## THE ODISHA STATE POLICE HOUSING & WELFARE CORPORATION LTD. JANAPATH, BHOINAGAR, BHUBANESWAR - 22

[Electrical Division]

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## PRICE BID FOR THE WORK UNDER SL. NO:- 09 AS PER IFB

NAME OF THE WORK :- EXTERNAL ELECTRIFICATION WORK FOR POWER SUPPLY TO 10-E TYPE QUARTERS AT RESERVE OFFICE, PURI IN THE DISTRICT OF PURI.

## BID REF NO :- 67/PM/ELECT/OPHWC/2024-25

NAME & ADDRESS OF THE FIRM

## **SCHEDULE OF WORKS**

Sl. No.	Description of work	Unit	Qty.	Estimated Cost in Rs.		
				RATE IN RS.	AMOUNT IN RS.	
I	Construction of LT Line using 4x50+1x50+1X16 sq	. mm LT	AB Cable-	-0.15 Km.		
1	9 Mtr Long 300 KG PSC Pole	No	5	4080.00	20,400.00	
2	LT stay set complete	Set	2	707.20	1,414.40	
3	7/12 SWG GI stay wire, Grade-2	Kg	24	102.00	2,448.00	
4	LT stay clamp	Pair	2	149.60	299.20	
5	LT stay set Insulator	No	2	40.80	81.60	
	LT Accessories with Eye Hook and Clamp					
6	Pole Clamp for Eye Hook for XLPE Areial bunched cable	Pair	6	272.00	1,632.00	
7	Eye Hook for XLPE Areial Bunched Cable	No	4	81.60	326.4	
8	Dead End Clamp suitable for messenger XLPE Aerial Bunch Cable (25x70 sqmm)	No	4	88.40	353.6	
9	Suspension clamp with Eye Hook for ABC (25-70 sqmm)	No	2	462.40	924.8	
10	4 Cx50(P)+1Cx50(M)+1CX16 Street Light)sq. mm LT Aerial Bunched Cable	Mtr	157.5	214.00	33,705.0	
12	Insulated Piercing connector ,Type-A main 50-150 sq. mm & Tap-50 to 150 sq. mm	No	2	113.08	226.1	
13	GI Pipe for earthing (each 5th pole to earth)	EA	1	1428.00	1,428.0	
14	Coil Earthing	No	4	225.76	903.0	
15	No-8 GI wire (Dia-4.6mm)	Kg	1.31	102.00	133.6	
16	Danger plate (LT)	No	5	108.80	544.0	
17	Back clamp for Danger Plate 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 1 Nos=(1x0.59x0.510)	Kg	1.5	102	153.00	
18	GI barbed wire/Anticlimbing device 3 kg per support	Kg	15	108.8	1632.00	
19	Back clamp for Anticlimbing Device 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 4 Nos=(4x0.59x0.510)	Kg	6.018	102	613.84	

5	Bunch Cable	No	2	88.40	176.80
4	Eye Hook for XLPE Areial Bunched Cable  Dead End Clamp suitable for messenger XLPE Aerial	No	2	81.60	163.20
3	cable	Pair	2	272.00	544.00
	Pole Clamp for Eye Hook for XLPE Areial bunched				
2	WPB GI Pole160X152(11 Mtr. Long ,30.44 Kg/Mtr.)  9 Mtr Long 300 KG PSC Pole	No No	2	34153.68 4080.00	68307.30 4,080.00
II	INSTALLATION OF 100 KVA S/S.			24472.60	60207.2
		Total Ma	aterial + Ser	vices Cost (J+K)	1,11,402.93
K			To	tal Services Cost	20,854.38
25	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	1	3784.73	3,784.73
24	Concreting Ratio 1:1:5:3(M-20 Grade)(500 mmx500mmx1500 mm)=0.375 Cu. Mtr.	Cu.Mtr	1.875	6648.85	12,466.59
23	Fixing of LT complete stay set includes(1) Turn Buckle assembly(2)Stay Rod & stay Plate(3)Stay Insulator(4)Stay Wire(5)stay Clamps with Nuts & Bolts,including excavation supply of 0.5 cum cement concrete foundation 1:2:4 size(500x500x800mm)using 20 mm BHG metal with all Labour and material(Excavation of earth will be done of size500x500x1500mm)	No	2	2301.53	4603.06
	Civil and Services Works (As per	Technical	Specification	)	
J				Sub Total Rs.	90,548.55
I				es of other @ 10%	4,592.12
H				Joist Poles @ 5%	, -
G		Erection		PSC Pole @ 20%	4,202.40
<u>E</u> F	<u> </u>		Transports	ation @ 7.5% of C	5,458.0
<u> </u>			Conti	T & P 2% of C	2,183.22 1,338.66
C D				ub Total (C=A+B) ngency @3% of C	72,774.09
В		Stock, St		urance @ 3% of A	2,119.63
<u>A</u>		G: 1 G		IATERIAL COST	70,654.4
22	Black paint	Ltr	5	299.20	1,496.0
21	Yellow colour paint for Background	Ltr	10	167.46	1,674.60

7	Top channel GI 100x50x6 mm 3000 mm Long(9.56 kg/Mtr.,2 Nos.)	Kg	57.36	102.00	5850.72
8	Fish Plate 50x6 mm ,2.36 Kg/Mtr.,each 0.280 Mtr., 6 nos. required	Kg	3.9648	102.00	404.41
9	MU Channel 75X40X 4.8mm.,3000 mm Long, 7.14KG/Mtr., 2 Nos.	Kg	42.84	102.00	4369.68
10	AB switch mounting channel 75x40x4.8 mm GI channel, 3000 mm Long (7.14 kg/mtr,2 Nos.)	Kg	42.84	102.00	4369.68
11	AB witch side support channel 100x50x6 mm GI channel (0.35Mtr Long)(9.56 kg/mtr,2 Nos.)	Kg	6.69	102.00	682.38
12	Channel support for down pipe 75x40x4.8 mm GI channel (7.14 kg/mtr,2 Nos.)each channel length 0.8 Mtr.	Kg	5.711	102.00	582.52
13	HG/DO fuse Mounting channel 75x40x4.8 mm GI channel (3000 mm Long ) (7.14 kg/mtr,2 Nos.)	Kg	42.84	102.00	4369.68
14	Cantilever suport channel75x40x4.8 mm GI channel(810 mm Long,2 Nos.)(7.14 kg/mtr,2 Nos.)	Kg	11.57	102.00	1180.14
15	Cantilever suport angle 50x50x6 mm GI (1282 mm Long)(4.5 kg/mtr,2 Nos.)	Kg	11.54	102.00	1177.08
16	Double Pole Belting GI channel 75x40x4.8 mm (3000 mm Long,2 Nos.)(7.14 kg/mtr)	Kg	42.84	102.00	4369.68
17	50x50x6 mm GI Bracing Angle(3.512 Mtr. Long, 2 Nos.)(4.5 kg/mtr,2 Nos.)	Kg	31.61	102.00	3224.22
18	50x6mm GI Flat for earthing, 2.36kg/mtr., (12.5 Mtr. For L.A, 3 Mtr for AB Switch Body, 2.5 mtr. For mesh formation and 2.5 mtr. For raising)= 20.5x2.36	Kg	154.81	102.00	15790.62
19	100 KVA , 11/0.4 KV (AL) Transformer BIS Energy Level-II	No	1	193901.46	193901.46
20	LT Distrubution Box with MCCB, Aluminim Busbar of 2 Bay with kit kat Fuse for 100 KVA S/S.	No	1	33209.84	33209.84
21	55 sq. mm All Alloy conductor-PVC insulated	Mtr	50	55.24	2762.00
22	4Cx150 sq. mm LT XLPE cable	Mtr	15	803.39	12050.85
23	4Cx150 sq. mm LT XLPE cable-from LTDB to Pole	Mtr	40	803.39	32135.60
24	11 KV AB switch (200 Amp, 3 pole)	Set	1	9996.00	9996.00
25	11 KV HG Fuse (200 Amp, 3 pole)	Set	1	8323.20	8323.20
26	Wedge connector for 55 sq. mm conductor	EA	6	146.20	877.20
27	Polycarbonate Bird Guard	EA N.	6	20.96	125.76
28	11 KV Disc insulator polymer type 70 KN	No	3	1564.00	4692.00
29	11 KV I A (12KV 10 KA) station class 2	Pair No.	3	476.00	1428.00
30	11 KV LA (12KV,10 KA)station class-2	No	3	4828.00 272.00	14484.00
31	11 KV Pin Insulator polymer type HT Stay Set (Complete)	No Set	3 2		816.00
32	HT Stay Set (Complete) HT Stay Insulator	Set No.	2	1428.00 68.00	2856.00 136.00
33	·			170.00	340.00
	HT Stay Clamp(1.95 K.g/Pair) 7/10 SWG Stay Wire	Pair VG	2	102.00	340.00
35	GI Pipe for earthing 40mm dia 3mtr long	KG No	30	1428.00	9996.00
36	GI Pipe for eartning 40mm dia 3mtr long GI Nut, Bolt & washers of different sizes	No Ka		106.08	2652.00
38	GI Nut, Boit & wasners of different sizes  GI barbed wire/Anticlimbing device	Kg No	25	108.80	652.80
30		INU		100.00	032.80
39	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	102.00	245.53
40	Danger plate	Kg	2	108.80	217.60

41	Back clamp for Danger Plate 25x3 mm, flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 1 Nos=(1x0.59x0.510)		0.6040	400.00	
42	, , , , , , , , , , , , , , , , , , ,	Kg	0.6018	102.00	61.38
42	Name Plate	No	1	108.80	108.80
43	Structure Numbering and marking Yellow colour paint for Background	Ltr	2	167.46	334.92
43	Black colour paint for numbering	Ltr	1	299.20	
A	Black colour paint for humbering	Lu	1	A. Sub total	299.20
		D Stools St	torago & Inci	urance @ 3% of A	4,57,589.16
<u>в</u>		D. Stock, St		ub Total (C=A+B)	4,71,316.83
				T&P @ 2% of C	8,178.51
<u>B</u>			Cont	igency @ 3% of C	14,139.51
<u>E</u> 				ation @ 7.5% of C	35,348.76
<u> </u>	F	4 1			35,348.70
G	Erection Charges @ 5% for transformer and joist pole	e cost includ	iing stock, st	@3%	13,503.75
Н		Erection	Charges @	20% on PSC Poles	840.48
I	Ero	ection Char	ges @ 10% f	or other materials	13,464.79
J				Total	5,56,792.63
45	Concreting Ratio 1:1:5:3(M-20 Grade)(500 mmx500mmx1800 mm)=0.45 Cu. Mtr.	Cu. Mtr	0.9	6648.85	5,983.97
46	Couping Ratio 1:1:5:3(M-20 Grade) with dimension(500 mmx500mmx450 mm)=0.1125 Cu. Mtr.	Cu. Mtr	0.226	6648.85	1,502.64
47	PCC ratio 1:3:6(M-10 Grade) For DSS Area (3.5X1.5X0.1)= 0.525 Cu. mtr.	Cu. Mtr	0.525	5247.48	2,754.93
48	Fixing of stay set with 0.5 cum cement concret foundation 1:3:6 size (M-10 Grade)(900x 600x900 mm) using 40 mm BHG metal with all labour and material except stay wire, stay set, stay insulator.	No	2	2301.53	4,603.06
49	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
50	DTR Plinth	No	1	28000.00	28,000.00
51	Laying of 4Cx150 sq.mm LT XLPE cable	Mtr.	55	73.65	4,050.75
52	Supply and Erection of GI fencing with Gate	Sq. Mtr.	16	3682.44	58,919.04
53	Supply and erection of GI Pipe of dia. 150mm, Class-B (8Mtr.)	Mtr.	16	1496.91	23,950.56
54	Concreting ratio 1:1.5:3(M-20 Grade) (500mmX500mmX1500mm) = 0.375Cu.mtr(Per Pole) (For PSC Pole)	Cu. Mtr	0.375	6648.85	2,493.32

1.4	inside open trench.  Sub Total (Erection Port				79,365.48
1.4		14141.			21,2210
	Laying of <b>160 mm dia</b> PE 80-PN8, <b>HDPE pipe</b>	Mtr.	168.00	306.87	51,554.16
1.3	Erection of Outdoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 95sqmm, aluminium UG cable kits for 3core (set)	Set	4	1,944.33	7,777.32
1.1	Laying, Commissioning, Testing of 11kV, 3core, 95sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable by open trench method.	Mtr.	200.00	100.17	20,034.00
1	Laying, Commissioning, Testing of 11kV, 3core, 95sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable by open trench method and HDD method				
Sl. No.	Description of items	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)
Erection P	ortion				
	Sub Total (Supply Portion	on) (in Rs	i.)		3,75,418.56
	diameter (for 95 sqmm HT cable laying)				, , ,
1.4	cable for 3Core (Set) Supply of <b>HDPE</b> PE 80-PN8 pipe of <b>160 mm</b>	Mtr.	168.00	667.00	1,12,056.00
1.2	Supply of Outdoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 95 sqmm, HT UG	Set	4	14,890.64	59,562.56
1.1	Supply of 11kV, 3Core, 95sqmm, XLPE insulation armoured UG cable (SC rating of cable in kA- 9kA and SC rating of Armour in kA- 9kA)	Mtr.	200.00	1,019.00	2,03,800.00
a	Length of 11kV 3C, 95sqmm cable (open trench)	Mtr.	100		
1	Supply of materials for 11kV, 3Core, 95sqmm, XLPE insulation armoured UG cable with accessories				
Supply Por	rtion				
PART-C-(	Construction of 11 kv line using 3Cx95 sq. mm XLPE	U/G cabl	le of Length 1	100 Mtr .	
				Sub total Rs	7,22,061.83
					1,65,269.20
56	Supply and erection of double Compression Flameproof Type Glanding for armored Cable 3.5/4C 120-185 sqmm including making hole in Base plate and dressing of cable along with vermin proofing properly .Supply to be done as per TPCODL Spec and approved make dowells.	EA	3	920.61	2,761.83
	Fixing/connecting include supply and erection of PVC Tape as per voltage requirement.				
55	Supply of AL Lugs suitable for 150 sq mm cable/conductor, Crimping with cable and	EA	24	156.50	3,756.00

Civil Portio	)n						
Sl. No.	Description of items	Unit	Quantity	Rate (in Rs.)	Amount (in Rs.)		
1	Civil works with supply of all materials like cement, MS tor rod, brick, coarse & fine aggregates and labour, T&P, etc for UG Cable Trench						
1.1	Earth work excavation of soil (1mtr. width X 1mtr. depth) Route Length	Mtr	84				
1.1.a	Earth work excavation of soil	Cum	58.8	716.03	42,102.56		
1.1.b	Earth work excavation of hard rock	Cum	25.2	1,759.39	44,336.63		
1.2	Back filling with excavated soil outside and above the trench	Cum	84	204.58	17,184.72		
1.3	Damage of asphalt/tar Road and other utilities and reconstructing to bring to its original shape after laying of cable in open trench (1 Mtr. Width)	Km	0.084	38,74,084.29	3,25,423.08		
2	Civil works for Prefabricated RCC foundation with supply of all materials						
2.1	Supply and erection of GI Pipe of dia. 150mm, Class-B (8Mtr.)	Mtr	32	1,496.91	47,901.12		
2.2	Supply and Erection of Cable Route Marker along the cable route at an interval of 30mtrs with civil works	Nos.	3	1,035.17	3,105.51		
	Sub Total (Civil Portio	n) (in Rs.)			4,80,053.62		
A	Sub Total (Supply Portion)				3,75,418.56		
<u>В</u>	Stock, Storage & Insurance @ 3 % of A				11,262.56		
$\frac{D}{C}$	Sub Total (A+B)				3,86,681.12		
D	Contingency @ 3 % of C				11,600.43		
E	Tools & Plants Charges @ 2% of C (considered for ea	rthing item	ns)		11,000.13		
F	Transportation @, 7.5% of C				29,001.08		
G	Erection Charges @ 10% of earthing items				,		
Н	Total (C+D+E+F+G)				4,27,282.63		
I	Sub Total (Erection Portion + Civil Portion)				5,59,419.10		
J	Total Cost (H+I)						
PART-IV	Total Cost (H+I)  Supply and Laying of 1.1 KV LT U/G Cable using 4 C x 150 Sq. mm of length 120 Mtr.						
1	Supply of materials for 1.1 KV XLPE insulation armoured UG cablele with accessories-Open trench (along with spare cable)						
A	Length of 1.1 KV, 4C, 150 sq. mm XLPE insulation armoured-Aluminium UG Cable(open trench)	Mtr.	250				
1.1	4 core 150 sq. mm XLPE insulation armoured - Aluminium UG Cable	Mtr	240	803.39	1,92,813.60		

1.4	Supply of <b>HDPE</b> PE 80-PN8 pipe of <b>110 mm</b> diameter (for 150 sqmm HT cable laying)	Mtr.	240	306.00	73,440.00
2	supply of 1.1 KV Multimeter Panel				
a	No. of 1.1 KV I/C -160 A & 20 Nos. of O/G 32 A	No	1		
2.1	Supply of 1.1 KV I/C-160 A & 20 Nos. of O/G 32A	No	3	207000.00	6,21,000.00
3	Earthing of Multimeter Panel				
3.1	Earthing conductor 50x6mm (2.4 Kg/Mtr.)GI flat for equipment ,structure etc.)	Kg	39.6	102.00	4,039.20
3.2	40 mm Nominal bore GI pipe (medium gauge) earthing device with 3 Mtr. Long	Nos	6	1428.00	8,568.00
A				A. Sub total	8,99,860.80
	Erection Portion				
1	Laying ,commissioning ,Testing of 1.1 KV , Aluminium, XLPE insulation armoured UG cable by open trench method				
1.1	Laying of <b>HDPE</b> PE 80-PN8 pipe of <b>110 mm</b> diameter (for 150 sqmm HT cable laying)	Mtr	240	306.87	73,648.80
1.2	Laying of 1.1 KV ,4 core 150 sq. mm XLPE insulation armoured-aluminium UG cable	Mtr	240	73.65	17,676.00
2	SITC of Gland /AL term				
2.1	Supply and erection of double compression flameproof type glanding for armoured cable 3.5/4 core ,120-185 sq. mm including making hole in Base plate and dressing of cable along with vermin proofing properly .supply to be done as per TPCODL specification and approved make dowells.	EA	12	920.61	11,047.32
					1,02,372.12
vil Port	ion				
2	Civil works with supply of all materials like cement, MS tor rod, brick, coarse & fine aggregates and labour, T&P, etc for LT UG Cable Trench				
2.1	Earth work excavation of soil Trench Dimension(1.6 Mtr. Wx1.275 Mtr. D)	Cum	84	716.03	60,146.52
2.2	Earth work excavation of hard rock Trench Dimension(1.6 Mtr. Wx1.275 Mtr. D)	Cum	36	1,759.39	63,338.04
2.3	Back filling with excavated soil outside and above the trench	Cum	120	204.58	24,549.60
2.4	Damage of asphalt/tar Road and other utilities and reconstructing to bring to its original shape after laying of cable in open trench (1 Mtr. Width)	Km	0.12	38,74,084.29	4,64,890.11
3	Civil works for Prefabricated RCC foundation with supply of all materials				

	Construction of earthing chamber including				
3.1	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	Set	6	3,784.73	22,708.38
	welding of GI flat around pipe.				
	Sub Total (Civil Portion) (in Rs.)				6,35,632.65
A	Sub Total (Supply Portion)				8,99,860.80
В	Stock, Storage & Insurance @ 3 % of A				26,995.82
C	Sub Total (A+B)				9,26,856.62
D	Contingency @ 3 % of C	1,:	1 1	11: 1/	27,805.70
Е	Tools & Plants Charges @ 2% of C (considered for m	ultimeter p	anel and ear	thing items)	12,875.81 69,514.25
F	Transportation @ 7.5% of C				
G	Erection Charges @ 10% of earthing items				
H	Total (C+D+E+F+G)				
I	Sub Total (Erection Portion + Civil Portion)				7,38,004.77
J	Total Cost (H+I)		<u> </u>	I	18,39,436.19
	Sub Total Rs.				36,59,602.70
	Cess @1%				36,596.03
	Total Estimated Cost				36,96,198.72
	Total Estimated Cost in Figures				36,96,199.00
EXCESS	LESS (Please Tick)			%	
	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/-D.M (Elect)

Sd/-Project Manager (Elect.)