

BRIHANMUMBAI MUNICIPAL CORPORATION
MUMBAI FIRE BRIGADE

NOC: Provisional fire safety approval for firefighting & fire protection for the proposed construction of the High-rise residential building (Proposed Redevelopment building of building no. 32 known as Nishant CHS) on plot bearing C.T.S. No. 826(pt.), Village Chembur, Subhash Nagar, Mumbai

Ref: Online file submitted by Licensed Surveyor Mr. Jitendra Govind Dewoolkar, of M/s. Ellora Project Consultants Pvt. Ltd. under file no. P-21720/2024/(826)/M/W Ward/CHEMBUR-W/MHADA-CFO/1/New.

DEVELOPER/OWNER, M/S. NISHANT C.H.S.L.

This is a proposal for the construction of High-rise residential building having part basement floor for pump room (-04.70 mtrs.) + ground floor part on stilt + 1st to 16th upper residential floors with a total height of 50.00 mtrs. measured from general ground level up to terrace level, as shown on the plan.

FLOOR WISE USERS OF THE BUILDING:

Floors	Users
Part basement (-04.70 mtrs.)	Pump room.
Ground floor part on stilt	Entrance lobby + society office + electric meter panel + 04 tier pit stack car parking (02 level in pit) in stilt area
1 st to 7 th , 9 th to 14 th & 16 th floor	08 nos. of Residential flats on each floor
8 th floor	06 nos. of Residential flats + Refuge area
15 th floor	07 nos. of Residential flats + Refuge area
Terrace	Open to sky (treated as refuge area).

THE DETAILS OF STAIRCASES:

No. of staircase	Type of staircase	Width	From - to
One no.	Enclosed Type	01.50 mtrs.	Leading from part basement to terrace level (diverted on ground floor)
The staircase is externally located & adequately ventilated to outside air as shown on the plan.			

LIFTS:

No. of lifts	Type of lifts	Profile
02 nos.	Passenger lift	Leading from ground floor to top floor
One passenger lifts shall be converted into fire lift. The lift lobby/common corridor at each floor level is ventilated to outside air as shown on the plans.		

THE OPEN SPACES:

The building abuts on 12.00 mtrs wide existing road on east side of the building as shown on the plan.

Sides	From Building line to Plot boundary at Ground Level.
North	6.17 mtrs to 6.24 mtrs
South	3.72 mtrs
East	3.00 mtrs + 12.00 mtrs wide Existing Road
West	4.49 mtrs to 4.58 mtrs

REFUGE AREA:

Refuge floor	Refuge area (Required)	Refuge area (Proposed)	At the height of refuge floor from ground level.
8 th floor	133.61 sq. mtrs.	133.77 sq. mtrs.	24.35 mtrs.
15 th floor	38.16 sq. mtrs.	38.53 sq. mtrs.	44.30 mtrs.
In addition to above, terrace of the building will be treated as refuge area. Refuge area calculation shall be verified by E.E.(MHADA). Excess refuge area shall be counted in FSI.			

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

1. This proposal falls under regulation 33(5) of DCPR-2034.
2. The site abuts on 12.00 mtrs wide existing road on east side of the building, as shown on the plans, which is well accessible for firefighting in case of emergency.
3. Refuge area provided facing to road side on east side of the building.
4. Recommended to provide automatic sprinkler system in society office, in each habitable room of each flat & in lift lobby/common corridor at each floor level as well as entire car parking area covering each car on ground floor.
5. Recommended to provide automatic smoke detection system in society office, electric meter room, in lift machine room & in pump room of the building.
6. During construction stage and before the final occupation party shall comply additional requirement stipulated by Mumbai Fire Brigade Officer, if any.

In view of the above, as far as this department is concerned, provisional fire safety approval is issued from fire safety point of view i.e. from firefighting & fire protection point of view for the proposed construction of High-rise residential building having part basement floor for pump room (-04.70 mtrs.) + ground floor part on stilt + 1st to 16th upper residential floors with a total height of 50.00 mtrs. measured from general ground level up to terrace level, as shown on the plans signed in token of approval subject to satisfactory compliance with the following requirements;

1. ACCESS:

- i) There shall be no compound wall on 12.00 mtrs wide existing road on east side of the building. However, removable bollard chain link with clean opening of 9 mtrs. or sliding gates may be provided.
- ii) All access & fire tender access should be free of encumbrances.
- iii) Entrance gate of not less than 6.00 meters width each shall be provided, at locations marked on the plan. Archways, if any over the entrance gates, shall have height clearance of not less than 6.00 mtrs.

2. COURTYARDS:

- i) The entire available courtyards on all the sides of the building shall be paved suitably to bear the load of fire engines weighing up to 58 m. tones each with a point load of 10 Kgs. per sq. cms.
- ii) The courtyards shall be kept free from obstruction at all times.
- iii) No structure of any kind shall be permitted in courtyards of the building.

3. STAIRCASE:

- i) The layout of the staircase shall be enclosed type as shown in the plan throughout its height and shall be approached (gained) at each floor level through at least one-hour fire resistant self-closing door (45 mm. thickness) placed in the enclosed wall of the staircase at landing.
- ii) The flight width of the staircase shall not be less than 01.50 mtrs. Throughout its height.
- iii) Permanent vent at the top equal to 5% of the cross-sectional area of the staircase shall be provided.
- iv) 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.
- v) Nothing shall be kept or stored in staircase / corridor/passage.

The terrace door shall be provided in the following manner.

- A. The top of portion of the doors shall be provided with louvers.
- B. The single latch lock shall be installed from the terrace side at the height of not more than one mtrs.
- C. The glass front of 6-inch diameter with the breakable glass shall be provided just above the single 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. PART BASEMENT: (-04.70 Meters.) (FOR PUMP ROOM)

- i) Basement shall be used for designated purpose only.
- ii) The staircases of the basement shall be of enclosed type and entry to basement areas shall be through one-hour fire resistance self-closing door provided in the enclosed wall of the staircase.
- iii) Suitable signages shall be provided in the basement showing exit direction, way to exits etc.
- iv) One Dry Chemical Powder Extinguisher ABC type of capacity 09 kgs. shall be kept for pump room.

5. CORRIDOR / LIFT LOBBY:

- i) Corridor / lift lobby at each floor level shall be naturally ventilated.
- ii) The common corridor / lift lobby at each floor level shall be kept free from obstructions at all times.
- iii) Proper signage for way to staircase, escape routes, staircase, floor nos. etc. shall be provided at each floor of building.

6. ELECTRIC CABLE SHAFT AND ELECTRIC METER PANEL/ROOM:

- i) Electric cable Duct shall be exclusively used for electric cables or shall be taken in concealed manner and should not open in staircase enclosure.
- ii) Electric duct shall be sealed at each floor level with noncombustible materials such as vermiculite concrete. No storage of any kind shall be done in electric duct.
- iii) Electric wiring/ cable shall be halon-free, non-toxic, non-flammable, low smoke hazard having copper core for the entire building with provision of ELCB/MCB.
- iv) Electric meter panel/room shall be provided at location marked on the plan. It shall be adequately ventilated.
- v) Low & medium voltage wiring running in shaft & in false ceiling should run in separate conduits.

- vi) Water mains, telephone lines, intercom lines, gas pipes or any other service line should not be laid in the duct for electrical cables;
- vii) Master switches controlling essential service circuits shall be clearly labeled & provide in the lobby for emergency operations.

7. INTERNET OF THINGS SYSTEM:

- a) The IOT based Micro Controller Device shall be provided in the electrical installation of the building as per the requirement stipulated in circular No. शासन परिपत्रक क्र. मुविनि-२०२१/प्र. क्र. ११४/ऊर्जा -५.
- b) The IOT based Micro Controller Device 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 that time of compliance.
- d) The data and the alert generated by IOT based Micro Controller Devices shall be monitored by building management system and the 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.

OR

Smart meter with provision of the parameters included in the IOT devices is provided by electricity power supplier with specified certification.

8. ESCAPE ROUTE 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 firefighting 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.

9. ENTRANCE DOORS & EXIT / ENTRANCE STAIRCASE:

- i) Entrance door of each occupancy, including flat entrance & kitchen doors (if provided) shall be of solid core having fire resistance of not less than one hour.
- ii) The fire resistance rating for staircase F.R.D., Lift lobby / protected lobby & the lift doors shall be as per N.B.C. provisions.

10. LIFT:

A. PASSENGER LIFT:

- i) Walls enclosing lift shaft shall have a fire resistance of not less than two hours.
- 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) One lift of the building shall be converted into fire lift and shall be as per specifications laid down under the regulations.
- v) Threshold of non-combustible material shall be provided at the entrance of each landing door.

B. FIRE LIFT:

- i) To enable fire services personnel to reach the upper floors with the minimum delay, one lift of the building shall be provided, and shall be available for the exclusive use of the firemen in an emergency.
- ii) The electric supply shall be on a separate service from electric supply mains in a building and the cables run in a route safe from fire, that is, within the lift shaft. Light & fans in the elevators having wooden paneling or sheet steel construction shall be operated on 24-volt supply.
- iii) Fire lift should be provided with a ceiling hatch for use in case for emergency. So that when the car gets stuck up, it shall be easily openable.
- iv) In case of failure of normal electric supply, it shall automatically changeover to alternate supply. For apartment houses, this changeover of supply could be done through manually operated changeover switch. Alternatively, the lift shall be so wired that in case of power failure, it comes down at the ground level and comes to stand-still with door open.
- v) 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 a priority control device. When the switch is off, the lift will return to normal working. so, this lift can be used by the occupants in normal times.
- vi) The words 'Fire lift' shall be conspicuously displayed in fluorescent paint on the lift landing doors at each floor level.
- vii) The speed of the fire lift shall be such that it can reach the top floor from ground level with in one minute.
- viii) Fire lift shall be constructed as per prevailing Indian & International standard.

11. PIT STACK CAR PARKING: -

- i) Structural design shall be of structural steel construction.
- ii) Vertical deck separation multi-car parking level, vertical separation between the upper & lower decks shall be of non-perforated and non-combustible materials. Structural steel plate shall be provided. This is to minimize direct impingement of flame to the car in the upper deck and also to prevent dripping of any possible leaking fuel to the lower deck.
- iii) Elements of the staked car parking structure shall have 1 hr. fire resistance.
- iv) Each car parking deck shall have 1 hr. fire resistance.
- v) Parking area shall be accessible by trained staff when carrying out the maintenance work.
- vi) The parking system is to be ceased during the maintenance operation.
- vii) Stack car parking shall be provided with automatic sprinkler system covering each car parking level.

12. 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.

13. 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.

14. FIRE FIGHTING REQUIREMENTS:

A) UNDERGROUND WATER STORAGE TANK:

An underground water storage tank of 1,50,000 liters capacity shall be provided at location marked on the plan as per design specified in the rules with baffle wall and fire brigade collecting breaching. The design shall be got approved from H.E.'s department prior to erection.

B) OVERHEAD WATER STORAGE TANK:

A tank of 30,000 liters capacity shall be provided on the terrace level of the building as shown on the plan. The design shall be got approved from H.E.s department prior to erection. The tank shall be connected to the wet riser through booster pump through a non-return valve and gate valve.

C) WET RISER CUM DOWN COMER:

Wet riser cum down comer of internal diameter of 15 cms. of G.I. 'C' Class pipe shall be provided with double hydrant outlet and hose reel on each floor as shown on the plan. Pressure reducing discs or orifices shall be provided at lower level so as not to exceed the pressure of 5.5 kgs/sq.cm.

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 independently to (a) The wet riser, (b) Sprinkler system.
- ii) Breaching connection inlet shall be provided to refill U.G. tank.

E) AUTOMATIC SPRINKLERS SYSTEM:

Automatic sprinkler system with separate Sprinkler riser of suitable size of G.I. 'C' Class pipe shall be provided in society office, in each habitable room of each flat & in lift lobby/common corridor at each floor level as well as entire car parking area on ground floor covering each car of the building. The automatic sprinkler system shall be installed as per the standard laid down by T.A.C. and relevant I.S. specifications.

F) FIRE PUMP, SPRINKLER PUMP, JOCKEY PUMP & BOOSTER PUMP:

- i) Wet riser shall be connected to a fire pump at ground level of 2400 litres / min capacity giving a pressure of not less than 3.2 kgs / sq. cms. at the topmost hydrant with suitable jockey pump.
- ii) Booster pump of capacity of 900 liters / min. having a pressure of not less than 3.2 kgs. / sq. cms. at the hydrant outlets of the wet riser shall be provided at the terrace floor level.
- iii) An independent 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 on independent circuit.
- v) Only surface mounted pump or vertical turbine pump shall be installed for firefighting system. (Submersible pumps not permitted)
- vi) Switch of booster pump shall be provided at terrace floor as well as ground floor of the building.

G) FIRE FIGHTING REQUIREMENT AT THE CONSTRUCTION STAGE OF BUILDING:

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

- i) Dry riser of minimum 15 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.
- ii) Drums of 200 liters capacity filled with water & two fire buckets shall be kept of each floor.
- iii) 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.

H) EXTERNAL HYDRANTS:

Courtyard hydrants shall be provided within the confines of the site of the wet riser on ground floor for every 30.00 mtrs. distance around the building.

I) HOSE & HOSE BOXES:

Hose Box, with two hoses of 15 mts. length of 63 mm dia along with branch shall be provided near wet riser landing valve on ground floor as well as alternate floor level.

J) ALTERNATE SOURCE OF POWER SUPPLY:

An alternate source of LV/HV supply from a separate substation OR from a D.G. set with appropriate changeover switch shall be provided for fire lifts, fire pump, booster pump, sprinkler pump, jockey pump, staircase and corridor lighting circuits, detection and fire alarm system. It shall be housed in separate cabin.

K) PORTABLE FIRE EXTINGUISHERS:

- i) One dry chemical powder (ABC type) fire extinguisher of 9 kgs. capacity having B.I.S. certification mark and two buckets filled with dry clean sand shall be kept in pump room, electric meter room & lift machine room.
- ii) One dry chemical powder (ABC type) fire extinguisher of 9 kgs. capacity having B.I.S. certification mark shall be kept society office & on every floor level at prominent place.
- iii) One dry chemical powder (ABC type) fire extinguisher of 9 kgs. capacity having B.I.S. certification mark and two buckets filled with dry clean sand shall be kept near car parking on ground floor.

L) MANUAL 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 in accordance with B.I.S. specification.

M) AUTOMATIC SMOKE DETECTION SYSTEM:

Automatic smoke detection system shall be installed in society office, electric meter room, in lift machine room & in pump room of the building as per IS specifications with main console panel at ground floor level.

N) 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 hours.

15. SIGNAGES:

- i. Self-Glowing / Fluorescent exit signs in 'Green' color shall be provided in passage area of the building showing the direction of Escapes / Staircase / Exits etc.
- ii. All the exit routs shall be marked with fluorescent/radium painted & exits signs at strategic locations.

16. 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.

17. TRAINED FIRE STAFF/SECURITY GUARDS:

The trained fire staff / Security guards having basic knowledge of firefighting & fix firefighting installation shall be posted in the building.

18. FIRE DRILLS / EVACUATION DRILLS:

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

19. REFUGE AREA:-

Refuge area provided on 8th & 15th floor level 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 access road /wider open space of the building.
- b) The refuge area shall be provided with railing / parapet of 1.20 mt.
- c) The refuge area shall have a door which 'shall be painted or fixed with a sign in luminous paint mentioning "REFUGE AREA"
- 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

Adequate emergency lighting & drinking water facility shall be provided.

iv) Terrace floor as a refuge floor:

- a. The necessary facilities such as emergency lighting, drinking water etc. 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 shall be counted in FSI.

20. ELEVATION FEATURES:

Elevation feature/treatment shall be given as per the MCGM guidelines, DCPR-2034 and circular u/no. u/no. Ch. Eng./D.P./110/Gen. Dtd. 30.01.2020.

Now, Party has paid **Scrutiny Fees** of Rs. 1,09,360/- vide Receipt No. 18/6/2024/26209, dated 18.03.2024, Rs. 22,091/- vide Receipt No. 21/6/2024/26444, dated 21.06.2024, on the total gross built up area of 8648.00 sq. mtrs. as certified by the Licensed Surveyor.

However, E.E.(B.P SPL CELL/MHADA) is requested to verify the gross built up area & inform this department if it is more for the purpose of levying additional Scrutiny fee, if necessary.

Licensed Surveyor has certified height of the building as 50.00 mtrs. & total built up area 8648.00 sq. mtrs. for the said residential building & as per schedule II of section 11(1) of Maharashtra fire prevention & life safety measure act 2006 & as per prevailing rate as per MFPLSM (Amend) act 2023 and as per circular issued by Director of Fire Services Maharashtra, has paid **Fire Service Fee** of 10,93,590/- vide receipt No. 18/6/2024/26209, dated 18.03.2024 & 2,20,906/- vide receipt No. 21/6/2024/26445, dated 21.06.2024.

Note for the LICENSED SURVEYOR /E.E.(B.P.CELL/MHADA):

1. The fire-fighting installation shall be carried out by Govt. of Maharashtra approved Licensing Agency
2. The width of abutting road & open spaces is mentioned in plans as submitted by the Licensed Surveyor attached herewith and these parameters shall be certified by the Licensed Surveyor.
3. E.E.(B.P. SPL CELL/MHADA) 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 got approved from CFO.
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 MCGM/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 Licensed Surveyor If any matter pertaining to authenticity or legality shall be cleared by concerned Owner/Occupier/Developer/ LICENSED SURVEYOR, 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 Licensed Surveyor/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. E.E.(B.P. SPL CELL/MHADA) shall be verify the floor plate area of the said building if it exceed above 500 sq. mtrs. then referred back to this department for fresh provisional fire safety approval.

**Divisional Fire Officer
(Scrutinized & Primary Approval by)**

**Dy. Chief Fire Officer
(Final Approval by)**

Copy to:-

1. **E.E.(B.P. SPL CELL/MHADA):**
2. **MR. JITENDRA GOVIND DEWOOLKAR, LICENSEDD SURVEYOR,
OF M/S. ELLORA PROJECT CONSULTANTS PVT. LTD.**