

Kolkata Port Trust

Mechanical & Electrical Engineering Department 8, Garden Reach Road, Kolkata– 700043



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No. Mech/EE-III/25/226/ 1087

Date: 18.04.2018

Dear Sirs,

Sub: Enquiry for Quotation for the work "Rewiring of Electrical installations at Executive Engineer, GRJ – NSD".

Quotation, in duplicate, is sought for the subject work in sealed cover superscribing the subject work and enquiry letter No. as per enclosed terms & conditions and Bill of Quantities (BOQ). Documentary evidences for PAN No., GST No., Trade license, Electrical contractor's license are to be submitted along with the quotation.

Site inspection will be held at 11.30 hrs on 23.04.2018.

Sealed offers, in duplicate, should reach this office on or before 14.30 hrs. on 27.04.2018. Quotations will be opened at 15.00 hrs. on the same date in presence of the representatives of the quotationer.

Thanking you.

Yours faithfully,

Encl. : Terms & Conditions and Bill of Quantity.

(D. K. KUNDU) Executive Engineer (Elect) for Chief Mechanical Engineer

TERMS & CONDITIONS

- **1. Price:** The quoted price should be exclusive of GST. GST, if applicable, paid extra as applicable on actual.
- 2. Taxes & Duties: GST or any other taxes and duties, if leviable, shall be clearly mentioned in the quotation. If not mentioned otherwise, the quotation will be considered to be inclusive of all taxes and duties.
- **3. Payment Terms:** 100% payment against installation, commissioning, testing and handing over of the entire work after satisfactory completion subject to Security Deposit clause.
- 4. Validity: The quotation must be valid for 30 days from the date of opening of the quotation.
- 5. Completion time: The work is to be completed within 30 days from the date of receipt of order letter.
- 6. Liquidated Damage: In case the work is not completed within the stipulated completion period, liquidated damage @ 1/2 % per week or part thereof subject to a maximum of 10% of the ordered value will be deducted from the bill.
- 7. Security Deposit: 10% of the quoted value will be deducted from the bill of the successful quotationer towards Security Deposit which will be refunded without interest after successful completion of the guarantee period of one year.
- 8. You shall enclose certified copies of **Trade Licence**, **GST Registration No.**, **PAN No.**, **Electrical Contractor's Licence**. The certificates in original shall have to be submitted when so demanded for inspection.
- **9. Guarantee:** The contractor shall make good at his own expenses all defects, due to faulty design, materials and workmanship, which may develop under proper use during a period of 12 months from the date of installation and successful commissioning of the work. Should any difference of opinion arise on any of the provisions of this clause, the decision of the Engineer shall be final and binding. In default, the Trustees will be at liberty to get the repairs done by other agencies and reimbursed themselves so far as costs therefore are concerned out of the amounts lying with them as Security Deposit so far as that is practicable. If the costs of such repairs exceed the amount of Security Deposit, the Contractor shall pay the balance to the Trustees forthwith on demand.
- 10. Quotation: The quotation is to be submitted in duplicate in a sealed cover super scribing the name of the work and enquiry letter no. and to be submitted by 14.30 hrs of 27.04.2018. Quotations will be opened on 15.00 hrs on 27.04.2018. Price is to be inserted against the columns, 'Rate' and 'Amount' of the Bill of Quantities. Price shall include all manner of labour, material, plant /tools and all other matters necessary for the execution of the work.
- **11.** The price quoted in the quotation shall hold good and shall be binding on the quotation notwithstanding any increase in the prices of materials and labour or in the freights or levy or other charges whatsoever, the quotationer shall not be entitled to claim any increase over the rates quoted by them.
- **12.** Evaluation will be made on the basis of total Value of quotation.
- **13.** Acceptance or otherwise of all terms & conditions, herein stated above should be clearly mentioned on this page itself and is to be enclosed with the quotation.
- 14. The Trustees are not bound to accept the lowest or any tender without assigning any reason thereof.

15. Scope of work:

- (a) The Scope of Work for "Rewiring of Electrical installations at Executive Engineer, GRJ NSD" covers the following :
 - Supply, Delivery, Installation, Testing and Commissioning of MCCB Enclosure with MCCB.
 - Supply, Delivery, Installation, Termination, Testing & Commissioning of LT Cable.
 - Supply, Delivery, Installation, Testing and Commissioning of MCBDBs.
 - Circuit Wiring through PVC Rigid Conduit.
 - > Point Wiring through PVC Rigid Conduit.

- Supply, Delivery, Installation, Testing and Commissioning of 6A/16A flush type Uni Socket Outlet with 16A piano key type switches.
- Supply, Delivery, Installation, Testing and Commissioning of Ceiling Fan along with electronic regulator.
- Supply, Delivery, Installation, Testing and Commissioning of LED Luminaries.
- Supply, Delivery, Installation, Testing and Commissioning of Street Light Panel with all accessories mentioned in BOQ.
- Arrangement of Earth Pits, Earth Bus Bar connected with Earth Pits, Earthing all electrical equipment with Earth Pits.
- All dismantling materials are to be returned to Executive Engineer (Elect.) NSD Office, if any.
- Mending good of all damages including restoration to original condition without any extra cost to KoPT.
- > Any other item required for completion of the work in all respect but not included above.

The work shall be carried out as per Indian Electricity Act, 2003, CEA (Measures relating to safety and Electric Supply), Regulations 2010 with latest amendments and latest revised IS Code of Practice.

- (b) Unless otherwise specified, the work to be provided for by the contractor shall Include but not be limited to the following:
 - Provide all materials, supervision, services, scaffolding and temporary lighting as required for work purposes etc.
 - Prepare and submit for review and assessment to the Engineer, the working drawings showing how the work is actually going to be done as may be required by him.
 - The contractor shall carry out the work in phased manner as per availability of the site so that normal day to day activities are not affected for which no such extra payment will be entertained.
- (c) Any work, considered required by the contractor and not mentioned hereunder, for successful completion of the work, is to be included in the relevant item of Bill of Quantities suitably, which should be finalized in the pre-bid meeting.
- (d) The work shall be carried out as per Indian Electricity Act, 2003, Central Electricity Authority (Measures relating to safety & electricity supply) Regulation, 2010 with latest revised IS code of Practice and relevant portion of National Building Code particularly with respect to safety requirements as per IS 16103 (Part I): 2012 and also code of practice for fire safety of buildings (general): Electrical Installations, IS:1646: 1997.

16. Technical Specification :

(a) Light Fittings

Item details : Details are given in BOQ items.

Installation : The above LED Luminaries and with all other accessories shall be installed on the wall/ false -ceiling as per site requirement. Cost of round block/down rod should be included in the installation wherever required.

(b) Ceiling Fans

Item details : Details are given in BOQ items.

Installation : The ceiling fans complete with blades, canopy, fork, rubber and electronic step regulator are to be installed in the ceiling hook. Down rods are to be provided wherever necessary.

(c) Distribution Wiring , Point wiring : Details are given in BOQ items.

(d) Other Items specifically not mentioned in the T.S. shall be as per BOQ. Any other item required for installation but specifically not mentioned either in the BOQ or the T.S. like requisite length of MS Pipes, clamps and accessories shall be deemed to be included in the rates for installation of the items for which these items are intended. Tenderers are advised to build up the installation prices accordingly. Any claim in this regard on the plea that the item is not specifically mentioned shall not be entertained.

(e) **Dismantling & shifting of old materials**:

On completion of works, the contractor shall reinstate and make good at his own expense any property or land which might have been disturbed and/or damaged by his works. The items to be removed include all wiring, fittings, switch fuse units & accessories etc. Contractor should also clean the site as required during execution and fully clear the site after completion of all the works. Any holes/drillings/openings/damages made on the wall/roof for drawing of cables/installation of equipments shall be made good by the tenderer at his own cost.

All useable spares viz. lamps, holders, are to be returned to the office of the Executive Engineer (Elect.) – NSD.

(f) List of Approved Makes :

Item	Make				
Luminaries, lamps.	Philips/ Bajaj/ Crompton/ Anchor/ Sigma/GE /				
	any other reputed make				
PVC Copper wire of FRLS type for	KDK-Evershine/Finolex/Havells/				
internal wiring	National/Polycab/any other reputed make				
Piano type switches/ Socket/Ceiling	Havells/Anchor/ Ellora/ Precision/ Rider/				
Rose	Pritam/Sleek/any other reputed make.				
Ceiling Fan	Havells/Usha/Orient/Crompton Greaves/				
	Bajaj/Polar				

• Any other reputed make will only be considered if none of the approved make as mentioned in the above list is not available for some reason or the other which is to be acceptable to CME.

(g) Inspection and Testing:

Inspection and testing will be carried out by KoPT Engineer. Inspection will be carried out as applicable as per relevant Standard/ Technical Specification/Approved Drawing etc.

Insulation Resistance, Earth Continuity and Earth Resistance tests etc. as applicable prior to commissioning are to be carried out for electrical installation including LT cable (if any). All pre commissioning tests shall be carried out by the authorized representative of the firm having valid Supervisor's Certificate of Competency.

Date:

Signature of the quotationer with Rubber stamp.

<u>Bill of Quantities</u> <u>Rewiring of Electrical installations at Executive Engineer, GRJ – NSD</u>

Item	Description	Qty.	Unit	Rate	Amount
No.		_			
1.	Supply and delivery of one MCCB Enclosure consisting	01	Set		
	one no. 4 Pole, 63A, 10KA, 415V Fixed Thermal &				
	Fixed Magnetic Setting MCCB.				
1(a).	Installation of above mentioned MCCB Enclosure (Item	01	Set		
1(u).	No. 1) on the wall with suitable arrangement as required	01	~~~		
	including earthing arrangement by 8 SWG galvanized				
	wire with suitable length and commissioning.				
2.	Supply and delivery of 4C x 16 sq. mm. Cable with	100	Mtr.		
	following specification,				
	Conductor : Stranded Aluminium conforming to IS :				
	8130 - 1984 or latest amendment if any,				
	Colour coded,				
	Voltage Grade : 1.1KV, Insulation : XI PE				
	Insulation : XLPE , Inner Sheath : PVC,				
	Armour : Galvanized Steel Strips,				
	Outer Sheath : Extruded PVC,				
	Conforming to IS: 7098 (Part – 1) / 1988 or latest				
	amendment if any.				
2(a).	Laying of above cable (Item No. 2) on wall/surface	100	Mtr.		
2(u).	including S&F MS clamps, making hole etc. as				
	necessary, mending good damages and painting.				
2(b).	Supplying and fixing compression type gland complete	04	Nos.		
	with brass gland, brass ring & rubber ring for dust &				
	moisture proof entry of XLPE armoured cable, size of 4C				
2()	x 16 sq. mm., 1.1KV Grade.	0.4	ŊŢ		
2(c).	Finishing the end of above mentioned LT cable by	04	Nos.		
	crimping method inclusive of supplying and fixing solder less socket (Dowels make), tapes, anticorrosive paste &				
	jointing materials.				
3.	Supply & Delivery of Three Phase MCBDB for Lighting	01	No.		
5.	& Power Circuit having one no. 63A FP MCB as	01	110.		
	incomer, one no. 32A SP MCB and three nos. 16A SP				
	MCB per phase as outgoing.				
3(a)	Installation, Testing and Commissioning of above	01	No.		
- ()	mentioned [Item No. 3] MCBDB on the wall with				
	suitable arrangement as required including earthing				
	arrangement by 8 SWG galvanized wire with suitable				
	length and commissioning.				
4.	Supply & Delivery of Single Phase MCBDB (2+8 way)	01	No.		
	for Lighting Circuit having one no. 16A DP MCB as				
4(-)	incomer and eight nos. 6A SP MCB as outgoing.	01	NI-		
4(a).	Installation, Testing and Commissioning of above	01	No.		
	mentioned [Item No. 4] MCBDB on the wall with suitable arrangement as required including earthing				
	arrangement by 8 SWG galvanized wire with suitable				
	length and commissioning.				
	iongui una commissioning.	L	L		1

Item No.	Description	Qty.	Unit	Rate	Amount
5.	Supply & Delivery of Single Phase MCBDB (2+6 way) for Power Circuit having one no. 32A DP MCB as incomer and four nos. 16A SP MCB as outgoing.	01	No.		
5(a).	Installation, Testing and Commissioning of above mentioned [Item No. 5] MCBDB on the wall with suitable arrangement as required including earthing arrangement by 8 SWG galvanized wire with suitable length and commissioning.	01	No.		
6.	Wiring in 1.1KV grade single core stranded 'FR' PVC insulated & unsheathed copper wire (approved make) of 2 x 84/0.3 (6 sq. mm.) + 1 x 56/ 0.3 (4 sq. mm.) sizes in 20 mm size PVC rigid conduit 'FR' (Precision make) inclusive necessary fittings etc. as required.	25	Mtr.		
7.	Wiring in 1.1KV grade single core stranded 'FR' PVC insulated & unsheathed copper wire (approved make) of 2 x 56/0.3 (4 sq. mm.) + 1 x 36/ 0.3 (2.5 sq. mm.) sizes in 20 mm size PVC rigid conduit 'FR' (Precision make) inclusive necessary fittings etc. as required.	120	Mtr.		
8.	Wiring in 1.1KV grade single core stranded 'FR' PVC insulated & unsheathed copper wire (approved make) of 2 x $36/0.3$ (2.5 sq. mm.) + 1 x $22/0.3$ (1.5 sq. mm.) sizes in 20 mm size PVC rigid conduit 'FR' (Precision make) inclusive necessary fittings etc. as required.	150	Mtr.		
9.	Distribution wiring in 2 x 22/0.3 (1.5 sq mm) single core stranded 'FR' PVC insulated & unsheathed copper wire (approved make) in 20mm size PVC rigid conduit 'FR' (Precision make), with 1 x 22/0.3 (1.5 sq mm) single core stranded 'FR' PVC insulated & unsheathed copper wire for ECC, to light/fan with Piano Key type switch fixed on MS CRC sheet metal (16 SWG) switch board cum JB on wall complete with 2 no. suitable size "Ph & N" copper bar incl. Bakelite /Perspex (wall matching color) top cover 3 mm thick and incl. 75mm x 100mm x 65mm inspection box, making earthing attachment, painting the MS box and mending good the damages to original finish with average run of 5 metre.		Point		
10.	Distribution wiring in 1.1 KV grade 22/0.3 (1.5 sq mm) single core stranded 'FR' PVC insulated & unsheathed copper wire (approved make) in 20mm size PVC rigid conduit 'FR' (Precision make), with 1.1 KV grade 1 x 22/0.3 (1.5 sq mm) single core stranded 'FR' PVC insulated & unsheathed copper wire as ECC, to 5A 3 pin flush type plug socket & Piano Key type switch fixed on MS CRC sheet metal(16 SWG) switch board cum JB on wall incl. Bakelite /Perspex (wall matching color) top cover 3 mm thick and incl. painting the MS box and mending good the damages to original finish on board.	7	Point		
11.	Supply of 16A, 240V, 50 Hz Single way switch.	11	Nos.		
12.	Supply of 6A/16A, 240V, 50 Hz Uni Socket Outlet.	11	Nos.		
13.	Supply of Domestic Surface mounting box, 6 Module with cover.	03	Nos.		
13(a).	Installation & commissioning of Domestic Surface mounting box with 16A, 240V, 50 Hz Single way switch & 6A/16A, 240V, 50 Hz Uni Socket Outlet.	03	Sets		

Item No.	Description	Qty.	Unit	Rate	Amount
14.	Supply of Domestic Surface mounting box, 2 Module with cover.	02	Nos.		
14(a).	Installation & commissioning of Domestic Surface mounting box with 16A, 240V, 50 Hz Single way switch & 6A/16A, 240V, 50 Hz Uni Socket Outlet.	02	Sets		
15.	Supply and delivery of 1400 mm ceiling fan complete with blade, canopy similar to that of HAVELLS Make Pacer Model.	07	Nos.		
16.	Supply & delivery of stepped electronic fan regulator	07	Nos.		
16(a).	Installation & commissioning of the fan with electronic fan regulator.	07	Nos.		
17.	Supply and delivery of LED Luminaries with lamp and all accessories, similar to that of BAJAJ Make (Type: BLRB – DB 118 & BLRB 18W CWC)	19	Sets		
17(a).	Installation & commissioning of LED Downlighters Luminaries with all necessary accessories directly on wall/ceiling/HW round block and suitable size of MS fastener.	19	Sets		
18.	Supply & delivery of LED Luminaries complete with lamp and accessories similar to that of BAJAJ Make. (Type : BCLST 25W LED I)	04	Nos.		
18(a)	Installation & commissioning of the above fittings on wall of the building complete with all accessories inclusive S&F 40 mm GI Pipe (ISI medium) quality of 1.5 mts. Average length having suitable bend inclusive S&F necessary length 1.5 sq. mm. PVC insulated single core stranded annealed copper wire and making connections as required and mending good the damages to the wall.	04	Nos.		
19.	Supply and delivery of one Street Light panel consisting one no. Power Contactor, one no. Time Switch , Kit Kat fuse with suitable rating, selector switch etc.	01	No.		
19(a).	Installation of above mentioned control panel (Item No. 19) on the wall with suitable arrangement as required including earthing arrangement by S&F 8 SWG galvanized wire with suitable length and commissioning.	01	No.		
20.	Supplying & fixing earth bus bar of galvanized (Hot Dip) MS flat 25 mm x 6 mm on wall having clearance of 6 mm from wall including providing drilled holes on the busbar complete with G. I. Bolts, nuts, washers, spacing insulators etc. as required (For MCBDBs).	0.5	Mtr.		
21.	Connecting the earth bus bar to earth electrode inclusive S&F 25 mm. X 6 mm. Galvanized (Hot Dip) MS flat under the ground level / on wall/floor with GI saddle as required with inclusive drilling holes, bolts, nuts, washers etc. and mending good the damages as required.	40	Mtrs.		

Item	Description	Qty.	Unit	Rate	Amount
<u>No.</u> 22.	Earthing with 65 mm. Dia GI Pipe (TATA - Medium) x 3.0 Mtrs. Long and 1 no. 50 mm. X 6 mm. Galvanized (Hot Dip) steel strip (4 Mtrs. Long), 20 mm dia x 125 mm long galvanized bolt, double nuts, double washers including finishing both ends by making holes etc. and S & F 65 mm dia GI Pipe (ISI - Medium) protection (3 Mts. Long) to be filled with bitumen under the ground level to an average depth of 3.65 Mts Providing masonary enclosure on the top of the earth electrode of overall size 86.36 cm x 86.36 cm x 46 cm deep (below ground level) complete with cemented brick work (1 : 6) of 25 cm width duly plastered with cement morter (inside). CI hinged inspection cover of size 36.56 cm x 36.56 cm with locking arrangement, GI reducer including drilling of 46 nos. 12 mm dia holes on the GI pipe. With treatment of soil by using salt & charcoal or coke for pipe electrode. Earthing work is to be carried out as per relevant IS.		Nos.		
23.	Connecting the equipments body to earth bus bar including S&F GI (Hot Dip) wire of size 8 SWG on wall/floor with staples buried inside wall/floor as required and making connection to equipments with bolts, nuts, washers, cable lugs etc. as required and mending good damages.	200	Mtrs.		
	Total				

Total in words (Rupees

.....)

Note: The above price is exclusive of GST, which shall be paid extra as applicable on actual.

(Office Rubber Stamp of the Quotationer Firm)

Signature of the Quotationer

Dated, the _____