

DESIGN OF SEPTIC TANK WITH UPFLOW FILTER

NO OF DWELLING UNIT = 11 Nos.
 NO OF USERS = 11 X 5 = 55 Nos.

FIXTURE UNIT PER DWELLING = 24 Nos.
 TOTAL NO OF FIXTURE UNIT = 2 X 12 = 24 Nos.
 ASSUME A PEAK FACTOR OF 6LPM/FIXTURE UNIT = 11X12=132

SEPTIC TANK
 SURFACE AREA REQUIRED = 132 X 0.92 / 10 = 12.14M²

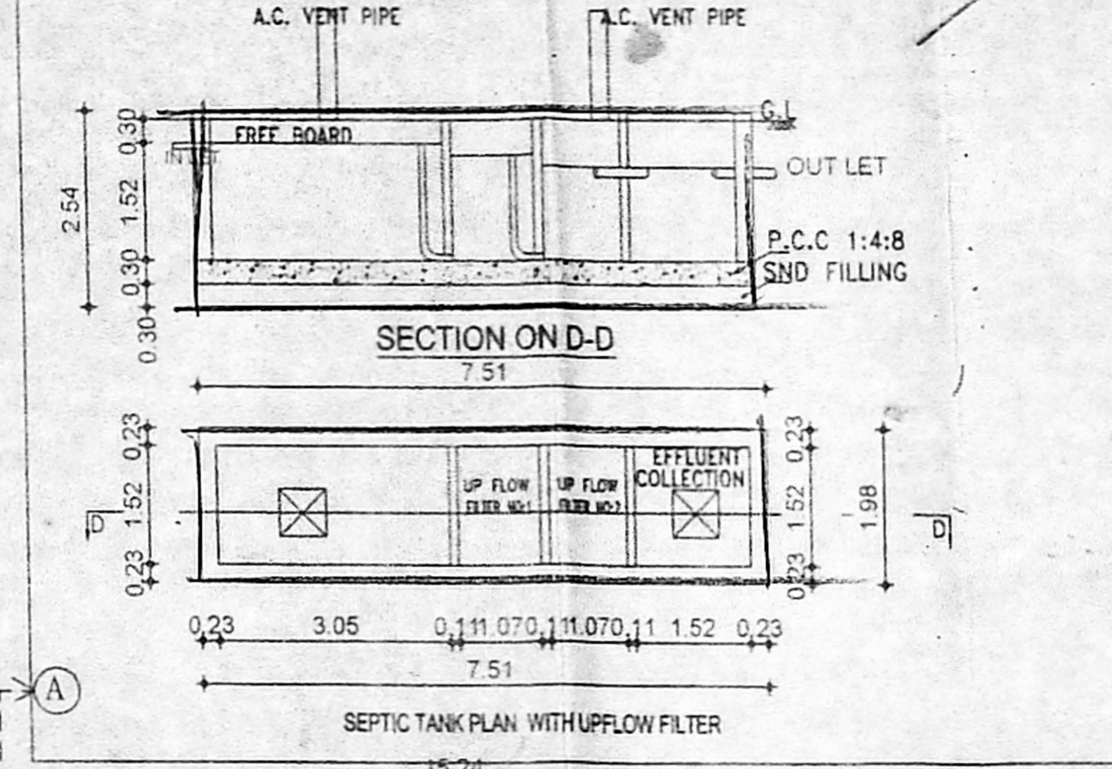
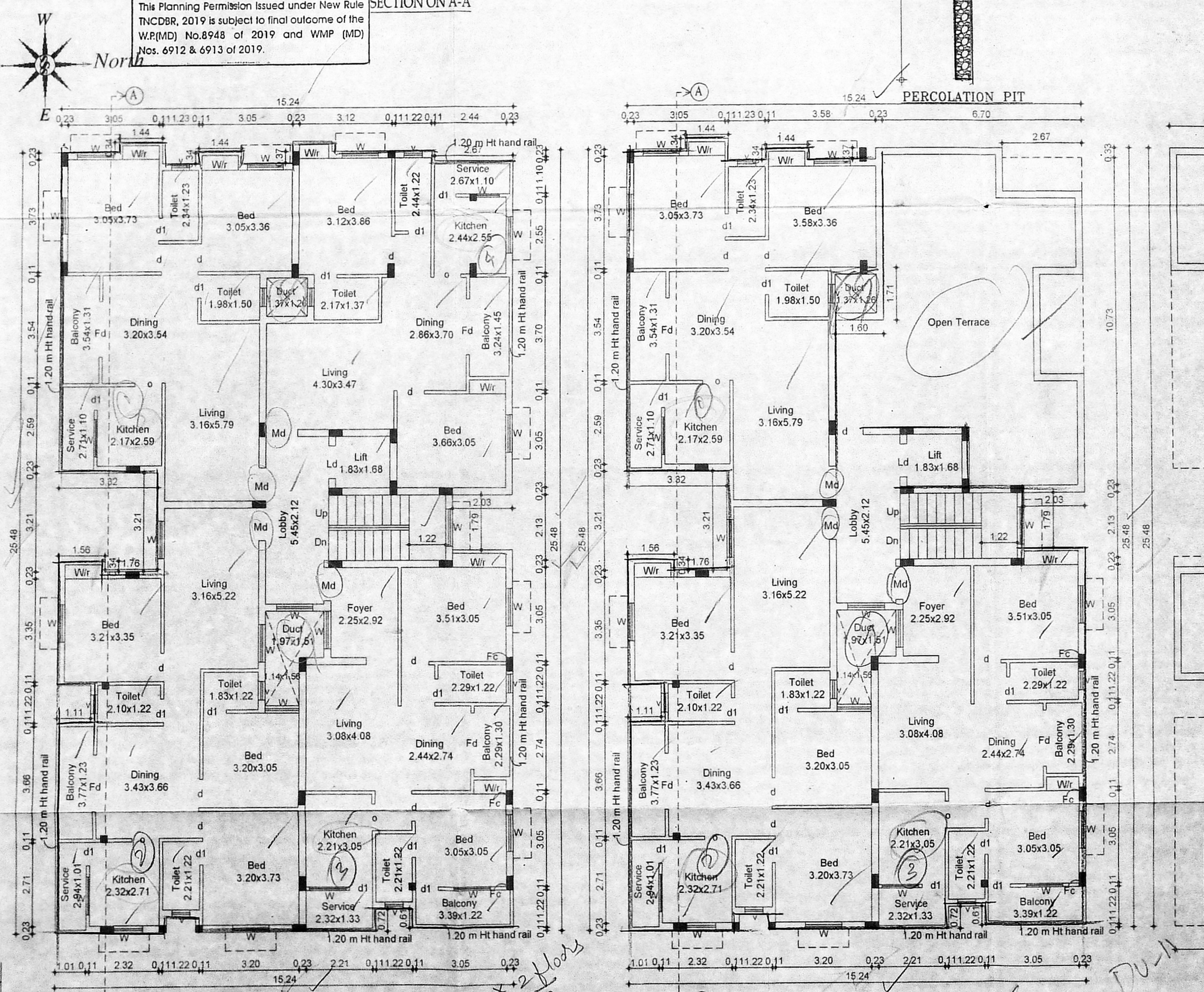
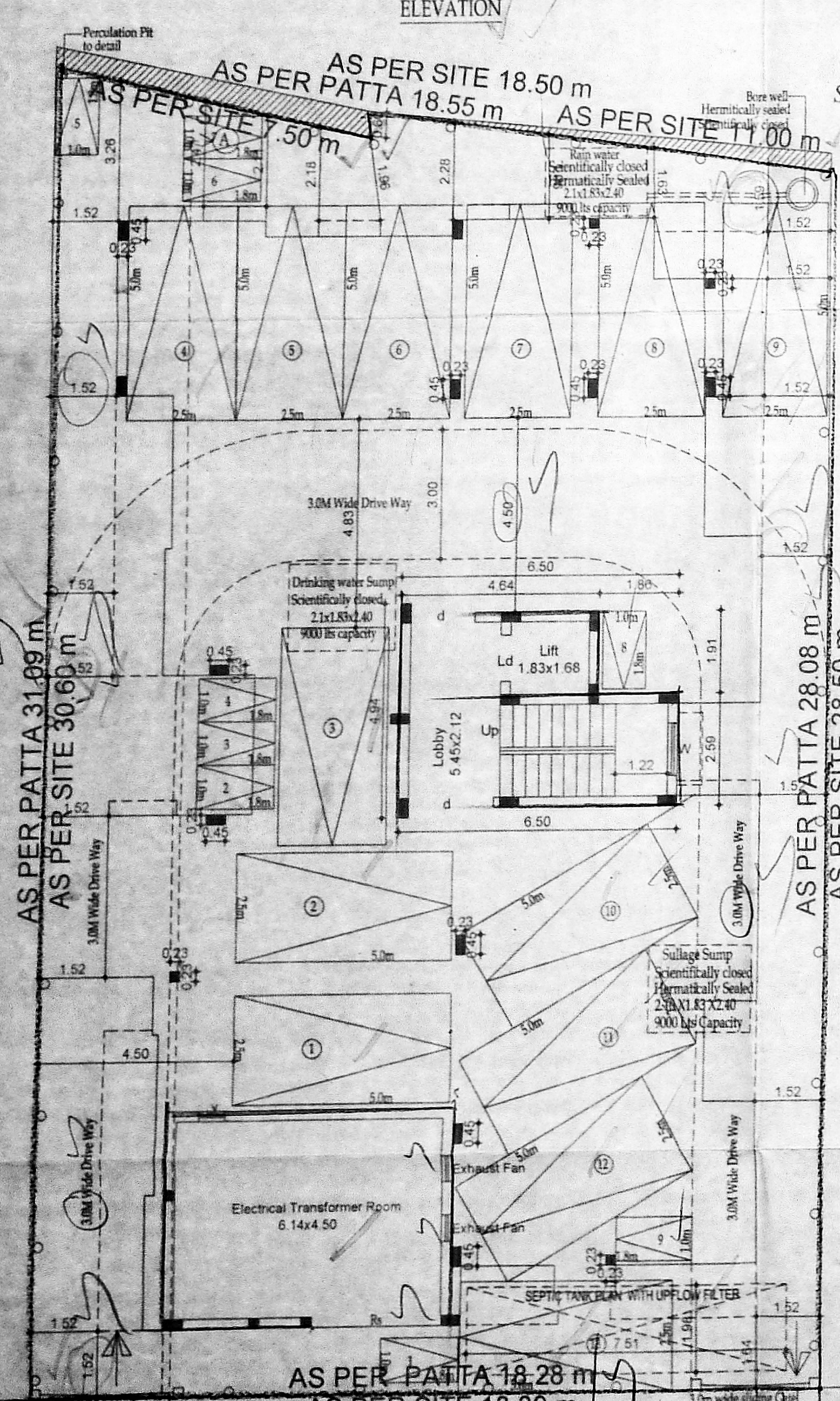
VOLUME OF FREE BOARD = 12.14X0.30 = 3.64M³
 VOLUME OF SEDIMENTATION = 12.14X0.30 = 3.64M³
 VOLUME OF DIGESTION = 55X0.032 = 1.76M³
 VOLUME OF SLUDGE = 55X365X0.0002 = 4.01M³

TOTAL VOLUME = 13.05M³
 DEPTH OF SEPTIC TANK = 13.05/10.20 = 1.27M
 PROVIDING L X B = 2.5:1
 SIZE OF SEPTIC TANK = 7.51mX1.52mX1.52M

UPFLOW FILTER
 CAPACITY PEAK GRAVITY = 55 X 0.045 = 2.47M
 ASSUME DEPTH = 0.80M
 HENCE AREA OF FINAL EFFLUENT SUMP = 2.47/0.80 = 3.08M²
 SIZE OF FINAL EFFLUENT SUMP = 1.52X1.52X0.80M
 SIZE OF UPFLOW FILTER-1 = 1.52X1.07X1.52M
 SIZE OF UPFLOW FILTER-2 = 1.52X1.07X1.52M

SCHEDULE OF JOINERY:

TYPE	DETAIL	WIDTH	HEIGHT
NETELLED DOOR		990	2135
DO-		915	2135
DO-		762	2135
FRAMED WINDOW		1830	1372
DO-		1524	1372
DO-		1220	1372
O	OPENING	915	2135
V	C.W. GLAZED VENTILATOR	610	915



SPECIFICATION:

FOUNDATION : R.C.C COLUMN FOOTINGS
 BRICK WORK : C.M 1:6 FOR SUPER STRUCTURE
 PLASTERING : C.M 1:5 FOR WALLS & 1:3 FOR CEILING
 FLOORING : MOSAIC FLOORING
 CEMENT PAINT : 2 COAT FOR WALLS & 1, EXTRA COAT FOR CEILING
 R.C.C : M25 GRADE OF CONCRETE FOR SLABS & LINTELS
 WOOD WORK : ALL WOOD WORKS IN BEST QUALITY TIMBER
 WEATHERING : B.JELLY LIME MORTAR OVER ROOF COURSE
 SLAB ONE LAYER OF COUNTRY TILES

COLOUR INDEX:

PROPOSAL :
 ROAD/STREET :
 BOUNDARY/SITE :

AREA STATEMENT SQ. M

PLOT EXTENT : AS PER SUB DIVISION : 525.00 SQM

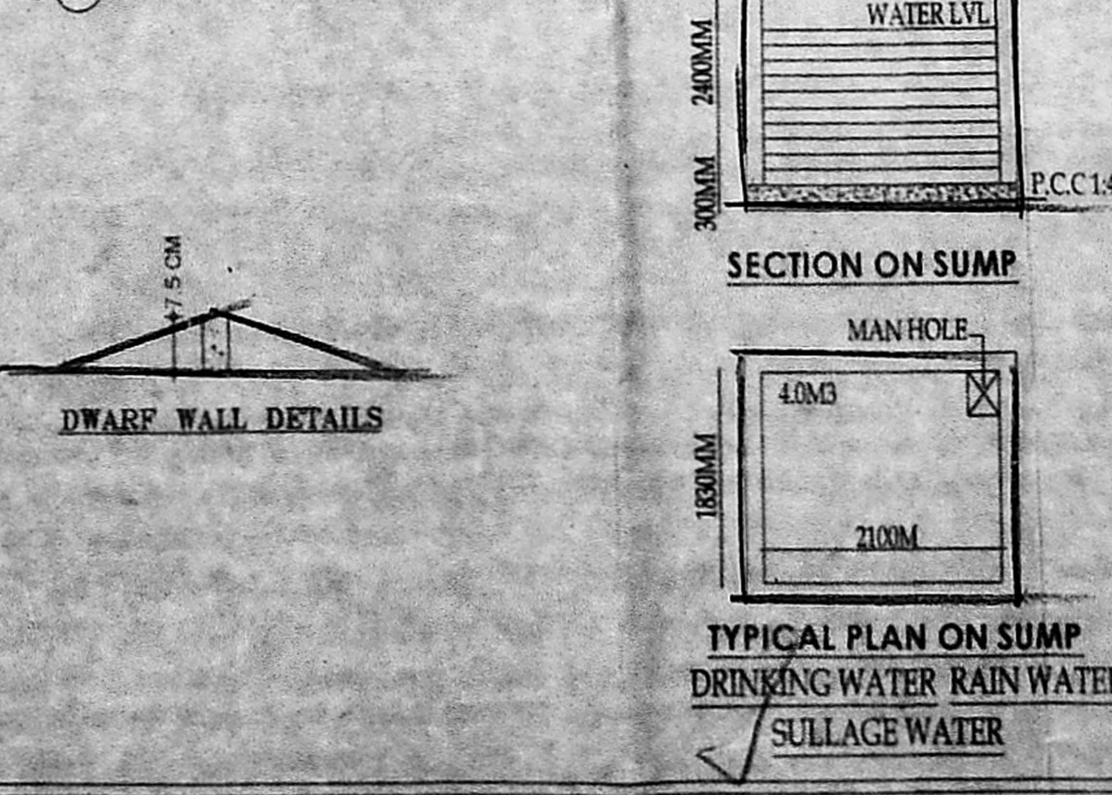
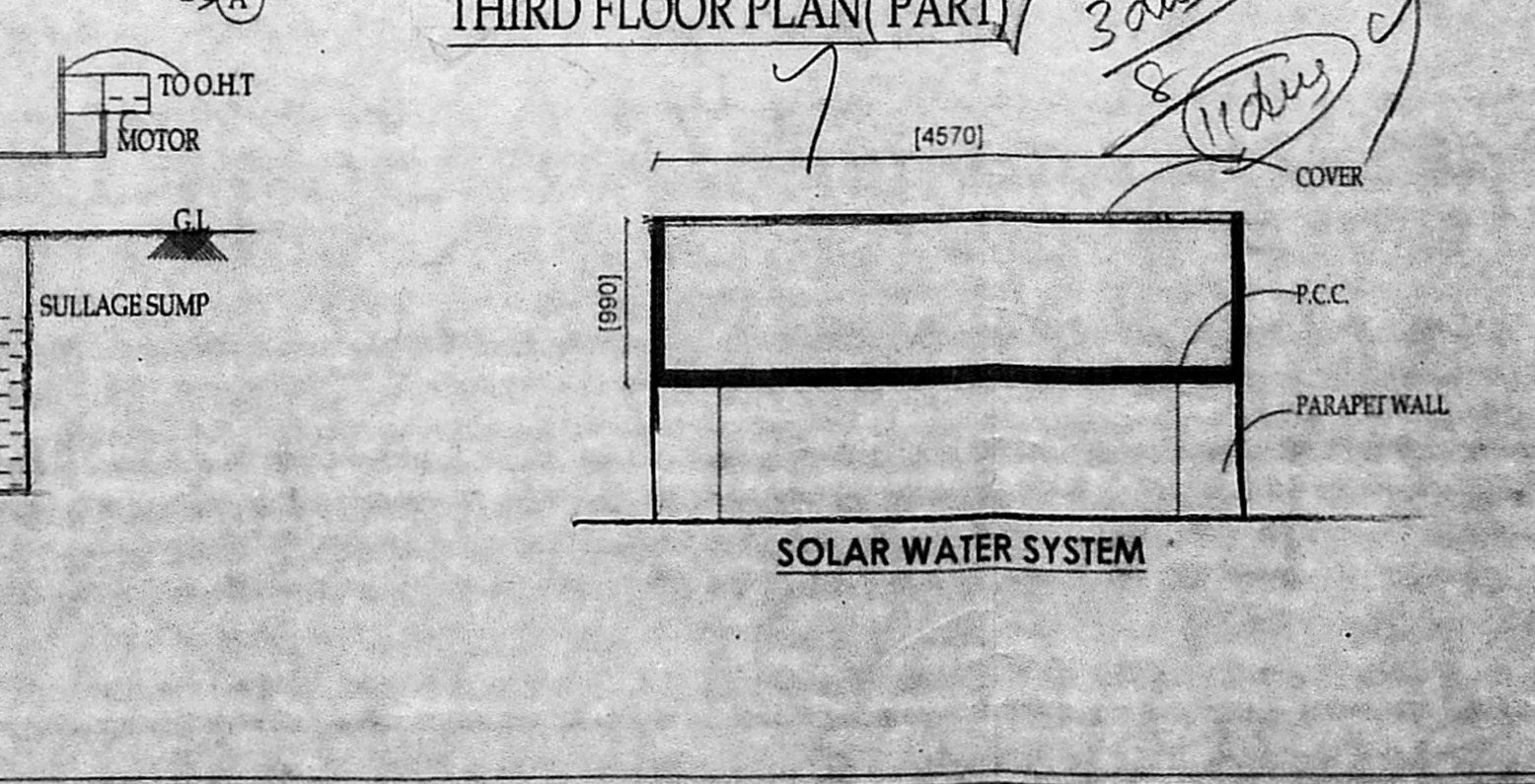
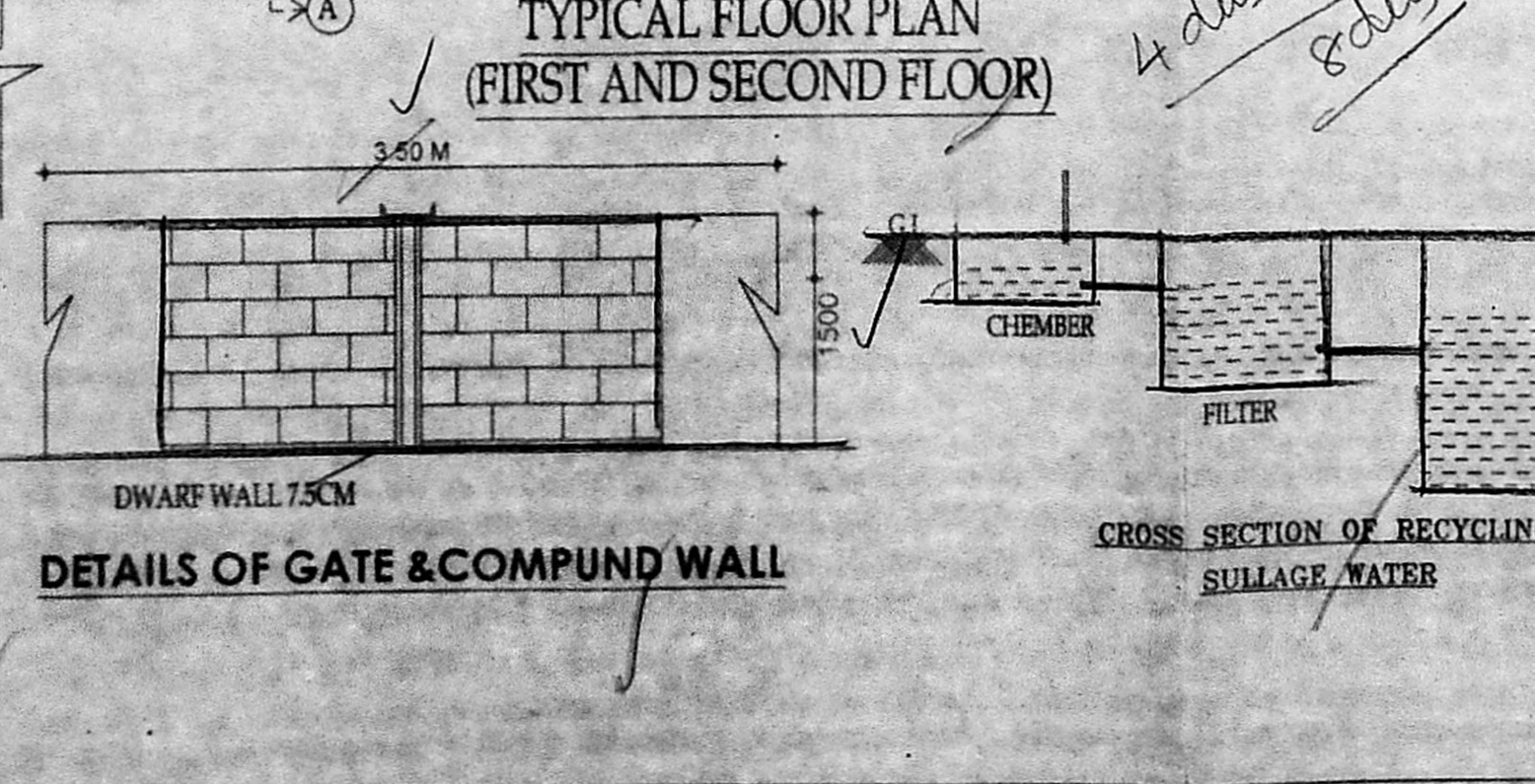
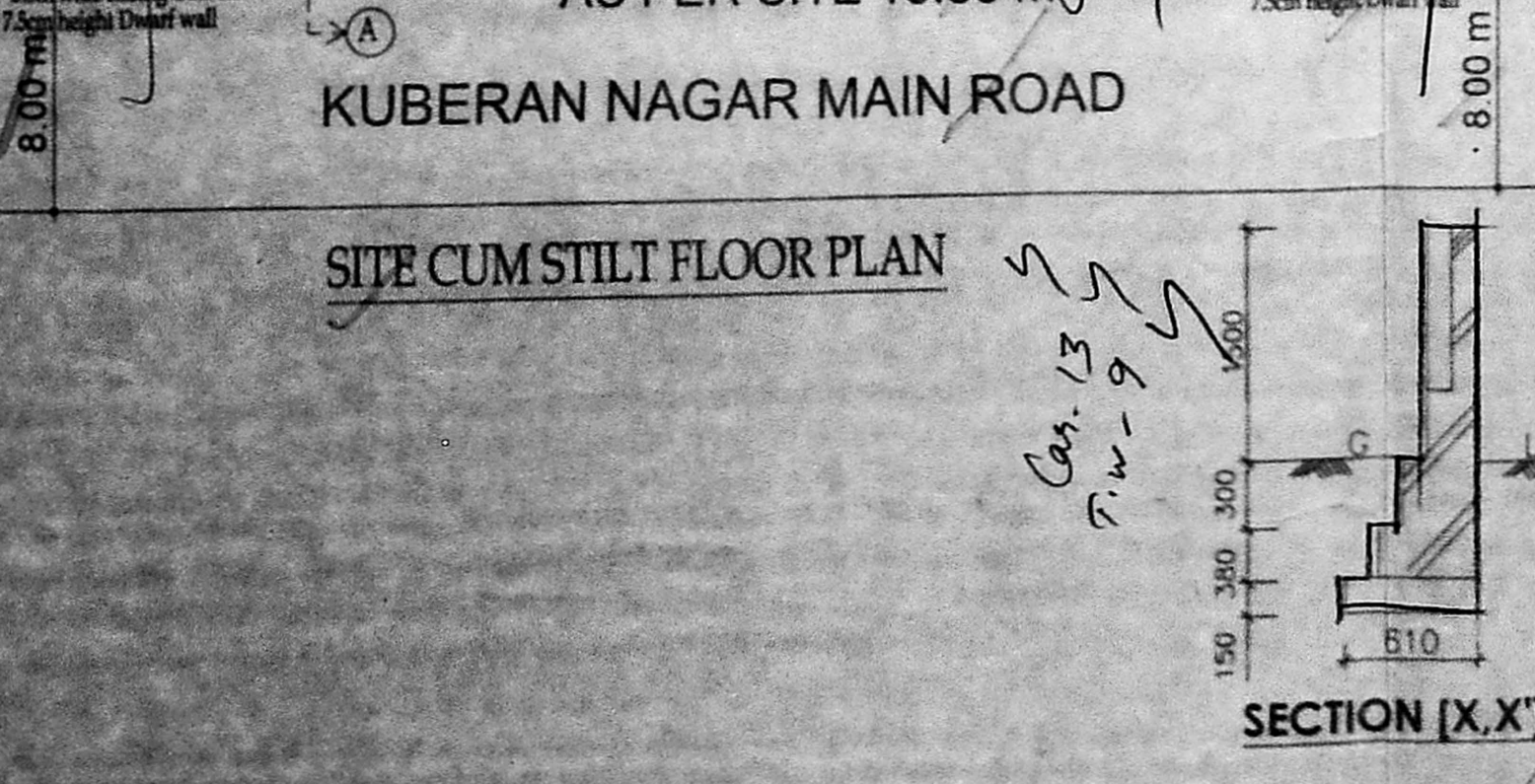
FLOOR	AREA (SQM)
STILT FLOOR	32.74
FIRST FLOOR	363.95
SECOND FLOOR	363.95
THIRD FLOOR PART	288.69
TOTAL BUILTUP AREA	1049.33
F.S.I	1.99

THE PLAN SHOWING PROPOSED CONSTRUCTION OF RESIDENTIAL BUILDING AT SUBDIVISION PLOT NO: C, KUBERAN NAGAR MAIN ROAD, MADIPAKKAM, CHENNAI - 600 091 OLD S.NO:205/6 (Part),4 (Part), COMPRISED IN NEW S.NO: 205/22,205/6A1A1, and 205/6A2, OF MADIPAKKAM VILLAGE, WITHIN GREATER CHENNAI CORPORATION

ZONE: XIV DIV: 188

SCALE 1/8" = 1'-0"

SIGNATURE OF GPA



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LICENSED SURVEYOR