

PROJECT - VICTORY AMARA AT GREATER NOIDA

WATER REQUIREMENT CALCULATIONS

sl. no.	Description	No. of units	Unit Population	Built up Area (Sq M)	Population (persons)	Unit Water Consumption (liters)	Total Water Required (liters)	Recycle Water Requirement (liters)	Total Recycle Water (liters)
1	Apartments	950	4.5		4275	135	577125	45	192375
2	Servant Units	28	2.25		63	135	8505	45	2835
3	Club & Floating Population				650	15	9750	5	3250
4	Staff				150	45	6750	15	2250
5	Commercial / Shopping				150	45	6750	15	2250
6	Filter Backwash						15000		0
7	Make-up water for swimming pool						10000		0
8	Horticulture			5000		4	20000	100%	20000
						total	6,53,880		2,22,960

SUMMARY OF WATER REQUIREMENT

Total Permanent Population	=	4338	persons	
Total Domestic Water Requirement	=	6,53,880	lit/day	
Total Recycle Water Requirement	=	2,22,960	lit/day	
<u>Net Domestic Water Requirement</u>	=	4,30,920	lit/day	
Total Sewage Load (total domestic water required - horticulture - s.pool makeup - filter backwash)	=	6,08,880	lit/day	
Net Sewage Flow - 80% of total sewage load	=	4,87,104	lit/day	
Sewage Treatment Plant capacity required	=	490	KLD	250 kld x 2
Total recycle water required	=	2,22,960	liters	
Net water balance (to discharge into drainage system)	=	2,64,144	liters	
UGT Capacity (for Domestic Use) = 16 hrs storage	=	2,87,280	liters	300 KL
UGT Capacity (for Fire Fighting)	=			200 KL
Total UGT Capacity (Domestic + Fire)	=			500 KL