



LEGEND :		
S. No.	SYMBOL	DESCRIPTION
1.		RISING MAIN LINE (FROM T.W. TO U.G.T.)
2.		MUNICIPAL WATER SUPPLY PIPE LINE
3.		PROPOSED TUBE WELL
4.		BASEMENT RETAINING WALL

WATER REQUIREMENT CALCULATIONS										
S.No.	Description	Built up Area (Sq.M)	Horticulture Water Requirement (per Sq.M Area)	No. of Water Units / Seats	Unit Population	Total Population	Domestic Fresh Water Requirement (A)			Total Water Requirement (A+B)
							LPD	LPD	LPD	
1.	Population (Sales Basement & Street Floors) (Shopping)	4546		3	SqM/person	1620				
2.	Population (Upper Sales Floors) (Shopping)	4368		6	SqM/person	730				
3.	Permanent Population (Shopping)			25%	of total population of Shopping	560	25	14000	20	11200
4.	Transient Population (Shopping)			75%	of total population of Shopping	1690	5	8450	10	16900
5.	Banquet	1954		1.4	SqM/person	1400	25	35000	20	28000
6.	Restaurant	709		1.8	SqM/person	430	55	23650	15	6450
7.	Miscellaneous for Food Joint							0		0
8.	Maintenance Staff					100	25	2500	20	2000
9.	Filter Backwash							6500		6500
10.	AC Makeup Water							60000		60000
11.	Horticulture	500	4					2000	2000	
Total								90,100	1,26,550	2,16,650

SUMMARY OF WATER REQUIREMENT / UGT & STP CAPACITY CALCULATION	
Description	Water Requirement (KLD)
Domestic Fresh Water Requirement	90
Recycle Water Requirement	127
Flow to Sewer	138
STP Capacity required	138
STP Capacity provided (by adding 20% as per MOEF)	166
STP Capacity rounded off	170
Net water balance (to discharge into sewerage system)	11
UGT Capacity	
For Domestic Use (24 hrs storage)	90 KL
For Fire Fighting	150 KL
For Water Curtain	50 KL
Total UGT Capacity	290 KL

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
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project
PROPOSED COMMERCIAL COMPLEX
AT Plot No-COMMERCIAL-1A, WAVE CITY GHAZIABAD (U.P.) 201002

title
LAYOUT PLAN

subTitle
EXTERNAL WATER SUPPLY SYSTEM

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

drg. no. 1A / 21B05 / ES - 04 drawn by Prem Saini

scale 1 : 150 designed by Badri Vishal

date 24.11.2021 checked by Anand Havella

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