

<p align="center"> THE ODISHA STATE POLICE HOUSING & WELFARE CORPORATION LTD. JANAPATH, BHOINAGAR, BHUBANESWAR - 22 [Electrical Division] Ph: 0674-2541545, 2542921, Fax: 0674-2541543 E-mail :- pmelectricalophwc2025@gmail.com, Website: www.ophwc.com </p>					
<p align="center">PRICE BID FOR THE WORK UNDER SL. NO :- 04 AS PER IFB</p>					
<p>NAME OF THE WORK- EXECUTION OF AREA ILLUMINATION WORK, EXTERNAL ELECTRIFICATION WORK, INSTALLATION OF LIGHTNING PROTECTION SYSTEM & SOLAR P.V SYSTEM AT COB FOR C.A.P.F AT PARIGADA IN THE DISTRICT OF KANDHAMAL.</p>					
<p>BID REF NO :- 73/PM/ELECT/OPHWC/2025-26</p>					
<p>NAME & ADDRESS OF THE FIRM</p>					
<p align="center"><u>SCHEDULE OF WORKS</u></p>					
Sl. No.	Description of work	Unit	Qty.	Estimated Cost in Rs.	
				RATE IN RS.	AMOUNT IN RS.
	EXTERNAL ELECTRIFICATION WORK				
I	CONSTRUCTION OF 11 KV LINE .				
A	11 KV PIN POINTS WITH WPB				
1	WPB GI Pole160X152(11 Mtr. Long ,30.44 Kg/Mtr.)	No	1	34321.52	34321.52
2	11 KV V cross arm	No	1	1150.20	1150.20
3	GI Back clamp for 11 KV V cross Arm	No	1	113.60	113.60
4	Top Bracket 100x50x6 mm GI channel(2 Kg each)	No	1	241.40	241.40
5	Danger plate	No	1	113.60	113.60
6	Back clamp for Danger Plate 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 1 Nos=(1x0.59x0.510)	Kg	0.3	106.50	31.95
7	GI barbed wire/Anticlimbing device	No	3	113.60	340.80
8	Back clamp for Anticlimbing Device 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 4 Nos=(4x0.59x0.510)	Kg	1.2	106.50	127.80
9	11 KV Pin Insulator Polymer	No	3	284.00	852.00
10	Earthing of Support (Coil Type)	No	1	235.72	235.72
11	No. 8 GI wire (dia 4.6 mm)0.131 Kg/Mtr.-2 Mtr. For connecting pole with coil earthing	Kg	0.26	106.50	27.69
12	GI Nut , Bolt & Washer of different sizes	Kg	1.5	110.76	166.14
13	55 sq. mm AAAC	Mtr.	247.20	42.60	10530.72
14	Yellow colour paint for Background	Ltr	1	212.77	212.77
15	Black colour paint for numbering	Ltr	0.5	312.40	156.20
A	A. Sub total				48,622.11
B	B. Stock, Storage & Insurance @ 3% of A				1,458.66
C	Sub Total (C=A+B)				50,080.77
D	T&P @ 2% of C				1,001.62

E	Contingency @ 3% of C				1,502.42
F	Transportation @ 7.5% of C				3,756.06
	Erection Charges @ 5% on poles				1,767.56
G	Erection Charges @ 10%				1,472.96
H	Total				59,581.39
16	Concreting Ratio 1:1:5:3(500 mmx500mmx1800 mm)=0.45 Cu. Mtr.	No.	1	2991.98	2991.98
17	Couping Ratio 1:1:5:3(500 mmx500mmx450 mm)=0.1125 Cu. Mtr.	No.	1	748.00	748.00
18	Survey of incremental/delta network	Km	0.08	9633.00	770.64
	Total Material + Services Cost (J+K)				64,092.01
B	11 KV NEW TAPPING POLE				
1	WPB GI Pole160X152(11 Mtr. Long ,30.44 Kg/Mtr.)	No	1	34321.52	34321.52
2	100X50X5 mm Channel for Straight cross arm	Kg	28.68	106.50	3054.42
3	11 KV V cross arm	No	1	1150.20	1150.20
4	GI Back clamp for 11 KV V cross Arm	No	1	113.60	113.60
5	11 KV F clamp	No	1	340.80	340.80
6	11 KV Disc insulator polymer type 45 KN	No	3	1221.20	3663.60
7	11 KV H/W fitting polymer type	Pair	3	184.60	553.80
8	11 KV Pin Insulator Polymer	No	5	284.00	1420.00
9	Earthing of Support (Coil Type)	No	1	235.72	235.72
10	No. 8 GI wire (dia 4.6 mm)0.131 Kg/Mtr.-2 Mtr. For connecting pole with coil earthing	Kg	0.26	106.50	27.69
11	GI Nut , Bolt & Washer of different sizes	Kg	3.75	110.76	415.35
12	Fish Plate 50x8 mm ,2.36 Kg/Mtr.,each 0.280 Mtr., 6 nos. required	Kg	1.086	106.50	115.66
13	GI barbed wire/Anticlimbing device	No	3	113.60	340.80
14	Back clamp for Anticlimbing Device 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 4 Nos=(4x0.59x0.510)	Kg	1.224	106.50	130.36
15	Danger plate	No	1	113.60	113.60
16	Back clamp for Danger Plate 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 1 Nos=(1x0.59x0.510)	Kg	0.306	106.50	32.59
17	Saundries	Set	1.00	500.00	500.00
18	Yellow colour paint for Background	Ltr	2	212.77	425.54
19	Black colour paint for numbering	Ltr	1	312.40	312.40
A	A. Sub total				47,267.64
B	B. Stock, Storage & Insurance @ 3% of A				1,418.03
C	Sub Total (C=A+B)				48,685.67
D	T&P @ 2% of C				973.71
E	Contingency @ 3% of C				1,460.57
F	Transportation @ 7.5% of C				3,651.43
	Erection Charges @ 5% on poles				1,767.56

G	Erection Charges @ 10%				1,333.45
H	Total				57,872.39
20	Concreting Ratio 1:1:5:3(500 mmx500mmx1500 mm)	No.	1	2493.32	2493.32
21	Couping Ratio 1:1:5:3(500 mmx500mmx450 mm)=0.1125 Cu. Mtr.	No.	1	748.00	748.00
	Total Material + Services Cost (J+K)				61,113.71
C	11 KV LINE PROTECTING GUARDING FOR ROAD CROSSING-1 SPAN				
1	Guarding Channel 75X40X4.8 mm, 7.14 KG/Mtr., each channel length 2.2 mtr., 4 no's channel required =(4x7.14x1.2)	Kg	62.832	106.50	6691.61
2	No-8 GI wire (0.192 Kg/Mtr.)for main string	Kg	38.4	106.50	4089.60
3	No-10 GI wire (0.131 Kg/mtr.)for lacing	Kg	5	106.50	532.50
4	Eye Bolt(236 mm,16 mm dia,1.577 Kg/mtr.)	No	4	85.20	340.80
5	GI Pipe earthing 40 mm dia 3 Mtr. Long	No	2	1491.00	2982.00
6	50x6mm GI Flat for earthing, 2.36kg/mtr.	Kg	50.504	106.50	5378.68
7	GI Nut , Bolt & Washer of different sizes (7.433 Kg each cut pole)	Kg	0.75	110.76	83.07
8	H.T. Stay clamp, 50x8 mm. Flat(GI), 3.14Kg/Mtr., 0.551 Mtr. Length, 2 no's qty. required (1 Pair)	No.	2	177.50	355.00
9	H.T. Stay set (Complete)	Set	2	1491.00	2982.00
10	H.T. Stay Insulator Type-C	No.	2	71.00	142.00
11	7/10 SWG Stay Wire 15kg /stay	Kg	20	106.50	2130.00
12	Sundries	Set	1	500.00	500.00
A	TOTAL MATERIAL COST (FOR-2020-21)				26,207.25
B	Stock, Storage & Insurance @ 3% of A				786.22
C	Sub Total (C=A+B)				26,993.47
D	Contingency @3% of C				809.80
E	T & P 2% of C				539.87
F	Transportation @ 7.5% of C				2,024.51
G	Erection Charges for PSC Pole @ 20%				
H	Erection Charges of DTR and Joist Poles @ 5%				
I	Erection Charges of other @ 10%				2,392.20
J	Sub Total Rs.				32,759.86
13	Construction of earthing chamber including installation of earthing pipe.Making earthing chamber including excavation, soil treatment with betonide powder, calculation of earth resistance,including installation of 3 Mtr. GI Pipe 40/50 mm including welding of GI flat around pipe.	No	2	3784.73	7,569.46

14	Stay concreting in Ratio 1:2:4	No	2	1330.00	2,660.00
	Total Rs.				42,989.32
II	INSTALLATION OF 63 KVA S/S.				
1	63 KVA , 11/0.4 KV(AL) Transformer BIS Energy Level-II	No	1	140470.99	140470.99
2	WPB GI Pole160X152(11 Mtr. Long ,30.44 Kg/Mtr.)	No.	2	34321.52	68643.04
3	GI Channel 100x50x6 mm	Kg	107.072	106.50	11403.17
4	GI channel 75x40x4.5 mm	Kg	123.244	106.50	13125.49
5	GI angle 50x50x6 mm,4.5 Kg/Mtr.	Kg	36.638	106.50	3901.95
6	Braking support channel	Kg	1.57	106.50	167.21
7	Fish Plate 50x8 mm ,2.36 Kg/Mtr.,each 0.280 Mtr., 6 nos. required	Kg	5.275	106.50	561.79
8	Danger plate	Kg	2	113.60	227.20
9	Back clamp for Danger Plate 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 1 Nos=(1x0.59x0.510)	Kg	0.6018	106.50	64.09
10	GI barbed wire/Anticlimbing device	No	6	113.60	681.60
11	Back clamp for Anticlimbing Device 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 4 Nos=(4x0.59x0.510)	Kg	2.4072	106.50	256.37
12	11 KV LA (9 KV,10 KA, DH Class	No	3	1260.00	3780.00
13	11 KV AB switch (200 Amp, 3 pole)	Set	1	10437.00	10437.00
14	11 KV HG Fuse (200 Amp, 3 pole)	Set	1	8690.00	8690.00
15	LT Distrubution Box with MCCB, Aluminim Busbar for 63 KVA S/S.	No	1	32581.36	32581.36
16	11 KV Pin Insulator polymer type	No	3	284.00	852.00
17	Earthing of support Coil Type	No	2	235.72	471.44
18	No. 8 GI wire (dia 4.6 mm)0.131 Kg/Mtr.-2 Mtr. For connecting pole with coil earthing	Kg	0.262	106.50	27.90
19	HT Stay Set (Complete)	Set	2	1491.00	2982.00
20	HT Stay Insulator	No.	2	177.50	355.00
21	HT Stay Clamp(1.95 K.g/Pair)	Pair	2	71.60	143.20
22	7/10 SWG Stay Wire	KG	20	106.50	2130.00
23	1.1 KV Al 1Cx 95 sq. mm Un-armoured Cable	Mtr	20	96.16	1923.20
24	Gland for 1.1 KV AL 1Cx95 sq. mm	No.	4	230.00	920.00
25	Lug AL crimping 95 sq. mm XLPE single Hole	No	8	28.40	227.20
26	11 KV Disc insulator polymer type 45 KN	No	3	1221.20	3663.60
27	11 KV H/W fitting polymer type	Pair	3	184.60	553.80
28	Clamp PG Conductor Rabbit ACSR 55 sq. mm	No.	3	681.60	2044.80
29	55 SQ. mm ACSR Conductor PVC Insulated	Mtr.	20	41.50	830.00
30	GI Nut, Bolt & washers of different sizes	Kg	25	110.76	2769.00
31	GI Pipe for earthing 40mm dia 3mtr long	No	7	1491.00	10437.00
32	GI Flat 25x6 mm	Kg	78.523	106.50	8362.70
33	Yellow colour paint for Background	Ltr	2	212.77	425.54
34	Black colour paint for numbering	Ltr	1	312.40	312.40
35	Sundries	Set	1	500.00	500.00
A	TOTAL MATERIAL COST (FOR-2020-21)				334,922.02

B	Stock, Storage & Insurance @ 3% of A				10,047.66
C	Sub Total (C=A+B)				344,969.69
D	Contingency @3% of C				10,349.09
E	T & P 2% of C				6,899.38
F	Transportation @ 7.5% of C				25,872.73
G	Erection Charges for PSC Pole @ 20%				
H	Erection Charges of DTR and Joist Poles @ 5%				10,769.37
I	Erection Charges of other @ 10%				11,883.14
J	Sub Total Rs.				410,743.39
36	Concreting Ratio 1:1:5:3(500 mmx500mmx2200 mm)	No.	2	2991.98	5,983.96
37	Couping Ratio 1:1:5:3 with dimension(500 mmx500mmx450 mm)=0.1125 Cu. Mtr.	No.	2	748.00	1,496.00
38	Stay concreting in Ratio 1:2:4	No.	2	1330.00	2,660.00
39	Construction of earthing chamber including installation of earthing pipe.Making earthing chamber including excavation, soil treatment with betonide powder, calculation of earth resistance,including installation of 3 Mtr. GI Pipe 40/50 mm including welding of GI flat around pipe.	No	7	3784.73	26,493.11
40	Brick Boundary wall Fencing 3Mx3M	Mtr.	12	7300.08	87,600.96
41	survey and Digitalisation of New DSS	No.	1	6883	6,883.00
	Total Rs.				541,860.42
	Total Rs.				710,055.46
III	LT LINE-1.250 Km(3x50+1x35+1x16) sq. mm AB Cable				
1	9 Mtr. Long 116X100 MM RS Joist Pole(23 Kg/Mtr.)	No	42	19106.10	802456.20
2	3x50+1x35+1x16 sqmm AB Cable	Km	1.25	198800.00	248500.00
3	Danger Board	No.	42	113.60	4771.20
4	Anticlimbing Device(GI barbed wire 3 Kg per support)	Kg	126	113.60	14313.60
5	Pole clamp for eye Hook for AB cable	Pair	39	284.00	11076.00
6	Suspension clamp with I Hook for ABC	No.	21	482.80	10138.80
7	Eye hook for AB Dead End cable	No.	18	85.20	1533.66
8	Dead end clamp suitable for XLPE cable	No	18	92.30	1661.34
9	GI Pipe earthing	No	8	1491.00	11928.00
10	L.T Stay set (Complete)	Set	9	738.40	6645.60
11	L.T Stay Insulator	No.	9	42.60	383.40
12	L.T Stay Clamp(1.4 K.g/Pair)	Pair	9	156.20	1405.80
13	7/12 SWG Stay Wire	Kg	108	106.50	11502.00
14	Coil earthing	No	36	235.72	8485.92
15	GI Nuts and Bolts of assorted size	Kg	20	110.76	2215.20
16	Sundries	Ls	1	2000.00	2000.00
A	TOTAL MATERIAL COST (FOR-2020-21)				1,139,016.72
B	Stock, Storage & Insurance @ 3% of A				34,170.50
C	Sub Total (C=A+B)				1,173,187.22
D	Contingency @3% of C				35,195.62
E	T & P 2% of C				21,703.82
F	Transportation @ 7.5% of C				87,989.04
G	Erection Charges for PSC Pole @ 20%				

H	Erection Charges of DTR and Joist Poles @ 5%				41,326.49
I	Erection Charges of other @ 10%				31,383.66
J	Sub Total Rs.				1,390,785.85
17	Couping of poles in ratio 1:1:5:3, 0.1125 cum @6400	Nos.	1	748.00	748.00
18	Concreting of poles	Nos.	1	2493.32	2493.32
	Total Rs.				1394027.17
	Sub Total Rs.(PART-A)				2,104,082.63
PART-B	AREA ILLUMINATION WORK				
1	40001030 Supply and laying of 16 sq.mm 2 core PVC Al. Arm Cable of 1.1 KV grade ISI Marked direct in ground including excavation , sand cushioning , protective covering and refilling the trench etc. as required. (sl no- 5.1.1)(Make Cable- Finolex/ Havells/Polycab/KEI)	Mtr.	100	₹ 288.46	₹ 28,846.00
2	40001126 providing and fixing 8 SWG(4mm)dia copper wire on surface or in recess for loop earthing as required (sl no-3.18)	Kg	60	₹ 31.88	₹ 1,912.80
3	40002124 Supply & fixing of outdoor/indoor type 63A DPMCB panel having I/C-63 A DPMCB-01 No & 63 Amp 2P Change Over/rotary switch ,Outgoing - 02 Nos 32 Amp DPMCB & 02 nos 32 A DP switch with powder coating all accessories & connectionMake a)MCB/MCCB- legrand/schneider/abb/,L&T/Anchor/Panasonic (b)Voltmeter/Ametre-AE/CAPPA	NO	2	₹ 20,125.00	₹ 40,250.00
4	40002201 Supply & fixing of 200x150mmx60mm(nominal) size pvc(SINTEX) looping end box with hinged cover having one no.20 amp rating moulded fuse base &holder, 4amp NS type fuse and 4way connector to be used in the bottom of street light pole for cable termination as per electrical engg -in - charge and consoltant and complite as per electrical engg -in -charge and consultation	NO	50	₹ 1,100.00	₹ 55,000.00
5	40002239 Supply and laying of 2.5Sqmm 3 Core Cupper Cable 20 mm dia non-metalic heavy duty flexible conduit 1.6 mm thick (Make of wire Finolex/L &T/Anchor/Havels/V Guard)	Mtr.	250	₹ 89.66	₹ 22,415.00
6	40008291 Supply and fixing of Earthing with GI earth pipe 3 meter long 40 mm dia Heavy Duty TATA make including accessories and providing masonary enclosure with cover plate having locking arrangement and water pipe etc with charcoal and salt as required.(Minimum 1.5 mtr distance from building & 3 mtr distance from earthing to earthing)	NO	2	₹ 3,757.95	₹ 7,515.90

7	40008405 Supply & fixing of 90 Wt. LED Street light fitting comprises of Pressure die cast Aluminium housing powder coated in silver grey and toughened glass, Surge Arrester 1 No & 100lum/wt, Protection IP66 having LM 79 LM 80 tested including bulb,choke,cover,G.I bracket,clamp & nut bolt connecting wire with all accessories . (Make-CROMPTON(MODEL NO-TRP-412-90-57-SL-LM-NSG)/PHILIPS(MODEL NO-BRP033 LED90S 90W 9000LM)/WIPRO(MODEL NO-LR08-102-XXX-57-XX)	NO	20	₹ 7,574.77	₹ 151,495.40
8	40008415 Supply & fixing of 120 Wt. LED FLOOD light fitting comprises of Pressure die cast Aluminium housing powder coated in silver grey and toughened glass, Surge Arrester 1 No & 100lum/wt, Protection IP66 having LM 79 LM 80 tested including bulb,choke,cover,G.I bracket,clamp & nut bolt connecting wire with all accessories and as per instruction of Electrical Engineer-in-charge . (Make-CROMPTON(MODEL NO-TFS-504-120-57-60D-SL-GL-NSG/PHILIPS(MODEL NO-BVP142 LED100S 110W 11000)/WIPRO(MODEL NO-LF40-132-060-57-XX)	MTR	30	₹ 11,065.37	₹ 331,961.10
9	40012515 Supply, erection & stringing of 1-phase 2-wire L.T line with (1X35 + 1 x25) mm ² AB cable over 8mtr long PSC Pole along the road. (30 Mtr Span).	MTR	400	₹ 322.75	₹ 129,100.00
	Sub Total Rs.(PART-B)				₹ 768,496.20
PART-C	LIGHTNING PROTECTION SYSTEM				
1	Air-Terminal Supply, Installation, Testing & Commissioning of Early Streamer Emission (ESE-30))type Lightning Air Terminal. Supporting Mast The mounting pole used to support the lightning air terminal shall be minimum length of 05 Mtr. , non corrosive and made up of medium class GI / SS pipe of 1.5" diameter having base plate at bottom for securely fixing the mast on roof top. The mounting pole and supports shall be securely fixed with the brackets and PVC insulated metallic guy wires to withstand the maximum wind velocity of that area. Protection Radius :- 48 Mtr Make :- ABB / STROMKING All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge.	NO	2	₹ 99,250.00	₹ 198,500.00

2	<u>Lightning Strike Counter</u> Supply, Installation, Testing & Commissioning of non-electronic & non-resettable (Not require any external power supply) type lightning strike counter to count the lightning stroke having display with IP-67 enclosure including all accessories and connection..(6/7 digit)	No	2	₹ 27,250.00	₹ 54,500.00
3	40002095 Supply, Installation, Testing & Commissioning of maintenance free chemical earthing having enhancing chemical compound with 3 Mtr. Long copper bonded steel rod and suitable termination clamp including all accessories. Make :- ABB / STAR-X / UNIVERSAL All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge.	NO	5	₹ 16,650.00	₹ 83,250.00
4	40002098 Supply, connection & Testing of sub earthing with 16 Sq.mm single core multi stranded copper flexible wire from surge protection device (SPD) panel to earth electrode & Main panel board to SPD panel including all accessories, cable socketing and connections. Make :- FINOLEX / ANCHOR / HAVELLS All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge	MTR	18	₹ 154.73	₹ 2,785.14
5	40002101 Supply, Installation, Testing & Commissioning of indoor type wall mounted Surge protection device (SPD) panel made of 2 mm thick CRCA sheet, dust and vermin proof duly powder coated having the following arrangement & complete factory wired by 16 Sq.mm single core multi stranded copper flexible wire. [A] Type 1+2 AC Surge Protection Device (SPD) (TP+N) (50 KA) - 01 Set [B] 63 Amp. HRC fuse with link – 03 Nos [C] 100 Amp. 4 pole stud connector – 01 No Make of SPD & HRC Fuse :- HAVELLS / L&T / LEGRAND Make of Wire :- FINOLEX / ANCHOR / HAVELLS All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge.	NO	1	₹ 18,665.00	₹ 18,665.00
6	40002720 Supply and laying of 70sqmm single core FR PVC insulated unseathed copper conductor for voltage grade 1100 volt as per IS-694 in sur face/underground as required(sl no-5.5.2)(Make-KEI/FINOLEX/HAVELLS)	MTR	60	₹ 1,071.33	₹ 64,279.80

7	40003593 Supply & Erection of 12 mtr long Heavy gauge Tata MS stepped pole(6mtrx4inch and 6 mtr x 4 inch) with 2ft x2ft x 10mm MS Base plate and 30 cm x 30cm x6mm MS Top plate including fabrication,painting with 1 coat red oxide and 2 coat aluminium paint/12 mtr long heavy gauge G.I stepped pole with 4nos complete stay set for support of pole coupling and conercting along with all accessories complete as required and as per electrical engineer-in-Charge. Ground Floor	SET	2	₹ 44,714.99	₹ 89,429.98
	Sub Total Rs.(PART-C)				₹ 511,409.92
PART-D	SOLAR PV SYSTEM				
1	Design, Supply, Installation, Testing, Commissioning and Comprehensive Maintance Contract for a period of 05 (five) years of 1KWp Off-Grid Solar PV Systems (Roof Top / Ground Mounted) with 06 Hrs power backup of 12.8V-30AH LI Battery.	KW	8	₹ 86,000.00	₹ 688,000.00
	Sub Total Rs.(PART-D)				₹ 688,000.00
	Sub Total Rs.(PART-A+PART-B+PART-C+PART-D)				₹ 4,071,988.75
	Cess @ 1%				₹ 40,719.89
	Total Estimated Cost				4112708.64
	Total Estimated Cost in Figures				4112709.00
EXCESS	<input type="checkbox"/> LESS <input type="checkbox"/> (Please Tick)	In Figure _____ % In word _____ %			
Quoted Amount in Figure					
Quoted Amount in word					

N:B- The Estimated cost is exclusive of GST .

Signature of Tenderer with seal

Sd/-
Asst. Project Manager (Elect)

Sd/-
Dy. Manager (Elect)

Sd/-
Project Manager (Elect)