पर्यावरणावरील परिणामांचा अभ्यास आणि पर्यावरण व्यवस्थापन पुकल्प सारांश

''पुर्नविकास प्रकल्प"

[under "D. C. Regulations of 33 (7)"]

आमचा प्रकल्पाचे स्थान ः

अंतिम भूखंड कमांक ८२४, टी पी एस ४, माहिम विभाग, १४० - अ, "वगळ निवास", रा एस के बोले मार्ग लगत, आगार बाजार, दादर [प], मुंबई - ४०००२८

मे आशियाना कन्स्ट्रक्शन



GREEN CIRCLE INC.

EIA Consulting & Environmental Laboratory (MoEF Approved Environmental Laboratory)

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१.0 प्रस्तावना

प्रस्तावित पुर्नविकास प्रकल्प मे आशियाना कन्स्ट्रक्शन ह्यांनी जुन्या आणि मोडकळीस आलेल्या "डी.सी. नियमाअंतर्गत ३३[७]", मिळकत अंतिम भूखंड कमांक ८२४, टी.पी.एस.४, माहिम विभाग, १४० - अ, "वगळ निवास", रा.एस.के बोले मार्ग लगत, आगार बाजार, दादर [प.], मुंबई - ४०००२८ हाती घेतला आहे.

ज्याअर्थी हा अस्तित्वात असलेल्या बांधकामाच्या पुर्नविकासाचा प्रकल्प आहे त्याअर्थी अस्तित्वात असलेल्या जिमन वापरांत, प्रस्तावित प्रकल्पामुळे काही बदल होणार नाही. प्रस्तावित प्रकल्प हा मुंबईच्या विकासाच्या योजनेप्रमाणे असेल. अस्तित्वात असलेली जिमन-वापर पद्धत ही रहिवासी प्रकाराची आहे.

ह्या प्रकल्पाचा डिझाईन आराखडा व सुविधा ह्या पुर्णपणे लोकांच्या सोयींचा उद्देश व निरंतर विकास डोळ्यांसमोर ठेवून आखण्यांत आल्या आहेत. सदर प्रकल्पाची जागा ही जवळच्या हमरस्त्यांशी चांगल्या प्रकारे जोडलेली आहे.

2.0 प्रकल्पाची गरज

अस्तित्वात असलेले बांधकाम [जुन्या इमारतीचे स्थानिक नाव हे "वागळ निवास" Gr. + 1 असे आहे] हे जुनाट व मोडकळीस आलेल्या स्थितीत होते व आणखी दुरुस्ती, सदर बांधकामाला शक्य नव्हती व रहिवाशांना दुरुस्ती/नवीन बांधकामाचा खर्च पेलण्यासारखा नव्हता. तिथे योग्य पाणी पुरवठा व सांडपाणी व्यवस्था नव्हती अपु-या व्यवस्थापनामुळे प्रकल्पाच्या जागेची स्थिती वाईट होती .

म्हणून तिथे तातडीने लक्ष देवून तेथील सभासदांचे पुर्नवसन करणे अत्यंत जरुरी होते. ''डि.सी. नियमाअंतर्गत ३३[७]", सदर प्रस्तावित योजनेखाली, सद्य रहिवाश्यांना नविन घरे, सर्व मुलभूत सोयीनिशी, सुधारित इन्फ्रास्ट्रक्चर्स सहित

पूर्णपणे मोफत मिळतील. प्रस्तावित पुर्नविकासामुळे प्रत्येक कुटुंबाला प्रत्येकी अंतर्भुत असे 300 चौ. फु. क्षेत्रफळाचे गाळे उपलब्ध होतील. सदर पूर्ण वसाहत योग्य पाणीपुरवठा संपन्न, सांडपाणी व्यवस्था व जोड-रस्त्यांनी सुसज्य असेल. सदर प्रस्तावित योजना तेथील लोकांची आर्थिक-सामाजिक स्थितीची सुधारणा करील, जे लोक सध्या जुनाढ्य व मोडकळीस स्थितीत रहात आहेत.

अंतिम भूखंड कमांक ८२४ स्थित वगळ हाऊस हया इमारतीचा शासकीय योजनेनुसार पुर्निवकास करण्याचे सर्व कायदेशीर हक्क मे . आशियाना कन्स्ट्रक्शनचे मालक श्री . संग्राम पेटकर यांना दिलेले आहेत .

सदर प्रस्तावित प्रकल्प हा मान्य बांधकामाच्या दिशेला भू-प्रति सी.आर.झेड-II प्रमाणे पडतो.

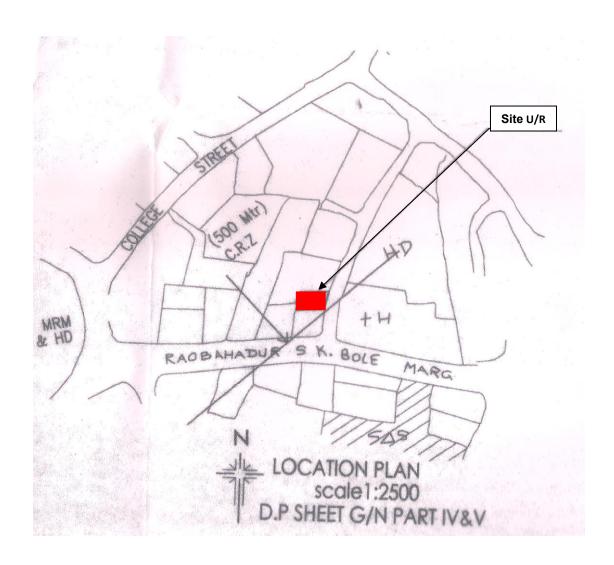
सर्वसाधारणपणे असे मानले जाते कि, काही विकासीय कामकाज जे किनारपट्टी क्षेत्रांत किंवा समुद्री भागांत आहेत, ज्यामुळे समुद्री पर्यावरणावर परिणाम होवून अल्प व दीर्घकालीन भौतिक, रासायनिक व जैविक बदल घडवून आणतात. त्यासाठी योग्य प्रतिकारात्मक व नियंत्रणरूपी उपाय घेणे अनिर्वाय आहे, नाहीतर हे बदल परिणालक ठरू शकतात. सागरी पाणी व गाळ ह्यांच्यातील अदला–बदलामुळे किनारी पर्यावरण क्षेत्र ह्यांचा दर्जा किनारपट्टी लगत बिघडू शकतो. म्हणून अगोदरच संवेदनशील भागांचे संरक्षण करण्यासाठी उपाययोजना केली पाहिजे मुख्यतः पर्यावरणीय, व्यापारी, मच्छीमारी आणि मनोरंजनीय, समुद्री विकास ह्याप्रमाणे अशा समस्या अधिक कठीण करतो आणि पर्यावरणीय व्यवस्थापनाला निवन आव्हाने निर्माण होतात.

सागरी/किनारी पर्यावरणावर किमान दुष्परिणाम व्हावे म्हणून, हे जरुरी आहे कि अशा कंपनीने अशा प्रतिबंधक उपायांना अलग ठेवले, त्यांचे एकरुपीकरण व त्यांची अंमलबजावणी त्यांच्या पुढील विकासांत केले पाहिजे.

3.0 प्रकल्प वर्णन

प्रस्तावित ''पुर्नविकास प्रकल्प" ''डि.सी. नियमाअंतर्गत ३३[७]", पुर्नवसन इमारतीचा आराखडा खालीलप्रमाणे आहे.

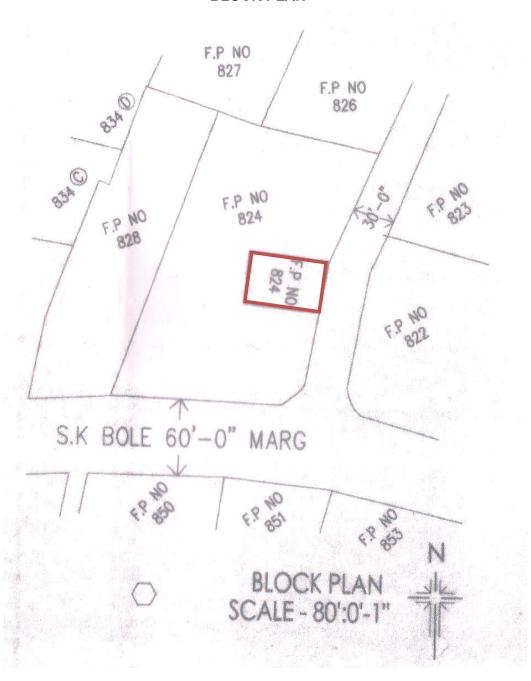
Part Stilt + Part Ground + 7 upper floors प्रकल्प ठिकाण ៖



4.0 प्रकल्पाचा सविस्तर

अ.क्र.	प्रकल्प गरज	सविस्तर		
1	क्षेत्र विधान	विस्तारपुर्वी (चटई क्षेत्र २.० प्रमाणे)		
		• एकूण प्लॉट क्षेत्र :२२० .७४ चौ .मी .		
		• वि.अ.क्षे : ४४१ -४८ चौ -मी -		
		विस्तार उपरांत (चटई क्षेत्र २.५ प्रमाणे) • एकूण प्लॉट क्षेत्र :२२०.७४ चौ.मी. • एकूण मान्य बि.अ.क्षे. चटई क्षेत्र : ५५१.८५ चौ.मी.		
		• बांधकामव्यतिरिक्त क्षेत्र [जिना, लिफ्ट आणि लॉबी क्षेत्र]		
		३ १३८ .३८ चौ .मी .		
		• एकूण बांधकाम क्षेत्र १६९० २३ चौ मी .		
2	एकूण पाण्याची गरज	स्त्रोत ः मुंबई महानगरपलिका पुरवटा		
		6 मी ³ / प्रतिदिन		
3	एकूण मलउत्पत्ती	सांडपाणी उत्पत्ती : 5 मी ³ / प्रतिदिन		
		एकूण सर्व सांडपाणी मुंबई महानगरपालिकेच्या नाल्यात सोडले		
		जाईल .		
4.	एकूण घन उत्पत्ती	१८ कि.ग्रं/प्रतिदिन		
5.	ऊर्जा गरज	During Operation Phase - Source – BEST Maximum Demand load – 38 KW		
6.	अशांस	19 ⁰ 01'08.39" ਚ.		
7.	रेखांश	72° 50′ 04.04" पू.		
8.	एम.एस.एल वरील चढण	38 फु.		
9.	भुकंपीत झोन	झोन III		
10.	प्रकल्पाचा खर्च	2.23कोटी		

BLOCK PLAN



पार्कींग तपशील

		No. of Parking		
		Required (As per Norms)	Provided	
Residential Building	Part Stilt & Part Ground	5	5	
		Total	5	

4.0 उपयुक्तता गरजः

4.1 पाण्याची गरज

1 बाधकाम टप्पा :

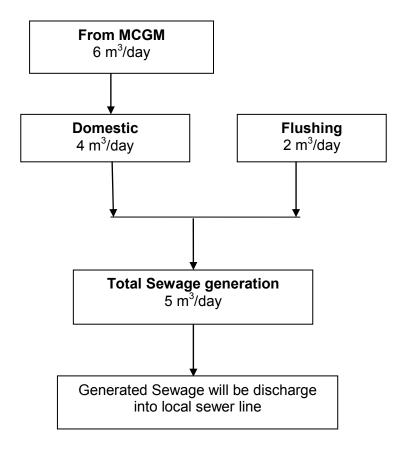
बांधकामासाठी – 10 ते 15 मी³ प्र.दि. (टॅंकर पाणी) घरगुती कामासाठी – 5 मि³/प्र.दि. (मुंबई महानगरपलिका पुरवठा)

2 कार्यान्वयीत टप्यात

6 मी³/प्र.दि. - मुंबई महानगरपलिका पुरवटा

WATER BALANCE CHART

Net water Demand: 6 m³/day



4.2 सांडपाणी प्रक्रिया

एकूण <u>सांडपाणी</u> उत्पत्ती कार्यान्वीत टप्यात 5 मी³/प्र.दि. राहील. एकूण सर्व सांडपाणी मुंबई महानगरपालिकेच्या नाल्यात सोडले जाईल •

4.3 <u>घन सांडपाणी</u> उत्पत्ती

During Construction Phase:
Demolition waste: 7500 Cft.
Construction waste: 9800 Cft.

During Construction Phase:

Total Solid waste generation will be 18 kg/day.

· Disposal:

Total generated waste will be segregated at source itself in Non Biodegradable & Biodegradable waste & will be handed over to Municipal Corporation for further disposal.

4.4 ऊर्जा गरजः

During Operation Phase -

Source - BEST

Maximum Demand load - 38 KW

4.5 Energy Conservation:

- 1. Building will be provided with CFL lamps.
- 2. Common area / external lighting on timers
- 3. Multiple circuits for lighting

4.5 पर्यावरण व्यवस्थापन योजना ः

Sr. No.	Environmental Component	Potential Impacts	Potential source of Impact	Controls though EMP and Design	Impact Evaluation
1.	Water	Water contamination	Construction Phase Domestic waste water from workers	Septic tank will be provided and disposed off.	No adverse impact
			Surface runoff from site.	Silt traps and diversion ditches will be constructed to control surface run off.	No adverse impact
			Operation phase Discharge of domestic wastewater.	Generated sewage will be transferred to STP for its treatment of 110 m³/day capacity for residential and 100 m³/day for commercial.	No adverse impact
			Surface runoff from site	Rain water harvesting – ground water recharging will be done through percolation pits thereby prevent run off and facilitate water percolation.	Positive impact.
2.	Air Quality	Dust Emission	Construction Phase Construction activities	 Dust mask will be provided to prevent worker exposure of dust. Barricading the site periphery by tin sheets. Sprinkling of water will be done for dust suppression. 	Temporary & insignificant impact.
		Gaseous emissions of pollutants i.e. SPM, SO ₂ , NO _x and HC	Construction equipments and vehicular movement.	 Periodic maintenance of construction equipments will be done. Heavy vehicle must be checked for PUC 	Temporary & insignificant impact.

Sr. No.	Environmental Component	Potential Impacts	Potential source of Impact	Controls though EMP and Design	Impact Evaluation
				certificate.	
		Gaseous emissions of SPM, SO ₂ , NO _x and HC.	Operation Phase DG Set	Applicable height of stack is given. Also it is operated only during absence of the normal electricity.	No significant impact
			Emissions from vehicular traffic.	 Adequate wide approach road is proposed for smooth vehicular movement. Road side plantation will further act as sink to gaseous emission. 	No significant impact
3.	Noise	Increase in noise level.	Construction Phase Operation of construction equipments and vehicular movement.	Use of well-maintained equipment fitted with silencers. Providing noise shields near the heavy construction operations. Noisy operations will be limited to day time only. Ear plug and muffs will be provided to workers.	No significant impact.
			Operation Phase Vehicles movement	Wide road and ample parking space will be provided to reduce vehicular noise	No significant impact
4	Land	Land	D.G. sets operations	No significant noise pollution.	No impact.
4.	Land	Land	<u>Construction</u>	 Construction debris 	No significant

Sr. No.	Environmental Component	Potential Impacts	Potential source of Impact	Controls though EMP and Design	Impact Evaluation
		contamination by construction debris and solid waste.	Phase Disposal of construction debris & solid waste.	will be collected and used for leveling the site. Solid waste from labours use will be colleted in collection bins and disposed off to approve municipal landfill site.	impact.
			Excavated soil	Top soil will be used for landscaping	No significant impact.
			Metallic waste	Metallic waste will be sold to vendors for reprocessing.	No significant Impact.
			Operation Phase Municipal solid waste like	Efficient solid waste collection and storage facility is proposed.	No significant impact
			rubbish, paper, plastic garbage etc.	Segregation of waste as biodegradable and non biodegradable waste will be done.	Compost material will be used as manure in
				Biodegradable waste will be treated by OWC while non biodegradable waste will be given to approve vendors for disposal.	landscaping.
5.	Ecology	No significant Impact	Construction Phase Site Developmen t during construction	 There is a plain terrain 	•
			Operational Phase Increase of green cover	Suitable green belt will be developed as per landscaping plan at site.	•

Sr. No.	Environmental Component	Potential Impacts	Potential source of Impact	Controls though EMP and Design	Impact Evaluation
6.	Traffic Pattern	Increase of vehicular movements	Construction Phase Heavy Vehicular movement at site	Heavy Vehicular movement will be restricted to daytime only and adequate parking facility will be provided.	
			Operational Phase Traffic due to commercial once the site is operational	 Vehicular movement will be regulated inside the site with adequate roads and parking. 	
7.	Socio- Economic	Increase in Job opportunities	Construction Phase Job opportunitie s for the local residents		

४.७ निष्कर्षः

प्रस्तावित प्रकल्पामुळे पर्यावरणावर होणारा परिणाम हा किरकोळ प्रमाणात असेल .

EXECUTIVE SUMMARY

For

Proposed

Redevelopment Project under "D. C. Regulations of 33 (7)"

On Property bearing C.S. No. 127 of Mahim division, F.P.No. 824, T.P.S. IV, Mumbai, Maharashtra.

Preparaed By



GREEN CIRCLE INC.

EIA Consulting & Environmental Laboratory (MoEF Approved Environmental Laboratory)

www.greencircleinc.com
Email: info@greencircle.com

Developer: M/s. Aashiyana Construction Redevelopment Project at Mahim

EXECUTIVE SUMMARY

1.0 INTRODUCTION:

It is an ongoing project undertaken **by M/s. Aashiyana Construction** for the redevelopment of old & Dilapidated structures under "**D. C. Regulations of 33 (7)**" on Property bearing C.S. No. 127 of Mahim division, F.P.No. 824, T.P.S. IV, Mumbai, Maharashtra.

Since it is redevelopment project of the existing structure, there will be no significant changes in existing land use pattern by proposed project. The proposed project is in accordance with the approved Development Plan of Mumbai. The existing land use pattern is Residential.

The design of this project and utilities is thoroughly planned with the objectives of providing facilities to the people and keeping the mind on sustainable development.

The Site is well connected by road networks.

2.0 NEED OF PROJECT:

The existing structures on the site were old and in dilapidated condition, any further repair to the structures was not possible and the existing tenants were also unable to afford the cost of repairs/new construction.

Hence there was urgent attention and need for the rehabilitation of existing members through the redevelopment of old & Dilapidated structures under "D. C. Regulations of 33 (7)". Under the proposed scheme the existing inhabitants will get new housing tenements with all basic amenities for fully free of cost with better infrastructure. The proposed redevelopment will allow each family to stay in a self-contained tenement of minimum 300 square feet area each. The entire colony will be provided with proper water supply, drainage facility and access road. The proposed scheme will improve the socio-economic condition of people living in present old and dilapidated houses.

Hence, owners of the property have given development rights/POA to M/s. Aashiyana Construction. M/s. Aashiyana Construction is developing the property under reference by rehabilitating existing tenants & co owners free of cost in proposed new building on the same plot. The copy of list of tenants certified by MHADA. There is no share of MHADA in

expenses towards construction / profit of the project. M/s. Aashiyana Construction is

having 100% shares in the project.

The proposed project falls under CRZ-II on Land-word side of authorized structure as per

CZMP.

Generally it is envisaged that some of the developmental activities adjacent to coastal

area or marine areas would inevitably interact with marine environment causing short and

long-term physical, chemical and biological changes. Unless adequate preventive and

control measures are planned and implemented, these changes may cause disturbances

to coastal environment due to alterations in marine water and sediment quality and also

entail disruption of environmental quality along the coastline. Therefore, measures are

required to be taken well in advance to protect sensitive areas, viz. ecological,

commercial fishing and recreational. Offshore developments thus aggravate such

problems posing new challenges for environmental management.

In order to minimize adverse impacts on the marine / coastal environment, it is therefore

essential that preventive and control measures are delineated, incorporated and

implemented by company in their further developmental plans.

3.0 PROJECT DESCRIPTION:

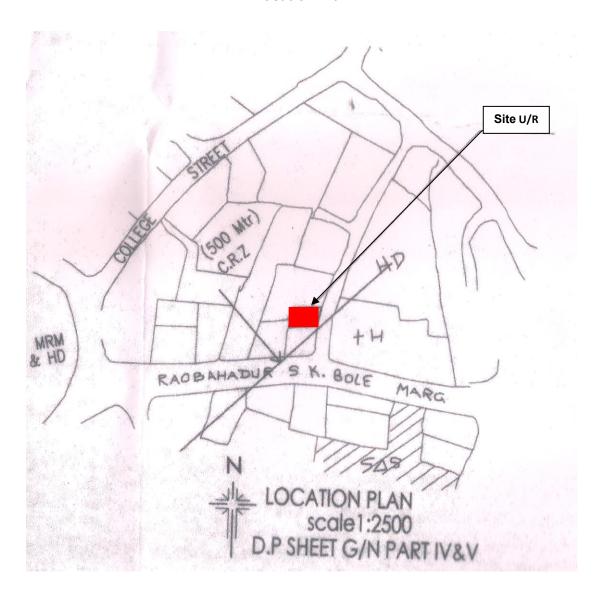
Proposed "Redevelopment Project" under D. C. Regulations of 33 (7) comprises

of Rehabilitation Building Configuration of each is given as follows:

For 'Rehabilitation Component for Existing members' - Part Stilt + Part Ground

+ 7 upper floors

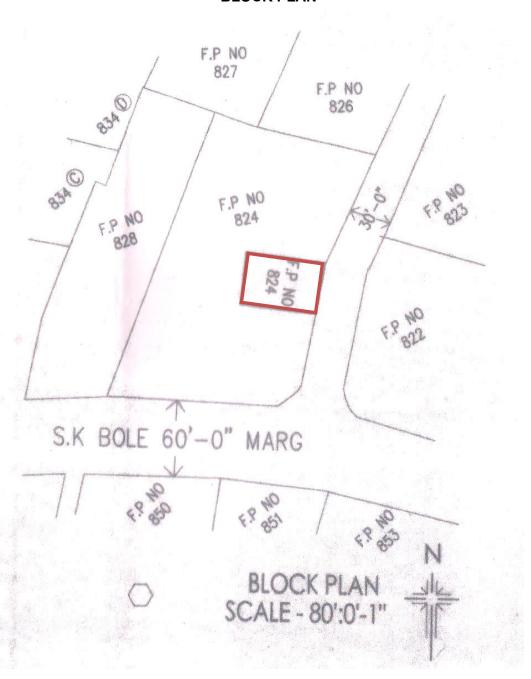
Location Plan



4.0 DETAILS OF THE PROJECT

Sr.		_		
No.	Project Requirement	Details		
1.	Area Statement	 Before Expansion [As per 2.0 FSI] Total Plot Area: 220.74 m² FSI Area: 441.48 m² After Expansion (As per 2.5 FSI) Total Plot Area: 220.74 m² Total Permissible built up area as per FSI: 551.85 m² Non FSI Area [Staircase, Lift, Lobby area]: 138.38 m² Construction Area: 690.23 m² 		
2.	Total Water requirement	Source: Municipal Corporation of Greater Mumbai [MCGM] Fresh water requirement: 6 m³/day [Domestic & Flushing]		
3.	Sewage Generation	Total Sewage generation will be 5 m³/day & will be directly disposed into local sewer line.		
4.	Total Solid waste Generation	During Construction Phase: Demolition waste: 7500 Cft. Construction waste: 9800 Cft. During Construction Phase: Total Solid waste generation will be 18 kg/day. • Disposal: Total generated waste will be segregated at source itself in Non Biodegradable & Biodegradable waste & will be handed over to Municipal Corporation for further disposal.		
5.	Power requirement	During Operation Phase - Source – BEST Maximum Demand load – 38 KW		
6.	Latitude	19 ⁰ 01' 08.39" N		
7.	Longitude	72 ⁰ 50' 04.04" E		
8.	Elevation above MSL	38 ft		
9.	Seismic Zone	Zone –III		
10.	Project Cost	Rs. 2.23 Crore		

BLOCK PLAN



PARKING DETAILS

		No. of Parking		
		Required (As per Norms) Provided		
Residential Building	Part Stilt & Part Ground	5	5	
		Total	5	

UTILITY REQUIREMENT:

4.1 Water Requirement:

1. **CONSTRUCTION PHASE**:

For Construction: 10 to 15 m^{3/}day (Tanker water)

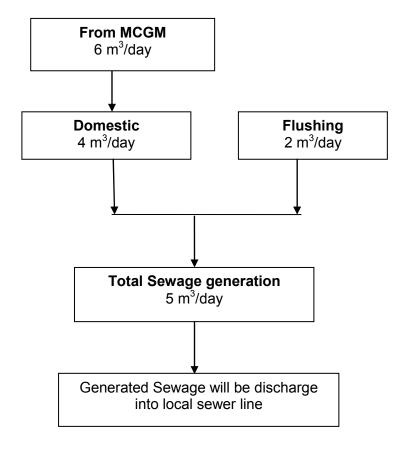
For Domestic: 5 m³/day (For Worker: MCGM).

2. **OPERATION PHASE**:

Source : Municipal Corporation of Greater Mumbai [MCGM] **Fresh water requirement :** 6 m³/day [Domestic & Flushing]

WATER BALANCE CHART

Net water Demand : 6 m³/day



4.2 Waste Water Disposal:

Total sewage generation during operation phase will be 5 m³/day. Generated sewage will be disposed into local sewer line.

4.3 Solid Waste Generation:

During Construction Phase:
Demolition waste: 7500 Cft.
Construction waste: 9800 Cft.

During Construction Phase:

Total Solid waste generation will be 18 kg/day.

· Disposal:

Total generated waste will be segregated at source itself in Non Biodegradable & Biodegradable waste & will be handed over to Municipal Corporation for further disposal.

4.4 Power Requirement:

During Operation Phase - Source – BEST

Maximum Demand load - 38 KW

4.5 Energy Conservation:

- 1. Building will be provided with CFL lamps.
- 2. Common area / external lighting on timers
- 3. Multiple circuits for lighting

4.6 Environment Management Plan:

Sr. No.	Environmental Component	Potential Impacts	Potential source of Impact	Controls though EMP and Design	Impact Evaluation
1.	Water	Water contamination	Construction Phase Domestic waste water from workers	Septic tank will be provided and disposed off.	No adverse impact
			Surface runoff from site.	Silt traps and diversion ditches will be constructed to control surface run off.	No adverse impact
			Operation phase Discharge of domestic wastewater.	Generated sewage will be transferred to STP for its treatment of 110 m³/day capacity for residential and 100 m³/day for commercial.	No adverse impact
			Surface runoff from site	Rain water harvesting – ground water recharging will be done through percolation pits thereby prevent run off and facilitate water percolation.	Positive impact.
2.	Air Quality	Dust Emission	Construction Phase Construction activities	 Dust mask will be provided to prevent worker exposure of dust. Barricading the site periphery by tin sheets. Sprinkling of water will be done for dust suppression. 	Temporary & insignificant impact.

Sr. No.	Environmental Component	Potential Impacts	Potential source of Impact	Controls though EMP and Design	Impact Evaluation
		Gaseous emissions of pollutants i.e. SPM, SO ₂ , NO _x and HC	Construction equipments and vehicular movement.	 Periodic maintenance of construction equipments will be done. Heavy vehicle must be checked for PUC certificate. 	Temporary & insignificant impact.
		Gaseous emissions of SPM, SO ₂ , NO _x and HC.	Operation Phase DG Set	Applicable height of stack is given. Also it is operated only during absence of the normal electricity.	No significant impact
			Emissions from vehicular traffic.	 Adequate wide approach road is proposed for smooth vehicular movement. Road side plantation will further act as sink to gaseous emission. 	No significant impact
3.	Noise	Increase in noise level.	Construction Phase Operation of construction equipments and vehicular movement.	Use of well-maintained equipment fitted with silencers. Providing noise shields near the heavy construction operations. Noisy operations will be limited to day time only. Ear plug and muffs will be provided to workers.	No significant impact.

Sr. No.	Environmental Component	Potential Impacts	Potential source of Impact	Controls though EMP and Design	Impact Evaluation
			Operation Phase Vehicles movement	Wide road and ample parking space will be provided to reduce vehicular noise	No significant impact
			D.G. sets operations	No significant noise pollution.	No impact.
4.	Land	Land contamination by construction debris and solid waste.	Construction Phase Disposal of construction debris & solid waste.	 Construction debris will be collected and used for leveling the site. Solid waste from labours use will be colleted in collection bins and disposed off to approve municipal landfill site. 	No significant impact.
			Excavated soil	Top soil will be used for landscaping	No significant impact.
			Metallic waste	Metallic waste will be sold to vendors for reprocessing.	No significant Impact.
			Operation Phase Municipal solid waste like	Efficient solid waste collection and storage facility is proposed.	No significant impact
			rubbish, paper, plastic garbage etc.	Segregation of waste as biodegradable and non biodegradable waste will be done.	Compost material will be used as manure in
				Biodegradable waste will be treated by OWC while non biodegradable waste will be given to approve vendors for disposal.	landscaping.
5.	Ecology	No significant Impact	Construction Phase Site Developmen t during construction	There is a plain terrain	•

Sr. No.	Environmental Component	Potential Impacts	Potential source of Impact	Controls though EMP and Design	Impact Evaluation
			Operational Phase Increase of green cover	Suitable green belt will be developed as per landscaping plan at site.	•
6.	Traffic Pattern	Increase of vehicular movements	Construction Phase • Heavy Vehicular movement at site	Heavy Vehicular movement will be restricted to daytime only and adequate parking facility will be provided.	
			Operational Phase Traffic due to commercial once the site is operational	Vehicular movement will be regulated inside the site with adequate roads and parking.	
7.	Socio- Economic	Increase in Job opportunities	Construction Phase Job opportunitie s for the local residents		

4.7 Conclusion:

The proposed project will have marginal & negligible impact on the environment.