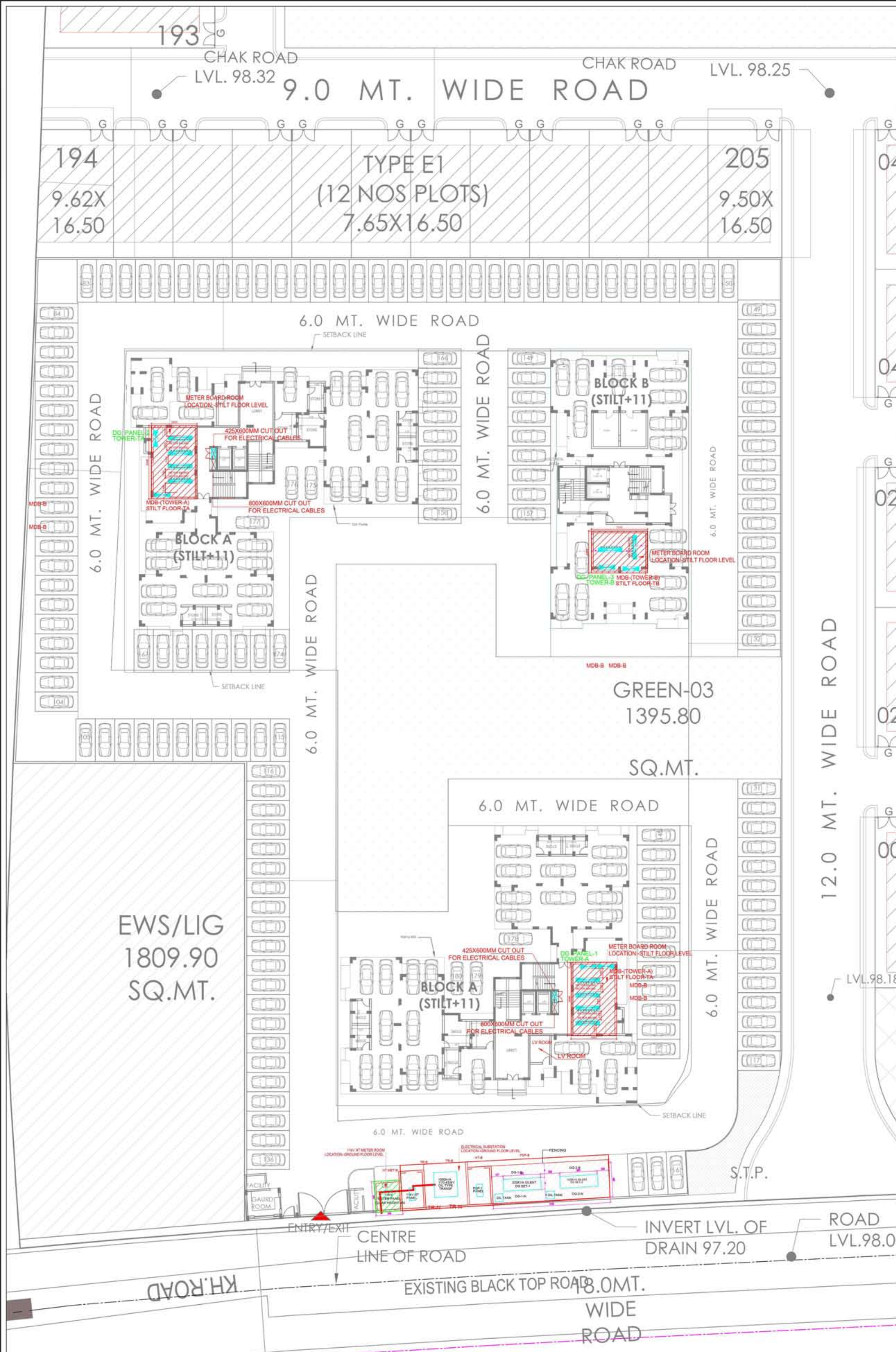




1. Design Calculations

2. Notes As Per Maharashtra Village Norms Limited (For domestic - 500 watt per 10 sq. meters)

3. Table with 5 columns: S.No., Flat Type, Connected Load (kW), Connected Load per Flat (kW), Proposed DG Power Rating (kW)

4. Table with 4 columns: S.No., Description, Connected Load (kW), Proposed DG Power Rating (kW)

4.1. Table with 4 columns: S.No., Description, Connected Load (kW), Proposed DG Power Rating (kW)

4.2. Table with 4 columns: S.No., Description, Connected Load (kW), Proposed DG Power Rating (kW)

5. Table with 4 columns: S.No., Description, Connected Load (kW), Proposed DG Power Rating (kW)

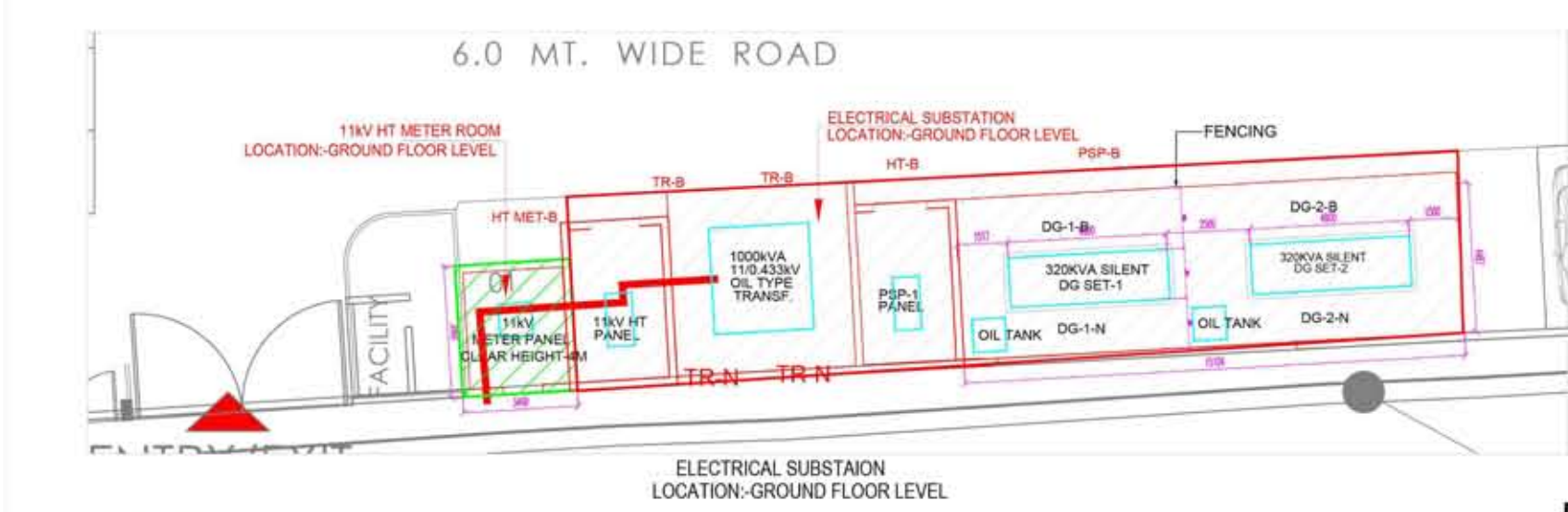
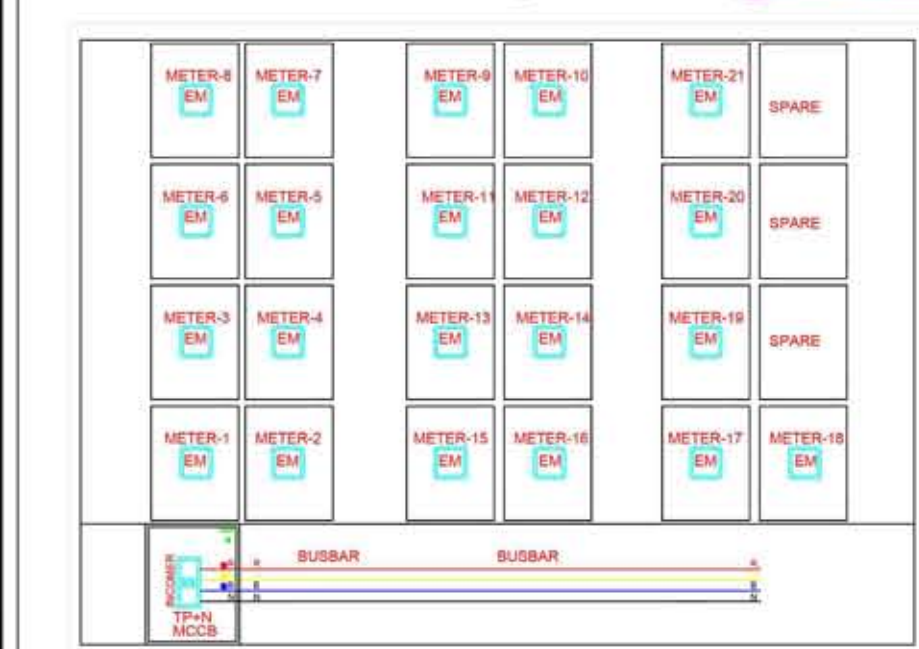
S.NO.	EQUIPMENT	EARTHING NETURAL(CU)	EARTHING BODY(GI)
1.	11KV HT METER		2
2.	11KV HT PANEL		2
3.	TRANSFORMER	2	2
4.	PSP PANEL		2
5.	MDB		6
6.	DG-1 & 2	4	4
TOTAL		06	18

LEGEND:-

- 11KV HT CABLE
- EARTH PIT

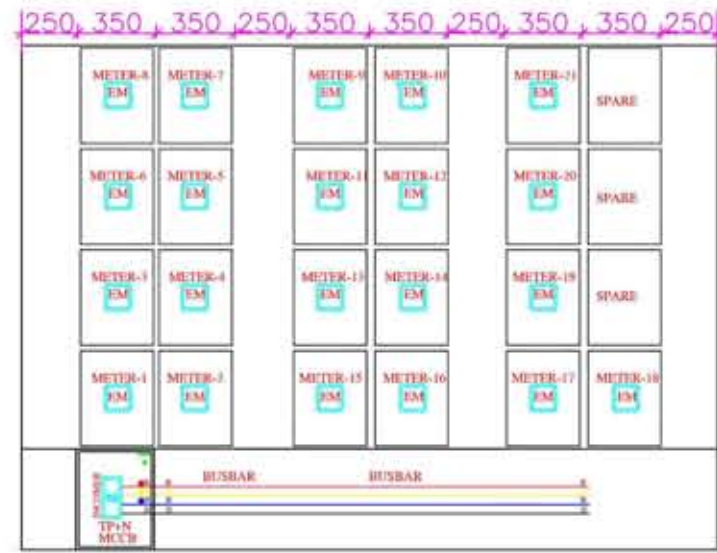
Note:

- HT Meter Panel shall be Located at Ground Floor Level
- 11KV HT Panel INo. incoming and for transformers.
- Electrical Substation is Outdoor Type Located at Ground Floor Level
- 11KV underground cable 3C x 185 Sqmm xlpe Cable.
- Transformers INo are 750KVA 11/0.433KV rated with app.4.5% impedance
- Transformers L.T. Psp-1&2 Panel shall be Located at Ground Floor Level
- Meter Board Panel shall be Located at Ground Floor Level



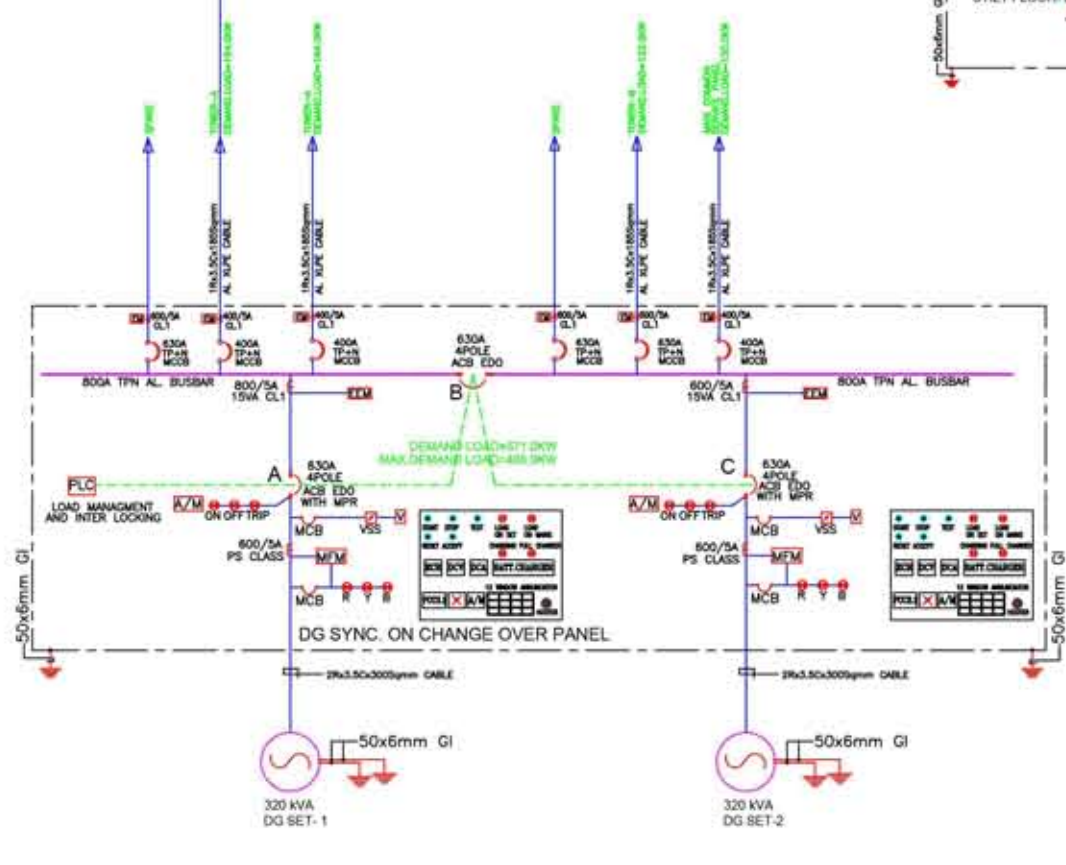
ELECTRICAL SUBMISSION DRAWING

PROJECT: PROPOSED AJIT'S ORO COUNTY, MINI RESIDENTIAL TOWNSHIP AT KHASRA NO. 675, 676, 677, 678, 680, 692, VILLAGE - MADIYAON, TEHSIL - BAKSHI KA TALAB, LUCKNOW	MEP CONSULTANT :- MULTIPLE SERVICES CONSULTANTS 253/B, Rajpur Khurd Extension, Chattarpur, New Delhi-110068, Ph. no. -8920225677/8920228058 msc@msc-mep.com	TITLE: SITE PLAN - GROUP HOUSING ELECTRICAL LAYOUT DATE: 03.10.2022	NORTH: 	LAND OWNER: AJIT MAURYA & OTHERS	DEVELOPER/PROMOTER: ORO REAL INFRA LLP	ARCHITECT: Rakesh Kumar Sharma Regd. Architect CA/91/13596
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S.NO.	EQUIPMENT	EARTHING NEUTRAL(CU)	EARTHING BODY(GI)
1.	11KV HT. METER		2
2.	11KV HT. PANEL		2
3.	TRANSFORMER	2	2
4.	PSP PANEL		2
5.	MDB		6
6.	DG-1& 2	4	4
	TOTAL	06	18

1. Design Calculations	
2. Notes As Per Manufacturer's Data Sheet (For dimensions - 500 x 200 x 100 mm)	
3.	
4. Tower - Block A (HT-1)	
5.	
6. Tower - Block B (HT-2)	
7.	
8. Power Requirement	
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Note:
 1. HT Meter Panel is Located at Ground Floor Level
 2. 11KV HT Panel 1No. incoming and for transformers.
 3. Electrical Substation is Outdoor Type Located at Ground Floor Level
 4. 11KV underground cable 3C x 185 Sqmm Alpc Cable.
 5. Transformers 1No are 750KVA 11/0.433KV rated with app 4.5% impedance
 6. Transformer LT Psp-1&2 Panel is Located at Ground Floor Level
 7. Meter Board Panel is Located at Ground Floor Level

SNO.	SYM.	DESCRIPTION
01.	(A)	AMMETER
02.	(V)	VOLT METER
03.	(PF)	POWER FACTOR METER
04.	(F)	FREQUENCY METER
05.	(WH)	KILOWATT HOUR METER
06.	(KW)	KILOWATT METER
07.	(DE)	DUAL ELECTRONIC ENERGY METER
08.	(FR)	FIRE RETARDANT CABLE
09.	(AS)	AMMETER SELECTOR SWITCH
10.	(VS)	VOLTMETER SELECTOR SWITCH
11.	(RSCB)	RESIDUAL CURRENT CIRCUIT BREAKER
12.	(PLC)	PROGRAM LOGIC CONTROLLER
13.	(LR)	LOCKOUT RELAY
14.	(STR)	SUPERSVISOORY TRIP RELAY
15.	(URV)	UNDER VOLTAGE DEVICE
16.	(OVV)	OVER VOLTAGE DEVICE
17.	(DPR)	DIFFERENTIAL PROTECTION RELAY
18.	(APFC)	AUTOMATIC POWER FACTOR CORRECTION RELAY
19.	(*)	NOT TO BE INCLUDED IN DEMAND LOAD
20.	(CF)	CONTROL FUSE
21.	(CT)	CURRENT TRANSFORMER
22.	(TMO)	TRIMETER METER
23.	(IL)	INDICATING LAMP
24.	(OR)	OVER LOAD RELAY
25.	(PC)	POWER CONTACTOR
26.	(PT)	POTENTIAL TRANSFORMER
27.	(ACB)	AIR CIRCUIT BREAKER (ACB)

28.	(VCB)	VACUUM CIRCUIT BREAKER (VCB)
29.	(GND)	GROUNDING
30.	(MPR)	MICRO PROCESSOR BASED RELEASE
31.	(EM)	ELECTRONIC ENERGY METER
32.	(MCCB)	MOLDED CASE CIRCUIT BREAKER (MCCB)
33.	(MCB)	MINIATURE CIRCUIT BREAKER (MCB)
34.	(E.O.D.)	ELECTRICALLY OPERATED (MANUAL DRAWOUT)
35.	(AMF)	AUTO MAINS FAILURE
36.	(VSS)	VOLTMETER SELECTOR SWITCH
37.	(BC)	BREAKER CONTROL
38.	(H)	HOTTER
39.	(VSR)	VOLTAGE SENSOR RELAY
40.	(TVSS)	TRANSIENT VOLTAGE SURGE SUPPRESSOR
41.	(PSS)	PHASE SEQUENCE RELAY
42.	(ECR)	ENGINE CRANKING RELAY
43.	(PB)	PUSH BUTTON
44.	(VSS)	24V DC SHUNT TRIP COIL
45.	(VSM)	VOLT AMPERAGE METER
46.	(OLTC)	ON LOAD TAP CHANGER
47.	(T)	DELAY TIMER

ELECTRICAL SUBMISSION DRAWING

PROJECT:
 PROPOSED AJIT'S ORO COUNTY, MINI RESIDENTIAL TOWNSHIP AT KHASRA NO. 675, 676, 677, 678, 680, 692, VILLAGE - MADIYAON, TEHSIL - BAKSHI KA TALAB, LUCKNOW

MEP CONSULTANT :-
 MULTIPLE SERVICES CONSULTANTS
 253/B, Rajpur Khurd Extension, Chattarpur, New Delhi-110068,
 Ph. no. -8920225677/8920228058
 msc@msc-mep.com

TITLE:
 TOWER-A (PART-1)
 MAIN SINGLE LINE DIAGRAM

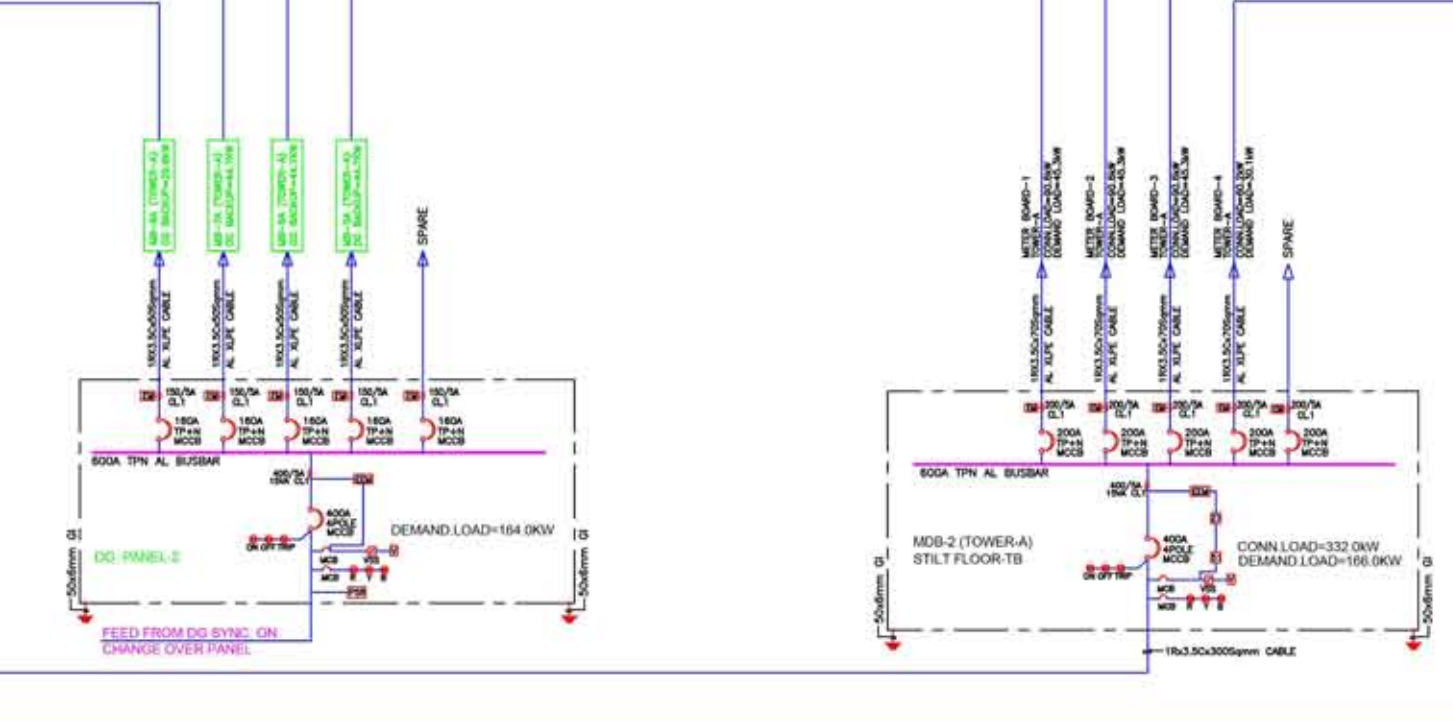
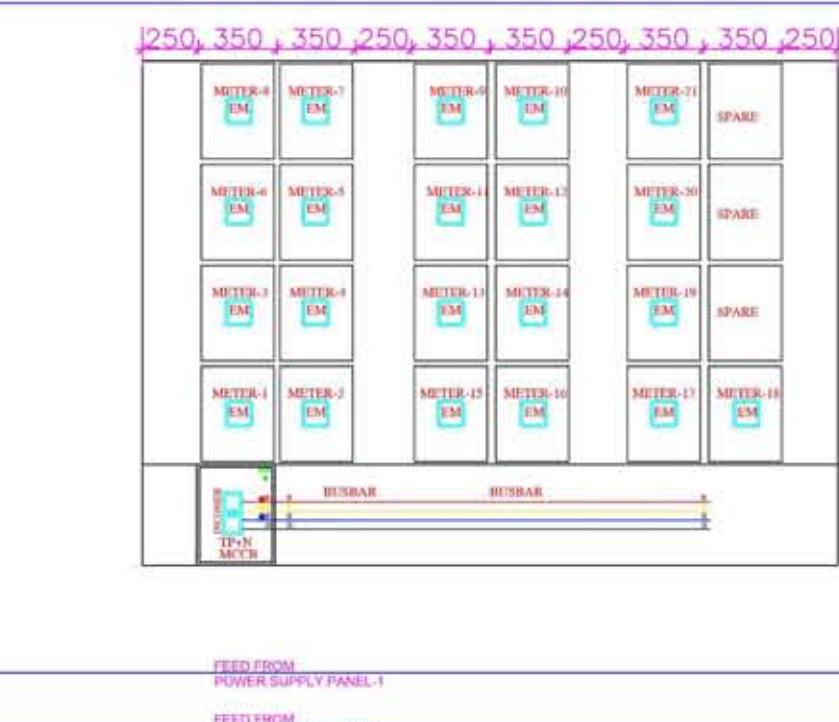
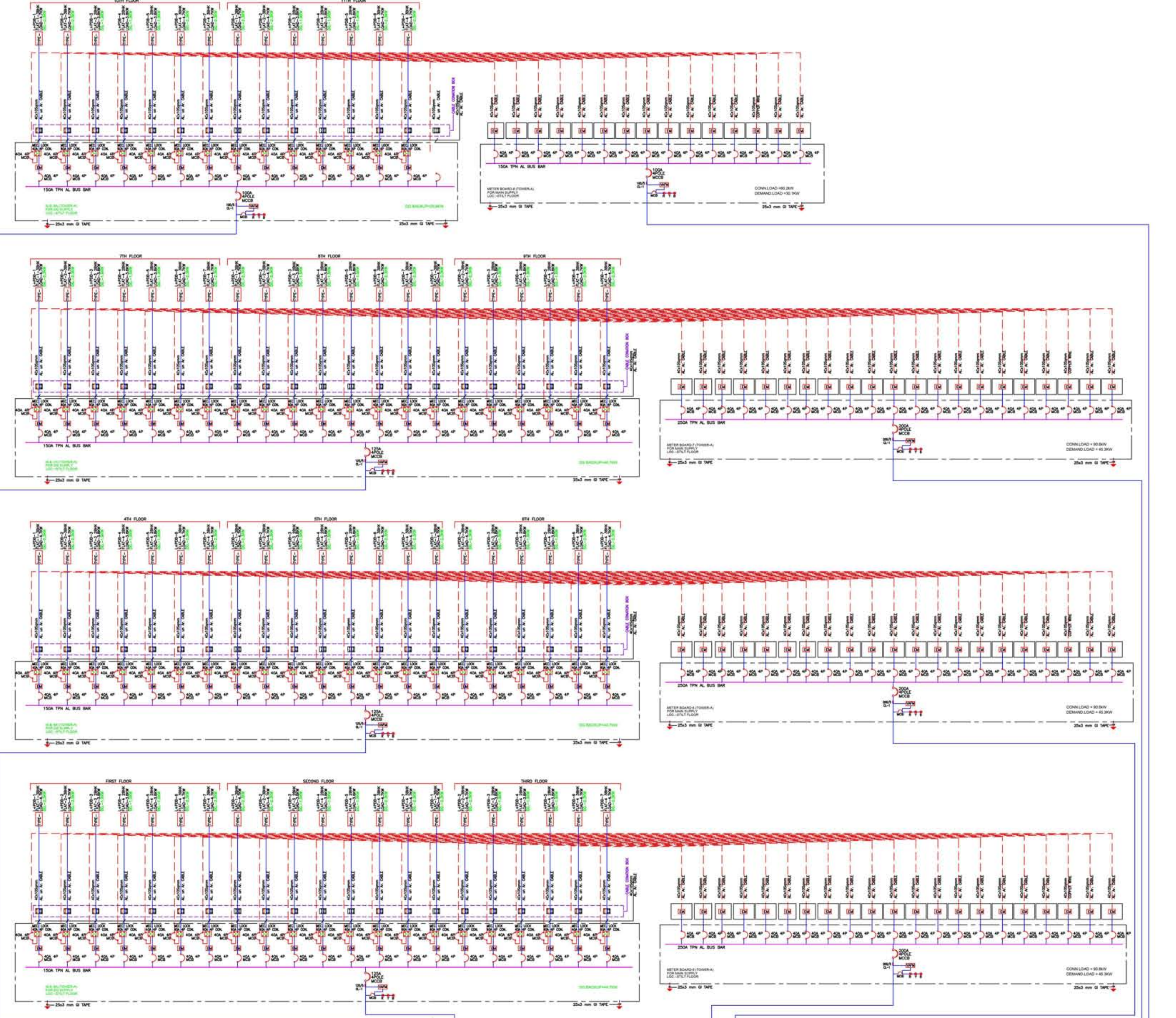
DATE:
 04.10.2022

NORTH:

LAND OWNER:
 AJIT MAURYA & OTHERS

DEVELOPER/PROMOTER:
 ORO REAL INFRA LLP

ARCHITECT:
 Rakesh Kumar Sharma
 Regd. Architect
 CA/1913596



1. Design Calculations	
2. Notes: As Per Maharashtra Voltage Levels (For domestic - 240 volt per 10 sq. meters)	
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SNO.	SYM.	DESCRIPTION
01.	[A]	AMMETER
02.	[V]	VOLT METER
03.	[P]	POWER FACTOR METER
04.	[F]	FREQUENCY METER
05.	[KWH]	KILOWATT HOUR METER
06.	[KW]	KILOWATT METER
07.	[EKM]	DUAL ELECTRONIC ENERGY METER
08.	[FR]	FIRE RESISTANT CABLE
09.	[AS]	AMMETER SELECTOR SWITCH
10.	[VS]	VOLTMETER SELECTOR SWITCH
11.	[OCSR]	OVER CURRENT & EARTH FAULT RELAY
12.	[PLC]	PROGRAM LOGIC CONTROLLER
13.	[LR]	LOCKOUT RELAY
14.	[STR]	SUPERSVORY TRIP RELAY
15.	[UV]	UNDER VOLTAGE DEVICE
16.	[OV]	OVER VOLTAGE DEVICE
17.	[DPR]	DIFFERENTIAL PROTECTION RELAY
18.	[APCR]	AUTOMATIC POWER FACTOR CORRECTION RELAY
19.	*	NOT TO BE INCLUDED IN DEMAND LOAD
20.	[CF]	CONTROL FUSE
21.	[CT]	CURRENT TRANSFORMER
22.	[TVM]	TRIVECTOR METER
23.	[IL]	INDICATING LAMP
24.	[OLR]	OVER LOAD RELAY
25.	[PC]	POWER CONTACTOR
26.	[PT]	POTENTIAL TRANSFORMER
27.	[ACB]	AIR CIRCUIT BREAKER (ACB)
28.	[VCB]	VACUUM CIRCUIT BREAKER (VCB)

29.	[GND]	GROUNDING
30.	[MPR]	MICRO PROCESSOR BASED RELEASE
31.	[EM]	ELECTRONIC ENERGY METER
32.	[MCCB]	MOULDED CASE CIRCUIT BREAKER (MCCB)
33.	[MCB]	MINIATURE CIRCUIT BREAKER (MCB)
34.	[ED.O]	ELECTRICAL OPERATED (MANUAL DRAWOUT)
35.	[AMF]	AUTO MAINS FAILURE
36.	[AMS]	AUTO/ MANUAL SWITCH
37.	[BC]	BREAKER CONTROL
38.	[H]	HOTTER
39.	[VSR]	VOLTAGE SENSOR RELAY
40.	[TVSR]	TRANSIENT VOLTAGE SURGE SUPPRESSOR
41.	[PSR]	PHASE SEQUENCE RELAY
42.	[ECR]	ENGINE CRANKING RELAY
43.	[PUSH]	PUSH BUTTON
44.	[24V DC]	24V DC SHUNT TRIP COIL
45.	[VAFM]	VOLT AMMETER FREQUENCY METER
46.	[OLC]	ON LOAD TAP CHANGER
47.	[DT]	DELAY TIMER

S.NO.	EQUIPMENT	EARTHING NATURAL(CU)	EARTHING BODY(GI)
1.	11kV HT METER	2	2
2.	11kV HT PANEL	2	2
3.	TRANSFORMER	2	2
4.	PSP PANEL	2	2
5.	MDB	6	6
6.	DG-1 & 2	4	4
TOTAL		06	18

Note:
1. HT Meter Panel shall be Located at Ground Floor Level
2. 11kV HT Panel Ino. incoming and for transformers.
3. Electrical Substation is Outdoor Type Located at Ground Floor Level
4. 11kV underground cable 3C x 185 Sqmm vlpe Cable
5. Transformers Ino are 750KVA 11/0.433KV rated with app.4.5% impedance
6. Transformers LT Psp-1&2 Panel shall be Located at Ground Floor Level
7. Meter Board Panel shall be Located at Ground Floor Level

PROJECT:
PROPOSED AJIT'S ORO COUNTY, MINI RESIDENTIAL TOWNSHIP AT KHASRA NO. 675, 676, 677, 678, 680, 692, VILLAGE - MADIYAON, TEHSIL - BAKSHI KA TALAB, LUCKNOW

MEP CONSULTANT :-
MULTIPLE SERVICES CONSULTANTS
253/B, Rajpur Khurd Extension, Chattarpur, New Delhi-110068,
Ph. no. -8920225677/8920228058
msc@msc-mep.com

TITLE:
TOWER-A (PART-2)
MAIN SINGLE LINE DIAGRAM

DATE:
04.10.2022

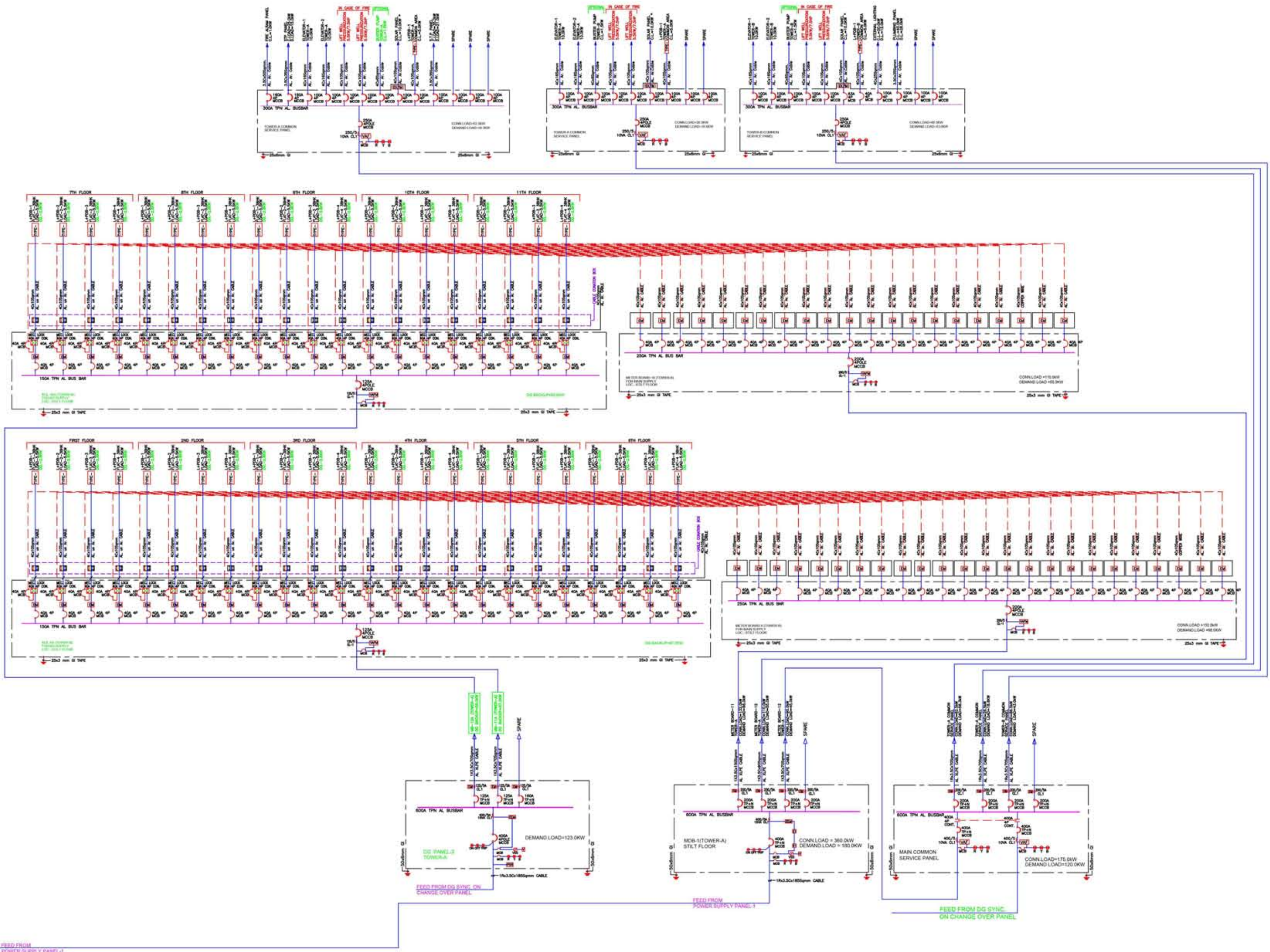
NORTH:

LAND OWNER:
AJIT MAURYA & OTHERS

DEVELOPER/PROMOTER:
ORO REAL INFRA LLP

ARCHITECT:
Rakesh Kumar Sharma
Regd. Architect
CA/01/13596

ELECTRICAL SUBMISSION DRAWING



LEGEND:-

S.NO.	SYM.	DESCRIPTION
01.	[Symbol]	AMMETER
02.	[Symbol]	VOLT METER
03.	[Symbol]	POWER FACTOR METER
04.	[Symbol]	FREQUENCY METER
05.	[Symbol]	KILOWATT HOUR METER
06.	[Symbol]	KILOWATT METER
07.	[Symbol]	DUAL ELECTRONIC ENERGY METER
08.	[Symbol]	FIRE RETARDANT CABLE
09.	[Symbol]	AMMETER SELECTOR SWITCH
10.	[Symbol]	VOLTMETER SELECTOR SWITCH
11.	[Symbol]	OVER CURRENT & EARTH FAULT RELAY
12.	[Symbol]	PROGRAM LOGIC CONTROLLER
13.	[Symbol]	LOCKOUT RELAY
14.	[Symbol]	SUPERSVORY TRIP RELAY
15.	[Symbol]	UNDER VOLTAGE DEVICE
16.	[Symbol]	OVER VOLTAGE DEVICE
17.	[Symbol]	DIFFERENTIAL PROTECTION RELAY
18.	[Symbol]	AUTOMATIC POWER FACTOR CORRECTION
19.	[Symbol]	NOT TO BE INCLUDED IN DEMAND LOAD
20.	[Symbol]	CONTROL FUSE
21.	[Symbol]	CURRENT TRANSFORMER
22.	[Symbol]	TRINECTOR METER
23.	[Symbol]	INDICATING LAMP
24.	[Symbol]	OVER LOAD RELAY
25.	[Symbol]	POWER CONTACTOR
26.	[Symbol]	POTENTIAL TRANSFORMER
27.	[Symbol]	AIR CIRCUIT BREAKER (ACB)
28.	[Symbol]	VACUUM CIRCUIT BREAKER (VCB)

S.NO.	EQUIPMENT	EARTHING (CU)	EARTHING BODY (G)
1.	11KV HT METER	2	2
2.	11KV HT PANEL	2	2
3.	TRANSFORMER	2	2
4.	PSP PANEL	2	2
5.	MDB	6	6
6.	DG-1& 2	4	4
TOTAL		06	18

Note:

- HT Meter Panel shall be Located at Ground Floor Level
- 11KV HT Panel 1No. incoming and for transformers.
- Electrical Substation is Outdoor Type Located at Ground Floor Level
- 11KV underground cable 3C's 185 Sqmm Alpc Cable.
- Transformers 1No are 750KVA 110/0.438KV rated with app 4.5% impedance
- Transformers LT Psp-1&2 Panel shall be Located at Ground Floor Level
- Meter Board Panel shall be Located at Ground Floor Level

1. Design Calculation

2. Name & Per Multitap Voltage Voltage Limited (For domestic - 100 watt per 10 sq. meters)

S. No.	Item	Power (Watt)	Current (Amp)	Current (Amp)	Current (Amp)	Current (Amp)
1.	Lighting (100W/10sqm)	1000	4.5	4.5	4.5	4.5
2.	Power (100W/10sqm)	1000	4.5	4.5	4.5	4.5
3.	Power (100W/10sqm)	1000	4.5	4.5	4.5	4.5

4. Tower Load

5. Tower - Block-A (5+1)

S. No.	Description	Current (Amp)	Current (Amp)	Current (Amp)
1.	Lighting (100W/10sqm)	4.5	4.5	4.5
2.	Power (100W/10sqm)	4.5	4.5	4.5
3.	Power (100W/10sqm)	4.5	4.5	4.5

6. Tower - Block-B (5+1)

S. No.	Description	Current (Amp)	Current (Amp)	Current (Amp)
1.	Lighting (100W/10sqm)	4.5	4.5	4.5
2.	Power (100W/10sqm)	4.5	4.5	4.5
3.	Power (100W/10sqm)	4.5	4.5	4.5

7. Power Requirement

S. No.	Description	Current (Amp)	Current (Amp)	Current (Amp)	Current (Amp)
1.	Lighting (100W/10sqm)	4.5	4.5	4.5	4.5
2.	Power (100W/10sqm)	4.5	4.5	4.5	4.5
3.	Power (100W/10sqm)	4.5	4.5	4.5	4.5

PROJECT: PROPOSED AJIT'S ORO COUNTY, MINI RESIDENTIAL TOWNSHIP AT KHASRA NO. 675, 676, 677, 678, 680, 692, VILLAGE - MADIYAON, TEHSIL - BAKSHI KA TALAB, LUCKNOW	MEP CONSULTANT :- MULTIPLE SERVICES CONSULTANTS 253/B, Rajpur Khurd Extension, Chattarpur, New Delhi-110068, Ph. no. -8920225677/8920228058 msc@msc-mep.com	TITLE: TOWER-B (PART-3) MAIN SINGLE LINE DIAGRAM DATE: 04.10.2022	NORTH: 	LAND OWNER: AJIT MAURYA & OTHERS	DEVELOPER/PROMOTER: ORO REAL INFRA LLP	ARCHITECT: Rakesh Kumar Sharma Regd. Architect CA/91/13596
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