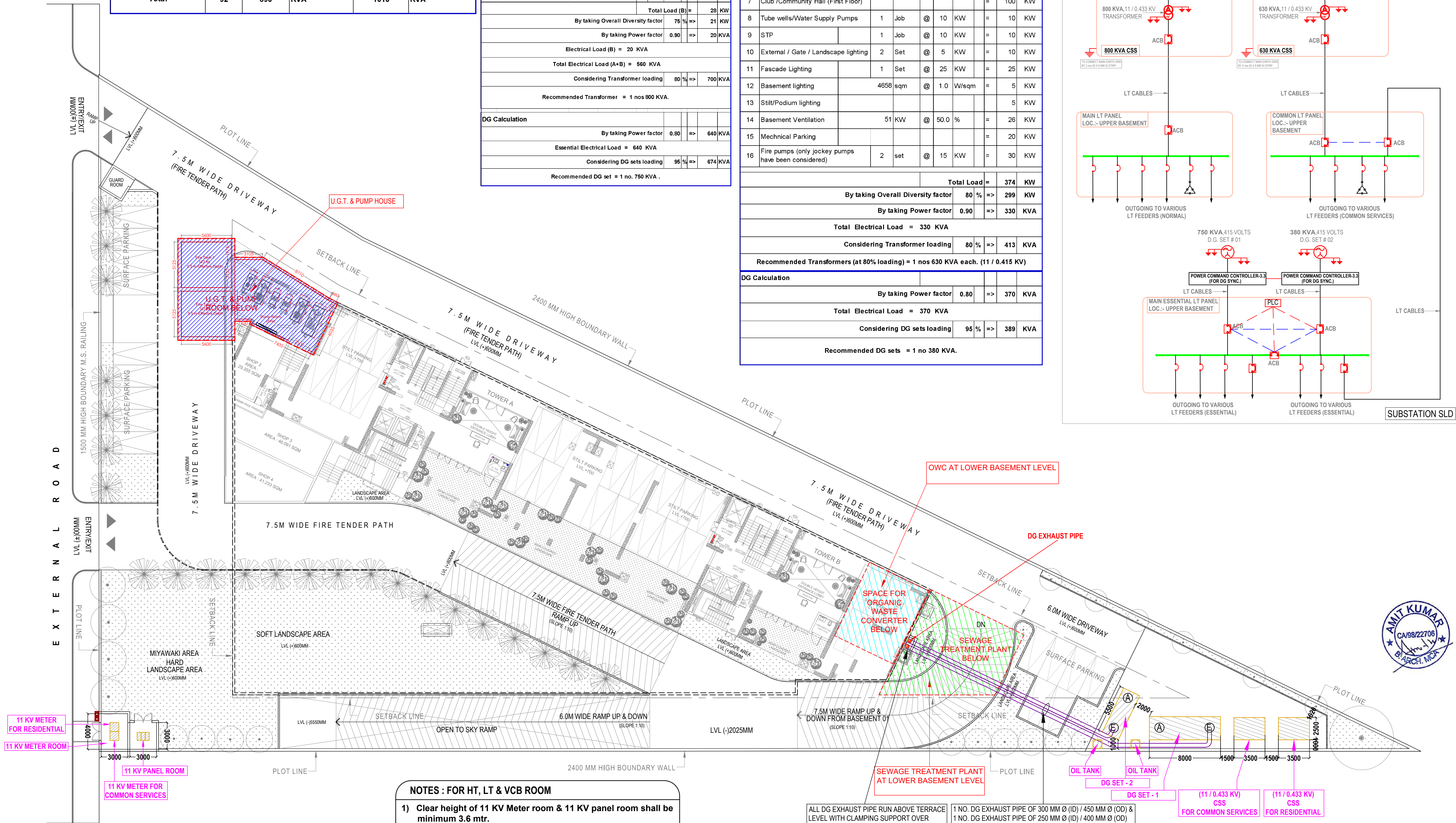
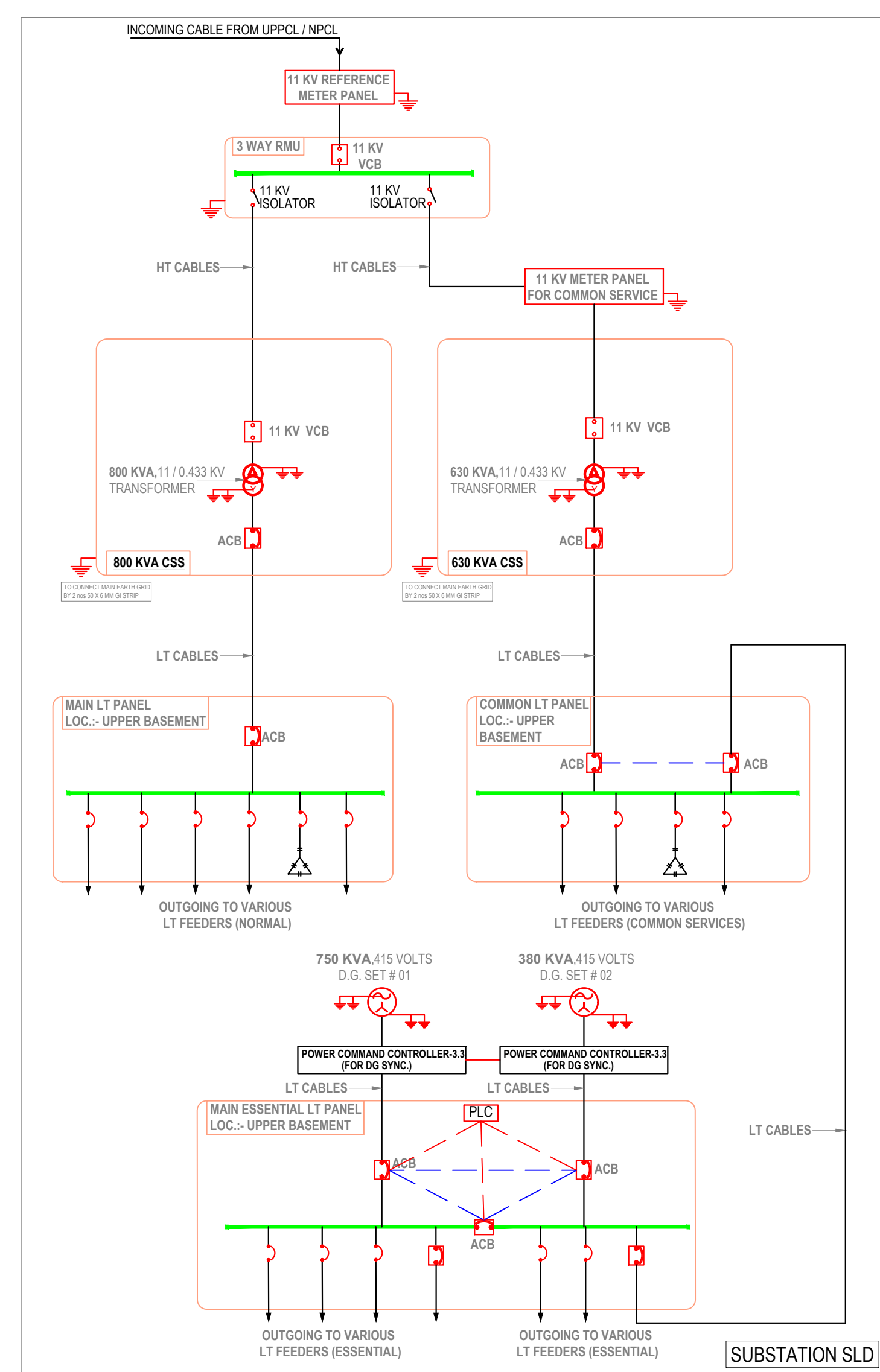


SUMMARY LOAD SHEET					
MULTIPOINT SUPPLY					
Sl.no	Substation with Block	Number of Units	Load in KVA	Selection of Transformer	Essential load in KVA
1	Residential + Commercial	92	560	1 nos 800 KVA.	640
2	Common Services		330	1 nos 630 KVA.	370
Total		92	890	KVA	1010

Electrical Load Calculation (Residential)				
S.no	Description	No. of unit	Load per Unit	Total Load
A (RESIDENTIAL LOAD)				
Tower - A (2B+S+24)				
1	4BHK	46 units	@ 8.9 KW	= 407 KW
Tower - B (2B+S+24)				
2	4BHK	46 units	@ 8.9 KW	= 407 KW
Total Load (A) =				814 KW
By taking Overall Diversity factor 60 % =>				489 KW
By taking Power factor 0.90 =>				540 KVA
Electrical Load (A) = 540 KVA				
B Commercial Load				
3	Commercial	189.583 sqm	@ 150 W/sqm	= 28 KW
Total Load (B) =				28 KW
By taking Overall Diversity factor 75 % =>				21 KW
By taking Power factor 0.90 =>				20 KVA
Electrical Load (B) = 20 KVA				
Total Electrical Load (A+B) =				560 KVA
Considering Transformer loading 80 % =>				700 KVA
Recommended Transformer = 1 nos 800 KVA.				
DG Calculation				
By taking Power factor 0.80 =>				640 KVA
Essential Electrical Load = 640 KVA				
Considering DG sets loading 95 % =>				674 KVA
Recommended DG set = 1 no. 750 KVA .				

Electrical Load Calculation				
S.no	Description	No. of unit	Load per Unit	Total Load
COMMON SERVICES - TOWERS				
Tower - A (2B+S+24)				
1	Elevators (20 Passenger) 1.75 mps	1 nos	@ 15 KW	= 15 KW
2	Elevators (16 Passenger) 1.75 mps	2 nos	@ 12 KW	= 24 KW
3	Common Lights	1 towers	@ 3 KW	= 3 KW
Tower - B (2B+S+24)				
4	Elevators (20 Passenger) 1.75 mps	1 nos	@ 15 KW	= 15 KW
5	Elevators (16 Passenger) 1.75 mps	2 nos	@ 12 KW	= 24 KW
6	Common Lights	1 towers	@ 3 KW	= 3 KW
COMMON SERVICES - General				
3	Car EV Charging			= 50 KW
7	Club /Community Hall (First Floor)			= 100 KW
8	Tube wells/Water Supply Pumps	1 Job	@ 10 KW	= 10 KW
9	STP	1 Job	@ 10 KW	= 10 KW
10	External / Gate / Landscape lighting	2 Set	@ 5 KW	= 10 KW
11	Fascade Lighting	1 Set	@ 25 KW	= 25 KW
12	Basement lighting	4658 sqm	@ 1.0 W/sqm	= 5 KW
13	Stilt/Podium lighting			= 5 KW
14	Basement Ventilation	51 KW	@ 50.0 %	= 26 KW
15	Mechanical Parking			= 20 KW
16	Fire pumps (only jockey pumps have been considered)	2 set	@ 15 KW	= 30 KW
Total Load =				374 KW
By taking Overall Diversity factor 80 % =>				299 KW
By taking Power factor 0.90 =>				330 KVA
Total Electrical Load = 330 KVA				
Considering Transformer loading 80 % =>				413 KVA
Recommended Transformers (at 80% loading) = 1 nos 630 KVA each. (11 / 0.415 KV)				
DG Calculation				
By taking Power factor 0.80 =>				370 KVA
Total Electrical Load = 370 KVA				
Considering DG sets loading 95 % =>				389 KVA
Recommended DG sets = 1 no 380 KVA.				



- NOTES : FOR HT, LT & VCB ROOM**
- 1) Clear height of 11 KV Meter room & 11 KV panel room shall be minimum 3.6 mtr.
 - 2) Plinth Level of 11 KV Meter room & 11 KV Panel room shall be 450 mm above final finished ground level of internal road

ALL DG EXHAUST PIPE RUN ABOVE TERRACE LEVEL WITH CLAMPING SUPPORT OVER WALL FROM FIRST FLOOR

1 NO. DG EXHAUST PIPE OF 300 MM Ø (ID) / 450 MM Ø (OD) & 1 NO. DG EXHAUST PIPE OF 250 MM Ø (ID) / 400 MM Ø (OD) WITH 75 MM INSULATION ALL AROUND.



rev. no.	date	revision

project
PROPOSED GROUP HOUSING
AT PLOT NO.GH-03A, SECTOR-16B, GREATER NOIDA, U.P.

title
LAYOUT PLAN

subtitle
ELECTRICAL SETTING OUT SITE PLAN

drawing released for
☐ APPROVAL ☒ SUBMISSION
☐ ADVANCE COPY ☐ CONSTRUCTION

drg. no. GIH / 22B01 / ES - 05 drawn by Prem Saini

scale 1 : 250 designed by Badri Vishal

date 27.12.2022 checked by Anand Havela

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