

BHRIHANMUMBAI MUNICIPAL CORPORATION
MUMBAI FIRE BRIGADE

Sub: Fire-safety requirements for the proposed construction of a high-rise residential building (Proposed Redevelopment of Existing Building known as 'Datta Dham') on plot bearing C.T.S. No. 2394/A of Eksar Village at Devidas Road, Borivali (W) Mumbai.

Ref: 1) Online submission from **Mr. Ashok Gandhi**, Architect.
2) Online file No. **P-18637/2023/(2394)/R/N Ward/EKSAR (S) R/N-CFO/1/New.**

Mr. Ashok Gandhi, Architect,

This is a proposal for the construction of high rise residential building having part basement (-3.90 mtrs) for pump room + Ground floor on stilt + 1st to 3rd podium floors for car parking by way of 6.00 mtrs wide two-way ramp + 4th to 21st upper residential floors with a total height of 69.95 mtrs measured from general ground level to terrace level as shown on the plan.

The details of floor-wise users of the building will be as follows:

Floor Level	Users
Part basement (-3.90 mtrs)	Pump room + U.G. water storage tank
Ground floor on stilt	Entrance lobby + Meter room + Society office + Substation + Servant toilet + Surface car parking & 02 tier stack car parking in stilt area
1 st & 2 nd podium floor	Surface car parking by way of a 6.00 meters wide two way ramp on each floor
3 rd podium floor	Two-wheeler parking & Surface car parking by way of 6.00 mtrs wide two way ramp + Fitness centre + Servant toilet
4 th to 6 th , 8 th to 13 th , 15 th to 21 st floor	04 nos. of residential flats on each floor
7 th & 14 th floor	03 nos. of residential flats + Refuge area on each floor
Terrace	Terrace- open to the sky (treated as refuge area)

Details of the Staircase provided for the building are as follows:

No. of staircase	Width	From – To	Type of staircase
01 No.	1.50 mtrs	Leading from the ground floor to the terrace level	Enclosed type

The staircase is externally located & adequately ventilated to outside air as shown on the plan.

Details of Lifts provided for the building are as follows:

No. of lifts	Type of lifts	Profile
02 Nos.	Passenger lifts	Each leading from the ground floor to the terrace floor level
01 No.	Fireman evacuation lift	Leading from ground floor to top floor level & opening at staircase mid-landing level of each floor

	with smoke check lobby
The lift lobby/ common corridor on each floor is directly ventilated to the outside air as shown on the plans.	

Details of Open Spaces:

The plot abuts 27.45 mtrs wide Existing Devidas Road on the South side as shown on the plan by the Architect.

The side open spaces all around the building are as under;

<u>Side</u>	<u>Building Line to podium line</u>	<u>Podium line to plot Boundary</u>	<u>Building line to plot Boundary</u>
North	6.23 mtrs to 7.53 mtrs	1.60 mtrs to 1.82 mtrs (Including LOS)	7.88 mtrs to 9.37 mtrs (Including LOS)
South	4.54 mtrs to 7.20 mtrs	3.00 mtrs to 8.38 mtrs (Including LOS) + 27.45 mtrs wide Existing Devidas Road	7.53 mtrs to 13.24 Mtrs (Including LOS) + 27.45 mtrs wide Existing Devidas Road
East	0.66 mtrs to 12.60 mtrs	6.12 mtrs to 19.33 mtrs	8.06 mtrs to 19.33 mtrs
West	1.83 mtrs to 6.88 mtrs	1.50 mtrs to 1.96 mtrs (Including LOS)	3.35 mtrs to 8.72 mtrs (Including LOS)

Details of the refuge area are as follows:

<u>Refuge floor</u>	<u>Refuge area in Sq.mtrs</u>		<u>At the height of the refuge floor in mtrs from general ground level.</u>
	<u>(Required)</u>	<u>(Proposed)</u>	
7 th floor	75.43	77.53	22.70 mtrs
14 th floor	110.29	111.29	44.75 mtrs

In addition to above, the terrace of the building will be treated as a refuge area. Refuge area calculation shall be verified by E.E.B.P.(W.S.). Excess refuge area shall be counted in FSI as per DCPR 2034.

The proposal has been considered favorably taking into consideration the following; -

- i) The plot abuts 27.45 mtrs wide Existing Devidas Road on South side as shown on the plan by the Architect.
- ii) There shall be no compound wall on 27.45 mtrs wide Existing Devidas Road on South side shown on the plan by the Architect.
- iii) The Architect has proposed a refuge area facing road side i.e. on the South side from where specialized fire appliances of this department can be operated in case of emergency.
- iv) As per norms, 3rd refuge area is to be provided on the 21st floor in addition to the refuge area on the 7th & 14th floors. However due to planning constraints, the Architect has not proposed a refuge area on the 21st floor. However, the Architect has included refuge area calculations for the 21st floor in the refuge area calculations of the 14th floor and has requested this department to consider the terrace above 21st floor to be treated as a refuge area in addition to the refuge area provided on 7th & 14th floor. However, the same is considered by this department as there is only one floor i.e. 21st floor.
- v) The architect has proposed open space of minimum 6.00 mtrs on East side of

the plot. Further, the Architect has proposed Fireman evacuation lift leading from ground to top floor level with smoke check lobby opening at staircase mid-landing on each floor of the building as shown on the plan. However, the same is considered as per circular no. CHE/HRB/6159/DPWS dated 15/07/2019 issued by Ch.E.(D.P.).

- vi) Automatic sprinkler system will be provided in the car parking area on ground floor & each podium floor covering each car parking, in fitness centre, in society office, in each habitable room of each residential flat on each floor & lift lobby/common corridor of each floor as per relevant I.S. standards.
- vii) Any additional fire safety requirements for the proposed building recommended in the future from the Mumbai Fire Brigade Officer before final occupation shall be complied with.

In view of the above as far as this department is concerned, this fire safety requirement letter is issued from fire safety point of view for the proposed construction of high rise residential building having part basement (-3.90 mtrs) for pump room + Ground floor on stilt + 1st to 3rd podium floors for car parking by way of 6.00 mtrs wide two-way ramp + 4th to 21st upper residential floors with a total height of 69.95 meters measured from general ground level to terrace level as per the details shown on the uploaded plan signed in token of approval, subject to satisfactory compliances of the following requirements;

1) ACCESS:

There shall be no compound wall on 27.45 mtrs wide Existing Devidas Road on South side. However, removable bollard chain link may be permitted at roadside. Courtyards shall be flushed with the road level.

2) COURTYARDS:

- i) The entire available courtyards on all sides of the building shall be paved suitably to bear the load of fire engines weighing up to 58 m. tones each with point load of 10 kg/cm²
- ii) All the courtyards shall be in one plane.
- iii) The courtyards shall be kept free from obstruction at all times.
- iv) No structure of any kind shall be permitted in the courtyards of the building.

3) STAIRCASE:

- i) 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 through at least one hour fire-resistant self-closing door placed in the enclosed wall of the staircase at landing.
- ii) The flight width of the staircase shall not be less than 1.50 mtrs throughout its height.
- iii) A 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 openings 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 staircase terrace 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 a height of not more than 1 meter.
- c) The glass front of 6-inch diameter with the breakable glass shall be provided just above the latch lock, to open the latch in case of an emergency by breaking glass.
- d) The door shall either be fitted with magnetic lock connected to the console & detection system or shall be synchronized with fire detection and alarm system.

4) PROTECTION TO STRUCTURAL STEEL:

- a) All the structural steel members i.e. columns, beams, etc., shall be protected with the fire-resisting materials and methods as stipulated under IS 1942-1960 as application for residential buildings.
- b) A certificate to that effect that the fire resistance protection has been provided as above shall be furnished from the chartered Structural Engineer at the time of application for occupying the building.

5) SURFACE CAR PARKING:

- a) Car parking shall be permitted in the designated area.
- b) Drainage of the car parking area of all the levels shall be laid independent from that of the buildings & it shall be provided with catch pit & fire trapped before connecting the building drainage or Municipal drainage.
- c) Drainage of the car parking areas at all the levels shall be so laid as to prevent any overflow in the staircase, lift shaft etc.
- d) The parking area shall not be used for dwelling purposes & repairing / maintenance purposes, at any time. Dwelling use of naked light/flame, and repairing /maintenance of vehicles shall be strictly prohibited in the parking area.
- e) The driveway shall be properly marked & maintained unobstructed.
- f) An automatic sprinkler system conforming to the standards laid down by relevant I.S. specifications shall be provided in the car parking area and same shall be coupled with wet riser system of the building.

6) STACK CAR PARKING:

- a) The designated parking shall be used for car parking only.
- b) The drainage of the car parking areas shall be separate from that of the building and shall be provided with a catch with fire trap before connecting to the Municipal Sewer.
- c) The parking area shall not be used for dwelling purposes and repair/maintenance of vehicles, storage, trade activity etc., at any time and use of naked light/flame shall be strictly prohibited.
- d) Vertical deck separation shall be provided between the upper & lower decks of stack parking by using non-perforated and noncombustible materials. (structural steel plate) 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.
- e) Elements of the stack car parking structure shall have 1 hr. fire resistance.
- f) Each car parking deck shall have 1 hr. fire resistance.

- g) Parking area shall be accessible by trained staff when carrying out the maintenance work.
- h) Entire car parking shall be provided with an automatic sprinkler system covering all levels of parking.
- i) The parking system is to be ceased during the maintenance operation.
- j) The driveways shall be properly marked & maintained unobstructed. Proper illuminated signage for escape routes, ramps, etc. shall be provided at prominent locations.

7) PART BASEMENT:

- i) The part basement shall be used for designated purposes only as shown in the plan.
- ii) The basement shall be provided with natural / Mechanical ventilation through cutouts as shown in the plan.
- iii) One Dry Chemical Powder fire extinguisher ABC type of 06 kgs. Capacity each shall be kept in part basement.

8) PODIUM FLOOR: -

- i) Podium shall be used for designated purposes as per shown on the plan.
- ii) All the sides of the stilted car parking shall be kept open except parapet walls of not more than 1.2 meters in height.
- iii) The Drencher system on the top of each podium floor shall be provided at the podium periphery.
- iv) The driveways shall be properly marked and maintained unobstructed, and proper illuminated signage shall be provided for escape routes, car lifts, etc. at prominent locations.

9) VERTICAL FINS (if provided):

Vertical fins of non-combustible type shall be provided on podium floors with sufficient openings for adequate natural ventilation and shall be of a solid core having a fire resistance of not less than one hour.

10) RAMPS FOR PARKING:

- a) The Ramps for parking as shown in the enclosed plan provided entry at the ground level.
- b) The gradient of the ramp shall be provided as per Reg. 37(16) of DCPR 2034.
- c) The access provided to the podium shall be kept unobstructed.

11) LIFT:

- i) Walls enclosing lift shafts shall have a fire resistance of not less than two hours.
- ii) Shafts shall have permanent vents of not less than 0.2 sq. mtrs. in a 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. Collapsible doors/shutters shall not be permitted.
- iv) One of the lifts shall be converted into a fire lift and shall conform to the specifications laid down under the D.C. Regulations.
- v) Thresholds of non-combustible material shall be provided at the entrance

of each landing door.

12) FIRE LIFT:

- a) To enable fire services 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 directly accessible to each floor.
- b) 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 a loading capacity of not less than 545 kgs. (8 persons lift) with automatic closing doors.
- c) There shall be an alternate electric supply from a generator/separate substation of an adequate capacity apart from the electric supply of the building and the cables run in a route safe from fire i.e. within the lift shaft. In case of failure of the normal electric supply, it shall automatically trip over to alternate supply.
- d) The operation of the fire lift should be by a simple toggle or two-button switch situated in a 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. The lift can be used by the occupants in normal times.
- e) The words 'Fire lift' shall be conspicuously displayed in fluorescent paint on the lift landing doors at each floor level.
- f) Landing doors and lift car doors of the lifts shall be of steel shuttered with fire resistance of one hour. Collapsible doors/shutters shall not be permitted.
- g) The speed of the lift shall be such that it can reach the top floor from ground level within one minute.

13) FIREMAN EVACUATION LIFT:

- a) The capacity of the Fireman Evacuation Lift shall be 845 to 1000 kgs. /8 to 15 persons and it shall be terminated on the ground floor or podium where a facility of assembly or evacuation is available in case of emergency.
- b) Fireman Evacuation Lift shall be housed in a separate core having a smoke check lobby with an opening on each floor and shall be attached to one of the staircases and required access to the staircase on each landing through fire resistance of two hours rating. Alternatively, a firemen evacuation lift shall be provided on every mid-landing of one of the enclosed staircases of the building and the staircase shall be protected with a smoke check lobby using a fire resistance door/ fire curtain or fire resistance glass having an hours rating.
- c) All the requirements about civil and electrical aspects mentioned in NBC for the Fire Lift shall apply to the Fireman Evacuation Lift.
- d) Fireman Evacuation Lift car doors and landing doors shall have two hours of 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) The Fireman Evacuation Lift shall have emergency operation switch which will be only operated by fire brigade personnel. On actuation of the switch the Fireman 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 on the ground floor.
- h) All the electrical cables shall be fire retardant with low smoke hazard complying with relevant BIS standards.
- i) The Fireman Evacuation Lift car shall be made of non-combustible material including an interior having a minimum of two hours of resistance.
- j) Lift maintenance shall be carried out only by Lift Manufacturing or Installation Company.
- k) The Fireman 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.
- l) The smoke check lobby with the evacuation lift shall have a positive level difference of a minimum of 75 mm concerning staircase landing or mid-landing level to avoid ingress of water in the fireman lift shaft

14) ESCAPE ROUTE FROM FLAT TO STAIRCASE:

- i) The corridor/lift lobby at each floor level shall be ventilated to the outside air as shown on the plan & shall be kept free from obstructions at all times.
- ii) Permanent ventilation in the form of a grill provided to the corridor / lift lobby/staircase area shall not be bricked up or closed at any time in the future.

15) ENTRANCE DOORS: -

- a) All flat entrance doors, kitchen doors (if provided), fitness centre, society office, staircase & refuge doors shall be of solid core having fire resistance of not less than one hour (solid wood of 45 mm thickness.)
- b) The fire resistance rating for staircase F.R.D., Lift lobby & lift doors as per N.B.C. provisions.

16) ELECTRIC CABLE DUCT AND ELECTRIC METER ROOM:

- i) Electric cable duct shall be exclusively used for electric cables and should not open in staircase enclosure.
- ii) Inspection doors for the duct shall have two hours of fire resistance.
- iii) Electric cables shall not pass through staircase enclosure and shall be taken in concealed manner.
- iv) Electric cables 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 duct.
- v) Electric wiring/ cable shall be non-toxic, non-flammable, low smoke hazard having copper core for the entire building with provision of ELCB/MCB.
- vi) An electric meter room shall be provided at the location marked on the plan. They shall be adequately ventilated.

17) ESCAPE ROUTE LIGHTING:

Escape route lighting (staircase and corridor lighting) shall be on independent circuits as per rules.

18) CORRIDOR / LIFT LOBBY:

- a) The corridor/lift lobby at each floor level shall be naturally ventilated as shown in the plan.
- b) The common corridor / lift lobby at each floor level shall be kept free from obstructions at all times.

19) STAIRCASE AND CORRIDOR LIGHTING:

- a) The staircase and corridor lighting shall be on separate circuits and shall be independently connected so that they can 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.
- b) Staircase and corridor lighting shall also be connected to alternate supply.

20) 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 non-combustible materials.

21) MATERIALS FOR INTERIOR DECORATION/FURNISHING:

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

22) FIRE FIGHTING REQUIREMENTS: -:

A) UNDERGROUND WATER STORAGE TANK:

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

B) OVERHEAD WATER STORAGE TANK:

A tank of 30,000 liters capacity shall be provided above the staircase shaft at the terrace level. The design shall be approved by form H.E.'s department before erection. The tank shall be connected to the wet riser through a booster pump through a non-return valve and gate valve.

C) WET RISER CUM DOWN COMER: -

A wet riser of internal diameter of 15 cms. of G.I. 'C' class pipe shall be provided as shown on the uploaded plan, with twin hydrant outlet and hose reel on each floor in such a way as not to reduce the width of the passage as shown on the enclosed plan. Pressure-reducing discs or orifices shall be provided at the 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 provided to connect the mobile pump of the fire service independently to (a) The wet riser cum down comer, (b) the Sprinkler system (c) drencher system, etc.

- ii) A breeching connection inlet shall be provided to refill the U.G. tank,
- iii) Operating switches of fire pumps shall be also provided in glass-fronted boxes on the ground floor.

E) AUTOMATIC SPRINKLERS SYSTEM:

Automatic sprinkler system will be provided in car parking area on ground floor & and each podium floor covering each car parking, in fitness centre, in society office, in each habitable room of each residential flat on each floor & lift lobby/common corridor of each floor as per relevant I.S. standards.

F) AUTOMATIC DRENCHER SYSTEM:

An automatic drencher system shall be provided on the top of the periphery of each podium floor & shall be at the external wall at the ceiling level of the podium floors & connected to the main sprinkler pump. The automatic drencher system shall be installed as per the standard laid down by relevant I.S. specifications.

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

- a) Wet riser shall be connected to a fire pump at the ground level of a capacity of not less than 2400 liters/min. capable of giving a pressure of not less than 3.2 kgs/sq.cms. at the topmost hydrant.
- b) Booster pump of capacity 900 liters/min. giving a pressure of not less than 3.2 kgs./sq.cms. at the topmost hydrant outlet of each wet riser shall be provided for the overhead tank at the terrace level.
- c) Two-way switches for each booster pump shall be provided at the top three floor levels of the building as well as at ground level easily accessible/ noticeable places of the building.
- d) A sprinkler pump of suitable capacity along with a jockey pump shall be provided for an automatic sprinkler system.
- e) Only surface-mounted pumps or vertical turbine pumps shall be installed for firefighting installation with adequate size pump room. (submersible pump is not permitted).
- f) Operating switches for all pumps shall be also provided in glass-fronted boxes on the ground floor.
- g) Electric supply (normal) to these pumps shall be on an independent circuit.

H) EXTERNAL HYDRANTS:

Courtyard hydrants shall be provided at a distance of every 30.00 mtrs. around the building within the confines of the ground & and each podium floor.

I) HOSES & HOSE BOXES:

One Hose Box, each with two hoses of 15mts length of 63mm dia. along with a branch shall be provided and shall be kept on ground floor, podium floor as well as on each floor at easily accessible places.

- J) AUTOMATIC SMOKE DETECTION SYSTEM:**
An automatic smoke detection system shall be installed in the fitness centre, society office, pump room, lift machine room, in electric meter room & substation as per IS specifications and a console panel shall be provided on the ground floor.
- K) ALTERNATE SOURCE OF POWER SUPPLY:**
An alternate source of LV/HV supply from a separate substation or a D.G. set with an appropriate changeover over switch shall be provided for the fire lift, fireman evacuation lift, fire pump, booster pump, sprinkler pump, jockey pump, staircase, and corridor lighting circuits and fire alarm system. It shall be housed in a separate cabin.
- L) PORTABLE FIRE EXTINGUISHERS: -.**
- a) One dry chemical powder (ABC type) fire extinguisher of 06 kgs. Capacity having BIS certification mark and one no. of a bucket filled with dry clean sand shall be kept in substation, in electric meter room, in each lift machine room & pump room.
 - b) Two dry chemical powder (ABC type) fire extinguishers of 06 kgs. Capacity each having a BIS certification mark and two buckets filled with dry clean sand shall be kept for every 100.00 sq. mtrs area of parking on the ground floor & and on each podium floor.
 - c) One dry chemical powder type fire extinguisher of 06 kgs. Capacity having BIS Certification mark shall be kept in the fitness center, society office & in the lift lobby / common corridor on each floor of the building.
- 23) FIRE ALARM SYSTEM:**
The entire building shall be provided with a manual fire alarm system with the main control panel on the ground floor level and pillbox and hooters on each of the upper floors. The layout of the fire alarm system shall be by IS specification.
- 24) PUBLIC ADDRESS SYSTEM:**
The building shall be provided with a public address system as per the rules with the main control operator at the console panel on ground floor.
- 25) SIGNAGES:**
Self-glowing/fluorescent exit signs in green color shall be provided, showing the means of escape for the entire building.
- 26) PANEL BOARD OF FIRE-FIGHTING SYSTEM:**
Fire alarm system, public address system, Automatic smoke detection system, Automatic sprinkler system, alternate supply, etc. panels shall be installed on the ground floor of the building.
- 27) FIRE FIGHTING REQUIREMENTS AT THE CONSTRUCTION STAGE OF BUILDING:**
Following fire protection arrangement shall be provided with the following fire protection measures & same shall be maintained in good working condition at all times.

- a) 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 by good practice.
- b) Drums of 200 liters capacity filled with water & two fire buckets shall be kept on each floor for every 100 sq. mtrs area.
- c) A water storage tank of a minimum 20,000 liters capacity shall be kept at the site ready to use in case of emergency, which may be used for another construction purpose.

28) TRAINED STAFF / SECURITY GUARDS:

The trained staff/security guards having basic knowledge of fire-fighting & fixed fire-fighting installation shall be provided/posted in the building.

29) FIRE DRILLS / EVACUATION DRILLS:

Fire Drills and evacuation drills shall be conducted regularly in consultation with the Mumbai Fire Brigade & log of the same shall be maintained.

30) ELEVATION FEATURE:

As shown on the plan, elevation feature/treatment shall be given as per the MCGM guidelines, DCPR-2034, and circular u/no. u/no. Ch. Eng./D.P./30449/Gen. Dtd. 03.01.2017 and Ch. Eng./D.P./110/Gen. Dtd. 30.01.2020.

31) 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 an accredited testing agency/laboratory by the recognized IS:732-2019 code for practice for Electrical wiring installation.
- c) The complete installation of IOT-based microcontroller devices shall be checked and certified by the Chief Electrical Inspector, Govt. of Maharashtra, and a certificate to that effect shall be issued at that time of compliance.
- d) The data and the alert generated by IOT-based microcontroller devices shall be monitored by the building management system and the necessary corrective measures shall be taken by the owner, and occupier immediately.
- e) The data generated by IOT-based Micro Controller Devices shall be made available to the fire brigade department as and when required to investigate the cause of the fire.

32) ELECTRIC SUBSTATION (Dry type only):

- a) Only dry-type substations shall be installed.
- b) Entire installation of the substation including switchgear room, capacitors, transformer, etc. shall be confirmed to the Indian Electric Act/Rules in practice
- c) Cables in the cable trenches shall be coated with fire-retardant material. Automatic built-in circuit breakers shall be provided in the substation.
- d) The door of the sub-station shall be of two hours fire resistance.
- e) The capacity of the substation shall be as per the service provider's

- requirements.
- f) Adequate heating ventilation of the switch room is essential to prevent condensation of moisture.
 - g) The substation area shall be kept prohibited and no unauthorized person shall be allowed to enter the area.
 - h) The proposed substation shall be completely segregated either by brick masonry wall each of 9" thickness or R.C.C 4" thickness from the rest of the premises as shown in the enclosed plans.
 - i) The danger signage on the substation fencing along with the electric voltage load shall be installed.
 - j) Entrance and exit doors provided for transformer fencing shall be under lock and key at all times.
 - k) Two dry chemical power type (ABC stored pressure type) fire extinguishers each of 06 kgs. capacity each with a BIS certification mark coupled with four buckets filled with dry clean sand shall be kept in the sub-station at the entrance.

33) REFUGE AREA:

A. The refuge area provided on the 7th & and 14th floor of the building shall conform to the following requirements:

- i) The layout of the refuge area shall not be changed/modified at any time in the future.
- ii) The refuge area shall be provided with a railing/ parapet of 1.20 meters. height on the open side and shall be of sound construction.
- iii) There shall not be any opening/s into the refuge area from any portion of the occupied premises.
- iv) The refuge area shall be segregated by a brick masonry partition wall of 9" thickness or a concrete block wall of 6" thickness and access to the refuge area shall be gained through an hour fire resistance self-closing door.
- v) The refuge area shall be earmarked exclusively for the use of occupants as temporary shelter and for the use of the fire brigade or any other organization dealing with fire or another emergency when it occurs in the building and also for exercises/drills if conducted by the Fire Brigade Department.
- vi) The refuge area 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 encumbrance and encroachments at all times.
- vii) The entrance door to the refuge area shall be painted or fixed with a sign painted in luminous paint mentioning "REFUGE AREA IN CASE OF EMERGENCY".
- viii) An adequate drinking water facility shall be provided in the refuge area.
- ix) Adequate emergency lighting facility connected to the electric circuit to the staircase, corridor/passage, etc. lighting shall be provided in the refuge area.

B. The terrace of the building will be treated as a refuge area and shall be provided as under:

- i) The entrance door to the refuge area shall be painted or fixed with a sign painted in luminous paint mentioning "REFUGE AREA IN CASE OF

EMERGENCY”.

- ii) An adequate drinking water facility shall be provided in the refuge area.
- iii) Adequate emergency lighting facility connected to the electric circuit to the staircase, corridor/passage, etc. lighting shall be provided.

34) 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.

Now, the Architect vide his letter dated 27/09/2023 has certified the gross built-up area as 10,220.00 sq. mtrs for the said high-rise building and the party has paid scrutiny fees of Rs. 10,52,660/- vide Challan No.: CHE/BP/121496/23 dated 03/10/2023.

However, E.E.B.P. (W.S) is requested to verify the gross built-up area and inform this department if the same is found to be more for levying the additional scrutiny fees if any.

As per MFS & LA 2006, u/s. 11(1) & as certified by the Architect in the classification of the building stated in schedule II/part I/ part III, the party has paid fire service fees of Rs. 1,53,300/- vide CFC Receipt No. 5/10/2023/12034 dated 05/10/2023 on the gross built-up area of 10,220.00 sq. mtrs. for the said high rise residential building having a total height of 69.95 meters.

In this case, as per MFS&LA 2006 (2007 Of MAHA-3) &MFP &LSM Act amended 2023 & vide circular No (MFS-2023-59/895) Dated 2/6/2023 fire and emergency service fees are applicable from date 30/5/2023. However the guidelines for fee calculation from Maharashtra Fire Service & circular from Mumbai Fire Brigade is not yet received, Hence Architect/Developer shall pay the necessary fees as per demand letter from this department in future as soon as circular is received & on intimation to the Architect or before the final occupation, Accordingly Architect has also uploaded consent letter.

Note:

- 1) The fire-fighting installation shall be carried out by Govt. of Maharashtra approved Licensing Agency.
- 2) The width of the abutting road and open spaces are mentioned in the plans as submitted by the Architect attached herewith and these parameters shall be certified by the Architect.
- 3) E.E.B.P. (W.S.) shall examine the proposal in context with the relevant Regulations of DCPR-2034.
- 4) The schematic drawings/plans of the automatic sprinkler system, automatic smoke detection system, wet riser system, public address system, and manual fire alarm system shall be approved by the 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 & and 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 be used.

- 7) There shall be no tree located in the compulsory open spaces or in the access way near the Entrance gates.
- 8) This recommendation letter is issued only from the Fire Protection and fire-fighting requirements point of view on behalf of the online application from the Architect. If any matter about authenticity or legality shall be cleared by the concerned Owner/Occupier/Developer/ Architect, etc.
- 9) The plans approved along with this recommendation letter are issued from a Fire Risk and life Safety point of view only. Approval of these plans does not mean in any way allowing construction of the building. It is the Architect /Developer's responsibility to obtain 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 the Owner/Occupier to provide the Fixed Fire Fighting installations which shall be maintained in good working order and efficient condition all the time, by the provisions of Maharashtra Fire Prevention and Life Safety Measures Act or the rules.
- 11) This recommendation letter is issued without prejudice to legal matters pending in the court of law, if any.

**Divisional Fire Officer
(Scrutiny, NOC preparation)**

**Deputy Chief Fire Officer
Final Approval**

Copy to: E.E.B.P.(W.S.)

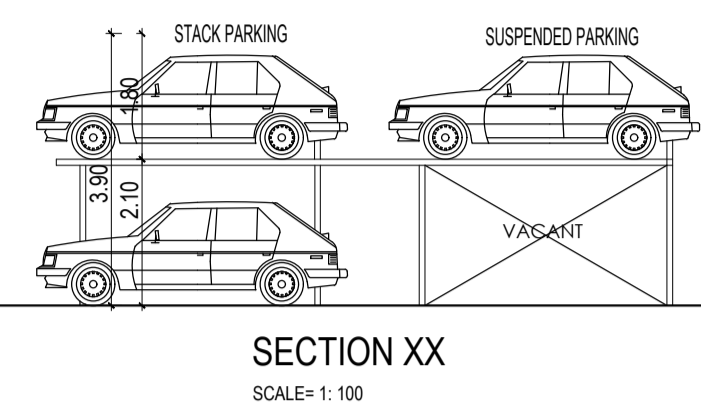
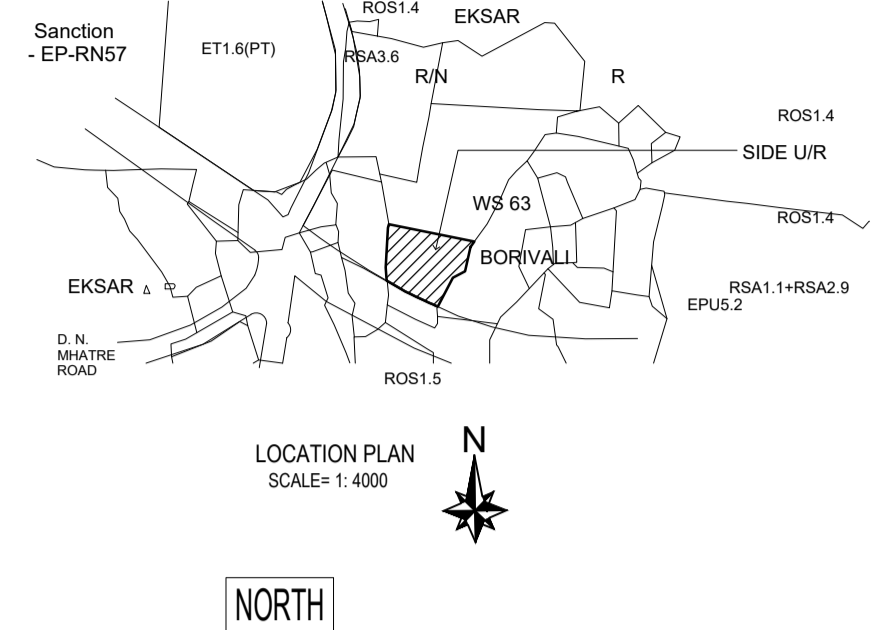
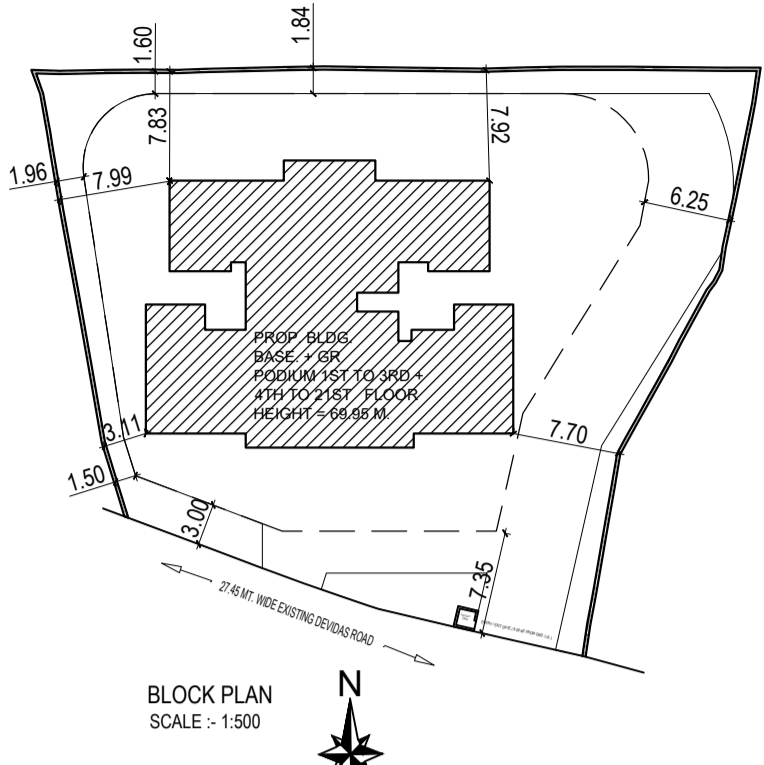
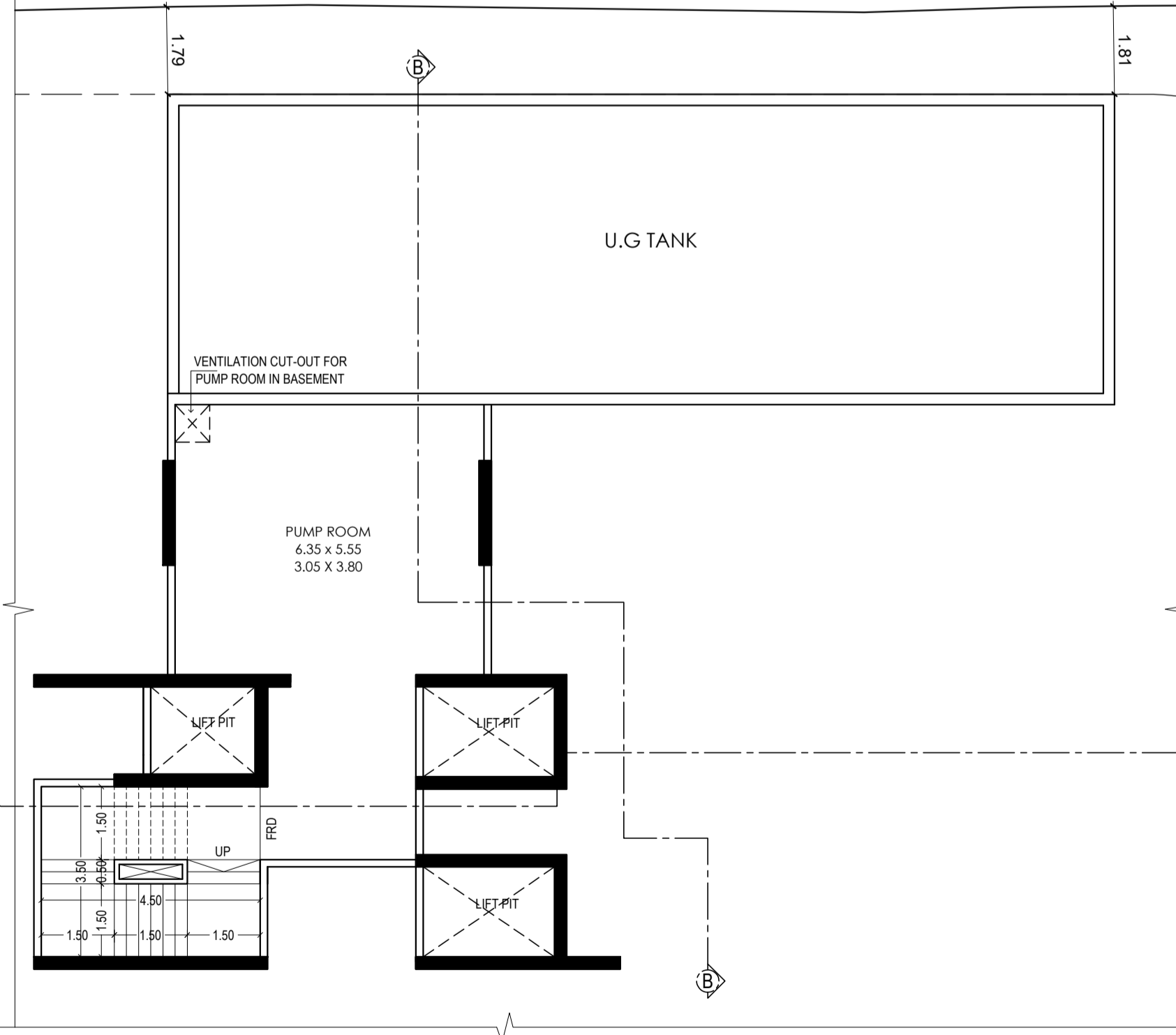


TABLE NO - 1
PROPOSED BUILT UP AREA STATEMENT

Sr. No.	Wing	Floor No.	Proposed Built up area (in Sq. mt.)		Total (4+5) (in Sq. mt.)	Staircase /Lift /Hobby (Area in Sq. mt.)		Flat/ N/ Society Office/ Fitness centre/ Refuge Area
			Commercial	Residential		Commercial	Residential	
1	A	BASEMENT	Nil	Nil	Nil	Nil	Nil	SOCIETY OFFICE/ STILT PARKING
		GR.	Nil	Nil	Nil	Nil	Nil	PODIUM PARKING
		1ST	Nil	Nil	Nil	Nil	Nil	PODIUM PARKING/FITNESS CENTRE
		2ND	Nil	Nil	Nil	Nil	Nil	REFUGE
		3RD	Nil	Nil	Nil	Nil	Nil	REFUGE
		4TH	Nil	249.28	249.28	Nil	59.81	REFUGE
		5TH	Nil	256.17	256.17	Nil	59.81	REFUGE
		6TH	Nil	259.32	259.32	Nil	59.81	REFUGE
		7TH	Nil	191.34	191.34	Nil	59.81	REFUGE
		8TH	Nil	268.89	268.89	Nil	59.81	REFUGE
		9TH	Nil	268.89	268.89	Nil	59.81	REFUGE
		10TH	Nil	283.41	283.41	Nil	59.72	REFUGE
		11TH	Nil	283.41	283.41	Nil	59.72	REFUGE
		12TH	Nil	283.41	283.41	Nil	59.72	REFUGE
13TH	Nil	306.50	306.50	Nil	59.72	REFUGE		
14TH	Nil	234.11	234.11	Nil	59.66	REFUGE		
15TH	Nil	345.37	345.37	Nil	59.66	REFUGE		
16TH	Nil	362.96	362.96	Nil	58.84	REFUGE		
17TH	Nil	362.96	362.96	Nil	58.84	REFUGE		
18TH	Nil	362.96	362.96	Nil	58.84	REFUGE		
19TH	Nil	362.96	362.96	Nil	58.84	REFUGE		
20TH	Nil	362.96	362.96	Nil	58.84	REFUGE		
21ST	Nil	362.96	362.96	Nil	58.84	REFUGE		
TERRACE	Nil	6.90	6.90	Nil	58.84	REFUGE		
COLUMN AREA	Nil	5414.74	5414.74	Nil	1128.94	REFUGE		
2	Total BUA Proposed	Nil	1403.01	1403.01	Nil	Nil	REFUGE	
3	Fungible compensatory area proposed: (pr.no.2/1.35 or as proposed)	Nil	4011.75	4011.75	Nil	Nil	REFUGE	
4	Net BUA Proposed (2-3)	Nil	5414.74	5414.74	Nil	1128.94	REFUGE	
5	Fitness Centre	Permissible = 5414.74 X 2% = 108.30 SQ.MT	Provided = 87.58 SQ.MT	Permissible = 20.00 SQ. MT.	Provided = 19.95 SQ. MT.	Nil	Nil	Provided at 3rd floor
6	Society Office	Permissible = Nil	Provided = Nil	Permissible = Nil	Provided = Nil	Nil	Nil	Provided at 5th floor
7	Amenity area/BUA in sqmt (Reg 14A or 14B)	Permissible = Nil	Provided = Nil	Permissible = Nil	Provided = Nil	Nil	Nil	Not Provided
8	IH/PH provided	Required BUA = Nil	Sq. Mt. = Nil	No. of Tenements = Nil	Provided BUA = Nil	Sq. Mt. = Nil	No. of Tenements = Nil	Not provided
9	Refuge Area AS PER D.C.P.R NO 48 (B)(A)(1).	75.43 SQ.MT (86.00 X 0.00%)	110.29 SQ.MT (11.29 X 0.00%)	185.72	77.53	Nil	14TH	BUA considered for Refuge Area Floor from --- to --- Total BUA 1885.85 Sq.Mt. 2757.24 Sq.Mt.



PARKING SUMMARY

	LARGE	SMALL	TOTAL
STILT FLOOR	12 NOS	26 NOS	38 NOS

PROFORMA - A

AREA STATEMENT	PLAN AS PER DCPR 2023 AREA IN SQ.MT
1. AREA OF PLOT	1664.70
(a) Area of Reservation in Plot	--
(b) Area of Road Set-back	--
(c) Area of D.P. Road	--
2. DEDUCTIONS FOR FOR RESERVATION ROAD AREA	--
(a) Road Set-back Area to be Handled Over (100%) (Regulation No 16)	--
(b) Proposed D.P. Road to be Handled Over (100%) (Regulation No 16)	--
(c) Reservation area (plot) to be Handled Over (Regulation No 17)	--
(d) Area under Encroachment	--
3. TOTAL DEDUCTIONS: [2(A) - 2(B) + 2(C)]	--
4. BALANCE AREA OF THE PLOT [1 Minus 3]	1664.70
5. PLOT AREA UNDER DEVELOPMENT	1664.70
6. ZONAL (Basic) FS (1 or 1.33)	1.00
7. PERMISSIBLE BUILT UP AREA AS PER ZONAL (Basic) FS	1664.70
8. BUILT UP AREA EQUAL TO AREA OF LAND HANDLED OVER AS PER REGULATION OF 30A)	--
(A) As per 2(a) and 2(b) except 2(a)(ii) above with in cap of 'admissible car' as column 6 of table - 12 on remaining / balance plot	--
(B) In case of 2(a)(ii) permissible over and above 200% For Set-Back (0.00 x 2) = --	--
(C) Permissible BUA of remaining / balance plot	--
9. BUILT UP AREA IN LIEU OF COST OF CONSTRUCTION OF BUILT UP AMENITY TO BE HANDLED OVER	--
10. 15% of ar. no. 7b above or 19 sq.mt. per rehab tenements as per reg. 33(7b)	400.00
11. BUILT UP AREA DUE TO ADDITIONAL FS ON PAYMENT OF PREMIUM* AS PER TABLE NO 12 OF REGULATION NO 30A) SUBJECT TO REGULATION NO 30A(3)	882.35
12. ADDITIONAL FS PERMISSIBLE AS PER REG. 33(1b)	--
13. BUILT UP AREA TO BE ADMISSIBLE TO AS PER TABLE NO 12 OF REGULATION NO 30A) SUBJECT TO REGULATION NO 30A) (ROAD WIDTH 27 AS MT)	1664.70 X 1.00
(A) Slum TDR: (min. 20% of total permissible TDR) = 1664.70 x 20% sqmt	332.94
(B) General TDR = 1664.70 X 80% = 1331.76 - 400.00(33(7b)) = 931.76 sqmt	931.76
(C) Protected Area	--
(D) Twice Set Back Area Benefit: Within The Cap	--
(E) Total TDR Provided (A+B+C+D)	1264.70
14. PERMISSIBLE BUILT UP AREA (1+3+8+9+10+11+12+13)	4311.75
15. PROPOSED BUILT UP AREA	4311.75
(A) Residential Built up area	4311.75
(B) Commercial Built up area	4311.75
(C) Protected Area	4311.75
16. FUNGIBLE COMPENSATORY AREA AS PER REGULATION NO 31 (3)	--
(i) Permissible Fungible Compensatory Area For Rehab Component Without Charging Premium/Resident	651.17
(ii) Proposed Fungible Compensatory Area For Rehab Component Without Charging Premium/Resident	651.17
(iii) Fungible Area kept in Abeyance (Residential)	6.00
(iv) Permissible Fungible Compensatory Area by Charging Premium (Residential)	752.94
(v) Proposed Fungible Compensatory Area Available on Payment of Premium (Residential)	752.94
17. TOTAL BUILT UP AREA PROPOSED INCLUDING FUNGIBLE COMPENSATORY AREA [14 + 16(iii) + 16(iv) + 16(v)]	5414.74
18. FS CONSIDERED ON THE PLOT	2.50

PROFORMA - B

CONTENTS OF SHEET

GROUND FLOOR PLAN, PART BASEMENT PLAN, BLOCK PLAN, LOCATION PLAN, PROPOSED BUA STATEMENT, SECTION XX.

D.F.O. Dy.C.F.O.

DESCRIPTION OF PROPOSAL AND PROPERTY
PROPOSED REDEVELOPMENT OF EXISTING BUILDING ON PLOT BEARING C.T.S. NO. 2394/A OF EKSAR VILLAGE AT DEVIDAS ROAD, BORIVALI (W) MUMBAI.

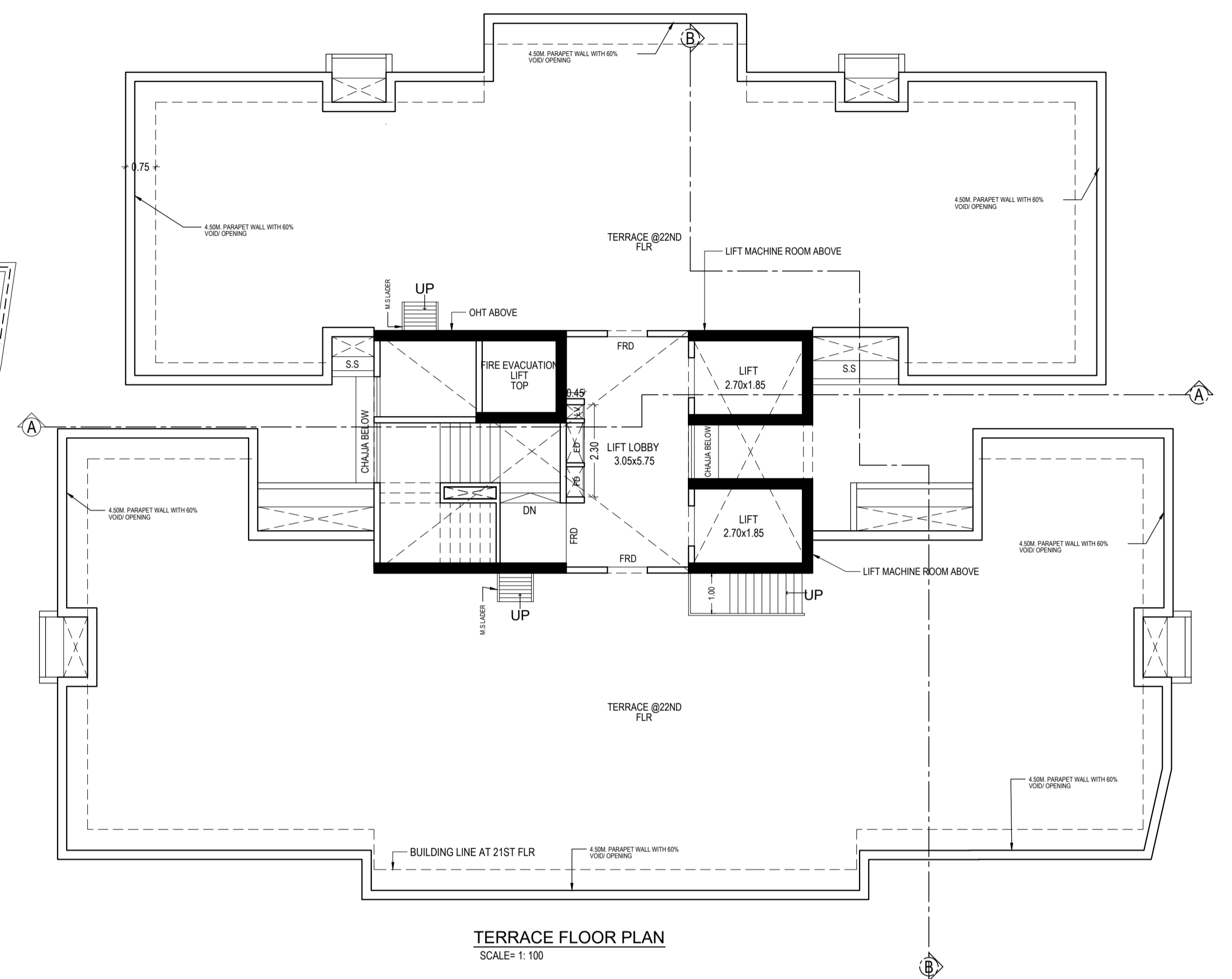
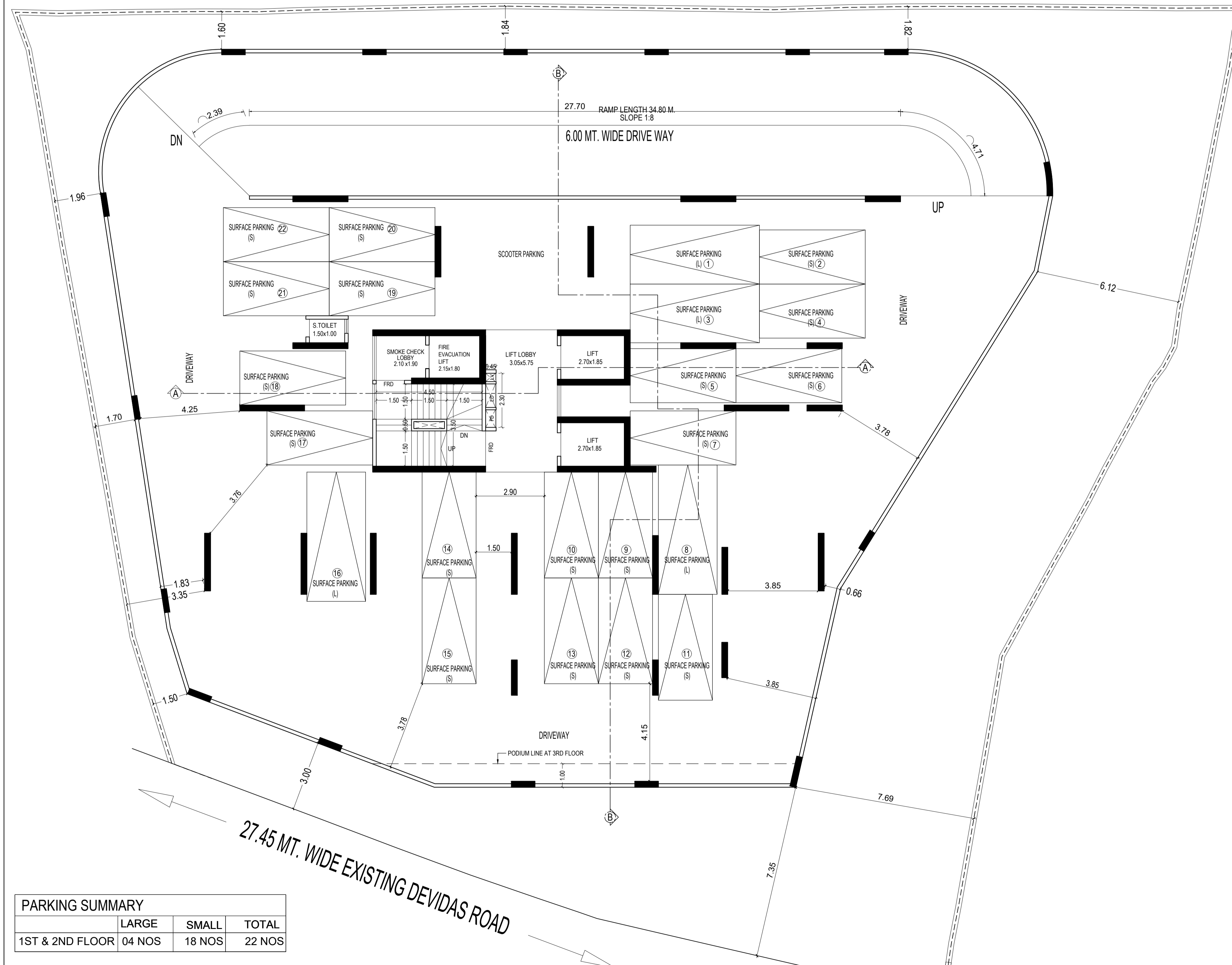
NAME ADDRESS & SIGNATURE OF OWNER / DEVELOPER
Ms. KUNJAL C. DEDHIA
DIRECTOR OF
M/S HINDUSTAN REALTY LTD
C/A TO DATTA DHAM CHS

NAME ADDRESS & SIGNATURE OF STRUCTURAL ENGINEER
ABHIL VINOOD HATHARPEKAR
AVP STRUCTURAL CONSULTANTS
B.E. (CIVIL), M.I.E.
BMCSTR40009956

NAME ADDRESS & SIGNATURE OF LICENSED ARCHITECT
ASHOK GANDHI
DATTATRAYA GANDHI
Date: 2023.10.09
11:12:26 +05'30'

ASHOK GANDHI CONSULTANTS LLP
SARITA S. MANJUNATH
ARCHITECTS PLANNERS VALUERS
303/304, E-SQUARE PREMISES, SUBHASH ROAD,
VILE PARLE (E), MUMBAI-400 057.
OFFICE : TEL: 022 48044074
M : 98218 39152, 98218 50189
sarita@ashokgandhiconsultants.com
info@ashokgandhiconsultants.com
LICENSE NO. CA1752187

DRAWN BY RAVI **CHECKED BY** AS SHOWN **SCALE** AS SHOWN **DATE** 09/10/2023

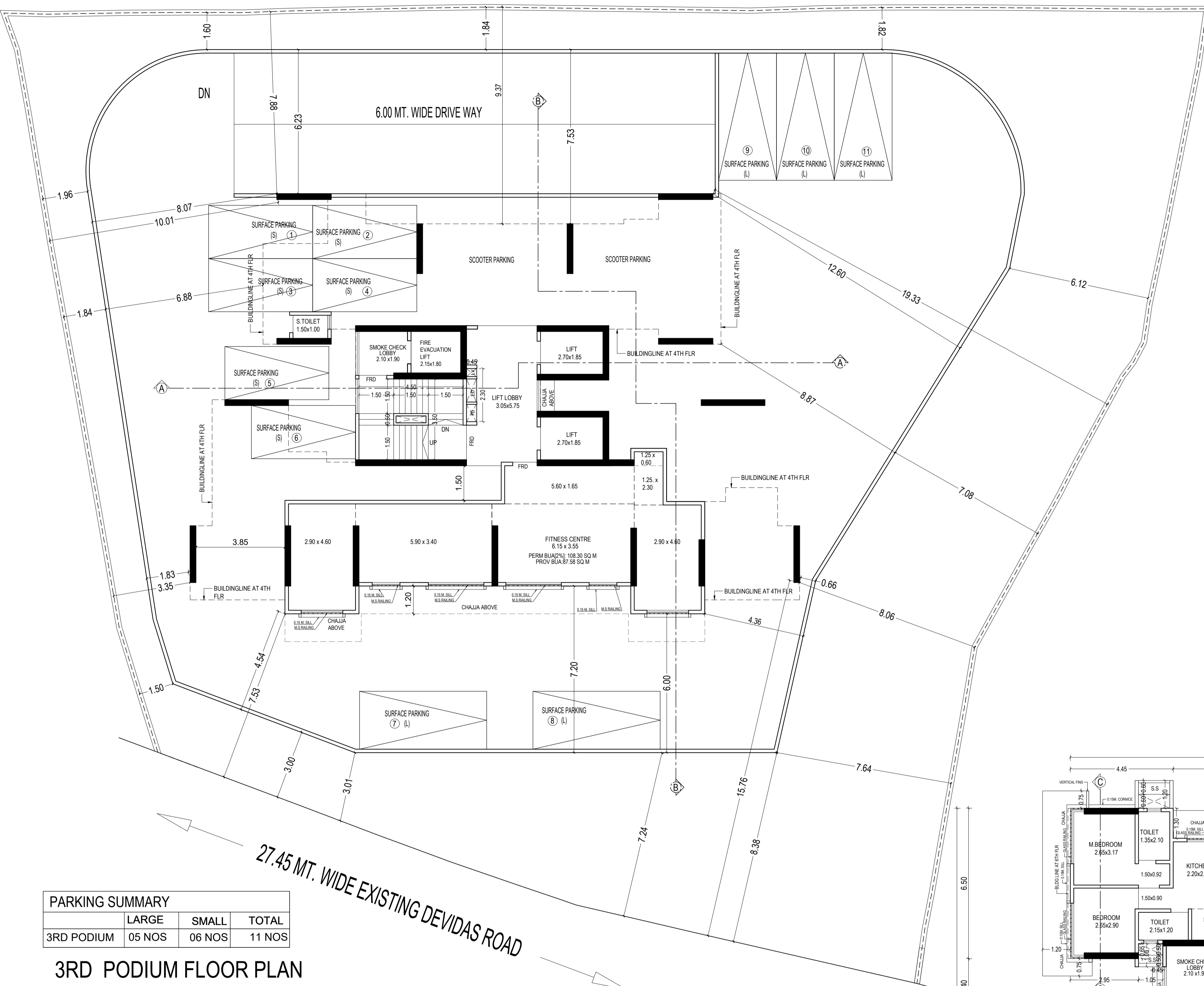


PARKING SUMMARY			
	LARGE	SMALL	TOTAL
1ST & 2ND FLOOR	04 NOS	18 NOS	22 NOS

1ST & 2ND PODIUM FLOOR PLAN
SCALE= 1: 100

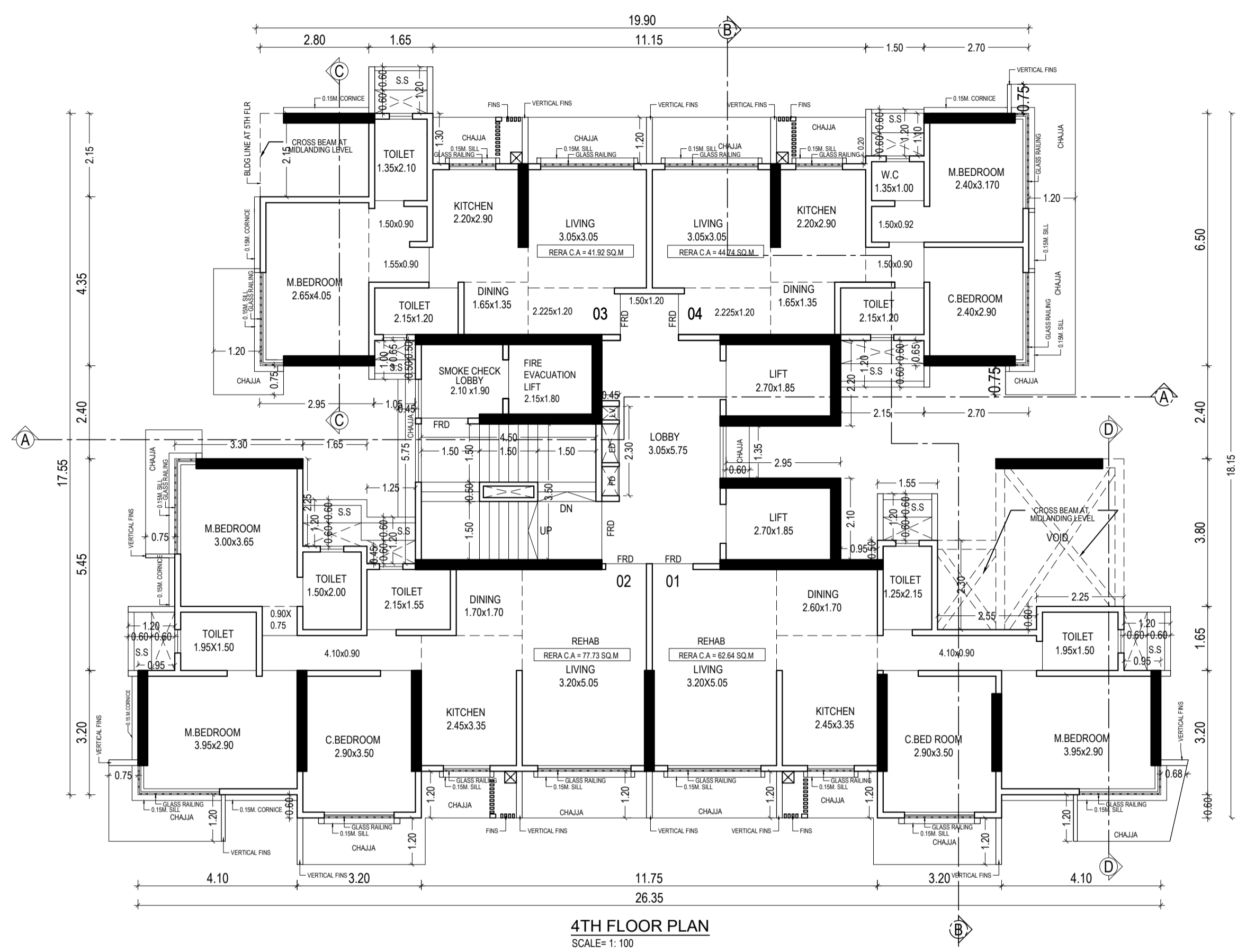
TERRACE FLOOR PLAN
SCALE= 1: 100

PROFORMA - B	
CONTENTS OF SHEET 1ST & 2ND PODIUM FLOOR PLAN, TERRACE FLOOR PLAN.	
D.F.O. Dy.C.F.O.	
NORTH	DESCRIPTION OF PROPOSAL AND PROPERTY
PROPOSED RE-DEVELOPMENT OF EXISTING BUILDING ON PLOT BEARING C.T.S. NO. 2394/A OF EKSAR VILLAGE AT DEVIDAS ROAD, BORIVALI (W) MUMBAI.	
NAME ADDRESS & SIGNATURE OF OWNER / DEVELOPER	
Ms. KUNJAL C. DEDHIA DIRECTOR OF M/S HINDUSTAN REALTY LTD C.A TO DATTA DHAM CHS ADDRESS 3rd FLOOR A WING VICTORY PARK CHANDAVARKAR ROAD, BORIVALI (WEST), MUMBAI 400092.	
NAME ADDRESS & SIGNATURE OF STRUCTURAL ENGINEER	
ABHIJIT VINOD PHATARPEKAR AVP STRUCTURAL CONSULTANTS B.E. (CIVIL), M.I.E. BMC/STR/84000956 ADDRESS: AA1201, NL ARYAVARTA, NL COMPLEX ANAND NAGAR, DAMHSAR EAST MUMBAI- 400 068	
DRAWN BY	CHECKED BY
RAVI	AS SHOWN
SCALE	DATE
	09/10/2023
NAME ADDRESS & SIGNATURE OF LICENSED ARCHITECT	
ASHOK DATTATRA YA GANDHI Digitally signed by ASHOK DATTATRAYA GANDHI Date: 2023.10.09 11:12:52 +05'30'	
ASHOK GANDHI CONSULTANTS LLP S R I T A S M A N J U N A T H ARCHITECTS PLANNERS VALUERS 303 / 304, E-SQUARE PREMISES, SUBHASH ROAD, VILE PARLE (E), MUMBAI-400 057. OFFICE : TEL:- 9227 490944074 M. -98210 39752, 98218 50189 sarita@ashokgandhiconsultants.com info@ashokgandhiconsultants.com LICENSE NO CA/75/2167	
SIGNATURE OF ARCHITECT	

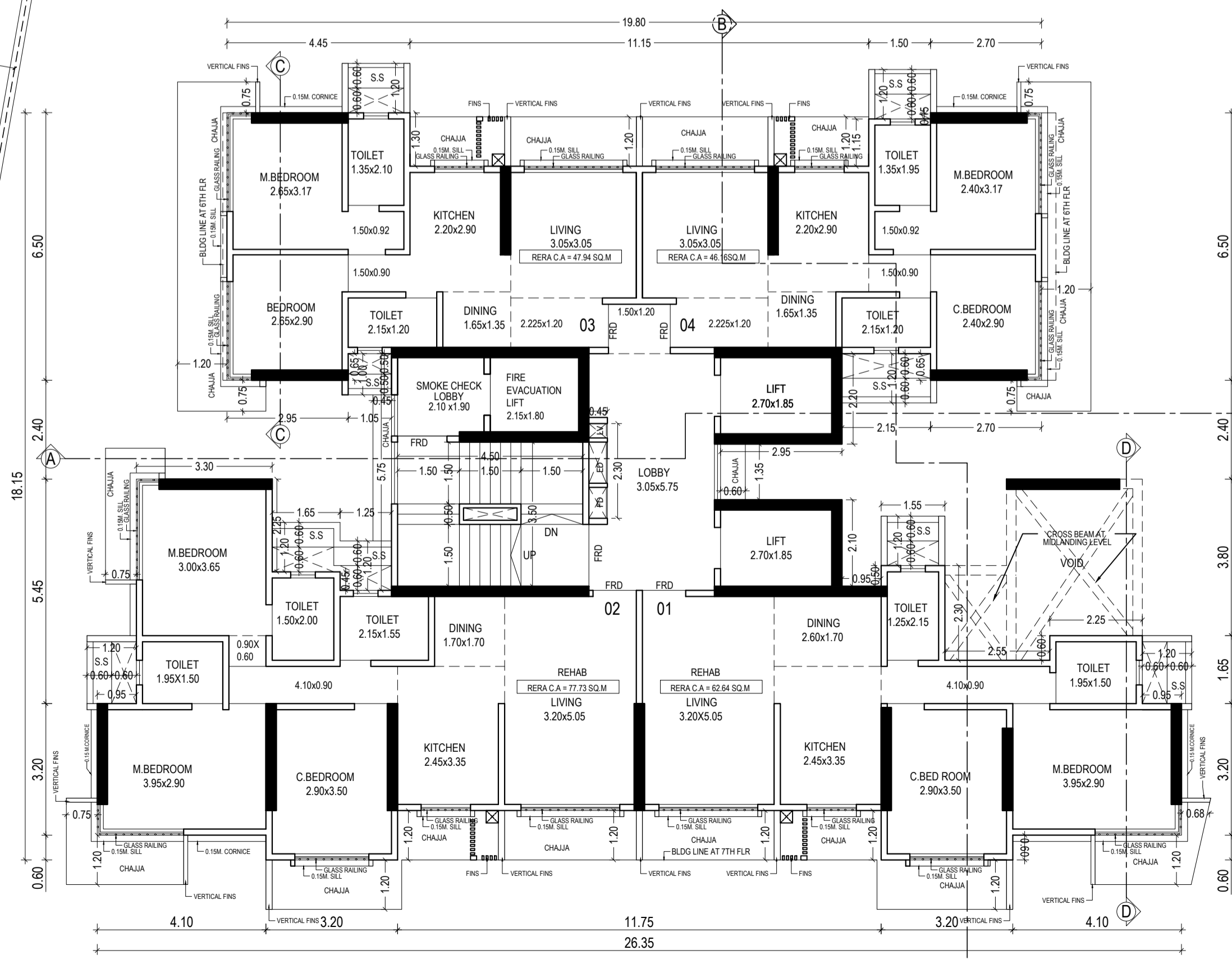


PARKING SUMMARY			
	LARGE	SMALL	TOTAL
3RD PODIUM	05 NOS	06 NOS	11 NOS

3RD PODIUM FLOOR PLAN
SCALE= 1: 100

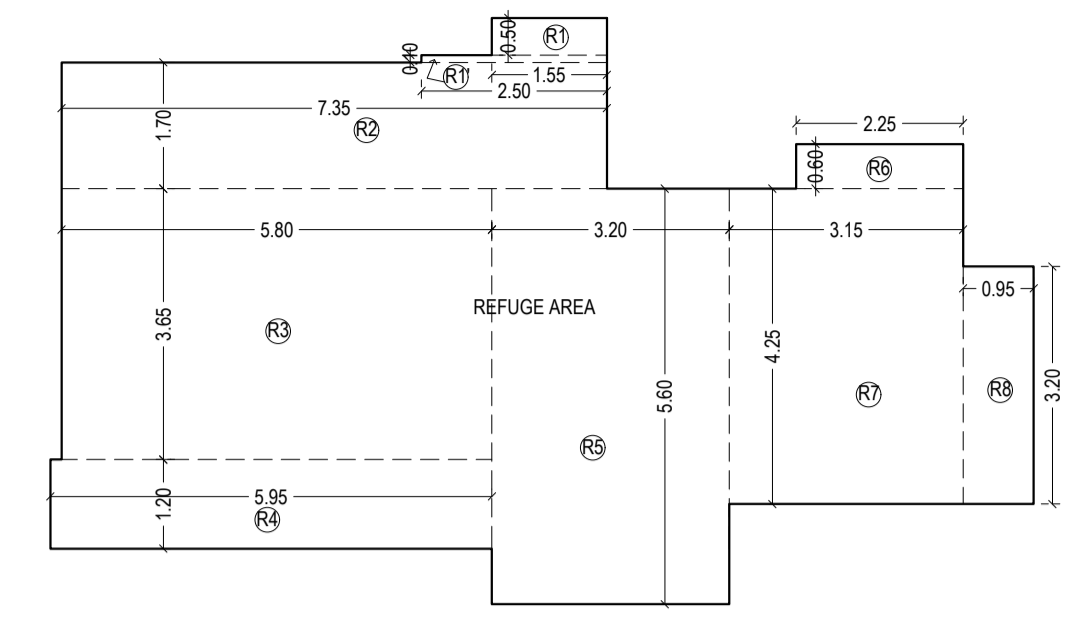
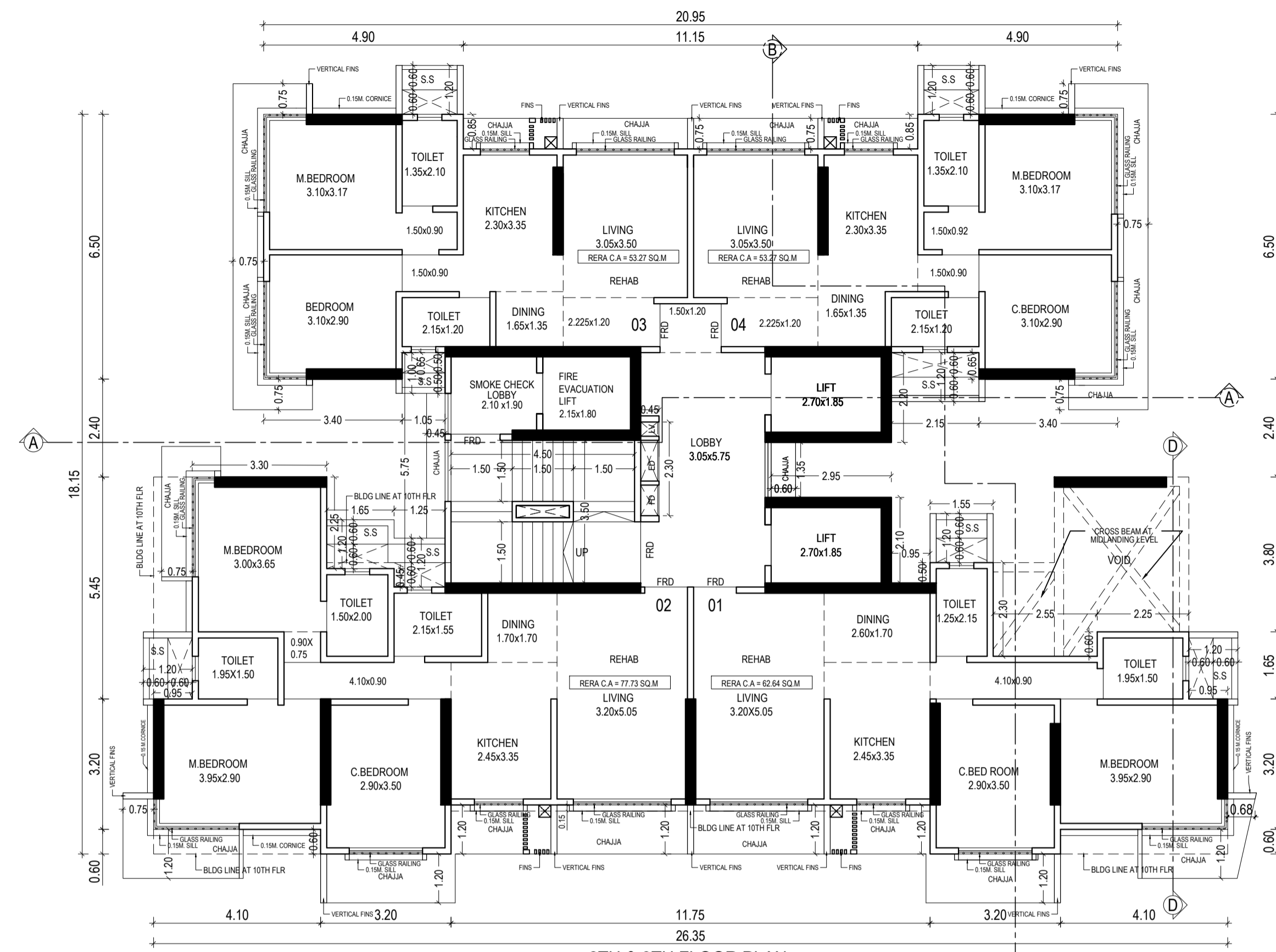
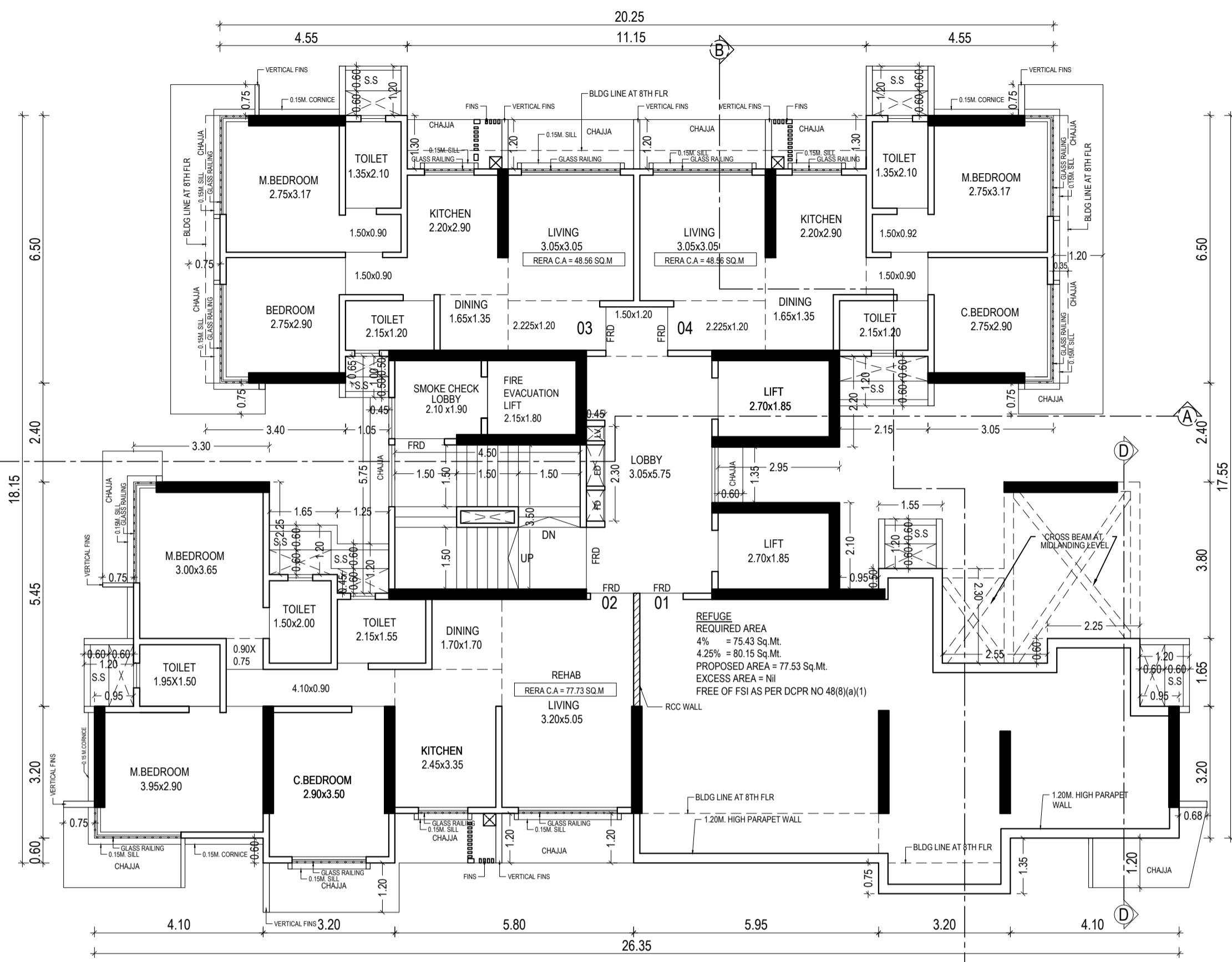


4TH FLOOR PLAN
SCALE= 1: 100



5TH FLOOR PLAN
SCALE= 1: 100

PROFORMA - B	
CONTENTS OF SHEET	
3RD PODIUM FLOOR PLAN, 4TH FLOOR PLAN, 5TH FLOOR PLAN.	
D.F.O. Dy.C.F.O.	
NORTH DESCRIPTION OF PROPOSAL AND PROPERTY	
PROPOSED RE-DEVELOPMENT OF EXISTING BUILDING ON PLOT BEARING C.T.S. NO. 2394/A OF EKSAR VILLAGE AT DEVIDAS ROAD, BORIVALI (W) MUMBAI.	
NAME ADDRESS & SIGNATURE OF OWNER / DEVELOPER	
Ms. KUNIAL C. DEDHIA DIRECTOR OF M/S HINDUSTAN REALTY LTD C/A TO DATTAM CHARK ADDRESS 3rd FLOOR A WING VICTORY PARK CHANDAVARKAR ROAD, BORIVALI (WEST), MUMBAI 400092.	
NAME ADDRESS & SIGNATURE OF STRUCTURAL ENGINEER	
ABHIJIT VINOD PHATARPEKAR AVP STRUCTURAL CONSULTANTS B.E. (CIVIL), M.I.E. BMC/STR/840009956 ADDRESS: AA1201, N. ARYAVARTI, N. COMPLEX ANAND NAGAR, DAHISAR EAST, MUMBAI- 400 068	
DRAWN BY	CHECKED BY
RAVI	AS SHOWN
SCALE	DATE
AS SHOWN	09/10/2023
NAME ADDRESS & SIGNATURE OF LICENSED ARCHITECT	
ASHOK GANDHI CONSULTANTS LLP S A R I T A S M A N J U N A T H ARCHITECTS PLANNERS VALUERS 303/304, E SQUARE PREMISES, SUBHASH ROAD, VILE PARLE (E), MUMBAI-400 057. OFFICE : TEL- 022 40044074 M. 98210 39752, 98218 50189 saritha@ashokgandhiconsultants.com info@ashokgandhiconsultants.com LICENSE NO CA/175167	



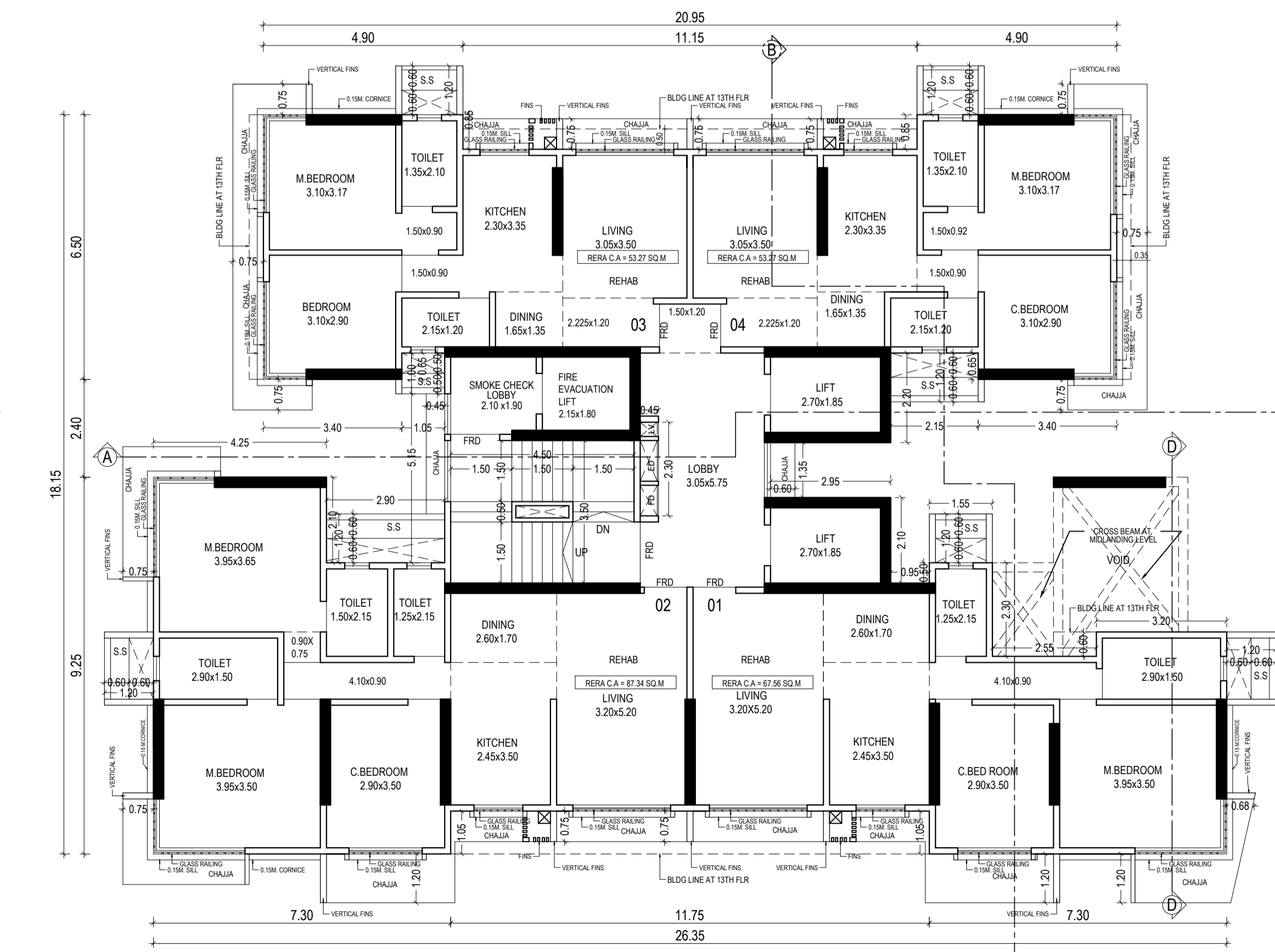
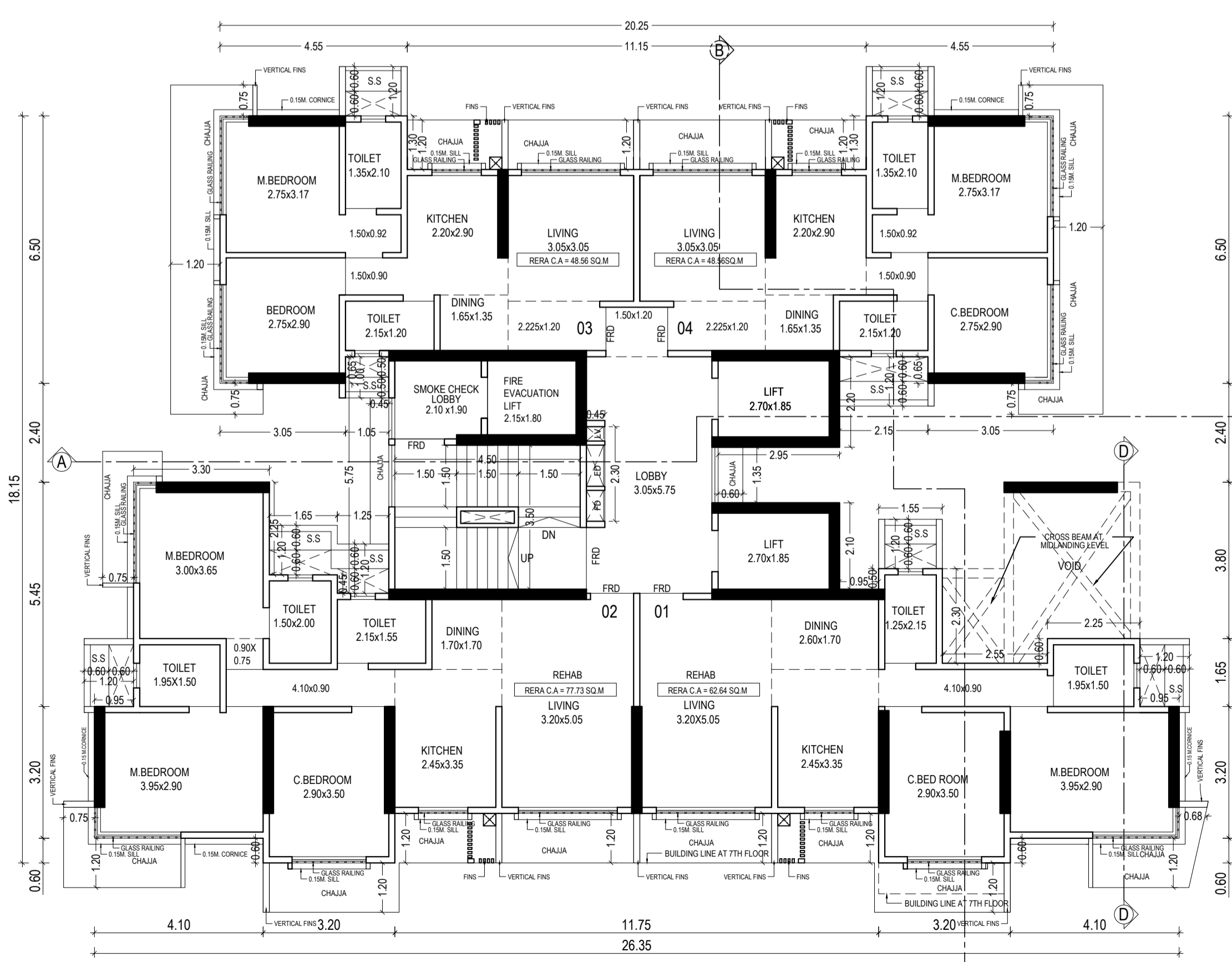
REFUGE AREA CALCULATION (7TH FLOOR)

R1	1.55 x 0.50 x 1.00	=	0.78 SQ.MT
R1'	2.50 x 0.10 x 1.00	=	0.25 SQ.MT
R2	7.35 x 1.70 x 1.00	=	12.50 SQ.MT
R3	5.80 x 3.65 x 1.00	=	21.17 SQ.MT
R4	5.95 x 1.20 x 1.00	=	7.14 SQ.MT
R5	3.20 x 5.60 x 1.00	=	17.92 SQ.MT
R6	2.25 x 0.60 x 1.00	=	1.35 SQ.MT
R7	3.15 x 4.25 x 1.00	=	13.39 SQ.MT
R8	0.95 x 3.20 x 1.00	=	3.04 SQ.MT
TOTAL			77.53 SQ.MT

REFUGE AREA CALCULATION 7TH FLR.

TOTAL REQ REFUGE AREA	AREA	IN SQ.MT
7TH FLR	191.34	SQ.MT
8th FLR	268.89	SQ.MT
9th FLR	268.89	SQ.MT
10th FLR	283.41	SQ.MT
11th FLR	283.41	SQ.MT
12th FLR	283.41	SQ.MT
13th FLR	306.50	SQ.MT
TOTAL	1885.85	SQ.MT
1885.85 x 4%	75.43	SQ.MT
1885.85 x 4.25%	80.15	SQ.MT
REFUGE AREA REQ.	80.15	SQ.MT
REFUGE AREA PROV.	77.53	SQ.MT

FREE OF FSI DCPR No. 48 (B) (1)



PROFORMA - B

CONTENTS OF SHEET
6TH FLOOR PLAN, 7TH FLOOR PLAN, 8TH & 9TH FLOOR PLAN, 10TH TO 12TH FLOOR PLAN, 7TH FLOOR REFUGE AREA DIAGRAM & CALCULATION.

D.F.O. **Dy.C.F.O.**

NORTH DESCRIPTION OF PROPOSAL AND PROPERTY
PROPOSED RE-DEVELOPMENT OF EXISTING BUILDING ON PLOT BEARING C.T.S. NO. 2394/A OF EKSAR VILLAGE AT DEVIDAS ROAD, BORIVALI (W) MUMBAI.

NAME ADDRESS & SIGNATURE OF OWNER / DEVELOPER
Ms. KUNJAL C. DEDHIA
DIRECTOR OF
M/S HINDUSTAN REALTY LTD
C/A TO DATTA DHAM CHS
ADDRESS
3rd FLOOR A WING VICTORY PARK
CHANDAVARKAR ROAD,
BORIVALI (WEST), MUMBAI 400092

NAME ADDRESS & SIGNATURE OF STRUCTURAL ENGINEER
OWNER / DEVELOPER SIGNATURE
ABHILASH PHATARPEKAR
AVP STRUCTURAL CONSULTANTS
B.E. (CIVIL), M.I.E.
BMCISTR40009956

ADDRESS: A/1201, N. ARYAVARTA,
N. COMPLEX ANAND NAGAR,
DAHISAR EAST,
MUMBAI-400 068

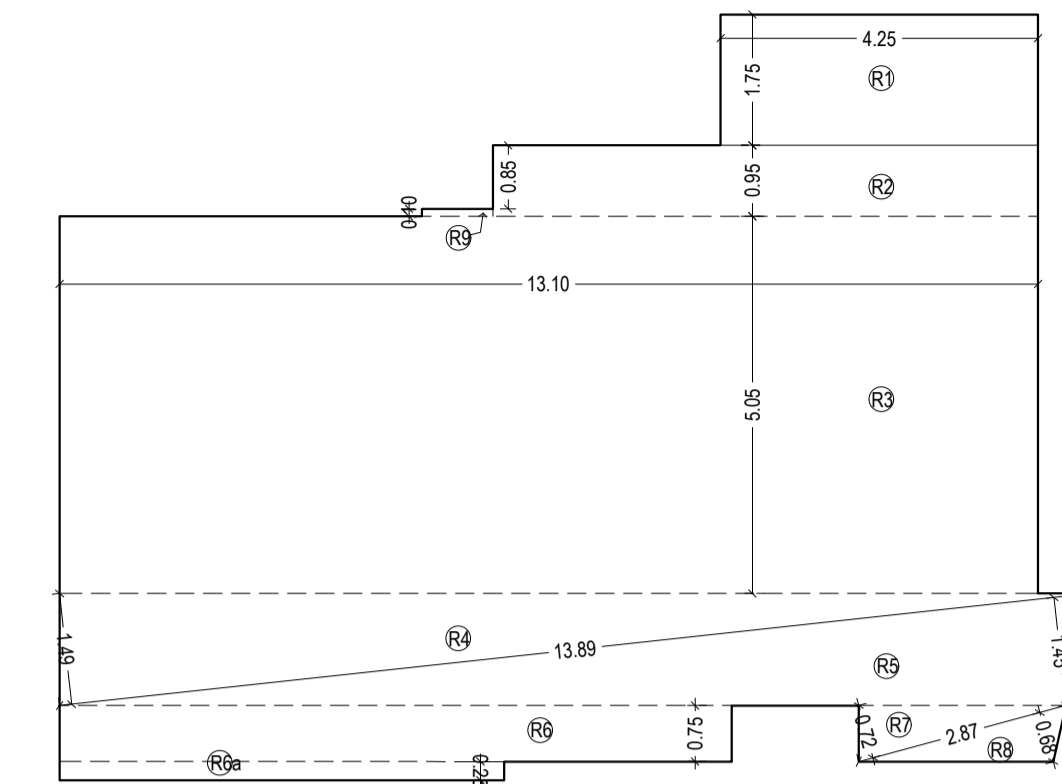
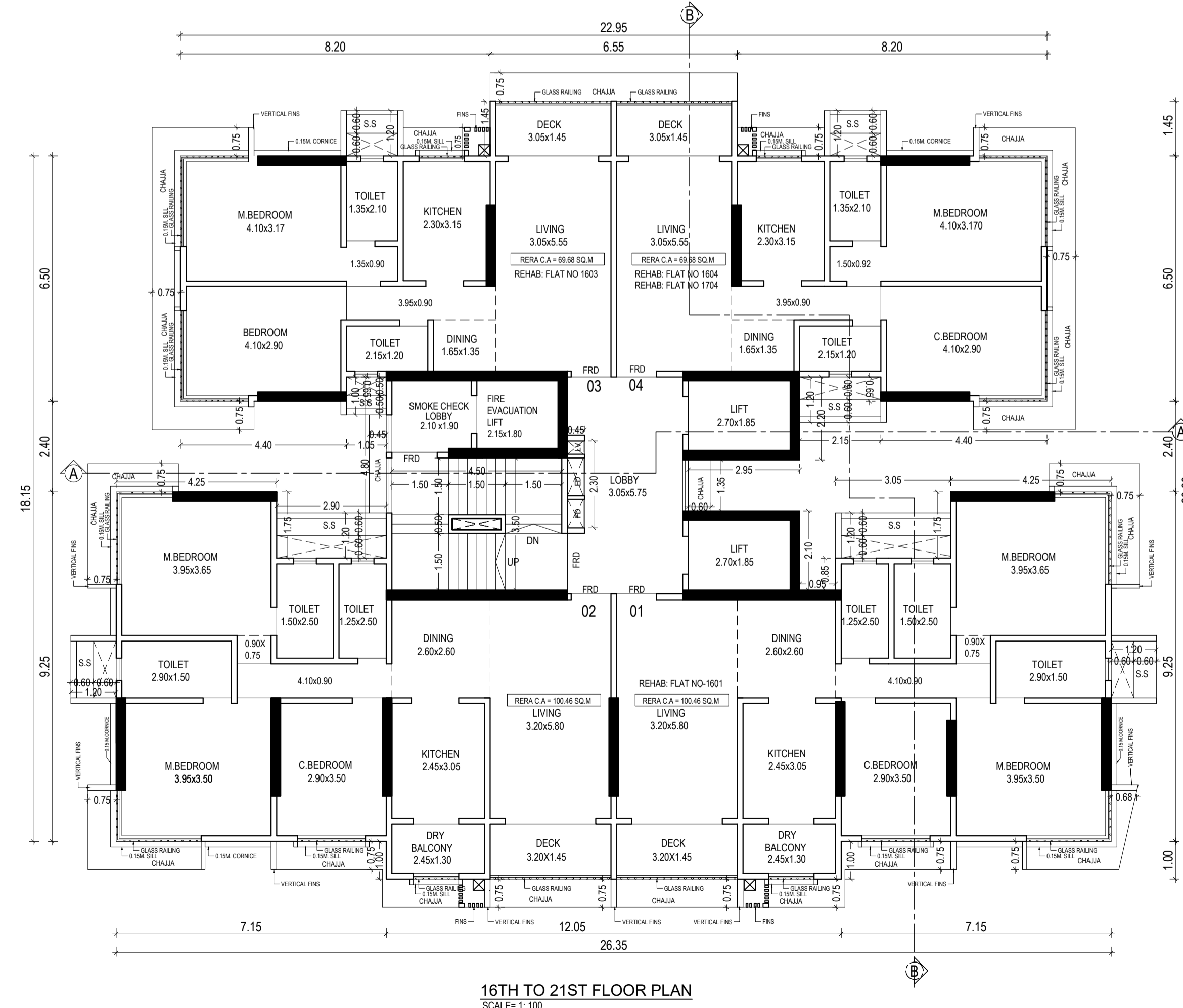
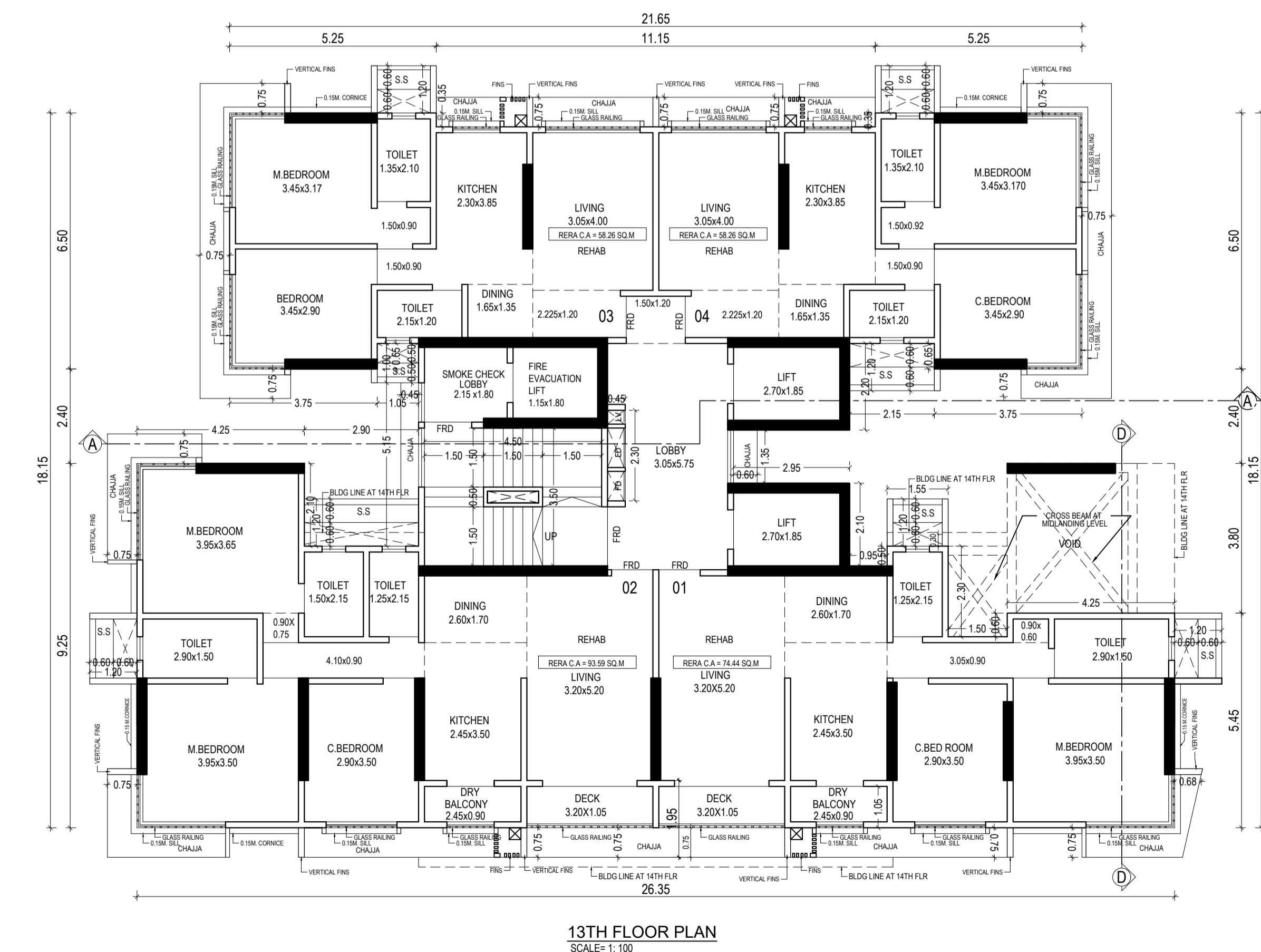
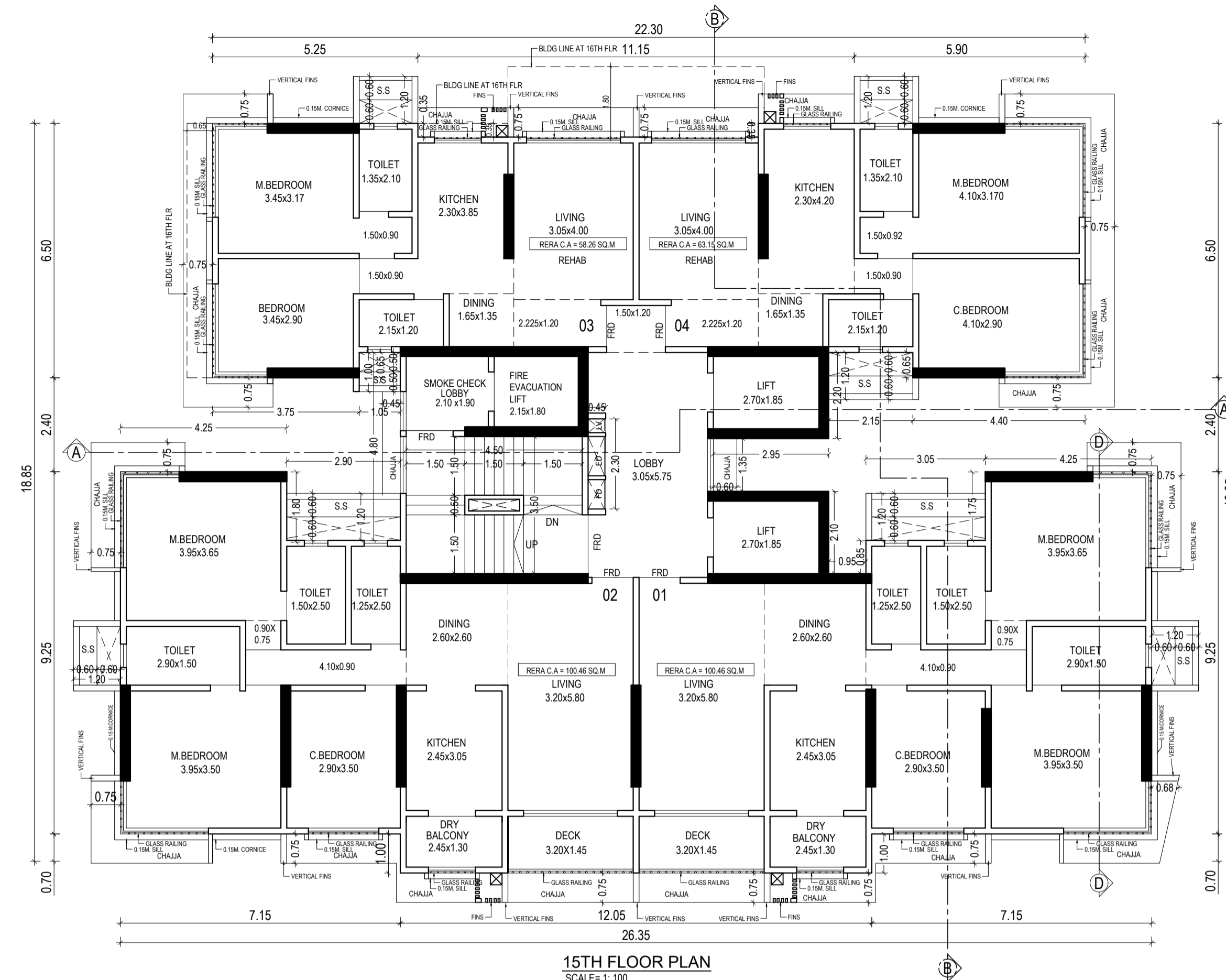
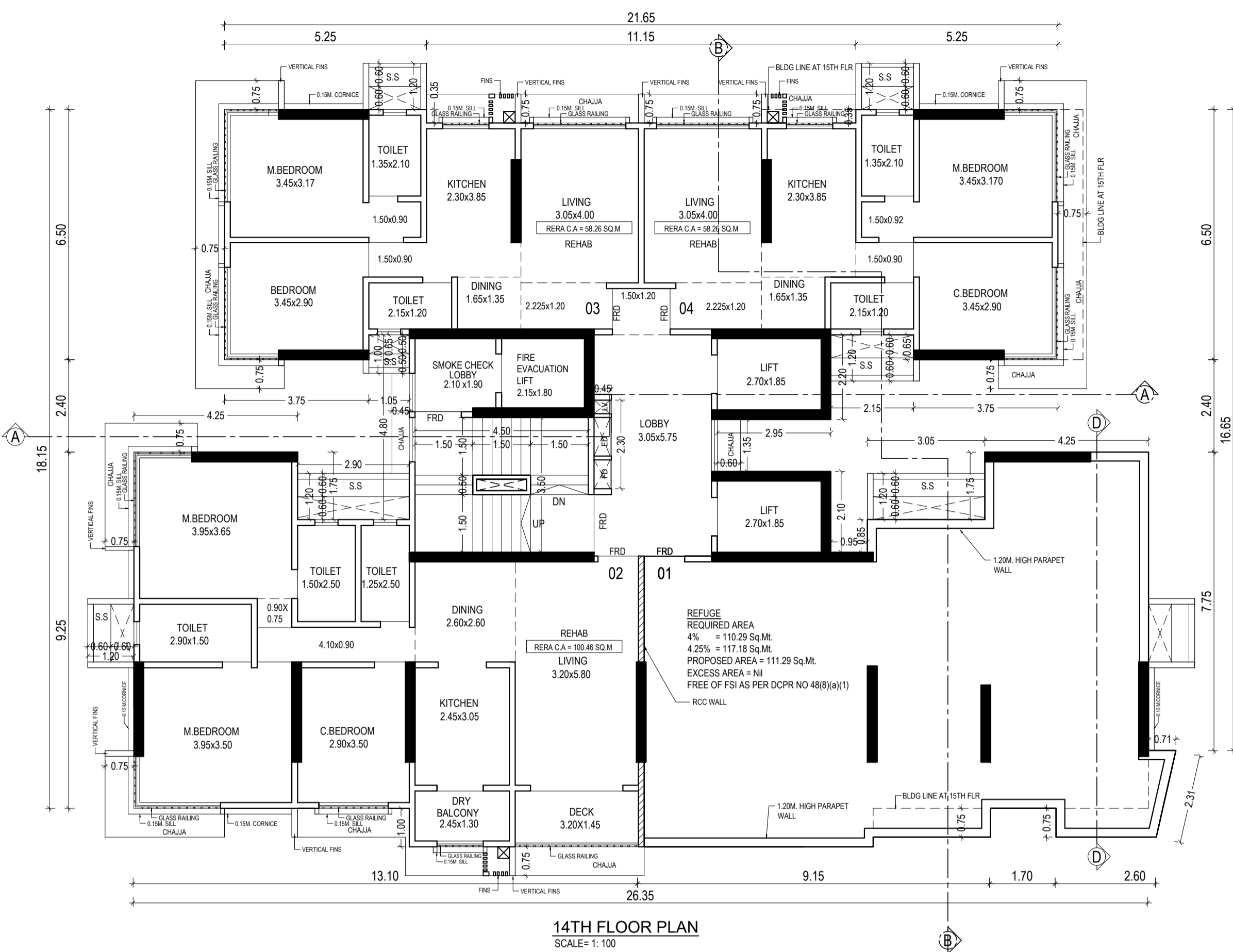
STRUCTURAL ENGINEER SIGNATURE

DRAWN BY RAVI **CHECKED BY** AS SHOWN **SCALE** AS SHOWN **DATE** 09/10/2023

NAME ADDRESS & SIGNATURE OF LICENSED ARCHITECT

ASHOK Digitally signed by ASHOK DATTATRAYA
DATTATRAYA ARCHITECTS PLANNERS VALUERS
GANDHI 303/304 G-SQUARE PREMISES, SUBHASH ROAD,
YA GANDHI 11:32:23 +05'30" OFFICE TEL: 022 48044074
M. +9210 387152, 98218 50188 saritha@ashokgandhiconsultants.com
info@ashokgandhiconsultants.com
LICENSE NO CA/175121/17

ASHOK GANDHI CONSULTANTS LLP
SARITA S. MANJUNATH



REFUGE AREA CALCULATION (14TH FLOOR)

R1	4.25 x 1.75 x 1.00	=	7.44	SQ.MT
R2	7.30 x 0.95 x 1.00	=	6.94	SQ.MT
R3	13.10 x 5.05 x 1.00	=	66.16	SQ.MT
R4	13.89 x 1.49 x 0.50	=	10.35	SQ.MT
R5	13.89 x 1.45 x 0.50	=	10.07	SQ.MT
R6	9.00 x 0.75 x 1.00	=	6.75	SQ.MT
R6a	5.95 x 0.25 x 1.00	=	1.49	SQ.MT
R7	2.87 x 0.72 x 0.50	=	1.03	SQ.MT
R8	2.87 x 0.68 x 0.50	=	0.98	SQ.MT
R9	0.10 x 0.95 x 1.00	=	0.10	SQ.MT
TOTAL			111.29	SQ.MT

REFUGE AREA CALCULATION 14TH FLR.

TOTAL REQ REFUGE AREA				
FLOOR	AREA	IN	SQ.MT	
14TH FLR	234.11	SQ.MT		
15th FLR	345.37	SQ.MT		
16th FLR	362.96	SQ.MT		
17th FLR	362.96	SQ.MT		
18th FLR	362.96	SQ.MT		
19th FLR	362.96	SQ.MT		
20th FLR	362.96	SQ.MT		
21st FLR	362.96	SQ.MT		
TOTAL	2757.24	SQ.MT		
2757.24 x 4%	110.29	SQ.MT		
2757.24 x 4.25%	117.18	SQ.MT		
REFUGE AREA REQ.	117.18	SQ.MT		
REFUGE AREA PROV.	111.29	SQ.MT		
FREE OF FSI DCPR No. 48 (a),(1)				

PROFORMA - B

CONTENTS OF SHEET
13TH FLOOR PLAN, 14TH FLOOR PLAN, 15TH FLOOR PLAN, 16TH & 21ST FLOOR PLAN, 14TH FLOOR REFUGE AREA DIAGRAM & CALCULATION.

D.F.O. Dy.C.F.O.

NORTH DESCRIPTION OF PROPOSAL AND PROPERTY
PROPOSED RE-DEVELOPMENT OF EXISTING BUILDING ON PLOT BEARING C.T.S. NO. 2394/A OF EKSAR VILLAGE AT DEVIDAS ROAD, BORIVALI (W) MUMBAI.

NAME ADDRESS & SIGNATURE OF OWNER / DEVELOPER
Ms. KUNJAL C. DEDHIA
DIRECTOR OF
M/S HINDUSTAN REALTY LTD
C.A TO DATTATRA DHAM CHS
ADDRESS
3rd FLOOR A WING VICTORY PARK
CHANDAVARKAR ROAD,
BORIVALI (WEST), MUMBAI 400092.

NAME ADDRESS & SIGNATURE OF STRUCTURAL ENGINEER
ABHIJIT VINOD PHATARPEKAR
AVP STRUCTURAL CONSULTANTS
B.E. (CIVIL), M.I.E
BMC/STR/84009956
ADDRESS-AA1201, N.L. ARYAVARTA,
N.L. COMPLEX ANAND NAGAR,
DAKSHIN EAST
MUMBAI-400 068

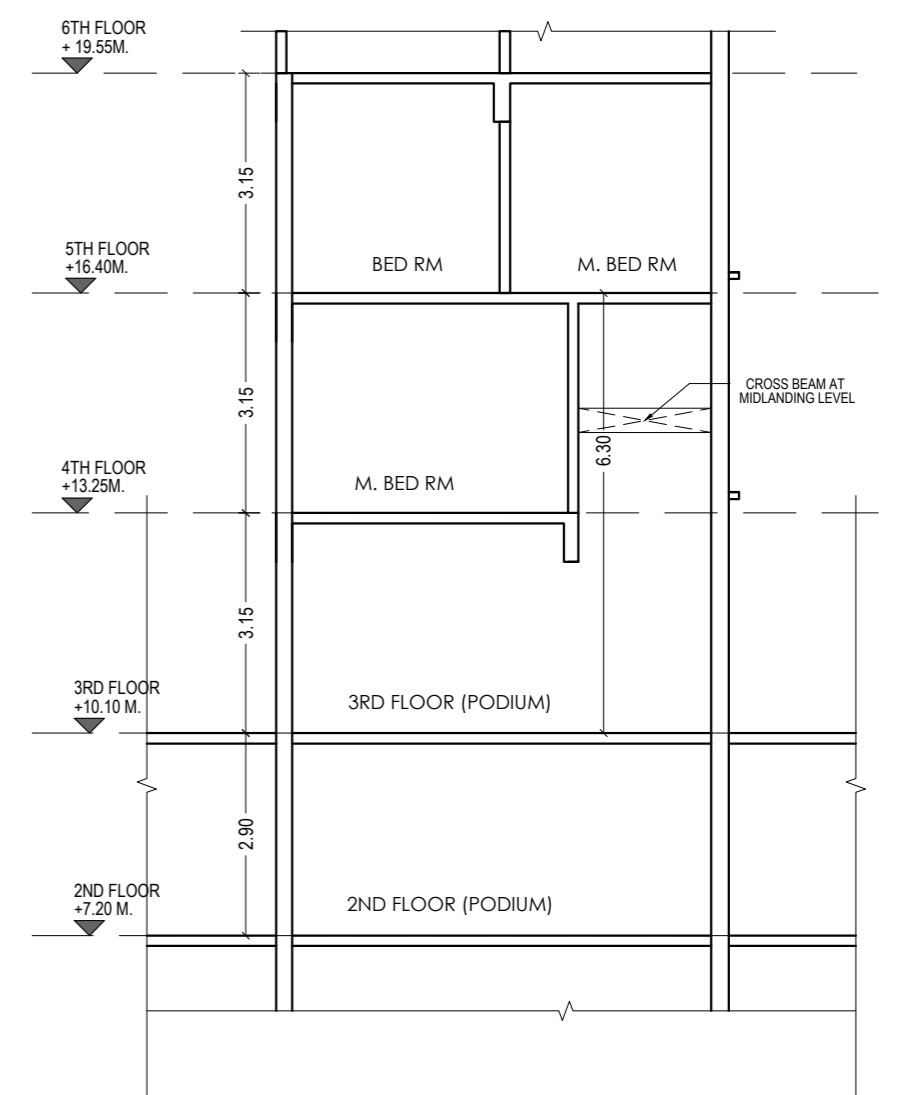
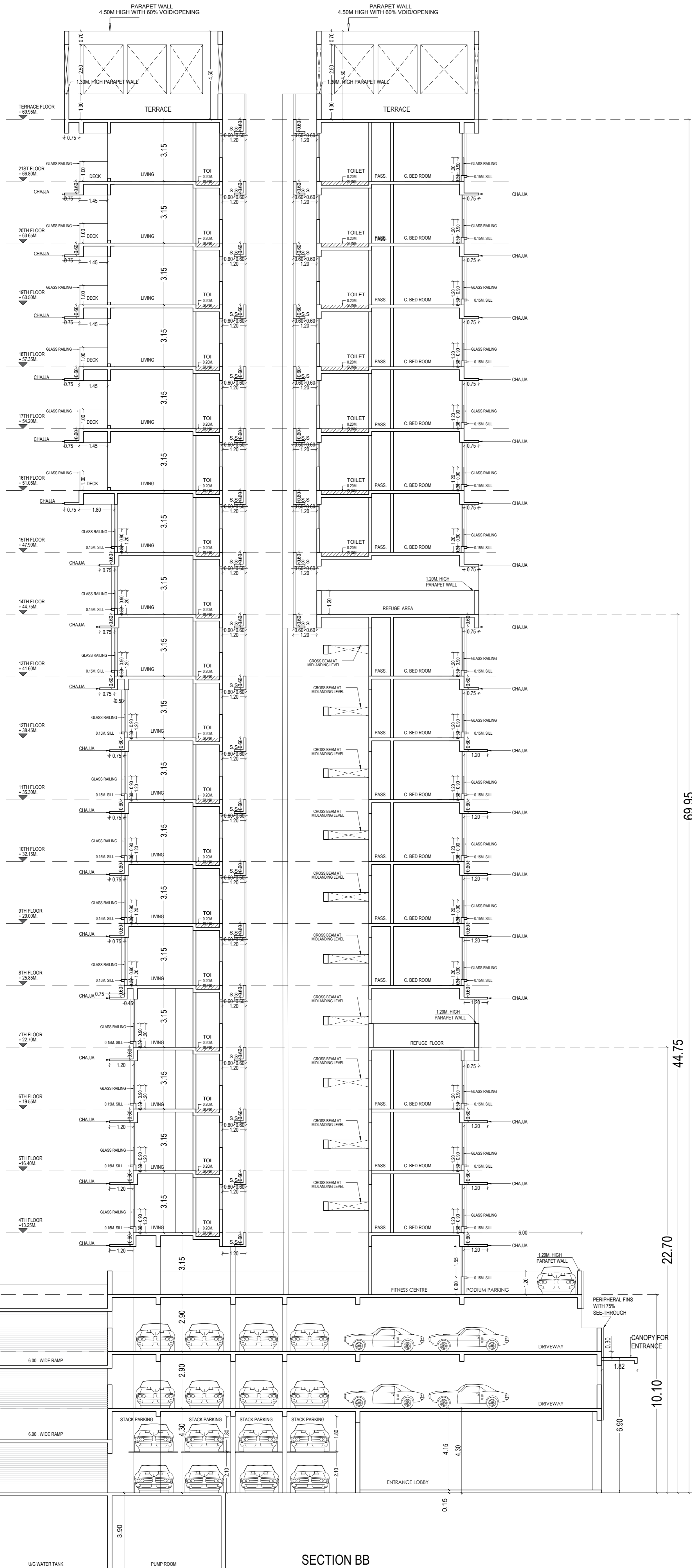
STRUCTURAL ENGINEER SIGNATURE

ASHTOK GANDHI CONSULTANTS LLP
SARITA S. MANJUNATH
ARCHITECTS PLANNERS VALUERS
303 / 304, E-SQUARE PREMISES, SUBHASH ROAD,
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LICENSE NO CA7752187

DRAWN BY RAVI **CHECKED BY** AS SHOWN **SCALE** AS SHOWN **DATE** 09/10/2023

NAME ADDRESS & SIGNATURE OF LICENSED ARCHITECT

SIGNATURE OF ARCHITECT



PROFORMA - B

CONTENTS OF SHEET	
SECTION BB, SECTION C-C.	
D.F.O. Dy.C.F.O.	
NORTH	
DESCRIPTION OF PROPOSAL AND PROPERTY	
PROPOSED RE-DEVELOPMENT OF EXISTING BUILDING ON PLOT BEARING C.T.S. NO. 2394/A OF EKSAR VILLAGE AT DEVIDAS ROAD, BORIVALI (W) MUMBAI.	
NAME ADDRESS & SIGNATURE OF OWNER / DEVELOPER	
Ms. KUNJAL C. DEDHIA DIRECTOR OF M/S HINDUSTAN REALTY LTD C/A TO DATTATRAYA CHS ADDRESS 3 rd FLOOR A WING VICTORY PARK CHANDAVARKAR ROAD, BORIVALI (WEST), MUMBAI 400092.	
NAME ADDRESS & SIGNATURE OF STRUCTURAL ENGINEER	
ABHJIT VINOD PHATARPPEKAR AVP STRUCTURAL CONSULTANTS B.E. (CIVIL), M.I.E. BMC/STR/840009956	
ADDRESS AA1201, NI. ARYAVARTTA, NI. COMPLEX ANAND NAGAR, DAHISAR EAST, MUMBAI-400 058	
DRAWN BY	CHECKED BY
RAVI	AS SHOWN
SCALE	DATE
AS SHOWN	09/10/2023
NAME ADDRESS & SIGNATURE OF LICENSED ARCHITECT	
ASHOK GANDHI CONSULTANTS LLP SARITA S. MANJUNATH ARCHITECTS PLANNERS VALUERS 303 / 304, E-SQUARE PREMISES, SUBHASH ROAD, VILE PARLE (E), MUMBAI-400 037 OFFICE : TEL. 022 4004074 M. 98210 38752, 98218 50189 sarita@ashokgandhiconsultants.com info@ashokgandhiconsultants.com LICENSE NO. CA/75/2167	