EXECUTIVE SUMMARY

Prepared for

(Reconstruction of Residential Building)

at

Plot no. 81, TPs no. 2, C.S. NO 657, of Mahim Division situated at 197 – Anand Bhawan no.2 also known as Bhageshwar Bhawan, Dilip Gupte Marg Mumbai.

Developed By

M/s. Shagun Builders

1. PROJECT DESCRIPTION

The redevelopment of old 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 becomes dangerous and unfit for habitation. Hence, M/s Shagun Builders as a developer has identified possibility in this field to provide safe space for accommodation.

1.1 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.

1.2 APPLICABILITY OF CRZ NOTIFICATION

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 State or Union territory Planning authorities.

1.3 LOCATION

The proposed project admeasuring about 816.06 sq. m. of plot area is situated on Plot no. 81, TPs no. 2, C.S. NO 657, of Mahim Division, Dilip Gupte Marg Mumbai. The environmental setting around the proposed site is given in Table-1.1.

Sr. No.	Particulars	Details		
1	Latitude	19º 01'53.35" N		
2	Longitude	72º 50' 21.14" E		
3	Elevation above MSL	13.5 m above Mean Sea Level		
		Maximum Temperature :36.0 °C		
4	Climatic Conditions	Minimum Temperature :16.5 °C		
		Annual Rainfall :2567.5 mm		
5	Present land use at the proposed site	Residential		
6	Transport Connectivity			
A	Nearest Highway	Western Express Highway		
В	Nearest Railway Station	Matunga Road Station (1.2 km – E)		
С	Nearest Road	As above		
7	Social Aspect			
A	Nearest College	Bombay Scottis School 500 m		
В	Nearest Hospital	Hinduja Hospital (250 m- NW)		

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Sr. No.	Particulars	Details
8	Hills/Valleys	Nil
9	Ecologically sensitive zones within 15-	CRZ – I & CRZ - II
	km distance	
10	Seismic Zone	Zone – III

1.4 PROJECT DETAILS

Table 1.2: Project Details

#	Particular	Details
1	Project Type	Residential
2	Site fall under CRZ I/II/III	CRZ - II
3	Distance of proposed building from HTL	170.0 m
4	Proposed Plot Area	816.06 sq. m
5	Total Construction area	sq. m
6	No of Building	1 2878.07
7	Configuration of proposed Buildings	2 B + G + 15 upper Floor (48.60 m)
8	No of tenements	47 No
9	Water	
а	Total water requirement	35.5 KLD
b	Total sewer generation	27.0 KLD
10	Solid Waste Generation	88 kg/day
	Mode of Disposal	In house management/Handed over to MCGM
11	Power	
а	Requirement	275 KVA
b	Source	BEST
12	Project cost	11.00 Cr

2. DESCRIPTION OF THE ENVIRONMENT

2.1 METEOROLOGICAL

Relative Humidity

Climate of district Mumbai can be generally classified as warm and moderately humid. Relative humidity ranges from 32 % in April to 82 % in July.

Temperature Annual Mean Maximum Temperature: 36 °C

Annual Mean Minimum Temperature: 16.5 °C

Rainfall

Total Mean Annual Rainfall: 2567 mm

2.3 AMBIENT AIR QUALITY

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

Parameters	Range of Pollutant Present	Unit
SO ₂	19.5 – 28.5	µg/m³
NOx	27.5–41.50	µg/m³
RSPM	68.0– 178.0	µg/m³

2.4 NOISE LEVEL

Day Time Noise Levels $[(L_{day})]$ The noise levels ranged between 45.20 dB (A) to 71.20 dB (A).

Night Time Noise Levels (L_{night}) The noise levels ranged between 32.80 dB (A) to 42.15 dB (A).

2.5 WATER QUALITY

Ground Water Quality:

- pH is 7.8
- Suspended Solids is 45.0 mg/l
- TDS is 288 mg/l
- Conductivity 312.50 µs/cm
- Chloride is 302 mg/l
- Hardness is 210 mg/l

2.6 DEMOGRAPHY AND SOCIO - ECONOMIC PROFILE

Ward	Area	Land Area km ²	Households	Population	Density/km ²
G north	Dadar	9.1	1,20,643	582007	64168

Source: District Census Hand Book

3. ANTICIPATED ENVIRONMENTAL IMPACTS & MITIGATION MEASURES

3.1 WATER & WASTEWATER GENERATION

Water requirement @ 135 lpcd (90 liter for domestic purposes and 45 liter for flushing).

Sr.		Domestic		Flushing	
No.	Particular	Standard	Quantity	Standard	Quantity
		(lpcd)	(lit)	(lpcd)	(lit)
1	Tenements (47)	90	22000	45	11000
2	Other	15	500	30	1000
3	Landscaping				1000
	Total	35500 lit			

Sewage line will be collected to existing municipal sewer line.

3.2 AIR & NOISE POLLUTION & CONTROL MEASURES

The sources of air & noise pollution are D. G. sets and vehicular movement and honking. By implementing appropriate mitigation measures these effects are expected to become insignificant.

3.3 SOLID WASTE GENERATION & MITIGATION MEASURES

				Solid Waste Generation (Kg/day)	
Type	Population	Standard	Quantity	Biodegradable	Non-
туре		(kg/day/person)	(kg/day)	waste (50 %)	biodegradable
					waste (50%)
Residential	235	0.375	88	44	44

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 and rest will be disposed off into the garbage collecting vehicles of the local authorities.

4. ENVIRONMENTAL MONITORING PROGRAMME

4.1 ENVIRONMENTAL MONITORING

The Post Project Monitoring to be carried out at the project is 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 physicochemical characteristics and results reported to SPCB.

Noise Levels

Noise levels near the DG set shall be monitored once in three months.

4.2 COST PROVISION FOR ENVIRONMENTAL MEASURES

Environment Protection Capital Cost **Recurring Cost** Measures (lakh Rs.) per annum (lakh Rs.) Environment Protection 2.0 measures during construction stage Green belt 2.0 0.25 0.25 Solar 2.0 RWH 2.0 0.25 Solid Waste Management 0.5 1.0 TOTAL 9.0 1.25

Budget Allocation for Environmental Protection

5. 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, earth quake 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 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.

6. PROJECT BENEFITS

- To create an environment that could support the culture of good standards;
- The development of land for any purpose creates both an immediate demand for services and a flow of revenues to the community and govt. from a variety of sources, for example transportation, property tax, licenses and permits fee etc.
- This project will increase the economic activities around the area, creating avenues for direct/ indirect employment in the post project period. There would be a wider economic impact in terms of generating opportunities for other business like workshops, marketing, repair and maintenance tasks etc.
- The continuous inflow of people will require local transport systems like autos, taxis etc which would help their business;
- During construction phase, the project will provide temporary employment to many unskilled and semi-skilled laborers in nearby villages. The project will also help in generation of indirect employment to those people who render their services for the personnel directly working in the project; and

7. ENVIRONMENTAL MANAGEMENT PLAN

Preparation of Environmental Management Plan is a must to fulfill bifocal aspect of the statutory compliance as well as that of social concern.

7.1 AIR & NOISE ENVIRONMENT

- Monitor the consented parameters for ambient air, regularly.
- Monitor the D.G stack
- Monitor the work zone to satisfy the requirements for health and environment.
- PUC vehicles
- Water sprinklers
- Trucks Covered & Smooth Roads.
- Green Belt development

7.2 WATER ENVIRONMENT

- Keep record of input water every day for quantity and periodically of quality.
- Collection of rain water.
- Water conservation shall be accorded highest priority in every section of the activity.

7.3 SOLID WASTE

- Monitor solid waste zones environnent.
- Segregation of waste at source

7.4 BIOLOGICAL ENVIRONMENT

- Special attention is planned to maintain green belt in and around the premises.
- Adequate provisions are made to facilitate daily watering of all plants and lawns. Ensure the availability of water for green belt.
- Development & maintenance of green belt to be considered as a priority issue.