Executive summary

Proposed Redevelopment Project Of Residential Building

Name Of Developer
M/S K L Housing LLP

The Lido Juhu CHSL. Plot No 31-32, Meghdoot, Juhu Road, Santacruz West,

Mumbai-400049

Mumbai the capital of Maharashtra is also the financial capital and the most populated city of India. Mumbai has grown in recent decades for many residential and commercial developments. Diminishing of industrial zones and development of corporate offices, mall culture in very short period is one of the features of today's Mumbai. Mumbai has many old, dilapidated structures. They are very unsafe to retain. Many of them are in CRZ zones. Development of those by rehabilitant those tenants along with development of new flats to compensate the development charges will not be possible if Extra FSI is not used. Because of CRZ conditions the FSI restriction makes those structures unattended.

1.1 PREAMBLE

We are aware that there are constraints on the availability of open land within the city limits coupled with fast growing demand for houses and storage of housing stock. On the other hand, that there are thousands of ageing buildings which are dilapidated and have reached a stage where it is not possible to carry out structural repairs and rehabilitation as the same are not economically viable. The redevelopment of cess dilapidated building has become a necessity since the problem of old and dilapidated buildings in the city of Mumbai grows more acute with each passing year and with each passing monsoon more and more building become dangerous and unfit for habitation. Hence, **M/s K L housing LLP.** has identified business possibility in this field to provide space for accommodation. have identified dilapidated buildings for redevelopment namely **Meghdoot** Building.

1.2 NEED OF PROJECT

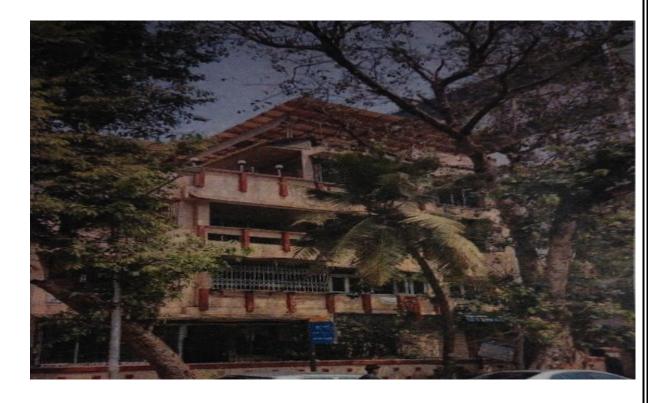
Many buildings collapse each year, killing or injuring people. Many of these buildings are so run down that they are unrepairable and the only solution is to put them down totally and to reconstruct them. Government has floated various schemes wherein they have allowed incentive FSI for carrying out redevelopment schemes. Proposed redevelopment thus will help the existing tenants to get permanent, safe structure. At present they are residing in old building.

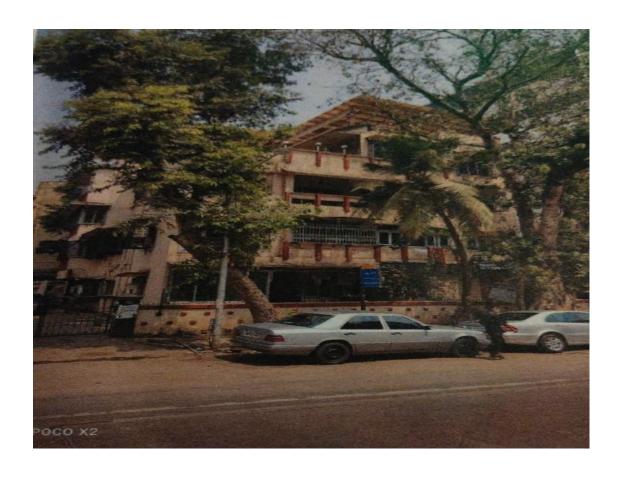
As per MCGM – Notice under section 353(B) of the Mumbai Municipal Corporation

Act Notice No: - ACGN/WEE/762/AEBF-II/Date: - notice under section 354 of the Mumbai municipal corporation act. Notice no. KW/354(pull down) 246/BF/AE-iV/71 dated 11/05/2021 are given in Figure 1.1B respectively.

In accordance to with the earlier D.C. Regulation 33(7) and Appendix - III to this regulation 33(7) as the above-mentioned property is affected by CRZ as per Govt. of India Notification issued under No. So -114(E) of 19.02.1991 Coastal Regulation Zone Notification 2011 issued under SO. 19(E) dated 06.01.2011 and Office Memorandum issued by MCZMA, Environment Department, Government of Maharashtra dated 02.07.2011, Notification No. TPB 4308/3224/CR-268/08/UD-11 dated 2nd March 2009. The proposed project needs to obtain prior permission from Maharashtra Coastal Zone Management Authority (MCZMA) for redevelopment.

Redevelopment of Residential Building at juhu, Mumbai





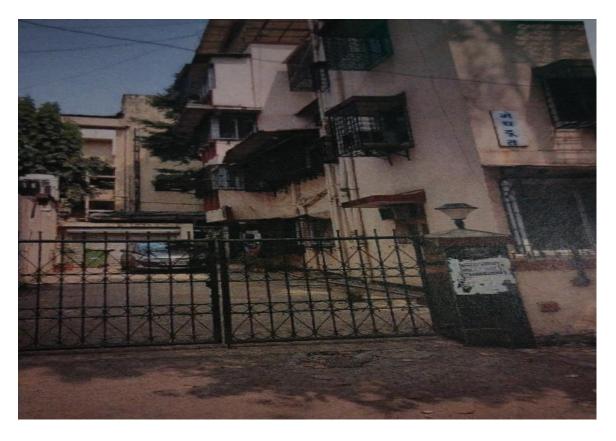


Table 1.2 site structure photograps .

1.3 Applicability of CRZ Notification 2011

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). According to para 4(d) of CRZ notification 2011, the proposal for the construction in the areas falling in CRZ-II shall be approved by the concerned states or Union territory Planning authorities. In accordance with this notification one can obtain recommendations from the concerned CZMA and subsequently CRZ clearance accord based on requisite documents like Form I, CZMP map, DP plan etc.

1.4 IDENTIFICATION OF PROJECT PROPONENT

M/s K L Housing LLP has proposed redevelopment of a residential building on subjected land. The details of the project proponent are given in

Table-1.1: Details of Contact Person

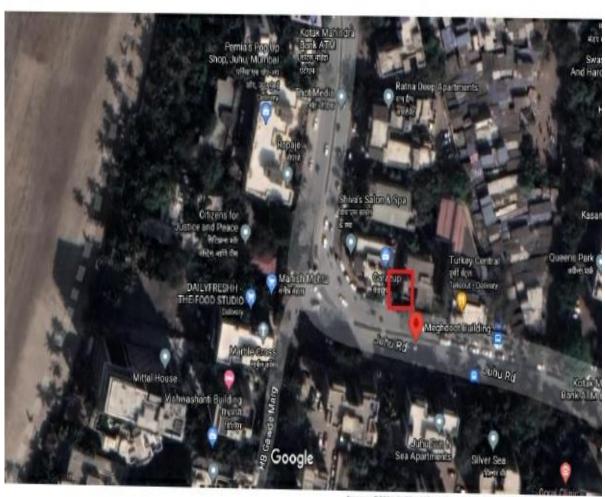
Sr.No.	Particular	Details		
1	Name of Developer	M/s K L Housing LLP		
2	Name of Contact Person	Mr. Puneet Lahrani.		
3	Designation of Contact Person	Director.		
4	Contact No	9820026926		
5	Email	puneet@klgroup.org		
6	Address	M/s K L Housing LLP, 801, 8 th floor k L Regalia, linking road, khar west, Mumbai 400052.		

1.5 LOCATION OF THE PROJECT

The proposed project admeasuring about **657.0 sq.m.** (as per PRC) and 535.55(as per actual survey) of plot area is situated on F.P. No. D/29, (CTS.1043) **31-32, Meghdoot, The Lido juhu CHSL, Juhu road, Santacruz(west), Mumbai 400049.** The Google image of the proposed site is given in Figure 1.2 and Location of Proposed Project on CZMP Map is given in Figure 1.3.

Figure 1.2:-Location of Proposed Project on Google Image

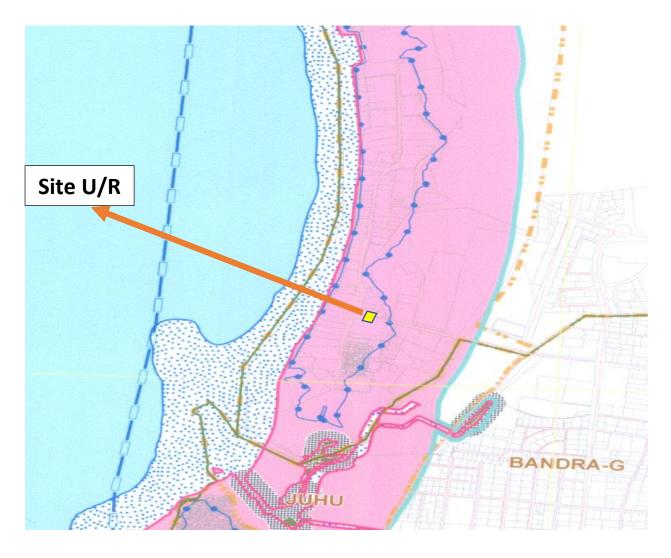




magery ©2021 CNES / Airbus, Maxar Technologies, Map data ©2021 20 m j.



Figure 1.3:- Showing Location of Proposed Project on CZMP Map



DESCRIPTION OF PROJECT SITE

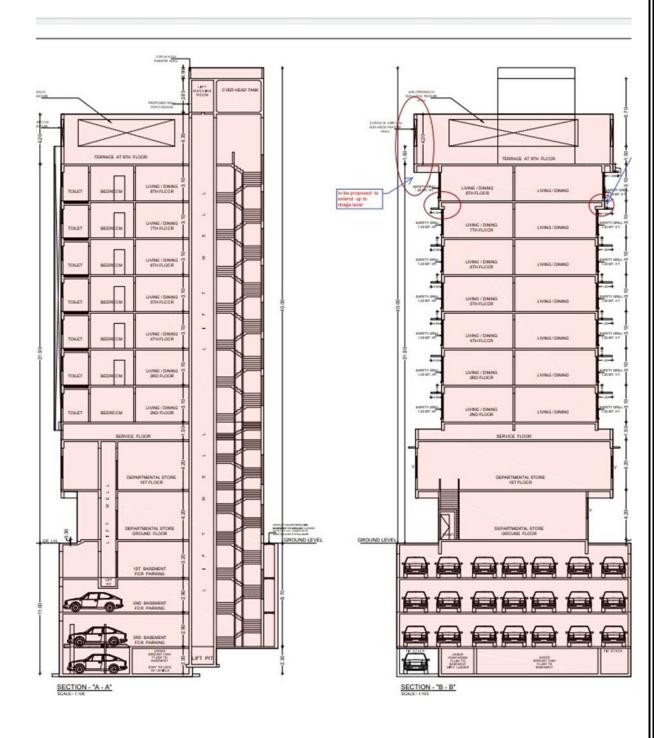
The proposed project has existing access road from Santacruz juhu road sector no II The environmental features are illustrated in given Table 1.2 given below.

Table-1.2: Environmental Setting of Proposed Project

1.6 PROJECT LAYOUT

The proposed project is a redevelopment project which comprises of 3 Basement Car Parking + GR + 1st Commercial + 2nd To 8thFloor Residence in Figure 1.4, 1.5 and 1.6 respectively.

1	Latitude	19°05″10.30′N
2	Longitude	72°49′39.86′E
3	Elevation above MSL	5.98m
4	Climatic Conditions	
5	Present land use at the	Residence
	proposed site	
6	Transport Connectivity	Road
Α	Nearest Highway	Western express highway
В	Nearest Railway Station	Santacruz
С	Nearest Road	Juhu Tara Road
7	Social Aspect	
Α	Nearest School/College	SNDT
В	Nearest Hospital	
С	Nearest Fire Station	Andheri
D	Nearest Police Station	Santacruz
8	Hills/Valleys	Nil
9	Ecologically sensitive	
	zones within 15-Km	
	distance	
10	Seismic Zone	Zone – III



Project configuration and parking floor

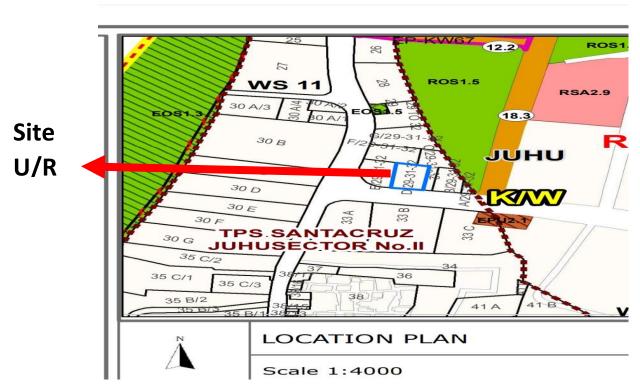


Figure 1.4: - Location plan of the Proposed site

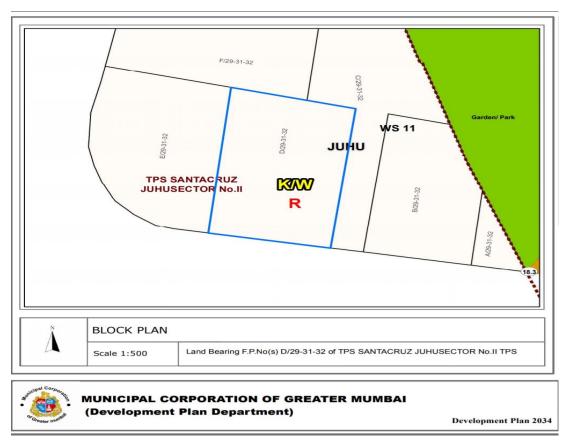


Figure 1.5:- Block plan of the proposed site

BRIEF DESCRIPTION OF PROJECT

The brief description of the proposed project is given Table 1.3.

Table 1.3: Brief description of the project

#	Particular	Details		
1	Project Type	Commercial cum		
		Residential		
2	Location	Juhu Road		
	CTS No	1043		
	Village	Juhu		
	Tehsil	Andheri		
	District	Mumbai		
	State	Maharashtra		
3	Site fall under CRZ I/II/III	II		
4	Distance of proposed building from HTL			
5	Proposed Plot Area	657 sq.mt as per PR		
		Card.		
6	Permissible FSI	2.50		
7	Permissible BUA	1338.85		
9	Total construction area	3700 sq mtr		
10	No of Buildings	1		
		3 Basement Car Parking		
11 Configuration of proposed Buildings		+ GR + 1 st Commercial +		
		2 nd To 8 th Floor		
		Residence		
12	Population	153 Nos		
13	Water	ВМС		
а	Source	ВМС		
b	Total water requirement	16.00		
С	Total sewer generation	13.60		
d	Mode of Disposal	Connected to Municipal		
		Sewer Line		

14	Solid Waste Generation	51.90 Kg/Day		
	Mode of Disposal	Handed over to		
		Municipal Garbage		
		Collection vehicle.		
16	Power	Adani		
а	Requirement			
		3.3		
b	Source	ADANI		
17	Project cost	15 CR.		
18	Parking Details (no of parking's)	32		

2.0 DESCRIPTION OF THE ENVIRONMENT

2.1 METEOROGICAL

Relative Humidity	Temperature	Rainfall
Climate of district Mumbai can	Annual Mean Maximum	Total Me-
be generally classified as warm	Temperature: 36∘c	an Annual
and moderately humid. Relative	Annual Mean Minimum	Rainfall:
humidity ranges from 32% in	Temperature:16.5° c	2567 mm
April to 82% in july		

2.2 AMBIENT AIR QUALITY

The range of average values of the pollutants is as below.

parameters	Range of Pollutants Present	Unit
SO ₂	19.0 - 29.0	μg/m₃
NO_x	26.5 – 42.0	μg/m ₃
RSPM	78.0-168.0	μg/m₃

2.3 NOISE LEVEL

DAY Time Noise Levels [(L Day)]

The noise levels ranged between 48.20 dB(A) to 74.60 dB (A).

Nighttime Noise Levels (L night)

The noise levels ranged between 25.99 dB(A) to 51.15 dB(A).

2.5 WATER QUALITY

Ground Water Quality:

Parameters	Units
рН	7.8
Suspended Solids	40.0 mg/L
TDS	280 mg/L
Conductivity	300 μs/cm
Chloride Hardness	302mg/L 200 mg/L

2.5 DEMOGRAPHY AND SOCIO- ECONOMIC PROFILE

k/w Juhu 657.0(as per 32 NOS. 153 Nos Approx.	
k/w Juhu 657.0(as per 32 NOS. 153 Nos Approx. PR Card) 535.55 (as per actual survey)	

3.0 ANTICIPATED ENVIRONMENTAL IMPACTS & MITIGATION MEASURES

3.1 WATER SUPPLY AND WASTEWATER MANAGEMENT

Construction Phase:

Water Supply:

During construction phase, water will be supplied by MCGM for drinking and other domestic purposes of the construction labors and by tankers to be used

for construction. Total water requirement during the construction phase is about 50 cmd. Water will be utilized for domestic use of construction laborers and for construction activity.

Wastewater generation:

Wastewater during the construction phase will be sewage generation, estimated as **8 cmd** (**80% of water supplied**). The details of Water Requirement and Waste generation during Construction Phase are given in Table 1.4.

Table 1.4: Water Requirement and Waste generation during Construction Phase

Sr. No.	Purpose	Source	Quantity (cub .m/day)	Wastewater generated (cub .m/day)
1.	Domestic use of construction workers	MCGM	10	8 (@80% of water supply)
2.	Construction activity	Tanker water	40	
	Total		50	8

Management:

- Temporary toilets would be made available for construction workers. It would be directly connected to the existing municipal sewer line for disposal of wastewater.
- 2. Care will be taken to ensure that the water used for construction purposes does not accumulate on the site to prevent breeding of mosquitoes.

Operation Phase:

Water supply:

During operation phase, water supplied by MCGM will be used for domestic purpose and for other purposes like flushing, gardening etc.

Water requirement

The average water consumption for residential buildings has been calculated as 135 liters per capita per day (90 liter for domestic purposes and 45 liter for flushing) (as prescribed by the Central Public Health and Environmental Engineering Organization or CPHEEO). During operation phase, water supplied

by MCGM would be used for domestic purpose and for other purposes like flushing & gardening etc. The details of Water Requirement and Waste generation during Operation Phase are given in Table 1.5. Water Balance is given in figure 1.6 respectively.

Table 1.5: Water Requirement during Operation Phase

Purpose	Quantity (KLD)
Total water requirement	16
Domestic water requirement	10.43
Flushing water requirement	5.57
Landscape water requirement	0.8
Total sewage generation	13.60

3.2 SOLID WASTE GENERATION AND MITIGATION MEASURES

Construction stage:

During the construction stage, construction waste would be generated which would include debris, concrete, steel and other metals, bricks, pallets, packaging and paper products, railings, door and window casings, fixtures, tiles, furnishings etc.

Operation stage

During operation phase, solid waste will be generated @ 0.4 Kg/ day for residential purposes. The details of solid waste generated during operation phase are given in Table 1.6.

The main solid waste generated from the proposed project is due to consumption of food materials, plastic, packing material and paper. The solid waste will be segregate at the site and recyclable material will be sold out through vendors. Biodegradable waste would be transferred to mechanical composting units within the premises and rest will be disposed of into the garbage collecting vehicles of the local authorities.

Sr. No.	Waste Type	Collection	and	Method of Disposal
		Storage		

1.	Organic waste	Manual collection &	Treatment in
		storage at ground	mechanical
		level.	composting units
			provided at the
			ground level within
			the premises. The
			manure generated
			will be used for
			gardening.
2.	Inorganic waste	Manual collection &	Disposed to the
		storage in closed	municipal waste
		rooms at ambient	collection system
		temperature	and recyclable
			waste to be taken
			away by private
			contractor for
			resale.

Proposed method for Solid Waste Management

Table 1.6: Solid Waste Generated during Operation Phase

	Quantity (Kg/Day)
Total Solid waste generated (@0.4 kg/Person/ Day)	52
Bio-degradable waste generated @60% of total waste	31
Non-Biodegradable waste generated @40% of total was	te 21

3.3 POWER REQUIREMENT

During Construction Phase:

Power required for the general purpose will be approx. 100 KW & shall be taken from local authority from the existing connection.

During Operational Phase:

For the proposed high rise building the average electrical load consumption per day is 737.63 KVA while the average annual consumption is 4235 KVA.

Transformers will be as per BEST Norms.

The same will be operated for essential power requirements such as fire lifts, water pumps, and passage lighting etc. As in Mumbai there is hardly any power failure is observed.

The building will have following energy saving measures.

- ➤ Light fixtures will be used with energy saving CFL & T5 fluorescent tube with electronic chocks.
- Selection of Energy efficient equipment's (BEE STAR RATED).
- > All vertical fenestrations will be as per ECBC.

3.4 AIR & NOISE POLLUTION & CONTROL MEASURES

The sources of air vehicular movement and honking. By implementing appropriate mitigation measures these effects are expected to become insignificant.

3.5 FIRE FIGHTING MEASURES

For protection of the facility against fire, all the units will be equipped with any one or a combination of the following firefighting systems:

- Smoke detector, and smoke alarm system
- Fire Detection and alarm system; and
- Different types of fire extinguishers.
- Precautions will be taken as per NBC & C.F.O NOC.

For storage of water for firefighting in case of emergency, a firewater underground sump will be provided. This will serve the firefighting needs of the project.

4.0 ENVIRONMENTAL MONITORING PROGRAMME

4.1 Environmental monitoring

The post project monitoring to be carried out at the project site will be as mentioned below:

Air Pollution and Meteorological Aspects

Both ambient air quality and stack emissions shall be monitored. The ambient air quality shall be monitored once in three months by engaging the services of the laboratory approved by SPCB/ MOEF.

Wastewater quality

The wastewater generated from sanitation shall be monitored once in a month for physio - chemical characteristics and results reported to SPCB. The treated water from STP shall be monitored once in a month of physiochemical characteristics and results.

Noise levels

Noise levels shall be monitored once in three months.

Environmental Monitoring Plan

	During Construction Phase									
	Item	Parameters	Frequency	Location						
1.	Ambient Air	SPM, RSPM, SO ₂ ,NOX, HC	Quarterly	At major						
	Quality	& CO		construction						
				area. (Total 1						
				station)						
2.	Noise Level	Equivalent noise Level	Daily	At major						
		dB(A)		construction						
				area. (Total 1						
				station)						
3.	Drinking	Analysis of water for	Quarterly	Municipal						
		physical, chemical,		supply						

	water	Biological parameters.						
During Operation Phase								
	Item		Parame	eters	Frequency	Location		
1.	1. Ambient Air Quality		SPM,	RSPM,	Quarterly	Total 1 station		
			SO ₂ , No	OX, HC				
			& CO					
2.	Noise Leve		Equival	ent	Quarterly	Total 1 station		
			noise	Level				
			dB(A)					
3.	Drinking W	ater	Analysi	s of	Quarterly	Municipal supply		
			water	for				
			physica	ıl <i>,</i>				
			chemic	al,				
			biologi	cal				
			parame	eters				

5.0 Environment Health and Safety

All the safety and security measures shall be observed at constructions site. Safety precautions will be observed as per the guidelines during the construction phase. Personal Protective Equipment's (PPE) will be provided to all the personnel involved in the construction activities. The project authorities will ensure use of safety equipment's for workers during execution process. The safety and security officers shall supervise the site. Proper training will be given to workers and authorities to handle the hazard situation.

Safety Measures Onsite

- 1) Parameters and Quality will be strictly adhered to as per the approved architectural design data/map. All the regulations of government authorities will be followed.
- 2) All the safely precaution will be observed as per the guidelines during the construction phase. Personal Protective Equipment's (PPE) will be provided to all the personnel involved in the construction activities.
- 3) Site barricading by corrugated tin sheets up to height of 5.0 mtr 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. Jute barricading along building / plot boundary shall be provided to minimize noise level from construction activities.
- 6) The safety and security officers shall supervise the site.
- 7) Safety helmets will be mandatory to all the persons present on the site during the construction Activities.
- 8) Hand gloves and dust masks will be provided to persons handling construction materials during the operation.
- 9) Safety belts will be provided to the persons working at height during the operation.

10)Safety nets will be arranged at a height at about 5.0 mtr when the structures get raised above the required height from the ground.

6.0 Additional Studies

Disaster Management Plan

This provision is applicable in the present case only to safety and fire hazard because it is a small residential unit. The only hazards envisaged here are from fire either due to short circuit or gas cylinder in the kitchen of individual houses. There are no other manmade disasters expected. We have not considered here the natural disasters like flooding, earthquake etc.

Normal safety plans and precautions are expected to be in place as per CFO and MCGM guidelines. To maintain the ecological balance and check any probable harmful effect, proper EMP, good housekeeping around project site, have been suggested.

The fire safety measures followed will be:

- Underground and overhead water storage tank
- Exit sign & Emergency escape route sign shall be provided
- Fire pumps, sprinkler pumps with jockey pumps to be provided
- Pressurized wet risers at mid-landing in the duct adjoining each staircase with hydrant outlet and hose reel on each floor
- Portable extinguisher and bucket filled with sand shall be kept in Electric meter room, Lift machine room and entire parking.
- Automatic smoke detection & Fire alarm system
- Fire escape staircases, fire lift & fire safety doors as per DC Regulations and in the line with NBC 2005

The Disaster Management Plan studies include:

- Identification of the major hazards to people and the environment.
- Assessment of the risks
- Develop warning system wherever possible.
- Develop manpower and measures to prevent / control the risks.
- Make advance preparations to face the disaster, minimize the losses, provide help to affected people.
- Planning to recover from the effects of the hazard.

7.0 PROJECT BENEFITS

The project proponent seems to be safety conscious and alert about good housekeeping and is environment friendly. We may conclude as under:

- Proposed Redevelopment project is in juhu. area of Mumbai. The site under reference is affected by CRZ-II zone. Thus, property attracts the CRZ legislation, which is reflected in CZMP plan.
- The proponents are following all the Firefighting safety rules and regulations as prescribed by M.C.G.M and CFO regulations.
- Ambient Air quality of the project site will be within the permissible limit as prescribed by National Ambient Air Quality Standards.
- Grey water Recycling Plant is proposed for treatment of grey water generated from proposed project. Black water generated from proposed project will be directly connected to the existing Municipal sewer line.
- Solid waste will be collected and segregated and kept separately for wet and dry garbage. Dry garbage will be sorted into recyclable and nonrecyclable. Recyclable dry garbage will be disposed to authorized recycling agencies and nonrecyclable will be sent to land fill sites by the municipality. Wet garbage will be treated by
- Air, water, Noise, soil parameters will be studied during construction as well as after construction to minimize the environmental impact by taking proper precautionary measures.
- No significant impact is seen on flora and fauna.
- Fly -ash will be used in concrete work.
- Total 8 trees will be planted along with landscape development to improve microclimate.
- The project will generate employment opportunities during construction stage and at operational phase.
- Proposed buildings have considered energy efficient lighting.

Thank you