MILITARY ENGINEER SERVICES

GARRISON ENGINEER KALUCHAK

CA NO: GE/KC-59 OF 2024-2025 REPAIR/REPLACEMENT OF MISC E/M PLANTS, PERIMETER LIGHTS & EQPT INCLUDING SERVICING OF DISINFECTION PLANTS & STANDBY- SETS AT ZONE 'B' AT MIL STN KALUCHAK UNDER GE KALUCHAK.

CONTENTS SHEET

Srl	l Particulars		Page No.		
No		From	То		
(1)	(2)	(3)	(4)		
1.	Contents Sheet.	•	1		
2.	Tender forwarding letter.	2	4		
3.	Instructions to Tenderers for filling of Tender Documents.	5	7		
4.	Notice of Tender (IAFW-2162) (Rev 1960) including Appendix 'A' & amendment thereto, if any.	8	13		
5.	Tender and item rate contract for works by measurement (IAFW-1779-A) (Revised 1955) Schedule 'A (EXCEL SHEET IN BOQ)', 'B', 'C' & 'D' & General Summary.	14	49		
6.	Special Conditions	50	61		
7.	Particular Specifications including List of Buildings	62	85		
8.	General Conditions of Contracts IAFW-2249 (1989 Print) including errata & amendments thereof.	86	118		
9.	Schedule of Minimum Fair Wages.	119	126		
10.	Errata/Amendments to Tender Documents.				
11.	Relevant correspondence.				
12.	Acceptance Letter				
Total	No of Pages :				

Signature of the Contractor	AGE (Contracts)
Dated :	for Accepting Office

Garrison Engineer Kaluchak C/O 56 APO Pin-900673

8300/GE/KC-59/ 2024-2025/	/E8	Oct 2024
M/O		
M/S		

CA NO: GE/KC-59 OF 2024-2025 REPAIR/REPLACEMENT OF MISC E/M PLANTS, PERIMETER LIGHTS AND EQPT INCLUDING SERVICING OF DISINFECTION PLANTS & STANDBY- SETS AT ZONE 'B' AT MIL STN KALUCHAK UNDER GE KALUCHAK

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 and cover II are specified in NOTICE OF TENDER.
- 2. Bids will be received on line 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. Bid will be opened on due date and time fixed for opening in the presence of tenderers/ bidders or their authorized representatives, who have uploaded their quotation bid and who wish to be present at the time of opening the bids.
- 4. Your attention is also drawn to instruction 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, 3 days before the <u>BID SUBMISSION START DATE (COVER NO. 1 & 2)</u>. You are requested not to write piece meal points and forward your points duly consolidated 3 days prior to <u>BID SUBMISSION START DATE (COVER NO. 1 & 2)</u>.
- 5. Un-enlisted 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) or Bid Securing Declaration alonwith tender fee on www.defproc.gov.in portal and submit the physical documents in the office of **Garrison Engineer Kaluchak** within the time limit specified in NIT. Inadequacy/deficiency of documents shall make the bid liable for rejection resulting in disqualification for opening of financial bid.
- Contractor having not executed standing security bond and standing security deposit in any formation shall upload scanned copy of EARNEST MONEY DEPOSIT (EMD) or Bid Securing Declaration as mentioned here-in-after and shall ensure receipt of hard copy of EMD or Bid Securing Declaration in the office of tender issuing authority before the date and time fixed for this purpose. In case of failure to abide by any of these two requirements, the financial bid will not be opened.

7. **PERFORMANCE SECURITY**:-

7.1 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 3% of the contract sum.

- (a) A Bank Guarantee in the prescribe form.
- (b) Government Securities, FDR or any other Government Instruments stipulated by the Accepting Officer.
- 7.2 If the performance security is provided by the successful contractor in the form of Bank Guarantee, it shall be issued by Nationalized / Scheduled Indian Bank but its confirmation shall be done only from the Head Office of the Bank.
- 7.3 Failure of the successful contractor to comply with the requirements of sub-clause 7.1 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 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.
- 7.4 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, endorsed 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.

7.5 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.

7.6 **REFUND OF PERFORMANCE SECURITY**

The Performance Security Deposit mentioned on Srl No. 7.1 to 7.5 above may be refunded to the contractor after the expiration of the defects liability period (vide condition 46) by the GE provided always that the contractor shall first have been paid the final bill and have rendered a 'No-Demand certificate' (IAFW-451).

- 8. Enlisted contractors 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 on www.defproc.gov.in portal and submit physical documents in the office of Garrison Engineer Kaluchak before date and time fixed for this purpose.
- 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 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.

CA NO: GE/KC-59 OF 2024-2025

Serial Page No.4

Yours faithfully.

- 11. 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. Tenderer are advised to read these documents in the office of **GARRISON ENGINEER KALUCHAK C/O 56 APO PIN –900673** on any working day during office hours.
- 12. ANY TENDERER, WHICH PROPOSES ALTERATIONS TO ANY OF THE CONDITION, SPECIFICATION LAID DOWN IN THE TENDER DOCUMENTS OR ANY NEW CONDITION, WHATSOEVER, IS LIABLE TO BE REJECTED.
- 13. Please note that NO payments to contractors/ firms will be made unless proof of payment of wages to the workmen through Aadhaar linked bank account is submitted by the contractor / firm. In case payments are made in current coin or currency notes, certificate will be submitted to Eng-in-charge by the contractors/ firms alongwith undertaking by the concerned workmen asking for payment other than by cheque or by crediting in the bank account of the employee/ workmen.

	•
Signature of the Contractor	AGE (Contracts)
Dated:	for Accepting Officer

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER

1. EARNEST MONEY DEPOSIT (EMD)

- (i) All bidders shall be exempted from submission of EMD in all tenders except those who are ineligible from such exemption vide Para 1 (iii) below.
- (ii) 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 on being called upon to submit the Performance Security/ Security Deposit, fail to deposit the Performance Security / Security Deposit before the deadline defined in the request for bid documents / Notice Inviting Tender. I/We shall be debarred from exemption of submitting Bid Security Earnest money deposit for a period of 6 (Six) months from the date I/We are declared disqualified from exemption from submission of Earnest Money Deposit/Security Deposit, for all tenders issued by MES during this period.

(iii) Contractors enlisted in MES formation but other than Chief Engineer, Western Command and who have deposited Standing Security and have executed Standing Security Bond may tender without depositing earnest money with the tender.

2. **GENERAL INSTRUCTIONS FOR COMPLIANCE**

- 2.1 The bids received only in the electronic form will be considered. All bids shall be submitted on 'www.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 'www.defproc.gov.in' portal on or before the bid closing date mentioned in the Critical Dates. 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 **DIGITALY** 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 initialled 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 initialled. 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 contract (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 including the Arbitration Clause.

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER (CONTD..)

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 **GARRISON ENGINEER KALUCHAK** 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/bid 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 site only before the bid closing time and date.

3. <u>REVOKATION/REVISION OF OFFER UPWARD/OFFERING VOLUNTARY REDUCTION, AFTER OPENING OF FINANCIAL BIDS BY LOWEST BIDDER</u>

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 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/bidder's 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.

INSTRUCTIONS ON FILLING AND SUBMISSION OF TENDER (CONTD..)

- 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. These instruction shall form part of the contract documents.

Signature of the Contractor	AGE (Contracts)
Dated :	for Accepting Officer

MILITARY ENGINEER SERVICES e-NOTICE OF TENDER

1. A tender is invited for the work as mentioned in Appendix 'A' to this NOTICE INVITING TENDER (NIT)

- 2. The 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 about two weeks after the date of Acceptance of tender.
- 4. The office of <u>Garrison Engineer Kaluchak</u> 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 NIT. A scanned copy of DD with enlistment details/documents shall be uploaded as packet 1/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.
- 5.1. Tender form and conditions of contract and other necessary documents shall be available on www.eprocure.gov.in site for download and shall form part of contract agreement in case the tender/bid is accepted.
- 5.2. In case of contractor who has not executed the Standing Security Bond, the Cover-I 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 **Garrison Engineer Kaluchak** (see Appendix 'A') by a scheduled Bank or in receipted treasury Challan the amount being credited to the revenue deposit of the **Garrison Engineer Kaluchak** (see Appendix 'A') or Bid Securing Declaration as mentioned here-in-before.
- 5.3. 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.
- 5.4. The **Garrison Engineer Kaluchak** 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.
- 5.5. The <u>Garrison Engineer Kaluchak</u> 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 performance security deposit if such a transaction is feasible.
- 5.6. Copies of the drawings and other document 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 AGE during working hours.
- 6. The tenderers/bidders are advised to visit the site of work by making prior appointment with **Garrison Engineer Kaluchak** who is also the Executing Agency of the work (see appendix 'A). The tenderers / bidders are deemed to have full knowledge of all relevant documents, samples, site etc., whether they have inspected them or not.

MILITARY ENGINEER SERVICES e-NOTICE OF TENDER (contd..)

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

- 8. 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.
- 9. Tenderers/bidders must be in possession of a copy of the MES Standard Schedule of Rates (see appendix 'A') including amendments and errata thereto.
- 10. 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 website. The applicant contractor/bidder if he so desires may appeal to the next higher Engineer authority viz HQ CWE Jammu C/O 56 APO PIN-900172 with copy to the Accepting Officer on email at cwej55@gmail.com 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.
- 11. 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.
- 12. Accepting Officer does not bind himself to accept the lowest or any tender/bid or to give any reason for not doing so.
- 13. This Notice Inviting Tender (NIT) including Appendix 'A' shall form part of the contract.

Signature of the Contractor	AGE (Contracts)
Dated :	for Accepting Officer

(In lieu of IAFW-1779-A (Revised 1955)

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

MILITARY ENGINEER SERVICES

Garrison Engineer Kaluchak C/O 56 APO Pin-900673

8300/GE/KC-59/2024-2025/ /E8 Oct 2024

	FOR WORKS REQUIRED FOR REPAIR/REPLACEMENT OF
PLANTS & STANDBY- SETS AT ZO	NE 'B' AT MIL STN KALUCHAK UNDER GE KALUCHAK
	of is/are hereby ementioned work. The tender is to be uploaded on ssion End Date (Cover No. 1 & 2)' as mentioned in CRITICAL
2. Any correspondence concerning NO:GE/KC-59 OF 2024-2025)" to office concerning of the concerning of	this tender should be addressed quoting the reference as " <u>CA</u> of <u>Garrison Engineer Kaluchak</u> .
	ES NOT BIND HIMSELF TO ACCEPT THE LOWEST OR ANY TO ACCEPT TENDER AS A WHOLE OR IN PARTS AS HE
MAT DECIDE.	
(Signature of the contractor)	(Signature of the officer issuing the tender documents) Appointments: AGE (Contracts) Dated: Oct 2024

SCHEDULE 'A' NOTES

CA NO: GE/KC-59 OF 2024-2025 REPAIR/REPLACEMENT OF MISC E/M PLANTS, PERIMETER LIGHTS AND EQPT INCLUDING SERVICING OF DISINFECTION PLANTS & STANDBY- SETS AT ZONE 'B' AT MIL STN KALUCHAK UNDER GE KALUCHAK

NOTES:-

CA NO: GE/KC-59 OF 2024-2025

- 1. All items of BOQ are for 'Material and Labour', 'Supply and Fixing' including testing as applicable complete unless otherwise mentioned as 'Supply only', 'Fixing only', 'Material only', 'Labour only' etc in the description of any particular item.
- 2. The quantities (Appx. No of units) for all items given in BOQ (Sch 'A') under Col 3 are provisional. They do not constitute any guarantee of the ultimate quantities which will be ordered on the contractor. They shall not however be varied beyond the limit laid down in condition 7 of IAFW- 2249 (General Conditions of Contract).
- 3. <u>METHOD OF MEASUREMENT</u>: Method of measurement for all items listed in BOQ (Schedule of works) shall be as given in MES Standard Schedule of Rates 2020, unless specifically stated otherwise hereinafter for any particular item of work.
- 4. <u>PERIOD OF COMPLETION</u>: The entire work under this contract described in BOQ shall be completed within <u>180 days</u> from the date of handing over of site/ commencing of work as shown in Work Order No: 01. **Defect liability period** for the subject work will be **01 (One) years** from date of physical completion of work.
- 5. Description of items of work in BOQ (Sch 'A') are in brief. These shall be read in conjunction with Special Conditions, Particular Specifications and Specification for material and workmanship and conditions in relevant section of of MES Standard Schedule of Rates Part I (Specifications) and MES Schedule 2020 Part-II (Rates) including preambles all these documents taken as mutually explanatory of one another and contract shall be read as a whole.
- 6. The tenderer shall quote his unit rates in Column 5 of Schedule 'A' in figures only & extended amount in Column 6 & 7 shall be inserted automatically in figures & words both..
- 7. The material obtained from dismantling/demolition of items as specified in BOQ shall be the property of the contractor for which credit as specified in Schedule 'A' Part-II shall be effected. The contractors are advised to visit the site of work to as the quality of materials to be obtained under Schedule of credit. No claim whatsoever in this regard shall be entertained at a later stage whether the contractor visits the site or not. The items, which are not covered in Schedule of credit, shall be taken on charge and contractor shall deposit these items in MES Store Yard without any extra cost to Govt. However quantities mentioned under Col-4 of Schedule of credit are provisional. Credit will be deducted on the actual quantity of materials obtained from demolition/dismantling and contractor shall have no claim if the actual quantity of material obtained from demolition/ dismantling is found less/more than the quantity mentioned under col-4 against each item.
- 8. The contractor shall organise required tools, plants and transportation etc at his own level. Cost element of organising and functioning of these shall be included in the unit rates quoted by the tenderer and nothing extra shall be payable to the contractor in this regard.
- 9. The tenderers are advised to inspect the site with prior appointment with GE Kaluchak to as the nature of site access thereof, local facilities for procurement of material working and labour rates prevailing in the area and also all other matter effecting his prices for execution and completion of the work within the specified time period in accordance with the conditions specifications contained in the tender documents. The tenderer will deem to have full knowledge of the site and other relevant factors effecting the tender whether he actually visits or not.

SCHEDULE 'A' NOTES (contd..)

10. <u>TAXES, DUTIES AND LEVIES ETC</u>: The Contractor's quoted rates shall be deemed to be inclusive of all Taxes / Cesses viz. GST, duties, Royalties, Octroi and other levies payable under respective statues as applicable as on date of receipt of tender. It may be noted that any tender imposing any condition in this regard or any other account shall be treated as a conditional tender and the same shall be liable to be rejected.

- 11. All the debris retrieved after the demolition / dismantling / taking down shall be removed out of MOD land or to be spread in a low lying area, as directed by Engr-in-Charge, to a distance not exceeding 5.0 Kms. The rates quoted by the contractor for different items of demolition / dismantling / taking down shall deemed to be inclusive of this aspect and nothing extra from the department what-so-ever shall be admissible on this account.
- 12. A tenderer is supposed to check if any revised BOQ has been uploaded and quote in revised BOQ only. Thus uploading quotation in pre-revised BOQ shall be considered as a willful negligence by the bidder and his quotation shall be considered non-bonafide.
- 13. All bidders/contractors (enlisted with MES and unenlisted) shall be in possession of Provident Fund Code Number under J&K Employees Provident Fund and (Miscellaneous Provisions) Act 1961 as amended up to date. It is Mandatory for the contractor to upload copy of their Provident Fund Code Number in Cover-1 of e-tendering in addition to their other documents and also submit hardcopy to Garrison Engineer along with the other documents. If contractor not in possession of Provident Fund Code Number and fails to upload the same in cover 1, their technical bid will be disqualified and their financial bid shall not be opened.
- 14. Being a statutory requirement Rule 45 of IE rules (1956) shall be followed in latter and spirit.
- 15. During the currency of the contract the executives shall have to ensure the rule is complied with by ensuring that only valid license holder does the work as specified in Rule 45 of IE Rules 1956.
- 16. NO payments to contractors/ firms will be made unless proof of payment of wages to the workmen through Aadhaar linked bank account is submitted by the contractors/ firms. In case payments are made in current coin or currency notes, certificate will be submitted to Eng-in-charge by the contractors/ firms alongwith undertaking by the concerned workmen asking for payment other than by cheque or by crediting in the bank account of the employee/ workmen.

17. **PERFORMANCE SECURITY**:-

- 17.1 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 % of the contract sum.
 - (a) A Bank Guarantee in the prescribe form.
 - (b) Government Securities, FDR or any other Government Instruments stipulated by the Accepting Officer.
- 17.2 If the performance security is provided by the successful contractor in the form of Bank Guarantee, it shall be issued by Nationalized / Scheduled Indian Bank but its confirmation shall be done only from the Head Office of the Bank.
- 17.3 Failure of the successful contractor to comply with the requirements of sub-clause 17.1 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 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.

SCHEDULE 'A' NOTES (contd..)

17.4 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 of 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, endorsed 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.

17.5 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.

17.6 **REFUND OF PERFORMANCE SECURITY**

The Performance Security Deposit mentioned in Sch 'A' Note No. 17.1 to 17.5 above may be refunded to the contractor after the expiration of the defects liability period (vide condition 46) by the GE provided always that the contractor shall first have been paid the final bill and have rendered a 'No-Demand certificate' (IAFW-451).

- 18. Site for repair & maintenance works shall be handed over in piece meal on daily requirement basis.
- 19. The subject work pertains to the Maintenance Grant 2024-25. The works are to be executed at different locations / scattered pockets (as mentioned against each Job) under the jurisdiction of Kaluchak Stn under GE Kaluchak as per site requirement.

(SCHEDULE OF CREDIT)

(LIST OF ITEMS OF CREDIT TO BE CHARGED FROM THE CONTRACTOR FOR THE MATERIAL RETRIEVED FROM DEMOLITION/DISMANTLING)

	<u>RETRIEVED FROM DEMOL</u>	<u>.1110N/D.</u>	<u>lsmanil</u>	<u>ING</u>)	
Srl No.	Description of items of work	A/U	Qty	Rate	Amount
1	2	3	4	5	6
1	Old unserviceable LT UG cable any size	RM	2420	10.00	24200.00
2	Old unserviceable GI pipe 40mm	RM	60	60.00	3600.00
3	Old unserviceable Light fittings any type	Each	484	80.00	38720.00
4	Old unserviceableGI bracket	Each	45	20.00	900.00
5	Old unserviceable cable junction box	Each	70	20.00	1400.00
6	LED driver of any size	Each	350	20.00	7000.00
7	Old unserviceable Filter of any type	Each	17	2.00	34.00
8	Old unserviceable used oil	Ltr	300	10.00	3000.00
9	Old unserviceable battery leads of any size	Each	10	1.00	10.00
10	Old unserviceable indicator lamp assy	Each	5	1.00	5.00
11	Old unserviceable ammeter	Each	5	1.00	5.00
12	Old unserviceable voltmeter	Each	5	1.00	5.00
13	Old unserviceable Flexible Pipe	Each	7	1.00	7.00
14	Old unserviceable hose pipe	Each	25	1.00	25.00
15	Old unserviceable Change Over	Each	7	150.00	1050.00
16	Old unserviceable water temp guage	Each	5	150.00	750.00
17	Old unserviceable fan belt	Each	2	150.00	300.00
18	Old unserviceable gasket set of any type	Each	6	150.00	900.00
19	Old unserviceable AVR of any size	Each	4	150.00	600.00
20	Old unserviceable battery of any size	Each	4	1200.00	4800.00
21	Old unserviceable bricks bats	Each	16	1.00	16.00
22	Old unserviceable earthing platesof any description	Each	8	100.00	800.00
23	Old unserviceable pole of any description and length	Each	2	1500.00	3000.00
24	Old unserviceable LT panel/ bus bar	Each	6	1500.00	9000.00

(SCHEDULE OF CREDIT) (LIST OF ITEMS OF CREDIT TO BE CHARGED FROM THE CONTRACTOR FOR THE MATERIAL RETRIEVED FROM DEMOLITION/DISMANTLING)

Srl No.	Description of items of work	A/U	Qty	Rate	Amount
1	2	3	4	5	6
25	Old unserviceable cross arms.	Qtl	1	1400.00	1400.00
26	Old unserviceable Aluminum conductor	Qtl	1	1400.00	1400.00
27	Old unserviceable MCCB of any size	Each	8	1500.00	12000.00
28	Old unserviceable insulators any type	Each	25	10.00	250.00

Total of Schedule 'A' Part-II C/O to SUMMARY OF SCHEDULES	Rs. 1,15,177.00
Total of Confedere At Fait II O/O to Committee of Conteded	1,10,17.00

Notes: The contractors are advised to visit the site of work to as the quality of materials to be obtained under Schedule of credit. No claim whatsoever in this regard shall be entertained at a later stage whether the contractor visits the site or not. The items which are not covered in Schedule of credit will be the property of Government and shall be taken on charge and contractor shall deposit these items in MES Store Yard without any extra cost to Govt. However, quantities mentioned under Column - 4 of Schedule of Credit are provisional. Credit will be deducted on actual quantity of materials obtained from demolition/dismantling and contractor shall have no claim if the actual quantity of materials obtained from demolition/dismantling if found less/more than the quantity mentioned under Column-4 against each item. Credit of the item will be deducted from the running payments as per the actual measurement of demolished/dismantled materials.

Signature of the Contractor	AGE (Contracts)
Dated :	for Accepting Officer

CA NO: GE/KC-59 OF 2024-2025

Serial Page No.44

SCHEDULE 'B'

ISSUE OF MATERIALS DUE TO THE CONTRACTOR (SEE CONDITION 10 OF IAFW-2249)

Ser No	Description of Material	Rate at which materials etc will be issued to the contractor	Place of issue by Name	Remarks
1	2	3	4	5

NIL	
Signature of the Contractor Dated:	AGE (Contracts) for Accepting Officer

SCHEDULE 'C' LIST OF TOOLS AND PLANT (OTHER THAN TRANSPORT) WHICH WILL BE HIRED BY THE CONTRACTOR (SEE CONDITION 15, 34 AND 35 OF IAFW-2249)

Ser No	Quantity	Particulars	Details of Crew supplied for each road	Hire Charges per unit per working day	Standby off day charges per day	Place of issue by Name	Remarks
1	2	3	4	5	6	7	8

Signature of the Contractor AGE (Contract	
Signature of the Contractor AGE (Contract	
Dated: for Accepting	ts)

CA NO: GE/KC-59 OF 2024-2025

SCHEDULE 'D' TRANSPORT TO BE HIRED TO THE CONTRACTOR (SEE CONDITION 16 AND 36 0F IAFW-2249)

Ser No	Quantity	Particulars	Rate per unit per working day	Place of issue by Name	Remarks
1	2	3	4	5	6

.....NIL.....

Signature of the Contractor Dated:	AGE (Contracts) for Accepting Officer

TENDER

THE PRESIDENT OF INDIA

- 1. Having examined and perused the following documents:-
 - (a) Specification signed by Shri Nandan Singh, AE (QS&C), AGE (Contracts).
 - (b) Drawing detailed in the specifications.
 - (c) Schedule 'A', 'B', 'C' and 'D' attached hereto.
- 2. MES Standard Schedule of Rates 2009 (Part-I) (Specifications) with amendments 1 to 3 to Part-I & 2020 (Part-II) (Rates) (here-in-after and in IAFW-2249 referred to as the MES Schedule).
- 3. General conditions of contract IAFW-2249 (1989 Print) together with amendment No 1 to 49 and errata 1 to 20.
- 4. <u>WATER</u>: Condition 31 of IAFW-2249 (General Conditions of Contracts):-Water will not be supplied by the MES. The contractor shall make his own arrangements.
- 5. Should this tender be accepted:-

I/We agree	
*(a) That the sum of Rs.	Rupees
) forwarded as earnest mon-
•	formance Security or be refunded by the Department or commance Security within the time specified.

(b) 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 the General Summary and to Carry out such deviations as may be ordered vide condition 7 of IAFW-2249, upto a maximum of **10 (Ten)** percent and further agree to refer all the disputes as required vide condition 70 to Sole Arbitration of serving officer having degree in Engineering or equivalent or having passed final/direct final examination of sub Div-II from institution of surveyors (India) recognised by the Govt of India to be appointed by CHIEF ENGINEER PATHANKOT ZONE, PATHANKOT or in his absence, the officer officiating as CHIEF ENGINEER PATHANKOT ZONE, if specifically delegated in writing by Chief Engineer whose decision shall be final, conclusive and binding.

^{*}To be deleted where-ever not applicable.

CA NO: GE/KC-59 OF 2024-2025

SUMMARY OF SCHEDULES

1	Total amount of BOQ brought forward from Serial Page No: 37	:	Rs.
2	<u>DEDUCT</u> : Total amount of Schedule of Credit brought forward from Serial Page: 43	:	(-) Rs 1,15,177.00 (Minus)
	Net Total of Sch 'A' after deducting Schedule of Credit carried over to next page		Rs.
	(Rupees		
)

(In lieu of IAFW - 1779 - A (Rev - 1955)

Total Brought forwards	ed From Serial Page No: 48 fo of Rs (Rupee	or Rs es
		only)
		apacity of PROPERIETOR/PARTNER duly
-	tender for and on behalf of M/S	S
<u>WITNESS</u>		POSTAL ADDRESS
		<u>PTANCE</u>
	alterations have	been made and these documents and as evidence
that these alterations	were made before the execution	on of the Contract agreement they have been initialed
by the contractor and	d Shri Nandan Singh, AE (Q	S&C), AGE (Contracts). The said Officer is hereby
authorised to sign and	initial on my behalf the docum	ents forming part of this contract.
The above tender is a	ccepted by me on behalf of the	e President of India at the item rates contained in the
Schedule of Works 'B	OQ' on the day	y of for the contract sum o
Rs	Rupees	
)
Signature :	on the	day of2024.
Appointment : EE Garrison Engineer		

Kaluchak Pin : 900673 (For and on behalf of the President of India)

SPECIAL CONDITIONS

1. **GENERAL**

1.1 The following special conditions shall be read in conjunction with General Conditions of contracts IAFW-2249 (1989 Print), IAFW-2159 (Revised 1947) or IAFW-1779A (Revised-1955) as applicable 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 2009 (Part-I) 2020 Part-II shall be applicable unless specific provisions to the contrary are made in these tender documents.
- 1.3 Where there is a discrepancy between the number of reinforcement bars as marked in the drawings and the number of bars as worked out from the C/C of spacing shown on the drawings, the latter shall prevail. The number of reinforcement bar in the RCC slabs etc. shall be worked out considering the space between the C/C of supports.
- 1.4 The tenderers are advised to point out in writing discrepancies in any of the tender documents at least 10 days before the due date of the receipt back of tender. In case discrepancy(s) in contract documents is noticed by the Contractor during execution of the works it shall be brought out to the notice of Accepting Officer of Contract and other concerned in writing before commencement of the particular work where discrepancies is/are noticed, falling which the contractor shall have no right to claim on account of such discrepancy.
- 1.5 In case of any type of ambiguity in the contract provisions, the Accepting Officer shall be the sole deciding authority with regard to the intention of the contract, documents and his decision in this respect shall be final and binding.

2. **VISIT TO SITE (S) OF WORK**

The tenderers are advised to visit the site(s) of work with prior permission of GE and make themselves familiar with the local working conditions, accessibility to sites(s), availability of material and other relevant conditions which effect 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. **RESTRICTION FOR ENTRY TO WORK SITE**:

All work lies in **RESTRICTED AREA**. The restriction for entry to work site and conditions of working in restricted areas shall be as under:-

- (a) **ENTRY AND EXIT**: The contractor/his agents/representatives/workmen etc. and his material carts, trucks or other means of transport etc. will be allowed to enter through and leave from such gate or gates and at such times as the GE 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 the purpose of identifying his carts, trucks, etc to the personal in charge of the restricted area. The opening and closing of the security barriers installed at entry / exit points by the user units shall be the responsibility of the contractor/his agents/representatives/workmen etc.
- (b) <u>IDENTITY OF WORKMEN</u>. Every workman shall be in possession of an identity card. The identity cards shall be issued by Station Headquarters or other unit authorised for issue of passes after a thorough investigation of the antecedents of the labourers by contractor and attested by officer in charge of the units. The contractor shall submit copy of Aadhar Card along with other authenticated documents issued by Central Government / State Government of his Labour / agents / representatives / workmen etc. The cost of passes including photograph shall be borne by the contractor. The Contractor shall be bound to abide the regulations of the units. The contractor shall be responsible for conduct of his workmen, agents or representatives. The contractor shall not engage any Rohingya labour for execution of work.

SPECIAL CONDITIONS(contd..)

(c) <u>IDENTITY CARDS OR PASSES</u> The contractor; his agents and representatives are required individually to be in possession of any 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) <u>SEARCH</u>: 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 any number of times at the site within the restricted area.
- (e) <u>WORKING HOURS</u> The units controlling restricted area usually work during six days in a week and remain closed on the seventh day. The working hours available to the contractor's labour staff reduced because of the time of entry and exit during working hours. The exact working hours, working days and no working days observed for these restricted area (s) where works are to be carried out shall be deemed to have been assessed by contractor before submitting his tender. The tenderers attention is invited to the fact that number of working hour for a unit are prescribed in regulations and that they cannot be increased by GE 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 holiday, weekly holiday and other non working day except when he is specially authorised in work to do so by the GE. The GE may at his sole discretion declare any day as holiday or non working day without assigning any reason for such declaration.

(g) FIRE PRECAUTIONS.

- (i) The contractor, his agents, representatives, workmen etc. shall strictly observe the orders pertaining to fire precaution prevailing within the restricted area.
- (ii) Motor transport vehicles, if allowed by the authorities to enter the restricted area must be fitted with the serviceable fire extinguisher and spark arrestor.
- (h) <u>FEMALE SEARCHER</u>. If the contractor desires to employ female labour on works to be carried out inside the area of factory, depot, part etc. and female searcher is not borne on the authorised strength of factory, depot, park etc. at the time of permission 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 the area, if more than one, contactor employ female labourer during any month and female 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 searcher (s) shall be distributed on equitable bases between the contractors employing female labour taking into consideration the values and period of completion of their contracts. The GE's decision in respect of the amount recoverable on this account from any contractor shall be final and binding.

4. 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 within one month from the date of commencement of work.
- 4.2 The GE 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's) opinion is undesirable. The contractor shall not be allowed any compensation on this account.

SPECIAL CONDITIONS(contd..)

4.3 Tenderer's attention is also drawn to condition 25 of IAFW-2249 in this connection.

5. **HOURS OF WORKING**

The working hours shall be as notified by the authority controlling the area, which will be normally from 0800 hours to 1700 hours. If, however, contractor wants to work beyond these normal hours he can do so if permitted by the GE in writing. Similarly, no work will be allowed to be carried out on Sunday and gazetted holidays unless specifically permitted by the GE in writing.

6. <u>LAND FOR STORAGE OF MATERIALS, WORKSHOP, OFFICE AND ACCOMMODATION FOR LABOURERS:</u>

- 6.1 The contractor shall be permitted to store materials including erecting temporary sheds, erect temporary workshop and the site office at the area(s) of land marked on the site plan(s) or as decided by the GE if the area(s) are not marked on the site plans. The contractor shall pay license fee of Re 1.00 (Rupee one only) per year or part thereof in respect of each and every separate area(s) of land allotted to him.
- 6.2 The contractor shall not be permitted to erect labour camp on Ministry of Defence land even for labour coming from outside the J&K State .

7. 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 supplied by the contractor in the works diary and send the return to the GE for record in his office.

8. 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 para 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, 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 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.

SPECIAL CONDITIONS(contd..)

9. **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.

10. **WATER**

Water shall not be supplied by MES. The tenderers are advised to visit the site of works to as availability of water from civil sources or from nearby natural sources out side 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, in any case on completion of work and before issue of completion certificate shall ensure removal of hand pumps/tube wells unless GE 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. The water from such source(s) shall be got tested by the contractor from the laboratory approved by the GE. The contractor shall submit the test results to the GE who shall after satisfying himself; permit the contractor to use water from such sources. Testing charges shall be borne by the contractor.

11. **ELECTRICITY**

- 11.1 In case the contractor desires to buy electricity from the MES, he shall be charged for electric energy consumed on the following rates:-
 - (i) At Rs 6.29 per unit for lighting.
 - (ii) At Rs 6.29 per unit for power.
- 11.2 Electric supply required for works shall be made available by the MES at one point near the proposed site of building/incoming terminal of the main switch as marked on the site plan. The main switch and KWH meter to register the electric energy supplied shall be provided and installed by the MES. The contractor shall provide all necessary cables fittings etc. from the main switch in order to ensure a proper and suitable supply of electricity for the execution of work.
- 11.3 The MES do not guarantee for continuity of supply and no compensation what-so-ever shall be allowed for supply becoming intermittent or for break down in the system.
- 11.4 The supply shall be AC, 3 phase.
- 11.5 In case point is not marked on site plan it shall be as decided by GE.

12. 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. **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 the quarrying shall be permitted on the defence land".

SPECIAL CONDITIONS(contd..)

14. **GOODS AND SERVICE TAX (GST)**: It is to be noted that the work shall be executed in the state of Jammu and Kashmir. Goods and Service Tax (GST) on works contracts shall be applicable and deducted as per the existing rules and regulations. All the bidders shall get themselves acquainted with the relevant provision of GST Act and get themselves enrolled for GST as per rules of State Government / Central Govt. Contractor's bid shall be deemed to have included GST and all other Taxes/ Duties/ Cess etc prevailing at the time of bid submission end date. The deduction of GST at source by the department shall be as per rules and regulations of Government prevailing at the time of payment.

15. <u>RE-IMBURSEMENT/ REFUND ON VARIATION IN "TAXES DIRECTLY RELATED TO CONTRACT VALUE"</u>.

- 15.1 The rates quoted by the Contractor shall be deemed to be inclusive of all taxes / Cesses viz. GST, Labour Welfare Cess etc., duties, Royalties, Octroi and other levies, and/or imposition/abolition of any new/existing taxes / cesses, duties royalties, Octroi & other levies shall be made except as provided in Sub Para (b) here-in-below. No reimbursement/refund for variation in rates of taxes, duties, Royalties, Octroi & other levies, and/or imposition/abolition of any new/existing taxes / cesses, duties, Royalties, Octroi & other levies shall be made except as provided in sub Para 15.2 here-in-below.
- 15.2 The taxes / cesses which are levied by Govt. at certain percentage rates of contract Sum / Amount shall be termed as "taxes directly related to contract Value" such as GST, Labour Welfare Cess / Tax and like as applicable but excluding Income Tax. 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 for receipt of tenders. Any increase in percentage rate 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 rate of "taxes directly related to Contract value" with reference to prevailing rates on last due date of receipt of tenders shall be refunded by the Contractor to the Government / deducted by the Government 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 Government / deducted by the Government from the payments due to the contractor.
- 15.2.1 The contractor shall, within a reasonable time of this 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 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 may require.
- 15.2.2 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 Government, and shall further, at the request of the GE furnish, verified in such a manner as the GE may require, any documents so kept and such other information's as the GE may require.
- 15.2.3 Reimbursement for increase in percentage rates/imposition of "taxes directly related to contract value" shall be made only if the contractor necessarily and 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 Government Authority and submits documentary proof for the same as the GE may require.
- 16. **CONSTRUCTION LABOUR WELFARE TAX**: Consequent upon promulgation of ordinance by the president of India, the contractor is liable to pay element for construction labour welfare tax. The rates quoted by the contractor shall be deemed to be inclusive of this tax. The construction labour welfare tax at the rates of 01% (One percent) on gross amount shall be deducted at source by the GE while releasing payment to the contractor under the contract.

SPECIAL CONDITIONS(contd..)

17. MINIMUM WAGES PAYABLE TO LABOUR

17.1 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.

- 17.2 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.
- 17.3 The contractor shall have no claim whatsoever if on account any local regulation or otherwise he is required to pay wages in excess of minimum wages as described above during the execution of work.
- 18. **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. BANK GUARANTEE BOND FOR SECURITY DEPOSIT/RETENTION MONEY

On acceptance of the tender, the Govt. may accept a guarantee bond from State Bank of India or any Nationalized Bank and/or Scheduled Banks for security deposit and/or retention money. The bond is to be on the prescribed form which is available and may be seen by the tenderers in the office of Chief Engineer Pathankot Zone and also in the offices of CsWE and GEs.

20. RELEASE OF ADDITIONAL SECURITY

Reference condition 22 and 68 of IAFW-2249. To enable the department to release the additional security deposit in two installments, the contractor shall be required to submit the security in two equal Parts which can be released separately.

21 TIME AND PROGRESS CHART.

21.1 The time and progress chart to be prepared as per condition 11 of IAFW-2249 (General Conditions of Contracts).

22. 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 registrar 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 issue/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:-
 - (a) Daily by JE B/R in charge of supervision of works.
 - (b) 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. In case the cement is specified to be procured by contractor and is not to be issued by MES under Sch 'B' similar record shall be maintained as decided by Engr-in-Charge.
- 22.3 The aforesaid provisions will however not absolve the contractor from returning the overdrawn cement if any detected during the course of checking/examination of final bill/work and similarly to use required quantity of cement in work, where the cement is contractor's supply.

23. SECURITY OF CLASSIFIED DOCUMENTS

23.1 Tenderers special attention is drawn to condition 2A & 3 of General Conditions of Contract 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.

SPECIAL CONDITIONS(contd..)

- 23.2 The contractor shall attach with final bill the receipt from Engr-in-Charge to the effect that the contractor has returned the classified documents as per condition 3 of General Conditions of contracts, IAFW-2249.
- 24. **CLEANING DOWN** The contractor shall clean all floors, joinery, glass panes etc. and remove drops of cement/lime paint etc. and touch up all painters' 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.
- 25. **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.

26. **PROPRIETARY MATERIALS/ARTICLES**

- (a) The proprietary articles such as bitumen, water proofing compound, paint 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 on demand, produce to the GE, original receipt vouchers/invoices in respect of the supplies to ensure that the contractor has actually brought the required quality and quantity from the authorised source/sources 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 items of materials as applicable.
 - (i) Steel (ii) Electrical and mechanical equipment
 - (iii) Electric cable (iv) Paint
 - (v) Steel window (vi) Factory made door shutter
 - (vii) Distemper and cement base paint (viii) Sanitary fittings
 - (ix) Electrical and water supply (x) Cast iron pipe and fittings fittings/fixtures
 - (xi) Article/fitting/fixture where name of manufactures/brands are specified.
- (f) The vouchers/invoices will clearly indicate the contract number and the IS No. with specific alternatives to which the materials conforms in case of various alternatives given in IS.
- (g) Payment for the above materials shall neither be made in the RARs nor shall these 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.

27. REFER SPECIAL CONDITIONS 6 & 9

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 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.

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 in writing to retain such areas of land/building which is in the opinion of GE may be required for storage of materials required for rectification of defects (decision of the GE 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.

SPECIAL CONDITIONS(contd..)

28. 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 23 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.

29. **TESTING OF MATERIAL**: Building materials required for incorporation in this work shall be tested as per level of test in GE (CTL) Chandigarh/ GE (CTL) Udhampur/ AGE (I) lab of CE Pathankot Zone/ lab of HQ CWE Jammu C/O 56 APO/ contractor's site laboratory / National test house/ Engineering College or any other Govt's approved lab in accordance with MES Schedule and relevant IS. The cost of testing including cost of materials and handling charges shall be borne by the contractor. However, in case testing of materials to be conducted in GE (CTL)/ AGE (I) lab of CE Pathankot Zone/ lab of HQ CWE Jammu C/O 56 APO, the testing charges shall be recovered from contractor's payment as per Annexure-I. Rates given under Col. 7 shall be per lot of samples. Refer Annexure-I for detail.

30. APPLICABLILITY OF EMPLOYEES PROVIDENT FUND

- 30.1 Employees Provident Funds and Miscellaneous Provisions Act 1961 is applicable to contractor for this contract. The contractor and their sub contractors shall be in possession of Provident Fund Code Number. All the workers deployed in the work by the contractor and sub contractor shall be enrolled as members of Provident Fund and shall be give the Universal Account Number (UAN).
- 30.2 It is the responsibility of the contractor that the labour working with them shall open EPF account in any Bank in J&K State. The Contractor shall credit PF subscription in the EPF account of the labour as per EPF Rules & Act. The contractor shall submit a certificate stating that all workers employed by him or his subcontractors in the work are registered for EPF and their due contributions have been credited into their account. This certificate duly signed by the contractor shall form part of RARs and FB.

Signature of the Contractor	AGE (Contracts)
Dated :	for Accepting Officer

SPECIAL CONDITIONS(contd..)

(Refer to Special Condition 29)

<u>ANNEXURE – I</u>

Sr	Material	Tests	29) te	Level	Pata	Remarks			
No	ivialerial	16212	Method of testing	LIEC	uency of tes	ເວ	of test	ı \alt	Nemarks
110			l				01 1001	(Rs)	
1	2	3	4		5		6	7	8
1.	Bricks	i) Compressive Strength	IS 3495 (Part- II)	As per (IS-5	6454) As give	en under	'A'	330	Checks for visual and dimensional characteri strics shall also be carried out as per IS- 5454.
		ii) Water Absorption	-do-	Lot size	Sample size	Permissi ble No. of defective bricks	'A'	330	0101.
		iii) Efflorescence	-do- (Part-I)	1001 to 10001 to 35001 to	10000 5 10 35000	0 0	'A'	330	
2	Coarse Aggre gate	i) Sieve Analysis	IS : 2386 (Part-I)	One test fo aggregates or	r every 15 C		'A'	660	Legend: 'A' -Site Lab.
	gato	ii) Flakiness Index	-do-		-do-		'A'	250	B-Zonal Lab
		iii) Estimation of deleterious materials	IS : 2386 (Part-I)	One test for aggregate	every 100 (es or part the		'A'	600	'C'Approved test house/Engg
		iv) Organic impurities	-do-	One test pe	er source of s	supply	'C'	275	College
		v) Moisture content	-do- (Part-II)	Regula	rly as require	ed	'A'	330	
		vi) Specific Gravity	IS : 2386 (Part-II)	One test for e	ach source o	of supply	'B'	330	
3.	Fine Aggre gate	i) Sieve analysis	IS : 2386 (Part-I)	One test for e	very 15 Cum n brought to		'A'	660	
		ii) Test for clay silt and impurities.	-do- (Part-II)		-do-		'A'	500	
		iii) Specific gravity	-do- (Part-II)	One for eac	ch source of	supply	'B'	330	
		iv) Moisture content	-do- Part-II	Regularly as tests/day	required sub when being (•	'A'	330	
		v) Test for organic impurities	-do- (Part-II)	One test for e			,C,	275	
4	Cement	i) Setting time	IS : 4031- 63 affirmed 1980		ch consignm vhen require		'B'	500	
		ii) Soundness	-do-		-do-		'B'	550	
		iii) Compressive strength	-do-		-do-		'B'	550	
		iv) Fineness	-do-		-do-		'B'	275	

SPECIAL CONDITIONS(contd..)

							ANNEXURE – I
1	2	3	4	5	6	7	8
5	Structural concrete (M-25 grade and above)	i) Slump test (OR) compacting factor test (OR) Vee-Bee time.	IS: 1199	The minimum frequency of sampling of concrete of each grade shall be as under :-	'A'	300	i) Random sampling shall be carried out to cover all mix units.
	u,	ii) Compressive strength	IS: 516	Qty of No of Samples concrete in the work (Cum)	'A'	900	
		NOTE :- The	e contractor s	1-5 1 6-15 2 16-30 3 31-50 4 51 & above 4 +1 for each addl cum or part there of hall provide following items at site	lab fo	or car	rrying out field tests
		<u> 11012</u> 1116	o contractor 3	 a. Universal testing machine. b. Sieve set – 02 Nos. c. Weighing balance – 02 Nos. d. Cube mould – 27 Nos. e. Graduated jars. (f) Oven 		n Cai	Tyling out held tests.
6	a) PCC blocks for walling (Hollow block)	Compressive Strength	IS: 2156 of 1984 (Appx 'B')	8 Block out of 14	'A	900	Samples: 14 blocks from consigum ent of every 5000 blocks or part there of.
		ii) Water absorption	-do- (Appx 'E')	3 block out of 14	'B'	330	there of.
		iii) Density	-do- (Appx 'A')	3 Blocks out of 14	'B'	330	
	b) PCC solid blocks for walling	i) Compressive strength	IS : 2185	12 Blocks out of 18	'A'	900	Samples: 18 Blocks from consignment of every 1000 blocks or part there of. These blocks to be checked for dimensions and weight.
		ii) Water absorption	-do-	3 blocks out of 18	'B'	330	
7	Cement flooring tiles/Terra zzo tiles	iii) Density i) Water absorption	-do- IS-1237 Appx 'D'	3 Blocks out of 18 6 Tiles out of 18	'B' 'B'	330 330	Samples 18 tiles from each source of supply selected at random.
		ii) Wet transverse strength	-do- (Appx 'E')	-do-	'B'	660	
		iii) Resistance to wear	-do- (Appx 'F')	-do-	'C'	1000)

SPECIAL CONDITIONS(contd..)

						ANN	EXURE – I
1	2	3	4	5	6	7	8
8	Timber	i) Specific gravity and weight	IS : 1708- 1960	Minimum 3 samples from a lot of 4 cum or 250 pieces of seasoned timber.	'B'	120	
		ii) Moisture content	-do-	-do-	'A'	120	
9	Water for constructi on on 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	-do-	-do-	'B'	500	
		alkalinity iii) Test for soils content	-do-	-do-	'C'	500	
10	Welding of steel work	i) Visual Inspection test	IS: 822- 1970 clause 7.1	100% by visual inspection.	Work site	360	Specialised tests, their method and frequency to be decided on consideration of their importance by the accepting officer.
11	Timber paneled and glazed Door/Win dow shutters (incl factory made shutter)	a) Dimensions sizes. Workmanship and finish	IS : 1003- 1977 (Part- I)	Frequency of sampling from each lot shall be as under :- <u>Lot Size</u> <u>Sample size</u> 26 to 50 5 51 to 100 8 101 to 150 13 151 to 300 20 301 to 500 32 501 to 1000 50 1001 and above 80	'A'	180	
	ŕ	b) Strength test	IS: 1303	From each lot 5% of the factory made shutters shall be manufacturer tested for strength tests			
		i) Slamming ii) Impact Indentation iii) Shock Resistance iv) Edge Loading	-do- -do- -do-				

SPECIAL CONDITIONS(contd..)

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							ANNUAL I
1	2	3	4	5	6	7	8
12	Ply wood (IS : 303- 1989)	a) Moisture content	IS : 1734- 1983 (Part-I)	Six test pieces cut from each of the boards selected as per table shall be subjected to tests.	'C'	240	Sampling shall be as per IS: 7835-1975 tables.
13	Wood particle board (Mediu m density IS: 3097- 1985)	a) Density	IS: 2360 (Part-III)	Three test specimens from each sample (Size 150mm x 75mm)	'A'	60	Sampling shall be as per IS: 3487-1983 with moisture metre.
	1000,	b) Moisture content	-do-	-do-	'A' & 'B'	60	
		c) Water absorption	-do- (Part-16)	-do- (Size 300mmx300mm)	'A'	60	
		d) Swelling due to surface absorption	-do- (Part-17)	-do- (Size 125mmx100mm)	'A'	60	
		e) Swelling in water	-do-	-do- (Size 200mmx100mm)	'A'	60	
		f) Modulus of rupture	-do- (Part-4)	Three test specimens as per IS: 2380-77	'B'	90	
		g) Screw withdrawal strength	-do- (Part-14)	-do- as per IS : 2385	,C,	120	

Signature	of	the	Contractor
Dated :			

AGE (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, General Specifications and other provisions contained in MES Schedule Part-1 (2009) and Part-II (2010) read in conjunction with each other.

- 1.2 Term "General specifications" referred to therein before as well as referred in IAFW-2249 (General Conditions of contracts) shall mean the specifications contained in the MES Schedule 2009(Part-I).
- 1.3 General Rules, specifications, special conditions and all preambles 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, relates to relevant particular specifications and in its absence, general specifications. All references to MES Schedule/SSR in these specifications relate to Part-I of MES Schedule 2009 unless otherwise mentioned. Reference 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".
- 1.4 Where specifications for any item 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.
- 2. **SCOPE OF WORK**. The scope of work under this contract comprises of full, final and entire completion of works as described in Schedule of works (BOQ) and all as specified in this particular specification. The work is covered in scattered area at different locations. The contractor shall provide sufficient materials and labour to complete the works of priority nature all as directed by Engineer-in-Charge/GE.

PRECAUTION.

- (a) The contractor shall take all careful precautions to prevent any damage to structure, fittings etc and shall make good at his own expense for any such damages caused resulting from his operations.
- (b) The contractor shall ensure that all necessary scaffoldings, tools, plants etc are kept and maintained in a proper manner at the work site as directed by the engineer-in-Charge till the completion of work. Soon after the work is completed the contractor shall remove all his tolls, plants, scaffoldings etc. All rubbish waste materials, dirt, splashes, drippings etc shall be cleaned off from the premises and the buildings and premises shall be left in a clean and tidy manner

4. **RATES**.

- (a) The rates quoted by the contractor shall include for work at any height and of any description except fixed flag staff pole aerials (Not latticed) and steel chimneys. Suitable ladder/scaffolding to be provided for applying any kind of finishes and no rope ladder is permitted.
- (b) Use of all scaffoldings and cradles including hoisting and lowering the same to allow MES representatives to inspect and measure the work.
- (c) Taking down as directed, refixing blinds and fittings picture rods, cornices poles and small items of buildings, hardware etc (not painted) such as door knobs, finger plates, hooks etc which are not required to be painted
- (d) Use of dust sheets and other coverings for the protection of fixtures, fittings, furniture etc.
- (e) Moving of movable cupboards and furniture as required and replacing in position
- (f) Removing all splashes, drop etc that may result from the execution or painting and leaving premises in a clean state.
- (g) Work to be executed by employing skilled painter/white washer as approved by the Engineer-in-charge.

PARTICULAR SPECIFICATIONS (Contd..)

MATERIALS.

5.1 **LOCAL MATERIALS**:-

5.1.1 Local materials such as sand, stone, bricks and stone aggregate etc shall confirm to the specifications and to the samples kept in the office of CWE/GE and the tenderers are advised to inspect these samples. The tenders shall be deemed to have inspected these samples before quoting for this tender and have full knowledge there of whether they inspect them or not.

5.2 **PROPRIETARY MATERIALS**:-

- 5.2.1 Proprietary materials like paint, water proofing compound etc shall be procured and brought in manufactures original sealed containers/packing with seal and marking on the containers/packing intact except where the requirement for the whole work is less than the contents of smallest container/packing.
- 5.2.2 The contractor shall produce to the GE original printed and machine numbered purchase voucher(s) for the proprietary/ materials when so ever procured and brought to the site of work for incorporation in the work. A copy of such vouchers shall be kept on the GE's record duly signed by the contractor and the Engr-in-charge. The original voucher shall be stamped (office stamp) and defaced in ink by Engr-in-Charge stating verified for materials purchased and brought to the site for incorporation in the work under contract CA No GE/KC- OF 2018-19 and signed with date.

5.3 **SAMPLES OF THE MATERIALS**.

- 5.3.1 The contractor shall produce samples of all materials and got them approved by the GE before placing bulk order for procurement for incorporation in the work. The contractor shall produce along with the samples original printed vouchers and requisite test certificates from manufactures recognized laboratories in respect of and as are required for verification of the quality of the materials
- 5.3.2 **MAKES**: Material to be incorporated in the work shall be of the makes as mentioned in Appx 'B' to these specifications.
- 5.4 <u>RECORD OF MATERIALS</u>: Material shall be brought for full quantity in sealed containers and the same shall be recorded in MB. The contractor shall submit original purchase vouchers along with the materials brought at site. The same shall be duly verified by the Engineer-in-charge & entered in MB. The materials brought at site shall be recorded in a register and their daily consumption shall be recorded and signed by both the parties kept on safe custody for verification at a later date.

6. **EXCAVATION AND EARTH WORK**.

6.1 <u>PREPARATORY WORK:</u> Before setting out the layout and commencing the construction, contractor shall carry out the preparatory work such as removal of grass, vegetation etc and trimming/surface dressing of the area as per clause 3.8 and 3.10 of MES Schedule Part-I to the entire satisfaction of Engineer-in-Charge. The cost of such work as may be necessary shall be deemed to be included in the contractor's quoted rates against respective items in Schedule 'A'

6.2 **EXCAVATION**:

- (a) Soft/loose soil, hard/dense soil mixed with boulders as defined or soft or disintegrated rock and mud shall be classified as any type of soil.
- (b) Unit rates in Schedule 'A' Part-I shall include for excavation and earth work in any type of soil as aforesaid. In case of deviation on average rate for soft/loose soil hard/dense soil given in SSR-2010 shall be considered for any type of soil.

PARTICULAR SPECIFICATIONS (Contd..)

- 6.2.1 FILLING IN TRENCHES/UNDER FLOORS: The approved earth obtained from excavation in foundations shall be used for filling in trenches, under floors and any other situation as specified after removing big stones, grass roots and vegetable moulds, or other organic matter. Earth mixed with small stones/pebbles (if approved by GE) is permitted for use in filling under floors and foundations. The filling around pipes after the pipes are laid and tested shall however be with earth-free from pebbles/stones. Any additional earth required for the purpose of filling shall be arranged by the contractor at no extra cost to the department from outside of defence land.
- 6.2.2 Filling under floors/sides of trenches shall be in layers not exceeding 250mm thick, and each layer shall be watered and well rammed.
- 6.2.3 Surplus spoil shall be removed and spread at places as directed by the Engineer-in-Charge, to a distance exceeding 100 metres, but not exceeding 200 metres, and levelled as directed by Engineer-in-Charge.
- 6.3 **TRENCHES FOR FOUNDATIONS AND PIPES**: The excavation shall be restricted to dimensions shown on the drawings. Excavation made, if any, in excess of required depth/width shall be made good by the contractor with cement concrete mix (1:4:8) without extra cost to the Govt. The bed of the trenches, if in soft or made up earth, shall be watered and well rammed and any depressions thus formed shall be filled with approved earth as required to the level and slope as directed by Engineer-in-Charge.
- 6.4 **BAILING/PUMPING OF WATER**: All water that may accumulate in trenches of foundation, column footings rafts etc, during the progress of work from rains/snow, sub soil water, spring etc shall be bailed/pumped out or otherwise removed all as per clause 3.17 of MES SSR Part-I and nothing extra except as provided for vide special condition 3.11 on page 19 of MES SSR Part-II shall be payable on this account. Contractors are therefore advised to ascertain level of sub soil water at site of work before tendering.

6.5 **BLANK**

7. **CONCRETE WORK**.

- 7.1 **CEMENT.** Contractor shall make his own arrangements to procure cement as specified herein-after. The cost of cement, its transportation, storage, testing charge, its accounting and preservation etc till consumed in work shall be borne by the contractor.
- 7.1.1 <u>Type of Cement:</u> Type of cement to be used in this contract shall be Pozzolana Portland Cement (PPC) as per IS 1489-2002 subject to compliance of the following requirements:-
 - (a) PPC meets the strength criteria of 43 grade OPC as laid down in IS-8112-1989.
 - (b) The minimum period before striking form work given in clauses 11.3.1 of IS 456-2000 is suitably modified and approved for the period by the GE. The contractor shall not claim any extra on this account.
 - (c) Mixing of OPC & PPC shall not be allowed in the work.
 - (d) While procuring PPC, the following requirements are to be ensured and certificate to that effect is to be obtained for each batch from manufacturers:-
 - (i) The quality of fly ash is strictly as per IS 1489 (Part-I) 2002.
 - (ii) Fly ash is inter-ground with clinker not mixed with clinker.
 - (iii) Dry fly ash is transported in closed containers and stores in silos. Only pneumatic pumping should be used.
 - (iv) The fly ash is received from Thermal Power plants in using high temperature combustion above 1000 degree Celsius should be used.
 - (v) The fly ask content in PPC shall not exceed 25% to ensure consistency.

Note: No concerting shall be undertaken during extreme weather conditions as given in IS-456-2000.

PARTICULAR SPECIFICATIONS (Contd..)

7.2 **PROCUREMENT**: Cement shall be procured from any of the producers listed in List of Make/manufacturers.

- 7.2.1 **PROCUREMENT FROM AUTHORISED DISTRIBUTERs/DEALERS**:- If the total estimated requirement of cement under this contract does not exceed 1200 bags, the cement may be procured from the authorized distributors/dealers of the approved firms. The contractor shall have to submit the test certificate for the batch, issued by the firm. If the requirement for this contract as a whole exceeds beyond 1200 bags, then the cement shall be procured directly from the manufacturer of the approved firms only.
- 7.2.2 Contractor shall produce purchase vouchers, test certificate and other valid documentary proof to the entire satisfaction of GE for entire quantity of each consignment to prove that cement has been purchased from the main producer as in Para 4.2.1 above. The contractor shall also obtain date of manufacturing of cement from manufacturers/suppliers for every lot of cement separately and will submit complete documents in support of purchase of cement to Engineer-in-Charge/GE for verification.

7.2.3 **TESTING OF CEMENT**.

- 7.2.3.1 The contractor shall submit the manufacturer's test certificate in original alongwith the test sheets giving the result of each physical test as applicable and the chemical composition of the cement or authenticated copy thereof, in accordance with BIS provisions duly signed by the manufacturer or his authorized representative with each consignment. The Engineer-in-Charge shall record these specifications in the cement Acceptance Register in Format given in Appx 'A' attached herewith.
- 7.2.3.2 Cement brought to site of work shall remain the properly of Govt. Contractor shall in no case, remove any hag of cement unless permitted in writing by GE. In addition to manufacturers test certificate, GE shall also take random samples of cement drawn from various lots of each consignment as specified in IS Codes and get them tested from any one of the Govt Approved Laboratory or Zonal Laboratory, all as per IS-3535-1985 (Method of chemical analysis of hydraulic cement). Irrespective of results, cost of materials for such samples, cost of requisite handling and conveyance and cost of testing etc. shall be borne by the contractor. Cement from each consignment shall be allowed to be incorporated in the work only after the GE is satisfied with the quality of cement brought by contractor.
- 7.2.3.3 Cost of testing undertaken as per provision in clause 4.2.3.2 above shall also be borne by the contractor. It shall be ensured that tested and untested cement is segregated and stored separately with district identification. Cement of different brands shall be stacked separately.
- 7.2.3.4 If the test results on samples of a particular consignment are not within acceptable limits, the matter shall be referred to the Accepting Officer, whose decision regarding acceptability of such cement with price adjustment or removal from the site shall be final and binding. No claim whatsoever shall be entertained on this account.

7.2.4 STORAGE/CONSUMPTION OF CEMENT.

- 7.2.4.1 Cement in bags shall be stored in proper leak proof/damp proof storage godown, over at least a 20cm high platform at least 20cm away from floor and walls in such manner so as to prevent deterioration due to moisture or intrusion of foreign matter, all as specified in clause 4.3.1 to 4.3.3 of SSR Part-I. It shall be ensured that stacking of cement shall not be more than 10 bags high. It shall be ensured that tested and untested cement are segregated and stored separately with distinct identification.
- 7.2.4.2 The entire quantity of cement brought at site shall also be suitably recorded in the MB indicating quantity and purchase voucher (s) before incorporating in the works. Entries in the MB shall be signed by the Engineer-in-Charge and the contractor.
- 7.2.4.3 For the purpose of keeping a record of cement procured and consumed in works the contractor shall maintain a properly bound register in the form approved by the Engineer-in-Charge showing all procurements, quantity used in the work and balance in hand, at the end of each day and such other information as may be required to control the consumption of cement. Pages of the register shall be numbered and initialled by Engineer-in-Charge. This register shall be signed daily by the contractor or his representative in token of correctness of the entries made. In token to check, it shall be signed by MES representative also as follows.

PARTICULAR SPECIFICATIONS (Contd..)

- (a) Daily by JE (Civ) in charge or works.
- (b) Twice in week by the Engineer-in-Charge
- 7.2.4.4 The register shall remain at site of work, in the safe custody of the contractor and on demand shall be produced for verification of Inspecting Officer. On completion of the work, the register shall be returned to MES.
- 7.2.4.5 The cement go-down shall be provided with two locks on each door. The key of one lock of each door shall remain with the Engineer-in-Charge or his authorized representative and that of the other lock with the contractor's authorized agent at site of work so that cement is removed from the go-down according to daily requirements and with the knowledge of both the parties.
- 7.2.4.6 Foregoing provisions shall not, however absolve the contractor of his responsibility of incorporating required quantity of cement in various items of works as per contract provisions.
- 7.2.4.7 Cement shall be used in order of which it is received. It shall be ensured that only one type/make of cement is used in any structural member
- 7.2.4.8 **DOCUMENTATION**. The contractor shall submit original purchase vouchers from the dealer for the total quantity of cement supplies under each consignment to be incorporated in the work. All consignment received at the work site shall be inspected by the GE along-with the relevant documents before acceptance. The original vouchers and the test certificates shall be defaced by the Engineer-in-Charge and kept on record in the office of GE duly authenticated and with cross reference to the control number recorded in the cement Acceptance Register. The cement Acceptance Register will be signed by the JE (Civil), Engineer-in-Charge, GE and contractor. The Accepting Officer may order a board of officers for random check of cement and verification of connected documents. The entire quantity of cement shall be suitably recorded in the measurement book also for record purposes before incorporation in the work, as 'Not to be abstracted' indicating the voucher number with dates, quantity, date of manufacture/expiry date etc. It shall form the basis to allow advance on account through RARs. While allowing advance on account quantities of cement, so entered in MB, shall be reduced by 2.50%
- 7.2.4.9 **SCHEDULE OF SUPPLY.** The contractor shall ensure that procurement action is taken immediately after acceptance of the contract so as to adhere to schedule of activities as per CPM Net Work.
- 7.2.5 In case the quantity of cement required is less than 600 bags independent testing as mentioned in clause No 4.1.3.2 to 4.1.3.8 here in before will be at the option/discretion of Garrison Engineer provided test certificate of the factory are produced by contractor. However if contractor does not produce the factor test certificate testing as specified in clause 4.1.3.2 to 4.1.3.8 will be mandatory.

7.3 **AGGREGATE**.

- 7.3.1 Aggregate for concrete works shall conform to specifications all as specified in clauses 4.4.1 to 4.4.7 of MES Schedule Part-I.
- 7.4 **FINE AGGREGATE (SAND)** Grading for fine aggregate shall be within the limits of grading zone 1 to 11 as given in clause 4.4.7(2) of MES Schedule Part-I.
- 7.4.1 **COARSE AGGREGATES** Coarse aggregates for all concrete work in all situations shall be graded crushed store aggregate (crushed in mechanically operated crusher) of approved quality.
- 7.4.2 **GRADING OF COARSE AGGREGATE** Graded aggregate of nominal sizes given hereunder, shall be used unless specified otherwise in the specifications here-in-after :-
- 7.5 **WATER**: Water shall conform to the requirements stipulated in IS-456-2000
- 7.6 **MIX OF CONCRETE**. All as specified in relevant item.
- 7.7 **IMPORTANT REQUIREMENT FOR RCC/PCC** All as specified in IS-456-2000 and relevant Clauses of MES Schedule Part-I.

PARTICULAR SPECIFICATIONS (Contd..)

7.8 All cement concrete, both plain and reinforced shall be mixed in a mechanical mixer with hopper of approved type. The coarse of fine aggregates for mixing of cement concrete shall be put in the hopper through measuring boxes. Under no circumstances, measuring with other than proper measuring boxes shall be allowed. However, in case of small quantity i.e quantity of concrete required being less than one bath of mix, the contractor may after obtaining written permission of the Engineer-in-charge, be allowed hand mixing. Where hand mixing is permitted, it shall be carried out on a water tight platform and care shall be taken to ensure that mixing is continued until the concrete is uniform in colour and consistency.

7.90 All concrete for RCC works shall be consolidated/compacted by mechanical vibrators of approved type as specified in Para 4.11.11 of MES Schedule Part-I. Precast/cast-in-citu plain cement concrete shall however, be rammed and consolidated by tamping and rolling.

8. **WATER SUPPLY**:

8 WATER TUBING, BIB TAPS, STOP VALVES AND SHOWER ROSE ETC:

(a) Mild steel galvanized tubes (Pipes) and fittings hall be all as specified in clause 18.4 of MES Schedule Part-I, bib tap and stop valves shall be all as specified in clause 18.14 and 18.15 of MES Schedule part-I. Shower rose shall be of approved make as per sample kept in GE's office.

(b) LAYING AND FITTING PIPES:

- (i) The pipes for supply of water to all fittings in the buildings shall run on the internal walls (from OHT), except otherwise as specified, connected to various fittings and shall be brought in the room at point/position approved by the Engineer-in-Charge at site. Pipes for internal water supply shall run on internal surfaces of walls/floors having a clearance to accommodate PUF type insulation.
- (ii) Where pipes are laid underground the trenches shall be excavated as directed by the Engineer-in-Charge. The pipes running along face of the walls shall be clamped in the walls as specified in SSR. Where pipe is passing through a wall a mild steel tube sleeve shall be fixed all as specified in clause 18.51.1 of SSR Part-I.

(c) WORKMANSHIP:

- (a) Laying of GI Pipes (Material works shall be in accordance with clause 18.51 of MES Schedule Part-I).
- (b) The contractor shall use proper bends, elbows, unions etc at turning corner perding of pipes shall not be allowed in any case.
- (c) Pipe shall not on diagonally.
- (d) Contractor shall provide screwed plug to all open ends of pipes on completion of days work.
- 9. <u>MILD STEEL, GALVANISED TUBES (PIPES) AND FITTINGS</u>: These shall conform to the relevant IS specifications as mentioned in clause 18.4.1 to 18.4.5 of MES Schedule Part-I and shall bear ISI certification mark.
- 9.1 RUBBER GASKET FOR JOINTING: It shall be as specified in clause 18.11 of MES Schedule Part-I.
- 10. **SLUICE VALVE**: It shall be of cast iron class PN-I.6 with flanged ends. It shall bear ISI Certification mark as per IS-780. Valve shall be non rising type loaded with tin bronze sheet and egoist tensile brass stem. Sluice Valve shall be fixed all as specified in clause 18.57 of MES Schedule Part-I.

PARTICULAR SPECIFICATIONS (Contd..)

11. **MASONRY VALVE PITS**: These shall be of size as given in relevant part of Schedule 'A' and drawings. Pit shall be under ground with foundation of PCC (1:2:4), brick work with sub class 'B' bricks, minimum strength 75 Kg/Cm square, in cement mortar (1:6) internally finished with 15mm thick cement plaster in cement mortar (1:6) and externally flush pointed as work proceeds. Flooring shall be 40mm thick PCC (1:2:4) B-1 laid over 75mm thick hard core. Cover shall be 16 SWG MS sheet fixed with nuts/bolts having proper locking arrangements and shall be provided with two coats of synthetic enamel paint over a coat of primer.

12. CAST IRON PRESSURE PIPES AND FITTINGS:

- 12.1 Cast iron pressure pipes and fittings shall conform to relevant IS specifications as mentioned in clause 18.2.8 of MES SSR Part-I and to the description of items given in Schedule 'A'. All cast iron pipes and fittings shall bear IS certification mark.
- 12.1.1 MS column pipe shall be confirming to relevant IS specification and beer IS certification mark.

12.2 **WORKMANSHIP**:

- 12.2.1 The work shall be carried out in compliance with the requirement specified in clause 18.40 to 18.48 of MES Schedule Part-I as applicable to handing/laying of cast iron pipe with lead joints.
- 12.2.2 Laying and jointing of GI pipe shall be in accordance with clause 19.50 to 18.51 of MES Schedule Part-I.
- 12.2.3 Back filling trenches shall be all as specified in clause 18.56 of MES Schedule Part-I.
- 12.2.4 Fixing of sluice valve shall be in accordance with clause 18.57 of MES Schedule Part-I.
- 12.2.5 Making connections of GI distribution with GI main shall be as per clause 18.59 of MES Schedule Part-I.
- 12.2.6 Cutting of GI pipe line fixing, fixing meters and stop valves shall be as per clause 18.63 of MES Schedule Part-I.
- 12.2.7 **JOINTING OF PIPE FITTINGS/VALVES ETC WITH FLANGED ENDS**. The pipes and fittings shall be aligned and jointed as specified in MES Schedule (Part I) using approved neoprene rubber rings / gaskets, high tensile bolts and nuts (all supplied by the contractor).
- 12.2.8 **JOINTING OF CI PIPES AND FITTINGS WITH SPIGOT AND SOCKET ENDS:** The jointing of Cast iron spigot and socket pipes and fittings shall be done with run lead joints all as specified in clause 18.48 of SSR Part –I. The total weight of lead and spun yarn used in each joint shall be recorded jointly and shall be produced along with final bill.
- 12.2.9 **TESTING OF PIPE LINES**. Testing of pipe lines shall be carried out all as specified in clause 18.9 and 18.54 of SSR Part-I. The contractors lumpsum/rate quoted against respective part of Sch 'A'/items shall be deemed to include for this aspect

13. **EXTERNAL ELECTRIFICATION**:

- 13.1 **GENERAL REQUIREMENT**: Materials, execution, testing and record of installation shall conform to relevant IS specifications and as given in clause 19.2.1 to 19.2.6 and as also in accordance with Indian Electricity Rules 1956.
- 13.2 Making Good: The contractor is deemed to have included in his rates, the cost of cutting holes/making chases when required through roads/bricks or concrete work for taking in cables conduit and conductors etc and making good the same to match with the existing work.

PARTICULAR SPECIFICATIONS (Contd..)

13.3 Materials:-

- (a) Plain cement concrete poles shall be all as specified in clause 19.5 of SSR Part-I.
- (b) Insulator and insulator fittings shall be as specified in clause 19.6.1 to 19.6.4.
- (c) Stay wire and stay wire assemblies shall conform to specification given in clause 19.7 to 19.8.
- (d) Steel cross arms shall conform to specifications given in clause 19.9.
- (e) Conductors shall conform to specifications given in clause 19.10.
- (f) Bearer wires shall conform to specifications given in clause 19.11.
- (g) LT and HT Power cables shall be as specified in Schedule 'A' and shall conform to specifications, given in clause 19.19.
- (h) Street light fittings: These shall conform to the specifications given in clause 19.42 of MES schedule Part-I and as specified in schedule 'A'

13.4 **WORKMANSHIP**:

- (a) Erection of poles shall conform to clause 19.50 to 19.52.
- (b) Pole fitting and cross arms shall conform to details given in clause 19.53.
- (c) Insulators shall conform to clause 19.54.
- (d) Stay and stay arrangements shall conform to clause 19.55.
- (e) Laying of conductor shall conform to clause 19.56 to 19.68 and as given in Schedule 'A'.
- 13.5 **UNDERGROUND CABLES**: These shall be laid in trenches and shall conform to clauses 19.75, 19.76, 19.78, 19.80 to 19.82 and as given in Schedule 'A'.

13.6 Excavation:

- (a) Excavation in trenches for cable sand laying of cables in trenches shall be carried out all as specified in clause 19.74 to 19.76 of SSR Part-I.
- (b) Measurement of excavation shall be as per authorised width as given in section 3, clause 3.2.3 para (a), (b) and (c) on pages 16 & 18 of MES Schedule (Part-II).
- (c) Please refer clauses on excavation hereinbefore.
- 13.7 **SAND CUSHIONING:** Sand cushioning to UG cable shall be carried out as specified in Schedule 'A' and all as described in clause 19.75 of MES Schedule.
- 13.8 **CABLE PROTECTION**: Brick cover as specified in relevant item of Sch 'A' shall be used in cable protection, all as specified in relevant clauses of SSR Part-I.
- 13.9 **CABLE LAYING AND RECORD**: The following essential data shall be furnished by the contractor as cable record of all the buried cable installation:-
 - (a) Size, type and make of cable.
 - (b) Location of cable in relation to bench marks or any other permanent structure.
 - (c) Cross-section showing where cables are laid in pipes or trenches giving their sizes, type and depth Position and type of all joints.
 - (d) Position and depth of all pipes, ducts to which it met and obstructions to the cable run.
 - (e) Record of accurate lengths from joints to joint and phase sequence between joints to joints to each cable run.

PARTICULAR SPECIFICATIONS (Contd..)

(f) The contractor shall provide LT cable metal tags indicating sizes, each run joints, length of cable between sub lead centres, so that at any spot each cable can be identified easily.

- (g) While laying LT cable under the roads, paths etc, exact depth at which the cables are to be laid shall be as per SSR and as directed by the Engineer-in-Charge.
- (h) Cable shall not be bent to small radius while laying in trenches/ducts. The minimum safe bending radius shall be taken as 12 D, where `D' indicates dia of cable.
- (j) Before laying the cable, the trenches shall be provided with a layer of sand to the thickness as directed by Engineer-in-Charge, for the purpose of cushioning. Cable ends with exposed ends shall be provided with cable sockets. Sand cushioning for protection of underground cable in trenches shall be done as described in clause 19.75 of MES Schedule.
- (k) All jointing of cables in joint boxes, etc., shall be done strictly as per manufacturer's instructions. The joints shall conform to the relevant IS. Each jointing will be inspected and passed by Engineer-in-Charge. Random checks shall be exercised by GE also and the findings recorded. The PVC cable shall be terminated through a gland, made of suitable sizes. Before making joints in cables near the proposed building sufficient loops shall be provided for further maintenance.

13.10 **UNDERGROUND CABLES**:

These shall be laid in trenches and shall conform to clauses 19.75, 19.76, 19.78, 19.80 to 19.82 and as given in Schedule 'A'

13.11 **TESTING OF UNDERGROUND CABLES**: During and after laying, testing shall be done as specified in clause 19.93 to 19.96. Testing of cable shall be carried as specified in Para 19.9, 19.93.1 and 19.94 of page 19-22 and 19-23 of MES standard Schedule of Rates 1991 Part-I (Specification shall also be kept in view. The rates quoted by the contractor for relevant items of Schedule 'A' shall deem to be inclusive of the testing.

14. **INTERNAL ELECTRIFICATION**:

- (a) Cable for internal wiring for light, power and sub main cables shall be PVC unsheathed cable wring stranded copper conductor cable of size as mentioned in relevant item of Sch 'A'.
- (b) **WOODEN BLOCK, BOARDS AND ROUND BLOCKS**: These shall be in accordance with clause 27.28 of MES Schedule Part-I.
- (c) PLUG/GUTGES SCREWS AND TESTININGS: These shall be in accordance with clause 27.30 and 27.31 of MES Schedule Part-I.
- (d) <u>CEILING ROSE, SHADES AND BULK HEAD FITTINGS</u>: These shall be in accordance with clause 27.32 and 27.34 of MES Schedule Part-I and specified and as shown on drawings.
- (e) **SUNK TYPE BOXES**: These shall be in accordance with clause 27.38 of MES Schedule Part-I.
- (f) **SWITCH SOCKET OUTLETS**: These shall be in accordance with clause 27.40 of MES Schedule Part-I.

PARTICULAR SPECIFICATIONS (Contd..)

(g) **LAMP HOLDERS**: These shall be in accordance with clause 27.41 of MES Schedule Part-I.

- (h) MINIATURE CIRCUIT BREAKERS: These shall conform to IS-3828 (specification for MCBs for AC circuit for voltage not exceeding 1000 Volts). All MCBs shall be housed in suitable size standard sheet metal enclosure of 16 gauge MS Sheet supplied by the manufacturer of MCBs.
- (j) <u>LIGHT FITTINGS:</u> All light fittings shall be provided in accordance with the description of the items given in Sch 'A' and as shown on the drawings and shall be fixed on first class hard wood boxes of suitable size except for ceiling fittings as directed by Engineer-in-Charge. Cost of hard wood boxes for light fittings shall be inclusive in the unit rate of respective items
- (k) Due regard shall be given to doors, windows, opening etc, in fixing of runs of cables, position of fittings, control switches and outlet points. The workmanship shall comply strictly with the rules contained in latest Indian Electricity rules.
- (I) Samples of all electric fittings shall first be got approved from GE before incorporation in work and shall conform to relevant IS. Utility light fittings shall be of the best quality available and conform to sample kept in GE/CWE office.
- 14.1 **EARTHING AND TESTING**: Earthing shall be carried out as described in clause 27.137 to 27.149 and as shown in electric plate No 5 of MES Schedule Pt-I.
- 14.2 <u>SITING OF ELECTRIC EQUIPMENT:</u> The siting of cable, conduit run controls, distribution boards, fittings and accessories etc, shall be as laid down in IS-4648. "Guide for electrical layout in residential building" or as directed by the Engineer-in-Charge. The location of fittings etc shall be marked in advance on walls etc and approved by the Engineer-in-Charge.
- 14.3. **SYSTEM OF WIRING:** Wiring shall be carried out with PVC insulated cable. All conductors, as far as possible, shall run near walls and ceiling so as to be easily accessible and capable of being thoroughly inspected. Power wiring shall be kept separate and distinct from light wiring. In all type of wiring due consideration shall be given for neatness, good appearance and safety. Diagonal runs will not be permitted.
- 14.4. **CONTROL AT POINT OF ENTRY OF SUPPLY**: These shall be linked with main switch gear (Isolator) with MCB on each live conductor of the supply mains at the point of entry. The wiring throughout the installation shall be such that there is no break in the neutral wire except in the form of a linked switch gear. No fuses shall be inserted in the earth neutral.
- 14.5. <u>TYPE OF SWITCH BOARDS:</u> Hinged type metal boards for mounting the MCB and electrical meters shall be as per clause 27.105.1 of MES Schedule Part-I. Meter box shall be made of 16 gauge MS sheet with provision of locking arrangement and glass window.
- 14.6. **JOINTS AND LOOPING BACK**: These shall be as per clause No 27.109 of MES Schedule Part-I.
- 14.7. **PASSING THROUGH WALLS AND FLOORS**: Refer clause 10.111 of MES Schedule Part-I for passing the conductors through wall and floors. The rate for surface wiring against internal electrification shall be deemed to include the provisions mentioned in clause 27.111 of MES Schedule part-I.

PARTICULAR SPECIFICATIONS (Contd..)

15. LT PANEL BOARD, SINGLE PANEL SWITCH BOARD.

- 15.1 **SCOPE** These specifications 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.
- 15.2 **LT PANELS** Lt panels shall be 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.
- 15.3 **ELECTRICAL PARAMETERS**. Suitable for 415 volts rated voltage 3 Phase, 4 wire 50Hz AC supply.

16. **PURCHASE VOUCHER/TEST CERTIFICATE**:

Purchase vouchers and manufacturers test certificates in respect of the following materials shall be furnished by the contractor to the Engineer-in-charge after obtaining written approval of makes from GE before incorporating in the work. The copies of purchase vouchers and test certificates duly verified by Engineer-in-Charge shall invariably submitted while claiming the payment in the RAR/FB. If demanded, necessary initial test may be conducted at the manufacturers work site in presence of GE's representative. All tests shall be carried out in accordance with relevant Indian Standards (or British standards where Indian standard do not exist) and testing charges shall be borne by the contractor.

- (i) XLPE cable.
- (ii) Street light luminaries.
- (iii) Steel tubular poles
- (iv) GI Tube
- (v) Junction box
- (vi) Feeder pillar box.
- (vii) LT / APFC Panel
- (viii) LED tube light fittings
- (ix) Storage Water Heater
- (x) Sheet metal enclosure
- (xi) Ceiling fans
- (xi) MCCB, Change over switch, MCB
- (xii) Submersible pump

17.0 **GUARANTEE**

The contractor shall give two year guarantee after completion of work for the all Items as mentioned in Sch 'A'. If any defects are noticed during this period the same shall be rectified by the contractor at cost under his own arrangement.

18. CREDIT FOR DISMANTLED/DEMOLISHED MATERIALS:

- 18.1 The work ordered to be demolished/dismantled shall be done with due care to avoid any damage adjoining surfaces. Any damage caused due to negligence of workman shall be made good by the contractor at his own cost
- 18.2 Measurements of all works except hidden work shall be taken before commencement of demolition/dismantling i.e. at the time of preparation of inventories.
- 18.3 The materials obtained from demolition/dismantling shall be displayed out and stacked as per direction of the Engineer-in-Charge for inspection by the GE for disposal as given below :-
 - (a) Materials to be taken by the contractor against credit.
 - (b) Materials to be deposited in the MES store Yard.

PARTICULAR SPECIFICATIONS (Contd..)

(c) Materials to be disposed off otherwise to be thrown away. The decision of the GE in this regard shall be final and binding.

18.4 The demolition statement in respect of all demolished/dismantled items shall be prepared irrespective of their disposal. The materials to be taken away by the contractor against credit shall be booked in measurement book (IAFW-2261). The contractor shall be allowed to remove the materials from site of work only after credit is recovered from running payment and after written permission of GE. The permission letters issued by the GE from time to time will describe the items, quantity, credit rate and the total amount to be recovered from the contractor.

Signature of the Contractor	AGE (Contracts)
Dated :	for Accepting Officer

PARTICULAR SPECIFICATIONS (Contd..)

Appendix 'A'

CEMENT SUPPLY ACCEPTANCE/REJECTION FORM

Contract No

Name of work

Details of purchases Date:

(a) Particulars of Manufacturers(b) Details of the suppliers if any

Details of Test Certificate

(a) No and date

(b) Particulars of the Issuing Authority

SL NO	NOMENCLATURE OF THE CEMENT	IS NO	QTY	SPECIFIC SURFACE BY BLAINS PERMETY METHOD	SOUND-NESS BY LE' CHA TILLERS METHODS	SETTING TIME INITIAL	SETTING TIME FINAL	AVERAG STRENG CUBES / RELEVA 24 HRS+ 30 MTS	TH OF AS DEFI	THREE I NED IN	672 HRS + 4 HRS	スロMAススひ
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Remarks with signature Junior Engineer (Civil) Engineer-in-Charge

Contractor

Accepted / Rejected Garrison Engineer

Remarks of B.O.O. /Inspecting Officer/CWE

<u>Contractor</u> <u>JE (Civil/E&M)</u> <u>Engineer –in-Charge</u> Garrison

Engineer

Remarks of BOO / Inspeting Officer / CWE

*To be allotted serially by GE consignment

wise.

CA NO : GE/KC-59 OF 2024-2025 Serial Page No.75

<u>Appendix 'B'</u>

PARTICULAR SPECIFICATIONS (Contd..) LIST OF MAKES/MANUFACTURERS/PRODUCERS

1. PRODUCERS OF CEMENT (OPC & PPC)

a)	The Associated Cement Companies Ltd BRAND "ACC" (All Grades)	b)	M/s Ultra Tech Cement Ltd BRAND"ULTRATECH" (All Grades)
c)	The India Cement (All Grades)	d)	M/s Dalmia Cement (Bharat) Ltd. BRAND "DALMIA CEMENT" (All Grades)
e)	Century Cements BRAND "CENTURY" (All Grades)	f)	Saurashtra Cement BRAND "SAURASHTRA" (All Grades)
g)	M/S Ramco Cements Ltd. Brand "RAMCO" (All Grades)	h)	Mangalam Cement Ltd BRAND "MANGALAM" (All Grades)
j)	Birla Corporation Ltd BRAND " BIRLA " (All Grades)	k)	Orient Cement BRAND "ORIENT " (All Grades)
l)	Nuvoco Vistas Corporation Ltd. BRAND "NUVOCO" (All Grades)	m)	Shree Cement BRAND "SHREE" (All Grades)
n)	J K Cement BRAND "J K" (All Grades)	0)	JK Lakshmi Cement Ltd BRAND "JK LAKSHMI" (All Grades)
p)	Jaypee Rewa Cement BRAND " JAYPEE " (All Grades)	q)	Ambuja Cement Ltd BRAND "AMBUJA" (All Grades)
r)	M/s Shri Guru Kirpa Cement Pvt Ltd BRAND "SARTAJ"	s)	M/s Parashakti Cements Ltd BRAND "PARASAKTI" (OPC 43 grade & PPC)
t)	M/s My Home Industry Ltd BRAND "MAHA CEMENT " (OPC 43 grade, PPC & PSC).	u)	M/s Chettinad Cement Corporation Ltd BRAND"CHETTINAD" (OPC 43 Grade & PPC)
v)	M/s Sanghi Industries Ltd BRAND"SANGHI" (OPC 53 grade & PPC)	w)	M/s Wonder Cements Ltd BRAND "WONDER CEMENT" (OPC 43, 53 grade & PPC)
x)	M/s Kesoram Industries Ltd BRAND "BIRLA SHAKTI" (OPC 43, 53 grade & PPC)	y)	M/s JSW Cements Ltd BRAND "JSW PSC (Portland Slag Cement)" (PSC)
z)	M/s Shiva Industries (OPC only) 6, Industrial Extn Area Kathua - 184102, J&K		

PARTICULAR SPECIFICATIONS (Contd..) LIST OF MAKES/MANUFACTURERS/PRODUCERS

3. SECONDARY PRODUCER FOR STRUCTURAL STEEL ONLY

(a) M/S Pushpak Steel Industries Pvt Ltd.

Gate No. 119. A Landi Market Road Dhanore, Teh: Khed, Pune

M/S KL Steel Pvt. Ltd. (c)

Post Box No. 61, Lal Kuan Buland Shahar Road, Ghaziabad (UP)

M/S Shree Parashnath Re-Rolling Mills Ltd. (e) **Read Office**

4 C Maharshi Devendre Road 3rd Floor Kolkata-700007 Tele 033-22740045/4475,

Fax: 033-22740039

Admn Office

3511 Part Dr BC Roy Avenue, Durgapur -713201 Tele: 0343-2550537/0538, Fax: 0343-2554457

(g) M/S SRMB Srijan Pvt Ltd **Read Office**

7 No. Khetra Das Lane, Kolkata-700012 Tele: 033-40097390, Fax: (033) 22113636

Works

Sagar Bhanga, Durgapur-713211 Tele(0343)2550448

M/S Madhav Udyog Pvt Ltd.

Talwara Road (Sirhind Side) Mandi Gobindgarh-147301 (PB)

Tele: 01765-256754, 251657, 241420

Fax: 01765-256798

(I) M/S Anant Steels Pvt Ltd.

Regd Office

368, Civil Line, Jhansi (UP) Tele: 0517-2330115,619,

Fax: 01517-2330618 **Corporate office**

170/10, Film Colony, Opp Ravindra Nritya Grih

RNT Marg, Indore-452001

Tele-0731-2526950-51, 2520967, 5070135

Fax: 0731-2526638"

M/S Amba Shakti Ispat Ltd.

Plot No. 6, Phase-II Industrial Area, Kala Amb, Dist Sirmor – 173030 (HP)

M/S Shyam Steel Industries Limited

NH-6, Mombay Road, Village - Pakuria, PO:

Lakhanpur, PS: Dsomjur Distt: Howrah (WB)

(f) M/S SRMB Udyog Ltd Kolkata

Regd Office

46 B.B Ganguly Street, Kolkata-700012

Tele: 22369999 (Hunting), Fax: (033) 2236666

Works

1 Oil Installation Road, Paharpur Kolkata-700008 Tele: 24391161/7697,

Fax: (033) 2439 2056

(h) M/S Amba Steels

Regd Office

21/6, West Patel Nagar, New Delhi-110008

Tele-011-25885225, 25885226, Fax: 011- 25886914

Works

7th Km, Meerut Road, Muzaffarnagar-251003 (UP)

Telefax: 01396-252385, 252387

(k) M/S Shree Om Rolling Mills (P) Ltd.

D-51/2, Additional MIDC Jalna- 413203

Maharastra

Tele-02482-220925, 220474, Fax: 02482-221306

(m) M/s Karam Steel Corporation

Regd Office

Narsali Road, PO Box No 56, Mandi Gobindgarh – 147 301 (Pb)

Tele: 01765 - 257536

FACTORY MADE WOODEN PANELLED/ GLAZED/ WIRE GAUGE DOOR SHUTTERS

- CHANDIGARH TIMBER PRODUCTS, b) M/S SARAB ENTERPRISES, KANGRA PATIALA
- SHRI KRISHNA INDUSTRIES d) M/S NEW JAGDAMBA DOORS c) PANCHKULA
- HARYANA INDUSTRIES

- M/S SUPREME DOORS & ALLIED PRODUCTS, KANPUR
- (g) NND WOOD INDUSTRIES, SRIGANGA (h) MASSONITE DOORS, PATHANKOT NAGAR
- **PIONEER** TIMBER (j) CHANDIGARH
 - PRODUCTS, (k) GOYAL INDUSTRIES CORPORATION, NEW DELHI
- (I) A-1 Teak Products Pvt Ltd

Appendix 'E'

_	LIST OF MAKES/MANUFAC	
5.	STEEL WINDOWS/VENTILATORS WITH TU	
	a) SHRI KRISHNA ASSOCIATES, PANCHKULA c) GANPAT DOORS, RAJPURA e) MOHINDRA FABRICATORS g) SHIVAM METAL SHAPERS j) JANGID ENGG WORKS I) SKS INDUSTRIES	
6.	a) GOODLESS NEROLAC PAINTS c) BERGER PAINTS d) ASIAN PAINTS	b) JENSON & NICHOLSON d) ICI INDIA DULUX e) BRITISH (GLO HIGHGLOSS)
7.	GI PIPES/MS PIPES/FITTINGS a) JINDAL PIPES c) NECO e) BHUSHAN g) PRAKASH SURYA	b) TATA d) BHARAT STEEL TUBE f) APL APPLO
8	a) SINTEX INDUSTRIES c) M/S DURA PLAST EXTRACTION PVT LTD e) ECOCELL	b) RAJSHRI PLASTIWOOD LTD d) FENESTA
9.	LOOKING MIRROR a) SAINT GOBAIN c) TRIVENI FLOAT GLASS	b) MODI FLOAT
10.	a) SAINT GOBAIN c) ATUL	b) MODI FLOAT d) ASAHI
11.	CEMENT BASED PAINTS a) SNOWCEM c) DURACEM	b) ACRO PAINTS
12.	BIB TAPS/ STOP COCK (CP) & FANCY FITT a) JAQUAR c) MARC e) PRIMA	b) Somany d) JOHNSON f) PRAYAG
13.14.	BATH ROOM FANCY FITTINGS a) JAQUAR c) MARC e) PRIMA FALSE CEILING / METAL FALSE CEILING	b) Somany d) JOHNSON f) PRAYAG
17.	a) GYPBOARD c) ANCHORLAM e) Hi STEEL DEXUNE	b) ARMSTRONG d) ANCHOR
15.	GALVANIZED STEEL SHEETS	

b) TATAd) BHUSHAN

a) SAIL c) JINDAL

PARTICULAR SPECIFICATIONS (Contd..)

16.	LIST OF MAKES/MANUFAGE GLAZED CERAMIC/ NON SKID WALL/ FLO		
10.	a) KAJARIA		H&R JOHNSON
	c) CERA	,	SOMANY
	e) ORIENT BELL	,	
17.	VETRIFIED TILES (NORMAL/ ANTI SKID)		
	a) KAJARIA	b)	H&R JOHNSON
	c) CERA	ď)	SOMANY
	e) ORIENT BELL		
18.	INTERLOCKING TILES/ EXTERIOR TILES/	PAVE	ER BLOCKS
	a) NTC		NITCO
	c) ULTRA		JOHNSON
	e) UNISTONE	f)	SURYA K
	g) MEHTAB TILES		
19.	TERRAZZO TILES/ PPC TILES/ PPC CHEQ		
	a) NTC		NITCO
	c) EUROCON	d)	DURACRETE
	e) MEHTAB TILES		
20.	PVC TILES/SHEET		
	a) PRIMER VINYL POLYFILM LTD	b)	WONDER FLOOR
	c) ARMSTRONG		
21.	VITREOUS CHINA SANITARY APPLIANCES	S/ FIT	TINGS (SANITARIWARE)
	a) NEYCER	,	CERA
	c) MARC	,	HINDWARE
	e) PARRYWARE	f)	JAQUAR
00	g) PRAYAG	^	VEAT 00\/ED
22.	WATER CLOSET SEATS AND COVER TOIL		
	a) JAQUAR c) SOMANI	d)	MARC COMMANDER
	e) PRAYAG	f)	NEYCER
	g) JOHNSON	'/	NETOLIK
23.	PVC FLUSHING CISTERN		
	a) JAQUAR	b)	MARC
	c) SOMANI	,	COMMANDER
	e) PRAYAG	f)	NEYCER
	g) JOHNSON	ŕ	
24.	SHOWER ROSES CHROMIUM PLATED (SV		
	a) JAQUAR		MARC
	c) SOMANI	,	COMMANDER
	e) PRAYAG	f)	NEYCER
25	g) JOHNSON		
25.	WALL PUTTY	۴,	DIDLA WUITE
	a) ASIAN PAINTS	,	BIRLA WHITE
	c) NEROLAC e) BERGER PAINT	u)	JK CEMENT
	o, bendert Airi		

26. DRY DISTEMPER/ OIL BOUND DISTEMPER/ PLASTIC EMULSION/ EXTERIOR **EMULSION/ SILICON PAINTS & COATINGS**

- a) ASIAN TRACTOR ACRYIL DISTEMPER
- c) BERGER BISON ACRYIL DISTEMPER
- d) AKZO DUWEL ACRYIL DISTEMPER
- b) NEROLAC BEAUTY ACRYIL
- DISTEMPER

CA NO : GE/KC-59 OF 2024-2025 Serial Page No.79
Appendix 'E'

PARTICULAR SPECIFICATIONS (Contd..) LIST OF MAKES/MANUFACTURERS/PRODUCERS

	LIST OF MAKES/MANUFACTURERS/PRODUCERS						
27.	PLASTIC EMULSION PAINT a) BERGER (SILK, RANGOLI EASY CLEAN) c) NEROLAC (IMPRESSION ECOCLEAN, IMPRESSION 24 CARAT)	ADVANCE)					
28.	EXTERIOR PAINT a) ASIAN PAINTS APEX ULTIMA c) BERGER WEATHER COAT LONGLIFE FLEXO	b) NEROLAC EXCEL TOTAL d) AKZO WEATHER SHIELD MAX					
29.	FALSE CEILING TILES/ BOARD (GYPSUM B a) LAFARGE BORAL c) ARMSTRONG e) V-BOARD	b) GYPROC d) DIAKEN f) DEXUNE					
30.	a) NIRALI c) JAYNA e) KOBRA	t Draining Board / Plate Rack b) NEELKANTH d) BLUE STAR F) PRAYAG					
31.	PARTICLE BOARD (VENEERED & UNVENEER a) NOVA PAN INDUSTRIES, NEW DELHI c) BHUTAN BOARD e) KITPLY g) DURA BOARD						
32.	PLYWOOD FOR GENERAL PURPOSES a) DURA PLY c) MYSORE CHIP BOARD LTD e) CENTURY	b) BHUTAN BOARD d) ARCHID PLY f) DURIAN					
33.	a) ARCHID LAM c) MERINO LAM e) GREELAM	b) SUNMICA d) MYSORE CHIP BOARD					
34.	FIBRE BOARD (MEDIUM DENSITY) a) NOVAPAN c) KITPLY e) GREEN PANEL MAX	b) BHOTAN BOARD d) MYSORE CHIP BOARD LTD					
35.	PRE FAB PANEL BOARDS/ WALL LINING / (a) LAFARGE BORAL GYP BOARD c) AEROLITE CEILING SYSTEM e) V-BOARD	CEILING TILES b) SHRI NEPAL BOARD PVT LTD d) ARMSTRONG f) HILUX					

36. **GALVALUME SHEETS**

a) TATA BLUE SCOPE (JINCALUME)
b) JSW STEEL(GALVALUME)
c) KAMDHENU GALVALUME
d) BHUSHAN GALVACOLOR

Serial Page No.80 Appendix 'E'

37.	PTMT FITTINGS		
	a) PRAYAG	b)	SHAKTI
	c) POLYTUF		
38.	ATACTIC POLYPROPYLENE WATER POLYI		
	A) IWL INDIA LTD	B)	STP LTD.
	C) PIDILITE INDUSTRIES LTD,	D)	TIKI TAR DANOSA (INDIA)
	,		RIVATE LIMITED ` `
	e) BENGAL BITUMEN		TORCTAR MEMBRANCES &
	,		TUMEN PVT LTD
	g) ASIAN PAINTS		
39.	FACTORY MADE FLUSH DOOR SHUTTERS		
	a) M/S GREEN PLY INDUSTRIES	b)	M/S CENTURY PLY
	c) SWASTIK PLY WOOD	d)	DURA PLY
	e) MYSORE CHIP BOARD	f)	JAIN WOOD INDUSTRIES
40.	WATER STORAGE HDPE TANKS		
	a) SINTEX		SHEETAL
	c) POLYCON	d)	VECTUS
	e) ULTRA TUF		
41.	AC CORRUGATED/SEMI CORRUGATED/ AC		
	a) EVEREST	b)	CHARMINAR
	c) RAMCO		
40	ALLIMINIUM CECTIONS		
42.	ALUMINIUM SECTIONS	ل ما	INIDAL
	a) JINDAL	D)	INDAL
	c) HINDALCO		
43.	ALUMINIUM FITTINGS FOR WOODEN/	ΔΙ	LIMINILIM/ PVC DOORS AND
4 5.	WINDOWS THE THREE TOR WOODEN		LOWINGIONII I VC DOORS AND
	a) ELITE ENTERPRISES, MUMBAI	b)	ALUMINIUM UDYOG
	c) MOHAN METAL INDUSTRIES	d)	CLASSIC, NEW DELHI
	e) GANPATI	٠,	32, t33.3, t12.11 322
44.	ANODISED ALUMINIUM DOORS/ WINDOWS	/ FF	RAMES/ PARTITIONS
	a) FENESTA		JINDAL
	c) INDAL	ď)	HINDALCO
	,	,	
45.	PVC RAIN WATER PIPE/ SEWAGE PIPES/ C		
	a) SUPREME	b)	RELIANCE
	c) FINOLEX		
46.	SAND CAST IRON SPIGOT & SOCKET SOIL		
	a) SRIF (GOLA CASTINGS)	b)	NECO(JAYASWAL)
	c) HIF MATHURA		
17	DITUMEN DEODUCTS		
47.	BITUMEN PRODUCTS	L١	CTD
	a) BENGAL BITUMEN	,	STP
	c) SHIVA BITUMEN	a)	SHIVA ASHPHALTIC
48.	WHITE CEMENT		
1 0.	a) BIRLA	h١	L&T
	c) JKCEMENT	u)	LGI
	O, OR OLIVILIAI		

Appendix 'E'

49.	a) MOWJEE c) RS INDUSTRIES			b)	KITCH ARCHITECTURAL
50.	MODULAR/ SEMI MODULAR KITCHEN FITT a) HETTICH c) GODREJ	<u>TIN</u>	<u>GS</u>	,	ZUARI SLEEK
51.	SALT GLAZED STONEWARE PIPES/ GLAZa) DEVRAJ INDUSTRIALc) PERFECT SANITARY PIPE	<u>ZED</u>	STONE	b)	ARE PIPES BURAN SUPREME PIPE & FITTINGS
52.	ci pipe fittings (for sewerage/ rain a) SKF c) SINGHAL IRON FOUNDARY e) JINDAL SAW g) HEPCO (BINAY UDYOG)	<u>IWA</u>		d) PR	SRIF HINDUSTAN ENGG ODUCTS NECO (JAYASWAL)
53.	a) SKF c) SINGHAL IRON FOUNDARY	NHC	OLE COV	b)	SILC NECO
54.	HDPE PIPES/ SNR PIPES (WATER/SEWAG a) GAMSON INDIA c) REX POLYEXTRUSION LTD e) SKF	<u>iE)</u>		ď)	DUSTRON SRIF SFMC
55.	RIGID PVC CONDUIT PIPES a) VPL c) PLAZA	b)	KALING	βA	
56.	GI/ MS CONDUIT/ ERW CONDUIT PIPE a) VPL c) BEC g) f	,	AKG BHARA	T S	STEEL TUBES
57.	PVC WIRES & CABLES – 650/1100 VOLTS a) KEI c) STANDARD e) GRANDLAY g) FINOLEX j) PARAGON	d) f)	PLOYC HAVELI HPL ELEKTI GLOST	LS ROI	N
58.	SWITCH/ SOCKETS/CEILING ROSES/ FAN a) SSK c) CRABTREE e) PHILIPS g) BAJAJ	b)	GULATO LEGRA SCHNE ANCHO	ND IDE	

Serial Page No.82 Appendix 'E'

59.	MCB/ ELCB/ RCCB/ RCBO/ ISOLATORS/ MCB DISTRIBUTION BOARD							
	a) CRYSTAL		SSK					
	c) GM & G	d)	INDO ASIAN					
	e) HAVELLS	f)	C&S ELECTRIC					
	g) BENLO	h)	HPL					
	5,	,						
60.	LAMIINATED SHEET COVER							
	a) HYLUM	b)	GREEN LAMINATED BOARDS					
	c) FORMICA	,						
	,							
61.	MODULAR SWITCH/ SOCKETS/ FAN REGU	LAT	ORS					
	a) SSK	b)	INDO ASIAN					
	c) POLYCAB	d)	HAVELLS					
	e) C&S ELECTRIC	f)	HPL					
	g) LEGRAND	h)	CRABTREE					
	j) SCHNEIDER							
62.	STREET LIGHT FITTING & ACCESSORIE	S/	<u> LAMPS - HPSV (70/150/250/400)</u>					
	HPMV (80/125/250/400)/ METAL HALIDE							
	a) PHILIPS	b)	CROMPTON GREAVES					
	c) WIPRO	d)	BAJAJ					
	e) C&S ELECTRIC	,	HAVELLS					
	g) HPL	h)	SCHNEIDER					
63.	TUBE LIGHT/ STREET LIGHT FITTING & AC							
	a) POLYCAB	,	HAVELLS					
	c) C&S ELECTRIC	d)	HALONIX					
	e) HPL	f)	SURYA					
64.	PVC CASING CAPING							
	a) PLAZA	,	KALINGA					
	c) SUPRIME	d)	ASIAN					
65.	LED LIGHT FITTINGS & LUMINARIES FO	<u>OR</u>	ROAD AND STREET LIGHTING					
	(OUTDOOR)							
	a) EVEREADY	,	POLYCAB					
	c) HAVELLS	,	C&S ELECTRIC					
	e) HALONIX	f)						
	g) PHILIPS	,	CROMPTON					
	j) BAJAJ	k)	OSRAM					
00			-0741 -4410)					
66.	FAN (CEILING, EXHAUST, TABLE, WALL, P							
	a) CROMPTON		BAJAJ					
	c) KHAITAN	,	USHA					
	e) ORIENT	f)						
	g) HAVELLS	h)	RR ELECTRIC					
07	WATER HEATER 65/255							
67.	WATER HEATER GEYSER							
	a) RR ELECTRIC	,	AO SMITH					
	c) USHA	,	CROMPTON					
	e) BAJAJ	f)	HAVELLS					

Serial Page No.83 Appendix 'E'

00	LIST OF WARES/WANUFAC	·IUr	RERS/PRODUCERS
68.			000 51 505510
	a) HAVELLS	,	C&S ELECTRIC
	c) HALONIX	d)	HPL
69.	LED LAMPS		
	a) CLAIR	b)	EVEREADY
	c) POLYCAB		HALONIX
	e) PHILIPS		CROMPTON
	g) BAJAJ	,	OSRAM
	g) bada	11)	OSIVAIVI
70	LED LIGHTS DANELS & LUMINADIES (IND	005	D\
70.	<u>LED LIGHTS, PANELS & LUMINARIES (IND</u> a) EVEREADY		POLYCAB
	,	,	
	c) HAVELLS	,	C&S ELECTRIC
	e) HALONIX		HPL
	g) PHILIPS		CROMPTON
	j) BAJAJ	k)	OSRAM
71.	FLOOD LIGHT FITTINGS		
	a) POLYCAB	b)	HALONIX
	c) SURYA		
72.	BOX TYPE DECORATIVE TUBE LIGHT FITT		
	A) POLYCAB	,	HAVELLS
	c) C&S ELECTRIC	d)	HALONIX
73.	TRANSFORMER OIL		
	a) M&I MATERIAL(MIDEL)	b)	POWER LINK
	c) POWER OIL	d)	SAVITA
	,	,	
74.	LIGHTENING ARRESTERS		
	a) BHEL	b)	CROMPTON GREAVES
	c) SCHNEIDER	d)	PACTIL
	e) OBLUM		OBO BETTERMEN
	g) JMV		HPL
	9) 01/11	""	2
75.	COMPOSITE POLYMERIC INSULATORS		
	a) YAMUNA DENSONS	b)	JAIPURIA
	c) POWER GRID	,	MG MATERIALS
	c) FOWER GRID	u)	WIG WATERIALS
76.	HT XLPE CABLES 11 KV		
70.	a) KEI	h)	POLYCAB
	,	D)	FOLICAB
	c) HAVELLS		
77.	STREET LIGHT TIMERS		
11.	A) SINETRAC	h)	INIDO ACIANI
		u)	INDO ASIAN
	c) HAVELLS		
78.	IT DOWED & CONTROL CARLES 1400 VOL	TC	YI DE
10.	LT POWER & CONTROL CABLES 1100 VOL		
	a) KEI	,	POLYCAB
	c) HAVELLS	,	GRANDLAY
	e) GLOSTER	f)	HPL

Serial Page No.84 Appendix 'E'

79.	LT/ HT CABLE JOINTS HEAT SHRINK	ABLE/ COLD SHRINKABLE/ PUSH ON
	TYPE a) COMPAQ c) M-SEAL	b) MS-SEAL d) DENSON
80.	ACSR CONDUCTORS/ OVERHEAD COND a) DYNAMIC CABLES c) STERLITE POWER	DUCTORS b) COYOTE d) ALIND
81.	LT PCC POLES a) CEMENT FABRIC CHANDIGARH c) HARYANA CONC UDYOG LTD e) ECI g) PRACTO ENGINEERS j) KASHMIR CEMENT l) CONCRETE UDYOG LTD	b) PUNJAB CONCRETE LTD d) PCIC f) HINDUSTAN PREFAB h) ICB INDUSTRIES k) CONCRETE FABRIC m) PRE CAST CEMENT PRODUCT
82.	LT STEEL TUBULAR SWAGED POLES a) QUALITY STEELS c) SOHAN LAL & SONS e) TTI g) MAHENDRA INDUSTRIES j) PARUTHI ELECTRICALS l) SURYA	 b) SURJIT STEEL INDUSTRIES d) MS ELECTROSTEEL f) AST h) VIKRAM INDUSTRIES k) SHIVAM METAL SHAPERS m) HPL
83.	STEEL TUBULAR DECORATIVE POLES POLES a) FINOLEX c) CROMPTON GREVES e) HOMEDEC	b) HAVELLS d) C&S ELECTRIC
84.	MCCBS ALL TYPES a) ABB c) C&S ELECTRIC e) LEGRAND g) HAVELLS j) L&T l) BENLO	b) SIEMENS d) SCHNEIDER f) HAGER h) HPL k) INDO ASIAN
85.	POWER CONTACTORS a) L&T c) SCHNEIDER e) LEGRAND g) AE j) HPL	b) ABB d) SEIMENS f) INDO ASIAN h) HAVELLS k) C&S ELECTRIC
86.	voltmeter/ ammeter/ frequency ma) L&T c) SCHNEIDER e) LEGRAND g) HAVELLS	b) AE d) SECURE f) HAGER h) HPL

Serial Page No.85 Appendix 'E'

PARTICULAR SPECIFICATIONS (Contd..) LIST OF MAKES/MANUFACTURERS/PRODUCERS

87.	DIGITAL TYPE ENER	GY METER / VOLTMETER / AMMETER / POWE	ER FACTOR
	METER		
		L) LOT (DICHAR)	

- a) SECURE
- c) C&S ELECTRIC
- e) DUCATI

- b) L&T (RISHAB)
- d) MECO
- f) AMTL

CHANGE OVER SWITCHES 88.

- a) CRYSTAL
- c) INDO ASIAN
- e) HAVELLS
- g) HPL

- b) GM & G
- d) STANDARD
- f) C&S ELECTRIC

89. **VOLTAGE STABILIZERS UPTO 25 KVA**

- a) ITE GURGAON
- c) SINETRAC
- e) IECO

- b) VOLINA
- d) VINITEC

90. **VOLTAGE STABILIZERS ABOVE 25 KVA (SERVO CONTROLLED)**

- a) ITE GURGAON
- c) SINETRAC
- e) IECO

- b) VOLINA d) VINITEC
- e) M/S POWER STAR

LT PANELS/ APFC PANELS/ AC CONTROL PANELS/ PUMP HOUSE PANELS / FEEDER PILLER BOX OF ANY CAPACITY

- a) UNIVERSAL SWITCHGEAR
- c) PSC
- e) ITE GURGAON
- g) SATNDARD
- j) C&S ELECTRIC
- I) SHALABH
- n) HPL
- p) L&T
- s) HPC

- b) DVEPL
- d) GM&G
- f) INDO ASIAN
- h) HAVELLS
- k) BHANDARI
- m) ADHUNIK SWITCHGEAR
- o) M/s GUPTA & FRIENDS
- q) SIEMENS
- 92. Make of all other items shall be as approved by GE.

- 1. Makes specified in Sch 'A' only shall be provided when makes are mentioned in Sch 'A'.
- 2. Makes specified in Particulars Specifications only shall be provided when no makes are specified in Sch 'A'.
- 3. Makes specified in this Appendix shall be provided only when no makes are mentioned in Sch 'A' and Particulars Specifications.
- 4. Irrespective of makes specified in drawings, the makes as shown here-in-before shall be provided.
- 5. Contractor will supply the material only after obtaining the written approval from GE regarding use of specific make of items and will supply the material at appropriate time as and when required by the GE.
- 6. To ensure genuineness of material, the contractor will place order only on manufacture or authorised dealer only and the Engineer-In-Charge will receive the material after verifying the delivery challan of the supplier and after satisfying the genuineness of material.

Signature	of the	Contractor
Dated:		

AGE (Contracts) for Accepting Officer

* LUMP-SUM CONTRACTS (IAFW-2249 1989 PRINT) * LUMP-SUM CONTRACT (IAFW-2159) * MEASUREMENT CONTRACTS (IAFW-1779 AND 1779A)

- * TERM CONTRACT FOR ARTIFICER WORKS (IAFW-2249)
- 1. A copy of the GENERAL CONDITION OF CONTRACT (IAFW-2249) (1989 PRINT) with errata 1 to 20 and amendment No. 1 to 49 has been supplied to me/us and is in my/our possession. I/We have read and understood the provisions contained in the aforesaid GENERAL CONDITIONS OF CONTRACTS before submission of this tender and I/We agree that I/We shall abide by the terms and conditions thereof as modified, if any elsewhere in these tender documents.
- 2. It is hereby further agree and declared by me/us, that the GENERAL CONDITIONS OF CONTRACTS (IAFW-2249: 1989 PRINTS) including condition 70 of thereof pertaining to settlement of disputes by Arbitration, containing **33 pages** with errata 1 to 20 and amendment No. 1 to 48 form part of these tender documents.
 - * Retain as applicable

AGE (Contracts)
For Accepting Officer

Signature	of the	Contract	0
Dated :			

SCHEDULE OF MINIMUM FAIR WAGES

It is hereby agreed that the "Schedule of Minimum Fair Wages" (SMFW) as published vide Government of India Notification dated 14 Jul 94 forms part of these documents.

My/our signature hereunder accounts to my/our having read and understood the provisions contained therein and I/we shall abide by the same and that aforesaid documents forms part of this tender.

It is expressly mentioned here that although latest notification of labour wages as available with the Dept has been included in the tender, in case the Govt has further revised the wages, the latest revised wages shall be taken minimum wages in place of wages mentioned in above notification.

Note: "Schedule of Minimum Fair Wages" referred to above is available for reference in the office of Accepting Officer.

AGE (Contracts)
For Accepting Officer

Signature	of	the	Con	trac	toı
Dated :					