

**OFFICE OF DEPUTY SUPERINTENDING ARCHAEOLOGIST (MUSEUM)  
RED FORT, DELHI-110006**

**SHORT NOTICE INVITING EXPRESSION OF INTEREST**

**1. Introduction**

The Archaeological Survey of India under the Ministry of Culture is the premiere organization for the Archaeological researches and protection of the Cultural Heritage of the nation. Maintenance of the Ancient Monuments and Archaeological Sites and Remains of national importance is prime concern of the Archaeological Survey of India. Besides, it regulates all Archaeological activities in the country, such as excavation, exploration and preservation etc. as per the provision of the Ancient Monuments and Archaeological Sites and Remains Act, 1958. The implementation of Antiquities and Art Treasures Act 1972 is another mandate given to Archaeological Survey of India. Archaeological Survey of India also runs site Museums of its own and there are altogether 45 Site Museums running under its umbrella.

The Archaeological Survey of India, Museum Branch, Delhi invites 'Expression of Interest' (EOI) in a single bid format from well experienced agencies for supply, installation, testing and commissioning of electrical materials/equipments in the Swatantrata Sangram Sangrahalaya, Red Fort Delhi.

**2. Scope of Work**

Supply Installation, testing and commissioning of electrical materials/equipments in Swatantrata Sangram Sangrahalaya. The materials/equipments should be from reputed companies having ISI marks.

**3. Experience**

The bidder should have experience in supplying, installing, testing and commissioning of electrical materials/equipments.

**4. Warranty / Guarantee**

At least a guarantee/warranty may be given by the agency/company as per manufacturer's standard terms.

**5. The bid shall include quotation for supply, installation, testing and commissioning of electrical materials/equipments in the following format:**

**Work of General Electrical Work Repair and Maintenance at  
SWATANTRATA SANGRAM SANGRAHALAYA, RED FORT, DELHI**

S.N	Description	Unit of measurement	QTY	Unit Rate	Amount
1	Supply ,Excavation of cable trench by digging and then refilling after laying of cable as per IS 1255: 1983 and technical specification enclosed on a cushion of sand 100 mm below and providing protective second class bricks as per drawing and soil and ramming, levelling and repairing the floor to its original condition Testing & Commissioning .				
2	Supply, laying, testing and commissioning of 1100 Volt grade XLPE insulated and sheathed Al conductor cables 3.5Corex150Sq mm Al Armd	Mtr	70		
3	Supply Installation Testing & Commissioning of Chemical Earthing : GI (50 mm dia X 3 Mtr) HDGI Electrode – MTS Protection having internal strip size of 25 X 6 mm or Eq from top to bottom, the pipe thickness must be 2.0 mm or more inside filler of CCM Compound with One Bag Jam Fill Compound	Nos	1		
4	Supply Installation Testing & Commissioning of GI Earth Strip 25x5mm	Mtr	15		
5	Supply Installation Testing & Commissioning of GI Earth Wire 8Gauge	Mtr	50		
6	Supply, laying, testing and commissioning of 1100 Volt grade XLPE insulated and sheathed Al conductor cables 4Corex10Sq mm Al Armd	Mtr	100		
7	Supply Installation and Testing of Following MCCB/MCB / DB of Approved Make				
8	40A DP MCB with Enclosure	Nos	10		

9	32A SP MCB	Nos	60		
10	20A SP MCB	Nos	30		
11	16A SP MCB	Nos	80		
12	10A SP MCB	Nos	65		
13	63A DP MCB	Nos	18		
14	40A DP MCB	Nos	22		
15	63A FP MCB	Nos	10		
16	100A FP MCCB with Enclosure	Nos	1		
17	Supply Installation Testing & Commissioning of PVC Insulated Single Core Unsheathed FR Confirming to IS 694:1990 for Voltage Grade of 1100Volts				
18	Wire 0.75MM	Mtr	300		
19	Wire 1.0MM	Mtr	600		
20	Wire 1.5MM	Mtr	300		
21	Wire 2.5MM	Mtr	300		
22	Wire 4.0MM	Mtr	180		
23	Wire 6.0MM	Mtr	180		

	Termination Lug of Approved Make as given below Detail				
1	150Sq MM Al Ring Type	Nos	12		
2	120Sq MM Al Ring Type	Nos	6		
3	95Sq MM Al Ring Type	Nos	6		
4	70Sq MM Al Ring Type	Nos	12		
5	16Sq MM Al Ring Type	Nos	12		
6	6Sq MM CU	Nos	100		
7	4Sq MM CU	Nos	100		
8	2.5Sq MM CU	Nos	400		
9	Electrical Appliances and Accessories as given below				
10	LED Tube Light 18Watt with fitting of approved make	Nos	5		
11	Light Fitting 2'x2' Led 28watt of approved make	Nos	4		

12	Ceiling Fan 56Inch of approved Make	Nos	10		
13	MS Sattel without base 2"	Nos	200		
14	MS Sattel without base 1"	Nos	200		
15	PVC Gitti	Pkt	15		
16	Wooden Screw 1.5"	Pkt	15		
17	Wooden Screw 2.5"	Pkt	10		
18	PVC Batten/Casing Caping 1"	Mtr	40		
19	PVC Batten/Casing Caping 1/2"	Mtr	40		
20	PVC Tap (All Colours R/Y/B/Blk/Green Pack of 30)	Pkt	2		
21	Switch 6A	Nos	70		
22	Socket 6A	Nos	20		
23	Switch 16A	Nos	30		
24	Socket 16A	Nos	30		
25	Sheet 8"x 5"	Nos	30		
26	Sheet 10"x 13"	Nos	20		
27	Sheet 8"x 10"	Nos	10		
28	Flexible Conduit 1"	Roll	3		
29	Batten Holder	Nos	12		
30	Tee Cover / Round Sheet	Nos	100		
31	Brass Screw 1.5"	Pkt	2		
32	Brass Screw 2.5"	Pkt	2		
33	Submersible Pump Starter Outdoor Type 15A with SPPR 32A TP MCB Contactor & 15A O/L on/off/trip I/L and Start Stop Push Button	Set	1		
34	Cable For Submersible Pump 3cx2.5Sq MM	Mtr	30		
35	PVC Conduit 1" for Submersible Pump	Mtr	30		
36	Labour Charges	LumSum	1		
	<b>TOTAL</b>				

## **6. Eligibility Criteria for applying**

- (i) The applicant should have registered Agency/Organization registered in India.
- (ii) The applicant should have experience supply, installation, testing and commissioning of electrical materials/equipments.
- (iii) The applicant should have tax registration number/Pan number etc.

## **7. Submission of EOI**

The expression of Interest should be submitted on the applicants letter head and format given at **Annexure-I** to the Deputy Superintending Archaeologist (Museums), Archaeological Survey of India, Museum Branch, Red Fort, Delhi-110006 (ph. 011-23262235, 23262237) along with EMD of rupees 10,000/- (Ten Thousand only) and tender cost of Rs. 500/- (Five Hundred only) by way of Demand Draft/Pay Order in favour of Deputy Superintending Archaeologist (Museums), ASI, Museum Branch, Red Fort, Delhi not later than 10 days from the date of advertisement in ASI's website/newspapers upto 1400 hours.

## **8. Selection Procedure**

- (i) The bid of eligible applicants will be opened and evaluated as per standard procedure.
- (ii) EMD of Rupees 10,000/- (Ten thousand only) from of all bidders except successful bidder would be returned within 2 months after award of the work.
- (iii) The successful bidder has to provide a letter of acceptance to Archaeological Survey of India within 3 Days of receiving communication of his/her selection.
- (iv) The successful bidder will have to complete the work within 30 days in the Museum from assigning the date of work to him.
- (v) The period of validity of EOI would be 60 days after opening of the bid.
- (vi) The selection agency will have to furnish bank guarantee for an amount of 10% of the total work issued by a scheduled nationalized bank in favour of Deputy Superintending Archaeologist (Museum), Red Fort, Delhi.
- (vii) Archaeological Survey of India reserves all right to reject or accept any/all EOI application without assigning any reason, whatsoever and is not bound to award the work to the lowest bidder. Archaeological Survey of India takes no responsibility for the delay loss or non receipt of any submission or letter sent by post within the prescribed time period.

## **Explanatory notes**

### **General**

These explanatory notes are for guidance of contractor and field staff. Each work has its own particular requirements. Engineer in charge will be responsible for successful execution of the work as per technical specification.

- I) All electrical work should comply with latest Indian electricity act and latest Indian electricity Rules.
- ii) All electrical installation works shall conform to relevant Indian standard code of practice and carried out as per relevant safety code of practice, Guide for safety procedure in electrical works as per IS: 5216/pt 1 & 2<sup>nd</sup> /1982 shall be observed.
- iii) All components used in installation shall be of proper voltage, current and frequency.
- iv) All minor items wiz hardware items, foundation bolts, termination lugs for electrical Connection and packing material etc as required shall be deemed to have been included in the tender, whether such items are specially mentioned in the tender documents or not.

## **Technical Specification**

### **Excavation of Trench**

Trenching will be done in accordance with the route plan approved by authority and in straight line as far as possible, except where there is any obstruction due to sewer pipe line, water pipe line, nallah etc for which the route shall be decided by the supervisor at site.

Where there is any change in direction, suitable curve shall be provided.

The bottom of the trench shall be level and free from stones, brick bats etc. After laying of cable and placing of bricks the trench shall be filled with excavated earth free from stone particles or any other sharp edges debris. After back filling the excavated earth, the upper portion shall be properly dressed up, levelled & restored to the original condition.

Cable Trenching should be made carefully so as not to damage any other cable which is already in the digging portion of trench. It will be the responsibility of the contractor to make it good as per entire satisfaction of the owner at the cost of contractor.

### **Laying Procedure of Cable**

The cable shall be laid as per IS code of practice Cables of different sizes and length as per site requirements XLPE cable shall be laid from LT panel/Board/pole/mast etc in the excavated trench or and along the wall or structure with suitable mounting arrangements as required. The terminals of the cable shall be provided with suitable cable lugs and cable glands as per requirement. A minimum safe bending radius for all types of cables shall be taken as 15 times the overall dia of the cable. .

The XLPE cable shall be tested with 500 Volt meggar before and after the laying. A loop of 4 to 5 mtr in length shall be provided near the panel / board/ pole/ mast etc. (near the cable termination point) and the armour of the cable shall be thus connected with panel body glands for proper earthing. Correct size thimbles of approved makes shall be used and crimped.

## **Supply Box/Feeding Post**

The feeder post shall be suitable for operation on 3 phase, 4 wire AC system which shall be fabricated from 16/14 swg MS sheet It shall be painted with black enamel paint over red oxide primer and panel should be Powder Coated. Hinged doors should be provided on front to enable installation & inspection of cable connections and other maintenance requirements.

The canopy will be provided on the top for stopping entry of rain water inside it. The entry / connection of cables and required inspection / removal, replacement to MCCB / MCB can be carried out at front side.

TPN Aluminium, Bus bar with insulating tape with colours red, yellow, blue and black. MCCB / MCB should be fitted on the feeder post for completing the power supply requirements and connection to the Bus bars.

## **Maintenance Free Earthing**

Maintenance Free Earthing shall be with Environment Free Chemical. The work of making bore/pit and supply of material is covered with in quoted rates.

### **List of Makes for Material**

- |    |               |   |
|----|---------------|---|
| 1. | MCCB          | : L&T, Schenider, ABB, Siemens            |
| 2  | MCB           | : L&T, Schenider, ABB, Siemens HPL,MDS    |
| 3' | Wire/Cable    | : Poly cab / Havells /HPL /Safe / Skytone |
| 4' | LED Light     | : Bajaj,Suraya ,Philips, NTL,Reputrd Make |
| 5  | Switch Socket | : ISI Mark                                |
| 6. | Celling Fan   | : Crompton/Havells/HPL                    |

## FORM OF COMPLETION REPORT

(To be filled in by the contractor after completion of work and verified by the Site Supervisor indicating final measurements)

I, hereby certify that the installation detailed below has been installed by me and tested and that, to the best of my knowledge and belief, is complete in accordance with the Indian Electricity Rules and as well as the technical specification of the assigned work as per the tender documents.

The results of the tests are as under:

Name of work : Work of General Electrical Work Repair and  
Maintenance at Swatantrata Sangram Sangrahalaya  
Red Fort New Delhi

Tender reference No. :

Voltage system of the electric supply : .....

Brief details of the electrical installation : .....

If the work involved erection of overhead lines and or underground cables :

Voltage of O.H. line : .....

Total length of OH/Line and No. of span : .....

Total length of underground cable /cables and size : .....

No. of joints , if any, with details : .....

Signatures and Seal of the contractor  
Site

Signatures and seal of the  
Supervisor



**FORM OF COMPLETEION REPORT**

**EARTHING**

Description of earthing electrodes : .....

No. of Earth electrodes : .....

Size of main earthing lead :.....

**TEST RESULTS**

Insulation resistance of the whole system of conductors to earth : .....

Insulation resistance between 'R' phase & neutral : .....

Insulation resistance between 'Y' phase and neutral : .....

Insulation resistance between 'B' phase and neutral : .....

Insulation resistance between 'R' & 'Y' phase conductors .....

Insulation resistance between 'Y & B' phase conductor : .....

Insulation resistance between 'B' & 'R' phase conductors : .....

**POLARITY TEST**

Polarity test of non-linked single pole switches.

**EARTH CONTINUITY TEST**

Maximum resistance between any point in the earth continuity conductor including metal conduit and the main earthing lead:

Signature of the contractor

Signature of Site Supervisor

**FORM OF COMPLETION REPORT -2**

**EARTH ELECTRODE RESISTANCES;**

Resistance of individual earth No.1 : ..... ohms

2. : ..... ohms

3. : ..... ohms

4. : ..... ohms

5. .... ohms

Overall resistance of inter connected earth electrodes : .....Nos.

.....Ohms

Signature of the supervisor in charge  
Name & Designation

Signature of contractor  
Name and Address

**OFFICE OF DEPUTY SUPERINTENDING ARCHAEOLOGIST (MUSEUM)**

**RED FORT, DELHI**

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**TENDER DOCUMENT BID/FINANCIAL BID**

1. Name of the Registered Firm/Company:
2. Postal address of the Company:  
(with Tel. Nos., E-mail etc.)
3. Name and address of the proprietor/partner/Directors:  
(with Tel. Nos., E-mails etc.)
4. Registration No. of the Firm:
5. Permanent Account Number (PAN)/Service Tax No etc:
6. Details of Security Deposit (EMD) and Tender Cost:  
(with date and name of the bank)

<b>S.N</b>	<b>Description</b>	<b>Unit of measurement</b>	<b>QTY</b>	<b>Unit Rate</b>	<b>Amount</b>
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35	PVC Conduit 1" for Submersible Pump	Mtr	30		
36	Labour Charges	LumSum	1		
	<b>TOTAL</b>				

I/We hereby certify that the information furnished above is true and correct to the best of my knowledge. I/we understand that in case any deviation is found in the statement at any stage, I/We will not have dealing with the department in future.

(Signature of the authorized signatory with date and seal)