

DESIGN CALCULATION FOR SEPTIC TANK AND UP FLOW FILTER

Total Number of Fixtures Units = 48 Units
 Assume a Peaking Factor 6 Litres per Fixture unit 48 x 6 = 288 Litres Per Minute

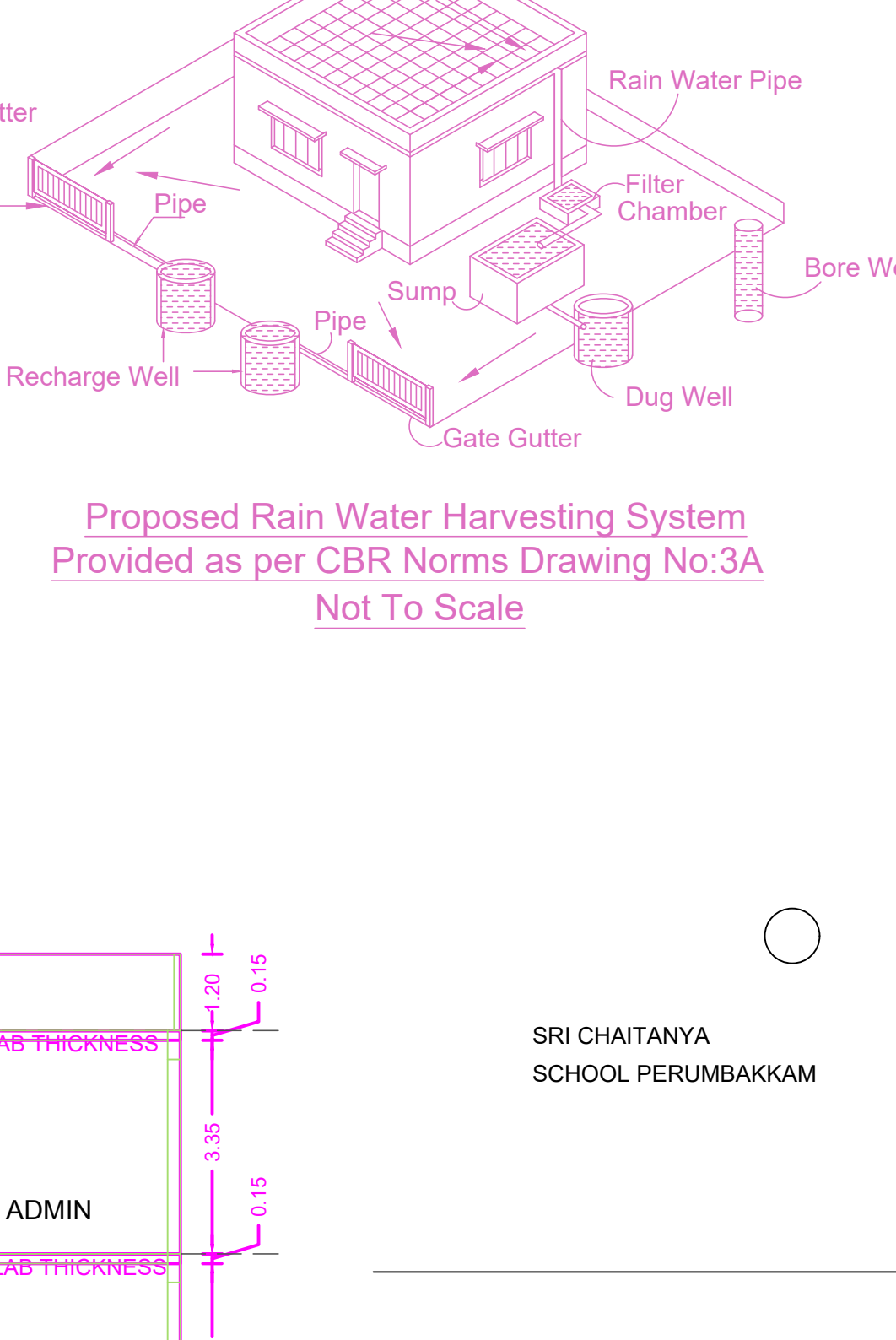
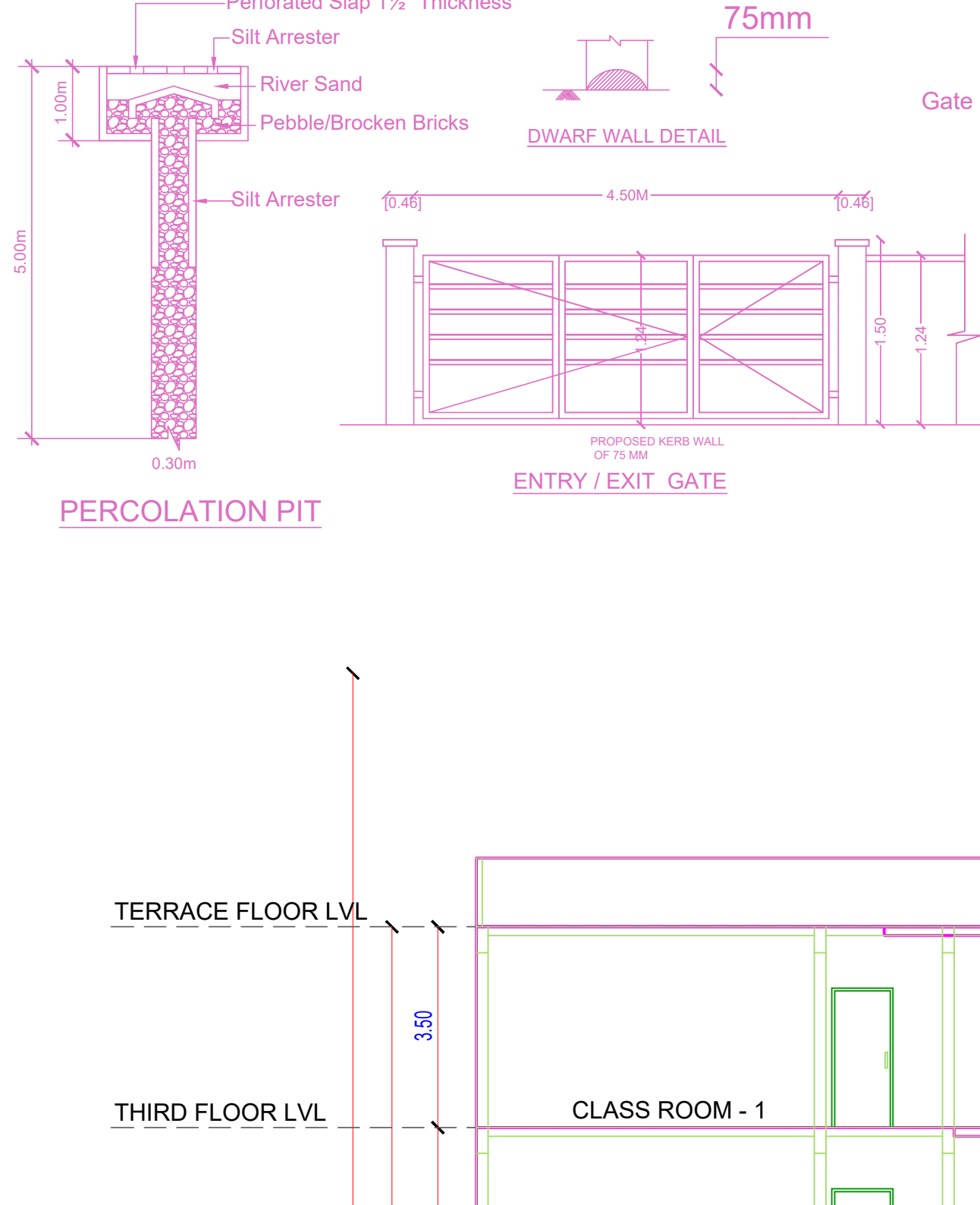
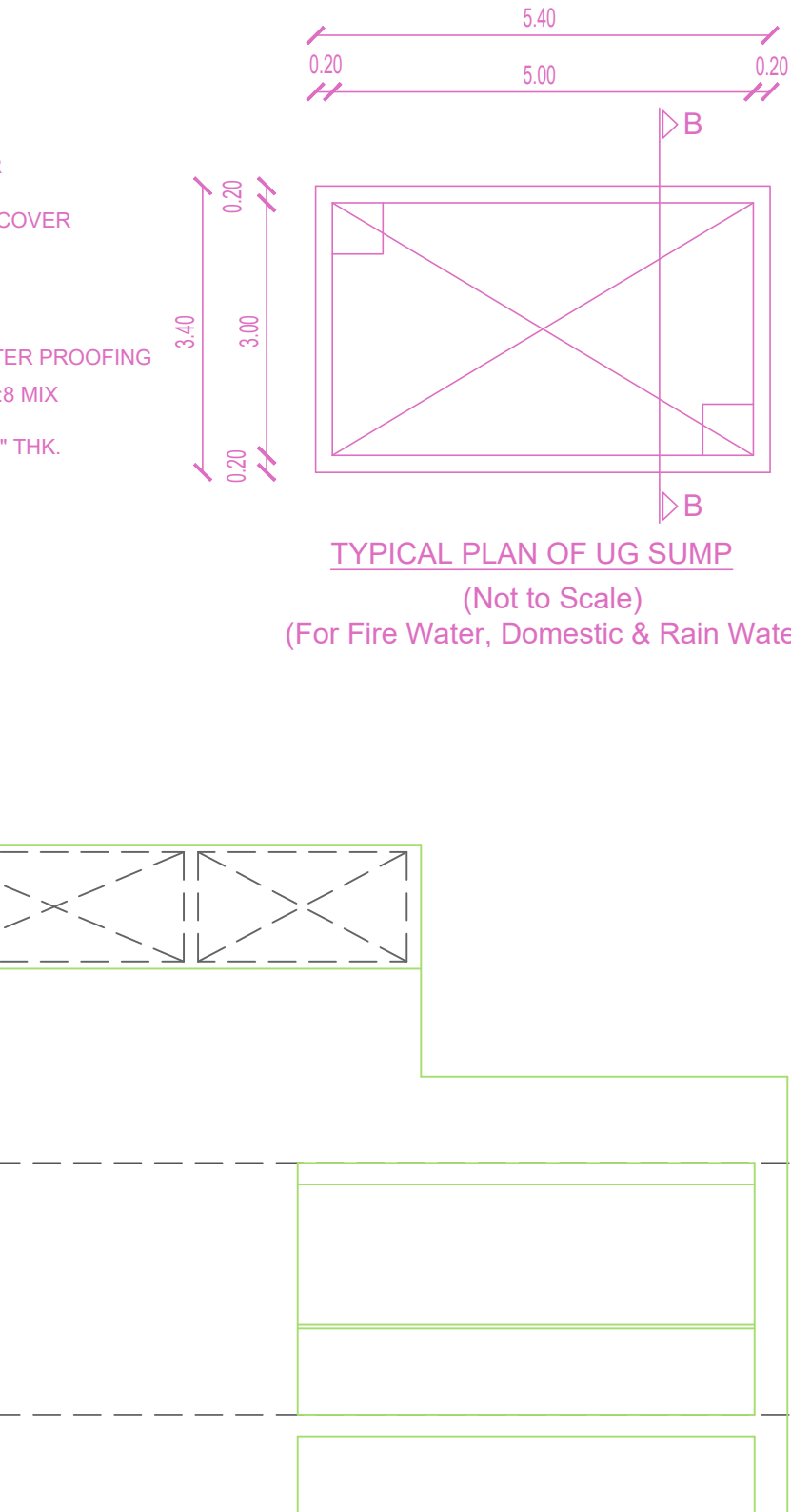
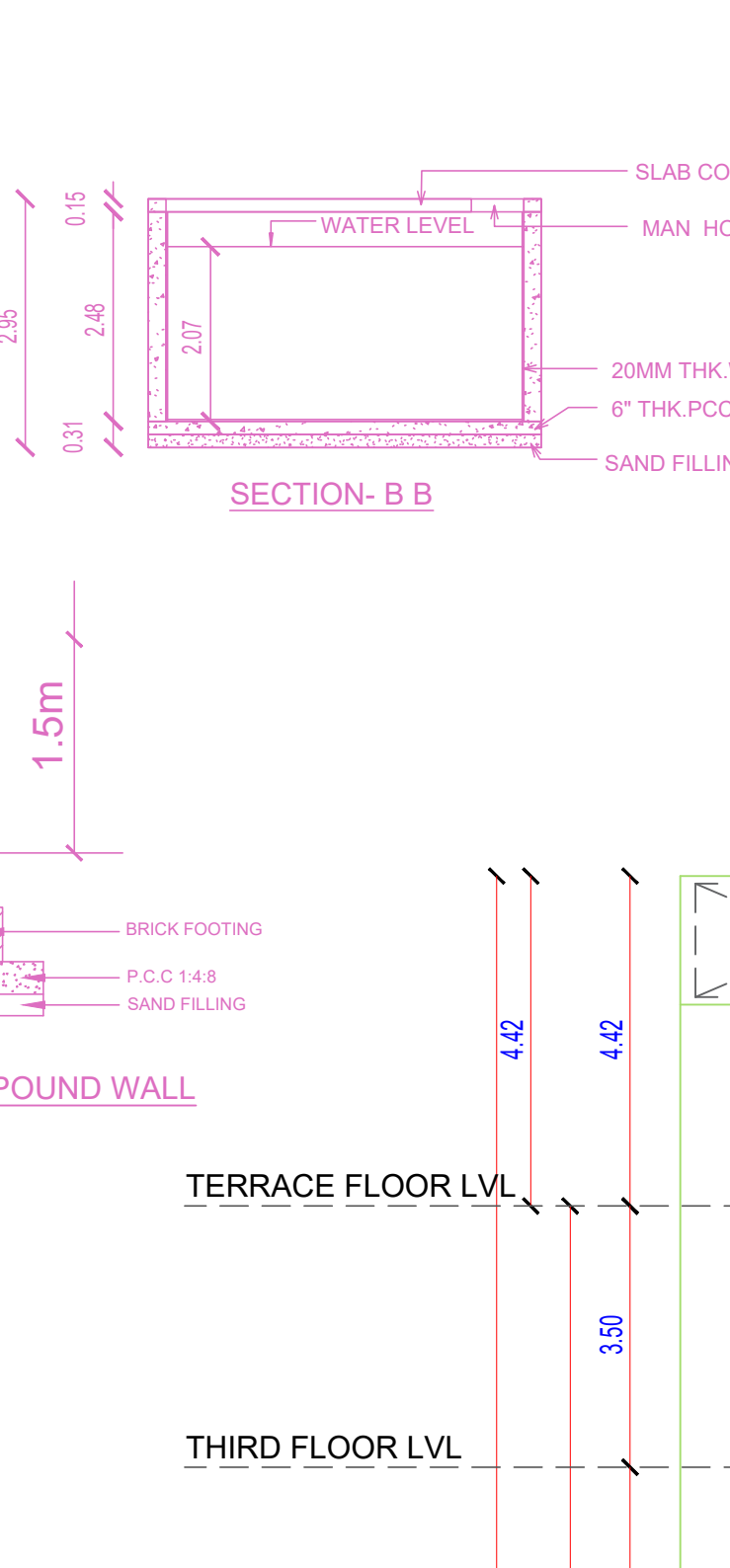
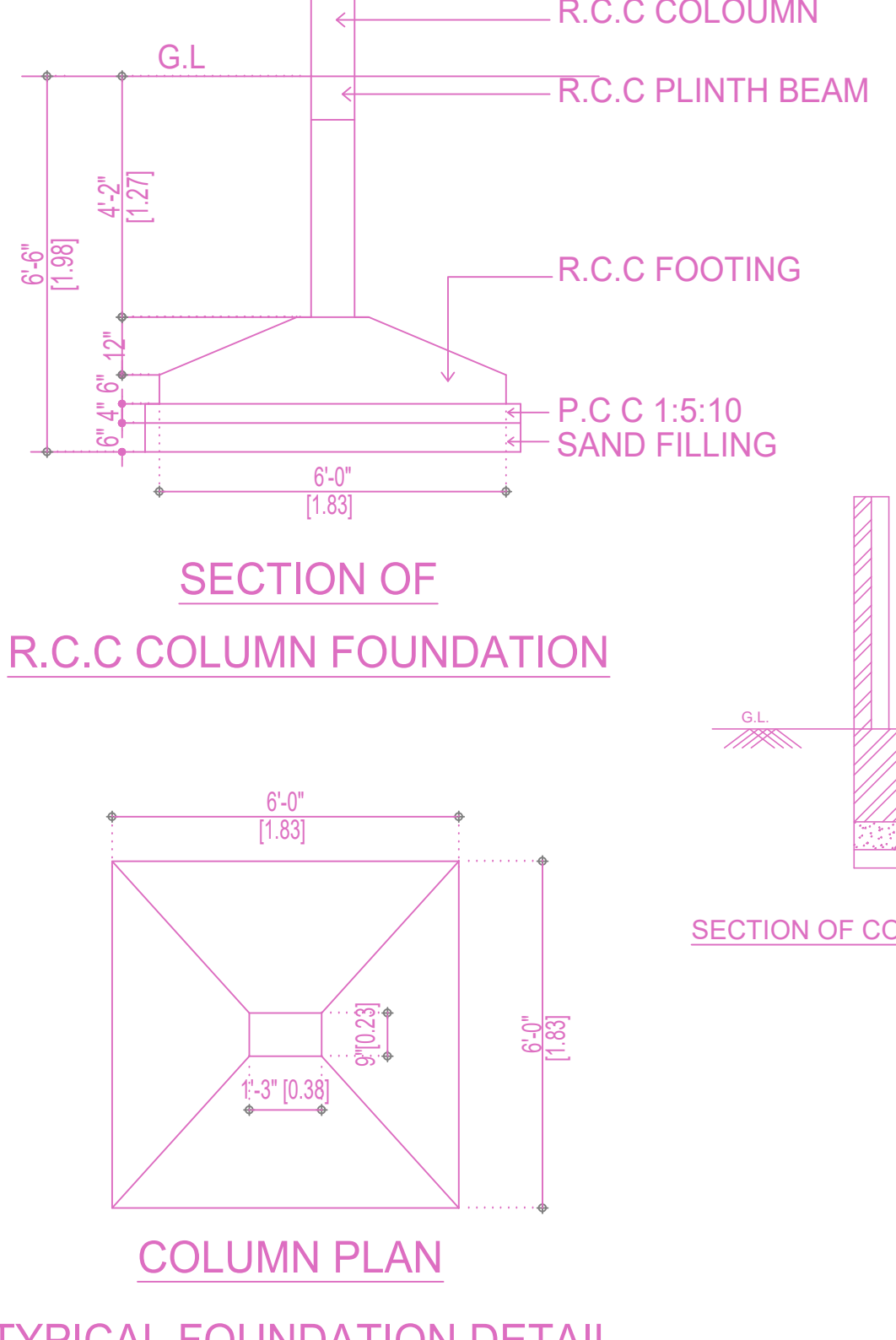
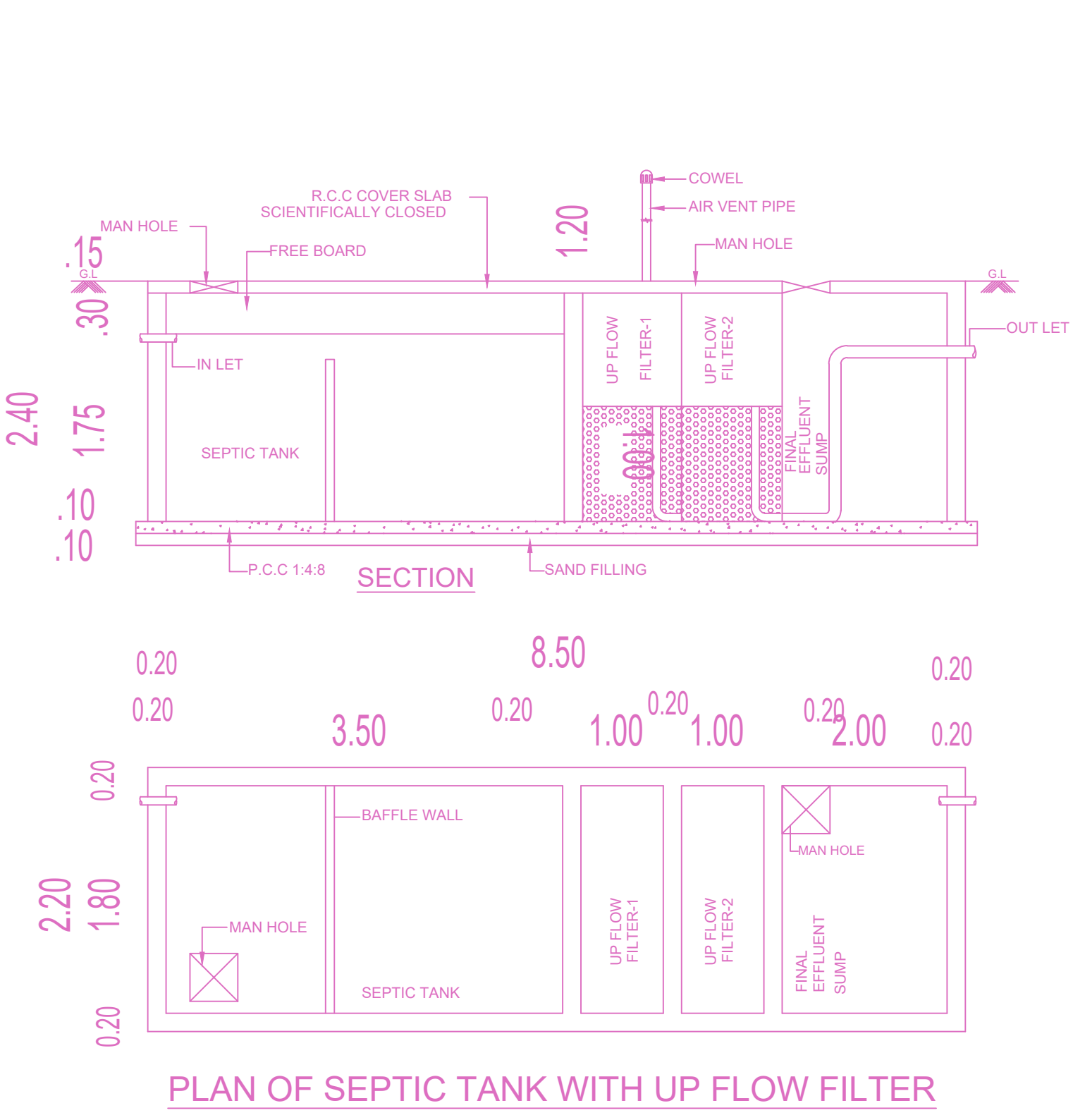
SEPTIC TANK

Surface Area Required for Septic Tank = $288 \times 0.92 / 10 = 26.49 \text{ M}^2$
 Volume of Free Board = $26.49 \times 0.30 = 7.95 \text{ M}^3$
 Volume of Digestation = $240 \times 0.002 = 0.48 \text{ M}^3$
 Volume of Sludge = $26.49 \times 0.30 = 7.95 \text{ M}^3$
 Volume of Sedimentation = $26.49 \times 0.30 = 7.95 \text{ M}^3$
TOTAL VOLUME = 41.10 M³

Depth of Septic Tank = $41.10 / 26.49 = 1.55 \text{ M}$
 Required Depth = Say 1.75 M
 Provided Depth = 1.75 M
 Ratio of Length and Breadth = 2 : 1
 Size of Septic Tank Required = $3.50 \text{ M} \times 1.80 \text{ M} \times 1.75 \text{ M}$

UPFLOW FILTER

Up Flow Capacity Required = $240 \times 0.04 = 9.6 \text{ M}^3$
 Depth Assumed = 2.00 M
 Hence Area of Final Effluent Surface Required = $9.6 / 2.00 = 4.80 \text{ M}^2$
 Therefore Area of Final Effluent Surface Provided = 5.00 M^2
 Size of Final Effluent Collection Sump Required = $2.00 \text{ M} \times 1.80 \text{ M} \times 1.75 \text{ M} = 6.30 \text{ M}^3$
 Therefore Size of Final Effluent Collection Sump Provided = $2.00 \text{ M} \times 1.80 \text{ M} \times 1.75 \text{ M} = 6.30 \text{ M}^3$
 Size of Upflow Filter I Provided = $1.00 \text{ M} \times 1.80 \text{ M} \times 1.75 \text{ M}$
 Size of Upflow Filter II Provided = $1.00 \text{ M} \times 1.80 \text{ M} \times 1.75 \text{ M}$
 Length of Septic Tank = 3.50 M
 Breadth of Septic Tank = 1.80 M
 Depth of Septic Tank = 1.75 M



PLAN SHOWING THE PROPOSED CONSTRUCTION OF GROUND FLOOR + 3 FLOORS (HEIGHT-15.00M) SECONDARY SCHOOL BUILDING AT PLOT NOS:421,422, 423,424, INDIRA PRIYADHARSHINI ROAD (HOSPITAL ROAD) & 9M WIDE APPROVED LAYOUT ROAD, PERUMBAKKAM, TAMBARAM TALUK, CHENNAI-600100 COMPRISED IN S NO 463/42, 463/43 & 464/18, 464/19, 464/20, 464/21 OF PERUMBAKKAM VILLAGE WITHIN THE LIMIT OF ST.THOMAS MOUNT PANCHAYAT UNION.

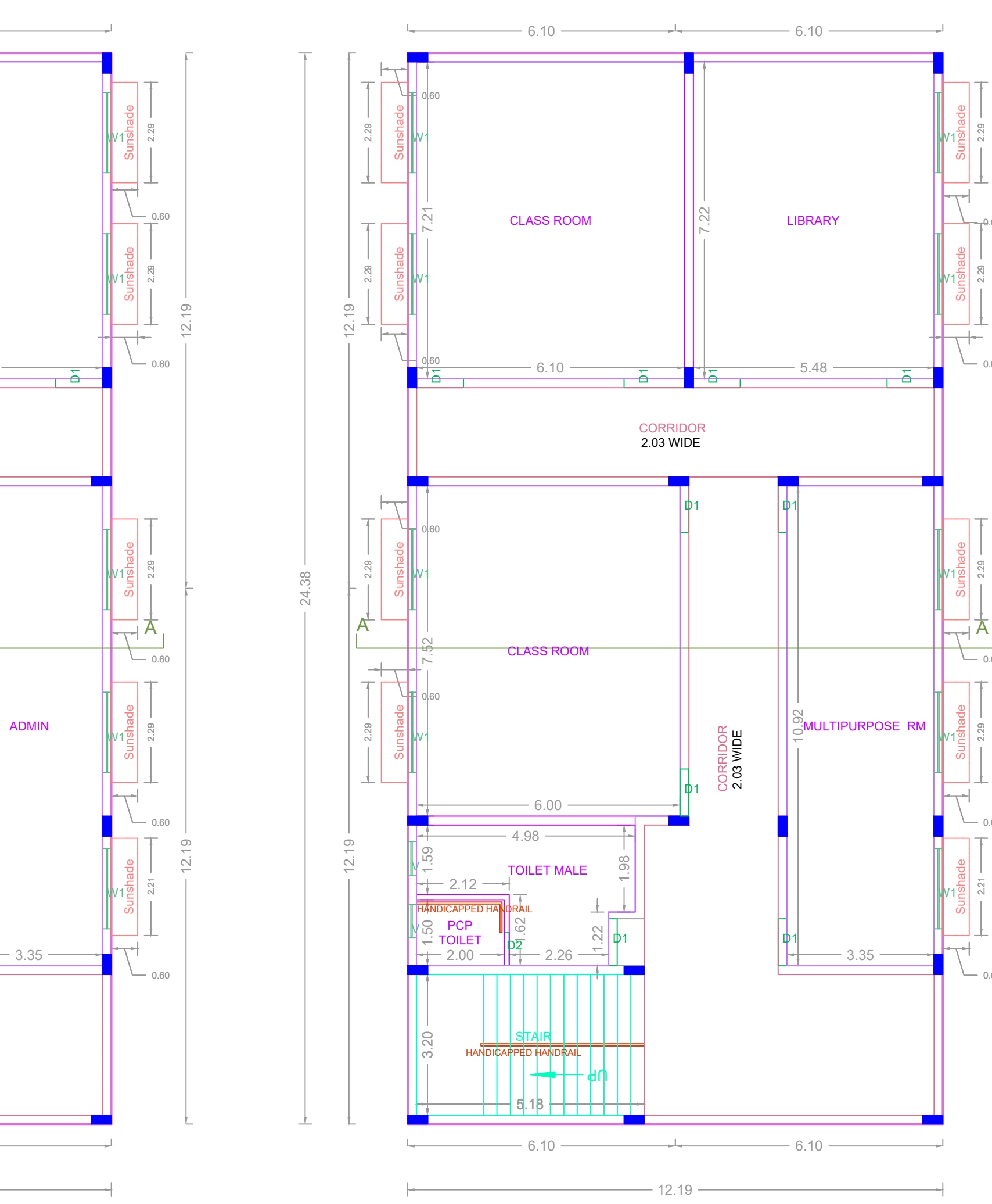
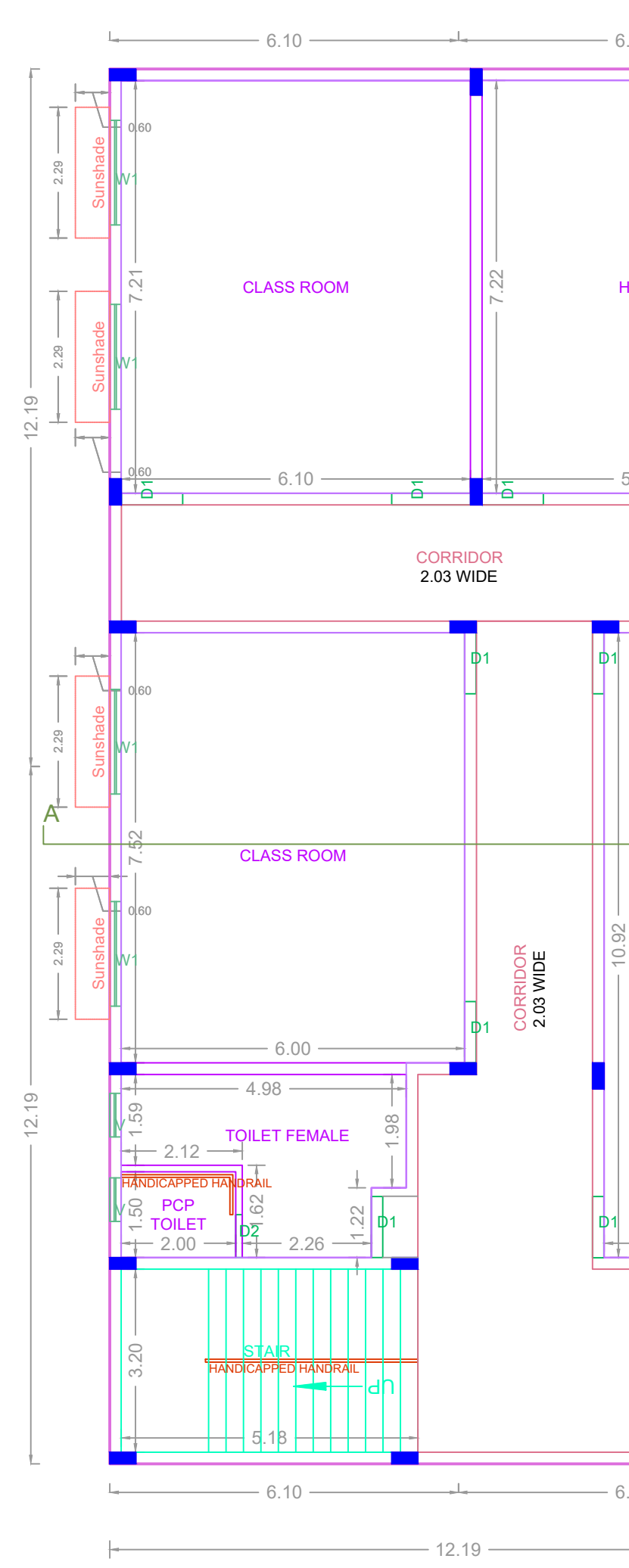
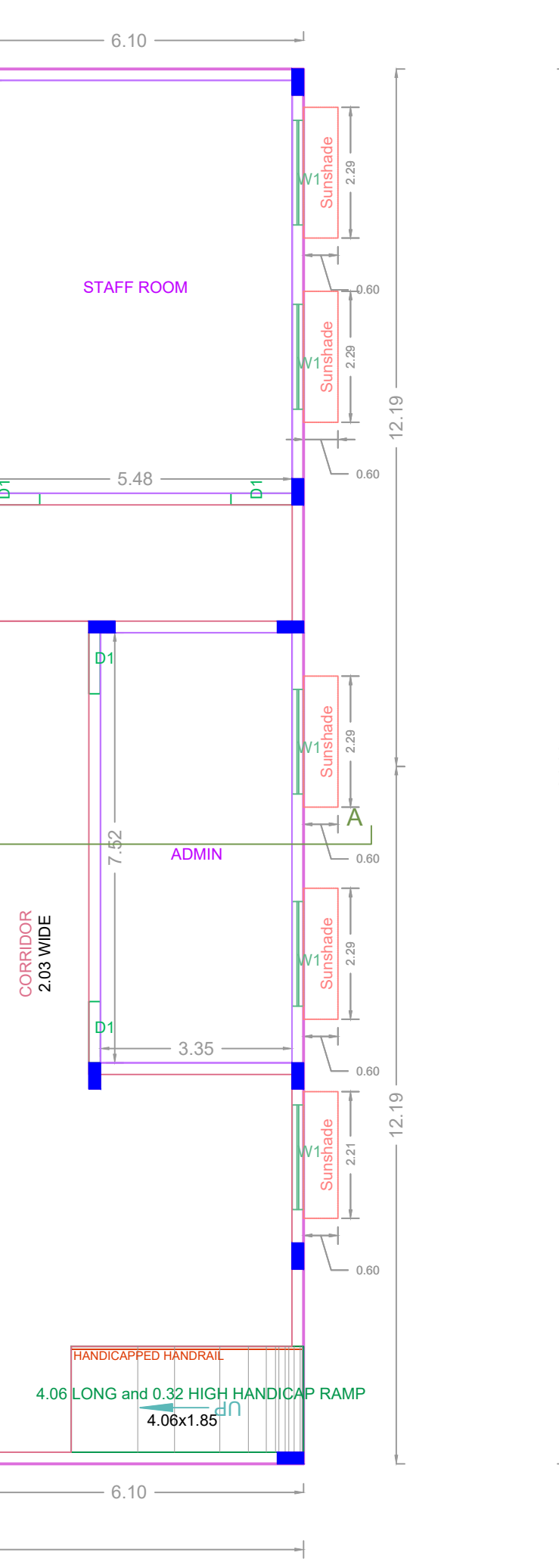
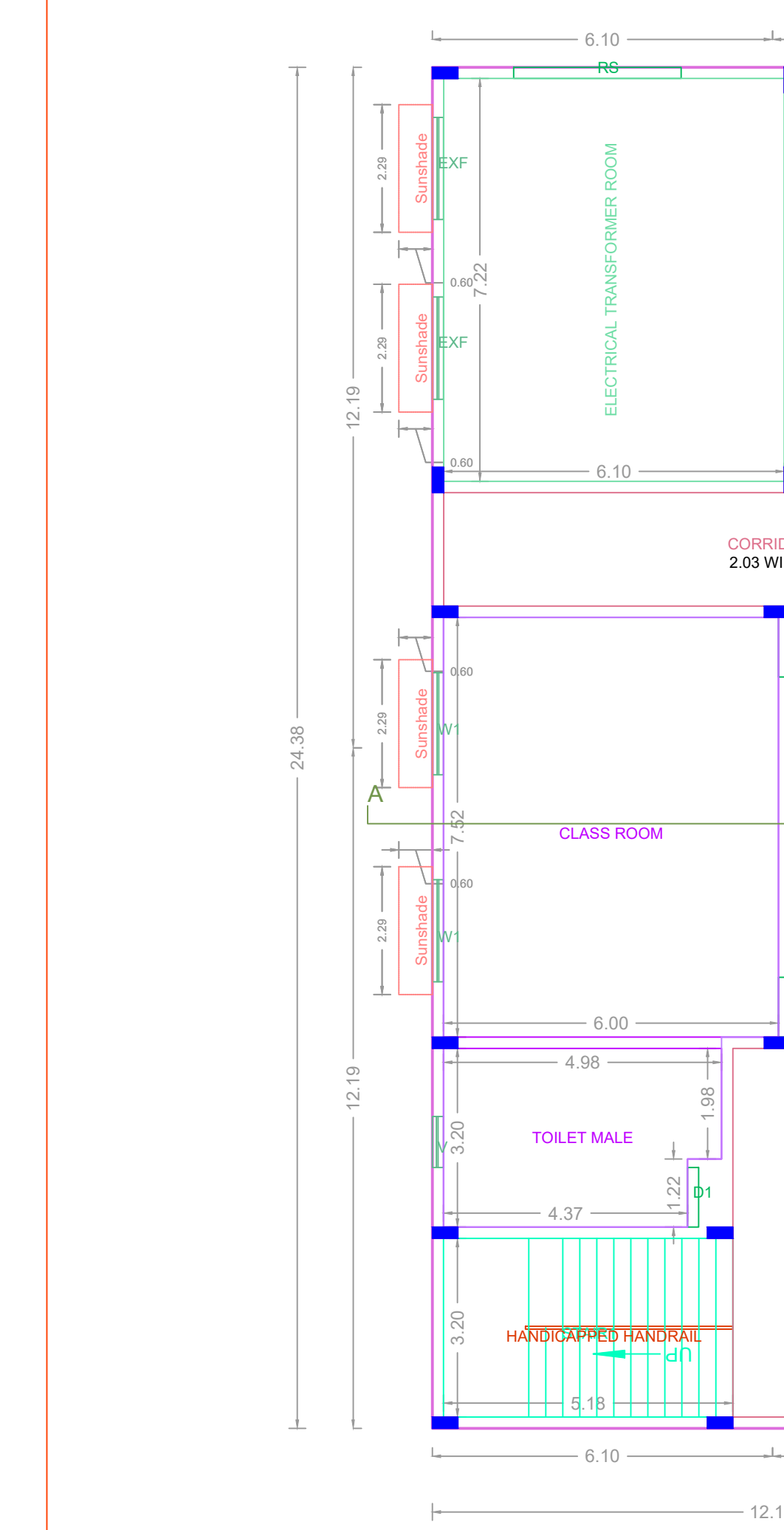
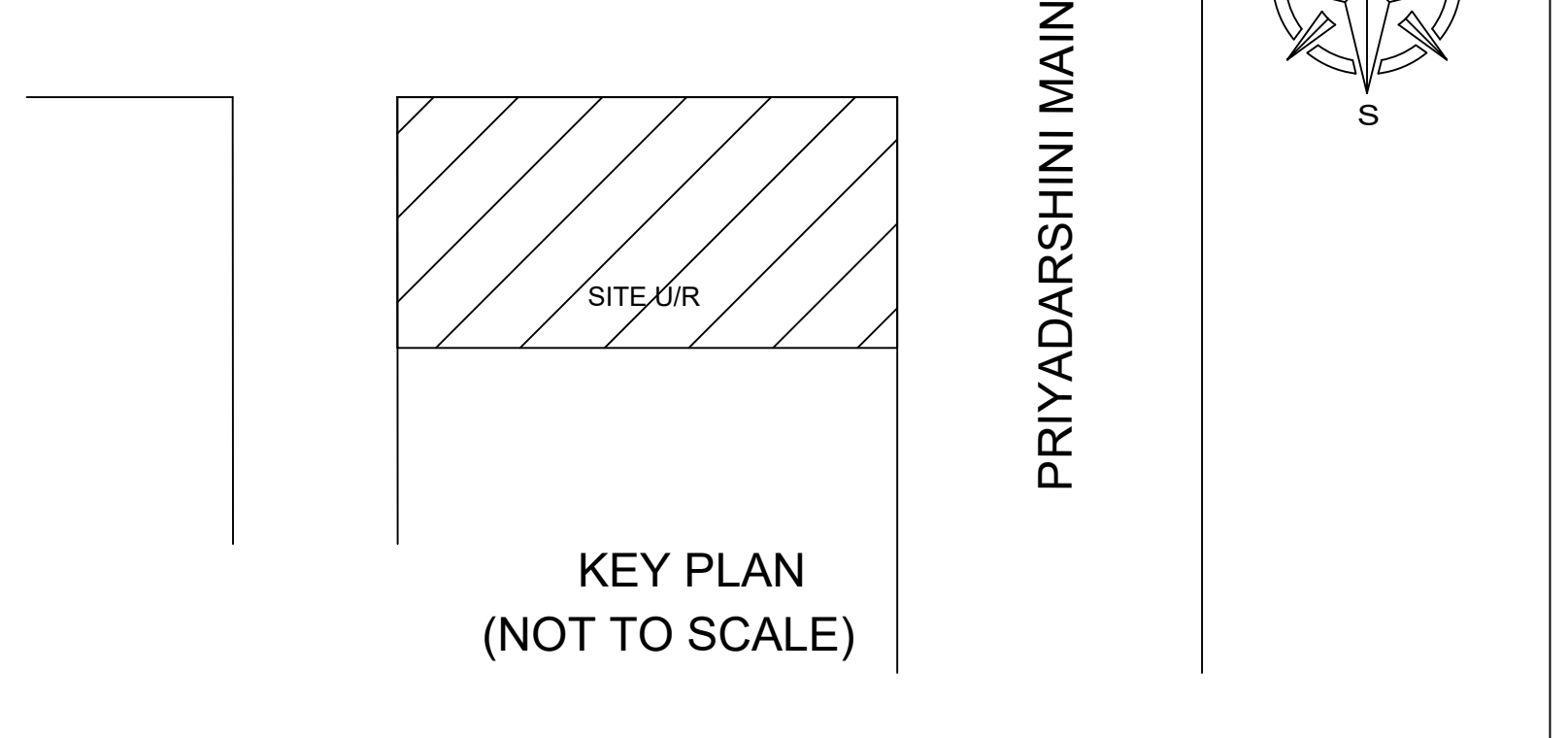
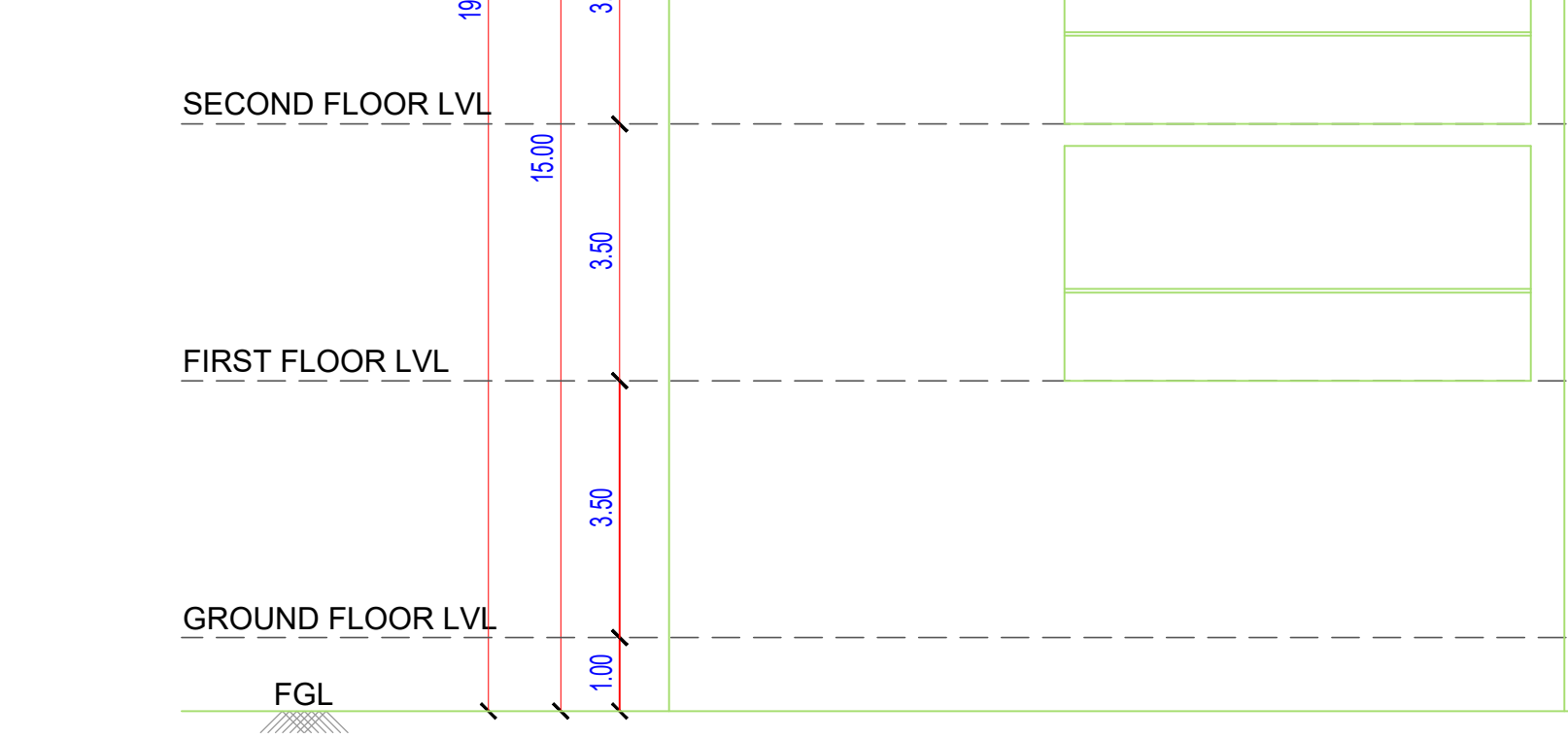
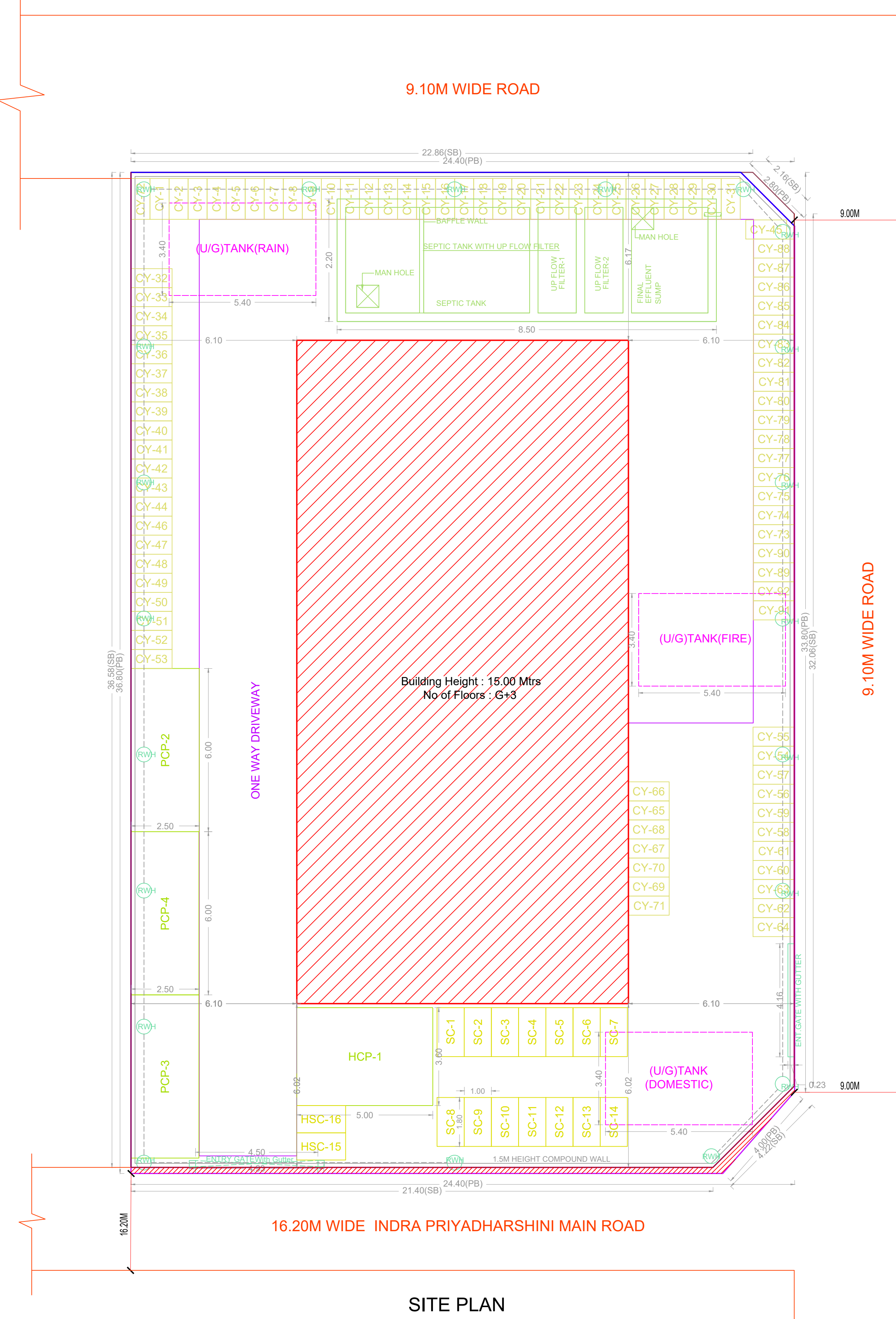
A) AREA STATEMENT

AREA AS PER PATTA	800.00
AREA AS PER DOCUMENT	882.94
AREA CONSIDERED FOR FSI	800.00
STREET ALIGNMENT ROAD WIDENING LINK ROAD	0.00
OSR AREA	0.00
TOTAL FSI AREA	1189.16
FSI FACTOR	1.486
COVERAGE AREA (PERCENTAGE %)	NA

A) PARKING STATEMENT

VEHICLE	REQUIRED	PROVIDED
LORRY	0	0
CAR	1	4
TWO WHEELER	6	16
CYCLE	63	92

CMDA APPROVED LAYOUT P.P.D.I.L.O. No. 91/84 WIDE LETTER No. LV12740/84/02



BUILDING WISE FSI STATEMENT

BUILDING	NO OF SAME BUILDING	FSI AREA				DU	TOTAL FSI AREA
		COMM.	RESI.	IND.	INST.		
NHRB-1 (INST)		0.00	0.00	0.00	1189.16	0	1189.16
Total		0.00	0.00	0.00	1189.16	0	1189.16

FLOOR WISE FSI STATEMENT: NHRB (INST)

FLOORS	FSI AREA				DU	TOTAL FSI AREA
	COMM.	RESI.	IND.	INST.		
GROUND FLOOR	0.00	0.00	0.00	297.29	0	297.29
FIRST FLOOR	0.00	0.00	0.00	297.29	0	297.29
SECOND FLOOR	0.00	0.00	0.00	297.29	0	297.29
THIRD FLOOR	0.00	0.00	0.00	297.29	0	297.29
Terrace	0.00	0.00	0.00	0.00	0	0.00
Total	0.00	0.00	0.00	1189.16	0	1189.16

APPROVAL CONDITION

SCALE: 1:100

CHENNAI METROPOLITAN DEVELOPMENT AUTHORITY

APPROVED

SUBJECT TO THE CONDITIONS MENTIONED IN THIS OFFICE

For Deputy Planner / Chief Planner / Section In-charge
 High Rise Building / Non High Rise Building
 This Approval is valid only after building Permit is issued by the concerned Local Body.

QR CODE