

## ANNEXURE 1C

### INTERNAL ELECTRIFICATION LOW SIDE WORK

Project Name : - GTL Sitapura, Jaipur

Sr. No.	Description of Item	Unit	Qty	Rate	Amount
<b>POINT WIRING</b>					
1	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 with recessed / surface PVC conduit, suitable GI box and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required. (Length up to 10 Meter)	Point	110		
2	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable with recessed / surface PVC conduit, suitable GI box and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required. (Length between two point up to 10 Meter)	Point	210		
3	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, suitable GI box and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.	Point	5		
4	Wiring for light/power plug & switch board with 2X2.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No. 2.5 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Point	5		
5	Wiring for looped light/power plug & switch board with 2X2.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No. 2.5 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Point	5		
6	Wiring for 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.	Point	8		
7	Wiring for looped power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Point	17		
8	Supplying and fixing call bell/ buzzer suitable for single phase, 230 volts, complete as required.	Each	5		
9	Supplying and fixing 25/32 amps, 415 volts, TPN industrial type, socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 30 amps "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. complete as required.	Each	2		
10	Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top, alongwith 20 amps "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. complete as required.	Each	2		
11	Supply & Wiring for circuit/ submain wiring/cable 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				
i	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire <b>(As per required)</b>	Metre	RO		
ii	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire <b>(As per required)</b>	Metre	RO		
iii	2 X 4 sq. mm + 1 X 4 sq. mm earth wire <b>For AC Unit</b>	Metre	950		
iv	2 X 6 sq. mm + 1 X 6 sq. mm earth wire <b>For AC Unit</b>	Metre	RO		
12	P/Laying P.V.C. / XLPE insulated & P.V.C. sheathed cable of 1.1 KV grade with Copper conductor of IS:1554 P-I / IS :7098 P - I of Group 1 of approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, 11nd class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size.				
i	4 X 6 sq. mm	Metre	30		
ii	4 X 10 sq. mm	Metre	50		
iii	4 X 16 sq. mm	Metre	50		
13	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.				
i	25 mm	Metre	100		
ii	32 mm	Metre	50		
iii	40 mm	Metre	RO		
iv	50 mm	Metre	RO		
<b>MCCB, MCB &amp; DB</b>					
14	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)				
i	4 way (4 + 12), Double door	Each	RO		
ii	6 way (4 + 18), Double door	Each	3		
iii	8 way (4 + 24), Double door	Each	3		
iv	12 way (4 + 36), Double door	Each	RO		
15	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)				
i	6 way, Double door		RO		
ii	8 way, Double door		2		
16	Supplying and fixing 6 amps to 32 amps rating, 240/415 volts, "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.				
i	Single pole	Each	120		
ii	Double pole	Each	RO		

Sr. No.	Description of Item	Unit	Qty	Rate	Amount
iii	Triple pole	Each	RO		
iv	Triple pole and neutral	Each	RO		
17	Supplying and fixing following rating, four pole, 415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing DB/LT Panels complete with connections, testing and commissioning etc. as required.	Each			
i	40 amps	Each	2		
ii	63 amps	Each	6		
18	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	Each	5		
19	Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, Residual Current Breaker with Overload (RCBO), having a sensitivity current up to 100 mill amperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
i	25 amps	Each	RO		
ii	40 amps	Each	RO		
iii	63 amps	Each	18		
<b>Workstation Point</b>					
20	S & I of 4 nos. of 6 A, 5 pin Sockets and with 1 no. 16 A switches with concealed company made metallic boxes or PVC flush box on walls / furniture's / trunking etc complete all respect with necessary wiring of mains of 2 no of 2.5 sq mm and 1 no of 2.5 sqmm FRLS pvc insulated copper conductor multi-stranded flexible wire with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. complete from PDB to Computer power supply boards.(Maxi. 3 to 5 Points in one circuit). complete with necessary termination etc. complete. [black / white Colour Outer Plate For These Switchboards].LOOP POINTS MUST BE OF SAME SIZED WIRES.	Each	50		
21	S & I of 4 nos. of 6 A, 5 pin Sockets with 1 no.16 A switches + 6A 1 no. socket with 1 no. 6A switch + 2 nos. 16A 5 pin socket with 1 no. 16A switch with concealed company made metallic boxes or PVC flush box on walls / furniture's / trunking etc complete all respect with necessary wiring of mains of 2 no of 4.0 sq mm and 1 no of 4.0 sqmm FRLS pvc insulated copper conductor multi-stranded flexible wire with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. complete from PDB to Computer power supply boards.(Maxi. 3 to 5 Points in one circuit). complete with necessary termination etc. complete. [black / white Colour Outer Plate For These Switchboards].LOOP POINTS MUST BE OF SAME SIZED WIRES.	Each	8		
22	S & I of 4 nos. of 6 A, 5 pin Sockets with 1 no.16 A switches + 4 nos. of 6 A, 5 pin Sockets with 1 no.16 A switches + 4 nos. 16A 5 pin socket with 1 no. 16A switch with concealed company made metallic boxes or PVC flush box on walls / furniture's / trunking etc complete all respect with necessary wiring of mains of 2 no of 4.0 sq mm and 1 no of 4.0 sqmm FRLS pvc insulated copper conductor multi-stranded flexible wire with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. complete from PDB to Computer power supply boards.(Maxi. 3 to 5 Points in one circuit). complete with necessary termination etc. complete. [black / white Colour Outer Plate For These Switchboards].LOOP POINTS MUST BE OF SAME SIZED WIRES.	Each	3		
23	S & I of 2 nos. of 6 A, 5 pin Sockets with 1 no.6 A switch + 1 no. of 6 A switch above table and 2 nos. 6A 5 pin socket below table with concealed company made metallic boxes or PVC flush box on walls / furniture's / trunking etc complete all respect with necessary wiring of mains of 2 no of 2.5 sq mm and 1 no of 2.5 sqmm FRLS pvc insulated copper conductor multi-stranded flexible wire with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. complete from PDB to Computer power supply boards.(Maxi. 3 to 5 Points in one circuit). complete with necessary termination etc. complete. [black / white Colour Outer Plate For These Switchboards].LOOP POINTS MUST BE OF SAME SIZED WIRES.	Each	8		
24	S & I of 1 no. of 16 A, 5 pin Sockets with 1 no.16 A switch + 1 no. of 16 A switch above table and 2 nos. 16A 5 pin socket below table with concealed company made metallic boxes or PVC flush box on walls / furniture's / trunking etc complete all respect with necessary wiring of mains of 2 no of 4.0 sq mm and 1 no of 4.0 sqmm FRLS pvc insulated copper conductor multi-stranded flexible wire with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. complete from PDB to Computer power supply boards.(Maxi. 3 to 5 Points in one circuit). complete with necessary termination etc. complete. [black / white Colour Outer Plate For These Switchboards].LOOP POINTS MUST BE OF SAME SIZED WIRES.	Each	5		
25	S & I pop up box for conferance table with 1 no. of 6 A, 5 pin Sockets with 1 no.6 A switch + 1 no. 16A 5 pin socket with 1 no. 16A switch+ 1 no RJ 45 Jack + 1 no. RJ-11 telephone jack top of table with concealed company made metallic boxes or PVC flush box on walls / furniture's / trunking etc complete all respect with necessary wiring of mains of 2 no of 4.0 sq mm and 1 no of 4.0 sqmm FRLS pvc insulated copper conductor multi-stranded flexible wire and cat-6 cable with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. complete from PDB to Computer power supply boards.(Maxi. 3 to 5 Points in one circuit). complete with necessary termination etc. complete. [black / white Colour Outer Plate For These Switchboards].LOOP POINTS MUST BE OF SAME SIZED WIRES.	Each	4		

Sr. No.	Description of Item	Unit	Qty	Rate	Amount
<b>TELEPHONE AND NETWORKING CONDUITING/ WIRING SYSTEM:</b>					
26	Supply and installing telephone point with Telephone socket outlets of RJ 11 of approved make with company made concealed boxes in walls / furniture's etc. complete with Providing, installing, testing, commissioning of cat-6 cable of ITI approved with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. or to be cleated on wall / ceiling with saddles / spacer etc. necessary termination etc. complete.from kroone box to table tele. points, etc. complete.	Nos.	85		
27	Supply, installation, testing and commissioning of CAT 6, RJ 45 information outlet (I/O) of D-link make with front modular cover plate, flush box metallic or PVC for trucking system etc. complete with terminations etc complete with Providing, installing, testing, commissioning of CAT 6 UTP pvc insulated copper conductor data cable of D-link make with 20/25 dia. PVC conduits with accessories duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. or to be cleated on wall / ceiling with saddles / spacer etc. necessary termination etc. with ferrule numbering at both ends of each of piece of cable etc. complete as per the requirement from metal rack to table I / O points complete.( one for each Work station, one for each smart TV and one for IP phone as required)	Nos.	85		
28	Supply and installation of wall/recessed mounting KRONE connector type telephone tag block of following sizes in sheet metal enclosure of suitable dimensions fabricated out of 16 SWG sheet steel with castle key lock, hinged gasketed type cover including termination of telephone cables, making connections, painting of box etc, complete as required.				
	50 Pair Tel Tag Block	Nos.	2		
	20 Pair Tel Tag Block	Nos.	RO		
29	Jelly filled armoured (PIJF) Armoured telephone cable including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, 11nd class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size.				
	50 Pair (0.5 mm dia FRLS PVC insulated annealed copper conductor)	Metre	50		
	20 Pair (0.5 mm dia FRLS PVC insulated annealed copper conductor)	Metre	RO		
26	Supply , Installation and Testing of 2 meter 4 pair , 100 Ohm, 24 AWG , Cat 6 UTP, flexible , Double ended Patch Cords along with 2 No of RJ 45 connectors with strain relief transparent boots as per TIA /EIA 568 B.2-1 Specifications.	Each	85		
30	Fixing following size/ modules, GI box for modular switches in recess etc. as required.				
i	2 module	Each	RO		
ii	4 module	Each	RO		
31	Fixing of following Modular base & cover plate on existing modular metal boxes etc. as required.				
i	2 Module	Each	RO		
ii	4 Module	Each	RO		
32	Supply , Drawing and Testing of 4 pair, 24 AWG UTP Cat 6 Cable as per latest ammendments of TIA /EIA 568 B.2-1 Specifications in existing MS/PVC Conduits including making connections to Information outlets and Patch Panels with ferruling at both ends for identification with necessary tools for punching, stripping, crimping and testing required	Mtr.	RO		
33	Supplying and laying of following sizes of PVC conduit on surface/ recess including cutting/filling chases along with conduit accessories etc. complete as required.				
a)	25 mm dia	RM	RO		
b)	32 mm dia	RM	RO		

Sr. No.	Description of Item	Unit	Qty	Rate	Amount
<b>TV SYSTEM:</b>					
34	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
	TV antenna socket outlet	Each	2		
35	Fixing following size/ modules, GI box for modular switches in recess etc. as required.				
i	2 module	Each	2		
ii	4 module	Each	RO		
36	Fixing of following Modular base & cover plate on existing modular metal boxes etc. as required.				
i	2 Module	Each	2		
ii	4 Module	Each	RO		
37	Supplying and fixing 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.	Metre	50		
38	Supplying and fixing co-axial TV cable RG-11 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.	Metre	RO		
39	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.				
	25 mm	Metre	50		
<b>LIGHTS AND CEILING</b>					
40	Installation testing and commissioning of IP20 recess / surface type LED down light including making connection testing etc.as required	Each	250		
41	Installation testing and commissioning of IP20 suspended/pandent type LED down light including making connection testing etc.as required	Each	RO		
42	Installation testing and commissioning of suspended type LED chandelier light including making connection testing etc.as required	Each	RO		
43	Installation testing and commissioning of IP65 LED foot light light including making connection testing etc.as required	Each	RO		
<b>CCTV</b>					
44	Supply , Drawing and Testing of 4 pair, 24 AWG UTP Cat 6 Cable as per latest ammendments of TIA /EIA 568 B.2-1 Specifications in existing MS/PVC Conduits including making connections to Information outlets and Patch Panels with ferruling at both ends for identification with necessary tools for punching, stripping, crimping and testing required	Mtr	500		
45	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.				
	25 mm	Metre	600		
<b>FIRE ALARM</b>					
46	Supplying and drawing FR PVC insulated & unsheathed flexible copper conductor ISI marked (IS:694) of 1.1 kV grade and approved make in existing surface or recessed conduit/casing capping including making connections etc. as required.	Mtrs.	150		
<b>Total</b>					

Note : - Lighting Fixture, Switch Socket & base cover plate make & model will be finalize by interior designer/ Architect / client