

PROJECT: BCAA OFFICE BUILDING

CLIENT: - BCAA

LOCATION: PARO

OVERALL SUMMARY

Sl. No	Description of Item	AMOUNT (Nu.)	REMARKS
	ELECTRICAL WORKS		
A	WIRING	-	
B	FITTING & ACCESSORIES	-	
C	CONTROL, SWITCHGEARS & BUSBAR	-	
D	ERECTION / INSTALLATION	-	
E	EARTHING	-	
F	POWER CABLE	-	
G	TELEPHONE & TELEVISION NETWORK	-	
	TOTAL FOR ELECTRICAL WORKS	-	
	COST INDEX-5%	-	
	GRAND TOTAL	-	

NAME OF WORK : CONSTRUCTION OF PROPOSED BCAA						
ELECTRICAL ESTIMATION						
Sl.No.	CODE (BSR 2018)	Description	Quantity	Unit	Rate(Nu.)	Amount(Nu.)
A	WIRING					
1		Wiring for light, fans, call bell and 2 pin light socket outlet with 1.5 sq.mm 1.1kV grade, PVC insulated copper conductor cable in recessed HDPE pipe including connections, painting, testing and commissioning etc. as required (Modular type).(Emgee/RR Kabel/Havels/HPL or Equivalent)-from switch to last fitting point				
	WC0301	Medium point	59.00	Point		-
	WC0302	Long point	84.00	Point		-
2		Wiring for 5/6 pin, 6/16 ampere international plug Power point with 4 sq.mm 1.1kV grade, PVC insulated copper conductor cable (RR Kabel/Havels/HPL/ EMGEE Cable make or equivalent) in recessed HDPE pipe with providing and fixing 5/6 pin, 6/16 ampere international socket outlet and switch including earthing the third pin, connections, painting, testing and commissioning etc. as required (M.K make or equipment)				
	WC0341	Medium point	7.00	Point		-
	WC0342	Long point	89.00	Point		-
3		Wiring for points in excess length above long points with 1.1kV grade, PVC insulated copper conductor cable in recessed HDPE pipe including connections, painting, testing and commissioning etc. as required(Emgee/RR Kabel/Havels/HPL or Equivalent)				
	WC0381	2x1.5 sq.mm	167.00	Mtr		-
	WC0382	2x4 sqmm	628.00	Mtr.		-
4		Wiring for lighting circuit with 1.1kV grade, PVC insulated copper conductor cable in recessed HDPE pipe including connections, painting, testing and commissioning etc. as required(Emgee/RR Kabel/Havels/HPL or Equivalent)				
	WC0391	2x2.5 sq.mm	775.00	Mtr.		-
5		Wiring for sub-main with 1.1kV grade, PVC insulated copper conductor cable in recessed HDPE pipe including connections, painting, testing and commissioning etc. as required (RR Kabel/Havels/HPL/ EMGEE Cable make or equivalent). Main Busbar to SDB as per MCPB drawing.				
	WC0391	2x2.5 sq.mm (fire alarm)	24.00	Mtr.		-
	WC0414	4x10 sq.mm	173.00	Mtr.		-
		SUBTOTAL FOR WIRING				-

B	FITTING & ACCESSORIES					
7		Supplying of light fittings complete set with all accessories as required,with lamp (HPL/VINAY/HAVELLS OR EQUIVALENT)				
	MR	BRITO LED ROUND 6W,HPLLEDRB06(CW),Recess Mounted Round LED Downlight(HPL)	5.00	Each		-
	MR	INTEGRANEODLR24WLED840S,24 W Recess mounted downlighter (Havells)	4.00	Each		-
	MR	12W LED Surface Light(Round),Code-650026.(Vinay)	58.00	Each		-
	MR	18W LED Surface Light(Round),Code-650027.(Vinay)	109.00	Each		-
	MR	28W Hollow Square LED Pendant Light(Vinay)	3.00	Each		-
	MR	28W Hollow Round LED Pendant Light(Vinay)	2.00	Each		-
	MR	ORBITDLR5WLED830S,5 W Recess mounted downlighter (Havells)	16.00	Each		-
	MR	5W LED Up-Down Wall Lamp (Vinay)	6.00	Each		-
	MR	Crystall Chandelier	1.00	Each		-
8		Supplying of exhaust fan 240 volt A.C 1400 rpm with all accessories such as frame with arm 3 Nos., sweep 3 Nos., condenser and fan body etc. complete asrequired				
	FN0030	300mm sweep	1.00	Each		-
9		Providing & fixing Split Type Air Conditioners				
	AC0016	1.5 tonne, split type	1.00	Each		-
10	MR	Supply, Installation and commissioning of three phase energy meter of suitable size after consulting BPC complete as required.	2.00	Job		-
SUBTOTAL FOR FITTING & ACCESSORIES						-
C	CONTROL, SWITCHGEARS & BUSBAR					
11		Supplying of Aluminium alloy/wrought aluminium busbar complete with all accessories etc. to accomodate in prefabricated MS cubical panel board as required(SQCA Category A or Equivalent Make)				
	GB0025	4 strips, 600mm bar, 300A	1.00	Each		-
12		Supplying of panel moulded case circuit breaker (MCCB) with electronic release, breaking capacity 70KA, 4 pole 415 volt A.C complete with all accessories etc. as required(SQCA Category A or Equivalent Make)				
	GB0240	250A	1.00	Each		-
13		Supply of miniature circuit breaker (MCB) single pole, 230 volt A.C complete with all accessories suitable to fix on a din-bar etc. as required(SQCA Category A or Equivalent Make)				
	GB0270	6A	15.00	Each		-
	GB0272	16A	96.00	Each		-
14		Supply of miniature circuit breaker (MCB) triple pole & neutral, 415 volt A.C complete with all accessories suitable to to fix on a din-bar etc. as required (SQCA Category A or Equivalent Make)				
	GB0315	32A(Double pole)	1.00	Each		-
	GB0352	32A	2.00	Each		-
	GB0353	40A	5.00	Each		-

15		Supply of residual current circuit breaker (RCCB) 4 pole, sensitivity 100/300mA, 415 volt A.C complete with all accessories suitable to to fix on a din-bar etc. as required (SQCA Category A or Equivalent Make)				
	GB0502	32A	2.00	Each		-
	GB0503	40A	5.00	Each		-
16		Supply of TPN distribution board (DIN type, vertical) with arcylic door, 415 volt A.C complete with all accessories without MCB/isolator/RCCB out going or incoming etc. as required (SQCA Category A or Equivalent Make)				
	GB0561	4 way	1.00	Each		-
	GB0562	6 way	6.00	Each		-
17		Providing and fixing of Main Control Panel Board, Powder coated prefabricated with M.S angle/flat with providing Indication Lamp and Fuse unit etc as per site requirement to accomodate switch gears incoming/outgoing busbars, energy meter etc. including drilling holes, welding, insulator, painting, denting, grounding, thimbling, testing, connection etc. complete as required with locking arrangment approved by engineer incharge				
	MR	Floor Mounted MS Cubical Panel of Welded Construction	1.00	Set		-

SUBTOTAL FOR CONTROL, SWITCHGEARS & BUSBAR						-
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D	ERECTION/INSTALLATION					
18		Erection of all indoor/outdoor surface type wall bracket (single or double)/ surface ceiling fittings GLS lamps/ bulk head GLS lamp / all types call bell / all type picture or mirror lighting luminiaries fittings with all accessories, fixing of lamp, testing etc. as required including connection with PVC insulated copper conductor				
	EI0002	1.5 sq.mm single core cable 1.1 KV grade	179.00	Each		-
19		Erection of all indoor recessed type ceiling fittings/ wall fittings, GLS lamps, fixing of lamp, testing etc. as required including connection with PVC insulated copper conductor				
	EI0016	1.5 sq.mm single core cable 1.1 KV grade	25.00	Each		-
20		Installation, testing and commissioning of exhaust fan upto 510mm sweep the existing opening including making the hole to suit the size of the indicated fan making good the damages, and connection with PVC insulated copper conductor				
	EI0136	1.5 sq.mm single core cable 1.1 KV grade	1.00	Each		-
21		Installation, testing & commissioning of aluminium alloy/wrought aluminium bus bar complete with all accessories accessories to accomodate in prefabricated MS cubical control panel board including connections etc. as required				
	EI0185	4 strips, 600mm length, 300A	1.00	Each		-
22		Installation, testing and commissioning of SP/DP miniature circuit breaker DIN type complete with all accessories to accommodate on/in prefabricated MS surface /MS cubical control panel board including drilling holes, connections etc as required				
	EI0380	6/10/16/20A	111.00	Each		-

23		Installation, testing and commissioning of TPN miniature circuit/ isolator breaker complete with all accessories to accommodate on/in prefabricated MS surface/MS cubical control panel board including drilling holes, connections etc as required				
	EI0337	32A, 415V	2.00	Each		-
	EI0338	40A, 415V	5.00	Each		-
24		Installation, testing and commissioning of four pole moulded case circuit breaker (DIN type) breaking capacity 70K earthleakage module complete with all accessories to accommodate on/in prefabricated MS surface /MS cubical control panel board including drilling holes, connections etc as required				
	EI0450	250A, 415V	1.00	Each		-
25		Installation, testing and commissioning of TPN DB (DIN type, horizontal/vertical) with no door, metal door or acrylic door (double/single door) complete with all accessories to accommodate incoming RCCB FP 40/63A sensitivity 30/100/300mA and outgoing SP MCB 6/10/16A on/in prefabricated MS surface /MS cubical control panel board including drilling holes, connections etc. as required				
	EI0525	4 way	1.00	Each		-
	EI0535	6 way	6.00	Each		-

SUBTOTAL FOR ERECTION/INSTALLATION						-
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E	EARHTING & LIGHTENING PROTECTION					
26	MR	Providing and fixing of Chemical earhting with all accessories required	6.00	Each		-
27	ET0076	Providing and laying of metal strip at 0.5m below ground level for as strip earth electrodes including soldering etc as required with 25x4mm copper strip	100.00	Mtr		-
28		Providing and fixing lightning conductor including holes etc. complete as required				
	LG0002	25mm dia 900mm long copper tube four prong at top.	1.00	Each		-
29		Providing and fixing metal strip on parapet or surface of wall/roof for lightning conductor as required for vertical run (Length as per site requirement)				
	LG0046	25x4mm copper strip	65.00	Mtr.		-

SUBTOTAL FOR EARHTING & LIGHTENING PROTECTION						-
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F	POWER CABLE					
30		Supplying of 4- Core 1.1KV grade PVC insulated and sheathed Aluminium conductor armoured power cables				
	PC0186	150 sq.mm	40.00	Mtr.		-
31		Supplying of heavy duty brass single compression gland for 4- Core 1.1KV grade PVC insulated and sheathed Copper/ Aluminium conductor armoured/un-armoured power cables				
	PC0295	50mm dia, 150sq.mm	2.00	Each		-
32		Laying of one number PVC insulated and sheathed power cable copper/aluminium,armoured/un-armoured 1.1KV single core to four core direct in the ground including excavation, sand cushioning, protective covering and refilling the trenches etc. as required				
	CL0004	Above 70sq.mm to 150sq.mm	40.00	Mtr.		-

33		Installation, Testing and Commissioning of end termination with single/double compression gland for PVC insulated and sheathed aluminium/copper conductor cable of 1.1KV grade including connections etc. as required				
	CL0113	45/50/55mm dia	2.00	Each		-

SUBTOTAL FOR POWER CABLE						-
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G	TELEPHONE & TELEVISION NETWORK					
34	MR	Supplying and drawing coaxial cable, RG6 in recessed PVC conduit including necessary cutting, connection, testing etc. as required.	40.00	Mtr		-
35		Supplying & fixing of socket/regulator on existing metal box with fibre sheet cover (recessed or surface) including necessary cutting, connection testing etc.as required.				
	SS0077	TV coaxial socket	1.00	Each		-
36		Supply, Installation, Testing and commissioning Powder coated Telephone Tag Box including with all accessories.				
	MR	Supplying Television & Telephone Terminal Cabinet (TTC)(SQCA Appd.)as required.	2.00	Each		-
37		Supplying and fixing of HDPE pipe on recessed including all accessories such as screws, bends, elbows, Tees, corners, etc. complete as required				
	CD0221	25mm	550.00	Mtr		-
38		Supplying & fixing of socket/regulator on existing metal box with fibre sheet cover (recessed or surface) including necessary cutting, connection testing etc.as required.				
	SS0076	RJ 11 telephone socket	41.00	Each		-
		Provide and draw high density polythene insulated & sheathed copper conductor 0.5mm dia telephone wire in existing surface/ recessed conduit wiring system complete as required				
39	TC0001	2 pair	869.00	Mtr		-

SUBTOTAL FOR TELEVISION NETWORK						-
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TOTAL						-
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