EXECUTIVE SUMMARY

REDEVELOPMENT OF COMMERCIAL PROJECT

AT

C.S. NO.941 OF WORLI DIVISION, DR. ANNIE BESANT ROAD, 'G/SOUTH' WARD, MUMBAI

BY

M/S SIRIUS LAND HOLDINGS LLP

1. INTRODUCTION TO PROJECT

After recognizing the need for proposed redevelopment of existing dilapidated building to new commercial building on the plot bearing C.S. No.941 of Worli Division, Dr. Annie Besant Road, 'G/South' Ward, Mumbai, the same is now being proposed to be redeveloped by M/s Sirius Land Holdings LLP. The proposal involves demolition of the existing Ground Floor + 1st to 2nd Upper Floor old dilapidated building structure, declared as dilapidated vide Notice and to demolish / pull down the building situated on plot under reference, dated 17.10.2018 thereby declaring it as dangerous / dilapidated and likely to fall.

The proposal is submitted for availing existing Rehab Built Up Area + 50% Incentive area as per 33 (7)(A) + 35% fungible compensatory FSI. The structure is occupied by three owners.

The developer has proposed a new commercial building of Three basement for parking + Ground Floor for Parking and Entrance Lobby + 1st to 9th parking floor +10th floor for parking and pantry + 11th floor for Office and refuge area + 12th to 17th + 18th floor (part) for commercial purpose. The plot falls in Residential Zone and is not reserved for any public purpose as per old DP as well as revised sanctioned DP (1993) and is not under any reservation as per old DP.

1. DESCRIPTION OF THE PROJECT

3.1 NATURE OF THE PROJECT

This is a proposed redevelopment of “Declare Dilapidated building” structure to new commercial building on plots bearing C.S. No.941 of Worli Division, Dr. Annie Besant Road, 'G/South' Ward, Mumbai, in CRZ-II belt, as the same is situated within 500 mtr. from Arabian Sea. The plot under reference is on landward side of existing Khan Abdul Gaffar Khan Road, in existence prior to 19/2/1991 as seen from the approved CZMP of Mumbai as well as 1967 DP of the area and it attracts provisions of CRZ Notification 2011.Hence the work is permitted subject to the approval of CRZ clearance. Thus property attracts the CRZ legislation, which is reflected in CZMP plan.

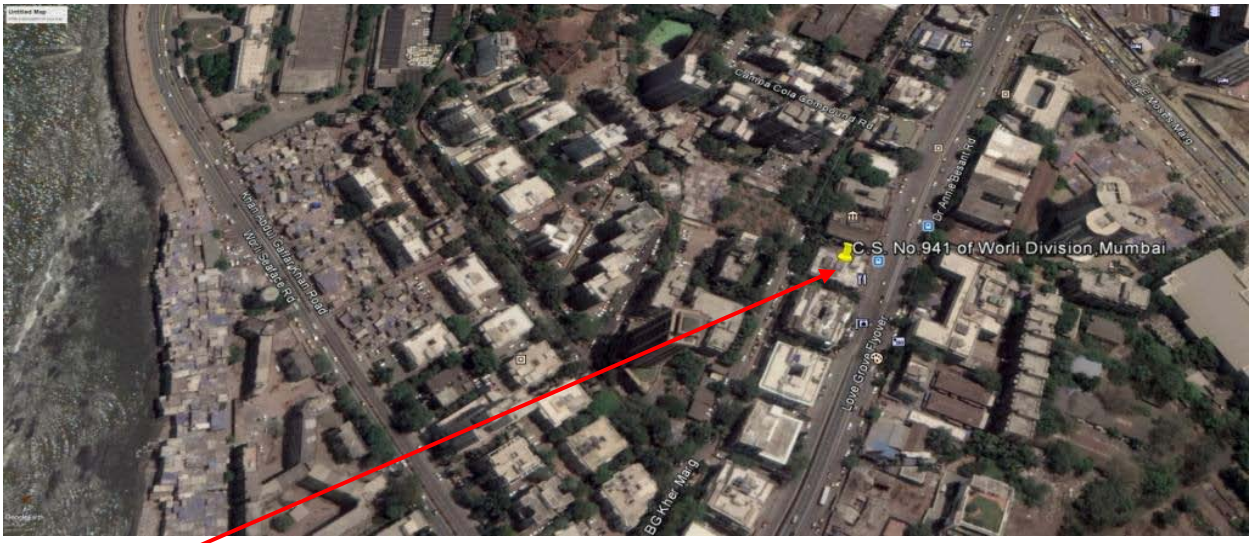
3.2 SIZE OF THE PROJECT

Total Area of the said plot, taken on strigent basis, is 1,214.26 sq. mtrs. Cost of the Project is Rs. 91,60,000,00/- (Rupees Ninety One Crore and Sixty Lakhs Only) as per the valuation report.

3.3 LOCATION

The C.S. No.941 of Worli Division, Dr. Annie Besant Road, 'G/South' Ward, Mumbai, is in the southern part of the city. The nearest railway station is Lower Parel railway station located on Western line at about 4.00 km from the site.All local trains ply at the frequency of about once per 3-4 minutes.

Google Earth Image of the site



SITE UNDERREFERENCE

CZMP Plan showing location of reference Plot

SITE UNDERREFERENCE

3.4 SITE DESCRIPTION

The site under reference is affected by CRZ-II zone and the property falls on landward side of the authorized existing Khan Abdul Gaffar Khan Road, in existance prior to 19/2/1991, as may be seen from CZMP of Mumbai. Thus property attracts the CRZ legislation as per CRZ - 2011. The development site does not fall or contain the environmentally sensitive areas as specified in the Coastal Regulation Zone notification.

Town / Tehsil	:	Mumbai
District	:	Mumbai
State	:	Maharashtra
Latitude	:	**18°59'46.73"N**
Longitude	:	**72°48'57.10"E**

3.5 PROPOSED DEVELOPMENTS

3.5.1 AREA STATEMENT

A)	**AREA STATEMENT**	**SQ.MTS.**
1)	Area of plot as per C.S. Plan	1250.57 m^2
	Area of plot as per as per Survey Plan	1217.76 m^2
	Area of Plot as per Stringent Plot Area	1214.26 m^2
	Stringent Plot Area taken for Scheme	1214.26 m^2
2)	Deductions for	
	(a) Road Set-back Area	122.62 m^2
	(b) Any other Reservations	0.00 m^2
	Total (a+b)	122.62 m^2
3)	Balance Area Of Plot (1 minus 2)	1091.64 m^2
4)	Owner Occupied Carpet Area	114.06 m^2
5)	Owner Occupied BUA	136.87 m^2
6)	Existing Rehab Carpet Area	1516.41 m^2
7)	Existing Rehab BUA (1516.41 X 1.20)	1819.69 m^2
8)	Incentive BUA for Sale Permissible as per 33(7) (A) 50%	978.28 m^2
9)	Total Rehab + Sale Permissible BUA(5 +7 +8)	2934.84 m^2

10)	Proposed Built Up Area	2624.88 m^2
11)	Fungible Area	
	(a) Permissible Fungible BUA (9 X 35%)	1027.20 m^2
	(B) Proposed Fungible BUA	918.67 m^2
12)	Permissible Fungible BUA (9 + 11 (a))	3962.04 m^2
13)	Total proposed BUA Including fungible (10 + 11 (b))	3543.55 m^2
14)	Balance BUA (12-13)	418.49 m^2

PROJECT DEVELOPMENT DETAILS

Proposed development		
1	Structure of Building	**Proposed Building:** Three basement for parking + Ground Floor for Parking and Entrance Lobby + 1st to 9th parking floor +10th floor for parking and pantry + 11th floor for Office and refuge area + 12th to 17th + 18th floor (part) for commercial purpose.
2	Tenements existing for dilapidated building	03 Nos.
3	Tenements proposed for dilapidated building	09 Nos.
4	Height of Building from Ground level	69.50 Meters

2.5.2 UTILITIES

The Utilities required during the construction phase are water, power, fuel and Labour.

i) **WATER:** (Expected Consumption – total 17 cum/day)

For worker - 7 KLD

For construction - 10 KLD

Note: The actual quantity of water may depend upon the actual construction requirement.

Water Balance (Operation Phase)

Sr. No	Component/Head	Occupant load	Water Requirement m^3/day		Remarks
			Domestic	Flushing	
1.	Total Commercial population	589	11.78	14.72	@ 20/25 lpcd

2.	Total non residential population (Visitors, Drivers, etc.)	155	3.10	3.9	@ 20/25 lpcd
3.	Total Quantity of Water Required	33.50 CMD			For a total population 744 Nos. of people.
4.	Sewage generation	26.80 CMD			
5.	Sewage Treatment Plan	30.00 CMD			

Source: - Water will be available from Mumbai (MCGM) for domestic use and from Tanker for construction purpose.

ii) **POWER**

During Constructional Phase–

Connected Load: 150KW (Estimated)

During Operational Phase–

Component	Values
Maximum demand kW	1066.257
D.G. sets (for emergency back up during power failure)	1 DG of 500 kVA

iii) FUEL

DURING CONSTRUCTION PHASE

Estimated energy shall be used.

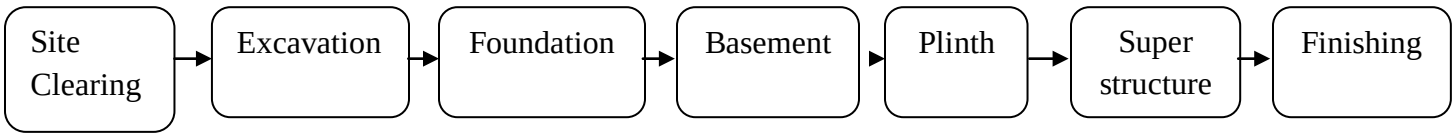
DURING OPERATION PHASE

Diesel will be required to run the D. G. Set in case of power failure, in emergency case only.

1. Storage: Diesel and oil will be stored as per guidelines from concerned authorities.
2. Fire and safety measures will be taken as per the guidelines from concerned authority.
3. All Safety and fire precautions will be followed.

2.6 CONSTRUCTION PROCEDURE

The outline of the construction procedure is described below schematically.



Note:

1. Parameters and Quality will be strictly adhered to as per the drawing approved by MCGM. Applicable regulations of government authorities will be followed.
2. Necessary safety precaution will be observed as per the guidelines during the construction phase. Personal Protective Equipment (PPE) will be provided to the personnel involved in the construction activities.
3. Site barricading will be done to protect the surrounding area of the project site from nuisance /dusting.
4. All electrical connections & cables will be checked by authorized persons to ensure the safety of workers on field.
5. Water sprinkling will be done, wherever required to reduce the emission of fugitive in atmosphere. Jute barricading along plot boundary shall be provided to minimize noise level from construction activities.
6. The safety and security officers shall supervise the site.

3. ENVIRONMENTAL CONCERNS

3.1 AIR POLLUTION

Fugitive Emissions i.e. Emissions from construction activities will mainly consist of dust. Movement of Heavy & light vehicles, for loading and unloading of Construction Materials, transporting people, will also add on to source of emissions.

Parameter	Permissible Range	CPCB Limits	AVG Range Before Activity
SPM ($\mu g/m^3$)	100 ~ 200	200	80-100
RSPM ($\mu g/m^3$)	50 ~ 100	100	20-30
SO2 ($\mu g/m^3$)	50 ~ 80	80	10-15
NOx ($\mu g/m^3$)	40 ~ 80	80	5-10

Ref: 24 Hourly values as per Central Pollution Control Board, National Ambient Air Quality Monitoring, Notification 11th April, 1994, Schedule 1.

3.2 AIR POLLUTION MITIGATION

Sr. No.	Source	Mitigation	
1.	Vehicle	i]	Vehicles coming to the site will be ensured to be in good condition having PUC.
		ii]	Public awareness to use Green Fuel will be done.
2.	Solid Waste	i]	Proper segregation and collection of waste will be ensured.
		ii]	Location of loading and unloading will be fixed.
		iii]	Good Housekeeping practices will be ensured at the premises.
3.	Construction Activities	i]	Noise / Dust nuisance preventions by barricading site up to 5.0 meter height.
		ii]	Water sprinkling on dry site, sand.
		Iii]	Construction equipment with regular maintained

3.3 WATER POLLUTION

1] **Use**: - Water for domestic purpose will be procured from MCGM i.e. drinking water for staff and laborers working on the field whereas bore well water/Tanker water will be used for various constructions activities like, Concreting, Plastering, Flooring & Finishing etc.

2] **Effluent**: - There will be no generation of effluent from construction activities as the water used for concreting; Plastering, Flooring and Finishing etc. will get evaporated during drying or curing time. All the construction activities are physical in nature. The Domestic Effluent will be generated due to the persons working on the site who will require water for drinking, cleaning, etc.

Sewage generated during operation phase will be treated in the Sewage Treatment Plant. The treated water will be used for non domestic purposes such as gardening, flushing etc and excess treated water shall be discharged to Municipal drain.

3] **Treatment & Disposal**: - The Domestic Effluent generated (if any) in construction phase will be disposed off in existing MCGM Sewer.

4] **Rain Water Harvesting**: - The Plot is occupied by a declared dilapidated building. A building is now proposed to be redeveloped. Roof rain water harvesting is proposed in the project. 1 Recharge pits to be

provided for the percolation of rain water into the soil rather than flowing to the drain.

5] **Storm Water Discharge**:- Storm water drains will be constructed for proposed facility as per the norms. A recharge pit and Rain water recharge pit will help to reduce the runoff and reduce the load on external storm water drain.

3.5 NOISE LEVEL MITIGATION

Sr. No.	Source	Mitigation
1.	Near Residential Areas	i] Site Barricading will be done to protect the surrounding area. ii) Construction Activity will be carefully planned and carried out accordingly.
2.	Nearby Traffic	i] All the vehicles coming to the site will be ensured in good condition, having Pollution Under Check (PUC).
3.	Construction Equipments	i] Regular maintenance to all the equipment at proper interval for efficient working ii] Appropriate PPE to be provided to workers

1] It is evident from the nature of operation (i.e. Construction) that the Concentration of suspended particulate matter would be higher than the other two parameters.

2] Control of Emission: - Proper precaution will be taken to reduce the particulate matter by water sprinkling on the dry site area, barricading the periphery by corrugated tin Sheets of 5.0 mtrs height to protect the surrounding area from dusting. Also it will be ensured that the vehicles will carry PUC certificate. To minimize air pollution efforts shall be made by use of equipments, which are electric power driven.

3.6 SOLID WASTE MANANGMENT DURING OPERATIONAL PHASE

1] The solid waste generated during operation phase is proposed to be segregated as biodegradable & non-biodegradable waste within the premises.

2] Solid waste transfer station shall be proposed for collection, sorting, segregation, storage & transportation of biodegradable and non-biodegradable waste.

Calculation for quantum of solid waste to be generated in the building:

- Total no of Commercial and Non- residential population = 744 persons
- Generation of Total waste per person of Commercial population = 0.2 kg/ capita per day (as per As per assessment of per capita Waste Quantity – b) Commercial Refuse : 0.1 to 0.2 kg/ capita per day, of NBC 2016)
- Thus total solid waste generation, for Commercial and Non Residential population will be 744 x 200 gms/person/day = 148.80 Kg
- Thus solid waste generated in the project will be 148.80 kg/day.
- Generation of organic waste = 40% of total waste (as per guidelines in As per assessment of per capita Waste Quantity, of NBC 2016)
- So total organic/Wet/ Bio degradable waste generated by the occupants = 148.80 x 40 % = 59.52 Kg by all occupants of the building.
- Total inorganic/Dry/ Non biodegradable waste generated will be 89.28 kg/ day.

Measures for treatment of Solid Waste Generated on the site during operation phase

- Segregation of non biodegradable and biodegradable garbage on site.
- Bio degradable garbage: Treatment by means of composting/Organic Waste Convertor (OWC).
- Non- biodegradable garbage: Segregated into recyclable and non-recyclable waste.
- Recyclable waste: Handed over to vendors for recycling.
- Non-recyclable waste: Handed over to M.C.G.M.
- GWTP Sludge : Used as manure.
- The debris generated due to demolition and excavated material shall be partly reused on site and partly shall be disposed off to authorized Landfill sites with permission from M.C.G.M.

3.7 DEMOLITION WASTE AND CONSTRUCTION WASTE MANAGEMENT

Local Municipal norms shall be followed to ensure responsible disposal of C & D waste.

3.8 SEISMICITY:

Seismic zone map was initially based on the amount of damage suffered by the different regions of India because of earthquakes. Following are the varied seismic zones of the nation,

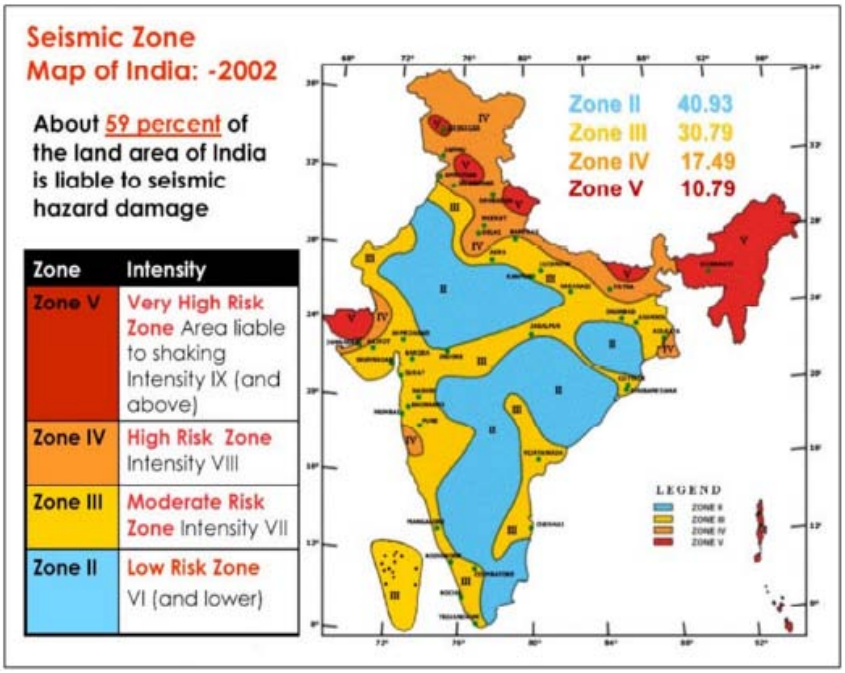
• Zone - II: This is said to be the least active seismic zone.

• Zone - III: It is included in the moderate seismic zone.

• Zone - IV: This is considered to be the high seismic zone.

• Zone - V: It is the highest seismic zone.

Proposed project and Study Area comes under Seismic Zone III.



4. PROJECT SCHEDULE AND COST ESTIMATES

The Proposed Project is Redevelopment project and will be started as soon as required government NOC's and CRZ Clearance is received to start the work.

5. TRAFFIC MANAGEMENT

5.1 CONSTRUCTION PHASE

- Storage and Godown area will be properly identified, as per requirement.
- The area for loading and unloading will be located at proper demarcated location in the premises.
- Thus the traffic management on the project site will be easily and smoothly monitored without any hindrance to the regular flow of traffic on the main road.

5.2 OPERATIONAL PHASE

- About 86 cars are expected to be accommodated in the premises. The parking space will be provided on Three Basements + Ground + 1st to 10th Upper Parking floors. There is ample space in the building from South side gate and the ramp is provided for smooth movements of cars.

6. ENVIRONMENTAL, HEALTH AND SAFETY

6.1 SAFETY MEASURES ON SITE

1. Parameters and Quality will be strictly adhered to as per the drawings approved by MCGM. Necessary regulations of government authorities will be followed.
2. Necessary safety precaution will be observed as per the guidelines during the construction phase. Appropriate Personal Protective Equipments (PPE) will be provided to all the personnel involved in the construction activities.
3. Site barricading up to height of 5.0 mtr will be done to protect the surrounding area of the project site from nuisance/ dusting.
4. All electrical connections & cables will be checked by authorized persons to ensure the safety of workers on field.
5. Water sprinkling will be done, wherever required to reduce the dusting in atmosphere.

7. BENEFITS OF THE PROJECT

- It will provide employment opportunities to the local people in terms of labour during construction and services personnel during operational phase.
- Modern sanitation and infrastructure facilities will have minimal impact on living condition of local people.
- The project will improve living standard and welfare of the area and local people.
