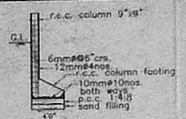
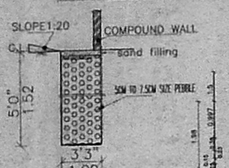
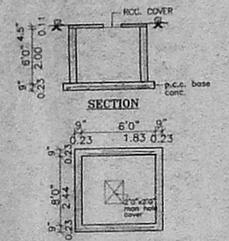
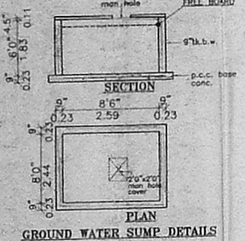
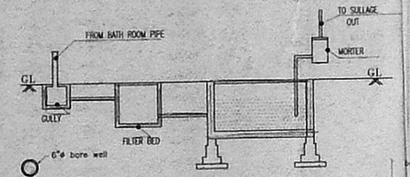
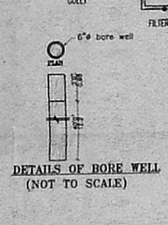


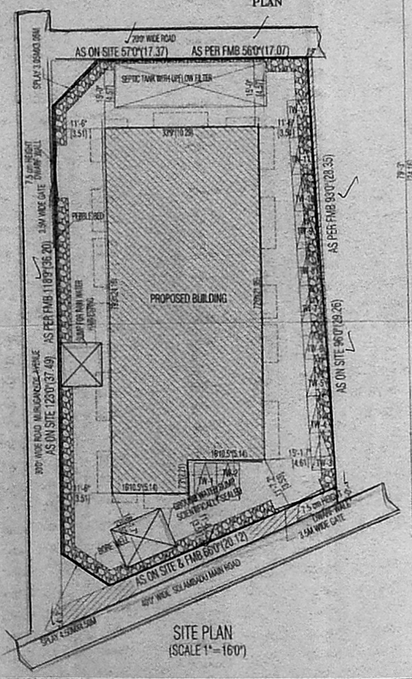


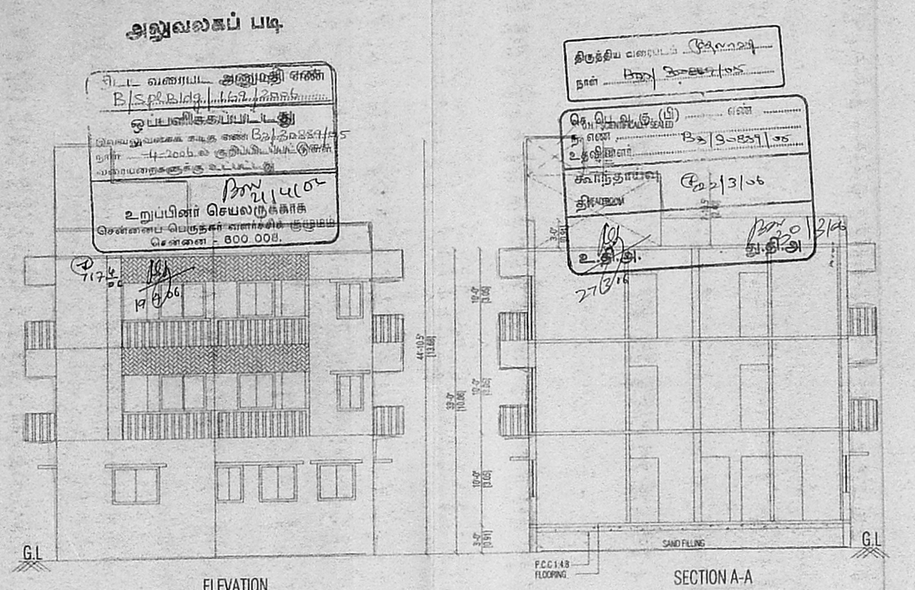


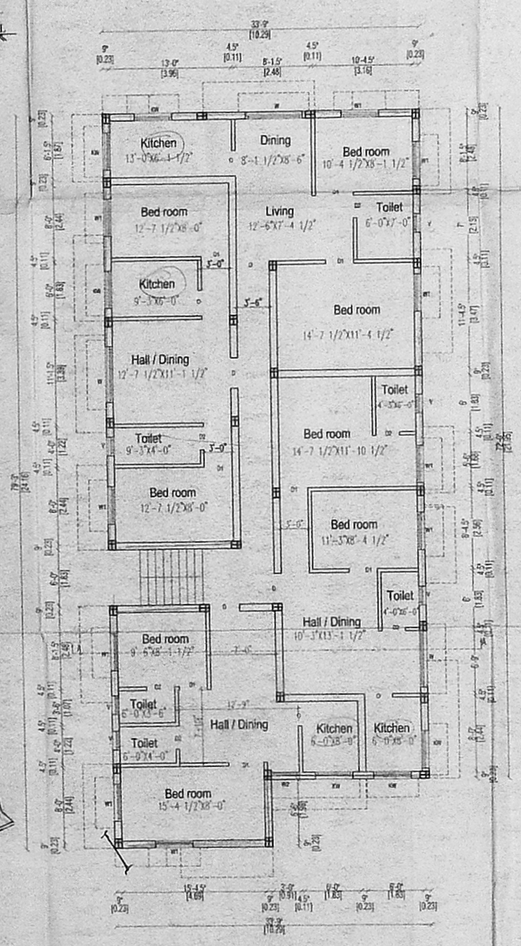


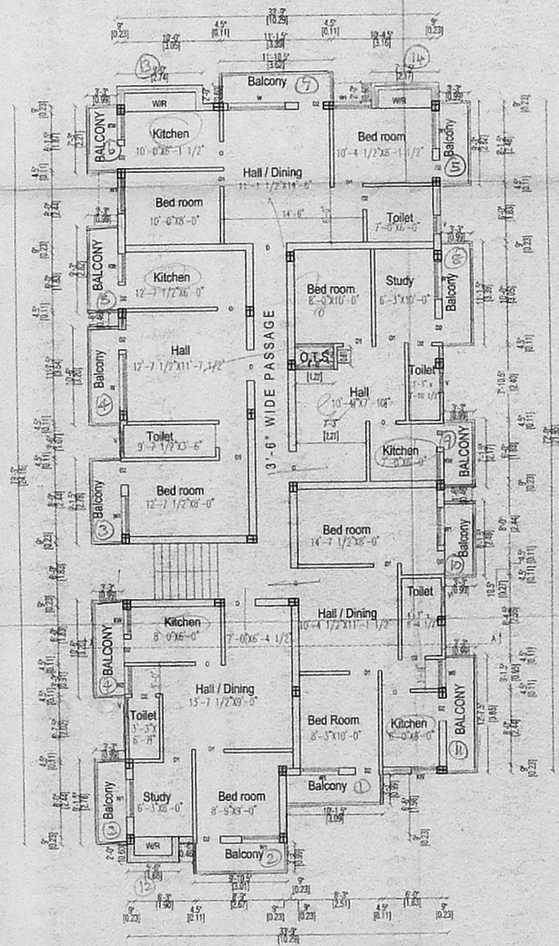


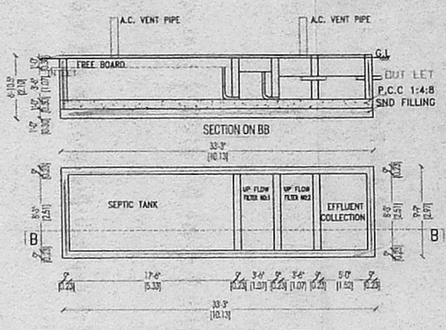


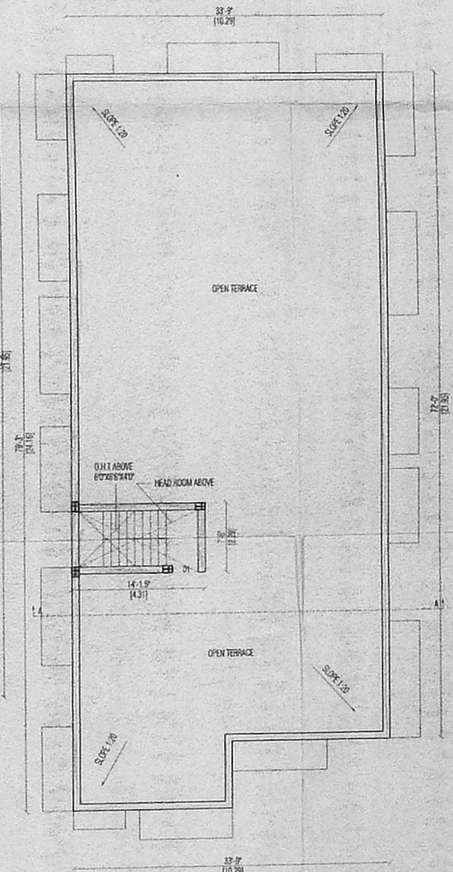






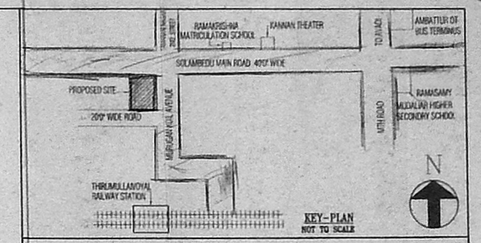






DESIGN OF SEPTIC TANK WITH UPFLOW FILTER

NO OF DWELLING UNIT		=	14 NoS.
NO OF USERS = 14 X 5		=	70.00
ASSUME A STANDARD OF 2 Nos. OF FIXTURE UNIT PER DWELLING			
TOTAL NO OF FIXTURE UNIT = 2 X 14		=	28 NoS.
ASSUME A PEAK FACTOR OF 6LPM/FIXTURE UNIT.		=	28X6=168LPM
SEPTIC TANK			
SURFACE AREA REQUIRED	= 168 X 0.92 / 10	=	15.45M^2
VOLUME OF FREE BOARD	= 15.45X0.30	=	4.63M^3
VOLUME OF SEDIMENTATION	= 15.45X0.30	=	4.63M^3
VOLUME OF DIGESTION	= 70X0.032	=	2.24M^3
VOLUME OF SLUDGE	= 70X365X0.0002	=	5.15M^3
	TOTAL VOLUME		16.65M^3
DEPTH OF SEPTIC TANK 16.65/15.45		=	1.07M - SAY 1.10M
PROVIDING L X B		=	2.5:1
SIZE OF SEPTIC TANK		=	5.33M X 2.51M X 1.10M
UPFLOW FILTER			
CAPACITY PEAK GRAVITY		=	70 X 0.045 = 3.15M^3
ASSUME DEPTH		=	0.80M
HENCE AREA OF FINAL EFFLUENT SUMP		=	3.15/0.80 = 3.93M^2
SIZE OF FINAL EFFLUENT SUMP		=	2.51X1.52X1.07M
SIZE OF UPPLOW FILTER-1		=	2.51X1.07X1.07M
SIZE OF UPPLOW FILTER-2		=	2.51X1.07X1.07M



SAND FILLING IN FOUNDATION
P.C.C 1:4:8 IN FOUNDATION
BRICK WORK IN CM 1:5
R.C.C WORK IN 1:1.5:3 MIX
PLASTERING IN CM 1:4
WEATHERING COURSE WITH BRICK JELLY LIME CONCRETE

87X59

JOINERIES

D	MAIN DOOR	3'3" X 7'0"	1.00 X 2.13
D1	DOOR	3'0" X 7'0"	0.91 X 2.13
D2	DOOR	2'6" X 7'0"	0.76 X 2.13
W	WINDOW	5'0" X 4'0"	1.83 X 1.22
W1	WINDOW	4'0" X 4'0"	1.22 X 1.22
W2	WINDOW	3'0" X 4'0"	0.91 X 1.22
KW	WINDOW	4'0" X 3'0"	1.22 X 0.91
V	VENTILATOR	2'0" X 2'0"	0.61 X 0.61
O	OPENING	3'0" X 7'0"	0.91 X 2.13

AREA DETAILS

	SQ.FT.	SQ.MT.
PLOT EXTENT (AS PER DOC.)	6099.00	566.61
PLOT EXTENT (AS PER PATTA)	5920.15	550.00
GROUND FLOOR	2552.35	237.12
FIRST FLOOR	3037.17	282.16
SECOND FLOOR	3037.17	282.16
	8626.69	801.44

COVERAGE = 43%
F.S.I = 1.457

REFERENCE

PROPOSED
ROAD
BOUNDARY

N

SCALE : 1"-8'0"
1 : 100

PLAN SHOWING THE PROPOSED CONSTRUCTION OF RESIDENTIAL BUILDING AT PLOT No.3, SRI NAGAR COLONY, SOLAMBEDU MAIN ROAD IN S.No. AS PER DOC.533/2, S.No. AS PER PATTA 533/2A1A1A2 OF THIRUMULLAIVOYAL VILLAGE, AMBATTUR TALUK, TIRUVALLUR DISTRICT, CHENNAI

OWNER'S SIGNATURE

G.S. KUMAR, B.E.,
Licensed Surveyor
Regn. No. 539
Phone : 4331299
23/3 SOUTH USMAN ROAD,
T. NAGAR, CHENNAI - 600 017.

LICENSED SURVEYOR