# PROJECT REPORT
# for
# GROUP HOUSING COLONY
# "THE 88"




## At

## Village-Bajghera
## Sector 112, Gurugram, Haryana

EMAAR

## M/s. Emaar India Ltd.

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## 1.0 INTRODUCTION

The proposed project is a Group Housing to be developed by M/s Emaar India Ltd. The site is located at village Bajghera, Sector – 112, Gurgaon, Haryana on a land admeasuring 1.84 Acres (part of 10.744 Acres of Group Housing) would be developed in this phase and referred to as "proposed project". The proposed project has been named as "**THE 88**". M/s Emaar India Ltd. are successful in providing specifically designed solutions to the elite professional keeping in mind their daily needs and their exquisite taste in lifestyle.

The project is based on following objectives:

- To provide for luxuy residential experience.
- To enhance the surrounding with greenery, landscaping and recommended aesthetics.
- To adopt the practice of plantation and rain water harvesting to create a better micro climate in the area.
- To recharge Ground Water by proposing Rainwater Harvesting System.

As already mentioned, the proposed site is spread over an area of 10.744 Acres of which 1.84 Acres would be developed in this phase. 0.8330 (3371.0314 sq m) is earmarked for development of building. All the infrastructure/amenities like water supply, sewage line, storm water line, STP, road network, power, etc. will be provided for the proposed project. The site is accessible through 24 mtr. ropad and It is proposed to have 0.0550 Acre (222.58 sq m) as green/landscape area. Approximately 0.4940 Acre (1999.15 sq m) is earmarked for roads and pavements. The tentative date for start of the project is April 1, 2024 and completion date is March 31, 2029. The layout is enclosed as **Annexure I**

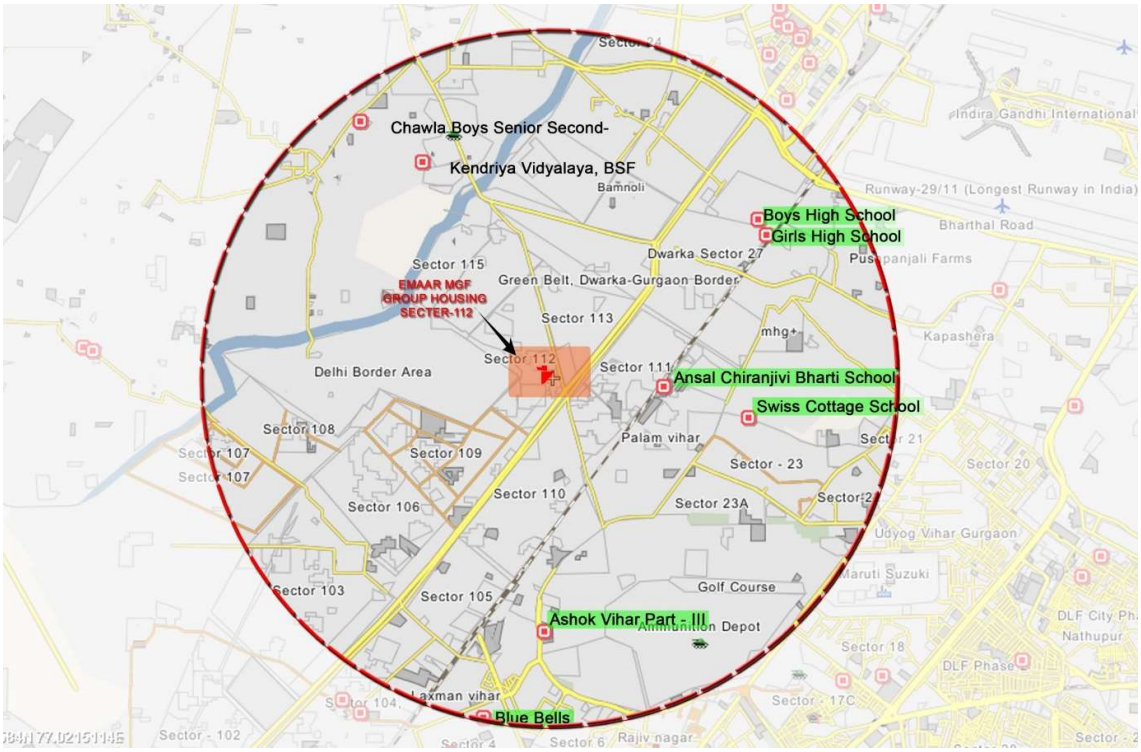
## 2.0 SITE LOCATION AND SURROUNDINGS

The proposed project is located at village – Bajghera, Sector 112, Gurgaon, Haryana. The coordinates of the project site are 28° 31` 23.04" N and 77° 01` 09.67" E with site elevation of 213.28 MSL. Site location aon Master Plan and google image showing project site & surroundings is given below:

# MASTER PLAN

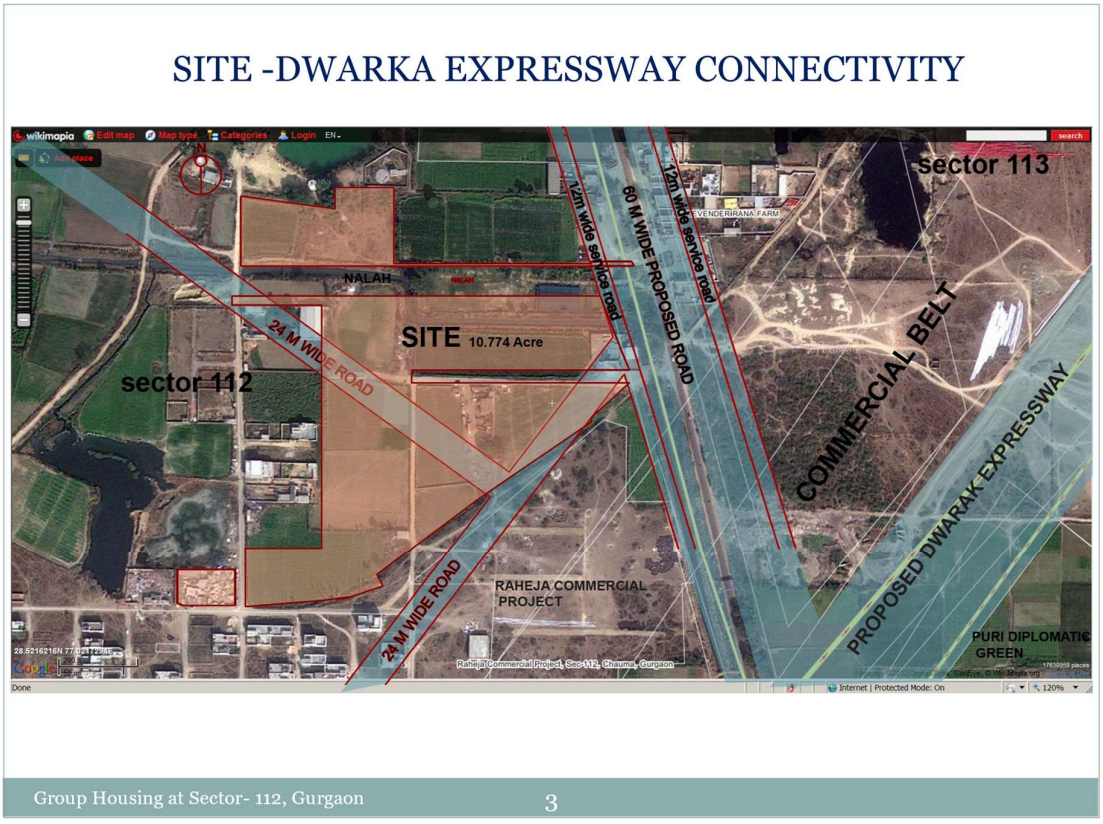

NAJAFGARH DRAIN
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TO MANESAR
TO TAURU
TO PALWAL
LEGEND
FAVISTA
INDUSTRIAL
AGRICULTURE LAND
TRANSPORT & COMMUNICATION
RESIDENTIAL/GROUP HOUSING
PUBLIC – UTILITIES
COMMERCIAL
SEZ
FOREST LAND
OPEN SPACES
VILLAGES
EXISTING TOWN
RELOCKS
PROPOSED METRO ROUTE

# TOPOSHEET SHOWING 10 & 15 KM AREA



## CONNECTIVITY

The project site is well connected through 24 mtr road. The nearest road is proposed which is near away from project site. Gurgaon railway station is about 2 km away and the nearest airport is Indira Gandhi International airport



## 3.0 PROJECT DETAILS

As already mentioned, the area of proposed project is 10.744 Acres of which 1.84 Acres would be developed in this phase. The license for the proposed development has been issued by Director, Town & Country Planning, Government of Haryana.

The project details are given in Table 1.0 below:

**Table 1.0: Project Details**

| S. No. | Particulars | Remarks |
|---|---|---|
| 1. | Total Project Area | (7474.54 sq m part of 43480.19 sq m sq m plot) |
| 2. | Proposed Site Area | 1080.51sq m |
| 3. | Area under Roads | 1999.15sq m sq m |
| 4. | Nos. of dwelling unitss | 88 |
| 5. | Height | ~45 Sq. Mt. |
| 6. | Greenbelt | 222.58 sq m |
| 7. | Water requirement | ~66.4 KLD |
| 8. | Waste water | ~53 KLD |
| 9. | STP Capacity | STP of 65 KLD |
| 10. | Solid Waste | ~250 kg per day |
| 11. | Rain Water Harvesting | 2 pits |
| 12. | Total Cost of project | ~Rs. 12559.54 Lacs |
| 13. | Total Population | ~492 |

### POPULATION DENSITY

**Population Density:**

The population for the proposed project would be 492 persons @ 267 PPA.

### VEHICLE PARKING FACILITIES

**Road:**

The project will have an access through 24 mtr. wide road.

## POWER REQUIREMENT

The power supply shall be supplied by DHBVNL (Dakshin Haryana Bijli Vitaran Nigam Limited). The total demand load for the complete project is estimated to be 1.5 MVA. The power requirements have been assessed on the basis of DHBVNL Sales Circular No. D-16/2017 dated April 12, 2017 and D- 26/2019 dated July 10, 2019

## WATER & WASTEWATER DETAILS

Water would be sourced through pipeline supply of Gurugram Metropolitan Development Authority (GMDA). The total fresh requirement for the project would be 45 KLD. The landscaping, road cleaning and flushing requirement amounting to 35 KLD would be met from recycled water of Sewage Treatment Plant and excess would be discharged to GMDA sewer.

**Sullage Generation & Treatment**

It is expected that the project will generate approx. ~53 KLD of sewage that would be treated in Sewage Treatment Plant (STP) of 65 KLD capacity to be installed at site. The treated wastewater will be used for flushing, horticulture and rest will be discharged to GMDA sewer. The Sewage Treatment Plant will be based on Moving Bed Biofilm Reactor (MBBR) technology.

## Sewage Treatment Details

**MBBR TECHNOLOGY**

**Sewerage System**

An external sewage network shall collect the sewage from all points of the Group housing colony, and flow by gravity to the sewage treatment plant.

Following are the benefits of providing the Sewage Treatment Plant in the present circumstances:

- The process has long retention time and can absorb shock load situation.
- Reduced net daily water requirements, source for Flushing and Horticultural purposes by utilization of the treated waste water.

- Reduced dependence on the public utilities for water supply and sewerage systems.
- The process produces a well-oxidized sludge in small quantities only, which can be removed and used as manure.

**a. Characteristics of inlet /outlet of STP (After tertiary treatment):**

| Parameters | Domestic | Outlet |
|---|---|---|
| pH | 6.5 to 8.5 | 6.0 to 8 |
| Suspended solids | 200 - 600 mg/l | <10 mg/l |
| Biochemical Oxygen Demand (BOD) | 200 - 450 mg/l | <10 mg/l |
| Chemical Oxygen Demand (COD) | 500- 800 mg/l | <50 mg/l |
| Oil & Grease | 50 mg/l | <5 mg/l |

**b. Treatment Technology**

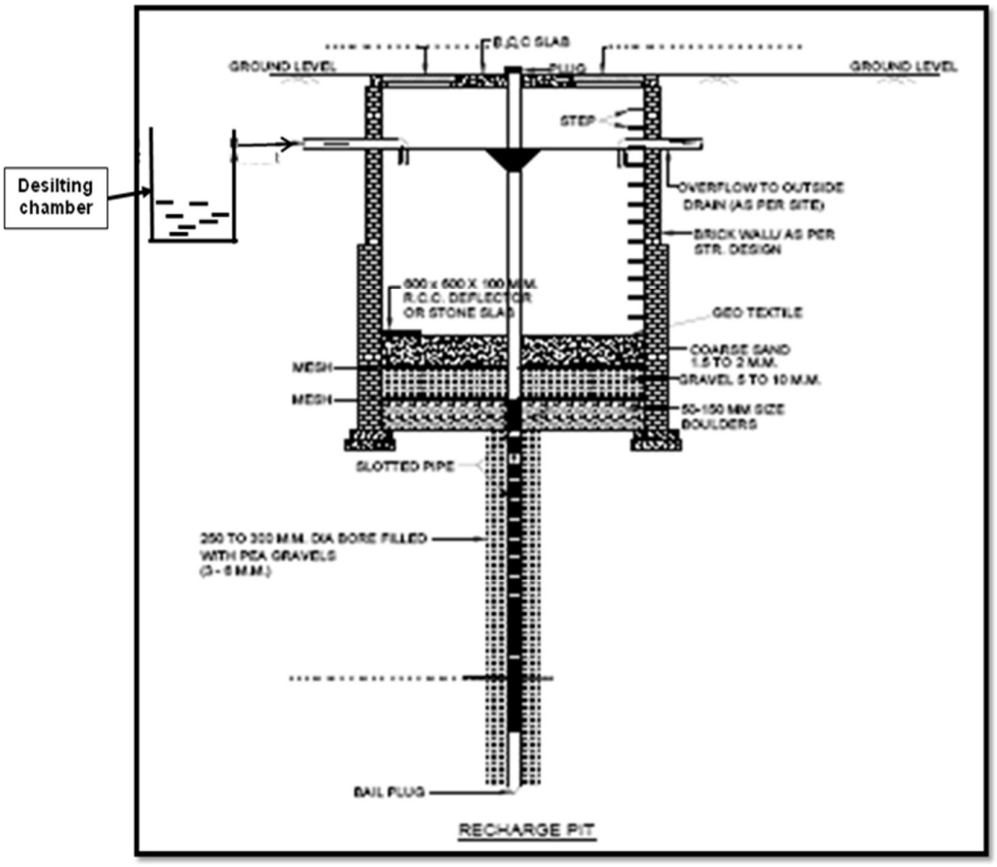
Moving bed biofilm reactor (MBBR) technology will be deployed for the project. The Sewage Treatment Plant shall be designed to receive continuous sewage inflow within the plant room allocated on the site plan. The ease of maintenance and operation is of utmost importance in the design of Sewage Treatment Plant.

The design of the Sewage Treatment Plant shall be such that it can be installed within the allocated space and shall be subjected to the approval of the Construction Manager / Consultant. STP is proposed to use Moving Bed Bio Reactor (MBBR) process with UV for the treatment:

## RAIN WATER HARVESTING

The storm water disposal system for the premises shall be self-sufficient to avoid any collection/stagnation and flooding of water. The amount of storm water run-off depends upon many factors such as intensity and duration of precipitation, characteristics of the tributary area and the time required for such flow to reach the drains. The drains shall be located near the

carriage way along either side of the roads. Taking the advantage of road camber, the rainfall run off from roads shall flow towards the drains. Storm water from various buildings shall be connected to adjacent drain by a pipe through catch basins. Therefore, it has been calculated to provide 2 rainwater harvesting pits at selected locations which will catch the maximum run-off from the area. The pit design is given below:

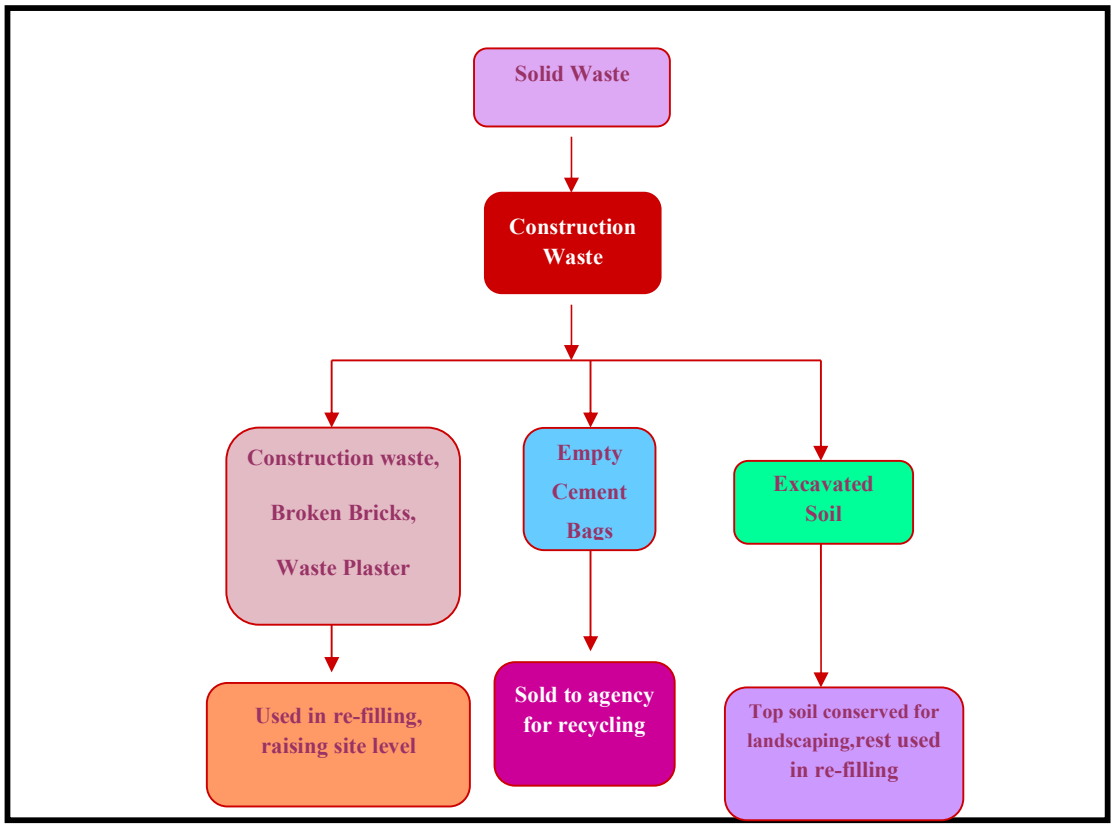



## SOLID WASTE GENERATION

Solid waste will be generated both during the construction as well as the operation phase. The solid waste expected to be generated during the construction phase will comprise of excavated materials, used bags,bricks, concrete, MS rods, tiles, wood etc. The following steps are proposed to be followed for the management of solid waste:

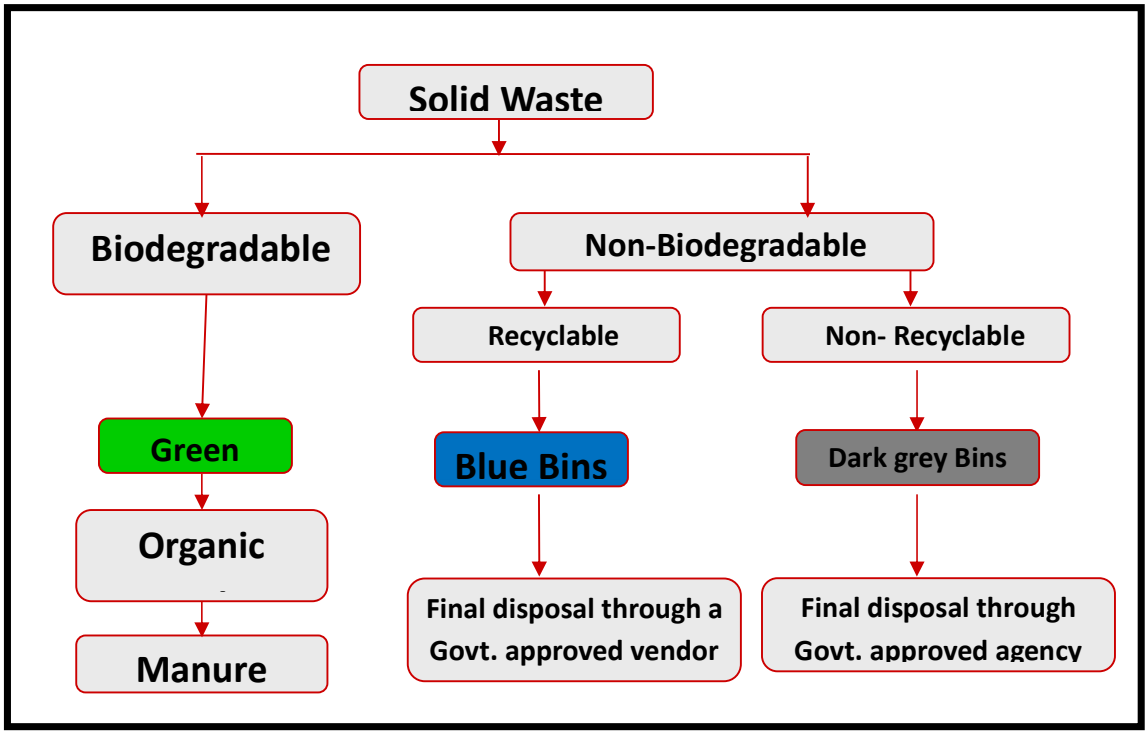
- Construction yards are proposed for storage of construction materials.
- The excavated material such as topsoil and stones will be stacked for reuse during later stages of construction

- Excavated top soil will be stored in temporary constructed soil bank and will be reused for landscaping of the group housing project**.**
- Remaining soil shall be utilized for refilling / road work / rising of site level at locations/ selling to outside agency for construction of roads etc.




**Solid Waste Management Scheme (Construction Phase)**

Waste will consist of domestic as well as gardening waste during the operation phase. The solid waste generated from the complete project including the proposed development shall be mainly domestic waste and estimated quantity of the waste shall be approx. 250 Kg per day (@ 0.5 kg per capita per day. Various arrangements will be made at the site in accordance to Municipal Solid Wastes (Management and Handling) Rules, 2016 as discussed later on.




**Solid Waste Management Scheme (Operation Phase)**

**GREEN AREA**

It is proposed to have 222.58 sq m as green/landscape area (for Shelter belt, for Avenue plantation, for Landscape, herbs, shrubs, water bodies and climbers). Evergreen tall and ornamental trees like *Belonix regia, Polvalthia longfolia, Veronia selowna, Cassia fistula,*etc.will be planted inside the premises.

**PROJECT COST**

The anticipated total cost for the proposed project will be 12559.54 Lacs. This includes land, construction, approvals, etc.

## 4.0 CONCLUSION

The proposed project has been designed in sustainable way to have least impact on environment. The project will have overall positive impact in terms of job opportunities during construction phase and organised Group housing along with better infrastructure development during operation phase. It will also enhance the overall aesthetics of the area.