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Government of Goa
Directorate of Fire & Emergency Services

St. Inez, Panaji,
Goa - 403 001 - India



File No.: DFES/FP/C-1/14-15/ 2014

Date: 26.09.2014.

Sub:- Uses of places and trades for the proposed Residential cum Commercial Building M/s. AVR Realty in Plot bearing Chalta No. 172 of P.T. Sheet No. 253 situated at Malbatta, Margao, Tiswadi - Goa

Ref:- 1) This office letter No. DFES/FP/C-1/14-15/202 dated 25.09.2014.
2) Your undertaking dated 26.09.2014.

With reference to the above, this office has no objection to the said proposal for the construction of the proposed Residential cum Commercial Building subject to compliance of the conditions as agreed by you vide undertaking dated; 03.09.2014.

The No Objection given is specific to the plan submitted to this department. Any changes other than as per the plans submitted and the recommendation given by this office, will need prior approval of this Directorate.

The Formal No Objection Certificate be obtained from this office on satisfactory compliance of fire safety requirements as stipulated in the Annexure on completion of the building before it is occupied.


(ASHOK MENON)
DIRECTOR

FIRE & EMERGENCY SERVICES

Encl:- Annexure "A"

To,

Shri. Veerendra Kamat,
M/s. AVR Realty,
T-3, 3rd Floor, Kamat Commercial,
Opp. Hari Mandir,
Margao - Goa.

m/g

ANNEXURE "A"

I. APPROACH FOR FIRE APPLIANCE:-

- i) Adequate passage way clearance required for the fire fighting vehicles to enter the premises shall be provided at the main entrance, the width of such entrance shall not be less than 4.5 mtrs. If an arch or covered gate is constructed it shall have a clear head room of not less than 5 mtrs.
- ii) The compulsory open space around the building shall not be used for parking.

II. COURTYARD:- The Courtyard upto 12 mtrs, distance from the building line on all the sides shall be hard surfaced to take the weight of the fire engine weighing upto 24 metric tones. All the courtyards, including the pathway shall be in the same plain without any obstruction in the building.

III. FIRE ESCAPE/EXTERNAL STAIRS:

- a) The building shall be provided with Fire Escape Staircase of Dog leg type with adequate landing on every floor, in addition to the normal staircase as shown in the approved plan No. SGPDA/P/5381/846/14-15 dated 19.08.2014. The fire escape / External Staircase should be of R.C.C. construction and shall be of enclosed type directly connected to the ground and the staircase case shall be separate and remote from the internal staircase.
- b) Entrance to the fire escapes shall be separate and remote from the internal staircase.
- c) The doorway leading to the fire escapes shall be provided with 2 hours fire resistance door with Panic Bar facility to prevent spread of fire and smoke.
- d) No Staircase used as fire escape shall be inclined at an angle greater than 45° from the horizontal.
- e) Fire Escape staircases shall have flight not less than 125 cms. wide with 25 cms. Treads and Risers not more than 19 cms. and should be limited to 15 per flight.
- f) The hand rails shall be of height not less than 100 cms. and not exceeding 120 cms.

IV. **FLAT ENTRANCE:-** The flat entrance and kitchen doors shall be of solid core with fire resistance of not less than half hour (solid wood of 35 mm Shutter) finished thickness and the same shall be of self closing type in the building.

V. **FIRE LIFTS AND OTHER LIFTS:-**

- a) Fire lift shall be provided with a minimum capacity for **Eight (8) Passengers** fully automated with emergency Switch on ground level and shall be equipped with inter communication equipments.
- b) Wall enclosing lift shall have fire resistance of not less than 2 hours.
- c) Shaft shall have permanent vents of not less than 0.2 sq. mtrs. in clear area immediately under machine room.
- d) **Landing doors and lift car doors of the lift shall be of steel shutters of fire resistance of one hour. No collapsible shutters shall be permitted.**
- e) Grounding switch(es), at ground floor level, shall be provided on all the lifts to enable the fire service to ground the lifts in the building.
- f) A sign shall be posted and maintained on every floor at or near the lift indicating that in case of fire, occupants shall use the stairs.

VI. **ELECTRICAL CABLE SHAFT AND ELECTRICAL METER ROOM:-**

- a) Electrical cables shafts shall be exclusively used for electrical cables and should not open in the staircase enclosures.
- b) Inspection doors for the shaft if provided shall have **two hours fire resistance**.
- c) Electrical shaft shall be sealed at each floor level with non-combustible material such as Fire Rated Cement.
- d) Electrical meter rooms shall be provided at ground floor level and they shall be adequately ventilated.
- e) The electrical installation should conform to BIS:1646/1997 Code of Practice for the fire safety of the building.
- f) Electrical shafts in the building shall be sealed at each floor level with non-combustible material having **fire resistance rating of not less than 1 hour**.

- VII. **ESCAPE ROUTE LIGHTING**:- Escape route lighting (Staircase and Corridor light) in Building shall be on independent circuit as per Clause 4.2.7 of part IV N.B.C. of India 2005 Illumination of Means of Exit. The exit arrangements shall comply with BIS: 1644/1989 Code of practice for Fire Safety of Building (General).
- VIII. **FIRE FIGHTING REQUIREMENTS**:- The Fire Protection Measures shall be provided in the premises as incorporated in fire protection drawings No. A-01, A-02, A-03, A-04, A-05, A-06, A-07 and A-08 submitted to this office vide your letter No. Nil dated; 20.08.2014.
- a) **UNDERGROUND STATIC WATER STORAGE TANK**:- The underground Static Water Storage tank of 75,000 liters capacity shall be provided at ground level as per design specified in the rules with baffled wall.
- b) **OVERHEAD (TERRACE WATER STORAGE TANK)**:- Another tank of 10,000 liters capacity shall be provided on top of the terrace level of the building. The tank shall be connected to the Wet Riser Cum Down Comer all through by a booster pump through a non – return valve and a gate valve.
- c) **WET RISER CUM DOWN COMER**:- Wet Riser cum Down Comer of internal diameter of 10 cms. of GI 'C' class pipe per 500m² floor area shall be provided in the duct in the building with landing valve on each floor including Basement alongwith Hose Boxes and 2 Nos. of RRL delivery hoses of 70 mm diameter having a length of 15 mtrs. each with hand controlled Branch pipe and Hose Reel Hose conforming to type 'A' 884-1985 on each floor in such a way as not to reduce the width of the corridor and no part of the floor is more than 6 mtrs. away from the nozzle when fully extended.
- d) **FIRE SERVICE INLET CONNECTION**:- Two way Fire Service Inlet Connection of 63 mm diameter standard coupling shall be provided at the ground floor in the premises to connect the mobile pump of the fire service to the Wet Riser.

e) **FIRE PUMP:-**

- i) Wet Riser shall be connected to a electric fire pump capable of delivering 2,280 liters/min. of water at ground level at a pressure of not less than 3.5 Kg/cm. at the topmost hydrant.
- ii) Another electric Pump of 180 ltrs/min. shall be provided.
- iii) Electric supply to these pumps shall be on independent circuit.
- iv) A stand-by diesel operated pump of equal capacity as that of (i) above shall be provided and the same shall be connected to the Wet Riser and Sprinkler System.

f) **COURTYARD HYDRANT :-** Eight Nos. of Courtyard hydrants shall be located in the courtyard of the premises with a minimum size of the main being not less than 150 mm. which shall be pillar post type with 63 mm single outlet conforming to BIS:908. in the building.

g) **ALTERNATE SOURCE OF POWER SUPPLY:-** Independent Secondary Circuit fed by Secondary source of Power supply with appropriate change over switch shall be provided for the Fire systems viz. Corridor lighting, Manual Fire Alarm system, Fire Pumps, Fire lift etc. in the building.

h) **MANUALLY OPERATED ELECTRIC FIRE ALARM SYSTEM :-** The Building shall be provided with Manually Operated Electric Fire Alarm System conforming to BIS:2189/1999 with the main control panel at ground floor and pill boxes, hooters at each side of the upper floors. The layout shall be in accordance with Indian Standard Specification.

i) **SPRINKLER SYSTEM** :- Automatic Sprinkler System confirming to Bureau of Indian Standard should be installed in **Basement, First, Second, Third & Fourth Floor** of the building comprising of Parking and Commercial Area.

j) **SMOKE DETECTORS** : Smoke Detectors of Optical type as per Indian Standard Specification should be installed in the **Basement, First, Second, Third & Fourth Floor** of the building comprising of Parking and Commercial Area.

k) **PORTABLE FIRE EXTINGUISHERS**:- The type/distribution of Fire Extinguishers shall be in accordance with BIS:2190/1992 in the building. All extinguishers shall confirm to IS:15683/2006.

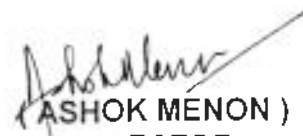
l) **DIRECTIONAL FIRE EXIT SIGN**:- The Fire Safety Signages and Emergency Escape Signages shall be installed at the appropriate places on all floor as per the specimen and size enclosed in Annexure "B".

The floor wise Emergency Escape Plan showing the line of escape shall be displayed appropriately in the Lift Lobby, Passage Area and other enclosed Room to facilitate smooth exit of occupants when need arises.

m) **LIGHTNING PROTECTION OF BUILDING** : The Building shall be protected from lightning as per section 11 of Part VIII – section 2 of National Building Code of India 2005 and same shall conform to IS: 2309/1989.

n) **BASEMENT**:-

- i) The designated staircase for means of escape during emergencies should terminate at ground floor, similarly the lift should cease at ground floor. No staircase or lifts are permitted to have a continuous flight to basement.
- ii) Sprinkler system should be provided in the basement floors.
- iii) If cut-outs are provided from basements to the upper floors or to the atmospheres, all sides cut-out openings in the basements shall be protected by sprinkler head at close spacing so as to form a water curtain in the event of a fire.
- iv) The basement shall be separately ventilated.


(ASHOK MENON)
DIRECTOR
FIRE & EMERGENCY SERVICES

The Chief Officer,
Margao Municipal Council,
Margao- Goa.

NO OBJECTION CERTIFICATE

Report of Health Officer from Sanitation Point of View for the proposed commercial cum Residential building / bungalow in Chalta No: 172 of P.T.S. No. 253 of AVR realty. Ref Application No. 926 Dtd: 20/08/2014 of AVR realty. This is to certify that the Health Officer along with the Sanitary Inspector has inspected the site of the proposed commercial cum Residential building / bungalow by in Chalta No: 172 of P.T.S. No. 253, at Malbhat, Margao Goa and this office No Objection for the construction from the sanitary point of view as under:-

- a) No. of unit for residential:- } Proposed construction of Residential Cum Commercial Building.
b) No. of unit for commercial:- }
c) Total:-
d) Size of the septic tank & soak pit :- Submitted plan of Septic tank & Soak Pit.
e) Whether the septic tank/Soak pit :- Western side
has been shown on the plan. So at which site
f) Whether the size of the Septic tank/ :- 200 persons
Soak pit is adequate to the above unit and persons, if not what should be the size
g) Whether the drains in the complex:- Yes
have been properly shown to discharge of rain water
h) Whether there is any possibility of :- No
contaminating the water by the near by wells due to the construction of septic tank Soak pit.

The Applicant/ Builder shall further observe the following conditions: -

- 1) The Applicant/ Builder should ensure that all the labourers posses cards and the same should be renewed every three months. No labour shall be engaged by the Contractor/ Builder at the construction sites unless he/she has a Health Card.
- 2) The soak pit of the septic tank should be constructed at minimum distance of 15.00meters away from any well, whose water is used for domestic purpose or for providing water.
- 3) The N.O.C. shall be revoked if the construction of the Septic tank/ Soak pit drainage system of the building as not existing as per the approved plans.
- 4) The Applicant should construct a separate soak pit in order to absorb in the sullage water from Kitchen and other non sewage sources.
- 5) Accumulation of water shall be prevented in pits in around the site so as to avoid breeding of Mosquitoes.
- 6) The Builder/ Contractor etc. to take adequate anti- larval measures at to construction sites in consultation with the concerned Health officer.
- 7) N.O.C. from this Authority be obtained before issuing Occupancy Certificate.
- 8) The N.O.C. Certificate issued is liable to be withdrawn is conditions stipulated above are not complied with.
- 9) Temephos (Abate/ Solar) in the proportion 2.5ml in 10 lit of water to be sprayed once in 7 days.
- 10) Board should be displayed with builder name & contact no., Municipal License No. / Health NOC No., SPDA Order/ License No.

Copy to,
AVR Realty,
Office 1-3, Kamat Commercial,
Opp. Hari Mandir,
Margao Goa.



Y
Health Officer.
HEALTH OFFICER
URBAN HEALTH CENTRE
MARGAO