

EXECUTIVE SUMMARY REPORT

**(AS PER CRZ NOTIFICATION 06.01.2011,
UNDER PARA 08 V (D) 4)**

FOR

REDEVELOPMENT OF “RUNGTA CHAWL”

**(UNDER REGULATION NO. 33(7) OF
D. C. P. R. 2034 OF MUMBAI)**

AT

**PLOT BEARING C. S. NO. 355 (PT) OF
MALABAR AND CUMBALA HILL DIVISION,
AT NEPEANSEA ROAD, WARD-D,
MUMBAI – 400006.**

PROPOSED BY

EMPRESS HAMMER REALTY LLP

EXECUTIVE SUMMARY

INTRODUCTION

Empress Hammer Realty LLP is proposing Redevelopment of “**Rungta Chawl**” at plot bearing C. S. No. 355 (pt) of Malabar and Cumbala Hill Division at Nepeansea Road, Ward-D, Mumbai – 400006 which comes within the municipal limits of **Municipal Corporation of greater Mumbai**.

There are existing **CESSED** structures and **NON-CESSED** structure on plot which are now proposed to be redeveloped into a residential building of S + 8 upper floors for residential use. The existing **CESSED** category structure is of Ground + 1 storey with 16 nos. of Residential tenants having 251.05 m² of built up area. The **NON-CESSED** structure (cottage) is of Ground story having 45.61 m² of built up area. Both the **CESSED** and **NON-CESSED** category structures are affected by **CRZ II**. The site is in Residential Zone as per DP 2034.

The project after redevelopment will have 24 nos of tenements, out of which 16 tenements will be given for rehabilitation of existing tenants and 08 for the Sale component.

The site under reference is affected by **CRZ-II zone**. Proposed site is accessible by 12.20 m wide Rungtha lane which is connected to 27.45 m wide Napeansea Road.

The total plot area of the project is 303.87 m², FSI area is 1,235.26 m² and total Construction area is 1,858.74 m². The proposed project comprise of 1 residential Bldg. with S + 8 floors (31.95 m) having 24 nos. of flats.

MHADA has awarded revised NOC for redevelopment of the said property with 3.0 FSI for the CESSED Category structure.

In proposed project, total water requirement is 16 KLD. Sewage generation will be 15 KLD and the same will be treated in Packaged STP of 20 KLD capacity (MBBR technology). The treated water will be used for Flushing (05 KLD) purposes. Excess treated water will be disposed in Municipal Sewer system.

Total solid waste generated from the proposed project will be 60 kg/day. Wet garbage (36 kg/day) will be composted using Mechanical Composting unit. Dry garbage (24 kg/d) will be handed over to authorized recyclers.

The cost of the project is Rs. 4.00 Cr. Adequate car parking facilities are provided in the proposed project. The total car parking provision of 9 nos has been made.

PROJECT DETAILS:

The total permissible built up area of proposed project is 1,264.55 m². The total plot area of the proposed redevelopment project is 303.87 m²

The area statement is tabulated below:

Area Statement

1	Total Plot area	303.87	m ²
2	Permissible FSI	1,264.55	m ²
3	Proposed FSI Area	1,235.26	m ²
4	Non FSI Area	623.48	m ²
5	Total Construction Area	1,858.74	m ²

Project Summary

Sr. No.	Details	Details
1.	Proposed bldg. configuration & height	S + 9 floors (31.95 m)
2.	Tenements existing	CESSED Structure: 01Nos. NON-CESSED Structure: 02 Nos.
3.	Tenement proposed	24 Nos.
4.	Total Water Requirement	16 KLD
5.	Sewage Generation	15 KLD
6.	STP capacity	20 KLD
7.	Total Solid Waste Generation	60 kg/day
8.	Total Power Requirement	0.1 MW
9.	Parking details	4W: 9 Nos.
10.	Project Cost	Rs. 4.00 Cr

BASELINE ENVIRONMENT

The baseline environmental status of the study region has been collected by the study team to ascertain the present environmental conditions around the proposed construction site. The study region for this assessment has been confined to 5 km radius from the project site.

Geographical Context

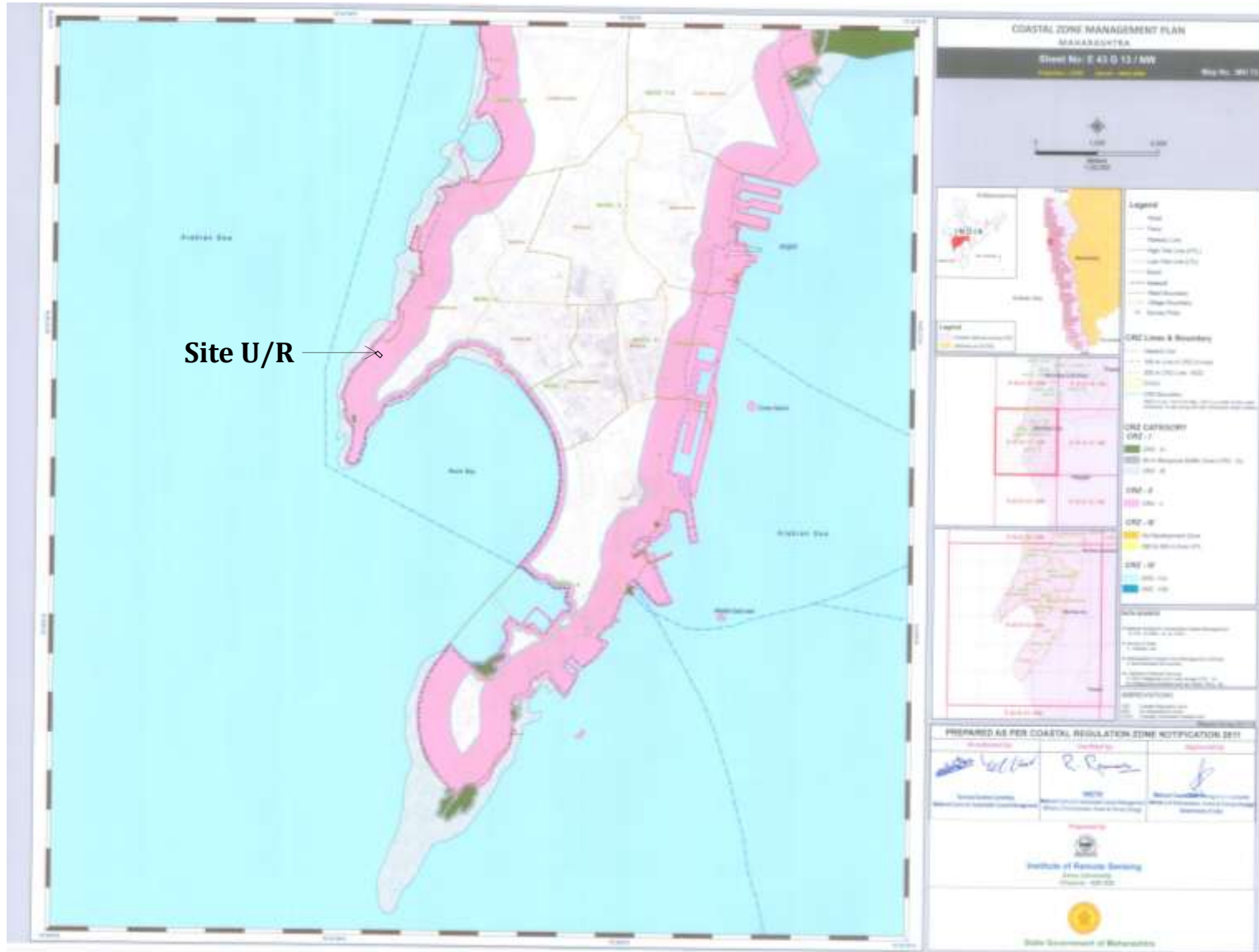
The proposed redevelopment site is under coastal regulation zone planned at Malabar and Cumbala Hill Division at Nepeansea Road, Ward-D, Mumbai – 400006 located on 18°57'16.02"N latitude and 72°47'51.84"E longitude. The proposed site is located at about 2.5 km away from Grant Road Railway Station and 3.0 km from Charni Road Railway Station. Proposed site is accessible by 12.20 m wide Rungtha lane which is connected to 27.45 m wide Napeansea Road.

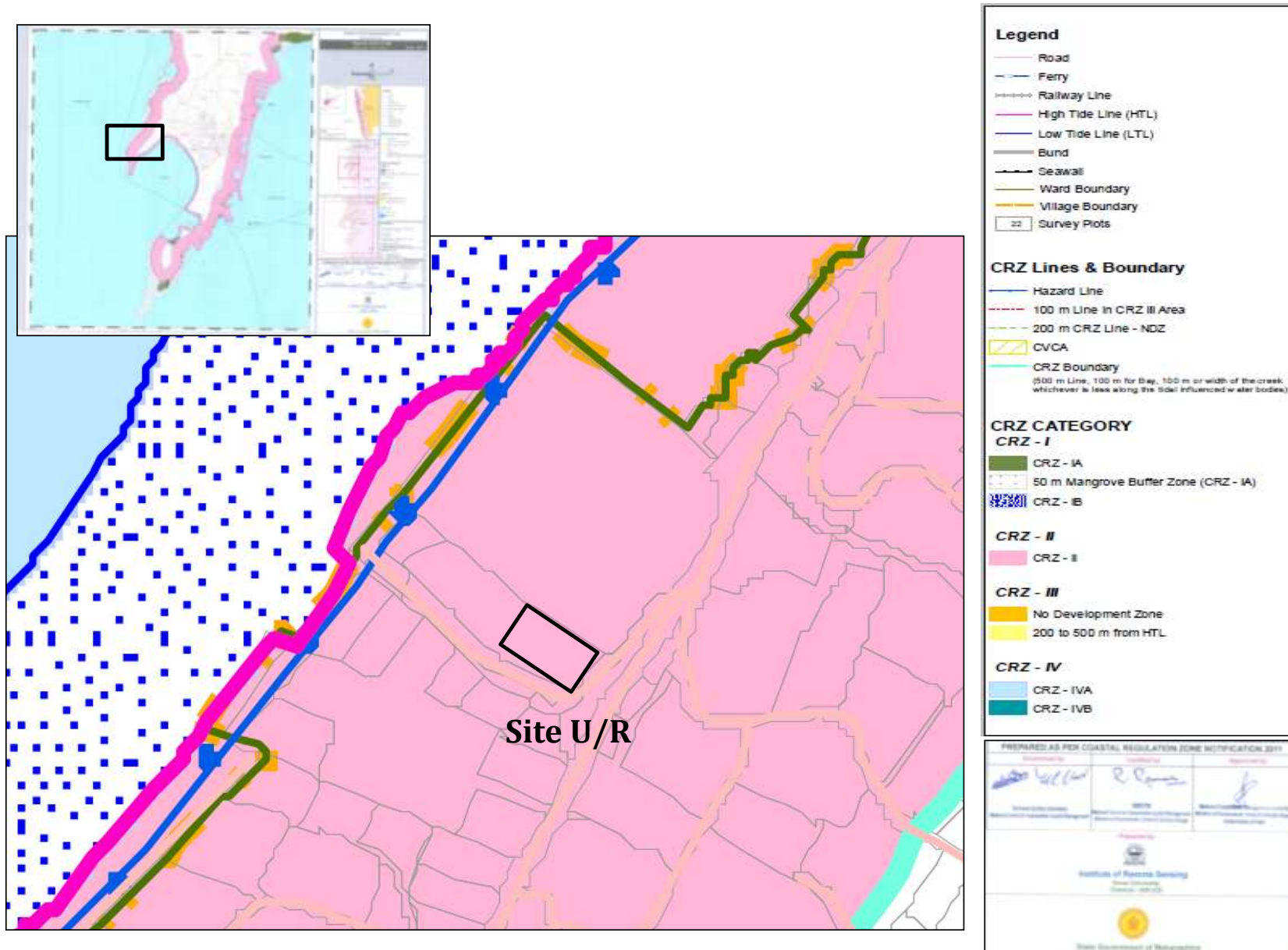
The complex is planned in the plot admeasuring 303.87 m² areas.

Location of the proposed redevelopment project:

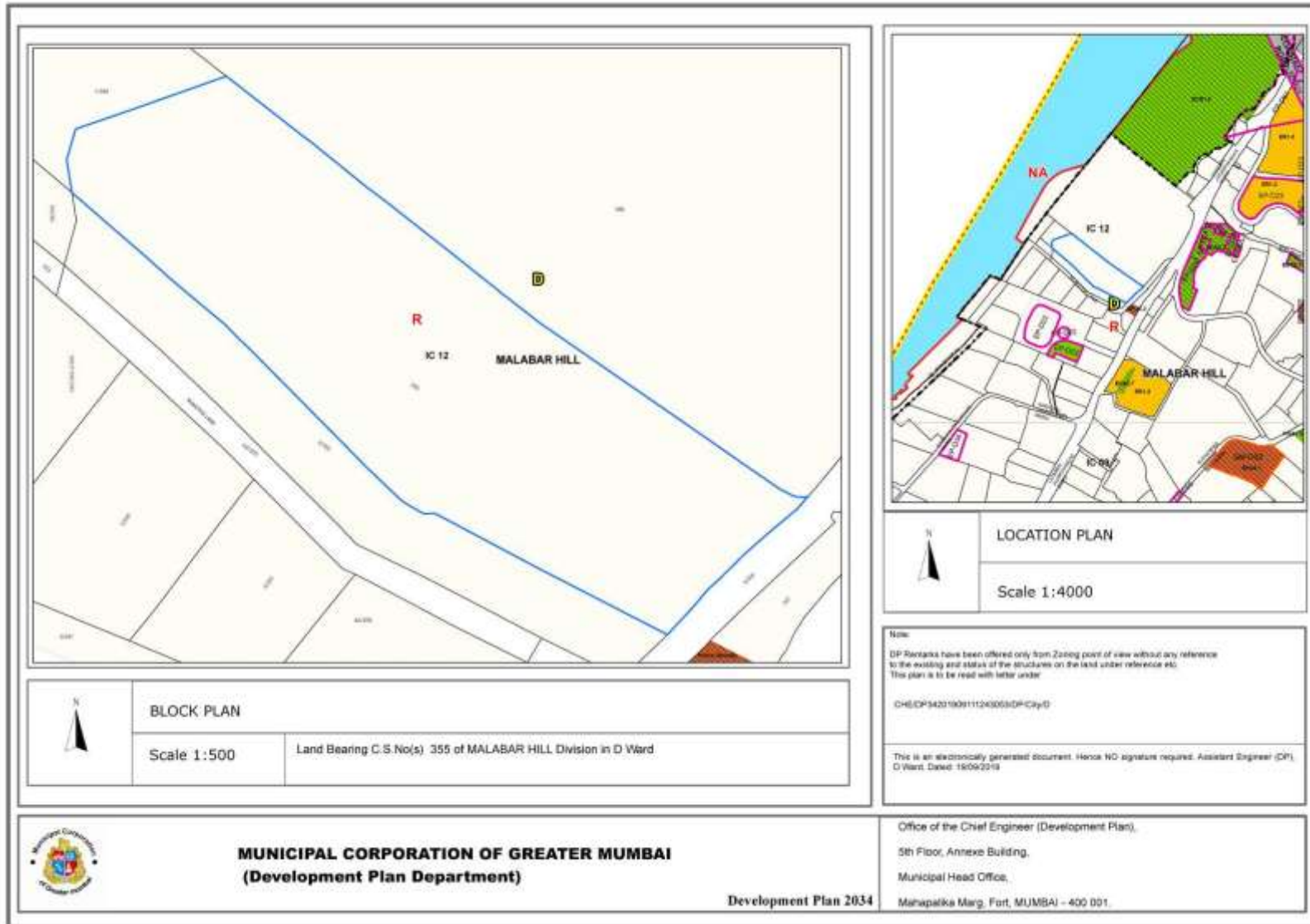


CRZ Demarcation:





DP Remark



Data Sources

The study team has collected the secondary information as well as the primary information on various environmental attributes. Information on existing environmental conditions has been gathered from several sources including:

- Site surveys and field experiments to gather the information on Meteorology, Air Quality, and Water Quality, Noise Quality, Biological environment and traffic were conducted by the study team.
- The published literature mainly Gazetteers and Environmental Status Report of Brihan Mumbai Municipal Corporation,
- Maps from Geological Survey of India and Development Plans of Brihan Mumbai Municipal Corporation.
- Mumbai City Census Data 2011 and satellite imagery.
- Secondary data from IMD, Santacruz.

Key aspects of prevailing baseline environmental qualities are as follows:

Meteorology

The climate of this region is mostly humid throughout the year. It receives heavy rainfall in the monsoon season. On an average, the temperature varies from 16.6°C to 37.9°C with marginal difference between summer and winter months and weather remains damp nearly throughout the year. The year may be divided into four seasons, as outlined below:

Season	Period
Summer	March to May
Monsoon	June to September
Post monsoon	October to November
Winter	December to February

Ambient Air Quality

Air quality was measured at three locations in the study area considering the prevalent upwind and downwind directions. Concentrations of Suspended particulate matter, Respirable Particulate Matter, PM_{2.5}, Sulphur dioxide, oxides of Nitrogen, Carbon Monoxide were measured. All the parameters were in the normal range and in conformance with their respective National Ambient Air Quality Standards.

Water Quality

Arabian Sea falls in the 5 km study region. No water samples were taken because there is no source of ground water on the site and drinking water will be supplied by MCGM.

Noise Quality

The quality of noise was monitored at three locations in the study area. The locations selected were such as to represent residential & commercial areas. At two locations the day time noise levels were found to be exceeding the ambient noise quality standards for day time prescribed by CPCB. This is attributed due to high traffic flow. The day time noise levels were found in the range of 55-65 dB and the Night time noise levels were found in the range of 40-44 dB.

Traffic Pattern and Density

The traffic survey was conducted to ascertain the present traffic scenario along 27.45 m wide Napeansea Road. It has been observed from analysis of traffic surveys that surrounding road network has acceptable level of traffic carrying capacity considering the total traffic vis-à-vis total volume (i.e. both directions) during both the AM and PM peak hours.

Land use

The study area is predominantly well developed residential and commercial in nature. The proposed project is a redevelopment and hence there would be no change the land use.

Flora and fauna

A field survey undertaken around the study area and analysis of secondary data with respect to flora & fauna indicates the following:

- Plant species have been observed in the area which includes trees, shrubs and climbers; herbs are common and found in other parts of Maharashtra as well.
- The area supports varied habitats for invertebrate & vertebrate species. The avian fauna species form a major portion of vertebrate group.

Socio-Economic Characteristics

The project site comes under the Malabar and Cumbala Hill Division. The main land use is built-up area. The major occupational activity of the population is in service sector. An analysis of the secondary data regarding educational facilities in the study area reveals adequate availability of schooling facilities at primary and secondary levels. An average meeting the national standards with regard to health, medical infrastructural facilities is also available in the area. Besides, the area is well connected and has a fairly good amount of accessible infrastructural facilities.

Environmental Impact Identification

The Environmental Impact Assessment report enumerates the likely impacts due to implementation of proposed project on environmental components such as Air, Noise, Water, Land, Biological and Socio-economic environment.

Air Environment

During construction phase emissions from construction machinery and transportation vehicles would mainly contain particulates, SO₂, NO_x and CO. Dust in the atmosphere may increase during clearing and excavation.

In the functional phase impact may be mainly due to vehicular emissions.

Noise Environment

During construction phase operation of construction and material handling machinery and use of DG sets may lead to increase in ambient noise levels.

In functional phase impact on noise may be due to vehicular traffic and operation of DG sets in case of power failure.

Water Environment

Probable source of pollution could be spillage of oil and fuels used for construction machinery. The sewage generated from workers will be discharged in existing municipal sewer lines to avoid contamination of ground water.

Impact during functional phase will be mainly due to discharge of domestic sewage.

Total water required for the project is 16 KLD. The waste water generated from proposed project will be around 15 KLD the same will be treated in STP of 20 KLD capacity (MBBR technology). The treated water will be reclaimed for flushing purposes. The excess treated water will be disposed in Municipal sewer.

Water Balance chart

Particulars	No of Flats /rooms	Occupancy	Total Population	Water Requirement Basis (in lpcd)*		Total Water Requirement/ person	Water Demand KLD
				Domestic	Flushing		
Residential flats	24	5	120	90	45	135	16
Total							16
Sewage Generation				90 % of Domestic & 100 % of Flushing Requirement			15
Sludge				1 % of Sewage Generation			0.2
Recycling for Flushing							
Residential flats	24	5	120		45	45	5
Total	24		120				5
Total Recycled Water							5
Excess Treated Water to Municipal Sewer							10

* Basis for Water supply is taken from BIS: National Building Code of India 2016: Part 9 pg 12

Land Environment

Soil erosion caused in the activities like clearing, cutting, filling and levelling during construction may contaminate the land.

Disposal of solid waste/garbage will be the only land pollutant factor in the functional phase. Appropriate measures will be adopted for its storage and disposal.

In this proposed project solid waste generated will be purely domestic and is estimated to be 60 kg/day of which 36 kg/day is biodegradable and 24 kg/day is Non-biodegradable. The dry and wet garbage will be segregated at the source by providing separate dust bins. Wet garbage will be composted in mechanical composting unit and the byproduct (i.e. compost) will be used as fertilizer while dry garbage will be disposed off for recycling purpose.

Traffic Impact

During construction, movement of haul trucks carrying debris, construction material, etc. and parking of construction vehicles on the road outside the site premises may lead to congestion of traffic.

In the operation phase there will be increase in the vehicular movement because of the residents and visitors. The analysis indicates that the traffic in the proposed conditions during both the morning and evening peak hours are well below the capacity of the access road. Hence there would be no adverse impact on adjoining road traffic on account of this development.

Biological Environment

During construction phase there will be no significant impact as there will be no cutting of trees from the construction site.

The impact on ecological environment during the use phase of the project will be positive as plantation will be done along plot boundary.

Socio-economic Environment

In construction phase it will create work opportunity for the local population. No negative impact is envisaged.

Overall positive impact in the functional phase, as the project in the activities such as maintenance of buildings and ancillary services.

Environmental Management Plan

Measures which will be adopted to reduce the magnitude of negative impacts from the proposed project during construction and functional phase are discussed below in the Environment Management Plan.

Environmental Management Plan during Construction Phase

Sr. No.	Environmental Components	Predicted Impacts	Probable source of Impact	Mitigation Measures	Remarks
CONSTRUCTION PHASE					
1.	Ambient Air Quality	Negative impact inside construction site premises. No negative impact outside site.	Dust emissions from demolition, excavation, air emissions from machinery and other construction activities at site.	<p>Net Fabric Wrapping, around the building during demolition to reduce air bourne dust generation</p> <p>Water sprinkling at regular interval to arrest air-bourne dust</p> <p>Periodic maintenance of construction equipment.</p> <p>Use of Personal Protective Equipments</p>	Impacts are temporary during construction phase. Impacts will be confined to short distances, as coarse particles will settle within the short distance from activities.
2.	Noise	<p>Negative impact near noise generation sources inside premises.</p> <p>No significant impact on ambient noise levels in the surrounding area.</p>	Noise generated from construction activities and operation of construction equipment	<p>Provision of barricades of adequate height along the periphery of the site</p> <p>Use of well-maintained equipment.</p> <p>Heavy construction activity limited to day-time hours only.</p> <p>Use of earplugs/muffs by construction staff.</p>	Temporary impacts during construction phase. No blasting or other high noise activities envisaged.
3.	Water quality	No significant negative impact.	<p>Surface runoff from project site.</p> <p>Oil/fuel and waste spills.</p> <p>Improper debris disposal.</p>	<p>Silt fences to reduce run-off</p> <p>Secondary containment and dykes in material storage areas.</p>	Impact will be temporary. Local labour will be employed to reduce size of labour camps. No perennial surface water resource adjacent to site.
4	Land	Minor negative impact	Excavation, Construction debris, waste from labour	Reutilisation and recycling of construction debris	

Sr. No.	Environmental Components	Predicted Impacts	Probable source of Impact	Mitigation Measures	Remarks
CONSTRUCTION PHASE					
			camp.	Topsoil will be conserved and used for landscaping in functional phase.-	
5.	Aesthetics	Minor negative impacts	Construction activities and Excavation	The impacts will be compensated by tree plantation.	Short term impact restricted only in the initial stages of construction. In long term there will be positive impact
6.	Socio-economic	Overall positive impact	Increased job opportunity for locals.	--	--
7.	Traffic Pattern	No Negative Impact	Haul truck movement and possibility of traffic congestion outside site on the road.	Adequate parking space will be provided inside the site.	--

Environmental Management Plan during functional Phase

Sr. No.	Environmental Components	Predicted Impacts	Probable Source Of Impact	Mitigation Measures	Remarks
FUNCTIONAL PHASE					
1.	Ambient Air Quality	Minor Negative impact	Particulate and gaseous emissions from DG sets and vehicle movement	Use of low sulphur good fuel Periodic maintenance of DG sets. Use of CNG/LPG as a fuel should be encouraged.	DG sets will be used only during power failure.
2.	Noise	Minor negative impact inside premises.	Noise from vehicle movement and operation of diesel generator sets during power failure.	Housing of DG sets in buildings with appropriate acoustics. Traffic management measures to reduce noise	--
3.	Water	No significant adverse impact	Oil/ fuel and waste spills in vehicle parking area. Discharge of sewage. Discharge of contaminated storm water	Provision of STP of 20 KLD capacity for treatment of sewage. Use of treated water for flushing purposes. Rainwater harvesting will be done by providing RWH tank for the proposed building Good housekeeping and storm water management will be followed.	
4	Land	No negative impact	Storage and disposal of solid wastes. Discharge of sewage. Fuel and material spills.	Separate dustbins for collection of wet & dry waste will be provided. Wet garbage will be composted using Mechanical Composting and used as organic manure	Segregation of dry and wet garbage before will be done before disposal.

Sr. No.	Environmental Components	Predicted Impacts	Probable Source Of Impact	Mitigation Measures	Remarks
FUNCTIONAL PHASE					
5	Biological	Overall Positive impact	Cutting and uprooting trees Habitat disturbance	Plantation inside the premises will help to compensate the earlier effect from vegetation.	Landscaping will help in reducing any adverse impacts on air and noise quality.
6	Socio-economic	Overall Major Positive impact	Increased job opportunity in household activities and ancillary maintenance services.	--	Positive and long term impact-
7	Traffic Pattern	No significant Impact	The Building is likely to add moderately to the traffic flow considered during peak hour.	Traffic Management practises will be employed. Adequate parking space will be provided in the premises.	The existing traffic flow in the peak hours is below the capacity of the road to cater the traffic. Thus Project will add no significant additional traffic burden on the road.