

Date:- 22.07.2022

To,
Director,
Ministry of Environment, Forest and Climate Change,
Reginal Office (WCZ), Ground Floor, East Wing,
New Secretariat Building Civil Lines,
Nagpur.

Subject : Present status of Project work from the period of January 2022 to June 2022 for Proposed redevelopment project - Slum Rehabilitation Scheme U/Sec. 33(10) of DC Regulation 2034 on Property bearing Survey No. 267, C.T.S. No. 845(pt.) of Village Malad-E, Taluka Borivali, Mumbai - 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)"

Reference: Environmental Clearance Letter No. SIEAA-EC-0000001503, dated: 7th May 2019; Amended EC: Application No. SIA/MH/MIS/136637/2020 dated: 31st March 2020.

Dear Sir,

This is with reference to the above subject of Proposed redevelopment project - Slum Rehabilitation Scheme U/Sec. 33(10) of DC Regulation 2034 on Property bearing Survey No. 267, C.T.S. No. 845(pt.) of Village Malad-E, Taluka Borivali, Mumbai - 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)"

The present project status at site is as follows:

Building No.	Configuration	Status
Rehab Building No.1	Basement + Stilt +1 st to 21 st Upper floors	Casting of 7 th Habitable Floor Completed.
Sale Building No.1	Lower Ground + Upper Ground + 6 Podium + 7 th E-Deck Floor + 1 st to 38 th (PT) Upper floors	Casting of 6 th Habitable Floor Completed For Flat No.1,2,3 & 4. Casting of 4 th Habitable Floor Completed For Flat No.5 & 6.

We kindly request you to kindly visit our site for compliance verification of Environment Clearance.

Thanking you.

Your's faithfully,

For, **M/s. Dynamix Contractors & Builders Pvt. Ltd.**



Authorized Signatory



Date:- 22.07.2022

To,
Member Secretary,
Maharashtra Pollution Control Board,
3rd Floor, Kalpataru Point,
Sion, Mumbai - 400022.

Subject : Present status of Project work from the period of January 2022 to June 2022 for Proposed redevelopment project - Slum Rehabilitation Scheme U/Sec. 33(10) of DC Regulation 2034 on Property bearing Survey No. 267, C.T.S. No. 845(pt.) of Village Malad-E, Taluka Borivali, Mumbai - 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)"

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Maharashtra Pollution Control Board
Kalpataru Point, 2nd Floor, Sion Circle,
Opp. Cine Planet, Sion (East),
Mumbai - 400 022.
Tel. 24010437 / 24020781.
Website : www.mpcb.gov.in

Date:- 22.07.2022

To,
Member Secretary,
State level Environmental Impact Assessment Authority (SEIAA),
217, Department of Environment,
Annex Building, 15th Floor, Mantralaya,
Mumbai - 400032.

Subject : Present status of Project work from the period of January 2022 to June 2022 for Proposed redevelopment project - Slum Rehabilitation Scheme U/Sec. 33(10) of DC Regulation 2034 on Property bearing Survey No. 267, C.T.S. No. 845(pt.) of Village Malad-E, Taluka Borivali, Mumbai - 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)"

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Authorized Signatory



Handwritten signature
28-7-22
आयक लिंपक (नं.शा.)
पंचावग्न व वातावरण व बदल विभाग
मंत्रालय, मुंबई 400 032

DATA SHEET

S. No.	Project Details	Particulars						
1)	Project type: river/valley/ mining/industry/thermal/nuclear/other (specify):	Slum Rehabilitation Scheme (Residential)						
2)	Name of the project:	Proposed redevelopment project - Slum Rehabilitation Scheme U/Sec. 33(10) of DC Regulation 2034 on Property bearing Survey No. 267, C.T.S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai - 400097 For “Shivpuri Pragati SRA Co-Op Hsg. Society. (Prop.)”.						
3)	Clearance letter (s)/OM/ no and date:	Environmental Clearance Letter No. SEIAA-EC-0000001503 dated: 7 th May 2019 Amended EC: Application No. SIA/MH/MIS/136637/2020 dated: 31 st March 2020						
4)	Location of the Project:	Property bearing Survey No. 267, C.T.S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai - 400097						
a)	District:	Borivali						
b)	State:	Maharashtra						
c)	Latitude: Longitude:	19° 10' 41.9988" N 72° 52' 18.0012" E						
5)	Address for correspondence:							
a)	Address of concerned project chief Engineer (with pin code & telephone/telex/fax numbers):	Name: Mubeen Mukadam Designation: Liasoning Manager Address: DB House, Yashodham, Gen. A. K. Vaidya Marg, Goregaon East, Mumbai – 400063 Contact No.: 8879226520 Email: mubeensonu@reddifmail.com PAN No.: AACCD7719E						
b)	Address of Executive Project Engineer/ Manager (with pin code / fax number):	Name: Mubeen Mukadam Designation: Liasoning Manager Address: DB House, Yashodham, Gen. A. K. Vaidya Marg, Goregaon East, Mumbai – 400063 Contact No.: 8879226520 Email: mubeensonu@reddifmail.com PAN No.: AACCD7719E						
6)	Salient Features -							
a)	Of the project:	<table><tr><th>Buildings</th><th>Configuration</th></tr><tr><td>Rehab Building No. 1</td><td>Basement (for services) + Stilt +1st to 21st Upper floors</td></tr><tr><td>Sale Building No. 2</td><td>Lower ground + Upper Ground + 6 Podium + 7th E-Deck Floor + 1st to 38th (PT) Upper floors</td></tr></table>	Buildings	Configuration	Rehab Building No. 1	Basement (for services) + Stilt +1 st to 21 st Upper floors	Sale Building No. 2	Lower ground + Upper Ground + 6 Podium + 7 th E-Deck Floor + 1 st to 38 th (PT) Upper floors
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b)	Of the Environmental Management Plans:	STP Treatment for wastewater; OWC unit for Biodegradable Waste Treatment; RWH for water conservation						
7)	Break Up of the project Area:							
a)	Submerge area: forest & non-forest:	Not Applicable						

b)	Other -																																													
	Total Plot Area:	6002.90 m ²																																												
	FSI area:	22049.07 m ²																																												
	Non FSI area:	9467.01 m ²																																												
	Total BUA area (Construction Area):	31516.08 m ²																																												
	Greenbelt Area:	756.52 m ²																																												
8)	Break-up of the project affected: Population with enumeration of those losing houses/dwelling units, and agriculture land and landless labourers/artisan	Not Applicable																																												
a)	SC, ST/Adivasis	Not Applicable																																												
b)	Other (Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figured, if a survey is carried out give details and years of survey)	Not Applicable																																												
9)	Financial details																																													
a)	Project cost as originally planned and subsequent revised estimated and the year of price reference	₹176.00 Cr																																												
b)	Allocation made for environmental management plans with item wise and year wise break-up	<div><div>A.) Construction Phase</div><table><tr><th>S. No.</th><th>Attributes</th><th>Parameter</th><th>Total Capital Cost Per annum (in Rs. Lacs)</th><th>O & M Cost per annum (in Rs. Lacs)</th></tr><tr><td>1.</td><td>Water Environment</td><td>Drinking water</td><td>1.7</td><td>0.2</td></tr><tr><td>2.</td><td>Health</td><td>Sanitation</td><td>3.5</td><td>0.8</td></tr><tr><td></td><td></td><td>Health Check Up</td><td>3.5</td><td>0.8</td></tr><tr><td>3.</td><td>Air Environment</td><td>Water for dust suppression</td><td>1.0</td><td>0.2</td></tr><tr><td colspan="3">TOTAL</td><td>9.7</td><td>2.0</td></tr></table><div>B.) Operation Phase</div><table><tr><th>S. No.</th><th>Component</th><th>Description</th><th>Capital Cost (in Rs. Lacs)</th><th>O & M Costs (in Rs. Lacs/y)</th></tr><tr><td>1.</td><td>STP & Sewerage Network</td><td>Cost for 2 sewage treatment plant of 70</td><td>45</td><td>19</td></tr></table></div>					S. No.	Attributes	Parameter	Total Capital Cost Per annum (in Rs. Lacs)	O & M Cost per annum (in Rs. Lacs)	1.	Water Environment	Drinking water	1.7	0.2	2.	Health	Sanitation	3.5	0.8			Health Check Up	3.5	0.8	3.	Air Environment	Water for dust suppression	1.0	0.2	TOTAL			9.7	2.0	S. No.	Component	Description	Capital Cost (in Rs. Lacs)	O & M Costs (in Rs. Lacs/y)	1.	STP & Sewerage Network	Cost for 2 sewage treatment plant of 70	45	19
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			CMD & 110 CMD			
		2.	RWH Systems	Cost for RWH Tank	32	1.6
		3.	Environmental Monitoring	Cost of Ambient Air & Noise monitoring cost for DG Stack exhaust monitoring cost of organic manure	0	5
		4.	Solid Waste Management	Cost of treatment of biodegradable garbage in OWC	10	1.5
		5.	Solar Installation	Solar panel installation	35	1.5
		6.	Landscaping	Cost for tree plantation & gardening	53	5
		TOTAL			175	33.6
c)	Benefit cost ratio/internal rate of return and the year of assessment	Not Applicable				
d)	Whether (9.3.) includes the cost of environmental management as shown in the above	Not Applicable				
e)	Actual expenditure incurred on the project so far					
f)	Actual expenditure incurred on the environmental management plans so far	Capital Cost – 175 Lakhs O&M Cost – 33.6 Lakhs				
10)	Forest land required:					
a)	The status of approval for diversion of forest land for non-forestry use	The plot is of non-forest land and thus not applicable				
b)	The status of clearing and felling	Not Applicable				
c)	The status of compensatory afforestation if any	Not Applicable				
d)	Comments on the viability & sustainability of compensatory afforestation program in the light of actual field experience so far	Not Applicable				
11)	The status of clear felling in non-forest area (such as submergence area of reservoir, approach roads), if any with quantitative information	Not Applicable				
12)	Status of construction					

a)	Date of commencement (Actual and/or planned)	12.07.2019
b)	Date of completion (Actual and/or planned)	12.07.2024
13)	Reasons for the delay if the project is yet to start	
14)	Dates of site visits	
a)	The date on which the project was monitored by the regional office on previous occasions, if any	No visit to the project site that has undertaken by the regional office till date.
b)	Date of site Visit for this monitoring report	02-12-2021
15)	Details of correspondence with project authorities for obtaining action plans/information on status on compliance to safeguard other than the routine letters for logistical site visits.	Name: Mr. N. P. Bajaj Designation: Managing Director Contact No.: 022-42490500

Reference:

Environmental Clearance Letter No. SIEAA-EC-0000001503, dated: 7th May 2019

Amended EC: SIA/MH/MIS/136637/2020 dated: 31st March 2020.

Consent to Establish from MPCB Consent No.: Format1.0/BO/JD(WPC)/UAN No. 84435/CE/CC-200700361; Dated: 06/07/2020

Present status of project work from the period of July 2020 to December 2020 for proposed Slum Rehabilitation Scheme U/Sec. 33(10) of DC Regulation 2034 on property bearing Survey No. 267, C.T.S. No. 845(pt.) of village Malad-E, Taluka Borivali, Mumbai – 4000097 For “Shivpuri Pragati SRA Co-Op Hsg. Society. (Prop.)” by M/s. Dynamix Contractors & Builders Pvt. Ltd.

COMPLIANCE REPORT**TERMS & CONDITIONS**

S. No.	Environmental Clearance Conditions	Environmental compliance
SPECIFIC CONDITIONS		
1.	PP to ensure that STP should be 40% open to derive adequate ventilation.	Noted. The STP will feature sufficient ventilation to improve efficiency.
2.	Committee noted that the south-east portion of the plot showed as paved RG should be converted by green pavers/ green area.	The paved RG will be converted into a green lawn as per the condition in the construction plan.
3.	PP to revise the list of trees mentioned in the landscape plan, PP to ensure that, there will be diversity of indigenous variety of plants.	The PP will assess the list of trees and make sure that the trees are of native species in accordance with the construction plan.
4.	Local planning authority to ensure the structural stability of building for which vertical expansion is proposed.	Noted.
5.	PP to get NOC from competent authority with reference to Thane Creek flamingo sanctuary boundary. The planning authority to ensure the fulfilment of this condition before granting CC.	Noted. The plot boundary does not fall into the area of Thane Creek Flamingo Sanctuary, Thus NOC is not needed.
6.	PP to submit CER prescribed by MoEF & CC circular dated 1.5.2018 relevant to the area and people around the project. The specific activities to be undertaken under CER to be carried out in consultation with municipal Corporation or collector or Environment Department.	Noted.
7.	PP Shall comply with Standard EC conditions mentioned in the Office Memorandum issued by MoEF & CC vide F.No. 22-34/2018-IA, III dt. 04.01.2019.	Noted.
8.	SEIAA decided to grant EC for: FSI: 22049.07m ² , Non-FSI: 9467.01 m ² and Total BUA: 31516.08 m ² (Plan Approval no-SRA/ENG/2848/PN/PL/LOI, dated:05-11-2019)	SRA has granted LOI to the PP vide no.: SRA/ENG/2828/PN/PL/LOI dated 5.11.2019 and submitted to SEIAA and EC has been obtained.

GENERAL CONDITIONS		
9.	E-waste shall be disposed through authorized vendor as per E-waste (Management and Handling) Rules, 2016	Not Applicable
10.	The Occupancy Certificate shall be issued by the local planning Authority to the project only after ensuring sustained availability of drinking water, connectivity of sewer line to the project site and proper disposal of treated water as per environmental norms.	Condition is noted
11.	This environmental clearance shall be issued subject to obtaining NOC from Forestry & Wildlife angle including clearance from the standing committee of the National Board for Wildlife as if applicable & this environment clearance does not necessarily imply that. Forestry & Wildlife clearance granted to the project which will be considered separately on merit.	Noted. Reff: Amended EC: SIA/MH/MIS/136637/2020 dated: 31 st March 2020.
12.	PP has to abide by the conditions stipulated by SEAC & SEIAA.	Condition is noted and adhered to.
13.	The height, construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan & before according to commencement certificate to proposed work. Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.	The plans of the project have been reviewed by SRA and SEIAA. All the norms have been followed with reference to vide no.: SRA/ENG/2828/PN/PL/LOI dated 5.11.2019.
14.	If applicable Consent for Establishment" Shall be obtained from Maharashtra pollution control Board under air and water Act. And a copy shall be submitted to the Environment department before start of any construction work at the site.	The PP has obtained the letter for Consent for Establishment from the MPCB with reference to no.: Format1.0/BO/JD(WPC)/UAN No. 84435/CE/CC-2007000361 dated: 06-07-2020

15.	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase	Drinking water, sanitation, Health check-ups and water suppression for dust, have been arranged for the working staff and available for all to use.
16.	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured	Drinking water and sanitation facilities have been provided to all working staff. Mobile toilets have been connected to the public sewerage line outside the plot.
17.	The solid waste generated should be properly collected and segregated. Dry/inert solid waste should be disposed off to approved sites for land filling after recovering recyclable material.	Dry Waste: Dry waste would be further segregated into recyclable and non-recyclable, and it will be handed over to authorized vendors. Wet Waste: Wet Garbage will be treated in Mechanical Composting Unit with the help of an 'Organic Waste Converter' (OWC) and the compost generated would be used as manure for Gardening purposes and excess would be sold to authorized vendors.
18.	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	Disposal of construction waste will be as per "Construction and Demolition and De-silting Waste" (Management and Disposal) Rules 2006 and the Solid Waste Management rules, 2016 for the designated site as directed by the MCGM. The approval of authorities will be taken prior to the construction phase and post construction phase as well.
19.	Arrangement shall be made that wastewater and storm water do not get mixed.	Storm water drain is laid at a slope of 1:300 to the municipal outfall outside the plot. Rainwater from the site shall be collected by network of storm water piping system through catch basins and storm channel & then allowed to connect to the public storm water line outside the plot boundary. Wastewater will not be mixing with storm water.
20.	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site	The substratum removed would be used for back filling, leveling, and road construction.
21.	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.	Condition is noted. If any additional soil is needed, it will be taken from the plot itself to improve drainage.
22.	Green Belt Development shall be carried out considering CPCB	An area of 756.52m ² has been dedicated for the development of a green belt.

	guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.	
23.	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Soil and water samples have been taken for testing on 02-12-2021 and results are all within the limits of the norms set by the CPCB
24.	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.	There will be a very small amount of construction waste that will be generated in this plot therefore, the effects are negligible, yet care will be taken.
25.	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board	There will be no hazardous wastes generated in the project and thus, this condition is not applicable.
26.	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.	The fuel being used for the DG set is HSD Diesel, with low Sulphur content (2%).
27.	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.	Condition is noted and storage area will be allocated, if needed in case of emergency.
28.	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.	<ul style="list-style-type: none"> Engines & exhaust systems will be properly maintained. Low sulphur diesel (LSD) will be used. Idling time will be eliminated/reduced to the maximum. Evaporative losses will be minimized. Only vehicles with a valid PUC certificate will be allowed to enter the site. During non-peak hours, the air and noise levels are all within the norms.
29.	Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate	The noise levels measured by a sound level meter are in conformation of the day time and night time limits set up by the CPCB.

	measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB /MPCB	
30.	Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and amended as on 27th August 2003. (The above condition is applicable only if the project site is located within the 100 km of Thermal Power Stations).	The concrete and cement used will have fly ash included in it, when being purchased.
31.	Ready mixed concrete must be used in building construction	Ready mixed concrete will only be used in building construction.
32.	Storm water control and its re-use as per CGWB and BIS standards for various applications.	300m wide storm water drain is laid at a slope of 1:300 to the municipal outfall outside the plot. Rainwater from the site shall be collected by network of storm water piping system through catch basins and storm channel & then allowed to connect to the public storm water line outside the plot boundary
33.	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred	<ul style="list-style-type: none"> • Use of curing water: Spraying of curing water and after liberal curing, all concrete structures will be covered with gunny bags, followed by spraying of water. • Use of polymer dispersion and air entraining agents to reduce the construction water demand. • Admixtures will be used to reduce water demand during construction. • Discouraging the washing of vehicles and equipment on the construction site. Workers will not be allowed to wash their personal vehicles on site. Vehicles and equipment that regularly leave the construction site should be washed offsite.
34.	The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.	Samples of Ground water have been regularly sent to a certified testing lab regularly in accordance to the prepared EMP.
35.	The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the MPCB and Environment department before the project is commissioned for operation. Discharge of this unused treated effluent, if any should be discharge in the sewer line. Treated effluent emanating from STP shall be recycled/refused to the maximum extent possible.	60% of the treated water should be recycled & reused and remaining will be discharged in municipal sewer.

	Discharge of this unused treated affluent, if any should be discharge in the sewer line. Treatment of 100% gray water by decentralized treatment should be done. Necessary measures should be made to mitigate the odour problem from STP.	
36.	Permission to draw ground water and construction of basement if any shall be obtained from the competent Authority prior to construction/operation of the project	The project doesn't use drawn groundwater for the construction purposes. Tanker water will be used for the construction; thus, the condition is not applicable.
37.	Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water	Dual plumbing system will be used to keep the grey and black water separated so that the grey water can be treated and reused for landscaping.
38.	Fixtures for showers, toiler flushing, and drinking should be low flow either by use of aerators or pressure reducing devices or based control.	Low flow fixtures or sensors are used to promote water conservation.
39.	Use of glass be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows	Condition is noted.
40.	Roof should meet Prescriptive requirement as per Energy Conservation building Code by using appropriate thermal insulation material to fulfill requirement.	Condition is noted and thermal insulation will be inlaid.
41.	Energy conservation measures like installation of CFLs /TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed of/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels	SALE BUILDING <ul style="list-style-type: none"> • By using CFL/T5 lamps for parking areas instead of conventional T8 lamps and LED for lobbies/atrium/staircases • Savings due to LED lamp • Savings due to electronic ballast • Savings due to timer/sensor (Providing timers for 3 time zones - 4 hours 100% lighting/4 hours 50% lighting and 4 hours 25% lighting for 12-hour lighting cycle for parking and street lighting - hence overall savings shall be 40%) • Savings due to capacitors • Savings due to solar lighting (Lighting {1% of lighting load on solar })

	may be done to the extent possible like installing solar streetlights, common solar water heater system. Project proponent should install, after checking feasibility, solar plus hybrid non-conventional energy source as source of energy	<ul style="list-style-type: none"> • Savings due to Hot Water Solar Panel for Common Toilet REHAB BUILDING <ul style="list-style-type: none"> • By using CFL/T5 lamps for parking areas instead of conventional T8 lamps and LED for lobbies/atrium/staircases • Savings due to LED lamp • Savings due to electronic ballast • Savings due to capacitors • Renewable source of energy - Savings due to solar lighting - Lighting (1% of lighting load on solar) • Savings due to Hot Water Solar Panel for Common Toilet
42.	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to height needed for the combined capacity of all proposed DG sets. Use low Sulphur diesel. The location of the DG sets may be decided with in consultation with Maharashtra Pollution Control Board.	<ul style="list-style-type: none"> • DG set conforming to the CPCB standards will be deployed. • D.G. set will be provided with a safe stack height of DG Set proposed is above building terrace level. DG Stack heights are as under: <ol style="list-style-type: none"> 1. Sale Building: 153m 2. Rehab Building: 66m • Low-Sulphur-content fuel (HSD - Sulphur content 2%) will be used. • DG set is in an acoustic enclosure, to reduce the noise generated.
43.	Noise should be controlled to ensure that it does not exceed the prescribed standards. During nighttime the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	The noise levels at nighttime have been measured and noted. All levels are under the prescribed limits.
44.	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized, and no public space should be utilized.	<ul style="list-style-type: none"> • Sufficient width of driveways to ensure smooth traffic movements. • Provisions of fully internalized parking including the parking facilities for the visitors. • Guided traffic ways within the project site
45.	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code, which is proposed to be mandatory for all air-conditioned spaces while it is aspiration for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement	<p>Condition is noted.</p> <p>The walls of the building will be constructed with required thermal insulation to improve the energy efficiency of the building.</p>

46.	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.	The building passages and doorways have been built spaciouly for the reason that there is natural air, light and ventilation.
47.	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	A skilled and experienced inspector will be hired for the sole purpose of monitoring all the above parameters with regular supervision which will be logged.
48.	Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.	The LOI for EC has been obtained from SRA vide no.: SRA/ENG/2828/PN/PL/LOI dated 5.11.2019 and then EC has also been granted from SEIAA vide No. SIA/MH/MIS/136637/2020. Thus, not required, as all papers are in possession with the PP.
49.	Six monthly monitoring reports should be submitted to the Regional Office of MoEF, Bhopal, with copy of this department and MPCB	Condition is noted and the reports are submitted regularly on a six-month basis.
50.	Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the building. As agreed during the SEIAA meeting, PP to explore possibility of utilizing excess treated water in the adjacent area for gardening before discharging it into sewer line No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. Prior certification from appropriate authority shall be obtained	The construction plans have made sure that the STP and OWC have to be completed first before occupation of the building. Treated water from the STP will be used for landscaping and gardening and the rest will be discarded in the public sewerage.
51.	Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in existing premise for gardening and no wet garbage will be disposed outside the premises. Local authority should ensure this	‘Organic Waste Converter’ (OWC) unit will be set up for the disposal of the wet garbage and the compost generated would be used as manure for Gardening purposes within the premises and excess would be sold to authorized vendors.
52.	Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.	Only post completion of the EMP plans, then only will the application for a No Occupancy certificate will be drafted with approval from a official from the local governing body.

53.	A complete set of all the documents submitted to Department should be forwarded to the Local Authority and MPCB.	Condition is noted and the documents have been forwarded to the concerned authorities.																																																												
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			monitoring cost of organic manure		
		4.	Solid Waste Management	Cost of treatment of biodegradable garbage in OWC	10 1.5
		5.	Solar Installation	Solar panel installation	35 1.5
		6.	Landscaping	Cost for tree plantation & gardening	53 5
		TOTAL		175	33.6
57.	The Project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded Environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at website at http://parivesh.nic.in	PP has given the advertisement in 2 local newspapers, In “Free Press Journal” dated 12 th May 2019 & In “Navshakti” dated 12 th May 2019. <i>Attached as Annexure VIIA & VIIB</i>			
58.	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.	Condition is noted and the necessary reports have been submitted to the MPCB.			
59.	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	Condition is noted. The copy of the clearance letter has been sent by the PP to the concerned Municipal Corporations and local NGOs for submission.			
60.	The proponent shall upload the status of compliance of the stipulated EC conditions, including	Condition is noted.			

	results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely: SPM, RSPM, SO _x , NO _x (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company by the public domain.	The PP has attached and sent a copy of the stipulated conditions of the EC and the data to the MoEF&CC and MPCB with the test results.
61.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC condition including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB	Condition is noted and the necessary have been submitted to the concerned authority.
62.	The Environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	Condition is noted. The PP has sent a copy of the required forms to MPCB along with the EC compliance report.

ANNEXURES

List of Annexures	
Annexure IA	Environment clearance for modification in EC obtained for proposed redevelopment project – Slum rehabilitation Scheme U/Sec. 33(10) of DC regulation 2034 on Property bearing survey no. 267, C.T.S. No. 845(Pt.) of village Malad, Taluka Borivali, Mumbai – 400097 For “Shivpuri Pragati SRA Co-op Hsg. Socy. (Prop.)” by M/s Dynamix Contractors and Builders Pvt. Ltd.; dated: 31.03.2020
Annexure IB	Environment clearance for proposed slum rehabilitation Scheme U/Sec. 33(10) of DC regulation 1991 on Property bearing survey no. 267, C.T.S.

	No. 845(Pt.) of village Malad, Taluka Borivali, Mumbai – 400097 For “Shivpuri Pragati SRA Co-op Hsg. Socy. (Prop.)” by M/s Dynamix Contractors and Builders Pvt. Ltd.; dated: 07.05.2019
Annexure II	Environmental Management Plan (EMP)
Annexure IIIA	Amended plans Sale Building No. 2 in S.R. Scheme on plot bearing C.T.S. No. 845 (pt.) of village Malad, at Malad (E), vide no.; PN/PVT/0170/20150610/AP/S-2, Mumbai; dated 17.01.2020
Annexure IIIB	Amended plans Rehab Building No. 1 in S.R. Scheme on plot bearing C.T.S. No. 845 (pt.) of village Malad, at Malad (E), vide no.: PN/PVT/0170/20150610/AP/R-1 Mumbai; dated 31.12.2019
Annexure IIIC	Proposed S.R. Scheme on plot bearing C.T.S. No. 845(pt.) of village Malad, At Malad(E), Mumbai, vide no. SRA/ENG/2828/PN/PL/LOI dated 05.11.2019
Annexure IV	Consent to establish; consent no.: Format1.0/BO/JD(WPC)/UAN No. 84435/CE/CC-2007000361, dated: 06.07.2020
Annexure V	Monitoring reports by Go Green Mechanisms Pvt. Ltd.; dated: 02.12.2021
Annexure VIA	Water Management Details
Annexure VIB	Rainwater Harvesting Details
Annexure VIC	Solid Waste Management Details
Annexure VIIA & VIIB	Newspapers advertisement

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

No. SIA/MH/MIS/136637/2020
Environment Department
Room No. 217, 2nd Floor,
Mantralaya, Mumbai- 400032.
Date: 31.03.2020.

To,
M/s. Dynamix Contractors & Builders Pvt. Ltd
DB House, Yashodham,
General A.K Vaidya Marg,
Goregaon (E), Mumbai - 400063.

Subject : Environment Clearance for Modification in EC obtained for proposed redevelopment project - Slum Rehabilitation Scheme U/Sec. 33(10) of DC Regulation 2034 on Property bearing Survey No. 267, C.T.S. No. 845(pt) of Village Malad, Taluka Borivali, Mumbai-400097 for Shivpuri Pragati CHS (Prop) M/s. Dynamix Contractors & Builders Pvt. Ltd

Reference : Application no. SIA/MH/MIS/136637/2020

This has reference to your communication on the above mentioned subject. The proposal was considered by the SEAC - 2 in its 130th meeting under screening category 8 (a) B2 as per EIA Notification, 2006 and recommend to SEIAA. Proposal then considered in 197th meeting of State Level Environment Impact Assessment Authority (SEIAA).

2. Brief Information of the project submitted by you is as below:-

No.	Description	Details
1.	Project Name & with Site Address	Proposed redevelopment project - Slum Rehabilitation Scheme U/Sec. 33(10) of DC Regulation 2034 on Property bearing Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai - 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)" by M/s Dynamix Contractors & Builders Pvt. Ltd.
2.	Plot Area (sq. m)	6002.90 Sq. m.
3.	FSI Area (sq. m)	22049.07 Sq. m
4.	Non-FSI Area (sq. m)	9467.01 Sq. m
5.	Proposed built-up area (FSI + Non FSI) (sq. m)	31516.08 Sq. m
6.	Building Configuration	Rehab Building 1: Basement (for services) + Stilt + 21st Upper Floors Sale Building 2: Lower Ground + Upper ground + 6 Podium + 7th E-Deck Floor + 1st to 38 (PT) Upper Floors

7.	No. of Tenements & shops	Residential Rehab Building: 138 Nos. Sale Building: 208 Nos. Total Flats: 346 Nos. Balwadi: 1 Anganwadi: 1 Fitness Centre: 2 Society Office: 2 Library: 2 Welfare centre: 1
8.	Total population	1735 (Residential & Visitor Population)
9.	Total Water Requirement CMD	Total Water Requirement: 238 CMD Fresh Water: 158 CMD Flushing Water: 80 CMD
10.	Sewage Generation CMD	214 CMD
11.	STP Capacity & Technology	1 no. of 90 CMD for rehab & 1 No. of 130 CMD for sale, Technology: Moving Bed Bio Reactor (MBBR)
12.	STP Location	Rehab: Part Basement Sale: Lower Ground
13.	Total Solid waste Quantities	Wet Waste: 316 Kg/day Dry Waste: 474 Kg/day Total: 790 kg/day Disposal: OWC 130 (2 Nos.) & Curing System
14.	R.G Area in sq.m	1116.28 Sq. m Location: Ground & Podium
15.	Power requirement	Connected Load: 5815 KW Maximum Demand: 2360 KW
16.	Energy Efficiency	Total Energy Savings: 12.1 % By Solar Energy: 2%
17.	D.G. set capacity	1 X 750 KVA ,
18.	Parking 4W & 2W	4W: 335 Nos; 2W: 16
19.	Rain water harvesting Scheme	10 tanks of 5 cum ;00 RWH pits
20.	Project Cost in (Cr)	176 Cr
21.	EMP Cost	Capital Cost – 175 Lakhs O & M Cost – 33.6 Lakhs
22.	CER Details	0.75 % of Project cost (i.e 1.32 Cr)

3. The proposal has been considered by SEIAA in its 197th meeting and decided to accord Environment Clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implantation of following terms and conditions-

Specific Conditions:

- I. PP to ensure that STP should be 40% open to derive adequate ventilation. —
- II. Committee noted that the south-east portion of plot showed as paved RG should be converted

- by Green pavers/green area.
- III. PP to revise the list of trees mentioned in landscape plan, PP to ensure that, there will be diversity of indigenous variety of plants.
- IV. Local planning authority to ensure the structural stability of building for which vertical expansion is proposed
- V. The PP to get NOC from competent authority with reference to Thane creek flamingo sanctuary if the project site falls within 10 Km radius from the said sanctuary boundary. The planning authority to ensure fulfilment of this condition before granting CC.
- VI. PP to submit CER prescribed by MoEF&CC circular dated 1.5.2018 relevant to the area and people around the project. The specific activities to be undertaken under CER to be carried out in consultation with Municipal Corporation or collector or Environment Department.
- VII. PP Shall comply with Standard EC conditions mentioned in the Office Memorandum issued by MoEF& CC vide F.No.22-34/2018-IA.III dt.04.01.2019.
- VIII. SEIAA decided to grant Environment Clearance for FSI:22049.07 m2, Non-FSI:9467.01 m2 and Total BUA: 31516.08 m2 (Plan Approval no-SRA/ENG/2848/PN/PL/LOI, dated-05.11.2019)

General Conditions:

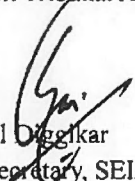
- i. E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016.
- ii. The Occupancy Certificate shall be issued by the Local Planning Authority to the project only after ensuring sustained availability of drinking water, connectivity of sewer line to the project site and proper disposal of treated water as per environmental norms.
- iii. This environmental clearance is issued subject to obtaining NOC from Forestry & Wild life angle including clearance from the standing committee of the National Board for Wild life as if applicable & this environment clearance does not necessarily implies that Forestry & Wild life clearance granted to the project which will be considered separately on merit.
- iv. PP has to abide by the conditions stipulated by SEAC& SEIAA.
- v. The height, Construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan & before according commencement certificate to proposed work. Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
- vi. If applicable Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.
- vii. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- viii. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- ix. The solid waste generated should be properly collected and segregated. Dry/inert solid waste should be disposed of to the approved sites for land filling after recovering recyclable material.
- x. Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- xi. Arrangement shall be made that waste water and storm water do not get mixed.
- xii. All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.

- xiii. Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- xiv. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
- xv. Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- xvi. Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.
- xvii. Any hazardous waste generated during construction phase should be disposed of as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.
- xviii. The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.
- xix. The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.
- xx. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- xxi. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/MPCB.
- xxii. Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and amended as on 27th August, 2003. (The above condition is applicable only if the project site is located within the 100Km of Thermal Power Stations).
- xxiii. Ready mixed concrete must be used in building construction.
- xxiv. Storm water control and its re-use as per CGWB and BIS standards for various applications.
- xxv. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- xxvi. The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.³
- xxvii. The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the MPCB and Environment department before the project is commissioned for operation. Discharge of this unused treated effluent, if any should be discharge in the sewer line. Treated effluent emanating from STP shall be recycled/ refused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharge in the sewer line. Treatment of 100% grey water by decentralized treatment should be done. Necessary measures should be made to mitigate the odour problem from STP.
- xxviii. Permission to draw ground water and construction of basement if any shall be obtained from the competent Authority prior to construction/operation of the project.
- xxix. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
- xxx. Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- xxxi. Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air

- conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- xxxii. Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfil requirement.
 - xxxiii. Energy conservation measures like installation of CFLs /TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed of /sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heaters system. Project proponent should install, after checking feasibility, solar plus hybrid non-conventional energy source as source of energy.
 - xxxiv. Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Maharashtra Pollution Control Board.
 - xxxv. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night-time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
 - xxxvi. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.
 - xxxvii. Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code, which is proposed to be mandatory for all air-conditioned spaces while it is aspiration for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.
 - xxxviii. The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
 - xxxix. Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
 - xl. Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.
 - xli. Six monthly monitoring reports should be submitted to the Regional office MoEF, Bhopal with copy to this department and MPCB.
 - xl.ii. Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. As agreed during the SEIAA meeting, PP to explore possibility of utilizing excess treated water in the adjacent area for gardening before discharging it into sewer line No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. Prior certification from appropriate authority shall be obtained.
 - xl.iii. Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for gardening. And, no wet garbage will be disposed outside the premises. Local authority should ensure this.
 - xliv. Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.
 - xl. v. A complete set of all the documents submitted to Department should be forwarded to the Local authority and MPCB.
 - xlvi. In the case of any change(s) in the scope of the project, the project would require a fresh

- appraisal by this Department.
- xlvi. A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
 - xlvi. Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.
 - xlix. The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at <http://parivesh.nic.in>
 - i. Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.
 - ii. A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
 - iii. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
 - iiii. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
 - liv. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.
 4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.
 5. In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environment clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.
 6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.
 7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification, 2006, amended time to time.

8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.
10. Any appeal against this Environment clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1st Floor, D - Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.


Anil Diggikar
(Member Secretary, SEIAA)

Copy to:

1. Shri Johnny Joseph, Chairman, SEIAA.
2. Secretary, MoEF & CC
3. IA- Division MOEF & CC
4. Member Secretary, Maharashtra Pollution Control Board, Mumbai.
5. Regional Office MoEF & CC, Nagpur
6. District Collector, Mumbai.
7. Commissioner, Municipal Corporation of Greater Mumbai
8. Regional Officer, Maharashtra Pollution Control Board, Mumbai.



STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Environment department,
Room No. 217, 2nd floor,
Mantralaya, Annexe,
Mumbai- 400 032.
Date: May 7, 2019

To,
M/s Dynamix Contractors & Builders Pvt. Ltd.
at Property bearing Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai - 400097

Subject: Environment Clearance for Proposed Slum Rehabilitation Scheme U/Sec. 33(10) of DC Regulation 1991 on Property bearing Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai - 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)".

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee-II, Maharashtra in its 86th th meeting and recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 165th meetings.

2. It is noted that the proposal is considered by SEAC-II under screening category 8(a) {Building and Construction projects = 20,000 sq. m. and <1,50,000 sq. m. of built-up area} Category 'B' as per EIA Notification 2006.

Brief Information of the project submitted by you is as below :-

1.Name of Project	Proposed Slum Rehabilitation Scheme U/Sec. 33(10) of DC Regulation 1991 on Property bearing Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai - 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)".
2.Type of institution	Green Building
3.Name of Project Proponent	M/s Dynamix Contractors & Builders Pvt. Ltd.
4.Name of Consultant	AQURA Enviro Projects Private Limited
5.Type of project	S. R. Scheme
6.New project/expansion in existing project/modernization/diversification in existing project	New project
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Not applicable
8.Location of the project	Property bearing Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai - 400097
9.Taluka	Borivali
10.Village	Malad
Correspondence Name:	Mr. N. P. Bajaj
Room Number:	-
Floor:	-
Building Name:	D.B. House
Road/Street Name:	Gen. A. K. Vaidya Marg
Locality:	Yashodham
City:	Goregaon (E)
11.Area of the project	Municipal Corporation of Greater Mumbai
12.IOD/IOA/Concession/Plan Approval Number	SRA/ENG/PN/PVT/0170/20150610/AP/R dated 19.01.2018, SRA/ENG/PN/PVT/0170/20150610/AP/S dated 19.01.2018, SRA/ENG/2828/PN/PL/LOI dated 18.01.2018 IOD/IOA/Concession/Plan Approval Number: SRA/ENG/PN/PVT/0170/20150610/AP/R dated 19.01.2018, SRA/ENG/PN/PVT/0170/20150610/AP/S dated 19.01.2018, SRA/ENG/2828/PN/PL/LOI dated 18.01.2018 Approved Built-up Area: 13856.38
13.Note on the initiated work (If applicable)	Not Applicable

SEIAA Meeting No: 165 Meeting Date: April 25, 2019 (SEIAA-STATEMENT-0000001479)
SEIAA-MINUTES-0000001860
SEIAA-EC-0000001503

Page 1 of 12

Shri. Anil Diggikar (Member Secretary SEIAA)

14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	SRA/ENG/2828/PN/PL/LOI dated 18.01.2018
15.Total Plot Area (sq. m.)	6002.90 Sq. m
16.Deductions	980.36 Sq. m
17.Net Plot area	5022.54 Sq. m
18 (a).Proposed Built-up Area (FSI & Non-FSI)	FSI area (sq. m.): 13856.38 Sq. m
	Non FSI area (sq. m.): 11654.74 Sq. m
	Total BUA area (sq. m.): 25511.12
18 (b).Approved Built up area as per DCR	Approved FSI area (sq. m.): 13856.38
	Approved Non FSI area (sq. m.): 11654.74
	Date of Approval: 18-01-2018
19.Total ground coverage (m2)	2940.25
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	48.93%
21.Estimated cost of the project	1630000000



Government of Maharashtra

22.Production Details				
Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Not applicable	Not applicable	Not applicable	Not applicable
23.Total Water Requirement				
Dry season:	Source of water	MCGM		
	Fresh water (CMD):	131		
	Recycled water - Flushing (CMD):	66		
	Recycled water - Gardening (CMD):	12		
	Swimming pool make up (Cum):	20		
	Total Water Requirement (CMD) :	210		
	Fire fighting - Underground water tank(CMD):	400		
	Fire fighting - Overhead water tank(CMD):	90		
	Excess treated water	93		
Wet season:	Source of water	MCGM		
	Fresh water (CMD):	131		
	Recycled water - Flushing (CMD):	66		
	Recycled water - Gardening (CMD):	0		
	Swimming pool make up (Cum):	20		
	Total Water Requirement (CMD) :	197		
	Fire fighting - Underground water tank(CMD):	400		
	Fire fighting - Overhead water tank(CMD):	90		
	Excess treated water	105		
Details of Swimming pool (If any)	20 CMD of water will be required. Tanker water will be procured & water will be treated in Water Treatment Plant.			

Maharashtra

24.Details of Total water consumed									
Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
Water Requirement	Existing	Proposed	Total	Existing	Proposed	Total	Existing	Proposed	Total
Domestic	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
25.Rain Water Harvesting (RWH)	Level of the Ground water table:		1.84 to 7.0 m below ground Level						
	Size and no of RWH tank(s) and Quantity:		8.5 Sq. m of 5 nos. of 12 Cum each tank						
	Location of the RWH tank(s):		Intermediate/break/service Tanks on Refuge Floors.						
	Quantity of recharge pits:		NA						
	Size of recharge pits :		NA						
	Budgetary allocation (Capital cost) :		32 Lakh						
	Budgetary allocation (O & M cost) :		1.6 Lakh per annum						
	Details of UGT tanks if any :		Fire Fighting: Rehab 100CMD, Sale 300CMD Domestic: Rehab 34 CMD, Sale 54 CMD Flushing: Rehab 18 CMD, Sale 35 CMD						
26.Storm water drainage	Natural water drainage pattern:		Strom water drain is laid at a slope of 1: 300 to the municipal outfall outside the plot. Rainwater from site shall be collected by network of storm water piping system through catch basins and storm channel & then allowed to connect to the public storm water line outside the plot boundary.						
	Quantity of storm water:		700cum/hr						
	Size of SWD:		300 mm wide Strom Water Drain						
27.Sewage and Waste water	Sewage generation in KLD:		179 CMD						
	STP technology:		Moving Bed Bioreactor (MBBR) Technology						
	Capacity of STP (CMD):		1 no. of 70 CMD for Rehab & 1 No. of 110 CMD for sale						
	Location & area of the STP:		Rehab: Part Basement, Area: 54.3 Sq. m, Sale: Lower Ground, Area: 108.3 Sq. m						
	Budgetary allocation (Capital cost):		45 Lakh						
	Budgetary allocation (O & M cost):		19 Lakh/ annum						

28.Solid waste Management

Waste generation in the Pre Construction and Construction phase:	Waste generation:	Construction Debris
	Disposal of the construction waste debris:	Disposal of construction waste will be as per "Construction and Demolition and De-silting Waste" (Management and Disposal) Rules 2006 at the designated site as directed by the MCGM
Waste generation in the operation Phase:	Dry waste:	442 kg/day
	Wet waste:	295 kg/day
	Hazardous waste:	NA
	Biomedical waste (If applicable):	NA
	STP Sludge (Dry sludge):	16.2 kg/day
	Others if any:	NA
Mode of Disposal of waste:	Dry waste:	Dry waste would be further segregated into recyclable and non-recyclable and it will be handed over to authorize vendors
	Wet waste:	Wet Garbage will be treated in Mechanical Composting Unit 'Organic Waste Converter' (OWC) and the compost generated would be used as manure for gardening purpose and excess would be sold to authorize vendors.
	Hazardous waste:	NA
	Biomedical waste (If applicable):	NA
	STP Sludge (Dry sludge):	Dry sludge would be used as manure for gardening purpose and excess would be sold to authorize vendors.
	Others if any:	NA
Area requirement:	Location(s):	Rehab: Ground Floor, Sale: Lower Ground
	Area for the storage of waste & other material:	30.13 Sq. m
	Area for machinery:	7 Sq.m
Budgetary allocation (Capital cost and O&M cost):	Capital cost:	10 Lakh
	O & M cost:	1.5 Lakh/year

Government of
Maharashtra

29.Effluent Charecterestics

Serial Number	Parameters	Unit	Inlet Effluent Charecterestics	Outlet Effluent Charecterestics	Effluent discharge standards (MPCB)
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Amount of effluent generation (CMD):		Not applicable			
Capacity of the ETP:		Not applicable			
Amount of treated effluent recycled :		Not applicable			
Amount of water send to the CETP:		Not applicable			
Membership of CETP (if require):		Not applicable			
Note on ETP technology to be used		Not applicable			
Disposal of the ETP sludge		Not applicable			



Government of Maharashtra

30.Hazardous Waste Details							
Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

31.Stacks emission Details						
Serial Number	Section & units	Fuel Used with Quantity	Stack No.	Height from ground level (m)	Internal diameter (m)	Temp. of Exhaust Gases
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

32.Details of Fuel to be used				
Serial Number	Type of Fuel	Existing	Proposed	Total
1	Not applicable	Not applicable	Not applicable	Not applicable
Source of Fuel		Not applicable		
Mode of Transportation of fuel to site		Not applicable		

33.Energy		
Power requirement:	Source of power supply :	Reliance Energy Ltd.
	During Construction Phase: (Demand Load)	240 KW
	DG set as Power back-up during construction phase	NA
	During Operation phase (Connected load):	Rehab: 1325 KW , Sale: 3148 KW
	During Operation phase (Demand load):	Rehab: 555 KW , Sale: 1219 KW
	Transformer:	Transformer size will be decided by the supplier
	DG set as Power back-up during operation phase:	1 no. of 315 KVA of DG set for Rehab and 1 no of 500 KVA of DG set for Sale
	Fuel used:	HSD/LSD
	Details of high tension line passing through the plot if any:	NA

34.Energy saving by non-conventional method:	
Common area lighting using Solar PV panels Solar Panels for Hot water	

36.Detail calculations & % of saving:		
Serial Number	Energy Conservation Measures	Saving %
1	Savings due to LED lamp + Savings due to electronic ballast + Solar PV Panels	13 %

37.Details of pollution control Systems		
Source	Existing pollution control system	Proposed to be installed
NA	NA	NA
Budgetary allocation (Capital cost and O&M cost):	Capital cost:	35 Lakh
	O & M cost:	1.5 Lakh/annum

38.Environmental Management plan Budgetary Allocation		
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a) Construction phase (with Break-up):							
Serial Number	Attributes	Parameter	Total Cost per annum (Rs. In Lacs)				
1	Water Environment	Drinking water	1				
2	Health	Sanitation	2				
3	Health	Health check up	1				
4	Air Environment	Water for dust suppression	2				
b) Operation Phase (with Break-up):							
Serial Number	Component	Description	Capital cost Rs. In Lacs	Operational and Maintenance cost (Rs. in Lacs/yr)			
1	STP & Sewerage network	Cost for 2 sewage Treatment Plant of Capacity 70 CMD & 110 CMD	45	19			
2	RWH System	Cost for RWH tank	32	16			
3	Environmental Monitoring	Cost for Ambient air & Noise Monitoring Cost for DG Stack Exhaust Monitoring Cost for Rainwater Monitoring Cost for monitoring of organic manure	0	5			
4	Solid Waste Management	Cost for Treatment of biodegradable garbage in OWC	10	1.5			
5	Solar Installation	Solar Panel Installation	35	1.5			
6	Landscaping	Cost for Tree Plantation & Gardening	53	5			
39.Storage of chemicals (inflammable/explosive/hazardous/toxic substances)							
Description	Status	Location	Storage Capacity in MT	Maximum Quantity of Storage at any point of time in MT	Consumption / Month in MT	Source of Supply	Means of transportation
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
40.Any Other Information							
No Information Available							

Government of
Maharashtra

	CRZ/ RRZ clearance obtain, if any:	NA
	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries	Sanjay Gandhi National Park at 0.5 km.
	Category as per schedule of EIA Notification sheet	8(a) {Building and Construction projects = 20,000 sq. m. and <1,50,000 sq. m. of built-up area} Category 'B'
	Court cases pending if any	Not Applicable
	Other Relevant Informations	Not Applicable
	Have you previously submitted Application online on MOEF Website.	No
	Date of online submission	-

3. The proposal has been considered by SEIAA in its 165th meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:

Specific Conditions:

I	PP to upload the copy of HRC NoC & CFO NoC
II	PP to ensure that RG should be minimum 8% and should be on Mother Earth.
III	PP to ensure that Energy saving through renewable energy source should be minimum 2%.
IV	PP shall operate and maintain Environmental Management Facilities (EMF) including STP & fire- fighting system for 10 years after giving possession and shall also generate corpus fund for next 5 years
V	PP to submit CER as per MoEF&CC circular dated 1.5.2018 relevant to the area and people around the project or Environment Department may direct PP to undertake CER work in identified area
VI	PP to submit HRC NOC.
VII	PP to submit revised Energy saving calculations after considering the use of LED fixtures.
VIII	PP Shall comply with Standard EC conditions mentioned in the Office Memorandum issued by MoEF & CC vide F.No.22-34/2018-IA.III dt.04.01.2019.
IX	PP to submit CER plan to the Commissioner, MCGM and submit the acknowledgement to the Member Secretary, SEIAA.
X	SEIAA decided to grant EC for:FSI: 9254.62 m2, Non-FSI: 12927.07 m2 and Total BUA: 22181.69 m2 (IOD no-SRA/ENG/PN/PVT/0170/20150610/AP/R & S, Date-19.01.2019)

General Conditions:

I	E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016.
II	The Occupancy Certificate shall be issued by the Local Planning Authority to the project only after ensuring sustained availability of drinking water, connectivity of sewer line to the project site and proper disposal of treated water as per environmental norms.
III	This environmental clearance is issued subject to obtaining NOC from Forestry & Wild life angle including clearance from the standing committee of the National Board for Wild life as if applicable & this environment clearance does not necessarily implies that Forestry & Wild life clearance granted to the project which will be considered separately on merit.
IV	PP has to abide by the conditions stipulated by SEAC& SEIAA.
V	The height, Construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan & before according commencement certificate to proposed work. Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
VI	If applicable Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.
VII	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
VIII	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
IX	The solid waste generated should be properly collected and segregated. dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.

X	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
XI	Arrangement shall be made that waste water and storm water do not get mixed.
XII	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
XIII	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
XIV	Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
XV	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
XVI	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.
XVII	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.
XVIII	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.
XIX	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.
XX	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
XXI	Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/MPCB.
XXII	Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and amended as on 27th August, 2003. (The above condition is applicable only if the project site is located within the 100Km of Thermal Power Stations).
XXIII	Ready mixed concrete must be used in building construction.
XXIV	Storm water control and its re-use as per CGWB and BIS standards for various applications.
XXV	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
XXVI	The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.
XXVII	The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the MPCB and Environment department before the project is commissioned for operation. Discharge of this unused treated effluent, if any should be discharge in the sewer line. Treated effluent emanating from STP shall be recycled/refused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharge in the sewer line. Treatment of 100% gray water by decentralized treatment should be done. Necessary measures should be made to mitigate the odour problem from STP.
XXVIII	Permission to draw ground water and construction of basement if any shall be obtained from the competent Authority prior to construction/operation of the project.
XXIX	Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.
XXX	Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
XXXI	Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.
XXXII	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
XXXIII	Energy conservation measures like installation of CFLs /TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heaters system. Project proponent should install, after checking feasibility, solar plus hybrid non-conventional energy source as source of energy.
XXXIV	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Maharashtra Pollution Control Board.
XXXV	Noise should be controlled to ensure that it does not exceed the prescribed standards. During nighttime the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
XXXVI	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.

XXXVII	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code, which is proposed to be mandatory for all air-conditioned spaces while it is aspiration for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
XXXVIII	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
XXXIX	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
XL	Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.
XLI	Six monthly monitoring reports should be submitted to the Regional office MoEF, Bhopal with copy to this department and MPCB.
XLII	Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. As agreed during the SEIAA meeting, PP to explore possibility of utilizing excess treated water in the adjacent area for gardening before discharging it into sewer line. No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. Prior certification from appropriate authority shall be obtained.
XLIII	Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for gardening. And, no wet garbage will be disposed outside the premises. Local authority should ensure this.
XLIV	Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.
XLV	A complete set of all the documents submitted to Department should be forwarded to the Local authority and MPCB.
XLVI	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.
XLVII	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
XLVIII	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.
XLIX	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in .
L	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.
LI	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
LII	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO ₂ , NO _x (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
LIII	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
LIV	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.

5. In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environment clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.

6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.

7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification, 2006, and amendments by MoEF&CC Notification dated 29th April, 2015.

8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.

9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.

10. Any appeal against this Environment clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1st Floor, D- Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Copy to:

1. SHRI JOHNY JOSEPH, CHAIRMAN-SEIAA
2. SHRI UMAKANT DANGAT, CHAIRMAN-SEAC-I
3. SHRI M.M.ADTANI, CHAIRMAN-SEAC-II
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5. SECRETARY MOEF & CC
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7. MEMBER SECRETARY MAHARASHTRA POLLUTION CONTROL BOARD MUMBAI
8. REGIONAL OFFICE MOEF & CC NAGPUR
9. MUNICIPAL COMMISSIONER MUMBAI
10. MUNICIPAL COMMISSIONER NAVI MUMBAI
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13. REGIONAL OFFICE MIDC ANDHERI
14. REGIONAL OFFICE MIDC KOPER KHAIRANE NAVI MUMBAI
15. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD
16. COLLECTOR OFFICE MUMBAI
17. COLLECTOR OFFICE MUMBAI SUB-URBAN

Shri. Anil Diggikar (Member Secretary SEIAA)



STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Environment department,
Room No. 217, 2nd floor,
Mantralaya, Annexe,
Mumbai- 400 032.
Date: May 7, 2019

To,
M/s Dynamix Contractors & Builders Pvt. Ltd.
at Property bearing Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai - 400097

Subject: Environment Clearance for Proposed Slum Rehabilitation Scheme U/Sec. 33(10) of DC Regulation 1991 on Property bearing Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai - 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)".

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee-II, Maharashtra in its 86th th meeting and recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 165th meetings.

2. It is noted that the proposal is considered by SEAC-II under screening category 8(a) {Building and Construction projects = 20,000 sq. m. and <1,50,000 sq. m. of built-up area} Category 'B' as per EIA Notification 2006.

Brief Information of the project submitted by you is as below :-

1.Name of Project	Proposed Slum Rehabilitation Scheme U/Sec. 33(10) of DC Regulation 1991 on Property bearing Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai - 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)".
2.Type of institution	Green Building
3.Name of Project Proponent	M/s Dynamix Contractors & Builders Pvt. Ltd.
4.Name of Consultant	AQURA Enviro Projects Private Limited
5.Type of project	S. R. Scheme
6.New project/expansion in existing project/modernization/diversification in existing project	New project
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Not applicable
8.Location of the project	Property bearing Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai - 400097
9.Taluka	Borivali
10.Village	Malad
Correspondence Name:	Mr. N. P. Bajaj
Room Number:	-
Floor:	-
Building Name:	D.B. House
Road/Street Name:	Gen. A. K. Vaidya Marg
Locality:	Yashodham
City:	Goregaon (E)
11.Area of the project	Municipal Corporation of Greater Mumbai
12.IOD/IOA/Concession/Plan Approval Number	SRA/ENG/PN/PVT/0170/20150610/AP/R dated 19.01.2018, SRA/ENG/PN/PVT/0170/20150610/AP/S dated 19.01.2018, SRA/ENG/2828/PN/PL/LOI dated 18.01.2018 IOD/IOA/Concession/Plan Approval Number: SRA/ENG/PN/PVT/0170/20150610/AP/R dated 19.01.2018, SRA/ENG/PN/PVT/0170/20150610/AP/S dated 19.01.2018, SRA/ENG/2828/PN/PL/LOI dated 18.01.2018 Approved Built-up Area: 13856.38
13.Note on the initiated work (If applicable)	Not Applicable

SEIAA Meeting No: 165 Meeting Date: April 25, 2019 (SEIAA-STATEMENT-0000001479)
SEIAA-MINUTES-0000001860
SEIAA-EC-0000001503

Page 1 of 12

Shri. Anil Diggikar (Member Secretary SEIAA)

14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	SRA/ENG/2828/PN/PL/LOI dated 18.01.2018
15.Total Plot Area (sq. m.)	6002.90 Sq. m
16.Deductions	980.36 Sq. m
17.Net Plot area	5022.54 Sq. m
18 (a).Proposed Built-up Area (FSI & Non-FSI)	FSI area (sq. m.): 13856.38 Sq. m
	Non FSI area (sq. m.): 11654.74 Sq. m
	Total BUA area (sq. m.): 25511.12
18 (b).Approved Built up area as per DCR	Approved FSI area (sq. m.): 13856.38
	Approved Non FSI area (sq. m.): 11654.74
	Date of Approval: 18-01-2018
19.Total ground coverage (m2)	2940.25
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	48.93%
21.Estimated cost of the project	1630000000



Government of Maharashtra

22.Production Details				
Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Not applicable	Not applicable	Not applicable	Not applicable
23.Total Water Requirement				
Dry season:	Source of water	MCGM		
	Fresh water (CMD):	131		
	Recycled water - Flushing (CMD):	66		
	Recycled water - Gardening (CMD):	12		
	Swimming pool make up (Cum):	20		
	Total Water Requirement (CMD) :	210		
	Fire fighting - Underground water tank(CMD):	400		
	Fire fighting - Overhead water tank(CMD):	90		
	Excess treated water	93		
Wet season:	Source of water	MCGM		
	Fresh water (CMD):	131		
	Recycled water - Flushing (CMD):	66		
	Recycled water - Gardening (CMD):	0		
	Swimming pool make up (Cum):	20		
	Total Water Requirement (CMD) :	197		
	Fire fighting - Underground water tank(CMD):	400		
	Fire fighting - Overhead water tank(CMD):	90		
	Excess treated water	105		
Details of Swimming pool (If any)	20 CMD of water will be required. Tanker water will be procured & water will be treated in Water Treatment Plant.			

Maharashtra

24.Details of Total water consumed									
Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
Water Requirement	Existing	Proposed	Total	Existing	Proposed	Total	Existing	Proposed	Total
Domestic	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
25.Rain Water Harvesting (RWH)	Level of the Ground water table:		1.84 to 7.0 m below ground Level						
	Size and no of RWH tank(s) and Quantity:		8.5 Sq. m of 5 nos. of 12 Cum each tank						
	Location of the RWH tank(s):		Intermediate/break/service Tanks on Refuge Floors.						
	Quantity of recharge pits:		NA						
	Size of recharge pits :		NA						
	Budgetary allocation (Capital cost) :		32 Lakh						
	Budgetary allocation (O & M cost) :		1.6 Lakh per annum						
	Details of UGT tanks if any :		Fire Fighting: Rehab 100CMD, Sale 300CMD Domestic: Rehab 34 CMD, Sale 54 CMD Flushing: Rehab 18 CMD, Sale 35 CMD						
26.Storm water drainage	Natural water drainage pattern:		Strom water drain is laid at a slope of 1: 300 to the municipal outfall outside the plot. Rainwater from site shall be collected by network of storm water piping system through catch basins and storm channel & then allowed to connect to the public storm water line outside the plot boundary.						
	Quantity of storm water:		700cum/hr						
	Size of SWD:		300 mm wide Strom Water Drain						
27.Sewage and Waste water	Sewage generation in KLD:		179 CMD						
	STP technology:		Moving Bed Bioreactor (MBBR) Technology						
	Capacity of STP (CMD):		1 no. of 70 CMD for Rehab & 1 No. of 110 CMD for sale						
	Location & area of the STP:		Rehab: Part Basement, Area: 54.3 Sq. m, Sale: Lower Ground, Area: 108.3 Sq. m						
	Budgetary allocation (Capital cost):		45 Lakh						
	Budgetary allocation (O & M cost):		19 Lakh/ annum						

28.Solid waste Management

Waste generation in the Pre Construction and Construction phase:	Waste generation:	Construction Debris
	Disposal of the construction waste debris:	Disposal of construction waste will be as per "Construction and Demolition and De-silting Waste" (Management and Disposal) Rules 2006 at the designated site as directed by the MCGM
Waste generation in the operation Phase:	Dry waste:	442 kg/day
	Wet waste:	295 kg/day
	Hazardous waste:	NA
	Biomedical waste (If applicable):	NA
	STP Sludge (Dry sludge):	16.2 kg/day
	Others if any:	NA
Mode of Disposal of waste:	Dry waste:	Dry waste would be further segregated into recyclable and non-recyclable and it will be handed over to authorize vendors
	Wet waste:	Wet Garbage will be treated in Mechanical Composting Unit 'Organic Waste Converter' (OWC) and the compost generated would be used as manure for gardening purpose and excess would be sold to authorize vendors.
	Hazardous waste:	NA
	Biomedical waste (If applicable):	NA
	STP Sludge (Dry sludge):	Dry sludge would be used as manure for gardening purpose and excess would be sold to authorize vendors.
	Others if any:	NA
Area requirement:	Location(s):	Rehab: Ground Floor, Sale: Lower Ground
	Area for the storage of waste & other material:	30.13 Sq. m
	Area for machinery:	7 Sq.m
Budgetary allocation (Capital cost and O&M cost):	Capital cost:	10 Lakh
	O & M cost:	1.5 Lakh/year

Government of
Maharashtra

29.Effluent Charecterestics					
Serial Number	Parameters	Unit	Inlet Effluent Charecterestics	Outlet Effluent Charecterestics	Effluent discharge standards (MPCB)
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Amount of effluent generation (CMD):		Not applicable			
Capacity of the ETP:		Not applicable			
Amount of treated effluent recycled :		Not applicable			
Amount of water send to the CETP:		Not applicable			
Membership of CETP (if require):		Not applicable			
Note on ETP technology to be used		Not applicable			
Disposal of the ETP sludge		Not applicable			



Government of Maharashtra

30.Hazardous Waste Details							
Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

31.Stacks emission Details						
Serial Number	Section & units	Fuel Used with Quantity	Stack No.	Height from ground level (m)	Internal diameter (m)	Temp. of Exhaust Gases
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

32.Details of Fuel to be used				
Serial Number	Type of Fuel	Existing	Proposed	Total
1	Not applicable	Not applicable	Not applicable	Not applicable
Source of Fuel		Not applicable		
Mode of Transportation of fuel to site		Not applicable		

33.Energy		
Power requirement:	Source of power supply :	Reliance Energy Ltd.
	During Construction Phase: (Demand Load)	240 KW
	DG set as Power back-up during construction phase	NA
	During Operation phase (Connected load):	Rehab: 1325 KW , Sale: 3148 KW
	During Operation phase (Demand load):	Rehab: 555 KW , Sale: 1219 KW
	Transformer:	Transformer size will be decided by the supplier
	DG set as Power back-up during operation phase:	1 no. of 315 KVA of DG set for Rehab and 1 no of 500 KVA of DG set for Sale
	Fuel used:	HSD/LSD
	Details of high tension line passing through the plot if any:	NA

34.Energy saving by non-conventional method:	
Common area lighting using Solar PV panels Solar Panels for Hot water	

36.Detail calculations & % of saving:		
Serial Number	Energy Conservation Measures	Saving %
1	Savings due to LED lamp + Savings due to electronic ballast + Solar PV Panels	13 %

37.Details of pollution control Systems		
Source	Existing pollution control system	Proposed to be installed
NA	NA	NA
Budgetary allocation (Capital cost and O&M cost):	Capital cost:	35 Lakh
	O & M cost:	1.5 Lakh/annum

38.Environmental Management plan Budgetary Allocation		
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a) Construction phase (with Break-up):							
Serial Number	Attributes	Parameter	Total Cost per annum (Rs. In Lacs)				
1	Water Environment	Drinking water	1				
2	Health	Sanitation	2				
3	Health	Health check up	1				
4	Air Environment	Water for dust suppression	2				
b) Operation Phase (with Break-up):							
Serial Number	Component	Description	Capital cost Rs. In Lacs	Operational and Maintenance cost (Rs. in Lacs/yr)			
1	STP & Sewerage network	Cost for 2 sewage Treatment Plant of Capacity 70 CMD & 110 CMD	45	19			
2	RWH System	Cost for RWH tank	32	16			
3	Environmental Monitoring	Cost for Ambient air & Noise Monitoring Cost for DG Stack Exhaust Monitoring Cost for Rainwater Monitoring Cost for monitoring of organic manure	0	5			
4	Solid Waste Management	Cost for Treatment of biodegradable garbage in OWC	10	1.5			
5	Solar Installation	Solar Panel Installation	35	1.5			
6	Landscaping	Cost for Tree Plantation & Gardening	53	5			
39.Storage of chemicals (inflammable/explosive/hazardous/toxic substances)							
Description	Status	Location	Storage Capacity in MT	Maximum Quantity of Storage at any point of time in MT	Consumption / Month in MT	Source of Supply	Means of transportation
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
40.Any Other Information							
No Information Available							

Government of
Maharashtra

	CRZ/ RRZ clearance obtain, if any:	NA
	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries	Sanjay Gandhi National Park at 0.5 km.
	Category as per schedule of EIA Notification sheet	8(a) {Building and Construction projects = 20,000 sq. m. and <1,50,000 sq. m. of built-up area} Category 'B'
	Court cases pending if any	Not Applicable
	Other Relevant Informations	Not Applicable
	Have you previously submitted Application online on MOEF Website.	No
	Date of online submission	-

3. The proposal has been considered by SEIAA in its 165th meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:

Specific Conditions:

I	PP to upload the copy of HRC NoC & CFO NoC
II	PP to ensure that RG should be minimum 8% and should be on Mother Earth.
III	PP to ensure that Energy saving through renewable energy source should be minimum 2%.
IV	PP shall operate and maintain Environmental Management Facilities (EMF) including STP & fire- fighting system for 10 years after giving possession and shall also generate corpus fund for next 5 years
V	PP to submit CER as per MoEF&CC circular dated 1.5.2018 relevant to the area and people around the project or Environment Department may direct PP to undertake CER work in identified area
VI	PP to submit HRC NOC.
VII	PP to submit revised Energy saving calculations after considering the use of LED fixtures.
VIII	PP Shall comply with Standard EC conditions mentioned in the Office Memorandum issued by MoEF & CC vide F.No.22-34/2018-IA.III dt.04.01.2019.
IX	PP to submit CER plan to the Commissioner, MCGM and submit the acknowledgement to the Member Secretary, SEIAA.
X	SEIAA decided to grant EC for:FSI: 9254.62 m2, Non-FSI: 12927.07 m2 and Total BUA: 22181.69 m2 (IOD no-SRA/ENG/PN/PVT/0170/20150610/AP/R & S, Date-19.01.2019)

General Conditions:

I	E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016.
II	The Occupancy Certificate shall be issued by the Local Planning Authority to the project only after ensuring sustained availability of drinking water, connectivity of sewer line to the project site and proper disposal of treated water as per environmental norms.
III	This environmental clearance is issued subject to obtaining NOC from Forestry & Wild life angle including clearance from the standing committee of the National Board for Wild life as if applicable & this environment clearance does not necessarily implies that Forestry & Wild life clearance granted to the project which will be considered separately on merit.
IV	PP has to abide by the conditions stipulated by SEAC& SEIAA.
V	The height, Construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan & before according commencement certificate to proposed work. Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
VI	If applicable Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.
VII	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
VIII	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
IX	The solid waste generated should be properly collected and segregated. dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.

X	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
XI	Arrangement shall be made that waste water and storm water do not get mixed.
XII	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
XIII	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
XIV	Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
XV	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
XVI	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.
XVII	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.
XVIII	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.
XIX	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.
XX	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
XXI	Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/MPCB.
XXII	Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and amended as on 27th August, 2003. (The above condition is applicable only if the project site is located within the 100Km of Thermal Power Stations).
XXIII	Ready mixed concrete must be used in building construction.
XXIV	Storm water control and its re-use as per CGWB and BIS standards for various applications.
XXV	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
XXVI	The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.
XXVII	The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the MPCB and Environment department before the project is commissioned for operation. Discharge of this unused treated effluent, if any should be discharge in the sewer line. Treated effluent emanating from STP shall be recycled/refused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharge in the sewer line. Treatment of 100% gray water by decentralized treatment should be done. Necessary measures should be made to mitigate the odour problem from STP.
XXVIII	Permission to draw ground water and construction of basement if any shall be obtained from the competent Authority prior to construction/operation of the project.
XXIX	Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.
XXX	Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
XXXI	Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.
XXXII	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
XXXIII	Energy conservation measures like installation of CFLs /TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heaters system. Project proponent should install, after checking feasibility, solar plus hybrid non-conventional energy source as source of energy.
XXXIV	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Maharashtra Pollution Control Board.
XXXV	Noise should be controlled to ensure that it does not exceed the prescribed standards. During nighttime the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
XXXVI	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.

XXXVII	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code, which is proposed to be mandatory for all air-conditioned spaces while it is aspiration for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
XXXVIII	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
XXXIX	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
XL	Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.
XLI	Six monthly monitoring reports should be submitted to the Regional office MoEF, Bhopal with copy to this department and MPCB.
XLII	Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. As agreed during the SEIAA meeting, PP to explore possibility of utilizing excess treated water in the adjacent area for gardening before discharging it into sewer line. No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. Prior certification from appropriate authority shall be obtained.
XLIII	Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for gardening. And, no wet garbage will be disposed outside the premises. Local authority should ensure this.
XLIV	Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.
XLV	A complete set of all the documents submitted to Department should be forwarded to the Local authority and MPCB.
XLVI	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.
XLVII	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
XLVIII	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.
XLIX	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in .
L	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.
LI	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
LII	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO ₂ , NO _x (ambient levels as well as stack emissions) or critical sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
LIII	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
LIV	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.

5. In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environment clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.

6. The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.

7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification, 2006, and amendments by MoEF&CC Notification dated 29th April, 2015.

8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.

9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.

10. Any appeal against this Environment clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1st Floor, D- Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Copy to:

1. SHRI JOHNY JOSEPH, CHAIRMAN-SEIAA
2. SHRI UMAKANT DANGAT, CHAIRMAN-SEAC-I
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12. REGIONAL OFFICE MPCB NAVI MUMBAI
13. REGIONAL OFFICE MIDC ANDHERI
14. REGIONAL OFFICE MIDC KOPER KHAIRANE NAVI MUMBAI
15. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD
16. COLLECTOR OFFICE MUMBAI
17. COLLECTOR OFFICE MUMBAI SUB-URBAN

Shri. Anil Diggikar (Member Secretary SEIAA)

ENVIRONMENT MANAGEMENT PLAN

For

Proposed Slum Rehabilitation Scheme U/Sec. 33(10)

at

*Property bearing Survey No. 267, C. T. S. No. 845(pt.) of
Village Malad, Taluka Borivali, Mumbai - 400097*

For

“Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)”

Proposed By

**M/s. Dynamix Contractors & Builders
Pvt. Ltd.**

Prepared By

**M/s. AQURA ENVIRO PROJECTS PVT. LTD.
(AEPPL)**

December 2019

CONTENT

SR. NO.	TOPIC	PAGE NO.
1.1	Identification, Prediction And Evaluation Of Impacts	3
1.2	Air Environment	3
1.2.1	Construction Phase	3
1.2.2	Post Construction Phase	5
1.3	Water Environment	7
1.3.1	Construction Phase	7
1.3.2	Post Construction Phase	8
1.4	Storm Water Management	9
1.4.1	Construction Phase	9
1.4.2	Post Construction Phase	9
1.5	Waste Management	10
1.5.1	Construction Phase	10
1.5.2	Post Construction Phase	10
1.6	Energy Conservation Measures	10
1.7	Risk & Hazard In Construction Industry	11
1.7.1	Health Hazards On Construction Sites	11
1.7.2	Primary Hazards Encountered In Skilled Construction Trades	12
1.7.3	Construction Hazards	13
1.7.4	Evaluating Exposure	13
1.7.5	Management for Safe Construction Work	13
1.7.6	Preventing Accidents And Injuries	14
1.7.7	Fire Protection	16
1.8	Electrical Safety Measures	18
1.9	EMP Implementation Schedule	19
1.10	Environmental Monitoring Routines	19
1.11	Environmental Legislations	20
1.11.1	Environment Protection Act & Rules	20
1.11.2	Environmental Statement	21
1.12	Budgetary Allocation	21
1.12.1	Budgetary Allocation For EMP During Construction	21
1.12.2	Budgetary Allocation For EMP During Operation	22
1.13	Environmental Management Cell	23

ENVIRONMENT MANGEMENT PLAN

1.1 IDENTIFICATION, PREDICTION AND EVALUATION OF IMPACTS

Environmental impact can be defined as any alteration of environmental conditions, adverse or beneficial, caused or induced by the action or set of actions under consideration.

Various operations involved in the project have been studied in details to identify, predict and evaluate impacts on various environmental components. The identified impacts were quantified using mathematical models to a possible extent so as to estimate the future environmental scenario.

1.2 AIR ENVIRONMENT

Air pollution has long been recognized as a brain storming issue worldwide. The onset of technological and scientific innovations in various fields and diverse activities of human race for its elegance have put extra load on the atmosphere by way of releasing air pollutants like particulate matter (PM₁₀, PM_{2.5}), sulphur dioxide (SO₂), oxides of nitrogen (NO_x), carbon monoxide (CO), unburned hydrocarbon (HC) and other organic as well as inorganic pollutants including trace metals responsible for causing health consequences. Entry of pollutants into the atmosphere occurs in the form of gases or particles. Continuous mixing, transformation and trans-boundary transportation of air pollutants make air quality of a locality unpredictable. The growth of population, industry and number of vehicles and make the problem of air pollution still worse. Rapid industrialization and vehicular traffic especially in the urban areas of India is a great threat to air quality.

1.2.1 CONSTRUCTION PHASE

SOURCES OF POLLUTION

1. Vehicular Exhaust

The major source of pollution in construction phase will be vehicles carrying construction material. Pollution load from the same is calculated as:

Pollution Load = No. of trucks × Emission Factors × Deterioration Factor

Due to movement of average 05 trucks short term pollution load is given in table:

Parameter	Emission Factor (g /km)*	Deterioration Factor (g/km)*	Pollution Load (g/km)
CO	4.5	1.33	29.92
NOx	1.21	1	6.05
SPM	0.8	1.595	6.38
SO2	0.15	1	0.75
HC	1.21	1	6.05

*Source: CPCB Publication, 1998

2. Emissions from Construction equipment's
The fugitive dust emission sources are:

- Excavation
- Haul road movements
- Construction
- Material Handling
- Finishing

Emissions factors for construction equipment are given in table below:

Equipment	Emissions Factors (g/hr)				
	CO	VOC	NOX	SOX	PM10
Excavator	214.09	43.99	516.18	3.31	27.21
Backhoe/ Front end loader	190.05	56.69	370.13	1.58	37.64
Rubber tired crane	161.02	39.00	464.02	2.67	23.58
Hydraulic Crane	161.02	39.00	464.02	2.67	23.58
Concrete Vibrator	72.57	13.60	122.46	0	4.53
Paving Equipment	186.42	48.53	412.31	1.95	29.93
Roller/ Compactor	165.10	34.92	316.15	1.90	23.13

*Source: SCAQMD CEQA Handbook

MITIGATION MEASURES:

Sr. No.	Guidance on	Practices to reduce emission
1	Water Application	Water will be applied by variety of methods, for instance trucks, hoses, sprinklers, etc. to mitigate dust generation from the

		construction site.
2	Dust Suppressants	Dust suppressants which are more effective than water, will be applied judiciously.
3	Design	<ul style="list-style-type: none"> Travelled distances will be minimized for delivery of materials Green building materials viz. fly ash bricks, RMC's, etc. will be used to the best possible extent.
4	Storage Piles	<ul style="list-style-type: none"> Storage pile activity will be conducted downwind Enclosures/ coverings will be used for storage piles Properly shape storage piles will be considered.
5	Vehicles & Equipment's	<ul style="list-style-type: none"> Engines & exhaust systems will be properly maintained. Low sulphur diesel (LSD) will be used. Idling time will be eliminated/ reduced to the maximum Evaporative losses will be minimized
6	Material Handling & Transfer systems	<ul style="list-style-type: none"> Mud and dirt track-out and carryout will be controlled properly. Material drop will be minimized at the transfer point and enclosure Foam suppression systems will be utilized. Loads on haul trucks will be secured. PM emissions from spills will be prevented. Material handling operations will be minimized.
7	Road Surfaces	<ul style="list-style-type: none"> On-site vehicle restrictions will be established. Unpaved roads will be properly maintained.

1.2.2 POST CONSTRUCTION PHASE

The emission sources are mainly due to the diesel generator set of capacity 200 kVA and increase in number of vehicles.

SOURCES OF POLLUTION:

A. DG sets:

Calculation of stack height of D.G. sets

i. DG Set of capacity 1 no. 750 KVA for sale:

The stack height of DG set is calculated as under:

Sale Building

$$\begin{aligned}
 H &= 0.2 (\sqrt{\text{capacity of the DG set in kVA}}) + h (\text{Height of the building}) \\
 &= 0.2 \times (\sqrt{750}) + 147.60\text{m} \\
 &= 0.2 \times 27.38 + 147.60 = 153.076 \text{ m}
 \end{aligned}$$

However, a safe stack height of DG Set proposed is above building terrace level.

B. Vehicular emissions:

Parking provided for Proposed project (Sale & Rehab Building)

There will be increase of 335 four wheelers and 16 two wheelers due to the proposed project.

MANAGEMENT PLAN

SOURCES	MANAGEMENT
Exhaust from D.G. set of capacity 200 kVA	<ul style="list-style-type: none">• DG set conforming to the CPCB standards will be deployed.• D.G. set will be provided with a safe stack height of DG Set proposed is above building terrace level.• Low-sulphur-content fuel (HSD - Sulphur content 0.05%) will be used.
Vehicular exhausts especially congestions during peak traffic hours.	<ul style="list-style-type: none">• Sufficient width of driveways to ensure smooth traffic movements.• Provisions of fully internalized parking including the parking facilities for the visitors.• Guided traffic ways within the project site.

1.3 WATER ENVIRONMENT

1.3.1 CONSTRUCTION PHASE

WATER CONSERVATION TECHNIQUES

Best construction practices will be adopted to reduce the water demand for construction activities:

- Use of curing water: Spraying of curing water and after liberal curing, all concrete structures will be covered with gunny bags, followed by spraying of water.
- Use of polymer dispersion and air entraining agents to reduce the construction water demand.
- Admixtures will be used to reduce water demand during construction.
- Discouraging the washing of vehicles and equipment on the construction site. Workers will not be allowed to wash their personal vehicles on site. Vehicles and equipment that regularly leave the construction site should be washed offsite.

MANAGEMENT PLAN

SOURCES	MANAGEMENT
Generation of sewerage	<ul style="list-style-type: none"> • Temporary toilets will be provided which will be directly connected to existing Municipal Sewer line for disposal of waste.
Un-captured run-off from the site may contaminate ground water aquifers.	<ul style="list-style-type: none"> • The rain-water entering into the pit will be screened for the removal of heavy silt and other materials. • Provisions will be made to ensure the construction vehicles stick to the access track to prevent mud & dirt being deposited on roads. • Fence will be constructed around the site to trap sediments whilst allowing the water to flow through. • Up slope water will be diverted with turf and due care will be taken not to mix mortar in locations that will drain into storm water system.
Unsanitary conditions during rainy season.	<ul style="list-style-type: none"> • The civil contractor will be made responsible for site sanitation and will be bound by the management to adhere to healthy level of sanitation. • There will be no stagnant water at site, as the runoff from the relevant areas will be systematically drained into the storm water line. There will be provision of cleaning the storm water line periodically.

1.3.2 POST CONSTRUCTION PHASE:

The daily water demand for the project will be 238 KLD. Daily fresh water demand will be 158 KLD. The fresh water demand will be met from MCGM water supply.

A. WATER CONSERVATION TECHNIQUES:

Following water conservation techniques have been proposed for the project:

- Dual plumbing system will be adopted to utilize the treated waste water for flushing (80 KLD). This will help in reducing the fresh water demand by 33%.
- Dual flushing fixtures will be used to allow different volumes of water for solid and liquid flushing which will help in conserving the water demand for flushing significantly.
- Low flow fixtures or sensors are used to promote water conservation.
- Use of water efficient appliances should be promoted with low flow fixtures or sensors.
- Landscape design & management of irrigation systems:
 - Native plant species: Choose native plant species that need less water.
 - Maintain Healthy Soil: Healthy soils are the basis for a water-smart landscape; they effectively cycle nutrients, minimize runoff, retain water, and absorb excess nutrients, sediments, and pollutants.
 - Avoid watering during the heat of the day. Water early in the morning to reduce the evaporation rate
 - Drought tolerant species will be selected.
 - Turfs will be avoided to the extent possible.
 - Sprinkler landscaping system will be used to conserve water

B. WASTE WATER GENERATION & TREATMENT

Approximate 214 KLD waste water will be generated which will be treated in STP based on MBBR technology with capacity of 130 KLD for Sale Building & 90 KLD for Rehab Building.

1.4 STORM WATER MANAGEMENT

1.4.1 Construction Phase

Sr. No.	Contaminant	Sources	Impact Mitigation
1.	Sediment & Floatables	Streets, lawns, driveways, roads, construction	During construction, sediment fencing or other erosion control devices will be used to mitigate the short-term adverse

		activities,	impacts of sedimentation.
2.	Oil & Grease	Roads, driveways, parking lots etc.	Oil & Grease trap will be provided to remove oil & grease, suspended matter, and ensure the quality of water.

Storm water control and rain water harvesting will be done as per the standards laid down by CGWA & BIS. Following measure will be adopted for the same.

1.4.2 Post Construction Phase

A. Design

For good design of rainwater harvesting, following points are to be kept under consideration:

- Ideal location with good ground slope.
- The location has adequate subsurface permeability of the aquifer to accommodate maximum recharge of rainwater through injection well.
- Rate of filtration should exceed average rainfall intensity.
- Clogging of filtration media should be cleaned periodically.
- Ground water pollution does not take place.

B. Calculation of No. of RTWH Structures

- Ground water table level : 1.84 to 7.0 m

Rain Water Harvesting

- Ground Water table Level: 1.84 to 7.0 m
- Location of RWH tank: On Refuge Floors (1st, 8th, 15th, 22nd & 29th)
- Capacity of Tank: 5 KLD each – Total Capacity 50 KLD
- No. of Tank: 10 (intermediate/break/service) Tanks on Refuge Floors.
- Roof rainwater of all building will be discharged in to rainwater harvesting tank and after online filtration shall be discharged into Domestic Tank.
- The excess water from the tank will be discharged in Storm Water Drain

1.5 WASTE MANAGEMENT

1.5.1 CONSTRUCTION PHASE

About 1500 CUM of sub-stratum will be removed during excavation for building foundation. The substratum removed would be used for back filling, leveling, and road

construction. Construction waste would be generated at site and disposal details of the same are as given below;

Sr. No.	Particulars	Disposal
1	Wood	Sold to vendors
2	Dry Wall	Disposal site
3	Concrete	Disposal site
4	Metal Scrap	Sold to vendors
5	Cardboard	Sold to vendors
6	Plastics	Sold to vendors
7	Electronic Scrap	Disposal site
8	Misc. (Paint, Ceramic etc.)	Disposal site

1.5.2 POST CONSTRUCTION PHASE

The solid waste generated from the project considering full occupancy will be mainly domestic waste and estimated quantity of the same will be approx. 790 kg/day. The solid waste generated will be first segregated as plastic, glass, paper, and other waste separately and disposed off as per Solid Waste Management Rules 2016.

1.6 ENERGY CONSERVATION MEASURES

SALE BUILDING

- By using CFL / T5 lamps for parking areas instead of conventional T8 lamps and LED for lobbies / atrium / staircases
- Savings due to LED lamp
- Savings due to electronic ballast
- Savings due to timer / sensor (Providing timers for 3 time zones - 4 hours 100% lighting / 4 hours 50% lighting and 4 hours 25% lighting for 12 hour lighting cycle for parking and street lighting - hence overall savings shall be 40%)
- Savings due to capacitors
- Savings due to solar lighting (Lighting {1% of lighting load on solar})
- Savings due to Hot Water Solar Panel for Common Toilet

REHAB BUILDING

- By using CFL / T5 lamps for parking areas instead of conventional T8 lamps and LED for lobbies / atrium / staircases
- Savings due to LED lamp

- Savings due to electronic ballast
- Savings due to capacitors
- Renewable source of energy - Savings due to solar lighting - Lighting (1% of lighting load on solar)
- Savings due to Hot Water Solar Panel for Common Toilet

Note: For detailed Energy Saving measures and calculations for Rehab & Sale Building please refer to Conceptual Plan Section 2.1

1.7 RISK & HAZARD IN CONSTRUCTION INDUSTRY

The International Labour Organization (ILO) classifies the construction industry as government and private-sector firms erecting buildings for habitation or for commercial purposes and public works such as roads, bridges, tunnels, dams or airports. In India, construction workers also clean hazardous waste sites.

1.7.1 Health Hazards On Construction Sites

Construction workers are exposed to a wide variety of health hazards on the job. Exposure differs from trade to trade, from job to job, by the day, even by the hour. Exposure to any one hazard is typically intermittent and of short duration, but is likely to reoccur. A worker may not only encounter the primary hazards of his or her own job, but may also be exposed as a bystander to hazards produced by those who work nearby or upwind. This pattern of exposure is a consequence of having many employers with jobs of relatively short duration and working alongside workers in other trades that generate other hazards. The severity of each hazard depends on the concentration and duration of exposure for that particular job. Bystander exposures can be approximated if one knows the trade of workers nearby. Hazards present for workers in particular trades are listed in table below.

1.7.2 Primary Hazards Encountered In Skilled Construction Trades

Each trade is listed below with an indication of the primary hazards to which a worker in that trade might be exposed. Exposure may occur to either supervisors or to wage earners. The classifications of construction trades used here are those used in India. It includes the

construction trades as classified in the Standard Occupational Classification system. This system classifies the trades by the principal skills inherent in the trade.

Sr. No.	Occupations	Hazards
1.	Brick masons	Cement dermatitis, awkward postures, heavy loads
2.	Stonemasons	Cement dermatitis, awkward postures, heavy loads
3.	Hard tile setters	Vapour from bonding agents, dermatitis, awkward postures
4.	Carpenters	Wood dust, heavy loads, repetitive motion
5.	Drywall installers	Plaster dust, walking on stilts, heavy loads, awkward postures
6.	Electricians	Heavy metals in solder fumes, awkward posture, heavy loads
7.	Electrical power installers and repairers	Heavy metals in solder fumes, heavy loads
8.	Painters	Solvent vapours, toxic metals in pigments, paint additives
9.	Plasterers	Dermatitis, awkward postures
10.	Plumbers	Lead fumes and particles, welding fumes
11.	Pipefitters	Lead fumes and particles, welding fumes
12.	Steamfitters	Welding fumes
13.	Carpet layers	Knee trauma, awkward postures, glue and glue vapour
14.	Soft tile installers	Bonding agents
15.	Concrete and terrazzo finishers	Awkward postures
16.	Insulation workers	Synthetic fibres, awkward postures
17.	Paving, surfacing and tamping equipment operators	Asphalt emissions, gasoline and diesel engine exhaust, heat
18.	Roofers	Roofing tar, heat, working at heights
19.	Sheet metal duct installers	Awkward postures, heavy loads, noise
20.	Structural metal installers	Awkward postures, heavy loads, working at heights
21.	Welders	Welding emissions
22.	Solderers	Metal fumes, lead, cadmium
23.	Drillers, earth, rock	Silica dust, whole-body vibration, noise
24.	Air hammer operators	Noise, whole-body vibration, silica dust
25.	Pile driving operators	Noise, whole-body vibration
26.	Hoist and winch operators	Noise, lubricating oil
27.	Crane and tower operators	Stress, isolation

28.	Excavating and loading machine operators	Silica dust, histoplasmosis, whole-body vibration, heat stress, noise
29.	Grader, dozer and scraper operators	Silica dust, whole-body vibration, heat noise
30.	Truck and tractor equipment operators	Whole-body vibration, diesel engine exhaust

1.7.3 Construction Hazards

As in other jobs, hazards for construction workers are typically of four classes:

1. Chemical Hazards,
2. Physical Hazards,
3. Biological Hazards and
4. Social Hazards

1.7.4 Evaluating Exposure

Evaluating either primary or bystander exposure requires knowing the tasks being done and the composition of ingredients and by-products associated with each job or task. This knowledge usually exists somewhere (e.g., material safety data sheets, MSDSs) but may not be available at the job site. With continually evolving computer and communications technology, it is relatively easy to obtain such information and make it available.

1.7.5 Management for Safe Construction Work

Effective safety programmes have several features in common. They are manifest throughout organizations, from the highest offices of a general contractor to project managers, supervisors, union officials and workers on the job. Codes of practice are conscientiously implemented and evaluated. Costs of injury and illness are calculated and performance is measured; those that do well are rewarded, those that do not are penalized. Safety is an integral part of contracts and subcontracts. Everybody-managers, supervisors and workers-receives general, site-specific and site-relevant training. Inexperienced workers receive on-the-job training from experienced workers. In projects where such measures are implemented, injury rates are significantly lower than on otherwise comparable sites.

1.7.6 Preventing Accidents And Injuries

Entities in the industry with lower injury rates share several common characteristics: they have a clearly defined *policy statement* that applies throughout the organization, from top management to the project site. This policy statement refers to a specific code of practice that describes, in detail, the hazards and their control for the pertinent occupations and tasks at a site. *Responsibilities are clearly assigned* and standards of performance are stated. Failures to meet these standards are investigated and penalties imposed as appropriate. Meeting or exceeding standards is rewarded. An *accounting system* is used that shows the costs of each injury or accident and the benefits of injury prevention. *Employees or their representatives are involved* in establishing and administering a programme of injury prevention. Involvement often occurs in the formation of a *joint labour or worker management committee*. *Physical examinations are performed to determine workers' fitness for duty and job assignment*.

Hazards are identified, analysed and controlled following the classes of hazards. The entire work site is inspected on a regular basis and results are recorded. Equipment is inspected to ensure its safe operation (e.g., brakes on vehicles, alarms, guards and so on). Injury hazards include those associated with the most common types of lost-time injuries: falls from heights or at the same level, lifting or other forms of manual materials handling, risk of electrocution, risk of injury associated with either highway or off-road vehicles, trench cave-ins and others. Health hazards would include airborne particles (such as silica, asbestos, synthetic vitreous fibres, diesel particulates), gases and vapours (such as carbon monoxide, solvent vapour, engine exhaust), physical hazards (such as noise, heat, hyperbaric pressure) and others, such as stress.

Preparations are made for emergency situations and emergency drills are conducted as needed. Preparations would include assignment of responsibilities, provision of first aid and immediate medical attention at the site, communication at the site and with others off the site (such as ambulances, family members, home offices and labour unions), transportation, designation of health care facilities, securing and stabilizing the environment where the emergency occurred, identifying witnesses and documenting

events. As needed, emergency preparedness would also cover means of escape from an uncontrolled hazard such as fire or flood.

Accidents and injuries are investigated and recorded. The purpose of reports is to identify causes that could have been controlled so that, in the future, similar occurrences can be prevented. Reports should be organized with a standardized record-keeping system to better facilitate analysis and prevention. To facilitate comparison of injury rates from one situation to another, it is useful to identify the pertinent population of workers within which an injury occurred, and their hours worked, in order to calculate an injury rate (i.e., the number of injuries per hour worked or the number of hours worked between injuries).

Workers and supervisors receive training and education in safety. This education consists of teaching general principles of safety and health, is integrated into task training, is specific for each work site and covers procedures to follow in the event of an accident or injury. Education and training for workers and supervisors is an essential part of any effort to prevent injuries and disease. Training about safe work practices and procedures have been provided by some companies and trade unions. These procedures, include lockout and tagout of electrical power sources during maintenance procedures, use of lanyards while working at heights, shoring trenches, providing safe walking surfaces and so on. It is also important to provide site-specific training, covering unique features about the job site such as means of entry and exit. Training should include instruction about dangerous substances. Performance or hands-on training, demonstrating that one knows safe practices, is much better.

Information about chemical, physical and other health hazards is available at the work site in the languages that workers use. If workers are to work intelligently on the job, they should have the information necessary to decide what to do in specific situations.

And finally, contracts between contractors and subcontractors should include safety features. Provisions could include establishing a unified safety organization at multi-employer work sites, performance requirements and rewards and penalties.

1.7.7 FIRE PROTECTION

The objective of installing Fire Alarm system shall be to provide early warning. The building shall be protected by comprehensive fire protection system in conformity with National Building Code requirements backed by proper manning and maintenance. The system proposed shall be Analogue Addressable type fire detection and alarm system. It shall consists of fire alarm control panel, photo electric smoke sensors, manual call points, hooters and fault isolators. The detectors shall be combination of photo electric type smoke detectors and heat detectors. The cabling shall be with armored copper conductor cables.

Semi addressable fire alarm system for all towers will be provided. It shall be linked to the Main Fire Panel located in the Fire Control room in the ground floor. This Main Fire Panel shall be linked to the Fire Panel for the complete development.

Zone will be provided for the flow switch one for each floor.

The automatic fire alarm shall be provided depending on the height of the tower. It shall be as follows:

- The Option of using Fire Survival cables (MICC) cables may be considered.
- The entire building will be designed as per NBC-2016 of India pertaining to fire hazards.

SALE BUILDING

- Hazard classification as per the NBC-2016, Part IV-Fire & Life Safety:
Group A, sub division A-4(Residential Buildings): Apartment Houses
Minimum Requirements for fire-fighting Installations (as per NBC 2016 Part IV Table 7 - Residential Buildings – Above 60 m in height)

Minimum fire-fighting requirement (as per NBC 2016 Part IV Table 7) will be provided in the project. The same is tabulated as under:

Sr. No.	Description	Minimum Fire Fighting Requirement
1	Fire extinguisher	Required
2	First Aid Hose Reel	Required
3	Wet Riser	Required
4	Down Comer	Not-Required
5	Yard Hydrant	Required
6	Automatic sprinkler system	Required
7	Manually operated fire alarm system	Required
8	Automatic detection & alarm system	Required
9	Underground water tank	200,000 Lit.
10	Terrace water tank	10, 000 Lit.

REHAB BUILDING

- Hazard classification as per the NBC-2016, Part IV-Fire & Life Safety:
Group A, sub division A-4(Residential Buildings): Apartment Houses
Minimum Requirements for fire-fighting Installations (as per NBC 2016 Part IV Table 7 - Residential Buildings – Above 45 m in height but not exceeding 60 m in height)

Minimum fire-fighting requirement (as per NBC 2016 Part IV Table 7) will be provided in the project. The same is tabulated as under:

Sr. No.	Description	Minimum Fire Fighting Requirement
1	Fire extinguisher	Required
2	First Aid Hose Reel	Required
3	Wet Riser	Required
4	Down Comer	Not Required
5	Yard Hydrant	Required
6	Automatic sprinkler system	Required
7	Manually operated fire alarm system	Required
8	Automatic detection & alarm system	Not Required
9	Underground water tank	1500,000 Lit.
10	Terrace water tank	10, 000 Lit.

1.8 ELECTRICAL SAFETY MEASURES

Following steps shall be taken for safety measures.

1. HT & LT danger sign boards shall be installed wherever required.
2. Rubber mats of adequate sizes shall be placed in the front of HT, LT, Panels & Sub Distribution Boards.
3. Sand buckets & Fire Extinguisher shall be kept closed to transformers, diesel generators & panels.
4. Shock treatment charts written in English, Hindi and local languages framed in wooden and covered with glass shall be hanged at required places.
5. Earth leakage circuit breaker are provided for human safety against any leakage in the system
6. MCB Distribution Boards will be used in places of rewirable fuses.
7. MCCB's and ACB's are used for the safety and protection instead of earlier switch fuse units.
8. There will be no loose wire and no over loading
9. For Neutral isolation, 4 Pole switches shall be provided in the incomer of all the panels & boards.
10. Outgoing MCB's shall not be of less than 10KA fault withstand capacity in the final DB's.
11. All panels & boards shall be designed as per the expected short circuit level at that point.
12. Lighting & small power boards shall have 100% sized neutral bus bar.
13. All electrical equipment & not current carrying metallic parts shall be effectively earthed.
14. Separate feeders from the Main LT Panel shall be provided for: (as per NBC):
 - Fire-fighting pumps
 - Lifts
 - Staircases & Lift well pressurization fans
 - Plumbing pumps
 - Lifts

1.9 EMP IMPLEMENTATION SCHEDULE

Phased according to the priority, the implementation schedule is presented below.

Implementation Schedule for EMP

Sr. No.	Recommendations	Requirement
1	Air pollution control measures	Before commissioning of respective units.
2	Water pollution control measures	Before commissioning of the project.
3	Noise control measures	Along with the commissioning of the project.
4	Solid waste management	During commissioning of the project.
5	Green belt development	Stage-wise implementation.

The responsibility of EMP implementation lies with the project proponent for a period of 5 years or till society formation. Once the project is established, the EMP responsibility will be properly handed over with clearly defined procedures and guidelines of Society.

1.10 ENVIRONMENTAL MONITORING ROUTINES

A comprehensive monitoring programme is suggested as given below;

Monitoring Schedule for Environmental Parameters

Sr. No.	Particulars	Monitoring frequency	Duration of monitoring	Important parameters for monitoring
I	AIR QUALITY			
	Ambient Air monitoring			
1.	Project premises	Once in a month	24 hourly sample	PM, SO ₂ , NO ₂
2.	Stack Monitoring	Once in a month	Grab	SO ₂ , SPM, NO ₂ , HC, CO
II	WATER & WASTE WATER QUALITY			
1.	Water Quality			
i	Ground water at two locations (up-gradient and down-gradient) of treated effluent discharge area/land	Once in a month	Grab	As per MPCB requirements
2.	Waste water quality			
i	Inlet to STP	Daily	Composite	-
ii	Treated effluent prior to	Daily	Composite	-

	discharge			
III	SOIL QUALITY			
1.	Within project premises at 1 location on effluent discharging area / land	Once in a month	Composite Sample	As per MPCB requirements
2.	Ecological preservation and up-gradation	Seasonal	Visual observations	Survival rate
IV	NOISE MONITORING			
1.	Project premises	Once in a month	Day and Night	As per MPCB requirements

1.11 ENVIRONMENTAL LEGISLATIONS

There are many Environmental Acts & Rules which are formulated by Ministry of Environment and Forests (MoEF) for the prevention of Environmental pollution and are to be compiled by the Industry. All the regulations are not applicable to all. The Act and Rules which are to be constantly perused and followed by the Industry are enumerated in the following section.

Particulars of Environmental Legislations

Year of Enactment	LEGISLATION
1974	The Water (Prevention and Control of Pollution) Act.
1975	The Water (Prevention and Control of Pollution) Rules.
1977	The Water (Prevention and Control of Pollution) Cess Act.
1978	The Water (Prevention and Control of Pollution) Cess Rules.
1988	The Water (Prevention and Control of Pollution) as amended.
1981	The Air (Prevention and Control of Pollution) Act.
1987	The Air (Prevention and Control of Pollution) and as amended.
1986	The Environment (Protection) Rules.
1991	The Environment (Protection) Rules (Amended).

1.11.1 ENVIRONMENT PROTECTION ACT & RULES

Among the various notifications coming under the Environment (Protection) Act, following are the notifications applicable to this project are:

Notifications under Environmental Protection Act & Rules

Year of Notification	RULES
1989	The Hazardous Waste (Management & Handling) Rules
2000 & 2003	The Hazardous Waste (Management & Handling) Rules (amended)
1992/1993	Environmental Statement
2000	Noise Pollution (Regulation & Control) Rules and Amendment Rule 2006
2000	Municipal Solid Wastes (Management & Handling) Rules
2002	D G Rules
2008	The Hazardous Wastes (Management, Handling & Transboundary Movement) Rules

1.11.2 ENVIRONMENTAL STATEMENT

Under rule 14 of the Environmental Protection Rules 1986, every person carrying on an industry, operation or process requiring Consent under Section 25 of Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) or under Section 21 of the Air (Prevention and Control of Pollution) Act 1981 (14 of 1981) or both or authorization under the Hazardous Waste (Management & Handling) Rules 1989 issued under the Environment (Protection) Act, 1986 (29 of 1986) shall submit an Environmental Statement Report for the financial year ending the 31st March in Form-V to the concerned State Pollution Control Board on or before 15th Day of September every year.

1.12 BUDGETARY ALLOCATION**1.12.1 BUDGETARY ALLOCATION FOR EMP DURING CONSTRUCTION**

Sr. No.	Attributes	Particulars	Capital Cost	O& M Cost
1.	Water Environment	Drinking	1.7	0.2
2.	EHS	Sanitation	3.5	0.8
3.	EHS	Health Check	3.5	0.8
4.	Air Environment	Water for dust suppression	1.0	0.2
		Total	9.7	2.0

1.12.2 BUDGETARY ALLOCATION FOR EMP DURING OPERATION

Sr. No.	COMPONENT	DESCRIPTION	CAPITAL COST (Lakhs)	OPERATIONAL COST (Lakhs/Annum)	Man power For O & M
1.	Water & Waste water Management	Sewage Treatment Plants	45	19	One Operator One Helper
2.	Water Conservation	Rainwater harvesting System	32	1.6	Same helper use
3.	Green belt Management	Landscape development	53	5	One Gardener
4.	Solid Waste Management	OWC & Curing Machine	10	1.5	One Operator One
5.	Renewable Energy	Solar Panel Installation for Street & Landscape Lighting	35	1.5	MoEF Approved Lab
6.		Environmental Monitoring	0	5	Out sourced
		TOTAL	175	33.6	

1.13 ENVIRONMENTAL MANAGEMENT CELL

Apart from having an Environmental Management Plan, it is also necessary to have a permanent organizational set up charged with the task of ensuring its effective implementation of mitigation measures and to conduct environmental monitoring. The major duties and responsibilities of Environmental Management Cell shall be as given below:

- To implement the Environmental Management Plan.
- To ensure regulatory compliance with all relevant rules and regulations.
- To ensure regular operation and maintenance of pollution control devices.
- To minimize environmental impacts of operations by strict adherence to the EMP.
- To initiate environmental monitoring as per approved schedule.
- Review and interpretation of monitored results and corrective measures in case monitored results are above the specified limit.
- Maintain documentation of good environmental practices and applicable environmental laws as ready reference.
- Maintain environmental related records.
- Coordination with regulatory agencies, external consultants, monitoring laboratories.
- Maintain of log of public complaints and the action taken.

Organizational Structure of Environmental Management Cell

A dedicated person who will report to the site manager should supervise normal activities of the EMP cell. The Environment Management Cell shall be consisting of a hierarchal structure having people from both the Contractor's and Project Proponent side which will coordinate and supervise the activities within the plan with respect to environment. With the systematic hierarchal structure, the managing and resolving of issues are faster and efficient. Further the Standard Operating Procedures (SOPs) supports in completing the respective activity in more planned and organized manner.



SLUM REHABILITATION AUTHORITY

No: PN/PVT/0170/20150610/AP/S-2

Date:

11 7 JAN 2020

To,
Shri. Jitendra B. Patel
Of M/s. Aakar Architects & Consultants
Ground Floor,
Satyanarayan Prasad Commercial Centre Dayaldas Road,
Off Nehru Road,
Vile Parle (E), Mumbai

Subject: Amended plans Sale building no. 2 in S. R. Scheme on plot bearing C.T.S. No. 845(pt.) of village Malad, at Malad(E), Mumbai.

Ref:- Your letter dated 30/12/2019.

Gentleman,

With reference to above, the amended plans submitted by you for Sale building no. 2 are hereby approved by this office subject to following conditions.

- 1) That all conditions of Revised Letter of Intent issued under No SRA/ENG/2828/PN/PL/LOI dated 18/01/2018 & revised LOI dated 05/11/2019 shall be complied with.
- 2) That conditions of IOA under No.PN/PVT/0170/20150610/AP/S-2 dtd. 19/01/18 shall be applicable and should be complied with.
- 3) That you shall submit revised NOC for parking layout before further C.C. to the building under reference.
- 4) That revised drainage approval shall be obtained for proposed amended plans.
- 5) That the C.C shall be got re-endorsed as per amended plans.

- 6) That Revised Structural design and calculations shall be submitted.
- 7) That you shall submit the registered undertaking for not misuse the fitness Centre.

One set of amended plan is returned herewith as token of approval.

Yours faithfully,

- sd -

Executive Engineer
Slum Rehabilitation Authority.

Copy to:

- ✓ 1) M/s. Dynamix Contractors and Builders Pvt. Ltd.
- 2) The Assistant Municipal Commissioner "P/N" Ward,
- 3) A. E. W. W. "P/N" Ward,
- 4) A. A. & C. "P/N" Ward,
- 5) H. E. of MCGM,
- 6) ARS (SRA)
- 7) F.C. (SRA)
- 8) Estate Manager (SRA)

For information please.

seah
17.01.20
Executive Engineer
Slum Rehabilitation Authority.



SLUM REHABILITATION AUTHORITY

No: PN/PVT/0170/20150610/AP/R-1

Date: 31 DEC 2019

To,
Shri. Jitendra B. Patel
Of M/s. Aakar Architects & Consultants
Ground Floor,
Satyanarayan Prasad Commercial Centre Dayaldas Road,
Off Nehru Road,
Vile Parle (E), Mumbai

Subject: Amended plans Rehab building no. 1 in S. R. Scheme on plot bearing C.T.S. No. 845(pt.) of village Malad, at Malad(E), Mumbai.

Ref:- Your letter dated 20/02/2019.

Gentleman,

With reference to above, the amended plans submitted by you for Rehab building are hereby approved by this office subject to following conditions.

- 1) That all conditions of Revised Letter of Intent issued under No SRA/ENG/2828/PN/PL/LOI dated 18/01/2018 & revised LOI dated 05/11/2019 shall be complied with.
- 2) That conditions of IOA under No. PN/PVT/0170/20150610/AP/R-1 dtd. 19/01/18 shall be applicable and should be complied with.
- 3) That you shall submit revised NOC for parking layout before further C.C. to the building under reference.
- 4) That revised drainage approval shall be obtained for proposed amended plans.
- 5) That the C.C shall be got re-endorsed as per amended plans.

6) That Revised Structural design and calculations shall be submitted.

One set of amended plan is returned herewith as token of approval.

Yours faithfully,

- Sd/-
Executive Engineer-III
Slum Rehabilitation Authority

Copy to:

- ✓ 1) M/s. Dynamix Contractors and Builders Pvt. Ltd.
- 2) The Assistant Municipal Commissioner "P/N" Ward,
- 3) A. E. W. W. "P/N" Ward,
- 4) A. A. & C. "P/N" Ward,
- 5) H. E. of MCGM,
- 6) ARS (SRA)
- 7) F.C. (SRA)
- 8) Estate Manager (SRA)

For information please.

Seahy
31/12/19
Executive Engineer-III
Slum Rehabilitation Authority



SLUM REHABILITATION AUTHORITY

No. : **SRA/ENG/2828/PN/PL/LOI**

Date: **5 NOV 2019**

1. **Lic. Surveyor:** Shri. Jitendra B. Patel
Of M/s. Aakar Architects & Consultants
Gr. Floor, Satyanarayan Prasad Commercial
Centre, Dayaldas Road, Vile Parle East,
Mumbai 400 057.
- ✓ 2. **Developer :** M/s. Dynamix Contractors and Builders Pvt. Ltd.,
Dynamix House, Yashodham,
Gen. A.K. Vaidya Marg, Goregaon (E),
Mumbai- 400 063.
3. **Society :** Shivpuri Pragati SRA CHS (Prop.).

Sub : Proposed S. R. Scheme on plot bearing C.T.S. No. 845(pt.) of village
Malad, at Malad (E), Mumbai.

Ref: SRA/ENG/2828/PN/PL/LOI

With reference to the above mentioned Slum Rehabilitation Scheme and on the basis of documents submitted by applicant and continuation to earlier LOI dated 18/01/18 this office is pleased to issue in principle approval to the scheme in the form of this **Revised Letter of Intent (LOI)** subject to the following conditions.

This **Revised Letter of Intent** is issued in continuation with the Letter of Intent issued under even number SRA/ENG/2828/PN/PL/LOI dtd. 18/01/18 and conditions mentioned therein will be continued, only the following conditions stands modified as under.

Condition No. 3: The built up area for sale and rehabilitation shall be as per the following scheme parameters. In the event of change in area of plot, nos. of eligible huts etc. the parameters shall be got revised from time to time

The salient features of the scheme are as under :

Sr. No.	Particulars	Now Proposed		
		Slum (sq.mt)	Non-Slum (sq.mt)	Total (sq.mt)
1.	Plot area	2156.60	3846.30	6002.90
2.	Less:			
	i.) Setback/DP Road	--	474.60	474.60
3.	Total	--	474.60	474.60
4.	Balance Plot Area	2156.60	3371.70	5528.30
5.	5% Amenity Open Space	37.74	168.59	206.33
6.	Net plot area for tenement density	2118.86	--	--
7.	Plot area for FSI	2118.86	3203.11	5321.97
8.	Permissible FSI on Plot	4.00 or upto sanctioned FSI	1.00	--
9.	Additional 50% FSI as per Reg. 30 (50% of 3203.11)	--	1601.56	1601.56
10.	FSI credit available by TDR (70% of 3203.11 as plot fronting to 13.40 mt. road)	--	2242.18	2242.18
11.	Rehabilitation BUA	4629.24	--	4629.24
12.	Areas of Amenities including common passage	1241.26	--	1241.26
13.	Rehabilitation Component (11 + 12)	5870.50	--	5870.50
14.	Sale Component = 13 X incentive factor (1)	5870.50 X 1 = 5870.50	7046.85	12917.35
15.	Total BUA sanctioned for project (11 + 14)	10499.74	7046.85	17546.59
16.	Total FSI sanctioned for project	4.96	2.20	--
17.	BUA permissible for Sale on plot	5870.50	7046.85	12917.35
18.	Total BUA proposed to be consumed on plot.	10499.74	7046.85	17546.59
19.	FSI in-situ	4.96	2.20	--
20.	TDR generated in SR Scheme	--	--	--

Additional Conditions:-

1. That you shall hand over unencumbered plot of POS to the concerned department of MCGM before granting C.C. to last 25% of sale BUA.

SRA/ENG/2828/PN/PL/LOI

2. That you shall submit NOC/Remarks from office of Ch. Eng.(SWM)/DMC(SWM) for providing segregation centers/OWC's and transportation & deposition of C & D waste generated from site to designated land fill sites as per C & D waste management plan rule 2016.
3. That the developer shall ensure compliance of the provisions of building and other construction workers (Regulation and Employment and conditions of strikes, Act-1996 and submit documentation to that effect in order to comply the various orders of Hon'ble supreme court of India in 1A127961/2018 in SWM(c) No.(s)1/2015.
4. That the work shall not carried out between 10.00 pm. to 6.00 am, only in accordance with rule 5A (3) of noise pollution (regulation & control) Rules 2000 & the provision of notification issued by Ministry of Environment & forest Department.
5. That you shall register the said project with MAHA- RERA & submit the certificate to this office for office record.
6. The Amenity Tenements shall be handed over within 30 days from the date of issue of OCC of rehab bldg. & handing over/Taking over receipt shall be submitted to SRA by the developer.

Sr. No.	Amenity	Amenity shall be handed over to following
1	Balwadi	Women and child Welfare Department, Government of Maharashtra.
2	Society office	slum dwellers society.
3	Welfare Centre	slum dwellers society.
4	Aanganwadi	slum dwellers society.
5	Library	slum dwellers society.

7. That proper safety measures like barricading, safety net etc. shall be taken on site during construction work as maybe necessary depending upon the type of work and the developer along with their concerned technical team shall be solely responsible for safety.
8. That you shall submit Registered Undertaking stating therein that, the adequate safety measures shall be taken during entire construction activity as per the recommendation of Registered Structural Consultant & Geotechnical Consultant & or any other Consultant required as per specific site conditions. The entire responsibility in this regards shall vest with the developer.

SRA/ENG/2828/PN/PL/LOI

9. That the developer shall ensure compliance of the provision of building & other construction workers (Regulation & Employment and condition of service) Act, 1996 and submit documentation to that effect in order to comply various order of Hon'ble Supreme Court of India in 1A 127961/2018 on SWM (c)No (s) 1/2015.
10. That You shall abide by all the proceeding /orders of court of Law or any judicial/cosy judicial forums arising out of S. R. Scheme under reference if any. You shall submit proposals by taking cognizance of it from time to time.
11. That all the condition mentioned in the circular issued by GoM on 28.08.2019 relevant to amendment in Sec. 15 A of Slum Act. 1971 shall be complied with.

If you are agreeable to all these above conditions, you may submit proposal for approval of plans, consuming full sanctioned F.S.I. separately for each building, in conformity with the D.C. Regulation No. 33(10) in the office of the undersigned.

Yours faithfully,


for Chief Executive Officer
Slum Rehabilitation Authority

(Hon'ble CEO/SRA approved the Revised LOI)



Maharashtra Pollution Control Board

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MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 24010437/24020781
/24037124/24035273
Fax : 24044532/24024068
/24023518
Email : dwat@mpcb.gov.in
Visit At : <http://mpcb.gov.in>



Kalpateru Point, 3rd & 4th floor,
Sion- Matunga Scheme Road No. 8,
Opp. Cine Planet Cinema,
Near Sion Circle, Sion (E),
Mumbai - 400022

Infrastructure /Red/LSI

Consent No: Format1.0/BO/JD(WPC)/UAN No. 84435/CE/CC-2007000361 Date-06/07/2020

To,
M/s Dynamix Contractors & Builders Pvt. Ltd,
at Property bearing Survey No. 267, C. T. S. No. 845(pt.) of Village Malad,
Borivali, Mumbai

Subject: Consent to Establish in Red Category for construction project under SRA Scheme

Ref : 1. Your application vide UAN No.0000084435 Dated: 09.12.2019.
2. Minutes of Consent Committee meeting dtd 14.02.2020
3. Minutes of Consent Committee meeting dtd 26.05.2020

For: Consent to Establish for construction project under SRA Scheme.

under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 5 of the Hazardous and Other Wastes (M & TM) Rules, 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

1. The consent is granted for a period upto Commissioning of the project or of 5 years whichever is earlier.
2. The proposed capital investment of the project is Rs. 176.0 Crs. (As per undertaking submitted by project proponent).

Consent to Establish is valid for construction project under SRA Scheme named as M/s Dynamix Contractors & Builders Pvt. Ltd, at Property bearing Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Borivali, Mumbai on Total plot area of 6002.90 sq mtr and total construction BUA area of 31516.08 sq.mts as per EC dtd 31.03.2020 including utilities and services as per construction commencement Certificate issued by local body.

3. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

Sr. No.	Description	Permitted quantity of discharge (CMD)	Standards to be achieved	Disposal
1	Trade effluent	NIL	NA	NA
2	Domestic effluent	214	As per Schedule -I	60% should be reused & recycled and remaining should be discharged in municipal sewer

4. Conditions under Air (P&CP) Act, 1981 for air emissions:

Sr. No.	Description of stack/ source	Capacity	Number Of Stack	Standards to be achieved
1	DG Set	750 KVA	01	As per Schedule-II



Maharashtra Pollution Control Board

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5. Conditions under Solid Waste Management Rules, 2016:

Sr. no.	Type Of Waste	Quantity & UoM	Treatment	Disposal
1	Wet garbage	316 Kg/Day	OWC	Used as Manure
2	Dry garbage	474 Kg/Day	—	Segregate and Hand over to Local Body for recycling
3	STP Sludge	18 Kg/Day	—	Used as Manure

6. Conditions under Hazardous and Other Wastes (M & TM) Rules, 2016 for treatment and disposal of hazardous waste; NIL.
7. The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same should be binding on the industry.
8. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.
9. Project Proponent shall comply the Construction and Demolition Waste Management Rules, 2016 which is notified by Ministry of Environment, Forest and Climate Change dtd.29/03/2016.
10. Project Proponent shall install online monitoring systems for pH, TSS and flow at the outlet of STP.
11. Project Proponent shall provide Organic waste digester with composting facility or Biogas digester with composting facility.
12. Project Proponent shall submit an affidavit in Board's prescribed format within 15 days regarding the compliance of conditions of EC/CRZ clearance and C to E.
13. The applicant shall comply with the conditions stipulated in Environment Clearance granted vide No SIA/MH/MIS/136637/2020 dtd 31.03.2020

For and on behalf of the
Maharashtra Pollution Control Board

(E. Ravendran, IAS)
Member Secretary

Received Consent fee of -

Sr. No.	Amount (Rs.)	Transaction No.	Date
1	326000.00	RTGS 5456803	13.12.2019
2	26000	NEFT MPCB-DR-0512	15.06.2020

Copy to:

1. Regional Officer, MPCB, Mumbai and Sub-Regional Officer, MPCB, Mumbai-IV
— They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB, Mumbai.
3. CC/CAC desk- for record & website updating purposes.



Maharashtra Pollution Control Board

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Schedule-I

Terms & conditions for compliance of Water Pollution Control:

- 1) A) As per your application, you have proposed to install 2 Sewage Treatment Plants (STPs) with design capacity of 90 CMD and 130 CMD based on MBBR Technology.

B) The Applicant shall operate the effluent treatment plant (STP) to treat the sewage so as to achieve the following standards prescribed by the Board or under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

Sr No.	Parameters	Standards prescribed by Board Limiting Concentration
1	pH	6.5 to 9.0
2	BOD (3 days 27°C)	10mg/l
3	Suspended Solids	20mg/l
4	COD	50mg/l
5	Total Nitrogen	10 mg/l
6	Ammonical Nitrogen	5 mg/l
7	Fecal Coliform	100 MPN/100ml

- C) The treated effluent shall be 60% recycled for secondary purposes such as toilet flushing, air conditioning, firefighting, on land for gardening etc and remaining shall be discharged in to the municipal sewerage system.

- D) Project proponent shall operate STP for five years from the date of obtaining occupation certificate.

The Board reserves its rights to review plans, Specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant should obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or and extension or addition thereto.

- 2) The industry should ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
- 3) The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters and other provisions as contained in the said act.

Sr. no.	Purpose for water consumed	Water consumption quantity (CMD)
1	Domestic purpose	238

- 4) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time.



Maharashtra Pollution Control Board

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Schedule-II

Terms & conditions for compliance of Air Pollution Control:

1. As per your application, you have proposed to install the Air pollution control (APC) system and also proposed to erect following stack (s) and to observe the following fuel pattern-

Sr. No.	Stack Attached To	APC System	Height in Mtrs.*	Type Of Fuel	Quantity	UOM	S%	SO ₂ Kg/day
1	DG Set 750 KVA	Acoustic enclosure	5.5	HSD	175	Ltr/Hr	2%	3.0

* Above roof of the building in which it is installed.

2. The applicant should operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards.

Particulate matter	Not to exceed	150 mg/Nm ³ .
--------------------	---------------	--------------------------

3. The Applicant should obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement alteration well before its life come to an end or erection of new pollution control equipment.

The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).



Maharashtra Pollution Control Board

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Schedule-III Details of Bank Guarantees

Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	Consent to Establish	Rs. 10 Lakhs	15 Days	Towards Compliance of Environmental Clearance & Consent conditions.	Upto Commissioning of the project	Five years

The above Bank Guarantees shall be submitted in favour of Regional Officer, Mumbai and shall be submitted to Regional Office, Mumbai.

Maharashtra Pollution Control Board



Schedule-IV

General Conditions:

The following general conditions shall apply as per the type of the industry.

- 1) The applicant shall provide facility for collection of samples of sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
- 2) The firm shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and environmental protection Act 1986 and Solid Waste Management Rules, 2016 and E-Waste (Management) Rules, 2016.
- 3) Drainage system shall be provided for collection of sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No sewage shall be admitted in the pipes/sewers downstream of the terminal manholes. No sewage shall find its way other than in designed and provided collection system.
- 4) Vehicles hired for bringing construction material to the site should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- 5) Conditions for D.G. Set
 - a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
 - b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
 - c) The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise less than 55 dB(A) during day time and 45 dB(A) during the night time. Day time is reckoned between 6 a.m. to 10 p.m and night time is reckoned between 10 p.m to 6 a.m.
 - d) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
 - e) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
 - f) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
 - g) D.G. Set shall be operated only in case of power failure.
 - h) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
 - i) The applicant shall comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel.
- 6) Solid Waste - The applicant shall provide onsite municipal solid waste processing system & shall comply with Solid Waste Management Rules, 2016 & E-Waste (M) Rules, 2016.
- 7) Affidavit/undertaking in respect of no change in the status of consent conditions and compliance of the consent conditions the draft can be downloaded from the official web site of the MPCB.
- 8) The treated sewage shall be disinfected using suitable disinfection method.
- 9) The firm shall submit to this office, the 30th day of September every year, the environment statement report for the financial year ending 31st march in the prescribed Form -V as per the provision of rule 14 of the Environmental (Protection) Second Amended rule 1992.
- 10) The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before commissioning of the project.

WATER MANAGEMENT

Construction Phase

Water Supply

During construction phase, water will be supplied by MCGM for drinking and other domestic purposes of the construction labors and by tankers to be used for construction. Total water requirement during the construction phase is about 08 cmd. Water will be utilized for domestic use of construction laborers and for construction activity.

Waste water generation

Waste water during the construction phase will be sewage generation, estimated as 8 cmd (80% of water supplied). Please refer to Table below for water requirement & waste water generation during construction phase.

Water Requirement and Wastewater generation during Construction Phase

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

Management

- Temporary sanitation facility would be provided for construction workers which would be directly connected to the existing municipal sewer line for disposal of wastewater.
- Care will be taken to ensure that the water used for construction purposes does not accumulate on the site to prevent breeding of mosquitoes.

Operation Phase

Water Supply

During operation phase, water supplied by MCGM will be used for domestic purpose and for other purposes like flushing & gardening etc., treated water from proposed Sewage Treatment Plants (STP) will be also used.

Water requirement

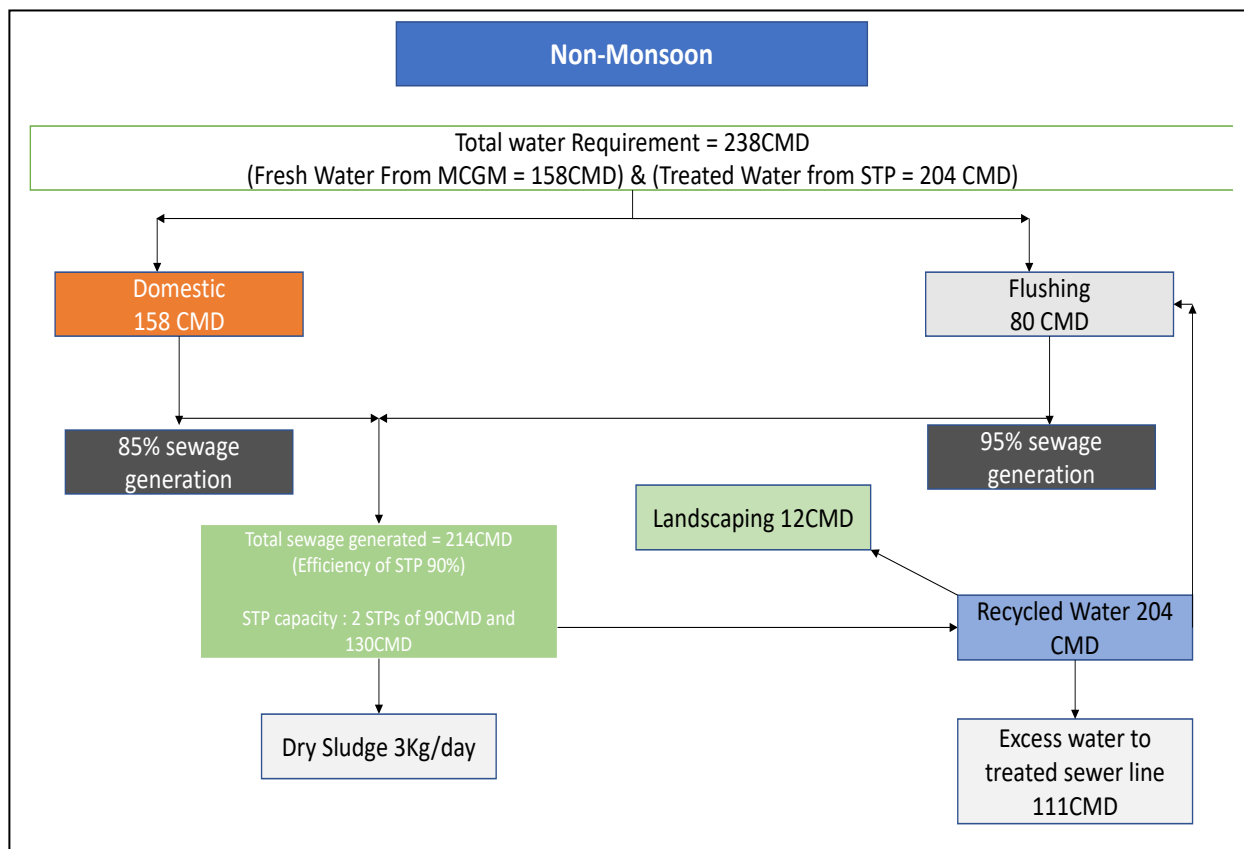
The average water consumption for residential buildings has been calculated as 135 litre per capita per day (NBC 2016 - National Building Code of India 2016, Part 9, Section 1, Page 11 – 13). During operation phase, water supplied by MCGM would be used for domestic purpose and for other purposes like flushing & gardening etc., treated water from proposed Sewage Treatment Plants (STP) would be used. Source: MCGM water supply for domestic purpose & recycled water from Sewage Treatment Plant (STP) for gardening, and flushing. Total Water Requirement: 238 cmd [Domestic water from MCGM: 158 cmd and recycled water from STP: 80 cmd. Please refer to Table below For Water Requirement during Operation Phase & Figures for water balance for Rehab & Sale Building.

Water Requirement during Operation phase

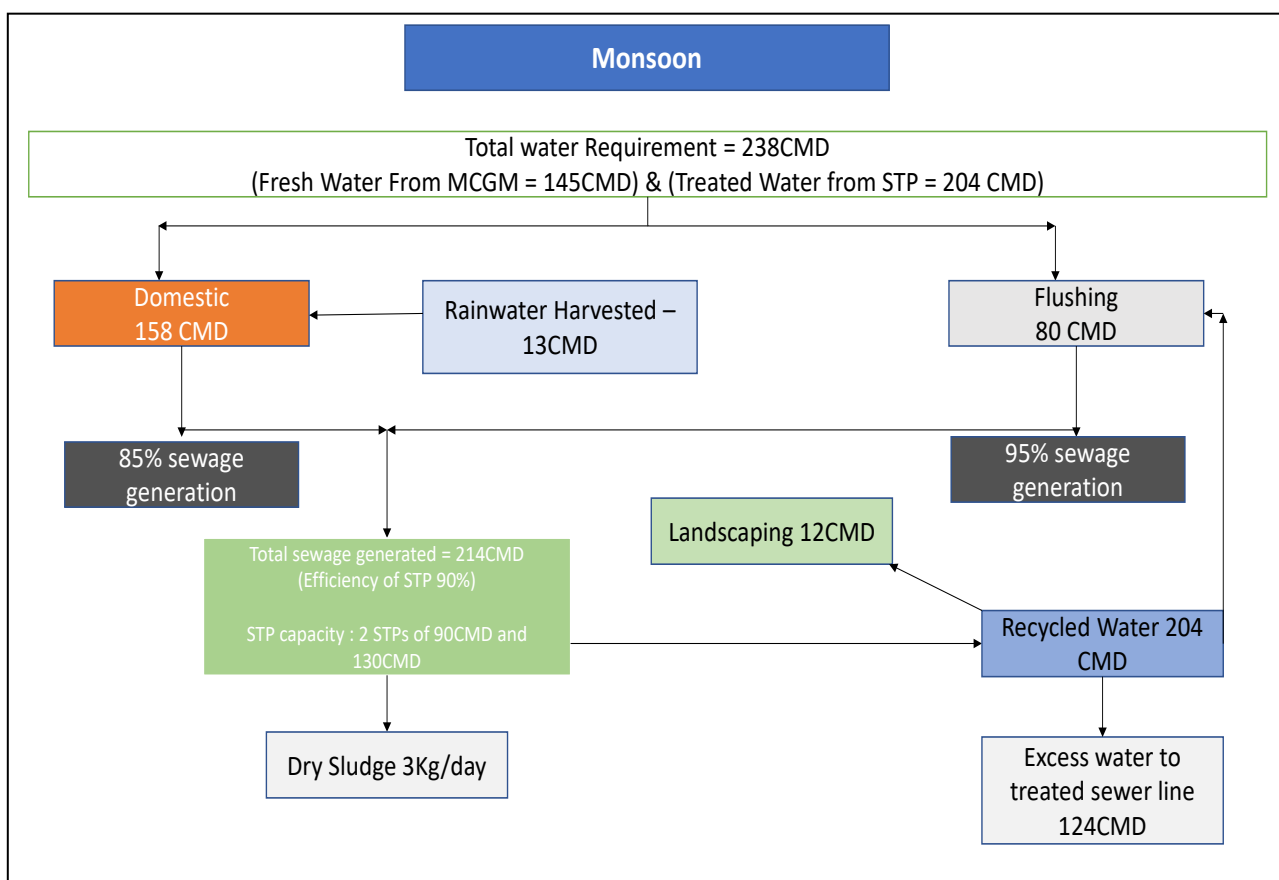
Building Type	Flat No.	Population	Domestic water (m ³ /Day)	Flushing water (m ³ /Day)	Total Water Requirement (m ³ /Day)
Rehab Bld No. 1	138	690	62	31	93
+					
Sale Bld No. 2	208	1045	94	47	141
Staff+Visitors		88	2	2	4
Total	346	1823	158	80	238

	Non Monsoon Season
Purpose	Quantity (m ³ /Day)
Total water requirement	238
Domestic water requirement	158
Flushing water requirement	80
Waste water generated	214
STP Capacity	
Rehab Building No. 1	90
Sale Building No. 2	130

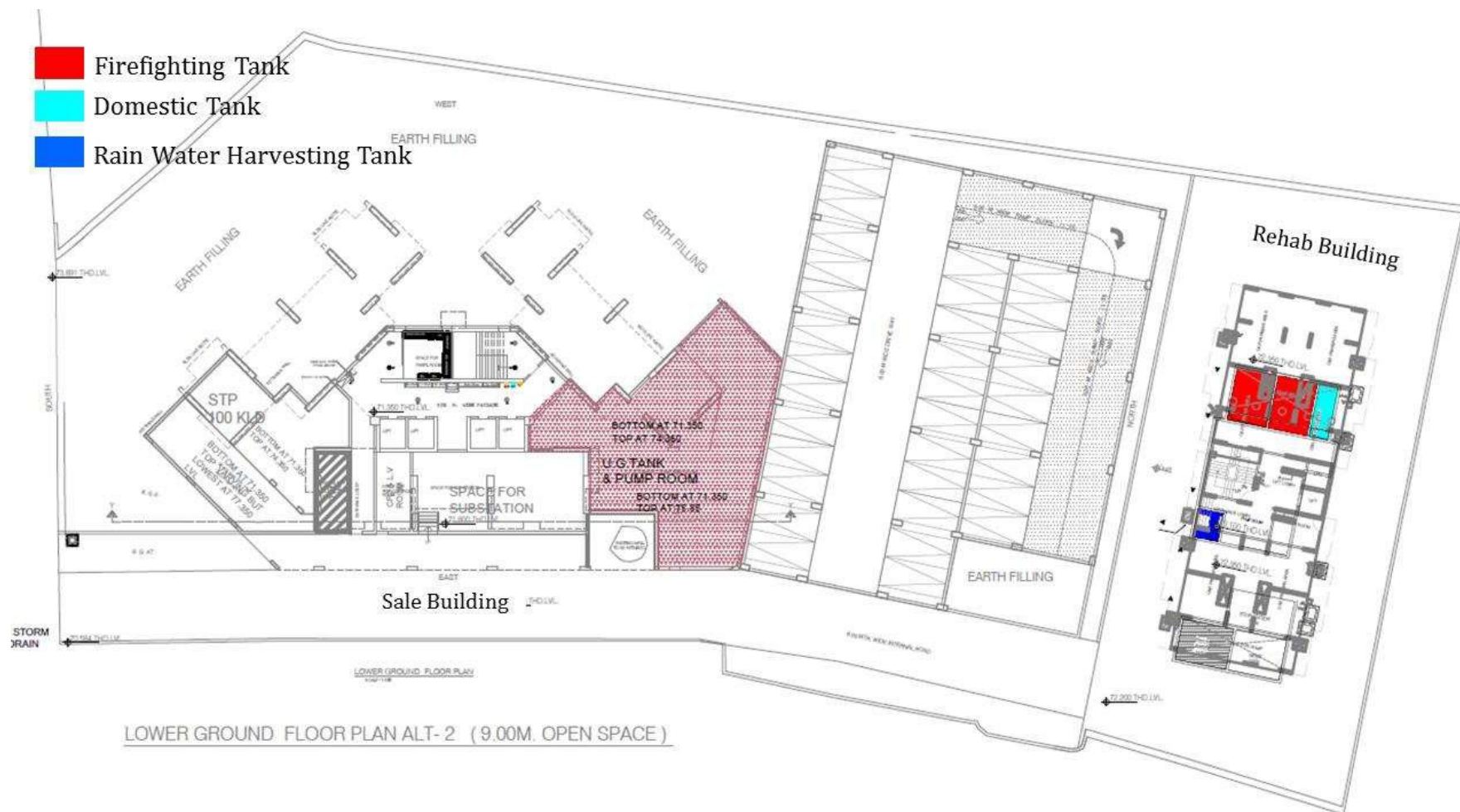
Treated water from STP (90% efficiency)	204
Gardening water requirement	12
Excess water diverted to sewer line after meeting Flushing & gardening water requirement	111
<i>Reference: National Building Code of India 2016, Part 9, Section 1, Page 11 - 13</i>	



Water Balance Chart for Non-Monsoon Season



Water Balance Chart for Monsoon



Location of Underground Tanks – Lower Ground Level

Capacities of Underground & Overhead Tanks

Sale Building

Sr. No	Description	Total no. of Compartments	Capacity of each compartment in cum	Total Project Capacity in cum	Remarks
A	Under Ground Water Tank				
1	Fire fighting tank	2	150	300	
2	Domestic water tank	1	63	63	
3	Flushing water Tank	1	39	39	
4	Rain Water Harvesting Tank (Terrace Area 640 sq.m)	1	5	50	10 of 5 cu.m each on each refuge floor
B	Overhead Water Tank				
1	Fire Fighting Tank (30,000 Its On each staircase)	2 (Each for each Tank)	15	60	Total 2 nos of 30 cum Tanks in project
2	Domestic Water tank (Bldg Storage divided into 2 and kept on each staircase)	1	95	95	
3	Flushing Water tank (Bldg Storage ..Flush & Irrigation divided into 2 and kept on each staircase)	1	66	66	

Rehab Building

Sr. No	Description	Total no. of Compartments	Capacity of each compartment in cum	Total Project Capacity in cum	Remarks
A	Under Ground Water Tank				
1	Fire fighting tank	2	50	100	
2	Domestic water tank	1	43	43	
3	Flushing water Tank	1	23	23	
4	Rain Water Harvesting Tank (Terrace Area 400 sq.m)	1			Discharged into the open well
B	Overhead Water Tank				
1	Fire Fighting Tank (30,000 lts On each staircase)	2	15	30	
2	Domestic Water tank (Bldg Storage divided into 2 and kept on each staircase)	1	68	68	
3	Flushing Water tank (Bldg Storage ..Flush & Irrigation divided into 2 and kept on each staircase)	1	41	41	

RAIN WATER HARVESTING DETAILS

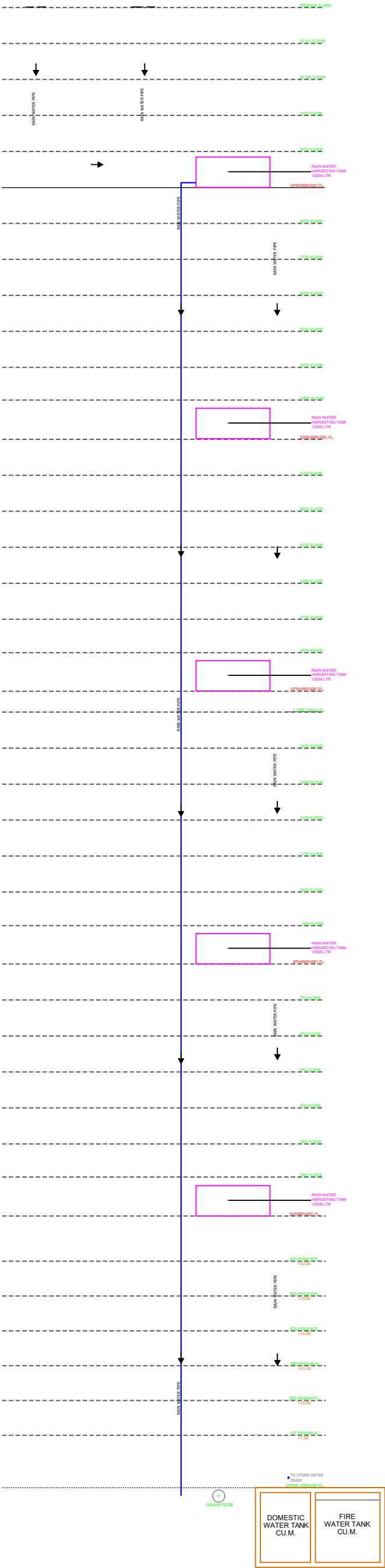
Rain Water Harvesting :

- Ground Water table Level: 1.84 to 7.0 m
- Location of RWH tank: On Refugees Floors (1st, 8th, 15th, 22nd & 29th)
- Capacity of Tank: 5 KLD each – Total Capacity 50 KLD
- No. of Tank: 10 (intermediate/break/service) Tanks on Refuge Floors.
- Roof rainwater of all building will be discharged in to rainwater harvesting tank and after online filtration shall be discharged into Domestic Tank.
- The excess water from the tank will be discharged in Storm Water Drain

Building	Terrace Area (m2)	Rain Fall (mm/day)	Run off Coefficient	RWH Potential (m3) 2 day storage
Rehab	400	25	0.8	16
Sale	640	25	08	26

** RWH and Conservation Manual by GOI, CPWD, Page No. 19*

Schematic representation of Rain Water Harvesting tank for Sale Tower is given Below.



RAIN WATER SCHEMATIC SALE TOWER

SOLID WASTE MANAGEMENT DETAILS

Generation of Solid Waste

Construction Phase

During the construction stage, construction waste would be generated which would include debris, concrete, steel and other metals, bricks, pallets, packaging and paper products, railings, door and window casings, fixtures, tiles, furnishings etc. Approximately 200- 300 kg/day construction waste will be generated.

Operation Phase

During operation phase, solid waste will be generated @0.45 kg/day/person for residential area as per NBC 2016 (National Building Code of India 2016, Part 9, Section3, Page 9). Please refer to Table No. 3 for Solid Waste generated during Operation phase.

Table –3: Solid Waste Generated during Operation Phase

Building Type	Flats	Population	Solid Waste Generation (0.5 kg /capita/day) (Kg/day)	Bio Degradable Waste @ 40% of Solid waste generated (Kg/day)	Non Bio Degradable Waste @ 60% of Solid waste generated (Kg/day)
Rehab Bld No. 1 & Sale Bld No. 2	138	690			
	208	1045			
Staff+Visitors	88				
Total	346	1823	790	316	474
Reference: National Building Code of India 2016, Part 9, Section3, Page 9					

Collection and Disposal

Construction Phase

For waste generated during the construction phase, gross segregation of the wastes into roadwork materials, structural building material and salvaged building parts would be made. Additional segregation to facilitate reuse/ recycling would be made. Material wastes like bricks, cement etc. will be used as fill material and concrete would be recycled and

reused at the site. Adequate facilities for the storage of these waste materials would be made on site.

Operation Phase

Management of solid waste generated during the operation phase would include collection, transportation and disposal in a manner so as to cause minimal environment impact. For this, it will be made mandatory for waste to be segregated into bio-degradable waste and non-biodegradable waste right at the source of waste generation. Collection of segregated waste would be made from the residential areas. Biodegradable waste would be transferred to mechanical composting units within the premises for disposal and non-degradable waste will be disposed through authorized municipal waste disposal system.

Waste Management during Operation Phase

The various forms of solid waste generated will be collected, handled and disposed off in a manner so as to cause minimal environmental impact. Municipal solid waste will be segregated as dry and wet waste. The organic waste will be used for composting. The inorganic waste will be disposed off to the existing municipal solid waste management system.

- The dried STP sludge will be used as manure for gardening to the extent possible. Rest will be disposed off through municipal contractor.
- Spent activated carbon from the ACF will be given back to the supplier for regeneration and recycling.
- Waste sand from the PSF will be disposed off within the site for ground leveling or as fill material for making pathways or for small construction work.
- Spent ion exchange resins from the softening plant will be given back to the supplier
- Waste oil generated from DG set / other machinery overhauling and transformer oil replacement will be sold off to CPCB / MPCB authorized vendors for waste oil.

The following table 4 gives the overall proposal for the management of solid waste within the proposed residential development.

Table - 4: Proposed method for Solid Waste Management

Sr. No.	Waste Type	Collection and Storage	Method of Disposal
1.	Organic waste	Manual collection & storage at ground level.	Treatment in Mechanical composting units provided at the ground level within the premises. The manure generated will be used for gardening.
2.	Inorganic waste	Manual collection & storage in closed rooms at ambient temperature.	Disposed to the Municipal waste collection system and recyclable waste to be taken away by private contractor for resale.

Details of Proposed Mechanical-Composting

Mechanical-composting process and organic waste converter can be used for this purpose. The specifications of the mechanical-composting unit (Organic Waste Converter) are as follows:

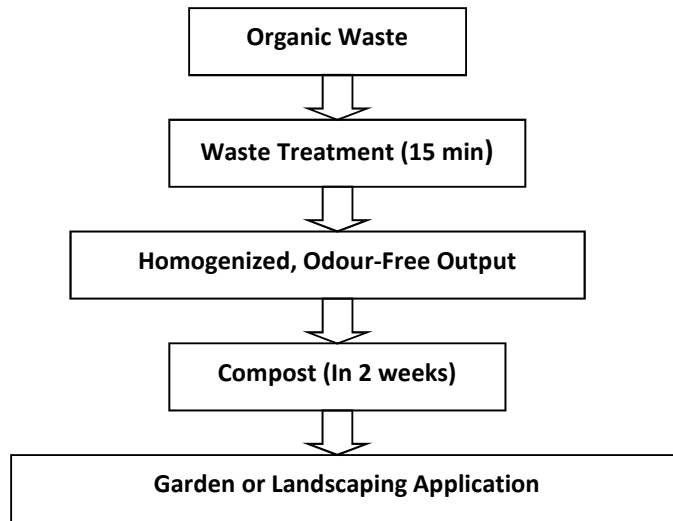
- Input: Segregated organic waste
- Model:OWC- 300
- Capacity: 124 kg per batch
- Batch time: 10-15 minutes (2-3 Batch per day)
- Power: 13.5 HP each.
- Area : 1.98 x 1.40 x 1.47 m

The specifications of the curing system used are enlisted below:

- Capacity : 200 kg per day
- Size : 365 x 120 x 255cm
- Automatic fogging system

Organic Waste Converter – Waste Flow Chart

The schematic representation for the processes in the organic waste converter - Waste Flow chart, OWC machine, curing system, Solid Waste Management Facility is given below.



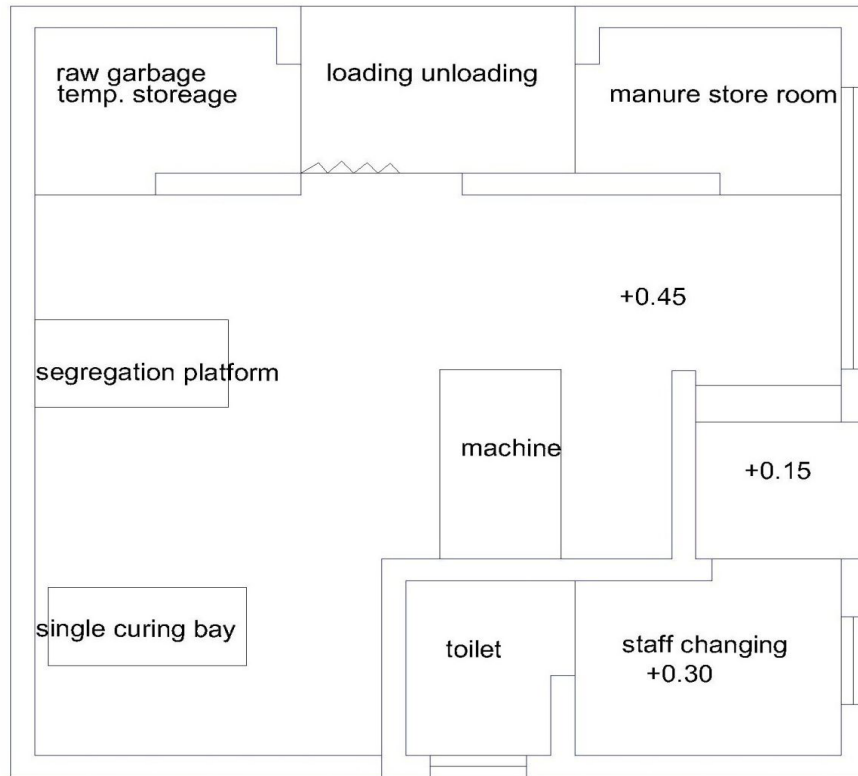
Waste flow chart



OWC Machine

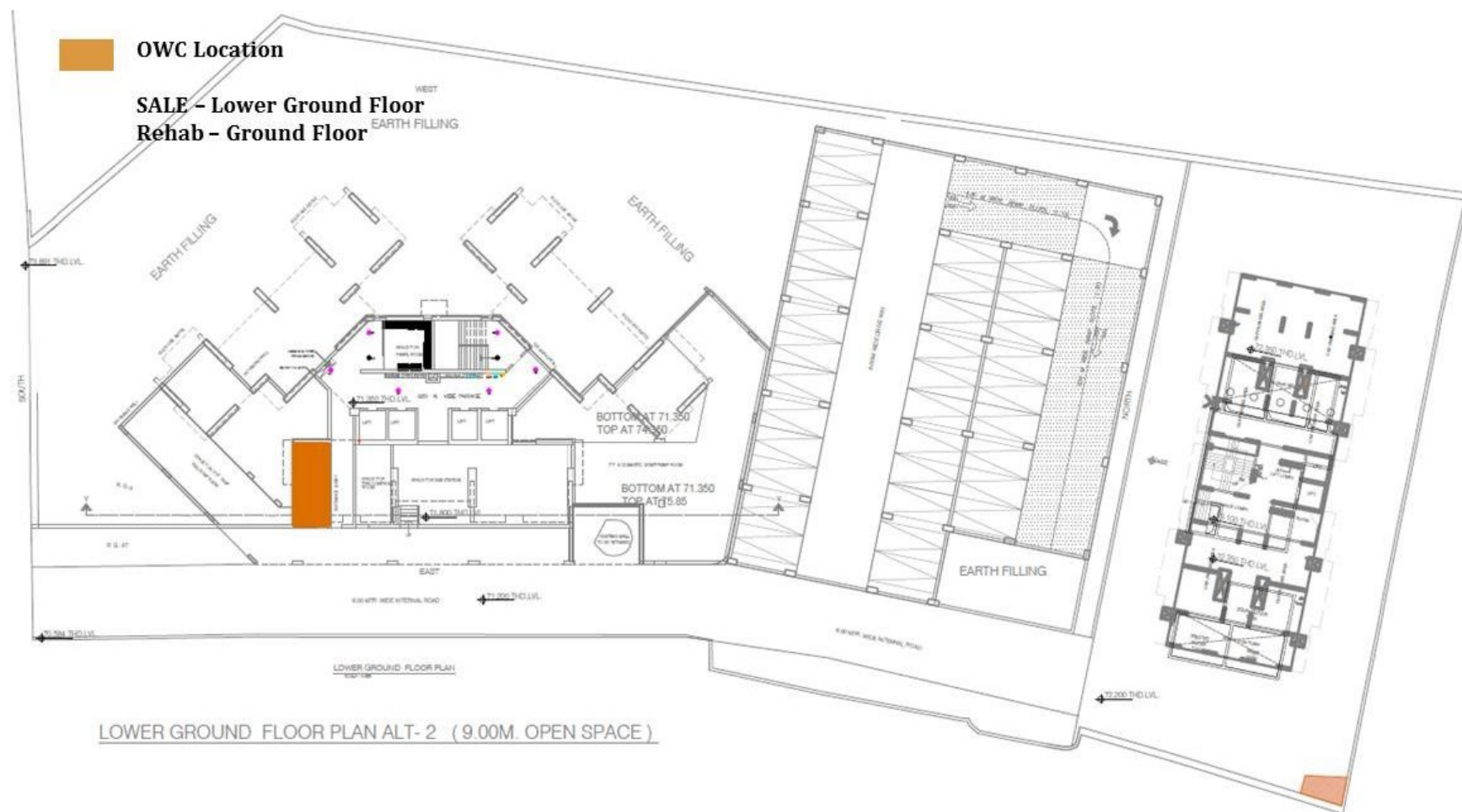


Curing System



Solid Waste Management Facility

Location for Solid waste management facility is provided on Lower Ground level for Sale Building & on stilt level for Rehab Building. The schematic location of Solid waste management facility is given below.



Location of Solid Waste Management Facility

CERTIFICATE OF ANALYSIS

Report Number: GGMPL/441B/01

Reporting Date : 01/06/2022

M/s Dynamix Contractors & Builders Pvt. Ltd.

Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai
- 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)"



SAMPLE DETAILS

Lab ID:	Lab/441B/01	Sampling Date:	24/05/2022
Sample Drawn By:	Laboratory Representative	Sample Receipt Date:	26/05/2022
Sample Type:	Water	Analysis Start Date:	26/05/2022
Sample Description:	Ground Water Of Borewell	Analysis End Date:	31/05/2022
Sample Quantity:	2 L	Sampling Method:	IS 3025(Pt-1)/APHA 1060
Sample Condition:	Satisfactory	Packing:	Sealed

Specification:

Sr.No	Parameters	Results	Unit	Test Method	AL	PL
1	pH at 25 °C	7.20	-	IS 3025-Part 11	6.5 to 8.5	No Relaxation
2	Alkalinity as CaCO ₃	176.00	mg/L	APHA 23rd Edn 2320 B	200	600
3	Ammonical Nitrogen	BQL (QL=0.5)	mg/L	APHA 23rd Edn 4500 NH ₃ C	NS	NS
4	BOD at 27°C 3 Days	BQL (QL=2)	mg/L	IS 3025- Part 44	NS	NS
5	Calcium as Ca	51.30	mg/L	APHA 23rd Edn 3500 Ca B	75	200
6	Chemical Oxygen Demand (COD)	BQL (QL=5)	mg/L	APHA 23rd Edn 5220 B	NS	NS
7	Chloride	74.97	mg/L	IS 3025 -Part 32	250	1000
8	Dissolved Oxygen	6.00	mg/L	IS 3025-Part 38	NS	NS
9	Fluoride (F)	0.41	mg/L	APHA 23rd Edn 4500 F D	1	1.5
10	Magnesium as Mg	25.27	mg/L	APHA 23rd Edn 3500 Mg B	30	100
11	Nitrate	4.30	mg/L	IS 3025-Part 34	45	No Relaxation
12	Salinity	134.94	mg/L	APHA 23rd Edn 2520 B	NS	NS

AL & PL =As Per IS 10500

NS=Not Specified, BQL=Below Quantification Limit,QL= Quantification Limit

Analyzed By
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- 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)"



TC-7073

SAMPLE DETAILS

Lab ID: Lab/441B/01
Sample Drawn By: Laboratory Representative
Sample Type: Water
Sample Description: Ground Water Of Borewell
Sample Quantity: 2 L
Sample Condition: Satisfactory

Sampling Date: 24/05/2022
Sample Receipt Date: 26/05/2022
Analysis Start Date: 26/05/2022
Analysis End Date: 31/05/2022
Sampling Method: IS 3025(Pt-1)/APHA 1060
Packing: Sealed

Specification:

Sr.No	Parameters	Results	Unit	Test Method	AL	PL
13	Sulphate	47.14	mg/L	APHA 23rd Edn 4500 SO4 E	200	400
14	Temperature	27.3	°C	APHA 23rd Edn 2550 B	NS	NS
15	Total Dissolved Solids	363.00	mg/L	APHA 23rd Edn 2540 C	500	2000
16	Total Hardness as CaCO3	232.00	mg/L	APHA 23rd Edn 2340 C	200	600
17	Turbidity	BQL (QL=0.1)	NTU	APHA 23rd Edn 2130 B	1	5
18	Potassium (K)	BQL (QL=0.1)	mg/L	APHA 23rd Edn 3120 B	NS	NS
19	Sodium (Na)	8.30	mg/L	APHA 23rd Edn 3120 B	NS	NS

AL & PL =As Per IS 10500

NS=Not Specified, BQL=Below Quantification Limit,QL= Quantification Limit

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Report Number: GGMPL/441B/01A

Reporting Date : 01/06/2022

M/s Dynamix Contractors & Builders Pvt. Ltd.

Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai
– 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)"

SAMPLE DETAILS

Lab ID:	Lab/441B/01	Sampling Date:	24/05/2022
Sample Drawn By:	Laboratory Representative	Sample Receipt Date:	26/05/2022
Sample Type:	Water	Analysis Start Date:	26/05/2022
Sample Description:	Ground Water Of Borewell	Analysis End Date:	31/05/2022
Sample Quantity:	2 L	Sampling Method:	IS 3025(Pt-1)/APHA 1060
Sample Condition:	Satisfactory	Packing:	Sealed

Specification:

Sr.No	Parameters*	Results	Unit	Test Method	AL	PL
1	Total Coliform (MPN/100ml)	Absent	MPN/100ml	IS 1622	Absent	Absent
2	Feacal Coliform (MPN/100ml)	Absent	MPN/100ml	IS 1622	NS	NS

AL & PL =As Per IS 10500

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Report Number : GGMPL/441B/02

Reporting Date: 01/06/2022

M/s Dynamix Contractors & Builders Pvt. Ltd.

Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai
– 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)"



SAMPLE DETAILS

Lab ID:	Lab/441B/02	Sampling Start Date:	24/05/2022
Sample Drawn By:	Laboratory Representative	Sampling End Date:	25/05/2022
Sample Type:	Ambient Air	Sample Receipt Date:	26/05/2022
Sample Description:	Nr. Main Gate	Analysis start- End Date:	26/05/2022-31/05/2022
Env. Cond.-Sampling:	Ambient Temperature	Total Sampling hours:	24
Env. Cond.-Sample Receipt:	Satisfactory	Env. Cond.-Testing:	25±5°C

Sr.No	Parameters	Results	Unit	Test Method	NAAQ Standards
1	Particulate Matter (PM10)	74.13	µg/m3	IS 5182- Part 23	100
2	Particulate Matter (PM2.5)	32.07	µg/m3	GGMPL/SOP/AA/60	60
3	Sulphur Dioxide (SO2)	14.13	µg/m3	IS 5182-Part 2	80
4	Nitrogen Dioxide (NO2)	18.72	µg/m3	IS 5182- Part 6	80

NS=Not Specified, BQL=Below Quantification Limit, QL= Quantification Limit

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CERTIFICATE OF ANALYSIS

Report Number : GGMPL/441B/03

Reporting Date: 01/06/2022

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- 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)"



TC-7073

SAMPLE DETAILS

Lab ID:	Lab/441B/03	Sampling Start Date:	24/05/2022
Sample Drawn By:	Laboratory Representative	Sampling End Date:	25/05/2022
Sample Type:	Ambient Air	Sample Receipt Date:	26/05/2022
Sample Description:	Nr. Admin Building	Analysis start- End Date:	26/05/2022-31/05/2022
Env. Cond.-Sampling:	Ambient Temperature	Total Sampling hours:	24
Env. Cond.-Sample Receipt:	Satisfactory	Env. Cond.-Testing:	25±5°C

Sr.No	Parameters	Results	Unit	Test Method	NAAQ Standards
1	Particulate Matter (PM10)	73.35	µg/m3	IS 5182- Part 23	100
2	Particulate Matter (PM2.5)	31.66	µg/m3	GGMPL/SOP/AA/60	60
3	Sulphur Dioxide (SO2)	10.26	µg/m3	IS 5182-Part 2	80
4	Nitrogen Dioxide (NO2)	17.76	µg/m3	IS 5182- Part 6	80

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CERTIFICATE OF ANALYSIS

Report Number: GGMPL/441B/04

Reporting Date: 01/06/2022

M/s Dynamix Contractors & Builders Pvt. Ltd.

Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai
– 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)"



TC-7073

SAMPLE DETAILS

Sampling Instrument : Sound Level Meter
Sample By : Laboratory Representative

Sampling Date: 24/05/2022
Sample Description: Ambient Noise

Sr.No	Lab Id	Location	Time	Unit	Test Method	Reading	Norms
1	Lab/441B/04A	Nr. Main Gate	Day Time	dB(A)Leq	IS 9989	52.3	55
2	Lab/441B/04B	Nr. Construction Site	Day Time	dB(A)Leq	IS 9989	54.0	55
3	Lab/441B/04C	Nr. Oppo Site Of Main Gate	Day Time	dB(A)Leq	IS 9989	51.0	55
4	Lab/441B/04D	Nr. Main Gate-2	Day Time	dB(A)Leq	IS 9989	52.7	55
5	Lab/441B/04A	Nr. Main Gate	Night Time	dB(A)Leq	IS 9989	43.8	45
6	Lab/441B/04B	Nr. Construction Site	Night Time	dB(A)Leq	IS 9989	43.2	45
7	Lab/441B/04C	Nr. Oppo Site Of Main Gate	Night Time	dB(A)Leq	IS 9989	41.2	45
8	Lab/441B/04D	Nr. Main Gate-2	Night Time	dB(A)Leq	IS 9989	42.0	45

NS=Not Specified, BQL=Below Quantification Limit, QL= Quantification Limit

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Tantan Kumar



Page No : 1/1

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CERTIFICATE OF ANALYSIS

Report Number: GGMPL/441B/05

Reporting Date : 01/06/2022

M/s Dynamix Contractors & Builders Pvt. Ltd.

Survey No. 267, C. T. S. No. 845(pt.) of Village Malad, Taluka Borivali, Mumbai
- 400097 For "Shivpuri Pragati SRA Co-Op Hsg. Socy. (Prop.)"



TC-7073

SAMPLE DETAILS

Lab ID:	Lab/441B/05	Sampling Date:	24/05/2022
Sample Drawn By:	Laboratory Representative	Sample Receipt Date:	26/05/2022
Sample Type:	Soil	Analysis Start Date:	26/05/2022
Sample Description:	Construction Area	Analysis End Date:	31/05/2022
Sample Quantity:	2 Kg	Sampling Method:	IS 2720 & GGMPL/WI/27
Sample Condition:	Satisfactory	Packing:	Sealed

Sr.No	Parameters	Results	Unit	Test Method	Norm
1	pH	7.32	pH	IS 2720 (Part 26)	NS
2	Conductivity	698	uS/cm	IS 14767: 2000	NS
3	Organic Matter	0.67	%	IS 2720 (Part XXII)	NS
4	Sodium Absorption Ratio, SAR	2.01	-	IS 5949	NS
5	Texture	Sandy Clay Loam	%	USDA Method	NS
6	Water Holding Capacity	17.86	%	IS 14765: 2000	NS
7	Sand	56	%	USDA Method :1999	NS
8	Silt	21	%	USDA Method : 1999	NS
9	Clay	23	%	USDA Method : 1999	NS

NS=Not Specified, BQL=Below Quantification Limit,QL= Quantification Limit

Analyzed By
Milan Patel



Authorized Signatory
Tantan Kumar

Page No : 1/1

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CERTIFICATE OF ANALYSIS

Report Number: GGMPL/441B/05A

Reporting Date : 01/06/2022

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Sample Quantity:	2 Kg	Sampling Method:	IS 2720 & GGMPL/WI/27
Sample Condition:	Satisfactory	Packing:	Sealed

Sr.No	Parameters*	Results	Unit	Test Method	Norm
1	Colour	Brownish	-	GGMPL/SOP/Soil/29	NS
2	Porosity	25.3	%	USDA Method: 1999	NS
3	Permeability	1.3	cm/hr	IS 2720 (Part 17)	NS

NS=Not Specified, BQL=Below Quantification Limit, QL= Quantification Limit

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