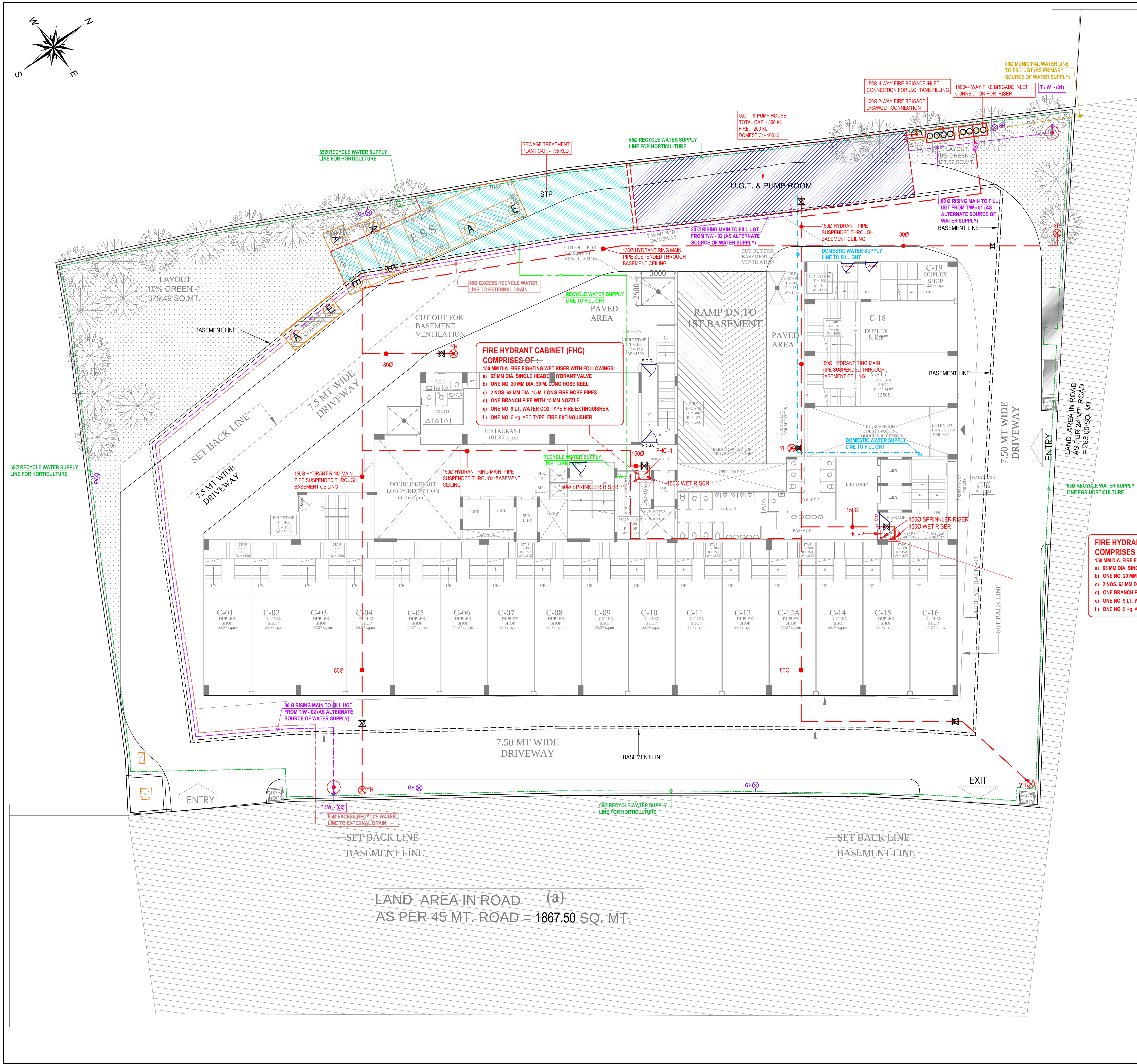




WATER REQUIREMENT CALCULATIONS													
S.No.	Description	Built up Area (Sq.M)	Horticulture Water Requirement per Sq.M Area	No. of Units/ Seats	Unit Population	Total Population	Domestic Fresh Water Requirement (A)	Recycle Water Requirement (B)	Total Water Requirement (A+B)	Domestic 80%	Domestic 100%	Flow to Sewer	LPD
1	Population (Sales Ground Floor (Shopping))	1092.35			3 SqM/person	370							
2	Population (Sales First Floors (Shopping))	1092.35			6 SqM/person	190							
3	Permanent Population (Shopping)				@ 10% of total population	60	25	1500	20	1200	2700	1200	2400
4	Transient Population (Shopping)				@ 90% of total population	500	5	2500	10	5000	7500	2000	7000
5	Banquet / Conference / Hotel Activity	4042.04			1.4 SqM/person	2890	5	14450	10	28900	43350	11560	28900
6	Restaurant	872.24			1.8 SqM/person	490	55	26950	15	7350	34300	21560	28910
7	Kitchen							10000			10000	8000	0
8	Service Apartments & Guest Rooms				130	2	260	90	23400	45	11700	35100	18720
9	Floting Population (Apartment & Guest Rooms)				13	5	65	10	130		195	52	130
10	Staff (Apartment & Guest Rooms)				13	25	325	20	260		585	260	520
11	Filter Backwash							15000			15000	15000	15000
12	Makeup Water for Water Body							1000			1000		
13	AC Makeup Water										55000	55000	
14	Horticulture	487.06	7								3409.42	3409.42	
Total											95,190	1,12,948	2,08,138
											63,352	69,640	1,32,992
SUMMARY OF WATER REQUIREMENT / UGT & STP CAPACITY CALCULATION													
S.No.	Description	Water Requirement (KLD)											
1	Domestic Fresh Water Requirement	95											
2	Recycle Water Requirement	113											
3	Flow to Sewer	133											
STP Capacity required		133											
STP Capacity rounded off		135											
4	Net water balance (to discharge into drainage system)	20											
UGT Capacity													
For Domestic Use (24 hrs storage)		100 KL											
For Fire Fighting (as per NBC)		200 KL											
Total UGT Capacity		300 KL											

FIRE HYDRANT CABINET (FHC) COMPRISES OF :
a) 150 MM DIA. FIRE FIGHTING WET RISER WITH FOLLOWINGS:
b) 63 MM DIA. SINGLE HEADED HYDRANT VALVE
c) 2 NOS. 63 MM DIA. 15 M. LONG FIRE HOSE PIPES
d) ONE BRANCH PIPE WITH 15 MM NOZZLE
e) ONE NO. 9 LT. WATER CO2 TYPE FIRE EXTINGUISHER
f) ONE NO. 6 Kg. ABC TYPE FIRE EXTINGUISHER

LEGEND :		
S.No.	SYMBOL	DESCRIPTION
1.	---	RISING MAIN LINE (FROM TW TO U.G.T.)
2.	---	MUNICIPAL WATER SUPPLY PIPE LINE
3.	---	RECYCLED WATER SUPPLY LINE FOR FLUSHING
4.	---	RECYCLED WATER SUPPLY LINE FOR HORTICULTURE
5.	---	DOMESTIC WATER SUPPLY LINE
6.	⊙	PROPOSED TUBE WELL
7.	⊙	GARDEN HYDRANT
8.	---	BASEMENT RETAINING WALL

LEGEND :		
S.No.	SYMBOL	DESCRIPTION
1.	---	FIRE LINE
2.	⊙	YARD HYDRANT 63 M.M. DIA. SINGLE HEADED HYDRANT VALVE WITH 2 NOS. 15 M. LONG, 63 M.M. DIA. FIRE HOSE PIPE & 1 NO. BRANCH PIPE WITH NOZZLE
3.	⊙	4 WAY FIRE BRIGADE INLET CONNECTION
4.	⊙	2 WAY FIRE BRIGADE DRAWOUT CONNECTION
5.	⊙	BUTTERFLY VALVE
6.	⊙	NONRETURN VALVE (CHECK VALVE)
7.	⊙	ISOLATING VALVE WITH MASONARY CHAMBER

rev. no.	date	revision
..	..	..

project
"MANGAL HEIGHTS"
PROPOSED HOTEL COMPLEX
AT KHASRA No. 1069, N.H. 58
VILLAGE :- NOORNAGAR, GHAZIABAD.

title
LAYOUT PLAN

subtitle
EXTERNAL WATER SUPPLY SYSTEM

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

drg. no.
MH / 16B02 / EWS - 01

scale
1 : 175

date
12.06.2018

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