

COST SUMMARY

S.No	WORK DESCRIPTION	AMOUNT	REMARKS
1	SP OFFICE ELECTRICAL PANEL	290,000.00	
2	SP OFFICE DSR ITEM	3,585,089.00	
3	POLICE BANQUEST ELECTRICAL PANEL	85,000.00	
4	POLICE BANQUET DSR ITEM	1,238,845.00	
5	HOUSING TYPE-2 ELECTRICAL PANEL	50,000.00	
6	HOUSING TYPE-2 DSR ITEM	1,477,680.00	
7	HOUSING TYPE-3 ELECTRICAL PANEL	50,000.00	
8	HOUSING TYPE-3 DSR ITEM	1,546,808.00	
9	POLICE STATION BAROO ELECTRICAL PANEL	75,000.00	
10	POLICE STATION BAROO DSR ITEM	1,529,234.00	
11	POLICE BARRACK 40PAX ELECTRICAL PANEL	65,000.00	
12	POLICE BARRACK 40PAX DSR ITEM	1,341,076.00	
13	POLICE BARRACK 200 PAX ELECTRICAL PANEL	70,000.00	
14	POLICE BARRACK 200 PAX DSR ITEM	1,469,538.00	
	TOTAL	12,873,270.00	

Dated : 05/12/2020

BOQ OF ELECTRICAL WORKS FOR PROPOSED POLICE HOUSING**TYPE-2 AT KARGIL****SUB HEAD "A" ELECTRICAL WORKS**

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	1.10	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.10.2	Group B	42	Point	783	32886
	1.10.3	Group C	81	Point	990	80190
	1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	6	Point	1057	6342
	1.12	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface /recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	2340	Meter	200	468000
	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	50	Meter	146	7300
	1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	265	Meter	167	44255
	1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	510	Meter	200	102000
	1.14.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	720	Meter	249	179280
	1.14.5	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	25	Meter	328	8200
	1.14.10	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	150	Meter	543	81450
	1.17	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.17.3	3 x 1.5 sq. mm	120	Meter	54	6480
	1.17.12	3 x 2.5 sq. mm	120	Meter	75	9000
	1.17.21	3 x 4 sq. mm	60	Meter	117	7020
	1.18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.18.1	1 Pair	R.O	Meter	19	
	1.18.2	2 Pair	900	Meter	20	18000
	1.18.3	4 Pair	R.O	Meter	29	

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	540	Meter	33	17820
	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
	1.21.1	20 mm	470	Meter	84	39480
	1.21.2	25 mm	315	Meter	90	28350
	1.21.3	32 mm	30	Meter	92	2760
	1.21.4	40 mm	70	Meter	130	9100
	1.21.5	50 mm	5	Meter	158	790
	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	1.24.1	5/6 A switch	18	Each	85	1530
	1.24.2	2 way 5/6 A switch	18	Each	123	2214
	1.24.3	15/16 A switch	6	Each	132	792
	1.24.4	3 pin 5/6 A socket outlet	18	Each	111	1998
	1.24.5	6 pin 15/16 A socket outlet	6	Each	175	1050
	1.24.6	Telephone socket outlet	30	Each	119	3570
	1.24.7	TV antenna socket outlet	9	Each	119	1071
	1.24.8	Bell push	6	Each	126	756
	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	30	Each	32	960
	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
	1.27.1	1 or 2 Module (75mmX75mm)	6	Each	243	1458
	1.27.3	4 Module (125mmX75mm)	1	Each	287	287
	1.27.4	6 Module (200mmX75mm)	18	Each	333	5994
	1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	114	Each	401	45714
	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	42	Each	495	20790
	1.35	Installation ,Testing, Commissioning of wall bracket /ceiling fittings of all sizes and shapes containing upto two GLS/CFL/LED lamps per fitting, complete with all accessories including connections etc. as required.	178	Each	98	17444
	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	6	Each	92	552

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	1.5	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
	1.50.1	Upto 450 mm sweep	12	Each	363	4356
	1.51	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	12	Each	168	2016
	1.53	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.				
	1.53.1	1 run of cable	540	Meter	49	26460
	1.55	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.55.2	Group B	30	Point	508	15240
	1.55.3	Group C	25	Point	555	13875
	1.57	Supplying & fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	18	Each	639	11502
	2.3	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.3.1	6 way , Double door	R.O	Each	1661	
	2.3.2	8 way , Double door	1	Each	1760	1760
	2.4	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.4.2	6 way (4 + 18), Double door	R.O	Each	3693	
	2.4.3	8 way (4 + 24), Double door	6	Each	4601	27606
	2.10	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.1	Single pole	112	Each	199	22288
	2.10.3	Double pole	1	Each	556	556
	2.10.5	Triple pole and neutral	1	Each	1092	1092

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	2.11	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	24	Each	8	192
	2.12	Supplying and fixing following rating, double pole, 240 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
		40 A	1	Each	339	339
		63 A	R.O	Each	385	
	2.13	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.13.1	40 A	R.O	Each	832	
	2.13.2	63 A	6	Each	839	5034
	2.14	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.14.2	40 A	19	Each	2095	39805
	2.14.3	63 A	R.O	Each	2640	
	2.16	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32 A 240 V "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	2	Each	848	1696
	2.18	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	12	Each	1232	14784
	2.19	Supplying and fixing 20 A, 415 V, TPN Industrial type socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, TPMCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	6	Each	1690	10140
	5.2	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/ coke and salt as required.	2	Each	5308	10616
	5.8	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	R.O	Meter	853	
	5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	30	Meter	206	6180

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	5.16	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	30	Meter	57	1710
	5.18	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	150	Meter	37	5550
TOTAL SUB HEAD "A"						1477680

<u>SUMMARY SHEET</u>						
1.	SUB HEAD "A" ELECTRICAL WORKS			Rs.		1477680.00
	GRAND TOTAL			Rs.		1477680.00

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<u>LIST OF APPROVED MAKE OF MATERIALS</u>						
S.NO.	DETAILS	MANUFACTURERS NAME				
1)	M.C.C.B.S.	L&T / Schiender. / ABB				
2)	Fuses and Switches	L&T / Schiender. / ABB				
3)	Contactors and over load relays	L&T / Schiender. / ABB				
4)	Indicating lamps	L&T / Schiender. / ABB				
5)	Toggle Switches	Kaycee				
6)	Bakelite Moulded fuse bases	English Electric / L&T				
7)	Connector Block	Elmax / Tosha				
8)	CTS and Meters	Automatic Electric / IMP / Enersol				
9)	MCBS/ DB's	Schiender / Haggar / Legrand				
10)	1100 Volts Armoured cables (PVC cables)	Skytone / KEI / Polycab				
11)	FRLS PVC Conduit/MS Conduit	A.K.G./ B.E.C. / M-Kay				
12)	PVC insulated Copper Wire FRLS	Skytone / Polycab / ESC / KEI				
13)	Telephone / T.V. Cables	Skytone / ESC / Polycab / KEI				
14)	Switch / Sockets	Legrand / Crabtree / Schiender / Philips				
15)	Floor / Ceiling, Trunking / Box Type Cable Trays	Inovar / KME				

Dated : 07/12/2020

BOQ OF ELECTRICAL WORKS FOR PROPOSED POLICE HOUSING
TYPE-3 AT KARGIL
SUB HEAD "A" ELECTRICAL WORKS

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	1.10	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.10.2	Group B	42	Point	783	32886
	1.10.3	Group C	93	Point	990	92070
	1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	6	Point	1057	6342
	1.12	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface /recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	2430	Meter	200	486000
	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
	1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	295	Meter	167	49265
	1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	540	Meter	200	108000
	1.14.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	810	Meter	249	201690
	1.14.5	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	25	Meter	328	8200
	1.14.10	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	150	Meter	543	81450
	1.17	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.17.3	3 x 1.5 sq. mm	120	Meter	54	6480
	1.17.12	3 x 2.5 sq. mm	120	Meter	75	9000
	1.17.21	3 x 4 sq. mm	60	Meter	117	7020
	1.18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.18.1	1 Pair	R.O	Meter	19	
	1.18.2	2 Pair	900	Meter	20	18000
	1.18.3	4 Pair	R.O	Meter	29	

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	540	Meter	33	17820
	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
	1.21.1	20 mm	470	Meter	84	39480
	1.21.2	25 mm	315	Meter	90	28350
	1.21.3	32 mm	30	Meter	92	2760
	1.21.4	40 mm	70	Meter	130	9100
	1.21.5	50 mm	5	Meter	158	790
	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	1.24.1	5/6 A switch	18	Each	85	1530
	1.24.2	2 way 5/6 A switch	18	Each	123	2214
	1.24.3	15/16 A switch	6	Each	132	792
	1.24.4	3 pin 5/6 A socket outlet	18	Each	111	1998
	1.24.5	6 pin 15/16 A socket outlet	6	Each	175	1050
	1.24.6	Telephone socket outlet	30	Each	119	3570
	1.24.7	TV antenna socket outlet	9	Each	119	1071
	1.24.8	Bell push	6	Each	126	756
	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	30	Each	32	960
	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
	1.27.1	1 or 2 Module (75mmX75mm)	6	Each	243	1458
	1.27.3	4 Module (125mmX75mm)	1	Each	287	287
	1.27.4	6 Module (200mmX75mm)	18	Each	333	5994
	1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	120	Each	401	48120
	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	42	Each	495	20790
	1.35	Installation ,Testing, Commissioning of wall bracket /ceiling fittings of all sizes and shapes containing upto two GLS/CFL/LED lamps per fitting, complete with all accessories including connections etc. as required.	178	Each	98	17444
	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	6	Each	92	552

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	1.5	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
	1.50.1	Upto 450 mm sweep	12	Each	363	4356
	1.51	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	12	Each	168	2016
	1.53	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.				
	1.53.1	1 run of cable	540	Meter	49	26460
	1.55	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.55.2	Group B	30	Point	508	15240
	1.55.3	Group C	31	Point	555	17205
	1.57	Supplying & fixing suitable size GI box wih modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	18	Each	639	11502
	2.3	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.3.1	6 way , Double door	R.O	Each	1661	
	2.3.2	8 way , Double door	1	Each	1760	1760
	2.4	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.4.2	6 way (4 + 18), Double door	R.O	Each	3693	
	2.4.3	8 way (4 + 24), Double door	6	Each	4601	27606
	2.10	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.1	Single pole	112	Each	199	22288
	2.10.3	Double pole	1	Each	556	556
	2.10.5	Triple pole and neutral	1	Each	1092	1092

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	2.11	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	24	Each	8	192
	2.12	Supplying and fixing following rating, double pole, 240 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
		40 A	1	Each	339	339
		63 A	R.O	Each	385	
	2.13	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.13.1	40 A	R.O	Each	832	
	2.13.2	63 A	6	Each	839	5034
	2.14	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.14.2	40 A	19	Each	2095	39805
	2.14.3	63 A	R.O	Each	2640	
	2.16	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32 A 240 V "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	2	Each	848	1696
	2.18	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	18	Each	1232	22176
	2.19	Supplying and fixing 20 A, 415 V, TPN Industrial type socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, TPMCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	6	Each	1690	10140
	5.2	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/ coke and salt as required.	2	Each	5308	10616
	5.8	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	R.O	Meter	853	
	5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	30	Meter	206	6180

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	5.16	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	30	Meter	57	1710
	5.18	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	150	Meter	37	5550
TOTAL SUB HEAD "A"						1546808

<u>SUMMARY SHEET</u>						
1.	SUB HEAD "A" ELECTRICAL WORKS			Rs.		#####
	GRAND TOTAL			Rs.		#####

LIST OF APPROVED MAKE OF MATERIALS

S.NO.	DETAILS	MANUFACTURERS NAME
1)	M.C.C.B.S.	L&T / Schiender. / ABB
2)	Fuses and Switches	L&T / Schiender. / ABB
3)	Contactors and over load relays	L&T / Schiender. / ABB
4)	Indicating lamps	L&T / Schiender. / ABB
5)	Toggle Switches	Kaycee
6)	Bakelite Moulded fuse bases	English Electric / L&T
7)	Connector Block	Elmax / Tosha
8)	CTS and Meters	Automatic Electric / IMP / Enersol
9)	MCBS/ DB's	Schiender / Hagggar / Legrand
10)	1100 Volts Armoured cables (PVC cables)	Skytone / KEI / Polycab
11)	FRLS PVC Conduit/MS Conduit	A.K.G./ B.E.C. / M-Kay
12)	PVC insulated Copper Wire FRLS	Skytone / Polycab / ESC / KEI
13)	Telephone / T.V. Cables	Skytone / ESC / Polycab / KEI
14)	Switch / Sockets	Legrand / Crabtree / Schiender / Philips
15)	Floor / Ceiling, Trunking / Box Type Cable Trays	Inovar / KME

Dated : 06/12/2020

BOQ OF ELECTRICAL WORKS FOR PROPOSED POLICE BARRACK
40 PAX AT KARGIL
SUB HEAD "A" ELECTRICAL WORKS

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	1.10	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.10.1	Group A	R.O	Point	717	
	1.10.2	Group B	5	Point	783	3915
	1.10.3	Group C	50	Point	990	49500
	1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	5	Point	1057	5285
	1.12	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface /recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	1800	Meter	200	360000
	1.13	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface /recessed medium class PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	75	Meter	308	23100
	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	40	Meter	146	5840
	1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	450	Meter	167	75150
	1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	540	Meter	200	108000
	1.14.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	480	Meter	249	119520
	1.14.5	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	20	Meter	328	6560
	1.14.9	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	R.O	Meter	394	
	1.14.10	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	80	Meter	543	43440
	1.14.11	4 X 16 sq. mm + 2 X 6 sq. mm earth wire	R.O	Meter	752	
	1.17	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.17.3	3 x 1.5 sq. mm	30	Meter	54	1620
	1.17.12	3 x 2.5 sq. mm	110	Meter	75	8250
	1.17.21	3 x 4 sq. mm	80	Meter	117	9360
	1.17.30	3 x 6 sq. mm	30	Meter	167	5010

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	1.18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.18.2	2 Pair	660	Meter	20	13200
	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	150	Meter	33	4950
	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
	1.21.1	20 mm	210	Meter	84	17640
	1.21.2	25 mm	360	Meter	90	32400
	1.21.3	32 mm	10	Meter	92	920
	1.21.4	40 mm	10	Meter	130	1300
	1.21.5	50 mm	R.O	Meter	158	
	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	1.24.1	5/6 A switch	25	Each	85	2125
	1.24.2	2 way 5/6 A switch	4	Each	123	492
	1.24.3	15/16 A switch	5	Each	132	660
	1.24.4	3 pin 5/6 A socket outlet	25	Each	111	2775
	1.24.5	6 pin 15/16 A socket outlet	5	Each	175	875
	1.24.6	Telephone socket outlet	25	Each	119	2975
	1.24.7	TV antenna socket outlet	5	Each	119	595
	1.24.8	Bell push	10	Each	126	1260
	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	40	Each	32	1280
	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
	1.27.1	1 or 2 Module (75mmX75mm)	30	Each	243	7290
	1.27.2	3 Module (100mmX75mm)	23	Each	267	6141
	1.27.3	4 Module (125mmX75mm)	2	Each	287	574
	1.27.4	6 Module (200mmX75mm)	5	Each	333	1665
	1.28	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required.				
	1.28.1	1 or 2 Module	2	Each	114	228
	1.28.2	3 Module	2	Each	128	256
	1.28.3	4 Module	2	Each	138	276
	1.28.4	6 Module	R.O	Each	167	
	1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	65	Each	401	26065

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	55	Each	495	27225
	1.35	Installation ,Testing, Commissioning of wall bracket /ceiling fittings of all sizes and shapes containing upto two GLS/CFL/LED lamps per fitting, complete with all accessories including connections etc. as required.	195	Each	98	19110
	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	10	Each	92	920
	1.39	Providing and fixing plain 16/0.20mm (0.50sqmm) twin flat flexible, FRLS PVC insulated, copper conductor cable, in PVC sleeve of suitable size on the floor/ wall, or side of the table/ door etc. as required.	20	Meter	26	520
	1.5	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
	1.50.1	Upto 450 mm sweep	11	Each	363	3993
	1.50.2	510 mm sweep	R.O	Each	523	
	1.51	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	11	Each	168	1848
	1.53	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.				
	1.53.1	1 run of cable	630	Meter	49	30870
	1.53.2	2 run of cable	R.O	Meter	82	
	1.55	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.55.1	Group A	R.O	Point	463	
	1.55.2	Group B	20	Point	508	10160
	1.55.3	Group C	135	Point	555	74925
	1.56	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos. 3 pin 5/6 A modular socket outlet and 2 nos. 5/6 A modular switch, connections etc. as required. (For light plugs to be used in non residential buildings).	21	Each	582	12222
	1.57	Supplying & fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	21	Each	639	13419

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	2.3	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.3.1	6 way , Double door	R.O	Each	1661	
	2.3.2	8 way , Double door	4	Each	1760	7040
	2.3.3	12 way , Double door	R.O	Each	2053	
	2.4	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.4.1	4 way (4 + 12), Double door	R.O	Each	3068	
	2.4.2	6 way (4 + 18), Double door	R.O	Each	3693	
	2.4.3	8 way (4 + 24), Double door	4	Each	4601	18404
	2.5	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
	2.5.1	4 way (4 + 12), Double door	R.O	Each	5651	
	2.5.2	8 way (4 + 24), Double door	R.O	Each	7744	
	2.10	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.1	Single pole	88	Each	199	17512
	2.10.2	Single pole and neutral	2	Each	544	1088
	2.10.3	Double pole	2	Each	556	1112
	2.10.4	Triple pole	1	Each	826	826
	2.10.5	Triple pole and neutral	1	Each	1092	1092
	2.11	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	20	Each	8	160
	2.12	Supplying and fixing following rating, double pole, 240 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.12.1	40 A	4	Each	339	1356
	2.13	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.13.1	40 A	R.O	Each	832	
	2.13.2	63 A	4	Each	839	3356

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	2.14	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.14.1	25 A	R.O	Each	1927	
	2.14.2	40 A	4	Each	2095	8380
	2.14.3	63 A	12	Each	2640	31680
	2.16	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32 A 240 V "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	2	Each	848	1696
	2.18	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	11	Each	1232	13552
	2.21	Providing and fixing M.V. danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	8	Each	226	1808
	4.6	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.6.1	100 mm width X 50 mm depth X 1.6 mm thickness	20	Meter	599	11980
	4.6.2	150 mm width X 50 mm depth X 1.6 mm thickness	10	Meter	644	6440
	4.6.4	300 mm width X 50 mm depth X 1.6 mm thickness	10	Meter	875	8750
	4.7	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.7.1	100 mm width X 50 mm depth X 1.6 mm thickness	3	Each	1063	3189
	4.7.2	150 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1168	2336
	4.7.4	300 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1713	3426
	4.8	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Tee" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.8.1	100 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1220	1220
	4.8.2	150 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1274	1274
	4.8.4	300 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1997	1997

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	4.9	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Crossmember" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc as required.				
	4.9.1	100 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1220	1220
	4.9.2	150 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1274	1274
	4.9.4	300 mm width X 50 mm depth X 1.6 mm thickness	1	Each	2194	2194
	4.10	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Reducer" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc as required.				
	4.10.1	100 mm width X 50 mm depth X 1.6 mm thickness	R.O	Each	1528	
	4.10.2	150 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1778	1778
	4.10.4	300 mm width X 50 mm depth X 1.6 mm thickness	2	Each	2618	5236
	5.2	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/ coke and salt as required.	2	Each	5308	10616
	5.4	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	R.O	Set	6216	
	5.7	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	30	Meter	44	1320
	5.9	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	60	Meter	131	7860
	5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	10	Meter	206	2060
	5.16	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	200	Meter	57	11400
	5.18	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	20	Meter	37	740
TOTAL SUB HEAD "A"						1341076

<u>SUMMARY SHEET</u>						
1.	SUB HEAD "A" ELECTRICAL WORKS			Rs.		1341076.00
	GRAND TOTAL			Rs.		1341076.00

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<u>LIST OF APPROVED MAKE OF MATERIALS</u>						
S.NO.	DETAILS	MANUFACTURERS NAME				
1)	M.C.C.B.S.	L&T / Schiender. / ABB				
2)	Fuses and Switches	L&T / Schiender. / ABB				
3)	Contactors and over load relays	L&T / Schiender. / ABB				
4)	Indicating lamps	L&T / Schiender. / ABB				
5)	Toggle Switches	Kaycee				
6)	Bakelite Moulded fuse bases	English Electric / L&T				
7)	Connector Block	Elmax / Tosha				
8)	CTS and Meters	Automatic Electric / IMP / Enersol				
9)	MCBS/ DB's	Schiender / Haggar / Legrand				
10)	1100 Volts Armoured cables (PVC cables)	Skytone / KEI / Polycab				
11)	FRLS PVC Conduit/MS Conduit	A.K.G./ B.E.C. / M-Kay				
12)	PVC insulated Copper Wire FRLS	Skytone / Polycab / ESC / KEI				
13)	Telephone / T.V. Cables	Skytone / ESC / Polycab / KEI				
14)	Switch / Sockets	Legrand / Crabtree / Schiender / Philips				
15)	Floor / Ceiling, Trunking / Box Type Cable Trays	Inovar / KME				

Dated : 08/12/2020

BOQ OF ELECTRICAL WORKS FOR PROPOSED POLICE BARRACK**200 PAX AT KARGIL****SUB HEAD "A" ELECTRICAL WORKS**

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	1.10	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.10.1	Group A	2	Point	717	1434
	1.10.2	Group B	5	Point	783	3915
	1.10.3	Group C	76	Point	990	75240
	1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	12	Point	1057	12684
	1.12	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface /recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	1905	Meter	200	381000
	1.13	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface /recessed medium class PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	75	Meter	308	23100
	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	50	Meter	146	7300
	1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	260	Meter	167	43420
	1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	450	Meter	200	90000
	1.14.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	510	Meter	249	126990
	1.14.5	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	R.O	Meter	328	
	1.14.9	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	R.O	Meter	394	
	1.14.10	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	150	Meter	543	81450
	1.14.11	4 X 16 sq. mm + 2 X 6 sq. mm earth wire	R.O	Meter	752	
	1.17	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.17.3	3 x 1.5 sq. mm	70	Meter	54	3780
	1.17.12	3 x 2.5 sq. mm	75	Meter	75	5625
	1.17.21	3 x 4 sq. mm	240	Meter	117	28080
	1.17.30	3 x 6 sq. mm	30	Meter	167	5010

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	1.18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.18.2	2 Pair	720	Meter	20	14400
	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	180	Meter	33	5940
	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
	1.21.1	20 mm	90	Meter	84	7560
	1.21.2	25 mm	320	Meter	90	28800
	1.21.3	32 mm	30	Meter	92	2760
	1.21.4	40 mm	10	Meter	130	1300
	1.21.5	50 mm	R.O	Meter	158	
	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	1.24.1	5/6 A switch	20	Each	85	1700
	1.24.2	2 way 5/6 A switch	10	Each	123	1230
	1.24.3	15/16 A switch	5	Each	132	660
	1.24.4	3 pin 5/6 A socket outlet	20	Each	111	2220
	1.24.5	6 pin 15/16 A socket outlet	5	Each	175	875
	1.24.6	Telephone socket outlet	25	Each	119	2975
	1.24.7	TV antenna socket outlet	6	Each	119	714
	1.24.8	Bell push	20	Each	126	2520
	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	30	Each	32	960
	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
	1.27.1	1 or 2 Module (75mmX75mm)	50	Each	243	12150
	1.27.2	3 Module (100mmX75mm)	2	Each	267	534
	1.27.3	4 Module (125mmX75mm)	2	Each	287	574
	1.27.4	6 Module (200mmX75mm)	6	Each	333	1998
	1.28	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required.				
	1.28.1	1 or 2 Module	2	Each	114	228
	1.28.2	3 Module	2	Each	128	256
	1.28.3	4 Module	2	Each	138	276
	1.28.4	6 Module	2	Each	167	334
	1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	65	Each	401	26065

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	65	Each	495	32175
	1.35	Installation ,Testing, Commissioning of wall bracket /ceiling fittings of all sizes and shapes containing upto two GLS/CFL/LED lamps per fitting, complete with all accessories including connections etc. as required.	250	Each	98	24500
	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	20	Each	92	1840
	1.39	Providing and fixing plain 16/0.20mm (0.50sqmm) twin flat flexible, FRLS PVC insulated, copper conductor cable, in PVC sleeve of suitable size on the floor/ wall, or side of the table/ door etc. as required.	20	Meter	26	520
	1.5	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
	1.50.1	Upto 450 mm sweep	6	Each	363	2178
	1.50.2	510 mm sweep	R.O	Each	523	
	1.51	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	6	Each	168	1008
	1.53	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.				
	1.53.1	1 run of cable	480	Meter	49	23520
	1.53.2	2 run of cable	R.O	Meter	82	
	1.55	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.55.1	Group A	5	Point	463	2315
	1.55.2	Group B	10	Point	508	5080
	1.55.3	Group C	190	Point	555	105450
	1.56	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos. 3 pin 5/6 A modular socket outlet and 2 nos. 5/6 A modular switch, connections etc. as required. (For light plugs to be used in non residential buildings).	20	Each	582	11640
	1.57	Supplying & fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	35	Each	639	22365

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	2.3	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.3.1	6 way , Double door	R.O	Each	1661	
	2.3.2	8 way , Double door	R.O	Each	1760	
	2.3.3	12 way , Double door	R.O	Each	2053	
	2.4	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.4.1	4 way (4 + 12), Double door	R.O	Each	3068	
	2.4.2	6 way (4 + 18), Double door	R.O	Each	3693	
	2.4.3	8 way (4 + 24), Double door	6	Each	4601	27606
	2.5	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
	2.5.1	4 way (4 + 12), Double door	R.O	Each	5651	
	2.5.2	8 way (4 + 24), Double door	R.O	Each	7744	
	2.10	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.1	Single pole	180	Each	199	35820
	2.10.2	Single pole and neutral	2	Each	544	1088
	2.10.3	Double pole	2	Each	556	1112
	2.10.4	Triple pole	2	Each	826	1652
	2.10.5	Triple pole and neutral	1	Each	1092	1092
	2.11	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	20	Each	8	160
	2.12	Supplying and fixing following rating, double pole, 240 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.12.1	40 A	R.O	Each	339	
	2.13	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.13.1	40 A	R.O	Each	832	
	2.13.2	63 A	6	Each	839	5034

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	2.14	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.14.1	25 A	R.O	Each	1927	
	2.14.2	40 A	12	Each	2095	25140
	2.14.3	63 A	6	Each	2640	15840
	2.16	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32 A 240 V "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	2	Each	848	1696
	2.18	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	20	Each	1232	24640
	2.21	Providing and fixing M.V. danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	10	Each	226	2260
	4.6	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.6.1	100 mm width X 50 mm depth X 1.6 mm thickness	20	Meter	599	11980
	4.6.2	150 mm width X 50 mm depth X 1.6 mm thickness	10	Meter	644	6440
	4.6.4	300 mm width X 50 mm depth X 1.6 mm thickness	10	Meter	875	8750
	4.7	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.7.1	100 mm width X 50 mm depth X 1.6 mm thickness	5	Each	1063	5315
	4.7.2	150 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1168	2336
	4.7.4	300 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1713	3426
	4.8	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Tee" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.8.1	100 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1220	2440
	4.8.2	150 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1274	2548
	4.8.4	300 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1997	1997

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	4.9	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Crossmember" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc as required.				
	4.9.1	100 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1220	2440
	4.9.2	150 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1274	1274
	4.9.4	300 mm width X 50 mm depth X 1.6 mm thickness	1	Each	2194	2194
	4.10	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Reducer" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc as required.				
	4.10.1	100 mm width X 50 mm depth X 1.6 mm thickness	R.O	Each	1528	
	4.10.2	150 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1778	3556
	4.10.4	300 mm width X 50 mm depth X 1.6 mm thickness	1	Each	2618	2618
	5.2	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/ coke and salt as required.	2	Each	5308	10616
	5.4	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	R.O	Set	6216	
	5.7	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	30	Meter	44	1320
	5.9	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	30	Meter	131	3930
	5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	10	Meter	206	2060
	5.16	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	200	Meter	57	11400
	5.18	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	30	Meter	37	1110
TOTAL SUB HEAD "A"						1469538

<u>SUMMARY SHEET</u>						
1.	SUB HEAD "A" ELECTRICAL WORKS			Rs.		#####
	GRAND TOTAL			Rs.		#####

<u>LIST OF APPROVED MAKE OF MATERIALS</u>					
S.NO.	DETAILS	MANUFACTURERS NAME			
1)	M.C.C.B.S.	L&T / Schiender. / ABB			
2)	Fuses and Switches	L&T / Schiender. / ABB			
3)	Contactors and over load relays	L&T / Schiender. / ABB			
4)	Indicating lamps	L&T / Schiender. / ABB			
5)	Toggle Switches	Kaycee			
6)	Bakelite Moulded fuse bases	English Electric / L&T			
7)	Connector Block	Elmax / Tosha			
8)	CTS and Meters	Automatic Electric / IMP / Enersol			
9)	MCBS/ DB's	Schiender / Hagggar / Legrand			
10)	1100 Volts Armoured cables (PVC cables)	Skytone / KEI / Polycab			
11)	FRLS PVC Conduit/MS Conduit	A.K.G./ B.E.C. / M-Kay			
12)	PVC insulated Copper Wire FRLS	Skytone / Polycab / ESC / KEI			
13)	Telephone / T.V. Cables	Skytone / ESC / Polycab / KEI			
14)	Switch / Sockets	Legrand / Crabtree / Schiender / Philips			
15)	Floor / Ceiling, Trunking / Box Type Cable Trays	Inovar / KME			

Dated : 08/12/2020

BOQ OF ELECTRICAL WORKS FOR PROPOSED POLICE STATION**BAROO AT KARGIL****SUB HEAD "A" ELECTRICAL WORKS**

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	1.10	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.10.1	Group A	R.O	Point	717	
	1.10.2	Group B	5	Point	783	3915
	1.10.3	Group C	70	Point	990	69300
	1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	6	Point	1057	6342
	1.12	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface /recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	1500	Meter	200	300000
	1.13	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface /recessed medium class PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	75	Meter	308	23100
	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	50	Meter	146	7300
	1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	325	Meter	167	54275
	1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	610	Meter	200	122000
	1.14.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	570	Meter	249	141930
	1.14.5	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	R.O	Meter	328	
	1.14.9	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	R.O	Meter	394	
	1.14.10	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	90	Meter	543	48870
	1.14.11	4 X 16 sq. mm + 2 X 6 sq. mm earth wire	R.O	Meter	752	
	1.17	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.17.3	3 x 1.5 sq. mm	50	Meter	54	2700
	1.17.12	3 x 2.5 sq. mm	150	Meter	75	11250
	1.17.21	3 x 4 sq. mm	640	Meter	117	74880
	1.17.30	3 x 6 sq. mm	50	Meter	167	8350

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	1.18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.18.2	2 Pair	930	Meter	20	18600
	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	390	Meter	33	12870
	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
	1.21.1	20 mm	375	Meter	84	31500
	1.21.2	25 mm	870	Meter	90	78300
	1.21.3	32 mm	20	Meter	92	1840
	1.21.4	40 mm	10	Meter	130	1300
	1.21.5	50 mm	R.O	Meter	158	
	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	1.24.1	5/6 A switch	35	Each	85	2975
	1.24.2	2 way 5/6 A switch	10	Each	123	1230
	1.24.3	15/16 A switch	5	Each	132	660
	1.24.4	3 pin 5/6 A socket outlet	35	Each	111	3885
	1.24.5	6 pin 15/16 A socket outlet	5	Each	175	875
	1.24.6	Telephone socket outlet	35	Each	119	4165
	1.24.7	TV antenna socket outlet	15	Each	119	1785
	1.24.8	Bell push	12	Each	126	1512
	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	45	Each	32	1440
	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
	1.27.1	1 or 2 Module (75mmX75mm)	60	Each	243	14580
	1.27.2	3 Module (100mmX75mm)	2	Each	267	534
	1.27.3	4 Module (125mmX75mm)	2	Each	287	574
	1.27.4	6 Module (200mmX75mm)	15	Each	333	4995
	1.28	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required.				
	1.28.1	1 or 2 Module	2	Each	114	228
	1.28.2	3 Module	2	Each	128	256
	1.28.3	4 Module	1	Each	138	138
	1.28.4	6 Module	2	Each	167	334
	1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	60	Each	401	24060

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	40	Each	495	19800
	1.35	Installation ,Testing, Commissioning of wall bracket /ceiling fittings of all sizes and shapes containing upto two GLS/CFL/LED lamps per fitting, complete with all accessories including connections etc. as required.	245	Each	98	24010
	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	12	Each	92	1104
	1.39	Providing and fixing plain 16/0.20mm (0.50sqmm) twin flat flexible, FRLS PVC insulated, copper conductor cable, in PVC sleeve of suitable size on the floor/ wall, or side of the table/ door etc. as required.	20	Meter	26	520
	1.5	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
	1.50.1	Upto 450 mm sweep	13	Each	363	4719
	1.50.2	510 mm sweep	R.O	Each	523	
	1.51	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	13	Each	168	2184
	1.53	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.				
	1.53.1	1 run of cable	900	Meter	49	44100
	1.53.2	2 run of cable	R.O	Meter	82	
	1.55	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.55.1	Group A	R.O	Point	463	
	1.55.2	Group B	20	Point	508	10160
	1.55.3	Group C	175	Point	555	97125
	1.56	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos. 3 pin 5/6 A modular socket outlet and 2 nos. 5/6 A modular switch, connections etc. as required. (For light plugs to be used in non residential buildings).	32	Each	582	18624
	1.57	Supplying & fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	25	Each	639	15975

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	2.3	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.3.1	6 way , Double door	R.O	Each	1661	
	2.3.2	8 way , Double door	R.O	Each	1760	
	2.3.3	12 way , Double door	R.O	Each	2053	
	2.4	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.4.1	4 way (4 + 12), Double door	R.O	Each	3068	
	2.4.2	6 way (4 + 18), Double door	2	Each	3693	7386
	2.4.3	8 way (4 + 24), Double door	4	Each	4601	18404
	2.5	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
	2.5.1	4 way (4 + 12), Double door	R.O	Each	5651	
	2.5.2	8 way (4 + 24), Double door	R.O	Each	7744	
	2.10	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.1	Single pole	100	Each	199	19900
	2.10.2	Single pole and neutral	2	Each	544	1088
	2.10.3	Double pole	2	Each	556	1112
	2.10.4	Triple pole	R.O	Each	826	
	2.10.5	Triple pole and neutral	1	Each	1092	1092
	2.11	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	30	Each	8	240
	2.12	Supplying and fixing following rating, double pole, 240 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.12.1	40 A	2	Each	339	678
	2.13	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.13.1	40 A	R.O	Each	832	
	2.13.2	63 A	6	Each	839	5034

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	2.14	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.14.1	25 A	R.O	Each	1927	
	2.14.2	40 A	6	Each	2095	12570
	2.14.3	63 A	12	Each	2640	31680
	2.16	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32 A 240 V "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	2	Each	848	1696
	2.18	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	15	Each	1232	18480
	2.21	Providing and fixing M.V. danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	10	Each	226	2260
	4.6	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.6.1	100 mm width X 50 mm depth X 1.6 mm thickness	15	Meter	599	8985
	4.6.2	150 mm width X 50 mm depth X 1.6 mm thickness	10	Meter	644	6440
	4.6.4	300 mm width X 50 mm depth X 1.6 mm thickness	10	Meter	875	8750
	4.7	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.7.1	100 mm width X 50 mm depth X 1.6 mm thickness	5	Each	1063	5315
	4.7.2	150 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1168	2336
	4.7.4	300 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1713	3426
	4.8	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Tee" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.8.1	100 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1220	2440
	4.8.2	150 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1274	2548
	4.8.4	300 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1997	1997

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	4.9	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Crossmember" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc as required.				
	4.9.1	100 mm width X 50 mm depth X 1.6 mm thickness	3	Each	1220	3660
	4.9.2	150 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1274	1274
	4.9.4	300 mm width X 50 mm depth X 1.6 mm thickness	1	Each	2194	2194
	4.10	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Reducer" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc as required.				
	4.10.1	100 mm width X 50 mm depth X 1.6 mm thickness	R.O	Each	1528	
	4.10.2	150 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1778	1778
	4.10.4	300 mm width X 50 mm depth X 1.6 mm thickness	2	Each	2618	5236
	5.2	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/ coke and salt as required.	2	Each	5308	10616
	5.4	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	R.O	Set	6216	
	5.7	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	30	Meter	44	1320
	5.9	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	30	Meter	131	3930
	5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	10	Meter	206	2060
	5.16	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	200	Meter	57	11400
	5.18	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	20	Meter	37	740
TOTAL SUB HEAD "A"						1529234

<u>SUMMARY SHEET</u>						
1.	SUB HEAD "A" ELECTRICAL WORKS			Rs.		#####
	GRAND TOTAL			Rs.		#####

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<u>LIST OF APPROVED MAKE OF MATERIALS</u>						
S.NO.	DETAILS	MANUFACTURERS NAME				
1)	M.C.C.B.S.	L&T / Schiender. / ABB				
2)	Fuses and Switches	L&T / Schiender. / ABB				
3)	Contactors and over load relays	L&T / Schiender. / ABB				
4)	Indicating lamps	L&T / Schiender. / ABB				
5)	Toggle Switches	Kaycee				
6)	Bakelite Moulded fuse bases	English Electric / L&T				
7)	Connector Block	Elmax / Tosha				
8)	CTS and Meters	Automatic Electric / IMP / Enersol				
9)	MCBS/ DB's	Schiender / Hagggar / Legrand				
10)	1100 Volts Armoured cables (PVC cables)	Skytone / KEI / Polycab				
11)	FRLS PVC Conduit/MS Conduit	A.K.G./ B.E.C. / M-Kay				
12)	PVC insulated Copper Wire FRLS	Skytone / Polycab / ESC / KEI				
13)	Telephone / T.V. Cables	Skytone / ESC / Polycab / KEI				
14)	Switch / Sockets	Legrand / Crabtree / Schiender / Philips				
15)	Floor / Ceiling, Trunking / Box Type Cable Trays	Inovar / KME				

Dated : 06/12/2020

BOQ OF ELECTRICAL WORKS FOR PROPOSED SP OFFICE
AT KARGIL
SUB HEAD "A" ELECTRICAL WORKS

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	1.10	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.10.1	Group A	5	Point	717	3585
	1.10.2	Group B	20	Point	783	15660
	1.10.3	Group C	190	Point	990	188100
	1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	15	Point	1057	15855
	1.12	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface /recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	3150	Meter	200	630000
	1.13	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface /recessed medium class PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	150	Meter	308	46200
	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	R.O	Meter	146	
	1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	699	Meter	167	116733
	1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	1395	Meter	200	279000
	1.14.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	1125	Meter	249	280125
	1.14.5	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	75	Meter	328	24600
	1.14.9	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	R.O	Meter	394	
	1.14.10	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	200	Meter	543	108600
	1.14.11	4 X 16 sq. mm + 2 X 6 sq. mm earth wire	R.O	Meter	752	
	1.17	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.17.3	3 x 1.5 sq. mm	100	Meter	54	5400
	1.17.12	3 x 2.5 sq. mm	150	Meter	75	11250
	1.17.21	3 x 4 sq. mm	2720	Meter	117	318240
	1.17.30	3 x 6 sq. mm	100	Meter	167	16700
S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount

	1.18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.18.2	2 Pair	4170	Meter	20	83400
	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	390	Meter	33	12870
	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
	1.21.1	20 mm	1180	Meter	84	99120
	1.21.2	25 mm	1650	Meter	90	148500
	1.21.3	32 mm	100	Meter	92	9200
	1.21.4	40 mm	50	Meter	130	6500
	1.21.5	50 mm	R.O	Meter	158	
	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	1.24.1	5/6 A switch	140	Each	85	11900
	1.24.2	2 way 5/6 A switch	5	Each	123	615
	1.24.3	15/16 A switch	5	Each	132	660
	1.24.4	3 pin 5/6 A socket outlet	140	Each	111	15540
	1.24.5	6 pin 15/16 A socket outlet	5	Each	175	875
	1.24.6	Telephone socket outlet	140	Each	119	16660
	1.24.7	TV antenna socket outlet	15	Each	119	1785
	1.24.8	Bell push	20	Each	126	2520
	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	160	Each	32	5120
	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
	1.27.1	1 or 2 Module (75mmX75mm)	160	Each	243	38880
	1.27.2	3 Module (100mmX75mm)	140	Each	267	37380
	1.27.3	4 Module (125mmX75mm)	2	Each	287	574
	1.27.4	6 Module (200mmX75mm)	R.O	Each	333	
	1.28	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required.				
	1.28.1	1 or 2 Module	5	Each	114	570
	1.28.2	3 Module	2	Each	128	256
	1.28.3	4 Module	2	Each	138	276
	1.28.4	6 Module	2	Each	167	334
	1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	100	Each	401	40100
S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount

	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	110	Each	495	54450
	1.35	Installation ,Testing, Commissioning of wall bracket /ceiling fittings of all sizes and shapes containing upto two GLS/CFL/LED lamps per fitting, complete with all accessories including connections etc. as required.	490	Each	98	48020
	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	20	Each	92	1840
	1.39	Providing and fixing plain 16/0.20mm (0.50sqmm) twin flat flexible, FRLS PVC insulated, copper conductor cable, in PVC sleeve of suitable size on the floor/ wall, or side of the table/ door etc. as required.	R.O	Meter	26	
	1.5	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
	1.50.1	Upto 450 mm sweep	15	Each	363	5445
	1.50.2	510 mm sweep	R.O	Each	523	
	1.51	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	15	Each	168	2520
	1.53	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.				
	1.53.1	1 run of cable	4080	Meter	49	199920
	1.53.2	2 run of cable	R.O	Meter	82	
	1.55	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.55.1	Group A	5	Point	463	2315
	1.55.2	Group B	30	Point	508	15240
	1.55.3	Group C	275	Point	555	152625
	1.56	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos. 3 pin 5/6 A modular socket outlet and 2 nos. 5/6 A modular switch, connections etc. as required. (For light plugs to be used in non residential buildings).	140	Each	582	81480
	1.57	Supplying & fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	50	Each	639	31950

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	2.3	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.3.1	6 way , Double door	R.O	Each	1661	
	2.3.2	8 way , Double door	4	Each	1760	7040
	2.3.3	12 way , Double door	R.O	Each	2053	
	2.4	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.4.1	4 way (4 + 12), Double door	R.O	Each	3068	
	2.4.2	6 way (4 + 18), Double door	R.O	Each	3693	
	2.4.3	8 way (4 + 24), Double door	12	Each	4601	55212
	2.5	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
	2.5.1	4 way (4 + 12), Double door	1	Each	5651	5651
	2.5.2	8 way (4 + 24), Double door	R.O	Each	7744	
	2.10	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.1	Single pole	254	Each	199	50546
	2.10.2	Single pole and neutral	2	Each	544	1088
	2.10.3	Double pole	2	Each	556	1112
	2.10.4	Triple pole	2	Each	826	1652
	2.10.5	Triple pole and neutral	2	Each	1092	2184
	2.11	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	35	Each	8	280
	2.12	Supplying and fixing following rating, double pole, 240 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.12.1	40 A	10	Each	339	3390
	2.13	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.13.1	40 A	R.O	Each	832	
	2.13.2	63 A	13	Each	839	10907

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	2.14	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.14.1	25 A	R.O	Each	1927	
	2.14.2	40 A	16	Each	2095	33520
	2.14.3	63 A	24	Each	2640	63360
	2.16	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32 A 240 V "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	2	Each	848	1696
	2.18	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	15	Each	1232	18480
	2.21	Providing and fixing M.V. danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	15	Each	226	3390
	4.6	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.6.1	100 mm width X 50 mm depth X 1.6 mm thickness	40	Meter	599	23960
	4.6.2	150 mm width X 50 mm depth X 1.6 mm thickness	30	Meter	644	19320
	4.6.4	300 mm width X 50 mm depth X 1.6 mm thickness	20	Meter	875	17500
	4.7	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.7.1	100 mm width X 50 mm depth X 1.6 mm thickness	6	Each	1063	6378
	4.7.2	150 mm width X 50 mm depth X 1.6 mm thickness	4	Each	1168	4672
	4.7.4	300 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1713	3426
	4.8	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Tee" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.8.1	100 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1220	1220
	4.8.2	150 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1274	1274
	4.8.4	300 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1997	1997

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	4.9	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Crossmember" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc as required.				
	4.9.1	100 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1220	1220
	4.9.2	150 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1274	1274
	4.9.4	300 mm width X 50 mm depth X 1.6 mm thickness	1	Each	2194	2194
	4.10	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Reducer" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc as required.				
	4.10.1	100 mm width X 50 mm depth X 1.6 mm thickness	R.O	Each	1528	
	4.10.2	150 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1778	3556
	4.10.4	300 mm width X 50 mm depth X 1.6 mm thickness	2	Each	2618	5236
	5.2	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/ coke and salt as required.	2	Each	5308	10616
	5.4	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	R.O	Set	6216	
	5.7	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	30	Meter	44	1320
	5.9	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	60	Meter	131	7860
	5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	20	Meter	206	4120
	5.16	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	300	Meter	57	17100
	5.18	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	50	Meter	37	1850
TOTAL SUB HEAD "A"						3585089

<u>SUMMARY SHEET</u>						
1.	SUB HEAD "A" ELECTRICAL WORKS			Rs.		3585089.00
	GRAND TOTAL			Rs.		3585089.00

<u>LIST OF APPROVED MAKE OF MATERIALS</u>					
S.NO.	DETAILS	MANUFACTURERS NAME			
1)	M.C.C.B.S.	L&T / Schiender. / ABB			
2)	Fuses and Switches	L&T / Schiender. / ABB			
3)	Contactors and over load relays	L&T / Schiender. / ABB			
4)	Indicating lamps	L&T / Schiender. / ABB			
5)	Toggle Switches	Kaycee			
6)	Bakelite Moulded fuse bases	English Electric / L&T			
7)	Connector Block	Elmax / Tosha			
8)	CTS and Meters	Automatic Electric / IMP / Enersol			
9)	MCBS/ DB's	Schiender / Hagggar / Legrand			
10)	1100 Volts Armoured cables (PVC cables)	Skytone / KEI / Polycab			
11)	FRLS PVC Conduit/MS Conduit	A.K.G./ B.E.C. / M-Kay			
12)	PVC insulated Copper Wire FRLS	Skytone / Polycab / ESC / KEI			
13)	Telephone / T.V. Cables	Skytone / ESC / Polycab / KEI			
14)	Switch / Sockets	Legrand / Crabtree / Schiender / Philips			
15)	Floor / Ceiling, Trunking / Box Type Cable Trays	Inovar / KME			

Dated : 08/12/2020

BOQ OF ELECTRICAL WORKS FOR PROPOSED POLICE**BANQUET AT KARGIL****SUB HEAD "A" ELECTRICAL WORKS**

S.NO.	DSR ITEM No.	Description	Qty	Unit	Rate	Amount
	1.10	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.10.1	Group A	R.O	Point	717	
	1.10.2	Group B	5	Point	783	3915
	1.10.3	Group C	63	Point	990	62370
	1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	12	Point	1057	12684
	1.12	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface /recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	1500	Meter	200	300000
	1.13	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface /recessed medium class PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	75	Meter	308	23100
	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	50	Meter	146	7300
	1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	315	Meter	167	52605
	1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	435	Meter	200	87000
	1.14.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	200	Meter	249	49800
	1.14.5	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	R.O	Meter	328	
	1.14.9	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	R.O	Meter	394	
	1.14.10	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	175	Meter	543	95025
	1.14.11	4 X 16 sq. mm + 2 X 6 sq. mm earth wire	R.O	Meter	752	
	1.17	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.17.3	3 x 1.5 sq. mm	50	Meter	54	2700
	1.17.12	3 x 2.5 sq. mm	70	Meter	75	5250
	1.17.21	3 x 4 sq. mm	190	Meter	117	22230
	1.17.30	3 x 6 sq. mm	20	Meter	167	3340

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	1.18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
	1.18.2	2 Pair	360	Meter	20	7200
	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	30	Meter	33	990
	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
	1.21.1	20 mm	50	Meter	84	4200
	1.21.2	25 mm	350	Meter	90	31500
	1.21.3	32 mm	20	Meter	92	1840
	1.21.4	40 mm	10	Meter	130	1300
	1.21.5	50 mm	R.O	Meter	158	
	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	1.24.1	5/6 A switch	10	Each	85	850
	1.24.2	2 way 5/6 A switch	3	Each	123	369
	1.24.3	15/16 A switch	5	Each	132	660
	1.24.4	3 pin 5/6 A socket outlet	10	Each	111	1110
	1.24.5	6 pin 15/16 A socket outlet	5	Each	175	875
	1.24.6	Telephone socket outlet	12	Each	119	1428
	1.24.7	TV antenna socket outlet	1	Each	119	119
	1.24.8	Bell push	4	Each	126	504
	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	20	Each	32	640
	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
	1.27.1	1 or 2 Module (75mmX75mm)	5	Each	243	1215
	1.27.2	3 Module (100mmX75mm)	10	Each	267	2670
	1.27.3	4 Module (125mmX75mm)	R.O	Each	287	
	1.27.4	6 Module (200mmX75mm)	2	Each	333	666

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	1.28	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required.				
	1.28.1	1 or 2 Module	2	Each	114	228
	1.28.2	3 Module	1	Each	128	128
	1.28.3	4 Module	1	Each	138	138
	1.28.4	6 Module	2	Each	167	334
	1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	40	Each	401	16040
	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	55	Each	495	27225
	1.35	Installation ,Testing, Commissioning of wall bracket /ceiling fittings of all sizes and shapes containing upto two GLS/CFL/LED lamps per fitting, complete with all accessories including connections etc. as required.	295	Each	98	28910
	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	4	Each	92	368
	1.39	Providing and fixing plain 16/0.20mm (0.50sqmm) twin flat flexible, FRLS PVC insulated, copper conductor cable, in PVC sleeve of suitable size on the floor/ wall, or side of the table/ door etc. as required.	20	Meter	26	520
	1.5	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
	1.50.1	Upto 450 mm sweep	8	Each	363	2904
	1.50.2	510 mm sweep	R.O	Each	523	
	1.51	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	8	Each	168	1344
	1.53	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.				
	1.53.1	1 run of cable	300	Meter	49	14700
	1.53.2	2 run of cable	R.O	Meter	82	
	1.55	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.				
	1.55.1	Group A	R.O	Point	463	
	1.55.2	Group B	25	Point	508	12700
	1.55.3	Group C	210	Point	555	116550

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	1.56	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 2 nos. 3 pin 5/6 A modular socket outlet and 2 nos. 5/6 A modular switch, connections etc. as required. (For light plugs to be used in non residential buildings).	10	Each	582	5820
	1.57	Supplying & fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	13	Each	639	8307
	2.3	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.3.1	6 way , Double door	R.O	Each	1661	
	2.3.2	8 way , Double door	R.O	Each	1760	
	2.3.3	12 way , Double door	R.O	Each	2053	
	2.4	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
	2.4.1	4 way (4 + 12), Double door	R.O	Each	3068	
	2.4.2	6 way (4 + 18), Double door	3	Each	3693	11079
	2.4.3	8 way (4 + 24), Double door	6	Each	4601	27606
	2.5	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
	2.5.1	4 way (4 + 12), Double door	R.O	Each	5651	
	2.5.2	8 way (4 + 24), Double door	R.O	Each	7744	
	2.10	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.10.1	Single pole	165	Each	199	32835
	2.10.2	Single pole and neutral	2	Each	544	1088
	2.10.3	Double pole	2	Each	556	1112
	2.10.4	Triple pole	2	Each	826	1652
	2.10.5	Triple pole and neutral	1	Each	1092	1092

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	2.11	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	30	Each	8	240
	2.12	Supplying and fixing following rating, double pole, 240 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.12.1	40 A	1	Each	339	339
	2.13	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.13.1	40 A	1	Each	832	832
	2.13.2	63 A	8	Each	839	6712
	2.14	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	2.14.1	25 A	R.O	Each	1927	
	2.14.2	40 A	3	Each	2095	6285
	2.14.3	63 A	6	Each	2640	15840
	2.16	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32 A 240 V "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	2	Each	848	1696
	2.18	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	7	Each	1232	8624
	2.21	Providing and fixing M.V. danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	10	Each	226	2260
	4.6	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.6.1	100 mm width X 50 mm depth X 1.6 mm thickness	20	Meter	599	11980
	4.6.2	150 mm width X 50 mm depth X 1.6 mm thickness	10	Meter	644	6440
	4.6.4	300 mm width X 50 mm depth X 1.6 mm thickness	10	Meter	875	8750

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	4.7	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.7.1	100 mm width X 50 mm depth X 1.6 mm thickness	5	Each	1063	5315
	4.7.2	150 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1168	2336
	4.7.4	300 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1713	3426
	4.8	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Tee" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
	4.8.1	100 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1220	2440
	4.8.2	150 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1274	1274
	4.8.4	300 mm width X 50 mm depth X 1.6 mm thickness	1	Each	1997	1997
	4.9	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Crossmember" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc as required.				
	4.9.1	100 mm width X 50 mm depth X 1.6 mm thickness	3	Each	1220	3660
	4.9.2	150 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1274	2548
	4.9.4	300 mm width X 50 mm depth X 1.6 mm thickness	2	Each	2194	4388
	4.10	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "Reducer" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc as required.				
	4.10.1	100 mm width X 50 mm depth X 1.6 mm thickness	R.O	Each	1528	
	4.10.2	150 mm width X 50 mm depth X 1.6 mm thickness	2	Each	1778	3556
	4.10.4	300 mm width X 50 mm depth X 1.6 mm thickness	2	Each	2618	5236
	5.2	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/ coke and salt as required.	2	Each	5308	10616
	5.4	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	R.O	Set	6216	
	5.7	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	20	Meter	44	880

S.NO.	DSR ITEM No.	Description		Unit	Rate	Amount
	5.9	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	30	Meter	131	3930
	5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	20	Meter	206	4120
	5.16	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	250	Meter	57	14250
	5.18	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	20	Meter	37	740
TOTAL SUB HEAD "A"						1238845

<u>SUMMARY SHEET</u>					
1.	SUB HEAD "A" ELECTRICAL WORKS			Rs.	1238845.00
	GRAND TOTAL			Rs.	1238845.00

<u>LIST OF APPROVED MAKE OF MATERIALS</u>					
S.NO.	DETAILS	MANUFACTURERS NAME			
1)	M.C.C.B.S.	L&T / Schiender. / ABB			
2)	Fuses and Switches	L&T / Schiender. / ABB			
3)	Contactors and over load relays	L&T / Schiender. / ABB			
4)	Indicating lamps	L&T / Schiender. / ABB			
5)	Toggle Switches	Kaycee			
6)	Bakelite Moulded fuse bases	English Electric / L&T			
7)	Connector Block	Elmax / Tosha			
8)	CTS and Meters	Automatic Electric / IMP / Enersol			
9)	MCBS/ DB's	Schiender / Haggar / Legrand			
10)	1100 Volts Armoured cables (PVC cables)	Skytone / KEI / Polycab			
11)	FRLS PVC Conduit/MS Conduit	A.K.G./ B.E.C. / M-Kay			
12)	PVC insulated Copper Wire FRLS	Skytone / Polycab / ESC / KEI			
13)	Telephone / T.V. Cables	Skytone / ESC / Polycab / KEI			
14)	Switch / Sockets	Legrand / Crabtree / Schiender / Philips			
15)	Floor / Ceiling, Trunking / Box Type Cable Trays	Inovar / KME			

PROPOSED POLICE DEPARTMENT PROJECTS AT KARGIL LADAKH**SUB HEAD "S.P. OFFICE PANEL-1"**

S.NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Design, manufacture, S.I.T.C of following Panels made of 16 S.W.G.C.R.C.A. sheet, steel dust and vermin proof compartmentalized construction with bus bar chambers, cable alley, cable glands plate etc. as required duly painted from inside as well as out side, as below:-				
1.	<u>S.P. OFFICE PANEL-1</u>				
	<u>INCOMER</u>				
	i) 1 Set of 630 Amps 415 Volts TPN MCCB. of 50 KA with built in protections.				
	<u>MAIN BUS BARS</u>				
	800 Amps. 3 phase 4 wire 415 volts 50HZ Al. Bus bars with colour coded PVC heat shrinkable sleeves(Neutral to be equal to phase size)				
	<u>METERING</u>				
	i) 1 sets of 0-500V Voltmeter (96sqmm) with VSS & protection MCB.				
	ii) 1 sets of 0-630A / 5A Ammeter (96 sq.mm) with ASS & CTS.				
	iii) 3 Nos. of phase indication lights LED type with protection MCB.				
	<u>OUTGOINGS</u>				
	i) 10 Nos. 63 Amps. TPN MCB of 10 KA				
	ii) 7 Nos. 100 Amp TP+N MCCB of 25 KA				
	<u>S.P. OFFICE PANEL-1 AS DESCRIBED ABOVE</u>	1	Set	205000.00	205000.00
2.	<u>UPS PANEL</u>				
	<u>INCOMER</u>				
	i) 2 Set of 63 Amps 415 Volts 4P MCCB. of 10 KA with built in protections.				
	<u>MAIN BUS BARS</u>				
	(ii) 1 Set of 100-Amps 3 phase 4 wire 415 volts 50 HZ Copper bus bars with colour coded PVC heat shrinkable sleeves (Neutral to be equal to phase size).				
	<u>METERING</u>				
	i) 2 sets of 0-500V Voltmeter (96sqmm) with VSS & protection MCB.				
	ii) 2 sets of 0-63A / 5A Ammeter (96 sq.mm) with ASS & CTS.				
	iii) 6 Nos. of phase indication lights LED type with protection MCB.				
	<u>OUTGOING</u>				
	i) 2 Nos. 32 Amps. DP. MCB of 10 KA				
	ii) 5 Nos. 63 Amp TP+N MCB of 25 KA				
	<u>UPS PANEL AS DESCRIBED ABOVE.</u>	1	Set	65000.0	65000.00
3.	<u>L+P. VERTICAL TYPE DB.-UG3</u>				
	<u>INCOMER</u>				
	i) 1 Set of 63 Amps 415 Volts 4P Isolator 10 KA with built in protections.				
	<u>MAIN BUS BARS</u>				
	(ii) 1 Set of 100-Amps 3 phase 4 wire 415 volts 50 HZ Copper bus bars with colour coded PVC heat shrinkable sleeves (Neutral to be equal to phase size).				
	<u>METERING</u>				
	iii) 3 Nos. of phase indication lights LED type with protection MCB.				
	<u>OUTGOING</u>				

i) 5 Nos. 32 Amps. DP. Isolator of 10 KA

L+P. VERTICAL TYPE DB.-UG3 AS DESCRIBED ABOVE.

1

Set

20000.0

20000.00

GRABND TOTAL

290000.00

PROPOSED POLICE DEPARTMENT PROJECTS AT KARGIL LADAKH**SUB HEAD "POLICE STATION BAROO PANEL-2"**

S.NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Design, manufacture, S.I.T.C of following Panels made of 16 S.W.G.C.R.C.A. sheet, steel dust and vermin proof compartmentalized construction with bus bar chambers, cable alley, cable glands plate etc. as required duly painted from inside as well as out side, as below:-				
2.	<u>POLICE STATION BAROO PANEL-2</u>				
	<u>INCOMER</u>				
	i) 1 Set of 200 Amps 415 Volts TPN MCCB. of 25 KA with built in protections.				
	<u>MAIN BUS BARS</u>				
	250 Amps. 3 phase 4 wire 415 volts 50HZ Al. Bus bars with colour coded PVC heat shrinkable sleeves(Neutral to be equal to phase size)				
	<u>METERING</u>				
	i) 1 sets of 0-500V Voltmeter (96sqmm) with VSS & protection MCB.				
	ii) 1 sets of 0-200A / 5A Ammeter (96 sq.mm) with ASS & CTS.				
	iii) 3 Nos. of phase indication lights LED type with protection MCB.				
	<u>OUTGOINGS</u>				
	i) 10 Nos. 63 Amps. TPN MCB of 10 KA				
	<u>POLICE STATION BAROO PANEL-2 AS DESCRIBED ABOVE</u>	1	Set	75000.00	75000.00

PROPOSED POLICE DEPARTMENT PROJECTS AT KARGIL LADAKH**SUB HEAD "POLICE BARRACK (200Capacity) PANEL-3"**

S.NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Design, manufacture, S.I.T.C of following Panels made of 16 S.W.G.C.R.C.A. sheet, steel dust and vermin proof compartmentalized construction with bus bar chambers, cable alley, cable glands plate etc. as required duly painted from inside as well as out side, as below:-				
3.	<u>POLICE BARRACK (200Capacity) PANEL-3</u>				
	<u>INCOMER</u>				
	i) 1 Set of 200 Amps 415 Volts TPN MCCB. of 25 KA with built in protections.				
	<u>MAIN BUS BARS</u>				
	250 Amps. 3 phase 4 wire 415 volts 50HZ Al. Bus bars with colour coded PVC heat shrinkable sleeves(Neutral to be equal to phase size)				
	<u>METERING</u>				
	i) 1 sets of 0-500V Voltmeter (96sqmm) with VSS & protection MCB.				
	ii) 1 sets of 0-200A / 5A Ammeter (96 sq.mm) with ASS & CTS.				
	iii) 3 Nos. of phase indication lights LED type with protection MCB.				
	<u>OUTGOINGS</u>				
	i) 12 Nos. 63 Amps. TPN MCB of 10 KA				
	<u>POLICE BARRACK (200Capacity) PANEL- AS DESCRIBED ABOVE</u>	1	Set	70000.00	70000.00

PROPOSED POLICE DEPARTMENT PROJECTS AT KARGIL LADAKH**SUB HEAD "POLICE BARRACK (40Capacity) PANEL- 4"**

S.NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Design, manufacture, S.I.T.C of following Panels made of 16 S.W.G.C.R.C.A. sheet, steel dust and vermin proof compartmentalized construction with bus bar chambers, cable alley, cable glands plate etc. as required duly painted from inside as well as out side, as below:-				
4.	<u>POLICE BARRACK (40Capacity) PANEL- 4</u>				
	<u>INCOMER</u>				
	i) 1 Set of 200 Amps 415 Volts TPN MCCB. of 25KA with built in protections.				
	<u>MAIN BUS BARS</u>				
	250 Amps. 3 phase 4 wire 415 volts 50HZ Al. Bus bars with colour coded PVC heat shrinkable sleeves(Neutral to be equal to phase size)				
	<u>METERING</u>				
	i) 1 sets of 0-500V Voltmeter (96sqmm) with VSS & protection MCB.				
	ii) 1 sets of 0-200A / 5A Ammeter (96 sq.mm) with ASS & CTS.				
	iii) 3 Nos. of phase indication lights LED type with protection MCB.				
	<u>OUTGOINGS</u>				
	i) 10 Nos. 63 Amps. TPN MCB of 10 KA				
	<u>POLICE BARRACK (40Capacity) PANEL- AS DESCRIBED ABOVE</u>	1	Set	65000.00	65000.00

PROPOSED POLICE DEPARTMENT PROJECTS AT KARGIL LADAKH**SUB HEAD "POLICE BANQUET HALL PANEL- 5"**

S.NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Design, manufacture, S.I.T.C of following Panels made of 16 S.W.G.C.R.C.A. sheet, steel dust and vermin proof compartmentalized construction with bus bar chambers, cable alley, cable glands plate etc. as required duly painted from inside as well as out side, as below:-				
5.	<u>POLICE BANQUET HALL PANEL- 5</u>				
	<u>INCOMER</u>				
	i) 1 Set of 160 Amps 415 Volts TPN MCCB. of 25KA with built in protections.				
	<u>MAIN BUS BARS</u>				
	200 Amps. 3 phase 4 wire 415 volts 50HZ Al. Bus bars with colour coded PVC heat shrinkable sleeves(Neutral to be equal to phase size)				
	<u>METERING</u>				
	i) 1 sets of 0-500V Voltmeter (96sqmm) with VSS & protection MCB.				
	ii) 1 sets of 0-160A / 5A Ammeter (96 sq.mm) with ASS & CTS.				
	iii) 3 Nos. of phase indication lights LED type with protection MCB.				
	<u>OUTGOINGS</u>				
	i) 12 Nos. 63 Amps. TPN MCB of 10 KA				
	<u>POLICE BANQUET HALL PANEL- 5 AS DESCRIBED ABOVE</u>	1	Set	85000.00	85000.00

PROPOSED POLICE DEPARTMENT PROJECTS AT KARGIL LADAKH**SUB HEAD "METER BOARD PANEL- 6 (FOR HOUSING TYPE-2)"**

S.NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Design, manufacture, S.I.T.C of following Panels made of 16 S.W.G.C.R.C.A. sheet, steel dust and vermin proof compartmentalized construction with bus bar chambers, cable alley, cable glands plate etc. as required duly painted from inside as well as out side, as below:-				
6.	<u>METER BOARD PANEL- 6 (FOR HOUSING TYPE-2)</u>				
	<u>INCOMER</u>				
	i) 1 Set of 160 Amps 415 Volts TPN MCCB. of 25KA with built in protections.				
	<u>BUS BARS</u>				
	i) 200 Amps. 3 phase 4 wire 415 volts 50HZ Al. Bus bars with colour coded PVC heat shrinkable sleeves.				
	<u>METERING</u>				
	i) 1 Set of 0-500-V (96 sq.mm) Voltmeter with VSS & protection MCB				
	ii) 1 Set of 0-160-A / 5-A (96 sq.mm) Ammeter with ASS & CT"s.				
	iii) 3 Nos. phase indication lights LED type with protection MCB.				
	<u>OUTGOING</u>				
	i) 7 Nos. 40 Amp TPN. MCB of 10 KA for units with sealing arrangement by Electricity department.				
	ii) 2 Nos. 32 Amp DP. MCB of 10 KA for units with sealing arrangement by Electricity department.				
	Space for 1 No. Prepaid Metering System with single Phase, single register, & 6 Nos. Prepaid Metering System with Three Phase, Three register, 10 - 40 A KWH Meter with LCD display, communication port, Wired Communication system, Wall mounted with built in disconnector for Auto Load cut-off with Prepaid EMS to keep track of the transactions with meters, maintain consumer wise ledger, generate recharge coupons & data for each consumer as per requirement, generate bills at month end & SMS alert for low credit KWH meter suitable to record Active energy KWH (cumulative) main supply.(To be made as per spec of local Electricity Board)				
	METER BOARD PANEL- 6 (FOR HOUSING TYPE-2) AS DESCRIBED ABOVE	1	Sets	50000.00	50000.00

PROPOSED POLICE DEPARTMENT PROJECTS AT KARGIL LADAKH**SUB HEAD "METER BOARD PANEL- 7 (FOR HOUSING TYPE-3)"**

S.NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Design, manufacture, S.I.T.C of following Panels made of 16 S.W.G.C.R.C.A. sheet, steel dust and vermin proof compartmentalized construction with bus bar chambers, cable alley, cable glands plate etc. as required duly painted from inside as well as out side, as below:-				
7.	<u>METER BOARD PANEL- 7 (FOR HOUSING TYPE-3)</u>				
	<u>INCOMER</u>				
	i) 1 Set of 160 Amps 415 Volts TPN MCCB. of 25KA with built in protections.				
	<u>BUS BARS</u>				
	i) 200 Amps. 3 phase 4 wire 415 volts 50HZ Al. Bus bars with colour coded PVC heat shrinkable sleeves.				
	<u>METERING</u>				
	i) 1 Set of 0-500-V (96 sq.mm) Voltmeter with VSS & protection MCB				
	ii) 1 Set of 0-160-A / 5-A (96 sq.mm) Ammeter with ASS & CT"s.				
	iii) 3 Nos. phase indication lights LED type with protection MCB.				
	<u>OUTGOING</u>				
	i) 7 Nos. 40 Amp TPN. MCB of 10 KA for units with sealing arrangement by Electricity department.				
	ii) 2 Nos. 32 Amp DP. MCB of 10 KA for units with sealing arrangement by Electricity department.				
	Space for 1 No. Prepaid Metering System with single Phase, single register, & 6 Nos. Prepaid Metering System with Three Phase, Three register, 10 - 40 A KWH Meter with LCD display, communication port, Wired Communication system, Wall mounted with built in disconnecter for Auto Load cut-off with Prepaid EMS to keep track of the transactions with meters, maintain consumer wise ledger, generate recharge coupons & data for each consumer as per requirement, generate bills at month end & SMS alert for low credit KWH meter suitable to record Active energy KWH (cumulative) main supply.(To be made as per spec of local Electricity Board)				
	METER BOARD PANEL- 6 (FOR HOUSING TYPE-2) AS DESCRIBED ABOVE	1	Sets	50000.00	50000.00