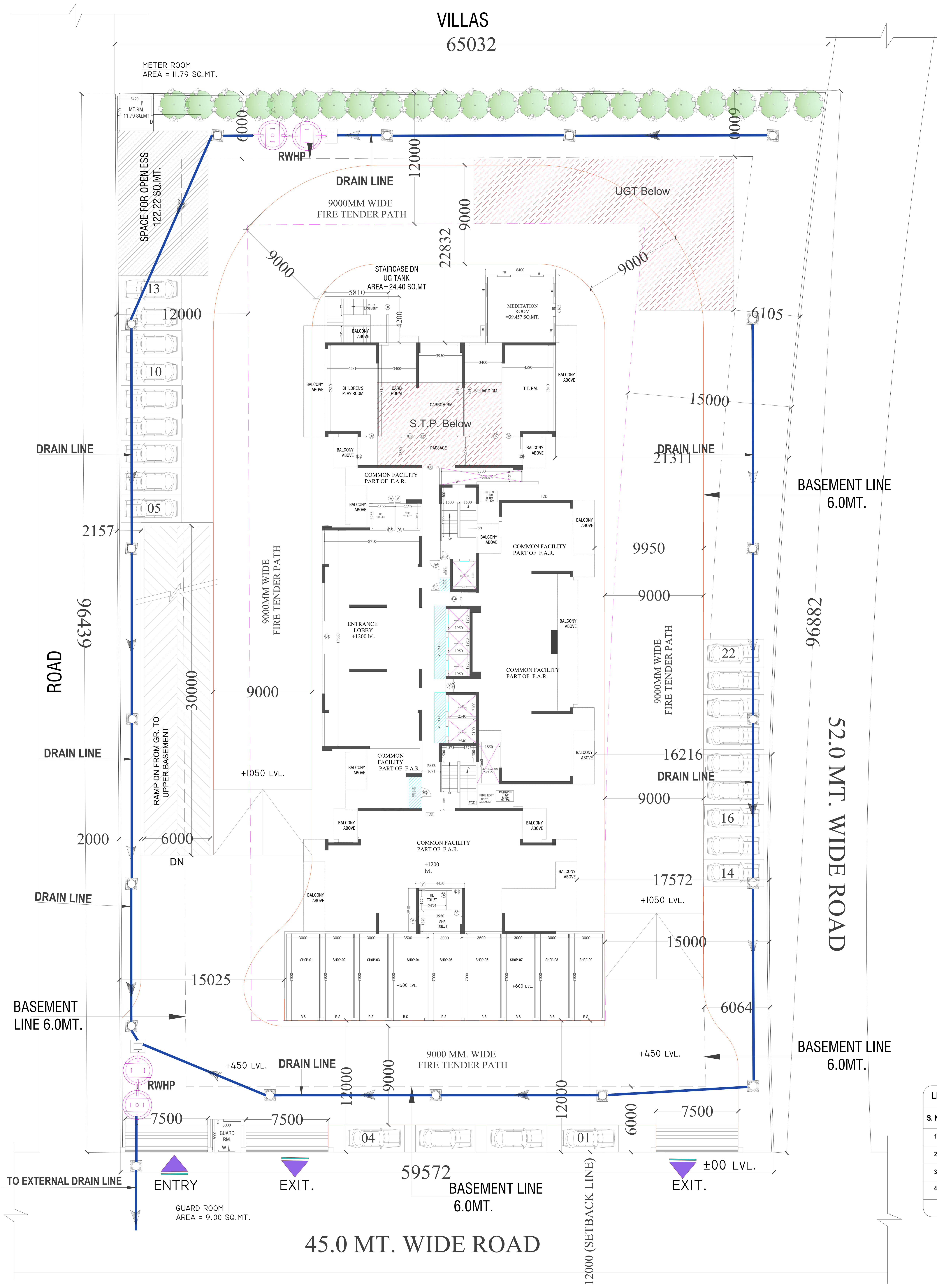



**RAIN WATER HARVESTING CALCULATION (Roof Area)**

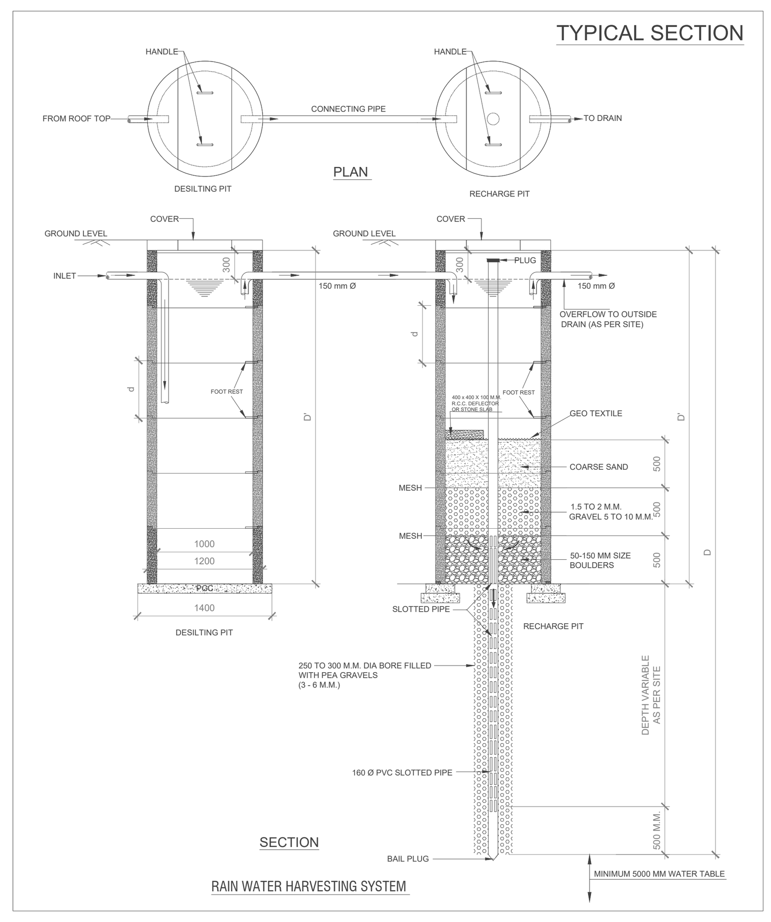
The capacity of tank and recharge pit is designed to retain runoff for at least 15 minutes of rain fall of the peak intensity.

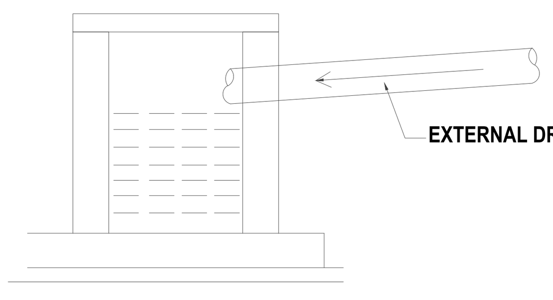
| | |
|---|---|
| Peak Rainfall in one hour | = About 90 mm/hr |
| Peak Rainfall in 15 minutes, R | = 22.5 mm or say 25 mm |
| | = or 0.025 m |
| Total Roof Area, A | = 1096.00 sq.m |
| Run off coefficient, C (Complete site) | = 0.9 |
| Hence total combined capacity of desilting tank and recharge pit required, | = A x R x C |
| | = 24.66 cubic meters |
| Providing Desilting tank of size | = 1.2 x 5.00 m effectivity depth |
| Capacity of desilting tank of given size (Cu.m.), a | = 5.65 cubic meter |
| Providing Recharge pit of size | = 1.75 x 2.75 1.2dia x 5.00 |
| Capacity of recharge pit of given size (Cu.m.), b( | = 5.65 cubic meter |
| Hence total combined capacity of one set of desilting tank and recharge | = a + b |
| | = 11.30 cubic meter |
| Therefore no. of desilting tank and recharge pit required pit, (Cu.m.) | = (A x R x C) / (a + b) |
| | = 2 nos. |
| | **Say, 2 nos.** |

**Hence, 12nos. sets of recharge pit and desilting tank are required of following size:**

| | |
|---|---|
| **Desilting tank** | = **1.2 x 5.0 m effectivity depth** |
| **Recharge pit** | = **1.2 x 5.0 m effectivity depth** |

Hence, total 02 Rain Water Harvesting pits and Tanks are proposed for artificial ground water recharge.




TYP. SECTION OF EXTERNAL DRAIN

**LEGEND :**

| S. No. | SYMBOL | DESCRIPTION |
|---|---|---|
| 1. | C.P. | CATCH PIT |
| 2. | | UNDER GROUND DRAIN |
| 3. | | RAIN WATER HARVESTING |
| 4. | | BASEMENT LINE |
| | | |

PROJECT :-

**PROP. GROUP HOUSING**
**"SKA IMPERIA" AT PLOT NO- GH-04,SECTOR-4**
**SPRINGWOOD ENCLAVE , WAVE CITY (GZB)**

BUILDERS & PROMOTERS :-

**JRS BUILDCON LLP**

DRAWING TITLE :-

**SITE PLAN**
**EXTERNAL DRAINAGE & RWHP**

ARCHITECTS :
Space Designers International
B-34,Sector-67, NOIDA-201301
PH :91-9711633717,18
e-mail : info@spacedi.com, www.spacedi.com

| CHECKED BY :- | SCALE :- | DATE :- |
|---|---|---|
| VISHAL | 1:300 | |

Lalit Narayan Jha — Digitally signed by Lalit Narayan Jha Date: 2026.04.20 11:57:25 +05'30'

OWNER'S SIGNATURE

Vishal Mittal — Digitally signed by Vishal Mittal Date: 2026.04.20 12:37:51 +05'30'

ARCHITECT'S SIGNATURE

DRG. No. :-S-02