
16. EMD shall not carry any interest.
17. Tenderer shall pursue carefully the instructions provided in ‘Direction to Parties Tendering’ and the conditions of the agreement form and all other relevant documents before tendering rates for the work. The approximate quantity of work to be executed under each class is given in Schedule–A. The quantities are given with a view to enable the tenderer to quote his overall rate for each class of work in the tender form and for a uniform comparison of tenders. It shall be definitely understood that Bharat Heavy Electricals Limited does not accept any deviations (omissions, deductions, or additions) that may be made in the tender documents by the parties tendering.
18. DGM (PROJECTS) reserves the right to reject any tender or part thereof or all the tenders with out assigning any reasons thereof.
19. Tenders offering a percentage deduction or increase on the estimate amount and those not submitted in proper form or in due time will be rejected.
20. The offer shall be valid for a minimum period of 120 days from the date of opening of the tender.
21. Security Deposit shall 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

22. The Security Deposit should be deposited before the start of the work by the contractor.
23. Security Deposit may be furnished in any one of the following forms.
 - a. Cash (as permissible under the Income Tax Act)
 - b. Pay Order, Demand Draft in favour of BHEL R&D.
 - c. Local cheques of schedule banks subject to realization.
 - d. Security available from Post Office such as National savings Certificate, Kissan Vikas Patras etc.
 - e. Bank Guarantee from schedules 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 R&D.

- f. Fixed Deposit Receipt issued by scheduled Banks/Public Financial Institutions as defined in the companies Act. The FDR should be in the name of contractor, A/C BHEL R&D, duly discharge on the back.
- g. Security Deposit can also be recovered at the rate 10% from the running bills. However in such cases at least 50% of the security deposit should be deposited before the start of the work and the balance 50% will be recovered from the running bills.

24. EMD of the successful tender shall be converted and adjusted against the security deposit.

Note: Acceptance of Security Deposit against Sl. No.(iv) and (vi) above will be adjusted to Hypothecation or endorsement on the documents in favour of BHEL R&D. However, BHEL R&D 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.

Security Deposit shall be refundable to the contractor in accordance with the terms of the contract mentioned below.

The 50% Security Deposit will be released along with final bill, balance will be released after 12 (Twelve) Months maintenance period.

25. Rs.1,50,000/- (Rupees One lakh Fifty thousand only) will be retained as EMD to keep the offer open for a period of 90 days from the date of opening of the tender; it being understood that the tender documents have been sold/issued to the tenderer and the tenderer is being permitted to Tender in consideration of the above stipulation on his part and that he shall not alter or modify the terms and conditions thereof in a manner not acceptable to DGM (PROJ.) Should the tenderer fail to observe or comply with the foregoing stipulation, the aforesaid amount of Rs.1,50,000/- (Rupees One lakh Fifty thousand only) shall be liable to be forfeited.

26. The under signed reserves the right to reject any or all tenders or part there of or to divide the work in to convenient groups and award the work to more than one agency. The under signed also reserved the right to allow to public enterprises preference facilities as admissible under the existing policy.

27. BHEL reserves the right to go in for Reverse Auction. All bidders must explicitly give their consent for reverse auction along with their technical bid. Modalities will be informed separately.

ISSUING OFFICER

I/We agree to above term and conditions.

AUTHORISED OFFICER (CONTRACTOR)



BHARAT HEAVY ELECTRICALS LTD
CORPORATE R&D, VIKASNAGAR,
HYDERABAD – 500 093.

TENDER NOTICE NO: CL/18/11-12 Dt. 01/03/2012

Sealed Tenders are invited by the DGM (PROJ.) from the reputed contractors experienced in similar work having valid PF No., IT, Service Tax, VAT/TIN, ESI, Labour License and registered with local PWD, CPWD, Railways, MES, BHEL, for the following works to be taken up at BHEL, Corp. R&D, Division, Vikasnagar, Hyderabad-500 093, so as to reach the DGM (PROJ.) Office, BHEL R&D Division, Vikasnagar, Hyderabad-500 093 up to 14-30 hours on the date mentioned against the Tender which will be opened on the same day at 14-45 hours in the tender room (SANGAM) near CTS building.

S. No	Description of Work	Estimated Value (Lakhs)	EMD (Rs.)	Cost of Tender document Rs.	Period of sale of tender document	Date of tender opening	Period of completion
1	Civil infrastructure facilities for COE-ATS in ITL first floor in BHEL R&D Lab Complex.	53.31	1,50,000/-	500/-	14-03-2012 to 03-04-2012	04-04-2012	8 months

Note:

1. Tenders received without EMD are liable for rejection.
2. Tender documents can be obtained, on the dates mentioned, from the office of the DGM (PROJ) BHEL (R&D) Division, Vikasnagar, Hyderabad - 500 093 during office hours on submission of application with proof of experience and copies of registration certificates, PF No. ESI, Sales Tax, service tax registration etc. Labour license shall be available and shall be produced prior to contract agreement.
3. The cost of tender documents will not be refunded and tenders are not transferable under any circumstances.
4. The under signed reserves the right to reject any or all tenders or part thereof or to divide the work in to convenient group and award the work to more than one agency. The under signed also reserves the right to allow to Public Enterprises preference facilities as admissible under the existing policy.
5. **Crossed demand drafts/Cash** for issue of tender documents shall be sent to the Accounts Officer, BHEL Corp. R&D Division, Vikasnagar, Hyderabad - 500 093. Cash may be remitted at our cash counter between 12.30 hours to 14.00 hours.
6. Contractors engaged at BHEL R&D shall pay Earnest Money Deposit. EMD will neither be adjusted against their pending bills nor be transferred from one work to the other.
7. The contract agreement will be in the form prescribed by BHEL R&D.
8. In case date of opening happens to be a holiday or Sunday, tenders will be received and opened on the next working day.

DGM (PROJECTS)

TENDERER AND CONTRACTOR'S CERTIFICATE

I / WE hereby declare that I have pursued in detail and examined closely the Central Public Works Department Detailed Standard Specifications and its addenda volume and also the BHEL General Conditions of Contract, I / WE agree to be bound by and comply with all specifications contained in CPWD Standard Specifications and BHEL General Conditions of Contract, for the various items of work specified in the "SCHEDULE - A" and the work as a whole.

I / WE hereby declare that I / WE shall pay the statutory minimum wages to my workers as applicable from time to time. I shall also adhere to all the statutory obligations under Contract labour (Regulation and Abolition) Act 1971 and Rules framed there under with subsequent revisions if any.

SIGNATURE OF CONTRACTOR(S)

Date:

SEAL:

DIRECTIONS TO PARTIES TENDERING

1. A list of materials proposed to be supplied by the BHEL along with the place and the prices at which they are proposed to be supplied is given in Schedule-B. TENDERER MUST ACCEPT THESE MATERIALS AT THE SPECIFIED PRICES AND QUOTE FOR FINISHED WORK ACCORDINGLY.
2. Any variation in market prices for these materials shall not change the agreed contract value.
3. In event of issue of materials, other than those specified in contract, by BHEL (for unforeseen reasons) at the request of the contractor for completion of the work, the materials would be charged at prevailing market value or at procurement price plus 12.5% handling charges whichever is higher.
4. The tenderer shall examine carefully the CPWD Detailed Standard Specifications and also the relevant clauses of the Standard Preliminary Specifications, available at office of DGM (PROJ), before submitting his tender unit rates for finished work in situ. The contractor is advised to purchase a book of CPWD Detailed Standard Specification for his reference. He shall also carefully study the drawings, additional specifications and all other documents which form part of the contract agreement.
5. Each tenderer must submit Annual IT -Return from income tax authority for past three years. In the case of proprietary or partnership firm it will be necessary to produce this certificate for the proprietor/s and for each of the partners as the case may be. All tenders received without a certificate as aforementioned will be summarily rejected.
6. Tenderer is expected to satisfy himself about the expected work, quantity and quality before quoting his rates by inspecting the site of the proposed work. He should also inspect the quarries and availability of materials. The best class of materials shall be used in proposed work. In every case, the materials must comply with the relevant standard specification. Samples of materials as called for in the standard specifications or in the tender notice or as required by the DGM (PROJ) shall be arranged by the tenderer. The material should be supplied to site after obtaining the approval from the Engineer In-charge. Attention of the contractor is directed towards the Standard 'Preliminary Specification' regarding payment of seignior age, tools etc.
7. Time shall be considered as essence of the contract. The rate of progress as indicated in Annexure-C shall be maintained. Date of commencement of this programme will be the date on which the site (or premises) is handed over to the contractor.
8. The tenderer should quote his minimum rates for each item of the schedule (in Rupees and paisa). Specific rate for each item shall be offered. The rates shall not be mixed or compounded. The units and rates should be written both in words and figures. In case of differences between quoted rate in figures and words, the lowest rate will be considered.
9. The enclosures/schedule accompanying the tender shall be written legibly, in **English**. No over writing, correction shall be made on documents. Unavoidable correction should be made by crossing out the wrong information the corrections shall be endorsed and dated. Alteration without authentication by the tenderer in (i) the agreement form; (ii) the conditions of agreement and (iii) the drawing or specifications accompanying the same will not be recognized if corrected without

endorsement. Any such alterations found in the tender shall disqualify the tender for acceptance.

10. The Tenderer shall not include any additional condition.
11. The Tenderer shall sign on each page of the tender schedule.
12. Rates quoted shall be firm throughout the period of contract.
13. Sub-contracting the work as a whole is not permitted.
14. The contractor should ensure HSE management and qualified, experienced site staffs are available at all times during working hours for proper supervision to maintain the quality.
15. The tenderer should submit the following within a week from the receipt of this order:
 - a) BAR/PERT/CPM chart for the execution of the work
 - b) Man power employed with designation
 - c) Week wise mobilization of material, and machinery
 - d) Weekly progress report along with consumption of material.
16. Rates quoted on overall offers are liable for rejection.
17. Rates quoted shall be exclusive of applicable taxes, octroi, transport etc.
18. ALL taxes, octroi charges, transport etc shall be quoted separately.
19. BHEL's General Conditions of Contract as enclosed shall apply for this work.
20. Income Tax will be deducted as applicable.
21. Sales Tax will be deducted as applicable.
22. CESS or any other taxes at specified rates will be deducted as implemented by the State/Central Government from time to time.
23. Service tax, if applicable will be reimbursed on production of proof of payment.

ISSUING OFFICER

I/We agree to above term and conditions.

AUTHORISED OFFICER (CONTRACTOR)

DATE:

SEAL:

TENDER FOR THE WORK

I/We _____
Do hereby tender to execute works of the under mentioned description and in accordance with the conditions noted below in consideration of payment being made for the quantity of work actually executed at the respective rates specified in Schedule 'A' hereto.

I/We hereby distinctly and expressly declare and acknowledge that before the submission of my/our tender I/We have carefully followed the instructions in the tender notice and have read the CPWD Detailed Standard Specifications and the clauses of the Preliminary Specifications/BHEL General Conditions of Contract and that I/We have made such examination of the contract documents and of the specifications, etc and of the location where the said work is to be done and such investigation of the work required to be done, and in regard to the material required to be furnished as to enable me/us thoroughly understand the intention of the same and the requirements, convenient agreements, stipulations and restrictions; and distinctly agree that I/We will not hereafter make any claim or demand upon the BHEL, based upon or arising out of any alleged misunderstanding or misconception or mistake on my/our part of the said requirements, convenient, agreements, stipulations, restrictions and conditions”.

I/We enclose an income tax verification certificate _____
_____/_____
_____ I /We have already produced an income tax verification certificate during the current calendar year in respect of (here particular of the previous occasion on which the certificate was produced should be given). _____

I/We agree to keep the tender open for acceptance for Ninety (90) days from the date of submission thereof and not to make any modifications in its terms and conditions which are not acceptable to BHEL.

After the tender is accepted, if I/We fail to commence the execution of the works as provided in the conditions, I/We agree that BHEL shall without prejudice to any of their right or remedy, be at liberty to forfeit the said earnest money.

Signature of Contractor (S)
Address:

DATE :

SEAL:

AGREEMENT

M/s Bharat Heavy Electricals Limited (a Government of India Undertaking) a Company incorporated under the Companies Act.1956, having its Registered Office at BHEL House, Siri Fort, New Delhi-110 049 through its Unit/Division at Corporate Research & Development Division, Vikasnagar, Hyderabad-500 093 hereinafter called “the Company” (which expression shall unless repugnant to the context or meaning thereof be deemed to include its successors and assigns herein after called First Party) of one part and M/s _____ situated at _____ (here after called the contractor) of second part.

Whereas M/s Bharat Heavy Electricals Limited having placed Work order, vide LOI No. _____ (hereinafter called “Contract”) for the work _____ at BHEL R&D Township, site at Vikasnagar, Hyderabad-93 of Bharat Heavy Electricals Limited, Corporate Research and Development Division, situated approx 9 KMs west of Secunderabad City, more particularly described in the schedule including drawings and specifications attached herewith on M/s _____ (hereinafter called the “Contractor”) and the said contract made for the above said work.

AND WHEREAS the contract interalia provides that the contractor furnish to the Company a sum of Rs. _____ (Rupees _____ only) towards Security Deposit for due and faithful performance of the contract in the form and manner specified therein.

And whereas the contractor has agreed to the retention by the first party of the Security Deposit of Rs. _____ (Rs. _____ only) paid by him when he submitted his tender as part of the security for the due fulfillments of the contract to the satisfaction of the first party.

And whereas the contractor has also perused the copy of the Central Public Works Department Standard Specifications and addenda volume, BHEL General Conditions of contract maintained in the Senior Engineer/Manager (Civil)’s office and is bound by all the standard specifications for items of work described by a standard specifications numbers in “Schedule-A” and by all the conditions and clauses of the standard preliminary specifications detailed in the agreement.

And whereas the contractor has agreed to execute upon and subject to the conditions set forth in standard specification indicated in Schedule-A and in the standard preliminary specifications and such other conditions as are contained in all the specifications forming part of this contract (hereinafter referred to as the said conditions) , the work shown upon the drawings and described in the said specifications and set forth in Schedule-A as the probable quantities and comply with the rate of progress, noted at Annexure-C.

Now these presents witness that in consideration of the “Schedule- A” as also of agreement of good and faithfully service to be rendered and performed by the contractor in the execution of the said work, subject to the stipulations hereinafter expressed.

Now it is hereby agreed as follows:

1. That the contract shall come into force with effect from _____ the date on which the site or premises was handed over to the contractor.

2. That it is agreed between the parties that the non-exercise of any of the powers conferred on the authorities of the first party, will not in any manner constitute waiver of the conditions hereto contained in these presents and the liability of the contractor either of part or future compensation shall remain unaffected.
3. That notwithstanding any thing mentioned earlier by either party, only the conditions included in the NIT and Agreement shall prevail.
4. That the expenses of completing and stamping the agreement shall be paid by the contractor.
5. The decision of the Company whether any default has been occurred or has been committed by the contractor in the performance, observance or discharge of any of the terms, conditions, stipulations or undertakings or any one of them as contained in the contract and/or to the extent of loss, damage, costs, charges and expenses caused to or suffered by the company by reason of the contractor making any default in the performance, observance or discharge of any of the terms, conditions, stipulations or undertakings or any one of them shall be conclusive and binding on, irrespective of the fact whether the contractor admits or denies the default or questions the correctness of any demand made by the company in any court, Tribunal or Arbitration proceedings or before any other Authority. In addition, the Contractor is also liable for legal action by the company for civil and or criminal consequences.
6. For Violation of terms and conditions of contract, 30 days notice will be given for termination of contract.
7. In the event of any dispute or difference between the parties while executing the contract, the same will be referred to the Arbitrator agreed upon by the both parties.
8. The award given by the arbitrator is binding on both parties.
9. The jurisdiction of courts for any claims is within in Hyderabad/Secunderabad.
10. The contractor will be responsible for complying with all the relevant statutory provisions under various Labour Laws viz, Contract Labour (Regulation & Abolition) Act 1970 Minimum Wage Act 1948, Employees Provident Funds and Misc. Provisions Act 1952, ESI Act 1948, Payment of Bonus Act, 1965, Workmen's Compensation Act 1923 and other relevant Acts. Further in case BHEL R&D as principal employer has to pay any amount to any agency for non-fulfillment of any of the provisions of the above referred Act, I/We authorize BHEL R&D to deduct the amount from my/our bills or I/We, will pay the amount of BHEL R&D.

SIGNATURE OF CONTRACTOR

DATE :

SEAL :

WITNESSES: 1.

2.

for and on behalf of,
Bharat Heavy Electricals Limited

ACCEPTING OFFICER

SCHEDULE-A

SCHEDULE – ‘B’**ISSUE OF STORES TO THE CONTRACTOR**

SNo	Particulars	Unit	Issue Rate
			Rupees
1.	Cement non-refundable bags	M.T.	FREE
2.	Mild steel rounds all diameters	M.T.	FREE
3.	Tor steel/Ribbed steel all diameters	M.T.	FREE

- A. The materials listed above will be issued from BHEL/R&D/Stores. It will be the responsibility of the contractor to submit his demand for stores in writing at least seven days in advance of the actual requirement.
- B. Issue of all stores is subject to the extent of their availability at the place of issue noted above. The Contractor should make his own arrangements for any or all of the materials shown above in case the BHEL desires so. The contractor shall not be entitled to any claim or compensation for non supply of the materials or delay in the supply of stores under any circumstances.
- C. The materials will be issued only during the working hours on Tuesday and Friday. The Contractors shall have to transport them to site of work at his own cost as soon as these are issued to him.
- D. Where cost of stores issued, if any, is recoverable from the contractor, recoveries will be made from the running bills for the gross quantity issued and not on actual consumption on the basis of the net measured quantity on finished work.
- E. The contractor shall, from time to time, render proper accounts of all materials issued to him by BHEL. If contractor fails to do so, no further issued of the materials will be made to him and he shall be held responsible for any delay in the execution of the work which may occur on this account.
- F. Only Cement, Mild Steel & Tor-Steel items are issued free of cost to the contractor the contractor will have to make good at his own cost any loss or damage to part or whole of the item issued to him as above.
- G. All surplus materials whether issued free of cost or on cost or on cost recovery basis are to be returned to the BHEL stores in good Condition. Quantities of materials consumed in excess of the actual requirement shall be charged for at punitive rates as listed below.

The decision of the Sr. Engineer/Manager (Civil) as to the extent to which materials have been rendered surplus have been consumed in excess of the actual requirements shall be final and binding on the contractor.

H. CEMENT:

For the purpose of determining the actual requirement of cement, the theoretical consumption of cement as per CPWD norms shall be considered by the Sr. Engineer/Manager (Civil). As per CPWD norms the following are the variation allowed in Cement consumption.

A > Work costing upto Rs. 2,00,000-00	: +/-5%
B > Work Costing from Rs. 2,00,000-00 to Rs.5,00,000-00	: +/-4%
C > Work costing above Rs. 5,00,000-00	: +/-3%

STEEL:

Steel will be issued by weight duly weighing at Store as stocked by Bharat Heavy Electricals Ltd., The surplus steel is represented by the difference between the quantity received and the quantity required and utilised on the work with an allowance of 5% towards scrap. The contractor will be responsible for removal of scrap from the site in good time as Directed by the Sr. Engineer/Manager (Civil). The cut pieces retained as scrap shall be short than one metre in length.

Any variation in weight of steel issued should be brought to the notice of the Engineer/Manager (Civil) without any delay in writing for consideration.

PUNITIVE RATE FOR EXCESS / SHORT CONSUMPTION

1. CEMENT	Rs. 4,500-00 per M.T
2. MILD STEEL	Rs. 40,000-00 per M.T
3. TOR STEEL	Rs. 40,000-00 per M.T

SIGNATURE OF CONTRACTOR(S)

ACCEPTING OFFICER

SCHEDULE 'C'

SERVICES VIZ, WATER & LIGHTING TO THE CONTRACTOR

1. WATER:

Water required for construction purpose shall be supplied by Bharat Heavy Electricals Limited. The supply will be made at convenient point to be determined by the DGM (PROJ) and contractor has to make his own arrangements to distribute the water to places where required including cost of providing and fixing water meters. The charges for the consumption of water will be as under, where meters could not be provided by the contractor and prior permission for the same was obtained in writing from Manager (Civil).

- | | |
|---|-------|
| i) On the water consumed items of the work of periodical maintenance of buildings | 0.25% |
| ii) On the water consumed items of the road works | 0.75% |
| iii) On the water consumed items of the other Civil Works | 0.50% |

2. POWER:

Electric power, if required, will be supplied at a convenient metered point, to be selected by Engineer-in-Charge. Any extensions required will have to be arranged by the contractor himself. Energy consumed will be metered and charged at Rs. 5.50 (Rupees five and paise fifty only per unit).

SIGNATURE OF CONTRACTOR(S)

ACCEPTING OFFICER

SCHEDULE 'D'

TOOLS AND PLANT TO BE HIRED TO THE CONTRACTOR

(See Conditions 14 & 34A)

Sl. No.	Particulars	Number available	Hire charges per Unit per Working day Rs.	Frequency of maintenance	+value per unit	place of issue	Number required by
1	2	3	4	5	6	7	8

Signature of Contractor _____

Signature of Issuing Officer _____

Date: _____

Date: _____

Note:

1. The tenderer shall indicate in column 8 the number required by him subject to the maximum indicate in column 3.
2. Column 6 is not to completed if condition 34 A committed from the General Condition of Contract.

SPECIAL CONDITIONS OF CONTRACT

- 1 THAT the contractor shall undertake to maintain the following registers as per prescribed Proforma
 - 1.1 Register of workmen (Form xiii)
 - 1.2 Muster Roll (Form xvi)
 - 1.3 Wages Register (Form xvii)
 - 1.4 Leave Register
 - 1.5 Register of Over time and deductions

- 2 THAT the company after proper checking of the bills submitted by the said contractor will pay to him during the progress of the said work, at the said contract rates and agreed terms of payment, a sum as determined by the company in respect of the work executed by the contractor.

- 3 THAT the contract shall come into force with retrospective effect from..... the date on which the letter accepting the tender (letter of Intent) has been communicated to the said contractor.

- 4 THAT whenever under this contract or otherwise any sum of money shall be recoverable from or payable by the contractor the same may be deducted in the manner as set out in the conditions of contract as aforesaid.

- 5 THAT all charges on account of Octroi, Terminal and Sales-Tax other duties on materials obtained for the works shall be borne by the said contractor.

- 5.1 It is also agreed between parties that the second party to the contract will ensure adherence to all statutory requirements under the State Rules in respect of service conditions for the employment of contract labour. The second party also hereby undertakes to get himself licensed from the appropriate authority as a contractor in accordance with A.P. Contract Labour (R&A) Rules, 1971. It is understood by the second party that for this agreement to be effective, the prime condition is his fulfilling the condition being licensed as a contractor under the state Legislation and the continuance of the agreement is subject to his sustained ensurance of the agreement is subject to his sustained endurance of fulfillment of all statutory requirements including those contained in Labour Commissioner's Notification No.8385/79 in respect of employment conditions for contract labour and payment of wages as specified by the State Government. Further as and when there are changes in the service conditions/wages rates for contract labour, as notified by the State Labour Department, the same will be implemented even if the said modification is given at any time after the conclusion of the Agreement. Any violation in respect of absorbance of statutory requirement under the contract Labour (Regulation and Abolition) Act 1970, will make the Agreement liable for immediate termination in regard to paid holidays, the contractor will observe BHEL list of holidays as notified from time to time.

- 5.2 The Contractor shall ensure abidance by all the labour laws especially including contract Labour (R&A) Act, payment of wages, Workmen's Compensation Act, Minimum wages Act, as amended from time to time.

- 5.3 The contractor will obtain a separate provident fund code for his establishment and ensure implementation of provident fund Act in the case of all eligible employees and in the process shall conform to all the stipulated conditions under the PF Act and rules framed there under.

- 5.4 Notwithstanding clause (c) above in case of any financial loss incurred by the company on account of the contravention of the provident fund regulations or any regulation of rules

touching the same by the contractor, the contractor shall undertake to indemnify the company to the extent of the loss incurred by the company.

- 6 THAT the contractor shall be **solely responsible for the safety** and good conduct of the staff employed/ deputed by him at site. BHEL shall not have any obligation toward compensation or otherwise towards any incident, mishap etc.
- 7 THAT it is agreed between the parties that the non-exercise of any of the powers conferred on the Authorities of the company, will not in any manner constitute waiver of the conditions here to contained in those presents and the liability of the said contractor either of past or future compensation shall remain unaffected.
- 8 Any claim or dispute arising under the terms of this document shall only be enforced or settled at any courts located at Hyderabad / Secunderabad / Rangareddy only.
- 9 THAT the expression BHEL wherever occurring means THE BHARAT HEAVY ELECTRICALS LIMITED, Corporate R&D Division Hyderabad-500 093 (Andhra Pradesh)

CONTRACTOR (S)

ACCEPTING OFFICER

ABSTRACT ESTIMATE

CIVIL Infrastructure facilities for COE ATS in ITL first floor in BHEL R&D lab complex

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
1	Demolishing of Brick masonry in cement mortar 1:6 (1 Cement 1:6 coarse sand) using of manchine moulded Brick displayed in office or equivalent quality as directed by the engineer in charge in all floors and basement. Cement will be FREE supply.	Cu.m	56.27			
2	Dismantling of existing Al.Partitions including removing beading, glass, laminated sheets carefully without damage & stocking the materials as directed by the engineer in incharge.	Sq.m	84.42			
3	Demolishing of doors windows (steel of wood) shutter including chowkhats, hold fasts etc, complete & stacking within 50 meters lead for 3 Sq.m and below	Sq.m	108.67			
4	Demolishing Reinforced cement concrete work of any mix including disposal of materials within 50meters lead as directed by the engineer.(197)	Cu.m	8.68			
5	Demolishing cement concrete work of any mix including disposal of materials within 50 metre lead as directed by the engineer	Cu.m	57.02			
6	Demolishing of cement plaster/tar felt/unwanted materials deposited to a specified depth as directed and preparing the surface for re-plastering including disposal of rubbish within a lead of 50mm as directed by the engineer-in-charge	Sq.m	54.62			
7	Demolishing of tile work of any thickness at all levels laid over any base including stacking serviceable materials within 50 meters lead as directed by the engineer in charge	Sq.m	34.44			
8	Providing and laying of cinder concrete in mix 1:3:6 (1 cement : 3 sand : 6 cinder concrete) light weight in all floors in trench, sunken slabs of toilets etc complete including cost of all materials	Cu.m	30.24			
9	Providing and laying cement concrete in mix 1:2:4 (1 cement:2 coarse sand :4 graded stone aggregate 20 mm nominal size) upto floor five level in retaining walls, returned walls, walls including attached pilasters, columns piers, abutments , pillars , posts, buttresses, strings or lacing courses parapets, copings, bed blocks anchor blocks, plain window sills fillets etc. exc-	Cu.m	18.47			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
	excluding the cost of centering, shuttering and finishing. Cement will be FREE supply, (22)					
10	Inter carting of surplus excavated earth by mechanical transport including loading spreading etc., complete with in 2km lead.(13)	Cu.m	156.00			
11	Brick masonry in cement mortar 1:6 (1 cement :6 coarse sand) using of machine moulded brick displayed in office or equivalent quality as directed by the engineer in charge in all floors and basement. Cement will be FREE supply. (67)	Cu.m	25.38			
12	Half brick masonry in cement mortat 1:4 (1 cement :4 coarse sand) with machine molded bricks displayed in office or equivalent as directed by the engineer in charge with 2 nos.of m s. rod of 6mm dia. For every 5th coarse etc, but excluding the cost of m s. rods including the cost and conveyance of materials and labour charges in all floors. Cement will be FREE supply. 68.	Sq.m	43.43			
13	18mm thick cement plastering in two coats under layer 12m thick cement plastering 1:5 (1 cement 1:5 coarese sand) and a top layer 6mm thick cement plaster 1:3 (cement 3 fine sand of sponge / smooth finishing in all floors as directed including cost of all materials etc., complete	Sq.m	317.79			
14	Providing and laying 8mm thick Vitrified ceramic tileflooring laid over 40mm thick cement mortar 1:6 (1 cement:6 coarse sand) and applying a cement slurry of 6.4 kg/Sq.m for fixing the tiles All the joints are to be grouted with matching colour grout of approved make. Flooring has to be maintained zero level. The final finished tile surface has to be cleaned with approved cleaning agents (cement will be supplied by department at free of cost) all other material such as colour grout, sand, chips, are to be procurred by contractor rate should include labout, transportation and lifting of all materials, tiles etc complete.	Sq.m	402.72			
15	Providing & fixing 18mm to 20mm thick polished granite stone slabs (Icon brown / Vizag blue) on a Cement mortar bed of 40mm thick 1:6 (1 Cement: 6 Coarse sand) and applying cement slurry of 6.4 Kg/Sq.m laid in design pattern as specified and jointed with matching tiles mate of approved brand and shade including smoothening of edges etc., complete. Cement will be free supply.(687)	Sq.m	203.22			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
16	Providing and fixing 18 to 20mm thick polished granite stone slabs [Steel Grey] on a cement mortar 1:6 [1 cement :6 coarse sand] of 40mm thick and applying cement slurry 64 kg/sqm laid on staircase steps & risers as specified & jointed with matching tile made of appd. Brand and shade. Three sides of tread tile has to be fully moulded and polished. Two anti skid lines are to be created at the end of steps. Cement will be free supply	Sq.m	30.10			
17	Providing and laying 10mm thick Antiskid Vitrified ceramic tiles flooring laid over 40mm thick cement mortar 1:6 (1 cement :6 coarse sand) and applying a cement slurry of 6.4 Kg/Sq.m fixing the tiles to the base mortar. All the joints are to be grouted with matching colour grout of approved make . Flooring has to be maintained zero level. The final finished tile surface has to be cleaned with approved cleaning agents cement will be free issue. (735)	Sq.m	78.49			
18	Supply and erection of false ceiling: Providing & fixing in true horizontal level 600 mm x 600 mm false ceiling system manufactured by M/s Armstrong world Industries using DUNE SUPREME RH 99 MICORLOOK EDGE WITH SILHOUETTE GRID, using hot dipped galvanized steel section, rotaru stitiched main tee of size 15mm x 42 mm web height, having 0.36 mm gauge at every 600 mm centre to maximum and rotary stitiched cross tee of size 15mm x 42mm, having 0.33 mm gauge at every 600 mm. C/C and wall angle of size 19 x19 mm., having 0.35 mm guage fixed to the periphery of the wall. The above grid is suspended at every 600mm C/C. in lboth directions using 2.0 mm. thick pre-straightened GI wire, and laying dune supreme microlook edge ceiling tiles manufactured by M/s Armstrong World Industries, of size 600mmx600mmx15mm having NRC 0.50 light reflectance of >85% (WT) thermal conductivity K = 0.052-0.057 W/mOK, Humidity Resistance of 99% (having LIFETIME GURANTEE against SAG) having fire performace CLASS O / CLASS 1 (BS 476), surface having 3 coats of white paint - crisp finely.	Sq.m	245.12			
19	Supplying and fixing of False/access Floor system shall provide a finished floor height of 300mm from the existing Floor level. The entire False/Access floor system shall be made from steel and light weight cementitious core fully bonded and encapsulated it with in a casing of corrosion-resistant galvanized steel. The panels shall be Finished will antistatic laminate of approved colour on top.	Sq.m	38.40			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
	<p>The panels should have fire resistance of class o' acoustic barrier and air leakage resistance. the system shall be able to with stand a UDL of minimum 12.0KN/Sq.m (With a panel displacement of 2.5 mm as the above mentioned UDL) and a point load of 4.5 KN per Sq.inch (with a panel displacement of 2.5 mm on the above mentioned concentrated load)</p> <p>Pedestal head should consist of solid steel stud roll formed & press fitted in to head Pedestal head accurately align the head with panels. The stud shall provide on anti-rotation feature & vibration proof locking device when engaged will pedestal base assembly. pedestal assembly shall provide on easy adjustment of leveling and accurately align panels to ensure lateral restrain.</p> <p>Pedestal base should be 100Sq.cm with adequate thickness & assembled to stud or tube which is designed to engage the pedestal assembly, secured of subfloor with adhesive or mechanical fixing . size of panel 600mmx600mmx35mm.</p>					
20	<p>Providing & fixing India gypsum suspended false ceiling which includes pre-coated GI angle of size 24X24X0.9mm thick fixed to the brick wall/partition at the perimeter of ceiling with nylon sleeves and screws at 610mm centers. Then suspending main GI T section [bottom pre-coated] size 24X38X0.7mm and 360mm long from soffit in one direction with the help of metal rawl plug, soffit cleat and GI rod 4mm dia with galvanized spring steel level click 1220mm centers GI cross T section [bottom pre-coated] size 24X38X0.7mm and 600mm long in insert fixed into the slots provided in the main T at 600mm centers to form 600X600 mm grid. Providing and laying 12.5mm thick gypsum board tiles with metalised polyester film backing tiles of size of 595X595mm can be laid on to grid. PVC universal holding clips are to be placed on sealing panel in each direction.i.e. 4 clips for panel. Frame for light fitting have to be made with steel screws to the main T section to form suitable size of the light openings.</p>	Sq.m	406.56			
21	<p>Providing and fixing 89mm thick pre-laminated double skin partitions full height using 40mmX64mm medium teak wood frame work with horizontals and verticals placed at 600mm center and cladding panels of 12mm thick one sided pre-laminated exterior grade of approved colour and make on both sides of the frame work by using cleats. 3 mm gap has to be provided for expansions at the joining of the cladding panels. 100mmX25mm thick teakwood beading with polish of matching sh-</p>	Sq.m	99.37			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
	ade of partition laminates or natural colour teak wood polish (Some partitions are stopping at ceiling height but vertical members should go up to false ceiling only where partitions are stopping at false ceiling).Prelaminated exterior grade board should confirm to IS: 12823.(745)					
22	Supply & fixing of 43 mm th. Hollow core flush door with all round Teak wood frame of size 4"X1" middle & bottom frame of 6"X1" and fixing both side 9mm thick prelaminated exterior board all as per the design of the door and teak wood design beading including polishing all the exposed teak wood surfaces with wax polishing Door has to be fixed with necessary furniture fittings such as Mortice lock of approved make or Aldrop of approved design, tower bolts, Handles, Door stoppers, etc., complete. Necessary opening in the upper part of the door has to be made with glass and beading prelaminated exterior grade board should be confirm to IS 12823. (753)	Sq.m	16.80			
23	Providing and fixing 89mm thick prelaminated double skin Half Height partitions using 40mmX 65mm medium teakwood frame work with horizontals and verticals placed at 600mm center to center & cladding panels of 12mm th. One sided pre-laminated exterior grade board of approved color & make [IS 12823] on both sides of the frame work by using cleats. 3mm gap has to be provided for expansion at joining of the cladding panels. 100mmX23mm th teakwood beading with polish of matching shade has to be used as skirting at bottom of partitions. Teakwood beading has to be polished either with matching shade of partition laminates or natural colour teakwood polish. The exposed edges on top and sides or wherever visible should be covered with 100x12 mm th teakwood liping duly polished to natural colour clear glass of 8 mm th upto a height of 400 mm with a curve on top as per the design should be fixed above the partition using decorative molding. Glass edges should be sanded polished to smooth and simple itching design all as per the drawings. (746)	Sq.m	34.92			
24	Glass Doors for cabins: Supply and fixing of 12mm Toughened Glass doors to the existing aluminium frame work partitions with door hardware DORMA make like floor spring patcj fittings, bottoms locks, 'D' handles, pivot fittings with specified design and sizes fo frosted film on glass doors complete in all respects.	Sq.m	7.77			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
25	Supply and fixing of 12mm toughened galss partitions in required heights and base made of brushed steel free standing holders make DROMA which is suitable to 12mm thick toughened frosted/etched glass including supply and fixing og 12mm thick toughened galss with required size and desing of frostred film etching	Sq.m	59.34			
26	Providing & fixing 47 mm thick prelaminated she- et wall paneling using 35x50 mm thick Exterior grade plain particle board for horizontals & vertic- als placed at 600mm C/C and leveling to plumb with a gap of min 35mm for running of electrical pipes etc complete. Cladding panels of 12mm thick one side Prelaminated exterior grade boa- rd of approved make & shade (IS:12623) has to be fixed to the frame work using cleats. 3mm gap has to beprovided for expansion at the join- ing of the cladding of panels Provided 100mm. x25mm Tead wood skirting at bottom of the wall paneling. Teak wood beading has to be polished either with matching shade of wall paneling or natural colour teak wood polish [715]	Sq.m	136.88			
27	Providing and Fixing trench covers of 35mm thi- ck MDF board conforming to IS 12406 in between MS angles including fixing and applying one coat of primer and two or more coats of synthetic en- amel paint on both sides of trench cover of approved make and shade. (586)	Sq.m	9.75			
28	Providing and Fixing Two track Aluminium sliding grade of powder coating with approved colour. Aluminium extrusions for two track windows are of JINDAL makes sections No-8732,61.85x45.5 x1.3 mm as bottom track with gutter provision for rain water drain. Section No-8931 61.85x31.75x 1.5 mm as top and side track, section No-8820 40x26.7x1.5 mm as shutter interlocka and secti- on No-8822 40x18x1.5 mm as shutter handle side. Sliding panels are to befitted with Tinted glass of 4mm thick necessary rubber beading etc complete. All the gaps around the windows are to be closed with sillicon sealant.. (100)	Sq.m	68.38			
29	Providing and fixing main entrance door all as per the drawing with following specification. All thepartition box sections are made of 101x 44x3mm thick Aluminum sections powder coa- ted with approved colour and shade. Door verti- cals will be with 47x44.5x3mm door top & bott- om will be with 95x44.5x3mm. All the glass in partition will be fitted with 5mm th. Clear glass & door shutter glass has to be fitted with 8mm th glass, partition glass and door glass has to be	Sq.m	25.65			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
	fitted with around rubber beading and heavy type aluminum powder coated clip beading on both and heavy type aluminium powder coated clip beading on both sides of glass, Door shutter has to be fitted with 2 Nos of approved make floor springs with ISI mark, Door handles of approved design & made, Door stoppers, Concealed tower bolts, Concealed Mortise lock of approved make and PVC beading around the door Frame. Threaded Galvanized MS rod with bolt and nuts has to be provided inside the door members. (694)					
30	Providing and fixing M.S Grills of approved desing with metallic shade paint of approved shade including cost of all materials transportation and fixing etc complete.(692)	Sq.m	68.38			
31	Providing and fixing Two coats of Birla Luppum over plaster surface to make the surface even smooth sand pepering two times to get even smooth sruface at all levels as directed including cost of all materials etc., complete	Sq.m	525.640			
32	Removal any kind of paint (Internal or external) by scrapping, sand papering and pereparing the surface smooth for painting at all levels as directed including cost of all materials etc., complete.	Sq.m	525.64			
33	Applying and painting with plastic emulsion paint jof approved brand & shade to give an even shade on new work two or more coats over a cpat pf cement primer of approved brand.(185)	Sq.m	932.20			
34	Applying Two or more coats of delux Multisurface paint system "Uni gloss": of Snow cem india or equivalent make paint for interiors & Exteriors over and including one coat of Primer (Snowcem plus or Equivalent) all as pwr manufacturers specifications including cost of all materials, labour scaffolding etc complete(193)	Sq.m	612.48			
35	Applying & finishing with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade, two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.(183)	Sq.m	110.98			
36	Polishing with french spirit polish of approved brand and manufacture of requird shade two or more coats on new work including a coat of wood filler.	Sq.m	82.03			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
37	Providing wood work in frames of doors, windows & clerestory windows and othr frames, wrought framed and fixed in position in second class indian teak wood. (71)	Cu.m	0.29			
38	Providing and applying polymer based texture for interior wall finish of approved desing & make to the interior surface of the building all as per the manufactures instructions over final coat of pleastering including appluing approved colour chemical coating cost will including all materils scaffolding scrapping or cleaning finishing etc.,	Sq.m	21.60			
39	Providing and fixing of Glass mosaic mural with name of the building of approved shade and brand including all materials, labour etc, complete.(695)	Sq.m	34.00			
40	Supplying and fixing synthetic washable wall paper of approved make and desing including fixing with necessary adhesives etc., complete	Sq.m	75.85			
41	Providing and fixing Mortise lock of approved make and designed (710)	Each	7.00			
42	Providing and fixing of 5.5mm thick clear glass with wood/Aluminium beading including fixing beading including cost of all materials labour.etc	Sq.m	18.26			
43	Providing and applying plain stained/ itching on glass with partly acid wash design in the partitions, design will be as per the drawing.The glass has to be fixed with tapered Teak wood beading of approved design including polishing with matching shade of partion etc., complete(695)	Sq.m	16.80			
44	Providing and fixing cup-board shutters made out of 18mm th. Water proof plywood pasted with 1mm th. Laminate on both sides of the shutter with approved shade & make. Around the opening has to be fixed with 75X37mm th. Medium class TW frame polished with wax polish with 3 or more coats of approved shade. Shutters are to be fixed with hinges, handles, tower bolts, ball catchers, concealed locks etc. complete all as per directions of engineer-in-charge.[69]	Sq.m	38.60			
45	Supply and Spreading of POP(Plaster of paris) material on the vitrified and granite flooring for protection of the flooring. It has to be done in two layers. After applying first layer thin plastic sheet has to be laid and apply the interior works entire POP has to be removed. Floor has to be cleaned with approved detergents.(769)	Sq.m	638.58			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
46	Providing & fixing hydraulic door closer of approved make with two speed adjustment 90 deg. hold open feature. It should hold a maximum door weight of 80 kd etc. complete.	Each	7.00			
47	Providing and fixing wall paneling using 35x50 mm thick exterior grade plain particle board for horizontals and vericlas placed at 600mm C/C and leveling to plumb with a gap of minimum 35 mm for running from electrical pipes etc., complete. Cladding has to be made with 12mm the exterior grade water proof plywood of approved make. Plywood has to be pasted with 2mm thick laminate of matallic shade of approved brand as per the design shown in the drg. Teakwood skirting of 100mm X25mm has to be fixed to bottom of panels with natural colour polish of approved shade.[732]	Sq.m	154.30			
48	Providing and laying 10mm thick parking Antiskid Vitrified ceramic tile (Jhonsons endura or equivalent) flooring laid over 40mm thick cement mortar 1:6 (1 Cement :6 Coarse sand) and applying a cement slurry of 6.4kg/Sq.m for fixing the tiles. All the joints are to grouted with matching colour grout of approved make. The final finished tile surface has to jbe cleaned with approved cleaning agents (Cement will be supplied by department at free of cost) etc Complete.(736)	Sq.m	81.25			

Civil works for Construction of material handling lift for COE ATS

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
1	Surface dressing of the ground including removing vegetation and inequalities not exceeding 150 mm deep and disposal of rubbish lead upto 50m. And lift upto 1.5m. In all kinds of soil.	Sq.m	25.00			
2	Earth work excavating in foundations, trenches, or drains not exceeding 1.50m in width or 10 sq.m on plan including dressing of the sides and ramming of bottoms, left upto 1.50 m including getting out the excavated soil and disposal of surplus soil as directed within a lead of 50 m in all kinds of soils. (3)	Cu.m	65.00			
3	Extra depth of excavation in foundations trenches, or drains not exceeding 1.50m in width or 10 sq.m on plan including dressing of the sides and ramming of bottoms, left upto 1.50 m including getting out the excavated soil and disposal of surplus soil as directed within a lead of 50 m in all kinds of soils. (17)	Cu.m	5.00			
4	Excavation in hard rock or breaking of boulders by only chiseling using necessary machinery / plant required in all depths(payment will be made on the basis of stack measurement duly deducting 40% voids) (4)	Cu.m	1.00			
5	Supplying and filling with morrum brought from outside including laying in layers not exceeding 200mm in depth, watering and ramming and consolidating each deposited layer. (12).	Cu.m	41.75			
6	Filling with available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. In layers not exceeding 200 mm in depth, consolidation each deposited layer by ramming and watering lead upto 50m and lift upto 1.5 m.	Cu.m	24.38			
7	Inter carting of surplus excavated earth by mechanical transport including loading un loading spreading etc, complete with in 2 km lead. (13).	Cu.m	60.94			
8	Supplying and stacking of Chlorpyrifos/Lindane emulsifiable concentrate of 20% in sealed containers to the site. (19)	Ltr	40.00			
9	Diluting & injecting chemical emulsion for PRE-CONSTRUCTIONAL antitermite treatment & cre-	Sq.m	50.00			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
	ting chemical barrier under & around the column pits, top surface of plinth filling, junction of wall and floor, expansion joints, surroundings of pipe and conduits etc, complete (Plinth area of building at ground follr only shall be measured) with chlorpyriphos emulsifiable concentrate 20% with 1% concentratrion. (14).					
10	Providing and laying in position cement concret of mox 1:4:8 (1 cement: 4 coarse sand: 8 graded stone aggregate 40 mm nominal size) excluding the cost of centering, shttering all works upto plinth level. Cement will be FREE supply(23)	Cu.m	11.65			
11	Providing and laying cement concrete in Mix 1:2:4 (1 cement:2 coarese sand:4 graded stone aggregate 20mm nominal size upto floor five level in retaining walls return w2all wallls including attached pilasters, columns, piers, abutments, pillars, posts, buttressers, strings, or lacing courses parapets copings bed blocks, anchjor blocks plain window sills fillets etc. excluding the cost of centering shuttering and finisjhing cement will be free supply.(24)	Cu.m	1.26			
12	Providing and laying M-20 grade Reinforced cement concrete in position machine mixed and machine vibrat desing mix cement concrete for reinforced cement concrete elements excluding the cost of centring shuttering finishing and reinforcement cost of admixtures in recommednded proportions (As per IS 9103) to accelerate, retard setting time of concrete imnprove workability & water proffing of the structure with ot impairing strength and durability as per directions of Engineer in charge in footings bases of coloums up to plinth levels.(26)	Cu.m	5.04			
13	Providing and laying M20 grade Reinforced cement concrete in position machine mixed and machined vibrated design mix cement concrete for reinforced cement concrete elements excluding the cost for centering shuttering, finishing and reinforced including cost of admixtures in recommended proportions (As per IS 9103) to accelerate, retard setting time of concrete, improve workability and water proofing of the structure with out imparing strength and durability as per directions of Enginee in charge in walls coloums, pillars, posts and struts etc., complete in all floors cement will be free supply.	Cu.m	13.14			
14	Provding and laying M-20 grade Reinforced cement concrete in position machine mixed and machine vibrated desing mix cement concrete for reinforced cement concrete elements, excluding the cost of centering, shuttering, finishing, and reinforcement, including cost of admixtures in recomme-	Cu.m	11.95			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
	neded proportions (As per IS 9103) to accelerate, retard setting time of concrete, improve, work ability and water proofing of the structure without impairing strength and durability as per directions of engineer in charge. In beams, plinth beams, cantilivers, suspended floors, lintels, chajjas, stair cases and shelves etc complete in all floors. Cement will be free supply.(32)					
15	Providing centering and shuttering including strutting, propping, etc. & removal of form work after the specified time as directed by the engineer in-charge only with steel shuttering (the extent of construction activities) for raft slab and footings and Machine foundations. (48).	Sq.m	10.86			
16	Providing centering and shuttering including strutting, propping, etc. and removal of form work after a specified time as directed by the engineer-in-charge (extent possible usage of wood as to be avoided in construction activities) only using steel shuttering for columns, pillars, posts and struts in all floors. (49).	Sq.m	95.74			
17	Providing centering and shuttering including strutting etc. and removal of form work after a specified time as directed by the engineer-in-charge (extent possible usage of wood has to be avoided in the construction activities) only with steel shuttering for walls in all floors. (47)	Sq.m	60.00			
18	Providing centering and shuttering including strutting etc. and removal of form work after a specified time as directed by the engineer-in-charge (extent possible usage of wood has to be avoided in the construction activities) only with steel shuttering for lintels, beams, plinth beams, girders, bresssummers and cantilevers in all floors. (50).	Sq.m	81.36			
19	Providing centering and shuttering including strutting, propping, etc. and removal of form work after a specified time as directed by the engineer-in-charge (extent possible usage of wood has to be avoided in construction activities) using only steel shuttering for suspended floors, roofs, Landings, etc complete. (52).	Sq.m	32.40			
20	Reinforcement for RCC work including fabrication, cutting, bending, binding and placing in position etc, including cost of 18 gauge ms annealed binding wires in all floors. The steel required will supplied free of cost at central stores. TOR/COLD TWISTED BARS	Kg	3163.48			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
21	Coursed rubble stone masonry (second sort) with hard stone in layers with suitable bond stone at 1 m intervals in each course in cement mortar 1:6 (1 cement :6 coarse sand) in basement or super-structure. Cement will be FREE supply. (62)	Cu.m	22.68			
22	Brick masonry in cement mortar 1:6 (1 cement :6 coarse sand) using of machine moulded brick displayed in office or equivalent quality as directed by the engineer in charge in all floors and basement. Cement will be FREE supply. (67)	Cu.m	27.70			
23	Providing and fixing galvanized steel sheet doors frame produced from 1.2mm [18 G] thick galvanized sheet formed to single rebate profile of size 100 mm x 57 mm door leaves [shutter] single / double are constructed from 0.8 mm thick galvanized steel sheet formed to provide a 46mm thick fully flush double skin door shell with lock seam joints at stile edges. In fill of honey comb kraft paper is to be used to give the required rigidity and effective acoustic & thermal insulation. Frame has to be fixed on plastered opening with the help of Anchor fasteners. Vision glass as to be fixed with unbreakable toughened glass of 5mm thick as per the size mentioned in the drawing. The door frames and shutters are to be finished with zinc phosphate primer and finished with thermosetting polyurethane paint of Aliphatic grade providing high level of scratch resistance & durability. Each door shutter has to be provided with SS ball bearing butt hinges 3mm thick fixed flush to the frame and shutter, mortise steel lock with lever handles, mortise dead bolt, mortise lock has to be provided. For double door concealed extended level action flush bolts are to be provided on the top of the door to the leading stile edge. [728]	Sq.m	10.92			
24	52 mm th Cement concrete flooring with concrete hardener topping under layer 40mm thick cement Concrete mix.1:2:4 (1 cement :2 coarse sand : 4 graded stone aggregate 20mm nominal and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix 2 graded stone aggregate 6size) by volume hardening compound is mixed at 2 liter per 50Kg of cement or as per manufactures specifications. This cement including slurry, rounding of edges and strips etc, complete. Cement will be FREE supply.(148)	Sq.m	62.00			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
25	Providing cement concrete flooring mix.1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement including slurry, rounding of edges and strips etc, complete of 40mm thick flooring. Cement will be FREE supply.(146)	Sq.m	29.00			
26	Providing and fixing 18mm to 20mm thick polished granite stone slabs (icon brown/vizag blue) on a cement mortar bed of 40 mm thick 1:6 (1 cement:6 Coarse sand) and applying cement slurry of 6.4 Kg/ Sq.m laid in desing pattern as speicified and jointed with matching tiles mate of approved brand and shade including smoothing of edges etc,. Complete cement will be free supply.	Sq.m	15.3			
27	18mm thick cement plaster in two coats under layer 12mm thick cement plaster 1:5(1 Cement : 5Coarse sand) and a toplayer 6mm thick cement plaslte 1:3 (Cement : 3 Fine sand) of sponge finish in all floors. (Cement will be Free supply.	Sq.m	637.48			
28	Providing 20 mm thick Impervious plaster with Cement mortar1:3 (1cement :5 Coarse sand)and finished with a floating coating of neat cement cement plaster 1:3 (Cement : 3 Fine sand of sponge finish in all floors. (Cement will be Free supply)	Sq.m	20.00			
29	Applying and painting with plastic emulsion paint jof approved brand & shade to give an even shade on new work two or more coats over a cpat pf cement primer of approved brand.	Sq.m	189.58			
30	Providing and applying cement based Textured Exterior wall finish of approved design and make to the exterior surgace of the building all as per the manufactures instructions over final coat of plastering including appluing approved colour chemical coating cost will including all materials scafflodng scraping or cleaning, finishing etc complete.	Sq.m	369.60			
31	Applying two or more coats of delux Multisurface paint system "Uni gloss" of snow cem india or equivalent make paint for interirors & Exteriors over and including one coat of Primer (Snowcem plus or Equivalent) all as per manufactures specifications including cost of all materials, labour sacffolding etc complete.	Sq.m	447.90			

Abstract for Civil works in Toilets for COE (ATS)

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
1	Demolishing of doors windows (steel of wood) shutter including chowkhats, hold fasts etc, complete & stacking within 50 meters lead for 3 Sq.m and below	Sq.m	18.57			
2	Demolishing of tile work of any thickness at all levels laid over any base including stacking serviceable materials within 50 meters lead as directed by the engineer in charge	Sq.m	106.01			
3	Removal any kind of paint (Internal or external) by scrapping, sand papering and pereparing the surface smooth for painting at all levels as directed including cost of all materials etc., complete.	Sq.m	60.64			
4	Removal of cement plaster/tar felt/unwanted materials deposited to a specified depth as directed and preparing the surface for re-plastering including disposal fo rubbish within a lead of 50mm as directed by the engineer-in-charge	Sq.m	136.73			
5	Demolishing of G.I Pipes including specials upto 40 mm dia.	Rmt	95.00			
6	Demolishing of flushing cisterns of any type including of C.I brackets.	Each	3.00			
7	Demolishing of CI Pipes including excavation and refilling trenches after taking out the pipes breaking leade caulked joints melting of lead and making into blocks including stacking of of pipes lead at site within 50 meters leade upto 150mm diameter	Rmt	20.00			
8	Demolishing cement concrete work of any mix including disposal of mateirals within 50 metre lead as directed by the engineer. (197)	Cum	3.91			
9	Inter carting of surplus excavated earth by mechanical transport including loading spreading etc., complete with in 2km lead.(13)	Cu.m	135.00			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
10	Providing and fixing three layer PP-R [poly propylene random co-polymer] pipes SDR 7.4 UV stablized and anti-micro bio fusion welded having thermal stability for hard and cold water supply including all PP-R plane and brass threaded poly propylene random fittings including fixing the pipe with clamps at 1 m spacing. This includes the cost of cutting, chases and making good the same including testing of joints complete as per the direction of Engineer in Charge . For PN-16 pipe 16mm OD.	Rmt	75.00			
11	Providing and fixing three layer PP-R [poly propylene random co-polymer] pipes SDR 7.4 UV stablized and anti-micro bio fusion welded having thermal stability for hard and cold water supply including all PP-R plane and brass threaded poly propylene random fittings including fixing the pipe with clamps at 1 m spacing. This includes the cost of cutting, chases and making good the same including testing of joints complete, as per direction of Engineer in Charge. For PN-16 pipe 20 mm OD.	Rmt	75.00			
12	Providing and fixing three layer PP-R [poly propylene random co-polymer] pipes SDR 7.4 UV stablized and anti-micro bio fusion welded having thermal stability for hard and cold water supply including all PP-R plane and brass threaded poly propylene random fittings including fixing the pipe with clamps at 1 m spacing. This includes the cost of cutting, chases and making good the same including testing of joints complete, as per direction of Engineer in Charge. For PN-16 pipe 25 mm OD.	Rmt	100.00			
13	Providing and laying Water proofing treatment to vertical and horizontal surface of depressed and portion of WC kitchen and the like consisting of i) 1st course of applying cement slurry @ 4.4 kg/sq.m mixed with water proofing compound confirming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. ii) 2nd course of 20mm cement plaster 1:3 (1 Cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. iii) 3rd course of applying blown or residual bitumen applied hot at 1.7 kg per sq.m area. iv) 4th course of 400micron thick PVC sheet .(Overlaps at joints of pvc sheet should be 100mm wide and plastered to each other with bitumen @ 1.7 kg/Sq.m)	Sq.m	63.60			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
14	providing and laying cinder concrete in mix 1:3:6 (1 cement :3sand :6 cinder concrete) light weight in all floors in trench, sunken slabs of toilets etc complete including cost of all materials	Cu.m	2.66			
15	Providing and laying in position cement concrete of mix 1:2:4(1 cement: 2 coarse sand:4 graded stone aggregate 20mm nominal size) excluding the cost of centering , shuttering all works upto plinth level.	Cu.m	2.97			
16	Labour charges for fixing 8 mm thick 12"x24" of size ceramic tile on wall face on cement plaster of 12mm thick cement mortar 1:3 [1 cement: 3 fine sand] tiles are to be fixed with grey cement slurry over cement plaster and jointed with matching tile grout of approved brand and colour. Cleaning the finished surface with acid wash etc. complete. Cement and tiles will be issued free of cost.(391)	Sq.m	200.91			
17	18mm thick cement plastering in two coats under layer 12m thick cement plastering 1:5 (1 cement 1:5 coarse sand) and a top layer 6mm thick cement plaster 1:3 (cement 3 fine sand of sponge / smooth finishing in all floors as directed including cost of all materials etc., complete	Sq.m	249.48			
18	Labour charges for laying 10mm thick antiskid Vitrified Ceramic tiles flooring laid over 40mm thick cement mortar 1:6 (1 cement :6 coarse sand)and applying a cement slurry of 6.4kg/sq.m fixing the tiles to the base mortar. All the joints are to be grouted with matching colour grout of approved make. Flooring has to be according to levels specified . The final finished tiel surface has to be cleaned with approved cleaning agents all the material such as colour grout, sand, chips, labour, transportation & lifiting of tiles has to be provided by contractor) cement and floor tiles will be free Issue (735)	Sq.m	35.20			
19	Providing & fixing India gypsum suspended false ceiling which includes pre-coated GI angle of size 24X24X0.9mm thick fixed to the brick wall/partition at the perimeter of ceiling with nylon sleeves and screws at 610mm centers. Then suspending main GI T section [bottom pre-coated] size 24X38X0.7mm and 360mm long from soffit in one direction with the help of metal rawl plug, soffit cleat and GI rod 4mm dia with galvanized spring steel level click 1220mm centers GI cross T section [bottom pre-coated] size 24X38X0.7mm and 600mm long in insert fixed into the slots provided	Sq.m	30.96			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
	in the main T at 600mm centers to form 600X600 mm grid. Providing and laying 12.5mm thick gy-board tiles with metalised polyster film backing tiles of size of 595595mm can be laid on to grid. PVC universal holding clips are to be placed on sealing panel in each direction.i.e. 4 clips for panel. Frame for light fitting have to be made with steel screws to the main T section to form suitable size of the light openings.					
20	Providing and fixing TRAP of self cleansing design with screwed down or hinged graining with or without 6 vent arm etc., complete including cost of cutting and making good the walls and floors etc. with 100 mm inlet and 100 mm outlet with SCI S&S.(267)	Each	9.00			
21	Labour charges for dismantling & removing of broken EWC/IWC/Orissa pan/urinal pan including dismantling of flooring & fixing new along with all accessories & specials. Sanitary ware and fittings will be supplied by dept. at free of cost. [464]	Each	4.00			
22	Labour charges for dismantling the damaged wash basin /urinal & replacing the new in position along with all accessories. Sanitary ware and fittings will be supplied by dept. at free of cost. [465]	Each	6.00			
23	Providing and fixing 18 mm thick granite slab of gang saw mirror polishing premoulded and prepolished machine cut for urinal partition of required size of approved shade, colour layed over 20mm thick base cement mortar 1:4 [1 cement: 4 coarse sand] with joints treatd with maching colour pigment epoxy touchups, including rubbing, curing, moulding and polishing to wedge to give high glass finish etc complete at all levels	Sq.m	5.40			
24	Providing and laying 110 mm Dia. UV resistant SWR grade PVC pipe (sudhakar/ prince/ supreme) in all height including the cost of fitting, solution for fixing PVC pipe and MS clamps etc. complete.(644)	Rmt	99.00			
25	Providing and laying 100 mm Dia. UV resistant SWR grade PVC pipe (sudhakar/ prince/ supreme) in all height including the cost of fitting, solution for fixing PVC plain bend etc. complete.(648)	Each	6.00			
26	Providing and laying 100 mm Dia. UV resistant SWR grade PVC pipe (sudhakar/ prince/ supreme) in all height including the cost of fitting, solution for fixing PVC Door bend etc. complete.(646)	Each	6.00			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
27	Providing and laying 75 mm Dia. UV resistant SWR grade PVC pipe (sudhakar/ prince/ supreme) in all height including the cost of fitting, solution for fixing PVC pipe and MS clamps etc. complete.(645)	Rmt	99.00			
28	Providing and laying 75 mm Dia. UV resistant SWR grade PVC pipe (sudhakar/ prince/ supreme) in all height including the cost of fitting, solution for fixing PVC plain bend etc. complete.(646)	Each	6.00			
29	Providing and laying 75 mm Dia. UV resistant SWR grade PVC pipe (sudhakar/ prince/ supreme) in all height including the cost of fitting, solution for fixing PVC DOOR bend etc. complete.(646)	Each	6.00			
30	Brick masonry in cement mortar 1:6 (1 cement :6 coarse sand) using of machine moulded brick displayed in office or equivalent quality as directed by the engineer in charge in all floors and basement. Cement will be FREE supply. (67)	Cu.m	0.97			
31	Half brick masonry in cement mortar 1:4 (1 cement :4 coarse sand) with machine molded bricks displayed in office or equivalent as directed by the engineer in charge with 2 nos. of m s. rod of 6mm dia. For every 5th coarse etc, but excluding the cost of m s. rods including the cost and conveyance of materials and labour charges in all floors. Cement will be FREE supply. 68.	Sq.m	62.36			
32	Providing wood work in frames of doors, windows and clerestory windows and other frames. wrought framed and fixed in position in second class indian teak wood. 71	Cu.m	0.19			
33	Providing and fixing 35 mm thick skin door shutter with non decorative type with frame of 1st class hard wood. The shutter has to be fixed with 1 No. Aluminium power coated handle, 1 No. tower bolt ISI mark stainless steel butt hinges 100x58x1.9 mm 3 nos. to each shutter fitted with suitable nettle fold screws etc complete for single door shutter.	Sq.m	8.71			
34	providing and fixing Two track Aluminium sliding window with mat finish exterior grade of powder coating with approved colour. Aluminium extrusions for two track windows are of JINDAL make sections No-8732,61.85x45.5x1.3mm as bottom track with gutter provision for rain water drain.section no-8820 40x18x1.5mm as shutter bottom and top section No-8821 40x26.7x1.5mm as shutter interlock and section no-8822 40x18x1.5mm as shutter handle side. Sliding panels are to be fitted with tinted glass of 4mm thick necessary rubber beading etc complete.all the	Sq.m	3.60			

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
	gaps around the windows are to be closed with silicon sealant.					
35	Providing and fixing Aluminium ventilator with mat finish exterior grade of powder coating of approved colour with Aluminium box section of 63x37x2mm for the outer frame . Desing should be as kper the drawing 4 mm thick pin headed glass has to be fixed with 'U' shape beading for louvers. The ventilator has to be f fixed to top & sides fo the str4ucture with coach screws and plugs etc., complete.	Sq.m	3.50			
36	Providing and fixing M.S Grills of approved desing with metallic shade paint of approved shade including cost of all materials transportation and fixing etc complete.(692)	Sq.m	3.50			
37	Providing and applying Two coats of BIRLA LA-PPUM over plaster surfacet to make the surface even and smooth and sand papering Two times to get even & smooth surface including curing etc. complete.(179)	Sq.m	37.80			
38	Applying two or more coats of delux Multisurface paint system "Uni gloss" of snow cem india or equivalent make paint for interior & Exteriors over and including one coat of Primer (Snowcem plus or Equivalent) all as per manufactures specifications including cost of all materials, labour sacffolding etc complete.(193)	Sq.m	37.80			
39	Applying & finishing with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade, two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.(183)	Sq.m	21.00			
40	Constructing brick masonry manhole with locally available best quality of bricks in cement mortar 1:4 (1 cement : 4 fine sand) R.C.C. top slab with 1:2:4 (20 mm nominal size) , foundation concrete 1:4:8 (1 Cement :4 coarse sand : 8 greded stone aggregate 40 mm nominal size) ins-ide plastering with 12 mm thick with cement mortar 1 :3 (1 cement : 3 coarse sand) finished with a floating cot of neat cement and making channels in 1 :2:4 cement concrete (1 cement :2coarse sand :4 graded stone aggregate 20 mm nominal size) neatly finished complete as per staandard type design. Inside size 120 X 90 cm &					

Sl.No	Description	Unit	Qty	Rate in figures	Rate in words	Amount
	90 cm deep including C.I. cover with frame (heavy duty) 560 mm internal dimensions total weight of cover and frame to be not less than 208 Kg (Cover 108 Kg & frame 100 Kg) Cement will be free supply.(353)	Each	2.00			
41	Providing, laying & jointing GLAZED STONEWARE PIPES of GRADE "A" with stiff mixture of cement mortar in the proportion of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete, of 100 mm dia.	Rmt	15.00			
42	Providing & fixing square mouth s.w. gully trap grade'A' complete with C.I. grating brick masonry chamber with bricks and water tight C.I. cover with frame of 300X300mm size (inside) the weight of cover to be not less than 4.5Kg. And frames to be not less than 2.7Kg as per standard design; 125X100mm size with p type trap.	Each	4.00			

TOTAL AMOUNT:

Note:

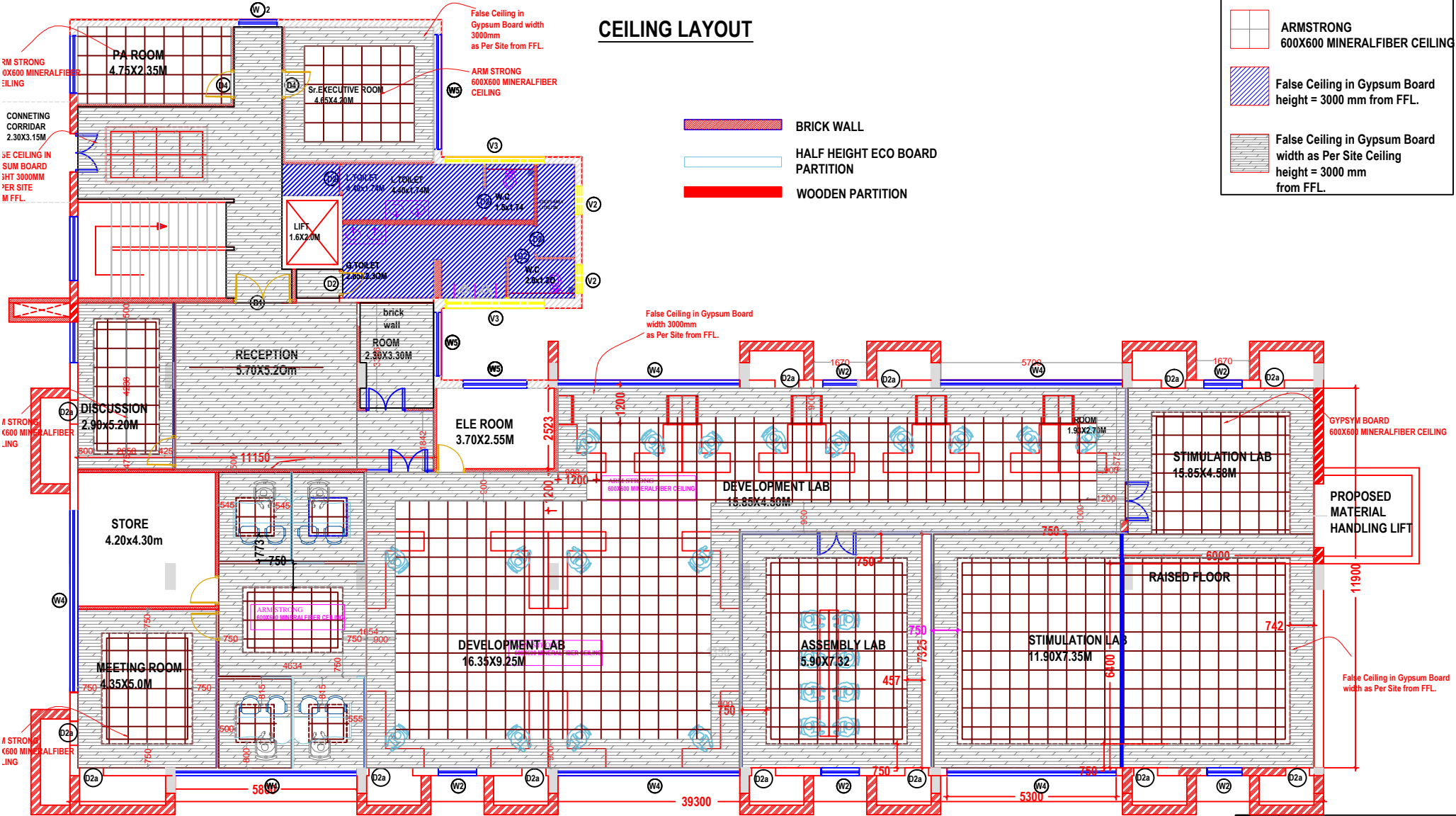
- 1 Cement, Mild steel and Tor steel required theoretically will be supplied for free of cost at BHEL R&D stores.
- 2 excess / short consumption of above said material will be accounted at panel recovery at the time of FINAL / RUNNING BILL as per norms of CPWD schedule specifications.
- 3 the panel recovery rate for CEMENT.

	Rs.	4600.00 Per M.T.
MILD STEEL	Rs.	44000.00 Per M.T.
TOR STEEL	Rs.	44000.00 Per M.T.

CONTRACTOR(S)

ACCEPTING OFFICER

CEILING LAYOUT



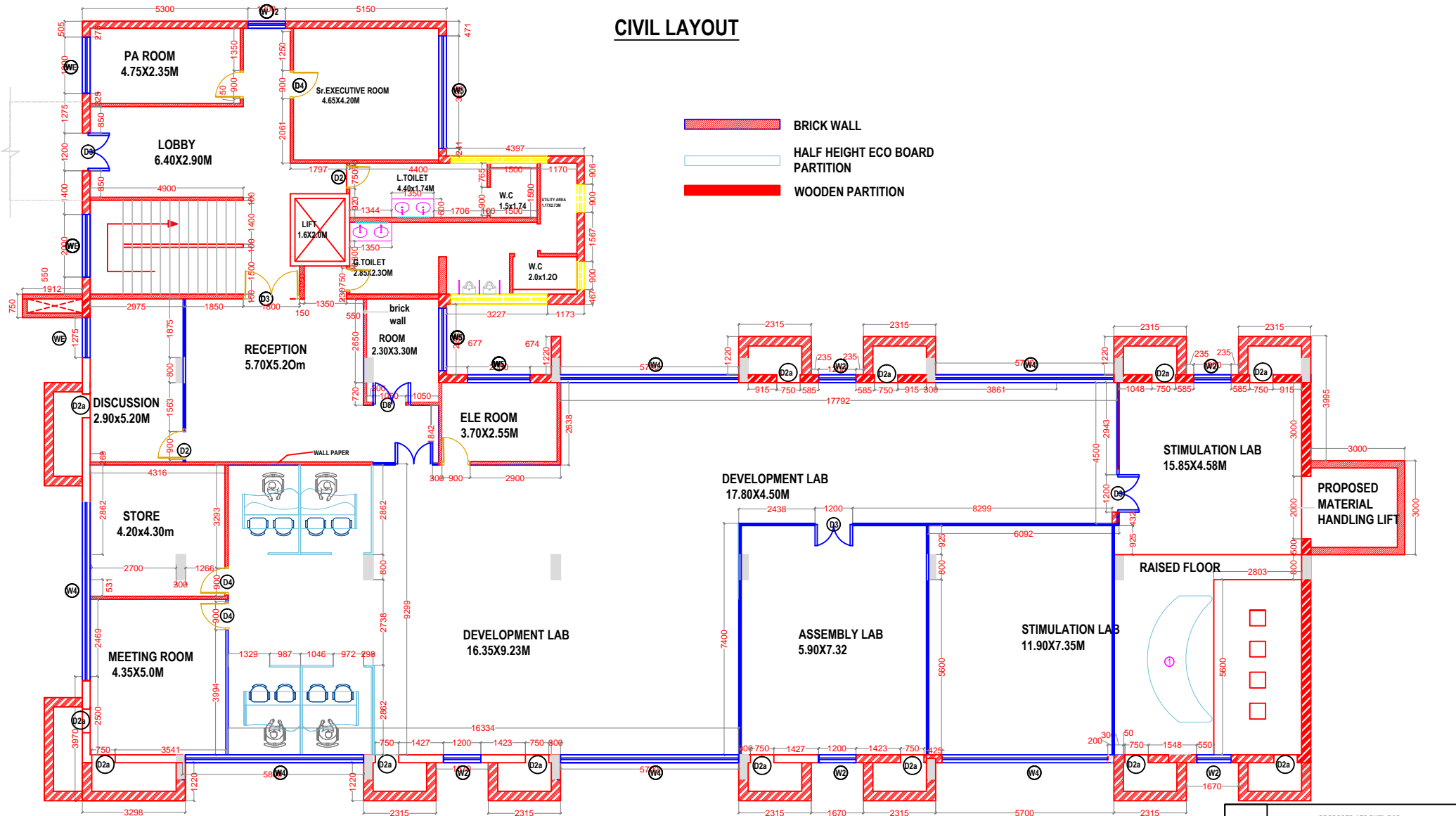
LEGEND - CEILING

- ARMSTRONG 600X600 MINERAL FIBER CEILING
- False Ceiling in Gypsum Board height = 3000 mm from FFL.
- False Ceiling in Gypsum Board width as Per Site Ceiling height = 3000 mm from FFL.

PROJECT:	PROPOSED ATS BHEL R&D
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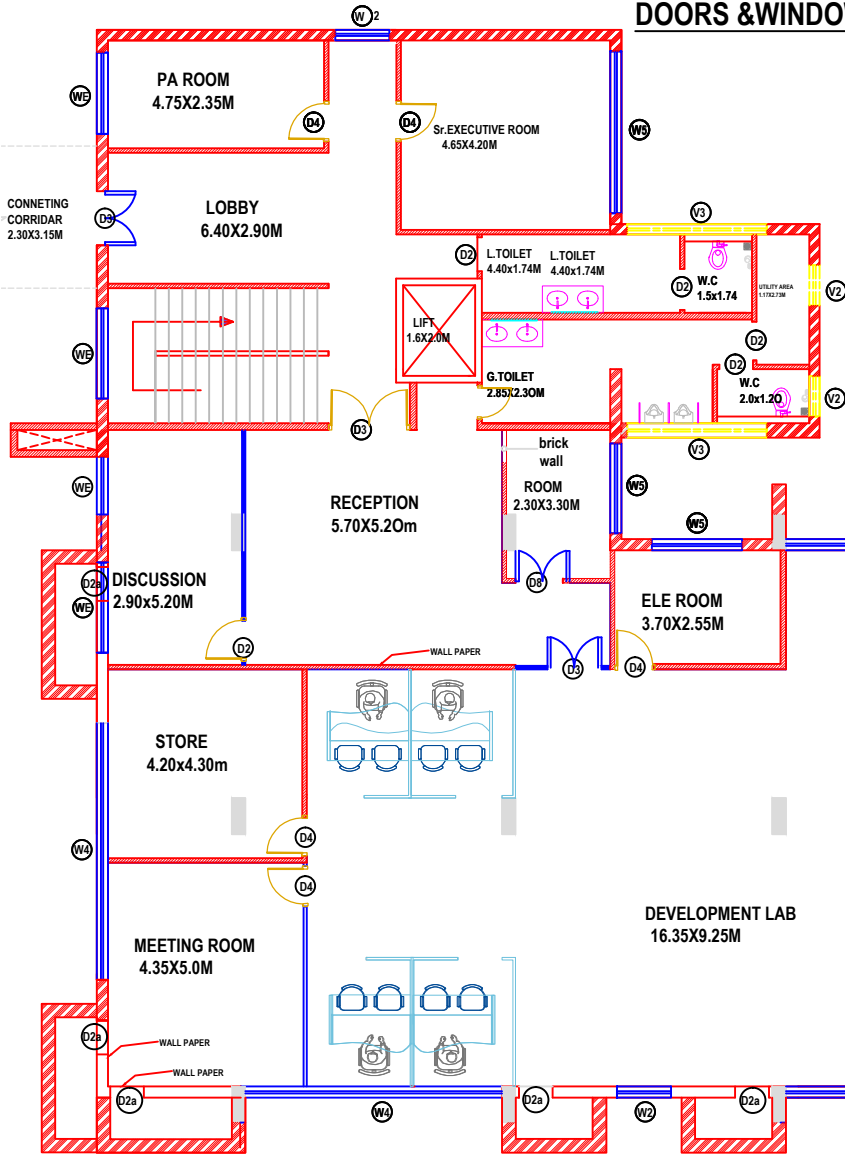
CIVIL LAYOUT

-  BRICK WALL
-  HALF HEIGHT ECO BOARD PARTITION
-  WOODEN PARTITION



PROJECT:	PROPOSED ATS BHEL R&D

DOORS & WINDOWS SHEDULES



- BRICK WALL
- HALF HEIGHT ECO BOARD PARTITION
- WOODEN PARTITION

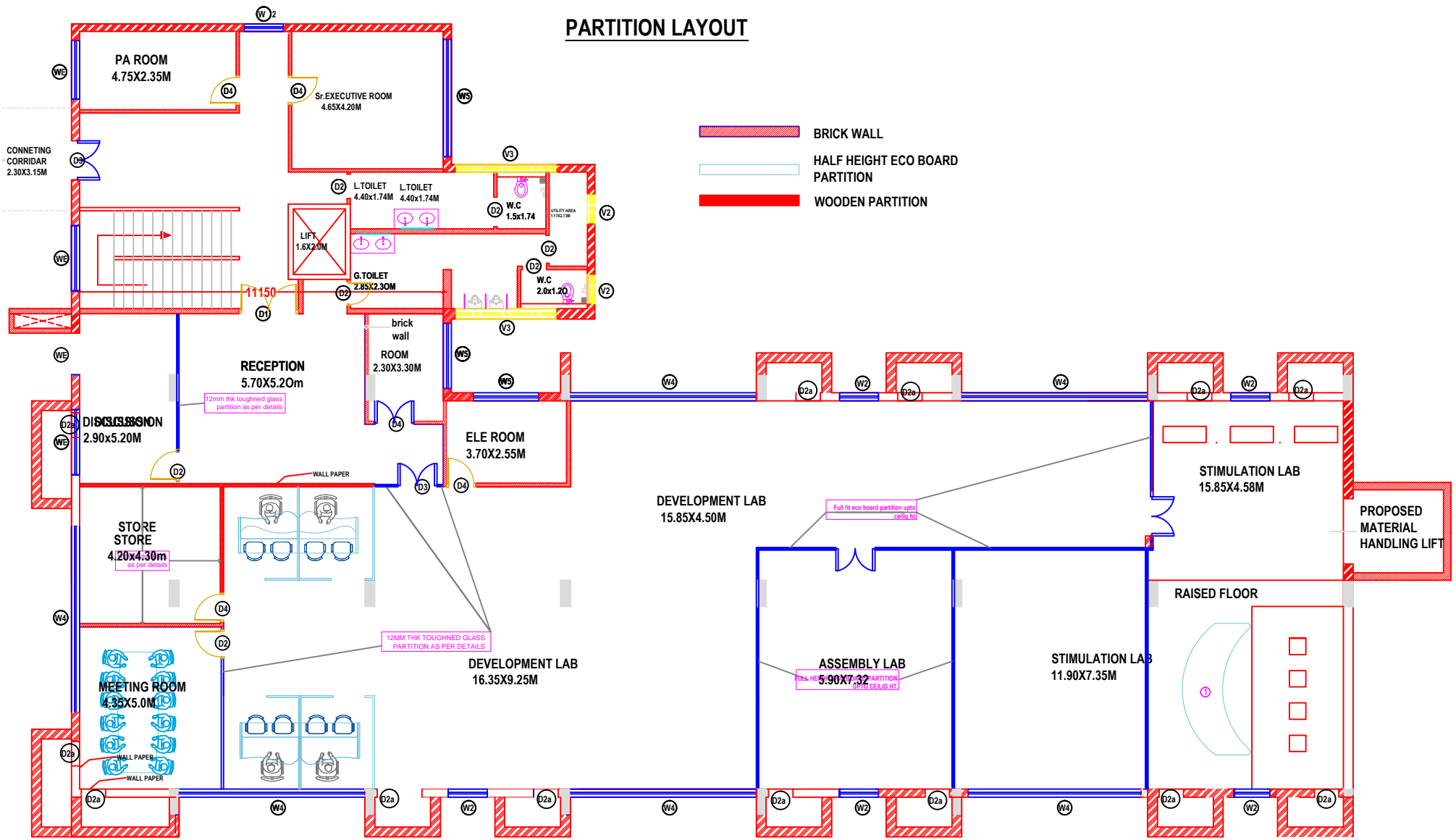
S.No	W	Existing Windows	-	-	-
1	W1	3600x 1300	2100	900	1
2	W2	1100x 1300	2100	900	7
3	W3	3100 x 1300	2100	900	1
4	W4	5700 x 1300	2100	900	5
5	W5	2000 x 1300	2100	900	4
6	W6	900 x 1500	2100	900	2
7	W7	3100 x 1500	2100	900	2

S.NO.	NAME	MASONRY OPENING	LINTEL	CILL	NOs.
1	D1	1800 X 2100		2100	- 01
2	D2a	750 X 2100 (with ventilation grill & with wooden frame)		2100	- 00
3	D2a	650 X 2100 (duct doors)		2100	- 00
4	D4	900 X 2100		2100	- 06
5	D8	1200 X 2100 (without vision panel with wooden frame)		2100	- 01

NOTES
1. DIMENSION IN MILLIMETRES. LEVELS IN METERS

PROJECT :	PROPOSED ATS BHEL R&D
CLIENT :	BHEL R&D - HYDERABD
	NTS

PARTITION LAYOUT



CONNECTING CORRIDAR 2.30X3.15M

PA ROOM 4.75X2.35M

Sr. EXECUTIVE ROOM 4.65X4.20M

RECEPTION 5.70X5.20m

DISCUSSION 2.90x5.20M

STORE STORE 4.20x4.30m

MEETING ROOM 4.38X5.0M

ELE ROOM 3.70X2.55M

DEVELOPMENT LAB 16.35X9.25M

DEVELOPMENT LAB 15.85X4.50M

ASSEMBLY LAB 5.90X7.32

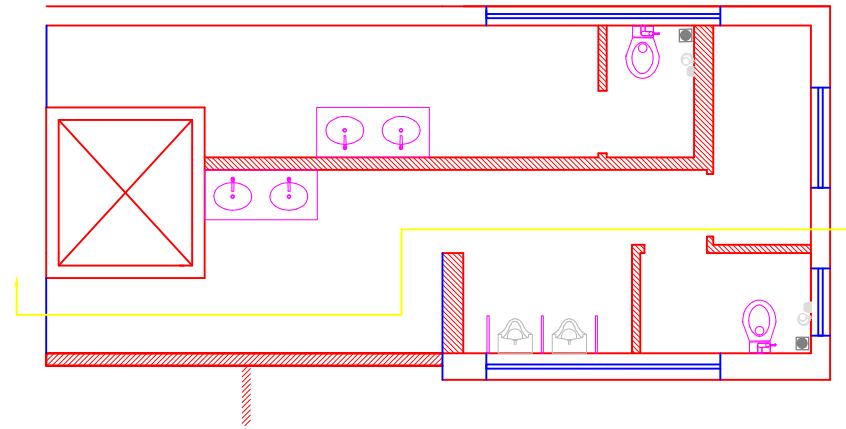
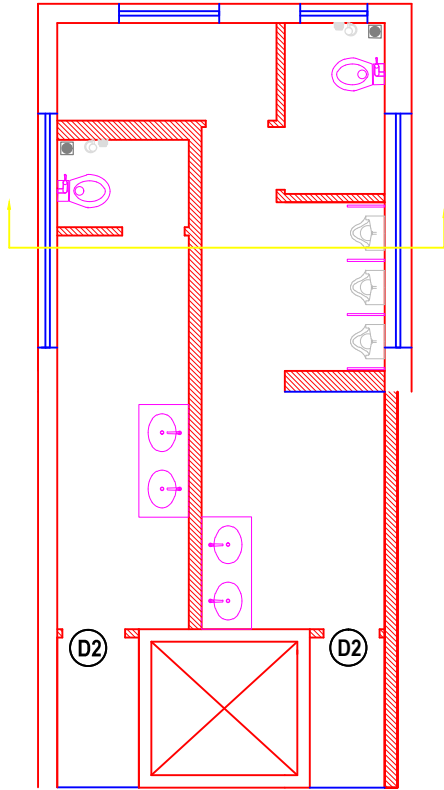
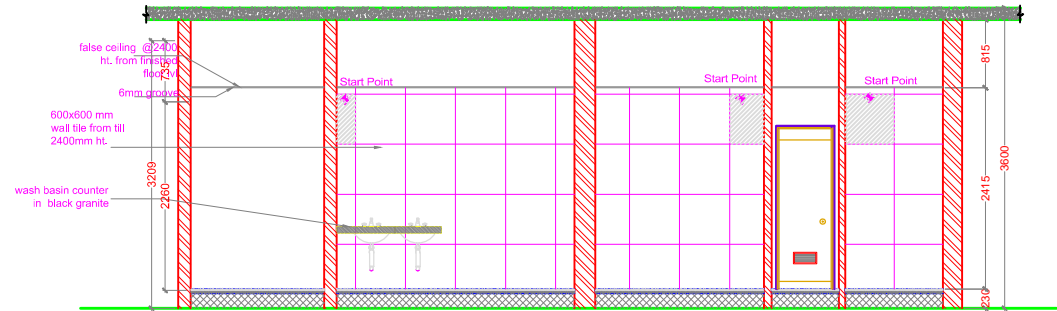
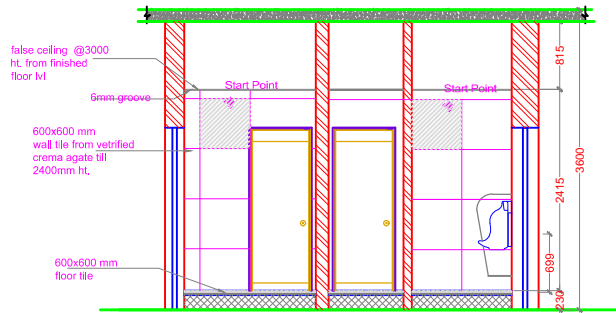
STIMULATION LAB 15.85X4.58M

STIMULATION LAB 11.90X7.35M

PROPOSED MATERIAL HANDLING LIFT

RAISED FLOOR

TOILET DETAILS



NOTES
 1. DIMENSION IN MILLIMETRES. LEVELS IN METERS
 2. DONT SCALE THE DIAGRAMS FROM DRAWING FOLLOW WRITTEN
 WRITTEN DIMENSIONS ONLY.
 3. LEVELS INDICATED REFER TO UPPER SIDE STEEL PROFILES.
 4. REFER GENERAL NOTES OF SPECIFICATION ALONG WITH THE
 DRAWING FOR OTHER DETAILS OF CONSTRUCTION PROCEDURE
 AND MATERIALS.

PROJECT:	PROPOSED ATS BHEL R&D		
CLIENT :	BHEL R&D - HYDERABD		
ARCHITECT	SATYA	NTS	
DESIGNER BY	MANOHAR	DESIGNER'S GUILD	
CHECKED BY		A. 105, HOUST BANAJARA, ROAD NO.12, BANAJARA HILLS, HYDERABAD 500 054, PHONE NO. : 91 40 2256005 SATYA@BHEL.COM	
APPROVED BY		DWG. NO.	TITLE
		0	TOILET DETAILS
		DATE	SCALE
		24-1-2020	1:10