

**ICHALKARANJI TEXTILE DEVELOPMENT CLUSTER LTD.  
ICHALKARANJI.**

**Upgradation of Infrastructure facilities at Textile Cluster,Ich.**

**Maharashtra.**

**Project under Industrial Infrastructure Upgradation scheme (IUS)-2003.**

**Ministry of Commerce & Industry.**

**Government of India.**

**TENDER DOCUMENTS FOR THE WORK OF-**

**supply, erection, testing &**

**commissioning of 1500 KVA**

**Transformer Centre including all**

**the associated works at 12 MLD**

**CETP, R.S.No.610, Ichalkaranji.**

**ICHALKARANJI TEXTILE DEVELOPMENT**

**CLUSTER LTD., ICHALKARANJI.**

**5/617, SWIMMING POOL PREMISES, NEAR VED BAVAN,  
ICHALKARNJI-416115. DIST. KOLHAPUR. (MAHARASHTRA) .**

**Phone No. : (0230)2421009, FAX : (0230)2421143**

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**Managing Director**

## ICHALKARANJI TEXTILE DEVELOPMENT CLUSTER LTD.

5/617, Swimming pool Premises, Near Ved Bhavan, ICHALKARANJI-416115 DIST.KOLHAPUR (Maharashtra)  
Phone: (0230) 2421009, Website: www.ichcluster.com Email : chairperson @ ichcluster.com

### **TENDER NOTICE**

Sealed Percentage rate tenders are invited for the following works from reputed Experienced or Registered Contractors.

Sr. No.	Name of the Work	Estimated Cost In Rs. in lacs.	Earnest Money Deposited in Rs.	Period of Completion of work	Tender Form Cost In Rs.
1	supply, erection, testing & commissioning of 1500 KVA Transformer Centre including all the associated works at 12 MLD CETP, R.S.No.610, Ichalkaranji.	36.38	36380/-	2 Months	1000/-
2	Construction of H.T. Metering room & Transformer Yard at 12 MLD CETP, Ichalkaranji.	8.93	8930/-	2 Months	500/-
3	Providing erecting 150 watt SV street Lighting at Ichalkaranji Co-op. Ind. Estate.	0.56	560/-	2 Months	500/-
4	Construction of RCC Gutters in Industrial Estate, Khanjire Nagar, Shahapur on Awade Industry to Pritam shed road.	0.65	650/-	2 Months	500/-

1. Blank Tender Forms, will be issued at cluster office between 17<sup>th</sup> Mar. 2010 to 29<sup>th</sup> Mar. 2010 on payment of tender form fee and fulfilling eligible criteria as per tender form
2. Sealed tenders will be accepted in cluster office on or before Tuesday, 30<sup>th</sup> Mar. 2010 up to 2.00 P.M.Tender will be opened on the same day at 4.00 P.M. in the presence of tenderers.  
If any change in the date on tender opening it will be informed.
- 3 Ichalkaranji textile development cluster reserves the rights to reject any or all tenders without assign any reasons.
- 4 This Tender Notice & Tender Documents are also available at our website [www.ichcluster.com](http://www.ichcluster.com)

(G.R.Akiwate.)  
Managing Director.

(Sou. Megha S. Chalake.)  
Chairperson

## **DETAILED TENDER NOTICE TO CONTRACTOR**

Managing Director, Ichalkaranji Textile Development Cluster Ltd., Ichalkaranji invites sealed tender on two envelope system on prescribed formats from bonafied reputed experienced or Registered Electrical Class I contractors who are qualifying following "Essential Qualifying Criteria". Detail of execution of work is mentioned in Tender Notice.

Tender documents can also be downloaded from ITDC website [www.ichcluster.com](http://www.ichcluster.com) and in such a case, the tenderer shall deposit the cost of tender documents along with submission of the tender, failing which his tender will not be opened. The cost of tender documents shall be deposited in the form of demand draft/pay order and enclosed in the envelope containing the Earnest Money Deposit. Tenderers are advised not to make any corrections, additions or alterations in the downloaded tender document. In case, any correction, additions or alterations in the downloaded standard documents are made, such tender shall not be considered.

### **Essential Qualifying Criteria**

1. The Contractor should possess the experience of having successfully completed similar works during the last 2 years (ending last day of 31<sup>st</sup> March every year.) which should be following.
  - i) **Two similar completed works each costing not less than amount equal to 90% of the estimated cost.**
2. **The Tender should be Government approved Contractor of Maharashtra State and the approved list of MSEDCL.**
3. **Competency worthiness certificate from their client for satisfactory work completion should be submitted by the tenderer.**
4. Contractor should have permanent qualified and experienced Engineer to supervise and execute the job as per tender to satisfy consultant and client. If the contractor fails to do so, the ITDC authorities will appoint the engineer at the cost of contractor.
5. Certificate from Nationalized bank that party has sound financial capability to execute the job.
6. The financial turnover during the last two years should be at least 90% of the estimated cost.

**Notes:-** the financial turnover shall be judged from ITCC or Annual reports including Profit and Loss A/c.

7. The Contractor should have its net worth not less than 10% of the estimated cost of the tender. This will be judged from the audited balance sheet of the last financial year ending on a date not prior to 18 months from the due date of submission of the tender.

8. The contractor should submit performance certificate in reference to S. No.1 above from clients for having successfully completed similar works in the last two years.
9. There should not be any unsatisfactory performance report of the contractor from any source.
10. all above documents should be submitted by the tenderer in separate envelope to ITDC and

1. Name of Work:-

**supply, erection, testing & commissioning of 1500 KVA Transformer Centre including all the associated works at 12 MLD CETP, R.S.No.610, Ichalkaranji.**

2. Cost of each blank tender form :- Rs.1000/-

(Non Refundable)

3. Estimated Cost of Works :- Rs. 36.38 Lakhs
4. Earnest Money :- Rs. 36380.00
5. Initial Security Deposit (1%EMD + 2%SD) :- Rs.109140.00
6. Date and time upto which blank tender forms will be issued. :-17<sup>th</sup> Mar.2010 to 29<sup>th</sup> Mar.2010
7. Date & time of receipt of sealed tender:-30<sup>th</sup> Mar 2010, 2.00pm
8. Probable date and time of opening of tender. :- 30<sup>th</sup> Mar. 2010, 4.00pm
9. Validity Period :- 120 Days  
The offer of the contractor shall remain valid for acceptance for a minimum period of 120 days from the date fixed for opening of Envelope No. 2 (Main Tender) and thereafter until it is withdrawn by the contractor by notice in writing duly addressed to the authority opening the tender and sent by Registered Post Acknowledgement due.
10. The tender notice shall form a part of the contract agreement.
11. The tenders are invited on Company design only.
12. The blank tender forms will be sold only to the eligible Contractors and above on production of original or attested copy of valid registration or renewal certificate at the time of applying for issue of blank tender forms otherwise blank tender forms will not be issued to them.
13. The tenderer if firm or company shall in their forwarding letter mention the names of all the partners of the firm or the company (as the case may be) and the name of the partner who holds the power of attorney if any, authorizing him to conduct transaction on behalf of the firm or company.
14. Right is reserved to revise or amend the contract documents fully or part thereof prior to the date notified or amended for the receipt of tender. Such deviations/amendments

if any shall be communicated in the form of corrigendum or by a letter as may be considered suitable.

15. Right is reserved to or rejects any or all tenders without assigning any reason thereof.

16. Tenders that do not fulfill all or any conditions or are incomplete in any respect are liable to summary rejection.

## **2) EARNEST MONEY:-**

1. Earnest money shall be acceptable in form of Demand Draft in favour of Ichalkaranji Textile Development Cluster Ltd. payable at Ichalkaranji.

2. Tender of those who do not deposit earnest money in the above acceptable form shall be summarily rejected.

3. The amount of earnest money will be refunded to the unsuccessful tenderer on deciding about the acceptance or otherwise of the tender or on expiry of the validity period whichever is earlier.

In case of successful tenderer it will be refunded on his paying the initial security deposit and completing the tender documents or will be transferred towards a part of security deposit to be paid after awarding of the work. If successful tenderer does not pay the security deposit in the prescribed time limit and complete the agreement bond, his earnest money will be forfeited.

## **3) TENDERING PROCEDURES:-**

### **1. Opening of tenders:-**

On the date specified in the tender notice following procedures will be adopted for tender opening of the tender.

#### **Envelope No. 1:-**

First of all, Envelope No. 1 of the tender will be opened to verify its contents as per requirements. If the various documents contained in the envelope do not meet the requirements of the Company, a note will be recorded accordingly by the tender opening authority and the said tenderer's Envelope No. 2 will not be considered for further action but the same will be recorded.

#### **Envelope No.2**

This envelope shall be opened immediately after opening of Envelope No.1, only if contents of Envelope No. 1 are found to be acceptable to the Company, the tendered rate in Schedule 'B' or Percentage above/below the estimated rates shall then be read out.

### **2. Security Deposit: -**

2.1 The successful tenderer shall have to pay 3% (including 1% EMD) of value of work by Demand Draft of a nationalized/ Scheduled Banks in favour of Ichalkaranji Textile Development Cluster Ltd. Payable at Ichalkaranji.

2.2 All compensations or other sums payable by the Contractor under the terms of this contract or on any account may be deducted from his security Deposit or from any sums which may be due to him or may become due to him by government on any account and in the event of security being reduced by reason of any such above noted deductions, the Contractor shall within 10 days of receipt of notice of demand from the engineer-in-charge make good the deficit.

3.3 There shall be no liability on the Company to pay any interest on the security Deposited by or recovered from the Contractor.

3.4 The security Deposit shall be refunded after One year Twenty Eight days from satisfactory commissioning of Transformer Centre i.e., defect liability period for this contract.

## **TENDER FOR WORKS**

I/ We here by tender for the execution for the Ichalkaranji Textile Development Cluster Ltd., Ichalkaranji Dist. Kolhapur, Maharashtra (herein before and herein after referred to as "Company") of the work specified in the under written memorandum within the time specified in such memorandum at

\_\_\_\_\_.  
(in words \_\_\_\_\_)

**Percent below/above** the estimated rates in BOQ entered in schedule 'B' (memorandum showing items for work to be carried out) and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to the annexed conditions of the contract.

### **MEMORANDUM**

**Name of Work:-**

**supply, erection, testing & commissioning of 1500 KVA**

**Transformer Centre including all the associated works at 12  
MLD CETP, R.S.No.610, Ichalkaranji.**

a) Estimate cost : Rs.36.38 Lakhs

b) Earnest Money : Rs. 36380.00

c) Security Deposit :

i) Demand Draft (2% in addition to EMD) Rs.

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Total : Rs.

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e) Time allotted for the work from

the date of written order to commence. 2 Months

2. I/We agree that the offer shall remain open for acceptance for a minimum period of 120 days from the date fixed for opening of the tender.

The amount of earnest money shall not bear interest and shall be liable to be forfeited to the Company, should I/We fail to (i) abide by the stipulations to keep the offer open for the period mentioned above or (ii) sign and complete the contract documents as required by the engineer and furnish the security deposit as specified in item (d) of the memorandum contained in paragraph 1 above within the time limit laid down in clause of the annexed General conditions of contract. The amount of earnest money may be adjusted towards the security deposit or refunded to me/us if so desired by me/us in writing, unless the same or any part thereof has been forfeited as aforesaid.

4. Should this tender be accepted I/We hereby agree to abide by and fulfill all the terms, and provisions of the conditions of contract annexed hereto so far as applicable and in default thereof to forfeit and pay to Company the sums of money mentioned in the said conditions.

Contractor \_\_\_\_\_ Signature of the Contractor  
Address \_\_\_\_\_ before submission of the  
\_\_\_\_\_ tender

Telephone No.-

Fax No.-

Email No. -

Date the \_\_\_\_\_ day of \_\_\_\_\_ Year \_\_\_\_\_

Address : \_\_\_\_\_ Signature of witness  
(Occupation) \_\_\_\_\_ to contractor's signature

The above tender is hereby accepted by me for and on behalf of the Company.

Date the \_\_\_\_\_ day of \_\_\_\_\_ Year \_\_\_\_\_

## **General Terms & Conditions**

### **Prices Basis:**

- 1) The quoted prices are for supply, erection (including all connected civil works ), testing at works(in the presence of our representatives, EB authorities) and at site before commissioning of 1500 KVA Transformer Center at 12 MLD CETP, R.S.No.610, Ichalkaranji.
  - A) The rates in the schedule are inclusive of all taxes, cesses, insurance & Transportation etc.
  - B) The price shall be firm till the execution / completion of the order and no variation clause accepted.
- 3) Delivery of all material F.O.R. site, Ichalkaranji.
- 4) Testing charges at works including making arrangement for the traveling and lodging of our representatives, EB authorities & other incidental expenses involved, Transporting of the equipment to site, Forwarding, Handling, loading & unloading charges included all Taxes, VAT,ED,Duties included.
- 5) Service tax shall be paid by tender for the labour works involved equipment at site.
  - Labour work of commissioning of all equipment at works.

### **Delivery & Period of Completion :**

To be completed within 2 months from the date of receipt of order. Work to be carried out and commissioned within this stipulated period only. If the tenderer is not able to complete the work within stipulated period, then the tenderer should request in writing giving the reasons of delay and get the work period extended in writing from ITDC.

### **Penalty:**

Penalty will be charged to the account of tenderer @ of 5 % of the total cost per week for delay in completing the work beyond the period of 2 months from the date of order.\_

### **Terms of Payment :**

Tenderer has to give bank Guarantee ( Of Nationalized bank / Govt. Bank ) for the advance amount and capability to complete the work within the stipulated period of 2 months and the acceptance of the penalty clause in case of delay for the completion of job.

A) 20 % Advance of the order value shall be paid along with the purchase order. This 20% advance will be released against submission of BG for the equivalent amount and valid for the total period of execution.(including delay period)

**B)** 60 % against supply of Transformer, VCB & Metering Cubical, HT/LT cable at site and bills of its supply value duly and jointly approved by Electrical advisor and ITDC representative. (Letter of demand of money by Tenderer). 60% advance for remaining item to be paid to the Tenderer after completion of erection & testing work.

**C)** 10 % against submission of bill of erection by joint approval of electrical advisor and company representative & MSEDCL authorities.

**D)** 10 % after successful commissioning of Transformer Centre along with permission of Electrical Inspector to charge the Transformer and furnishing PBG for the last 10% payment which should be valid 18 months from the date of handing over to the Transformer and system to the client.

**E)** All the work pertaining to the approval from this statutory authorities of the relevant Government departments on this work are to be included in the scope of the successful tenderer and all the expenses and incidental charges are to be born by the successful tenderer. Official Fees will be paid by ITDC.

**F)** All the above payments will be made subject to deduction of income tax @ 2% under section 194C(1) d of the income tax Act.

## **Inspection**

On readiness of the equipment the same shall be offered for inspection by tenderer giving 2 days advance intimation to enable us to depute our inspecting officer to inspect the equipment.

### **Insurance :**

For any material purchased by tenderer including the transformer, the insurance thereof including the risk, liability of the men at work, tools, tackles and machinery to be used by the tenderer, will be at tenderer's risk.

### **Make & Specification :**

As specified by S.E. MSEDCL Kolhapur , S.E. MSETCL, Karad & S.E.(TQA) MSEDCL, Pune. For details, visit web site of concern authorities for 11 kV line and metering cubical. All other equipment supplied should be approved make and as per the specification mentioned in tender. BOQ.

### **Attestation:**

To be done on all documents, true copies certificates to be tendered with seal while submitting tender.

Correction should be initiated with written intimation to ITDC authorities.

## Instruction to Tenderer

- 1) Jurisdiction of this tender will be Ichalkaranji only.
- 2) Tenderer to visit site and assess the site working condition before submitting his tenders.
- 3) Schedule of quantities is attached with tender, variation in Quantities may occur and payment will be done on only material consumed and at actual. No escalation will be permitted for quantities which may exceed over and above the quantities maintained in the BOQ .
- 4) Any error differences if found after scrutiny of tender the same shall be corrected by the tenderer in presence of the authorized representatives of the client and advisor.
- 5) Validity of value of tender will be for the whole period of the execution after acceptance of tender .
- 6) Tenderer whose tender will be accepted will have to enter into an agreement of Rs. 100/- stamp paper.
- 7) Service Tax if applicable has to be charged in the bill against which the payment will be made. However if it is not charged, in the bill will not be paid after words.
- 8) Sub-letting of contract will not be allowed .
- 9) Tenderer to prepare Bar/Part Chart and same shall be got approved from Electrical Advisor/ ITDC authorities.
- 10) Third party insurance, damage to public properties insurance, insurance of injuries accidents such as workmen and public during actual work will be liability of tenderer.
- 11) commencement time and delays should be notified with the advisor of the ITDC company Possession of site, Way leave is responsibility of tenderer.
- 12) Measurement of Quantities of work material will be done by ITDC representative and advisor and tenderer for approval of bills for payment. TDS, taxes payable will be deducted before payment of bill by company and certificates to the effect will be issued by the company to tenderer,.
- 13) If for the same reason tenderer fails to complete the job in stipulated period the same shall be got done by the ITDC authorities at risk and cost of tenderer. Additional 20% of cost over and above the accepted value of the tender will be charged in addition to the penalty amount.
- 14) All papers submitted by the tenderer should be invariably initiated and stamped by the tenderer.

- 15) Tender forms completed in all respects to be submitted to  
Ichalkaranji Textile Development Cluster Ltd,  
5/617, Swimming Pool Premises, Near Ved Bhavan, Ichalkaranji- 416115,  
Dist : Kolhapur, Tele Fax : (0230) 2421143, Tel:- 2421009
- 16) The ITDC reserves the right to reject any tender without giving any reason and is not bound to accept the lower or any tender.
- 17) ITDC reserve right to entrust the work to no. of contractors on lowest bid rates.

**Note :**

- 1) Civil Work connected with Transformer, Panel Erection and cable laying is in the scope of tenderer as per specification of MSEDCL, Kolhapur.
- 2) Any other work not specified in this tender and BOQ, but which are required to be carried out for completing the project in all respect and to the requirement of the statutory authorities and the MSEDCL etc are to be carried out without extra cost.
- 3) All approvals of following authorities is in the scope of tenderer.
  - a) S.E. MSEDCL, Kolhapur.
  - b) S.E. MSCTCL, Karad.
  - c) S.E. (TQA) MSEDCL, Pune
  - d) Electrical Inspector, Kolhapur.
  - e) Any other Govt. Authority
- 4) Drawing are available with the Advisor's office for inspection & Clarification.
- 5) Rate Quoted should be inclusive of all duties F.O.R. Site.
- 6) All material should be approved by MSEDCL Kolhapur authorities, for 11 KV line & metering cubical.
- 7) All tools, tackles, equipments, transportation, manpower etc. is in the scope of tenderer.
- 8) Right of Rejection reserved
- 9) As built drawing in hard copies ( 5 sets) and in soft copies ( either in the forms of CD or thumb drive) to be furnished by the successful tenderer and final payment will be released only after fulfilling this requirement.

Hence all drawings & Certificates of equipments should be submitted by the tenderer for the approval to the concern authorities before supply of material & inspection of electrical Inspector, Kolhapur is in the scope of tenderer.

# FORM B-1

## PERCENTAGE RATE TENDER AND CONTRACT FOR WORKS

### General Rules and directions for the Guidance of Contractors

1. All works proposed to be executed by contract shall be notified in a form of invitation to tender passed on a board hung up in office of the Managing Director and signed by the Managing Director.....

This form will state the work to be carried out as well as the date for submitting and opening tenders, and the time allowed for carrying out the work, also the earnest money to be deposited with the tender and the amount of security deposit to be deposited by the successful tenderer, and the percentage, if any, to be deducted from bills. It will also state whether a refund of a quarry fees, royalties, dues, and ground rates and any other documents copies of the specifications, designs and drawings, estimated rates, scheduled rates and any other documents required in connection with the work shall be signed by Managing Director for the purpose of identification and shall also be open for inspection by the contractors at the office of the Managing Director, ..... during office ours.

Where the works are proposed to be executed according to the specifications recommended by a contractor and approved by a competent authority on behalf of the company such specifications with designs and drawings shall form part of the accepted tender.

2. In the event of the tender being submitted by a firm, it must be signed by each partner thereof, and in the event of the absence of any partner, it shall be signed on his behalf by a person holding a power of attorney authoring him to do so.

2(A). i) The Contractor shall pay along with the tender the sum of Rs. \_\_\_\_\_  
(Rs. \_\_\_\_\_)

as and by way of earnest money by **demand draft in favour of Ichalkaranji Textile Development Cluster Ltd., payable at ICHALKARANJI** of any Nationalized/ Scheduled bank for the like amount in favour of the Managing Director, \_\_\_\_\_.

The said amount of earnest shall not carry any interest what so ever.

- ii) In the event of his tender being accepted, subject to the provisions of sub-clause (iii) below, the

said amount of earnest money shall be appreciated towards the amount of security deposit payable by him under conditions of General Conditions of Contract.

- 18) If, after submitting the tender, the contractor withdraws his offer or modifies the same, or if, after the acceptance of his tender the contractor fails or neglects to furnish the balance of security deposit without prejudice to any other rights and powers of the Company, hereunder, or in law, Company, shall be entitled to forfeit the full amount of the earnest money deposited by him.
3. Receipts for payments made on account of any work, when executed by a firm, should also be signed by all the partners except where the contractors are described in their tender as a firm, in a which case the receipt shall be signed in the name of the firm by one of the partners, or by some other person having authority to give effectual receipts for the firm.
4. Any person who submits a tender shall fill up the usual printed form starting at what percentage below or above the rates specified in Schedule 'B' (Memorandum showing items of work to be carried out) he is willing to undertake the work. Only one rate or such percentage of all the estimated rates/scheduled rates shall be named. Tenders which propose any alteration in the work specified in the said form of any sort will be liable to rejection. No printed form of tender shall include a tender for more than one work, but if Contractor who wish to tender for two or more works they shall submit a separate tender for each. Tender shall have the name and the number of work to which they refer written outside the envelope.
5. The Managing Director or his duly authorized assistant shall open tenders in the presence of the contractors who have submitted their tender or their representative who may be present at the time and he will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, the contractor shall, for the purpose of identification, sign copies of the specifications and other documents mentioned in Rule 1. In the event of tender being rejected the divisional officer shall authorize the treasury officer receipt for the refund of the money.
6. The officer concerned to dispose off the tenders shall have the right of rejecting all or any tenders.
7. No receipt for any payment alleged to have been made by a Contractor in regard to any matter relating to this tender or the contract shall be valid and binding on the company unless it is signed by the Managing Director.

8. The memorandum of work to be tendered for and the Schedule of materials to be supplied by the company and their rates shall be filled in and completed by the office of the Managing Director before the tender form issued. If a form issued to an intending tenderer has not been so filled in and completed, he shall request the said office to have this done before he completes and delivers his tender.
9. All works shall be measured net by standard measure and according to the rules and customs of the Department and their rates shall be without reference to any local custom.
10. Under no circumstances shall any Contractor be entitled to claim enhanced rates for items in this contract.
11. In case of Registered Contractors, contractor should produce along with his tender certificate of registration as approved Contractor in the appropriate class and renewal of such registration with date of expiry.
12. All Corrections and additions or pasted slips should be initiated.
13. The measurements of work will be taken according to the usual methods in use in the Department and no proposals to adopt alternative methods will be accepted. The Managing Director's decision as to what is "the usual method in use in the Department" will be final.
14. A tendering Contractor shall furnish a declaration along with a tender showing all works for which he has already entered into contract, and the value of the work that remains to be executed in each case on the date submitting the tender.
15. Every tenderer shall furnish a declaration along with the tender, information regarding the Income Tax Circle or Ward of the District in which he is assessed to Income tax, the reference to the number of the assessment and the assessment year, **Permanent Account Number Pan No.** \_\_\_\_\_.
16. The contractors shall also give a list of machinery in their possession and which they propose to use on the work in the form of statement No. II.
17. Successful tenderer will have to produce to the satisfaction of the accepting authority a valid and current license issued in his favour under the provisions of Contract Labour (Regulation and Abolition) Act, 1973 before starting work failing which acceptance of the tender will be liable for withdrawal and earnest money will be forfeited.
18. The Contractor shall comply with the provisions of Apprentices Act. 1961 and the rules and orders issued there under from time to time. If he fails to do so, his failure will be breach of the contract and the Managing

Director, may in his discretion cancel the contract. The Contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the Act.

19. In case of any dispute between Company and Contractor in the matter will be referred to sole arbitrator as per arbitration Act. Award of Arbitrator will be binding to both the parties.

20. Any legal action will be subject to Ichlakaranji jurisdiction.

Contractor

Managing Director

**Action when whole of security deposit is forfeited.**

**Clause 1** - In any case in which under any clause of this contract of the Contractor shall have rendered himself liable to pay compensation amounting to the whole of this security deposit whether paid in one sum or deducted by installments or in the case of abandonment of the work owing to serious illness or death of the Contractor or any other causes, the Managing Director, on behalf of the Company shall have power to adopt any of the following courses, as he may deem best to the interest of Government.

**a)** To rescind the contract (for which rescission notice in writing to the Contractor under the hand of Managing Directors shall be conclusive evidence) and in that case the security deposit of the Contractor shall stand forfeited and be absolutely at the interest of Company.

**b)** To carry out the work or any part of the work departmentally debiting the Contractor with the cost of the work, expenditure incurred on tools and plant, and charges on additional supervisory staff including the cost of work-charged establishment employed for getting unexecuted part of the work completed and crediting him with the value of the work done departmentally in all respects in the same manner and at the same rates as if it had been carried out by the Contractor

under the terms of his contract. The certificate of the Managing Director as to the costs and the other allied expenses so incurred and as to the value of the work so done departmentally shall be final and conclusive against the Contractor.

**c)** To order that the work of the Contractor be measured up and to take such part thereof as shall be unexecuted, out of his hands and to give it to another Contractor to complete, in which case all expenses incurred advertisement for fixing a new contracting agency, additional supervisory staff including the cost of work-charged establishment and the cost of the work executed by the new contract agency will be debited to the contractor and the value of he work done or executed through the new contractor shall be credited to the contractor in all respects and in the same manner and at the same rates as if it had been carried out by the Contractor under the terms of his contract. The certificate of the Managing Director as to all the costs of the work and other expenses as aforesaid for or in getting the unexecuted work done by the new contractor and as to the value of the work so done shall be final and conclusive against the Contractor.

In case the contract shall be rescinded under clause (a) above the Contractor shall not be entitled to recover or be paid, any sum for any work 18pproved18 actually performed by him under this contract unless and until the Managing Director shall have certified in writing the performance of such work and amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified. In the event of either of the courses referred to in Clause (b) or (c) being adopted and the cost of work executed departmentally or through a new contractor and other allied expenses exceeding the value of such work credited to the Contractor, the amount of excess shall be deducted from money due to the Contractor, by Government under the contract or otherwise howsoever or from

his security deposit or the sale proceeds thereof provided, however that the Contractor shall have no claim against Government even if the certified value of the work done departmentally or through a new contractor exceeds the certified cost of such work and allied expenses, provided always that whichever of the three courses mentioned in clauses (a), (b) or (c) is adopted by the Managing Director, the Contractor shall have no claim to compensation for any loss sustained by reason of his having purchased, or procured any materials, or with a view to the execution of the work or the performance of the contract.

**Action when the progress of any particular portion of the work is unsatisfactory**

**Contractor remains liable to pay compensation if action not taken under clause 3 & 4**

**Extension of time**

**Clause 2** - If the progress of any particular portion of the work is unsatisfactory, the Managing Director shall notwithstanding that the general progress of the work is in accordance with the conditions mentioned, be entitled to take action under after given the Contractor 10 days notice in writing. The Contractor will have to claim for compensation, for any loss sustained by him owing to such action.

**Clause 3** - In any case in which any of the powers conferred upon the Managing Director by clause 3 and 4 hereof shall have become exercisable and the same shall not been exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be excisable in the event of any future case of default by the Contractor for which under any clauses hereof he is declared liable to pay compensation amounting to the whole of his security deposit and liability of the Contractor for past and future compensation shall remain unaffected.

**Clause 4**- If the Contractor shall desire an extension of the time for completion of work on the ground of his having been unavoidably hindered in its execution or on any other grounds, he shall apply in writing to the Managing Director before the expiration of the period stipulated in the tender or before the expiration of 30

days from the date on which he was hindered as aforesaid or on which the cause for asking for extension occurred, whichever is earlier and the Managing Director in the opinion of Engineer as the case may be if in his opinion, there were reasonable grounds for granting an extension, grant such extension as he thinks necessary or proper, the decision of the Managing Director in this matter shall be final.

***Final  
certificate***

**Clause 5** - On the completion of the work the Contractor shall be furnished with a certificate by the Managing Director (hereinafter called the Engineer-in-charge) of such completion, but no such certificate shall be given nor shall the work be considered to be completed until the Contractor shall have removed from the premises on which the work shall have been executed, all scaffolding, surplus materials and rubbish and shall have cleaned off, the dirt from all wood work, doors, windows, walls, floor or other parts of any building in or upon which the work has been executed, or of which he may have had possession for the purpose of executing the work nor until the work shall have been measured by the Engineer-in-charge or where the measurements have been taken by his subordinates until they have received approval from the Engineer-in-charge the said measurements being binding and conclusive against the Contractor. If the contractor shall fail to comply with the requirements of this clause to the removal of scaffolding, surplus materials and the cleaning of dirt on or before the date fixed for the completion of the work the Engineer-in-charge may at the expenses of the Contractor, remove such scaffolding, surplus materials and rubbish and dispose off the same as he thinks fit and clean off such dirt as aforesaid and the Contractor shall forthwith pay the amount of all expenses so incurred, but shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually

realized by the sale thereof.

**Bills to be on printed forms.**

**Clause 6** - The Contractor shall submit all bills on the printed forms to be had on application at the office of the Engineer-in-charge. The charges to be made in the bills shall always be entered at the rates specified in the tender or in the case of any extra work ordered in pursuance of these conditions and not mentioned or provided for in the tender, at the rates hereinafter provided for such work.

**Works to be executed in accordance with specifications, drawings orders, etc.**

**Clause 7** - The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner, and both as regards materials and every other respect in strict accordance with specifications. The contractor shall also confirm exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work signed by the engineer-in-charge and loaded in his office and to which the contractor shall be entitled to have access for the purpose of inspection at such office, or on the site of the work during office hours. The contractor will be entitled to receive three sets of contract drawings and working drawings as well as one certified copy of the accepted tender along with the work order free of cost. Further copies of the contract drawings and working of required by him, shall be supplied at the rates Rs. \_\_\_\_\_ /- per set of contract drawing and Rs \_\_\_\_\_ /- per working drawing except where otherwise specified.

**Alteration in specification and designs not to invalidate contracts.**

**Clause 8-** The Engineer-in-charge shall have power to make any alterations in or additions to the original specifications, drawings, designs, and instructions that may appear to him to be necessary for advisable during the progress of the work, and the contractor shall be bound to carry out the work in accordance with any instructions in this connection which may be given to him in writing and signed by the engineer-in-charge and such alteration shall not invalidate the contact, and any

**Rates for works not entered in estimate or**

**schedule of  
rate of the  
district.**

**Extension of  
time in  
consequence of  
addition or  
alterations**

additional work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respects on which he has agreed to do the main work. And if the additional and altered work includes any class of work for which no rate is specified in this contract, then such class of work shall be carried out as the rates entered in the Schedule of Rates of the Division or at the rates mutually agreed upon between the Engineer-in-charge and the contractor, whichever are lower. If the additional or alter work for which no rate is entered in the Schedule of Rates Division, is ordered to be carried out before the rates are agreed upon the contractor shall within seven days of the date of receipt by him of the order to carry out the work inform the Engineer-in-charge of the rate which is his intention to charge for such class of work and if the Engineer-in-charge does not agree to this rate, he shall by notice in writing be at liberty to cancel his order to carry out such class of work, and arrange to carry out it in such manner as he may consider advisable provided always that if the contractor shall commence the work or incur any expenditure in regard thereto before the rates shall have been determined as lastly hereinbefore mentioned, then in such case he shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of the determination of the rate as aforesaid according to such rate or rate as shall be fixed by the engineer-in-charge. In the event of a dispute the decision of the Engineer-in-charge of the Company will be final. Where, however, the work is to be executed according to the designs, drawings, and specifications recommended by the Contractor and accepted by the Competent Authority the alterations above referred to shall be within the scope of such design, drawings and specifications appended to the tender.

The time limit for the completion of the work shall be extended in the proportion that the increase in its costs occasioned by alterations or additions bears to the cost of the original work, and the certificate of the Engineer-in-charge as to such proportion shall be conclusive.

***Time limit for unforeseen claims***

**Clause 9** Under no circumstances whatever shall the contractor be entitled to any compensation from company on any account unless the contractors shall have submitted claim in writing to the Engineer-in-charge within one month of the case of such claim occurring.

***Action and compensation payable in case of bad work.***

**Clause 10** If any time before the security deposit or any part thereof is refunded to the Contractor it shall appear to the Engineer-in-charge or his subordinate in charge of the work at any work has been executed with unsound, imperfect or unskilled workmanship or with materials of inferior quality, or that any material or articles provided by him to the execution of the work are unsound or of a quality inferior to the contracted for, or are otherwise not in accordance with the contract, it shall be lawful to the Engineer-in-charge to intimate this fact in writing to the contractor and then notwithstanding the fact that the work, materials, articles complained of may have been inadvertently passed, certified and paid for, the contractor shall be bound for with to rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or if so required shall remove the materials or articles at his own charge and cost and in the event of his failing to do so within a period to be specified by the engineer-in-charge in the written intimation aforesaid, the contractor shall be liable to pay the compensation at the rate of one percent on the amount of the estimate for everyday not exceeding 10 days during which the failure so continues and in case of any such failure Engineer-in-charge may rectify or remove and re-execute the work

***P.W.D.***

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94/ Bldg.-2  
Dated 14/6/89.***

or remove replace the materials articles complained of as the case may be at the risk and expense in all respect of the Contractor. Should the engineer-in-charge consider that any such inferior work or materials as prescribed above may be accepted or made use of, it shall be within his discretion to accept the same at such reduced rates as he may fix therefore.

**Work to be open to inspection**

**Contractor or responsible agent to be present.**

**Notice to be given before work is covered up.**

**Clause 11-** All works under or in course of execution or executed in pursuance of the contract shall at all times be open to inspection and supervision of the Engineer-in-charge and his subordinates, and the contractor shall at all time during the usual working hours, and at all other times at which reasonable notice of the intention of the Engineer-in-charge and his subordinates to visit the works shall have been given to the Contractor, either himself be present to receive orders and instructions, or have a responsible agent duly accredited in writing present for that purpose. Orders given to the Contractor's duly authorized agent shall be considered to have the same force and effect as if they had been given to the contractor himself.

**Clause 12-** The contractor shall give not less than five days notice in writing to the Engineer-in-charge or his subordinate in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof taken before the same is covered up or placed beyond the reach of measurement and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the Engineer-in-charge or his subordinate in charge of the work, and if any work shall be covered up or placed beyond the reach of measurement, without such notice having been given or consent obtained the same shall be uncovered at the contractor's expense, and in default thereof no payment or allowance shall be made for such work or for the materials with which the same

was executed.

**Contractor  
liable for  
damage done  
and for  
imperfections.**

**Clause 13** If during the period of \_\_\_\_\_ months from the date of completion certified by the Engineer-in-charge pursuant to clause 7 of the contract or \_\_\_\_\_ months after commissioning the work, whichever earlier in the opinion of the Managing Director the said work is defective in any manner whatsoever the contractor shall for with on receipt of notice in that behalf from the Managing Director duly commence execution in every respect all the work may be necessary for rectifying and setting right the defects specified therein including dismantling and reconstruction of unsafe portions strictly in accordance with and in the manner prescribed and under the supervision of the Engineer. In the event of the Contractor failing or neglecting to commence execution of the said rectification work within the period prescribed therefore in the said notice and/or to complete the same as aforesaid as required by the said notice, the Managing Director may get the same executed and carried out departmentally or by any other agency at the risk, on account and at the cost of the contractor. The contractor shall for with on demand pay to the Government the amount of such cost, charges and expenses sustained or incurred by the government of which the certificate of the Managing Director shall be final and binding on the contractor. Such costs charges and expenses shall be deemed to be arrears of land revenue and in the event of the contractor failing or neglecting to pay the same on demand as aforesaid without prejudice to any other rights and remedies of the Government the same may be recovered from the Contractor as arrears of land revenue. The Company shall also be entitled to deduct the same from any amount which may then be payable or which may therefore become payable by the Company to the Contractor either in respect of the said work or any other work whatsoever or from the amount of security

deposit retained by Company.

The defect liabilities period in particular for waterproofing treatment (building work) shall be 7 years.

**Contractor to supply plant, ladder, scaffolding etc.**

**And is liable for damages arising from non-provisions of light, fencing etc.**

**Clause 14** The contractor shall supply at his own cost all material (except such as special materials, if any as may, in accordance with the contract, be supplied from the P.W.D stores), plant, tools, appliances, implements, ladders, cordage, tackles, scaffolding and temporary works requisite or proper execution of the work, whether in the original, altered or submitted form, and whether included in the specification or other documents forming part of the contract or referred to in these conditions or not and may which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with the carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or the materials. Failing this the same may be provided by the engineer-in-charge at the expense of the contractor and expenses may be deducted from any money due to the contractor under the contract or from his security deposit or the proceeds of sale thereof, or a sufficient portion thereof. The contractor shall provide all necessary fencing and lights required to protect the public from accident and shall also be bound to bear the expenses of defense of every suit, action or other legal proceedings, at law that may be brought by any person for injury sustained owing to neglect of the above precautions, and to pay any damages and costs which may be awarded in any such suit action or proceedings to any such person, or which may with consent of the

contractor be paid for compromising any claim by any such person.

List of machinery in contractor's possession and which he proposes to use on the work should be submitted along with the tender.

**Clause 14 (A)** The contractor shall provide suitable scaffolds and working platforms, gangways and stairways and shall comply with the following regulations in connection therewith.

a) Suitable scaffold shall not be provided for workmen for all works that cannot be safely done from a ladder or by other means.

b) A scaffold shall not be constructed, taken down or substantially altered except

1) Under the supervision of a competent and responsible person; and

2) as far as possible by competent workers possessing adequate experience in this kind of work.

3) All scaffolds and appliances connected therewith and ladders shall

i) Be of sound material

ii) Be of adequate strength having regard to the loads and strains to which they will be subjected and

iii) Be maintained in proper condition.

d) Scaffolds shall be so constructed that no part thereof can be displaced in consequence of normal use

e) Scaffolds shall not be overloaded and so far as practicable the load shall be evenly distributed.

f) Before installing lifting gear on scaffolds special precautions shall be taken to ensure the strength and stability of the scaffolds.

g) Scaffolds shall be periodically inspected by a competent person.

h) Before allowing a scaffold to be used by his workmen the contractor shall whether the scaffold has been erected by his workmen or not, take steps to ensure

that it complies fully with the regulations herein specified.

i) Working platform, gangway, stairways shall

i) Be so constructed that no part thereof can sag unduly or unequally

ii) Be so constructed and maintained, having regard to the prevailing conditions as to reduce as far as practicable risks of persons tripping or slipping, and

iii) Be kept free from any unnecessary obstruction.

j) In case of working platform, gangways, working places and stairways at a height exceeding 2 mtrs (to be specified)

i) Every working platform and gangway shall be closely boarded unless other adequate measures are taken to ensure safety.

ii) Every working platform and gangway shall have adequate width, and

iii) Every platform gangway, working place and stairway shall be suitably fenced.

k) Every opening in the floor of a building in a working platform shall except for the time and to the extent required to allow the excess of persons or the transport of the shifting material provided with suitable means to prevent the fall of persons or material.

l) When persons are employed on a roof where there is a danger of falling from a height exceeding 2 mtrs (to be specified) suitable precautions shall be taken to prevent the fall of persons or material.

m) Suitable precautions shall be taken to prevent persons being struck by articles, which might fall from scaffolds or other working places.

n) Safe means of access shall be provided to all working platforms and other working places.

o) The contractor /(s) will have to make payments to labourers as per Minimum Wages Act 1948.

**Clause 14 (B)** The contractor shall comply with the following regulations as regards the Hoisting Appliances to be used

by him:

a) Hoisting machines and tackles, including their attachments, anchorages and supports shall

i) Be of good mechanical construction, sound material and adequate strength and free from patent defect.

And

ii) Be kept in good repair and in good working order.

b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of suitable quality and adequate strength and free from patent defect.

c) Hoisting machines and tackles shall be examined and adequately tested after erection on site and before use and be re-examined in position at intervals to be prescribed by the Government.

d) Every chain, ring, hook, schakle, shivel and pulley block used in hoisting or lowering materials or as a means of suspension shall be periodically examined.

e) Every cane driver or hoisting appliance operator shall be properly qualified.

f) No person who is below 21 years of age shall be in control of any hoisting machine including any scaffold, which give signals to the operator.

g) In case of every hoisting machine and of every chain, ring hook, shackle, swivel and pulley block used in hoisting or lowering or as a means of suspension, the safe workload shall be ascertained by adequate means.

h) Every hoisting machine and all gear referred to in preceding regulation shall be plainly marked with safe working load.

i) In the case of a hoisting machine having a variable safe working load each safe working load and the conditions under which it is applicable shall be clearly indicated.

j) No part of any hoisting machine or any

gear referred to in regulation (g) above shall be loaded beyond the safe working load except for the purpose of testing.

k) Motors, gearing, transmissions, electric wiring and other dangerous parts of hoisting appliances shall be provided with efficient safeguards.

l) Hoisting appliances shall be provided with such means as will reduce to minimum risk of accidental descent of the load.

m) Adequate precautions shall be taken to reduce to a minimum the risk of any part or suspended load becoming accidentally displaced.

**Measure for prevention of fire.**

**Clause 15** The contractor shall not set fire to any standing jungle, trees, bushwood, or grass without a written permission from the Executive Engineer. When such permit is given and also in the case when destroying, cut or dug up trees, bushwood, grass etc, by fire, the contractor shall take necessary measures to prevent such fire spreading to or otherwise damaging surrounding property. The contractor shall make his own arrangements for drinking water for the labour employed by him and provide them sanitary and other arrangements.

**Liability of Contractor for any damage done in or outside work area.**

**Clause 16** Compensation for all damages done intentionally by contractor's labours whether in or beyond the limits of the Company property including any damage caused by the spreading of fire mentioned in Clause 17 shall be estimated by Engineer-in-charge or such other officer as he may appoint and the estimate of the Engineer-in-charge subject to the decision of the Engineer on appeal shall be final and the Contractor shall be bound to pay the amount of the assessed compensation on demand failing which will be recovered from the contractor as damage in the manner prescribed in Clause 1 or deducted by Engineer-in-charge from any sums that may be due or become due from Government to contractor under this contract or otherwise. The contractor shall bear the expenses of defending any action or other legal proceedings that may be brought by any person for injury sustained by him owing to neglect of precautions to prevent

**Work not to subject**

**Contract may be rescinded and security deposit forfeited for subletting it without approval or for bribing a public officer or if contractor becomes insolvent.**

**Sum payable by way of compensation to be considered as reasonable compensation without reference to actual loss.**

**Changes in the constitution of firm to be notified.**

**Direction and**

the spread of fire and he shall pay any damages and cost that may be awarded by the court in consequence.

**Clause 17** The contract shall not be assigned or subject without the written approval of the Engineer-in-charge. And if the contractor shall assign or subject his contract, or attempt to do so, or become insolvent or commence any proceedings to get himself adjudicated and insolvent or make any composition with his creditors, or attempt so to do or if bribe, gratuity, gift, loan, perquisite, reward or advantage, pecuniary or otherwise shall either directly or indirectly be given, promised or offered by the contractor or any of his servants or agents to any public officer or person in the employment of company in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in-charge may thereupon by notice in writing rescind the contract, and the security deposit of the contractor shall thereupon stand forfeited and be absolutely at the disposal of company, and the same consequences shall ensure as if the contract had been rescinded under clause 3 thereof and in addition the contractor shall not be entitled to recover or be paid for any work thereof actually performed under the contract.

**Clause 18** All sums payable by a contractor by way of compensation under nay of these conditions shall be considered as a reasonable compensation to be applied to the use of company without reference to the actual loss or damage sustained, and whether any damage has or has not been sustained.

**Clause 19** In the case of tenders by partner, any change in the constitution of a firm shall be forthwith notified by the contractor to the Engineer-in-charge for his information.

**Clause 20** All works to be executed under

**control of the  
Superintending  
Engineer.**

the contract shall be executed under the direction and subject to the approval in all respects of the Engineer of the Company, for the time being, who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.

**Actions where  
no  
specifications  
.**

**Clause 21** In the case of any class of work for which there is no such specification as is mentioned in Rule 1 from B-1 such work shall be carried out in accordance with the Divisional specifications, and in the event of there being no Divisional specification then in such case work shall be carried out in all respect in accordance with all instructions and requirements of the Engineer-in-charge.

**Definition of  
work.**

**Clause 22** The expression "Work" or "Works" where used in these conditions, shall unless there be something in the subject or context repugnant to such construction, be construed to mean the work or works contracted to be executed under or in virtue of the contract whether temporary or permanent and whether original, altered, substituted or additional.

**Compensation  
under  
Workmen's  
compensation  
Act.**

**Clause 23** The Contractor shall be responsible for and shall pay any compensation to his workmen payable under workmen's compensation Act, 1923 (VIII of 1923) (herein after called the said Act) for injuries caused to the workmen. If such compensation is payable by the Government as principle used sub-section (1) of Section 12 of the said Act on behalf of the contractor, it shall be recoverable by the government from the contractor under sub-section (2) of the said section. Such compensation shall be recovered in the manner laid down in Clause 1 above.

**Entering upon  
or commencing  
any portion of  
work.**

**Clause 24** The contractor shall not enter upon or commence any portion of work except with written authority and instructions of the Engineer-in-charge or of his subordinate in charge of the work. Failing such authority the contractor shall have no claim to ask measurements of

or payment for work.

***Minimum age of person employed, the employment of donkeys and/or other animals and the payments of fair wages.***

**Clause 25**

- 19) No contractor shall employ any person under the age of 18 years
- ii) No contractor shall employ donkeys or other animals with breaching of string or thin rope. The breaching must be at least three inches wide and should be of tape (Newar).
- iii) No animal suffering from sores, lameness or emaciation or which is immature shall be employed on the work.
- iv) The Engineer-in-charge or his agent is authorized to remove from the work, any person or animal found working which does not satisfy these conditions and no responsibility shall be accepted by the Government for any delay caused in the completion of the work by such removal.
- v) The contractor shall pay fair and reasonable wages to the workmen employed by him, in the contract undertaken by him. In the event of any dispute arising between the contractor and his workmen on the grounds that the wages paid are not fair and reasonable the dispute shall be referred without delay to the Managing Director who shall decide the same. The decision of the Managing Director shall be conclusive and binding on the contractor but such decision shall not in any way affect the conditions in the contract regarding the payment to be made by Government at the sanctioned tender rates.
- vi) Contractor shall provide drinking water facilities to the workers. Similar amenities shall be provided to the workers engaged on large work in urban area.
- vii) Contractor to take precautions against accidents which take place on account of labour using loose garments while working near machinery.
- viii) All facilities provided in the Contract Labour (Regulation and Abolition Act 1971), the Maharashtra Contract Labour Regulation and Abolition Rule 1971 should

**Acceptance of conditions compulsory before tendering work**

**Employment of scarcity labour.**

**Maharashtra Act XIX of 1985, Clause regarding turnover tax vide P.W.D circular No. CAT-1086/CR-330 Bldg-2 Dated 10<sup>th</sup> June 1987**

**Government Circular No: CAT 1284(120) Building-2 Mantralaya Mumbai- 400032 Dated 14/08/85**

be provide.

**Clause 26** Any contractor who does not accept these conditions shall not be allowed to tender for work.

**Clause 27** If Government declares a state of scarcity or famine to exist in any village situated within 10 miles of the work, the contractor shall employ upon such parts of the work, as are suitable for unskilled labour, any person certified to him by the Executive engineer, or by any person to whom the Managing Director may have been delegated this duty in writing to be in need of relief and shall be bound to pay to such person wages not below the minimum which Government may have fixed in this behalf. Any disputes which may arise in connection with the implementation of this clause shall be decided by the Managing Director whose decision shall be final and binding on the contractor.

**Clause 28(a)** The tendered rates shall be inclusive of all taxes, cesses, and royalties. The amount of royalty shall be deducted from bills to deposit in the treasury of Government.

**Clause 29** The rates to be quoted by the contractor must be inclusive of sales tax. No extra payment on this account will be made to the contractor.

**Clause 30** The contractor shall duly comply with all the provisions of the contract Labour (regulation and Abolition) Act, 1970 (37 of 1970) and the Maharashtra Contract Labour (Regulation and Abolition) Rules, 1971 as amended from time to time and all other relevant statues and statutory provisions concerning payment of wages particularly for workmen employed by the contractor and working on the site of

the work. In particular the contractor shall pay wages to each worker employed by him on the site of the work at the rates prescribed under Maharashtra Contract Labour (Regulation and Abolition) Rules 1971. if the contractor fails or neglects to pay wages at the said rates or make short payments and the Government makes such payment of wages in full or part thereof less paid by the contractor as the case may be, the amount so paid by the Government to the workers shall be deemed to be arrears of land revenue and the Government shall be entitled to recover the same as such from the contractor or deduct the same from the amount payable by the Government to the contractor hereunder or from any other amount/s payable to him the Government.

**Clause 31                    CONDITIONS RELATING TO INSURANCE OF CONTRACT WORK**

The contractor shall take necessary Insurance Policy/ Policies so as to provide adequate insurance cover for execution of the awaited contract work for total contract value and complete contract period from the "Directorate of Insurance, Maharashtra State, Mumbai only. Its postal address for correspondence is "264 MHADA, First Floor Opposite Kalanagar, Bandra (East), Mumbai- 400051." (Telephone Nos. 022-26438690/26438746 and Fax no. 022-26438461). Similarly all workmen appointed to complete the contract work are required to insure under workmen's compensation Insurance Policy. Insurance Policy / Policies taken out from any other company will not be accepted and the amount of premium calculated by the Directorate of Insurance will be recovered directly from the amount payable to the contractor for the executed contract work.

**Clause 32-** Quantities mentioned in estimate of tentative and approximate and are subject to increase or decrease during executing, also owner reserves the rights to delete any items of work. The contractor shall have no right for any extra claim and his bill shall be paid on executed quantity as per tender only.

**Liquidated  
Damage**

**Clause 33-** In case of delay in execution of contract work within prescribed time limit penalty will be impose 1% per week and maximum 10% of the Contract value.

**Clause 34-** Work should be carried out under the supervision of Consultant V. A. Swami & Associates & Engineer of ITDC & and Electrical Engineer of M.S.E.D.C.L.

**Clause 35-** Each and every Material to be approved by Executive Engineer MSEDCL, Ichalkaranji & Electrical Consultant before supply of the material site.

Contractor

Managing Director

**STATEMENT NO.1**

**STATEMENT SHOWING WORK DONE IN CLASSES OF ELECTRICAL WORK DURING LAST THREE YEARS**

**NAME OF CONTRACTOR:-** \_\_\_\_\_

Sr. No.	Name of Work	Amount put to tender/ tendered cost	Agreement No.	Date of Commencement	Amount of work done during each of last three years.(Rs. In Lakhs)		Amount of work still remaining to be executed 2004-2005		Remarks
					2003-2004	2004-2005	2005-2006		
1	2	3	4	5	6	7	8	9	10
	GRAND TOTAL								

Contractor

Engineer

**STATEMENT NO.2**

**DETAILS OF LIST WORKS IN HAND AND WORKS TENDERED FOR AS ON**

Sr. No.	Name of Work	Agreement No	Tendered Amount	Date of Commencement	Stipulated Date of Completion	Value of work already done	Value of Balance Work	Probable date of completion	Remarks



Sr . No .	Name of work	Name and address of the organization for whom the work was done	Place and County	Agreement No.	Date of Commencement	Tendered cost	Total Cost of work done	Date of completion	Principal Features in brief
1	2	3	4	5	6	7	8	9	10

Contractor:

**Name of Work:- supply, erection, testing & commissioning of 1500 KVA Transformer Centre including all the associated works at 12 MLD CETP, R.S.No.610, Ichalkaranji.**

### DECLARATION OF THE CONTRACTOR

I/We hereby declare that I/we have made myself/ourselves thoroughly conversant with sub-soil conditions, the local conditions regarding all materials and labour of which I/we have based my/our rates for this work. The specifications, conditions, bore results and lead of materials on this work have been carefully studied and understood by me/us before submitting the tender. I/We undertake to use only the best materials approved by the Engineer, \_\_\_\_\_ or his duly authorized assistant, before starting the work and to abide by his decision.

I/We hereby further declare that my/our tender is unconditional in every manner of whatsoever in nature.

I/We hereby undertake to pay the labourers engaged on the work as per Minimum wages Act 1948 applicable to the zone concerned.

Signature of the Contractor(s).

Signature of Contractor

Managing Director

## Schedule –B

**Ichalkaranji Textile Development Cluster Ltd.**

Tender - Electrical Contract Work of Supply & Erection of 1500 KVA Transformer, and Installation of H.T & L.T Panels, Laying of HT & LT Cables, Earthing system etc of 11KV/433 V, 1500 KVA Transformer Sub Station(S/S )

**BILL OF QUANTITIES**

Sr. No.	Description	Qty	Unit	Rate/ Unit Rs.	Amount Rs	Total Rs.
	Supply Erection Testing, Commissioning of Transformer Sub Station work as under(including all the civil works & conforming to the requirement of MSEDCL.					
A 1	11 KV L.A.Set of 3 Nos	1	Set	3525	3525	
	2 L. A. Fixing Channel CH 75 x 40	1	Set	6200	6200	
	3 H.T. Earthing Set for LA (one set of 3 Nos)	3	No	600	1800	
	4 11 KV V X-Arm Clamp FI-50 x 8	2	No	100	200	
	5 G. I. Wire	10	Kg	80	800	
	6 11 KV Danger Board	2	Nos	50	100	
	7 M.S.Nut Bolts	10	Kg	75	750	
	8 Supply of 11 KV 3 Core XLPE Armoured aluminium cable 150 Sq. mm as per approved make only	35	RMT	1096	38360	
	9 HT Cable jointing Kit suitable for above 150 Sq. mm ( I-D & O-D type each including jointing works as per approved make only	1 (id)	Nos	8603	8603	
		1(od)	Nos	12247	12247	
	10 a. Laying above 11 KV 150 Sq. mm cable from 11 KV line to metering cubicle using 100 mm GI Pipe on pole and RCC "V" Gutter	35	RMT	28	980	

		in ground & covering the gutter using 100 mm RCC Slab ( m 20 ) and using sand & bricks for cable					
		b. G.I. Pipe ( 100 mm ) for cable support 3 Rmt	1	No.	1500	1500	
		c. RCC "V" Gutter with RCC cover 100 mm thick	30	RMT	150	4500	
	11	Channel for Cable Support CH 75 x 40	2	Nos.	1200	2400	
				<b>Total Rs.</b>	<b>A</b>	<b>81965</b>	<b>81965</b>
B	a)	Supply, Erecting, Testing, Commissioning of 11 KV/433 Volt, 1500 KVA Transformer on readymade foundation. ( Filtration of the oil in the transformer also be carried out before the testing & the commissioning of the transformer if necessary ) specification of Transformer as per Anex. 1 & approved make only	1	No	1961000	1961000	
	b)	Erection, Testing commissioning of RTCC AVR panel in control room using MS chanel 75 x 40 x 5 mm etc complete in all respect as per drawing. Appro. Size 600 x 600 x 2000 mm	1	No	2000	2000	
				<b>Total Rs.</b>	<b>B</b>	<b>1963000</b>	<b>1963000</b>
C	1	Supplying, Erection, Testing, Commissioning of metering cubicle as under inside Control Room on readymade foundation.  11 KV H T Metering Cubicle(Indoor type) with 3 Nos C.T. & 3 Nos. PT with LTOD Meter As per specifications and approval of MSEDCL and Chief Engineer ( Electrical ) PWD Department, Mumbai-400 007 and duly tested by MSEDCL Testing Division Kolhapur  C.T. Ratio - 80/5 VA. 10, CL : 0.5 (CT ratio to be confirmed as per MSEDCL sanction letter only) P.T.Ratio-11000/3/110 / 3 Volt VA:100, CL: 0.5 Make of Product : MSEDCL Approved	1	No	147202	147202	

				<b>Total Rs.</b>	<b>C</b>	<b>147202</b>	<b>147202</b>
D	1	Supply, Erecting, Testing, & commissioning of 11 KV VCB Panel indoor type inside control room using MS Chanel 100 x 50 x 5 mm. etc complete in all respect as per drawing and direction of consultant. Specification of VCB are as per enclosed Anex 2. & approved make only. Approximate size 1000 X 2000 X 2200 mm	1	No	404815	404815	
				<b>Total Rs.</b>	<b>D</b>	<b>404815</b>	<b>404815</b>
E	1	Supply laying and commissioning of 11 KV 3 Core XLPE Armoured alluminium cable 150 Sq. mm 3 core in trenches from metering cubicle to VCB panel and Transformer as per drawing and directions of consultant. Approved make only.	25	Mtr	1124	28100	
	2	Supply of 11 KV 150 Sq mm 3 core jointing kit including Jointing Work. Indoor Type. Approved make only.	4	Nos	860	3440	
E	3	Supply and laying of Copper conductor armoured PVC cables in built in trenhes, termination of cables using heavy duty compression type glands, copper lugs etc complete work in all respect including testing commsissioning as under ( Approved make only)					
	a	2.5 Sq.mm x 20 core cable from RTCC panel to Transformer OLTC panel	50	Mtr	507	25350	
	b	2.5 Sq.mm x 4 core cable from main panel to Transformer OLTC panel	25	Mtr	261	6525	
	c	2.5 Sq.mm x 2 core cable from LT panel to RTCC panel	25	Mtr	110	2750	
	d	2.5 Sq.mm x 2 core cable from RTCC to LV side of Transformer.	25	Mtr	110	2750	
	e	2.5 Sq.mm x 12 core cable from Transformer Marshaling Box to VCB Panel	25	Mtr	567	14175	
	f	2.5 Sq.mm x 2 core cable from Transformer Marshaling Box to VCB Panel	25	Mtr	110	2750	
	g	4 Sq.mm x 2 core cable from Transformer Marshaling Box to VCB Panel	25	Mtr	136	3400	

Sr. No.	Description	Qty	Unit	Rate/ Unit Rs.	Amount Rs	Total Rs.
E	4	Supply of heavy duty compression type glands, copper lugs etc complete material and cable termination connecting work in all respect including testing commssissioning as under				
	a	2.5 Sq.mm x 20 core cable from RTCC panel to Transformer OLTC panel	2	No	150	300
	b	2.5 Sq.mm x 4 core cable from main panel to Transformer OLTC panel	2	No	120	240
	c	2.5 Sq.mm x 2 core cable from LT panel to RTCC panel	2	No	100	200
	d	2.5 Sq.mm x 2 core cable from RTCC to LV side of Transformer.	2	No	98	196
	e	2.5 Sq.mm x 12 core cable from Transformer Marshaling Box to VCB Panel	2	No	150	300
	f	2.5 Sq.mm x 2 core cable from Transformer Marshaling Box to VCB Panel	2	No	100	200
	g	4 Sq.mm x 2 core cable from Transformer Marshaling Box to VCB Panel	2	No	120	240
	5	Suppy of 1.1 KV Aluminium condutor LT xipe 3.5 core 400 sq.mm armoured cable and laying 10 runs from transformer to LT panel providing M.S.Angle support in built in trenches etc complete in all respect as per drawing and direction of consultant. (Approved make only.) Quantity to be procuredas per actual measurement.	400	Mtr	1614	645600
	6	Suppy of heavy duty double compression type glands cnimping type bymetal lugs GI nut bolts etc and termination of cables connecting the cables taping with empire and PVC tape etc complete in all respect as per	20	No	454	9080

		drawing and direction of consultant					
				<b>Total Rs.</b>	<b>E</b>	<b>745596</b>	<b>745596</b>

F	a	<b>EARTHING</b>				
		Preparation of earth electrode station as per IS 3043 using centrifused casted CI earth electrode 2.5 Mtr length which should non-paintaed , 7 mm thick withclamp , 100 mm ID , wholes for watering , 2 Bags of 25 Kg grouting minaral (compound) and black soil etc . Job includes civil work of exacavation of earth pit ( or drilling hole by boring m/c for earth electrode, refiling by using 2 Bags of 25 Kg grouting minaral (compound) and black soil etc and supply fixing of RCC coller 9 " long ID - 14 " O.D 16 " with RCC cover as chember ) as per drawing and direction of consultant Earth testing should be carried out in presence of consultant and approved.	20	Nos	7000	140000
	b	Supply, Laying using GI spacer, sadles and making proper connection of copper earthing strip with each earth electrode station and electrical equipment by connecting one strip to other by brass nut bolt, washers/brazing the joints as per requirement.				
		i)Providing metering cubical earthing using 25 X 3 mm Copper strip.	40	Kg	460	18400
		ii)Providing transformer neutral earth using 50 X 6 mm Aluminium strip.	25	Kg	266	6650

	iii) Providing earthing using 40 x 6 mm Aluminium strip to transformer, VCB, metering cubicle, multy party Panel, chainlink fencing etc as per drawing and direction of consultants.	100	Kg	266	26600	
			<b>Total Rs.</b>	<b>F</b>	<b>191650</b>	<b>191650</b>

Sr. No.	Description	Qty	Unit	Rate/ Unit Rs.	Amount Rs	Total Rs.
G	1 Supply & Laying and fixing rubber matting of 12 mm thick x 1 Mtr. Width of ISI mark.	16	Rmt	1500	24000	
	2 Supply of Safety equipments					
	a) 4 Bucket with stand	1	Set	2129	2129	
	b) Shock treatment chart	2	Nos	56	112	
	c) 11 KV hand gloves	1	Pair	335	335	
	d) First Aid Box	1	Nos	400	400	
	e) Fire extiguisher Co2 gas type	1	Nos	2003	2003	
			<b>Total Rs.</b>	<b>G</b>	<b>28979</b>	<b>28979</b>
H	1 LIGHTING WORK					
	a) Supply of box type single fluorescent tube mounting channel fabricated from heavy gauge CRCA MS sheet, stove enamalled in white from inside with electronic ballast having THD less than 10% ( Life guarantee 2 years ) and supply of 36 Watt / 230 Volt 3250 lumen output flouroscent lamp etc complete.	8	Nos	1063	8504	
	b) FTL as above but in wheather proof IP-65 class.	2	Nos	1800	3600	
	c) Supply of 1200 mm Ceiling Fan of reputed make	1	Nos	1260	1260	
	2 LIGHT POINT WIRING WORK					

		a) Carrying out light point wiring work inside metering room using 20/25 mm heavy duty PVC pipe and accessories reputed approved make using GI saddles, screws and 1 sq. mm FR, PVC copper conductor wire from lighting DB to various lighting point, including installation of FTL as per drawing.	10	Nos	355	3550	
H	3	b) point wiring for independent plug as above using 1.5 Sqmm PVC FR copper conductor wire	1	Nos	200	200	
		LIGHTING DB Supply & installation lighting distribution board in sheet metal construction having copper busbar with protection class IP-54 as under Incomer – RCCB 4P 100 mA 10 A 4 No.Out going MCB SP 10 KA 2 A 2 No.Out going MCB SP 10 KA 6 A	1	No	7500	7500	
				<b>Total Rs.</b>	<b>H</b>	<b>24614</b>	<b>24614</b>
I	1	Approval & Testings					
	a	Approval & Testing of 1500 KVA transformer by MSEDCL testing authorities & clients representative/ consultant at works to be arranged by supplier. All incidental expenses, Travelling, Lodging boarding etc to be born by supplier. Official testing fee will be paid by ITDC.					
	b	Approval of material form MSEDCL authorities and ITDC & Electrical Consultant at site & at works of equipments. All expenses connected with testing of equipments at manufactures works to be born by supplier. Official MSEDCL fees will be paid by ITDC.	Lot				
	c	Testing of metering cubicle MSEDCL Testing Division Kolhapur, Testing fee & incidental expenses to be paid by supplier.	Lot				
d	Approval of all drawings from MSEDCL & Electrical Inspector Kolhapur. Govt. official fees will be paid by ITDC. Incidental expenses to be paid by supplier.	Lot	L/S	50000	50000		

e	Arranging HT meter testing at site with all formalities of MSEDCL authorities including testing fee & incidental expenses to be paid by supplier.	Lot				
f	Liasioning with MSEDCL & Electrical Inspector for commissioning of Transformer Centre including incidental & travelling expenses.	Lot				
g	Submission of all approved drawings and test certificates & as worked drawings in five sets to ITDC & electrical consultant.	Lot				
			<b>Total Rs.</b>	<b>I</b>	<b>50000</b>	<b>50000</b>
				<b>Grand Total</b>	<b>( A to I )</b>	<b>3637821</b>

Above quantities are base on estimated basis. Hence +/- 25% variation in quantity and amount to be considered. All drawings are available in consultant office and interested parties should study the drawings and visit to site before submitting the offer.

Note :-1) All material that will be used should be approved before procurement. Clients and consultant decision regarding make and specification of material is final & binding.

2) All approvals of drawings & Materials from MSEDCL Kolhapur and Electrical Inspector Kolhapur is in the scope of Electrical Contractor including liasoning & Coordination.

Engineer  
Consultant

Managing Director

## Annexure I

### Technical Specification of 1500 KVA Transformer

1	Rating	1500 kVA
2	No load Voltage Ratio	11/0.433 KV
3	Type	Outdoor Copper wond
4	Vector Group	Dyn11
5	Temperature rise (Oil / Wdg)	50 55 oC (Amb. 50 0C)
6	Cooling	ONAN
7	Type of Tap Changer	On Load Tap Changer
8	Tapping range	.+10% to - 10% in steps of 1.25%
9	Impedance	5% (Sub. To IS Tol.)
10	Termination	
	HV / LV	Cable Box / Cable Box
11	Orientation	180 o
12	Application	Outdoor
13	No Load Loss / Full Load Loss	2 /15 KW (sub. To IS Tol.)

### List of Fittings

Sr. No.	Description
1	Rating and Diagram Plate
2	Lifting Lugs, Jacking Pads.
3	Air Release Plug
4	Single portioned conservator with Oil filling hole & drain plug.
5	Explosion vent
6	Bottom Drain Cum filter valve
7	Top filter valve
8	Plain oil level gauge
9	2 Nos. Earthing Terminals

10	Silica gel breather
11	Detachable type radiators
12	4 Nos. Bi-directional flat rollers
13	6" Dial type oil temperature indicator with one no. trip contact
14	Marshalling Box
15	First fill of oil
16	Paint: Epoxy shade 631 of IS 5
17	OLTC with oil surge relay
18	RTCC panel and AVR

Engineer

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**Annexure II**  
**Technical Specification of 11 KV VCB**

DESCRIPTION	<u>QTY/PNL</u> <b>1 NO</b>
<p style="text-align: center;"><b><u>VACUUM CIRCUIT BREAKER :-</u></b></p> <p>Draw out type 11 KV, 630A, 25KA Horizontal Draw out VCB fitted with Manual / Motor operated spring charging mechanism with 240V AC Motor, Shunt trip coil of 48V DC, Closing Coil of 48V DC, Aux. Contact 4NO + 4NC, Mechanical ON/OFF indicator &amp; push button, mechanical operation counter.</p>	1
<p style="text-align: center;"><b><u>POTENTIAL TRANSFORMER:-</u></b></p> <p>Resin cast 1 Phase fixed PT with HT/LT fuses of ratio 11 KV/110V, Cl.0.5, 100 VA</p>	3
<p style="text-align: center;"><b><u>CURRENT TRANSFORMER:-</u></b></p> <p>Ratio : 80-40/5-5A Suitable, 10VA, Core 1: Cl.- 5 P 10 (PROTECTION), Core 2: Cl. 0.5 (METERING)</p>	3
<p style="text-align: center;"><b><u>METERING :-</u></b></p> <p>96 Sq.mm. DIGITAL Ammeter with selector switch 96 Sq.mm. DIGITAL Voltmeter with selector switch ENERGY ANALYSER –MULTIFUNCTION METER –Conserve make EM6400 WITH RS 232 or equivalent make.</p>	1 1 1
<p style="text-align: center;"><b><u>PROTECTION :-</u></b></p> <p>NUMERICAL RELAY 3 o/c E/F Aux. Relay for transformer protection Trip Circuit Supervision Relay. High Speed Trip Relay .</p>	1 2 1 1
<p style="text-align: center;"><b><u>INDICATIONS LAMPS / ANNUNCIATION (Led Type):-</u></b></p> <p>VCB ON/OFF/TRIP Indications lamps Trip circuit healthy lamp Spring charged Indication lamp Annunciator</p>	3 1 1 12 Window

<b><u>CONTROL SWITCHES/PUSH BUTTON :-</u></b>	
T-N-C Switch ( Breaker Control Switch)	1
Trip Circuit Healthy Push Button	1
<b>POWER PACK I/P : 230V : O/P : 48 V DC</b>	1
Control Wiring with appropriate colours, Copper conductor FRLS.	1 lot
Bus connection <b>630 Amps COPPER Busbars</b>	1 Set
<b><u>COMMON FOR SWITCHGEAR :-</u></b>	
Heater ON/OFF switch with space heater & Themostat, single phase switch with socket, cubcle Lamp for panel illumination with door limit switch, MCBs for AC/DC control	1 Set
MS sheet steel enclosure suitable for Indoor installation with provision for receiving incoming and outgoing FROM BOTTOM excluding termination kit and glands	1 Set

### Details of 12 Window Annunciator

Sr.No	Particular	Quantity in Nos
I	Backup protection (O/C + E/F) operated	1
II	Oil Temp Alarm for transformer 1	1
III	Oil Temp Trip for transformer	1
IV	Winding Temp Alarm for transformer 1	1
V	Winding Temp Trip for transformer 1	1
VI	Buchholz Alarm for transformer 1	1
VII	Buchholz Trip for transformer 1	1
VIII	OLTC Buchholz Alarm for transformer 1	1
IX	OLTC Buchholz Trip for transformer 1	1
X	D.C. low voltage / fail	1
XI	Space	2
	Total No of Windows	12

### List of Approved makes & Testing of equipments

<b><u>TRANSFORMER</u></b>	Crompton, Kirlosker, Volt-Amp, Transformer & Rectifier, Tewane Cromtek, universal. Company with ISO-9001 certificate and reputed in supplying Distribution Transformer with CPRI / ERDA test certificates. MSEDCL Testing & approval required before supply of Transformer at work to be arranged by supplier.
<b><u>VACUUM CIRCUIT BREAKER :-</u></b>	Siemens, ABB, Crompton, Megawin, PCE, Areava, Schneider. Company with ISO-9001 certificate and reputed in supplying VCB with CPRI/ERDA test certificate Testing of equipment at works before dispatch in presence of client representative for approval to be arranged by supplier.
<b><u>METERING CUBICAL :-</u></b>	As per latest specification and approval of MSEDCL, Head office Mumbai & Chief Engineer (Electrical) PWD Department Mumbai. Metering Cubical to be tested at MSEDCL, Testing Division, Kolhapur by Supplier before delivery at Site.
<b><u>HT / LT Cables:-</u></b>	CCI, RPG, Finolex, Primcab, Polycab, KEI, Havells. Company with ISO-9001 certificate CPRI / ERDA Test certificates.
<b><u>Cable Joints :-</u></b>	Reychem, Denson, M-seal
<b><u>FR Wires :-</u></b>	Lapp, RR, Finolex, Havells
<b><u>Light Fitting:-</u></b>	Philips / Wipro/ Bajaj / Crompton / Havells / GE
<b><u>Switchgear:-</u></b>	Siemens / L&T/ Schneider / Legrand / ABB

<b><u>Florescent Lamp:-</u></b>	Osram / Crompton/ Philips/ GE – 36 W , 230 V 3250 Lumen
<b><u>Electronic Ballast:-</u></b>	Osram / Crompton/ Philips/ GE / Wipro/ Intelux/Opal/ Shah. 24 Months warrenty & harmonics less than 10% THD
<b><u>PVC Pipes:-</u></b>	Finolex/ Precision/ ISO-9001 certified
<b><u>Lighting DB:-</u></b>	Siemens / Schneider / Legrand
<b><u>TOD mater</u></b>	L & T make
<b><u>Metering Cubical</u></b>	Hupen

Engineer

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Managing Director