

BHEL:: RC PURAM
M&S-P&C SECTION
TENDER No.M&S/P&C/2017/79
SCOPE OF WORK FOR : " **MAINTENANCE OF FACTORY ROAD LIGHTING** "

S.NO	DESCRIPTION OF ITEM	QTY
1	Periodical maintenance of the Road/Yard lighting. This includes:	
(a)	Cleaning of all items of fittings like fitting body, reflector, glass dome free of dust and insects, refixing of glass dome/covers, wherever required. (periodicity shall be once in two months)	425
(b)	Checking and rectifying of connections to starters, choke fuse units, capacitors, any loose contacts to lines, jumpers etc., tightening of binding wire wherever required and refixing of the above accessories if required.	425
2	Replacement of blown off fuses on individual fittings of the types referred in item(1).	250
3	Replacement of burnt out/wornout standard accessories of the following types:	
(a)	Lamp holders	300
(b)	Chokes/Ballasts	175
(c)	Condensers	200
(d)	Ignitors	175
(e)	MCBs of various capacities	120
(f)	Bulbs/Tubes of all types used in the fittings	500
(g)	Replacement of 2.5 sqmm PVC Al/Cu cable of 9 Mtrs each including connections at both sides..	75
	(items for "a to g" are BHEL's free issue)	
4	Dismantling,Transporting of old light fittings including brackets and clamps to the maintenance workshop of 15/83 bldg for rectification/reconditioning.	200
5	Fixing of new/reconditioned street/yard light fittings of any type on any of the poles as directed with brackets and clamps.	200
6	Excavation of cable trenches of size 0.5 M width and 0.5 M depth.	
a)	in all soils except hard soil/road cutting	750
b)	Hard soil/cutting of roads/flooring.	150
c)	Pits of 0.5 M radius and 0.5 M depth for cable loop at each pole.	50
7 (a)	Laying of 16/25/35/50 Sq.mm 3/4 core PVC insulated sheathed steel armoured Al/Cu conductor cable and fixing of cable markers on the cable route. (Cable&Cable markers will be on BHEL's free issue).	1000
(b)	Execution of end joints for item 7(a)	50
(c)	Execution of straight through joints for item 7(a)	15
8(a)	Supply and spreading of sand 50mm thick all round the cable and laying of bricks around the cables ie., two sides and laying of 1ft X 1ft shabad stones on top over the cable for item No. 6(a).	750
(b)	Supply and Laying of 6" dia RCC pipes including coller pipes in Road/Floor cutting for item 6(b).	150
9 (a)	Refilling of excavated trench with excavated solid ramming wit and levelling etc., complete for item 6(a).	750
(b)	Refilling of cut road/floor with excavated materials and wait for settling of the soil for one week.The same area shall be covered with suitable metal of size 50/25/10mm and cement/bituminous compound for free movement of vehicles for item 6(b).	150
(c)	Refilling of Cable loop pits for item 6(c)	50

10	Earth excavation (for poles/stays/struts) for pits of size 0.6x0.9x1.5 mtrs in all soils.	10
11	Supply and erection of 8 Mtrs length Prestressed Cement Concrete Poles as per IS:1343 and IS:1678-1978. The poles shall withstand the working load of 200 Kgs acting at 0.6 Mtr from top of the poles. Poles with hairline cracks will be rejected. The poles shall have good finishing and strength.	10
12	Bending and fixing of GI pipe brackets for extending the length of existing street light brackets/New fittings. (GI pipe BHEL's free issue)	30
13	Fabricating and fixing of MS clamps of 20x3mm, 25x6mm sizes as per requirement. Clamps shall be painted with 1 coat of Redoxide and two coats of aluminium paint. (Including necessary bolts, nuts and washers etc..)	60
14	Fixing of new PD box with Clamps, nuts, bolts and necessary accessories. (PD box will be BHEL's free issue)	40
15	Cleaning of existing PD boxes with wire brush and supply & painting of one coat of Redoxide and two coats of SE paint for complete PD box including clamps.	140
16	Replacement of accessories in PD box, such as fuse unit,connector strip (fuse unit and connector strip , and crimping lugs are in the contractor scope)	425
17	Poles colouring with white snowcem paint (Snowcem paint is in the scope of contractor)	140
18	Painting of serial numbers on RCC poles with black background and lettering with white enamel paint.	140
19	Repair/Replacement of lighting sensors.	15
20	Repair/Replacement of main contactors like ML2 to ML8 of L&T make.	15
21	Repair & Replacement of 15/30/60/100 Amps ICTP switches.	25
22	Periodical checking and repair of the internal wiring of Security Watch towers.	10
23	Periodical checking and repair of the internal wiring of High Security towers.	4
24	Periodical checking and repair of the internal wiring, ropes, Winch & Motor operation, contactors, timers, MCBs of High Mast towers once in two months.	2
25	Supply&Fabrication including painting with SE paint and installation of control gear box (rain proof MS box) for sensor, contactor, fuses for auto/manual provision including wiring and connections. (Contactor, sensor and fuse units will be BHEL free issue).	6
26	Checking, maintenance and cleaning of Solar street lighting system including PV Modules, luminaire, Batteries, Battery Box and replcement of spares. The solar street lights are to be cleaned once in a month. (Spares are BHEL's free issue)	125
27	Arrangement of temporary flood lighting for Emergencies/VVIP's Visit/Special requirement. This includes shifting of material,laying of Cables, fixing of flood lights and switches. After completion of work these are to be dismantelled and shifting to stores.	10