Annexure – 1

EXECUTIVE SUMMARY

1.0 ABOUT THE PROJECT:

- The proposed project is a redevelopment project on property bearing c.s. no. 2/358,2A/358 at Malbar – Cumbala Hill division situated at Nepean Sea Road & L.D. Ruparel Road, Mumbai
- The project site falls in Jurisdiction of MCGM.
- The site is in residential zone as per MCGM (Development Plan Department). Majority of the land surrounding the site is residential.
- The terrain of the project site & its surrounding area is plain. The site is devoid of any rocky outcrops and is not covered by any notified forests. The project plot has very sparse vegetative cover of common & local shrubs.
- The plot area of proposed project is 1172.71 sq.mt., which is in CRZ II area on the landwards side

2.0 PROJECT DETAILS:

<table>
<tr><td>Name and Location</td><td>"Proposed redevelopment on property bearing c.s. no. 2/358,2A/358" at Malbar – Cumbala Hill division situated at Nepean Sea Road & L.D. Ruparel Road, Mumbai</td></tr>
<tr><td>Total no. Of workers during the construction</td><td>150</td></tr>
<tr><td>Project cost</td><td>Total Cost of the project 42 Cr only.</td></tr>
<tr><td>Project infrastructure</td><td>Proposed Building details:
<table>
<tr><th>Sr. No.</th><th>Component</th><th>Details</th></tr>
<tr><td>1</td><td>Proposed</td><td>1st Basement + Lower ground floor + Upper ground floor + 1st to 5th floor: Podium + 6th floor: Service floor + 7th to 20th floor: Upper Residential floors</td></tr>
</table>
</td></tr>
</table>

Project Area Details

Sr. No.	Components	Details
1	Total Plot Area	1172.71 sq.mt.
2	Deductions	419.52 sq.mt
	Net Plot Area	753.19 sq.mt
3	Permissible FSI	3.00 & 1.33
4	Permissible Built up Area	3417.56 sq m
5	FSI Consumed	2.89 sq.mt
6	Total Built up area as per FSI	4,582.68 sq.mt
7	Total Built up area as per Non FSI	5,824.59 sq.mt
8	Building Height	69.90 mtrs
9	Parking area	4531.16 sq.mt.

Vehicular Parking Details

Parking Statement:

Required parking	Provided Parking	Parking Area on stilt Sq.mt.
39 Nos.	**43 Nos.**	**4531.16 Sq.mt.**

Water Requirement & Sources

Water requirement for the project and source:

Sr. No.	Description	Quantity of water required KLD	Source
1.	**Construction Phase**		
a.	Domestic	12	M.C.G.M
b.	Construction activity	10-20 (Depending upon the construction activity)	Water Tanker
2.			
a.	Domestic	13	M.C.G.M
b.	Flushing	6	Treated sewage from STP

Sewage generation

Sewage Generation:

Sr. No	Description	Quantity of Sewage generated (KLD)	Treatment/ Disposal
	Construction Phase	11	The sewage generated will be disposed to existing municipal sewer line.
	Operation Phase	17	The sewage generated will be disposed to existing municipal sewer line.

<table>
<tr><td>Sewage Treatment</td><td></td></tr>
<tr><td>Power</td><td>
<table>
<tr><td>Sr. No.</td><td>Description</td><td colspan="3">Power requirement (Source: MSEB)</td></tr>
<tr><td>A</td><td>Construction phase</td><td colspan="3">10 KW</td></tr>
<tr><td rowspan="2">B</td><td rowspan="2">Operational phase</td><td>Connected load</td><td>Maximum demand</td><td>D.G sets & Capacity</td></tr>
<tr><td>1200 KW</td><td>480 KW</td><td>1 DG Set of capacity 200 KVA</td></tr>
</table>
</td></tr>
<tr><td>Energy Saving practices</td><td>Following Energy conservation measures are proposed for Energy Saving:

Architectural Design:
Efficient use of air-conditioning
Maximize the use of natural lighting through design

Energy Saving Practices:
Solar panels will be installed
Most of the common area lighting is proposed to work on high energy efficient appliances like CFL, LED lamps and Solar lighting panels will be provided in open area
RCC roof slab is proposed to minimize the heat gain and internal saving of the electricity
Double insulated glass will be used
All the external walls will be 4-inch brick plastered on both sides and no additional insulation is envisaged</td></tr>
<tr><td>Gaseous emissions</td><td>DG sets will be used only during power failure. In project area, hardly power cutting is occurred. Hence pollution load due D.G. Sets will be very much negligible.</td></tr>
</table>

Solid waste:	**Solid Wastes During Construction Phase: -** The total quantity of solid waste is expected at 25 Kg /day. Out of which 18 Kg /day will be biodegradable and 7 Kg /day will be non-biodegradable garbage. **Solid Wastes During Operation Phase: -** The total quantity of solid waste is expected at 67 Kg/day. Out of which 18.9 Kg/day will be non-biodegradable and 48.1 Kg/day will be biodegradable garbage. **Disposal: -** Total Waste generated will be handed over to.

3.0 EXISTING ENVIRONMENTAL SETTING, IMPACT IDENTIFICATION AND ASSESSMENT:

3.1 ENVIRONMENTAL SETTING:

- **Site Topography:**

Proposed redevelopment project is on property bearing c.s. no. 2/358,2A/358 at Malbar – Cumbala Hill division situated at Nepean Sea Road & L.D. Ruparel Road, Mumbai

Geographical location of site:

Latitude	:	18°57'22.89"N
Longitude	:	72°47'58.49"E
Tehsil	:	Mumbai
District	:	Thane
State	:	Maharashtra

- **Land use pattern :**

The plot is situated on c.s. no. 2/358,2A/358 at Malbar – Cumbala Hill division, Mumbai. As per the survey remark, the plot under reference is affected by C.R.Z. and it falls under C.R.Z. II zone. The land under reference is situated in Residential zone as per Development Plan (DP) remarks. Majority of the land surrounding the site is developed residential.

Major Infrastructure around project area is as given below;

Transport Facilities:

- **Road access:** Nepean Sea Road & L.D. Ruparel Road, Mumbai
- **Nearest Railway Station:** Charni Road Railway Station which is away by 4 km approximately.
- **Nearest Airport:** Chhatrapati Shivaji International and Domestic Airport Area, Vile Parle, Mumbai, Maharashtra at 19.5 Km distance approximately
- **Expressways:** Western expressway is about 30 km and Eastern expressway is about 20 km.
- **Bus Depot:** Dariya Mahal bus stop with 1 km distance

Hospitals:

- St. Elizabeth Hospital- 1.1 km approximately

Fire Brigade:

- Fire & Emergency Station: Gowalia Tank Fire station at about 2.5 km

Police Station:

- Malabar Hill Police Station: 1.20 km approximately.

This redevelopment is mainly meant of residential construction. Due to construction activity, there shall some impacts on water and air environment, power requirement but it shall be mitigated by providing proper pollution control facilities. Power consumption shall be reduced by using energy saving practices. Impact on air quality shall be reduced by green belt development. The possible impacts and mitigation measures are discussed below.

3.2 ENVIRONMENTAL IMPACT IDENTIFICATION AND ASSESSMENT:

➢ **Air Pollution Assessment:**

Air Pollution Control:

Sources of Air Pollution during Construction Phase: -
During construction phase, Dust, Particulate Matter is the main pollutant, which may be generated during construction activities. But as the building is at advance stage of construction, dust generation is not anticipated as a major source. Other emission sources are intermittent and include emissions of SO_2, NOx and CO from materials transport of heavy vehicles on site etc.

Mitigation Measures: -
Precautions which would be taken to reduce dust generation during construction phase are mentioned as follows:

1. Proper upkeep and maintenance of vehicles
2. Offsite fabrication of structural components
3. Tarpaulin Dust covers will be provided on trucks that would be used for transportation
4. of materials prone to fugitive dust emissions.
5. Water sprinkling on ground and new construction will be done at regular intervals to
6. reduce spreading of dust particles.
7. Use of RMC instead of preparing concrete at site
8. Vehicles with valid PUC
9. DG sets: CPCB approved low sulphur fuel.

Sources of Air Pollution during Operational phase: -

1. The gaseous emissions from vehicles
2. Emissions from DG sets while in operation only during power failure

Mitigation Measures: -

1. The traffic congestion will be avoided by proper parking arrangement and maintaining smooth traffic flow
2. Regular PUC checkup for vehicles
3. DG sets will be used only during power failure. In project area, hardly power cutting is occurred. Hence pollution load due D.G. Sets will be very much negligible.
4. CPCB approved DG sets only will be used.

5. Proper maintenance of DG sets shall be done and Low sulphur fuel shall be used
6. Tarpaulins will be used to cover trucks carrying debris
7. Using RMC to reduce air pollution

The proposed project will not have any direct impact on air environment after completion. To ease the traffic congestion project proponent will provide well organized parking arrangement within school premises.

➢ **Noise Pollution Assessment:**

Noise Pollution Control:

Sources of Noise Pollution during Construction Phase: -
During construction phase, sources of noise pollution will be due to operation of machinery like compressors, compactors, concrete plant, cranes etc. as well as transportation vehicles. This will cause nuisance to the occupants of the nearby area.
Mitigate measures: -

- Use of equipment generating noise of not greater than 90 dB (A).
- High noise generating construction activities would be carried out only during day time.
- Installation, use and maintenance of mufflers on equipment.
- Workers working near high noise construction machinery would be supplied with ear muffs/ear plugs.
- Proper upkeep and maintenance of vehicles
- Offsite fabrication of structural components

Sources of Noise Pollution during Operation Phase: -
No noise pollution will occur during operation phase except vehicular noise during drop and pick of school students.

Mitigate measures: -
The proposed project being construction project, the source of noise is mainly vehicular noise. The project proponents have proposed to provide well organized parking arrangement, which would help in reducing noise levels due to vehicular movement in the parking area. Provision of green belt around the Site which will reduce air pollution and also act as noise buffer

➢ **Solid Waste Handling, Collection & Disposal:**

During Construction Phase: -
Solid waste would be generated mainly due to excavation in form of rubble and soil. This soil and rubble would be used for levelling of ground. Solid waste will be disposed as per the local rules and for that Solid waste management certificate are obtained from relevant departments.

The solid waste generation due to workers dwelling on the site will be handed over to M.C.G.M for safe disposal.

During Operation Phase: -
Total solid waste generated will be handed over to M.C.G.M for safe disposal.

➢ **Water Pollution Control: -**

Construction Phase: -

The sewage generated will be discharged into existing sewer line.

Operation Phase: -

The total quantity of sewage that is generated in the existing project is discharged into the existing sewer line. RWH will be done during operation and will be used for domestic purpose.

4.0 GREEN BELT DEVELOPMENT:

Project proponents have proposed an avenue tree plantation, which includes planting of non-deciduous, shady trees of local species. Total 38 Nos. of trees shall be planted on ground along the periphery of plot.

5.0 PROJECT BENEFITS:

The proposed project falls under Redevelopment of Cess structure under DCR 33 (7).

According to the Structural Audit Report by M/s Profile Structural Consultants in July 2014 the existing structure was notified as unsafe. The project will also accommodate tenants from the existing CESS building to a better environment which will enhance their standard of living. It could be seen that the overall impact on Socio-Economic Environment is positive and permanent in nature.

CONCLUSION

The project proponent M/s **Topvalue Real Estate Development Limited** seems to be safety conscious and alert about environment and social safety.

We may conclude as under:

- This project is mainly meant for residential redevelopment
- The proponents are following all the Fire fighting safety rules and regulations as prescribed by local authority and CFO regulations NBC CODE 2005.
- Fire hydrant System as per I.S code.
- Fire detection system as per requirements of Chief fire officer.
- Portable fire extinguishers of IS specification
- Alternate source of power supply / D.G sets only during power failure
- Adequate underground and overhead separate water storage tanks
- Building is designed to meet requirements of seismic zone III of Mumbai District
- Rain water harvesting is proposed
- Solid waste will be handed over to M.C.G.M for proper disposal
- Noise is expected to be on higher side during construction phase. In the operational phase it will be mainly due to the vehicular movement but will be maintained within the prescribed limits
- Overall positive social impact