BRIHANMUMBAI MUNICIPAL CORPORATION MUMBAI FIRE BRIGADE

Sub: Provisional Fire Safety approval for the construction of proposed High-Rise Residential building on plot bearing C.T.S. No186/A/2, 506/A/1 and 506/A/4 of village Wadhavali, Opp. Shalimar Petrol Pump, Dr. Choitram Gidwani Road, Ganeshwadi, Chembur, Mumbai-400074.

- **Ref:** i) Online File submitted by Architect Jinish Narendra Soni and Developer Mr. Trilochan kumar partner of M/s. S & T Developers
 - ii) File no. P-19683/2023/(186/A/2 And Other)/M/E Ward/WADHAVALI-CFO/1/New

<u>Developer Mr. Trilochan kumar partner of M/s. S & T Developers:</u>

This is a proposal for the construction of proposed high rise residential building comprising part stilt on ground up to maximum height 14.65mtrs. for puzzle parking system (02 level in pit & 07 level above ground) + 1st to 3rd part residential floors & partly as void for puzzle parking system + Service floor + 4th to 15th upper residential floors with a total height of 54.00mtrs. from general ground level up to terrace level, as shown on plans.

FLOOR WISE USERS OF THE BUILDING:

Floors	Occupancy per floor			
Ground floor	Pit puzzle parking system upto maximum height			
	14.65mtrs. (02 levels in pit & 07 level above ground) +			
	space for pump room + electric meter panel + U.G. tank			
	+ entrance lobby			
1 st floor	Society office + void for puzzle parking system			
2 nd floor	Fitness centre + space for letter box + void for puzzle			
	parking system			
3 rd floor	Fitness centre + void for puzzle parking system			
Service floor	Service area			
4th, 5th, 7th to 12th, 14th	04nos. of flats on each floor			
& 15 th floors				
6 th & 13 th floors	03nos. of flats + refuge area on each floor			
Terrace	Open to sky landscape garden (treated as refuge area)			
	+ OHT + LMR			

THE DETAILS OF STAIRCASE:

No. of staircase	Type of staircase	Width	From – to
01no.	Enclosed Type	01.50 mtrs.	Leading from ground floor to terrace level

The proposed staircase of the building is enclosed type and externally located & adequately ventilated to out side air as shown on plans.

LIFTS:

No. of lifts	Type of lifts	Profile	
02nos.	Passenger lifts	Leading from ground to top floor level.	
01no.	Fire Evacuation	Leading from ground to top floor level.	
	lift	(Accessible at mid-landing of the staircase	
The lift lobby/common corridor at each floor level is adequately ventilated to			

outside air as shown on the plans.

THE DETAILS OF OPEN SPACES:

The said building abuts on 7.42mtrs, wide Existing Road to be widened 18.30mtrs. wide proposed R.L. on West side which is connecting to 36.60mtrs. wide Existing Road on North side as shown on plan uploaded by Architect. Architect shall not apply for fire safety compliance till minimum 9.00mtrs. wide road to be developed.

The side open spaces around the building are as under:

Sides	Building line to plot boundary
North	2.02mtrs. to 5.56mtrs. including L.O.S.
South	6.01mtrs. to 6.96
East	3.43mtrs. to 5.25 including L.O.S.
West	2.52mtrs. to 6.47mtrs. + 7.42mtrs. wide Existing Road to be widened
	18.30mtrs. wide proposed R.L.

REFUGE AREA:

Refuge Floor	Refuge area in sq. mtrs.		At the Height of Refuge	
	Required	Proposed	area in mtrs.	
6 th floor	90.80	95.91	23.00	
13 th floor	38.97	39.77	44.70	

In addition to that terrace of the building will be treated as refuge area. E.E. (B.P.) shall verify the refuge area calculation & Excess refuge area shall be counted in F.S.I.

The proposal is considered favourably in view of the facts that;

- i) The said building abuts on 7.42mtrs. wide Existing Road to be widened 18.30mtrs. wide proposed R.L. on West side which is connecting to 36.60mtrs. wide Existing Road on North side as shown on plan uploaded by Architect. Architect shall not apply for fire safety compliance till minimum 9.00mtrs. wide road to be developed.
- ii) Party has already obtained the I.O.D. & C.C. upto plinth level from No. P-19683/2023/(186/A/2 & Other)/M/E Wadhavali/CC/1/New dated- 04/04/2024 to plinth level & accordingly work

- is under progress as stated by Developer/Architect.
- iii) Refuge area on 6th floor provided facing to road side on West side and refuge area on 13th floor provided facing to wider open space on South side as shown on plans.
- iv) Recommended to provide automatic sprinkler system in each habitable room of each flat, in society office, each fitness center, in lift lobby/common corridor at each floor level.
- v) Medium velocity Water Spray Projector System shall be provided in entire puzzled car parking system as per the standard laid down by N.B.C. & relevant I.S. specification.
- vi) In this case Architect has provided minimum 6.00mtrs. wide open space on South side. But provided fireman evacuation lift with smoke check lobby at mid-landing of the staircase. Hence, as per circular No. CHE/HRB/6159/DPWS, dated 15.07.2019 and this department's circular u/no. B.R.C.No.37, dated 06.08.2019 this proposal is considered.
- vii) Recommended to provide automatic smoke detection system in society office, each fitness center, electric meter panel area, in each lift machine room as well as in electric shaft at each floor level with response indicator as per IS specifications with main console panel at ground floor level.

Architects & E.E.(B.P.) is requested to ensure & verify civil work, interior work & all other requirements pertaining to Civil Engineering side including open spaces, abuts road, R.L., electric shaft & other ducts, common corridors, enclosed staircase, travel distance, doors, windows, civil work of the entire building, emergency lighting, height & floor occupancy of the building, staircase & lobby ventilation, etc., as per building plans.

In view of the above, as far as this department is concerned, the approval issued, stipulating fire-protection & fire-fighting safety requirement for the construction of high rise residential building comprising part stilt on ground upto maximum height 14.65mtrs. for puzzle parking system (02 level in pit & 07 level above ground) + 1st to 3rd part residential floors & partly as void for puzzle parking system + Service floor + 4th to 15th upper residential floors with a total height of 54.00mtrs. from general ground level up to terrace level as shown on plans, signed in token of approval, subject to satisfactory compliances of the following requirements:

1. ACCESS:

- i) There shall be no compound wall at proposed R.L. of 18.30mtrs. wide i.e. West side. However, removable bollard chain link or sliding gate not less than 6.00mtrs. may be permitted.
- ii) There shall not be any of the trees obstructing maneuvering of fire appliances.
- iii) All access & fire tender access should be free of encumbrances.

2. COURTYARDS/OPEN SPACES

a. The entire open spaces shall be sufficiently hardened to bear the weight of fire engine weighing up to 58 M.T. each with a point load of 10 kgs/sq. cm.

- b. All the courtyards shall be in one plane and mandatory open space shall be clear of any obstructions including tree.
- c. Courtyards around the building shall be maintained free from encumbrances / encroachments.

3. STAIRCASE:

- a. The flight width of staircase shall be maintained as shown in the enclosed plans.
- b. The layout of staircase shall be enclosed type as shown in the plan throughout its height and shall be approached (gained) at each floor level at least two hours fire resistant self closing door (45 mm. thickness) placed in the enclosed wall of the staircase.
- c. Externally located staircases adequately ventilated to outside air.
- d. Permanent vent at the top equal to 5% of the cross-sectional area of the staircase shall be provided.
- e. Openable sashes or R.C.C. grills with clear opening of not less than 0.5 sq. mtrs. per landing on the external wall of the staircase shall be provided.
- f. No combustible material shall be kept or stored in staircase / passage.

The terrace staircase door shall be provided in the following manner:

- a) The top half portion of the doors shall be provided with louvers.
- b) The latch-lock shall be installed from the terrace side at the height if not more than 1 mtrs.
- c) The glass front of 6 inch diameter with the breakable glass shall be provided just above the latch lock, so as to open the latch in case of an emergency by breaking glass.
- d) The door shall either be fitted with magnetic lock connected to console & detection system or shall be synchronized with fire detection and alarm system.

4. **CORRIDOR / LIFT LOBBY:**

- i) Corridor / lift lobby at each floor level shall be naturally ventilated as shown in plan.
- ii) The common corridor / lift lobby at each floor level shall be kept free from obstructions at all times.
- iii) Self glowing/fluorescent exit signs in green color shall be provided showing the means of escape for entire building.
- iv) Portable lights / instant lights shall be provided at strategic locations in the staircase and lift lobby.

5. STAIRCASE AND CORRIDOR LIGHTINGS:

- i) The staircase and corridor lighting shall be on separate circuits and shall be independently connected so that they could be operated by one switch installation on the ground floor easily accessible to fire fighting staff at any time irrespective of the position of the individual control of the light points, if any.
- ii) Staircase and corridor lighting shall also be connected to alternate supply.
- iii) Emergency lights shall be provided in the staircases/corridors.

6. FLAT ENTRANCE AND ENTRANCE OF ALL OCCUPANCY & EXIT / ENTRANCE STAIRCASE:

- i) Flat entrance doors & entrance of all occupancy shall be of solid core having fire resistance of not less than one hour (solid wood of 45 mm thickness.)
- ii) The fire resistance rating for staircase F.R.D., Lift lobby / protected lobby & the lift doors as per N.B.C. provisions.

7. <u>ELECTRIC CABLE SHAFTS, SERVICES & METER ROOM:</u>

- i) Electric cable shafts shall be exclusively used for electric cables and should not open in staircase enclosure.
- ii) Inspection doors for shafts shall have two hours fire resistance.
- iii) Electric shafts shall be sealed at each floor level with non combustible materials such as vermiculite concrete. No storage of any kind shall be done in electric shaft.
- iv) Electric wiring/ cable shall be non-toxic, non-flammable, low smoke hazard having copper core / fire resistance for the entire building with provision of ELCB/MCB.
- v) Electric meter room shall be provided at location marked on the plan. It shall be adequately ventilated & easily accessible.
- vi) Low and medium voltage wiring running in shaft and in false ceiling should run in separate conduits;
- vii) Water mains, telephone lines, intercom lines, gas pipes or any other service line should not be laid in the duct for electrical cables; use of bus bar/solid rising mains instead of cables is preferred.
- viii) Automatic smoke detector system shall be provided in each electric shaft/duct on each floor along with response indicator which shall be connected to main console panel board on ground floor level & each floor level.
- ix) Master switches controlling essential service circuits shall be clearly labeled.

8. <u>IOT BASED DEVICES FOR ELECTRICAL INSTALLATION OF THE</u> BUILDING:

- a) IOT based micro controller devices shall be provided in the electrical installations of the building as per the requirement stipulated in Circular No. शासन परिपत्रक क्र. मुविनि -2021/प्र.क्र.114/ऊर्जा -5.
- b) The IOT based Micro Controller Devices shall be tested and verified by NABL accredited testing agency/laboratory in accordance with the recognized IS:732-2019 code for practice for Electrical wiring installation.
- c) The complete installation of IOT based Micro controller Devices shall be checked and certified by the Chief Electrical Inspector, Govt. of Maharashtra and certificate to that effect shall be issued at the time of compliance.
- d) The data and the alert generated by IOT based Micro controller Devices shall be monitored by building management system and necessary corrective measures shall be taken by the Owner, Occupier immediately.
- e) The data generated by IOT based Micro controller Devices shall be made available to fire brigade department as and when required to investigate the

cause of fire.

9. FALSE CEILING (if provided):

False ceiling if provided in the building shall be of non-combustible material. Similarly, the suspenders of the false ceiling shall be of no combustible materials.

10. MATERIALS FOR INTERIOR DECORATION/FURNISHING:

The use of materials which are combustible in nature and may spread toxic fume/gases should not be used for interior decoration/furnishing, etc.

11. LIFTS:

A. PASSENGER LIFT:

- i) Walls enclosing lift shaft shall have a fire resistance of not less than two hour.
- ii) Shafts shall have permanent vent of not less than 0.2 sq. mtrs in clear area immediately under the machine room.
- iii) Landing doors and lift car doors of the lifts shall be of steel shuttered with fire resistance of one hour. No collapsible shutter shall be permitted.
- iv) Fire lift shown in the plan shall be as per specifications laid down under the regulations, a toggle switch shall be provided to this lift for the use of Firemen.
- v) Threshold of non combustible material shall be provided at the entrance of each landing door.

B. FIRE LIFT:

- i) Walls enclosing lift shafts shall have two hours fire resistance.
- ii) The shafts shall have permanent vent equal 0.2 sq.mtr. clear area under the Lift Machine room.
- iii) Landing doors and lift car doors shall be of steel shuttered type with one hour fire resistance. No collapsible shutters shall be provided.
- iv) To enable fire services personnel to reach the upper floor with the minimum delay, one fire lift shall be provided and shall be available for the exclusive use of the firemen in an emergency and the directly accessible to every dwelling of each floor.
- v) The lift shall have a floor area of not less than 1.4 sq. mtrs. with a minimum dimension of 1.12 mtrs. It shall have loading capacity of not less than 545 k.g. (8 persons lift) with automatic closing doors.
- vi) There shall be an alternate electric supply of an adequate capacity apart from the normal electric supply the building and the cables run in a route safe from fire, i.e. within the lift shaft. In case of failure normal electric supply, it shall automatically trip over to alternate supply.
- vii) The operation of fire lift should be by a simple toggle or two button switch situated in glass-fronted box adjacent to the lift at the entrance level. When the switch is on, landing call points will become inoperative and the lift will be on car control only or on priority control device. When the switch is off, the lift will return to normal working. This lift can be used by the occupants in normal times.

viii) The words 'Fire lift' shall be conspicuously displayed in florescent paint on the lift landing door at each floor level & Threshold of non combustible material shall be provided at the entrance of each landing door.

C) FIRE EVACUATION LIFT:

- a. Capacity of Fire Evacuation Lift shall be of 845 to 1000 kgs. /8 to 15 persons and it shall be terminated on ground floor where facility of assembly or evacuation is available in case of emergency.
- b. Fire Evacuation Lift shall be housed in a separate core having smoke check lobby with opening on each floor and shall be connected with one of the staircases and required access to the staircase on each landing through fire resistance of two hours rating. Alternatively, firemen evacuation lift shall be provided on every mid-landing of one of the enclosed staircases and the staircase shall be protected with smoke check lobby by means of fire resistance door/ fire curtain or fire resistance glass having two hours rating.
- c. All the requirements pertaining to civil and electrical aspects mentioned in NBC for Fire Lift shall be applicable for Fireman Evacuation Lift.
- d. Fire Evacuation Lift car doors and landing doors shall have two hours fire resistance and shall have provision of glass vision for both doors of minimum 1 ft. X 2 ft. And the glass shall also have two hours fire resistance.
- e. Fire Evacuation Lift shall have emergency operation switch which will be only operated by fire brigade personnel. On actuation of the switch the Fire Evacuation Lift will operate from inside and the lift car door shall not open automatically but shall have control from inside to open it. The emergency operation switch shall also be provided in the ground floor lobby.
- f. The backup electric supply shall be through UPS for at least 30 min and it shall be supported online by another regular and alternate emergency supply.
- g. Two-way communication systems shall be provided in Fireman Evacuation Lift car as well as at every landing level including lobby at ground floor.
- h. All the electrical cable shall be fire retardant with low smoke hazard complying relevant BIS standards.
- i. Fire Evacuation Lift car shall be of made of non-combustible material including interior having minimum two hours resistance.
- j. Lift maintenance shall be carried out only by Lift Manufacturing or Installation Company.
- k. Fire Evacuation Lift and the staircase attached to it shall be clearly marked mentioning FIRE ESCAPE LIFT/STAIRCASE at each landing door at each floor level.
- 1. The smoke check lobby with evacuation lift shall have positive level difference of minimum 75 mm with respect to staircase landing or mid landing level to avoid ingress of water in fireman lift shaft.

12. PUZZLE CAR PARKING SYSTEM:

i) All the structural steel members of the mechanized car parking block i.e. columns, beams shall be protected with the fire resisting / retardant

materials and methods as stipulated under relevant I.S. specification. A certificate to that effect that the fire resistance protection has been provided as above shall be furnished from the chartered Structural Engineer.

- ii) The cars shall be separated by perfect partition of 4.50 mm thick steel pallets between two cars to prevents spread of fire from one level to next level.
- iii) The mechanized car-parking block has door at the bottom and covered opening at the top to create natural drafts, to prevent spreading of fire.
- iv) The electrical cables used internally shall be fire retardant, and heat resistant of 105 degree centigrade.
- v) Emergency Stop switch shall be installed inside the auto parking system, at the top of the system, near the driving unit, outside the system on operation panel & on the main control panel for activation in case of any emergency, for the power cut off to the main motor and all operations to stop.
- vi) Stopper shall be installed on each pallet for the maximum position to which the car can be driven onto the pallet.
- vii) Blue and Red display lamps indicating whether system is ready to accept the car shall be installed at the entry point of the car. When the red lamp is on, car should not enter into the system.
- viii) High Velocity Water Spray Projector System as per relevant I.S. specifications shall be provided to entire puzzle car parking system, as per the standard laid down by N.B.C. & relevant I.S. specification.
- ix) Fire detectors (Heat) shall be installed below each pallet to detect any increased temperature beyond 80 degrees centigrade Control Panel on the ground floor.
- x) The car engine shall be shut off at ground level before parking at higher level.
- xi) Separate M.S. staircase of 1.00mtr. width having 1.00mtr. wide platform with Railing shall be provided at alternate car parking level.
- xii) Only trained operator certified by company installing car parking system shall operate car parking.

13. FIRE FIGHTING REQUIREMENTS

a) Under Ground Water Storage Tank:

An underground water storage tank of 2,00,000 liters capacity shall be provided, as per the design specified in the rules with baffle wall and fire brigade collecting breaching. The layout of which shall be got approved from H.E.'s department prior to erection. The tank shall be connected to sprinkler system.

b) Overhead Water Storage Tank:

A tank of 30,000 liters capacity shall be provided at terrace level, the layout of which shall be got approved from H. E.'s departments prior to erection. The tank shall be connected to wet risers through a booster pump through a non-return valve gate valve.

c) Wet- riser-cum-down comer:

Wet riser of internal dia. of 15 cms. of G.I. 'C' Class pipe shall be provided in the duct adjoining each staircase with double hydrant outlet & hose reel at

each floor in such a way as not to reduce the width of the common corridor. Pressure reducing discs or orifices shall be provided at lower level, so as not to exceed the pressure of 5.5 kgs. per sq. cms.

d) Fire Service Inlet:

- i) A fire service inlet on the external face of the building near the tank directly fronting the courtyards shall be provide to connect the mobile pump of the fire service to (a) The wet riser cum down comer (b) Sprinkler system (c) Medium velocity water spray projector system.
- ii) Breeching connection inlet shall be provided to refill U.G. tank.
- iii) Operating switches of fire pumps shall be also provided in glass fronted boxes at ground floor.

e) Automatic Sprinkler System:

The Automatic sprinkler system shall be provided in each habitable room of each flat, in society office, each fitness center, in lift lobby/common corridor at each floor level, as per the standards laid down by T.A.C. or relevant I.S. specifications.

f) Automatic Smoke Detection System:

Automatic smoke detection system shall be provided in society office, each fitness centre, electric meter panel area, in each lift machine room as well as in electric shaft at each floor level with response indicator; same should be connected to main consol panel on ground floor level, as per IS specification.

g) <u>Medium Velocity Water Spray Projector System:</u> (for Puzzle car parking system)

Medium Velocity Water spray projector system shall be provided to entire Puzzle car parking system and shall be connected to wet riser cum down comer system, as per the standard laid down by relevant I.S. specification.

h) Fire pump, Booster pump, Sprinkler pump & Jockey pump:

- i) Wet-riser shall be connected to a fire pump at ground level of capacity of not less than 2400 liters/min. capable of giving a pressure of not less than 3.2 kgs/sq. cms. at the top most hydrant along with jockey pump of suitable size.
- ii) Booster pump of 900 liters/min. capacity giving a pressure of not less than 3.2 kgs./ sq. cms. at the top most hydrant out let of the wet-riser shall be provided at the terrace level.
- iii) Sprinkler pump of suitable capacity along with jockey pump shall be provided for automatic sprinkler system.
- iv) Electric supply (normal) to these pumps shall be independent circuit.
- v) Operating switches for booster pumps shall be also provided in glass fronted boxes in lift lobbies on each floor at prominent place.
- vi) Operating switches of fire pumps shall be also provided in glass fronted boxes at ground floor.
- vii)All above pumps should be surface mounted or vertical turbine type (submersible pump not permitted) pump along with adequate size of pump

room.

i) External Hydrants:

Courtyard hydrants shall be provided at distance of 30.00 mtrs each within the confines of the site of the wet riser-cum-down comer.

i) Hose & Hose Boxes:

Hose box with two non percolating ISI marked hoses (length not less than 15 mtrs) & branch shall be equally distributed on ground floor as well as on each floor near the hydrant outlet.

k) Alternate source of power supply:

An alternate source of L. V./H. V. supply from a separate sub-station or D.G. Set with appropriate change over switch shall be provided for fire pump, fire lift, staircase, corridor lighting circuits, sprinkler pump, jockey pump and fire alarm system, detector systems, etc. It shall be housed in a separate cabin.

1) Portable fire extinguishers:

- a. Dry chemical powder type fire extinguisher of 06 kgs. capacity having I.S. certification mark and two bucket filled with dry clean sand shall be kept at the entrance of pump room, electric meter panel area as well as lift machine room.
- b. One dry chemical powder type fire extinguisher of 06 kgs. capacity having B.I.S. certification mark shall be kept in each lift lobby on each floor level at prominent place & refuge area.
- c. Dry chemical powder type fire extinguisher of 06 kgs. capacity having I.S. certification mark shall be kept in car parking area.

m) Fire Fighting Requirements At The Construction stage of Building:

Following fire protection arrangement shall be provided with the following fire protection measures shall be provided & same shall be maintained in good working condition at all the times.

- a) Dry riser of minimum 10 cm diameter pipe with hydrant outlets on the floor constructed with fire service inlet to boost the water in the dry riser & maintenance should be in accordance with good practice.
- b) Drums of 2000 liters capacity filled with water & two fire buckets shall be kept on each floor for every 100 sq. mtrs area.
- c) Water storage tank of minimum 20,000 liters capacity shall be kept at site ready to use in case of emergency, which may be used for other construction purpose also.

n) **Public Address System:**

The building shall be provided with public address system as per the rules with main control operator at console panel at ground floor area.

o) Fire Alarm System:

The building shall be provided with manual fire alarm system with main control panel at ground floor level and pill-boxes and hooters at each upper

floor level. The layout of fire alarm system shall be in accordance with I.S. specification.

p) Signages:

Self-glowing/fluorescent exit signs in green color shall be provided showing the means of escape for the entire building.

q) Panel Board of Fire-fighting System:

Fire alarm system, Public address system, Alternate supply, etc. panels shall be installed on ground floor at the location shown in the plans & which shall be manned 24 hrs.

r) Trained Occupiers / Security Guard:

Occupiers/Security of the building shall be trained Fire prevention and to extinguish fire in initial stage, supervision on Maintenance of fix fire fighting system & portable extinguishers, Mock evacuation drills etc.

s) Fire Drill/Evacuation Drills/Plan:-

Fire Drills and evacuation drills shall be conducted regularly and log of the same shall be maintained.

14. REFUGE AREA:

The Refuge area as shown on the plan and shall be conforming to the following requirements:

- i) Manner of refuge area
- a) The refuge area shall be so located that it shall preferably face the wider open space on the side of the building perpendicular to the main access road
- b) The refuge area shall be provided with railing / fire rated glass / parapet of height 1.20 mtrs.
- c) The refuge area shall have a door which 'shall be painted or fixed with a sign in luminous paint mentioning "REFUGEAREA".
- d) The lift/s shall not be permitted to open into the refuge areas.
- e) The refuge area provided within building line shall be accessible from common passage/staircase.
- ii) Use of refuge area:
- a. The refuge area shall be earmarked exclusively for the use of occupants as temporary shelter and for the use of Fire Brigade Department or any other organization dealing with fire or other emergencies when occur in the building and also for exercises/drills if conducted by the Fire Brigade Department.
- b. The refuge areas shall not be allowed to be used for any other purpose and it shall be the responsibility of the owner/occupier to maintain the same clean and free of encumbrances and encroachments at all times.
- iii) Facilities to be provided at refuge area:
- a. Adequate emergency lighting facility shall be provided.
- b. Adequate drinking water facility shall be provided in the refuge area.

iv) Terrace of the building as a refuge area:

- a. Necessary facilities like emergency lighting, drinking water shall be provided.
- b. The access door/s from the enclosed staircase/s to the terrace floor shall have louvers at top half portion of the door. The entrance doors to the terrace shall be painted or fixed with sign painted in luminous paint mentioning "REFUGE AREA".
- v) Excess refuge area (if any) shall be counted in FSI as per DCPR 2034.

15. **ELEVATION FEATURES:**

- a) Elevation treatment shall be of non-combustible materials and it should not obstruct firefighting activities.
- b) Elevation features for entire building shall be as per circular issue by Hon. M.C.'s Under No. CHE/DP/110/GEN/2019-20 Dated 2019-20.

16. TREE CUTTING (If any):

Trees falling before entrance gates shall be cut, while trees falling within the compulsory open space/courtyard shall be either transplanted or to be cut as may be found feasible by the Supdt. of Garden.

17. OTHER NOC / PERMISSIONS:

Necessary permissions / N.O.C. for licensable trade, addition/ alteration, interior work, etc. shall be obtained from competent Municipal Authorities & CFO's Department.

18. GLASS FACADE:(If provided) (for Fitness center)

- i) Architect should earmark conspicuously the glass wall either by sign or in words, on the plans submitted at the time of submission of proposal.
- ii) The said wall including doors frame work if any should be one hour fire resistance and shall satisfy stability, integrity and insulation characteristics for the fire resistance period given.
- iii) Plastic or any combustible film shall not be coated on external or internal face of the wall.
- iv) Horizontal opening to the glass façade of min. width 1.50 mtrs. and height 1.50 mtrs. shall be provided at every floor at a level of 1.20 mtrs. from the flooring facing compulsory open space as well as on road side. Minimum one such opening shall be provided at the interval of every 15 mtrs. The openable glass panel shall be either left or right hinged to facilitate approach of the rescue cage/ladder. Similarly this portion shall have manual opening mechanism from inside as well as outside. Such openable panels shall be marked conspicuously so as to easily identify the openable panel from outside.
- v) Distance between the external wall (glass/brick) and glass façade shall not be more than 300 mm.
- vi) The smoke seals/barriers between building wall and façade shall be provided at every floor level in the form of non-combustible material/vermiculate cement.
- vii) Glass façade blocking the area of staircase, lift lobby and corridor shall be kept openable, pressurized system of the staircase/lobby shall be synchronized with opening mechanism.

- viii)The glazing used for the façade shall be of toughened glass as per I.S. 2553-part I satisfying stability criteria.
- ix) Automatic Dry type water curtain system shall be provided at every floor level from inside of the façade.
- x) Openable vent of 600 mm height to be installed below ceiling level or false ceiling level (if provided) The openable vent of minimum 2.5% of the floor area shall be provided. It shall be of min 600 mm depth below ceiling / false ceiling or full length on the periphery of the façade whichever is less Openable mechanical devices for the said vent shall be located at 1.2 m. height from the flooring level. the Openable vent can be pop out type or bottom hinged provided with fusible link opening mechanism and shall also be integrated with automatic Smoke Detection system.

> Scrutiny Fees & Fire Service fees paid as follows;

File Nos.	C.F.C. / SAP Receipt Nos.	Gross Built- up area in sq. mtrs.	Paid Scrutiny fees (Rs.)	Remark
P- 19683/2023/(186/A/ 2 And Other)/M/E Ward/ WADHAVALI- CFO/1/New	26/4/2024/23554 dated- 26/04/2024	7,300.00	110,960/- + 1/-	Paid
File Nos.	C.F.C. / SAP Receipt Nos.	Gross Built- up area in sq. mtrs.	Fire Service fees (Rs.)	Remark
P- 19683/2023/(186/A /2 And Other)/M/E Ward/ WADHAVALI- CFO/1/New	26/4/2024/23554 dated- 26/04/2024	7,300.00	1,109,600/-	Paid

However, E.E. (B.P.) is requested to verify the total built-up area & inform this department, if the same is found to be more for the purpose of levying additional Scrutiny fees, if required.

Now Architect has uploaded undertaking on 500/- bond paper, dated 17.08.2023 & stated that as per MF & LSM Act 2006 (2007 of Maha-III) & MF & LSM Act amended 2023 & circular from Directorate of Maharashtra Fire Services vide no. मअसे-2023/59/895 dated 02.06.2023 fire & emergency fee is applicable from 30th May 2023. However, the guidelines for the fee calculation from Maharashtra Fire Services & circular from Mumbai Fire Brigade is not yet received, hence Architect/Developer shall pay the necessary fees as per the demand letter from this office, in Future.

Note:

- 1. The fire-fighting installation shall be carried out by Govt. of Maharashtra approved Licensing Agency
- 2. The width of abutting road, open spaces, LOS mentioned in plans as submitted by the Architect attached herewith and these parameters shall be Page 13 of 14

verified by E.E.(B.P.) E.S. before granting any permission (I.O.D./C.C., further C.C.) If found any contradiction, the proposal shall be referred back to this department.

- 3. **E.E.(B.P.)** shall verify the proposal in context with the relevant Regulations of DCPR-2034.
- 4. The schematic drawings/plans of automatic sprinkler system, automatic smoke detection system, wet riser system, public address system, manual fire alarm system shall be submitted to CFO department.
- 5. The area, size, etc. for the sprinkler system, detection system, fire alarm system, wet riser system, public address system, Fire duct, electrical duct etc. to be verified & examined by MEP Consultant.
- 6. Separate necessary permission for any licensable activity shall be obtained from concerned authorities of BMC/CFO's department, till then shall not be allowed to use.
- 7. There shall be no any tree located in the compulsory open spaces or in the access way near the Entrance gates.
- 8. This recommendation letter is issued only from Fire Protection & Fire-Fighting requirements point of view on behalf of the application from Architect. If any matter pertaining to authenticity or legality shall be cleared by concerned Owner/Occupier/Developer/ Architect, etc
- 9. The plans approved along with this approval are issued from Fire Risk & Life Safety point of view only. Approval of these plans does not mean in any way of allowing construction of the building. It is Architect/Developers responsibility to take necessary prior approval from all concerned competent authorities for the proposed construction of the building.
- 10. As per section 3 of Maharashtra Fire Prevention and Life Safety Measures Act 2006, it is the liability of Owner/Occupier to provide the Fire Protection measures & Fixed Fire Fighting Safety system installations and shall be maintained in good working order & in efficient condition all the time, in accordance with the provisions of Maharashtra Fire Prevention and Life Safety Measures Act or the rules.
- 11. This approval is issued without prejudice to legal matters pending in court of law, if any.
- 12. Architect has shown 18.30mtrs. wide R.L. on West side. Architect shall not apply for fire safety compliance till minimum 9.00mtrs. wide road to be developed.

Divisional Fire Officer
(Scrutinized & Primary Approval by)

Dy. Chief Fire Officer (Final Approval by)

Copy to:-

- 1. E.E.(B.P.):
- 2. Architect Jinish Narendra Soni