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Govt. of India
 O/o. Executive Engineer (E)
 DED-71, CPWD, IARI,
 Pusa Campus,
 New Delhi-110012
 Telephone 21520120
 Email- deleee-ded71@cpwd.gov.in

NOTICE INVITING e-TENDER

NIT No: 111/ 2026-27/ DED-71 /1

Name of work :- A/R&M/O in Agriculture Scientist Recruitment Board Building (Chayan Bhawan) at IARI, Pusa, New Delhi (SH:- Operation and Maintenance of Electrical and Specialised Electrical and Mechanical Services.)

Estimated cost: - **Rs 82,55,246/-**

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Certified that this e - NIT contains 1 to 57 Pages only.

Assistant Engineer (E) (P)

Executive Engineer (E)
 DED-71, CPWD, Pusa,
 New Delhi.

INFORMATION AND INSTRUCTIONS FOR CONTRACTORS FOR e-TENDERING FORMING PART OF BID DOCUMENT

The Executive Engineer (E), Delhi Electrical Division-71, CPWD, Pusa, New Delhi (Ph : 01125846515, email id: ded71.cpwd@gmail.com) on behalf of the President of India invites online percentage rate bids from approved and eligible contractors of CPWD and those of appropriate list of Registered contractor in CPWD in appropriate class of Buildings & Roads category in single bid system for the following work:-

S. No.	NIT No.	Name of work & Location	Estimated cost put to bid	Earnest Money	Stipulated period of completion of work (in months)	Last date of online submission of bid, copy of receipt of deposition of original EMD and other documents as specified in the bid document.	Date & Time of opening of bid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	111/2026-27/DED-71/1	A/R&M/O in Agriculture Scientist Recruitment Board Building (Chayan Bhawan) at IARI, Pusa, New Delhi (SH:- Operation and Maintenance of Electrical and Specialised Electrical and Mechanical Services.)	Rs.82,55,246/-	Rs.1,65,105/- (In favour of Executive Engineer (E), Electrical Division-XI, CPWD)	12 Months	13-10-2026 Up to 15:30 Hours	13-10-2026 at 15:40 Hours

1) The successful bidder (to be called as Main Contractor) shall have to associate specialized agency(s) for execution of the following specialized work(s) as per eligibility criteria defined in SPECIAL CONDITIONS FOR ASSOCIATION OF SPECIALIZED AGENCIES.

- (i) **Sub-Station & DG Set**
- (ii) **Fire Fighting & Fire Alarm System**
- (iii) **Comprehensive maintenance of Fire Alarm System**
- (iv) **Comprehensive maintenance of CCTV System**
- (v) **Lift**
- (vi) **Comprehensive maintenance of EPABX System**

- 2) The Intending bidder must read the terms and conditions of CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
- 3) Information and instructions for bidder posted on website shall form of bid document.
- 4) The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website <https://etender.cpwd.gov.in> or www.cpwd.gov.in free of cost.
- 5) But the bid can only be submitted after deposition of original EMD either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission and uploading the mandatory scanned documents such as Insurance Surety Bonds, Account Payee Demand draft or Bankers Cheque or Fixed Deposit Receipts or/ and Bank Guarantee (for balance amount as prescribed) from any of the Commercial Bank towards EMD in favour of **Executive Engineer (E), ED-XI**, CPWD, New Delhi as mentioned in NIT, receipt for deposition of original EMD to division office of any Executive Engineer (including NIT issuing EE/ AE), CPWD and other documents as specified.
- 6) Those contractors who are not registered or have not updated their profile on the website mentioned above, are required to get registered/update their profile beforehand. The necessary training materials including the videos with step to step process are available on download section of <https://etender.cpwd.gov.in>.
- 7) The intending bidder must have valid class-III digital signature certificate with encryption key (Combo type) to perform any operations/transactions on the e-tendering portal/website and the bidders should download and install the eMSigner on their system as per instruction available on download section of <https://etender.cpwd.gov.in>
- 8) On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
- 9) Contractor can upload documents in the form of JPG format and PDF format.
- 10) Contractor must ensure to quote rate in the prescribed column(s) meant for quoting rate in figures appears in yellow colour and the moment rate is entered, it turns sky blue.

In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).

However, If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.

LIST OF MANDATORY DOCUMENTS TO BE SCANNED AND UPLOADED WITHIN THE PERIOD OF BID SUBMISSION:

1. Insurance Surety Bond, Demand Draft/ Account Payee Banker's Cheque / FDR/ Bank Guarantee of any commercial Bank against EMD.
2. Copy of receipt for deposition of original EMD issued from Division office of any Executive Engineer, CPWD (In Enclosed Performa).
3. Copy of Enlistment Order of the Contractor of the Buildings & Roads category in CPWD/Consent letter submitted to the enlisting authority for conversion of existing category into composite category.
4. GST Registration Certificate, if already obtained by the bidder. If the bidder has not obtained GST registration as applicable then he shall scan and upload following under taking along with other bid documents. "If work is awarded to me, I/We shall obtain GST registration Certificate, as applicable, within one month from the date of receipt of award letter or before release of any payment by CPWD, Whichever is earlier, failing which I/We shall be responsible for any delay in payments which will be due towards me/us on a/c of the work executed and/or for any action taken by CPWD or GST department in this regard.
5. Copy of Valid Electrical Contractor License or undertaking that they will either obtain valid electrical license at the time of execution of electrical work or associate contractor having valid electrical license of appropriate class.
6. An affidavit on Rs. 100 stamp paper duly attested by notary as reqd. to that I/we have not been debarred suspended for tendering in CPWD till the last date of submission of bid. **(Not earlier than six months from the date of opening of Notice Inviting Tender).**
7. Copy of ERP Training Certificate
8. Copy of Permanent Account No. (PAN).
9. Email & mobile no. of the firm/ agency on the letter head of firm/ agency (For making correspondence)

Assistant Engineer (E) (P)

Executive Engineer (E)
DED-71, CPWD, IARI,
Pusa, New Delhi-110012

SPECIAL CONDITIONS FOR ASSOCIATION OF SPECIALIZED AGENCIES

1. The main contractor shall have to associate other agency(s)(Joint ventures are not accepted) for execution of each of the these specialized work(s), who fulfils the eligibility criteria as defined below.

S. No	Component of E&M works	Estimated cost	Eligibility criteria
a)	DG Set & Sub-station	Rs. 15,12,780/-	The main contractor should engage an experienced firm who satisfies the eligibility criteria of having successfully completed work of similar nature of “Operation of DG Set & Sub-Station System put to tender with capacity of individual DG set not less than 200 KVA & Transformer not less than 400 KVA” (1) Three similar workeach of value not less than 40% of the estimated cost of this subhead of work or (2) Two similar workeach of value not less than 60 % of the estimated cost of this subhead of work or (3) One similar work each of value not less than 80% of the estimated cost ofthis subhead work.
b)	Fire Fighting & Fire Alarm System	Rs. 15,12,780/-	The main contractor should engage an experienced firm who satisfies the eligibility criteria of having successfully completed work of similar nature of “Operation of Fire Fighting & Fire Alarm System “ (1) Three similar workeach of value not less than 40% of the estimated cost of this subhead of work or (2) Two similar workeach of value not less than 60 % of the estimated cost of this subhead of work or (3) One similar work each of value not less than 80% of the estimated cost ofthis subhead work.

c)	Lift	Rs. 8,62,080/-	The main contractor should engage an experienced firm who satisfies the eligibility criteria of having successfully completed work of similar nature of “Operation of Lift” (1) Three similar work each of value not less than 40% of the estimated cost of this subhead of work or (2) Two similar work each of value not less than 60 % of the estimated cost of this subhead of work or (3) One similar work each of value not less than 80% of the estimated cost of this subhead work.
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- Note:-** (1) If any agency carries out separate works for operation & maintenance of Sub-Station work and operation & maintenance of DG Set work and submits such work experience certificates for consideration then combination of these two work experiences will be considered as one similar work and higher amount among Sub-Station and DG Set works shall be considered as amount of the similar work.
- (2) The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7 % per annum; calculated from the date of completion to previous day of last date of submission of tenders.
- (3) Should have satisfactorily completed the works as mentioned below during the last Seven years ending last day of the month previous to the one in which tenders are invited.
2. Also the main contractor shall have to associate any the manufacturer / Authorized Service agencies only for execution of each of the specialized work(s) as mentioned below:-

a) Comprehensive maintenance of CCTV System

The main contractor shall have to associate the manufacturer / Authorized Service agencies of installed CCTV System **Bosch make**.

b) Comprehensive maintenance of Fire Alarm System

The main contractor shall have to associate the manufacturer / Authorized Service agencies of installed Fire Alarm System **GST make**.

c) Comprehensive maintenance of EPABX System

The main contractor shall have to associate the manufacturer / Authorized Service agencies of installed EPABX System **Unify make**.

3. However, the composite category contractor shall also be eligible to carry out himself /herself any or all of the above specialized works mentioned at Sl. No. 1 a) to 1 c) only without associating any specialized agency provided :-
 - i. The main agency fulfills the prescribed eligibility criteria respectively for the above specialized work(s).
4. The main contractor shall have to submit documents of proposed associated specialized agencies (for Sl.No. 1 a) to 1 c) such as (i) self attested copies of Certificates of Work Experience/Completion certified by an officer not below the rank of Executive Engineer/Project Manager or equivalent, clearly indicating... a) Name of work, b) Scope of Work, c) Agreement No., d) Estimated Cost, e) Tendered Cost, f) Final Value of Work Done, g) Date of Start, h) Stipulated date of Completion, i) Actual date of completion, j) Nature of the Work etc. (In case some of above said details are not mentioned in the Completion certificate, the firm shall attach sample proof in support of above details), (ii). self attested copy of valid Electrical contractor license (if applicable), (iii) GST registration for approval of the department as per eligibility requirement mentioned in above along with the performance guarantee after the acceptance of tender.
5. The main contractor shall have to submit documents of proposed manufacturer / Authorized Service agencies (for Sl.No. 2 a) to 2 c) such as (i) self attested copies of manufacturer / Certificates of authorized service agencies (ii) GST registration (iii) copy of applicable licenses/registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC for approval of the department as per eligibility requirement mentioned in above along with the performance guarantee after the acceptance of tender.
6. Original consent letter of such selected associated specialized agencies for association shall also be enclosed in the prescribed format as per FORM-X. alongwith documents mentioned at sl.no-4 & 5.
5. If the main contractor fails to submit all the documents of the proposed associated specialized agencies as mentioned at Sr No. 4,5 & 6 above, along with the performance guarantee after the acceptance of tender otherwise department may reject tender of the contractor & may forfeit the deposited EMD absolutely & debar the contractor from re-tendering for this work”
7. After approval of associated specialized agencies by Engineer-in-charge, the main contractor will submit MOU signed with the associated specialized agency as per FORM-Y in shape of affidavit on stamp paper duly attested by notary in original within 7 (Seven) Days after issue of approval letter (for associate specialized agency). The MOU shall be signed by both the parties” i.e. main contractor as 1st party and associated specialized Agency as 2nd party, independently for all specialized work(s).
8. All technical discussions during currency of the contract, shall be attended by the associated specialized agencies and the main contractor. Commercial/Technical submissions for the specialized work(s) shall be signed and submitted by the associate specialized agencies along with the main contractor.
9. The associated specialized agencies and the main contractor shall attend the site during inspection of the work by the Engineer-in-Charge or higher authority.

10. The main contractor shall be entirely responsible and answerable for all the works done by his associated specialized agency regarding their quality, adherence to the laid down specification, terms and conditions, warranty/guarantee etc as per the agreement and he shall be liable to bear any compensation that may be levied by the department under any of the clauses of the agreement.
11. In the event of the concerned Associated specialized Agency not performing satisfactorily or failure to complete the specialized works(s), the main contractor on written directions of the Engineer-in-charge, shall remove the Associated specialized Agency deployed on the work and shall submit name of new associated Specialized Agency as per eligibility criteria mentioned in the NIT to execute the left over specialized work(s) without any loss of time after completion of all formalities mentioned as above in Sl. No. 1, 2,4,5 & 6.
Also if main contractor wants to change the associated specialized agency during the currency of the contract he shall submit name of new associated Specialized Agency per eligibility criteria mentioned in the NIT to execute the left over specialized work(s) after completion of all formalities mentioned as above in Sl. No. 1, 2,4,5 & 6.
12. The main contractor shall be responsible and liable for proper and complete execution of the all works including specialized work(s) and ensure coordination and completion of all associated specialized agencies.
13. Running payment for the work shall be made to the main contractor. In case main contractor fails to make the payment to the associated specialized agency(s) by him within 15 days of receipt of each running account payment then on the written complaint of any associated specialized agency(s) for such work, Engineer-in-Charge shall serve the show cause to main contractor and after considering the reply of the same he may make the payment directly to the concerned associated specialized agency(s) for the work as per the terms & conditions of the agreement/M.O.U. drawn between main contractor and associated specialized agency fixed by him, if reply of main contractor either not received or found unsatisfactory. Such payment made to the associated specialized agency(s) shall be recovered by Engineer-in-Charge from the next RA/final bill due to main contractor as the case may be.

Form -X**CONSENT LETTER FROM ELIGIBLE ASSOCIATE AGENCY OF SPECIALIZED WORK(S)
OR MANUFACTURER / AUTHORIZED SERVICE AGENCIES**

Name of work : A/R&M/O in Agriculture Scientist Recruitment Board Building (Chayan Bhawan) at IARI, Pusa, New Delhi (SH:- Operation and Maintenance of Electrical and Specialised Electrical and Mechanical Services.).

1. I / We hereby give my consent to associate with M/s, for executing the of Specialized Work of (Mention specialized work(s) for which the agency to be associated)
2. I / We will execute the work as per specifications and conditions of the agreement and as per directions of the Engineer-in-Charge for the corresponding specialized work(s) till the completion of the work.
3. I / We will be responsible for necessary action to handover the installations and for rectification of defects and repair during the maintenance / warranty period.
4. Also I / We will employ full time technically qualified Engineer / supervisor for the specialized work(s) component of the work as required for the work. I / We will attend inspection of officers of the department as and when required.

Date:

Signature with date of Main Agency/Contractor

Signature with date of Associate
Specialized Agency or manufacturer / Authorized
Service agencies

Address

Address

1. Witness with address

(From main contractor side)

2. Witness with address

(From associated agency side)

Form-Y**MEMORANDUM OF UNDERSTANDING [M.O.U] BETWEEN**

1] M/S [Name of the firm/agency with full address]

Enlistment Status

Valid Upto:

[Henceforth called the main contractor]

And

2]M/S [Name of the firm/agency with full address]

Enlistment Status

Valid Upto:

[Henceforth, called Associated specializedAgency]

For the execution of Specialized Component of Work(s):.....

.....of main work
 “ A/R&M/O in Agriculture Scientist Recruitment Board Building (Chayan Bhawan) at IARI, Pusa, New Delhi
 (SH:- Operation and Maintenance of Electrical and Specialised Electrical and Mechanical Services.)

as per schedule, specifications, terms and conditions of the agreement.

We state that M.O.U between us will be treated as an agreement and has legality as per Indian Contract Act [amended upto date] and the department [CPWD] can enforce all the terms and conditions of the agreement for execution of the above work. Both of us shall be responsible for the execution of work as per the agreement to the extent this MOU allows. Both the parties shall be paid consequent to the execution as per agreement to the extent this MOU permits. In case of any dispute, either of us will go for mediation by the EE (E), DED-71, CPWD Pusa, New Delhi. Any of us may appeal against the mediation to the SE,DC-VII, CPWD, IARI Pusa, New Delhi. His decision shall be final and binding on both of us.

We have agreed as under:

1] The associated specialized agency or manufacturer / Authorized Service agencies will execute all specialized work(s) in the wholesome manner as per terms and conditions of the agreement and as per the direction of the Engineer-in-charge.

2] That the Associated specialized agency or manufacturer / Authorized Service agencies has gone through the contract and has understood the scope of work required for the purpose of executing the specialized work(s).

3] All the machinery and equipments, tools and plants, special T&P required for execution of the specialized work(s), as per agreement, shall be the responsibility of the associated specialized agency or manufacturer / Authorized Service agencies.

4] The site staff required for the specialized work(s) shall be arranged by the associated specialized agency or manufacturer / Authorized Service agencies as per terms and conditions of the agreement.

5] Site order book maintained for the said work shall be signed by the authorized representative of main contractor as well as Associated specialized Agency or manufacturer / Authorized Service agencies.

6] All the correspondence regarding execution of the specialized work(s) shall be done by the Department with the Associated specialized agency or manufacturer / Authorized Service agencies with a copy to the main contractor. In case of non-compliance of the provisions of agreement, the main contractor, as well as the associated agency or & manufacturer / Authorized Service agencies shall be responsible. The action under clauses 2 and 3 shall be initiated and taken against the main contractor.

SIGNATURE OF MAIN CONTRACTOR

SIGNATURE OF ASSOCIATED SPECIALIZED AGENCY
OR MANUFACTURER / AUTHORIZED SERVICE AGENCIES.

Date:

Date

Place

Place

RECEIPT OF DEPOSITION OF EMD

(Receipt No..... Date.....)

1. **Name of work** : **A/R&M/O in Agriculture Scientist Recruitment Board Building (Chayan Bhawan) at IARI, Pusa, New Delhi (SH:- Operation and Maintenance of Electrical and Specialised Electrical and Mechanical Services.)**
2. **NIT No** : **111/2026-27/DED-71/1**
3. **Estimated Cost** : **Rs. 82,55,246/-**
4. **Amount of Earnest Money Deposit** : **Rs. 1,65,105/-**
5. **Name of Payee** : **Executive Engineer (E), Electrical Division-XI, CPWD**
6. **Last date and time of submission of bids** : **13-10-2026 upto 15:30 Hrs.**

(To be filled by the receiving officer)

1. **Name of the Contractor** :
2. **Form of EMD** :
3. **Amount of EMD** :
4. **Date of Submission of EMD** :
5. **Name & Address of the EMD receiving office** :

**Signature, Name & Designation of EMD Receiving officer
(EE/AE(P)/AE/AAO) along with office Stamp**

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ub fnYyh-110012
VyhQku 21520120
bey&deleee-ded71@cpwd.gov.in



Govt. of India
O/o. Executive Engineer (E)
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Pusa Campus,
New Delhi-110012
Telephone 21520120
Email- deleee-ded71@cpwd.gov.in

No : 54 (NIT) / AB / DED-71/2026-27/

Date :-

CPWD-6 NOTICE

The Executive Engineer (E), DED-71, CPWD, IARI Pusa, New Delhi on behalf of the president of India invites online percentage rate bid from approved and eohligible contractors of CPWD and those of appropriate list of Registered contractors in CPWD in appropriate class of Buildings & Roads category in **single bid** system. Last date and time of submission of price bid **13.10.2026** at 15:30 Hrs. and date of opening of price bid 13.10.2026 at 15:40 Hrs.

S.No	NIT No/ Name of work	Estimate Cost	Earnest Money Deposit	Period of Completion
1.	111/2026-27/DED-71/1	Rs. 82,55,246/-	Rs. 1,65,105/-	12 Months
	A/R&M/O in Agriculture Scientist Recruitment Board Building (Chayan Bhawan) at IARI, Pusa, New Delhi (SH:- Operation and Maintenance of Electrical and Specialised Electrical and Mechanical Services.)			

The details of bid are available on “<https://etender.cpwd.gov.in>.”

Assistant Engineer (E) (P)

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2- **dk; ikyd vfhk;r k] fuek.k eMy&4] d-yk-fu-fo] i l k u0 fn0&12A**
3- **The Executive Engineer, PVMD, CPWD, Pushpa Bhawan New Delhi for information.**
4- **lg;k;d vfhk;r %o0&1/II/III & IV] fnYyh o|r eMy& 71] d-yk-fu-fo] ub fnYyh**
5- **;k tuk 'kk[-kk] fnYyh o|r eMy&71] d-yk-fu-fo] i l k] u0 fn0&12A**
6- **ukfVl ckM**
7- **jd fm; k] fnYyh o|r eMy&71]d-yk-fu-fo] i l k] u0 fn0&12A**

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ANNEXURE- 21
(Refer SOP No 4/8 & 4/9)
CPWD-6 FOR E- TENDERING

1. ~~Item rate/Percentage rate bids are invited on behalf of President of India from approved and eligible contractors of CPWD and those of appropriate list of **Registered contractor in CPWD in appropriate class of Buildings & Roads category** in single bid system and those of appropriate list of M.E.S, BSNL, Railways and State P.W.D. (B&R) or State Govt.'s Department (Strike out as the case may be) dealing with building and roads, if there is no state PWD (B&R) for the work of A/R&M/O in Agriculture Scientist Recruitment Board Building (Chayan Bhawan) at IARI, Pusa, New Delhi (SH:- Operation and Maintenance of Electrical and Specialised Electrical and Mechanical Services.)~~

The enlistment of the contractors should be valid on the last date of submission of bids.

In case only the last date of submission of bid is extended, the enlistment of contractor should be valid on the original date of submission of bids.

- 1-1 The work is estimated to cost Rs. 82,55,246/- This estimate, however, is given merely as a rough guide.
- 1-1-1 ~~The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the bids. He will also nominate Division which will deal with all matters relating to the invitation of bids. He will also nominate Division which will deal with all matters relating to the invitation of bids. For composite bid, besides indicating the combined estimated cost put to bid, should clearly indicate the estimated cost of each component separately. The eligibility of bidders will correspond to the combined estimated cost of different components put to bid.~~
- 1-2 ~~Intending bidder is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below :-~~

Criteria of eligibility for submission of bid documents

- 1-2-1 ~~Conditions for Non CPWD registered contractors only, if bids are also open to non-CPWD Contractors. For works estimated cost upto tendering limit of class -I Buildings & Roads (erstwhile Composite/ Building/ infrastructure) category Contractor (However, for Horticulture category, it may be modified as per bidding limit of CPWD class-I contractors of Horticulture category). (i) Three similar works each of value not less than Rs..... or two similar works each of value not less than Rs..... or one similar work of value not less than Rs..... (all figures rounded to nearest convenient figure) during the last 7 years ending last day of the month previous to the one in which tenders are invited. (ii) For EPC tender under Mode -I/II only (Applicable for CPWD enlisted contractors of appropriate class also). One completed work costing not less than Rs. executed with the structural system technology as proposed by bidder in the letter of transmittal during the last 7 years ending last day of the month previous to~~

the one in which tenders are invited. This work can be part of eligible work at 1.2.1 (i) above or as a separate work.

Note :-

~~For works costing above tendering limit of class II Buildings & Roads (erstwhile Composite/ Building/ infrastructure) category contractors but upto tendering limit of Class I Buildings & Roads (erstwhile Composite/ Building/ infrastructure) category Contractor (However, for Horticulture category, it may be modified as per bidding limit of CPWD class II and CPWD Class I contractors respectively of Horticulture Category) when bids are open to non-CPWD contractors also, then class II contractors of CPWD registered shall also be eligible if they satisfy the eligibility criteria specified in 1.2.1 above.~~

1.2.2 Criteria of eligibility for CPWD as well as non-CPWD contractors.

~~For works estimated to cost above the tendering limit of class I (Super) Buildings & Roads (erstwhile Composite/ Building/ infrastructure) category Contractor (However for Horticulture category, it may be modified as per bidding limit of CPWD class I contractors of Horticulture Category). (i) Three similar works each of value not less than Rs..... or two similar works each of value not less than Rs..... or one similar work of value not less than Rs..... (all figures rounded to nearest convenient figure) during the last 7 years ending last day of the month previous to the one in which tenders are invited. (ii) For EPC tender under Mode I/II only (Applicable for CPWD enlisted contractors of appropriate class also). One completed work costing not less than Rsexecuted with the structural system technology as proposed by bidder in letter of transmittal during the last 7 years ending last day of the month previous to the one in which tenders are invited. This work can be part of eligible work at 1.2.2 (i) above or as a separate work. The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to the last date of submission of bid. This is applicable for 1.2.1 as well as 1.2.2 (Para 1.2.1(i) and Para 1.2.2(i) are not applicable for CPWD enlisted contractors of appropriate class. Para 1.2.1(ii) and Para 1.2.2(ii) are also applicable for CPWD enlisted contractors of appropriate class).~~

~~To become eligible for issue of bid, the bidders shall have to furnish an affidavit as under: I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for bidding in CPWD in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer in Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee. (Scanned copy to be uploaded at the time of submission of bid)~~

1.2.3 ~~When bids are invited from non-CPWD contractors and CPWD class II contractors as per provisions of clause 1.2.1 above, it will be mandatory for non-CPWD contractors and CPWD class II contractors to upload the work experience certificate(s) and the affidavit as per the provisions of clause 1.2.2.~~

But for such bids, Class-I contractors of CPWD are eligible to submit the bids without submission of work experience certificate and affidavit. Therefore, CPWD class-I contractors shall upload two separate letters for experience certificate and affidavit that these documents are not required to be submitted by them. Uploading of these two letters is mandatory otherwise system will not clear mandatory fields.

2. Agreement shall be drawn with the successful bidders on prescribed Form No. CPWD 7/8 (or other Standard Form as mentioned) which is available as a Govt. of India Publication and also available on website www.cpwd.gov.in. Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
3. The time allowed for carrying out the work will be 12 Months from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
4. The site for the work is available.
OR The site for the work shall be made available in parts as specified below:-
(ii) ~~The architectural and structural drawing for the work is available or~~
5. The architectural and structural drawings shall be made available in phased manner, as per requirement of the same as per approved programme of completion submitted by the contractor after award of work. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen on website [https:// etender.cpwd.gov.in](https://etender.cpwd.gov.in) or www.cpwd.gov.in free of cost.
6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.
8. When bids are invited in three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.
9. Earnest Money in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee (for balance amount as prescribed) from any of the Commercial Banks (drawn in favour of **Executive Engineer (E), ED-XI, CPWD**) shall be scanned and uploaded on the e-Tendering website within the period of bid submission. The original EMD should be deposited either in the office of Executive Engineer inviting bids or division office of any Executive Engineer, CPWD within the period of bid submission. The EMD receiving Executive Engineer (including NIT issuing EE/AE) shall issue a receipt of deposition of earnest money deposit to the bidder in a prescribed format (enclosed) uploaded by tender inviting EE in the NIT.

A part of earnest money is acceptable in the form of bank guarantee also. In such case, minimum 50% of earnest money or Rs. 20 lac, whichever is less, shall have to be deposited in shape prescribed above, and balance may be deposited in shape of Bank Guarantee of any Commercial bank having validity for a period of 90 days for single bid works and 180 days for two bid system or more from the last date of receipt of bids which is to be scanned and uploaded by the intending bidders.

The earnest money given by all the tenderers except the lowest tenderer shall be refunded immediately after the expiry of stipulated bid validity period or immediately after acceptance of the successful bidder, whichever is earlier. However, in case of two/ three bid system, earnest

money deposit of bidders unsuccessful during technical bid evaluation etc. should be returned within 30 days of declaration of result of technical bid evaluation.

Copy of Enlistment Order and certificate of work experience and other documents as specified in the notice inviting e- tender shall be scanned and uploaded on the e-Tendering website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in e- tender notice shall have to be submitted by the lowest bidder within a week physically in the office of tender opening authority. Online bid documents submitted by intending bidders shall be opened only of those bidders, whose original EMD deposited with any division of CPWD and other documents scanned and uploaded are found in order.

The bid submitted shall be opened at 15:40 Hrs. on 13-10-2026.

10. The bid submitted shall become invalid and e-Tender processing fee shall not be refunded if:
 - (i) The bidder is found ineligible.
 - (ii) The bidder does not upload scanned copies of all the documents stipulated in the bid document.
 - (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening authority.
 - (iv) If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
11. The contractor whose bid is accepted will be required to furnish performance guarantee @ **5% of the Estimated Cost put to tender (ECPT) or Contract Amount whichever is higher and additional PG as per DG/Manual/2024/20, Dated:-27/02/2026** as mentioned in schedule E and within the period specified in Schedule F. This guarantee shall be in the form of Insurance Surety Bonds, Account Payee Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any of the Commercial Banks in accordance with the prescribed form.. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee. The contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/ registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. If applicable and also ensure the compliance of aforesaid provisions by the subcontractors, if any engaged by the contractor for the said work within the period specified in Schedule F
12. The description of the work is as follows: A/R&M/O in Agriculture Scientist Recruitment Board buildings at IARI, Pusa, New Delhi. (SH:- Operation and Maintenance of Electrical and Specialised Electrical and Mechanical Services.) Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidders shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge

consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

13. The competent authority on behalf of the President of India does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.
14. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
15. The competent authority on behalf of President of India reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
16. The contractor shall not be permitted to bid for works in the CPWD Circle (Division in case of contractors of Horticulture/Nursery category) responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the Central Public Works Department or in the Ministry of Housing and Urban Affairs. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
17. No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
18. The bids for the work shall remain open for acceptance for a period of 30 (thirty) days from the date of opening of bids in case of single bid system and ~~75 (seventy five) days from the date of opening of technical bids in case bids are invited in 2 or 3 bid system.~~ Further (i) If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department within 7 days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 50% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not. (ii) If any tenderer withdraws his tender or makes any modification in the terms & conditions of the tender which is not acceptable to the department after expiry of 7 days after last date of submission of bids, then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 100% of the earnest money absolutely irrespective of letter of acceptance for the work is issued or not. (iii) In case of forfeiture of earnest money as prescribed in para (i)

and (ii) above, the bidders shall not be allowed to participate in the rebidding process of the same work.

19. This notice inviting Bid shall form a part of the contract document. The successful bidder/contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:- (a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto. (b) Standard C.P.W.D. Form 7/8 or other Standard C.P.W.D. Form as applicable.
20. ~~For Composite Bids~~
 - 20.1.1 ~~The Executive Engineer in charge of the major component will call bids for the composite work. The cost of bid document and Earnest Money will be fixed with respect to the combined estimated cost put to tender for the composite bid.~~
 - 20.1.2 ~~The bid document will include following three components:~~
 - ~~Part A:- CPWD-6, CPWD-7/8 including schedule A to F for the major component of the work, Standard General Conditions of Contract for CPWD 2014 as amended/ modified up to~~
 - ~~Part B:- General / specific conditions, specifications and schedule of quantities applicable to major component of the work.~~
 - ~~Part C:- Schedule A to F for minor component of the work (competent authority under clause 2 and clause 5 shall be same authority as mentioned in schedule A to F for major components), General/specific conditions, specifications and schedule of quantities applicable to minor component(s) of the work.~~
 - 20.1.3 ~~The bidders must associate himself, with agencies as per NIT conditions.~~ 20.1.4 ~~The eligible bidders shall quote rates for all items of major component as well as for all items of minor components of work.~~
 - 20.1.5 ~~After acceptance of the bid by competent authority, the EE in charge of major component of the work shall issue letter of award on behalf of the President of India. After the work is awarded, the main contractor will have to enter into one agreement with EE incharge of major component and has also to sign two or more copies of agreement depending upon number of EE's/DDH incharge of minor components. One such signed set of agreement shall be handed over to EE/DDH incharge of minor component(s). EE of major component will operate Part A and Part B of the agreement. EE/DDH incharge of minor component(s) shall operate Part C alongwith Part A of the agreement.~~
 - 20.1.6 ~~Entire work under the scope of composite bid including major and all minor components shall be executed under one agreement.~~
 - 20.1.7 ~~Security Deposit will be worked out separately for each component corresponding to the estimated cost of the respective component of works.~~
 - 20.1.8 ~~The main contractor has to associate agencies for specialized component(s) conforming to eligibility criteria as defined in the bid document and has to submit detail of such agency(s) to Engineer-in-Charge of relevant component(s) within prescribed time. Name of the agency(s) to be associated shall be approved by Engineer-in-Charge of relevant component(s).~~
 - 20.1.9 ~~In case the main contractor intends to change any of the above agency/agencies during the operation of the contract, he shall obtain prior approval of Engineer-inCharge of relevant specialized component(s). The new agency/agencies shall also have to satisfy the laid down eligibility criteria. In case Engineer-in-Charge is not satisfied with the performance of any agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.~~

- 20.1.10 The main contractor has to enter into MoU with agency(s) associated by him. Copy of such MoU shall be submitted to EE/ DDH in charge of each relevant component as well as to EE-in-charge of major component. In case of change of associate contractor, the main agency(s) has to enter into MoU/agreement with the new contractor associated by him.
- 20.1.11 Running payment for the major component shall be made by EE of major discipline to the main contractor. Running payment for minor components shall be made by the Engineer-in-Charge of the discipline of minor component directly to the main contractor. The CMB shall be maintained independently by Engineer-in-Charge of major and minor components.
- 20.1.12A. The composite work shall be treated as complete when all the components of the work are complete. The completion certificate of the composite work shall be recorded by Engineer-in-Charge of major component after record of completion certificate of all other components.
- 20.1.12B. Final bill of whole work shall be finalized and paid by the EE of major component. Engineer(s) in charge of minor component(s) will prepare and pass the final bill for their component of work and pass on the same to the EE of major component for including in the final bill for composite contract.
21. ~~Integrity Pact: The contractor shall download the Integrity Pact, which is a part of tender documents, affix his signature in the presence of a witness, and upload the same while submitting online bids for all works of estimated cost put to tender equal or more than the threshold value given in Schedule-F. In the event of his failure to sign and upload the Integrity Pact along with other bid documents, his bid shall be rejected.~~
22. The intending bidders are required to update their profile in CPWD e- tender portal and to upload their bids well in advance of last date of submission of tender. Any issue related to updating profile/uploading tender can be resolved through the concerned Executive Engineer/ Assistant Engineer(Phone no *01125846515, e- mail Id *ded71.cpwd@gmail.com) or ERP helpline no. 18001803286 or e-mail Id cpwd.support@techmahindra.com. The e- tendering bidders are also advised not to wait to raise any issues till the last date of submission of bid in their own interest. *To be filled in by NIT approving authority.

FORM-A

AFFIDAVIT

I/we undertake and confirm that our firm/partnership firm has not been blacklisted by any state/Central Departments/PSUs/Autonomous bodies during the last 7 years of its operations. Further that, if such information comes to the notice of the department then I/we shall be debarred for bidding in CPWD in future forever. Also, if such information comes to the notice of department on any day before date of start of work, the Engineer-in-charge shall be free to cancel the agreement and to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee (Scanned copy of this notarized affidavit to be uploaded at the time of submission of bid)

NOTE: Affidavit to be furnished on a 'Non-Judicial' stamp paper worth Rs.100 /-

**Signature of Bidder(s) or an
authorized Officer of the firm with
stamp**

Signature of Notary with seal and date

CPWD-7	CPWD
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**GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT**

STATE : DELHI
BRANCH: E&M

DIVISION :DED-71
CIRCLE : DC-7

Percentage Rate Tender & Contract for Work

Tender for the work of:- A/R&M/O in Agriculture Scientist Recruitment Board Building (Chayan Bhawan) at IARI, Pusa, New Delhi (SH:- Operation and Maintenance of Electrical and Specialised Electrical and Mechanical Services.)

- (i) To be uploaded at [www. https://etender.cpwd.gov.in](https://etender.cpwd.gov.in) by 15:30 Hrs. on 13-10-2026
- (ii) To be opened in presence of tenderers who may be present at 15:40 Hrs on 13-10-2026 in the office of The Executive Engineer (E),DED-71, CPWD, IARI Pusa, New Delhi.

TENDER

I/We have read and examined the notice inviting tender, schedule, A,B,C,D,E & F Specifications applicable, Drawings & Designs, General rules and Directions, Conditions of Contract 2023 (Maintenance Works) with amendments up to the last date of submission of tenders, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the President of India within the time specified in Schedule "F", viz., schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for thirty **(30)** days from the due date of opening of bid and not to make any modifications in its term & conditions.

A sum of Rs. 1,65,105/- is hereby forwarded in cash/receipt treasury challan/deposit at call receipt of a scheduled bank/fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by a scheduled bank as earnest money.

A copy of earnest money in receipt treasury challan/deposit at call receipt of a scheduled bank/fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by a scheduled bank is scanned and uploaded (strike out as the case may be). If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the said President of India or his successors, in office shall without prejudice to any

other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/ We agree that President of India or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form.

Further, I/We agree that in case of forfeiture of Earnest Money or Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

~~I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in CPWD in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer in Charge shall be free to forfeit the entire amount of Performance Guarantee.~~

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived therefrom to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated: #.....

Witness: #

Address: #

Occupation:#

To be filled in by the contractor

Signature of Contractor #

Postal Address #

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for an on behalf of the President of India for a sum of Rs.....*
(Rupees.....)*

The letters referred to below shall form part of this contract agreement:-

(a)

(b)

(c)

For & on behalf of President of India

Signature

Dated:

Designation

PROFORMA OF SCHEDULES**SCHEDULE 'A'**

Schedule of quantities

Attached**SCHEDULE 'D'**

Extra schedule for specific requirements /document for the work, if any - As per sheets Attached.

SCHEDULE 'E'

Reference to General Conditions of contract:- General Conditions of Contract 2023 (Maintenance works) for CPWD as amended/modified upto last date of submission of bid

Name of Work	A/R&M/O in Agriculture Scientist Recruitment Board Building (Chayan Bhawan) at IARI, Pusa, New Delhi (SH:- Operation and Maintenance of Electrical and Specialised Electrical and Mechanical Services.)
Estimated cost of work	Rs. 82,55,246/-
i) Earnest Money (To be returned after receiving Performance Guarantee)	Rs. 1,65,105/-
ii) Performance Guarantee	5% of the Estimated Cost put to tender (ECPT) or Contract Amount whichever is higher and additional PG as per DG/Manual/2024/20, Dated:-27/02/2026
iii) Security Deposit	2.5% of tendered value

SCHEDULE 'F'

(GENERAL RULES & DIRECTIONS) : Officer inviting tender: EE(E), DED-71, CPWD, Pusa, New Delhi.

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3: **See below**

Definitions:

2(v)	Engineer-in-Charge	EE(E), DED-71 CPWD, Pusa, New Delhi
2(viii)	Accepting Authority	EE(E), DED-71 CPWD, Pusa, New Delhi

2(x)	Percentage on cost of materials and Labour coverall to overheads and profits	15%
2(xi)	Standard Schedule of Rates	DSR E&M 2025 with amendments and up to date corrections, Market rate, Minimum wages as per Govt. of Delhi or Central Government.
2(xii)	Department	Central Public works Department (CPWD)
9(ii)	Standard CPWD Contract Form GCC 2023, CPWD Form 7/8 as modified & corrected upto	GCC 2023 (Maintenane Work) for CPWD works as amended/ modified up to submission of the tender.

Clause 1

(iv)	Time allowed for submission of Performance Guarantee, programme chart (Time and progress) and applicable labour license, registration with EPFO, ESIC and BOCW welfare board or proof of applying thereof from the date of issue of letter of acceptance	7 Days
(v)	Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above.....	3 Days

Clause 2

(i)	Authority for fixing compensation under clause 2	SE,DC-VII, CPWD,IARI Pusa, New Delhi.
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Clause 2A

(i)	Whether clause 2A shall be applicable	No
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Clause 5

(i)	Number of days from the date of issue of letter of acceptance for reckoning date of start Mile stone(s) as per table given below :-	10 Days
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Sl. No.	Description of Mile Stone (Physical)	Time Allowed in days (From date of Start)	Amount to be with-held in case of non achievement of milestone
Nil			

Time allowed for execution of work:

12 Months

Authority to decide:

(i)	Authority to convey the decision of shifting of milestone and extension of time (Engineer-In-charge or Engineer-In-charge of Major component in case of composite contracts, as the case may be)	EE(E), DED-71, CPWD, Pusa, New Delhi.
(ii)	Authority to decide rescheduling of milestone and extension of time (SE/SE&PD/CE/CE&ED)	SE,DC-VII, CPWD, IARI Pusa, New Delhi.
(iii)	Shifting of date of start in case of delay in handing over of site (SE/SE&PD/CE/CE&ED)	SE,DC-VII, CPWD, IARI Pusa, New Delhi.

Proforma of Schedule Clause 5 Schedule of handing over of site.

Part	Portion of site	Description	Time period for handing over reckoned from date of issue of letter of intent.
Part A	Portion without any hindrance	100% site available	Not Applicable
Part B	Portion with encumbrances	100% site available	Not Applicable
Part C	Portion dependent on work of other agencies	100% site available	Not Applicable

Clause 6

(Whether Clause 6 shall be applicable Electronic Measurement Book (EMB) through CPWD ERP portal – **Yes**)

Clause 7

Gross work to be done together with net payment /adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment	Rs. 10 Lakhs or decided by Engineer-In-charge
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Clause 7A

Whether clause 7A shall be applicable.

Yes

Clause10A

List of testing equipment to be provided by the contractor at site lab:

---Nil---

Clause 10B (ii):

Whether Clause 10 B(ii) shall be applicable

No

Clause10C :

Yes

(i)	Component of labour expressed as percent of value of work	65%
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Clause10CC:

Not Applicable

Schedule of component of other materials, Labour etc. for price escalation

Component of civil (Except materials covered under Clause 10 CA) / Electrical construction value of work :-

Xm.....%

Component of Labour-

Expressed as percent of total value of work.

Y.....%

Note:- Xm.....% should be equal to (100)- (material covered under clause 10CA i.e. Cement, Steel, POL and other material specified in clause 10CA+ Component of Labour)

Clause 11

Specifications to be followed for execution of work

1. Electrical works:	a)	CPWD General Specifications for Electrical work Part I Internal - 2023, amended up to date.
	b)	CPWD General Specifications for Electrical work Part II External -2023, amended up to date.
	c)	CPWD General Specifications for Heating, Ventilation & Air-Conditioning (HVAC) - 2024, as amended up to date.
	d)	CPWD General Specifications for Electrical Works Part VII D.G. Sets / Part IV Substation – 2013, amended up to date.
	e)	General Specifications for Electrical Works (Part-III-LIFTS & Escalators) - 2003, amended up to date.
	f)	CPWD General Specifications for Electrical Works Part VI Fire Detection and Alarm System – 2018
	g)	CPWD General Specifications for Electrical Works Part V Wet Riser & Sprinkler Systems – 2023

Clause 12

Type of work:	Maintenance works including works of up-gradation, aesthetic improvement, special repair, addition/alteration etc.
The completion cost of any maintenance work shall not exceed 1.5 times of contract amount and 10% of the sanctioned cost for budgeted works. The Engineer-in-Charge shall record reasons for such deviation beyond the contract amount. Prior approval from SE/CE is required when completion cost of work is likely to go beyond 1.25 times of contract amount with recorded reasons. The powers to sanction the extra items and deviation are given in Financial Powers delegated to CPWD officers.	
Clause 12.2 & 12.3 Deviation limit beyond which clauses 12.2 & 12.3 shall apply for building work.	No Limit (as per vide no. DG/SOP/16 dated 15.02.2023)

Clause 16:

Competent Authority for deciding reduce rates

SE, DC-VII, CPWD, New Delhi.

Clause 18:

List of mandatory machinery, tools & plants to be deployed by the contractor at site.	As per direction of Engineer-In-charge
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Clause 19C: Authority to decide penalty for each default :

Engineer-in-charge

Clause 19D: Authority to decide penalty for each default :

Engineer-in-charge

Clause 19G: Authority to decide penalty for each default :

Engineer-in-charge

Clause 19K: Authority to decide penalty for each default :

Engineer-in-charge

Clause 25

Constitution of Dispute Redressal Committee (DRC)	
(a) Conciliator: -	ADG (DELHI), Nirman Bhawan, New Delhi
(b) Arbitrator :-Appointing Authority	SE, Delhi Circle-7, CPWD, New Delhi
(c) Place of Arbitration: -	New Delhi

Clause 32**Requirement of Technical Representative(s) and recovery Rate:**

Cost of work(Rs. In Crores)	Requirement of Technical		Minimum Experience(Years)	Designation Technical Staff	Rate at which recovery shall be made from the contractor in the event of not fulfilling
	Qualification	Number (of Major + Minor component)			
More than 15 lac to 1.5 Crore	Graduate Engineer or Diploma Engineer	1 of major Component	2 or 5 respectively	Project Manager cum Planning/quality/site/billing Engineer	Rs. 15,000/- per month per person

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.

Diploma holder Engineer with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holder Engineers should not exceed 50% of requirement of degree engineers.

Clause 38

- (i) (a) Schedule / statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates..... Printed by CPWD.
- (ii) (ii) Variations permissible on theoretical quantities :
- (a) Cement
- For works with estimated cost put
- To tender not more than Rs.25 lakh. 3% plus/ minus
- For works with estimated cost put to
- Tender more than Rs. 25 lakh.. 2% plus/minus.
- (b) Bitumen All Works 2.5% plus & only & nil on minus side.
- (c) Steel Reinforcement and structural steel
- Sections for each diameter, section and category 2% plus/minus
- (d) All other materials. Nil

GENERAL TERMS & CONDITIONS FOR ELECTRICAL**(FOR ALL SUB HEADS)**

1. Work shall be carried out as per CPWD General Specifications for Electrical Works-(Internal, External, D.G. Set, Fire Fighting/ Wet-riser, Fire Alarm, Sub Station, Lift), HVAC & CPWD maintenance manual wherever applicable and in accordance to the Indian Electricity Rules 1956 and Indian Electricity Act 2003 as amended up-to-date and as per the instructions and satisfaction of the Engineer-in – charge.
2. The rates quoted shall be inclusive of wages of man power i/c relievers, material, T&P and all taxes and duties etc. as applicable. However, ESI/ EPF will be reimbursed to the contractor, on production of proof of deposit of the same with respected Govt. department.
3. The contractor shall take all precautions for safety of the workmen. If any accident/mis-happening occur the department shall not be responsible for the same. If any compensation is to be paid to the victim, the firm shall pay the same and no claim in this account shall be entertained by the department.
4. All the cleaning material i.e. soap, duster etc. shall be arranged by the contractor at his own cost for cleaning of Electrical Installation & fans, switch gear, DB, Main control panel, D.G Set, Fire Alarm. Fire Fighting, Lift equipment etc. If cleaning of installation is not found satisfactory at any time, a recovery of Rs.200/- per occasion noticed per Sub Head shall be made from the running bill of contractor.
5. The contractor shall furnish name & contract number of the persons, who should be contacted during emergency.
6. All T&P and special T&P shall be arranged by contractor within scope of the work & nothing extra shall be paid on account of this. Before start of contract T&P items necessary for comprehensive maintenance & day to day maintenance, must be kept in a lockable box, if same is not available at site, then a recovery for the same @ Rs. 100/- per day shall be deduct from the contractor's bill maximum upto Rs.1000/-per month.
7. The contractor shall prepare a Sub Head wise "Fortnightly / Monthly "duty chart/ duty roaster with name and duty hours stated therein. The same shall be submitted to the JE (E) / AE (E) concern at least seven days in advance. In a case of absence /leave of any labour substitute should be provided by the contractor.
8. Since the operation of various services at site is event based and very important hence the deployed contractor staff can be interchanged as per requirement among these services as per their skill level on the instructions of Engineer- in-charge or his representatives.
9. In case of any damage to existing equipment/ system/ panels etc. during maintenance, the same will have to be made good by the contractor at his cost. Failure to which the same shall be made good by the department at risk and cost of the contractor and suitable recovery will be made from the contractor bill as decided by the Engineer-In-charge.
10. **Aadhar based biometric attendance system setup with Wi-Fi/Hotspot (Communication internet) along with standby arrangement at his own cost (for which nothing extra shall be paid) for the attendance of Manpower to be deployed. In case of any breakdown same shall be restored within 48 hours, else agency shall bear the penalty of @ 10% of the applicable wages for the number of days of breakdown in Aadhar based Biometric system subject to maximum**

10% of manpower item. During breakdown period of biometric machine concerned AE/JE -in charge shall mark / verify manual attendance of the contractual staff deployed at site by the contractor. However, during Covid period/any other circumstances if Govt. guideline restricted Aadhar based Biometric Attendance in that case JE / AE in-charge of work shall mark /verify manual attendance of the contractual staff deployed at site by the contractor. Any urgency In Round the clock shift duty, staff of current shift will relive only when staff of next shift join duty. All engaged manpower should join duty on time failing which a penalty charge @ Rs 50 for delay of every 30 minute or part thereof, after initial delay of 10 min will be imposed for every late attendance. Maximum permissible delay is 70 minutes (or as decided by Engineer-in-Charge) after which it will be treated absent. For early departure from scheduled off time, penalty charge will be imposed @ Rs 50 for every 30 minute or part thereof.

- 11.** Before the start of contract, the contractor is bound to submit the following details along with supporting papers of the workers proposed Sub Head wise to be engaged by him. After receipt of confirmation of their suitability from the Engineer-In-charge or his authorized representative, they shall be deployed on duty.

- (a) Name & Postal Address with ID Proof
- (b) Photograph with specimen signature
- (c) Qualification and experience
- (d) Bank accounts details
- (e) ESIC/EPF Details

Before start of work the agency has to get approved the detail of workers from Engineer-In-charge & has to take over the site from AE/J.E. in charge of site.

- 12.** The Engineer-in-charge reserves the right to ask the contractor to remove of any staff without assigning any reason what so ever. Decision of the Engineer-in-charge shall be final and binding on the contractor.
- 13.** The contractor/ Firm is advised to visit the site of work before quoting the rates, in order to ascertain the quantum, site condition and location of work.
- 14.** It shall be entirely the responsibility of the contractor to ensure that no unlawful act is done by his staffs while on duty. In case any theft/ loss of departmental property takes place due to the negligence or carelessness of his staffs, the contractor will be held responsible and shall make good the same. The aforesaid terms and conditions shall be read in conjunction with the general rules and directions from the guidance of Contract form PWD-7 & **General Conditions of Contract (GCC)– Maintenance Work -2023 amended/modified up to last date receipt of tender i/c extension, if any.**

15. Terms of payment and other facilities for workers.

- 15.1.** The contractor is bound to distribute the salary / wages to his worker by 10th of every successive month, positively, by ECS or RTGS or any online bank transaction as feasible and contractor is bound to submit the proof of wages 15th of every month to the JE(E)/AE(E) & if the payment is not made by 10th of every successive month to his workers, **then a recovery @ Rs. 100/- per worker per day of delay** shall be done from the bill of the contractor and the decision of Engineer-In-charge regarding this, shall be final & binding on the contractor. However, department will make payment to the agency/contractor subject to availability of fund/ Budget and fulfillment of terms & conditions of the agreement. The contractor shall pay

salary / wages to his staffs every month in time in spite of whether he will get payment from the department or not.

- 15.2 The contractor has to provide Vehicle / Cycle or other suitable means of travelling to worker for quick movement to various sites within the scope of the work, for which nothing extra shall be paid.
- 15.3 The contractor shall be registered with ESIC, EPF. The contractor shall deduct worker subscription toward Provident Fund as ESI, as per rules, he shall deposit the same along with his contribution into the respective accounts of the worker and submit the detail to this office for verification before payment of R/A or Final Bill.
- 15.4 The contractor shall take all precaution of safety of the workmen. If any accident / mis-happening occur, the department shall not be responsible for the same. Consequently, any compensation payable shall be borne by the contractor.
- 15.5 Recovery shall be made at the following rate if Operator/Wireman/AC Mechanic /Highly skilled / Khallasi etc. found absent from his duty.
 - 15.5.1 Skilled worker/Operator/Wireman@ Rs. 2318/-per worker per shift.
 - 15.5.2 Khallasi/unskilled worker @ Rs.1902/-per worker per shift.

17. Terms of payment for the contractor

- 17.1 The healthiness of the complete system/installations shall be evaluated on the method details in additional terms & condition of individual Sub Head.
 - 17.2 Submission of CMB through ERP.
 - 17.3 The contractor shall provide his mobile number and the mobile number of his representative to the Engineer-in -Charge for ease in communication. Contractor shall not change the mobile no during the agreement stipulated period. If mobile is found switch off for more than 4 hours, recovery shall be made@ 100/-per day per mobile no.
- 18.** Maintenance of any other minor addition / alternation in the existing installation shall be covered in the scope of the work and operation & maintenance of the same shall be included in scope of the work and nothing extra will be paid on this account.
- Regular maintenance of all the equipment's/ installations are to be carried out at appropriate time and recorded in prescribed form as per their respective maintenance schedules or as per instructions of OEM / CPWD Manual / Format as approved by Engineer-in-Charge.
- The contractor shall takeover all E&M inventories from the JE(E)/AE(E) before starting of the work and also handover above inventories in good conditions after the completion of work to JE/AE or next agencies.

19. Safety codes and labour Regulations: -

- (a) In respect of all labour employed directly or in directly on the work for the performance of the contractor's part of work, the contractor at his own expense, will arrange for safety provision as per the statutory provisions, B.I.S recommendations, factory act, workman's compensation act, CPWD code and instruction issued from time to time. Failure to provide such safety requirement would make the tenderer liable for penalty for Rs. 200/-for each violation. In addition, the Engineer-in-charge, shall be at liberty to make arrangements and provide facilities as a foresaid and recover the cost from the contractor.
- (b) The contractor shall provide necessary barriers, warning signals and other safety

measures while executing the work or wherever necessary so as to arising accidents. He shall also indemnify CPWD against claims for compensation arising out of negligence in this respect. Contractor shall be liable, in accordance with the Indian law and Regulations for any accidents occurring due to any cause. The department shall not be responsible for any accidents occurred or damaged incurred or claims arising there from during the execution of work. The contractor shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the contractor due to the above provisions thereof.

20. No contractor or his staff shall be allowed to stay at site of work i.e. DG Set Room, Fire Alarm/Control Room, Fire Fighting Pump House, Lift Machine Room, STP Room, WTP etc. or other place at site, after duty hours.
21. In inventory in the schedule is for just to have an idea of quantum of work. However, this may differ from time to time. If any additional / alteration in the installed inventory is found/ made after award of work then contractor shall be bound to maintain in the same within the quoted rates under same scope of work and term and conditions, for which nothing extra shall be paid.
22. Contractor would be bound to execute any extra / additional items (If required as per the Engineer-in-charge), the contractor shall be bound to execute the same and payment shall be made as per relevant clauses of the agreement.
23. The materials shall be purchased from Authorized Dealers/Manufacturers only.
24. The contractor shall submit proof for the genuineness of the materials supplied, like copies of cash memos /bills/challan etc. as per requirement of Engineer-in-charge.
25. All the staff deputed by the contractor shall be responsibility of the contractor and Department will not entertain any Liabilities / responsibilities at any stage for staff deployed by the firm /contractor for all purpose for their regularization /absorption in the department.
26. All the minor items such as cotton waste, grease, old dhoti, Gland dori, soot, safeda, grease, petroleum jelly, PVC Tapes, stationary items/ printed stationary like log book etc. shall be arranged by the contractor for which nothing extra shall be paid.
27. The staff of the contractor shall maintain the register, logbook, worker's diary, maintenance records and registers, as per standard Performa, which will be supplied by the contractor within the scope of the work & nothing extra shall be paid. The log book shall be kept at the site, which may be checked any time by JE(E), AE(E), EE(E) and higher officers. The contractor's staff will have to take action as per direction of Engineer-in-charge or his representative time to time.
28. All dismantle materials comes shall be stacked properly by the contractor and takeout from site as per instruction of the representative of Engineer-in-Charge from time to time.
29. Any damage caused due to negligence of the worker of the contractor during the routine maintenance shall be of responsibility of the agency. The agency will made good the same within the scope of works and nothing extra shall be paid on this account.
30. Bad work-man-ship will not be acceptable and defect shall be rectified at contractor's cost to the satisfaction of the Engineer-in-charge.
31. All scaffolding & material the debris of the electrical works shall be removed and the contractor should clear site immediately after the completion of job.
32. The contractor has to intimate the name of his authorized representative, who will be receiving instructions in his absence. The contractor / his authorized representative is bound to sign the site order book as and when required by the Engineer-in-charge and to comply with the instructions

therein.

- 33.** The Engineer-in-charge has the right to remove any worker from site without assigning any reason. The contractor shall replace with new worker immediately.
- 34.** The contractor will be fully responsible for the genuineness of material, and if at any stage found defective/duplicate shall have to be replaced free of cost.
- 35.** The department reserves the right to terminate the contractor in full or part thereof as required at any stage, without assigning any reason.
- 36.** The Work shall be carried out in ASRB Campus, so no claim of idle labour shall be entertained.
- 37.** Sub Head- Supply material items, No minus deviation shall be allowed item of supply shall be supplied within a one Month after award of work otherwise recovery @ 500/- per days shall be recovery from the bill of the contractor. The decision of Engineer-In-charge shall be final & binding on the contractor.
- 38.** All the spares material /parts required for repair /replacement under all subheads work (Electrical & Mechanical) shall be repaired / replaced with same make & model of spare material / parts. In case of any deviation the same shall be brought into the notice of Engineer-in-charge along with proper justification & supporting documents and shall be replaced / repaired after getting the approval of Engineer-in-Charge.
- 39.** The work will be executed in an occupied building i.e. ASRB Pusa Campus in a manner so that no inconvenience will be to the occupant. No claim for idle labour on account of this shall be entertained under this agreement.
- 40.** The contractor has to make his own arrangement of the tools for use by his skilled staffs. Further T&P required at site shall be arranged by contractor. Following T&P shall always be available at site of work otherwise recovery at the rate of Rs. 500/- per day for number of days it is not found at site of work: -
 - a) Megger, (0-1000Watt) : 1 No.
 - b) Earth Tester : 1 No.
 - c) Crimping tools : 1Set
 - d) Spanner set : 1Set
 - e) ALAN Keys set : 1Set
 - f) Hammer Drill : 1 Nos.
 - g) Hacksaw : 1Nos.
 - h) Tong tester : 2Nos.
 - i) Pipe wrench & Chain Wrench (for 2inch to 6 inch pipe): 1 No.
Tachometer/Hydrometer/Luxmeter (Digital)/ Vernier; Screw gauge (Digital)/ Dial Gauge (as per site requirement)
 - j) Ladder of different size: 2 Set (Suitable for internal and external electrical work)
 - k) Tool Bags with required tools such as Plier, Tester, Knives Screw Driver set, Rawl Plug with different size of screws Dhoti & PVC tape etc.: All wireman
- 41.** All the equipments and accessories available at site are deemed to be covered in the scope of operation and maintenance of EI & Fans. Any addition/ alteration shall be included in the operation and maintenance of the installations and nothing extra shall be paid.
- 42.** Guarantee for LED fittings/ fixtures/ Luminaire (except LED Batten)
 - a) All the LED Bulbs/ LED fittings/ LED beam light, (except LED batten) shall be guaranteed for

a period of 5 Years and the agency shall submit guarantee /warranty certificate issued by the competent authority of the manufacturer, specifically issued for this work/ agreement, before payment of final bill.

- b) 50% of the Performance Guarantee for tendered amount of LED fittings i/c extra item , shall be refunded to the contractor soon after the completion of the work and recording of the completion certificate.
- c) 50% of the Performance Guarantee for tendered amount of LED fittings, shall be retained as Security Deposit.
- d) 50% of the Performance Guarantee retained on tendered amount of LED fittings, as Security Deposit plus 2.5% Security Deposit already deducted from running bills (total 2.5 +2.5 = 5% of tendered amount of LED fittings i/c extra item) shall be refunded year wise proportionately.

43. Following colour coding shall be followed in wiring:

Live : Red (Single phase wiring)

Neutral: Black

Earth : Yellow/Green

44. Following preferred material to be used in work.

List of Preferred Make of Materials

Sl.No.	Description of Item	Makes
1	FRLS PVC Insulated Copper Conductor Wire , XLPE Al. armoured cable (ISI marked)	Polycab/RR Cable / Havells/Finolex/Greatwhite / Pi square/HPL/Rallison/Svam
2	MCB's ,MCB DB's, MCCB's , RCCB/ELCB, TPMCCB	LK/ Anchor Panasonic /Havells / Legrand/Schneider Electric/ Hager/ ABB/HPL/Greatwhite /Honeywell
3	Modular Type switch, socket, cover plate, Regulator (2 module size), blanking plate, ceiling rose, Bell push, and their M.S. Boxes/ brass batten angle holder/ electronic fan regulator, GI Box, Call bell, CAT 6 UTP	Wipro North-West /Havells / Legrand / MK Honeywell / Schneider /ABB / Anchor
4	Steel Conduit Conduit (ISI marked)	BEC/NIC/AKG /Norpack
5	PVC Conduit (ISI marked)	AKG/Finolex/Supreme/Polycab/Avon plast
6.	All LED fittings/ LED fixtures	Philips/ Havells/ Orient/Anchor Panasonic/Wipro /LT/Regent /Surya
7.	Ceiling Fan/ Fresh Air Fan / Sweep wall Fan/ Exhaust Fan	Havells/Orient/Usha/Anchor Panasonic/HPL
8	Capacitor	Usha/ Tibcon/Havells/Crompton
9	Paint	Asian/Nerolac / Berger / Dulux
10	All other items not covered above	As per samples approved by Engineer In-charge.

ADDITIONAL TERMS AND CONDITIONS

- (1) The work shall be carried out as per CPWD electrical specifications Internal, External upto date amended and entire satisfaction of Engineer-in-charge.

DETAILS OF ELECTRICAL INSTALLATION :-

1	Light/fan/exhaust fan point	881 Nos
2	Group Control Point	540 Nos
3	Power Points	450 Nos
4	AC Points	16 Nos
5	4 Feet 18 W LED Batten	34 Nos
6	2 Feet 8/9 W LED Batten	57 Nos
7	2X2 36 W LED Fitting	395 Nos
8	Downlighter 15 W Recess type	466 Nos
9	Downlighter 15 W Surface type	104 Nos
10	10 W LED Bulkhead	16 Nos
11	400 mm Wall Fan	4 Nos
12	1200 mm Ceiling Fan	261 Nos
13	Octagonal Pole	17 Nos
14	Ornamental Pole	12 Nos
15	Flood Lights 100 W	21 Nos
16	Street Lights 60 W	17 Nos
17	Street Lights 90 W	17 Nos
18	Bollard Lights 9/10 W	42 Nos
19	30 KVA UPS	2 Nos

- (2) The contractor will have to depute following staffs.

- 1) Wireman - 1 No. in General shift on all days excluding Sundays & Holidays.
- 2) Khallasi- 1 No. (1 No.in General shift) on all days excluding Sundays & Holidays.

- (3) The contractor will have to maintain all the installations/equipments in proper working condition.

- Qualification of Wireman:- Should have valid Wireman License/Electrical ITI holder /Electrician license issued by Delhi Govt. the competent authority.
- Qualification of Khallasi:-Physically strong/Mentally fit, minimum 5th Pass or above.

- (4) The contractor will have to depute additional skilled labour to attend to a fault beyond the competency of the staff deployed for which nothing extra shall be paid.

- (5) The staffs deputed at site shall have to attend all breakdown maintenance complaints and preventive maintenance of all internal and external electrical installations like pumps, wirings, MCB DBs, light fittings, Fans, Compound lights, Street lights etc. installed at the site mentioned in SOQ, within the scope of the works.
- (6) The staffs deputed at site shall attend all the complaints received directly from the client department or through JE(E)/AE(E) promptly.
- (7) Preventive maintained works to be done
 - a. Daily routine checks:-
 1. The voltage of supply, total load current and pf should be noted in log book every day, preferably during peak loading time of the day. (in the case of isolated/unattended buildings where it is not feasible to log daily, the period may be increased to weekly or fortnightly as feasible).
 2. If any instrument is not provided, provide the same now. If any of the instruments is defective get it repaired early.
 - b. Monthly checks:-
 1. Inspection of electrical installation is intended primarily for fire safety considerations. Following points need to be observed as part of inspection and corrective action as necessary should be taken immediately, including coordination with the client departments concerned, as may be required.
 2. Check that – there is not sign of heating up, burning smell, deceleration or sparking of any of the boards (SDBs as well as main boards,) and rising mains. These may occur due to overloading or loose terminations. Highly unbalanced loading may cause heavy neutral currents and consequent heating of neutral conductors and terminals.
 3. No temporary wiring exists anywhere in the building.
 4. There is no joint in cords connecting the WATC units/voltage regulators/office equipment like photocopier, PC etc.
 5. No bare wiring exists over the flooring without mechanical protection by a metallic conduit/channel.
 6. There is no misuse of socket outlets, such as connecting power load to light socket, connection of multiple loads to one socket, use of heaters in record room, library etc. In such cases of additional demands of outlets, these should be provided early. After taking approval of the competent authority.
 7. All DBs are only of MCB type and sockets for WTAC units are of industrial type controlled by MCB.
 8. The shafts/spaces for electrical services are not misused, for storage or for dumping rubbish.
 9. The spaces in front of DB's and sockets are free (without any storage of files/papers etc.)
 10. No additions/alterations are done by the user departments to the electrical installations by themselves.
 - c. Routine Checks:-
 1. A record of loading up to DB level (in each phase in case of 3 phase DBs) should be maintained, after measurements using a clip on ammeter. Such measurement should be done, as far as possible during peak season (summer and winter), when the loads are likely to be the highest.

2. The PF should be maintained above 0.8 (or any higher value fixed by the licensee without penalty) , if Power Factor Improvement equipments are installed at any site. Examine the adequacy of capacitors (if any) accordingly.
3. While cleaning fittings and fans, the fixing /suspending arrangements should also be checked and attended to as necessary. Care should be taken that the alignment is not disturbed.
4. Insulation test should be done monsoon season, as per clause 11.2 of CPWD specifications for elect. Works part I internal 2013.
5. earth continuity test and earth electrode resistance test should be conducted during summer season, as per clauses 11.5 of the above specifications.
6. Record the test results giving identification reference. If results are not satisfactory in any part of the installation, reason should be corrective action be taken immediately.

NOTE:-

- a) Safety procedures at indicated in Appendix E to the general specifications for Electrical works (Part I-Internal 2013) should be duly followed.
- b) The number of items to be maintained in a building may be like fitting, fans, DBs, earth sets etc. In order to achieve compliance to the prescribed periodicities for the various activities on them as per this schedule, each of these items any be divided in to convenient numbers, to carry out the respective activities in sub periods, in a syclinc (Sequential) order. For example, if DB' are to be checked every month, and there are 50 DBs in a building, these maybe checked at the rate of 2 or 3 DBs every days in a sequential order (programmed in advance) so that all DBs are checked in a month.

ADDITIONAL TERMS AND CONDITIONS
For pump Sets

- (1) The work shall be carried out as per CPWD Electrical specifications internal & external amended up to date and entire satisfaction of Engineer-in-charge.

DETAILS OF PUMP

1	Monosubmersible , open well type, pump set (pump & Electric Motor)	4 Nos
2	25 KLD STP Plant	1 Nos

- (2) The contractor will have to depute the staff in following roster at site.

- (i) Pump Operators :- 1 No. (1 No. in General shift) on all days excluding Sundays & Holidays.

Qualification of Operator

Pump operator should have passed ITI in relevant trade or shall have valid electrical license from competent authority with minimum 3 year experience in similar work.

- (3) The pump operators shall have to operate pump sets installed at various locations of ASRB Building IARI Pusa New Delhi.
- (4) In case of minor repairs/replace required such as gland dori, nut bolt etc. the contractor shall arrange the same within quoted rate. Major repairing not covered in the scope of work.
- (5) It will be the responsibility of the contractor to make all arrangement for smooth working of Pump installations and to ensure water supply at all the time. In case lapse of any service/ disruption of water supply due to fault of staffs of the contractor , then penalty @ Rs. 5,000/- per day will be deducted from the bill of the contractor.

Executive Engineer(E)
DED-71, CPWD, Pusa,
New Delhi.

ADDITIONAL TERMS & CONDITIONS**For Sub Head - V (Operation & Maintenance of Sub-Station and Operation of DG Set)****1. Details of Equipments/Inventories****SUBSTATION**

1	400 KVA Transformers	2 Nos
2	HT panel & LT panel	2 Nos
3	APFC Panel 180 KVAR	2 Nos
4	Electrical Panels	6 Nos
5	Emergency Panel	1 No
6	250 KVA Silent Type DG Set with AMF Panel and all other related accessories	1 No

2. Details of Manpower to be deployed at site

- Operator - 3 Nos in round the clock (1 No. in each shift) on all days including Sundays & Holidays.

Shift timings can be changed as per the requirement at site and decision of the Engineer-in-charge.

3. Qualification of deputed Manpower

Operator Should have valid Wireman License/Electrical ITI holder /Electrician license issued by Delhi Govt. the competent authority.

4. MAINTENANCE SCHEDULE FOR SUBSTATIONS

- a) Follow all safety procedure during maintenance activities. (See IS Code No. 5216 (Pt. 1 & 2) 1982 or safety procedure mentioned in CPWD Specifications for EI works (Pt.-I – Internal 2013) for more details)
- b) Only Authorised persons should be permitted to handle electrical equipment. Names of Authorised persons should be displayed in the main MV panel room (Rule 3 of IE Rules) when maintenance activities are performed, another person should accompany the one carrying out the tasks.
- c) ON LINE maintenance should not be undertaken in sub-stations. It must be ensured that supply lines concerned are isolated and proved isolated, considering also any likely back feeding.

Caution boards should be displayed while doing maintenance works so as to avoid accidental switching on.

- d) Supplement this schedule with recommendations of manufacturers of the respective equipments. Proper record of every maintenance activity must be kept as per this Schedule of maintenance. Result of all tests must be also recorded therein. However, if there is any repair or replacement done, the same should be recorded in the History Book.
- e) Logging of instruments Instruments may be logged daily, only in attended substations. In the case of unattended substations, logging should be done every month or at shorter intervals as feasible. As far as possible logging may be done in peak loading time, so as to monitor the pattern of loading. Periods of power cuts and shut downs should be indicated in attached substations. Logging is needed for voltage (HV/MV/battery), current (HV, MV/battery), power (MD), temperature (max.) of oil, ambient temperature and pf (and frequency meter is already installed). Load on each outgoing feeder may be checked by clip on ammeter/tong tester, once in every quarter, preferable during peak seasons, so that redistribution, if any needed among the feeders could be further examined and effected.
- f) Inspection of equipments rooms and equipments. Clean up equipment rooms; remove cobwebs, bird's nests etc., if any. Check that the ventilators are clear exhaust fans and fans are operational. The approach to equipment rooms, and yards in outdoor installations should be clear. Wipe out dirt/ dust from external surfaces of equipments. CAUTION: Never attempt to clean equipments with exposed (bare) bushing, with supply ON. Periodicity of cleaning such equipment may be increased to once a month or longer as felt in order, so as to avoid frequent switching operations.
- g) Observe for any abnormal noise, vibration, smell (usually due to overheating), excess temperature etc. if so, investigate the reason immediately. Radiators of transformers, LT bus bar chamber, and LT SFU/ FSUs and main LT cables (near terminations) may be touched externally to feel any undue heating. Apart from smell, the shine of PVC may reduce due to local heating. Compound may expand and come out of cable boxes due to local heating in compound filled cable terminators (usually old installations). Arcing contacts and main contacts should then be similarly examined. Do not use abrasive paper to clean the contacts, if there is any residue/ pitting. Check the architects to be intact, clean and without any obstructions. Mechanical linkages should be lubricated, wherever required. Test for free movements of all operations.
- h) In the case of electrically operated breakers, meggar test the motor/ solenoid and check for their free movement. Lubricate as necessary In the case of outdoor gang operated switch, free operation of the switch (and proper alignment of all the 3 phases) should be checked. Check that the HRC fuses are in position, and that safety interlock (with the front cover) is operational. Connections at bus bars, bus ducts and switchgear (including control wiring) should be checked. Tighten as required. Clean the supports and look for any possibilities of tracking on surface. Relays should be tested and setting checked. Relay coil insulation should be checked with LT meggar. Plug opening/ hole (if any) in switchboards, effectively. Meggar test the panel, and check the interior to be free from any foreign matter (like cotton waste/ flint, dislodged nuts/ washers/ cut tapes etc.) before energizing again.
- i) Check of safety items & others Check of safety items (insulating mat, caution boards, danger boards, first aid kit, fire protection items, Resuscitator (where provided), first aid chart etc.

- j) Check also whether telephone numbers of officers, supply agency (licensee), fire brigade and hospital are displayed on a painted board in MV panel room.
- k) Check that the correct schematic diagram of distribution is displayed in MV panel room. Test the earth resistance of each electrode (Preferrably during summer); and also the integrity of earth connections. Where the substation building is single storied, inspect the roof and roof drain before monsoon, so as to avoid water stagnation.
- l) Check the cable ducts to be free from extraneous items (rubbish/ water) and that duct covers are intact.
- m) The staff shall check condition of silica gel in breather of oil type transformer, oil level of transformer from time to time. If found color of gel turns pinkish color or drop of level of transformer oil, then bring this to notice of JE(E).

ADDITIONAL TERMS & CONDITIONS**For Sub Head - VI (FIRE ALARM SYSTEM) & (FIRE FIGHTING SYSTEM)****1. Details of Equipments/Inventories****FIRE ALARM SYSTEM**

1	10 zone main microprocessor based fire alarm control Panel	1 Nos
2	Repeater Panel	1 Nos
3	Intelligent analog addressable photothermal detector	239 Nos
4	Response Indicator	95 Nos
5	Ceiling Speaker	111 Nos
6	Fault Isolator	11 Nos
7	Intelligent addressable thermal detector	3 Nos
8	Intelligent addressable duct detector	7 Nos
9	Manual call point	12 Nos
10	Addressable horn cum strobe	12 Nos

FIRE FIGHTING SYSTEM

1	Electric Driven Main Fire Pump	1 Nos
2	Diesel Engine Driven Main Fire Pump	1 Nos
3	Jockey Pump	1 Nos
4	Electric Driven Terrace Pump	1 Nos
5	Fire Fighting Control Panel for main Fire Pump, Jockey Pump, Diesel Pump	1 Nos
6	Fire Fighting Control Panel for Terrace Pump	1 Nos
7	Internal Hydrant	15 Nos
8	External Yard Hydrant	8 Nos
9	ABC type fire extinguishers 6 Kg	16 Nos
10	CO2 type fire extinguisher of 4.5 Kg	16 Nos

- (1) The work shall be carried out as per CPWD specifications for Electrical (Part-I), Fire fighting (Part-V) and fire Alarm system (Part-VI) amended up to date and entire satisfaction of Engineer-in-Charge.
- (2) The minor components such as LED, glasses, LMT, condensers, capacitors, resistors, insulation tape, diodes, rubber gasket, indicating lamps, connecting wires, lead, lugs thimbles, distilled water, petroleum jelly, gland dori, greese etc. shall have to be replaced by the firm free of cost. All the major components if required for maintenance shall be arranged by the firm and the department shall however pay the cost at prevailing market rates at the time of requirement/replacement.

- (3) In case of fire signal received on control panel or some type of false fire alarm if any, the duty staff must locate the site of fire/fault and find out the location. If fire is detected the information shall be passed on security staff on duty OR AE (E)/JE (E) site in-charge and the fire services at once.

(4) **Details of Manpower to be deployed for following site**

- Operator - 3 Nos in round the clock (1 No. in each shift) on all days including Sundays & Holidays.

(5) **Qualification of deputed Manpower**

Operator should have passed ITI in relevant trade or shall have valid electrical license from competent authority with minimum 3 year experience in similar work.

- (6) The following checking & preventing maintenance of Fire alarm system to be done at site within the scope of work for which nothing extra shall be paid.

(A) DAILY CHECKS:-

- (i) The contractor shall carry out daily examination of the sector panels, main panels of F.A& P.A. system, control panel to check the status of fault and fire indicators and also to keep all the system in perfect working order. Any fault observed shall be recovered in the log book and reported to the department. Remedial action shall be taken at once to set right the system.

(B) WEEKLY CHECKS:-

- (i) Check the battery i/c level if electrolyte, connection, leads, voltage etc.
- (ii) Check the soundness of the panels.
- (iii) Once a week, some heat detectors and manual call boxes shall be triggered.
- (iv) Different detectors should be checked in the sequence. This shall be recorded in the log book.
- (v) Public address system i/c talk back system is to be tested once a week & fault noticed shall be made good and be recorded in the log book.

(C) MONTHLY CHECKS:-

- (i) Cleaning of all fire control panels and check the servicing conditions.
- (ii) Check all the sounders / hooters and talk back unit.
- (iii) Check the operational readiness of control panel in case of electrical main failure.

(D) QUARTERLY CHECKS:-

- (i) Cleaning of control panel, all the detectors by vacuum cleaners of all sluice valve/N.R valve etc.
- (ii) Carry out checks without main supply, on battery voltage with all the panels and sounders operating at a time.
- (iii) Zonal check by stimulating fault and removing the last detectors and correction if reqd.
- (iv) The contractors have to provide a demonstration to the client department regarding the working and operation of the entire system.

(7) The following checking & preventing maintenance of Fire Fighting system to be done at site within the scope of work for which nothing extra shall be paid.

1. **Twice of week: -**

- a. Check the complete system such as pumps, valves, fire fighting fitting at every outlet.
- b. Check the pipe line, joints/flanges, pumps sleeves for leakage and cleaning the panels etc. from the exterior with a damp cloth.
- c. Check the operability of motor, pumps at least by running for 5 minutes and recording of parameters such as voltage, current, pressure etc.
- d. Check the availability of water in the pump in case of fire fighting system.
- e. Check and maintenance of appropriate pressure in the pipe line incase of fire fighting.

2. **Fortnightly Checks: -**

- a. Checking / air blanking of installations.
- b. Checking of nuts and bolts and tight if necessary.
- c. Checking of lugs, thimbles, terminal blocks of electric motors, switches, starters and control accessories for their appropriate condition and indications, take remedial steps if required.
- d. Checking of pump's coupling for appropriate alignment and rectify if necessary.
- e. Checking of gland packing and add more packing, if required.

3. **Monthly Checks: -**

- a. Run the pumps set at least 10 minutes and check the operation for vibration, excessive heating, noise and alignment.
- b. Check the functioning of all the valves and accessories by actual opening and closing them.

4. **Half yearly Check: -**

- a. Apply grease and avoid over greasing.
- b. Checking of gland packing.
- c. Checking of for play in bearing, replace if necessary.
- d. Checking of accuracy of relay operation.

A. **Yearly Checks: -**

Calibrate all ammeters voltmeters pressure gauges and other indicating instruments

ADDITIONAL TERMS & CONDITIONS**Sub Head-VII (CCTV)**

1. Details of equipment's

CCTV

1	Dome Camera 4 MP IP Based	64 Nos
2	Bullet Camera 4 MP IP Based	16 Nos
3	Network Video Recorder 32 Channel	2 Nos
4	Hard Disk 6 TB	8 Nos
5	49" Flat HD LED Screen	4 Nos
6	Workstation Processor	2 Nos

2. Terms and Conditions and Scope of Work

- i) No T&P shall be issued to the Agency/Firm by the department.
- ii) The Agency has to maintain the complaint register to record the complaints & to get the attended on daily basis.
- iii) The Agency has to give a mobile phone to their staff & the number of which is to be given to the Engineer-In-Charge.
- iv) The Agency has to keep a liaison with authorities, the Engineer-In-Charge & his authorized representative.
- v) The proper record of images obtained by various CCTV Cameras shall be kept as per requirement of site.
- vi) The firm should ensure that no data recorded in the system should be lost.
- vii) Comprehensive Maintenance of the system as a whole comprising of the equipment as per list attached i/c repairs, servicing, replacements of defective parts & equipment's, whether major or minor, software camera, DVR, LIU, switches, monitor, POE, Rack, Junction box, Media converter, UPS (except battery).
- viii) The spare & equipment's to be used for repairs/replacement shall preferably be of the same make & specification as provided originally in the system as far as possible. Other make shall be permitted only if the existing make is not being manufactured or is not readily available with the major approval of Engineer-in-Charge.
- ix) The firm has to keep sufficient stock of vital spares in readiness for replacement/repairs.
- x) The firm has to maintain all the equipment in working condition in case of any repair same shall be attended within 24 hours. Rs. 1000/- will be deducted for each day of delay for rectifying the fault & Rs. 1000/- each day for not providing sufficient technical support.
- xi) The contractor shall take over the installation for its maintenance and upkeep before start of work will hand over the installation in normal working condition to the department after completion of work. If any defect/ damage (except normal wear & tear) is noticed, the same shall have to be rectified/ replaced by the contractor at his own cost failing which the same shall be got rectified at their cost.

ANNEXURE-VII**ADDITIONAL TERMS & CONDITIONS****For Sub Head - VIII (Operation of Lift)**

1. The work shall be carried out as per CPWD Electrical specifications Internal (Part-I), External (Part-II) & lift (Part-III) amended up to date and entire satisfaction of Engineer-in-charge.
2. The details of installation to be operated under the contract are as mentioned below.

Details of Equipments/Inventories**LIFT**

1	13 Passenger lift Johnson Make	2 Nos
2	6 Passenger lift (Double Side Opening)Johnson Make	2 Nos

3. **Details of Manpower to be deployed at site**

- Operator - 2 Nos in General shift (from 9 A.M. to 5 P.M.) on all working days excluding Sundays & Holidays.

4. **Qualification of deputed Manpower**

operator should have passed ITI in relevant trade or shall have valid electrical license from competent authority with minimum 3 year experience in similar work.

5. **Duties of Lift Operator :-**

- a). He should be able to read technical instructions and record/ maintain log books.
- b). He should be trained for proper operation of lift and about safety and technical aspects of lift and to rescue stranded person as per proper method of rescue.
- c). Proper method of rescuing a stranded passenger :-
 - i) The passenger is able to communicate with the help of emergency bell/ intercom.
 - ii) The car light, fan, bell, intercom system should get benefit or emergency electric supply.
 - iii) The operator is to assure the passenger that he will be rescued shortly and request him to stay claim and not to force open the doors.
 - iv) Go to lift M/C room, switch off power supply, bring lift to nearest landing by manual operation, open lift/ landing door, Now passenger can leave the lift.
 - v) Examine the lift, if it is unsafe, then shut down lift service. Don't allow the lift to be used.
 - vi) Immediately inform JE/AE/Lift service to take necessary action to remove the deficiency of lift.
 - vii) Keep " lift out of order/ Don't enter lift" handy sign boards to keep in front of such lift.
- d). During normal operation of lift, the operation is to ensure :-
 - i) Orderly exit / Entry of lift users.

- ii) No overloading.
- iii) Prevent improper goods transportation, which might damage the lift.
- iv) Misuse of lift.
- v) Passengers should not smoke inside.

e). Summary :-

The basis duties of lift operator are to ensure.

- i) Daily safety checks of lift.
- ii) Cleanliness of lifts and machine room.
- iii) Prevent overloading/ Misuse/ abuse of lift.
- iv) Shutdown lift in case it becomes unsafe and takes immediate action to inform JE/AE/Lift Machine/ Lift service center and guard the lift till help arrives.

f). Daily safety check & check list for lifts

Daily safety check

- i) First clean lift car inside and M/c room.
- ii) Run the lift to start from ground floor to last landing and back to ground floor, stopping at each floor.
- iii) Check leveling at each landing.
- iv) Check door opening/ closing at each landing.
- v). Check working of all buttons, controls, indication of the lift car.
- vi). Check working of alarm switch.
- vii). Check working of emergency light and fan.
- viii). Check working of intercom system.
- ix). Notice any abnormality in running, jerk, improper landing etc.

Monthly Check list (Open register for daily safety check of each lift to be counter signed by JE/AE once in a month)

- i). Lift car, M/c room cleaned – Ok.
- ii). All car buttons functional – Ok.
- iii). Emergency alarm working – Ok.
- iv). Emergency light, fan working – Ok
- v). Intercom working – Ok
- vi). Run the lift room ground floor to highest floor and back to stop at all landing – Ok
- vii). Leveling at each floor – Ok
- viii). Door opening / closing – Ok
- ix). No Jerk/ Abnormalities in running – Ok

ADDITIONAL TERMS & CONDITIONS
For Sub Head - IX (EPABX system)

1. The work shall be carried out as per CPWD Electrical specifications Internal (Part-I), External (Part-II) amended up to date and entire satisfaction of Engineer-in-charge.
2. No T&P shall be issued to the Agency/Firm by the department.
3. The Agency has to maintain the complaint register to record the complaints & to get the attended on daily basis.
4. The Agency has to give a mobile phone to their staff & the number of which is to be given to the Engineer-In-Charge.
- 5) The Agency has to keep a liaison with authorities, the Engineer-In-Charge & his authorized representative.
- 6) The proper record of images obtained by various EPABX system shall be kept as per requirement of site.
- 6 The spare & equipment's to be used for repairs/replacement shall preferably be of the same make & specification as provided originally in the system as far as possible. Other make shall be permitted only if the existing make is not being manufactured or is not readily available with the major approval of Engineer-in-Charge.
- 7 The firm has to keep sufficient stock of vital spares in readiness for replacement/repairs.
- 8 The firm has to maintain all the equipment in working condition in case of any repair same shall be attended within 24 hours. Rs. 1,000/- will be deducted for each day of delay for rectifying the fault & Rs. 500/- each day for not providing sufficient technical support.
- 9 The contractor shall take over the installation for its maintenance and upkeep before start of work will hand over the installation in normal working condition to the department after completion of work. If any defect/ damage (except normal wear & tear) is noticed, the same shall have to be rectified/ replaced by the contractor at his own cost failing which the same shall be got rectified at their cost.

SCHEDULE OF QUANTITY

Name of work :- A/R&M/O in Agriculture Scientist Recruitment Board Building (Chayan Bhawan) at IARI, Pusa, New Delhi (SH:- Operation and Maintenance of Electrical and Specialised Electrical and Mechanical Services.)

S. No.	Description of items	Qty.	Unit	Rate	Amount	Remarks
A	EI & FANS					
	Sub Head- I (EI & Fans)					
1	Providing services of running maintenance of the all internal & external Electrical installations/equipments of ASRB Building situated in IARI Complex, Pusa, New Delhi, by deploying following manpower on monthly basis, in general shift all working days excluding Sundays & Gazetted Holidays as per terms and conditions attached at Annexure-I & II etc. as required.					
	(a) Wireman - 1 Nos.					
	(b) Khallasi - 1 Nos	12	Job-Month	65390	784680	AR Attached
Total of Sub Head- I (EI & Fans)					784680.00	
	Sub Head- II (Pump Sets)					
2	Providing services of running operation of the various capacities of mono-block pump & submersible pumps, STP Plant & RO Pump, water supply etc. installed at ASRB Building Pusa, New Delhi by deploying following manpower on monthly basis, in General Shift on all working days excluding Sundays & Gazetted Holidays as per terms and conditions attached at Annexure-I & III etc. as required.					
	(a) Pump Operator - 1 No.	12	Job-Month	35920	431040	AR Attached
Total of Sub Head- II (Pump Sets)					431040	
	(SH: III - EI & Fans)					
3	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/ recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable etc. as required.					
(a)	Group C	30	points	2101.00	63030.00	1.3.3
4	Rewiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable and 1.5 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable as earth wire in existing surface/ recessed steel/PVC conduit including dismantling as required.					
(a)	Group C	20	points	1064.00	21280.00	1.15.3
5	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required.					
(a)	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	150	Meter	370.00	55500.00	1.7.1
(b)	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	150	Meter	476.00	71400.00	1.7.3
(c)	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	100	Meter	652.00	65200.00	1.7.4

(d)	4 X 4 sq. mm + 2 X 4 sq. mm earth wire	100	Meter	744.00	74400.00	1.7.8
6	Supplying and drawing following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.					
(a)	3 x 4 sq. mm	50	Meter	222.00	11100.00	1.17.21
(b)	6 x 4 sq. mm	50	Meter	424.00	21200.00	1.17.24
(c)	3 x 6 sq. mm	50	Meter	326.00	16300.00	1.17.30
7	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.					
(a)	5/6 A switch	50	Each	121.00	6050.00	1.24.1
(b)	3 pin 5/6 A socket outlet	50	Each	136.00	6800.00	1.24.4
(c)	15/16 A switch	50	Each	176.00	8800.00	1.24.3
8	6 pin 15/16 A socket outlet	50	Each	219.00	10950.00	1.24.5
9	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.					
(a)	1 or 2 Module (75mmX75mm)	10	Each	354.00	3540.00	1.27.1
(b)	6 Module (200mmX75mm)	10	Each	462.00	4620.00	1.27.4
(c)	8 Module (125mmX125mm)	10	Each	517.00	5170.00	1.27.5
(d)	12 Module (200mmX150mm)	10	Each	614.00	6140.00	1.27.6
10	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	40	Each	659.00	26360.00	1.32
11	Supplying & fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	15	Each	807	12105	1.57
12	Supplying, drawing, Installation, Testing and commissioning of CAT6 UTP LSZH 23AWG Twisted 275 Pair Cable in existing conduit/ on surface, Category 6 Unshielded Twisted Pair, 4 pair should be complied as per UL/ETL verification program for compliance with ANSI/TIA-568.2-D standard. Outer diameter should be in the range of 6.1mm nominal with Operating Temperature Range : -5° to +60°C, Bending Radius : < 4 X Cable Diameter at -5°C ± 1°C and Pulling Force : 11.5Kg etc. complete as required.					
(a)	1 run of cable	200	Meter	60.00	12000.00	39.17.1
(b)	2 run of cable	100	Meter	96.00	9600.00	39.17.2
13	Supplying and drawing following pair 0.5 mm dia FRLS/HFFR PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.					
(a)	1 Pair	100	Meter	33.00	3300.00	1.18.1
14	Providing and fixing following rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel, making connections, Ics=100% Icu and Operational Voltage 690V etc. as required.					
(a)	100 A, 16 KA,TPMCCB	5	Each	4003.00	20015.00	2.2.1
(b)	150 A, 16 KA,TPMCCB	5	Each	6326.00	31630.00	2.2.3
(c)	250 A, 25 KA,TPMCCB	5	Each	13647.00	68235.00	2.2.6
15	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.					

(a)	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	100	Mtr	180.00	18000.00	10.7.3
16	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required.					
(a)	Above 95 sq. mm and upto 185 sq. mm	100	Mtr	97.00	9700.00	10.5.3
17	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	400	Meter	50.00	20000.00	5.18
	Total of SH: I - EI & Fans				682425.00	
	Sub Head- IV (Supply of materials)					
18	Supplying of Following materials at JE(E) store for day to day maintenance					
18.1	1.5 sq. mm, ISI Marked, FRLS PVC insulated single wire	600	Metre	23	13800	AR Attached
18.2	4.00 sq. mm, ISI Marked, FRLS PVC insulated single wire	300	Metre	54	16200	AR Attached
18.3	6.00 sq. mm, ISI Marked, FRLS PVC insulated single wire	300	Metre	82	24600	AR Attached
18.4	S.P. 5/6 amps, one way switch, Modular type ISI marked	800	Each	44	35200	AR Attached
18.5	S.P. 15/16 amps, one way switch, Modular type ISI marked	500	Each	96	48000	AR Attached
18.6	3 pin 5/6 amps socket outlet, Modular type ISI marked	500	Each	82	41000	AR Attached
18.7	6 pin 15/16 & 5/6 amps socket outlet, Modular type ISI marked	500	Each	136	68000	AR Attached
18.8	Stepped type Modular Fan regulator (2 module)	50	Each	285	14250	AR Attached
18.9	Ceiling rose, 3 pin, 5 A ISI marked	50	Each	26	1300	AR Attached
18.1 0	5-32 Amp SPMCB 'C' curve 10 KA	100	Each	175	17500	AR Attached
18.1 1	5-32 Amp DPMCB 'C' curve 10 KA	20	Each	559	11180	AR Attached
18.1 2	5-32 Amp TPMCB 'C' curve 10 KA	20	Each	908	18160	AR Attached
18.1 3	FP Isolator 63 Amp	10	Each	859	8590	AR Attached
18.1 4	FP Isolator 100 Amp	10	Each	1048	10480	AR Attached
18.1 5	18 Watt LED Down lighter (SMD Type) (System lumen efficacy $\geq 105 < 120$ lm/Watt) of Powder coated die cast /Extruded aluminium Body including trim with Aluminium Reflector	200	Each	618	123600	AR Attached
18.1 6	36Watt Recessed type LED Panel light 2x2 ft. (System lumen efficacy $\geq 105 < 120$ lm/Watt) of CRCA Sheet body materials (Thickness > 0.50 mm)	100	Each	1682	168200	AR Attached

18.1 7	18-22 Watt LED Batten light (System lumen efficacy $\geq 105 < 120$ lm/Watt) of Powder Coated CRCA Sheet Body (Thickness > 0.50 mm)	20	Each	345	6900	AR Attached
18.1 8	72 Watt LED Street light fixture, powder coated pressure die cast aluminium body (System lumen efficacy $\geq 105 < 120$ lm/Watt) of powder coated pressure die cast aluminium body materials.	10	Each	1553	15530	AR Attached
18.1 9	50 Watt LED Flood Light fixture, powder coated pressure die cast aluminium body (System lumen efficacy $\geq 105 < 120$ lm/Watt) of powder coated pressure die cast aluminium body materials.	10	Each	1100	11000	AR Attached
18.2	Ceiling fan 1200mm, service value ≥ 6.0 CM/Min/Watt, air delivery 210 CM/Min (Minimum) with Brush Less Direct Current (BLDC) Motor, etc. complete as req	30	Each	2271	68130	AR Attached
18.2 1	2.50 mfd Capacitor.	100	Each	31	3100	AR Attached
18.2 2	3.15 mfd Capacitor.	50	Each	35	1750	AR Attached
18.2 3	300 mm sweep metal body, heavy duty 900 RPM exhaust FAN suitable for 230/240V AC supply along with all accessories such are blade, frame etc. (Heavy duty)	20	Each	3030	60600	AR Attached
18.2 4	380 mm sweep metal body, heavy duty 900 RPM exhaust FAN suitable for 230/240V AC supply along with all accessories such are blade, frame etc. (Heavy duty)	10	Each	3481	34810	AR Attached
18.2 5	450 mm sweep metal body, heavy duty 900 RPM exhaust FAN suitable for 230/240V AC supply along with all accessories such are blade, frame etc. (Heavy duty)	10	Each	4300	43000	AR Attached
18.2 6	250 mm sweep plastic body ventilator exhaust fan complete with louvers/shutter	20	Each	1474	29480	AR Attached
18.2 7	400 mm wall fan along with all accessories	20	Each	2274	45480	AR Attached
18.2 8	LED Post top fitting 35 to 40 watt along with all accessories	10	Each	5977	59770	AR Attached
18.2 9	Supply of 5 Watt LED Garden Spike Light along with all accessories	30	Each	1755	52650	AR Attached
18.3	Supply of 10 Watt LED Bollard Light, IP-66 along with all accessories	20	Each	5209	104180	AR Attached
18.3 1	3 X 6 sq. mm XLPE insulated and PVC sheathed Aluminium armoured conductor power cable of 1.1 KV grade confirming to IS 7098 (Part 1) 1988	300	Metre	251	75300	AR Attached

18.3 2	3½ X 120 sq. mm XLPE insulated and PVC sheathed Aluminium armoured conductor power cable of 1.1 KV grade confirming to IS 7098 (Part 1) 1988	100	Metre	1732	173200	AR Attached
18.3 3	3½ X 185 sq. mm XLPE insulated and PVC sheathed Aluminium armoured conductor power cable of 1.1 KV grade confirming to IS 7098 (Part 1) 1988	100	Metre	2554	255400	AR Attached
Total of Sub Head- IV ((Supply of materials)					1660340	
Total A (SH-I+SH-II+SH-III+SH-IV)					3558485.00	
B	SPECIALIZED WORK					
	SH-V (Operation & Maintenance of Sub-Station and Operation of DG Set)					
20	Providing services of running operation and routine maintenance of Electric Sub -Station having 2 X 400 KVA Transformer, HT panel, LT panels, and all other related accessories and 250 KVA D.G. Set with AMF and Distribution panel installed at ASRB Building at IARI, Pusa, New Delhi by deploying following manpower on monthly basis, in round the clock in 3 shifts on all days including Sundays & Holidays as per terms and conditions attached at Annexure-I & III etc. as required.					
	(a) Operator - 3 Nos.	12	Job-Mont h	126065	1512780	AR Attached
TOTAL of SH-V (Operation & Maintenance of Sub-Station and Operation of DG Set)					1512780	
	SH-VI (Fire Fighting & Fire Alarm System)					
21	Providing services of running operation maintenance of fire fighting, pump and water supply pump set and fire alarm system at ASRB Building by deploying following manpower on monthly basis, in round the clock in 3 shifts on all days including Sundays & Holidays as per terms and conditions attached at Annexure-I & IV etc. as required.					
	(a) Operator - 3 Nos.	12	Job-Mont h	126065	1512780	AR Attached
22	Annual Comprehensive Maintenance and servicing of Automatic fire alarm system i/c checking all the accessories, control panel, batteries etc and keeping the system in working condition	12	Job-Mont h	17452.00	209424	AR Attached
TOTAL of SH-VI (Fire Fighting & Fire Alarm System)					1722204	
	SH-VII (CCTV System)					
23	Annual Comprehensive Maintenance of CCTV Surveillance system installed at ASRB Building i/c all components like camera, NVR, VMS, Hard Disk, Software, Desktop, LED display, etc complete with all material to up keep the system in perfect running conditions	12	Job-Mont h	47219.00	566628	AR Attached
TOTAL of SH-VII (CCTV System)					566628	

	SH-VIII (Operation of Lift)					
24	Providing services of running operation of 2 No. 13 Passenger (884 kg) with machine room less (Duplex), having contract speed of 1.0 m/sec serving G+3 floors in the lift shaft with control panel & all other accessories at ASRB Building at IARI, Pusa, New Delhi by deploying following manpower on monthly basis on all working days excluding Sundays & Gazetted Holidays as per Annexure I & V attached.					
	(a) Operator - 1 Nos.	12	Job-Mont h	35920	431040	AR Attached
25	Providing services of running operation of 2 No. 6 Passenger (408 kg) with machine room less (Smplex), having contract speed of 1.0 m/sec double side opening serving G+1 floors in the lift shaft with control panel & all other accessories at ASRB Building at IARI, Pusa, New Delhi by deploying following manpower on monthly basis on all working days excluding Sundays & Gazetted Holidays as per Annexure I & V attached.					
	(a) Operator - 1 Nos.	12	Job-Mont h	35920	431040	AR Attached
TOTAL of SH-VIII (Operation of Lift)					862080	
	SH-IX(EPABX System)					
26	Annual Comprehensive Maintenance of Server based EPABX system installed at ASRB Building i/c all components like centralized operator, integrated voicemail, Digital Phones, Analog Speaker etc complete with all material to up keep the system in perfect running conditions	12	Job-Mont h	6067.00	72804	AR Attached
TOTAL of SH-IX (EPABX System)					72804	
TOTAL of B (SH-VI+SH-VII+SH-VIII+SH-IX Rs.)					4736496.00	
TOTAL of A+B					8294981.00	
	SH X Less credit for following Dismantled materials					
19	Less credit for following Dismantled materials					
a)	Assorted copper conductor pvc wire	5	Kg	250.00	1250.00	
b)	Assorted switch/socket	150	Each	0.10	15.00	
c)	Assorted MCB/DP/RCCB	20	Each	1.00	20.00	
d)	Assorted ceiling fan	40	Each	550.00	22000.00	
e)	Assorted plastic Wall fan	30	Each	200.00	6000.00	
f)	Assorted Exhaust fan matelic type	10	Each	350.00	3500.00	
g)	Assorted LED batten fitting	20	Each	10.00	200.00	
h)	Assorted LED 2X2 panel Fittings	50	Each	50.00	2500.00	
i)	Assorted Downlighter	50	Each	20.00	1000.00	
j)	Assorted Flood light/ Street Light	10	Each	150.00	1500.00	
k)	Assorted MCCB	5	Each	350.00	1750.00	

	Total of SH X		(-)	39735.00	
TOTAL of B (SH-VI+SH-VII+SH-VIII+SH-IX-X Rs.)				8255246.00	
Say Rs				8255246	

Say Rs. 82,55,246/-

Assistant Engineer (E) P

Executive Engineer(E),
DED-71, CPWD,
New Delhi.



Central Public Works Department

NIT No: 111/2026-27/DED-71/1

Name of work:- A/R&M/O in Agriculture Scientist Recruitment Board buildings at IARI, Pusa, New Delhi. (SH:- Operation and Maintenance of Electrical and Specialised Electrical and Mechanical Services.)

SCHEDULE OF QUANTITIES

Name of the Contractor / Company Name					
Sl.No.	Name of component	Estimated cost	Percentage above or below the estimated cost	% in Figures	Total Cost
1	Work as per SOQ	8294981	Select	0.00	-
2	Less Credit of dismantled material	-39735	Select	0.00	
	Grand Total	8255246			-

Note :- (For credit of Sub Head X, Item 19 (a) to (k) :- The rates should be quoted at par or above, if bidder quote the same as below, rates shall be considered at par for financial bid evaluation)

Assistant Engineer (E) P

Executive Engineer(E),
DED-71, CPWD,
New Delhi.