# EXECUTIVE SUMMARY

# FOR

# PROPOSED REDEVELOPMENT ON PLOT BEARING C. S. NO. 3/590 AND 4/590 OF MALABAR CUMBALLA HILL DIVISION, MUMBAI

# BY

# M/S KALPATARU PROPERTIES PVT. LTD.

## 1. INTRODUCTION TO PROJECT

After recognizing the need for the redevelopment of the cessed building having total 6 nos. of tenants/occupants on the plot bearing C. S. No. 3/590 and 4/590 of Malabar Cumballa Hill Division, situated at L. Jagmohandas Road, "D" Ward, Mumbai, the same is now being redeveloped by the owners M/s Kalpataru Properties Pvt. Ltd. The proposed development on plot bearing C. S. No. 3/590 and 4/590 of Malabar Cumballa Hill Division, situated at L. Jagmohandas Road, "D" Ward, Mumbai is a composite development i.e. tenements for rehabilitation and sale are proposed in the same building. The proposal is for construction of a new building consisting of a Basement + Ground + 14 Parking levels + Refuge/ Amenity level + 1st to 14th upper floors for residential use, which will be rehabilitation cum sale building. The surrounding of the subject plot also consists of mixed use i.e. residential and commercial but predominantly residential. The site is surrounded by many more existing structures

The plot under reference falls within 500 mtr. from H.T.L. of Arabian Sea. As such, it attracts MoEF guidelines & CRZ regulation. The plot falls in Residential zone as per old DP of 1967 as well as revised sanctioned DP (1991 & 1992) and is not affected by any reservation as per old DP. The user of "Residence" was permissible as per land use and zoning as on 19/02/1991.

### 1.1 PROPOSAL DETAILS

The existing structure on the plot is a CESSED structure. **The existing CESSED structure is of Ground Floor + 1st to 2nd (pt)Upper floor having 06 nos. of residential tenants/occupants consuming 1458.54 sq mtrs of built up area as certified by the Dy. Chief Engineer (Zone III), Mumbai Building Repair & Reconstruction Board, Mumbai, as enclosed with the NOC issued by the Chief Officer M.B.R.R.Board dated 29.04.2017**. The existing building is a Category "C"(R) and the with residential land use as per the Category certificate and the Inspection Extract issued by Asstt. Assessor & Collector 'D' Ward.

The re-development is proposed in view of provisions contained in CRZ 2011 notification, wherein benefits of DCRs as on the date of approval of plans is extended for re-development CESS category building.

The proposal has received MHADA NOC dated 29.04.2017 for FSI 3.00 or the FSI required for rehabilitation of existing occupiers plus 50% incentive FSI, whichever is higher, in accordance

with modified DC Regulations 33(7), as amended till date..

The proposal is for redevelopment on the plot under reference. The re-development proposal involves construction of a Residential building consisting of of Basement + Ground + 14 Parking levels + Refuge/ Amenity level + 1st to 14th upper floors as Rehabilitation-cum-Sale Building. Total number of tenement proposed by developer are 14 numbers for both rehabilitation and sale.

#The site under reference is affected by CRZ-II zone. It is within 500 mtrs. from the HTL of Arabian sea. It is on the landward side of the existing authorized structures, as can be seen from the Tikka Sheet, in existence much prior to 1967. Hence the work is permitted subject to the approval of CRZ clearance. Thus property attracts the CRZ legislation, which is reflected in CZMP plan.

The development site does not fall or contain the environmentally sensitive areas as specified in the Coastal Regulation Zone notification.

The total cost of the project is Rs. 98, 74, 52, 131/- (Rupees Ninety Eight Crore Seventy Four Lakh Fifty Two Thousand One Hundred and Thirty One Only) as per the valuation report.

## 1.2 PURPOSE OF THE REPORT

Proposal is for redevelopment on plot bearing C. S. No. 3/590 and 4/590 of Malabar Cumballa Hill Division, situated at L. Jagmohandas Road, "D" Ward, Mumbai and thereby obtain CRZ Clearance as per clause 33(7) of DCR – 1991 in force as on date. The Plot is occupied by CESSED category structures. The said CESSED category structure is now proposed to be redeveloped on this plot. The present proposal envisages the redevelopment of CESSED structure, by availing FSI 3.00 or the FSI required for rehabilitation of existing occupier plus 50% incentive FSI, whichever is higher as per DCR's in force as on date.

Current development thus will help the existing tenant/occupants to get a new, safe and permanent accommodation. As the site under reference is affected by CRZ-II zone, it attracts the CRZ legislation as per 6th January 2011 notification for Coastal Regulation Zone (CRZ and the regulating activities in the CRZ).

# 2. DESCRIPTION OF THE PROJECT

## 2.1 NATURE OF THE PROJECT

This is a proposal for redevelopment on plot bearing C. S. No. 3/590 and 4/590 of Malabar Cumballa Hill Division, situated at L. Jagmohandas Road, "D" Ward, Mumbai, in CRZ-II belt, as the same is situated within 500 mtr. from Arabian sea. The proposal is for redevelopment of cessed residential building, which is situated on the landward side of the existing authorized structures, as can be seen from the Tikka Sheet, in existence much prior to 1967 as well as from old 1967 DP of the area.

The Plot is situated in Residential zone and not under any reservation as per 1967 DP as well as Revised 1991/1992 DP. The FSI proposed is 3.00 or the FSI required for rehabilitation of existing occupiers plus 50% incentive FSI, whichever is higher, and the admissible fungible FSI.

## 2.2 SIZE OF THE PROJECT

The gross area of the Plot is 1075.35 sq.m and the balance plot excluding the area affected by road widening is 1011.55 sq. mtrs. Cost of the Project is Rs. 98, 74, 52, 131/- (Rupees Ninety Eight Crore Seventy Four Lakh Fifty Two Thousand One Hundred and Thirty One Only) as per the valuation report.

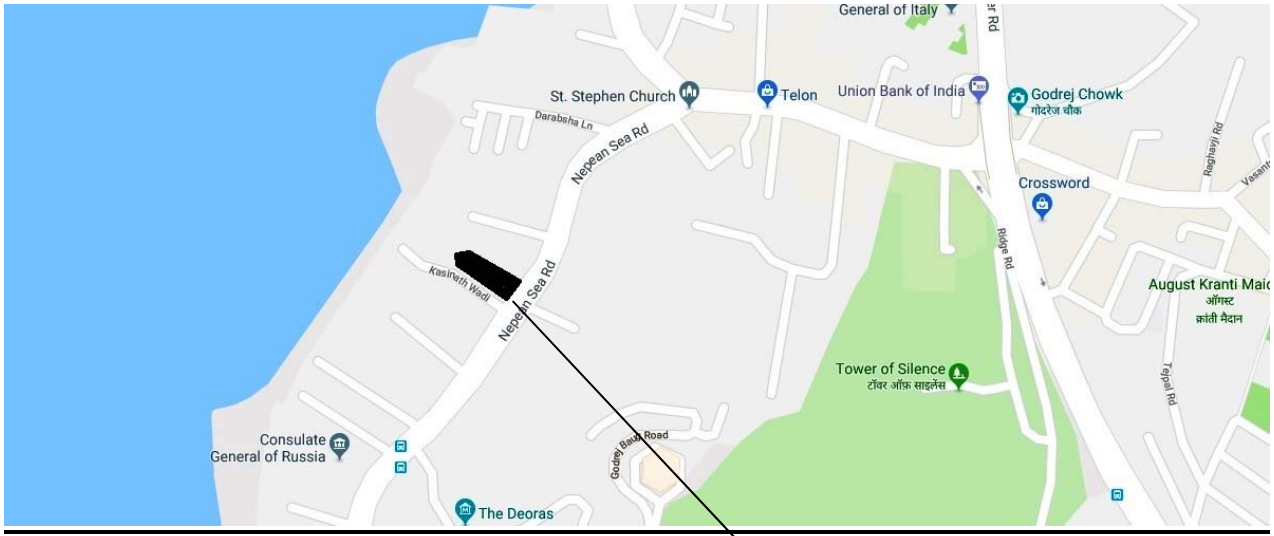
## 2.3 LOCATION

The C. S. No. 3/590 and 4/590 of Malabar Cumballa Hill Division, situated at L. Jagmohandas Road, "D" Ward, Mumbai, is in the heart of the city. The nearest railway station is Grant Road Railway Station, 2.00 kilometers on the Western line.

## Google Earth Image of the site


SITE UNDERREFERENCE

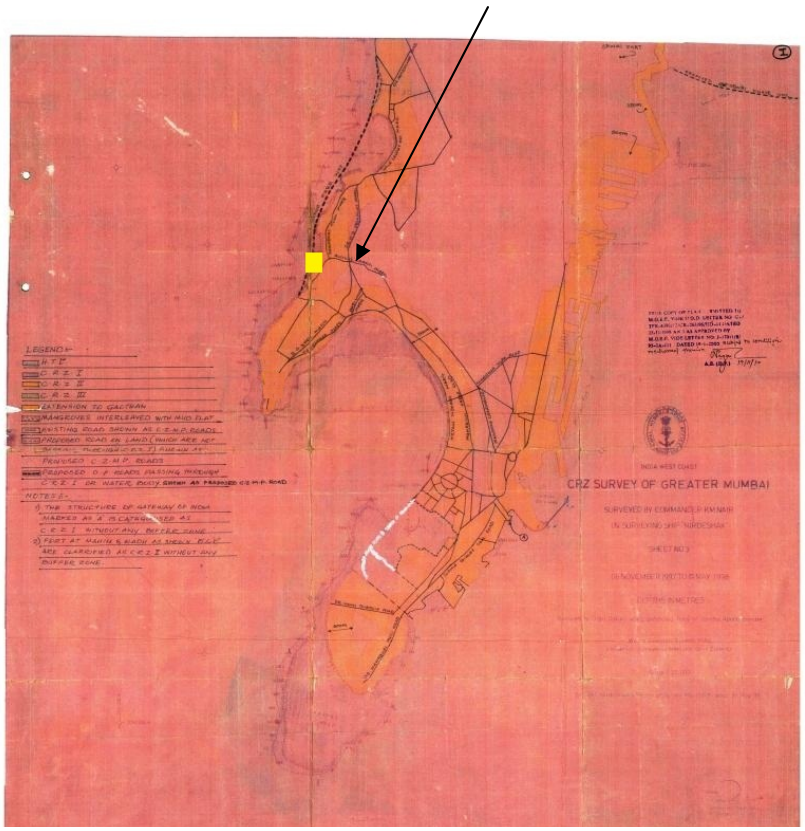
## Location map of the site




SITE UNDER REFERENCE

## CZMP Plan showing location of reference Plot

SITE UNDER REFERENCE




### 2.4 SITE DESCRIPTION

The site under reference is affected by CRZ-II zone and the property falls on landward side of the existing Kashinath Dhuru Road, which is reflected in CZMP of Mumbai. Thus property attracts the CRZ legislation as per CRZ - 2011. The development site does not fall or contain the environmentally sensitive areas as specified in the Coastal Regulation Zone notification. Total plot Area is 1075.35 sq. mtr.

| | | |
|---|---|---|
| Town / Tehsil | : | Mumbai |
| District | : | Greater Mumbai |
| State | : | Maharashtra |
| Latitude | : | **18°57'46.35"N** |
| Longitude | : | **72°48'8.86"E** |

## 2.5 PROPOSED DEVELOPMENT

### 2.5.1 AREA

| Sr. No. | Proforma A | Total |
|---|---|---|
| 1 | Area of plot | 1011.55 $m^2$ |
| 2 | Deductions for | |
| | (a)Road set-back area | 0.00 $m^2$ |
| | (b) Proposed road | 0.00 $m^2$ |
| | (c) Any reservation (sub-plot__) | 0.00 $m^2$ |
| | (d) _____% amenity space as per DCR 56/57 (sub - plot) other | 0.00 $m^2$ |
| 3 | Balance area of plot (1 minus 2) | 1011.55 $m^2$ |
| 4 | Deduction for 15% Recreation ground/10% Amenity space (if deduction for Ind) | |
| 5 | Net area of plot (3 minus 4) | 1011.55 $m^2$ |
| 6 | Additions for floor space index | |
| | 2(a) 100% for D.P.Road | 0.00 $m^2$ |
| | 2(b) 100% for Set-back | 0.00 $m^2$ |
| 7 | Total Areas (5 plus 6) | 1011.55 $m^2$ |
| 8 | Floor Space Index permissible | 3.00 |
| 9 | 9a) Floor Space Index credit available by Development Rights (Restricted to _____% of the balance area vide 3 above) DRC No.____ | 0.00 $m^2$ |
| | Additions for floor space index | |
| | 9(b) 33% as per DCR 32 | 0.00 $m^2$ |
| | 9 (c ) % as per DCR 33( ) | 0.00 $m^2$ |
| | 9(d) other | 0.00 $m^2$ |
| 10 | Permissible Floor Area (1011.55 X 3.00 + 63.80 X 1.33) | 3119.50 $m^2$ |
| 11 | Existing floor area | - |
| 12 | Proposed built up area | 3119.50 $m^2$ |

| | | |
|---|---|---|
| 13 | Excess balcony area taken in Floor Space Index | - |
| 14 | Purely Residential Built up area | 3119.50 $m^2$ |
| 15 | Total Fungible Built Up Area Permissible = (B.1 + B.2) | 1091.825 $m^2$ |
| 16 | Total Fungible Built Up Area Proposed = (B.6+ B.7) | 1091.825 $m^2$ |
| 17 | Total Gross Built Up Area proposed (14 + B.8) | 4211.325 $m^2$ |

**PROJECT DEVELOPMENT DETAILS**

| Proposed development | | |
|---|---|---|
| 1 | Structure of Building | Basement( Mainly for Pit parking, car service and allied services) + Ground + 14 Parking levels + Refuge/ Amenity level + 1st to 14th upper floors for residential use |
| 2 | Tenements existing | 06 Nos. |
| 3 | Tenements proposed | 14 Nos. |
| 4 | Height of Building from Ground level | 98.923 Meters |
| 5 | Emergency Power supply (D.G. Nos. x KVa | 1 no. 500 KVa |
| 6 | Salient features of the project | |
| | • Earthquake Resistance Building structure<br>• Rain water Harvesting System in the complex<br>• Energy conservation, through energy efficient devices.<br>• Use of low water fixtures to promote water conservation | |

**2.5.2 UTILITIES**

The Utilities required during the construction phase area water, power, fuel and Labour.

i) **WATER:** (Expected Consumption – total 17 cum/day)

For worker - 7 KLD
For construction - 10 KLD
Note: The actual quantity of water may depends upon the actual construction requirement

**Water Balance (Operation Phase)**

| Sr. No | | **Criteria** | **Total (KLD)** |
|---|---|---|---|
| A | Population (in Nos) | | 116 **Nos.** |
| B | Domestic | @ 90 lpcd | **11.00 CMD** |
| C | Flushing | @45 lpcd | **5.00 CMD** |
| D | Landscape | @ 8 liters/sq.m | **1.00 CMD** |
| E | Total Water Requirement | (B + C + D) | **17.00 CMD** |
| F | Total Waste Water generated | (80% x B + 100% x C) | **14.00 CMD** |
| G | STP capacity<br>STP Technology:<br>Attached Growth process | - | **20.00 CMD** |
| H | Treated Water Availability | (90% x F) | **13.00 CMD** |
| I | Recycled Water | (C + D) | **6.00 CMD** |
| J | To Municipal Drain | (H - I) | **7.00 CMD** |

Source: - Water will be available from Mumbai (MCGM) for domestic use and from Tanker for construction purpose.

ii) **POWER**

During Constructional Phase–

Connected Load: 150KW (Estimated)

**<u>During Operational Phase–</u>**

| **Component** | **Values** |
|---|---|
| Connected load in kW | 1049 |
| Maximum demand kW | 281 |
| D.G. sets (for emergency back up during power failure) | 1 DG of 500 kVA |

**iii) FUEL**

**DURING CONSTRUCTION PHASE**

Estimated energy shall be used.

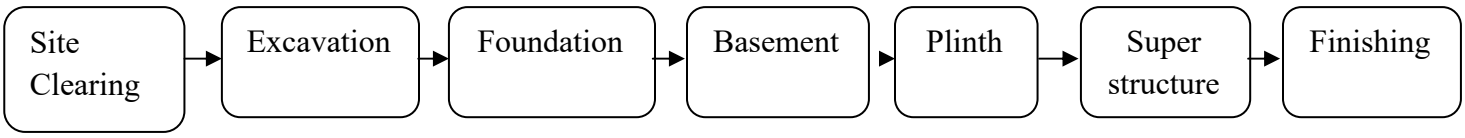
**DURING OPERATION PHASE**

Diesel will be required to run the D. G. Set in case of power failure, in emergency case only.

1. Storage: Diesel and oil will be stored as per guidelines from concerned authorities.
2. Fire and safety measures will be taken as per the guidelines from concerned authority.
3. All Safety and fire precautions will be followed.

## 2.6 CONSTRUCTION PROCEDURES

The outline of the construction procedure is described below schematically.




**Note:**

1. Parameters and Quality will be strictly adhered to as per the drawing approved by MCGM. Applicable regulations of government authorities will be followed.
2. Necessary safety precaution will be observed as per the guidelines during the construction phase. Personal Protective Equipment (PPE) will be provided to the personnel involved in the construction activities.
3. Site barricading will be done to protect the surrounding area of the project site from nuisance /dusting.
4. All electrical connections & cables will be checked by authorized persons to ensure the safety of workers on field.
5. Water sprinkling will be done, wherever required to reduce the emission of fugitive in atmosphere. Jute barricading along plot boundary shall be provided to minimize noise level from construction activities.
6. The safety and security officers shall supervise the site.

# 3. ENVIRONMENTAL CONCERNS

## 3.1 AIR POLLUTION

Fugitive Emissions i.e. Emissions from construction activities will mainly consist of dust. Movement of Heavy & light vehicles, for loading and unloading of Construction Materials, transporting people, will also add on to source of emissions.

| Parameter | Permissible Range | CPCB Limits | AVG Range Before Activity |
|---|---|---|---|
| SPM ($\mu g/m^3$) | 100 ~ 200 | 200 | 80-100 |
| RSPM ($\mu g/m^3$) | 50 ~ 100 | 100 | 20-30 |
| SO2 ($\mu g/m^3$) | 50 ~ 80 | 80 | 10-15 |
| NOx ($\mu g/m^3$) | 40 ~ 80 | 80 | 5-10 |

Ref: 24 Hourly values as per Central Pollution Control Board, National Ambient Air Quality Monitoring, Notification 11th April, 1994, Schedule 1.

## 3.2 AIR POLLUTION MITIGATION

| Sr. No. | Source | Mitigation | |
|---|---|---|---|
| 1. | Vehicle | i] | Vehicles coming to the site will be ensured to be in good condition having PUC. |
| | | ii] | Public awareness to use Green Fuel will be done. |
| 2. | Solid Waste | i] | Proper segregation and collection of waste will be ensured. |
| | | ii] | Location of loading and unloading will be fixed. |

| | | | |
|---|---|---|---|
| | | iii] | Good Housekeeping practices will be ensured at the premises. |
| 3. | Construction Activities | i] | Noise / Dust nuisance preventions by barricading site up to 5.0 meter height. |
| | | ii] | Water sprinkling on dry site, sand. |
| | | Iii] | Construction equipment with regular maintained |

**3.3 WATER POLLUTION**

1] **Use**: - Water for domestic purpose will be procured from MCGM i.e. drinking water for staff and laborers working on the field whereas bore well water/Tanker water will be used for various constructions activities like, Concreting, Plastering , Flooring & Finishing etc.

2] **Effluent**: - There will be no generation of effluent from construction activities as the water used for concreting; Plastering, Flooring and Finishing etc. will get evaporated during drying or curing time. All the construction activities are physical in nature. The Domestic Effluent will be generated due to the persons working on the site who will require water for drinking, cleaning, etc.

Sewage generated during operation phase is estimated to 14.00 CMD which will be treated in the Sewage Treatment Plant. The treated water will be used for non domestic purposes such as gardening, flushing etc and excess treated water shall be discharged to Municipal drain.

3] **Treatment & Disposal**: - The Domestic Effluent generated in construction phase will be disposed off in existing MCGM Sewer.

4] **Rain Water Harvesting**: - The Plot is occupied by a CESSED category building. A new sale cum rehab building is now proposed to be redeveloped. Roof rain water harvesting is proposed in the project. 1 Recharge pits to be provided for the percolation of rain water into the soil rather than flowing to the drain.

5] **Storm Water Discharge**:

Storm water drains will be constructed for proposed facility as per the norms. A recharge pit and Rain water recharge pit will help to reduce the runoff and reduce the load on external storm water drain.

## 3.5 NOISE LEVEL MITIGATION

| Sr. No. | Source | Mitigation |
|---|---|---|
| 1. | Near Residential Areas | i] Site Barricading will be done to protect the surrounding area.<br>ii) Construction Activity will be carefully planned and carried out accordingly. |
| 2. | Nearby Traffic | i] All the vehicles coming to the site will be ensured in good condition, having Pollution Under Check (PUC). |
| 3. | Construction Equipments | i] Regular maintenance to all the equipment at proper interval for efficient working<br>ii] Appropriate PPE to be provided to workers |

1] It is evident from the nature of operation (i.e. Construction) that the Concentration of suspended particulate matter would be higher than the other two parameters.

2] Control of Emission: - Proper precaution will be taken to reduce the particulate matter by water sprinkling on the dry site area, barricading the periphery by corrugated tin Sheets of 5.0 mtrs height to protect the surrounding area from dusting. Also it will be ensured that the vehicles will carry PUC certificate. To minimize air pollution efforts shall be made by use of equipments, which area electric power driven.

## 3.6 SOLID WASTE MANANGMENT DURING OPERATIONAL PHASE

1] The solid waste generated during operation phase is proposed to be segregated as biodegradable & non-biodegradable waste within the premises.

2] Solid waste transfer station shall be proposed for collection, sorting, segregation, storage & transportation of biodegradable and non-biodegradable waste.

**Calculation for quantum of solid waste to be generated in the building:**

- Total no of residential population = 116 persons
- Generation of Total waste per person of residential population = 0.5 kg/ capita per day (as per provisions of NBC 2016, Part 9 section 3 under the heading As per assessment of per capita Waste Quantity – a) Residential Refuse : 0.3 to 0.6 kg/ capita per day)
- Thus total solid waste generation, for residential population will be 116 x 500 gms/person/day = 58.00 Kg
- Generation of organic waste = 60% of total waste (as per guidelines in As per assessment of per capita Waste Quantity, of NBC 2016 )
- So total organic/Wet/ Bio degradable waste generated by the occupants = 58.00 x 60 % = 35.00 Kg by all occupants of the building.
- Total inorganic/Dry/ Non biodegradable waste generated will be 23.00 kg/ day.

### 3.6.1 Measures for treatment of Solid Waste Generated on the site during operation phase

- Segregation of non biodegradable and biodegradable garbage on site.
- Bio degradable garbage: Treatment by means of composting.
- Non- biodegradable garbage: Segregated into recyclable and non-recyclable waste.
- Recyclable waste: Handed over to vendors for recycling.
- Non-recyclable waste: Handed over to M.C.G.M.
- STP Sludge : Used as manure.
- The debris generated due to demolition and excavated material shall be partly reused on site and partly shall be disposed off to authorized Landfill sites with permission from M.C.G.M.

## 3.7 DEMOLITION WASTE AND CONSTRUCTION WASTE MANAGEMENT

Local Municipal norms shall be followed to ensure responsible disposal of C & D waste.

## 3.8 SEISMICITY:

Seismic zone map was initially based on the amount of damage suffered by the different regions of India because of earthquakes. Following are the varied seismic zones of the nation,

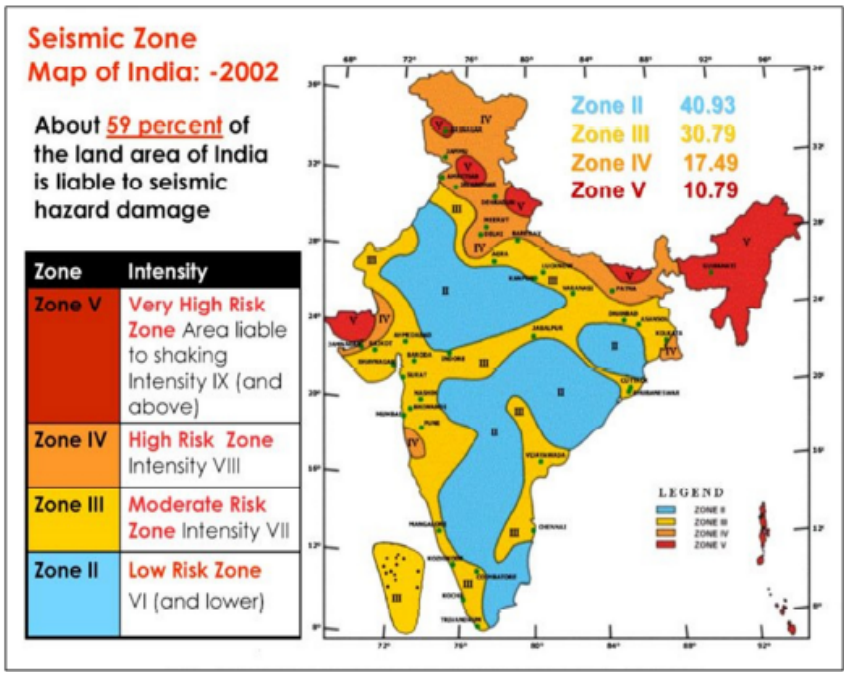
• Zone - II: This is said to be the least active seismic zone.

• Zone - III: It is included in the moderate seismic zone.

• Zone - IV: This is considered to be the high seismic zone.

• Zone - V: It is the highest seismic zone.

Proposed project and Study Area comes under Seismic Zone III.




## 4. PROJECT SCHEDULE AND COST ESTIMATES

The Proposed Project is Redevelopment project and will be started as soon as required government NOC's and CRZ Clearance is received to start the work.

## 5. TRAFFIC MANAGEMENT

### 5.1 CONSTRUCTION PHASE

- Storage and Godown area will be properly identified, as per requirement.
- The area for loading and unloading will be located at proper demarcated location in the premises.
- Thus the traffic management on the project site will be easily and smoothly monitored without any hindrance to the regular flow of traffic on the main road.

## 5.2 OPERATIONAL PHASE

- About 82 cars are expected to be accommodated in the premises. The parking space will be provided in basement (pit parking), stilt & 14 parking levels. There is ample space in the building on all sides for smooth movements of cars.
- There will be 6.0 mtrs wide approach road to the building from municipal road for movements of vehicles and parking.
- Thus the traffic management will be easily and smoothly monitored without any hindrance to the regular flow of traffic on the main road having width of 27.45 m.

## 6. ENVIRONMENTAL, HEALTH AND SAFETY

### 61 SAFETY MEASURES ON SITE

1. Parameters and Quality will be strictly adhered to as per the drawings approved by MCGM. Necessary regulations of government authorities will be followed.
2. Necessary safety precaution will be observed as per the guidelines during the construction phase. Appropriate Personal Protective Equipments (PPE) will be provided to all the personnel involved in the construction activities.
3. Site barricading up to height of 5.0mtr will be done to protect the surrounding area of the project site from nuisance/ dusting.
4. All electrical connections & cables will be checked by authorized persons to ensure the safety of workers on field.
5. Water sprinkling will be done, wherever required to reduce the dusting in atmosphere.

## 7. BENEFITS OF THE PROJECT

- It will provide employment opportunities to the local people in terms of labour during construction and services personnel during operational phase.
- Modern sanitation and infrastructure facilities will have minimal impact on living condition of local people.
- The project will improve living standard and welfare of the area and local people.