

Bill Of Quantity

Name of Work: Supply and Installation of LED Street light and 12.5 mtr, 120 Watt LED High Mast light, 11 KV Overhead Line with 25 KV Substation at Tilia G.P.					
Sl. No	Description	Unit	Qty	Rate (in Rs)	Amount (in Rs)
Part A: Supply, Installation and commissioning of LED Street light and 12.5 mtr, 120 Watt High Mast light					
1	Details alignment of survey marking with paint of street light pole pit complete with supply of all materials ,taxes,conveyance, labour,T&P etc. as directed by the Engineer-In-Charge	Km	7		
2	Erection of 8 meter PSC pole of following length in brick ballast and ramming the foundation, finishing with 150mm thick cement concrete (1:3:6) layer on top with including excavation and refilling etc.as requiredincluding all cost, conveyance, taxes and labour charges etc. Complete as per direction of EIC. (0.45 X 0.45 X 1.66)mtr	No	200		
3	Transportation of 8 meter PSC Pole (200 Kg) for Street Light pole from existing pole to new pole pit,complete with supply of all materials,taxes,conveyance, labour,T&P etc. as directed by the Engineer-In-Charge	Km	7		
4	Supplying and erection of stay set complete (galvanised) with 19/20 mm dia X 1.8 meters long stay rod, anchor plate of size 45 cm X 45 cm x 7.5 mm, thimble, stay clamp, turn buckle (20 mm X 60 cm), 7/4.00 mm dia G.I stay wire and strain insulator etc in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as required. including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	No	16		
5	Supplying and fixing of 32 mm dia X 2.00 meter long G.I. pipe (medium class) bracket for mounting of LED Street light fitting on pole including bending the pipe to the require shape, 2 nos 40 mm X 3 mm flat iron clamp with nuts, bolts and washer, painting the flat iron with primer and finish paint etc. as required, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	No	200		
6	Cost of paving, stringing of conductor, mounting of insulator & pin binding and out pointing & jumpering of A.B Cable size 25 sqmm. X 3 phase + 25 sqmm. X 1 Neutral + 16 sqmm. Barred messenger wire for erection of LT overhead line & street light system with all hardware fitting complete with supply of all materials,taxes,conveyance, labour,T&P etc. as directed by the Engineer-In-Charge	Km	7.35		
7	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. with charcoal and salt as required, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	No	4		
8	Providing and fixing 25 mm X 5 mm G.I strip on surface or recess for connections etc. as required, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Mtr	40		
9	Supplying and fixing of following way prewired vertical type TP&N MCCB distribution board of steel sheet for 415 volts on surface/recess complete with loose wire 12 way box of metal door, IP 43 protection, inclusive of 63 amp Four pole MCB, 40 Amp, 100 mA Four RCCB, 32 A three Contactor, 16 Amp legrand digital timer, 200 amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting of MCBs, terminal connector for incomming and outgoing circuit, duly prewired with adequate size of FRLS PVC insulated copper conductor up to terminal connector/ neutral link, earthing etc as required, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	No	1		

Sl. No	Description	Unit	Qty	Rate (in Rs)	Amount (in Rs)
10	Supply and fixing of LED street light fitting (45 W) in pole complete with supply of all materials like 3c X 2.5 sq. mm round cord ,GI pipe, GI bend, nut & bolt,washer etc. taxes,conveyance, labour,T&P etc. as directed by the Engineer-In-Charge	No	210		
11	Supply of 8 meter long, 200kg PSC pole including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	No	200		
12	Supply of A.B Cable size 25 sqmm. X 3 phase + 25 sqmm. X 1 Neutral + 16 sqmm. Barred messenger wire, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Mtr	7350		
13	Supply of 4C X 35 sq.mm PVC armoured cable ISI marked, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Mtr	200		
14	Laying of one number of PVC insulated and PVC sheathed /XLPE power cable of 1.1 KV grade of size 25 sqmm but not exceeding 120 sq.mm direct in ground including excavation , sand cushioning ,protective covering and refilling the trench etc. as required, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Mtr	200		
15	Supply and making end termination with brass compression gland and aluminum lugs for following size PVC insulated and PVC sheathed /XLPE aluminum cable for 1.1 KV grade as required. For cable size- 4C X 35 sqmm including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Set	8		
16	Supply, erection and commissioning of 9nos, 120 W LED Flood Lights, Fitted in 12.5 Mtr High Mast Tower as per attached specification with following item. including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC. 1. 2.5 sqmm x 3C copper flexible wire 2. 2nos. Earthing Point 3. LED Avation light 4. Outdoor type, IP65 Protection 63 A automatic inteligent energy saving dual timer panel with 1 no. 63 A, 4P, 30KA MCCB & 40 A, 3P, power contactor, dual 24 hrs. Microprocessor based timer, Auto manual switch, 40 A FP MCB, 2 nos. reverse forward push button. 5. Civil works of foundation, erection, commissioning and testing of 12 mtr high mast light	Nos	2		
17	Supplying and fixing of following way prewired vertical type Junction Box (size- 250 X 250 X 115) of polycarbonate for 415 volts on surface/recess complete with loose wire 35 sq.mm terminal , IP 65 protection, inclusive of 16 amp Four pole MCB, 200 amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting of MCBs, terminal connector for incomming and outgoing circuit, duly prewired with adequate size of FRLS PVC insulated copper conductor up to terminal connector/ neutral link, earthing etc as required. including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Set	12		
Part-B: Supply, Installation and commissioning of 11 KV Overhead Line & 25 KV Substation					
1	Details alignment of survey and tree trimming work for erection of 11 KV Overhead line.....Engineer -In- Charge, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Km	0.06		

Sl. No	Description	Unit	Qty	Rate (in Rs)	Amount (in Rs)
2	Erection of 8 or 9 meter PSC pole of following length in brick ballast and ramming the foundation, finishing with 150mm thick cement concrete (1:3:6) layer on top with including excavation and refilling etc for pin point, cut point, DP structure of 11 KV Line as required, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	No	3		
3	Cost of transportation of PSC from Road side to pole Pit (1/2 Km load) for erection of LT overhead line, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Km	0.06		
4	Supplying and erection of galvanised stay set for 11 KV over head line complete with 19/20 mm dia X 1.8 meters long stay rod, anchor plate of size 45 cm X 45 cm x 7.5 mm, thimble, stay clamp, turn buckle (20 mm X 600 mm), 7/4.00 mm dia G.I stay wire and 11 KV strain insulator etc in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as required, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	No	4		
5	Supplying of channel iron 75 mm X 40 mm X 6 mm (7.14 kg per meter) pole top bracket/cross arm for single 11 KV over head line conductor complete with 50 mm X 6 mm flat iron clamp, bolts, nuts etc and washer including drilling holes for insulator pin, bolts and nuts etc and painting with primer and finish paint as required, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	No	4		
6	Supplying of channel iron 75 mm X 40 mm X 6 mm (7.14 kg per meter) V shape cross arm for two 11 KV over head line conductor complete with 50 mm X 6 mm flat iron clamp, bolts, nuts including drilling holes for insulator pin, bolts and nuts and washer etc(as per drawing) and painting with primer and finish paint as required, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	No	1		
7	Supply and erection of 11 KV pin insulator complete with large steel head G.I. pin, nuts, washers etc. as required, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Set	3		
8	Supply and erection of 11 KV disc insulator for 11 KV over head line with galvanised insulator fittings, ball and socket type and complete with galvanised strain clamps, bolts, nuts, washer etc. as required, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Set	12		
9	Supplying of erection of a set of cross bracing frame work for 11 KV over head double pole structure having four member fabricated out of 50 mm X 50 mm X 6 mm angle iron to form a rectangle of minimum size 1400 mm width X 2500 mm height, complete with 50 mm X 6 mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts and nuts etc (as per drawing) and painting with primer and finish paint etc. as required (for DP Mounted 11 KV, 25 KVA Substation), including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Set	2		
10	Supply and erection of three piece nonlinear register type lightning arrestor suitable for 3 wire, 11 KV overhead lines with rated voltage 9 KV(rms) with a nominal discharge current rating of 5 KV and complete with galvanised clamping arrangement, G.I. bolts, nuts, washers etc. as required. insulator complete with large steel head G.I. pin, nuts, washers etc. as required, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Set	1		

Sl. No	Description	Unit	Qty	Rate (in Rs)	Amount (in Rs)
11	Supply, installation and mounting of 11 KV HG Fuse & 11 KV, 200A, 3 Pole AB Switch for DP Mounted Substation as per direction of EIC, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Set	1		
12	Cost of paving, stringing of conductor, mounting of insulator & pin binding and out pointing & jumpering of 55 sqmm AAA conductor for erection of HT overhead line & Substation as per direction of EIC, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Km	0.06		
13	Supply, installation and erection, of 11/0.4 KV , 25 KVA, BEE Star rated , copper winding, distribution transformer on DP Structure, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Set	1		
14	Providing and fixing following capacity TP&N disconnecter fuse switch unit inside the existing panel board with ISI marked HRC fuse including drilling holes in cubical panels, making connections, etc. as required (63 Amp TP&N Sf Unit), including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	No	1		
15	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. with charcoal and salt as required, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	No	6		
16	Providing and fixing 25 mm X 5 mm G.I strip on surface or recess for connections etc. as required, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Mtr	40		
17	Supply of 9 meter long , 300 Kg PSC pole, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	No	3		
18	Supply of 55 sqmm AAA conductor for 11 KV line, including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	Km	0.06		
19	WESCO Charges as per WSCO Utility (supervision charges, commissioning charges, drawing approval charges, security deposit, service connection charges, etc), including cost of all materials, transportation, labour, taxes, T&P etc. as directed by EIC.	LS	1		
	Total (in Rs.)				
	Rupees				