OFFICE COPY

PLAN SHOWING THE PROPOSED CONSTRUCTION OF RESIDENTIAL BUILDING AT PLOT NO: 44, 4TH STREET, NEW KUBERAN NAGAR & BAJANAI KOIL STREET, NEW S.NO: 191/3A2(AS PER PATTA) OF MADIPAKKAM PT VILLAGE,TAMBARAM TALUK, GREATER CHENNAI CORPORATION, ZONE - XIV, DIVISION : 187

GENERAL SPECIFICATIONS :

All concrete work should be specified as IS 456: 2000

Foundation	:RCC Column footing grade of Concrete M25
R.C.C.Work	:For Lintel,Beams,sunshade,Roof,etc., with required thickness cement concrete used M-20 grade
Cover	: Footing 50mm, column 40mm, Beam 25mm slab 25mm
Super Structure	: B.W in C.M 1:5
Flooring	:Vitrified Tiles
Joinery	:Best Indian Country Wood
Finishes	:Exterior & interior painted with cement paint.
Weathering coarse	:Brick jelly lime conc. below the weathering tiles

Quarry dust can be used for all P.C.C WORKS (1:4:8 / 1:5:10) and Brick jelly works (RIVER SAND IF NOT AVAILABLE)

SCALE: 1:100

JOINERIES		SQ.M
DOOR	D	0.99X2.13
DOOR	D1	0.91X2.13
DOOR	D2	0.70X2.13
ARCH OPEN	A/O	0.91X2.13
WINDOW	W	1.83X1.22
WINDOW	W1	1.22X1.22
VENTILATOR	V	0.91X0.60
VENTILATOR	V1	0.70X0.60
JOLLY	J	2.21X3.90

COLOUR INDEX

PROPOSED
ROAD
SITE BOUNDARY

AREA STATEMENT

PLOT AREA AS PER DOCUMENT	382.86 Sqm
PLOT AREA AS PER PATTA	382.00 Sqm
PLINTH AREA OF F.FLOOR	250.27 Sqm
PLINTH AREA OF S.FLOOR	249.59 Sqm
PLINTH AREA OF T.FLOOR	249.59 Sqm
TOTAL AREA	749.45 Sqm
FSI	1.961

ALL DIMENSIONS ARE IN METRES

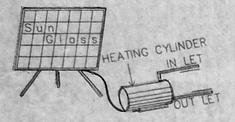
SCALE 1: 100

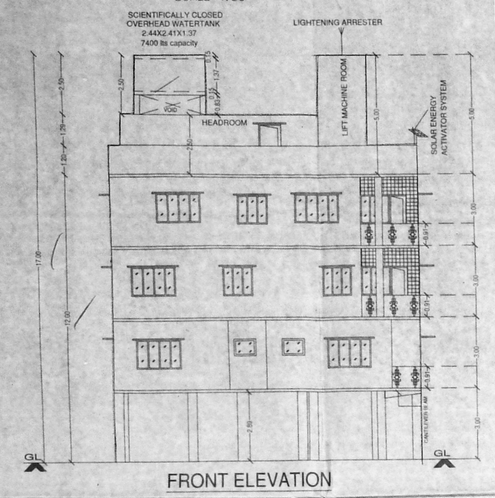
OWNERS:

G. SELVAKUMAR
Registered Architect
Reg. No: RE / GR.III / 14
No.15, V.V. Colony
Adambakkam, Chennai
Ph: 2250 9999, Mob: 9000

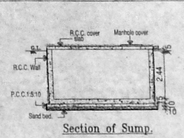
REGISTERED ENGINEER

SOLAR WATER HEATING SYSTEM
SCALE–1:30





FRONT ELEVATION



Section of Sump.

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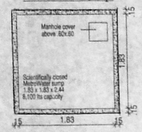
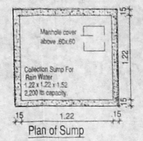
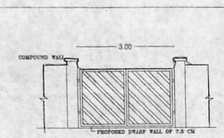


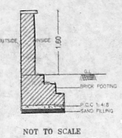
Plan of Sump
Metro water sump



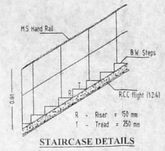
Plan of Sump
Sullage & Roof top water sump



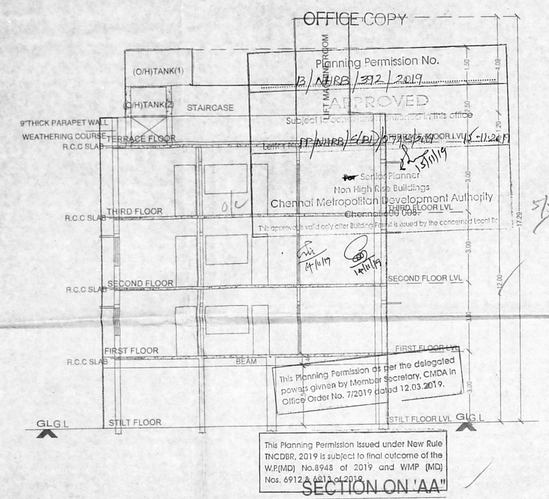
PROPOSED ENTRY & EXIT GATE
NOT TO SCALE



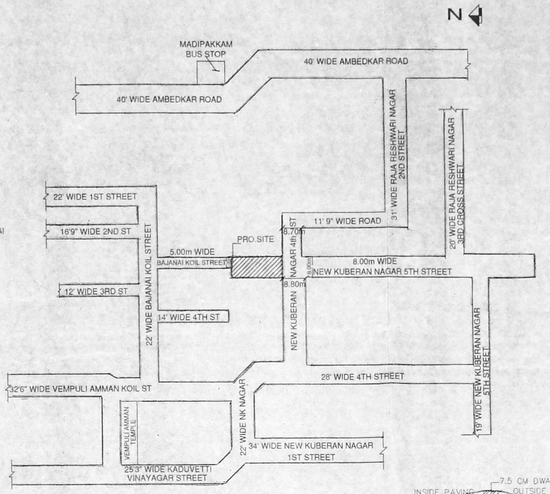
NOT TO SCALE
PROPOSED COMPOUND WALL



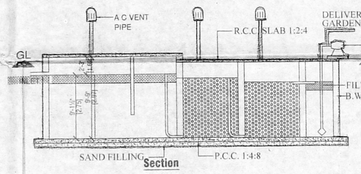
STAIRCASE DETAILS

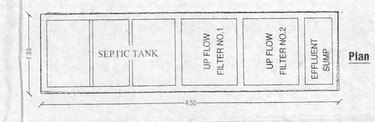


SECTION ON 'AA'

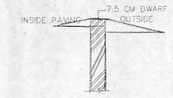


KEY PLAN (N.T.S)



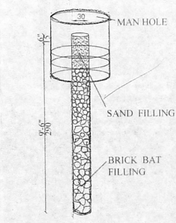


Details of upflow filter septic tank

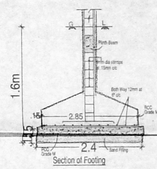


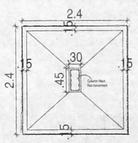
SECTION

DWARF WALL SECTION



Rainwater collection PIT





Column Foundation detail
Plan of Footing

DESIGN OF SEPTIC TANK WITH TWO UP-FLOW FILTERS

NO. OF (50 SQ.M I UNIT)(1441.41/50)	8 UNITS
NO. OF USERS	(8X5) = 40 PERSONS
RATE OF WATER SUPPLY	150 LITRES/HEAD/DAY
FLOW OF SEWAGE PER DAY	40 X 150 = 6000 LITRES
ASSUMING THE DETENTION PERIOD	18 HOURS
TANK CAPACITY (6000X18)/24	4500 LITRES

THE TANK WILL BE CLEANED EVERY YEAR SO SLUDGE STORAGE CAPACITY AT THE RATE OF 50 LITRES FOR PER YEAR = 40 X 50 = 2000 LITRES

TOTAL : 4500+2000 = 6500 LITRES

WITH PROVISION FOR FUTURE EXPANSION ACO 25% EXTRA

LET THE TANK CAPACITY BE	9M3
DEPTH OF FLOW AS	2.00 M (AVERAGE)
PLAN AREA OF THE TANK (9M3/2M)	= 4.5M2
THE RATE OF L:B	3:1
BREATH : B = √(4.5/3)	1.22M.
L = 3 X 1.22	3.69M.
FREE BOARD OF THE TANK	0.69M.
TOTAL DEPTH OF THE TANK	2.00M + 0.69M. = 2.69M.
REQUIRED SIZE OF SEPTIC TANK	1.50M. X 0.60M. X 2.69M. = 2.42 M3

WE PROVIDE THE SEPTIC TANK OF SIZE IS = 1.50M X 0.60M X 2.75M

HENCE THE SEPTIC TANK IS S.F.FICIENT

UP FLOW DETAILS:

DISCHARGE FOR 130 PERSONS	4500 LITRES
EXTRA FLOW TAKEN FOR FUTURE EXTENSION (ACO 50%)	6750 LITRES
TOTAL DISCHARGE	11250 LITRES

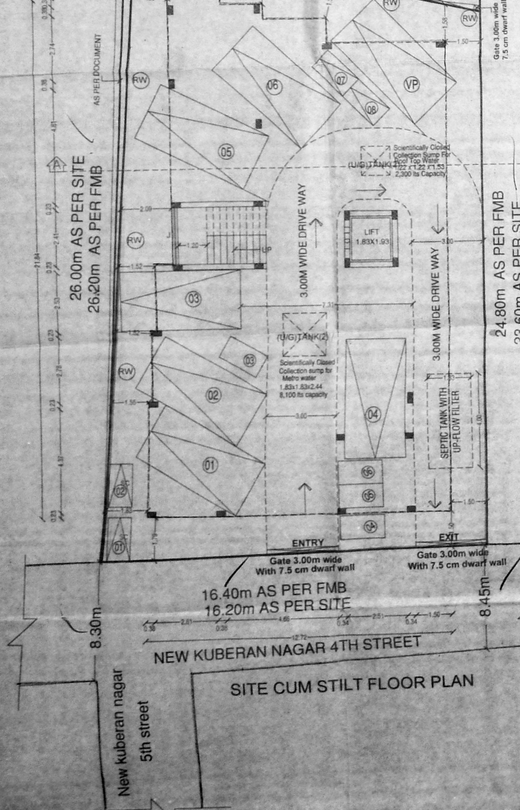
ASSUME THE PERCOLATING CAPACITY OF FILTER MEDIA OF THE UP FLOW FILTER PIT AS 1.25 M3 /1250 LITRES/M2/DAY)

VOLUME OF UP FLOW FILTER PIT REQUIRED	9.00 = 7.2 M3 / 1.25 M3
DEPTH OF UP FLOW FILTER PIT.	2.00M.
PLAN AREA REQUIRED	7.2 M3 / 2.0 M = 3.6 M2
LENGTH AND BREATH	√3.6 = 1.90M.
REQUIRED SIZE OF UP FLOW FILTER PIT	1.00M. X 1.90M X 2.0M = 3.8 M3
REQUIRED SIZE OF EFFLUENT COLLECTION TANK	3.61 M3

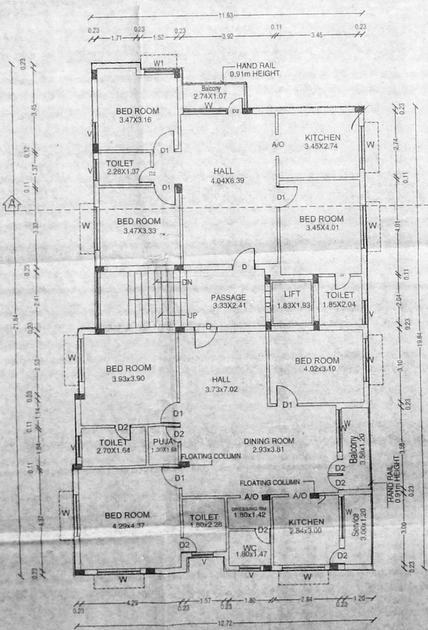
WE PROVIDE THE 2 NOS. OF UP FLOW FILTER PIT OF SIZE = 9.44 M3

WE PROVIDE THE EFFLUENT COLLECTION TANK = 0.91M X 2.13M X 2.00M = 2.87 M3

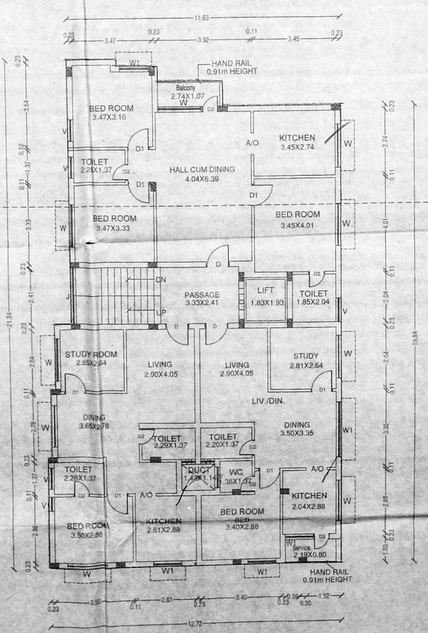
HENCE THE SEPTIC TANK SIZE (1.50M/0.60M/2.75M) UP FLOW FILTER PITS SIZE (2 NOS X 1.00M X 2.13M X 2.00M) AND EFFLUENT COLLECTION TANK SIZE (0.91M X 2.13M X 2.00M.) ARE SUFFICIENT FOR THE FLATS.



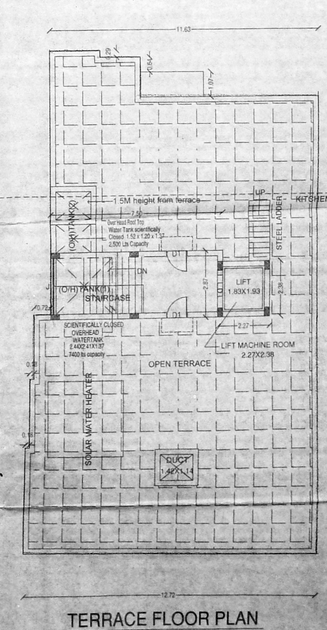
SITE CUM STILT FLOOR PLAN



FIRST FLOOR PLAN



TYPICAL FLOOR PLAN
SECOND & THIRD



TERRACE FLOOR PLAN

S. Jayakumar