Checked subject to Comments
In forwarding letter No. 18483
Dt. 14/01/2025 .....and notes
Attached with the estimate

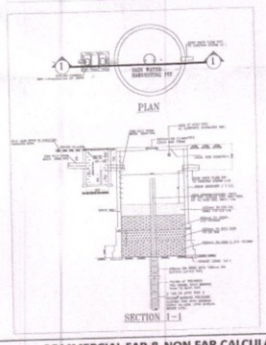
Executive Engineer (M)
for Chief Engineer-I
HSVP, Panchkula

Director
Town & Country Planning
Haryana

For Service Plan Estimate Only
Executive Engineer
HSVP Divn. No. VI,
Gurugram

S.T.P. (HQ) Member Secretary B.P.A.C. | S.T.P. (G) Member B.P.A.C. | C.T.P. (HR) Chairman B.P.A.C.

PLUMBING LEGEND -
- SEWER MANHOLE(9TH & ABOVE)
- SW-SEWER LINE
- STORM MANHOLE(9TH & ABOVE)
- ST-STORM WATER LINE
- DOMESTIC WATER SUPPLY LINE
- FLUSHING WATER SUPPLY LINE
- IRRIGATION LINE
- BORE WELL LINE
- RWHP RAIN WATER HARVESTING PIT



COMMERCIAL FAR & NON FAR CALCULATION					
F.A.R AREA CALCULATION					
ADDITIONS (GROUND COVERAGE)					
GROUND FLOOR					
GEOMETRY	NO.	LENGTH	BREADTH	AREA	
A	1	125.640	10.850	1363.194	
GROUND FLOOR F.A.R				1363.194	
FIRST FLOOR					
A	4	7.140	2.550	72.828	
B	2	22.080	8.300	366.528	
			TOTAL	439.356	
DEDUCTION					
1	2	7.805	5.75	89.758	
2	2	1.750	2.050	7.175	
			TOTAL	96.933	
FIRST FLOOR F.A.R AREA				342.424	
FIRST FLOOR NON F.A.R AREA					
S1	2	5.255	1.500	15.765	
S2	2	3.755	1.500	11.265	
				27.030	
TOTAL COMMERCIAL F.A.R AREA				1705.618	

TOTAL PARKING SUMMARY		
TOTAL NOS. OF UNITS	1891	
PARKING REQUIED @ 0.5 ECS PER DU	945.5	ECS
PARKING REQUIED BY AREA		
PROPOSED OPEN PARKING AREA	8245.28	SQ.MT.
TOTAL NOS. OF PARKING IN OPEN SPACE @23 SQ.M / ECS	358.49	ECS
SAY	358.00	ECS
PROPOSED STILT PARKING AREA	20535.18	SQ.MT
TOTAL NOS. OF PARKING IN OPEN SPACE @28 SQ.M / ECS	733.40	ECS
SAY	733.00	ECS
TOTAL PARKING ECS	1091.89	ECS
PARKING PROVIDED		
TOTAL NOS. OF UNITS	1891	NOS
TWO WHEELER PARKING REQUIRED @1 PARKING PER DU	1891	NOS
TWO WHEELER PROVIDED ON STILT LVL	1891	NOS

GENERAL NOTES:-

1. LIFT / SERVICES WILL BE INSTALLED WITH 100% POWER BACK UP.
2. THE RESPONSIBILITY OF THE STRUCTURE DESIGN & STRUCTURAL STABILITY OF THE BUILDING AGAINST THE EARTH QUAKE SHALL BE ENTIRELY OF THE ARCHITECT/ OWNER/ENGINEER.
3. HANDICAP RAMP WITH RAILING HAS BEEN PROVIDED IN ALL THE COMMON AREAS.
4. STRUCTURAL DRAWINGS SHALL BE READ IN CONJUCTION WITH
5. RELEVANT ARCHITECTURAL AND SERVICES DRAWING.
6. DO NOT SCALE FOLLOW WRITTEN DIMENSIONS ONLY.
7. ALL DIMENSIONS ARE IN MM. UNLESS OTHERWISE SPECIFIED.
8. UNLESS SPECIFIED OTHERWISE, ALL LEVELS SHOWN IN STRUCTURAL DRAWINGS ARE STRUCTURAL LEVELS ONLY.
9. FOR GENERAL NOTES AND STANDARD DETAILS REFER STANDARD DRG.
10. COVER
    a) BEAM : 25 MM
    b) SLAB : 20MM
11. CONCRETE MIX
    a) BEAM : M25
    b) SLAB : M25
12. TOP REINF.
13. BOTTOM REINF.
14. REINFORCEMENT : REINF. STEEL SHALL BE TMT BARS OF GRADE FE 500 CONFIRMING TO IS 1786-1985
15. DETAILING OF REINFORCEMENT SHALL BE ACCORDING TO SP-34: 1987.IS-456:2000, IS-13920:1993
16. PROVIDED DIST. REINF. WHEREVER REQD. AS FOLLOW:-
    TOP. - 8T@200 C/C
    BOT. - 8T@C/C

CONSTRUCTION DETAILS:-

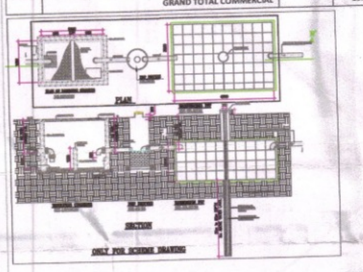
1. THE COLUMNS (RECTANGULAR) OR COLUMN LEG (L SHAPED) SHALL BE SYMMETRICAL ABOUT CENTER LINES.
2. NOT MORE THAN 50% OF BARS SHALL BE LAPPED AT ANY SECTION. LAP LENGTH IN LONGITUDINAL. BARS IN COLUMNS SHALL BE EQUAL TO DEVELOPMENT LENGTH IN TENSION.
3. ALL CONSTRUCTION WORKS SHALL BE CARRIED OUT ACCORDING TO C.P.W.D. SPECIFICATIONS, 1996 (VOL.-I TO VOL. –VI) WITH CORRECTION SLIPS AND IS:456-2000.
4. DETAILING OF REINFORCEMENT SHALL BE ACCORDING TO SP-34:1987, IS:456:2000, IS:13920:1993.
5. GATE & BOUNDARY WALL AS /STD. DESIGN

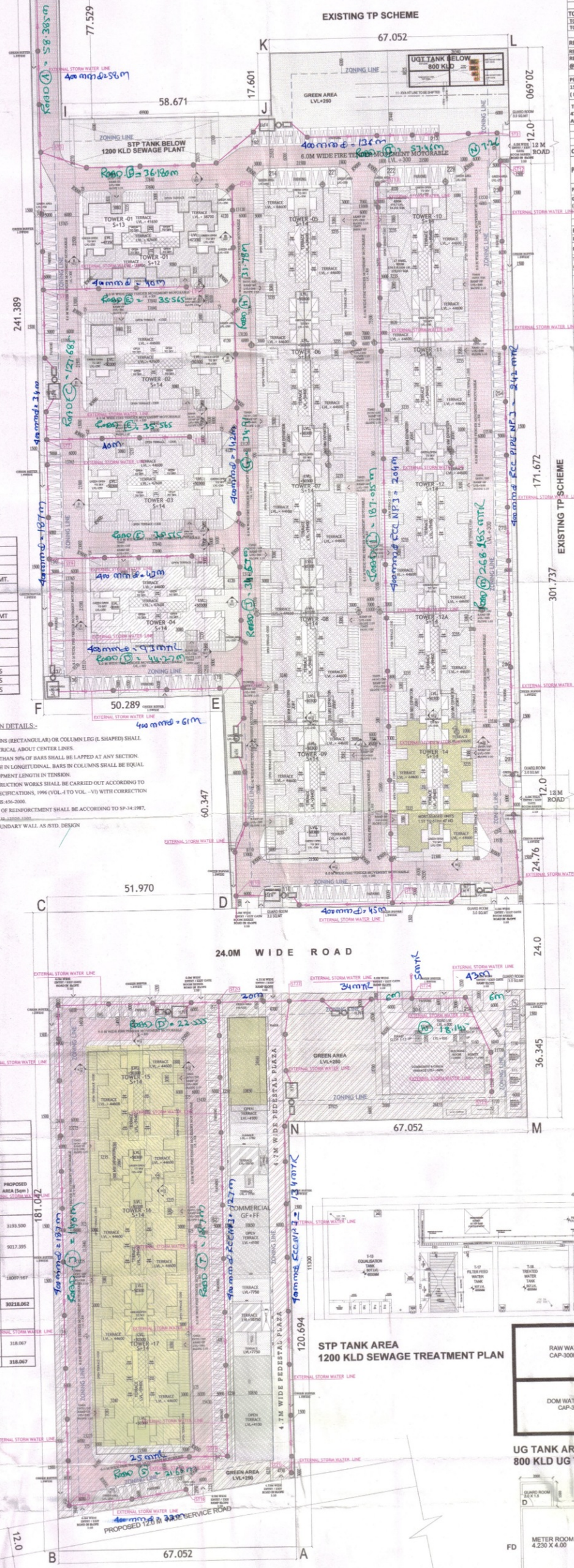
MORTGAGED LEGEND:-

- LAND MORTGAGED AREA 2.738 ACR.
- MORTGAGED TOWER UNITS
- MORTGAGED COMMERCIAL SHOPS

S.NO.	DETAILS OF LAND MORTGAGED RESIDENTIAL & COMMERCIAL		PERMISSIBLE (Sqm)	PROPOSED (Sqm)
1	TOTAL LAND AREA- (Acres) @ 11.11875	=	44,995.913	44,995.913
2	Required site area mortgaged @20% of total Land Area	=	8999.183	11083.163
3	Proposed site area mortgaged (In Acres)	=	2.223 Acres	2.738 Acres
			20.00%	24.62%

S.NO.	DETAIL OF BUILTUP AREA/UNIT NOS. MORTGAGED		REQUIRED UNITS	PROPOSED UNITS NOS FOR MORTGAGED	PROPOSED AREA (Sqm)
A	RESIDENTIAL TOTAL UNITS = 1891 NOS. MORTAGAGED UNITS 20% = 378 NOS.				
i	TOWER 14 (1st to 6 th floor only) = 47 Units TYPE A = 04 NOS., TYPE B = 03 NOS. TYPE C = 40 NOS.	=	378.000	47.00	3193.500
ii	TOWER 15 (1st to 14 th floor) = 112 Units TYPE A = 08 NOS., TYPE C = 104 NOS.	=		112.00	9017.395
iii	TOWER 16 (1st to 14 th floor) = 112 Units TYPE A = 08 NOS., TYPE C = 104 NOS.	=		112.00	18007.167
iv	TOWER 17 (1st to 14 th floor) = 112 Units TYPE A = 08 NOS., TYPE C = 104 NOS.	=		112.00	
	GRAND TOTAL RESIDENTIAL			383.00	30218.062
B	COMMERCIAL TOTAL FAR @ 1.75 = 1572.024 SQM MORTAGAGED FAR @ 20% = 314.404 NOS.				
i	COMMERCIAL SHOPS ON GROUND FLOOR SHOPS NUMBERS 21 TO 36 = 16 NOS.SHOPS	=		16.00	318.067
	GRAND TOTAL COMMERCIAL			16.00	318.067





AFFORDABLE GROUP HOUSING RESIDENTIAL PLOT SEC- 07, SOHNA , AREA SUMMARY								
TOTAL PLOT AREA STATEMENT	PERMISSIBLE			F.A.R PROPOSED / ACHIVED				TOTAL UNITS
TOTAL LAND AREA	11.11875 ACR.	44995.913	SQ.MT.	PER. %	ACRES	SQM		
TOTAL LAND NET PLANNED AREA	11.09875 ACR.	44914.976	SQ.MT.					
RESIDENTIAL FAR CALCULATION - (A)								
RESIDENTIA PERMISSIBLE @96% OF 11.09875 ACRES	10.6548	43118.377	SQ.MT.					
REMAINING COMMERCIAL CONVERT RESIDENTIAL @2% OF 11.09875 ACRES	0.22198	898.2995	SQ.MT.					
TOTAL RESIDENTIAL @ 98 %	10.87678	44016.677	SQ.MT.	98%	10.87678	44016.677		
PERMISSIBLE FAR ON RESIDENTIAL	225.00%	99037.523		225.00%		99037.523		
15 % EXTRA FAR FOR IGBC PLATINUM RATING (IGBC REG. NO. - GAH 240763) NOV. 2024	15.00%	6602.502		15.00%		6602.502		
TDR APPLICABLE (TDR CERTIFICATE NO. 1- 488 OF 47/2024 DATED 15.11.2024 FAR UTILIZATION AREA 21385.364 SQM.)	75.00%	33012.508		48.585%		21385.364		
TOTAL RESIDENTIAL F.A.R	315.00%	138652.532		288.58466%		127025.389		1891
TOTAL GROUND COVERAGE	50.00%	22008.348		33.225669%		14624.839		
COMMERCIAL FAR CALCULATION - (B)								
PERMISSIBLE COMMERCIAL @4% OF 11.09875 ACRES	0.44395 ACR.	1796.599	SQ.MT	2%	0.221975	898.2995		TOTAL SHOPS
PERMISSIBLE FAR ON COMMERCIAL	175.00%	3144.048		175.00%		1572.024		58 ON GR. FL. & 04 FIRST FL.
0.15 % EXTRA FAR FOR IGBC PLATINUM RATING (IGBC REG. NO. - GAH 240763) NOV.- 2024	15.00%	269.4898		15.00%		134.745		
TOTAL COMMERCIAL F.A.R	190.00%	3413.538		190.00%		1706.769		62 SHOPS
				189.872%		1705.618		
RESIDENTIAL + COMMERCIAL LAND								
RESIDENTIA NET LAND @ 96% OF 11.09875 ACR.	10.6548 ACR.	43118.377	SQ.MT.	98%	10.87678	44016.677		
PERMISSIBLE COMMERCIAL @ 4% OF 11.09875 ACR.	0.44395 ACR.	1796.599	SQ.MT.	2%	0.22198	898.2995		
TOTAL RESIDENTIAL + COMMERCIAL = (A) + (B) @ 96% + 4% = 100%	11.09875 ACR.	44914.976	SQ.MT.	100%	11.09875	44914.976		

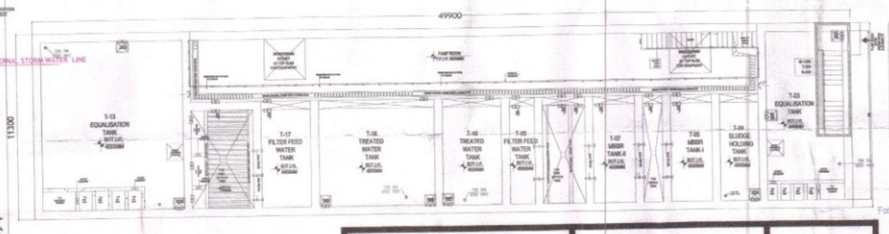
GROUND COVGERAGE	PERMISSIBLE %	PROPOSED								PROPOSED %
GROUND COVGERAGE AREA @ 98% + 2% = 100 % AREA (44016.677 + 898.300) = (44914.976 SQM)	50.00%	RESIDENTIAL	COMMERCIAL	COMMUNITY & CRECHE	GUARD ROOM	METER VCB ROOM	STP MUMTY	UGT MUMTY	ESS DG SET	37.691%
GROUND COVERAGE AREA CALCULATION (IN SQM.)	22457.488	14624.839	1363.194	411.182	12.000	75.000	22.000	26.000	56.000	16,590.215

DENSITY CALCULATION	PERMISSIBLE			RESI. AREA @98% OF NET PLAN AREA	PROPOSED					
	PERSON (PPA)	(TDR) ADDL PERSON +175	TOTAL DENSITY		TOTAL PERSON (PPA)	TOTAL DWELLING UNIT				TOTAL PERSON @ 5 EACH UNIT
POPULATION PER ACRES CALCULATION RESIDENTIAL (PPA)	750-900	750-900+(175)	750-1075		845.139	1891				9,455.00

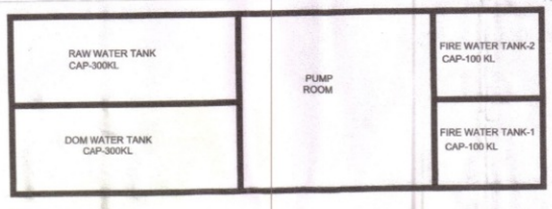
GREEN AREA CALCULATION @ NET PLANNED AREA	PERMISSIBLE			TOTAL PLOT EXCLUDING AREA UNDER	PROPOSED		
TOTAL PLOT AREA	11.11875 ACR.	44,995.913	SQ.MT.				
AREA UNDER 24.0 M ROAD WIDENING	0.79 ACR.	3197.011	SQ.MT.				
AREA UNDER 12.0 M ROAD WIDENING	0.19 ACR.	768.901	SQ.MT.				
AREA UNDER 60.0 M ROAD WIDENING	0.04 ACR.	161.874	SQ.MT.	10.098 ACRES			
NET PLANNED AREA	10.098 ACR.	40868.127	SQ.MT.				
GREEN REQUIRED @ 15% OF NET PLANNED AREA	1.514 ACR.	6129.763	SQ.MT.		1.520 ACRES	6195.284	SQ.MT

PARKING AREA CALCULATION	PERMISSIBLE				PROPOSED			
	ECS PER SQM	TOTAL UNITS	TOTAL ECS		ECS PER SQM	TOTAL AREA (SQM)		TOTAL PARKING NO.
TOTAL CAR PARKING (OPTIONAL) ECS & NUMBER'S		1891			358.49	8245.280		
ECS OPEN CAR PARKING	23				733.40	20535.18		
ECS STILT CAR PARKING	28				1091.89			1091.89
TOTAL NUMBER'S & ECS TWO WHEELER PARKING REQUIRED (OPEN + STILT) 2500 X 800 MM SIZE (2 .0 sqm)	0.5	1891	945.50					
OPEN TWO WHEELER PARKING NUMBER'S & ECS					99	198.00	TOWER 01	
					672	1344.00	TOWER ,02,03,04,09,14,15	
					224	448.00	TOWER 10,11	
STILT TWO WHEELER PARKING NUMBER'S & ECS					224	448.00	TOWER 12,12 A	
					672	1344.00	TOWER 05,06,07,08,15,16	
					1891	3782.00		1891

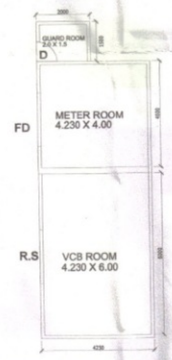
PROPOSED AGH GROUND COVERAGE,BUILT UP AREA, FAR & NON FAR AREA CALCULATION (IN SQM)															
	TOWER's	TOTAL FLOORS (STILT+ FLOORS NOS.) (A)	GROUND COVERAGE	STILT/GROUND FLOOR NON FAR - (B)	STILT/GROUND FLOOR FAR (C)	TYPICAL FLOOR NON F.A.R (1 TO 14) (D)	TYPICAL FLOOR F.A.R (1 TO 14) (E)	TOTAL TYPICAL FLOOR NON F.A.R (1 TO 14) (A) X (D)	TOTAL TYPICAL FLOOR F.A.R (1 TO 14) (A) X (E)	MUMTY & MACHINE NON-FAR AREA (M)	TOTAL FLOORS NON FAR ACHIEVED (A) X (D) + (B) (S)	TOTAL FLOORS FAR ACHIEVED (A) X (E) + (C) (Z)	TOTAL TYPICAL FLOOR & MUMTY FAR & NON FAR BUILT UP AREA ACHIEVED (S) + (Z) +(M)	TOTAL NOS. UNITS ACHIVED (3 BHK)
RESIDENTIAL	TOWER 1 (S+12 & 13)	12 1	883.972	809.145	74.827	43.364	532.250 210.299	520.368 43.364	6387.000 210.299	74.827	1372.877	6672.126	8119.830	96 3
	TOWER 2 (S+14 TH)	14	883.972	809.145	74.827	43.364	532.250	607.096	7451.5	74.827	1416.241	7526.327	9017.395	112
	TOWER 3 (S+14 TH)	14	883.972	809.145	74.827	43.364	532.250	607.096	7451.5	74.827	1416.241	7526.327	9017.395	112
	TOWER 4 (S+14 TH)	14	883.972	809.145	74.827	43.364	532.250	607.096	7451.5	74.827	1416.241	7526.327	9017.395	112
	TOWER 5 & 6 (S+14 TH)	14	1762.903	1613.249	149.654	86.728	1063.324	1208.074	14886.536	149.654	2821.323	15036.190	18007.167	224
	TOWER 7 & 8 (S+14 TH)	14	1762.903	1613.249	149.654	86.728	1063.324	1208.074	14886.536	149.654	2821.323	15036.190	18007.167	224
	TOWER 9 (S+14 TH)	14	883.972	809.145	74.827	43.364	532.250	607.096	7451.5	74.827	1416.241	7526.327	9017.395	112
	TOWER 10 & 11 (S+14 TH)	14	1612.003	1462.349	149.654	86.728	1063.324	1208.074	14886.536	149.654	2670.423	15036.190	17856.267	224
	TOWER 12 & 12A (S+14 TH)	14	1612.003	1462.349	149.654	86.728	1063.324	1208.074	14886.536	149.654	2670.423	15036.190	17856.267	224
	TOWER 14 (S+14 TH)	14	808.292	733.465	74.827	43.364	532.250	607.096	7451.500	74.827	1340.561	7526.327	8941.715	112
	TOWER 15 (S+14 TH)	14	883.972	809.145	74.827	43.364	532.250	607.096	7451.5	74.827	1416.241	7526.327	9017.395	112
	TOWER 16 & 17 (S+14 TH)	14	1762.903	1613.249	149.654	86.728	1063.324	1208.074	14886.536	149.654	2821.323	15036.190	18007.167	224
	TOTAL		14624.839	13352.780	1277.059	737.188	9252.669	10246.678	125738.98	1272.059	23599.458	127011.038	151882.555	1891
FACILITIES	CRECH (GROUND FLOOR)		411.182										882.654	
	COMMUNITY (FIRST FL.)					411.182								
	MUMTY									60.290				
	COMMERCIAL BLOCK (GROUND FLOOR)		1363.194									1705.618	1887.593	
	FIRST FLOOR						342.424				27.03			
	MUMTY									154.945				
	GUARD ROOM 1.5 X 2.0 M= 3 Sqm (4 NOS. Proposed)		12.00										12.00	
	METER ROOM & HT VCB ROOM		75.00										75.00	
	ESS DG SETS PLATFORM		56.00											
	STP MUMTY ROOM		22.00										22.00	
	UGT MUMTY ROOM		26.00										26.00	
	GRAND TOTAL		16590.215							1487.294	23626.488	128716.656	154787.802	1891 UNITS
	TOTAL BUILT UP AREA RESIDENTIAL , COMMERCIAL , COMMUNITY & CREACHE & FACILITIES FAR & NON FAR MUMTY & MACHINE ROOM AREA												154787.802	



STP TANK AREA
1200 KLD SEWAGE TREATMENT PLAN



UG TANK AREA
800 KLD UG TANK PLAN



METER ROOM & HT VCB ROOM

NOTES
1. Dimensions are not to be scaled.
2. All dimensions are in mm.
3. All windows and ventilators are openable.
4. Lift well are mechanically Pressurized.
5. Fire services install as per NBC.
6. 100% power backup for emergency services.

Owner's Sign&Stamp
For ROF Infratech and Housing Pvt. Ltd.
Authorised Signatory

Architect's Sign&Stamp
JYOTI PRAKASH SHARMA
CA/2008/43101

Architects :
JPS DESIGN STUDIO

Electrical, Plumbing, HVAC & Fire Fighting

BEHERA ASSOCIATES PVT LTD
F-623a, LADO SARAI
BEHIND CNG FILLING STATION
NEW DELHI - 110030
PH.-011-45453080,MOB:9811911853
EMAIL-behera.associates@gmail.com

Project Title :
PROPOSED BUILDING PLAN OF AFFORDABLE GROUP HOUSING COLONY OVER AN AREA MEASURING 11.11875 ACRE (LICENCE NO. 182 OF 2024 DATED 10/12/2024 IN SECTOR 07 , SOHNA , BEING DEVELOPED BY ROF INFRATECH & HOUSING PVT. LTD.

Drawing Title : STORM WATER LAYOUT
SITE PLAN AND AREA CALCULATION

Scale :	1: 200	Project No :	Rev :
	27-12-2024	Drawing Code :	Drawing No : SD-AH-01
Drawn By :			
Checked By :	J P SHARMA		
Sheet Size :	A0:841x1189mm.	Drawing Status : Submission Drawing	

Superintending Engineer,
HSVP Circle-I, Gurugram

SITE PLAN