

**I N D E X****NAME OF WORK : REPAIR & MAINT OF HT EXTERNAL ELECT, TRANSFORMER, AVR & UNDERGROUND CABLES OF SHARIFABAD MIL STN UNDER AGE (I) CIF (K)**

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(Signature of Contractor)  
Dated : \_\_\_\_\_

DCWE (Contracts)  
for Accepting Officer

Headquarters  
134 Works Engineers  
PIN-914134  
C/o 56 APO

80099/134 WE-02(T)/2026-27/ /E8

Apr 2026

M/S \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**NAME OF WORK : REPAIR & MAINT OF HT EXTERNAL ELECT, TRANSFORMER, AVR & UNDERGROUND CABLES OF SHARIFABAD MIL STN UNDER AGE (I) CIF (K)**

Dear Sir (s),

1. Tender documents in respect of above work are uploaded on the site **www.defproc.gov.in**. The tender is on single stage two cover e-tendering system. The contents of Cover I & Cover II are specified in NOTICE OF TENDER.
2. Bids will be received online by ACCEPTING OFFICER up to the date and time mentioned in the **NOTICE INVITING TENDER (NIT)**. No tender/bid will be received in physical form and any tender/bid received in such manner will be treated as non bonafide tender/bid.
3. Your attention is also drawn to instructions on filling and submission of tender attached herewith. You may forward your points on tender documents and/or depute your technical representative for discussion on tender/drawings and to clarify doubts, if any, on or before date & time fixed for this purpose. You are requested not to write piecemeal points and forward your points duly consolidated before due date fixed for this purpose.
4. Unenlisted contractors are required to submit the scanned copies (in pdf file) of documents required as per eligibility criteria mentioned in instructions for filling the tender documents and Appendix 'A' to **NIT** along with EARNEST MONEY DEPOSIT (EMD) and tender fee on [www.defproc.gov.in](http://www.defproc.gov.in) and submit the physical documents in the office of **HQ 134 Works Engrs** within time limit specified in **NIT**. Inadequacy/deficiency of documents shall make the bid liable for rejection resulting in disqualification for opening of finance bid.
5. The rates quoted by the contractor shall be deemed to be inclusive of all taxes viz GST, duties, Royalties, Cess & other levies payable under the respective Statutes, if any applicable as on end date of Bid Submission of tender. For details, refer Special Condition 35 of this Tender. It may be noted that conditional tender regarding this aspect and/or on any other account will not be considered and shall be liable to be **REJECTED**
6. Bidders shall also ensure that they are holding "GST Registration Number from concerned Authority". Bidders are advised to note that this shall be one of the mandatory criteria for qualifying in 'T' bid and shall be uploaded along with other documents. Bidders Non-uploading the same shall be disqualified in 'T'-evaluation and their finance bid shall not be opened.
7. Contractor having not executed standing security bond and standing security deposit in any MES formation shall upload scanned copy of EARNEST MONEY DEPOSIT (EMD) mentioned in Notice of Tender and shall ensure receipt of hard copy of EMD in the office of tender issuing authority before date & time fixed for this purpose. In case of failure to abide by any these two requirements, the finance bid will not be opened.
8. Enlisted contractor of MES shall submit the scanned copies (pdf file) of enlistment letter, tender fee and such other documents as mentioned in Appx 'A' to **NIT** [www.defproc.gov.in](http://www.defproc.gov.in) and submit physical documents in the office of **HQ 134 Works Engrs** before date & time fixed for this purpose.

Contd.../-

9. The contractor must ensure that the tender/bid on the proper form is uploaded in time as the Accepting Officer will take no cognizance of any quotations/offer received in any other electronic or physical form like email/fax/by hand/through post from tenderer/bidder even if they are received in time.

10. In case the BOQ is revised by the Department and the bidder has failed to quote in revised BOQ (i.e. he has quoted in previous/unrevised BOQ), such bid shall be treated as willful negligence by the bidder and his quotation shall be considered as non-bonafide. In such cases the lowest tender shall be determined by the lowest amount amongst the valid/bonafide bids only.

11. Any grievance concerning to this Contract Agreement on which contractor is not satisfied with decision of Accepting Officer shall be referred by him only to the Next Higher Engineer Authority (NHEA). The contractor shall under no circumstances communicate with any authority other than NHEA, unless he has exhausted the options to represent to all Engineer authorities upto NHEA. While representing his case to authorities above NHEA, copies of correspondence exchanged with all authorities shall be enclosed clearly bringing out his grievance on them. Any breach of this stipulation shall be treated as default on the part of the contractor and his grievance will not be entertained. In addition he shall be liable for disciplinary action as deemed fit by Registering Authority.

12 Any complaint against the contractor received from third party like suppliers of contractor, other contractors, his engineer, labouretc shall be referred to him by the GE/AGE (I). The contractor will be required to obtain settlement of the complaints from the originator and/or concerned authority and submit settlement letter to GE/AGE (I) within 15 days of receipt of referral from GE/AGE (I). Any failure in this regard will invite disciplinary action against the contractor by the Registering Authority.

13. In view of delays due to system failure or other communication related failures, it is suggested that the tender/bid be uploaded, if necessary, sufficiently in advance of the last due date and time fixed.

14. General Conditions of Contracts (IAFW-2249) (1989 Print) and errata and amendments thereto, Schedule of minimum fair wages and MES SSR (Part-I and Part-II) are not enclosed with these documents. These are available for perusal in the Office of GE/AGE (I) concerned and this office.

15. ANY TENDERER, WHICH PROPOSES ALTERATIONS TO ANY OF THE CONDITION, SPECIFICATIONS LAID DOWN IN THE TENDER DOCUMENTS OR ANY NEW CONDITION, WHATSOEVER, IS LIABLE TO BE REJECTED.

16. Your attention is drawn to the Official Secret Act -1923, particular section 5 thereof.

17. Your offer shall remain open for acceptance for a period of 60 days after bid submission end date (Refer critical dates).

Yours faithfully

**Signature of Contractor**

**DCWE (Contracts)  
For Accepting Officer**

**Encls:** One set of tender documents detailed on Index page .

**Uploaded on :** [www.defproc.gov.in](http://www.defproc.gov.in)

**INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER****1. EARNEST MONEY DEPOSIT (EMD)**

Contractor (s) who are not enlisted with MES/who are enlisted but have not executed the Standing Security Bond shall submit Earnest Money Deposit as detailed in Notice of Tender in one of the following forms, alongwith their tender/bid:-

- (a) Deposit at Call Receipt from a Scheduled Bank in favour of respective **AGE (I) CIF (K)**.
- (b) Receipted Treasury Challan, the amount being credited to the Revenue Deposit of respective **AGE (I) CIF (K)**.
- (c) It is advisable that Earnest Money is deposited in the form of deposit call receipt from an approved Schedule Bank for easy refund. In case the tenderer/bidder wants to lodge 'EARNEST MONEY DEPOSIT' in any other form allowed by MES, a confirmation about its acceptability will be obtained from the Accepting Officer well in advance of the bid submission end date and time. Earnest money Deposit shall be submitted in the name of respective **AGE (I) CIF (K)**. Notwithstanding all bidders shall be exempted from submission of EMD in all tenders except those who are ineligible from such exemption vide para here-in-below.
- (d) All bidders shall be required to sign the "Bid Securing Declaration" as below:-  
"I/We hereby understand and accept that if I/We withdraw or modify my/our bids during the period of validity, or if I/We are awarded the contracts and on being called upon to submit the Performance Security/Security Deposit, fail to submit the Performance Security/Security Deposit before the deadline defined in the request for bid documents/NIT, I/We shall be debarred from exemption of submitting Bid Security/EMD for a period of 06(six) months, from the date I/We are declared disqualified from exemption from submission of EMD/Security Deposit , for all tenders issued by MES during this period."

**Notes :** Earnest Money Deposit (EMD) in the form of cheque/Bank Guarantee etc will not be accepted. NON-SUBMISSION OF EARNEST MONEY DEPOSIT (EMD) (scanned copy alongwith Technical Bid & hard copy before the date & time fixed for opening of BOQ) WILL RENDER THE BID DISQUALIFIED FOR OPENING OF COVER II (FINANCE BID).

**2. GENERAL INSTRUCTION FOR COMPLIANCE**

2.1 The bids received only in the electronic form will be considered. All bids shall be submitted on 'defproc.gov.in' portal. Documents should be scanned and forwarded in 'pdf' form and 'xls' form as indicated.

2.2 Bids shall be uploaded on 'defproc.gov.in' portal on or before the bid closing date mentioned in the tender. No tender/bid in any other electronic or physical form like email/fax/by hand/through post will be considered.

2.3 Bid should be DIGITALLY signed using valid DSC. All pages of tender documents, corrections/alterations shall be signed/ initialed by the lowest bidder after acceptance.

2.4 Drawings, if issued in physical form, must be returned duly initialed by the tenderer/bidder in separate envelope indicating his name and address.

2.5 The tender shall be signed, dated and witnessed at all places provided for in the documents after acceptance. All corrections shall be initialed. The Contractor shall initial every page of tender and shall sign all drawings forming part of the tender. Any tender/bid, which proposes alterations to any of the conditions whatsoever, is liable to be rejected.

2.6 In the technical bid, a scanned copy of Power of Attorney in favour of the person uploading the bid using his/her DSC shall be uploaded. In case the digital signatory himself is the sole proprietor, scanned copy of an affidavit on stamp paper of appropriate value to this effect stating that he has authority to bind the firm in all matters pertaining to contract including the Arbitration Clause, shall be attached in 'pdf' form. In case of partnership concern or a limited company, digital signatory of the bid/tender shall ensure that he is competent to bind the contractor (through partnership deed, general power of attorney or Memorandum and Articles of Association of the Company) in all the matters pertaining to the contracts with Union of India including arbitration clause. A scanned copy of the documents confirming of such authority shall be attached with the tender/bid in 'pdf' form, if not submitted earlier. The person uploading the bid on behalf of another partner(s) or on behalf of a firm or company using his DSC shall upload with the tender/bid a scanned copy (in 'pdf' form) of Power of Attorney duly executed in his favour by such other or all of the Partner(s) or in accordance with constitution of the company in case of company, stating that he has authority to bind such other person of the firm or the Company, as the case may be, in all matters pertaining to the contract to the contract including the Arbitration Clause.

2.7 Even in case of Firms or Companies which have already given Power of Attorney to an individual authorizing him to sign tender in pursuance of which bids are being uploaded by such person as a routine, fresh Power of Attorney duly executed in his favour stating specifically that the said person has authority to bind such partners of the Firm, or the Company as the case may be, including the condition relating to Arbitration Clause, should be uploaded in 'pdf' form with the tender/bid; unless such authority has already been given to him by the Firm or the Company. It shall be ensured that power of attorney shall be executed in accordance with the constitution of the company as laid down in its Memorandum & Article of Association.

2.8 Hard copies of all above documents should be sent by the contractor to the Tender issuing authority well in advance to be received before the date & time fixed for the same.

2.9 Bid (Cover 1 & 2) shall be uploaded online well in time.

2.10 The Contractor shall employ Indian Nationals after verifying their antecedents and loyalty. Attention is also drawn to special condition 3 referred hereinafter and also conditions 24 & 25 of IAFW 2249 (General conditions of contract).

2.11 Tenderers/bidders who uploaded their priced tenders/bids and are desirous of being present at the time of opening of the tenders/bids, may do so at the appointed time.

2.12 The tenderer/bidder shall quote his rate on the BOQ file only. No alteration to the format will be accepted, else the bid will be disqualified and summarily rejected.

2.13 In case the tenderer/bidder has to revise/modify the rates quoted in the BOQ (excel sheet) he can do so only in the BOQ, through www.defproc.gov.in portal only before the bid closing time and date.

### **3. REVOCATION/REVISION OF OFFER UPWARD/OFFERING VOLUNTARY REDUCTION, AFTER OPENING OF FINANCIAL BIDS BY LOWEST BIDDER**

In the event of lowest tenderer/bidder revoking his offer or revising his rates upward/offering voluntary reduction, after closing of bid submission date & time, his offer will be treated as revoked and the Earnest Money deposited by him shall be forfeited. In case of MES enlisted Contractors, the amount equal to the Earnest Money stipulated in the Notice of tender, shall be notified to the tenderer/bidder for depositing the amount through MRO. Bids of such contractors/bidders shall not be opened till the aforesaid amount equal to the earnest money is deposited by him in Govt Treasury. In addition, bids of such tenderer/bidder and his related firm shall not be opened in second call or subsequent calls. Reduction offered by the tenderer/bidder on the freak high rates referred for review shall not be treated as voluntary reduction.

### **4. CPM (CRITICAL PATH METHOD)**

4.1 The project planning for work covered in the scope of tender is based on CPM.

4.2 The tenderer/bidder is expected to be fully conversant with the CPM technique and employ technical staff who can use the technique in sufficient details. Sufficient books and other literature on the subject are widely available in the market which the tenderer/bidder may make use of.

4.3 The tenderer's/bidders attention is drawn to special condition of the tender regarding preparation of the detailed network analysis and time schedule for the work and his liability for employing sufficient resources to adhere to this schedule. Any inability on the part of the tenderer/bidder in using the technique will be taken as his technical inefficiency and will affect his class of enlistment and future prospect/invitation to tenders for future works.

4.4 Department may issue amendments/errata in form of CORRIGENDUM to tender/revised BOQ to the tender documents. The tenderer/bidder is requested to read the tender documents in conjunction with all the errata/amendments/corrigendum, if any, issued by the department.

5. **DEFECT LIABILITY PERIOD** :- The work will have defect liability period of 12 calendar months from the date of handing over of asset to government.

6. These instructions shall form part of the contract documents.

**Signature of Contractor**

**DCWE (Contracts)  
for Accepting Officer**

**MILITARY ENGINEER SERVICES**  
**NOTICE INVITING TENDER (NIT)**

1. A tender is invited for the works as mentioned in Appendix 'A' to this NOTICE INVITING TENDER (NIT)
2. Tender work is estimated to cost as indicated in aforesaid Appendix 'A'. This estimate, however, is not a guarantee and is merely given as a rough guide and if the work cost more or less, a tenderer/bidder will have no claim on that account. The tender shall be based on as mentioned in aforesaid Appendix 'A'
3. The work is to be completed within the period as indicated in aforesaid Appendix 'A' in accordance with the phasing, if any, indicated in the tender from the date of handing over site, which will be on or after submitting performance security of the contract after the date of Acceptance of tender.
4. The officer of **Commander Works Engineer, HQ 134 WE** will be the Accepting Officer here in after referred to as such for purpose of the contract.
5. The Technical Bid and Financial Bid (Cover-1 and Cover-2) shall be uploaded by the tenderer/bidder on or before the date & time mentioned, in Critical dates. A scanned copy of DD with enlistment details/documents shall be uploaded as Cover-1 ('T' bid) of the tender/bid on e-tendering portal. DD is refundable in case T bid is not accepted resulting in non-opening of 'Q' bid. The applicant contractor shall bear the cost of bank charges for procuring and encashing the DD and shall not have any claim from Government whatsoever on this account.
- 6.1 Tender form and conditions of contract and other necessary documents shall be available on defproc.gov.in portal for download and shall form part of contract agreement in case the tender/bid is accepted.
- 6.2 In case of contractor who has not executed the Standing Security Bond, the Cover-1 shall be accompanied with by Earnest Money of amount as mentioned in Appendix 'A' in the form of deposit at call receipt in favour of concerned CCE/GE/GE(I)/AGE(I) (see Appendix 'A') by a scheduled Bank or in receipted treasury Challan the amount being credited to the revenue deposit of the concerned CCE/GE/GE(I)/AGE(I) (see Appendix 'A')
- 6.3 A contractor who is not enlisted for the area in which the work lies but whose name is in the MES approved list of any MES formation and who has deposited standing security and executed standing security Bond may bid without depositing earnest money alongwith the tender, but if the Accepting Officer accepts the tender/bid, the contractor will be required to lodge with the Controller of Defence Accounts concerned the amount of 'Individual security deposit' within thirty days of the receipt by him of notification of acceptance of his tender/bid, failing which this sum will be recovered from 1<sup>st</sup> RAR payment or from the first final bill. In the case of term/running contracts, remaining sum shall be recovered from subsequent bill (s) of the contractor.
- 6.5 The CCE/GE/GE(I)/AGE(I) will return the Earnest Money wherever applicable to all unsuccessful tenderers/ bidders by endorsing an authority on the deposit-at-call receipt for its refund, on production by the tenderer, bidder a certificate of the Accepting Officer that a bonafide tender/bid was received and all documents were returned.
- 6.6 The CCE/GE/GE(I)/AGE(I) will either return the Earnest Money to the successful tenderer/bidder by endorsing an authority on the deposit-at-call Receipt for its refund on receipt of an appropriate amount of Security Deposit or will retain the same in part or full on account of security deposit if such a transaction is feasible.
- 6.7 Copies of the drawings and other documents pertaining to the work signed for the purpose of identification by the Accepting Officer or his accredited representative, sample of materials and stores to be supplied by the contractor will also be available for inspection by the tenderer/bidder at the office of Accepting Officer and concerned GE/GE(I)/AGE(I) during working hours.

**Contd.../-**

**MILITARY ENGINEER SERVICES**  
**NOTICE INVITING TENDER (NIT)**

7. The tenderers/bidders are advised to visit the site of work by making prior appointment with GE/ GE(I)/ AGE(I)/ CCE/ Project Manager who is also the Executing Agency of the work (see appendix 'A'). The tenderers/bidders are deemed to have full knowledge of all relevant document, samples, site etc, whether they have inspected them or not.

8. Any tender/bid which proposed any alteration to any of the conditions laid down or which proposes any other condition or prescription whatsoever, is liable to be rejected.

9. The uploading of bid implies that bidder has read this notice and the Conditions of Contract and has made himself aware of the scope and specification of work to be done and of the conditions and rates at which stores, tools and plants etc will be issued to him and local conditions and other factors having bearing on the execution of the work.

10. Tenderers/bidders must be in possession of a copy of the MES Standards Schedule of Rates (see appendix 'A') including amendments and errata thereto.

11. Invitation for e-tender does not constitute any guarantee for validation of 'T' bid and subsequent opening of finance bid of any applicant/bidder, even of enlisted contractors of appropriate class, merely by virtue of enclosing DD. Accepting Officer reserves the right to reject the 'T' bid and not open the finance bid of any applicant/bidder. 'T' bid validation shall be decided by the Accepting Officer based on, inter alia, capability of the firm as per criteria given in Appx 'A' to this NIT. The applicant contractor/bidder will be informed regarding non-validation of his 'T' bid assigning reasons thereof through the [www.defproc.gov.in](http://www.defproc.gov.in). The applicant contractor/bidder if he so desires may appeal to the next higher Engineer authority CE, HQ 31 Zone on email [sswsnr2-mes@gov.in](mailto:sswsnr2-mes@gov.in) with copy to the Accepting Officer on email before the scheduled date of opening of Finance Bid. The decision of the Next Higher Engineer Authority (NHEA) shall be final and binding. The contractor/bidder shall not be entitled for any compensation whatsoever for rejection of his bid.

12. The Accepting Officer reserves the right to accept a tender submitted by a Public Undertaking, giving a price preference over other Tender (s)/bids which may be lower, as are admissible under the Government Policy. No claim for any compensation or otherwise shall be admissible from such tenderer/bidder whose tender/bid is rejected.

13. Accepting Officer does not bind himself to accept the lowest or any tender/bid or to give any reason for not doing so.

14. This **Notice Inviting Tender (NIT)** including Appendix 'A' shall form part of the contract.

15. **PERFORMANCE SECURITY.**

15.1 Within 28 days of receipt of the letter of Acceptance, the successful contractor shall deliver to the Accepting Officer a performance security in any of the forms given below for an amount equivalent to **5% (Five percentages)** of the contract sum. Work Order No 1 shall be placed only after submission of Performance Security of adequate value by the contractor.

- (a) A Bank Guarantee in the prescribe form.
- (b) Government Securities, FDR or any other Government Instruments stipulated by the Accepting Officer.

15.2. If the performance security is provided by the successful contractor in the form of a Bank Guarantee, it shall be issued Nationalized/ Schedule Indian Bank but its confirmation shall be done only from the Head Office of the Bank.

15.3 Failure of the successful contractor to comply with the equipments of clause 15.1 shall constitute sufficient grounds for cancellation of the award of work and forfeiture of the Earnest Money. In case of MES enlisted contractor. Amount equal to the Earnest Money Earnest stipulated in the Notice Inviting Tender, shall be notified to the tenderer for depositing the amount through MRO. Issue of tender to such tenderers shall remain suspended till the aforesaid amount equal to the Earnest Money is deposited in Government Treasury.

**Contd.../-**

**MILITARY ENGINEER SERVICES**  
**NOTICE INVITING TENDER (NIT)**

15.4 All compensation or other sums of money payable by the contractor to the Government under the terms of this contract or under any other contract with Government may be deducted from, or paid by the sale of a sufficient part of the Performance Security or from the interest arising there from or from any sums which may be due or become due to the contractor by the Government on any account whatsoever and in the event of his performance Security being reduced by reason of any such deduction, or sale as aforesaid, the contractor shall within ten days thereafter make good in cash or securities, enclosed as aforesaid, any sum or sums which may have been deducted from or realized by the sale of his Performance Security or any part thereof.

Government shall not be responsible for any loss of securities or any depreciation in the value of securities while in their charge nor for loss of interest thereon.

15.5 In the event of contract being cancelled, under Condition 52, 53 & 54 of General Conditions of Contract-2249, the Performance Security shall be forfeited in full and shall be credited into Consolidated Fund of India.

16. **Refund of performance security** : The performance Security Deposited shall be refunded to the contractor after the expiration of the defects liability period (vide Condition 46) by the Accepting Officer provided always the contractor shall first have been paid the final bill and have rendered a No-Demand Certificate (IAFW-451). Immediately after expiry of Defect Liability Period, GE/ AGE (I) concerned shall check and ascertain the position of final bill.

(a) In case final bill has been paid, Contractor shall be asked to submit the NO Demand Certificate (IAFW-451), if not already submitted by him. After submission of No Demand Certificate (IAFW-451), GE/ AGE (I) shall intimate to the Accepting Officer within a week who shall release the bond duly discharged to the contractor. Accepting Officer shall ensure that no delay occurs in releasing the Bank Guarantee Bond.

(b) In case final bill has not been paid, the status thereof shall be ascertained by Accepting Officer and effort shall be made to get it cleared within one month of expiry of Defect Liability Period. After clearance and payment of final bill, contractor shall be asked to submit the No Demand Certificate (IAFW-451), if not already submitted by him. After submission of No Demand Certificate (IAFW-451) to GE/ AGE (I) and on receipt of the same, Accepting Officer shall release the Bond duly discharged to the contractor without any delay.

17. **DEFECT LIABILITY PERIOD** :- The work will have defect liability period of 12 calendar months from the date of handing over of asset to government.

Signature of Contractor

DCWE (Contracts)  
for Accepting Officer

**APPENDIX 'A' TO NOTICE INVITING TENDER (NIT)**

1.	Name of work	<b><u>REPAIR &amp; MAINT OF HT EXTERNAL ELECT, TRANSFORMER, AVR &amp; UNDERGROUND CABLES OF SHARIFABAD MIL STN UNDER AGE (I) CIF (K)</u></b>															
2.	Estimated Cost	<b>Rs. 15,00,000.00</b> (As Per Market)															
3.	Period of completion	<b>180 days</b>															
4.	Cost of tender documents	<b>Rs. 500.00</b> in the form of DD/Bankers cheque from any Schedule Bank in favour of <b>AGE (I) CIF (K)</b> and payable at Srinagar.															
5.	Website/portal address	<a href="http://www.defproc.gov.in">www.defproc.gov.in</a>															
6.	Type of contract	The tender shall be based on drawing and specifications (IAFW2159)/IAFW 1779A and GCC (IAFW-2249) with Schedule 'A' (list of items of work) to be priced by contractor/ pre priced by MES. The contractor is required to quote the lump sum amounts for parts of Schedule 'A' and quote rates against items of other parts of Schedule 'A'.															
7.	<b>Information &amp; Details</b>	<b>Refer critical dates on the website.</b>															
	(a) Date of publishing																
	(b) Bid submission start date																
	(c) Last date of bid submission																
	(d) Date of bid opening																
8.	Eligibility Criteria																
	(A) For MES enlisted contractors.	Contractor shall be enlisted with MES in <b>Class 'E'</b> and above and <b>category b (ii)</b> subject to satisfactory remarks wrt performance in respect of works in hand as reflected in work Load Return (WLR) or any other report circulated by competent Engineer Authority.															
	(B) For contractors not enlisted with MES.	<p>(i) Contractor not enlisted with MES should meet the enlistment criteria of <b>'E' Class &amp; b (ii) category</b> contractor with regard to satisfactorily completion of requisite value works with Central/ State Government/ Central/ State PSUs/ AWHO/ AFNHB/ CGEWHO/ DGMAP, annual turnover, bank solvency, working capital and other requirements given in Para 1.4 &amp; 1.5 of Section 1 of MES Manual of Contracts 2020 as available in all MES formations as well as MES website (<a href="http://www.mes.gov.in">www.mes.gov.in</a>).</p> <p>(ii) Not carrying adverse remarks in Work Load Report (WLR) or any other similar report circulated by any competent authority, if already working MES.</p> <p>(iii) Not suspended/ debarred/ blacklisted (either permanently or temporarily) from participating in any bid or for business dealings by any Central/ State Government Department or any Central/ State Government PSU or any Autonomous Body under Central/ State Government or any Local Body as on the bid submission end date.</p> <p>(iv) Details of works completed and under progress in MES be submitted in the following format :-</p> <table border="1" data-bbox="565 2056 1502 2244"> <thead> <tr> <th>Srl No.</th> <th>CA No. &amp; Name of Work</th> <th>Value of CA</th> <th>Date of commencement</th> <th>Date of completion</th> <th>Extended date of completion</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>(v) Un-enlisted contractor who have secured two works in MES should get themselves registered in the appropriate designated Class with any Registration Authority, else the firm will not be eligible for participation in the tender unless until the firm is enlisted with the MES.</p>				Srl No.	CA No. & Name of Work	Value of CA	Date of commencement	Date of completion	Extended date of completion						
Srl No.	CA No. & Name of Work	Value of CA	Date of commencement	Date of completion	Extended date of completion												

	(C) Technical PQC criteria	In case of solar power works/ and Runway/ Pavements, Technical PQC criteria as stipulated in Manual on Contracts and as per policy letters issued by E-in-Cs Branch from time to time shall be included suitably.
9.	Tender issuing and Accepting Officer	Name : Col P Canon Anal Address : HQ 134 WE C/o 56 APO Phone No : 0194-2305251 Email Id : sswarc1343-mes@gov.in
10	Executing agency	<b>AGE (I) CIF (K), C/O 56 APO</b>
11	Earnest Money	<b>Rs. 30,000.00</b> in favour of <b>AGE (I) CIF (K), C/O 56 APO</b> in the form of Deposit at call receipt, FDR not acceptable.

**NOTES** :-

1. After opening of Cover I, if the number of MES enlisted contractors of eligible class as well as un-enlisted contractors, if any, fulfilling the other eligibility criteria given in NIT are less than 7 (Seven), applications in respect of contractors one class or two classes (in case of remote and difficult areas to be decided as per list circulated by CE command/ ADG) below the eligible class shall also be considered subject to fulfillment of other eligibility criteria given in the NIT. Therefore MES contractors one class below (two classes below in case of remote and difficult areas) may also bid for this tender. Such contractors (Contractors of one/two class below the eligible class) shall not be considered in case their present residual work in hand is more than **FIVE TIMES** their present tendering limit. However in case such contractors fulfill the criteria of up gradation to the stipulated eligible class based on experience of completed works (individual work experience and / or average annual turnover, as applicable) and financial soundness (solvency/ financial soundness and working capital), the ceiling of present residual work will not apply and they will be considered for issue of tender. Such bidders shall upload in their Cover-I bid details related to residual work in hand like details of works in hand showing names of work, names of accepting officers, contract accounts, dates of commencement and completion (stipulated) and progress as on bid submission date. Such contractors, if claim to fulfill the criteria of upgradation shall also upload the requisite information/ documents in support of up gradation. These details shall be verified by the Tender Issuing Authority from concerned formations in case bids of such contractors are considering for evaluation.

2. In case after opening of Cover-1, the number of MES enlisted contractors of eligible class as well as un-enlisted contractors, if any, fulfilling the other eligibility criteria given in NIT are 7 (Seven) or more, applications of only those one class below the eligible class bidders shall be considered, who have previously completed similar works satisfactorily and are meeting the criteria of upgradation in respect of past experience of completed works (individual work experience and/ or average annual turnover as applicable) and financial soundness (solvency/ financial soundness and working capital) as per details given in Manual on Contracts. Therefore such contractors shall upload the requisite information/ documents in the Cover-1.

3. Un-enlisted contractors shall be considered provided he meets the criteria. Foreign firms shall not be eligible for this tender. However Indian Firms having foreign national/ Indian nationals staying abroad/ Indian national having taken foreign citizenship, as director(s) shall be considered subject to security clearance from the concerned authorities.

4. Contractors enlisted with MES will upload following documents in Cover 1 for checking eligibility :-

- (a) Application for tender on Firm's letterhead.
- (b) Enlistment letter issued by the Registering Authority duly renewed for the cycle period in vogue.
- (c) Scanned copy of DD/ Bankers Cheque toward cost of tender and EMD instrument in case SSD bond is not signed at the time of registration.
- (d) GST registration No.

Contd.../-

5. Contractor not enlisted with MES will be required to upload following documents in Cover 1 for checking eligibility :-

- (a) Application for tender on Firm's letterhead.
- (b) Scanned copy of DD/ Bankers cheque toward cost of tender and Earnest Money Deposit (EMD) instrument.
- (c) Copy of police verification Report/ Police Clearance Certificate/ Character Certificate from the Police Authority of the area where the registered office of the firm is located/ notarized copy of valid passport of the proprietor/ each partner/ each Director.
- (d) All documents required for enlistment in MES for the class mentioned in Para 8(b) above as per Para 1.5 of Section 1 of MES Manual on Contracts 2020.
- (e) Details of works being executed in MES, if any.
- (f) Scanned copy of GST registration No and EPF No.

6. Tenders not accompanied by scanned copies of requisite DD/ Bankers cheque towards cost of tender and earnest money as applicable in Cover 1 shall not be considered for validation of "T" bid and their Financial Bids will not be opened.

7. Contractors should ensure that their original physical DDs and Earnest Money Deposit (EMD) instruments (as applicable) reach the office of Accepting Officer within 05 days of bid submission end date failing which following action shall be taken :-

(a) In case of tenders from an enlisted contractor of MES where scanned copies of the requisite DD/ Bankers cheque towards cost of the tender have been uploaded in Cover 1 but physical copies are not received within the stipulated period, their financial bids (Cover 2) will be opened. However non-submission of physical copies of cost of tenderer shall be considered as willful negligence of the tenderer with ulterior motives and such tender shall be banned from bidding for a period of six months commencing from date of opening of financial bid (Cover 2).

(b) In case of tenders from unenlisted contractor, where scanned copies of requisite DD/ Bankers Cheque towards cost of tender have been uploaded in Cover I but physical copies are not received within the stipulated period, their **financial bids (Cover 2) will not be opened**. Name of such contractors along with complete address shall be circulated for not opening of their bids for a period of six months commencing from the date of opening of Financial Bid (Cover 2).

(c) In case of tenders from enlisted and unenlisted contractors,, where scanned copies of instruments for Earnest Money Deposit (as applicable) have been uploaded in Cover I but the same are not received in physical form within stipulated period, such tenders shall not qualify for opening of financial bid (Cover 2).

8. Contractor will not be allowed to execute the work by subletting or through power of attorney to a third party/ another firm on his behalf. However a contractor can execute the work through power of attorney to sons/ daughters/ spouse of Proprietor/ partner/ Director and firm's own employees, director, project manager **provided they are not having a separate enlisted firm in MES in their name as Proprietor/ Partner/ Director**.

9. After opening of Cover I and during its technical evaluation, in case any deficiency is noticed in the documents required to be uploaded by the tenderers as per NIT, a communication in the form of e-mail/ SMS/ Speed Post etc shall be sent to the contractor to rectify the deficiency within a period of seven days from date of communication failing which their financial bid (Cover 2) Shall not be opened and contractor shall not have any claim on the same.

Contd.../-

10. Invitation for e-tender does not constitute any guarantee for validation of Technical bid and subsequent opening of financial bid of any applicant/ bidder merely by virtue of enclosing DD. Accepting Officer reserves the right to reject the Technical bid and not to open the financial bid of any applicant/ bidder. Technical bid validation shall be decided by the Accepting Officer based on eligibility of the firm as per criteria given in this Appendix. Tenderer/ bidder will be informed regarding non-validation of his Technical bid assigning reasons therefore through tender evaluation report which shall be uploaded on the website. Such tenderer, if desires, may appeal to the next Higher Engineer Authority (NHEA) viz HQ CE 31 Zone on email [sswsnr2-mes@gov.in](mailto:sswsnr2-mes@gov.in) with copy to the Accepting Officer on email [sswarc1343-mes@gov.in](mailto:sswarc1343-mes@gov.in) before the scheduled date of opening of Cover 2. NHEA shall decide the matter within a period of seven working days from the date of receipt of appeal. The decision of the NHEA shall be final and binding. The tenderer/ bidder shall not be entitled for any compensation whatsoever for rejection of his bid.

11. In case an un-enlisted contractor is already executing works in MES, he shall not be considered eligible for the subject tender if the total value of such works is more than twice the tendering limit of the MES Class of contractor for which it is eligible. For this purpose, details of the works being executed by such a contractor shall be uploaded in the Cover-I of the bid and shall be checked/ verified by the Accepting Officer.

12. In case the BOQ is revised through the corrigendum and the bidder has failed to quote on revised BOQ (i.e. he has quoted on pre revised BOQ) such bid shall be treated as willful negligence by the bidder and his quotation shall be considered non-bonafide. In such cases the lowest tender shall be determined from amongst the valid/ bonafide bids only. Accepting Officer may decide whether to re-tender or consider the lowest bonafide tender for acceptance.

13. Revoking the offer or revising the rates upward or offering voluntary reduction by the lowest tender after opening of Cover-2 shall be considered as a willful default. For this default a penalty of an amount equal of Earnest Money shall be levied. In case of an un-enlisted tenderer, Earnest Money deposited by him shall be forfeited. In case of MES enlisted tenderer having deposited the standing Security Bond, an amount equal to the earnest money stipulated in the NIT, shall be notified to the tenderer for depositing through MRO and consideration of such tenderer in tender evaluation for future works shall remain suspended till the aforementioned amount is deposited in the Government Treasury, No other disciplinary/ administrative action shall be taken against such tenderers. In such a situation, the next lowest offer shall not be considered for acceptance. Instead, retendering shall be resorted to in a transparent and fair manner and the defaulting tenderer and his related firm if any, shall not be eligible for this tender in second call or subsequent calls.

14. Irrespective of whatever is mentioned in condition 19.3 of IAFW-2249 with regard to suspension of tenders on account of non-submission of performance Security, issue of tenders to such tenderers shall remain suspended for a period of six months from the date of cancellation of contract under condition 19.3 of IAFW 2249 in case of un-enlisted contractors, In case of MES enlisted contractor, issue of tenders shall remain suspended till deposit of EMD or six months from the date of cancellation whichever is later.

15. Tender to related firms shall not be issued simultaneously. Firms shall be termed as related if Proprietor/ one or more Partners/ Directors are common. Decision of Accepting Officer on issue/ deny the tender to any one of the related firms shall be final and binding.

16. **Refer Condition 70 of IAFW 2249 (or condition 37 of IAFW 1815Z in case of furniture contract as applicable).** The request for invocation of arbitration and appointment of Arbitrator by either party shall be done mandatorily on MES Arbitration online platform (MIMAMSA). All proceedings related to such arbitration including submission of all documents shall be conducted on the subject platform and as per its applicable SOP. All procedural orders interim award, final award or any other information or direction given by the arbitrator shall be published by him/ her on the platform. Publishing and uploading of final award on the platform shall satisfy the requirements of Sec 31(5) of the Arbitration and Conciliation Act 1996. For purpose of calculating limitation period as per Sec 34(3) of the Arbitration and Conciliation Act 1996, the date of uploading of final award on the platform by the arbitrator shall be applicable.

**Signature of contractor**

HQ 134 Works Engrs  
PIN-914134  
C/o 56 APO

**Uploaded on : [www.defproc.gov.in](http://www.defproc.gov.in)**

**Copy to: -**

**INTERNAL :**

**DCWE (Contracts)  
for Accepting Officer**

Dated : Apr 2026

**IN LIEU OF IAFW-1779A**

**(TO BE USED IN CONJUNCTION WITH GENERAL CONDITION  
OF CONTRACTS IAFW-2249(1989 PRINT)**

**MILITARY ENGINEER SERVICES**

Headquarters  
134 Works Engineers  
PIN-914134  
C/o 56 APO

80099/134WE-02(T)/2026-27/ /E8

Apr 2026

**NAME OF WORK : REPAIR & MAINT OF HT EXTERNAL ELECT, TRANSFORMER, AVR  
& UNDERGROUND CABLES OF SHARIFABAD MIL STN UNDER AGE (I) CIF (K)**

1. Shri/ M/S \_\_\_\_\_ of \_\_\_\_\_ is/are hereby authorized to tender for the above mentioned work.
2. All requisite documents shall be uploaded along with the bid. Last date & time of submission / receipt of documents (offline) in respect of Cover-1 as per NIT as amended from time to time.
3. Any correspondence concerning this tender shall be addressed as indicated at the top of this sheet, quoting the reference as given.
4. **THE PRESIDENT OF INDIA DOES NOT BIND HIMSELF TO ACCEPT THE LOWEST OR ANY TENDER.**

(Signature of Contractor)

Dated : \_\_\_\_\_

Signature of officer  
Issuing the tender

Appointment : DCWE (Contracts)

**SCHEDULE 'A' NOTES****NAME OF WORK : REPAIR & MAINT OF HT EXTERNAL ELECT, TRANSFORMER, AVR & UNDERGROUND CABLES OF SHARIFABAD MIL STN UNDER AGE (I) CIF (K)**

1. Schedule 'A' of this contract has been divided into two parts as under:-
  - (a) Schedule 'A' Part -I - **As per BOQ.**
  - (b) Schedule 'A' Part -II - **Sch of Credit.**
2. The quantities (Approx No of units required) for all items of Schedule 'A' indicated under Col 3 are '**PROVISIONAL**'.
- 3.1 The tenderers are required to quote their rates against each item catered in Schedule 'A' (BOQ).
- 3.2 The unit rates under column 5 of Schedule 'A' (BOQ) shall be filled by the tenderer. The amount to column 6 & 7 of Schedule 'A' (BOQ) will be automatically calculated. In case of variation the rates quoted in words shall take precedence over the rates quoted in figures.
- 3.3 Method of measurement for all items in Schedule 'A' / BOQ shall be as given in MES SSR Part-II (Rates) (2020) unless specifically stated otherwise here-in-after for any particular items of work.
4. Description of works and items given under Col 2 of Schedule 'A' (BOQ) are in brief. This shall be deemed to be amplified and hence shall be read in conjunction with Particular Specifications, Specifications contained in the relevant trade sections of MES Standard Schedule including preamble and the contract drawings including notes therein.
5. All items in Sch 'A' (BOQ) are for "Material and Labour" in the description of items under Col 2 except where specifically mentioned as Material / Labour / Fixing only.
6. **PERIOD OF COMPLETION** :- Entire work under this contract comprising works described in Schedule 'A' (BOQ) shall be completed in an overall period of **180 days** from the date of handing over the site indicated in the first work order for the purpose. The site for entire work shall be handed over simultaneously.
7. Contractors quoted rate shall be deemed to include for all minor details, processes and operations which may not have been specifically mentioned or given in particular specifications and/ or general specifications and/ or special conditions but which are essential for the execution of works and services in a sound and workmanship like manner so as to be structurally and functionally sound. In case of any difference of opinion between the GE and the contractor as to whether or not certain items of works constitute(s) minor details, processes or operations which are deemed to be included in the contractor's contract sum, the decision of the Accepting Officer shall be final, conclusive and binding.
8. The abbreviation "Cum", "Sqm", "RM" and "X RM" where ever appear in the tender documents especially under column 4 of Schedule 'A' (BOQ) shall have the meaning "Cubic meter", "Square meter" "Running meter" and "Ten running meter" respectively.
9. **POWER OF ATTORNEY** :- Execution of work through Power of Attorney holder shall not be allowed.
10. Cost of testing charges shall be borne by the contractors which are required as per contract provision as well as specified in relevant clause of SSR/IS Code.
11. The provision of statutory laws relating to minimum wages, EPF, ESIC etc shall be strictly adhered to by the contractor and quoted rates shall deemed to included these factors.

Contd.../-

**SCHEDULE 'A' NOTES****12. TAXES**

- 12.1 As per latest Govt notification, the rates quoted by the tenderer shall be inclusive of all types of taxes, cesses, including GST, royalties, octroi, labour welfare cess etc. and other levies payable under respective statutes as applicable on the date of submission of tender. Any tender imposing any condition in this regard or on any other account shall be treated as a conditional tender and the same shall be liable to be rejected.
- 12.2 Certain taxes such as central excise duty, service tax, additional custom duty, state level value added tax, octroi and other levies which were applicable on interstate transportation of goods are subsume by GST, thus special condition for reimbursement of / refund on variation in prices in taxes directly related to contract value of tender shall be deemed to be amended incorporating GST in lieu of taxes mentioned in the condition but subsumed by GST.

**13. PERFORMANCE SECURITY**

- (a) Within 28 days of receipt of the letter of Acceptance, the successful contractor shall deliver to the Accepting Officer a Performance Security in any of the forms given below for an amount equivalent to **5%** of the Contract Sum. Work Order No. 1 shall be placed only after submission of Performance Security of adequate value by the contractor.
- (i) A Bank Guarantee in the prescribe form.
- (ii) Government Securities, FDR or any other Government Instruments stipulated by the Accepting Officer.
- (b) If the performance security is provided by the successful contractor in the form of a Bank Guarantee, it shall be issued Nationalized / Schedule Indian Bank but its confirmation shall be done only from the Head Office of the Bank.
- (c) The period of validity of Bank Guarantee Bond against performance security shall be upto and including schedule date of expiry of defect liabilities period.
- (d) Failure of the successful contractor to comply with the equipments of clause 13 (a) shall constitute sufficient grounds for cancellation of the award of work and forfeiture of the Earnest Money. In case of MES enlisted contractor an amount equal to the Earnest Money stipulated in the Notice Inviting Tender shall be notified to the tenderer for depositing the amount through MRO. Issue of tender to such tenderers shall remain suspended till the aforesaid amount equal to the Earnest Money is deposited in Government Treasury.
14. All compensation or other sums of money payable by the contractor to the Government under the terms of this contract or under any other contract with Government may be deducted from or paid by the sale of a sufficient part of the Performance Security or from the interest arising there from or from any sums which may be due or become due to the contractor by the Government on any account whatsoever and in the event of his Performance Security being reduced by reason of any such deduction or sale as aforesaid, the contractor shall within ten days thereafter make good in cash or securities, enclosed as aforesaid, any sum or sums which may have been deducted from or realized by the sale of his Performance Security or any part thereof.

Government shall not be responsible for any loss of securities or any depreciation in the value of securities while in their charge nor for loss of interest thereon.

- 14.1 In the event of Contract being cancelled, under Condition 52, 53 & 54 of General Conditions of Contracts (IAFW-2249), the Performance Security shall be forfeited in full and shall be credited into Consolidated Fund of India.
15. **DEFECT LIABILITY PERIOD** :- The work will have defect liability period of 12 calendar months from the date of handing over of asset to government.

Contd.../-

**SCHEDULE 'A' NOTES**

16.1 Makes of various items to be incorporated in the work have been specified in various documents viz. Schedule 'A' (BOQ), Particular Specifications & Appendix 'D' to the particular specifications which may be at variance with each other. In case of such variance, makes of the items shall be preferred in following order :-

- (a) Makes specified in schedule 'A' (BOQ).
- (b) Makes specified in Particular Specifications.
- (c) Makes specified in Appendix 'D' to Particular Specifications.

**Notes :-**

- (i) Brands/ makes/ manufacturer mentioned under **Group-II of Appx 'D' of Particular Specifications** shall be followed by the Contractor for the subject work. However, contractor may opt brands/ make/ manufacturers mentioned under Group-I without any extra cost to the Govt.
- (ii) If make of any item(s) not mentioned in Schedule 'A' / BOQ or tender documents, the same shall be decided and approved by GE/ AGE (I) before incorporating in the work. No claim any type shall be entertained on this account.

16.2 **EQUIVALENCY OF MAKES / BRANDS IN SCHEDULE 'A' (BOQ)** :- The equivalency of makes / brands as specified in Schedule 'A' (BOQ) to be read in conjunction with Appendix 'D', shall be decided by the GE/ AGE (I) and whose decision shall be final and binding. No claim of any compensation or otherwise shall be admissible in this regard. The contractor shall be deemed to have taken into consideration the above provisions before submitting his tender.

17. Special Conditions in MES SSR Part-I (2009) and preambles to items given in MES SSR Part-II (2020) under respective trade shall be applicable. If any provisions in the description of item of in Schedule 'A' (BOQ) and in particular specifications is at variance than the provisions in special conditions in MES SSR Part-I (2009) and preambles to MES SSR Part-II (2020), the provision in description of items shall take precedence there over.

18. **Site for execution of work will be available as soon as the work is commenced. In case, it is not possible for the department to make the entire site available on the commencement of work, contractor will have to arrange his working programme accordingly. No claim whatsoever for not giving the entire site on commencement of work and for giving the site gradually will be tenable.**

19. Contractor has to furnish labour engagement report daily to Engineer-in-Charge. In this regard refer Condition 26 of IAFW-2249.

20. Unless otherwise specifically provided in the items of in Schedule 'A' (BOQ), the cost of cuttings/ forming chases, holes, recesses in new masonry/ concrete as required for and making good the same in cement mortar (1:3) for filling up to 20mm and in PCC 1:2:4 type B-0 for filling beyond 20mm is deemed to be included in the unit rates quoted by the tenderer against the respective item of work. No price adjustment will be made consequent to any variation in the items/ quantities of items requiring for these works.

21. The materials/ articles retrieved while dismantling/ demolition/ taking down shall be the property of the Govt. The materials/ articles shall be deposited by the contractor in the MES store yard. The serviceable materials/ articles shall be stacked properly as directed by the Engineer-in-Charge. The retrieved material/ article shall not be reused in the work unless otherwise mentioned in Schedule 'A' (BOQ). The rates quoted by the tenderer/ bidder shall be deemed to include the transportation and/ or labour required. For the purpose nothing extra shall be admissible on this account.

22. Rates quoted by the contractor in respect of all items of demolition, dismantling, taking up/down, groove/chase hole, cutting and the like shall also be included for disposal of serviceable/ unserviceable material and debris irrespective of its having been described as such in in Schedule 'A' (BOQ) item or not.

**Contd.../-**

**SCHEDULE 'A' NOTES**

23. The work covered under this contract is to be carried out in buildings under occupation. Therefore the contractor shall plan progress of work in consultation with the Engineer-in-Charge / GE so as to cause least disturbance to the occupants and works to be completed within given time frame as directed by Engineer-in-Charge. The above aspect shall be deemed to be taken into consideration by the tenders while quoting the rates and no compensation whatsoever shall be admissible on this account.
24. The contractor shall procure (except sample) the material/ items/ equipments only after the sample of the material/ items/ equipments approved from GE/ AGE (I). No claim whatsoever shall be entertained on this account.
25. The Scope of work is as under :- **Job No : Maint Pgme FY 2026-27.**

**(Signature of Contractor)**  
Dated : \_\_\_\_\_

**DCWE (Contracts)**  
**for Accepting Officer**

**SCHEDULE 'A' PART-I (BOQ)**

REFER BOQ UPLOADED

(Signature of Contractor)  
Dated : \_\_\_\_\_

DCWE (Contracts)  
for Accepting Officer

**SCHEDULE 'A' PART-II**  
**(SCHEDULE OF CREDIT)**

<b>S.No</b>	<b>Description of item</b>	<b>Unit</b>	<b>Qty</b>	<b>Rate</b>	<b>Amount</b>
1.	Old unserviceable winding wire /copper strip any type	Kg	303.00	350.00	106050.00
2.	Old unserviceable HT/LT bushes of transformer any type and size.	Each	18.00	15.00	270.00
3.	Old unserviceable LT brass studs rod of transformer up to 600 KVA	Each	18.00	25.00	450.00
4.	Old unserviceable breather assy/temperature gauge	Each	11.00	15.00	165.00
5.	Old unserviceable Arching Horn	Each Job	5.00	25.00	125.00
6.	Old unserviceable Diapharm	Each Job	5.00	10.00	50.00
7.	Old unserviceable Transformer oil any strength	Ltrs	1500.00	15.00	22500.00
8.	Old unserviceable HT Spare parts (Male, female, belt, belt carrier & back plate etc).	Each	57.00	10.00	570.00
9.	Old unserviceable Earthing with connected accessories any type	Each set	27.00	250.00	6750.00
10.	Old unserviceable GOD any type	Each	4.00	1500.00	6000.00
11.	Old unserviceable Closing coil / Tripping coil	Each	4.00	50.00	200.00
12.	Old unserviceable Antipumping device	Each	3.00	70.00	210.00
13.	Old unserviceable Earth Fault relay	Each	2.00	200.00	400.00
14.	Old unserviceable Digital type power factor/ volt/Ammeter	Each	4.00	20.00	80.00
15.	Old unserviceable indicator lamp	Each	1.00	5.00	5.00
16.	Old unserviceable Vacuum Interupter	Each	3.00	100.00	300.00
17.	Old unserviceable spout incoming/out going side	Each	2.00	50.00	100.00
18.	Old unserviceable Epoxy insulators bushings	Each	3.00	5.00	15.00
19.	Old unserviceable spring charging motor with gear sysetm assy	Each	1.00	250.00	250.00
20.	Old unserviceable gear system assembly of VCB	Each	2.00	400.00	800.00
21.	Old unserviceable HT pole any size	Each	2.00	2600.00	5200.00
22.	Old unserviceable HT cable any size	RM	40.00	10.00	400.00
23.	Old unserviceable GI pipe 80mm size	RM	10.00	20.00	200.00
<b>Total</b>					<b>151090.00</b>

**Notes :-**

1. The tenderers are required to inspect/ assess the condition of material at site of work before quoting their tender. The retrieved (unsv) material will be handed over to the contractor in the existing condition and the recovery of material will be effected at the rates given above irrespective of the condition of material and whether the material at site exist or not and nothing extra/ less will be recovered/ claimed on this account. Serviceable retrieved material, if not utilized in the work, shall be taken on charge.
2. The material as mentioned in Sch 'A' **Part-II** shall be recorded in MB duly accepted by the contractor. The quantity/Number of material may vary as per Sch 'A' **Part-I**, however, the recovery will be made for the quantity actually provided against each item of Sch 'A'.
3. Any material other than as mentioned above in **Sch 'A' Part-II** shall be the property of Govt and shall be deposited by the contractor in Store Yard of **AGE (I) CIF (K)** and the same shall be taken on charge.

(Signature of Contractor)

Dated : \_\_\_\_\_

DCWE (Contracts)  
for Accepting Officer

**SCHEDULE 'B'**  
**ISSUE OF MATERIALS TO CONTRACTOR**  
**(REF CONDITION 10 OF IAFW-2249)**

Ser No	Description of material	Unit	Rate at which material will be issued to contractor	Place of issue by name	Remarks
1	2	3	4	5	6
-NIL-					

**SCHEDULE 'C'**

**ITEMS OF TOOLS AND PLANTS (OTHER THAN TRANSPORT WHICH WILL BE ISSUED TO THE CONTRACTORS**

(See Condition 15, 34 & 35 of IAFW-2249)

Ser No	Quantity	Particulars of Crew	Details	Hire charges per unit per working day		Standby charges per unit of off day		Place of issue	Remarks
				Rs.	Ps.	Rs.	Ps.		
-NIL-									

**SCHEDULE 'D'**

**TRANSPORT TO BE HIRED TO THE CONTRACTOR**

(See conditions 16 and 35 of IAFW-2249)

Ser No	Particulars	Rate per unit per working day		Place of issue	Remarks
		Rs.	Ps.		
-NIL-					

(Signature of Contractor)

Dated : \_\_\_\_\_

DCWE (Contracts)  
for Accepting Officer

**TENDER****(TO THE PRESIDENT OF INDIA)**

Having examined and perused the following documents:-

1. Specifications Signed by **DCWE (Contracts)**.
2. Drawings detailed in the Specification.
3. Schedule 'A' (BOQ), 'B', 'C', 'D' attached hereto.
4. MES Standard Schedule of rates 2009 (Part-I) (Specifications) and 2020 (Part-II) (Rates), (here-in-after and in IAFW-2249 referred to as the MES Schedule together with Errata No Nil amendment No 01 to 03 for Part-I, amendment No 1 to 122 for Part II (Rates) and amendment of the above said schedule as applicable).
5. General conditions of contracts IAFW-2249 (1989 Print) together with amendment No 1 to 51 and Errata 1 to 20.
6. **Water**. Refer conditions 31 of IAFW-2249 (General Conditions of contract). **Water will not be supplied by the MES.**
7. Should this tender be accepted, I/We agree:-

(a)\* To the sum of **Rs. 30,000.00 (Rupees Thirty thousand only)** forwarded as earnest money of a successful contractor shall be retained and will be refunded by the department on receipt of an appropriate amount as performance security, on failure of successful contractor to submit performance security as specified in condition 19.1 of IAFW-2249 shall constitute sufficient ground for cancellation of award of work and forfeiture of earnest money.

(b) Within 28 days of receipt of the letter of acceptance, successful contractor shall deliver to the accepting officer a Performance Security in the form of BGB/FDR or as directed by Accepting Officer an amount equivalent to **5% (five percent)** of the contract sum.

(c) To execute all the works referred to in the said documents upon the terms and conditions contained or referred to therein and as detailed in General Summary and to carry out such deviations as may be ordered vide condition 7 of IAFW-2249, up to maximum **10% (Ten Percent)** and further agree to refer all the disputes as required by condition 70 of IAFW-2249 to the Sole Arbitration of serving officer having degree in Engineering or equivalent or having passed final/direct final examination of Sub Divn II from Institute of Surveyors (India) Recognized by Govt of India, to be appointed by Chief Engineer Zone, HQ 31 Sub Area, C/o 56 APO whose decision shall be final, conclusive and binding.

**\*Note** : to be deleted where not applicable.

**Contd.../-**

**GENERAL SUMMARY**

1.	Total of Sch 'A' Part-I (BOQ)	-	Rs. _____
2.	Deduct for Sch 'A' Part-II (Credit) brought fwd from Srl Page No. 19.	-	(-) <b>Rs. 151090.00</b>
	Net amount carried over to next page	-	Rs. _____ _____

Signature of contractor

**DCWE (Contracts)  
for Accepting Officer**

Total brought forward from serial Page No \_\_\_\_\_ Rs. \_\_\_\_\_

(Rupees \_\_\_\_\_

\_\_\_\_\_ )

Signature \_\_\_\_\_ in the capacity of \_\_\_\_\_

duly authorised to sign the tender for and on behalf of \_\_\_\_\_

\_\_\_\_\_ (in block letters) dt \_\_\_\_\_

Witness \_\_\_\_\_

Postal Address

\_\_\_\_\_

Telegraphic Address \_\_\_\_\_

\_\_\_\_\_

Telephone Nos, if any \_\_\_\_\_.

\_\_\_\_\_

**ACCEPTANCE**

\_\_\_\_\_ alterations have been made in these documents and evidence that these alterations were made before the execution of the contract agreement these have been initialed by the contractor and **DCWE (Contracts), HQ 134 Works Engrs, C/o 56 APO.**

The said office is hereby authorised to sign and initial on my behalf the documents forming part of this contract.

The above tender is accepted by me on behalf of the President of India the item rates contained in the Schedule 'A' Rs. \_\_\_\_\_ (Rupees.....  
.....  
.....only)

Signature dated this \_\_\_\_\_ day of \_\_\_\_\_ 2026.

**Appointment  
Commander  
HQ 134 Works Engineers  
(For and on behalf of the  
President of India)**

**SPECIAL CONDITIONS****1.0 GENERAL**

- 1.1 The following special conditions shall be read in conception with General Conditions of contracts IAFW-2249 (1989 Print), including errata/amendments thereto. If there are any provisions in these special conditions, which are at variance with the provisions in the above-mentioned documents; the provisions in these special conditions shall be deemed to take precedence.
- 1.2 General Rules, preambles, special conditions, method of measurements etc. specified in MES Standard Schedule of Rates shall be applicable unless specific provisions to the contrary are made in these tender documents.

**2.0 VISIT TO SITE (S) OF WORK**

The tenderers are advised to visit the site(s) of work with prior permission of GE/AGE (I) and make themselves familiar with the local working conditions, accessibility to sites(s), availability of material and other relevant conditions which affect their pricing, workman like execution and entire completion of work. The tenderer shall be deemed to have visited the site(s) before tendering whether they actually visit or not.

- 3.0 **RESTRICTION FOR ENTRY TO WORKS SITE** :- All works lies in **RESTRICTED AREA**. The restrictions for entry to work site and conditions of working in restricted area shall be as under.

(a) **ENTRY AND EXIT** : The contractor/his agents/representatives/ workmen etc, and his materials, carts, trucks or other means of transport etc. will be allowed to enter through and leave from only such gate or gates and at such times as the GE/AGE (I) or authorities in charge of the restricted area may at their sole discretion permit to be used. Contractor's authorised representative is required to be present at the places of entry and exit for purpose of identifying his carts, trucks, etc. to the personal in charge of the security of the restricted area.

(b) **IDENTITY OF WORKMEN** : Every workman shall be in possession of an identity card. The identity card shall be issued after a thorough investigation of antecedents of the labourers by the contractor and attested by Officer-in-Charge of the unit concerned in accordance with the standing rules and regulations of the unit. Contractor shall be responsible for conduct of his workmen, agents or representatives.

(c) **IDENTITY CARD OR PASSES** : The contractor, his agent and representatives are required individually to be in possession of an identity card or pass which will be examined by the security staff at the time of entry into or exit from the restricted area at any time or number of times inside restricted area.

(d) **SEARCH** : Thorough search of all persons and transport shall be carried out at each gate and for as many times gate is used for entry or exit and may also be carried out any number of times at the site within the restricted area.

(e) **WORKING HOURS** : The units controlling restricted area, usually work during six days in a week and remain closed on the 7<sup>th</sup> day. The working hours available to the contractor's labour and staff are however appreciably reduced because of the time of entry and exit during working hours. The exact working hours, working days and number of working days observed for these restricted area (s) where works are to be carried out shall be deemed to have been ascertained by contractor before submitting his tender. The tenderers' attention is invited to the fact that number of working hours for a unit are prescribed in regulations and that they cannot be increased by the Garrison Engineer or authorities controlling the restricted area. The definition of "working days" as given under condition 1(t) of IAFW-2249 does not apply in case where the works are carried out in restricted area.

(f) **WORKING ON HOLIDAYS** : The contractor shall not carry out any work on gazetted holidays, weekly holidays and other non working days except when he is specially authorised in writing to do so by the Garrison Engineer. The GE/AGE (I) may at his sole discretion declare any day as holidays or non working day without assigning any reasons for such declaration.

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**SPECIAL CONDITIONS****(g) FIRE PRECAUTIONS :**

- (i) The contractor, his agents, representatives, workmen etc. shall strictly observe the order pertaining to fire precautions prevailing within the restricted area.
- (ii) Motor transport vehicle, if allowed by the authorities to enter the restricted area must be fitted with the serviceable fire extinguisher.

**(h) FEMALE SEARCHER :** If the contractor desires to employ female labour on works to be carried out inside the area of factory, depot, park etc, and a female searcher is not borne on the authorised strength of the factory, depot, park etc. at the time of submission of tender, he shall be deemed to have allowed in his tender for pay and allowances etc for a female searcher (Class IV servant) calculated for the period female labourers employed by him inside that area. If more than one contractor employs female labourers during any month and female's searcher (s) has/have to be employed in addition to the authorised strength of the factory, depot, park etc. the salary and allowances paid to the additional female searchers shall be distributed on equitable basis between the contractors employing female labour taking into consideration the value and period of completion of their contracts. The AGE (I)/ GE's decision in regard to the amount payable on this account by any contractor shall be final and binding.

**(j) OFFICIAL SECRET ACT :** The contractor shall be bound by the Indian Official Secret Act, 1923, particularly Section 5 thereof all as per condition 2A of IAFW-2249.

**4.0 CONTRACTOR'S REPRESENTATIVES/AGENTS AND WORKERS**

- 4.1 The contractor shall employ only Indian Nationals and verify their antecedents and loyalty before employing them on the work. He shall ensure that no person of doubtful antecedents and nationality is in any way associated with the work. If for reasons of technical collaboration or other consideration the employment of any foreign national is unavoidable, the tenderers shall furnish full particulars of such persons to the Accepting Officer at the time of submission of tender. As a proof that he has employed only Indian Nationals, the contractor shall render a certificate to this effect to GE/AGE (I) within one month from the date of commencement of work.
- 4.2 The GE/AGE (I) shall have full power, and without giving any reasons to order the contractor immediately to cease to employ in connection with this contract any representatives, agent, servants and workmen or employees whose continued employment in his (GE/AGE(I)'s) opinion is undesirable. The contractor shall not be allowed any compensation on this account.
- 4.3 Tenderer's attention is also drawn to condition 25 of IAFW-2249 in this connection.
- 4.4 **VERIFICATION OF ANTECEDENTS:** Verification of antecedents of the Contractor's representatives/ labour deployed at site in connection with execution of work under the Contract, as per security requirement of user unit/ installation shall be the responsibility of the Contractor and all expenses in connection with verification of antecedents by police authority/ security agency shall be borne by the Contractor.
- 5.0 **HOURS OF WORKING :** The working hours shall be as notified by the authority controlling the area, which will be normally from 0800hours to 1700 hours. If, however, contractor wants to work beyond these normal hours he can do so if permitted by the GE/AGE (I) in writing. Similarly no work will be allowed to be carried out on Sunday and gazetted holidays unless specifically permitted by the GE/AGE (I) in writing.

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**SPECIAL CONDITIONS****6.0 LAND FOR STORAGE OF MATERIALS, WORKSHOP, OFFICE AND ACCOMMODATION FOR LABOURERS**

- 6.1 The contractor shall be permitted to store materials including erecting temporary sheds, temporary workshop and the site office at the area(s) of land marked on the site plan(s) or as decided by the GE/ AGE(I) if the area(s) are not marked on the site plans. The contractor shall pay license fee of Rs. 1.00 (Rupee one only) per year or part thereof in respect of each and every separate area(s) of land allotted to him. The site shall be as shown on the site plan(s) or as decided by GE/AGE (I) and contractor shall have no claim what-so-ever on this amount.
- 6.2 Labour camp shall be permitted to erect on defence land as shown on site plan or as decided by GE/AGE (I) and contractor shall have no claim what-so-ever on this account.

**7.0 CONTRACTOR'S PLANT/ EQUIPMENT AT SITE**

- 7.1 The contractor shall furnish the Engineer-in-Charge every morning a distribution return of the plant and/or equipment on the site of work, stating the following particulars:-
- (i) Particulars of plant/or equipment, its make, year of manufacture, Model No. if any registration No, if any, capacity, year of purchase etc.
  - (ii) Total Nos. (quantity) on site of works.
  - (iii) Location indicating Nos. (quantity) at each location on the site of works.
  - (iv) Purchase value on the date of purchase. For the purpose of this condition plant and/or equipment shall include vehicle i.e, lorries but neither the workmen's tools nor any manually operated tools/equipment.
- 7.2 The Engineer-in-charge shall record the particulars of plant/equipment supplied by the contractor in the works diary and send the return to the GE/AGE (I) for record in his office.

**8.0 LOSS OR DAMAGE ON ACCOUNT OF ENEMY ACTION :-** If as a result of enemy action the contractor suffers any loss or damage, the Govt., shall reimburse to the contractor such loss or damage, to the extent and in the manner here-in-after provided:-

- (i) The loss suffered by him on account of any damage or destruction of his plant and or equipment (as defined in special condition 7 above) or materials or any part or parts thereof. (The amount of loss assessed by the Accepting Officer of the contract or CWE in the case of contract accepted by GE/AGE (I), shall be final and binding).
- (ii) The compensation paid by him under any law for the time being in force to any workman employed by him for any injury caused to him or to the Workmen's legal successors for loss of the workman's life.
- (iii) Payment of compensation for loss or damage to any work or part of work carried out. The amount of compensation shall be determined in accordance with condition 48 of General Conditions of Contracts (IAFW-2249). No reimbursement shall be made nor any compensation be payable under the above provision unless the contractor has taken air defence/precautions ordered in writing by the GE/AGE (I) concerned or in the absence of such reasonable precautions. Neither reimbursement shall be payable nor any compensation shall be payable for any plant and/ or equipment or material not lying at site of work at the time of enemy action.

**9.0 USE OF EXISTING BUILDINGS ETC :-** The contractor shall not use the existing latrines, baths and other existing buildings if any for use by his work people or for storage of his materials or for any other purpose unless permitted to do so in writing by Garrison Engineer.

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**SPECIAL CONDITIONS****10.0 WATER :-**

**Water will not be supplied by MES.** The tenderers are advised to visit the site of works to ascertain availability of water from civil sources or from nearby natural sources outside MOD land. The contractor shall be allowed, if he so desires to install hand pump(s)/tube well(s) at site of work at places as directed by the Engineer-in –Charge and nothing shall be charged from the contractor on this account. Contractor shall remove the hand pump(s)/tube well(s) as and when asked to do so by the Engineer-in-Charge. GE/AGE (I), in any case on completion of work and before issue of completion certificate shall ensure removal of hand pumps/tube wells unless GE/AGE (I) desires that these hand pump(s) /tube well(s) be left in positions, and the contractor agrees to do so without claiming cost thereof from the department. No compensation what so ever shall be admissible to the contractor if he is required to remove the pump(s)/tube well(s) before completion of work. Use of water from such source(s) shall only be permitted if found after testing potable and fit for construction purposes as per IS- 456-2000. The water from such source(s) shall be got tested by the contractor from the laboratory approved by the GE/AGE (I). The contractor shall submit the test results to the GE/AGE (I) who shall after satisfying himself; permit the contractor to use water from such sources. Testing charges shall be borne by the contractor.

**11.0 ELECTRICITY :- Electricity will not be supplied by MES.** The contractor shall make his own arrangements for provision and distribution of electricity through portable D.G sets of suitable capacities or by any other means for all the purposes in the contract.

**12.0 DAMAGE TO EXISTING BUILDINGS, ROADS AND DRAINS ETC :-** The contractor shall be responsible to reinstate and make good at his own expense, the damage if any caused by his workmen etc. to existing buildings, roads, drains, cables etc., while carrying out the work under this contract. Rectification, reinstatement, replacement, making good and touching up, etc, shall conform to the standard of workmanship and materials, originally used and the same shall be done to the entire satisfaction of Engineer-in-Charge.

**13.0 QUARRIES AND ROYALTY**

**Reference condition 14 of IAFW-2249 General Conditions of contracts. Delete this condition in toto and substitute as under: -**

**“Neither quarries are available nor shall the quarrying be permitted on the defence land”.**

**14.0 OCTROI AND OTHER DUTIES :-** The price quoted by the contractor shall be deemed to include all duties, taxes Octroi, sales tax, Service tax, surcharge, cess etc. The contractor shall not include any condition for fluctuation in price of labour and/or materials in his tender. Variation in prices of labour and materials during the progress of work consequent to any act of legislature is already covered in condition 63 of IAFW-2249.

**15.0 LEVY OF GOODS AND SERVICE TAX :-** The tenderer quoted rates shall deemed to be included Goods & Service Tax as notified by the Govt. The contractor shall ascertain and consider Goods & Service Tax while quoting their rates of each item and nothing extra shall be admissible to the contractor on this account.

**16.0 MINIMUM WAGES PAYABLE TO LABOUR**

**16.1** Refer condition 58 of IAFW-2249. The contractor shall not pay wages lower than minimum wages for labour as fixed by the Govt. of India/State Govt. whichever is higher.

**16.2** The fair wage referred to in condition 58 of IAFW-2249 will be deemed to be the same as the minimum wages as referred to above.

**16.3** The contractor shall have no claim whatsoever if on account of any local regulation or otherwise he is required to pay wages in excess of minimum wages as described above during the execution of work.

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**SPECIAL CONDITIONS**

- 16.4 The payment will be made into **AADHAAR** linked bank account of the employees by the contractor. Where the employee insists on being paid in coins or currency notes or by cheque, the same will not be denied. An undertaking may be obtained from such employees. The instructions will be strictly implemented and NO payments to the contractors/firms will be made unless proof of payment of wages through Aadhaar linked bank accounts is submitted by the contractors/firms.
- 17.0 **PERMIT FOR PLYING GOODS TRANSPORT IN J&K AREA :-** Recommendations for issue of permits for plying goods transport, private carrier for carrying materials for work will be made by the HQ Chief Engineer 31 Zone, Pin 914631, C/O 56 APO to competent transport authority of J&K Govt. However, the Ministry of Defence does not guarantee issue of such permits. The HQ Chief Engineer 31 Zone, Pin 914631, C/O 56 APO reserves the right to decide the routes, number of vehicles to be recommended for issue of permits, duration for which the permits is to be recommended and his decision shall be final, conclusive and binding with reference to the matter referred to in this condition.
- 18.0 **CO-OPERATION WITH OTHER AGENCIES :-** The contractor shall permit free access and afford reasonable facilities to other Agencies or departmental workmen engaged by Govt. to carry out other work services (whether or not in connection with the work under the scope of this contract) on the site, simultaneously. The contractor shall not be allowed any extra payment on this account.
- 19.0 **CRITICAL PATH METHOD IN LIEU OF TIME AND PROGRESS CHART**
- (a) The time and Progress Chart to be prepared as per condition 11 of General Conditions of Contracts (IAFW-2249) shall consist of detailed network analysis and a time schedule. The critical path network will be drawn jointly by the GE/AGE (I) and the contractor soon after acceptance of the tender. The time scheduling of the activities will be done by the Contractor so as to finish the work within the stipulated time. On completion of the time schedule a firm calendar date schedule will be prepared and submitted by the Contractor to the GE/AGE (I) who will approve it after due scrutiny. The schedule will be submitted in four copies within two weeks from the date of handing over the site.
- (b) During the currency of work the Contractor is expected to adhere to the time schedule and his adherence will be a part of contractor's performance under the Contract. During the execution of the work the Contractor is expected to participate in the reviews and updating of the network undertaken by the GE/AGE (I). These reviews may be undertaken at the discretion of the GE/AGE (I) either as a periodic appraisal measure or when the quantum of work ordered on the Contractor is substantially changed through deviation orders or amendments. Any revision of the schedule as a result of the review will be submitted by the contractor to the GE/AGE (I) within a week who will approve it after due scrutiny. The Contractor will adhere to the revised schedule thereafter. In case of Contractor disagreeing with the revised Schedule, the same will be referred to the Accepting Officer whose decision will be final, conclusive and binding. GE/AGE (I)'s approval to the revised schedule resulting in a completion date beyond the stipulated date of completion shall not automatically amount to a grant of extension of time. Extension of time shall be considered and decided by the appropriate authority mentioned in condition 11 of IAFW-2249 and separately regulated.
- (c) The Contractor shall mobilize and employ sufficient resources to achieve the detailed schedule within the broad frame work of the accepted methods of working and safety.
- (d) No additional payment will be made to the Contractor for any multiple shift work or other incentive methods contemplated by him in his work schedule even though the time schedule is approved by the Department.

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**SPECIAL CONDITIONS**

- 19.1 Contractor shall mobilise and employ sufficient resources to achieve the detailed schedule within the broad framework of the accepted method of working and safety. No additional payment will be made to contractor for any multiple shift work or other incentive methods of achieving the target dates.
- 20.0 **SITE FOR EXECUTION OF WORK** :- Site for execution of work will be available as soon as the tender is accepted. In case, it is not possible for the department to make the entire site available at the commencement of work, the contractor will have to prepare the CPM net work as required in terms of Special Condition 21 to achieve the target. No claim whatsoever for not giving the entire site on commencement of work and for giving the site gradually will be tenable.
- 21.0 **SECURITY OF CLASSIFIED DOCUMENTS**
- 21.1 Tenderers special attention is drawn to condition 2A & 3 of General Conditions of Contracts (IAFW-2249) for compliance. The contractor shall not communicate any classified information regarding the work either to sub contractor(s) or to any other person(s) without prior written approval of the Engineer-in-Charge. The contractor shall also not make copies of the design and drawings and other documents furnished to him in respect of works and he shall return all documents to the department on completion of the work or earlier determination and/or termination of the contract.
- 21.2 The contractor shall attach with final bill the receipt from Engineer-in-Charge to the effect that the contractor has returned the classified documents as per condition 3 of General Conditions of Contracts (IAFW-2249).
- 22.0 **RECORD OF CONSUMPTION OF CEMENT**
- 22.1 For the purpose of keeping a record of cement procured/received and consumed in work, the contractor shall maintain a properly bound register in the form approved by the Engineer-in-Charge showing the daily receipt of cement, quantity used in works and balance at the end of each day and such other information as is required to control the consumption and procured/receipt of cement. This register shall be signed daily by the contractor's representative in token of correctness of the entries made and it shall be signed in token of check by MES representative as follows:-
- (i) Daily by JE in charge of supervision of works.
  - (ii) Once in a week by the Engineer-in-Charge.
- 22.2 The register shall be kept at site of work in the safe custody of the contractor during progress of work and on demand he shall produce the same for verification of Inspecting Officer. The register shall be returned to MES on completion of work.
- 22.3 The aforesaid provisions will however not absolve the contractor to use required quantity of cement in work
- 23.0 **CLEANING DOWN** :- The contractor shall clean all floors, joinery, glass panes etc. and remove drops of cement/lime paint etc. and touch up all painter's work and carry out other items of work as are necessary to make and leave the premises clean and tidy before handing over the buildings and/or works. The contractor shall not be allowed any extra payment on this account.
- 24.0 **VALIDITY OF TENDER** :- The tender shall remain open for acceptance for a period of 60 days (Sixty days) from the date on which the same is due to be submitted.

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**SPECIAL CONDITIONS****25.0 PROPRIETARY MATERIALS/ARTICLES AND RECORD OF MATERIALS**

- (a) The proprietary materials/articles such as paint, bitumen, water proofing admixture, etc. when brought to site shall be inspected and approved by the Engineer-in-Charge.
- (b) The quantity of proprietary articles brought to site shall be recorded in measurement book (IAFW-2261) and signed by the contractor and the Engineer-in-Charge as a check to ensure that the required quantity has been brought to site for incorporation in the works.
- (c) The proprietary materials shall be stored as directed. Those already recorded in the measurement book shall be marked suitably for identification.
- (d) The contractor shall produce original receipt vouchers/invoices including manufacturer's test certificates (where applicable) in respect of the supplies to the GE to ensure that the contractor has actually brought the required quality and quantity from the authorized source(s) and also to find out the rates thereof.
- (e) Under no circumstances payment on account (RAR) shall be made to the contractor as material lying at site for incorporation in the work, unless the contractor produces original purchase vouchers/invoices for the following items of materials as applicable:-
  - (i) Electrical fittings/ fixtures where names of manufacturers/brands are specified or approved.
  - (ii) XLPE Cables.
  - (iii) Paver block.
  - (iv) Paint.
  - (v) Cement.
  - (vi) Steel/Iron section.
- (f) Payment for the above materials shall neither be made in the RARs nor these shall be allowed for incorporation in the work unless the purchase vouchers invoices as stated above are produced by the contractor and are verified by the Engineer-in-Charge regarding their correctness and genuineness and are defaced by him against the contract.
- (g) Vouchers/ invoices so produced and verified shall be stamped by Engineer-in-Charge indicating contact number. The contractor shall ensure that the materials are brought to site, in original sealed containers/ packing, bearing manufacturer's marking except in the case of requirement of material (s) being less than smallest packing.

**26.0 REFER SPECIAL CONDITIONS 6 & 9**

- (i) The contractor shall maintain site/area of land/buildings in a clean and tidy conditions at his own expenses and shall deliver up the same on/or before the date of completion of the works, or on termination of the contract, or in the event of the said areas or land/buildings required by the GE/AGE (I) within one month of an order to that effect, in a clean and tidy state complete in every particular and to the satisfaction of Engineer-in-Charge.

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**SPECIAL CONDITIONS**

- (ii) In addition to completion of all other stipulations under condition 49 of IAFW-2249, the completion certificate under condition 49 of IAFW-2249 shall be issued only after vacation of site/area of land/building allotted to the contractor. However the contractor may be permitted by the GE/AGE (I) in writing to retain such areas of land/building which is in the opinion of GE/AGE (I) may be required for storage of materials required for rectification of defects (decision of the GE/AGE (I) shall be final and binding in this regard). Soon after the rectification of defects such area of land/building shall be vacated and delivered to the Engineer-in-Charge in a neat state. Payment of final bill shall be made to the contractor only after such areas of land/building are vacated by the contractor.

**27.0 ADVANCE ON ACCOUNT OF MATERIALS (APPLICABLE TO CONTRACTS OF VALUE RS. 50 LAKHS AND ABOVE)**

- 27.1 For the purpose of such contracts, the following shall be deemed to be added in continuation of para 8 of condition 64 of IAFW-2249; Provided further the contractor may be paid advance on account to the full value of under mentioned materials (as applicable in this contract) brought on the site, on his furnishing guarantee bond on the prescribed form from a scheduled bank for the amount of the retention money which should otherwise be recoverable from him under the contract.

- (a) Electric cables/fittings/fixtures and electric equipments
- (b) Any other non-perishable and manufactured materials which do not lose their identity after incorporation in the work, as decided by GE/AGE (I).

- 27.2 The bank guarantee bond(s) shall be executed for a period of six months and on a form as directed by the Accepting Officer. The contractor shall further arrange to extend the period of guarantee bond(s) as and when necessary, and as directed by the Accepting Officer or shall furnish fresh guarantee bond(s) if and when necessary and as directed by the Accepting Officer of similar value in lieu.

- 27.3 It shall be noted that advance on account of the full value of materials brought on the site is permissible only in respect of fittings and fixtures and other manufactured items which do not lose their identity after incorporation in the works. Materials like bricks, aggregate, pre-cast concrete and similar items are not to be taken in the list.

- 28.0 **OFFICIAL SECRET ACT:** The contractor shall be bound by the Indian official Secret Act 1923 particularly Section 5 thereof, all as per condition 2A of IAFW-2249.

**29.0 SPECIAL CONDITION FOR CONCILIATION****29.1 Scope of conciliation.**

- 29.1.1 The scope of conciliation shall be as per condition 71 of IAFW 2249 (General Conditions of Contracts).

**29.2 Commencement of conciliation proceedings.**

- 29.2.1 The party initiating conciliation shall be send to the other party a written invitation to conciliate briefly identifying the subject of the dispute.

- 29.2.2 Conciliation proceedings shall commence when the other party accepts in writing the invitation to conciliate

- 29.2.3 If the other party rejects the invitation there will be no conciliation proceedings. If the party initiating conciliation does not receive a reply within 30 days from the date on which he sends or within such other periods of time as specified in the invitation. he may elect to treat this as a rejection of the invitation to conciliate and if he so elects, he shall inform in writing the other party accordingly.

- 29.3 **NUMBER OF CONCILIATORS** :- There shall be a Sole conciliator for works costing less than Rs 10.00 Crore and a disputes resolution board (DRB) consisting of three conciliators for works costing more than Rs 10.00 Crore.

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**SPECIAL CONDITIONS**

29.4 **APPOINTMENT OF CONCILIATOR** :- Disputes (other than those for which the decision of the CWE or any other person is by the contract expressed to be fixed and binding) shall be referred to the sole conciliator viz serving Officer not below the rank of superintending Engineer/ Superintending Engineer (QS&C) in case of works costing less than Rs 10 Crores and to Disputes Resolution Board (DRB) consisting of three Serving Officers, having degree in Engineering or equivalent or having passed final/Direct final examination of sub division-II of Institution of surveyors(India) to be appointed by the Engineer-in-Chief, Army Headquarters, New Delhi or in his absence the Officer officiating as Engineer-in-Chief or Director General of Works specifically delegated by the Engineer-in-Chief in writing.

29.5 **STATUS & EFFECT OF SETTLEMENT AGREEMENT**:- The settlement agreement signed by the parties as a result of conciliation proceedings shall be the same status and effect as it is an arbitral award on agreed terms.

30.0 **QUALIFIED TRADESMEN ( Applicable for estimated cost one crore and above work as per NIT)**

In compliance with the condition 26 of IAFW-2249(General Conditions of Contracts) the contractor shall employ skilled/semi skilled tradesmen who are qualified and possessing certificate in particular trade from Industrial Training Institute (ITI)/Similar reputed and recognized Institutes by State/Central government to execute the works of their respective trade. The number of such qualified trades men shall not be less than 25% of total skilled/semi skilled tradesmen required in each trade. The Contractor shall submit the list of such tradesmen along with requisite certificates to Garrison Engineer for verification and approval. Notwithstanding the approval of such tradesmen by GE/AGE (I), if the tradesmen are found to have inadequate skill to execute the work of their trades leading to unsatisfactory workmanship, the contractor shall remove such tradesmen within a week after written notice to this effect by the GE/AGE (I) and shall engage other qualified tradesmen after prior approval of GE/AGE (I). GE/AGE (I)'s decision whether particular tradesmen possess requisite qualification, skill and expertise commensurate with nature of work shall be final and binding. No compensation whatsoever on this account shall be admissible

31.0 **RE-IMBURSEMENT/REFUND ON VARIATION IN "TAXES DIRECTLY RELATED TO CONTRACT VALUE" :-**

- (a) The rates quoted by the Contractor shall be deemed to be inclusive of all prevailing taxes (including Goods & Service Tax, Labour welfare Cess / Income Taxes etc.), duties, Royalties, Octroi& other levies payable under the respective Statutes. No reimbursement/refund for variation in rates of taxes, duties, Royalties, Octroi& other levies, and/or imposition/abolition of any new/existing taxes, duties, Royalties, Octroi & other levies shall be made except as provided in sub para (b) here-in-below.
- (b) (i) The Goods & Service Tax, labour welfare cess and income tax etc, which are one levied by the Govt. at certain percentage rates of items of contract sum / amount shall be termed as "taxes directly related to contract value". The tendered rates shall be deemed to be inclusive of all "taxes directly related to Contract Value" with existing percentage rates as prevailing on last due date of receipt of tenders. Any increase in percentage rates of "taxes directly related to Contract value" with reference to prevailing rates on last due date for receipt of tenders shall be reimbursed to the Contractor and any decrease in percentage rates of "taxes directly related to Contract value" with reference to prevailing rates on last due date for receipt of tenders shall be refunded by the Contractor to the Govt/deducted by the Govt from any payments due to the Contractor. Similarly imposition of any new "taxes directly related to Contract value" after the last due date for receipt of tenders shall be reimbursed to the Contractor and abolition of any "taxes directly related to Contract value" prevailing on last due date for receipt of tenders shall be refunded by the Contractor to the Govt/deducted by the Govt from the payments due to the Contractor.

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**SPECIAL CONDITIONS**

- (ii) The contractor shall, within a reasonable time of his becoming aware of variation in percentage rates and/or imposition of any further "taxes directly related to Contract value", give written notice thereof to the GE/AGE (I) stating that the same is given pursuant to this Special Condition, together with all information relating thereto which he may be in a position to supply. The Contractors shall submit the other documentary proof/ information's as the GE/AGE (I) may require.
- (iii) The Contractor shall, for the purpose of this condition keep such books of account and other documents as are necessary and shall allow inspection of the same by a duly authorized representative of Govt, and shall further, at the request of the GE/AGE (I) furnish, verified in such a manner as the GE/AGE (I) may require, any documents so kept and such other information as the GE/AGE (I) may require.
- (iv) Reimbursement for increase in percentage rates/imposition of "taxes directly related to Contract value" shall be made only if the Contractor necessarily & properly pays additional "taxes directly related to Contract value" to the Govt, without getting the same adjusted against any other tax liability or without getting the same refunded from the concerned Govt Authority and submits documentary proof for the same as the GE/AGE (I) may require.

**32.0 SITE LABORATORY AND TESTING OF MATERIALS**

- (a) **A LEVEL TESTS FOR WORKS COSTING Rs 100 LAKHS AND ABOVE:-** The contractor shall set up site laboratory of minimum size 3m x 4m with proper ventilation and lighting for testing of materials (except Schedule 'B' materials) for A level tests as listed in Appendix 'C' to Particular specifications. The contractor shall arrange all equipments/ machines for the tests specified in Appendix 'C' as A level tests at his own cost with prior approval of GE/AGE (I). The cost shall be included in the costs quoted by the contractor. The contractor shall employ a competent technical representative as approved by the GE/AGE (I) for the purpose of testing and all such tests shall be carried out in the presence of Engineer-in-Charge. The successful test results thereof shall be recorded and signed jointly by the contractor and Engineer-in-Charge. The charges of these tests i.e. A level tests carried out in site laboratory of the contractor shall not be recovered. However in case a test which was specified to be carried out in site laboratory and which could not be carried out in site laboratory due to some reason, such test shall be carried out in Zonal lab/ any other approved lab and the recovery will be made at the rates given in Appendix 'C' for tests carried out in Zonal lab or otherwise at the actual rates in case the tests are carried out in other labs. Testing charges will be deducted from the RAR's irrespective of the tests results for such tests.
- (b) **A LEVEL TESTS FOR WORKS COSTING UP TO Rs 100 LAKHS:-** The contractor may set up site laboratory at his option for works costing up to 100 lacks. The other stipulations will be same as specified in preceding Para (a). However in case the contractor has not set up the site laboratory and tests are carried out in Zonal or any other laboratory approved/ set up but GE/AGE (I), the recovery shall be made at the rates given in Appendix 'C' for tests carried out in Zonal lab or otherwise as per actual rates in case the tests are carried out in other labs. Testing charges will be deducted from the RAR's irrespective of the test results for such tests.
- (c) **B & C LEVEL TESTS:** For tests of 'B' and 'C' level as indicated in Appendix 'C', the contractor shall provide all facilities for testing of materials at Zonal/Command Test Lab at his own cost. The rates quoted by the contractor shall deem to be inclusive of these tests. For 'C' level tests, actual cost of testing shall be borne by the Contractor and for 'B' level tests recovery shall be made at the rates of various tests conducted in Zonal/Command Test Lab of MES as indicated in Appendix 'C'.
- (d) The recoveries on account of testing charges wherever applicable shall be effected from the running account payments due to the contractor payable after completion of the respective test or whenever the test is due whichever is earlier.

Contd.../-

**SPECIAL CONDITIONS**

(e) This clause supersedes all other stipulations, if any, with regard to testing of materials specified elsewhere in the tender documents.

**Notes :-**

(i) All 'B' level test shall be conducted in CTL in case there is no functional Zonal Lab in the adjoining area, with testing charges to be recovered as per contract conditions.

(ii) 'C' level test for which facilities are available in CTL shall be conducted in CTL with testing charges to be recovered from contractors as per Contract Conditions Balance 'C' level test shall continue to be conducted in SEMT/Govt Approved Lab/Lab of GovtEngg College, as the case be under contractor's own arrangement.

(iii) Various random/independent testing for material/products required to be conduct in addition to routine tests as stipulated in contracts, be referred to CTL to get verification of quality of material/product.

**33.0 EMPLOYEES PROVIDENT FUND SCHEME:**

- (a) Under the Jammu & Kashmir Employees Provident Fund Act/Scheme 1961, the contractor shall have an EPF Code No and all labours employed by him or sub contractor shall be enrolled as member of Provident Fund and should be given Universal Account Number (UAN).
- (b) A certificate to effect that all working labours employed for execution of work are registered for EPF and due distribution have been credited into their account, shall be furnished by contractor along with running advances or final bill.
- (c) It is mandatory for the contractor to have EPF account of J&K state as per Jammu and Kashmir Employees Provident Funds and Miscellaneous Provisions Act, 1961 failing which no payment shall be made to the contractor towards their Running account payment in the contract.

**Note** : In case the contractor has obtained any order of Hon'ble Court exempting him from opening of EPF account the condition No 37 shall be treated as void.

**34. PERFORMANCE SECURITY.**

- (a) Within 28 days of receipt of the letter of Acceptance, the successful contractor shall deliver to the Accepting Officer a performance security in any of the forms given below for an amount equivalent to **5%** of the contract sum. Work Order No. 1 shall be placed only after submission of Performance Security of adequate value by the contractor
  - (i) A Bank Guarantee in the prescribe form.
  - (ii) Government Securities, FDR or any other Government Instruments stipulated by the Accepting Officer.
- (b) If the performance security is provided by the successful contractor in the form of a Bank Guarantee, it shall be issued Nationalized/ Schedule Indian Bank but its confirmation shall be done only from the Head Office of the Bank.
- (c) The period of validity of bank guarantee bond against performance security shall be upto and including sch date of expiry of defect liabilities period.
- (d) Failure of the successful contractor to comply with the equipment of clause 38 (a) shall constitute sufficient grounds for cancellation of the award of work and forfeiture of the Earnest Money. In case of MES enlisted contractor. Amount equal to the Earnest Money Earnest stipulated in the Notice Inviting Tender, shall be notified to the tenderer for depositing the amount through MRO. Issue of tender to such tenderers shall remain suspended till the aforesaid amount equal to the Earnest Money is deposited in Government Treasury.

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**SPECIAL CONDITIONS**

- 34.1. All compensation or other sums of money payable by the contractor to the Government under the terms of this contract or under any other contract with Government may be deducted from, or paid by the sale of a sufficient part of the Performance Security or from the interest arising there from or from any sums which may be due or become due to the contractor by the Government on any account whatsoever and in the event of his performance Security being reduced by reason of any such deduction, or sale as aforesaid, the contractor shall within ten days thereafter make good in cash or securities, enclosed as aforesaid, any sum or sums which may have been deducted from or realized by the sale of his Performance Security or any part thereof. Government shall not be responsible for any loss of securities or any depreciation in the value of securities while in their charge nor for loss of interest thereon.
- 34.2 In the event of contract being cancelled, under Condition 52, 53 & 54 of General Conditions of Contract the Performance Security shall be forfeited in full and shall be credited into Consolidated Fund of India.
35. **DEFECT LIABILITY PERIOD** :- The work will have defect liability period of 12 calendar months from the date of handing over of asset to government.

(Signature of Contractor)

Dated : \_\_\_\_\_

DCWE (Contracts)  
for Accepting Officer

**PARTICULAR SPECIFICATIONS****1. GENERAL**

- 1.1 Work under this contract shall be carried out in accordance with schedule 'A' Particular specifications, drawings and General specification and other provisions in MES Schedule 2009 Part-I (for Specifications) and MES Schedule 2020 Part-II (for Rates) read in conjunction with each other.
- 1.2 Term 'General specifications' referred to here-in-before as well as referred in IAFW-2229 (General Conditions of Contracts) shall mean the specifications contained in the MES schedule 2009 Part-I (for specifications) and MES schedule 2020 Part-II (for rates).
- 1.3 General Rules, specifications, special conditions and all pre-ambles in the MES Schedule shall be deemed to be applicable to the work under this contract unless specifically stated otherwise in these documents in which case the provisions in these documents shall take precedence over the aforesaid provisions in the MES schedule. The term "as specified" wherever appears in the tender documents and drawings relates to relevant particular specifications and in absence General specifications. All reference to MES Schedule /SSR in these specifications relates to Part-I of MES Schedule 2009 unless otherwise mentioned. References to only some paragraphs of MES schedule have been made in these particular specifications but other paragraphs and provisions as applicable are also to be followed for all parts of schedule 'A', if any even though not particularly mentioned here in after.
- 1.4 Where specifications of any items of work are not given in MES schedule or in these particular specifications, specifications as given in relevant Indian Standard Code of practice shall be followed.
- 1.5. Unit rate quoted by the contractor shall be deemed to include for any minor details/items of work and or constructions which are obviously and fairly intended and which may not have been included in these documents but which are essential for the execution and entire completion of work. Decision of the Accepting officer as to whether any minor details of work and or constructions of obviously and fairly intended to be included in the contractor or not shall be final, conclusive and binding.
- 1.6 **SCOPE OF WORK** :- The work shall be carried out all as described in schedule 'A', and these particular specifications.

**1.7 MATERIALS**

- 1.7.1 All the materials to be procured by the contractor for incorporation in the work under this contract (with the exception of local materials like brick, stone aggregate, stones and sand etc) shall be with IS certifications mark (Also refer para 1.6.2).
- 1.7.2 However, if any specific makes/manufactures names are specified elsewhere, materials shall be of those specific makes / manufactures only. If any material is not manufactured with the IS certification mark in the country, it shall be conforming to IS and other specifications specified elsewhere and shall also conform to sample displayed in GE's office as applicable.

2. **WORKMANSHIP** :- Workmanship shall be all as described and specified in various sections of MES SSR 2009 Part-I unless specifically modified by particular specifications herein after or by drawings forming Part of this tender.

**3. EARTH WORK**

- 3.1 Earth work shall be carried out as per relevant clauses of SSR.
- 3.2 Unless otherwise indicated in Schedule 'A' excavation and earthwork shall be in soft/loose soil.

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**PARTICULAR SPECIFICATIONS**

- 3.3 Earth required for filling in trenches and under floors shall be free from roots and other vegetation.
- 3.4 Any excavation inadvertently made deeper than what is directed shall be made good by the contractor in concrete as specified for foundation in that situation without any extra cost of the Government.
- 3.5 **SAND FOR CABLE CUSHIONING** :- The quality of sand for cable cushioning shall be same as that specified for concrete work herein-before. The method of laying shall be as specified in para-19.75 of SSR 2009 Part-I
4. **CONCRETE**
- 4.1 **CEMENT** :- Contractor shall make his own arrangements to procure cement required for all cement work under this contract as specified here-in-after. The cost of cement, its transportation, storage, testing. Its accounting and preservation etc till consumed in work shall be borne by the contractor.
- 4.1.1 **TYPE OF CEMENT** ; - Type of cement to be used in this contract shall be Ordinary Portland Cement, grade 43, conforming to IS-8112-1989/ Portland Pozzolana cement conforming to IS-1489-1991, unless otherwise specifically specified. Different type of cement, if so required as per contract provisions, shall also be arranged by contractor at no extra cost to Govt.
- 4.1.2 **PROCUREMENT**
- 4.1.2.1 OPC procured by the contractor shall be from any of the producer listed at Appx 'D'. Contractor will procure it directly from the producer.
- 4.1.2.3 If the estimated requirement of cement is less than 1200 (One thousand two hundred) bags Contractor can procure cement from the authorized distributors /dealers of the approved firm but contractor shall submit test certificates for the batch issued by the main producer to the GE. The GE will ensure that cement accepted is not more than two months old. Testing of cement shall invariably be got done before incorporation of work by the GE and cost of testing shall be borne by the contractor.
- 5.1 **PRECAST CONCRETE CABLE COVER**
- 5.1.1 These shall be all as specified in clause 19.20 of SSR 2009 Part-I and as per description of schedule "A".
- 5.1.2 Precast concrete cable covers shall comply with IS-5820-1970, Specification for precast concrete cable covers and shall be class HV type -2 unreinforced, Type 1 with peak, size 450mm x 180mm x 40 mm. The concrete used in the manufacture of cable covers shall be of grade not lower than M-20.
- 5.2 **BRICKS COVERING** :- Brick shall be provided and laid as described in Schedule 'A' / BOQ.
6. **GI PIPE** :- Pipe shall comply with IS-1239 (Part -I) 1979 and all as specified in clause 18.4 of SSR 2009 Part -I.
7. **UNDERGROUND LT CABLES** :- Cable shall be laid in trenches and shall conform to clauses 19.74 to 19.86 , 19.92.5 & 19.93 to 19.96 of SSR 2009 Part -I and as given in relevant section of Schedule 'A' . Testing of cable after laying shall be done as specified in clause 19.93 of SSR 2009 Part-I. Quoted rate of cable inclusive of cable route marker as applicable.

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**PARTICULAR SPECIFICATIONS****8. HT POWER CABLES**

- 8.1 All HT cables shall be of three core aluminium conductors, XLPE insulated, armoured and conforming to 1S-7098 (Part-2)/1985. These cables shall be suitable for Earthed system.
- 8.2 The aluminium conductor used in HT Cables shall be stranded, compacted and round to achieve minimum electrical stresses.
- 8.3 The aluminium conductor shall have a semi-conducting layer of XLPE of suitable thickness wrapped in such a way that it covers the conductor entirely.
- 8.4 The main insulation shall be of cross linked polyethylene (XLPE) in natural colour and shall be free of air voids and foreign materials.
- 8.5 The main insulation shall be covered with another layer of semi conducting layer followed by copper Tape to provide suitable earthing around the each core to keep the electrical stresses radial.
- 8.6 Each core shall have a numbered/coloured polyester tape applied over the copper tape for identification of all the three cores.
- 8.7 Inner sheath over the laid up cores shall be of thermoplastic extruded type and armouring over the inner sheath shall be of galvanised steel wire or strips of adequate size to give mechanical protection and PVC FRLS (Flame Retardant Low Smoke) outer sheath over the armour shall also be of adequate thickness all as specified in the IS.
- 8.8 The XLPE cables shall be suitable to with stand maximum conductor temperature of 900°C and 2500°C during operation and short circuit respectively and these cables shall be manufactured by triple extrusion using single (Common) cross head extrusion technique and dry cure inert gas cured cross linking process.

**9. CABLE TERMINATION AND JOINTING KITS**

- 9.1 These shall be all as specified in clause 19.22 of SSR 2009 Part-I and as per description of Schedule "A".

**9.2 CABLE TERMINATION AND JOINT BOXES**

- 9.2.1 Cable boxes for straight through and termination joint shall be in the form of "Kits" with jointing instructions and literature/test certificate. The kit shall also carry the name of manufacture, date of manufacture and expire date on the kit also size type and or cable for which suitable.

**9.3 CABLE TERMINATION ACCESSORIES**

- 9.3.1 All the cable termination accessories such as cable sockets, compression joint sleeves, conducting jellys, cable glands reducing bushes and check nuts etc. shall be best quality available or as indicated.

**9.4 TESTING OF CABLES**

- 9.4.1 HT/LT cables shall be tested all as specified in clause Nos 19.93 & 19.94 of SSR part-I. Contractor shall submit manufacturer's test certificate along with paid voucher/bill.

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**PARTICULAR SPECIFICATIONS****10. STEEL TUBULAR SWAGED POLE**

- 10.1 These shall be all as specified in clause 19.3 of SSR 2009 Part-I. Steel tubular poles shall be swaged type and conforming to IS-2713 (Part 1 to 3) 1980 specification for tubular poles for overhead power lines (Second revision). Tubes for making poles shall be out of steel conforming to grade YSt 240 (with minimum tensile strength of 410 Mps) except that manual metal arc welding process may also be used to manufacturer tubes and cold bend test need not be conducted.
- 10.2 Swaged poles shall be made of seamless or welded tubes of suitable lengths swaged and jointed together. No circumstantial joints shall be permitted in the individual tube length of the poles. If welded tubes are used, they shall have longitudinal weld seam only and the longitudinal welds shall be staggered at each swaged at each swaged joints. Pole shall be well finished, clean and free from harmful surface defects. Ends of pole shall be cut square. The poles shall be straight, smooth and cylindrical.
- 10.3 Finials and base plates shall be 6mm thick mild steel conforming to IS-2713 – 1980 Part 1 to 3.
- 10.4 The poles shall be painted with anti corrosive paint internally and externally up to planting depth and provision of alternative green & white strips of 30 cm width using synthetic enamel paint upto 1.5 mtr above ground level and balance portion of pole with two coats of aluminium paint.

**11. STAY WIRE**

- 11.1 These shall be all as specified in clause 19.7 of SSR 2009 Part-I and as per description of schedule "A". Stay wires shall be of grade 4 quality with minimum tensile strength of 700/N/Sqm and conform to IS-2141 Specification for galvanised stay strand and size as indicated.
- 11.2 Wires shall be so stranded together that when as evenly distributed pull is applied at the end of completed strand, each wire will take as equal share of the pull. The stay wire shall be circular and shall be free from scale, irregularities imperfection flaws, splits and other defects, the zinc coating shall be smooth, even and bright.
- 11.3 The construction and minimum breaking load of stay strand, grade 4 shall be as per IS-2141-1979.

**12. STAY ASSEMBLIES**

- 12.1 These shall be all as specified in clause 19.8 of SSR 2009 Part-I and as per description of schedule "A". The stay assemblies shall comprise of stay clamp, stay wire, stay insulator, stay grips, thimble, stay bow, stay-rod and stay-plate.
- 12.2 Stay clamp shall be made of mild steel flats and shall be galvanised.
- 12.3 Stay insulators or egg type insulators shall conform to IS 5300-1969 Specification for porcelain guy strain insulators.
- 12.4 Stay grips shall conform to the specifications for stay wires.
- 12.5 Thimbles shall comply with IS 2315-1978 Specifications for thimbles for wire ropes.
- 12.6 Staybows shall be of mild steel, galvanised of 14 mm dia and 40 cm length.
- 12.7 Stay-rods shall be of mild steel, galvanised, having a tensile strength not less than 420 N/sq.mm. Stay-rods shall be either of 16 mm or 20 mm dia as indicated and 1.8 mtr long.
- 12.8 Stay-plates shall be of mild steel galvanised, having 6 mm thickness and either of 23x23 cm or 30x30 cm as specified.

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**PARTICULAR SPECIFICATIONS****13. STEEL CROSS ARMS**

13.1 These shall be all as specified in clause 19.9 of SSR 2009 Part-I and as per description of schedule "A". Steel cross arms shall be of angle or channel sections as indicated. They shall be in one piece, sound, free from defects. Steel cross arms shall be given a coat of primer and 2 coats of painting as indicated or as directed. The length of the cross arms shall be suitable indicated to accommodate the number of insulators on them giving sufficient spacing between the insulators. A minimum distance of 8 cms for low and medium voltage lines and 10 cm for higher voltage lines shall be left from the centre of the extreme insulator pin hole to the end of the cross arm. The cross arm shall be complete with pole clamp made of MS Flat of size not less than 50 mmx6 mm with necessary nuts, bolts and washer. The pin holes on the cross arm shall be on required basis. Length of cross arm for carrying guard wire shall be such that the guard wire shall always run not less than 30 cms beyond the outermost bare conductor of the configuration.

**14. GANG OPERATED AIR BREAK SWITCH AND MALE/FEMALE CONTACTS**

14.1 These shall be all as specified in clause 19.69 of SSR 2009 Part-I and as per description of schedule "A".

14.2 They shall be three pole type, 3 insulators per phase, triple pole rocking, out-door type, gang operated, suitable for horizontal mounting with the following components :

- (a) Channel bases for mounting post insulators.
- (b) Operating mechanism complete with 5/6 m long operating pipe phase coupling shaft, operating handle with padlock arrangements but without padlocks.
- (c) Easy replacement type MS arcing horns with make first and break after features.
- (d) Multi-built type contacts will be provided to grip incoming and outgoing ACSR conductors.
- (e) None-ferrous parts shall be electroplated and ferrous parts hot dip galvanised. These shall be installed as directed by the Engineer-in-Charge.

**15. LIGHTING ARRESTER NON-LINEAR TYPE**

15.1 These shall be all as specified in clause 19.12 of SSR 2009 Part-I and as per description of schedule "A".

15.2 Non-linear resistor lightning arresters shall comply with IS 3070 (Part I)-1985 Specification for lightning Arresters to alternating current systems Part I Non-linear resistor type lightning arrester. These lightning arresters consist of single or multiple spark gaps in series with one or more non-linear resistor.

**Note** : This type of lighting arresters, are designed for repeated operation to limit voltage surges on alternating current power circuits and to interrupt power follow current and are suitable for operation when install outdoors and exposed to direct sun with ambient temperature within the range of (-)100 C to 50 OC

16. **PAINTING** :- Unless otherwise specified and described in Schedule "A" , all iron and steel work except galvanised surfaces shall be treated with 3 coats of paint. It shall consist of two coats of aluminum paint over one coat of red oxide primer including preparation of surfaces. The paint shall be 1<sup>st</sup> quality of approved brands to be approved by GE.

17. **HT INSULATORS AND FITTINGS** :- These shall be all as specified in clause 19.6 of SSR 2009 Part-I and as per description of schedule "A".

17.1 **PIN AND SHACKLE INSULATOR** :- These shall comply with IS 1445-1977, Specification for porcelain insulators for overhead power lines with a nominal voltage upto and including 1000 volts and IS 731-1971, Specification for porcelain insulators for overhead power lines with a nominal voltage greater than 1000V. The porcelain shall be sound, free from defects, thoroughly vitrified and smoothly glazed.

**PARTICULAR SPECIFICATIONS**

- 17.2 The pin insulator shall be in one piece and shall have a top groove and shall be threaded to take galvanised mild steel pin.
- 17.2.1 The shackle insulator shall be in one piece and shall have a groove on the side and a hole for a cotter pin and two galvanised bolts and nuts with or without a pair of straps as indicated.
- 17.2.2 **DISC INSULATORS**
- 17.3.3 Porcelain of disc insulators shall comply with IS 731-1971, Specification for porcelain insulators for overhead power lines with nominal voltage greater than 1000 volts. Dimensions of disc insulators shall be as per IS 3188-1980 Dimensions for disc insulators. These shall be in one piece, sound, free from defects, thoroughly vitrified and smoothly glazed.
- 17.4 The design of the insulators shall be such that stress due to expansion and contraction in any part of the insulator shall not lead to its deterioration.
- 17.4.1 **INSULATOR FITTINGS** :- Insulator fittings shall comply with requirements of IS 2486. Insulated fittings for overhead power lines with nominal voltage greater than 1000 volts (Part 1)1993, General requirements and tests and (Part 2)-1989, Dimensional, requirements.
18. **LT PANEL BOARD/ FEEDER PILLAR BOX**
- 18.1 LT panels/Feeder pillar box shall be CPRI approved all as specified in Sch 'A'. The contractor shall produce and get the detailed drawings of LT Panel approved from GE before fabrication and placing the order to the manufacturer.
- 18.2 **SCOPE** :- These specification cover the detailed requirements of medium voltage L.T Panel to be fabricated, supply, installations, its testing and commissioning. Any other material required for the successful completion of the work is included in these specifications if otherwise not mentioned herein.
- 18.3 **ELECTRICAL PARAMETERS** :- Suitable for 415 volts rated voltage 3 Phase , 4 wire 50Hz AC supply.
- 18.4 Contractor shall produce manufacturer's test certificate and CPRI approval for the LT panels/ feeder pillar boxes supplied under subject contract.
- 18.5 Bill/ voucher for panel/ feeder pillar boxes procured under subject contract shall be held on record duly defaced by all concern before release of payment under RAR/Final bill.
- 18.6 **GENERAL INSTRUCTIONS**
- 18.6.1 The LT Panels/ Feeder pillar box shall be out door type free standing type totally enclosed and compact having incoming and outgoing as specified in schedule 'A'. The degree of protection shall be IP-43 as per IS-2147-1962
- 18.6.2 The LT Panels/ Feeder pillar box shall be rain, dust and vermin proof and shall be suitable for climatic conditions of the station.
- 18.6.3 The LT Panels/ Feeder pillar box shall be fabricated out of MS angle iron frame 50x50x6mm and CRCA sheet of thickness as specified in Sch 'A'.
- 18.6.4 The design shall include all provisions for safety of operating and maintenance personal. The general construction shall conform to IS-5039 of 1983 for factory assembled LT Panel.
- 18.6.5 All incoming and outgoing cable entries shall be from the bottom as directed by Engr- in-charge.
- 18.6.6 General construction shall employ the principle of compartmentalization for safety consideration

**PARTICULAR SPECIFICATIONS**

- 18.6.7 The LT Panel shall be processed with 7 tank process for treatment of degreasing, pickling duly powder coated.
- 18.6.8 The LT Panel shall be suitably double earthed as per standard engineering practice.
- 18.6.9 The dimensions of the LT Panel shall be as on required basis for incorporating the electrical accessories as specified in schedule and these particular specifications.
- 18.6.10 The front and back side of the LT Panel shall be provided with hinged doors with locking arrangement. The lock shall be built in flush type of superior quality as directed. Hinges shall be of such construction that the door can swung open by not less than 150 degree. The fixing of the doors shall be such that the doors should automatically come to closed position if not kept open with effort.
- 18.6.11 **CANOPY** :- The top of the LT Panel shall be fitted with a sloping canopy, design of which shall be such that rain water shall not accumulate on the top.
- 18.6.12 **VENTILATION** :- Adequate ventilation shall be ensured by providing ventilation for the inlet and exhaust of air.
- 18.6.13 **BUS BARS** :- The Bus Bar of suitable size and as specified shall be provided. The bus bar for neutral shall be half the size of the phase bus bar. The bus bars shall be insulated with PVC sleeve / tape. One No. GI earth bus shall be 25mmx 4mm and shall be fixed at the bottom of the LT Panel for earth connections.
- 18.6.14 **BUS BAR SUPPORT** :- The bus bar shall be firmly fixed on the supports constructed from suitable grade of insulating material such as laminated sheet or porcelain insulators of suitable size conforming to relevant IS. The supports shall be sufficient robust to with stand electro mechanical force produced during the short circuit. The nuts, bolts shall be either of GI or cadmium plated. Bus bar chamber will be manufactured of not less from 2mm thick MS Sheet. Connections between bus bar and MCCBs will be made either with solid copper strip of adequate capacity duly insulated or by adequate capacity copper cable with copper lugs, provided for making the connections. As per site requirement the aluminium links duly insulated with PVC sleeves shall also be provided for connection with bus bar chamber and incoming or outgoing onwards.
- 18.6.15 **DANGER PLATE** :- Danger plate shall be provided on the front and back doors of the LT Panel and other distinguished mark shall also be written on the LT Panel as directed.
- 18.6.16 **INSTALLATION** :- The LT Panel shall be installed on a suitable plinth and grouted in the foundation with cement concrete and finished neatly with plaster as per manufactures recommendations. An apron will be provided below the door level of the LT Panel on the four sides. Four legs of feeder pillar box shall be embedded in PCC of size 200x200x300mm of mix (1:3:6) type C-2.
- 18.6.17 **TESTING** :- All necessary tests such as insulation / earth test etc shall be carried out before connecting the LT Panel with the supply system and will be recorded duly signed by contractor and Engineer -in- Charge
- 18.7. **ACB/MCCB/MCB** :- Shall be provided of various capacities as mentioned in respective item. MCCB/MCB shall be conforming to IS-8828-1996, IEC-60898, as applicable.
- 18.8. **MULTIFUNCTIONAL METER** :- These shall be provided of the shape and size as described in Sch 'A' and shall conform to specifications of IS-722.
- 18.9. **SELECTOR SWITCH** :- Selector switch shall be provided as per Sch 'A'. Selector switch shall be conforming to specifications of IS-6875 and ISI marked.
- 18.10. **INDICATING LAMPS** :- Indicating lambs shall be provided of size and shape as described in Sch. 'A'. Indicating lamb s shall be LED type.

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**PARTICULAR SPECIFICATIONS**

**18.11. TEST CERTIFICATE**

18.11.1 The contractor shall produce the manufactures test certificate to GE for required items.

18.11.2 All the material i.e. Feeder pillar box, DBs, MCBs, MCCBs, and accessories etc shall be procured from the Manufacturer or from their Authorised dealers. Contractor shall produce the original purchase vouchers, test certificate alongwith the material brought at site.

**Note:** - No RAR shall be paid without producing purchase vouchers/test certificate.

**18.12 PERFORMANCE GUARANTEE**

The contractor shall furnish a written guarantee for soundness, satisfactory performance and efficient working of feeder pillar box including all accessories etc under subject contract to cover a period of 24 months from the certified date of completion. During this period any defects or damages noticed in the working of feeder pillar box including all accessories due to incorrect installation, adjustment or manufacturing defects and faulty workmanship, shall be made good by the contractor at his own cost and expenses.

**19. EARTHING :-**

19.1 The earthing shall be strictly in conformity with MES schedule part-I electric plate No.3 , Earth plate shall be of galvanised iron, GI watering pipe shall be medium grade, Concrete PCC (1:3:6) type C-1 using 20 mm graded crushed stone aggregate in pit, wire mesh 0.63mm and funnel of PGI sheet, Precast RCC (1:2:4) type B-0 using 12.50mm graded crushed stone aggregate cover reinforced with hard drawn steel wire fabric 3mm dia mesh size 50mm shall be provided, if not specifically mentioned in respective items of Sch 'A'.

- (a) All metal parts shall be provided with a continuous earth wire aluminium conductor conforming to IS-732 .
- (b) Supply and fixing fuse distribution boards shall include for the earth continuity conductor as specified above.
- (c) No extra payment will be made if the contractor is required to provide extra depth of pit and extra quantity of charcoal dust to achieve specified test results.
- (d) The contractor's quoted rates against earthing includes all necessary items required for completion of earthing i.e., excavation, PCC in pit, GI plate, RCC pit cover, GI pipe funnel etc.

**19.2. TESTS :-**

19.2.1 The following tests shall be carried out by the contractor to the entire satisfaction of Engineer-in-Charge before the work is finally handed over by the contractor and completion certificate is issued:-

(a) Polarity Test		Test result shall not be lower than minimum specified in IE rules.
(b) Insulation resistance Test		
(c) Continuity Test sectional and overall		
(d) Earth resistance Test:		This shall not to exceed 5 Ohms

19.2.2 Clause 19.146 of MES SSR 2009 (Part-I) is applicable.

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**PARTICULAR SPECIFICATIONS**

20. **SHUT DOWN OF ELECTRICITY** :- For carrying of the necessary electrical work under the contract the Contractor shall be provided restricted hours of electric shut down, which may be during odd hours as well. The Contractor's quoted rate shall be deemed to include for the man hours lost on account of this eventuality. No extra payment shall be admissible to the Contractor towards this.
21. **TESTING AND COMMISSIONING OF ELECTRICAL EQUIPMENT & INSTALLATION**
- (a) All electrical equipment shall be tested, installed and commissioned in accordance with the latest relevant IS and code of practice published by ISI wherever available and stipulations made in the relevant general specifications.
  - (b) In case IS are not available the tests shall be carried out in accordance with the latest standards and code of practice published by any other recognized standard insulation or latest publication of IEC.
  - (c) The testing of all electrical equipment as well as the system as a whole shall be carried out to ensure that the equipment and its components are in satisfactory condition and will successfully perform its functional operation. The inspection of the equipment shall be carried out to ensure that all materials, workmanship and installation confirm to the accepted design, engineering and construction standards as well as accepted codes of practice and stipulations made in the specifications.
22. **WARRANTY / GUARANTEE** :- Contractor shall render necessary guarantee/ warranty of electrical items / equipment / materials, supplied and fixed/ installed under this contract for a period of 12 months from the certified date of completion of work under defect liability period. Any repairs/ replacement of parts/ spares due to fair, wear and tear shall be carried out by the contractor during the above period at his cost. Any modification to the installation necessitated due to site requirement shall also be done by the contractors free of cost during the warranty period.
23. **DEMOLITION AND DISMANTLING**
- (a) During demolition/ dismantling every precaution should be taken by the contractor to prevent damage to any of the structure and also the adjacent structure are to be left intact any damage caused to the structures shall be made good by him and at his own expense.
  - (b) The contractor shall be responsible for the safe custody of serviceable materials until handed over to the MES representative/ incorporated in the work.
  - (c) All unserviceable material shall be disposed off in the manner and as directed by EIC
24. **MAKING GOOD** :- All the dismantled portions shall be made good to match the existing to entire satisfaction of EIC/ GE.
25. **GENERAL**. If any of the specifications are not given above, the material used shall either bear ISI marking or conforming to ISS (if ISI marked not manufactured) and workmanship shall be all as per MES Schedule 2009 part I.

(Signature of Contractor)  
Dated : \_\_\_\_\_

DCWE (Contract)  
for Accepting Officer

**PARTICULAR SPECIFICATIONS**

**APPENDIX 'A'**

**CEMENT SUPPLY / ACCEPTANCE REGISTER**

1. **Contract No** :  
**Name of Work** :
2. Control No : Date :
3. Name of manufacture/ Brand Name/ Gde of Cement (a) Manufacturer...(b) Brand...(c) Grade
4. Qty of cement & Lot No/ Week No (in Bags) : (Qty... (b) Lot No/ Week No ...
5. Manufacturer's test certificates No .....
6. Random Test Details (a) Physical test report from ...vide their letter No...(Name of approved Lab/Engg College  
(b) Chemical test report from ...vide their letter No...(Name of approved Lab/Engg College
7. Details of Physical & Chemical Properties :

	Physical requirement (As per IS-4031)							Chemical Requirement (As per IS-4032)										
	Specific surface Area (M <sup>2</sup> / Kg)	Soundness by le Chatellar	Soundness by Auto Clave	Initial Setting Time (Minutes)	Final setting Time (Minutes)	Compressive Strengths (Mpa)			Temp during testing °C	Standard Consistency (%)	Lime Saturation factor (Ratio)	Alumina Iron Ration (Ratio)	Insoluble Residue (%)	Magnesium (%)	Sulphuric Anhydride (%)	Loss on ignition (%)	Alkalies (%)	Chlorides (%)
03 Days						07 Days	28 Days											
As per relevant IS																		
As per manufacturer's test certificate																		
As per random test certificate																		

Remarks with signature

Accepted/ Rejected

Contractor

Junior Engineer

Engineer-in-charge

Garrison Engineer

Remarks of BOO/ Inspecting Officer/ CWE

To be allotted serially by GE consignment wise

**PARTICULAR SPECIFICATIONS**

**APPENDIX 'B'**

**STEEL SUPPLY/ ACCEPTANCE FORM**

Contract No :

Name of work :

Control No :

Dated :

**Details of Purchase**

(i) Particular of Manufacturers

(ii) Details of the supply, if any

**Details of Test certificates**

(i) No. and date

(ii) Particulars of the issuing authority

Srl No	Nomenclature and size of steel	IS Ref	Quality		Physical Properties								Remarks
					0.2% Proof stress/ yield stress (minimum)			Elongation%					
			Actual	Conversion	IS	Test Sheet	Random Test	IS	Test Sheet	Random Test	Bend Test	Re-bend test	
1	2	3	4	5	6	7	8	9	10	11	12	13	14

\*As ordered

Remarks with signature :

JE (Civil)

Engineer-in-Charge

Contractor

Accepted / Rejected

Garrison Engineer

Remarks of BOO/ Inspecting Officer/ CWE

**APPENDIX 'B' TO PARTICULAR SPECIFICATIONS**  
**TEST OF MATERIALS AND RECOVERY RATES OF TESTING CHARGES**

Ser No	Materials	Test	Method of testing	Frequency of test			Levels of test	Rate per test :Rs.	Remarks
1	2	3	4	5			6	7	8
1	Bricks (except, Leh and Kargil area)	(i) Compressive strength.	IS-3495 (Part-II)	As per IS-5454 as given under :-			'A'	330/-	Checks for visual and dimensional characteristics shall also be carried out as per IS-5454.  <u>Legends</u> 'A' Site lab (Established at site by the contractor) 'B' – Zonal Lab. 'C' - National test house/SEMT wing Pune/Engg College.
		(ii) Water absorption.	-do-	Lot Size	Sample Size	Permissible No of defective bricks	'A'	330/-	
		(iii) Efflorescence	-do- (Part-I)	1001 to 10000	5	0	'A'	330/-	
				10001 to 35000	10	0			
				35001 to 50000	15	1			
2.	Coarse aggregate	(i) Sieve analysis	IS-2386 (Part-I)	One test for every 15 Cum of aggregate or part thereof brought to site.			'A'	660/-	
		(ii) Flakiness Index	-do-	-do-			'A'	250/-	
		(iii) Estimation of deleterious materials.	-do-	One test for every 100 Cum of aggregate or part thereof.			'A'	600/-	
		(iv) Organic impurities	-do-	One test per source of supply			'C'	275/-	
		(v) Moisture content	-do- (Part-II)	Regularly as required.			'A'	330/-	
		(vi) Specific gravity.	-do-	One test for each source of supply			'B'	330/-	

Contd....



**APPENDIX 'B' TO PARTICULAR SPECIFICATIONS**  
**TEST OF MATERIALS AND RECOVERY RATES OF TESTING CHARGES**

1	2	3	4	5	6	7	8
6	(a) PCC Block for walling (Hollow block)	(i) Compressive strength	IS:2156-1984 (Appx 'B')	08 Blocks out of 14	'A'	900/-	Sample:- 14 blocks from consignment of every 5000 blocks or part thereof.
		(ii) Water absorption	- do - (Appx 'E')	03 Blocks out of 14	'B'	330/-	
		(iii) Density	- do - (Appx 'A')	03 Blocks out of 14	'B'	330/-	
	(b) PCC solid block for walling	(i) Compressive Strength	IS-2185	12 Blocks out of 18	'A'	900/-	Sample:- 18 blocks from consignment of every 1000 blocks or part thereof. These blocks to be checked for dimension and weight.
		(ii) Water absorption	- do -	03 Blocks out of 18	'B'	330/-	
		(iii) Density	- do-	03 Blocks out of 18	'B'	330/-	
7	Cement Flooring Tiles/ Terrazzo Tiles	(i) Water absorption	IS-1237 (Appx 'D')	06 titles out of 18	'B'	330/-	Sample of 18 tiles from each source of supply selected at random.
		(ii) Wet transverse strength	IS-1237 (Appx 'E')	- do -	'B'	660/-	
		(iii) Resistance to wear	IS-1237 (Appx 'F')	- do -	'C'	540/-	
8	Burnt clay roofing tiles (hand made) as per IS-2690 (Part-II) <b>Length</b> 150mm to 250mm <b>Width</b> 100mm to 200mm <b>Thickness</b> 35mm to 50mm	(i) Water Absorption	IS-3495 (Part-II)	6 tiles out of 12	'B'	216/-	Sample of 12 tiles from each source of supply selected at random.
		(ii) Compressive strength	IS-3495 (Part-I)	- do -	'A'	180/-	

Contd

**APPENDIX 'B' TO PARTICULAR SPECIFICATIONS**  
**TEST OF MATERIALS AND RECOVERY RATES OF TESTING CHARGES**

1	2	3	4	5	6	7	8
9	Mangalore Pattern roofing tiles	(i) Water Absorption	IS-654 (Appx 'A')	6 tiles out of 32	'B'	180/-	Sample: - 32 tiles from each consignment of 3000 tiles or part thereof. These tiles shall be checked for dimension.
		(ii) Breaking Load	IS-654 (Appx 'C')	- do -	'B'	120/-	
10.	Water for construction purposes	(i) Test for Acidity.	IS-456 & 3015	Once at the stage of approval of source of water.	'B'	500/-	Also refer clause 4.3 of IS 456 and its subsequent sub clauses regarding suitability of water.
		(ii) Test for alkalinity	-do-	-	'B'	500/-	
		(iii) Test for solid content	-do-	-	'C'	500/-	
11.	Welding of steel work	Visual inspection test	IS-822-1790 Clause 7.1	100% by visual inspection	Work site	360/-	Specialized tests, their method and frequency to be decided on consideration of their importance by the accepting Officer.
12.	TIMBER	(i) Specific gravity and weight.	IS-1708-1960	Minimum 3 samples from a lot of 4 cum 250 pieces of seasoned timber.	'B'	120/-	
		(ii) Moisture content	-do-	-	'A'	120/-	
13.	Timber paneled and glazed door /window & shutters (including Factory made shutters)	(a) Dimensions, sizes, workmanship and finish	IS-1003-1977 (Part-I)	Frequency of sampling from each lot shall be as under :-	'A'	180/-	
				<u>Lot Size</u> 26 to 50			
				51 to 100			
				101 to 150			
				151 to 300			
				301 to 500			
				501 to 1000			
				1001 and above			
				<u>Sample size</u> 5			
				8			
				13			
				20			
				32			
				50			
				80			

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**APPENDIX 'B' TO PARTICULAR SPECIFICATIONS**  
**TEST OF MATERIALS AND RECOVERY RATES OF TESTING CHARGES**

1	2	3	4	5	6	7	8
		(b) <u>Strength test</u> (i) Slamming	IS 1303-1990	From the each lot 5% of the factory made shutters shall be manufacturer tested for strength tests.			
		(ii) Impact indentation	-do-				
		(iii) Shock resistance	-do-				
		(iv) Edge loading	-do-				
14.	Ply wood (IS-303-1989)	(a) Moisture content	IS-1734-1983 (Part-I)	Six tests of pieces cut from each of the boards selected shall be subjected to tests	'C'	240/-	Sampling shall be as per IS-7835-1975 tables.
15.	Wood particles board (medium density) (IS-3097-1985)	(a) Density	IS-2360 (Part-III)	Three test specimen from each sample (size 150mm x 75mm)	'A'	60/-	Sampling shall be as per IS-3487-83 with moisture metre
		(b) Moisture content	-do-	-do-	'A' & 'B'	60/-	
		(c) Water Absorption	-do- (Part-16)	-do- (size 300mm x 300mm)	'A'	60/-	
		(d) Swelling due to surface absorption	-do- (Part-17)	-do- (size 125mm x 100mm)	'A'	60/-	
		(e) Swelling in water	-do-	-do- (Size 200mm x 100mm)	'A'	60/-	
		(f) Modules of rupture	-do- (Part-4)	Three test specimens as per IS-2380-77	'B'	90/-	
		(g)Screw withdrawal strength	-do- (Part-4)	-do- as per IS-2385	'C'	120/-	

Sampling: The required number of blocks for testing shall be taken from every consignment of 5000 blocks. The block shall be picked up at random from a stack of particular batch. The sample of block shall be marked for future identification of the batch represents.

(Signature of Contractor)

Dated : \_\_\_\_\_

**DCWE (Contract)**  
**for Accepting Officer**

**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

Appx 'D'

Ser No	Company Name	Address	Type of Cement	Valid upto
<b>(A) Cement</b>				
1.	M/s The Associated Cement Companies Ltd <b>Brand: 'ACC'</b>	414-421, Spendor Forum (4 <sup>th</sup> Floor), 3, District Centre, Jasola, New Delhi – 110044, Ph : 011 46583600	All	
2.	M/s Ultra Tech Cement Ltd <b>Brand: 'ULTRATECH'</b>	'B' Wing, 2 <sup>nd</sup> Floor, Mahakali Caves Road, Andheri (East) Mumbai – 400093 Ph- 022 66917800	All	
3.	M/s The India Cement	Dhun Building, 827, Anna Salai, Chennai – 600002	All	
4.	M/s Dalmia Cement (Bharat) Ltd <b>Brand: 'DALMIA CEMENT'</b>	Dalmiapuram, Distt – Truchirappalli, Tamil Nadu – 621 651	All	
5.	M/s Century Cements <b>Brand: 'CENTURY'</b>	Industry House, 159 Church Gate Reclamation, Mumbai – 400020, Ph : 022 22023936	All	
6.	M/s Saurashtra Cement <b>Brand: 'SAURASHTRA'</b>	Gala No A-1, Ground Floor, Udhyog Sadan No 3 MIDC, Central Road Andheri (East) Mumbai – 400093, Ph : 022 32955557/ 67 Mob : 93202 90081	All	
7.	M/s Ramco Cements Ltd <b>Brand : 'RAMCO'</b>	Auras Corporate Centre, 98-A, Dr. Radhakrishnan Salai, Mylapore, Chennai – 600004, Ph- 044 28478666	All	

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**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

8.	M/s Mangalam Cement Ltd <b>Brand: 'MANGALAM'</b>	PO Adityanagar, Marok, Distt Kota, Rajasthan – 326520 Ph : 93514 68076	All	
9.	M/s Birla Corporation Ltd <b>Brand: 'BIRLA'</b>	Birla Building (3 <sup>rd</sup> & 4 <sup>th</sup> Floor) 9/1, R N Mukherjee Road, Kolkata – 700001, Ph : 033 30573700	All	
10.	M/s Orient Cement <b>Brand: 'BIRLA-A1'</b>	5-9-22/57/D, 2 <sup>nd</sup> and 3 <sup>rd</sup> Floor, GP Birla Centre, Adarsh Nagar, Hyderabad – 500063, Ph : 044 23688600	All	
11.	Nuvoco Vistas Corporation Ltd Ltd (Formerly Lafarage Cement) <b>Brand: 'NUVOCO'</b>	Equinox Business Park Tower-03, East Wing, 4 <sup>th</sup> Floor LBS Marg, Kurla (West), Kurla, Mumbai, Maharashtra-400070	All	
12.	Shree Cement <b>Brand: 'SHREE'</b>	Bangur Nagar, Beawar, Dist- Ajmer Rajsasthan-305901 Ph-01462-228101-06	All	
13.	M/s J K Cement <b>Brand: 'JK'</b>	Kamla Tower Kanpur – 208001	All	
14.	M/s J K Lakshmi Cement Ltd <b>Brand: 'JK LAKSHMI'</b>	Jaykaypuram, Distt. Sirohi, Rajasthan, Ph : 02971 244409/10	All	
15.	M/s Jaypee Rewa Cement <b>Brand: 'JAYPEE'</b>	Jaypee Nagar, P.O. - Jaypee Nagar, Rewa – 486450 M.P.	All	

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**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

16.	M/s Ambuja Cement Ltd <b>Brand: 'AMBUJA'</b>	Kodinar, PO- Ambujanagar Taluka– Kodinar, Distt- Sepagadh, Gujarat – 362715, Ph : 02795 237000	All	
17.	M/s Shree Guru Kripa Cement (Pvt) Ltd <b>Brand: 'SARTAJ'</b>	4/4 Trikuta Nagar Jammu, Ph : 0191 2472043	(a) OPC 43 (b) PPC	
18.	M/s Parasakti Cements Ltd <b>Brand: 'PRASAKTI'</b>	123/3RT, Plot #8-3-2014/21 Srinivasa Nagar Colony (West) Hyderabad – 500038, Tel- 040-44119100/ 200, Fax- 040-23747562	(a) OPC 43 (b) PPC	
19.	M/s My Home Industries Ltd <b>Brand: 'MAHA CEMENT'</b>	9 <sup>th</sup> Floor, Block-3, My Home Hub, Madhapur, Hyderabad – 500 081, Ph- 040-66929696, Fax- 040-66929797/98	(a) OPC 43 (b) PPC <b>(C) PSC</b>	
20.	M/s Chettinad Cement Corporation Ltd <b>Brand: 'CHETTINAD Cement'</b>	4 <sup>th</sup> Floor Rani Seethai Hall Building, 603 Anna Salai Hall, Chennai – 600006 Tel No 044-42951800 Fax No 044-28291558 E-mail : <a href="mailto:info@chettinadcement.com">info@chettinadcement.com</a> Website- <a href="http://www.chettinadcement.com">www.chettinadcement.com</a>	(a) OPC 43 (b) PPC	
21.	M/s Sanghi Industries Ltd <b>Brand: 'SANGHI'</b>	<b>10th</b> Floor, Katana Arcade. Off S G Highway. PO-Makarba. Dist-Ahmedabad, Pin-380051 Mob- 09825803690, Tel-079 26838000, Fax-079-26838111, Website <a href="http://www.sanghicement.com">www.sanghicement.com</a>	(a) OPC 53 (b) PPC	
<b>22.</b>	M/s Wonder Cement Ltd <b>Brand: 'WONDER Cement'</b>	17, Old Fatehpura, Seva Mandir Road, Udaipur- 313004 Rajasthan (India), Tele +91-294-33991133, Fax : +91-294-3006333, Email : <a href="mailto:corp.office@wondercement.com">corp.office@wondercement.com</a>	(a) OPC 43, 53 (b) PPC	

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**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

23.	M/s Kesoram Industries Ltd <b>Brand: 'Birla Shakti'</b>	Cement Division, Office No. 613 to 616 White House, Block-III VI Floor, 6-3-1192/1/1 Kundanbagh, Begumpet Hydrabad-500016, Telangana Tele +91-40-4334-4555 Fax +91-40-43334-4534 Email. corp.office@wondercement.com	(a) OPC 43, 53 (b) PPC	
24.	M/s JSW cement Ltd., A.P <b>Brand</b> <b>"JSW PSC (Portland Slag</b> <b>Cement)"</b> <b>Brand "JSW OPC 53"</b> <b>Brand "JSW OPC 43"</b>	JSW Centre Opp MIMRDA Ground Bandra Kurla Complex, Bandra (East) Mumbai-400051. Tele : +91-22-4286-5047 Fax : +91-22-2650-2001 Website : www.jswcement.in	PSC OPC 53 & OPC 43	
25.	M/s Shiva Industries, Kathua	6, Industrial Extn Area Kathua-184102, J&K	OPC	
26.	M/s Trumboo Industries Pvt Ltd <b>Brand "TCI Max"</b>	C/63, Rajbagh Extension, Srinagar Jammu & Kashmir, India PIN-190008 Tele: +91-9797573014/6006612828 E-Mail : <a href="mailto:Pro@tcimax.in">Pro@tcimax.in</a>	OPC -43	

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**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

<b>(B) TMT STEEL</b>					
Ser No	Company Name	Address	Type of Steel	Valid upto	Remarks
1.	Rashtriya Ispat Nigam Limited (RINL) <b>Brand: 'RINL'</b>	Visakhapatnam Steel Plant, Visakhapatnam -530 031, India Tel (91 891) 518226, 518376. Fax : (91 891)518316 Email: cmdvsp@itpvis.ap.nic.in	All		
2.	Tata Iron & Steel Company (TISCO or Tata Steel) <b>Brand: 'TATA'</b>	Bombay House, 2, 4 Homi Modi Steel, Mumbai-400 001, Tel (91 22) 2049131, Fax : (91 22) 204 9522, 287 0840 Email: corpcomm@jsr.tatasteel.com (Br Office for North: Jeevan Tara Bldg, Patel Chowk, New Delhi)	All		
3.	Steel Authority of India Limited (SAIL) <b>Brand: 'SAIL'</b>	Central Marketing Organization Northern Region, 17th Floor, Scope Minar, Laxmi Nagar Distt Centre, Delhi- 110 092	All		
4.	M/s Jai Balaji Industries Ltd <b>Brand: 'Balaji Shakti'</b>	5, Bentek Street, Kolkata-700 001 <u>Delhi Office:-</u> 510, Block-b, Navraung House, 21 Kasturba Gandhi Marg, New Delhi-110 001, Tel: 011-43620219, 43620220 Mob: 7838272772/ 9958936103, E-mail: <a href="mailto:info@jaibalajigroup.com">info@jaibalajigroup.com</a>	TMT Bars of Gde Fe 500 Fe 500D		
5.	M/s Shyam Steel Industries Ltd <b>Brand: 'SHYAM'</b>	Shyam Towers EN-32, Sector-V, Salt Lake, Kolkata-700 091, Tel: 033-40074007, Fax: 033 40074010, E-mail: <a href="mailto:marketing@shyamsteel.com">marketing@shyamsteel.com</a>	TMT Bars of Gde Fe 500 Fe 500D CRS		
6.	M/s Steel Exchange India Ltd <b>Brand: 'SIMHADRI TMT'</b>	My Home Luxminivas Apartments Ameerpet, Hyderabad-500 016 (AP), Tel: 040-23403725 Fax: 040-23413267, E-mail- <a href="mailto:info@seil.co.in">info@seil.co.in</a>	TMT Bars of Gde Fe 500/Fe 500D HSCRM		
7.	M/s Jindal Steels and Power Ltd <b>Brand: 'JINDAL PANTHER'</b>	OP Jindal Road Hissar, Haryana, PIN – 125 005 Tel: +91 1662 222471-84, Fax: +91 1662 220476	TMT Bars of Gde Fe 500/Fe 500D Fe 550/Fe 550D		

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**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

8.	M/s SRMB Srijan Pvt Ltd <b>Brand: 'SRMB'</b>	SRMB House, 7, Khetra Das Lane, Kolkata-700 012, Tel: 033-66006600, Fax: 033-22110483	TMT Bars of Gde Fe 500/Fe 500D Fe 550/Fe 550D (Size: 8-32mm)		
9.	M/s Shri Bajrang Power & Ispat Ltd <b>Brand: 'GOEL TMT'</b>	Vill - Borjhara, Urla industrial Area, Raipur-493221, Chhattisgarh, Tel- 0771 4288019/ 29/ 39	TMT Bars of Gde Fe 500 Fe 500D (Size: 8-32mm)		
10.	M/s JSW Steel Ltd <b>Brand: 'NEOSTEEL'</b>	JSW Centre, Bandra Kurla Compelx, Bandra (East) Mumbai-400051, Maharashtra Phone : 022-42861000 Fax : 022-42863000	TMT Bars of Gde Fe 500/Fe 500D CRS (Size: 8-40mm)		
11.	M/s Shyam Metalics & Energy Ltd <b>Brand: 'SEL TIGER'</b>	Viswakarma, 1 <sup>st</sup> Floor, 86C, Topsia Road, Kolkata-700046, Ph: 91 33 22852212, Website: <a href="http://www.shyamgroup.com">www.shyamgroup.com</a>	TMT Bars of Gde Fe 500 and Fe 500D (Size 8-32mm)		
12.	M/s Kamachi Industries Ltd. <b>Brand: 'KAMACHI'</b>	ABC Trade Centre, 3 <sup>rd</sup> Floor (Inside Devi Theatre Complex), Old No. 50, New No. 39, Anna Salai, Chennai- 600 002, India Tel: 91 044 42961100, Fax: 91 044 42961122 Email: <a href="mailto:sales@kamachitmt.com">sales@kamachitmt.com</a> Website: <a href="http://www.kamachitmt.com">www.kamachitmt.com</a>	TMT Bars of Gde Fe 500, Fe 500D Fe 550, Fe 550D HCRM (Size 8-40mm)		
13.	M/s Real Ispat & Power Ltd <b>Brand : 'G K TMT'</b>	Vrindavan, Near IDBI Bank Civil Lines Raipur-492001, C.G Tel : +91-771-4224000 Fax : +91-771-4224010 E-mail : <a href="mailto:real@realispat.com">real@realispat.com</a> Website : <a href="http://www.realispat.com">www.realispat.com</a>	TMT Bars of Gde Fe 500 Fe 500D (Size 8-36mm)		
14.	M/s Super Smelters Ltd. Kolkata <b>Brand : 'SUPER SHAKTI'</b>	Premlata, 39, Shakespeare Sarani, 3 <sup>rd</sup> Floor Kolkata-700017 Tel/Fax : +91-33-2289-2734/36 E-mail : <a href="mailto:info@supershakti.in">info@supershakti.in</a> Website : <a href="http://www.supershakti.in">www.supershakti.in</a>	TMT Bars of Gde Fe 500 Fe 500D, Fe 550 (Size 8- 32mm)		

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**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

15.	M/s Electrotherm (India) Ltd <b>Brand: 'ET TMT'</b>	Survey No. 72, Palodia, Via- Thaltej, Ahmedabad Gujrat-382115 Tel - +91-2717-660649/660550 Fax-+91-2717-234866 Website : <a href="http://www.electrotherm.com">www.electrotherm.com</a>	TMT Bars of Gde Fe 500D & CRS, (Size-8-32mm)		
16.	M/s Adhunik Industries Ltd <b>Brand "ADHUNIK Fe 500 SD"</b>	'Lansdowne Towers' 2/1A, Sarat Bose Road, 6 <sup>th</sup> Floor, Kolkata-700020 Tel- 033-30517100 Fax- +91-33-2289 0285 Website- <a href="http://www.adhunikindustries.com">www.adhunikindustries.com</a>	TMT bars of Grade Fe 500D with sizes 8mm to 32mm dia		
17.	M/s Gallant Metal Ltd <b>Brand : 'GALLANTT TMX'</b>	Ward 10BC, Plot No 123, Ground Floor, Gandhi Dham, Kutch, Gujraat – 370201 Tel : + 91 – 2836-228164, Fax : +91-2836-235787, E-mail : <a href="mailto:gml@gallantt.com">gml@gallantt.com</a> Website : <a href="http://www.gallantt.com">www.gallantt.com</a>	TMT Bars of Gde Fe 500 Fe 500D CRS (Size 8-32 mm)		
18.	M/s Rashmi Metaliks Ltd <b>Brand : 'RASHMI TMT'</b>	Premlata Building, 39, Shakespeare Sarani, 6 <sup>th</sup> Floor, Kolkata – 700017 Tel : 033-22894255/56, Fax : 033-22894254 E-mail : <a href="mailto:mkt.domesticdip@rashmigroup.com">mkt.domesticdip@rashmigroup.com</a> Website : <a href="http://www.rashmigroup.com">www.rashmigroup.com</a>	TMT Bars of Gde Fe 500 (Size 8-32mm) Fe 500D, Fe 550D (Size 8-25mm)		
19.	M/S Shyam Sel and Power Ltd <b>"SEL"</b>	SS Chambers,5 C.R. Avenue, Kolkata-700072 Tel-033-40111000 Fax-033-40111031 Website : <a href="http://www.shyamgroup.com">www.shyamgroup.com</a>	TMT Bars of Gde Fe 500D (Size 8-32mm)		

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**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

20.	M/s Shree Nakoda Ispat Ltd <b>Brand: 'NAKODA TMT'</b>	Near Railway Crossing, Mowa, P.O. Shankar Nagar Raipur-492007, <a href="http://www.nakodagroup.com">www.nakodagroup.com</a> Ph: 0771-2282130 Mobile: 7898989741, 7898989205	TMT Bars of Gde Fe 500/Fe 500D (Size 8-32mm)		
19.	M/s SPS Steels Rolling Mills Ltd <b>Brand: 'ELEGANT TMT'</b>	Diamond Prestige, 16, Strand Road, Room No H523A 5 <sup>th</sup> Floor Kolkata-700 001, Mob: 9831055568, 8910797649 Fax: 033-66255252, E-mail: <a href="mailto:info@spsgroup.co.in">info@spsgroup.co.in</a>	TMT Bars of Gde Fe 500/Fe 500D/Fe 550		
20.	M/s MSP Steel & Power Limited, Chattisgarh <b>Brand : "MSP TMT 500D"</b>	<b><u>M/s MSP Steel &amp; Power Limited, Chhattisgarh</u></b> 16/S, Blcok-A, New Alipore Kolkata 700053 Tele-03340057777/23982239 Mob-7381028976 Email : <a href="mailto:contactus@mbspsteel.com">contactus@mbspsteel.com</a> Website-www.mbspsteel.com	TMT Bars of Gde Fe 500D (size 8-32mm)		
21.	M/s Sugna Metals Limited, Hyderabad <b>Brand : "SUGNA TMT"</b>	<b><u>M/s Sugna Metals Limited</u></b> Plot No 76, Vemireddy Enclave, Road No 12, Banjara Hills, Hyderabad -500034 (Telangana) Tele : 04027664502/27663527 Email- <a href="mailto:Info@sugnatmt.com">Info@sugnatmt.com</a>	TMT bars of Gde 550D with (Sizes 8mm to 32mm)		
22.	M/s Tulsyan NEC Limited, Chennai <b>Brand : "TULSYAN TMT"</b>	APEX Plaza, 1 <sup>st</sup> Floor Old No.3, New No.77 Nungamapakkam High Road Chennai-600 034 (TN) Website- <a href="http://www.tulsyanec.in">www.tulsyanec.in</a> Tele- 04461991060/61991045 Mob-9840354010, 9677088334	TMT bars of Gde Fe500, Fe 500D & Fe 550 with (Sizes 8mm to 32mm)		

**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

<b>(C) STRUCTURAL STEEL</b>			
Ser No	Company Name	Address	Type of Steel
1.	Rashtriya Ispat Nigam Limited (RINL) <b>Brand : 'RINL'</b>	Visakhapatnam Steel Plant Visakhapatnam – 530 031, India, Tel : (91 891) 518226, 518376, Fax : (91 891) 518316 Email : <a href="mailto:cmdvsp@itpvis.ap.nic.in">cmdvsp@itpvis.ap.nic.in</a>	Structural Steel (Angle, Beam, Column, Channel, Plate)
2.	Tata Iron & Steel Company (TISCO, or Tata Steel) <b>Brand : 'TATA'</b>	Bombay House, 2, 4 Homi Modi Street Mumbai – 400 001, India, Tele : (91 22) 204 9131, Fax : (91 22) 204 9522, 287 0840 Email : <a href="mailto:corpcomm@sr.tatasteel.com">corpcomm@sr.tatasteel.com</a> (Br office for North : Jeevan Tara Bldg, Patel Chowk, New Delhi)	-- do --
3.	Steel Authority of India Limited (SAIL) <b>Brand : 'SAIL'</b>	Central Marketing Organization Northern Region, 17 <sup>th</sup> Floor, Scope Minar, Laxmi Nagar Distt. Centre, Delhi – 110092	-- do --
4.	M/s Jindal Steel and Power Ltd. <b>Brand : 'JINDAL'</b>	Jindal Centre, Plot No 2, Sector – 32, Gurgaon – 122001, Haryana, Tele – 0124 661 2000, Fax – 0124 661 2125, Website : <a href="http://www.jindalsteelpower.com">www.jindalsteelpower.com</a>	-- do --

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Signature of Contractor

DCWE (Contracts)

**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

Ser No	PRODUCT	GROUP OF PRODUCTS BASED ON MAKES / BRANDS		
		GROUP 1	GROUP 2	GROUP 3
<b>(D) EXT ELECTRIC SUPPLY</b>				
1.	POWER TRANSFORMER 66/33/11KV 500KVA AND ABOVE	BHEL SCHNEIDER ABB BHARAT BIJLEE ALSTOM ANDEW YULE	CROMPTON GREAVES VOLTAMP SIEMENS INDIAN TRANSFORMER & ELECT LTD (ITE GURGAON) ELECTRICFIELD	MEGAWIN SWITCH GEAR
2.	DISTRIBUTION TRANSFORMERS 11 KV ABOVE 100 KVA & BELOW 500KVA CAPACITY COPPER WINDING	BHEL SCHNEIDER ABB SIEMENS BHARAT BIJLEE ALSTOM ANDEW YULE	VOLTAMP CROMPTON GREAVES GEE INDUSTRIES INDIAN TRANSFORMER & ELECT LTD (ITE GURGAON)	MEGAWIN SWITCHGEAR AUTOMATIC ELECTRIC
3.	DISTRIBUTION TRANSFORMERS UPTO 100 KVA CAPACITY COPPER WINDING	RAJASTHAN TRANSFORMER CONTINENTAL	POWERWARE NORTHSON RK INDUSTRIES ELECTRIC FIELD ALBA POWER	
4.	CURRENT & POTENTIAL TRANSFORMER 11 & 33 KV	ABB SIEMENS CROMPTON GREAVES ENGLISH ELECTRIC SCHNEIDER	KAPPA AUTOMATIC ELECTRICAL NATIONAL	LAXMI JYOTI PRAGATI

**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

Ser No	PRODUCT	GROUP OF PRODUCTS BASED ON MAKES / BRANDS		
		GROUP 1	GROUP 2	GROUP 3
5.	TRANSFORMER OIL	CASTROL POWER LINK POWER OIL PURE LUBES		
6.	HT SWITCH GEAR 66/33/11 KV, GAS (INDOOR/ OUTDOOR) SF6	ABB SIEMENS SCHNEIDER BHEL ENGLISH ELECRTIC	ANDREW YULE CROMPTON GREAVES ALSTOM C&S ELECTRIC L&T AREVA	MEGAWIN SWITCHGEAR INDIAN TRANSFORMER & ELECT LTD (ITE GURGAON)
7.	HT SWITCH GEAR PROTECTION RELAYS (ELECTRO MECHANICAL / NUMERICAL)	L&T ABB SIEMENS SCHNEIDER BHEL, HAVELLS	CROMPTON GREAVES ANDEW YULE ALSTOM AREVA INDO ASIAN	
8.	HT 11 KV AUTOMATIC SWITCH FUSE UNIT	SOUTHERN SWITCH GEAR ANDREW YULE CROMPTON GREAVES SCHNEIDER	INDIAN TRANSFORMER & ELECT LTD (ITE GURGAON)	

**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

Ser No	PRODUCT	GROUP OF PRODUCTS BASED ON MAKES / BRANDS		
		GROUP 1	GROUP 2	GROUP 3
9.	LIGHTENING ARRESTERS	PACTIL CROMPTON GREAVES M EI ELECTRICAL ALSTOM SCHNEIDER	JAIPURIA, BROS RASHTRIYA JAYSHREE ATLAS GEC ELPRO OBLUM	JMV NOIDA
10.	DISC/ PIN INSULATORS	BHEL PACTIL MASORE PORCEILIN JAIPURIA BROS	JAYSHREE WS INSULATOR HITKARI RASTRIYA	
11.	HT XLPE CABLES 66/33 KV & 11 KV	UNIVERSAL CABLES ASIAN CABLES KEI INDUSTRIES LTD FINOLEX POLYCAB GLOSTER CABLES LTD CCI NICCO	HAVELLS NICCO ICL RAVIN ELECTRON RPG	RALLISON PLAZA
12.	LT CABLES 1100 VOLTS XLPE	FINOLEX UNIVERSAL RPG CABLES KEI INDUSTRIES PVT LTD POLYCAB GLOSTER GRANDLAY HAVELLS SCI CABLES	NICCO INDO ASIAN CABLES KALINGA GOLD PLAZA PARAGAON SEEWEL	RR CABLES CRYSTAL RAVIN RICHA EON RALLISON

**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

Ser No	PRODUCT	GROUP OF PRODUCTS BASED ON MAKES / BRANDS		
		GROUP 1	GROUP 2	GROUP 3
13.	LT/HT CABLE JOINTS HEAT SHRINKABLE/ COLD SHRINKABLE / PUSH ON TYPE	DENSON M-SEAL BIRLA 3M RAYCHEM CABSEAL	RPG YAMUNA GASES MAHENDRA & MAHENDRA CCI JAIPURIA BROS	
14.	ACSR CONDUCTORS	JAIPURIA ALUMINIUM IND ICC NICCO ALIND	NORTHSON PALICON ASIAN POWER	UJALA KONARK BHARAT CONDUCTOR
15.	HT/LT PCC POLES	HINDUSTAN PRE STRESSED CONCRETE KASHMIR CEMENT PRE CAST CEMENT PRODUCT CONCRETE UDYOG LTD	MA PRESTRESS WORK INDIAN PCC POLE CEMENT FABRIC INDIA PRECTO INDUSTRIES KB INDUSTRIES	
16.	HT/LT STEEL TUBULAR SWAGED POLES	NATIONAL TUBING CO KANPUR BHARAT CONDUIT & STEEL WORKS KANPUR JINDAL STEEL PRODUCTS MS BASANTAR FOUNDRY AND FABRICATOES	QUALITY STEELS SURJIT STEEL INDUSTRIES SOHAN LAL & SONS ANIL ENGG CORPORATION ZAIN INDUSTRIES SRINAGAR ADVANCE TUBE JAMMU MS BASANTAR FOUNDRY AND FABRICATOES	SIDHARTH STEEL NASIR ELECTRICAL

**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

Ser No	PRODUCT	GROUP OF PRODUCTS BASED ON MAKES / BRANDS		
		GROUP 1	GROUP 2	GROUP 3
17.	LT PANELS/ AC CONTROL PANELS/ PUMP HOUSE PANELS	SIEMENS L&T ABB SCHNEIDER LEGRAND HAGER HENSAL CROMPTON GREAVES	UNIVERSAL SWITCHGEAR CONTROL AVON AE HP ADHUNIK SWITCHGEAR NATIONAL ENGG WORKS	ANY CPRI APPROVED CO/FIRM SHALABH
18.	PVC FEEDER PILLER BOX / AC BOX/ JUNCTION BOX	L&T HPL SINTEX HAVELLS HENSAL	ADVANCE ADHUNIK NOVATEUR ELECTRIC MILESTONE	
19.	POWER CONTACTORS	L&T ABB SCHNEIDER SEIMENS LEGRAND GE POWER AE HAVELLS	C&S ELECTRIC HPL ENGLISH ELECTRIC INDOASIAN STANDARD	
20.	VOLTMETER/AMMETER/ FREQUENCY METER/ PF METER (ANALOG TYPE)	L&T AE ABB SECURE	HPL MECO HAVELLS INDOASIAN C&S ELECTRIC BENTEX	

**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

Ser No	PRODUCT	GROUP OF PRODUCTS BASED ON MAKES / BRANDS		
		GROUP 1	GROUP 2	GROUP 3
21.	DIGITAL TYPE VOLTMETER/ AMMETER / POWER FACTOR METER	SEURE L&T (RISHAB) C&S ELECTRIC MECO	HPL KAY HAVELLS ENERCON AUTOMETIC ELECTRIC	PREMIER
22.	INDICATING LAMP	L&T SIEMENS C&S	L&T SIEMENS C&S	
23.	SELECTOR SWITCH	KAYCEE SIEMENS C&S	KAYCEE SIEMENS C&S	
<b><u>(E) INTERNAL ELECTRIC SUPPLY</u></b>				
24.	RIGID PVC CONDUIT	PLAZA FINOLEX SUPREME PRESTO PLAST ANCHOR	BAJAJ AKG ASIAN	AVON RICHA CABLE NIC
25.	MS CONDUIT	BHARAT STEEL JINDAL TATA	AKG BEC PRAKASH TUBES TIRUPATI	VIMCO PRECISION NATIONAL
26.	PVC FLEXIBLE COPPER WIRE	L&T FINOLEX GRANDLAY ANCHOR POLYCAB HAVELLS M/S BILLTECH ELECTRICALS PVT LTD SCI CABLES	HPL PLAZA PARAGON (ELEKTRON) GLOSTER KEI M/S BILLTECH ELECTRICALS PVT LTD SEEWEL	SHALABH (INDIA) LTD

**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

Ser No	PRODUCT	GROUP OF PRODUCTS BASED ON MAKES / BRANDS		
		GROUP 1	GROUP 2	GROUP 3
27.	PVC CASING CAPING	CG BAJAJ FINOLEX POLYCAB	PLAZA SUPREME ASIAN	MODI NATIONAL LAXMI PRINCE
28.	BATTERY CHARGER	SU-KAM AMCO SINETRAC EXIDE BCH		
29.	LEAD ACID BATTERIES	AMARON STANDARD EXIDE TATA GREEN MICROTEK	SUKAM OKAYA APC AMCO	
30.	GI PIPES	JINDAL PIPES TATA PRAKASH SURYA	NIDHI PIPES OSWAL ZENITH	SWASTIK ADVANCE STEEL

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**APPENDIX 'D' TO PARTICULAR SPECIFICATIONS**  
**LIST OF MAKES/ BRANDS/ MANUFACTURERS**

Ser No	PRODUCT	GROUP OF PRODUCTS BASED ON MAKES / BRANDS		
		GROUP 1	GROUP 2	GROUP 3
<b>(F) WATER SUPPLY</b>				
39.	GI PIPES	JINDAL PIPES TATA BST PRAKASH SURYA	NIDHI PIPES OSWAL ZENITH	SWASTIK ADVANCE STEEL
40.	HDPE/UPVC PIPES	FINOLEX SFMC PIPE JAIN PIPE RELIANCE (RPPPL) SWASTIK KISAN	ALONPOLY EXTRUSION LTD KIRTI PRINCE SUPREME TIRUPATI DUTRON	
41.	GI PIPE FITTINGS	JINDAL TATA UNCO INDUS BHARAT STEEL TUBE DELHI	NIDHI PIPE LTD OSWAL SWASTIK PRAKASH SURYA	

**Note :- If any make not mentioned in Schedule 'A' Part-I (BOQ) and/ or Particulars Specification than the make of said item/ material / equipment shall be decided and approved by GE/ AGE (I) before incorporating in the work. No claim if any on this account shall be admissible on this account.**

**Signature of Contractor**

**DCWE (Contract)  
For Accepting Officer**

**GENERAL CONDITIONS OF CONTRACTS (IAFW-2249 (1989 PRINT))**

**FOR**

**ITEM RATE CONTRACTS (IAFW-1779 & IAFW-1779A)**

1. It is hereby agreed by me/us\* that the **GENERAL CONDITIONS OF CONTRACTS** including condition 70 & 71 pertaining to the settlement of disputes by arbitration (IAFW-2249 1989 Print) containing 33 Pages (**Serial Page No. 70 to 102**) with errata 1 to 20 and amendments 1 to 49 as **Serial page No. 103 to 121** form an integral part of the tender documents.

2. The tender submitted by me/us\* is subject to the aforesaid General Conditions of Contracts in IAFW-2249, an amendment copy of which has been supplied to me/us\* and is in my/our\* possession and which I/we\* have read and fully understood before submission of this tender.

3. My/our\* signature there under is in token of our\* having accepted the aforesaid amended General Conditions of Contracts together with errata and amendments (IAFW-2249 1989 Print) and the clause relating to arbitration forming an integral part of this tender.

\* Delete whichever is not applicable.

**(Signature of Contractor)**

**Dated : \_\_\_\_\_**

**DCWE (Contracts)**

**for Accepting Officer**

**SCHEDULE OF MINIMUM FAIR WAGES**

It is hereby agreed that the "Schedule of Minimum fair wages" (SMFW) as published vide Government of India (Ministry of Labour) Notification vide their letter No S.O.113 (E) .dated 28<sup>th</sup> Jan 2002 comprising **9 pages** form part of these tender documents.

My/Our signature here under amount to my/our having signed the aforesaid documents forming part of this tender.

**(Signature of Contractor)**

**Dated : \_\_\_\_\_**

**DCWE (Contracts)**

**for Accepting Officer**

**Note** : Schedule of Minimum fair Wages referred to above is available for reference in the office of Headquarters 134 Works Engineers, C/o 56 APO / any lower formation under this Area.