THE BASIC REQUIREMENTS FOR FIRE
PROTECTION OF HIGH-RISE BUILDING IN AMC AND AUDA AREA

1. HYDRANT SYSTEM:

ON/OFF switches located near the hose reel hose or hydrant outlet, at each floor for the main Fire-Pump at the underground water tank with a capicity to dischrge 900 liters per minute at 3 bar presure as measured at the terrace level should be installed.
The Riser for the buidings exceeding 18 meters and above 18 meters height should not be of less than 100 mm. internal diameter. The riser should be connected to the bottom of the terrace tank with a stop valve and a NRV to act as a Down-comer
One riser is required for every 1000 sq. meters floor area and if the building is divided into, two or more parts then each part should have a separate riser with all the fittings at each floor level. Each floor should have one hydrant outlet with a coupling for attaching a 63 mm. dia. hose & 25 mm. bore Hose-reel hose with 8 mm. SS. Shut-off nozzle at each floor landing. The length of the hose reel hose should be enough to reach the farthest corner of the floor. Hose-box with 15 meters long 63 mm. dia. hose and 12.5 mm. bore nozzle at alternate floors. The Hose-reel hose should be coupled to the Riser.
Fire-service inlet should be installed at a point near the entry to the premises where a Fire service vehicle can approach easily.
A permenent hydrant point comprising of 63 mm dia size 2nos of hydrant valves should be installed at the terrace level.
Overhead tank Refilling bypass connection sould be done at The terrace level.
The Overhead tank shall be of a capicity of not less than 20.000 litres. The Underground tank shall be of not less than 1,00,000 liters.

2. FIRE LIFT:

The Fire-Lift and all the lifts should have a provision to ground automatically in case of electricity failure. Each building should have at least one lift as a Fire-Lift and if the building divided into two or more parts then each part should have a Fire-Lift. Lift-well should have owers to pressurize the lift-well so connected that it will automatically operate whene alarm call point is operate, so that it prevents that lift well getting smoke logged.

3. FIRE ALARM:

Fire alarm call point to be installed at each floor withy sounders capable of being heard all throughout the building.

4. FIRE EXTINGUISHERS:

One Carbon Dioxide (CO_2) type extinguisher of 4.5 kg. with ISI mark. and one extinguisher of 5kg. Dry Chemical Powder (DCP) type extinguisher with ISI mark to be installed on each floor in case of commercial building.

One Carbon Dioxide (CO_2) type extinguisher of 4.5 kg. with ISI mark. OR Two Carbon Dioxide (CO_2) type extinguisher of 2 kg. with ISI mark capacity on each floor and 5kg. Dry Chemical Powder (DCP) with ISI mark type extinguisher on alternate floors in case of residentiall buildings.

If the building is divided into two or more parts then each part should have these extinguishers installed.

5. STAIRCASE:

The staircase has to be open from at least one or two sides but if the syaircase is in the centre core of the building it has to be pressurized to prevent it fromgetting smoke logged.
The Riser / Down-comer should be located in the staircase or close to in to make it easily approachable in case of Fire from the floor below.

6. BASEMENT:

The basemant of 200 sq. metres or more should be protected with Automatic Sprinkler system with at least one sprinkler head for actual Car aprking space.

Additionaly be protected by a Hydrant outlet and two 25 mm. bore Hose-reel hoses with 8 mm. bore npzles at each basement level.

7. LIGHTENING ARRESTER :

A lightening arrester should also be installed and be properly earthed to perevent damage to the building when the lightening strikes.

8. PHOTO LUMINESCENT (AUTO GLOW) SIGNAGE'S :

If the building falls in a confined area or if it has an inclosed staircase or is not well lit-up on the inside, then adequate photo luminescent (auto glow) signage's should be displayed at each floor / landing / pathway / dead-end and along all exit routes leading to the ground level. The signage should indicate fire fighting, fire safety, first-id and other safety equipment present on the respective floor/landing/pathway/dead-end and along all exit routes leading to the ground level.

9. ELECTRIC POWER SUPPLY TO THE ENTIRE FIRE-SAFETY SYSTEM

Electricity supply to the fire pump, fire alarm system, staircase pressurization system and fire lift sould be made available from the main Electrical supplay. (i.e. from Electrical power suply of the company) This is to ensure availability of power supplay to the fire Protection & Safety system even after the main electrical supplay to the building is switched off at the time of fire.

V IMPORTANT INSTRUCTION

After inspection of a low-rise building by the fire service authority, if the fire officer concerd feels the need for additional fire prevention / protection measures / ventilation system required or equipment (i.e. Passive system / Suppression system / Fire door - Window / Detection system / Active system / Sprinkler / Drencher etc.) as per Fire load / Fire risk / Public gathering. Potential / Occupancy / Confined area, those additional measures / equipment have to be implemented / installed.

10. FIRE ALARM CALL POINTS.

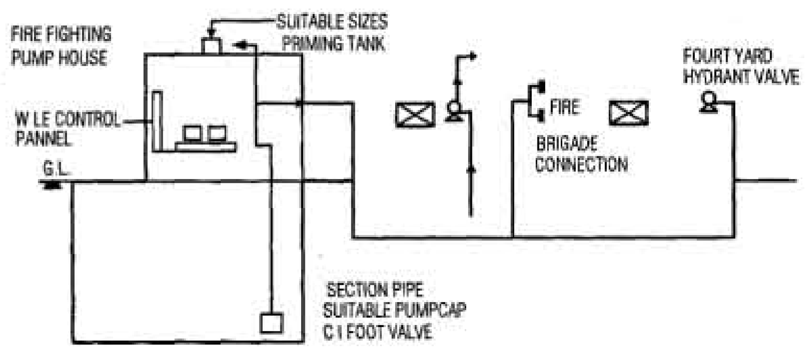
EACH FLOOR HAVE A FIRE ALARM CALL POINT INSTALLED.

SYMBOL	DESCRIPTION
—	FIRE HYDRANT EXSTEMPIPE
△-△-	O.C.R. OR C.P.L.
-o-o-	ON SINGLE HEADED HYDRANT VALVE
-⊠-	SLUICE VALVE
—▷	NON RETUNT VALVE
-[	TWO WAY STANESE CONNECTION
- -[	RISE OR DROP
-□-	REDUCER
⊕	FIRE HOUSE REE.
⊠	FIRE HOUSE BOX
-o-	COURT YARD HYDRANT VALVE
	LANDING HYDRANT VALVE
⊥	AIR RELEASE VALVE

SANITARY AREA CALC:- (Comm.)

BLOCK-A FLOOR AREA = 1432.39 SMT
REQ. 1 USERS FOR EACH 4 SQMT FL.AREA
1432.39 SMT/ 4 = 358.10 SAY 359 USERS
W.C. REQ. FOR 101 to 500 USERS = 7 G-W.C. & 7 L-W.C.
URNAL REQ. FOR 101 to 500 USERS = 7 URINAL FOR MALE
PROVIDE FROM 3rd.FL. TO 6th.FL. 1 W.C. IS PROVIDE IN EACH UNIT = 28 W.C. & 3 W.C. PROVI.@GR.LVL(SHOP-1,2,3)

25% SANITARY REQ. FOR COMMON USE
PROVIDE 2 G-W.C. & 2 L-W.C. & 2 URINAL AT GR.LVL & 1 TOI. FOR PHYSICAL HANDICAP PERSON



TENAMENT & FLOOR AREA TABLE :-

FLOOR	USE		EQ. TENAMENT			FLOOR AREA (SQ MT)		
	BLOCK-A	BLOCK-B	BLOCK-A	BLOCK-B	TOTAL	BLOCK-A	BLOCK-B	TOTAL
CELLAR	PARKING	-	-	-	-	-	-	-
H.P.	PARKING	-	-	-	-	-	-	-
GR. FL.	SHOP	RESI.	03	-	03	240.81	-	240.81
1st FL.	HALL	RESI.	01	08	09	274.03	441.22	715.25
2nd FL.	HALL	RESI.	01	08	09	274.03	441.22	715.25
3rd FL.	OFFICE	RESI.	07	08	15	186.62	441.22	627.84
4th FL.	OFFICE	RESI.	07	08	15	177.80	441.22	619.02
5th FL.	OFFICE	RESI.	07	08	15	177.80	441.22	619.02
6th FL.	HALL	RESI.	01	08	09	101.30	441.22	542.52
7th FL.	-	RESI.	-	08	08	-	441.22	441.22
TOTAL	COMM.	RESI.	27	56	83	1432.39	3088.54	4520.93

BUILT UP AREA TABLE :- SQMT / F.S.I. AREA TABLE :- SQMT

FLOOR	BUILT UP BLOCK-A COMM.	BUILT UP BLOCK-B RESI.	BUILT UP TOTAL	F.S.I. BLOCK-A COMM.	F.S.I. BLOCK-B RESI.	F.S.I. TOTAL
CELLAR	1179.61	-	1179.61	60.74	-	60.74
HOLLOW PLINTH	-	-	-	-	-	-
GR. FLOOR+H.P.	320.44	621.44	941.88	282.38	-	282.38
1st FLOOR	320.44	621.44	941.88	283.64	565.26	848.90
2nd FLOOR	320.44	621.44	941.88	283.64	565.26	848.90
3rd FLOOR	320.44	621.44	941.88	279.96	565.26	845.22
4th FLOOR	320.44	621.44	941.88	279.96	565.26	845.22
5th FLOOR	320.44	621.44	941.88	279.96	565.26	845.22
6th FLOOR	210.44	621.44	831.88	172.06	565.26	737.32
7th FLOOR	-	621.44	621.44	-	565.26	565.26
STAIR CABIN	38.22	38.02	76.24	-	-	-
LIFT MACHINE RM & O.H.W.T.	31.11	27.10	58.21	-	-	-
TOTAL	3382.02	5036.64	8418.66	1922.34	3956.82	5879.16

CONTAINER BIN CALC. :- IN NOS.

COMM. TOTAL FLOOR AREA = 1432.39
REQ. FL. AREA /100 = 1432.39/100
14.32 X 20 = 286.40 LTR
MAXI. CAPACITY OF CONTAINER 80 LTRS
287/80 = 3.59
SAY 4 NOS. REQ.
PROVIDE 4 NOS. CONTAINER PROVI.COMM. OF 80 LTRS CAPACITY

RESI. TOTAL NO. OF UNIT 56
PER UNIT REQ 10 LTRS 1 CONTAINER
MAXI.CAPACITY OF CONTAINER 80 LTRS
80 LTRS = 8 UNITS
TOTAL NO. = 56/8 = 7.00
REQ. REFUSED CONT. 7 NOS.
PROVIDE C.B-5 NOS. FOR RESI.
TOTAL C.B. PROVI. = 7+4 = 11 NOS OF 80 LTRS CAPACITY

CHARGEBLE F.S.I. AREA TABLE IN SQMT

BLOCK	PROP. IMAGINARY PLOT FOR CALC. PROPOSE ONLY	ALLOW F.S.I. (1:2.7)	TOTAL F.S.I. USE	CHARGE. F.S.I. USE
A	759.96	1367.92	1922.34	554.42
B	1426.04	2566.88	3956.82	1389.94
TOTAL	2186.00	3934.80	5879.16	1944.36

REVISED LAY OUT PLAN SHOWING COMM.+RESI.BUILDING ON F.P. NO.:-34/2, O.P. NO.:-34/2 OF SUR.NO.:-106/A/2 ,DRAFT T.P.S. NO.:- 109 (HANSPURA-MUTHIYA -BILASIYA), AT :- BILASIYA , TA :- DASCROI , DIST :- AHMEDABAD.

SHEET NO -1/7

SCALE :1CM = 2.00 MT	ZONE : RESI.-1	USE : RESI.+COMM.	BLOCK - A+B

AREA TABLE :-	IN SQMT
PLOT AREA OF F.P. NO. :- 34/2	2186.00
REQ. COMMON PLOT AREA @ 10 % (2186.00X0.10)	218.60
PROVI. COMMON PLOT AREA	218.97
PERMI. BUILT UP AREA ON GR. FLOOR @ 45 % (2186.00X0.45)	-
PROP. BUILT UP AREA ON GR. FL.	921.74
BALANCE BUILT UP AREA ON GR. FL.	-
OPEN PLOT AREA	1264.26
PERMI. F.S.I. AREA (1:1.8) (2186.00X1.8)	3934.80
PERMI. CHARGEBLE F.S.I. @ 0.90 % (2186.00X0.90%)	1967.40
MAXIMUM PERMI. F.S.I.	5902.20
TOTAL USED F.S.I. AREA	5879.16
PERMI. PAYMENT F.S.I. @ 25 % OF PERMI. F.S.I. (3934.80 X 0.25)	-
CHARGEBLE F.S.I. (5879.16-3934.80)	1944.36

COMMON PLOT PLOT AREA CALC :-

1/2(9.81+9.89)X22.23 = 218.97 SMT
NET COMMON PLOT = 218.97 SMT

COLOUR NOTE :-

FP BOUNDARY		COMMON PLOT	
PROP.WORK		PARKING	
PROP.DRAIN		P. WELL	
ROAD		TREE	

PERCOLATING WELL CALC:-
REQ. 1500 TO 4000 SMT= 1 NOS.
2186.00 / 4000.00 = 0.55 NOS.
SAY REQ. P.WELL = 1 NOS.
PROVI. P.WELL = 1 NOS.

TREE PLANTATION CALC :-
REQ. 200.00 SQMT = 3 TREE
2186.00X3/200 SMT = 32.79
SAY REQ.TREE = 33 NOS.
PROVI. TREE = 33 NOS.

CERTIFICATE:- ENGINEER IS FULLY RESPONISIBLE FOR OPEN LEAVING MARGINAL SPACE AND ROAD LINE PORTION.

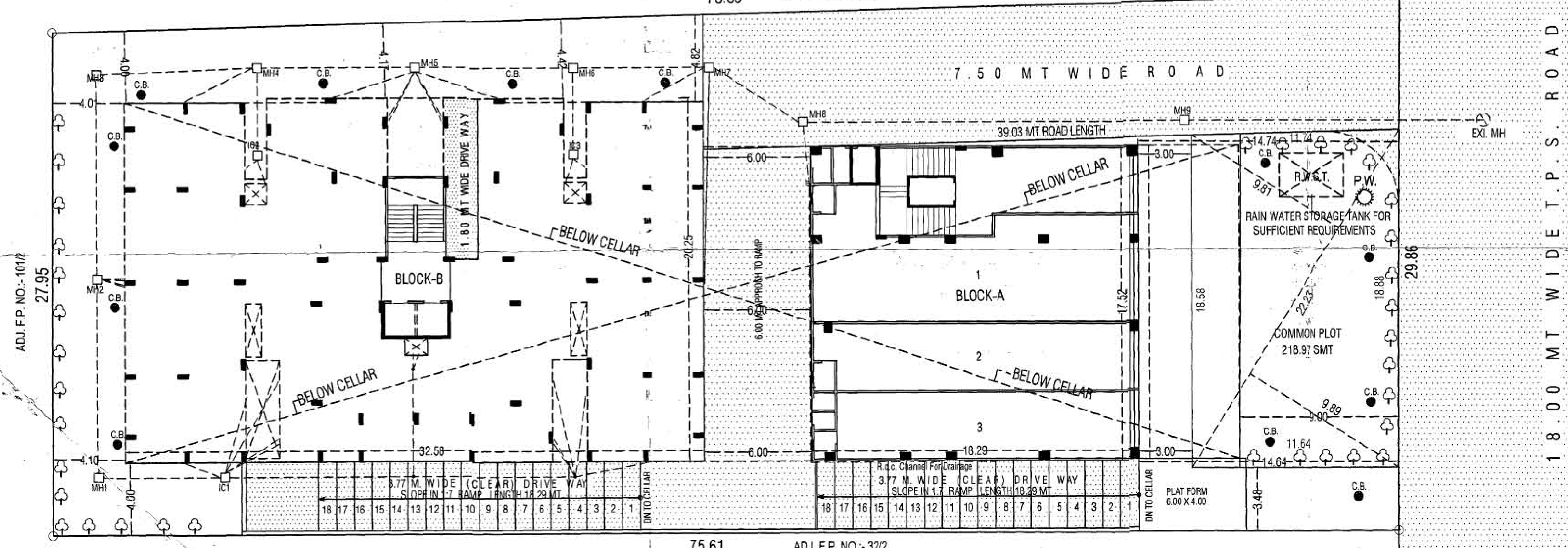
Dinesh K. Patel
AUDA/C.O.W.III/LIC No. 48
8, Shivnandan Residency,
Nikol-Naroda Road, A'bad.
C.O.W.

P.J. Patel
OWNER

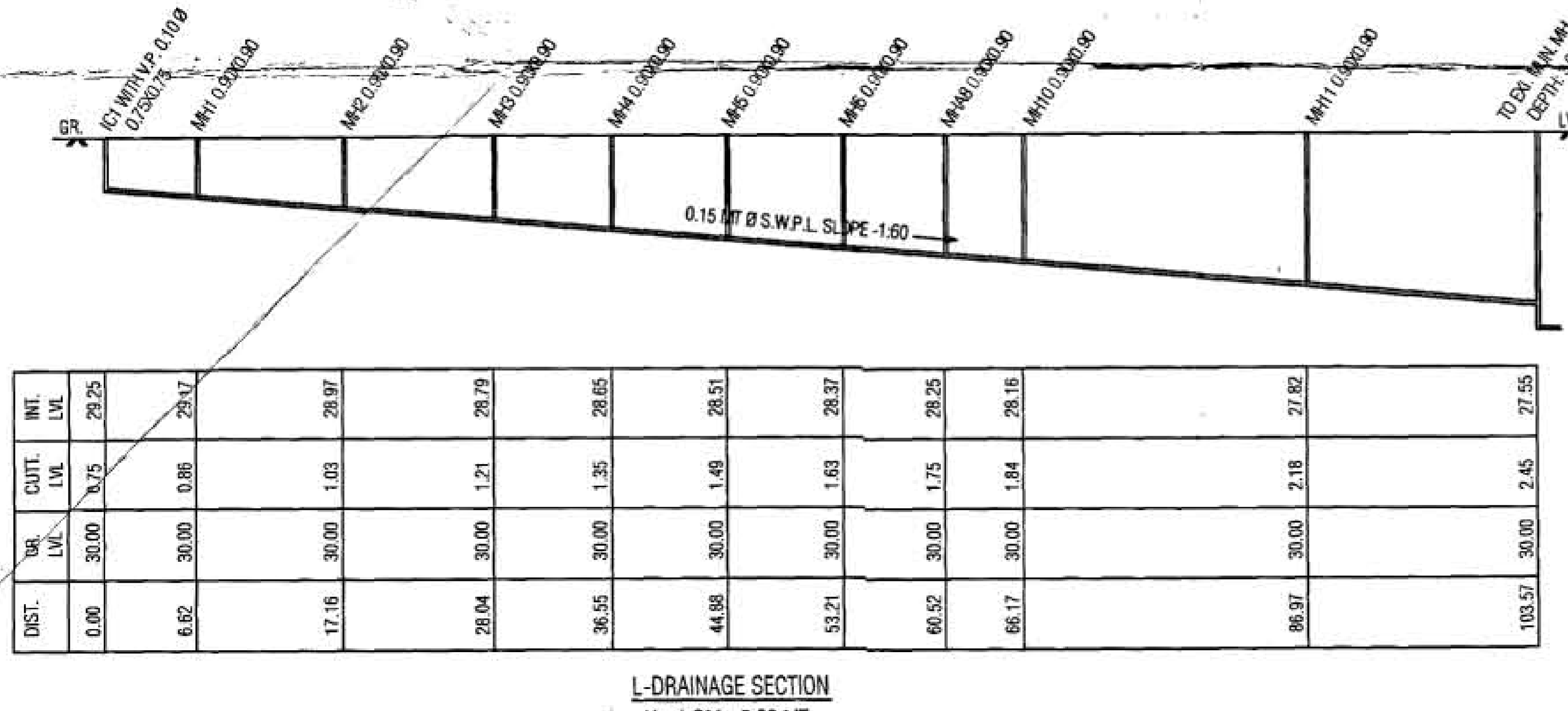
Jayesh D. Desai
AUDA LIC. No. SD-1/241
87, Arti Tenament,
Ghatlodia, Ahmedabad-61,
STR.ENGINEER

Siddhi Infra
Partner Patel Nevankumar P.
AUDA DEV LIC No. 883
5, Sant Achish Bunglows,
Naroda, Kathwada Road,
DEVELOPER

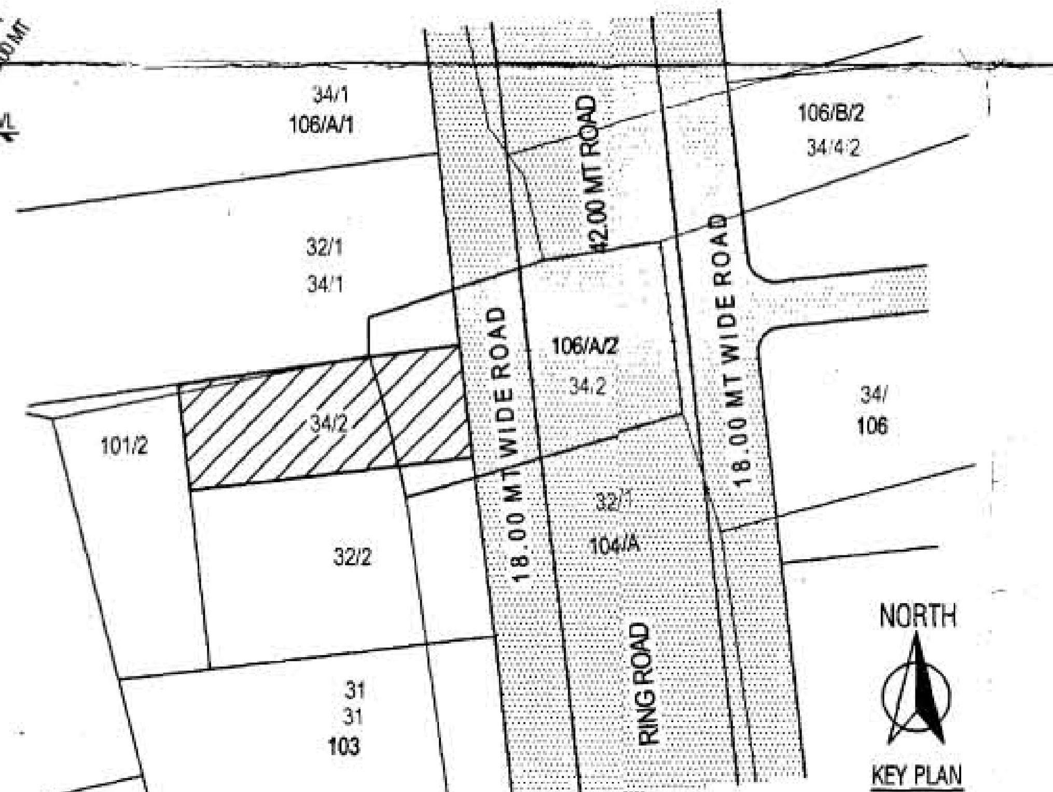
V. B. Contractor B.E. (Civil)
AUDA ENGINEER
ENG/800/02445/27-3-12
8, Kartikay, Nr. Ratanpura Gam,
Vastral, Ahmedabad-18.
ENGINEER



LAY OUT PLAN
SCALE : 1CM = 2.00 MT



L-DRAINAGE SECTION
H:- 1 CM=5.00 MT
V :- 1 CM=1.00 MT



KEY PLAN
SCALE :- 1 CM =20.00 MT

ખાસ શરત
તા.................. ના રોજ માલિક ઓર્ગેનાઈઝ આર્કિટેક્ટ તથા સ્ટ્રક્ચરલ એન્જીનીયરે આપેલ બાંહેધરી પત્રમાં દર્શાવેલ તમામ શરતોનું ચુસ્તપણે પાલન કરવાનું રહેશે.

ખાસ નોંધ :
ડ્રેનેજ કે-આઉટ ટેમ્જ સેપ્ટીક ટેંક તથા સાઈઝ ની સાઈજ તથા સંખ્યા નેશનલ બિલ્ડીંગ કોડ (આઈ.એસ.-૨૪૭૦) તથા સિવિલ એન્જીનીયરીંગ કેન્દ્ર બુક ભાગ-અન્ના મુજબ રાખવામાં આવેલ છે તે અનુસાર અરજદાર જમીન માલિકે સ્થળમત બાંધકામ કરવાનું રહેશે.

ખાસ શરત :
નકશામાં સૂચવેલમાં આવેલ કોમન પ્લોટનો કબજો જ્યાં સુધી સદર જમીનની માલિકી સોસાયટી એસોશીએશનની ન થાય ત્યાં સુધી કોમન પ્લોટનો કબજો / માલિકી સત્તામંડળની રહેશે.

The permission is valid only in the DP/TPS remains unaltered and further that the permission shall stand revoked as soon as there is change in DP/TPS with reference to the land under reference.

—: ખાસ શરત :—
બાંધકામ પૂર્ણ થયા બાદ બાંધકામ નો ઉપયોગ શરૂ કરતાં પહેલા નિયમાનુસાર અત્રેથી મકાનના વપરાશનું પ્રમાણપત્ર મેળવવાનું ફરજીયાત છે.

ખાસ શરત
મંજુર થયેલ નકશાઓની નકલનો ૧ સેટ સ્થળ પર પ્રસિધ્ધ કરવાનો રહેશે

Owner is fully responsible For open marginal Space and road line Portion.

ખાસ સરત :
વિકાસ પરવાનગી મેળવેલ બાંધકામ બાબતે જુદા જુદા તબક્કે ઓટલા પ્લીન્થ લેવલ (તથા દરેક) લેવલ તબક્કે કચેરી તરફથી સ્થળ નિરીક્ષણ કરવી તબક્કાવાર શાખા કચેરી તરફથી સ્થળ નિરીક્ષણ કરાવી જે તે બાંધકામ અપાયેલ પરિસ્થિતિની ચકાસણી કરાવી જે તે બાંધકામ વિકાસ પરવાનગી મુજબનું છે. તે મતલબનું પ્રમાણપત્ર મેળવ્યા બાદ આગળના તબક્કાનું બાંધકામ કરવાનું રહેશે.

Final Plan boundary and allotment of final plot is Subject to Veriation by Town Planning Officer

ખાસશરત : નામ સુપ્રિમ કોર્ટ SLP(CIVIL) નં. ૪૪૫૦-૪૪૫૧/૨૦૧૪ માં જે આખરી જજમેન્ટ આવે તે બંધનકર્તા રહેશે. તે બાબતે અરજદારશ્રીએ આપેલ બાંહેધરી પત્રકને આધીન આ વિકાસ પરવાનગી આપવામાં આવે છે.

APPROVED
As amanded by ....RED.......
(Colour) Subject to the condition as mentioned in this office Letter
No. 2193/11/2014 Dated...........
Note Approved by C.E. 18 APR 2015

AHMEDABAD URBAN DEVELOPMENT AUTHORITY
AHMEDABAD

DISPATCH BY
No. 122

Assistant Town Planner
Ahmedabad Urban Development Authority
Ahmedabad.

Senior Town Planner
Ahmedabad Urban Development Authority
Ahmedabad.
AUTHORITY