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 :-12 AS PER IFB

NAME OF THE WORK :- EXECUTION OF EXTERNAL ELECTRIFICATION WORK FOR POWER SUPPLY TO 28-D(20-D+8-D) TYPE QTRS. AT BARAGADA ,UPD, BHUBANESWAR.

BID REF NO :- 30/PM/ELECT/OPHWC/2024-25

NAME & ADDRESS OF THE FIRM

THE FIRM						
SCHEDULE OF WORKS						
Sl. No.			Qty.	Estimate	ed Cost in Rs.	
	Description of work	Unit		RATE IN RS.	AMOUNT IN RS.	
I	CONSTRUCTION OF 11 KV LINE OF LENGTH 0.4 KM.					
A	11 KV CUT POINT WITH 90 DEGREE ANGLE					
1	WPB GI Pole160X152(11 Mtr. Long ,30.44 Kg/Mtr.	No	1	29661.00	29661.00	
2	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each channel length 1.2 mtr., 4 no's channel required =(4x9.56x1.2)	Kg	45.888	97.50	4474.08	
3	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 16 no's required	Kg	10.5728	97.50	1030.85	
4	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each channel length 0.306 mtr., 4 no's channel required =(42x9.56x0.306)	Kg	11.70144	97.50	1140.89	
5	Danger plate	No	1	104.00	104.00	
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	0.3009	97.50	29.34	
7	GI barbed wire/Anticlimbing device	No	3	104.00	312.00	
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	1.2036	97.50	117.35	
9	11 KV Pin Insulator Polymer,3 Nos.,required for each support	No	4	260.00	1040.00	
10	H W fitting(B&S) 70KN, 3Bolt	No.	6	455.00	2730.00	
11	Disc insulator (B&S) 70 KN polymer	No.	6	1495.00	8970.00	
12	Non metallic ties 11 KV(for covered conductor)	No	4	251.00	1004.00	
13	IPC for 70 sq. mm AAAC covered conductor	No	3	371.00	1113.00	
	Wedge connector for 100 sq. mm conductor	No	6	130.95	785.70	
	Polycarbonate Bird Guard	No	10	29.40	294.00	
14	70 sq. mm AAAC XLPE covered conductor	Km	0.09	185200.00	17168.04	
15	Earthing of Support (Coil Type)	No	1	215.80	215.80	
16	No. 8 GI wire (dia 4.6 mm)0.131 Kg/Mtr2 Mtr. For connecting pole with coil earthing	Kg	0.262	97.50	25.55	
17	HT Stay Set (Complete)	Set	2	1365.00	2730.00	
18	HT Stay Clamp,50x8 mm , flat 3.14 kg/Mtr.,0.551 Length , 2Nos.	Pair	2	162.50	325.00	
19	HT Stay Insulator	No.	2	65.00	130.00	
20	7/10 SWG Stay Wire, 15 Kg/stay	KG	30	97.50	2925.00	
21	GI Nut, Bolt & Washer of different sizes (7.433 Kg each cut pole)	Kg	7.433	101.40	753.71	
22	Yellow colour paint for Background	Ltr	2	216.00	432.00	
23	Black colour paint for numbering	Ltr	0.5	286.00	143.00	
A	A. Sub total					
В	B. S	tock, St	orage & Insu	rance @ 3% of A	77,654.30 2,329.63	
С	Sub Total (C=A+B)				79,983.93	
D	T&P @ 2% of C				1,473.85	
E	Contigency @ 3% of C					

F			Transportat	ion @ 7.5% of C	5,998.79
	Erection Charges @ 5% on poles				1,527.54
G	Erection Charges @ 10%				4,314.00
Н				Total	95,697.63
24	Fixing of 11 KV line 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 exevation, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm) using 20mm BHG metal with all labour and material (Excavation of earth will be done of size 500X500X1500 mm.)	No	2	2250.00	4500.00
25	Couping Ratio 1:1:5:3(500 mmx500mmx450 mm)=0.55 Cu. Mtr.	Cum	0.45	6500.00	2925.00
26	Couping Ratio 1:1:5:3(500 mmx500mmx450 mm)=0.1125 Cu. Mtr.	Cum	0.1125	6500.00	731.25
	То	Total Material + Services Cost (J+K)			1,03,853.88
II	Construction of LT UG LINE				
	Length of 1.1 KV, XLPE insulation armoured UG able with accessories-Open Trench(Alongwith spare cable)				
1	Supply of 1.1 KV , 4 core 70 sq. mm XLPE insulation armoured UG Cable	Mtr.	50	376.78	18,839.00
2	Supply of 1.1 KV , 4 core 150 sq. mm XLPE insulation armoured UG Cable	Mtr.	100	732.12	73,212.00
3	Supply of 1.1 KV I/C-160A & 20 Nos. of O/G 32 A	Nos	1	207000.00	2,07,000.00
4	Supply of 1.1 KV I/C-160A & 10 Nos. of O/G 32 A	Nos	1	125000.00	1,25,000.00
5	Earthing conductor 50x6mm (2.4 Kg/mtr.) GI flat for equipment,structure etc.	Kg	26.4	97.50	2,574.00
6	Pipe earthing 40 mm GI pipe	No	4	1365.00	5,460.00
A				A. Sub total	4,32,085.00
	Laying , Commissioning ,Testing of 1.1 KV aluminium, XLPE insulation armoured UG cable by open trench method				
1	Laying of 1.1 KV ,4 core 70 sq. mm XLPE insulation armoured- Aluminium UG cable	Mtr	50	46.8	2,340.00
2	Laying of 1.1 KV ,4 core 150 sq. mm XLPE insulation armoured- Aluminium UG cable	Mtr	100	72	7,200.00
3	Supply and erection of double compression Flameproof type Glanding for armoured cable 3.5/4C 50-95 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.	No	2	675	1,350.00
4	Supply and erection of double compression Flameproof type Glanding for armoured cable 3.5/4C 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.	No	4	900	3,600.00
В					14,490.00
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				
2	Earth work excavation of soil (1mtr. width X 1mtr. depth) Route Length				
	Earth work excavation of normal soil Trench (1.6 Mtr. Wx 1.35	Cum	60.48	700.00	42,336.00
2.1	Mtr. D)				
2.1	Mtr. D) Earth work excavation of hard rock Trench Dimension	Cum	25.92	1,720.00	44,582.40

2.4	Supply and Erection of material for RCC trench(0.95 Mtr. D),150 mm thick(M-30 Grade)-cast in SITU	Cum	1.3	7,670.00	9,971.00
2.5	Supply and Erection of material for RCC trench(0.95 Mtr. D),150 mm thick(M-30 Grade)-cast in SITU	Cum	15	7,670.00	1,15,050.00
2.6	Supply and erection of rod ,bending,cutting and binding of prefabricated RCC trench(0.6523Quint/cum)-Cast-in SITU	Quint	9.7845	5,309.90	51,954.72
2.7	Supply and erection of rod ,bending,cutting and binding of prefabricated RCC slabs(0.678 Quint/cum)	Quint	0.8814	5,309.90	4,680.15
2.8	PCC(1:3:6)below trench(width 1100 mm ,thickness 100 mm throughout)	Cum	4	5,130.00	20,520.00
2.9	Construction Earthing chamber including installation of earthing pipe. Making earthing chamber including excavation, soil treatment with bentonide powder, calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of GI flat around pipe.	Set	4	3,700.00	14,800.00
	Sub Total (Civil Portion) (in	Rs.)			3,13,711.46
A				A. Sub total	4,32,085.00
В	B. S	tock, St	orage & Insu	rance @ 3% of A	12,962.55
С			Su	b Total (C=A+B)	4,45,047.55
D				T&P @ 2%	6,892.22
E				gency @ 3% of C	13,351.43
F			Transportat	ion @ 7.5% of C	33,378.57
G	Erection charges @10% of	f earthin	g items and M	Aultimeter Panel	34,461.12
Н				Total	5,33,130.88
I	Sub Total(Erection+civil)				3,28,201.46
	Total Rs.				8,61,332.35
PART-C	INSTALLATION OF 250 KVA S/S.				
1	WPB GI Pole160X152(11 Mtr. Long ,30.44 Kg/Mtr.)	No	2	29661.00	59322.00
2	Top channel GI 100x50x6 mm 3000 mm Long(9.56 kg/Mtr.,2 Nos.)	Kg	57.36	97.50	5592.60
3	Fish Plate 50x6 mm ,2.36 Kg/Mtr.,each 0.280 Mtr., 6 nos. required	Kg	3.9648	97.50	386.57
4	Double Pole Belting Channel(GI) 75X40X 4.8mm., 7.14KG/Mtr., each Channel(GI) length 3.0 Mtr., 2 no's Channel(GI) required =(7.14x3x2)	Kg	42.84	97.50	
	Chamici(GI) required (7.14x3x2)			97.30	4176.90
5	50x50x6mm.GI Bracing Angle(GI), 4.5Kg./mtr., each Angle(GI) length 3.512 mtr., 2 nos Angle(GI) required = (4.5x3.512x2)	Kg	31.608	97.50	
6	50x50x6mm.GI Bracing Angle(GI), 4.5Kg./mtr., each Angle(GI) length 3.512 mtr., 2 nos Angle(GI) required = (4.5x3.512x2) AB switch mounting channel 75x40x4.8 mm GI channel, 3000 mm Long (7.14 kg/mtr,2 Nos.)	Kg Kg	31.608		3081.78
	50x50x6mm.GI Bracing Angle(GI), 4.5Kg./mtr., each Angle(GI) length 3.512 mtr., 2 nos Angle(GI) required = (4.5x3.512x2) AB switch mounting channel 75x40x4.8 mm GI channel, 3000 mm Long (7.14 kg/mtr,2 Nos.) AB witch side support channel 100x50x6 mm GI channel (0.35Mtr Long)(9.56 kg/mtr,2 Nos.)			97.50	3081.78 4176.90
6	50x50x6mm.GI Bracing Angle(GI), 4.5Kg./mtr., each Angle(GI) length 3.512 mtr., 2 nos Angle(GI) required = (4.5x3.512x2) AB switch mounting channel 75x40x4.8 mm GI channel, 3000 mm Long (7.14 kg/mtr,2 Nos.) AB witch side support channel 100x50x6 mm GI channel (0.35Mtr Long)(9.56 kg/mtr,2 Nos.) Channel support for down pipe 75x40x4.8 mm GI channel(7.14 kg/mtr,2 Nos.)each channel length 0.8 Mtr.	Kg	42.84	97.50 97.50	3081.78 4176.90 652.28
6	50x50x6mm.GI Bracing Angle(GI), 4.5Kg./mtr., each Angle(GI) length 3.512 mtr., 2 nos Angle(GI) required = (4.5x3.512x2) AB switch mounting channel 75x40x4.8 mm GI channel, 3000 mm Long (7.14 kg/mtr,2 Nos.) AB witch side support channel 100x50x6 mm GI channel (0.35Mtr Long)(9.56 kg/mtr,2 Nos.) Channel support for down pipe 75x40x4.8 mm GI channel(7.14 kg/mtr,2 Nos.)each channel length 0.8 Mtr. HG/DO fuse Mounting channel 75x40x4.8 mm GI channel(3000 mm Long) (7.14 kg/mtr,2 Nos.)	Kg Kg	42.84	97.50 97.50 97.50	3081.78 4176.90 652.28 556.82
6 7 8	50x50x6mm.GI Bracing Angle(GI), 4.5Kg./mtr., each Angle(GI) length 3.512 mtr., 2 nos Angle(GI) required = (4.5x3.512x2) AB switch mounting channel 75x40x4.8 mm GI channel, 3000 mm Long (7.14 kg/mtr,2 Nos.) AB witch side support channel 100x50x6 mm GI channel (0.35Mtr Long)(9.56 kg/mtr,2 Nos.) Channel support for down pipe 75x40x4.8 mm GI channel(7.14 kg/mtr,2 Nos.)each channel length 0.8 Mtr. HG/DO fuse Mounting channel 75x40x4.8 mm GI channel(3000 mm Long) (7.14 kg/mtr,2 Nos.) Cantilever suport channel75x40x4.8 mm GI channel(810 mm Long,2 Nos.)(7.14 kg/mtr,2 Nos.)	Kg Kg	42.84 6.69 5.711	97.50 97.50 97.50 97.50	3081.78 4176.90 652.28 556.82 4176.90
6 7 8 9	50x50x6mm.GI Bracing Angle(GI), 4.5Kg./mtr., each Angle(GI) length 3.512 mtr., 2 nos Angle(GI) required = (4.5x3.512x2) AB switch mounting channel 75x40x4.8 mm GI channel, 3000 mm Long (7.14 kg/mtr,2 Nos.) AB witch side support channel 100x50x6 mm GI channel (0.35Mtr Long)(9.56 kg/mtr,2 Nos.) Channel support for down pipe 75x40x4.8 mm GI channel(7.14 kg/mtr,2 Nos.)each channel length 0.8 Mtr. HG/DO fuse Mounting channel 75x40x4.8 mm GI channel(3000 mm Long) (7.14 kg/mtr,2 Nos.) Cantilever suport channel75x40x4.8 mm GI channel(810 mm Long,2 Nos.)(7.14 kg/mtr,2 Nos.) Cantilever suport angle 50x50x6 mm GI (1282 mm Long)(4.5 kg/mtr,2 Nos.)	Kg Kg Kg Kg Kg Kg	42.84 6.69 5.711 42.84	97.50 97.50 97.50 97.50 97.50	3081.78 4176.90 652.28 556.82 4176.90
6 7 8 9	50x50x6mm.GI Bracing Angle(GI), 4.5Kg./mtr., each Angle(GI) length 3.512 mtr., 2 nos Angle(GI) required = (4.5x3.512x2) AB switch mounting channel 75x40x4.8 mm GI channel, 3000 mm Long (7.14 kg/mtr,2 Nos.) AB witch side support channel 100x50x6 mm GI channel (0.35Mtr Long)(9.56 kg/mtr,2 Nos.) Channel support for down pipe 75x40x4.8 mm GI channel(7.14 kg/mtr,2 Nos.)each channel length 0.8 Mtr. HG/DO fuse Mounting channel 75x40x4.8 mm GI channel(3000 mm Long) (7.14 kg/mtr,2 Nos.) Cantilever suport channel75x40x4.8 mm GI channel(810 mm Long,2 Nos.)(7.14 kg/mtr,2 Nos.) Cantilever suport angle 50x50x6 mm GI (1282 mm Long)(4.5	Kg Kg Kg Kg Kg Kg	42.84 6.69 5.711 42.84 11.57	97.50 97.50 97.50 97.50 97.50	4176.90 3081.78 4176.90 652.28 556.82 4176.90 1128.08 1125.15

14	LT Distribution Box with MCCB, Aluminium Busbar of 3 Bay	No	1	62400.00	62400.00	
15	with kit kat fuse for 250 KVA S/S 55 sq. mm All Alloy conductor-PVC insulated	Mtr	50	55.24	2762.00	
	1 Cx 400 mm2 LT XLPE Cable(Armoured) - FOR 250 KVA					
16	Trf.	Mtr	120	359.66	43159.20	
17	11 KV AB switch (200 Amp, 3 pole)	Set	1	9555.00	9555.00	
18	11 KV HG Fuse (200 Amp, 3 pole)	Set	1	7956.00	7956.00	
19	Wedge connector for 55 sq. mm conductor	No	6	146.20	877.20	
20	11 KV Disc insulator polymer type 70 KN	No .	3	1495.00	4485.00	
21	11 KV H/W fitting polymer type 11 KV LA (12KV,10 KA)station class-2	Pair No	3	455.00 4615.00	1365.00 13845.00	
23	11 KV Pin Insulator polymer type	No	3	260.00	780.00	
24	HT Stay Set (Complete)	Set	2	1365.00	2730.00	
25	HT Stay Insulator	No.	2	65.00	130.00	
26	HT Stay Clamp(1.95 K.g/Pair)	Pair	2	162.50	325.00	
27	7/10 SWG Stay Wire	KG	30	97.50	2925.00	
28	GI Pipe for earthing 40mm dia 3mtr long	No	7	1365.00	9555.00	
29	GI Nut, Bolt & washers of different sizes	Kg	25	101.40	2535.00	
30	GI barbed wire/Anticlimbing device	No	6	104.00	624.00	
31	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	97.50	234.70	
32	Danger plate	Kg	2	104.00	208.00	
33	Back clamp for Danger Plate 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 1 Nos=(1x0.59x0.510)	Vα.	0.6018	97.50	58.68	
34	Name Plate	Kg No	1	104.00	104.00	
34	Structure Numbering and marking	110	1	101.00	101.00	
35	Yellow colour paint for Background	Ltr	2	216.00	432.00	
36	Black colour paint for numbering	Ltr	1	286.00	286.00	
A				A. Sub total	8,68,015.76	
В	B. Stock, Storage & Insurance @ 3% of A					
С				Total (C=A+B)	8,94,056.23	
D			Т	C&P @ 2% of C	16,669.33	
E				ency @ 3% of C	26,821.69	
F				on @ 7.5% of C	67,054.22	
G	Erection Charges @ 5% for transformer and joist p	ole cos	_		34,017.56	
			<u> </u>	insurance @3%	,	
Н	Erec	Erection Charges @ 20% on PSC Poles				
I	Erection C	harges	s @ 10% for	15,311.56		
J				Total	10,53,930.58	
	Concreting Ratio 1:1:5:3(500 mmx500mmx1800 mm)=0.450 Cu.		0.0			
25	Mtr.	Cum	0.9	6500.00	5850.00	
26	Couping Ratio 1:1:5:3(500 mmx500mmx450 mm)=0.1125 Cu.	Cum	0.226	6500.00	1469.00	
	Mtr.					
	Fixing of stay set with 0.5 cum cement concret foundation 1:3:6 size (900x 600x900 mm) using 40 mm BHG metal					
43	with all labour and material except stay wire, stay set, stay	No	2	2250.00	4,500.00	
	insulator.					
	Construction of earthing chamber including installation of					
	earthing pipe.Making earthing chamber including					
44	excavation, soil treatment with betonide powder,	No	7	3700.00	25,900.00	
	calculation of earth resistance, including installation of 3		/ /	3700.00	25,900.00	
	Mtr. GI Pipe 40/50 mm including welding of GI flat around					
	pipe.	1				
15	1 1	NA	1	3000 00	3000 00	
15 16	LT DB Plinth	No No	1	3000.00 25000.00	3000.00 25000.00	
16	LT DB Plinth DTR Plinth	No	1	25000.00	25000.00	
	LT DB Plinth	_				
16 17	LT DB Plinth DTR Plinth Laying of 1Cx400 sq. mm LT XLPE cable	No Mtr	1 120	25000.00 72.00	25000.00 8,640.00	

IV	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	97.50	6126.12
2	No-6 GI wire (0.192 Kg/Mtr.) for main string	Kg	19.2	97.50	1872.00
3	No-8 GI wire (0.131 Kg/mtr.)for lacing	Kg	4.09375	97.50	399.14
4	Eye Bolt(236 mm,16 mm dia,1.577 Kg/mtr.)	No	4	78.00	312.00
5	GI Pipe earthing 40 mm dia 3 Mtr. Long	No	2	1365.00	2730.00
6	50x6mm GI Flat for earthing, 2.36kg/mtr.	Kg	50.504	97.50	4924.14
A		L MA	TERIAL COS	T (FOR-2020-21)	16,363.40
В				rance @ 3% of A	490.90
C			Su	b Total (C=A+B)	16,854.30
D			Contin	gency @3% of C	505.63
E				T & P 2% of C	280.85
F			Transporta	tion @ 7.5% of C	1,264.07
G	E	rection	Charges for	PSC Pole @ 20%	
Н	Erection (Charges	of DTR and	Joist Poles @ 5%	
I		Ere	ection Charges	s of other @ 10%	1,404.24
J				Sub Total Rs.	20,309.09
7	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	3700.00	7,400.00
	Total Rs.				27,709.09
	Total Rs.				21,93,184.90
	Cess @ 1%				21,931.85
	Total Estimated Cost				22,15,116.75
	Total Estimated Cost in Figures				22,15,117.00
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 I/C (Elect)

Sd/-Project Manager(Elect.)