

ESTATE (E&M) WORKS SECTION
IIT KHARAGPUR

Dated: 29.08.2019

CORRIGENDUM-I

Sub. : Extension of date of submission

Ref.: NIQ No: - IIT/E/E&M/2019-20/Qtn./40 Date: 14.08.2019

Sl.No.	Name of Work
1.	Electrical works associated with providing three phase connector to the newly installed 15 kW induction motor in the propulsion laboratory of Aerospace Department

Only one bid was received up to 28.08.2019. Due one bid received, Tender Committee recommends that the date of submission of Technical bid and Price bid for the above mentioned electrical works be extended as under:

Date of Submission of Technical Bid & Price Bid	Extended up to 11 th September 2019 up to 3:30 P.M.
Date of Opening of Technical Bid	Extended up to 11 th September 2019 up to 4:30 P.M.



(S. Ghosh)

Sr. Executive Engineer (EW)

Copy to:

1. Chief Engineer
2. Prof. In-charge IIC – with a request to upload the corrigendum
In the Institute Web site.
3. Superintending Engineer(E & M)
4. Dy. Registrar (S&P)
5. Dy. Registrar (Audit)
6. Mr. M. Kumar, Sr. Executive .Engineer (Elect).
7. Mr. P.P.Pal, Engineer (Elect.)
8. Mr. S. Sarkar, Engineer (Elect.)

**ESTATE (E & M) WORKS SECTION
INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR**

Notice Inviting Quotation

Quotation No: - IIT/E/E&M/2019-20/Qtn./40 Date: 14.08.2019

Sealed quotations on item rate basis are invited by Sr. EE (EW) from enlisted and approved Electrical contractors of IIT Kharagpur/CPWD/MES/WBPWD/Kharagpur municipality and Other bonafide contractors having valid GST, PAN and updated Electrical contractor license for below mentioned work. The approximate cost of the work is **₹ 48,526/- (Rupees Forty eight thousand Nine hundred Eighty two only)**

NAME OF THE WORK: Electrical works associated with providing three phase connector to the newly installed 15 kW induction motor in the propulsion laboratory of Aerospace Department

ISSUE OF QUOTATION : : **FROM 14.08.2019 to 28.08.2019**

**LAST DATE OF SUBMISSION OF :-
QUOTATION** **28.08.2019 UPTO 3:30 PM**

QUOTATION OPENING DATE :- **28.08.2019 TIME: 4:30 PM**

TENDER DOCUMENTS can be downloaded from the Institute website www.iitkgp.ac.in & <https://eprocure.gov.in>. Requisite Earnest Money amounting to **Rs. 970/- (Rupees Nine hundred Seventy only)** to be paid by in demand draft in favour of "Indian Institute of Technology Kharagpur" on any nationalized Bank of India payable at Kharagpur Branch at the time of submission of Bid. **Tenders without Earnest Money shall be summarily rejected.** For any amendment /corrigendum please visit the Institute website www.iitkgp.ac.in & <https://eprocure.gov.in>.

The following documents to be submitted at the time of submission of bid:

- i) GST
- ii) PAN
- iii) Experience of Electrical maintenance works.
- iv) Updated Electrical contractor License

ELIGIBILITY CRITERIA

- 1.1.1. The bidder must be registered in appropriate class of works with Government organization like CPWD/ PWD/ MES or PSUs or OEM or Authorized supplier and installer of OEM (Authority must be signed by OEM official not lower than General Manager or equivalent in corporate structure or those having experience in similar nature of works awarded by Government / Semi Government Organizations/ Government Funded Autonomous Organization.
- 1.1.2. The bidder must have done at least 1 (ONE) similar work of value of 80% of the estimated cost **or** 2 (TWO) similar works for projects each of value 60% of the estimated cost **or** 3 (THREE) similar work for projects each of value 40% of the estimated cost with Government/ Semi-government/ PSU/ Government Funded Autonomous Organization during last **7 (seven) years** preceding last date of the month of tender submission.

Note:

- (i) The estimated cost is **Rs. 48,526/- (Rupees Forty eight thousand Nine hundred Eighty two only)**
- (ii) 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 receipt of applications for tender.
- (iii) **Similar works shall mean:** Electrical renovation and modification works.

Signature of contractor

- 1.1.3. The bidder or the specialized agency the bidder intends to associate with must be registered with appropriate government authority as a bonafide business entity and must have GST registration certificate, Permanent Account Number of income tax and updated Electrical contractor license .
- 1.1.4. Electrical work shall be executed by selected bidder through agency holding electrical contractor license valid on date of execution.
- 1.1.5. The validity of the registrations and licenses should be valid as on the date of tender submission.

(S. Ghosh)
Sr. Executive Engineer (EW)

Copy to:

- 1) Chief Engineer
- 2) Chief System Manager
- 3) SE(E&M)
- 4) Mr. M. Kumar, Sr Executive Engineer(EW)
- 5) Engineer (EW)
- 6) Sr. Assistant/Assistant / Junior Engineer (E&M)
- 7) Notice Board
- 8) Office file



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Signature of contractor

1. INFORMATION TO BIDDERS

1.1. SCOPE OF WORK

- 1.1.1. The IITKGP intends to award the work of "**Electrical works associated with providing three phase connector to the newly installed 15 kW induction motor in the propulsion laboratory of Aerospace Department**". The work consists of comprehensive repair, renovation and modification of existing electrical systems.
- 1.1.2. Constraint: The job needs to be executed in Academic/Main building area without causing any disturbances to the normal functioning of offices/classes/departments and also road networks.
- 1.1.3. The vendor shall work out execution sequence and methodology so as to complete the project within the envisaged time and the estimated cost, duly handling the constraint mentioned above.

1.2. GENERAL INSTRUCTIONS

- 1.2.1. Bidding documents are to be obtained electronically through websites: Error! Reference source not found..
- 1.2.2. This bid document shall be read in conjunction with GCC (General Conditions of Contract) available on <http://www1.iitkgp.ac.in/topfiles/tenders.php>.
- 1.2.3. The bidder shall visit and inspect the site and obtain all information on his own responsibility and at own cost, which may be necessary for the purpose of quoting and submitting the tender. No excuse or ignorance as to site conditions and local information shall be accepted after awarding of the contract. Access to the site will be granted by the Engineer-in-charge on all working days within working hours.
- 1.2.4. IITKGP shall not provide any space at site for labour hutments.
- 1.2.5. All clarifications about the tender shall be sought by bidder on or before **28th August 2019 1.00 PM** through e-mail to the Engineer-in-charge on sghosh@hijli.iitkgp.ernet.in
- 1.2.6. Completion certificate issued by Competent Authority will only be considered as credential. If the Completion certificate issued by Competent Authority does not reflect the type of work, then Final bill / Schedule of Quantity of the qualifying works also to be attached along with the Completion certificates. Certificate from private individuals / organizations for whom such works have been executed shall not be accepted.
- 1.2.7. The bidding document (consisting of specifications, the schedule of quantities of various types of items to be executed, the set of terms and conditions of the contract and other documents / drawings, if any), Addendum/Corrigenda, Clarifications to Pre-bid queries can be downloaded from the websites: i) <http://www1.iitkgp.ac.in/topfiles/tenders.php> ii)<https://eprocure.gov.in/eprocure/app>. Corrigenda, if any shall be published only on these websites *at any time before the closing time of tender*.
- 1.2.8. The institute shall not be responsible for any delay / difficulties / inaccessibility of downloading facility for any reason whatsoever. *The tenderers who have downloaded the tender documents from website must visit the website and ensure that such addendum(s)/corrigendum(s) (if any) is also downloaded by them. This shall be the responsibility of the prospective registered bidders to check the web site for any such corrigendum/addendum before closing time of tender and ensure that bid submitted by them are in accordance with all the corrigendum's/addendums.*
- 1.2.9. All costs, charges & expenses that may be incurred in connection with the preparation of his tender shall be borne by him and the Institute accepts no liability whatsoever therefore.
- 1.2.10. **Rates quoted by the bidders shall be inclusive of GST (Goods and Services Tax - Central, State and Interstate) and all applicable taxes. Income Tax and all other statutory deductions like labourcess etc. will be deducted from the bill as per prevailing rules.**
- 1.2.11. Exemption to IITKGP against any tax/ duty/ fee/ surcharge/ charge/ cost, if any, found applicable or sought later from IITKGP after award shall be passed on to IITKGP by the contractor without dispute.
- 1.2.12. IITKGP reserves the right to reject any or all of the bids without assigning any reason.

- 1.2.13. **Bid Validity:** Bid shall remain valid for 120 days from the date of submission.
- 1.2.14. **Firm Price:** Bidder's quoted Rates/Prices for executing the activities under the Contract shall remain firm till completion of the entire work & shall not attract any escalation under any circumstances whatsoever.
- 1.2.15. If any information furnished by the bidder is found as false / fabricated, then his bid will be rejected and treated as cancelled. Even if the such manipulation is detected at any stage after signing of the contract, it would lead to termination of the contract besides forfeiture of Earnest Money Deposit and liabilities towards prosecution. In such cases the bidder will be debarred from participation in future tendering process in IITKGP for next 05 (Five) years.
- 1.2.16. **Earnest Money Deposit (EMD)** of requisite amount and that in prescribed mode or proof of payment thereof shall be enclosed with the Technical Bid explained in following section.
- 1.2.17. **Refund / Conversion of Earnest Money Deposit:** The Earnest Money received shall be refunded to the unsuccessful bidders without any interest after the opening of financial bids. The Earnest Money Deposit of successful bidder shall be retained and converted into part of Security Deposit.
- 1.2.18. **Forfeiture of Earnest Money Deposit:** Earnest Money Deposit will be forfeited in any of the following cases:
- (i) The bidder withdraws / modifies his tender during the period of Bid Validity.
 - (ii) The bidder, in case of tie between lowest bids, refuse to submit revised offer.
 - (iii) The bidder does not accept the correction of arithmetical errors of his tender.
 - (iv) The bidder fails to deposit Performance Guarantee and information as per format given in GCC within the stipulated time period before award of the work.

Tender Document

Sealed quotations on item rate basis are invited by Sr. EE (EW) from enlisted and approved Electrical contractors of IIT Kharagpur /CPWD/MES/WBPWD/Kharagpur municipality and Other bonafide contractors having valid GST, PAN and updated Electrical contractor license

The work to be completed within **15 days** from the date of acceptance of work order placed by IIT Kharagpur

1. The Bidders are required to complete quotation, quote rate as per the schedule of quantities and sign on each page of tender documents before submission. The quotation will not be accepted other than our format. The completed set is to be enclosed in a sealed envelope addressed to:

Sr. Executive Engineer (EW).
Indian Institute of Technology, Kharagpur
Kharagpur -721302 (WB)

Tenders will be received up to 3.30 PM on 28.08.2019 with all necessary documents i.e. GST, PAN and Electrical contractor license in the office of Estate (E & M), Old Building, IIT Kharagpur.

Agency has to submit the self-attested copy of the documents .Without these documents tender will not be accepted.

2. No tender will be received after the expiry of the date and time notified for receiving tenders under any circumstances whatsoever.
3. **The tender will be opened at 4.30 PM on 28.08.2019** at above address in the presence of authorized representative of Bidder and Tender opening committee of IIT Kharagpur
4. Tender shall remain valid for acceptance for a period of 120 days from the notified last date of tender

submission.

5. The price should be for the complete finished item of work and include all labour charges, material, taxes, overhead, duties, cess etc. **Earnest Money, amounting to Rs. 970/- (Rupees Nine hundred Seventy only)** in Demand Draft in favour of " Indian Institute of Technology Kharagpur" payable at Kharagpur must accompany each tender and each tender is to be in a sealed cover **super scribed** with "**Electrical works associated with providing three phase connector to the newly installed 15 kW induction motor in the propulsion laboratory of Aerospace Department**" and the NIQ No. IIT/E/E&M/2019-20/Qtn./40.
6. All tenders in which any of the prescribed conditions are not fulfilled or incomplete in any respect are liable to be rejected.
7. The Institute reserves the right to reject any or all bid without assigning any reason .If any information furnished by the applicant is found incorrect at a later stage, he shall be debarred from tendering and taking up of any work in IIT Kharagpur.
8. The quantities given in BOQ against each items may vary i.e. increase or decrease as per site requirement, but rate will be firmed.
9. This tender notice shall form part of the contract documents.
10. Penalty will be imposed against delay of work as per the Institute rule.
11. The agency is fully responsible for the safety of working personnel and has to follow all government safety rules.
12. All the Govt. labour rules, regulations and latest Indian Electricity Rule are followed by the contractor while executing the Electrical work.
13. All statutory deduction will be deducted as per government rules.
14. Rates quoted by the contractors in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures, and in word. However, if a discrepancy is found the rates which correspond with the amount worked out by the contractor shall be taken as correct.
15. If the amount of an item is not worked out by the contractor or it does not correspond with the rate written either in figures or in words that the rate quote by the contractor in words should be taken as correct.
16. Where the rate quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the rate quoted by the contractor will be taken as correct, not the amount.
17. The Tenderer whose tender is not accepted shall not be entitled to claim any costs, charges and expenses incidental to or incurred by him through or in connection with his submission of tender or its consideration by the Purchaser, even though the Purchaser may elect to modify/withdraw the Invitation to Tender or does not accept the tender.
18. Bidders are requested to witness the bid opening.

1.2.19. EVALUATION OF Financial Bids: The Financial Bid should contain the complete bid document with duly filled in Schedule of Financial Quote. Financial Bids opened as above will be checked for arithmetical errors.

1.2.20. Letter of Award (Work Order) shall be issued to the successful bidder only after receipt of the Program Schedule with specific Milestones to be achieved as to complete the work within the stipulated time limit, details of his Technical Staff to be deployed as per ANNEXURE-I, and complaint handling arrangement for the Defect Liability Period and Complaint Redressal Mechanism **as per following para.**

1.2.20 (a) Contractor shall submit Complaint redressal arrangement with name & contact number of the contractor's authorized representative for the purpose.

1.2.21. Agreement (Contract) consisting of complete tender document including conditions, bill of quantities, technical proposal and specialized services, drawings, if any, and acceptance thereof together with any correspondence leading thereto, shall be drawn and signed with the awardee **within 10 days** of the Letter of Award.

1.2.22. Date of start of work shall be reckoned from **the 07th day** of the issue of the Work Order.

1.2.23. Defect Liability Period (DLP): In partial modification to clause no.16 of General Conditions of Contract (GCC), the Defect Liability Period shall be 12 months after the certificate final or otherwise of its completion of work or till the final bill has been prepared.

1.3. COMPLAINT REDRESSAL MECHANISM

1.3.1. All maintenance complaints shall be got addressed by the contractor to the satisfaction of Engineer-in-charge within 3 days from the date of issuance of the "Job Card" from IIT Kharagpur.

1.3.2. Complaints requiring completion time more than 3 days shall be responded specifically by the contractor with the scheme, in consultation with Engineer-in-charge, and timeline for compliance, to the Engineer-in-charge within 3 days from the date of issuance of the "Job

1.3.3. Any complaint left unattended by the contractor beyond 3 days without specific reasons on record shall attract levy of penalty of Rs 50/- per complaint per day from 4th day to 7th day and Rs 100/- per complaint per day thereafter recoverable from dues to the contractor.



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ANNEXURE-I**TECHNICAL STAFF OF CONTRACTOR**

Name of Work: Electrical works associated with providing three phase connector to the newly installed 15 kW induction motor in the propulsion laboratory of Aerospace Department

DISCIPLINE	NAME	QUALIFICATION	EXPERIENCE	CONTACT NUMBER
Overall Project In-charge				
Engineer - Structure and Civil Works				
Engineer – Electrical & Mechanical Works				
In-charge - Safety, Health & Environment				

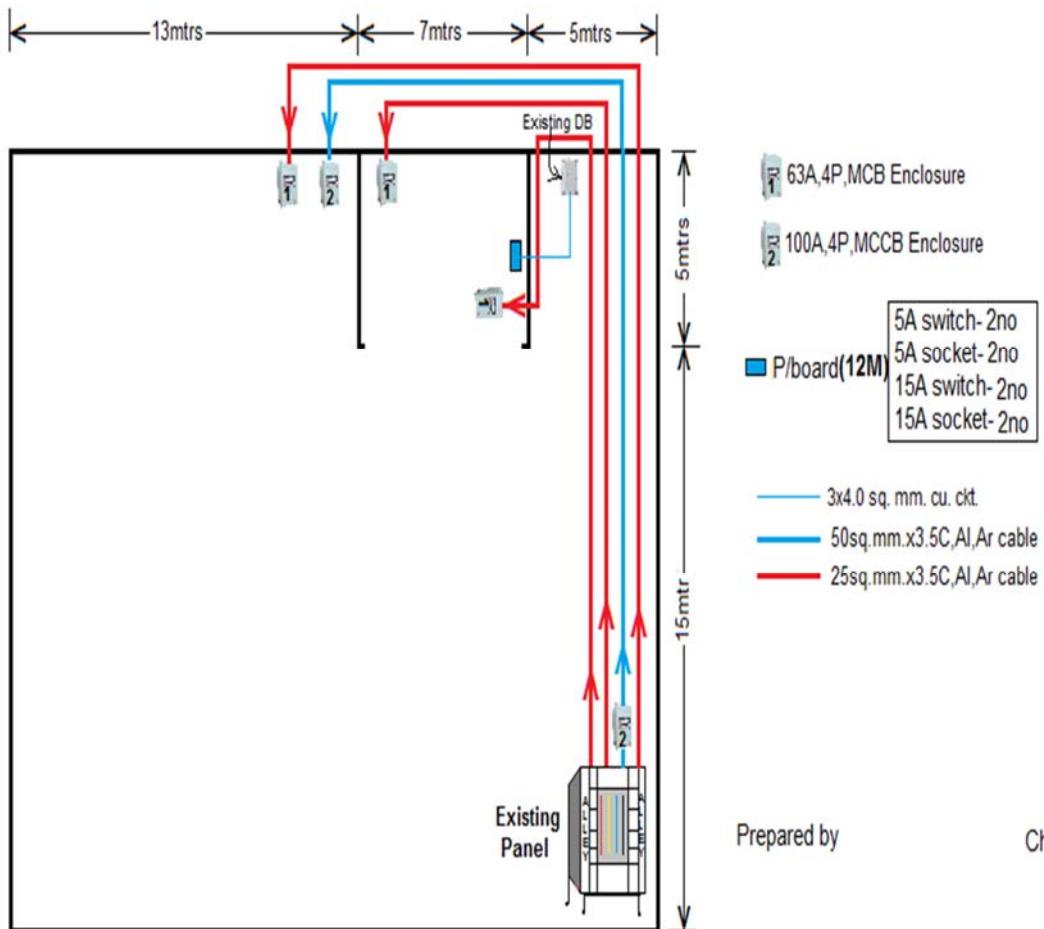
Seal & Signature of Contractor



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Signature of contractor

Electrical Layout for 4nos three phase motor connection of Propulsion Lab at Aerospace



Schedule of Quantities

Name of work: Electrical works associated with providing three phase connector to the newly installed 15 kW induction motor in the propulsion laboratory of Aerospace Department

Sl. No.	Description	Unit	Qty.	Rate	Amount
1	Supplying and fixing of following sizes of medium class PVC conduit/casing-capping along with all accessories in surface/recessed including cutting the wall and making good the same in case of recessed conduit as required. PVC Pipe: (Medium gauge) Precision/Pesto Plast/AKG/ /Equivalent approved by Engineer-in-charge				
a)	25mm	mtr	30		
2	Wiring for circuit/ submain along with earth wire with the following size of FRLS PVC insulated copper conductor, single core cable in surface/recessed medium class PVC conduit as required. Wire: 1.1kv grade, FRLS type Finolex/Havells/RR Kable PVC Pipe: (Medium gauge) Precision/Pesto Plast/AKG/ /Equivalent approved by Engineer-in-charge				
a)	2X4.0 sq.mm+1x 4.0 sq.mm earth wire	mtr	20		
3	Supplying and fixing following modular, GI box along with modular base & cover plate for modular switches in recess etc as required. Make:- Crabtree ((Thames)/Legrand(Myrius)/MK (wraparound plus)/Equivalent approved by Engineer-in-charge				
a)	12M	no	1		
4	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc as required. Modular Switch/Socket/Regulator: Legrand (Myrius)/Crabtree(Thames)/MK (wraparound plus)/Equivalent approved by Engineer-in-charge				
a)	5/6 amps switch	no	2		
b)	15/16 amps switch with indicator	no	2		
c)	3pin 5/6 amps socket	no	2		
d)	6pin 15/16 amps socket	no	2		
5	Laying and fixing of one number PVC insulated and PVC sheathed/XLPE power cable of 1.1 KV grade of following size on cable tray/surface on the wall as required.				
a)	Upto 35sq.mm.	mtr	120		
b)	Above 35sq.mm. And upto 95sq.mm	mtr	40		
6	Supplying and drawing of SWG bare GI conductor along with cable in the existing surface/recessed steel/PVC conduit or cable tray as required.				
a)	8-12 SWG GI hot dipped conductor	kg	5		

7	Supply &making indoor end termination with brass compression gland and AL/Cu lugs of following size of PVC insulated and PVC sheathed/XLPE AL. conductor cable of gr.1.1kv as required. Dowell's make.				
a)	Upto 3.5 core x25 sq.mm.	no	1		
b)	Upto 3.5 core x50 sq.mm.	no	1		
8	Supplying and fixing of 4-way ,SPN,Double MetalDoor,MCB, DB on wall with angle iron frame/recess with following combination. a)63A,4P,415V,10KA, 'C'curve MCB-01no. Make:-Legrand/Schneider/Siemens/L&T/Hager/Equivalent approved by Engineer-in-charge	no	3		
9	Supplying and fixing 4P,MCCB enclosure on wall with angle iron frame to be mounted on surface with following combination for all accessories as may be required. a)100A,4P,415V,16KA, 'C'curve MCCB-01no. Make:-Legrand/Schneider/Siemens/L&T/Hager/Equivalent approved by Engineer-in-charge	no	2		
10	Supplying and fixing MCB in the existing panel with all accessories as may be required. a)63A,TP,415V,10KA, 'C'curve MCB-03no. Make:-Legrand/Schneider/Siemens/L&T/Hager/Equivalent approved by Engineer-in-charge	no	1		
11	Dismantling of old panel and wiring as required and refixing of Switch board and deposit the dismantled material to site store as instructed	no	1		
		Total Amount			

Total amount in words inclusive GST (Please mention applicable GST %):

Note:-All materials to be used needs prior approval of Engineer -in -charge.

Any equivalent make use needs approved by Engineer-in-charge.

Signature of contractor

Signature of contractor



Special Condition for Electrical work

1. The work shall be carried out as per national code or C. P. W. D specifications for works with correction slips issued up-to date unless otherwise specified in the schedule of quantities for the works.
2. The following Indian Standard Specifications and Codes of Practice will apply to the equipment and the work covered by the scope of this contract. In addition the relevant clauses of the Indian Electricity Act 1910 and Indian Electricity Rules 1956 as amended upto date shall also apply. Wherever appropriate Indian Standards are not available, relevant British and/or IEC Standards shall be applicable.

BIS certified equipment shall be used as a part of the Contract in line with Government regulations. Necessary test certificates in support of the certification shall be submitted prior to supply of the equipment.

It is to be noted that updated and current Standards shall be applicable irrespective of those listed below.

Low voltage Switchgear and Controlgear specifications IS 13947 : 1993

Part I – General

Part 2 – Circuit Breakers

Part 3 – Switch Fuse Units

Part 4 – Contactors and Motor Starters

Part 5 – Control Circuit Devices

Electrical Relays for power system protection IS 3231 : 1986

Low voltage Switchgear and Control gear assemblies IS 8623 : 1993

Marking of Switchgear busbars IS 11353 : 1985

Degree of Protection of Enclosures for low voltage switchgear IS 2147 : 1962

Code of Practice for selection, installation and maintenance of Switchgear IS 10118 : 1982

4. No under-ground work or above the false ceiling shall be covered until the same has got approved by the Engineer-in-charge. The contractor will supply the drawings of specific works for approval, if required
5. All the old wiring has to be dismantled with proper care. The reusable old materials if any are to be handed over to departmental store with proper documentation and the other non reusable (nil reselling value) will be disposed by the contractor. The contractor shall clear the site thoroughly of all scaffolding materials & rubbish etc. left out of his work & dress the site around the building to the satisfactions & his decision in writing shall be final & binding on all concerned
6. Special care to be taken to avoid any theft of electrical fittings and fixtures while executing the work.
7. The location of Panel / DB / Switch board / Light point / Fan point will be as per existing location or as per the instruction of Engineer-in-charge.
8. All the wiring will be done with feruling and cable / Wire termination by required size or lugs of required materials and It should be noted that license wire man shall only be allowed for the wiring work.

Electrical safety at work site

The contractor will identify one of the supervisors for taking care of implementation of Safety systems.

The Contractor should follow the following General Guidelines governing the safety rules as laid down under:

Usage of eye protection equipment shall be ensured when workmen are engaged for grinding, chipping, welding and gas-cutting. For other jobs as and when site safety co-coordinator insists eye protection has to be provided.

1. All safety appliances like Safety shoes, Safety gloves, Safety helmet, Safety belt, Safety goggles etc. shall be arranged before starting the job.

Signature of contractor



2. All excavated pits shall be barricaded & barricading to be maintained till the backfilling is done. Safe approach to be ensured into every excavation.
3. All the dangerous moving parts of the portable / fixed machinery being used shall be adequately guarded.
4. Ladders being used at site shall be adequately secured at bottom and top. Ladders shall not be used as work platforms.
5. Material shall not be thrown from the height. If required, the area shall be barricaded and one person shall be posted outside the barricading for preventing the tre-passers from entering the area.
6. Other than electricians no one is allowed to carry out electrical connections, repairs on electrical equipment or other jobs related thereto.
7. All electrical connections shall be made using 3 or 5 core cables, having a earth wire.
8. Inserting of bare wires for tapping the power from electrical sockets is completely prohibited.
9. A tools and tackles inspection register must be maintained and updated regularly.
10. Debris, scrap and other materials to be cleared from time to time from the workplace and at the time of closing of work every day.
11. All the unsafe conditions, unsafe acts identified by contractors, reported by site supervisors and / or safety personnel to be corrected on priority basis.
12. No children shall be allowed to enter the workplace.
13. All the lifting tools and tackles shall be stored properly when not in use.
14. Clamps shall be used on Return cables to ensure proper earthing for welding works.
15. All the pressure gauges used in gas cutting apparatus shall be in good working condition.
16. Proper eye washing facilities shall be made in areas where chemicals are handled.
17. Connectors and hose clamps are used for making welding hose connections.
18. All underground cables for supplying construction power shall be routed using conduit pipes.
19. Spill trays shall be used to contain the oil spills while transferring / storing them.
20. Tapping of power by cutting electric cables in between must be avoided. Proper junction boxes must be used.
21. Non-compliance to above shall invite a penalty recovery as per 3.22.8.