

FORM-1

(I) Basic Information

Sr. No.	Item	Details
1	Name of the Project	"Ostwal Orchid" Residential Commercial Project
2	S. No. in the Schedule	8 (a)
3	Proposed capacity/area /length/tonnage to be handled/command area/lease area/ number of wells to be drilled	Total plot area: 23150.00 sq.m. FSI Area: 22546.39 sq.m. Non FSI Area:16527.40 Total BUA:39073.79 sq.m.
4	New/Expansion/Modernization	New Project
5	Existing Capacity/Area etc.	Not Applicable
6	Category of Project i.e. 'A' or 'B'	'B'
7	Does it attract the general condition? If Yes, Please specify	NA
8	Does it attract the specific condition? If yes, Please specify	NA
9	Location	S. No. 288/3, 5, 7, 295/2, 3, 297, 1, 2,3, 5, 6, 7, 9, 10, 12, 14, 15, 298/2, 4, 6, 7, 8, 9, 10, 11, 13 of village- Navghar, Tal & Dist-Thane
	Plot/Survey/Khasra No.	S. No. 288/3, 5, 7, 295/2, 3, 297, 1, 23, 5, 6, 7, 9, 10, 12, 14, 15, 298/2, 4, 6, 7, 8, 9, 10, 11, 13
	Village	Village Navghar
	Tehsil	Palghar
	District	Thane
	State	Maharashtra
10	Nearest railway station/airport along with distance in kms.	Mira Road Railway Station (2.50 km)
11	Nearest Town, City, District Headquarters along with distance in kms.	Mira Road Railway Station (2.50 km)
12	Village Panchayats, Zilla Parishad, Municipal Corporation, Local body (complete postal addresses with telephone nos. to be given)	Mira- Bhayandar Municipal Corporation
13	Name of the applicant	Asha Enterprises
14	Registered Address	Name: Mr. Umraosingh P. Ostwal Address: Asha Enterprises Ostwal House,Opp Shivar Garden , Mira Bhayandar Road ,Mira Road (East)Thane 401107 Tel No.: 28557777 Fax No.: No Email ID: info@ostwal.com

15	Address for Correspondence:	As Above
	Name	Mr. Umraosingh P. Ostwal
	Designation(Owner/Partner/CEO)	Partner
	Address	As Above
	Pin Code	401107
	E-mail	info@ostwal.com , kuldeep@ostwal.com,dgirbide@gmail.com
	Telephone No.	2855 7777/ 9821076238/9820436542
	Fax No.	-----
16	Details of Alternative Sites examined, If any. Location of these sites should be shown on a topo sheet	None
17	Interlinked Projects	Not Applicable
18	Whether separate application of interlinked project has been submitted?	Not Applicable
19	If yes, date of submission	Not Applicable
20	If no, reason	Not Applicable
21	Whether the proposal involves approval/clearance under: if yes, details of the same and their status to be given. (a) The Forest (Conservation) Act, 1980? (b) The Wildlife (Protection) Act, 1972? (c) The C.R.Z. Notification, 1991?	Not Applicable
22	Whether there is any Government Order/Policy relevant/relating to the site?	Not Applicable
23	Forest land involved (hectares)	Not Applicable
24	Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? (a) Name of the Court (b) Case No. (c) Orders/directions of the Court, if any and its Relevance with the proposed project.	Not Applicable

** Capacity corresponding to sectoral activity (such as production capacity for manufacturing, mining lease area and production capacity for mineral production, area of mineral exploration, length for linear transport infrastructure, generation capacity for power generation etc.)*

(II) Activity

- 1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)**

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	Yes	After the completion of the project the land will remain residential.
1.2	Clearance of existing land, vegetation and building?	No	No any clearance is required.
1.3	Creation of new land uses	Yes	Land use will be residential after the development.
1.4	Pre-construction investigations e.g. bore houses, soil testing?	Yes	Detailed feasibility studies and investigation was carried out for the proposed area.
1.5	Construction works?	Yes	The constructions of the buildings are already started as per received approvals. Construction of Bldgs. 1, 2, 3, 4, 5, 8, 9, 10, and 11 are completed. Total constructed area is 39073.79 sq.m.
1.6	Démolition Works?	No	Not Applicable
1.7	Temporary sites used for construction works or housing of construction workers?	Yes	Inside the site for construction small area will be utilized temporarily. No housing facilities for construction workers planned. Construction workers will be drawn from nearby areas. About 80-150 workers going to be employed at the construction phase.
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations	Yes	The above ground structures will comprise of residential buildings. Bldg Wing 1 to 5 = G/S+10 (Occupied) Bldg Wing 8 = G+12 (Occupied) Bldg Wing 9-11 = S + P +14 Bldg Wing 12 = S + P + 5
1.9	Underground works including mining or tunneling?	Yes	No underground works including mining or tunneling except Lay down of basement, pipes, electric cable etc.
1.10	Reclamation works?	No	Not Applicable
1.11	Dredging?	No	Not Applicable
1.12	Offshore structures?	No	Not Applicable
1.13	Production and manufacturing Process?	No	Not Applicable
1.14	Facilities for storage of goods or materials?	Yes	Temporary sheds will be constructed for the storage of construction materials during construction phase as per the material requirement.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	Yes	<u>SOLID WASTE:</u>

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data																
			<table border="1"> <thead> <tr> <th>#</th><th>TYPE OF WASTE</th><th>QUANTITY (Kg/Daily)</th><th>MANAGEMENT</th></tr> </thead> <tbody> <tr> <td>1</td><td>Biodegradable Waste</td><td>776 Kg/Daily</td><td>Biodegradable Waste To Be Processed In OWC And Manure So Obtained Will Be Used For Landscaping.</td></tr> <tr> <td>2</td><td>Non-Biodegradable Waste</td><td>528 Kg/Daily</td><td>To Be Managed Through Recyclers.</td></tr> <tr> <td>3</td><td>STP Sludge</td><td>20 kg</td><td>Dry Sludge Shall Be Used As Manure.</td></tr> </tbody> </table> <p>SEWAGE:</p> <ul style="list-style-type: none"> • Sewage generation: 148 KLD (wing 9 – 12) • STP Technology: MBBR • Capacity of STP (KLD): 150 KLD (wing 9-12) • Location of the STP: ground level <p>Wastewater generated will be treated and utilized for gardening, and flushing. Sewage Sludge: 20 Kg used as organic manure.</p>	#	TYPE OF WASTE	QUANTITY (Kg/Daily)	MANAGEMENT	1	Biodegradable Waste	776 Kg/Daily	Biodegradable Waste To Be Processed In OWC And Manure So Obtained Will Be Used For Landscaping.	2	Non-Biodegradable Waste	528 Kg/Daily	To Be Managed Through Recyclers.	3	STP Sludge	20 kg	Dry Sludge Shall Be Used As Manure.
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1.16	Facilities for long term housing of operational workers?	No	No long-term housing facilities proposed as most of the skilled/unskilled manpower required for the construction /operation activities will be hired from the nearby areas.																
1.17	New road, rail or sea traffic during construction of operation?	No	15.00 m wide DP road will be utilized.																
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc.?	No	No new Rail / road is required. The entire essential infrastructure is already available.																
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	There will be no diversion or closure of the existing transport routes and infrastructure.																
1.20	New or diverted transmission lines or pipelines?	No	Not Envisaged																

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No	Not Envisaged
1.22	Stream crossings?	No	There is no stream passing through the site.
1.23	Abstraction or transfers of water from ground or surface waters?	No	Water requirement in the construction phase will be supply from tanker water.
1.24	Changes in water bodies or the land surface affecting drainage or run-off	No	There will not be any change in the drainage pattern. It will be improved by well planned development.
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	The existing road near by the site will be utilized for the transportation of material and personal.
1.26	Long-term dismantling or decommissioning or restoration works?	No	Not applicable.
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	Yes	Noise pollution due to machineries and air pollution because of dust.
1.28	Influx of people to an area in either temporarily or permanently?	Yes	<u>Construction Phase</u> During the construction phase about 80-150 persons will be deployed on the site from nearby places. Influx of these people will be temporary in nature. <u>Operation Phase</u> On completion of the project, residents will occupy their property.
1.29	Introduction of alien species?	No	Not envisaged
1.30	Loss of native species or genetic diversity?	No	The project land is vacant with some trees found along the borders of the plot. The well planned Landscaping and tree plantation will improve the diversity of the area without any loss of native species.
1.31	Any other actions?	No	NA

2. Use of Natural resources for construction or operation of Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply).

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
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2.1	Land specially undeveloped or agricultural land (ha)	No	The proposed site is a Non-agricultural land.
2.2	Water (expected source & competing users) unit KLD	Yes	<p><u>Construction Phase:</u> Total water requirement is expected to be 25 KLD. The water demand will be met by water tankers.</p> <p><u>Operation Phase:</u> Dry Season</p> <ul style="list-style-type: none"> Fresh Water (KLD) & Source: by MBMC Wing 1 to 5, wing 8 = 127 Wing 9 to 12=106 Total = 233 Recycled Water (KLD): Wing 1 to 5, wing 8 = 77 Wing 9 to 12=58 Total = 135 Total Water Requirement (KLD): Wing 1 to 5, wing 8 = 204 Wing 9 to 12=164 Total = 368
2.3	Minerals (MT)	No	Not Applicable
2.4	Construction material – stone, aggregates, and/soil (expected source-MT)	Yes	The construction materials, which will be used in the project site, will be obtained from authorized local dealer.
2.5	Forests and timber (source-MT)	Yes	Apartments will use timber for doors etc.
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	Yes	<p>Construction Phase:100 KVA Operation Phase : Connected load: 1365 kW Maximum demand: 840 kW Source: MSEDCL Number and capacity of the DG sets to be used: 1 X 250 KVA & 1 X 125 KVA</p>
2.7	Any other natural resources (use appropriate standard units)	No	Not envisaged

3.0 Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	Yes	Since this is a construction project, no storage of hazardous chemical (as per MSIHC Rules) will be done. HSD for DG Set will be stored as per MSIHC rules
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	Not envisaged
3.3	Affect the welfare of people e.g. by changing living conditions?	Yes	Positive impact due to enhanced and hygienic living conditions generation. Aesthetic value of area will be improved. It will provide employment opportunities to the local people in terms of skilled and unskilled labour during construction and service personnel during operational phase.
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	No	Noise and Air Pollution control measures will be implemented so as to cause no harm to near by village residents
3.5	Any other causes	No	No other causes identified.

4.0 Production of solid wastes during construction or operation or decommissioning (MT/month)

Sr. No.	Information/Checklist Confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes	No	Not Applicable

4.2	Municipal waste (domestic and or commercial wastes)	Yes	<table><tr><th>#</th><th>TYPE OF WASTE</th><th>QUANTITY (kg/day)</th><th>MANAGEMENT</th></tr><tr><td>1</td><td>Biodegradable Waste</td><td>776 kg/day</td><td>Biodegradable waste to be processed in OWC and manure so obtained will be used for landscaping.</td></tr><tr><td>2</td><td>Non-biodegradable Waste</td><td>518 Kg/Day</td><td>To be managed through recyclers.</td></tr><tr><td>3</td><td>STP Sludge</td><td>20 Kg/Day</td><td>Dry sludge shall be used as manure.</td></tr></table>	#	TYPE OF WASTE	QUANTITY (kg/day)	MANAGEMENT	1	Biodegradable Waste	776 kg/day	Biodegradable waste to be processed in OWC and manure so obtained will be used for landscaping.	2	Non-biodegradable Waste	518 Kg/Day	To be managed through recyclers.	3	STP Sludge	20 Kg/Day	Dry sludge shall be used as manure.					
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4.3	Hazardous wastes (as per hazardous waste management rules)	Yes	Used oil from DG set will be stored carefully and will be handed over to authorized vendor for disposal.																					
4.4	Other industrial process wastes	No	Not Applicable																					
4.5	Surplus product	No	Not Applicable																					
4.6	Sewage sludge or other sludge from effluent treatment	Yes	Dewatered / dried sludge from STP will be used as manure for gardening/landscaping.																					
4.7	Construction or demolition wastes	Yes	<table><tr><th>Sr . No.</th><th>Particulars</th><th>Management</th></tr><tr><td>1</td><td>Scrap metal</td><td>To be sold for recycling</td></tr><tr><td>2</td><td>Empty cement bags (50 kg capacity)</td><td>To be sold to vendors.</td></tr><tr><td>3</td><td>Aggregates</td><td>To be used as a layer for internal roads.</td></tr><tr><td>4</td><td>Wood</td><td>To be sold for reuse/recycling.</td></tr><tr><td>5</td><td>Tiles</td><td>To be used as china mosaic water proofing for terraces and skirting purpose.</td></tr><tr><td>6</td><td>Empty Paint cans (20 lit)</td><td>To be sold to vendors.</td></tr></table>	Sr . No.	Particulars	Management	1	Scrap metal	To be sold for recycling	2	Empty cement bags (50 kg capacity)	To be sold to vendors.	3	Aggregates	To be used as a layer for internal roads.	4	Wood	To be sold for reuse/recycling.	5	Tiles	To be used as china mosaic water proofing for terraces and skirting purpose.	6	Empty Paint cans (20 lit)	To be sold to vendors.
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4.8	Redundant machinery or equipment	No	All Equipments used for construction will be of standard quality and maintained on regular basis.
4.9	Contaminated soils or other materials	No	Not Applicable
4.10	Agricultural wastes	No	Not Applicable
4.11	Other solid wastes	No	Dry waste (Kg/day): 518 .00 Kg/Day Wet waste (Kg/day): 776.00 Kg/Day STP sludge (Dry sludge) (Kg): 20 Kg/Day

5.0 Release of pollutants or any hazardous, toxic or noxious substances to air (kg/hr)

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	Exhaust emissions generated from increased vehicles.
5.2	Emission from production processes	No	There is no production as the proposed project is residential complex.
5.3	Emissions from materials handling including storage or transport	Yes	Fugitive emissions will be generated, while handling and transportation of materials to site, this will be temporary in nature.
5.4	Emissions from construction activities including plant and equipment	Yes	During the Operation Phase, DG sets will be operated only as a backup power at project site. Adequate provision made to mitigate the problem.
5.5	Dust or odours from handling of materials including construction materials, sewage and waste	Yes	<u>Construction Phase</u> Fugitive dust emissions will be generated due to movement of vehicles and material handling. <u>Operation Phase</u> During Operation Phase, emissions will be generated from operation of DG sets. Minimal emissions will be generated from movement of vehicles as fugitive dust as the roads will be paved roads. Odours can be from STP. However, the STP working on appropriate technology, so as to minimize odour problems, will be strategically located so that no adverse impact is caused.
5.6	Emissions from incineration of waste	No	Not Applicable

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	Not Applicable
5.8	Emissions from any other sources	No	Not Applicable.

6.0 Generation of Noise and vibration, and emissions of Light and heat

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	Noise generation from construction equipments used for drilling, cutting operations. During Operation Phase, Noise will be generated due to operation of DG sets. This will be about 90-105 dB (A). All DG sets will be per rules and will confirm to noise standards.
6.2	From industrial or similar processes	No	Not Applicable
6.3	From construction or demolition	Yes	The construction noise will be localized, intermittent in nature. This will subside with the completion of the construction phase. The resultant ambient air noise levels will be well within the prescribed norms. The operation will be restricted to day time. Adequate measures taken to keep noise and vibrations under control. No heat or light emission.
6.4	From blasting or piling	No	Not Applicable.
6.5	From construction or operational traffic	Yes	Workers will be provided with protective equipment such as earmuffs etc. The noise levels will be < 70 db (A).
6.6	From lighting or cooling systems	No	Not Applicable
6.7	From any other sources	No	Not Applicable.

7.0 Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	No	Not Applicable.
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	No	Sewage generation: 148 KLD (wing 9-12) STP Technology: MBBR Capacity of STP (KLD): 150 KLD (wing 9-12) Location of the STP: ground level
7.3	By deposition of pollutants emitted to air into the land or into water	No	Treated sewage water will be recycled and reused, whereas the surplus will be sent to Sewer line.
7.4	From any other sources	No	Not Envisaged
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	No	D.G sets will be used as a backup source only.

8.0 Risk of accidents during construction or operation of the project, which could affect human health or the environment

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances.	No	Only 'HSD' from DG set is involved but still Fire Fighting System will be provided.
8.2	From any other causes	No	Not Envisaged
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, could burst etc)?	No	The project falls under seismic zone-III as per IS1893 (Part-1):2002, care will be taken in designs to withstand earthquake of maximum Richter scale in that area. Further it is not flood prone or landslide prone areas. Hence, no risk due to natural hazards is envisaged.

9.0 Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
9.1	Lead to development of supporting utilities, ancillary	Yes	Supporting and ancillary development will take place. The project provides a well

Sr. No.	Information/Checklist Confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
	development or development stimulated by the project which could have impact on the environment e.g.: Supporting infrastructure (roads, power supply, waste or waste water treatment, etc) Housing development Extractive industries Supply industries Other	Yes Yes No No	designed residential housing area for the occupants. The project provides a well designed residential housing area for the occupants. Internal Roads, Rainwater Harvesting, STP etc will be provided
9.2	Lead to after use of the site, which could have an impact on the environment	No	Not Applicable.
9.3	Set a precedent for later developments	Yes	Already many construction projects are on the way in the surrounding areas.
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	No	Not Applicable.

(iii) Environmental Sensitivity

Sr. No.	Areas	Name/ Identity	Aerial distance (with 15-km) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No	Not Applicable.
2	Areas which are important or sensitive of ecological reasons – wetlands, water courses or other water bodies, coastal zone, biospheres, mountains,	Yes	Sanjay Gandhi National Park (5.00 Km)

Sr. No.	Areas	Name/ Identity	Aerial distance (with 15-km) Proposed project location boundary		
	forests				
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	Yes	Sanjay Gandhi National Park (4.00 Km)		
4	Inland, coastal, marine or underground waters	No	Not Applicable.		
5	State, national boundaries	No	The project is located within Municipal limits.		
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	No	Not Applicable.		
7	Defense installations	No	No defense installation in the neighborhood.		
8	Densely populated or built-up area	Yes	Residential & Commercial area all around the site.		
9	Areas occupied by sensitive man made land uses (<i>hospitals, schools, places of worship, community facilities</i>)	Yes			Distance
			Hospital Gymnasium/fitness centre	Galaxy Hospital	200 m
			School	RBK School Tiwari College	250.00 m
			College		500 m
10	Areas containing important, high quality or scarce resources (<i>ground water resource, surface resources, forestry, agriculture, fisheries, tourism, minerals</i>)	No	The project will tap municipal water for its use after proper permissions are obtained.		
11	Areas already subjected to pollution or environmental damage. (<i>those where existing legal environmental standards are exceeded</i>)	No	Not Applicable.		
12	Areas susceptible to natural hazard which could cause the project to present environmental problems (<i>earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic</i>	No	Earthquake Seismic Zone III having basic horizontal seismic coefficients () 0.04 but the construction is earthquake resistant and as per the NBC norms which takes care of environmental threat.		

Sr. No.	Areas	Name/ Identity	Aerial distance (with 15-km) Proposed project location boundary
	<i>conditions)</i>		



“I hereby given undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance give, if any to the project will be revoked at our risk and cost”.

Date: 30-06-2017

Place: Mumbai

Umrao Singh

Authorised Signatory
ASHA ENTERPRISES
Shri Umraosingh P.Ostwal
Ostwal House,opp.Shivar Garden,
Mira Bhayandar Road,
Mira road (East)
Taluka & Dist.Thane
Pin-401107

FORM-1A
(Only for Construction Projects listed under Item 8 of Schedule)
Checklist of Environmental Impacts

1. Land Environment

Requirement	Compliance
1.1. Will the existing land use get significantly altered from the project that is not consistent with the surroundings? (Proposed land use must conform to the approved Master Plan/Development Plan of the area. Change of land use if any and the statutory approval form the competent authority are submitted). Attach Maps of (i) site location, (ii) surrounding features of the proposed site (within 500 meters) and (iii) the site (indicating levels & contours) to appropriate scales.	The proposed land use is in conformation with the approved Municipal Master Plan/Development Plan. Enclosed maps: 1. Google Image. (ANNEXURE I) 2. Layout Plan. (ANNEXURE II) 3. Water Chart (ANNEXURE III)
1.2. List out all the major project requirements in terms of the land area, built up area, water consumption, power requirement, connectivity, community facilities, parking needs etc.	The major project requirements are:- (i) Total Plot Area: 23150.00 sq.m. Proposed Built up Area: 39073.80 sq.m. (ii) Water consumption: Construction Phase : 25 KLD Operation phase: wing 1 to 5 , wing 8 =204 KLD Wing 9-12 = 164 KLD Total = 368 KLD (iii) Power requirement: Source: MSEDCL • Connected Load = 1365 kW • Maximum demand=840 kW (iv) Parking provided : 191 nos.
1.3. What are the likely impacts of the proposed activity on the existing facilities adjacent to the proposed site? (Such as open spaces, community facilities, details of the existing landuse, disturbance to the local ecology)	The proposed activity will improve the basic infrastructure facilities of the area. Open spaces, community facilities are simultaneously being augmented in the surroundings.
1.4. Will there is any significant land distribution resulting in erosion, subsidence & instability? (Details of soil type, slope analysis, vulnerability to subsidence, seismicity etc may be given)	Terrain retained, it is flat. Thus, cutting & filling is not required. Soil investigation is done.
1.5. Will the proposal involve alteration of natural drainage systems? (Give details on a contour map showing the natural drainage near the proposed project site)	No alteration of natural drainage however in the site proper storm water drainage will be provided to prevent flooding. Water storage tanks also proposed.
1.6. What are the quantities of earthwork involved in the construction activity-cutting, filling, reclamation etc. (Give details of the quantities of earthwork involved, transport of fill	The cutting and filling is not required.

materials from outside the site etc.)	
1.7. Give details regarding water supply, waste handling etc. during the construction period.	It is expected to house about 80 to 150 labours at site during construction phase. The total requirement of water will be around 25 KLD for the waste handling septic tank and soak pit will be provided.
1.8. Will the low lying areas & wetlands get altered? (Provide details of how low lying and wetlands are getting modified from the proposed activity)	No low lying area, no wetlands within & around the site.
1.9. Whether construction debris & waste during construction cause health hazards? (Give quantities of various types of wastes generated during construction including the construction labour and the means of disposal)	Proper septic tank and soak pit will be provided at the labour camps for disposal of waste water generated from the labours. Construction debris will be recycled and utilized on the same site. No hazardous waste is involved.

2. Water Environment

Requirement	Compliance
2.1. Give the total quantity of water requirement for the proposed project with the break-up of requirements for various uses. How will the water requirements met? State the sources & quantities and furnish a water balance statement.	<p>Source: MBMC/Recycled Water</p> <p>Dry Season</p> <ul style="list-style-type: none"> Fresh Water (KLD) & Source: by MBMC Wing 1 to 5, wing 8 = 127 Wing 9 to 12=106 Total = 233 Recycled Water (KLD): Wing 1 to 5, wing 8 = 77 Wing 9 to 12=58 Total = 135 Total Water Requirement (KLD): Wing 1 to 5, wing 8 = 204 Wing 9 to 12=164 Total = 368 <p>Wet Season</p> <ul style="list-style-type: none"> Fresh Water(KLD): & Source: MBMC + Rain water Wing 1 to 5, wing 8 = 127 Wing 9 to 12=73+33 Total = 233 Recycled Water (KLD): Wing 1 to 5, wing 8 = 66 Wing 9 to 12=52 Total = 118 Total Water Requirement (KLD):

	Wing 1 to 5, wing 8 = 193 Wing 9 to 12=158 Total = 351
2.2. What is the capacity (dependable flow or yield) of the proposed source of water?	For water supply the project will be dependent on MBMC & recycled water. Recycled water will be used for gardening & flushing.
2.3. What is the quality of water required, in case, the supply is not from a municipal source? (Provide physical, chemical, biological characteristics with class of water quality)	Water supply from the Municipal Corporation.
2.4. How much of the water requirement can be met from the recycling of treated wastewater? (Give the details of quantities, sources and usage)	Total Recycled water is 58 KLD and it will be used at maximum extent for flushing & gardening. Flushing: 52KLD Greening: 6 KLD (considered for wing 9-12)
2.5. Will there be diversion of water from other users? (Please assess the impacts of the project on other existing uses and quantities of consumption)	No
2.6. What is the incremental pollution load from wastewater generated from the proposed activity? (Give details of the quantities and composition of wastewater generated from the proposed activity)	The sewage generation from the proposed project will be 148 KLD for sewage treatment, STP will be provided of 150 KLD capacities. No significant incremental pollution load, no significant load in surrounding. (considered for wing 9-12)
2.7. Give details of the water requirements met from water harvesting? Furnish details of the facilities created.	Runoff from the terrace area shall be stored in a storage tank for the use of secondary purpose. Storage tanks shall be provided of 2 days capacity. 1 tanks for each wing will be provided having total capacity 65 cum for wing 9-12
2.8. What would be the impact of the land use changes occurring due to the proposed project on the runoff characteristics (Quantitative as well as qualitative) of the area in the post construction phase on a long term basis? Would it aggravate the problems of flooding or water logging in any way?	This run off will be canalised properly through storm water drain and will be diverted to Infiltration wells.
2.9. What are the impacts of the proposal on the ground water? (Will there be tapping of ground water; give the details of ground water table, recharging capacity, and approvals obtained from competent authority, if any)	Ground water recharge through rain water harvesting.
2.10. What precautions/measures are taken to prevent the run-off from construction activities polluting land and aquifers? (Give details of quantities and the measures taken to avoid the adverse impacts)	Run off from the construction will be diverted through slope to an artificial pit where settling can be done.
2.11. How is the storm water from within the site	Storm water drain of adequate size will be

managed? (State the provisions made to avoid flooding of the area, details of the drainage facilities provided along with a site layout indication contour levels)	provided to manage storm water from within the site. Proper rainwater harvesting structure will be developed and storm water will be used for recharging ground water.
2.12. Will the deployment of construction labourers particularly in the peak period lead to unsanitary conditions around the project site (Justify with proper explanation)	Proper sanitation facilities will be provided at site for construction labours and staff. Temporary toilets with septic tank and soak pit provision will be provided.
2.13. What on-site facilities are provided for the collection, treatment & safe disposal of sewage? (Give details of the quantities of wastewater generation, treatment capacities with technology & facilities for recycling and disposal)	The quantity of wastewater (148 KLD) generated from the project will be treated in STP of capacity (150 KLD) and recycled and used for gardening and flushing purpose. The remaining treated water will be sent to sewer line.(wing 9-12)
2.14. Give details of dual plumbing system if treated wastewater is used for flushing of toilets or any other use.	Yes dual plumbing system will be provided. There will be separate line for flush water coming from the treated sewage water tank.

3. Vegetation

Requirement	Compliance
3.1. Is there any threat of the project to the biodiversity? (Give a description of the local ecosystem with its unique features, if any)	The project site is surrounded by developed roads. The local ecosystem and biodiversity will not be hampered because of this development.
3.2. Will the construction involve extensive clearing or modification of vegetation? (Provide a detailed account of the trees & vegetation affected by the project)	The construction activity will not involve any clearing vegetation as the land. These will be retaining with huge landscaping.
3.3. What are the measures proposed to be taken to minimize the likely impacts on important site features (Give details of proposal for tree plantation, landscaping, creation of water bodies etc. along with a layout plan to an appropriate scale)	<p>Required RG: 3415.34 Sq. m (25%) Proposed RG: 3428.31 sq.m. (25%) Ground RG area = 2579.43 sq.m., Podium RG area = 848.88 sq.m.</p> <p>There are total 177 nos. of trees will be planted.</p>

4. Fauna

Requirement	Compliance
4.1. Is there likely to be any displacement of fauna – both terrestrial and aquatic or creation of barriers for their movement? Provide the details.	There will be no displacement of fauna - both terrestrial and aquatic and there will be no barrier on their movement. There is no endangered species found except the local species.
4.2. Any direct or indirect impacts on the avifauna of the area? Provide details.	There will be no impact on the avifauna (birds) of the area.
4.3. Prescribe measures such as corridors, fish	The project is located on landmass and there is

ladders etc. to mitigate adverse impacts on fauna.	no need to provide corridors and fish ladders etc.
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5. Air Environment

Requirement	Compliance
5.1. Will the project increase atmospheric concentration of gases & result in heat islands? (Give details of background air quality levels with predicted values based on dispersion models taking into account the increased traffic generation as a result of the proposed constructions)	The proposed project activity will not increase any atmospheric concentration of gases and result in heat islands.
5.2. What are the impacts on generation of dust, smoke, odorous fumes or other hazardous gases? Give details in relation to all the meteorological parameters.	Generation of dust, smoke, & gases will be temporary during construction phase but during operation phase emission of gases will be permanent due to increased number of vehicles in the complex. To mitigate this greenbelt is proposed and regular air monitoring is proposed. Acoustic DG Sets are proposed with stack height.
5.3. Will the proposal create shortage of parking space for vehicles? Furnish details of the present level of transport infrastructure and measures proposed for improvement including the traffic management at the entry and exit to the project site.	Necessary arrangements will be made for smooth entry and exit of vehicles.
5.4. Provide details of the movement patterns with internal roads, bicycle tracks, pedestrian pathways, footpaths etc., with areas under each category.	Adequate provisions have been made in the internal roads, for smooth vehicles entry and exit and as well as pedestrian movements.
5.5. Will there be significant increase in traffic noise & vibrations? Give details of the sources and the measures proposed for mitigation of the above.	As the entry and exit will be made safe and smooth, there will be no noise and vibrations due to increased traffic. During construction activity vehicular movement will be the major source. While during Operational Phase D.G sets and Vehicular movement will be the moderate source.
5.6. What will be the impact of D.G. sets & other equipment on noise levels & vibration in & ambient air quality around the project site? Provide details.	DG sets will be used as power back-up source and will be used only during emergency conditions. D.G. set will create no noise due to vibration as sound proof canopy will be provided. Acoustic enclosure will be provided with proper stack height.

6. Aesthetics

Requirement	Compliance
6.1. Will the proposed constructions in any way result in the obstruction of a view, scenic amenity or landscapes? Are these considerations taken into account by the proponents?	The proposed construction activity will not result in the obstructions of a view, scenic amenity or landscapes. But better designed structure and well planned landscape for add up

	aesthetics of that zone.
6.2. Will there be any adverse impacts from new constructions on the existing structures? What are the considerations taken into account?	There will be negligible adverse impact due to new constructions on the existing structures. Height of building and spread of building structure is taken into account.
6.3. Whether there are any local considerations of urban form & urban design influencing the design criteria? They may be explicitly spelt out.	The design of the project is influenced by the regulation set out by local authority and modern needs of the society.
6.4. Are there any anthropological or archaeological sites or artefacts nearby? State if any other significant features in the vicinity of the proposed site have been considered.	There are no anthropological or archaeological sites or artefacts nearby proposed site.

7. Socio-Economic Aspects

Requirement	Compliance
7.1. Will the proposal result in any changes to the demographic structure of local population? Provide the details.	There will be no change to the demographic structure of local population due to the proposed activity.
7.2. Give details of the existing social infrastructure around the proposed project.	The proposed project is located around the dense populated area.
7.3. Will the project cause adverse effects on local communities, disturbance to sacred sites or other cultural values? What are the safeguards proposed?	The proposed project will not cause any adverse effects on local communities, disturbance to sacred sites or other cultural values.

8. Building Materials

Requirement	Compliance
8.1. May involve the use of building materials with high-embodies energy. Are the construction materials produced with energy efficient processes? (Give details of energy conservation measures in the selection of building materials and their energy efficiency)	The basic engineering materials like aggregate, cement, sand and bricks/blocks will be purchased locally. However, finishing materials will be purchased keeping in mind the energy conservation aspect.
8.2. Transport and handling of materials during construction may result in pollution, noise & public nuisance. What measures are taken to minimize the impacts?	Adequate measures will be taken to keep noise and dust problems at site under control by adopting good practices and good maintenance.
8.3. Are recycled materials used in roads and structures? State the extent of savings achieved?	Construction material will be recycled in the same or other development site.
8.4. Give details of the methods of collection, segregation & disposal of the garbage generated during the operation phases of the project.	The solid waste management facility will be proposed as per MSW rules. Garbage will be collected manually from each of the building in the garbage collection room. The garbage collected from area will be segregated into wet and dry garbage. The wet garbage (biodegradable waste) will sent to OWC to used as a manure for gardening/landscaping which required and rest will be handed over to vendors. The dry garbage (non biodegradable waste) will

	handed over to authorised dealers.
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9. Energy Conservation

Requirement	Compliance
9.1. Give details of the power requirements, source of supply, backup source etc. What is the energy consumption assumed per square foot of build-up area? How have you tried to minimize energy consumption?	Power requirement: Source: MSEDCL Connected Load = 1365 Kw Maximum demand= 840 Kw Backup power: 1 No. of DG set of capacity 250 KVA & 1 No. of DG set of capacity 125 KVA for backup power to emergency facilities.
9.2. What type of, and capacity of, power back-up to you plan to provide?	1 No. of DG sets of capacity 250 KVA for building will be provided for backup power to emergency facilities
9.3. What are the characteristics of the glass you plan to use? Provide specifications of its characteristics related to both short wave and long wave radiation?	Glass used for buildings and residences will be insulated double glazed type with preferred metal-oxide coating (specific U-value) to improve thermal insulation and control solar radiations.
9.4. What passive solar architectural features are being used in the building? Illustrate the applications made in the proposed project.	Building orientation, wall to window ratio and thermal properties of envelop are being looked into reduce solar heat gain and provide natural light and ventilation in areas where there is no AC.
9.5. Does the layout of streets and buildings maximize the potential for solar energy devices? Have you considered the use of street lighting, emergency lighting and solar hot water systems for use in the building complex?	Solar energy will be used specially for common area lighting & hot water system.
9.6. Is shading effectively used to reduce cooling/heating loads? What principles have been used to maximize the shading of Walls on the East and West and the Roof? How much energy saving has been effected?	Depending upon the site condition/location, efforts will be made by the Architects to maximize the shading of Walls on the East and West and the Roof.
9.7. Do the structures use energy-efficient space conditioning, lighting and mechanical systems? Provide technical details. Provide details of the transformers and motor efficiencies, lighting intensity and air-conditioning load assumptions? Are you using CFC and HCFC free chillers? Provide specifications.	All the electrical installations and structures will confirm to energy efficiency norms as available in the market.
9.8. What are the likely effects of the building activity in altering the microclimates? Provide a self assessment on the likely impacts of the proposed construction on creation of heat islands & inversion effects?	There will not be any effect of the building activity in altering the microclimates particularly creation of heat islands & inversion effects.
9.9. What are the thermal characteristics of the building envelope? (a) roof; (b) external walls; and	Roof will be of high quality concrete as per the NBC rules 2005.

(c) Fenestration? Give details of the material used and the U-values or the R-values of the individual components.	
9.10. What precautions & safety measures are proposed against fire hazards? Furnish details of emergency plans.	Standard fire safety norms as prescribed by chief fire officers will be followed as per the government norms. To the extent possible fire proof materials will be used in structures.
9.11. If you are using glass as wall material, provide details and specifications including emissivity and thermal characteristics.	Project is using double glazed glass for Windows.
9.12. What is the rate of air infiltration into the building? Provide details of how you are mitigating the effects of infiltration.	Proper ventilation will be providing in rooms. Air changes/hour is as per Bureau of Indian Standards (National Building Code, 2005).
9.13. To what extent the non-conventional energy technologies are utilised in the overall energy consumption? Provide details of the renewable energy technologies used.	Every effort will be made to generate and use non-conventional energy and renewable energy, depending upon the circumstances and chances of generating energy. Solar energy utilisation is the major part of that. Percentage energy saving: 30 %

ENVIRONMENT MANAGEMENT PLAN

(The Environment Management Plan would consist of all mitigation measures for each item wise activity to be undertaken during the construction, operation and the entire life cycle to minimise adverse environmental impacts as a result of the activities of the project. It would also delineate the environmental monitoring plan for compliance of various environmental regulations. It will state the steps to be taken in case of emergency such as accidents at the site including fire.)