

**MUNICIPAL CORPORATION OF GREATER MUMBAI****No: ChE / DP / 26239 / Gen of 28.12.2017****Subject: Guide Lines for of parking layout proposals****Reference: MCP/2116 of 19.12.2017****1) PLANS :**

Parking Layout proposal shall be submitted showing Block Plan (Scale 1:500, 1:40 or to the scale as per T.P. Scheme), Location Plan (Scale 1:4000 /1:2500) the required parking statement as per DCR 1991, Plans (Scale 1:100 preferably and 1:200 in case of bigger layouts only) showing parking floors such as ground floor, stilt floor, basement floors, parking/podium floors and floor next to parking floors, cross sections showing the details of parking/podium floors and floor next to parking/podium floor (Particularly, showing all level differences such as basement top, ground level, stilt level, underground water tank top, rewas of stair case, staircase mid landing, elevation features projection, where maneuvering is proposed) along with road level, ground level of the plot at the entry, exit points of vehicle and cross sections of mechanized parking systems ,if any.

- 1.1) Ground floor plan shall contain compound wall, entry/ exit gate, chain link gate, sliding gate, type of access to the plot such as layout road, existing road, D. P. Road, etc. with detail of width of road , R.G. / Paved R.G. and other reservations, amenities if any, required front open space line to be shown in dotted line.
- 1.2) Each parking floor plan shall contain minimum clear dimensions of drive way, angular dimensions of driveway at the corners of the plot and at the turning direction of driveways.
- 1.3) All R.C.C. / Structural members such as columns, lifts sheer walls, etc. shall be shown in dark colour.
- 1.4) Statement showing the area of side & rear open space of the building and

area consumed by the proposed car parking spaces as per DCR-36(5)(b)(ii).

- 1.5) Slope of the ramp, width of ramp and length of the ramp at the centre of driveway (Length of the ramp shall be shown at the centre of inner driveway in case of two-way maneuvering) shall be shown on plan.
- 1.6) In case of proposal under sub regulation 33 (24) of DCR – 91, the conditions insisted by Jt. C. P. (Traffic) & by the Committee for approval of the proposals under sub regulation 33 (24) of DCR – 91 shall be incorporated in the parking layout for obtaining NOC of Dy.Ch.E.(Traffic) deptt.

## 2) DRIVEWAY

- 2.1 Driveway proposed shall be free of any obstructions and width as mentioned below shall be provided.
  - 2.1.1) The width of driveway for one way maneuvering shall be minimum 3.00 mts. in straight alignment & 3.90 mts. width shall be provided at turning portions for proper maneuverings of the vehicles.
  - 2.1.2) The width of driveway for two way maneuvering shall be minimum 6.00 mts. in straight alignment & 7.50 mts. at the turning portions for proper maneuvering of the vehicles.
  - 2.1.3) Minimum 3.75 mts. wide driveway shall be provided for one way maneuvering in straight alignment & 4.65 mts. at the turning portions and 7.50 mts. wide driveway shall be provided for two way maneuvering in straight alignment & 9.00 mts. at the turning portions shall be provided for transport vehicles & Ambulance.
- 2.2) Minimum 3.50 mts. wide gate shall be provided in case of single entry or exit and 6.00 mts. wide gate for entry & exit.
- 2.3) Unobstructed Passage of minimum width of 3.00 mts. shall be provided from entry gate upto entrance lobby/ staircase of the building for ingress & egress of the vehicles upto entrance of the building, if the parking spaces are proposed in the said passage.
- 2.4) In the driveway portion where 'U' turn is proposed, minimum 5.50 mts. of

inner diameter of the turning portion ('U' turn) shall be provided.

- 2.5)** In the driveway portion, the minimum 2.40 m. head room shall be provided from the bottom of slab/ beam/ any projection/ ramp/ revas projection of staircase cantilever parking etc.
- 2.6)** If the surface angular parking is proposed along the one way driveway minimum 3.6 m width shall be provided for proper ingress and egress of vehicle in the parking space.

### **3) PARKING SPACES**

#### **3.1) SIZE OF PARKING SPACES**

The size of parking spaces shown on plan shall be as per the provisions of regulation 36 of DCR 1991.

##### **3.1.1) For motor vehicles : -**

Big cars = 2.50mts. x 5.50mts. (shall be shown in green colour)

In case of parking spaces for motor vehicles upto 50% of the prescribed parking spaces may be of size. 2.30mts. x 4.50mts. as per DCR 36 (1).

##### **3.1.2) For Transport Vehicles : 3.75mts. x 7.50mts. as per DCR 36(4) (shall be shown in red colour)**

##### **3.1.3) For Ambulance :**

4.00mts. x 10.00mts. as per DCR 36 (4) (shall be shown in red colour)

##### **3.1.4) In case of 33(24) proposals, PPL/ MCGM parking spaces (shall be shown in blue colour)**

##### **3.1.5) Mechanical stack parking shall be shown in green hatched.**

#### **3.2) Car parking spaces shall not be proposed on**

(1) Manholes/openings/chambers of underground water tank/Fire Fighting Tank/Septic tank/ Sewage Treatment Plant.

(2) Required front open space.

(3) R. G.

(4) Ventilation openings for Basements.

### **3.3 DISTANCE REQUIRED FOR PARKING SPACE -**

**3.3.1** There is no necessity to provide minimum distance on either side of parking for ingress/ egress of vehicle if parking spaces are proposed in row along the driveway or alternate parking.

**3.3.2 Tandem Parking:** The required sizes of parking spaces may be allowed directly one behind the other with 3.00 m. wide parking bay.

### **3.4 Parking spaces for Differently Able shall be proposed only for public building as under –**

**3.4.1)** Surface parking shall be provided near ground floor entrance or on immediate upper floor entrance for the physically handicapped persons with maximum travel distance of 30 mt. from building entrance.

**3.4.2)** The size of parking bay shall be minimum 3.60 mt. x 5.50 mt.

**3.4.3)** The information stating that the space is reserved for wheel chair users shall be conspicuously displayed.

### **4) CAR LIFT**

**4.1)** Minimum 2 nos. of car lifts upto 200 parking spaces and for each 100 parking or part thereof, beyond 200 parking spaces, additional one car lift for entry/exit shall be provided.

**4.2)** The minimum size of car lift hoist -way shall be 3.30 mts. x 6.00mts. to accommodate all kinds of vehicles.

**4.3)** Minimum 5.00 mts. unobstructed open space shall be provided in front of the car lift /hoist for proper maneuvering of vehicles on the respective parking floor.

**4.4)** If the car hoists are proposed, then provision of separate passenger lift shall be made nearby.

**4.5)** If the driveway is proposed through the Car Lift, then the clear opening of the car lift shall be minimum 3.30 mts. wide. (The details of the Car Lift and required hoist-way as per Manufacturer's specification shall be submitted.)

5) **RAMP**

- 5.1) The maximum 45.00 mts. continuous ramp length shall be permitted.(Mid-Landing minimum of 6.00 mts. in length shall be provided at the interval of maximum every 45.00 mts. travel distance.)
- 5.2) Slope of ramp shall not be steeper than 1:10
- 5.3) Width shall be as per norms of driveways.
- 5.4) Ramp shall not be proposed in front open space.
- 5.5) Parking spaces may be allowed over slopping parking floors of gradient not steeper than 1:20.
- 5.6) In the ramp portion where 'U' turn is proposed, Minimum 5.50 mts. inner diameter of the turning radius by means of well/turn shall be provided.
- 5.7) When a building abuts 3 or more roads, then ramps shall be allowed in front marginal open space facing the road having least width for ingress & egress of vehicles
- 5.8) **Parking floor:** The parking floors above ground/stilt floor within building line, for the provision of parking, accessible either by ramp or by minimum two car lifts up to 200 parking and one additional car lift for every 100 parking beyond 200 parking or thereof. The height of the parking floor shall not be more than 2.4m below soffit of the beam & maximum 32.00\_m height of the floor permitted in this regulation below soffit of slab. In case of mechanical parking more height as per the requirement of parking layout may be allowed.
- 5.9) **Podium:** A podium may be permitted in plot ad-measuring 1000 sq.m or more. The podium provided with ramp may be permitted in one or more level, total height not exceeding 32 m above ground level.

Podium not provided with ramp but provided with car lifts may be allowed subject to minimum two numbers of car lifts up to 32.00 m, for vehicles up to 200 parking and one additional car lift for every 100 parking beyond 200 parking or part thereof.

6) **MECHANICAL PARKING**

- 6.1) Stack, Pit, Rotary, Puzzle, Tower or any such type of Mechanized parking

system having height more than 4.20 mt. above G.L. may be proposed at least 1.50mts. away from the compound wall on all sides except front

- 6.2) Rotary, Puzzle, Tower or any such type of Mechanized parking system in side open space touching to the building or as an independent structure shall be proposed along dead wall only upto height of the building.
- 6.3) Minimum 5.00 mts. clear unobstructed open space shall be provided in front of stack parking meant for big size cars & 4.00 mts. for small stack parking shall be provided for smooth ingress & egress of vehicles in parking spaces.
- 6.4) At least 25% of total proposed car parking spaces to be proposed in mechanical parking system/surface parking shall be minimum clear height of 2.10 mts in all type of Mechanized parking system/ surface parking so as to accommodate all types of S.U.V. such as Scorpio (Ht. 1.975 mts.) and rest of the car parking spaces may be proposed with minimum height of 1.80 mts in all type of Mechanized parking system/ surface parking so as to accommodate all types of Hatchbacks/ small salon cars such as Nano (Ht. 1.652 mts.).
- 6.5) The minimum clear 3.60 m (i.e. 1.8 m + 1.8 m), 3.90 m (i.e. 1.8 + 2.1 m) 4.20 m (i.e.2.10 + 2.10) head room in the building whatsoever the case shall be provided where double stack parking is proposed (Note:-The proposed height under this clause can be modified as per the specification of manufacturer.)
- 6.6) A traffic impact analysis/ assessment study is required to be carried out through Traffic Engg, Deptt./ Traffic Engg. Institute/ Traffic consultancy agency for parking layout where car parking spaces are proposed more than 2000

## 7 ) General requirements for parking layouts

- i. The Ground Floor, stilt, podium, basement floor where parking spaces are proposed, the parking area shall be adequately lighted, ventilated and drained properly.

- ii. Edges of the column shall be either preferably round in shape or shall be covered with protective edge gaurds in the Ground Floor, stilt, podium, basement floor where parking spaces are proposed.
- iii. The parking spaces shall be paved & clearly marked, painted and numbered.
- iv. The traffic operation shall be marked in Thermoplastic road marking paint. Arrows and traffic amenities such as Retro Reflective Road Studs shall be provided to guide the motorists.
- v. Anti Crash Barriers shall be provided at the turning portions of the ramps.
- vi. Anti Skid finish (Surface) shall be provided at the parking floors / ramps.
- vii. Cautionary / Informatory signages shall be provided at the ramps as well as in the drive ways to guide the motorists.
- viii. The entire drive-way as well as parking spaces shall be kept free of obstructions.
- ix. The Board indicating car parking in Gr. Floor, stilt, podium, basement floor shall be provided near the entry gate.
- x. Adequate no. of parking attendants shall be employed where ever is required
- xi. Necessary care shall be taken to abate the nuisance of car exhaust / smoke / lights / noise in Ground Floor, stilt, podium, and basement floor parking area.
- xii. The convex mirror (i.e. m1, m2 etc.) shall be provided on ramp at the required locations of turning portions or locations shown on the parking layout plans so as to facilitate the smooth maneuvering of vehicle.
- xiii. The registered undertaking indemnifying the M.C.G.M. against any litigation arising out of hardship to user in case of the failure of Mechanized system / car lifts / nuisance due to mechanical system/ car lift to the building under reference & to the adjoining wing/ adjoining building shall be submitted to Ex.Eng.(B.P.).
- xiv. The standby arrangement of generator/ alternative electric power supply of requisite capacity for lifts and the mechanical parking system shall be made in case of failure of electric supply.

- xv. The Mechanized parking system shall be equipped with electric sensor devices and also proper precautions & safety measures shall be taken to avoid any mishap & the damages occurred due to flooding in pit if any & maintenance of Mechanized parking system shall be done regularly and registered undertaking & indemnity bond to that effect shall be submitted to Ex.Eng.(B.P.).
- xvi. The adequate measures shall be taken to provide proper artificial light & ventilation through mechanical means within basement floors proposed for parking.
- xvii. The parking layout shall also meet the requirement of C.F.O wherever applicable.

If the size, shape or configuration of the any floor with parking spaces, cantilever projection which will obstruct the parking spaces if any, amalgamation / subdivision, boundary correction of plot, changes in parking layout is required to be changed as per applicant requirement or as per the requirements of E.E.(B.P.)/ C.F.O. etc., revised parking layout shall be got approved from Dy.Ch.E.(Traffic) deptt/Lic. Surveyor/ Architect/ Consultant.

sd /20.11.2017  
**Ch.E.(D.P.)**

sd /20.11.2017  
**Municipal Commissioner**