

ESTIMATE OF HIGH MAST & LIGHT POLE

AT NAGAR PALIKA PARISHAD PANDARIYA DIST:- KABIR-DHAM (C.G.)

[As per S.O.R.P.W.D ELECT W.E.F. 01.06.2020]

AR NAVEEN SAHU

S.No.	Particular's of Item	Quantity	Rate	Amount
1	HIGH MAST LIGHT			
A	20 Mtr.Hight	3 Nos.	444728.00	1334184.00
B	16 Mtr. Hight	3 Nos.	394146.00	1182438.00
2	LIGHT POLE		Estimated	4291000.00
			TOTAL	6807622.00
A	ADD 2.00 % FOR CONSULTANCY & CONTINGENCY			136152.44
			G.TOTAL	6943774.44
			SAY AS.	6944000.00
			IN LACS.	69.44
[RUPEES IN WORDS : SIXTY NINE LACS FOURTY FOUR THOUSAND ONLY]				

CMMO./C.M.O

E.E./S.E

AR NAVEEN SAHU



No. - 49 Date - 29.04.26
 Technical Sanction of Nagar Nigam
 Paliya / Pandariya Pandariya
 Here by Sanctioned for the Construction
 & Repairing of HIGH MAST & LIGHT POLE
 In Ward No.
 for Rs. 69.44 L. (In words) Rs. Sixty
Nine Lacs Forty Four Thousand

Check by me

सार्वजनिक अधिकारी
 नगरीय प्रशासन एवं विकास
 दुर्ग संभाग, दुर्ग (छ.प्र.)

अधीक्षण अधिकारी
 नगरीय प्रशासन एवं विकास
 दुर्ग संभाग, दुर्ग (छ.प्र.)

ESTIMATE OF HIGH MAST LIGHT

AT NAGAR PALIKA PARISHAD PANDARIYA DIST:- KABIR-DHAM (C.G.)

[As per S.O.R.P.W.D Building W.E.F. 01.06.2020]

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S. NO.	CODE	PARTICULARS	MEASUREMENT				QTY.	UNIT	RATE	AMOUNT
			No.	L	B	H/D				
1	19.20	<p>Supplying erection testing and commissioning of hot dipped galvanised (single dip 86 micron) 20 metre High mast pole on existing RCC foundation with all accessories and equipments, detailed as below to withstand wind pressure upto 180km/hr and minimum following specifications:</p> <p>a) HM shaft made of not more than 2 sections of suitable lengths with telescopic stressfit joints between sections without any circumpherencial welding, sheet thickness 4mm top and bottom sections, nominal dia 460mm on bottom and 150 mm on top, base plate 30mm thick 670mm dia, PCD of foundation bolts 650mm.</p> <p>b) Double drum winch for lowering & raising of lantern carriage on high mast with operatable with power tool/ manual handle attachment with a torque limiting device for safe locking of carriage.</p>								
		<p>c) Raising/lowering type lantern carriage designed to carry specified nos of luminaries, control gear box, junction box.</p> <p>d) Top pulley assemble with weather proof cover.</p> <p>e) 3 Nos suitable length and size stainless steel wire ropes (minimum 6mm dia and 7/19 construction) for lowering & raising of lantern carriage.</p> <p>f) Suitable size and length multicore flexible copper power trailing cable (minimum 3 core 4 sqmm)</p> <p>g) Hinged service door in base section</p> <p>h) Base plate earthing terminal.</p> <p>i) Suitable arrangement for supply distribution with termination of suitable size underground cable in high mast.</p> <p>j) Lightning conductor finial made of 25mm dia 300 mm long G.I. tube having single prong.</p> <p>k) Anchor plate of size 750x750x6mm, tem-plates 3mm thick, GI foundation bolts 12 Nos of 30 mm dia 850 mm long (EN 8 Grade) along with nuts washers etc.</p> <p>(RCC fooundation and luminaries will be paid separately)</p>								
							1	Each	266510.00	266510.00

S. NO.	CODE	PARTICULARS	MEASUREMENT				QTY.	UNIT	RATE	AMOUNT
			No.	L	B	H/D				
2	6.29	Supplying of following 230/250 volts LED Flood light fitting with all accessories like driver, heat sink made of die cast aluminium with IP 66 protection and 15 KV surge protection on pole bracket, including connection, earthing, Seperate housing for driver etc complete as per specification and P.A. should be greater than 0.9. LFD chip efficacy ratio k 120 lumens /watt.								
	6.29.11	300 watt					6	Each	17225.00	103350.00
3	9.16	Supplying and fixing TP&N MCB, 440 VOLTE "C" curve, suitable for lighting and other loads in the existing MCB DB complete with Connecction, testing and commission etc. as per specification.								
	9.16.5	63 amps					1	Each	1316.00	1316.00
4	9.10	Supplying and fixing SP MCB, 240 volts, "B" curve, suitable for lighting and other loads in the existing MCB DB complete with connactions testing and commissioning etc. as per specification.								
	9.10.2	40 amps					6	Each	313.00	1878.00
5	12.3	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe, vvith charcoa and salt as pet specification and IS Code 3043. 1987(R 2016)								
							1	Set	6209.00	6209.00
6	12.4	Supplying and lay ng 8 SWG copper wire al 0.50 metre below ground level for conductor earth electrode, including solderng etc. as per specificalon.								
							20	Meter	77.00	1540.00
7	15.5	Supplying and laying foiling sees one number FRLS PVC insulated /XLPE, PVC sheathed, steel armoured, aluminium conductor power cable of 1. \ KV grade on surface/ existing cable tray with 1 mm thick GI saddle as per specircation, ISI 1554 (1688, Part 1) / IS 7098 1988. Part 1)								
	15.5.14	4x6 sq mm					150	Meter	126.00	18900.00

S. NO.	CODE	PARTICULARS	MEASUREMENT			QTY.	UNIT	RATE	AMOUNT
			No.	L	B				
8	7.19	Fabrication, supply, installation, testing and commissioning of cubicle type compartmentalized wall/ floor mounted power cum control panel board of specified size and following depth made out of not less than 2 mm thick CRCA MS powder coated sheet with suitable size compartments for bus bars, switchgears and necessary cutouts for voltmeters, ammeters etc as per specifications including powder coating painting but without busbars, switchgears and other accessories etc complete as per specification.							
	7.19.2	7.19.2above 30 mm and upto 450 mm deep				1	Sqm	7525.00	7525.00
9	19.23	Designing and providing suitable and approved size RCC foundation for 12-30 mere high mast including seel reinforcement form work, embedding 2 nos 50mm dia PVC pipe for cable entry in each foundation, excavation disposal of surplus soil and curing etc. as required including laying and fixing HM foundation bolts with tam plates but excluding the cost of foundation bolts with tam plates etc complete as per specification 1.00x1.00x2.00=2.00 Cum.				2	Cum	5219.00	10438.00
10	10.22	Providing and fixing following Time switch (timer) in existing panel including connection, testing and commissioning as per specification.							
	10.22.1	Digital type				1	Each	1901.00	1901.00
11	14.2	Supplying and laying HDPE pipe of 4kg/Sqcm in ground below road, path etc a t a depth not less than 40 cm and upto 90 cm including excavation, dismantling of road if required and refilling the trench with excavated material, ramming and making the surface good etc. as per specification.							
	14.2.1	mm outer dia				150	Meter	124.00	18600.00
12	32.3	Providing following size ISI marked FR PVC insulated PVC] sheathed, 3 core submersible copper conductor wire and IS: 694] (2010)							
	32.3.2	2.5 sq. mm				60	Meter	55.00	3300.00

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S. NO.	CODE	PARTICULARS	MEASURMENT			QTY.	UNIT	RATE	AMOUNT
			No.	L	B	H/D			
13	10.13	Providing and fixing 3 pole, 415/500 volts following rating (AC-1 Duty) power contactor in existing starter/ cubical panel including. connections, testing and commissioning etc. as per specification.							
	10.13.3	60 amps					1	Each	3261.00
		Rate For 01 High Mast LED Light						Total	444728.00

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ESTIMATE OF HIGH-MAST LIGHT

AT NAGAR PALIKA PARISHAD PANDARIYA DIST:- KABIR-DHAM (C.G.)

[As per S.O.R.P.W.D Building W.E.F. 01.06.2020]

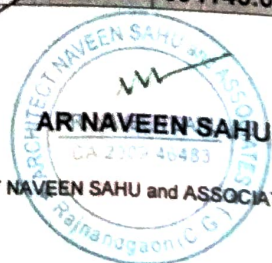
			AR NAVEEN SAHU			
S.N	S.NO	PARTICULAR'S	UNITS	NOS.	RATE	AMOUNT
1	19.19	Supplying erection testing and commissioning of hot dipped galvanised (single dip 86 micron) 16 metre High mast pole on existing RCC foundation with all accessories and equipments. detailed as below to withstand wind pressure upto 180km/hr and minimum following specifications: a) HM shaft made of not more than 2 sections of suitable lengths with telescopic stressfit joints between sections without any circumpherencial welding, sheet thickness 4mm top and bottom sections, nominal dia 460mm on bottom and 150 mm on top, base plate 30mm thick 670mm dia, PCD of foundation bolts 650mm, b) Double drum winch for lowering & raising of lantern carriage on high mast with operatable with power tool/ manual handle attachment with a torque limiting device for safe locking of carriage. c) Raising/lowering type lantern carmage designed to carry specified	Each	1.00	233700.00	233700.00
2	6.29	Supplying of following 230/250 volts LED Flood light fitting with all accessories like driver, heat sink made of die cast aluminium with IP 66 protection and 15 KV surge protection on pole bracket, including connection, earthing, Seperate housing for driver etc complete as per specification and P.A should be greater than 0.9. LED chip efficacy rabo z 120 lumens watt.				
	6.29.11	300 watt	Each	6.00	17225.00	103350.00
3	9.16	Supplying and fixing TP&N MCB, 440 volts, 'C' curve, suitable for lighting and other loads in the existing MCB DB complete with connections, testing and commissioning etc. as per specification.				
	9.16.5	63 amps	Each	1.00	1316.00	1316.00
4	9.10	Supplying and fixing SP MCB, 240 volts, 'B' curve, suitable for lighting and other loads in the existing MCB DB complete with connections, testing and commissioning etc. as per specification				
	9.10.1	6 amps to 32 amps	Each	6.00	151.00	906.00
5	12.3	Earthing with copper earth plate 600 mm x 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe, with charcoal and salt as per specification and IS Code 3043 1987(R 2016)	Set	1.00	6209.00	6209.00
6	12.4	Supplying and laying 8 SWG copper wire at 0.50 metre below ground level for conductor earth electrode, including soldering etc. as per specification	Meter	20.00	77.00	1540.00

			AR NAVEEN SAHU			
S.N	S.NO	PARTICULAR'S	UNITS	NOS.	RATE	AMOUNT
7	15.5.14	Supplying and laying following sizes one number FRLS PVC insulated XLPE PVC sheathed. steel armoured, aluminium conductor power cable of 1.1 KV grade on surface/ existing cable tray with 1 mm thick GI saddle as per specification. IS: 1554 (1988, Part 1)/ IS 7098 (1988) part1	Meter	100.00	126.00	12600.00
8	7.19	Fabrication, supply, installation, testing and commissioning of cubicle type compartmentalized wall/ floor mounted power cum control panel board of specified size and following depth made out of not less than 7.19 2 mm thick CRCA MS powder coated sheet with suitable size compartments for bus bars, switchgears and necessary cutouts for voltmeters, ammeters etc as per specifications including powder coating painting but without busbars, switchgears and other accessories etc complete as per specification.				
	7.19.2	Above 300 mm and upto 400 mm deep	Sqm	1.00	7225.00	7225.00
9	19.23	Designing and providing suitable and approved size RCC foundation for 12-30 mere high mast including seel reinforcement form work. embedding 2 nos 50mm dia PVC pipe for cable entry in each foundation, excavation disposal of surplus soil and curing etc. as required including laying and fixing HM foundation bolts with tam plates but excluding the cost of foundation bolts with tam plates etc complete as per specification	Cum	2.00	5219.00	10438.00
		1.00x1.00x2.00=2.00 Cum.				
10	10.22	Providing and fixing following Time switch (timer) in existing panel including connection, testing and commissioning as per specification				
	10.22.1	Digital type	Each	1.00	1901.00	1901.00
11	14.2	Supplying and laying HDPE pipe of 4kg/Sqcm in ground below road. path etc at a depth not less than 40 cm and upto 90 cm including excavation, dismantling of road if required and refilling the trench with excavated material, ramming and making the surface good etc. as per specification				
	14.2.1	63 mm outer dia	Meter	50.00	124.00	6200.00
12	32.3	Providing following size IS1 marked FR PVC insulated PVC sheathed. 3 core submersible copper conductor wire and IS: 694)				
	32.3.2	2.50 sq. mm.	Meter	100.00	55.00	5500.00
13	10.13	Providing and fixing 3 pole, 415/500 volts following rating (AC-1 Duty) power contactor in existing starter/ cubical panel including. connections, testing and commissioning etc. as per specification				
	10.13.3	60 amps	Each	1.00	3261.00	3261.00
					Total	394146.00

COMM./C.M.O.

E.E./S.E

ARCHITECT NAVEEN SAHU and ASSOCIATES



ESTIMATE OF LIGHT-POLE

AT NAGAR PALIKA PARISHAD PANDARIYA DIST:- KABIR-DHAM (C.G.)

[As per S.O.R.P.W.D Building W.E.F. 01.06.2020]

[As per S.O.R.P.W.D ELECT W.E.F. 01.06.2020]

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S/NO	CSR	PURTICULARS	UNIT	RATE	QTY	AMOUNT
1	19.7	Supply of hot dipped galvanized (in single dip to minimum 75 micron) octagonal pole made of 3mm thick steel grade E-350 sheet having window and flush cover with locking arrangement at suitable height from base for cable termination block, pole suitably reinforced with welded steel section at window cut section to make the strength of pole unaffected, with following minimum specifications with 4 way terminal connector including 3mm thick anchor plate, 4 nos 20mm dia foundation bolts of EN8 grade, and as per IS 2062 & BS EN: 10025. (designed for wind speed upto 180km/hr, IS: 875 Part 3)				
	19.7.2	7 metre high, dia 130mm at bottom and 90mm at top, base plate size 220x220x12mm, foundation bolts 700mm long	Each.	10938.00	97	1060985
2	19.10	Erection of STEEL TUBULAR or "H" BEAM/ ISMB pole in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation and cement concrete collar of size 0.4 metre dia and 0.50 metre height from ground level including excavation and refilling etc. as per specification of length:				
	19.10.4	7 metre to 10 metre	Each	2610.00	97	253170.00
3	19.23/169	Designing and providing suitable RCC foundation in cement concrete 1:2:4 (1 cement:2 coarse sand:4 graded stone aggregate 20 mm nominal size) for 3 mere to 12 metre high GI octagonal pole including steel reinforcement (Minimum 90 kg per cum), form work, ebeding 2 nos 50 mm dia PVC pipe for cable entry in each foundation , excavation disposal of surplus soil and curing etc. as required.				
		97x0.60x0.60x1.20=21.168	cubm	5219.00	41.90	218696.98
4	19.9/164	Supply and fixing following street light pole bracket on existing pole made out of 50 mm dia MS "B" class pipe welded to 300 mm long MS pole canopy of suitable dia at a angle of 102.50 including having MS triangular stiffner of size 150x50x5 mm thick, making arrangement for tightening the bracket with pole by provding suitable size heavy duty nuts and bolts in camopy, painting with one coat of approved steel primer etc. as required.				
	19.9.1	Single Over Hang 0.75 metre Long	Each	963.00	97	93411.00
		Extra for Existing pole	Each	963.00	45	43335.00
5	15.1	Supplying and laying following sizes one number PVC insulated/ ELPE PVC sheathed, steel armoured, aluminium conductor power cable of 1.1 KV grade direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
	15.1.23	4 x 16 sq. mm.	Mtr	300.00	2425	727500.00
		Extra for Existing pole	Mtr	300.00	750	225000.00
6	15.23/125	Supplying and making end termination with brass compression gland and aluminium lugs for following size armoured aluminium conductor power cable of 1.1 KV grade as required				
	15.23.24/125	4 X 16 sq. mm (22 mm)	Each	101.00	97	9797.00
		Extra for Existing pole	Each	101.00	65	6565.00
7	6.28/37	Supplying, Installation, Testing and commissioning of following 230/250volts LED street light fitting with all accessories like driver, heat sink made of die cast aluminium with IP 66 protection and 5kv surge protection				

[As per S.O.R.P.W.D ELECT W.E.F. 01.06.2020]				AR NAVEEN SAHU		
S/NO	CSR	PURTICULARS	UNIT	RATE	QTY	AMOUNT
		on pole bracket complete as required and furnishing 2 year Guarantee certificate from manufacturer.				
	6.28.7	60 watt	Each	3622.00	97	351334.00
		Only Led Street Light For Existing Light Pole	Each	3622.00	65	235430.00
8	12.12/98	Supplying and laying 6SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode , including soldering, excavation and refilling the trench etc. as required.	Mtr	36.00	2813	101268.00
		Extra for Existing pole	Mtr	36.00	585	21060.00
9	12.1	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal and salt as per specification and IS Code 3043: 1987(R 2016)				
			Set	3243.00	97	314571.00
10	9.2/79	Supplying and fixing on surface following way, 240 volts SP&N MCB DB ofvsheet steel phosphatized and power painted complete with tinned copper busbar , neutral busbar, earth bar, din bar, detachable gland plate, including interconnection , earthing etc. as required . (but without MCB/RCCB/Isolator)				
	9.2.1	4 way, Single door	Each	567.00	8	4536.00
		Extra for Existing pole	Each	567.00	5	2835.00
11	9.12/82	Supplying and fixing DP MCB 240 volts 'C' curve, suitable for lighting and other lads in the existing MCB DB complete with connection s, testing and commissioning etc. as required.				
	9.12.5	63 amps	Each	643.00	8	5144.00
		Extra for Existing pole	Each	643.00	5	3215.00
12	3.11/20	Supplying and drawing following sizes of FRLS PVC Insulated copper conductor, multi strand wire in the existing surface/ concealed, FRLS PVC conduit / PVC casing caping as per specification and IS: 694 (2010)				
	3.11.12/21	2x1.5 sq. mm	Mtr	39.00	4268	166452.00
13	14.1	Supplying and laying ISI marked double wall HDPE pipe (IS 14930 Part II) having corrugation on the outer wall and plan surface on inner wall in ground below road, path etc at a depth not less than 40 cm and upto 90 cm including excavation, dismantling of road if required and refilling the trench with excavated material, ramming and making the surface good etc. as per specification.				
	14.1.1	63 mm outer dia and 50 mm Inner dia	Mtr.	184.00	2425	446200.00
					Total	4290505.98
					Say As.	4291000.00

[Rupees in Words : **FOURTY TWO LACS NINETY ONE THOUSAND ONLY**]

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