

The Basic Requirements For Fire Protection Of High-Rise Building In A.M.C. and A.U.D.A. Area

1. HYDRANT
At each floor there shall be a Fire service vehicle can approach easily.
The Underground tank shall be of a capacity of not less than 1,00,000 liters.

2. FIRE LIFT
The Fire Lift and all the lifts should have a provision to ground automatically in case of electricity failure. Each building should have at least one lift as a Fire-Lift and if the building is divided into two or more parts then each part should have a Fire-Lift. Lift well should have blowers to pressurize the lift well so connected that it will automatically operate when alarm call point is operate, so that it prevents the lift well getting smoke logged.

3. FIRE ALARM
Fire alarm call point to be installed at each floor with sounders capable of being heard all throughout the building.

4. FIRE EXTINGUISHERS
One Carbon Dioxide (CO2) type extinguisher of 4.5 kg. with ISI mark and one extinguisher of Dry Chemical Powder (DCP) ISI mark to be installed on floor in case of commercial building.
Two Carbon Dioxide (CO2) type extinguisher of 2 kg. with ISI mark capacity on each floor and Dry Chemical Powder (DCP) type extinguisher with ISI mark on alternate floors in case of residential buildings.
If the building is divided into two or more parts then each part should have these extinguishers installed.

5. STAIRCASE
The staircase has to be open from at least one or two sides but if the staircase is in the center core of the buildings it has to be pressurized to prevent it from getting smoke logged. The Riser/Down-comer should be located in the staircase or close to it in make it easily approachable in case of Fire from the floor below or above.

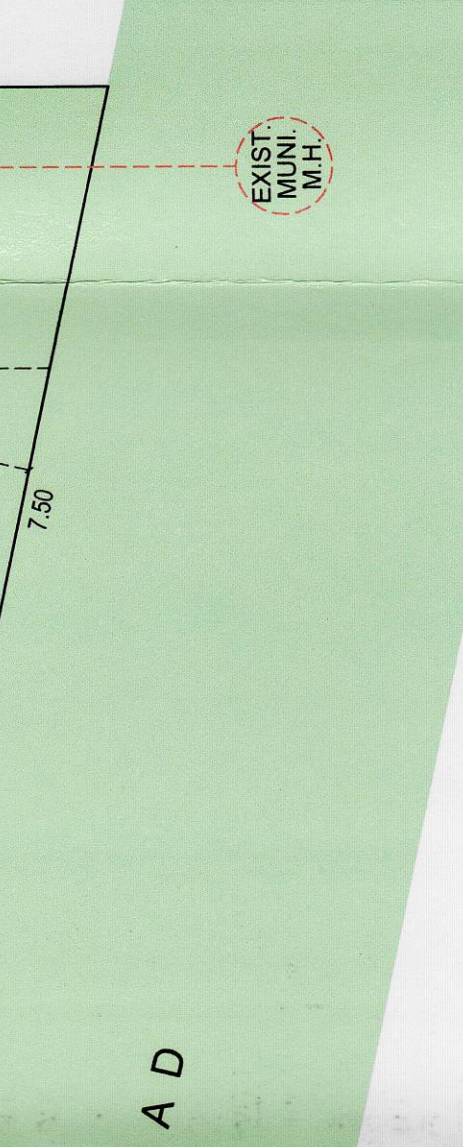
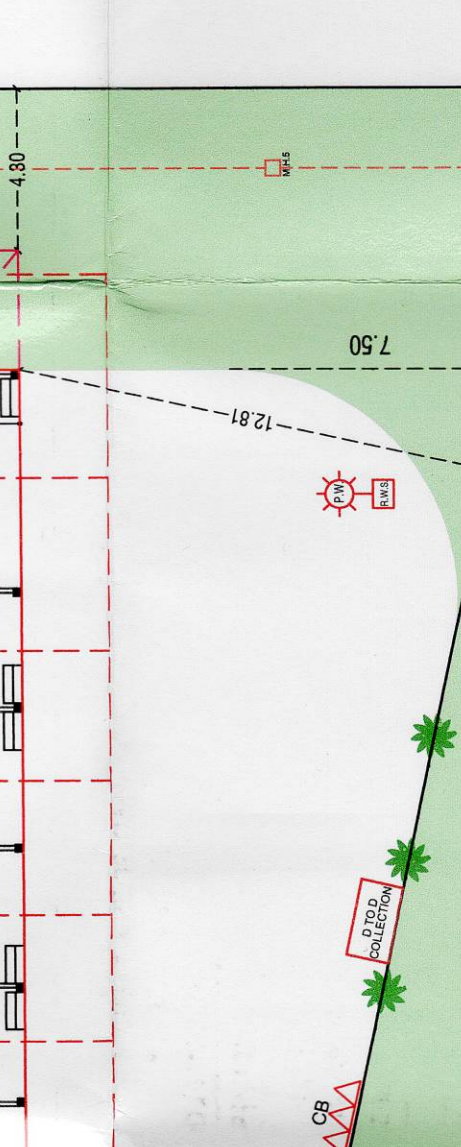
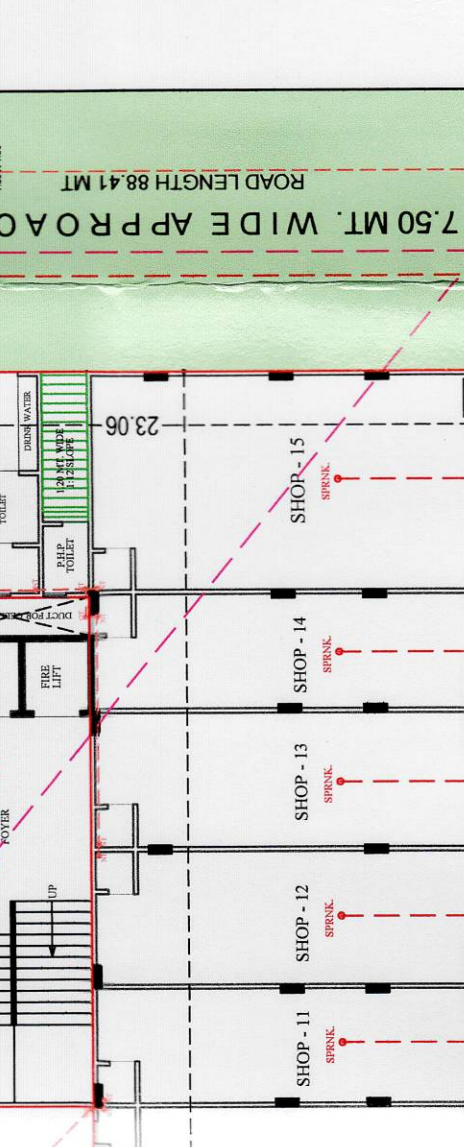
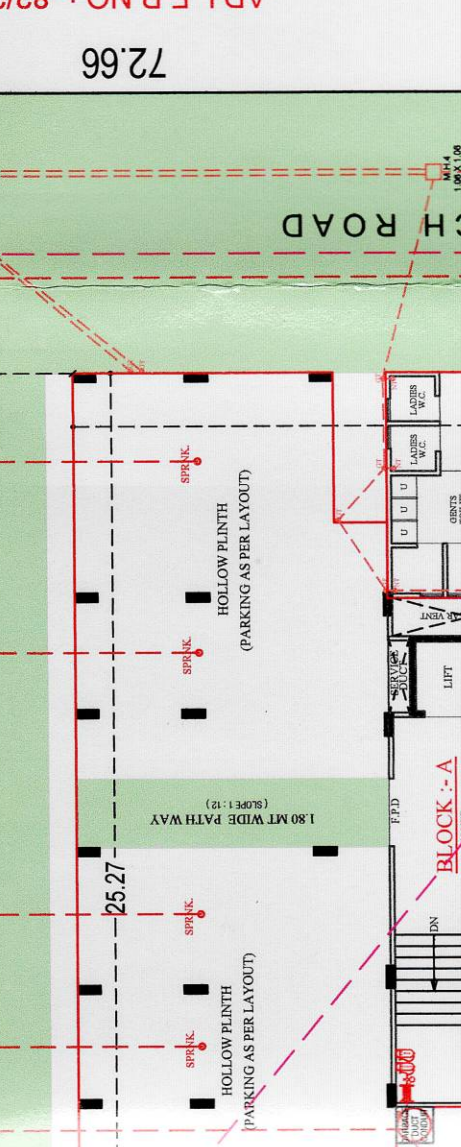
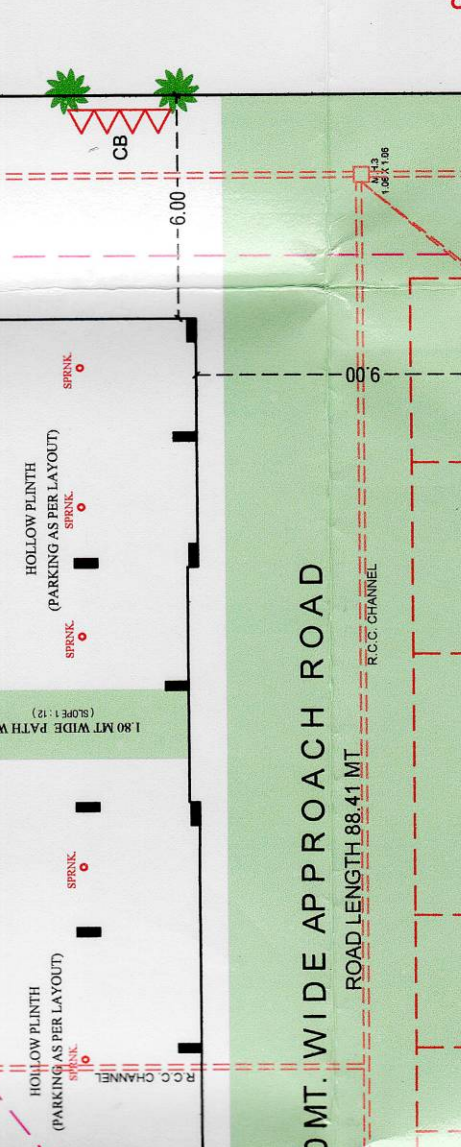
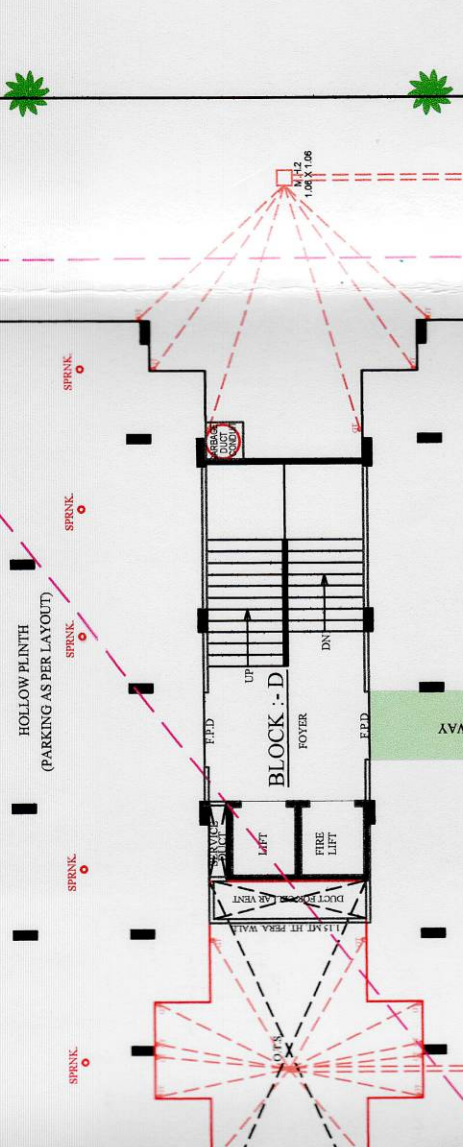
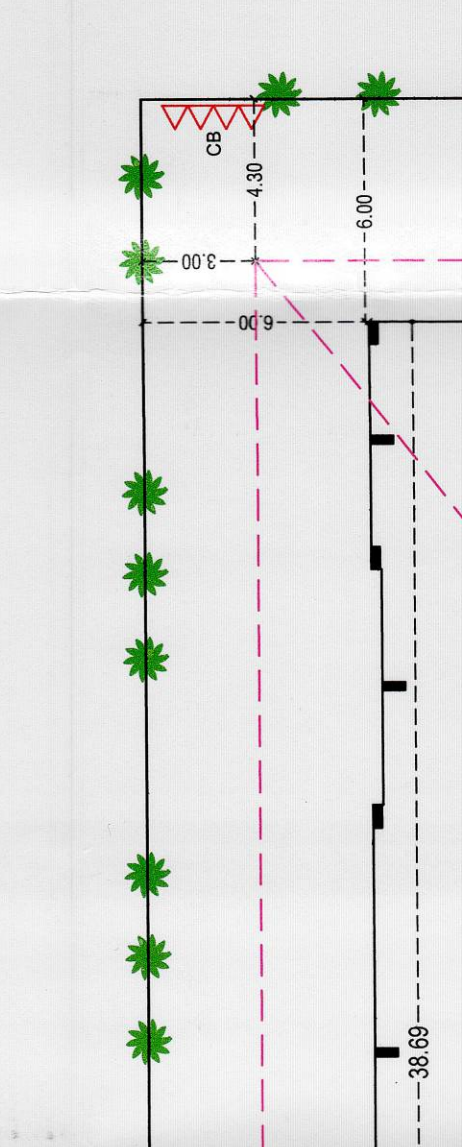
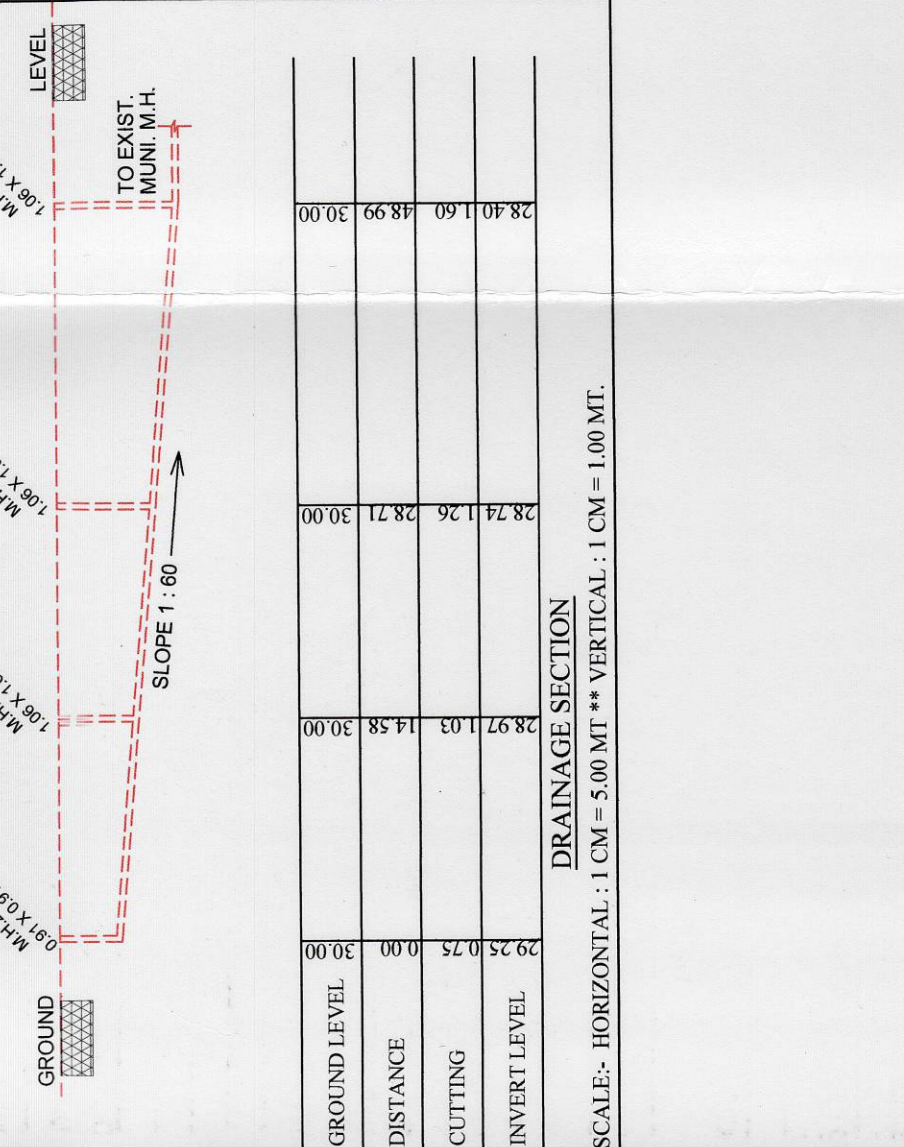
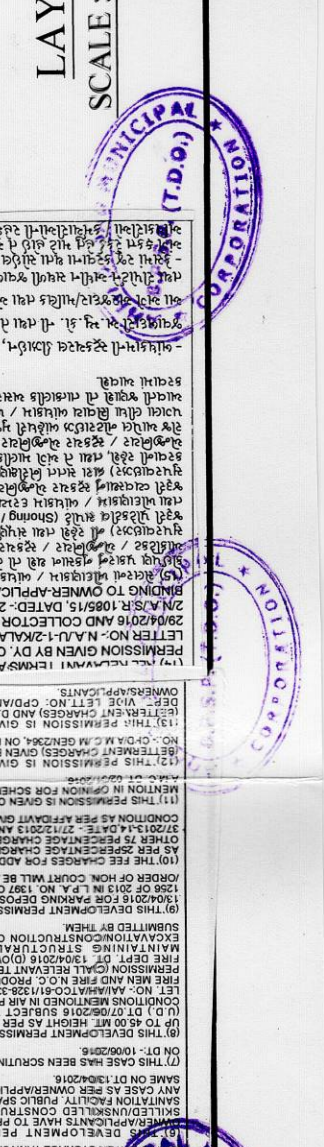
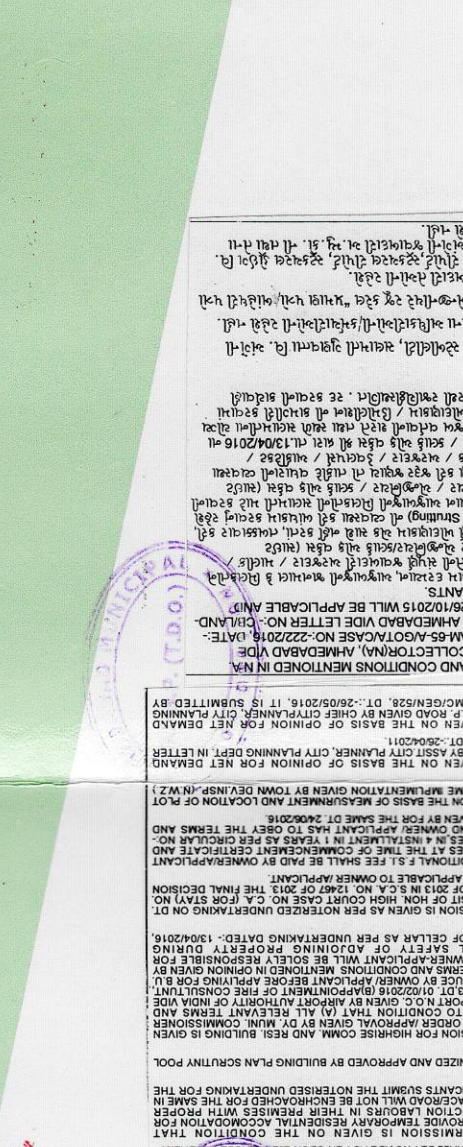
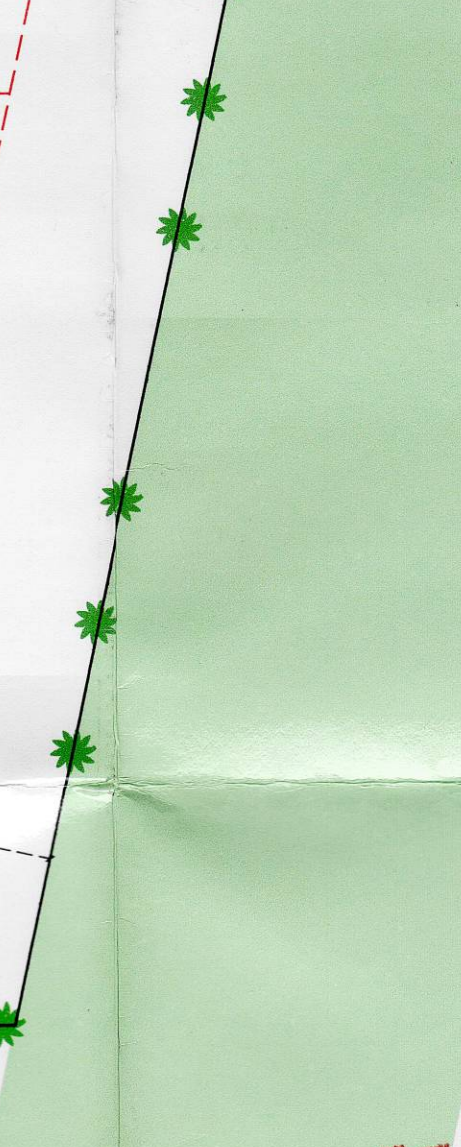
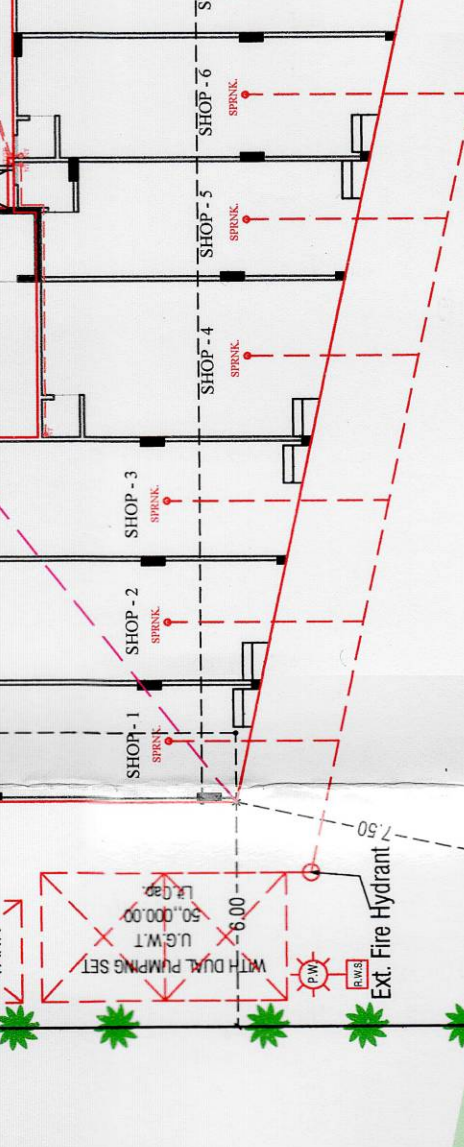
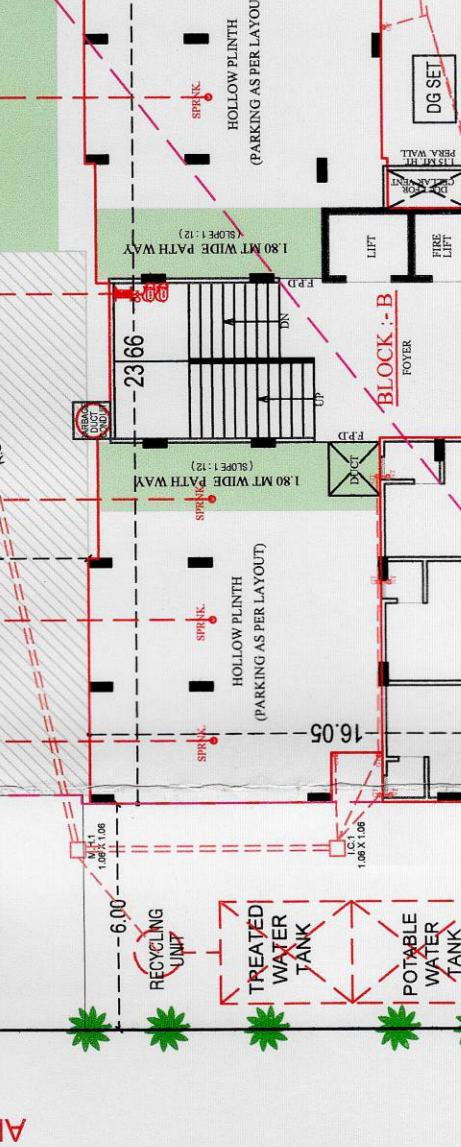
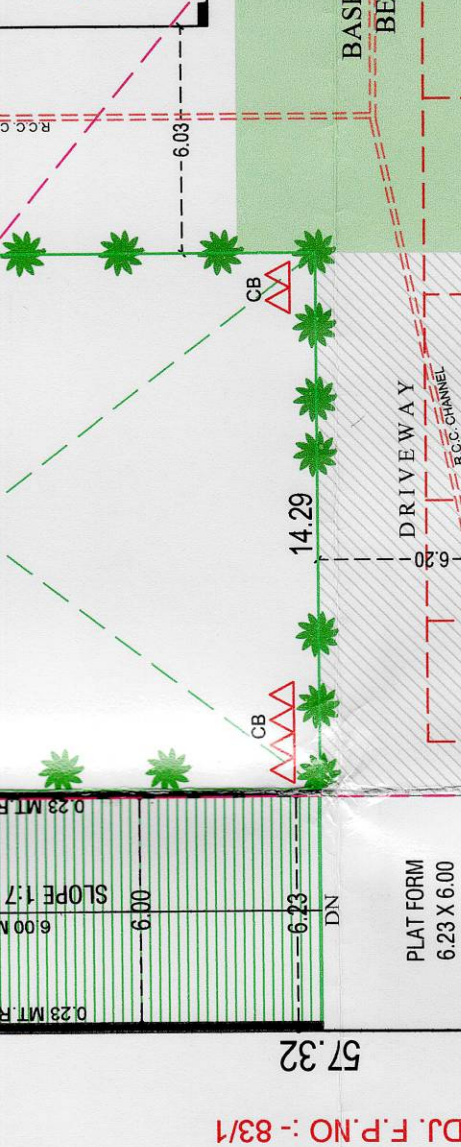
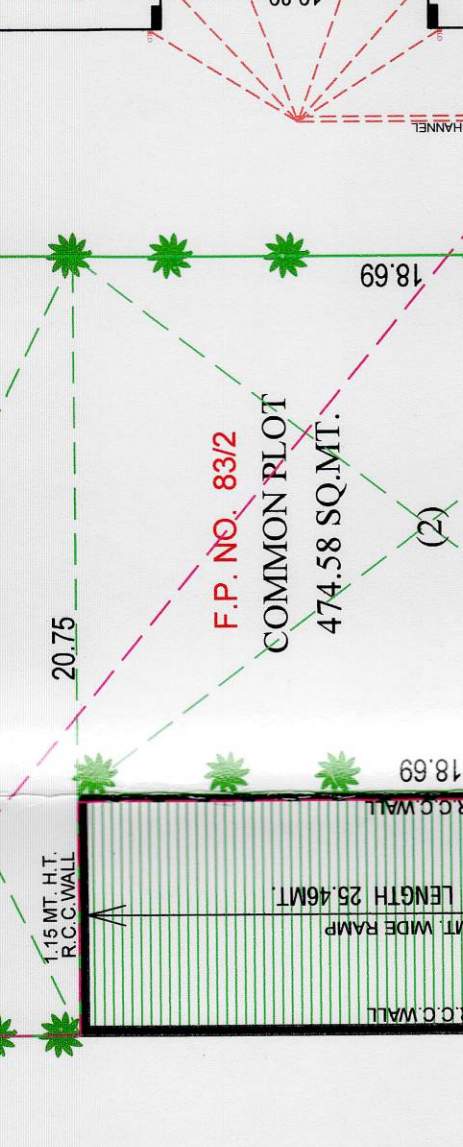
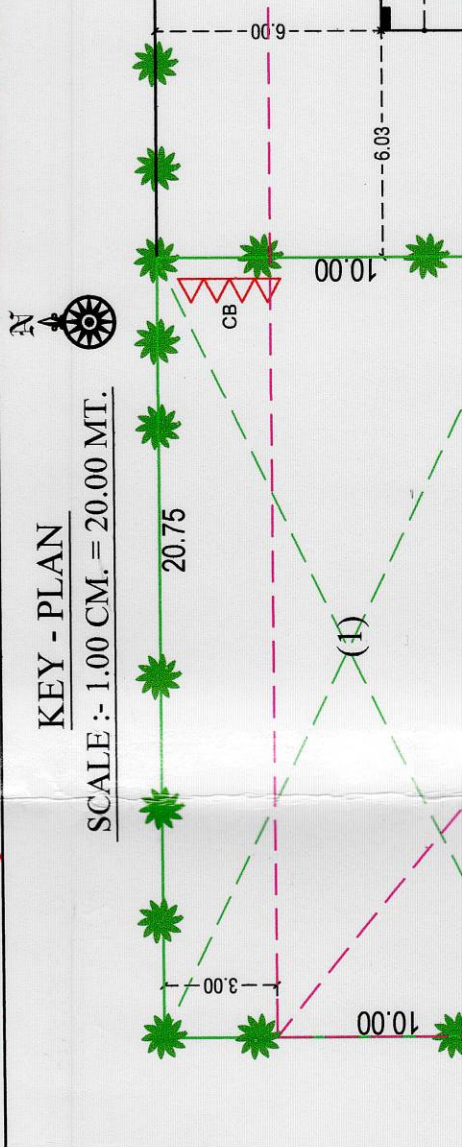
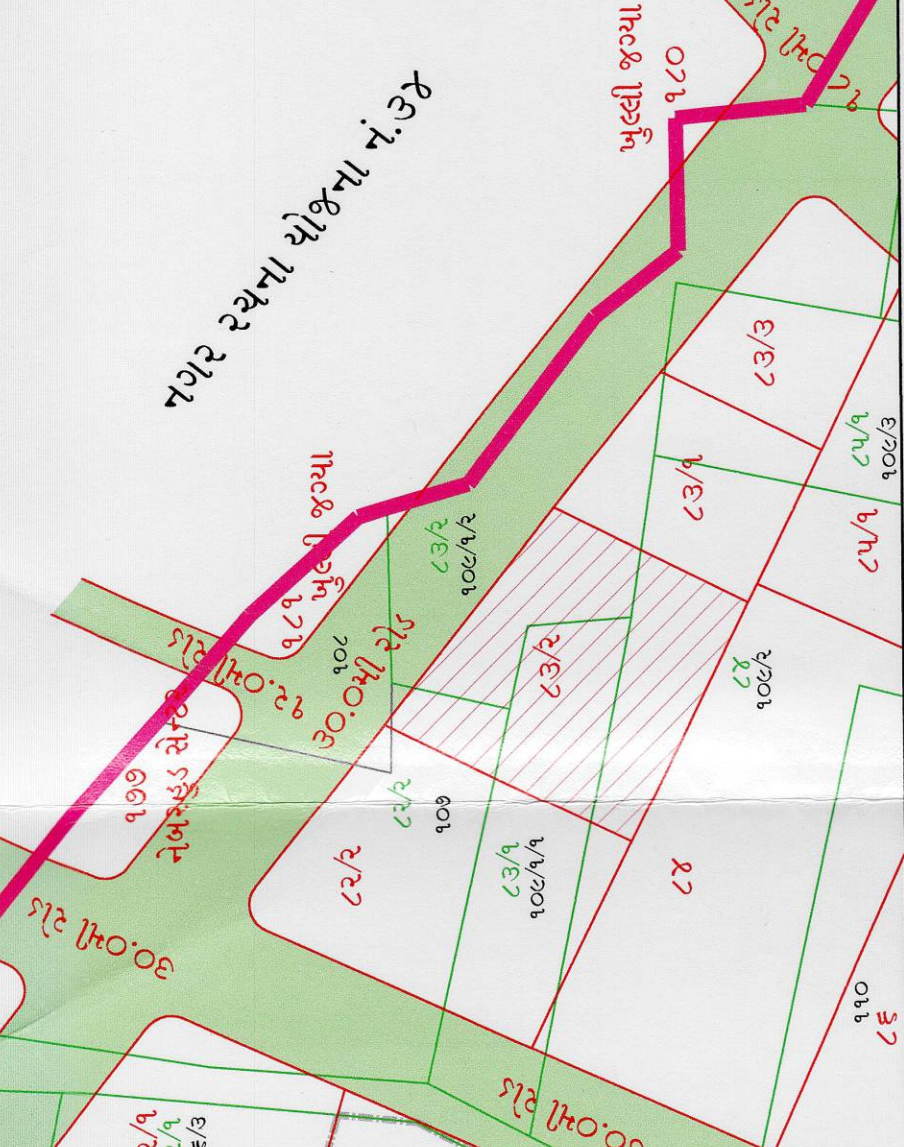
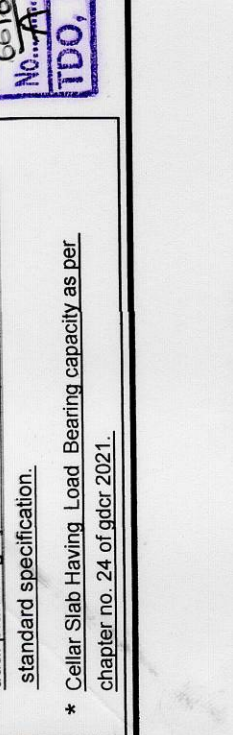
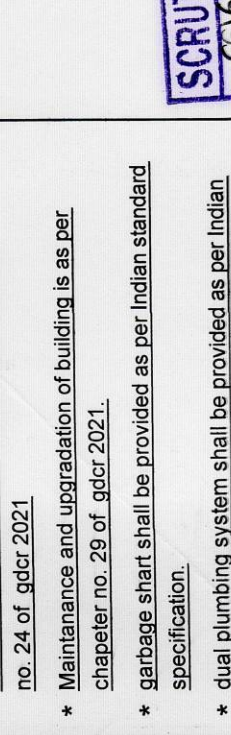
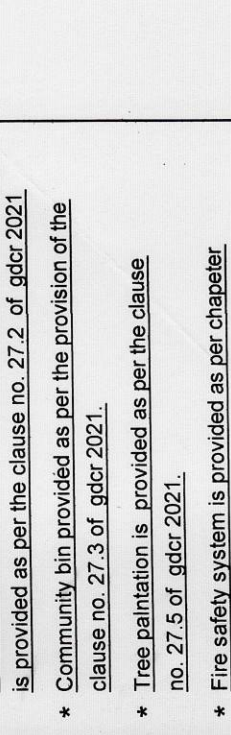
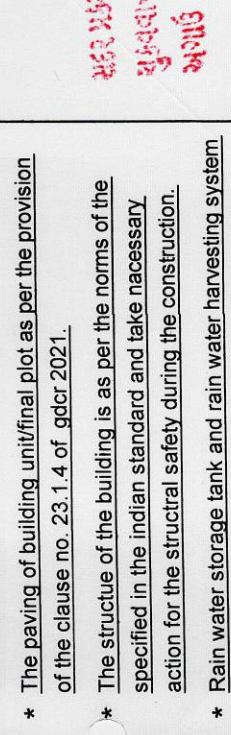
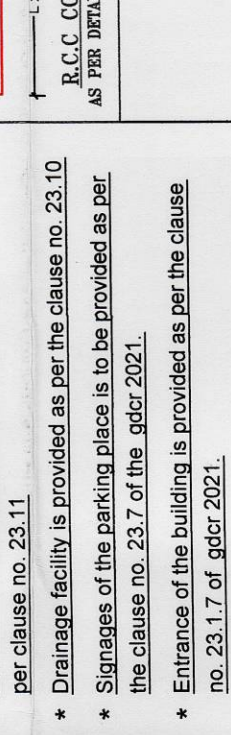
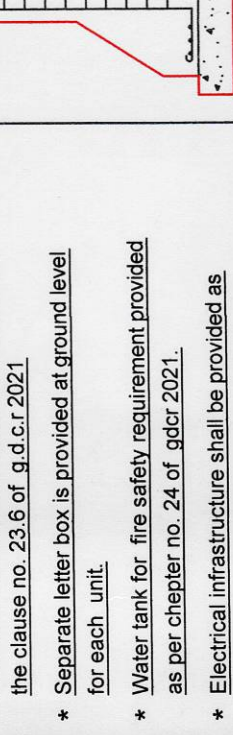
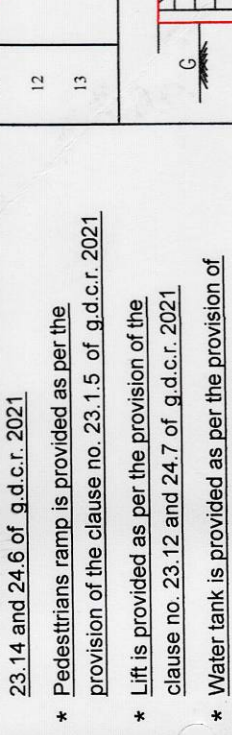
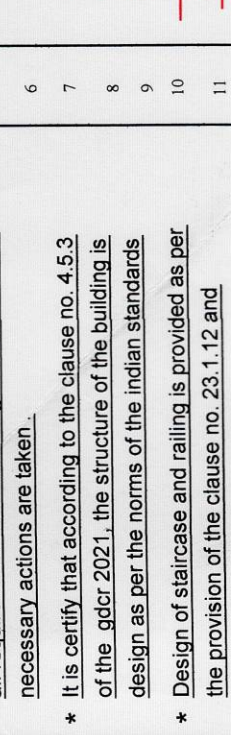
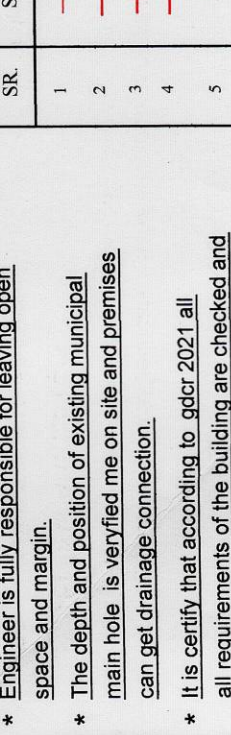
6. LIGHTENING ARRESTER
A lightning arrester should also be installed and be properly earthed to prevent damage to the building from the lightning strikes.

7. ELECTRIC POWER SUPPLY FOR HYDRANT LINE
Entire electric supply for hydrant line will be provided separately by separate electric supply from co. supply

8. BASEMENT
The basement of 200 sq. meters or more should be protected with Automatic Sprinkler system with at least one sprinkler head for actual Car parking spaces.
Additionally be protected by a Hydrant outlet and two 25 mm. bore hose reel hoses with 6 mm. bore nozzles at each basement level.

GENERAL NOTES :-
* Engineer is fully responsible for leaving open spaces and margins.
* The design and position of existing municipal main line is verified on site and any perturbation shall get drainage connection.
* It is certified according to govt 2021 all requirements of the building are checked and necessary actions are taken.
* It is certified according to the clause no. 4.5.3 of the govt. 2021, the structure of the building is design as per the norms of the Indian standards.
* Design of staircase and railing is provided as per the provision of the clause no. 23.1.12 and 23.1.14 and 24.6 of a.d.c.r. 2021.
* Pedestrians ramp is provided as per the provision of the clause no. 23.1.5 of a.d.c.r. 2021.
* Lift is provided as per the provision of the clause no. 23.1.2 and 24.7 of a.d.c.r. 2021.
* Water tank is provided as per the provision of the clause no. 23.6 of a.d.c.r. 2021.
* Separate letter box is provided at ground level for each unit.
* Water tank for fire safety requirement provided as per chapter no. 24 of govt. 2021.
* Electrical infrastructure shall be provided as per clause no. 23.11.
* Drainage facility is provided as per the clause no. 23.10.
* Signage of the parking place is to be provided as per the clause no. 23.7 of the govt. 2021.
* Entrance of the building is provided as per the clause no. 23.1.7 of govt. 2021.
* The paving of building uniform plot as per the provision of the clause no. 23.1.4 of govt. 2021.
* The structure of the building is as per the norms of the Indian standard and take necessary action for the structural safety during the construction.
* Rain water storage tank and rain water harvesting system is provided as per the clause no. 23.1.4 of govt. 2021.
* Community bin provided as per the provision of the clause no. 27.3 of govt. 2021.
* Tree plantation is provided as per the clause no. 27.5 of govt. 2021.
* Fire safety system is provided as per the clause no. 24 of govt. 2021.
* Maintenance and upgradation of building is as per chapter no. 28 of govt. 2021.
* Garbage chut shall be provided as per Indian standard specification.
* dual dumping system shall be provided as per Indian standard specification.
* Celler Side Having Load Bearing capacity as per chapter no. 24 of govt. 2021.

9. FIRE HYDRANT LEGEND
SR. SYMBOL DESCRIPTION
1 FIRE HYDRANT SYSTEM PIPE MAIN
2 SINGLE HANDED HYDRANT VALVE
3 SLICE VALVE
4 NON RETURN VALVE
5 LANDING HYDRANT VALVE
6 FIRE HOSE BOX
7 FIRST AID HOSE REEL
8 D.C.P. CO2
9 TWO WAY SANSSE CONNECTION
10 RISE OR DROP
11 REDUCER
12 COURT YARD HYDRANT VALVE
13 SPRINKLER



TENEMENT & FLOOR AREA STATEMENT		EQUITY TENA		TOTAL	
FLOOR	USE	A+B	C+D	A+B	C+D
GROUND (H.P.)	PARK.	15-00	---	15-00	---
1ST FLOOR	RESI	15-04	08	15-12	08
2ND FLOOR	RESI	08	08	16	16
3RD FLOOR	RESI	08	08	16	16
4TH FLOOR	RESI	08	08	16	16
5TH FLOOR	RESI	08	08	16	16
6TH FLOOR	RESI	08	08	16	16
7TH FLOOR	RESI	08	08	16	16
8TH FLOOR	RESI	08	08	16	16
9TH FLOOR	RESI	08	08	16	16
10TH FLOOR	RESI	08	08	16	16
TOTAL	COMM/RESI	30-76	68	30+144	---

BUILT UP AREA STATEMENT		(IN SQ.MT.)		TOTAL	
BLOCK	USE	A+B	C+D	A+B	C+D
BASEMENT	---	3282.56	---	3282.56	---
GROUND (H.P.)	---	452.60	723.99	1176.59	---
1ST FLOOR	---	612.05	---	612.05	---
2ND FLOOR	---	1035.38	723.99	1759.37	---
3RD FLOOR	---	806.13	723.99	1530.12	---
4TH FLOOR	---	806.13	723.99	1530.12	---
5TH FLOOR	---	806.13	723.99	1530.12	---
6TH FLOOR	---	806.13	723.99	1530.12	---
7TH FLOOR	---	806.13	723.99	1530.12	---
8TH FLOOR	---	806.13	723.99	1530.12	---
9TH FLOOR	---	806.13	723.99	1530.12	---
10TH FLOOR	---	806.13	723.99	1530.12	---
STAIR CABIN	---	120.90	111.03	231.93	---
LIFT MAC ROOM	---	82.44	60.49	142.93	---
TOTAL	---	12841.11	7107.00	19948.11	---

F.S.I. AREA STATEMENT		(IN SQ.MT.)		TOTAL	
BLOCK	USE	A+B	C+D	A+B	C+D
GR FLOOR (S.P.)	---	585.25	---	585.25	---
2ND FLOOR	---	900.54	571.77	1472.31	---
3RD FLOOR	---	684.20	571.77	1255.97	---
4TH FLOOR	---	684.20	571.77	1255.97	---
5TH FLOOR	---	684.20	571.77	1255.97	---
6TH FLOOR	---	684.20	571.77	1255.97	---
7TH FLOOR	---	684.20	571.77	1255.97	---
8TH FLOOR	---	684.20	571.77	1255.97	---
9TH FLOOR	---	684.20	571.77	1255.97	---
10TH FLOOR	---	684.20	571.77	1255.97	---
TOTAL	---	7643.59	4668.41	12312.00	---

BUILT UP AREA STATEMENT		F.S.I. AREA		TOTAL	
BLOCK	USE	A+B	C+D	A+B	C+D
BASEMENT	---	3282.56	---	3282.56	---
GROUND (H.P.)	---	452.60	723.99	1176.59	---
1ST FLOOR	---	612.05	---	612.05	---
2ND FLOOR	---	1035.38	723.99	1759.37	---
3RD FLOOR	---	806.13	723.99	1530.12	---
4TH FLOOR	---	806.13	723.99	1530.12	---
5TH FLOOR	---	806.13	723.99	1530.12	---
6TH FLOOR	---	806.13	723.99	1530.12	---
7TH FLOOR	---	806.13	723.99	1530.12	---
8TH FLOOR	---	806.13	723.99	1530.12	---
9TH FLOOR	---	806.13	723.99	1530.12	---
10TH FLOOR	---	806.13	723.99	1530.12	---
STAIR CABIN	---	120.90	111.03	231.93	---
LIFT MAC ROOM	---	82.44	60.49	142.93	---
TOTAL	---	12841.11	7107.00	19948.11	---

BUILT UP AREA STATEMENT		F.S.I. AREA		TOTAL	
BLOCK	USE	A+B	C+D	A+B	C+D
BASEMENT	---	3282.56	---	3282.56	---
GROUND (H.P.)	---	452.60	723.99	1176.59	---
1ST FLOOR	---	612.05	---	612.05	---
2ND FLOOR	---	1035.38	723.99	1759.37	---
3RD FLOOR	---	806.13	723.99	1530.12	---
4TH FLOOR	---	806.13	723.99	1530.12	---
5TH FLOOR	---	806.13	723.99	1530.12	---
6TH FLOOR	---	806.13	723.99	1530.12	---
7TH FLOOR	---	806.13	723.99	1530.12	---
8TH FLOOR	---	806.13	723.99	1530.12	---
9TH FLOOR	---	806.13	723.99	1530.12	---
10TH FLOOR	---	806.13	723.99	1530.12	---
STAIR CABIN	---	120.90	111.03	231.93	---
LIFT MAC ROOM	---	82.44	60.49	142.93	---
TOTAL	---	12841.11	7107.00	19948.11	---

BUILT UP AREA STATEMENT		F.S.I. AREA		TOTAL	
BLOCK	USE	A+B	C+D	A+B	C+D
BASEMENT	---	3282.56	---	3282.56	---
GROUND (H.P.)	---	452.60	723.99	1176.59	---
1ST FLOOR	---	612.05	---	612.05	---
2ND FLOOR	---	1035.38	723.99	1759.37	---
3RD FLOOR	---	806.13	723.99	1530.12	---
4TH FLOOR	---	806.13	723.99	1530.12	---
5TH FLOOR	---	806.13	723.99	1530.12	---
6TH FLOOR	---	806.13	723.99	1530.12	---
7TH FLOOR	---	806.13	723.99	1530.12	---
8TH FLOOR	---	806.13	723.99	1530.12	---
9TH FLOOR	---	806.13	723.99	1530.12	---
10TH FLOOR	---	806.13	723.99	1530.12	---
STAIR CABIN	---	120.90	111.03	231.93	---
LIFT MAC ROOM	---	82.44	60.49	142.93	---
TOTAL	---	12841.11	7107.00	19948.11	---

BUILT UP AREA STATEMENT		F.S.I. AREA		TOTAL	
BLOCK	USE	A+B	C+D	A+B	C+D
BASEMENT	---	3282.56	---	3282.56	---
GROUND (H.P.)	---	452.60	723.99	1176.59	---
1ST FLOOR	---	612.05	---	612.05	---
2ND FLOOR	---	1035.38	723.99	1759.37	---
3RD FLOOR	---	806.13	723.99	1530.12	---
4TH FLOOR	---	806.13	723.99	1530.12	---
5TH FLOOR	---	806.13	723.99	1530.12	---
6TH FLOOR	---	806.13	723.99	1530.12	---
7TH FLOOR	---	806.13	723.99	1530.12	---
8TH FLOOR	---	806.13	723.99	1530.12	---
9TH FLOOR	---	806.13	723.99	1530.12	---
10TH FLOOR	---	806.13	723.99	1530.12	---
STAIR CABIN	---	120.90	111.03	231.93	---
LIFT MAC ROOM	---	82.44	60.49	142.93	---
TOTAL	---	12841.11	7107.00	19948.11	---

BUILT UP AREA STATEMENT		F.S.I. AREA		TOTAL	
BLOCK	USE	A+B	C+D	A+B	C+D
BASEMENT	---	3282.56	---	3282.56	---
GROUND (H.P.)	---	452.60	723.99	1176.59	---
1ST FLOOR	---	612.05	---	612.05	---
2ND FLOOR	---	1035.38	723.99	1759.37	---
3RD FLOOR	---	806.13	723.99	1530.12	---
4TH FLOOR	---	806.13	723.99	1530.12	---
5TH FLOOR	---	806.13	723.99	1530.12	---
6TH FLOOR	---	806.13	723.99	1530.12	---
7TH FLOOR	---	806.13	723.99	1530.12	---
8TH FLOOR	---	806.13	723.99	1530.12	---
9TH FLOOR	---	806.13	723.99	1530.12	---
10TH FLOOR	---	806.13	723.99	1530.12	---
STAIR CABIN	---	120.90	111.03	231.93	---
LIFT MAC ROOM	---	82.44	60.49	142.93	---
TOTAL	---	12841.11	7107.00	19948.11	---

BUILT UP AREA STATEMENT		F.S.I. AREA		TOTAL	
BLOCK	USE	A+B	C+D	A+B	C+D
BASEMENT	---	3282.56	---	3282.56	---
GROUND (H.P.)	---	452.60	723.99	1176.59	---
1ST FLOOR	---	612.05	---	612.05	---
2ND FLOOR	---	1035.38	723.99	1759.37	---
3RD FLOOR	---	806.13	723.99	1530.12	---
4TH FLOOR	---	806.13	723.99	1530.12	---
5TH FLOOR	---	806.13	723.99	1530.12	---
6TH FLOOR	---	806.13	723.99	1530.12	---
7TH FLOOR	---	806.13	723.99	1530.12	---
8TH FLOOR	---	806.13	723.99	1530.12	---
9TH FLOOR	---	806.13	723.99	1530.12	---
10TH FLOOR	---	806.13	723.99	1530.12	---
STAIR CABIN	---	120.90	111.03	231.93	---
LIFT MAC ROOM	---	82.44	60.49	142.93	---
TOTAL	---	12841.11	7107.00	19948.11	---

