BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH AT NEW DELHI

APPEAL NO. 48 OF 2025

IN THE MATTER OF:

RAJESH SHARMA **...APPELLANT**

VERSUS

STATE OF HARYANA & ORS. ...**RESPONDENTS**

INDEX

NDOH:26.02.2026

S. No.	PARTICULARS	PAGE NO.
1.	Reply on behalf of Respondent No. 6 & 7 to Appeal No. 48 of 2025 with Affidavit.	**1-50**
2.	**Annexure R-1** A copy of the Board Resolution dated 15.05.2025 authorizing Ms. Anisha Mitra on behalf of Respondent No. 6.	**51-52**
3.	**Annexure R-2** A copy of the Board Resolution dated 15.10.2025 authorizing Mr. Jugal Kishor Prajapati on behalf of Respondent No. 7.	**53**
4.	**Annexure R-3** A copy of the No-Objection Certificate dated 29.02.2024 issued by the Divisional Forest Officer.	**54-56**

5.	**Annexure R-4** A translated copy of the Aravalli NOC dated 30.05.2024 issued in favour of Respondent No. 6 in respect of the subject land at Village Sidhrawali, Tehsil Manesar, District Gurugram, Haryana.	**57-61**
6.	**Annexure R-5** A copy of the license no. 104 of 2024 issued by the Town and Country Planning Department, Haryana.	**62-70**
7.	**Annexure R-6** A copy of the application dated 03.06.2026 for grant of license over land admeasuring 6.06875 acres (in addition to the already existing licensed area measuring 129.66875 acres).	**71-75**
8.	**Annexure R-7** The LOI dated 06.12.2024 issued by the Directorate of Town and Country Planning, Haryana.	**76-80**
9.	**Annexure R-8** A copy of the License No. 38 of 2025 dated 25.03.2025 granted by Department of Town and Country Planning, Haryana, for additional area measuring 6.06875 acres.	**81-85**

10.	**Annexure R-9** A copy of the Conceptual Plan of the proposed project.	**86-110**
11.	**Annexure R-10** A copy of the Standard TOR dated 10.09.2024 bearing File No. SEAC/HR/2024/190 issued by SEAC, Haryana.	**111-115**
12.	**Annexure R-11** A copy of the point-wise compliance of Terms of reference conditions as prepared by Respondent No. 6 in respect of the proposed project.	**116-126**
13.	**Annexure R-12** A copy of the EIA/EMP Report in respect of the proposed project.	**127-292**
14.	**Annexure R-13** A copy of the point wise reply by Respondent No. 6, to the EDS raised w.r.t the proposed project.	**293-325**
15.	**Annexure R-14** A copy of the agenda of 307th meeting of the SEAC, Haryana.	**326-336**
16.	**Annexure R-15** A copy of the agenda of 195th meeting of SEIAA, Haryana under	**337-345**

	the Chairmanship of Shri Pranab Kishore Das.	
17.	**Annexure R-16** A copy of the Policy dated 05.07.2022 regarding Change of Land Use permission for setting up of temporary site office.	**346-349**
18.	**Annexure R-17** A copy of the approval of building plan for temporary site office granted by Department of Town and Country Planning, Haryana vide its memo no. DTP(E)/2023/21001 dated 06.11.2023.	**350**
19.	**Annexure R-18** A copy of the lab reports pertaining to the baseline monitoring conducted by an NABL accredited and MoEF&CC recognized laboratory in respect of the proposed project.	**351-406**
20.	Proof Of Service	**407**

THROUGH

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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

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REPLY TO THE APPEAL ON BEHALF OF THE RESPONDENT NO. 6 &7

MOST RESPECTFULLY SHOWETH:

1. That the present reply is being filed by Respondent No. 6 & 7 (hereinafter referred to as the **"Answering Respondents"**) to the appeal filed by the Appellant, challenging the grant of Environmental Clearance (hereinafter referred to as **"EC"**) dated 19.02.2025 to the Answering Respondents for the development of the Industrial Plotted Colony Project located at Village Sidhrawali, Tehsil Manesar, District Gurugram, Haryana.
2. The present reply is being filed Ms. Anisha Mitra, who is Authorized Representative on behalf of Respondent No. 6, authorized vide Board Resolution dated 15.05.2025, and as such

well-versed with the facts of the case and competent to depose the present reply.

True copy of the Board Resolution dated 15.05.2025 authorizing Ms. Anisha Mitra to depose the present Reply on behalf of the Respondent No. 6 in the present appeal is attached hereto and marked as **Annexure R-1**.

3. Further, the present reply is also being filed by Mr. Jugal Kishor Prajapati, the Authorized Representative on behalf of the Respondent No. 7, authorized vide Board Resolution dated 15.10.2025, and as such well-versed with the facts of the case and competent to depose the present reply.

   True copy of the Board Resolution dated 15.10.2025 authorizing Mr. Jugal Kishor Prajapati to depose the present Reply on behalf of the Respondent No. 7 in present appeal is attached hereto and marked as **Annexure R-2**.

4. The deponents hereinabove have read and understood the contents of the Appeal and have perused the records available in the office of Respondent Nos. 6 & 7 pertaining to the present Appeal, and on the basis of the knowledge gathered from the records, the present Reply is being filed.

5. At the outset the Answering Respondents denies each and every statement and averment made in the Appeal, which is contrary to, and inconsistent with, what is stated herein, except in so far as it is matter of record or what is admitted herein. Nothing may be

deemed to be admitted for want of denial of otherwise unless specifically admitted by the Answering Respondents.

6. The instant Appeal filed by the Appellant is preferred to assail the grant of EC dated 19.02.2025 granted by the State Environment Impact Assessment Authority (SEIAA), Haryana to the Answering Respondents for the development of an Industrial Plotted Colony Project located at Sidhrawali, Tehsil – Manesar, District – Gurugram, Haryana (hereinafter referred to as the **"proposed project")** with a built-up area of approximately 6,36,042.498 sq. mtrs. and a total plot area of 135.7250 acres.

FACTS IN BRIEF

7. The facts necessary for adjudicating the controversy in the matter are as follows:

A. Respondent No. 6 is a company incorporated in the year 2014, operating as the largest real estate development company in the Delhi (NCR) Region, and is engaged in the business of real estate development with a particular focus on affordable and mid-segment housing.

B. Respondent No. 7 is a Limited Liability Partnership firm incorporated in the year 2016. The Proposed Project located at Sidhrawali, Tehsil – Manesar, District – Gurugram, Haryana is being developed by Respondent No. 6 in collaboration with Respondent No. 7, and the said project comprises of residential and industrial plots, under the aegis of Deen Dayal Awas Yojana.

C. Respondent No. 6 had applied for, and was duly granted, a No-Objection certificate dated 29.02.2024 from the Divisional Forest Officer in respect of Haryana Land and Preservation Act, 900 (Punjab Act II of 1900) or Forest or Restricted lands, for land located at Village Sidhrawali, Dist. Gurgaon, and the sanctioned land use whereof was for Residential and Commercial purpose.

True copy of the No-Objection Certificate dated 29.02.2024 issued by the Divisional Forest Officer is attached hereto and marked as **Annexure R-3**.

D. Pursuant to the official report of the Tehsildar, Manesar, dated 09.05.2024, which reviewed the revenue records of the proposed land of Mauja Sidhrawali, Tehsil Manesar, Dist. Gurugram. It was found that the subject land does not fall within the 'Aravalli Region' as per the notification dated 07.05.1992. Further, the record affirms that the subject land has never been under the ownership of any Panchayat or Nagar Palika/Nigam. Accordingly, based on the conditions mentioned therein the report of the Tehsildar, Manesar, it was deemed appropriate to issue Aravalli NOC in respect of the subject land vide letter dated 30.05.2024.

True copy of the Aravalli NOC dated 30.05.2024 issued in favour of Respondent No. 6 in respect of the subject land at Village Sidhrawali, Tehsil Manesar, District Gurugram, Haryana is attached hereto and marked as **Annexure R-4**.

E. The Answering Respondents obtained a license bearing no. 104 of 2024 dated 01.08.2024 for setting up of Industrial Plotted Colony over an area measuring 129.65625 acres in the revenue estate of village Sidhrawali, Tehsil Manesar, Dist. Gurugram from the Town and Country Planning Department, Haryana.

True copy of the license no. 104 of 2024 issued by the Town and Country Planning Department, Haryana is attached hereto and marked as **Annexure R-5**.

F. Thereafter, the Answering Respondents on 03.06.2024 applied for grant of license in respect of the additional land measuring 6.06875 acres, over and above the already licensed land admeasuring 129.66625 acres, for development of the proposed project. Prior to the grant of License No. 38 of 2025 dated 25.03.2025, the Answering Respondents were issued a Letter of Intent (hereinafter referred to as **"LOI"**) dated 06.12.2024, for an additional area of 6.06875 acres in respect of the proposed project. The LOI was issued subject to compliance with the pre-requisites laid down in Rule 11 of the Haryana Development and Regulation of Urban Area Rules, 1976, non-compliance of which would result in revocation of the request for such license.

True copy of the application dated 03.06.2026 for grant of license over land admeasuring 6.06875 acres (in addition to the already existing licensed area measuring 129.66875 acres) by the Answering

Respondents is attached hereto and marked as **Annexure R-6.** The LOI dated 06.12.2024 issued by the Directorate of Town and Country Planning, Haryana, to the Answering Respondents is annexed herewith and marked as **Annexure R-7.**

Pursuant thereto, License No. 38 of 2025 dated 25.03.2025 was granted to the Answering Respondents, by the Town and Country Planning Department, Haryana, in respect of area admeasuring 6.06875 acres, in addition to License No. 104 of 2024, thereby making the total area of the colony 135.725 acres.

True copy of the License No. 38 of 2025 dated 25.03.2025 granted by Department of Town and Country Planning, Haryana, for additional area measuring 6.06875 acres is annexed herewith and marked as **Annexure R-8.**

G. A detailed Conceptual Plan was prepared by Respondent No. 6 in respect of the proposed project. The salient features and technical specifications of the project, as highlighted in the said Conceptual Plan, are tabulated below for the sake of brevity:

S. No.	Particulars	Details
1	Online Proposal Number	SIA/HR/INFRA2/496874/2024
2	Latitude	28° 14′ 46.93′′ N
3	Longitude	76° 49′ 29.40′′ E
4	Plot Area	5,49,258.716 sq. m

5	Net Planned Area	5,26,513.219 sq. m
6	Net Plot Area	5,32,029.859 sq. m
7	Proposed FAR	5,78,220.453 sq. m
8	Non-FAR Area	57,822.045 sq. m
9	Total Built-up Area	6,36,042.498 sq. m
10	Total Green Area	1,05,302.64 sq. m (20% of net plot area); Block plantation: 42,121.05 sq. m (08% of net plot area)
11	Rainwater Harvesting Pits	65 RWH pits (Diameter: 2.5 m; Depth: 4 m)
12	STP Capacity	Total: 3060 KLD (500 KLD + 1410 KLD + 1150 KLD) • STP 1 [For Residential plots (Type 1)]: 500KLD • STP 2 [For Residential plots (Type 2), Community buildings, & Commercial buildings]: 1410 KLD • STP 3 [For Industrial plot]: 1150 KLD
13	Total Parking	For plotted development the parking shall be within the plots by the individual plot owners.
14	Organic Waste Converter	5 × 2000 kg/day
15	Power Requirement	12,883 kW

16	Power Backup	2 no. of DG Set of total capacity: 1100 kVA (commercial facility) + 2 no. of DG Set of total capacity: 1750 kVA (common s services)
17	Total Water Requirement	3,221 KLD
18	Domestic Water Requirement	2,905 KLD • Domestic Water for Residential plots (Type 1) = 458 KLD • Total Domestic Water for Residential plots (Type 2), Community buildings & Commercial Buildings = 1375 KLD • Total Domestic Water for Industrial Plots = 1072 KLD
19	Fresh Water Requirement	1,943 KLD • Fresh Water for Residential plots (Type 1) = 343 KLD • Total Domestic Water for Residential plots (Type 2), Community buildings & Commercial Buildings = 1001 KLD

		• Total Domestic Water for Industrial Plots = 599 KLD
20	Treated Water	2,030 KLD
21	Wastewater Generated	2,516 KLD
22	Solid Waste Generated	18,143 kg/day
23	Biodegradable Waste	10,886 kg/day
24	Dwelling Units / EWS	962
25	R+U Value of Glass	2.67 W/m²°C
26	Total Project Cost	1593.7 Crore
27	EMP Budget (per year)	During Construction phase: Rs. 45.00 lakh (Recurring cost – Rs. 11.25 lakh) • <u>During operation phase:</u> (Capital Cost – Rs. 667.00 lakh; Recurring Cost – Rs. 175.75 lakh) • <u>EMP Budget outside the project Site:</u> For improvement of infrastructure Government School (CER) – Rs. 60.00 lakh • Rs. 25.00 lakh
28	Incremental load in respect of:	PM2.5: PM10: 0.68 µg/m³; SO_2: 0.07 µg/m³; NO_2: 0.66 µg/m³; CO: 0.73 µg/m³

29	Status of Construction	No construction undertaken at project site
30	Construction Phase	Power Back -up: Water requirement & Source: 100 ML & Private water tankers STP (Modular): 1 Anti-Smog Gun: 1

True copy of the Conceptual Plan of the proposed project is annexed herewith and marked as **Annexure R-9**.

H. In furtherance of an application submitted by Respondent No. 6 to the State Level Expert Appraisal Committee (SEAC), Haryana, for the grant of Terms of Reference (hereinafter referred to as **"ToR"**), the SEAC after examining the proposal in accordance with the provisions of the Environment Impact Assessment Notification, 2006 and the amendments thereto, was pleased to grant ToR to the proposed project of the Answering Respondents on 10.09.2024. The said ToR was granted under Category 'B1', Schedule No. 8(b) Townships/ Area Development Projects / Rehabilitation Centres. The grant of ToR was made strictly in conformity with the applicable statutory framework and did not, in any manner, dispense with or substitute other approvals or clearances required under law.

True copy of the Standard TOR dated 10.09.2024 bearing File No. SEAC/HR/2024/190 issued by SEAC, Haryana is attached hereto and marked as **Annexure R-10**.

I. The standard terms of Reference issued by the SEAC Haryana to Answering Respondents for conducting the Environment Impact Assessment study and specifying other particulars to be included in the EIA/EMP report have been duly complied with by the Respondent No. 6 vide its ToR compliance, wherein it categorically furnished the following details regarding the proposed project:

   i. Project details – need and benefits of the project, details of built-up area, project cost;

   ii. Land Environment;

   iii. Land acquisition requirement and details of environmentally sensitive places along with rehabilitation of communities – since there was no human settlement at the site of the proposed project, no rehabilitation of communities/village was required;

   iv. Environmental Monitoring and Management –Baseline data (study conducted during 1st December 2023 to 29th February, 2024) with respect to major environmental components, viz air, noise, water, land, soil, Environmental Management Plan for both construction and operation phase, possible carbon footprint contribution from each activity and proposed mitigation measures;

   v. Drainage;

vi. Details of forest and permission required if any, for conversion of land such as forest, agriculture;

vii. Water environment and Management – comprising details of source of water supply, rainwater harvesting protocols; treatment of wastewater, etc.;

viii. Waste management;

ix. Energy requirements – adequate provision of power supply from the agency responsible for supplying power along with details of alternative sources of energy including solar energy;

x. Road and Traffic; and

xi. Disaster Management Plan

True copy of the point-wise compliance of Terms of reference conditions as prepared by Respondent No. 6 in respect of the proposed project is attached hereto and marked as **Annexure R-11**.

J. On 12.09.2024, an Environmental Impact Assessment & Environment Management Plan Report (EIA/EMP) was submitted by Respondent No. 6 to the SEAC, Haryana for the grant of Environment Clearance. The aforementioned EIA/EMP report delineated an area of 10km radius around the project site for baseline environmental study in relation to ambient air quality, water (surface and ground), noise, soil, land use, ecology and socio-economic conditions. Thereafter, the report identified and evaluated the likely environmental impacts during both the construction and

operational phase of the proposed project. The report further formulated a structured Environment Management Plan for each environmental component including air quality, water environment, solid waste and sewage management, noise attenuation, greenbelt development, disaster management and a continuous environmental monitoring regime. The EIA report thus furnished a comprehensive and parameter wise- outline of all environmental aspects and criteria which formed the very basis for grant of the Standard ToR by SEAC, Haryana, and unequivocally demonstrates the due and regulatory compliant conduct of the Answering Respondents.

K. As per the EIA report, the proposed project was a planned industrial and residential plotted development, conceived to cater to the growing demand of the local population, to augment physical and social infrastructure in the region, and to generate substantial direct and indirect employment, thereby contributing positively to the socioeconomic conditions of the surrounding area/region. All anticipated impacts on air, water, noise, soil and ecology had been assessed including emissions from DG set and traffic. These impacts were proposed to be mitigated through specific budgeted measures such as provision of an inhouse STP of 3,060 KLD for effective treatment of wastewater with complete reuse of treated effluent for flushing and landscaping, installation of rainwater harvesting structures for groundwater recharge, development of a peripheral and avenue greenbelt of approximately 37,241.664 sq. m. with 6,870

trees, acoustic enclosures to minimise noise generation and adequate stack height for DG sets, systematic segregation, composting and authorised disposal of solid waste, as well as a detailed Disaster Management Plan and Environmental Monitoring Programme to be overseen by a dedicated Environmental Management Cell. Accordingly, the EIA/EMP Report demonstrates that potential environmental impacts of the proposed project were duly identified, and Respondent No. 6 had put in place adequate mitigation measures to ensure that the environmental implications of the project remain within the permissible limits, while achieving the intended developmental benefits.

True copy of the EIA/EMP Report in respect of the proposed project is attached hereto and marked as **Annexure R-12**.

L. Further, in relation to the Essential Details Sought (EDS) issued by SEAC, Haryana in respect of the proposed project, Respondent No. 6, on 12.12.2024, submitted a comprehensive, point-wise reply to the queries raised therein, furnishing, inter alia, the following particulars:

- License for 129.65625 acres and LOI for additional 6.06875 acres;
- Electricity Plan;
- Zoning Plan;
- Traffic study – Highlighting vehicular emissions as the major source of air pollutants;

- Parking plan and Fire-fighting Plan;
- Air Simulation Plan proposing adequate mitigation measures like development of a green belt along the premises of the proposed project; and
- Assurance Certificates/NOC from the relevant agencies in respect of power supply, fresh water and treated water supply and construction of sewerage line.

A copy of the point wise reply by Respondent No. 6, to the EDS raised w.r.t the proposed project is attached hereto and marked as **Annexure R-13**.

M. The proposal of the Answering Respondents for the Industrial Plotted Colony at Village Sidhrawali, Tehsil Manesar, District Gurugram, Haryana, bearing Proposal No. SIA/HR/INFRA/2496874/2024 and File No. SEAC/HR/2024/266, was duly placed before the 307th Meeting of the SEAC, Haryana, held on 20.12.2024. During the meeting, as evident from the agenda of the said meeting thereof, the project was taken up for consideration for grant of EC under Category 8(b) (Townships and Area Development Projects/Rehabilitation Centres) and after due deliberation, the committee unanimously found the case to be fit for recommendation to SEIAA for granting EC under EIA Notification, 2006.

True copy of the agenda of 307th meeting of the SEAC, Haryana is attached hereto and marked as **Annexure R-14.**

N. Thereafter, the proposal for EC in respect of the proposed project, by the Answering Respondents, was duly placed before the 195th Meeting of the State Environment Impact Assessment Authority (SEIAA), Haryana, held on 28.01.2025. As per the Agenda of the said meeting, the project registered under Proposal No. SIA/HR/INFRA/2496874/2024 and File No. SEAC/HR/2024/266, was listed for consideration of "Fresh EC" under Activity 8(b), thereby demonstrating that the proposal had successfully traversed the statutory appraisal process and was ripe for grant of EC by SEIAA, Haryana.

True copy of the agenda of 195th meeting of SEIAA, Haryana under the Chairmanship of Shri Pranab Kishore Das, Chairman, SEIAA is attached hereto and marked as **Annexure R-15.**

O. The proposed project bearing proposal no. SIA/HR/INFRA2/49687/2024 after due consideration by SEAC, Haryana in its 307th meeting on 20.12.2024 and by SEIAA, Haryana, in its 195th meeting on 28.01.2025, was granted EC on 19.02.2025 subject to standard and specific conditions. The said EC mandated statutory compliances and prescribed elaborate safeguards related to air and water quality monitoring and preservation including dust mitigation measures, prohibition on use of groundwater during construction, dual plumbing, rainwater harvesting and zero discharge of untreated effluent through storm water drains, noise mitigation and energy conservation norms. Further, the EC stipulated maintenance of adequate green cover, detailed traffic management/decongestion plan

within 05 kms of the project site, compliance with corporate environment responsibility, establishment of Environmental Cell, installation of Anti-Smog Gun and DG sets in accordance with prescribed norms.

PRELIMINARY SUBMISSIONS

8. Before dealing with the submissions of the Appellant on merits of the case in a para wise manner, it is submitted that the Answering Respondents have certain preliminary submissions which are elaborated below:

I. Commencement of construction activity on the project site was permissible prior to the grant of EC

9. At the outset, it is submitted that the construction of the temporary site office was in accordance with the Policy regarding Change of Land Use permission for setting up of temporary site office notified by the Add. Chief Secretary, Govt. of Haryana, Town & Country Planning Department, on 05.07.2022 bearing Memo No. 7/12/2022-2TCP, under section 11 of Punjab Scheduled Roads and Controlled Areas Restricted of Unregulated Development Act, 1963 read with Section 9A of Haryana Development and Regulation of Urban Areas Act, 1975. This policy explicitly categorizes such infrastructure as essential for 'execution of project' and mandates its demolition prior to the grant of the Completion Certificate for the for development of licensed colonies, thereby distinguishing such temporary structures from permanent construction.

True copy of the Policy dated 05.07.2022 regarding Change of Land Use permission for setting up of temporary site office in relation to development of licenced colonies is attached hereto and marked as **Annexure R-16**.

10. Further, the only construction activity undertaken on the subject land prior to the grant of EC, was the construction of a temporary site office. The said construction was carried out strictly in terms of the change of land use permission and approval of building plan for Temporary site office granted by the Department of Town and Country Planning, Haryana vide its memo no. DTP(E)/2023/21001 dated 06.11.2023. Vide the said memo, the CLU permission was sanctioned and the building plan for temporary site office was approved, over an area measuring 0.5 acres in Khasra No. 7/24/1/1 in the revenue estate of Village Sidhrawali, Tehsil Manesar, District Gurugram, being developed by Respondent No. 6, pursuant to License No. 110 of 2021.

    True copy of the approval of building plan for temporary site office granted by Department of Town and Country Planning, Haryana vide its memo no. DTP(E)/2023/21001 dated 06.11.2023 is annexed herewith and marked as **Annexure R-17**.

11. That the preliminary construction of the temporary site office by Respondent No. 6, undertaken prior to the grant of EC, was expressly authorized under valid sanction and permission issued by the competent authority. The said approval for construction of temporary site office was expressly subject to stipulated conditions,

inter alia, demolition and removal of the temporary structure prior to issuance of the Occupation Certificate, adherence with the provisions of the Haryana Building Code, 2017 and MOEF guidelines of 2010, etc. It is respectfully submitted that Ancillary activities, such as limited road construction, land levelling, and establishment of the marketing office, were intrinsically linked to the sanctioned site office operations, for the plotted colony being built by Respondent No. 6 under DDJAY within the Gurugram Manesar Urban Complex under License No. 110 of 2021. These construction activities were limited in scope, and undertaken pursuant to a valid and subsisting permission of the Town and Country Planning Department, Haryana and hence, do not amount to any violation of the Haryana Development and Regulation of Urban Areas Act, 1975 or the EIA Notification, 2006.

II. No Discrepancy in the area covered under the EC and the License granted by DTCP

12. The Answering Respondents were granted Licence No. 104 of 2024 dated 01.08.2024 by the Director, Town and Country Planning Department, Haryana (DTCP), for the development of the proposed project over area measuring 129.65625 acres in the revenue estate of Village Sidhrawali. Subsequently, on 03.06.2024, the Answering Respondents sought license for additional land admeasuring 6.06875 acres, contiguous to the area, already licensed under Licence No. 104 of 2024. Pursuant to the said application, the Directorate of Town and Country Planning, Haryana (DTCP) issued a LOI dated 06.12.2024, for the additional area measuring 6.06875 acres.

Thereafter, License No. 38 of 2025 was granted on 25.03.2025 in respect of the said additional land, thereby augmenting the total licensed area of the proposed project to 135.725 acres.

13. It is respectfully submitted that the EC has been granted strictly and specifically in respect of the total plot area of 135.725 acres, for which valid licenses have been duly obtained by Answering Respondents from the Department of Town and Country Planning, Haryana (DTCP). Therefore, Appellant's contention that the EC appears to have been granted for land area exceeding the legally approved limits, is wholly misconceived and liable to be rejected. Although the additional Licence No. 38 of 2025 was granted after the issuance of EC to the Answering Respondents, the Answering Respondents were already in possession of the LOI dated 06.12.2024 for such additional land admeasuring 6.06875 acres, at the time of the grant of EC. Thus, no discrepancy, as alleged by the Appellant, is established.

14. It is pertinent to note that the Appellant, in the entire appeal, has failed to disclose about the License No. 38 of 2025 dated 25.03.2025 granted in respect of the additional area admeasuring 6.0875 acres. This material fact, which goes to the root of the allegation of alleged unauthorized land use, appears to have been deliberately withheld with an intent to mislead this Hon'ble Tribunal. Such suppression of material facts vitiates the Appellant's case and disentitles him to any relief sought under the present appeal.

III. The potential environmental impact of the proposed project is within permissible limits and not adverse

15. The potential environmental impact of the proposed project has been meticulously evaluated through a detailed Environment Impact Assessment (EIA) study and scientific laboratory analysis, confirming that the project remains within all permissible environmental limits. A comprehensive baseline monitoring across multiple stations during the period of December 2023 to February 2024, conducted by an NABL accredited and MoEF&CC recognized laboratory established the project site's existing environmental status as being well within prescribed limits.

16. In particular, the ambient air quality analysis recorded SO2 levels at 8.2–12.7 µg/m³ (significantly below the 24-hr permissible limit of 80ug/ m³), NO2 at 26.3–50.1 µg/m³ (significantly below the 24-hr permissible limit of 80ug/ m³), and CO at 450–1030 µg/m³ (below 1-hr limit of 4000 µg/m³), all below the National Ambient Air Quality Standards (NAAQs) 2009. Furthermore, the minimum and maximum concentration of PM2.5 were found to be between 59.7-103.7 µg/m3 respectively, while for PM10 it varied between 117.2-183.7 µg/m3. The high concentration of PM2.5 and PM 10 arose due to vehicular emission and nearby construction activities in the area. As part of the Air Pollution Management Plan in respect of the proposed project, adequate and effective mitigation measures have been proposed and implemented to control and minimise dust and air emissions. These measures, inter alia, include regular water

sprinkling at identified dust-prone locations to suppress fugitive dust emissions, use of low-sulphur diesel to reduce SO2 emission and provision of DG sets with an adequate stack height of 30 metres, to ensure proper dispersion of emissions.

17. Insofar as the water environment is concerned, the detailed laboratory analysis revealed the suitability of water for drinking purposes and compliance with water standards promulgated by Indian Standards (IS:10500), with pH levels ranging from 7.88-7.93 (permissible pH range 6.5-8.5) and TDS varying from 1420-1580 mg/L. (permissible range within 200-2000). An in-house Sewage Treatment Plant (STP) with a total capacity of 3060 KLD is proposed to be implemented to ensure effective treatment of effluent and wastewater, to be used for flushing after adequate treatment in STP. To further safeguard water resources, the project includes the installation of 65 rainwater harvesting pits designed as per CGWB guidelines to recharge the ground water, effectively mitigating any potential stress on water availability.

18. Similarly, baseline noise levels monitored across various locations were found to be within the prescribed limits as per Noise Pollution (Regulation & Control) Rules, 2000, with daytime levels ranging from 50.5-63.6 dB(A) and nighttime levels between 42.7-52.9 dB(A). The main sources of noise were identified as arising predominantly from the operation of DG sets and vehicular movement. To effectively address noise impacts, appropriate control measures included installation of acoustic enclosures for DG sets to attenuate

noise levels, use of construction equipment fitted with adequate silencers, enforcement of no-honking zones within the project premises, and development of a green belt within the project area, which will act as a natural barrier for both noise and air pollutants.

19. The soil environment baseline study characterizes the project site as sandy loam textured soil with pH ranging from 7.59 to 7.88, indicative of neutral to mildly alkaline, fertile conditions conducive to vegetation growth. The Answering Respondents propose comprehensive soil conservation methods, involving stripping and stockpiling of topsoil for subsequent reuse in developing a 37,241.66 m^2 greenbelt, comprising of approximately 6,870 native species such as Neem, Arjun, and Peepal, thereby averting erosion, enhancing soil stability, and functioning as a natural carbon sink for carbon emissions.

    True copy of the lab reports pertaining to the baseline monitoring conducted by an NABL accredited and MoEF&CC recognized laboratory in respect of the proposed project is attached hereto and marked as **Annexure R-18.**

20. That the Answering Respondents have formulated and shall implement a comprehensive and robust Environmental Management Plan (EMP), supported by a dedicated capital investment of INR 796 lakhs, providing for effective and systematic mitigation measures to prevent, minimise, and control any potential adverse environmental impacts arising from the proposed project. Through the careful and committed implementation of the said

EMP, any potential environmental impact will be short term, reversible and effectively capable of being mitigated.

IV. The proposed project is likely to result in various socio-economic benefits

21. It is humbly submitted that the proposed project shall yield significant and tangible socio-economic benefits to the local population as well as the surrounding region. The proposed project is expected to generate substantial direct and indirect employment opportunities, thereby contributing significantly to the improvement of the overall socio-economic status of the local community. In particular, the project shall require engagement of skilled, semi-skilled, and unskilled manpower across various stages and allied activities, including transport, logistics, engineering, maintenance, commercial services etc.

22. Additionally, the proposed expansion activity is likely to result in appreciation in land values in the nearby areas, along with ancillary development of the surrounding infrastructure. The project is also expected to act as a catalyst for the development of educational institutions, thereby enhancing the educational standards and opportunities available to the local population.

V. The Appellant has initiated proceedings to delay vital development works

23. The complaints of Appellant before various authorities are frivolous and devoid of merit. In fact, the present appeal has been

filed with a deliberate intent to obstruct a significant developmental project. The EC in respect of the proposed project has been granted to the Answering Respondents, after careful scrutiny and due compliance with the appliable statutory framework.

24. The Answering Respondents maintain full compliance with environmental laws, denies all allegations of procedural or substantive violations, and states that stringent and regular regulatory scrutiny confirms the project's legality. The Appeal lacks factual and legal merit and ought to be dismissed as obstructive and malafide with costs.

PARAWISE REPLY

25. Considering the brief facts as enumerated above and the preliminary objections to the Appeal, the Answering Respondents now seek to respond to the Appeal in a para-wise manner.

26. With respect to Synopsis and List of Dates, the same are denied in entirety. It is submitted that the allegations therein are vague, unsubstantiated and made solely to harass the Answering Respondents, and do not disclose how the grant of EC has aggrieved the Appellant herein which is a sine non qua of initiating an Appeal under Section 16 of the NGT Act, 2010. There is no impermissible construction prior to the grant of EC. Moreover, application for grant of EC is bona fide and permissible under the EIA Notification, 2006, and nothing has been brought on record to indicate otherwise. The Answering Respondents have all necessary

and relevant permissions and approval prior to undertaking activities which require prior permissions under the law. The proposal of the Answering Respondents for grant of EC in respect of the proposed project has undergone meticulous scrutiny and the EC has been granted strictly in accordance with the applicable statutory procedure and in adherence of environmental laws.

27. With respect to Para I and II of the Appeal, the same being formal in nature does not warrant any response.

28. With respect to Para III of the Appeal, it is submitted that the EC is granted to the proposed project in compliance with the principles of environmental law including the precautionary principle, and in adherence to the EIA Notification, 2006. It is denied that there is any violation, as alleged or otherwise.

29. The contents of Para IV of the Appeal are denied in entirety.

30. With respect to Para V of the Appeal, it is submitted that the EC was granted after due compliance and diligence. It is vehemently denied that any illegal construction commenced prior to the grant of EC. The only construction that the Respondent No. 6 undertook on the subject land prior to the grant of EC, was of a temporary site office for a project being developed under License No. 110 of 2021. The construction of temporary site office was strictly in accordance with and pursuant to, the approvals duly granted by the Department of Town and Country Planning, Haryana. Accordingly, the said construction was lawful, and authorized, and cannot, by

any stretch of imagination, be construed as illegal construction or as construction commenced prior to the grant of EC. The allegation regarding the neglect of MoEF&CC directives is denied. It is reiterated that there is no discrepancy between the area covered under the EC and the area licensed by the Department of Town and Country Planning (DTCP), Haryana. The Appellant has deliberately withheld the material fact that Answering Respondents have duly applied for and obtained a license for additional land admeasuring 6.06875 acres, over and above the land already covered under License No. 104 of 2024. The license for the additional area was granted by the competent authority vide License No. 38 of 2025 dated 25.03.2025. Accordingly, the EC has been granted strictly and precisely in respect of the total land area for which valid licenses have been obtained by the Answering Respondents from the DTCP, Haryana. In view of the above, the allegation of any discrepancy between the EC and the licensed area is wholly erroneous, misconceived, and devoid of any merit.

In respect of allegations regarding operation of DG sets without NOC, EC or CTE, it is submitted that the DG sets were merely kept at the project site and were never made operational. Additionally, the requisite number of anti-smog machines have been installed at the project site. It is further denied that there was any non-disclosure of the total project cost in the EC. The assertion made by the Appellant in this regard is incorrect and misleading. The total project cost has been duly disclosed by the Answering Respondents

in various documents before the concerned authorities, including the conceptual plan, ToR compliance, EIA report, etc.

31. With respect to Para 1 and 2 of the Appeal, the same being a matter of record warrants no specific reply.

32. At the outset each and every averment contained in facts in brief is denied except wherein it is explicitly admitted, and nothing shall be deemed to be admitted merely because of non-traverse.

32.1 With respect to Para 1 of facts in brief of the present appeal, it is denied that the EC dated 19.02.2025 is bad in law and has been granted without proper application of mind by SEIAA, Haryana. It is respectfully submitted that the proposal of the Answering Respondents for the Industrial Plotted Colony at Village Sidhrawali, Tehsil Manesar, Dist. Gurugram was duly placed before and carefully considered by the SEAC, Haryana in its 307th Meeting held on 20.12.2024. Thereafter, which the said proposal underwent a detailed and independent evaluation by SEIAA Haryana. This demonstrates that EC in respect of the proposed project was granted only after a rigorous statutory appraisal process in accordance with the prescribed procedure and was not granted mechanically or without due application of mind by SEIAA Haryana.

32.2 With respect to Para 2 of the facts in brief of the present appeal, it is submitted that the EC is granted to the project in compliance with the principles of environmental law including the

precautionary principle and in adherence to the EIA Notification, 2006. It is denied that there is any violation, as alleged or otherwise.

32.3 With respect to Para 3 of the facts in brief of the present appeal, the contents of the same being a matter of record are not being denied.

32.4 With respect to Para 4 of the facts in brief of the present appeal, it is reiterated that no illegal construction commenced prior to the grant of EC. The only construction that the Respondent No. 6 undertook on the subject land prior to the grant of EC, was of a temporary site office for a project being developed under License No. 110 of 2021. The construction of temporary site office was strictly in accordance with and pursuant to, the approvals duly granted by the Department of Town and Country Planning, Haryana. Accordingly, the said construction was lawful, and authorized, and cannot, by any stretch of imagination, be construed as illegal construction or as construction commenced prior to the grant of EC. The GPS photos taken by the Appellant on 04.08.2025 attached to the Appeal as ***Annexure C-2,*** do not disclose any impressible construction activity being undertaken on the subject land. Annexure C-2 at *Page 86* contains the photograph of temporary sales/site office constructed by Respondent No. 6 in connection with a project being developed under License No. 110 of 2021, for which due approval was accorded by the Department of Town & Country Planning, Haryana vide its memo dated 06.11.2023. The images on *Page 97* merely show the presence of

gensets on site and not that the same were operational. No inference regarding operational status of the gensets can be drawn from the said photograph relied upon by the Appellant. Furthermore, ancillary activities, such as limited road construction at *Page 98*, land
levelling, and establishment of the marketing office, were incidental to and intrinsically linked to the sanctioned site office operations and were carried out strictly within the scope of the permissions granted. Accordingly, the said activities cannot be construed as unauthorised/illegal construction.

32.5 The contents of Para 5 & 6 of the facts in brief of the present appeal are denied. It is submitted that there has been no violation at the project site, as alleged by the Appellant. The complaint purportedly made by the Appellant before the MoEFCC about the alleged illegal construction by the Answering Respondents is ex-facie an attempt to harass the Answering Respondents and to obstruct and hinder a major developmental work.

32.6 With respect to Para 7 of the facts in brief of the present appeal, the same being a matter of record do not warrant a comment.

32.7 With respect to Para 8 & 9 of the facts in brief of the present appeal, the same are denied for want of knowledge.

32.8 The contents of Para 10 of the facts in brief of the present appeal are denied. It is submitted that Annexure A-9, annexed by the Appellant at page 113 of the Appeal and purported to be a screenshot of a proposal application dated 11.12.2024, is unclear and

illegible. The said annexure does not conclusively establish, or even prima facie demonstrates, that the alleged screenshot from the PARIVESH portal pertains to or belongs to Respondent No. 6. Consequently, no reliance can be placed on the said document.

32.9 With respect to Para 11 of the facts in brief of the present appeal, the same being a matter of record do not warrant a comment.

32.10 With respect to Para 12 of the facts in brief of the present appeal, the same are denied for want of knowledge.

32.11 With respect to Para 13 of the facts in brief of the present appeal, it is submitted that prior to the institution of the present appeal before this Hon'ble Tribunal, the Appellant had filed a suit for declaration and mandatory injunction before the Ld. Civil Judge, Gurugram. The Answering Respondents herein had filed an application for rejection of plaint and the Appellant herein kept seeking time to file a response to the said application and thereafter on 22.09.2025, the Appellant withdrew the said suit with the liberty to approach an appropriate forum. It is stated that the during the pendency of the said Civil Suit the Appellant had filed this Appeal before this Ld. Tribunal with an intention to forum shop.

32.12 With respect to Para 14 of the facts in brief of the present appeal, the same being a matter of record do not warrant a comment.

32.13 With respect to Para 15 of the facts in brief of the present appeal, the same are denied for the want of knowledge. It is

submitted that the directive letters issued by MoEFCC, which mandated site inspections and detailed investigation, were not issued to the Answering Respondents and thus, no compliance was required on their part with respect to such directions. Further, state authorities have acted in accordance with law. The appraisal of the project by the SEAC and the subsequent grant of EC by the SEIAA is a rigorous process consisting of detailed deliberation and investigation. Therefore, the allegation that state officials shielded the project proponent is evidently defamatory and made without any evidentiary backing by the Appellant. In the absence of a specific finding of violation by the competent authority, the Appellant cannot presume the existence of illegalities.

32.14 With respect to Para 16 of the facts in brief of the present appeal, it is submitted that the EC granted to the Answering Respondents was the culmination of a rigorous, multi-tiered appraisal mechanism comprising of systematic and exhaustive technical evaluation by both SEAC and SEIAA, Haryana. The SEAC, constituted of domain experts conducted a comprehensive technical appraisal of the Detailed EIA-EMP Report, examining inter alia: (i) baseline environmental conditions across air, water, noise, soil, and biological domains; (ii) project design and technical specifications; (iii) predicted environmental impacts; and (iv) proposed mitigation and management measures. The SEAC, upon satisfaction that the project, subject to prescribed mitigation conditions, would not result in adverse environmental impacts,

forwarded its positive recommendation to the SEIAA. Thereafter, the SEIAA conducted an independent appraisal of the project documentation, and upon thorough examination of the proposed project, proceeded to grant the EC on 19.02.2025.

The fact that the EC was granted despite complaints having been made before multiple forums, including the MoEF&CC, clearly demonstrates that the competent authority did not find any substance in the said complaints. This, in turn, reflects the authorities' due satisfaction of the project's compliance with environmental norms, and their confidence in its environmental viability and sustainability.

32.15 With respect to Para 17 of the facts in brief of the present appeal, it is vehemently denied that the Respondent No. 6 commenced construction activities without securing the requisite approvals, or that the approvals granted were "post-facto" in nature to legitimize unauthorized development. It is respectfully submitted that no illegal construction commenced prior to the grant of EC. The only construction that the Respondent No. 6 undertook on the subject land prior to the grant of EC, was of a temporary site office for a project being developed under License No. 110 of 2021. The construction of temporary site office was strictly in accordance with and pursuant to the approvals duly granted by the Department of Town and Country Planning, Haryana. Accordingly, the said construction was lawful, and authorized, and cannot, by

any stretch of imagination, be construed as illegal construction or as construction commenced prior to the grant of EC.

Any allegation of post-facto regularization is completely denied. It is reiterated that the EC dated 19.02.2025 was granted following due appraisal of the proposed project by both SEAC and SEIAA Haryana. The Supreme Court rulings on mandatory prior EC before commencing any activity do not apply to the facts of the present case as permitted preliminary works like construction of a temporary site office under prior license do not trigger EIA violations.

32.16 With respect to Para 18 of the facts in brief of the present appeal, it is submitted that there is no discrepancy between the area covered under the EC and the area licensed by the Department of Town and Country Planning (DTCP), Haryana. The Appellant has deliberately withheld the material fact that the Answering Respondents have duly applied for and obtained a license for additional land admeasuring 6.06875 acres, over and above the land already covered under License No. 104 of 2024. The said additional license was granted by the competent authority vide License No. 38 of 2025 dated 25.03.2025. Accordingly, the EC has been granted strictly and precisely in respect of the total land area for which valid licenses have been obtained by the Answering Respondents from the DTCP, Haryana. In view of the above, the allegation of any discrepancy between the EC and the licensed area is wholly erroneous, misconceived, and devoid of any merit.

32.17 With respect to Para 19 of the facts in brief of the present appeal, it is denied that there has been any under-reporting of required dust mitigation measures. It is further denied that SEIAA Haryana failed to conduct proper due diligence in assessing and verifying dust mitigation measures particularly regarding the deployment of anti-smog guns in respect of the proposed project. It is submitted that the required no. of anti-smog guns as mandated have been implemented at the project site. There are at present more than 4 anti-smog gun machines at the project site. Proper measures including appropriate number of anti-smog guns have been deployed based on the size of the construction site, in due compliance of the guidelines set forth by the Commission for Air Quality Management (CAQM) and the Haryana State Pollution Control Board. It is denied that there has been any oversight or lapse on part of SEIAA, Haryana in ensuring compliance with dust mitigation measures in respect of the proposed project.

32.18 With respect to Para 20 of the facts in brief of the present appeal, it is specifically denied that SEIAA Haryana failed to assess power backup/DG Sets requirement in construction phase, especially in respect of the potential environmental and health impacts associated with the operation of such equipment. The Answering Respondents have, in fact, submitted a detailed EIA report wherein the deployment of DG sets during both the construction and operation phases of the proposed project was expressly contemplated only as an emergency power back-up

arrangement. In this regard, provision has been made for 2no. of DG set of total capacity 1100 kVA for Commercial Facility and 2no. of DG set of total capacity 1750 kVA for Common Services, solely for power backup purposes. The project proponents, being fully conscious of the potential environmental and health implications of DG set operation, have proposed adequate mitigation measures, including restricted operation only during power failure and the use of low Sulphur diesel to minimize the resultant SO_2 emissions.

It is further denied that project proponents initiated the operation of DG sets without obtaining the necessary approvals, including the NOC from Haryana State Pollution Control Board, prior EC and Consent to Establish (CTE). It is submitted that the DG sets were merely kept at the project site and were never made operational. In the absence of any commissioning or actual operation of the DG sets, no question of unauthorized use or operation arises.

32.19 With respect to Para 21 of the facts in brief of the present appeal, it is denied that the EC granted by the SEIAA, Haryana, is deficient in a material aspect, namely the failure to disclose the total project cost in EC. The assertion made by the Appellant in this regard is incorrect and misleading. The total project cost was duly and specifically disclosed in the application submitted by the Project Proponent.

32.20 With respect to Para 22 of the facts in brief of the present appeal, it is denied that the construction activities undertaken by

the Project Proponent before obtaining prior environment clearance is in violation to the EIA Notification, 2006.

32.21 The contents of Para 23 of the facts in brief of the present appeal are denied in entirety.

32.22 With respect to Para 24 of the facts in brief of the present appeal, it is humbly submitted that contrary to the Appellant's restrictive assertion that prior to the grant of EC, only fencing of the site or construction of a temporary shed for guard(s) could be undertaken on the basis of the OM dated 29.03.2022 issued by the MoEF&CC. However, Paragraph 3(ii) of the OM expressly authorizes the construction of temporary sheds using prefabricated/modular structure, for site office/guards and storing material and machinery, along with the provision of temporary electricity and water supply for such facilities. The Appellant's contention that "civil construction" is entirely prohibited is thus an incorrect interpretation as the OM clearly permits construction of temporary structures like site office for project management. It is further submitted that the construction of the temporary site office was duly approved and was being carried out in accordance with the Policy regarding Change of Land Use permission for setting up of temporary site office in relation to development of licensed colonies bearing Memo No. 7/12/2022-2TCP dated 05.07.2022.

In the instant case, the activities undertaken on the subject land prior to the grant of the EC dated 19.02.2025 were limited exclusively to the construction of a temporary site office, an activity

squarely permissible under the aforesaid OM. Furthermore, the construction of the temporary site office has been executed pursuant to a valid approval granted by the Department of Town and Country Planning, Haryana, vide Memo No. DTP(E)/2023/21001 dated 06.11.2023. This approval sanctioned the temporary site office over an area of 0.5 acres, subject to strict stipulations, including the mandatory demolition and removal of the structure prior to the issuance of the Occupation Certificate. Consequently, the Appellant's allegation that the Respondent commenced construction activities without requisite approvals, or that the subsequent approvals were post-facto attempts to regularize illegalities, is wholly misconceived and denied.

32.23 The contents of Para 25 & 26 of the facts in brief of the present appeal are denied to the extent they seek to imply any irregularity or non-compliance on the part of Answering Respondents. It is submitted that construction of the temporary site office, based on the approval dated 06.11.2023, was undertaken only after the receipt of the CTE. With respect to the issuance of CTE dated 19.03.2023 to the project proponent by RO South Gurugram HSPCB, it is stated that the project proponent had duly applied for the same through the online portal and upon submission such request was automatically assigned to the concerned RO. The assignment of request to a particular RO is a matter of internal administration, in which the project proponent has no role or control whatsoever.

32.24 With respect to Para 27 of the facts in brief of the present appeal, it is submitted that the self-serving averments regarding the Appellant's incessant efforts and zeal are denied for want of knowledge. As regards the Appellant's assertion pertaining to purported videos allegedly depicting ongoing construction activity at the project site prior to the grant of EC, the same is specifically denied, and the Appellant is put to strict proof thereof. It is submitted that, without prejudice and even assuming that any activity is depicted in the alleged videos, it is strictly limited to the construction of a temporary site office, which was executed under a valid CLU permission and building plan approval for temporary site office granted by the Department of Town and Country Planning, Haryana, vide Memo No. DTP(E)/2023/21001 dated 06.11.2023.

33. Th e grounds as alleged by the Appellant in the present appeal are completely denied.

33.1 With respect to Para A of the grounds of the present appeal, it is denied that the EC dated 19.02.2025 is bad in law and granted by SEIAA, Haryana without proper application mind by SEIAA.

33.2 With respect to Para B of the grounds of the present appeal, it is most respectfully submitted that the allegation of pre-EC construction under Category B1, 8(b) of EIA Notification, 2006 is denied. It is further denied that the Appraisal committee failed to scrutinize the fact that the project proponent has started the

construction activities on the project site before obtaining the Environmental clearance and thereafter granted the EC.

33.3 With respect to Para C of the grounds of the present appeal, the contents of the corresponding paragraph are denied as being legally misconceived and factually inapplicable to the present case. It is respectfully submitted that the Appellant's reliance on the judgments in ***Aashish Sardana v. Union of India*** **and** ***Ajay Jayvantrao Bhosale v. Union of India*** is entirely misplaced and clearly distinguishable on facts.

33.4 With respect to Para D, E & F of the grounds of the present appeal, the contents of the corresponding paragraph are denied as being factually inapplicable to the present case.

33.5 With respect to Para G of the grounds of the present appeal, it is submitted that the only construction undertaken by the Respondent No. 6 on the subject land is temporary in nature pursuant to a valid approval granted by the competent authority under License No. 110 of 2021. Therefore, there is no clear violation of EIA Notification, 2006.

33.6 The contents of Para H of the grounds of the present appeal are vehemently denied.

33.7 With respect to Para I of the grounds of the present appeal, it is submitted that unlike the cited precedent where approval was granted without adequate reasoning or discussion, the EC in the present case was granted after a rigorous, multi-stage appraisal

process strictly in accordance with the EIA Notification, 2006. The grant of EC on 19.02.2025 was thus a culmination of exhaustive evaluation by both SEAC and SEIAA, Haryana.

33.8 With respect to Para J of the grounds of the present appeal, it is denied that the Appraisal committee failed to scrutinize the fact that the project proponent has started the construction activities on the project site before obtaining the Environmental clearance and thereafter granted the EC.

33.9 With respect to Para K of the grounds of the present appeal, the contents of Para 30.3 of the present reply are reiterated.

33.10 With respect to Para L, M & N of the grounds of the present appeal, the contents of Para 30.4 of the present reply are reiterated.

33.11 With respect to Para O of the grounds of the present appeal, the contents of Para 30.5 of the present reply are reiterated.

30.12 With respect to Para P of the grounds of the present appeal, the contents of Para 30.5 of the present reply are reiterated.

33.13 With respect to Para Q of the grounds of the present appeal, the contents of the same warrants no specific reply and the same are denied in entirety.

33.14 With respect to Para R of the grounds of the present appeal, it is reiterated that there is no discrepancy between the area covered under the EC and the area licensed by the Department of Town and Country Planning (DTCP), Haryana. The Appellant has deliberately withheld the material fact that the Answering Respondents have

duly applied for and obtained a license for additional land admeasuring 6.06875 acres, over and above the land already covered under License No. 104 of 2024. The said additional license was granted by the competent authority vide License No. 38 of 2025 dated 25.03.2025. Accordingly, the EC has been granted strictly and precisely in respect of the total land area for which valid licenses have been obtained by the Answering Respondents from the DTCP, Haryana. In view of the above, the allegation of any discrepancy between the EC and the licensed area is wholly erroneous, misconceived, and devoid of any merit.

33.15 With respect to Para S of the grounds of the present appeal, it is submitted that the only construction that the Respondent No. 6 undertook on the subject land prior to the grant of EC, was of a temporary site office for a project being developed under License No. 110 of 2021. The construction of temporary site office was strictly in accordance with and pursuant to, the approval duly granted by the Department of Town and Country Planning, Haryana. Accordingly, the said construction was lawful, and authorized, and cannot, by any stretch of imagination, be construed as illegal construction or in violation of the Haryana Development and Regulation of Urban Areas Act, 1975.

33.16 With respect to Para T of the grounds of the present appeal, it is specifically denied that SEIAA Haryana failed to assess power backup/DG Sets requirement in construction phase, especially in respect of the potential environmental and health impacts

associated with the operation of such equipment. The Answering Respondents have, in fact, submitted a detailed EIA report wherein the deployment of DG sets during both the construction and operation phases of the proposed project was expressly contemplated only as an emergency power back-up arrangement.

It is further denied that project proponent initiated the operation of DG sets without obtaining the necessary approvals, including the NOC from Haryana State Pollution Control Board, prior EC and Consent to Establish (CTE). It is submitted that the DG sets were merely kept at the project site and were never made operational. In the absence of any commissioning or actual operation of the DG sets, no question of unauthorized use or violation arises.

33.17 With respect to Para U & V of the grounds of the present appeal, it is denied that there has been any under-reporting of required dust mitigation measures. It is further denied that SEIAA Haryana failed to conduct proper due diligence in assessing and verifying dust mitigation measures particularly regarding the deployment of anti-smog guns in respect of the proposed project. It is submitted that the required no. of anti-smog guns as mandated have been implemented at the project site. There are at present more than 4 anti-smog gun machines at the project site. Proper measures including appropriate number of anti-smog guns have been deployed based on the size of the construction site, in due compliance of the guidelines set forth by the Commission for Air Quality Management (CAQM) and the Haryana State Pollution

Control Board. It is denied that there has been any oversight or lapse on part of SEIAA, Haryana in ensuring compliance with dust mitigation measures in respect of the proposed project.

33.18 With respect to Para W & X of the grounds of the present appeal, it is denied that the EC failed to disclose the total project cost as required under the standard format for ECs. The assertion made by the Appellant in this regard is incorrect and misleading. The total project cost was duly and specifically disclosed in the application submitted by the Project Proponent.

34. The Appellant has filed the instant application beyond the period of limitation under Section 16 of the NGT Act, 2010, and has filed a separate application seeking condonation of delay along with the Appeal. The delay has been condoned by this Hon'ble Tribunal vide Order dated 01.12.2025.

35. In light of the foregoing submissions, it is most respectfully prayed that this Hon'ble Tribunal may be pleased to:

A. Dismiss the present Appeal preferred under Section 16 of the National Green Tribunal Act, 2010, as being devoid of merit;

B. Award costs in favour of the Answering Respondents; and

C. Pass such further or other orders as this Hon'ble Tribunal may deem just and proper in the facts and circumstances of the present case.

RESPONDENT NO. 6

THROUGH

PALLAV MONGIA
ADVOCATE-ON-RECORD
C-70, 2nd FLOOR, NIZAMUDDIN EAST
NEW DELHI - 110013

VERIFICATION

I, Anisha Mitra, W/o Mehul Choudhry having office at 2nd Floor, Tower A, Signature Towers, Sector 30, Gurugram, Haryana do hereby verify that the contents of paragraph 1 to 35 are true to my personal knowledge and belief and nothing material has been concealed therefrom.

RESPONDENT NO. 6

NOTARY
Mahender S. Punia
Gurugram
Regn. No. 3999
GOVT. OF INDIA

For Sungold Heights and Developers LLP

Auth. Signatory

RESPONDENT NO. 7

THROUGH

PALLAV MONGIA

ADVOCATE-ON-RECORD

C-70, 2nd FLOOR, NIZAMUDDIN EAST

NEW DELHI – 110013

VERIFICATION

I, Jugal Kishor Prajapati, aged 24 years, S/o Sh. Dayaram having Office at 609A, International Trade Tower, Nehru Place, New Delhi – 110019, do hereby verify that the contents of paragraph 1 to 35 are true to my personal knowledge and belief and nothing material has been concealed therefrom.

For Sungold Heights and Developers LLP

Auth. Signatory

RESPONDENT NO. 7

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH AT NEW DELHI

APPEAL No. 48 OF 2025

IN THE MATTER OF:

RAJESH SHARMA ...APPELLANT

VERSUS

STATE OF HARYANA & ORS. ...RESPONDENTS

AFFIDAVIT

I, Anisha Mitra, aged 35 years W/o Mehul Choudhary having my office at 2nd Floor, Tower-A, Signature Towers, South City-1, Gurugram, Haryana 122001, Authorized Representative of the Respondent No. 6 Company, do hereby solemnly affirm and state as follows:

1. I am the Authorized Signatory on behalf of the Respondent No. 6 authorized vide a Board Resolution dated 15.05.2025, and as such well-versed with the facts of the case and competent to depose the present Affidavit.

2. The contents of the accompanying Reply have been drafted by my counsel on the basis of instructions and documents furnished by me, which I affirm to be true and correct to the best of my knowledge and belief. The legal averments and submissions contained therein have been made under the advice of my counsel, which I believe to be accurate and appropriate.

NOTARY
Mahender S. Punia
Gurugram
Regn. No. 3999
GOVT. OF INDIA

3. The Annexures to the accompanying Reply are true copies of the original.

4. The contents of the accompanying Reply are true and correct and nothing material has been concealed therefrom.

DEPONENT

VERIFICATION

I, the deponent hereinabove, do hereby verify that the contents of the present affidavit from paragraph 1 to 4 are true and correct to my knowledge and belief and nothing material has been concealed therefrom.

Verified at Gurugram on this 19 day of January 2026.

DEPONENT

NOTARY
Mahender S. Punia
Gurugram
Regn. No. 3999
GOVT. OF INDIA

ATTESTED
MAHENDER S. PUNIA
ADVOCATE & NOTARY
Distt. Gurugram (Haryana) India
19 JAN 2026

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH AT NEW DELHI

APPEAL No. 48 OF 2025

IN THE MATTER OF:

RAJESH SHARMA ...APPELLANT

VERSUS

STATE OF HARYANA & Ors. ...RESPONDENTS

AFFIDAVIT

I, Jugal Kishor Prajapati, aged 24 years, S/o Sh. Dayaram having Office at 609A, International Trade Tower, Nehru Place, New Delhi – 110019, Authorised Signatory of Respondent No. 7 Company, presently at Gurugram, Haryana, do hereby solemnly affirm and state as follows:

1. I am the Authorized Signatory on behalf of Respondent No. 7 authorized vide a Board Resolution dated 15.10.2025, and as such well-versed with the facts of the case and competent to depose the present Affidavit.

2. The contents of the accompanying Reply have been drafted by my counsel on the basis of instructions and documents furnished by me, which I affirm to be true and correct to the best of my knowledge and belief. The legal averments and submissions contained therein have been made under the advice of my counsel, which I believe to be accurate and appropriate.

NOTARY
Mahender S. Punia
Gurugram
Regn. No. 3999
Comm. Exp.
17-04-2027
GOVT. OF INDIA

For Sungold Heights and Developers LLP
Auth. Signatory

3. The Annexures to the accompanying Reply are true copies of the original.

4. The contents of the accompanying Reply are true and correct and nothing material has been concealed therefrom.

For Sungold Heights and Developers LLP

Auth. Signatory

DEPONENT

VERIFICATION

I, the deponent hereinabove, do hereby verify that the contents of the present affidavit from paragraph 1 to 4 are true and correct to my knowledge and belief and nothing material has been concealed therefrom.

Verified at Gurugram on this 21st day of January 2026.

For Sungold Heights and Developers LLP

Auth. Signatory

DEPONENT

NOTARY
Mahender S. Punia
Gurugram
Regn. No. 3999
Comm. Exp.
17-04-2027
GOVT. OF INDIA

ATTESTED
MAHENDER S. PUNIA
ADVOCATE & NOTARY
Distt. Gurugram (Haryana) India
21 JAN 2026

SIGNATURE GLOBAL
REALTY. RELIABILITY. RESPONSIBILITY.
AN ISO 9001:2015; 14001:2015; 45001:2010; 27001:2022 CERTIFIED COMPANY

Annexure R-1

CERTIFIED TRUE COPY OF THE RESOLUTION PASSED AT THE MEETING OF THE BOARD OF DIRECTORS OF SIGNATUREGLOBAL (INDIA) LIMITED HELD ON THURSDAY, 15TH MAY, 2025

AUTHORISATION TO REPRESENT ON BEHALF OF THE COMPANY BEFORE JUDICIAL/NON-JUDICIAL BODY AND OTHER AUTHORITIES

"Resolved that in supersession to the earlier resolution passed by Board of Directors in its meeting held on 7th January, 2025, Mr. Vineet Maheshwari (PAN: AFXPM9686C). Authorised Person, Mr. Siddhartha Kapoor (PAN: BGQPK3764C), Assistant Vice President- Legal, Mr. Vedant Batra (PAN: CRXPB0736L), Assistant General Manager- Legal, Ms. Niyati Malik (PAN: DCWPM2166J) Manager, Ms. Kriti Khokhar (PAN: EFDPK8223M), Senior Executive-Legal, Ms. Anisha Mitra (PAN: BLHPM6646M), Authorised Person, Mr. Amaijeet Singh (PAN: DINPS1845H), Assistant Manager, Mr. Kapil Bakshi (PAN: CRGPB4765E), Authorised Person and Ms. Mansi Pahel (PAN: ETAPP7205M), Authorised Person of the Company (hereinafter referred as the Authorised Representatives), be and are hereby severally authorized and empowered to do the following acts, deeds and things for and on behalf of the Company:

To appear and represent the Company before any court of Law/Quasi-Judicial Body(ies)/Statutory Authority(ies)/ Forum(s), Comraission(s), Tribunals, Police Authority(ies) etc. including but not limited to District Court(s), Consumer Commision(s), Real Estate Regulatory Authority(ies), Tribunal(s), High Court(s), Supreme Court in any and all proceedings whether civil and/or criminal and/or revenue etc, and to make statement for and on behalf of the Company and to sign, verify, execute, affirm and present plaints, complaints, petitions, affidavits, applications, objections, replies, review, revision, appeal, and Vakalatnama and/or any other papers, or other petitions, to inspect the file and take notes and apply and receive certified copy thereof, to engage advocate(s) /law professionals/consultants for the purposes, if required, to adduce evidence, to give statement and enter into compromise, accept the payment, withdraw the suit, to admit or deny any document, to receive and hand over the document, to apply for transfer of case from one court to another court as may be deemed necessary, and to file the same before the appropriate Court and to appear and represent the Company and seek refund, if any, and to file and take back documents and papers from the court and to bring, prosecute, defend all action, suits claims, complaints, demands, and proceedings in respect of or affecting the cases(s), and for that purpose to appear and act for and on behalf of the Company.

Resolved further that the aforesaid Authorised Representatives of the Company be and are hereby severally authorized and empowered to sign and execute settlement deeds with customers / allottees, file complaints or submit replies to complaints/ show cause notices or to make other communication with DTCP Department and to represent and appear before them on behalf of the Company.

Resolved that any act, deed or thing done by any of the aforesaid Authorised Representatives of the Company for and on behalf of the Company and in the manner aforesaid shall be deemed as has been done by the Company and shall be binding on the Company.

Resolved further that the dfuiesakl Authorised Representatives of the Company shall ensure the strict confidentially of the information in their possession or brought to their knowledge and shall not disclose /share, directly or indirectly, such information to any person except for legitimate purpose nor shall use or exploit such information for any personal benefit and shall refrain from disclosing/ sharing such information to any person that could benefit competitor(s) of the company.

SIGNATURE GLOBAL
REALTY. RELIABILITY. RESPONSIBILITY.
AH ISO 9001:2015; 14001:2015; 45001:2018; 27001:2022 CERTIFIED COMPANY

Resolved further that the aforesaid Authorised Representatives of the Company shall not sub-delegate any of the aforesaid powers and authorities that have been delegated to them vide this resolution unless such sub-delegation is expressly permitted by another Board Resolution or in writing by any one of Mr. Pradeep Kumar Aggarwal, Chairman and Whole-time Director; Mr. Lalit Kumar Aggarwal, Vice- Chairman and Whole-time Director; Mr. Ravi Aggarwal, Managing Director and Mr. Devender Aggarwal, Joint Managing Director of the Company.

Resolved further that the aforesaid powers and authorities entrusted to the aforesaid Authorised Representatives of the Company shall be valid, effective and exercisable by them so long as they are in the employment of or are associated with Company or unless revoked by the Board or by any one of Mr. Pradeep Kumar Aggarwal, Chairman and Whole-time Director; Mr. Lalit Kumar Aggarwal, Vice- Chairman and Whole-time Director; Mr. Ravi Aggarwal, Managing Director and Mr. Devender Aggarwal, Joint Managing Director of the Company, in writing.

Resolved further that Mr. Pradeep Kumar Aggarwal, Chairman and Whole-time Director; Mr. Lalit Kumar Aggarwal, Vice- Chairman and Whole-time Director; Mr. Ravi Aggarwal, Managing Director; Mr. Devender Aggarwal, Joint Managing Director and Mr. M R Bothra, Company Secretary of the Company be and are hereby severally authorised to give certified true copy of this resolution on behalf of the Company."

For SIGNATUREGLOBAL (INDIA) LIMITED

signatureglobal (India) Limited New Delhi

M R BOTHRA
COMPANY SECRETARY
M. NO.: F6651
ADDRESS: 2890/1, RANI BAGH
DELHI 110034

SUNGOLD HEIGHTS AND DEVELOPERS LLP

LLPIN: AAH-2448

REGD. OFF.: 609A 6TH FLOOR BLOCK E INTERNATIONAL TRADE TOWER NEHRU PLACE, SOUTH DELHI, NEW DELHI, DELHI, INDIA, 110019

CERTIFIED TRUE COPY OF THE RESOLUTION PASSED BY THE BOARD OF DESIGNATED PARTNERS OF SUNGOLD HEIGHTS AND DEVELOPERS LLP HELD ON WEDNESDAY, OCTOBER 15, 2025 AT 609A, 6TH FLOOR, BLOCK E, INTERNATIONAL TRADE TOWER, NEHRU PLACE, SOUTH DELHI, NEW DELHI-110019

AUTHORIZATION TO MR. JUGAL KISHOR PRAJATAPATI TO APPEAR AND REPRESENT ON BEHALF OF THE COMPANY BEFORE HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI

"**RESOLVED THAT** pursuant to the notice received from the Hon'ble National Green Tribunal, New Delhi, in connection with the Appeal filed by the Appellant, wherein the matter was listed on 15th July 2025, Mr. Jugal Kishor Prajatapati (Authorised representative), be and is hereby authorized to appear and represent before the Hon'ble National Green Tribunal, New Delhi, on behalf of the Company in the said matter on 23rd September 2025 and on any adjourned or subsequent dates of hearing.

RESOLVED FURTHER THAT Mr. Jugal Kishor Prajatapati (Authorised representative) is hereby authorized to engage and instruct an Advocate, Solicitor, or Legal Counsel of his choice for filing reply, response, affidavit, vakalatnama, records, documents, or any other pleading as may be required or directed by the Hon'ble National Green Tribunal.

RESOLVED FURTHER THAT Mr. Jugal Kishor Prajatapati is also authorized to sign, affirm, verify, execute, modify and file any reply, affidavit, statement, application, or document, including Affidavit of Service, and to produce original records before the Tribunal, and to take all such steps, acts, and deeds as may be necessary or expedient for proper representation and compliance with the directions of the Hon'ble Tribunal.

RESOLVED FURTHER THAT a certified true copy of this resolution be issued to the concerned authorities, legal counsel, and any other person as may be required for giving effect to this resolution."

CERTIFIED TO BE TRUE

For **SUNGOLD HEIGHTS AND DEVELOPERS LLP**

For Sungold Heights and Developers LLP
Auth. Signatory

Jiten Masand
Designated Partner
Din No.- 09083497

For Sungold Heights and Developers LLP
Auth. Signatory

Jugal Kishor Prajapati
Authorize Signatory

प्रभागीय वन अधिकारी द्वारा स्पष्टीकरण पत्र
Clarification letter by
Concerned Divisional Forest Officer
हरियाणा सरकार / Government of Haryana

हरियाणा भू-परिक्षण अधिनियम,1900 (1900 का पंजाब का अधिनियम II) अथवा वन अथवा प्रतिबंधित भूमि से संबंध मे निराक्षेप प्रमाण पत्र।
NOC in respect of Haryana Land and Preservation Act, 1900 (Punjab Act, II of 1900) or Forest or Restricted lands.

नाम Name	संजय कुमार वरषनेय Sanjay Kumar Varshney
संगठन का नाम Organisation Name	Signatureglobal (india) Limited
वर्तमान पता Current Address	Sidhrawali,Gurgaon,Haryana
भूमि स्थान Land Location	Sidhrawali,Gurgaon,Sidhrawali
भूमि मापन Land Measurements	135.0125 (Acre)
आयत नम्बर / मुरबा नम्बर Rectangle No./ Murba No.	56//15(8-0),57//11(8-0),12/1(0-2),65//21/2(7-19),22(8-0),23(8-0),24(8-0),66//1(8-0),10(8-0),11(8-0),20(8-0),21(8-0),67//5(7-4),6(7-12),15/3(1-12),17(8-0),23/3(0-4),24/1(7-18),25(8-0),74//15/3/2/2(0-16),16/2/2/1/2(0-2),75//1/2/2/2/2(0-2),2/2/2/2(3-11),3(7-11),4/3(1-4),5/3(2-3),6(8-0),7/1(2-18),7/2(5-2),8/1(3-2),8/2(4-18),9(8-0),11/2/2(7-9),12/1(2-9),12/2(5-11),13(8-0),14(8-0),15(8-0),16(8-0),17(8-0),18(8-0),19/1(2-18),20/1(2-18),23(8-0),24(8-0),25(8-0),76//1/4(3-11),2/2(1-5),4/2(2-10),5/1(6-0),5/2(2-0),6(8-0),7(8-0),8/1(3-4),8/3(1-12),9/1(1-12),10(8-0),11(8-0),12(8-0),13(8-0),14(8-0),15(8-0),16(8-0),17(8-0),18(8-0),19(8-0),20(8-0),21/1(2-4),21/2(5-16),22(8-0),23(8-0),24(8-0),25/1/1(3-16),25/1/2(0-4),25/2(4-0),77//1(8-0),10(8-0),11(8-0),12(8-0),19(8-0),20(8-0),21(8-0),22(8-0),23(8-0),24(8-0),25(7-12),89//11/2(6-0),16(7-12),17(8-0),18(8-0),19/3(4-3),19/1(0-7),20/1(7-9),21/1(2-14),21/3(0-5),22/2(7-8),23(8-0),24(8-0),25(7-11),90//1(8-0),2(8-0),3(8-0),4(8-0),5(7-12),6/1(4-4),6/2(3-8),7(8-0),8(8-0),9/1(1-7),9/3(5-3),9/2(0-4),9/4(1-6),10(8-16),12(5-2),13(10-0),14(8-0),91//1(8-0),2(8-0),3(8-0),4(8-0),5/2(7-12),6(5-9),7(7-2),8(8-0),9(8-0),10(8-0),11(7-18),12(9-18),13(8-15),92//2/2(5-18),3/1(5-8),3/2(2-0),3/3(0-12),4(8-0),5(8-0),6(8-0),7(8-0),8/1(3-8),8/2(4-12),9/1(0-8),9/2(7-12),12/1(7-12),12/2(0-8),13(8-0),14/1(1-14),15(5-7),18(6-0),19/1(4-16),19/2(3-4),20/1(7-10),22(4-15),98//2(5-17),3(8-0),4(8-0),5(7-12),6(7-12),7(8-16),8(3-13),15(6-2),78//1(8-0),2(8-0),3(8-0),4/1(7-0),6/3(0-2),7/2(2-0),8(8-0),9(8-0),10(8-0),11(8-0),12(8-0),13(8-0),14/1/1(2-3),18/1(4-0),19(8-0),20/1(1-11),93//15/3(2-0),16/1(3-1),20/2min(1-5),21min(1-12),89//1min(1-12),10/1min(0-12),10/2min(0-19),11/1min(0-8),77//16min(1-5)

Reference No. (SRN):- HUQ-DTC-CHXW
जारी करने की तिथि / Date of Issuance: 29-02-2024
जारी करने का स्थान / Place of Issuance: Gurgaon
जारी करने वाला प्राधिकरण / Issuing Authority: Divisional Forest Officer

This is a Digitally Signed Certificate and does not require physical signature. The authenticity of this certificate can be verified from the verification link mentioned below:

https://164.100.137.243/eservices/mobileapi/verify/clarification/HUQDTCCHXW

प्रभागीय वन अधिकारी द्वारा स्पष्टीकरण पत्र
Clarification letter by
Concerned Divisional Forest Officer
हरियाणा सरकार / Government of Haryana

हरियाणा भू-परिक्षण अधिनियम,1900 (1900 का पंजाब का अधिनियम II) अथवा वन अथवा प्रतिबंधित भूमि से संबंध मे निराक्षेप प्रमाण पत्र।
NOC in respect of Haryana Land and Preservation Act, 1900 (Punjab Act, II of 1900) or Forest or Restricted lands.

किला नम्बर Killa Number	56//15(8-0),57//11(8-0),12/1(0-2),65//21/2(7-19),22(8-0),23(8-0),24(8-0),66//1(8-0),10(8-0),11(8-0),20(8-0),21(8-0),67//5(7-4),6(7-12),15/3(1-12),17(8-0),23/3(0-4),24/1(7-18),25(8-0),74//15/3/2/2(0-16),16/2/2/1/2(0-2),75//1/2/2/2/2(0-2),2/2/2/2(3-11),3(7-11),4/3(1-4),5/3(2-3),6(8-0),7/1(2-18),7/2(5-2),8/1(3-2),8/2(4-18),9(8-0),11/2/2(7-9),12/1(2-9),12/2(5-11),13(8-0),14(8-0),15(8-0),16(8-0),17(8-0),18(8-0),19/1(2-18),20/1(2-18),23(8-0),24(8-0),25(8-0),76//1/4(3-11),2/2(1-5),4/2(2-10),5/1(6-0),5/2(2-0),6(8-0),7(8-0),8/1(3-4),8/3(1-12),9/1(1-12),10(8-0),11(8-0),12(8-0),13(8-0),14(8-0),15(8-0),16(8-0),17(8-0),18(8-0),19(8-0),20(8-0),21/1(2-4),21/2(5-16),22(8-0),23(8-0),24(8-0),25/1/1(3-16),25/1/2(0-4),25/2(4-0),77//1(8-0),10(8-0),11(8-0),12(8-0),19(8-0),20(8-0),21(8-0),22(8-0),23(8-0),24(8-0),25(7-12),89//11/2(6-0),16(7-12),17(8-0),18(8-0),19/3(4-3),19/1(0-7),20/1(7-9),21/1(2-14),21/3(0-5),22/2(7-8),23(8-0),24(8-0),25(7-11),90//1(8-0),2(8-0),3(8-0),4(8-0),5(7-12),6/1(4-4),6/2(3-8),7(8-0),8(8-0),9/1(1-7),9/3(5-3),9/2(0-4),9/4(1-6),10(8-16),12(5-2),13(10-0),14(8-0),91//1(8-0),2(8-0),3(8-0),4(8-0),5/2(7-12),6(5-9),7(7-2),8(8-0),9(8-0),10(8-0),11(7-18),12(9-18),13(8-15),92//2/2(5-18),3/1(5-8),3/2(2-0),3/3(0-12),4(8-0),5(8-0),6(8-0),7(8-0),8/1(3-8),8/2(4-12),9/1(0-8),9/2(7-12),12/1(7-12),12/2(0-8),13(8-0),14/1(1-14),15(5-7),18(6-0),19/1(4-16),19/2(3-4),20/1(7-10),22(4-15),98//2(5-17),3(8-0),4(8-0),5(7-12),6(7-12),7(8-16),8(3-13),15(6-2),78//1(8-0),2(8-0),3(8-0),4/1(7-0),6/3(0-2),7/2(2-0),8(8-0),9(8-0),10(8-0),11(8-0),12(8-0),13(8-0),14/1/1(2-3),18/1(4-0),19(8-0),20/1(1-11),93//15/3(2-0),16/1(3-1),20/2min(1-5),21min(1-12),89//1min(1-12),10/1min(0-12),10/2min(0-19),11/1min(0-8),77//16min(1-5)
प्रयोजन Purpose	Residential And Commercial Project

जारी करने की तिथि / Date of Issuance: 29-02-2024
जारी करने का स्थान / Place of Issuance: Gurgaon
जारी करने वाला प्राधिकरण / Issuing Authority: Divisional Forest Officer

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https://164.100.137.243/eservices/mobileapi/verify/clarification/HUQDTCCHXW

प्रभागीय वन अधिकारी द्वारा स्पष्टीकरण पत्र
Clarification letter by
Concerned Divisional Forest Officer
हरियाणा सरकार / Government of Haryana

हरियाणा भू-परिक्षण अधिनियम,1900 (1900 का पंजाब का अधिनियम II) अथवा वन अथवा प्रतिबंधित भूमि से संबंध मे निराक्षेप प्रमाण पत्र।
NOC in respect of Haryana Land and Preservation Act, 1900 (Punjab Act, II of 1900) or Forest or Restricted lands.

Applicant Sanjay Kumar Varshney located at village /city Sidhrawali district Gurgaon made a proposal to use this land for Residential And Commercial Project. It is made clear that:

a) As per records available above said land is not part of notified Reserved Forest, Protected Forest under Indian Forest Act, 1927 or any area closed under section 4 of Punjab Land Preservation Act, 1900.

b) It is clarified that by the Notification No. S.O.8/P.A 2/1900/S. 4/2013 dated 4th January, 2013, all Revenue Estate of Gurgaon is notified u/s 4 of PLPA 1900 and S.O.81/PA.2/1900/S.3/2012 u/s 3 of PLPA 1900. The area is however not recorded as forest in the Government record but felling of any tree is strictly prohibited without the permission of Divisional Forest Officer, Gurgaon.

c) If approach is required from Protected Forest by the user agency, the clearance/ regularization under Forest Conservation Act 1980 will be required. Without prior clearance from Forest Department, the use of Forest land for approach road is strictly prohibited. M/s Signatureglobal (india) Limited whose land is located at village/city, Sidhrawali District Gurgaon must obtain clearance as applicable under Forest Conservation Act 1980.

d) As per the records available with the Forest Department, Gurgaon the area does not fall in areas where plantations were raised by the Forest Department under Aravalli project.

e) All other statutory clearances mandated under the Environment Protection Act. 1986, as per the notification of Ministry of Environment and Forests, Government of India, dated 07-05-1992 or any other Act/ order shall be obtained as applicable by the project proponents from the concerned authorities.

f) The project proponent will not violate any Judicial Order/ direction issued by the Hon'ble Supreme Court/ High Courts.

g) It is clarified that the Hon'ble Supreme Court has issued various judgments dated 07.05.2002, 29.10.2002, 16.12.2002, 18.03.2004, 14.05.2008 etc. pertaining to Aravalli region in Haryana, which should be complied with.

h) It shall be the responsiblity of user agency/ applicant to get necessary clearances/ permissions under various Acts and Rules applicable if any, from the respective authorities/ Department.

i) This certificate is not applicable in case of Environment Department notification dated 10.03.2016 for Screening Plant, and notification dated 11.05.2016 for Stone Crusher. Investor/Applicant has to take clearance from Environment Department in case of Screening Plant and Stone Crusher.

It is subject to the following conditions:

1.Clarification Is Hereby Issued Subject To The Conditions Mentioned Above.

Date: 29-02-2024
Place: Gurgaon

Rajeev Tejyan,
(Divisional Forest Officer)

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https://164.100.137.243/eservices/mobileapi/verify/clarification/HUQDTCCHXW

Sender, **Annexure P-4**

Deputy Commissioner, Gurugram.

To

M/S SIGNATUREGLOBAL (INDIA) LIMITED,
[formerly known as Signature Global (India) Private Limited],
Ground Floor, Tower-A, Signature Tower, South City-1, Gurugram.

No. 74 / M.B. Dated: 30/05/2024

Subject: NOC for Aravalli Project Plantation 1992 for setting up of Industrial Plotted Colony at Village Sidhrawali, Tehsil Manesar, District Gurugram, Haryana (regarding report of Tehsildar and DFO, Gurugram).

With reference to the above subject.

In the subject matter, reports have been received from the Tehsildar, Manesar and the Deputy Forest Conservator, Gurugram, which are as follows: -

The Tehsildar, Manesar, through his office letter No. 343/O.K. dated 09.05.2024, has forwarded a report to this office, in which it is written that as per the report of the Halka Patwari, after inspection of the revenue record of the proposed land of Mauza Sidhrawali, Tehsil Manesar, District Gurugram, Haryana, the report sought point-wise is as follows:-

1. The Murabba/Killa Nos. described in the application i.e. 56//15(8-0), 57//11(8-0), 12/1(0-2), 65//21/2(7-19), 22(8-0), 23(8-0), 24(8-0), 66//1(8-0), 10(8-0), 11(8-0), 20(8-0), 21(8-0), 67//5(7-4), 6(7-12), 15/3(1-12), 17(8-0), 23/3(0-4), 24/1(7-18), 25(8-0), 74//15/3/2/2(0-16), 16/2/2/1/2(0-2), 75//1/2/2/2/2(0-2), 2/2/2/2(3-11), 3(7-11), 4/3(1-4), 5/3(2-3), 6(8-0), 7/1(2-18), 7/2(5-2), 8/1(3-2), 8/2(4-18), 9(8-0), 11/2/2(7-9), 12/1(2-9), 12/2(5-11), 13(8-0), 14(8-0), 15(8-0), 16(8-0), 17(8-0), 18(8-0), 19/1(2-18), 20/1(2-18), 23(8-0), 24(8-0), 25(8-0), 76//1/4(3-11), 2/2(1-5), 4/2(2-10), 5/1(6-0), 5/2(2-0), 6(8-0), 7(8-0), 8/1/1(2-5), 8/3/2(0-13), 9/1/2(0-4), 10(8-0), 11(8-0), 12(8-0), 13(8-0), 14(8-0), 15(8-0), 16(8-0), 17(8-0), 18(8-0), 19(8-0), 20(8-0), 21/1(2-4), 21/2(5-16), 22(8-0), 23(8-0), 24(8-0), 25/1/1(3-16), 25/1/2(0-4), 25/2(4-0), 77//1(8-0), 10(8-0), 11(8-0), 12(8-0), 19(8-0), 20(8-0), 21(8-0), 22(8-0), 23(8-0), 24(8-0), 25(7-

12), 89//11/2(6-0), 16(7-12), 17(8-0), 18(8-0), 19/3(4-3), 19/1(0-7), 20/1(7-9), 21/1(2-14), 21/3(0-5), 22/2(7-8), 23(8-0), 24(8-0), 25(7-11), 90//1(8-0), 2(8-0), 3(3-0), 4(8-0), 5(7-12), 6/1(4-4), 6/2(3-8), 7(8-0), 8(8-0), 9/1(1-7), 9/3(5-3), 9/2(0-4), 9/4(1-6), 10(8-16), 12(5-2), 13(10-0), 14(8-0), 91//1(8-0), 2(8-0), 3(8-0), 4(8-0), 5/2(7-12), 6(5-9), 7(7-2), 8(8-0), 9(8-0), 10(8-0), 11(7-18), 12(9-18), 13(8-15), 92//2/2(5-18), 3/1(5-8), 3/2(2-0), 3/3(0-12), 4(8-0), 5(8-0), 6(8-0), 7(8-0), 8/1(3-8), 8/2(4-12), 9/1(0-8), 9/2(7-12), 12/1(7-12), 12/2(0-8), 13(8-0), 14/1(1-14), 15(5-7), 18(6-0), 19/1(4-16), 19/2(3-4), 20/1(7-10), 22(4-15), 98//2(5-17), 3(8-0), 4(8-0), 5(7-12), 6(7-12), 7(8-16), 8(3-13), 15(6-2), 78//1(8-0), 2(8-0), 3(8-0), 4/1(7-0), 6/3(0-2), 7/2(2-0), 8(8-0), 9(8-0), 10(8-0), 11(8-0), 12(8-0), 13(8-0), 14/1/1(2-3), 18/1(0-4), 19(8-12), 20/1(1-11), 93//15/3(0-2), 16/1(3-1), 77//16(7-13), 89//1(8-0), 10/1(3-2), 10/2(4-18), 11/1(2-0) Kita 182, Rakba 1079 kanal 6 marla, Mauza Sidhrawali, Tehsil Manesar, District Gurugram, as per notification dated 07.05.1992, is not in Aravalli area.

2. The disputed land, before and after notification dated 07.05.1992, up to Misal Haqiyat / consolidation, has not been recorded as Gair Mumkin Pahad, Gair Mumkin Rada, Gair Mumkin Beehad/Banjar Beehad and Rudr.
3. The disputed land, before notification dated 07.05.1992, was recorded as Kism Chahi, and after notification recorded as Kism Chahi / Gair Mumkin / B.K.
4. The disputed land, in Misal Haqiyat / consolidation till date, has never been ownership of Shamlat Deh / Panchayat Deh / Municipality or Municipal Corporation.
5. There is no entry of any case of any Hon'ble Court recorded in the Jamabandi column of remarks regarding the disputed land.
6. The disputed land is not in SEZ (Special Economic Zone).
7. On the disputed land Murabba/Killa Nos. 89//19 Min (3-10), 20 Min (0-11), 21 Min (2-12), 22 Min, as per Rapat No. 285 dated 02.01.2017, award has been passed; and as per Rapat No. 351 dated 04.02.2006, Section 3-A has been issued on Murabba/Killa No. 75//9 Min; and as per Rapat No. 390 dated 29.03.2004, Murabba/Killa Nos. 89//1, 10/1, 10/2, 11/1 are under acquisition.
8. On disputed land Murabba/Killa Nos. 89//1(8-0), 10/1(3-2), 10/2(4-18), 11/1(2-0), Kita 4, area 18 kanal 0 marla, M/s Sungold Heights and Developers LLP is owner of 2/5 share; and in Murabba/Killa No. 77//18(7-13), M/s Sungold Heights and Developers LLP is owner of 1/6 share; and in Murabba/Killa Nos. 76//9/2/1(3-6), 8/3/2(0-13), Kita 2, area 3 kanal 19 marla, M/s Sungold Heights and Developers LLP is owner; and in Murabba/Killa Nos. 76//8/1/1(2-5), 9/1/2(0-12), M/s Sungold Heights and Developers

LLP is owner; and in remaining leftover numbers also M/s Sungold Heights and Developers LLP is owner.

The Deputy Forest Conservator, Gurugram, through his office letter No. 409-6 dated 17.05.2024, informed that forest clarification online has already been issued on 29.02.2024 to M/s Signatureglobal (India) Ltd. for 135.0125 acres land of Village Sidhrawali, District Gurugram. A copy of the same has been forwarded to this office, in which it is written that the applicant Mr. Sanjay Kumar Varshney, M/s SIGNATUREGLOBAL (INDIA) LIMITED (formerly known as Signature Global (India) Private Limited), having Rectangle No./Murba No./Killa No. 56//15(8-0), 57//11(8-0), 12/1(0-2), 65//21/2(7-19), 22(8-0), 23(8-0), 24(8-0), 66//1(8-0), 10(8-0), 11(8-0), 20(8-0), 21(8-0), 67//5(7-4), 6(7-12), 15/3(1-12), 17(8-0), 23/3(0-4), 24/1(7-18), 25(8-0), 74//15/3/2/2(0-16), 16/2/2/1/2(0-2), 75//1/2/2/2/2(0-2), 2/2/2/2(3-11), 3(7-11), 4/3(1-4), 5/3(2-3), 6(8-0), 7/1(2-18), 7/2(5-2), 8/1(3-2), 8/2(4-18), 9(8-0), 11/2/2(7-9), 12/1(2-9), 12/2(5-11), 13(8-0), 14(8-0), 15(8-0), 16(8-0), 17(8-0), 18(8-0), 19/1(2-18), 20/1(2-18), 23(8-0), 24(8-0), 25(8-0), 76//1/4(3-11), 2/2(1-5), 4/2(2-10), 5/1(6-0), 5/2(2-0), 6(8-0), 7(8-0), 8/1(3-4), 8/3(1-12), 9/1(1-12), 10(8-0), 11(8-0), 12(8-0), 13(8-0), 14(8-0), 15(8-0), 16(8-0), 17(8-0), 18(8-0), 19(8-0), 20(8-0), 21/1(2-4), 21/2(5-16), 22(8-0), 23(8-0), 24(8-0), 25/1/1(3-16), 25/1/2(0-4), 25/2(4-0), 77//1(8-0), 10(8-0), 11(8-0), 12(8-0), 19(8-0), 20(8-0), 21(8-0), 22(8-0), 23(8-0), 24(8-0), 25(7-12), 89//11/2(6-0), 16(7-12), 17(8-0), 18(8-0), 19/3(4-3), 19/1(0-7), 20/1(7-9), 21/1(2-14), 21/3(0-5), 22/2(7-8), 23(8-0), 24(8-0), 25(7-11), 90//1(8-0), 2(8-0), 3(8-0), 4(8-0), 5(7-12), 6/1(4-4), 6/2(3-8), 7(8-0), 8(8-0), 9/1(1-7), 9/3(5-3), 9/2(0-4), 9/4(1-6), 10(8-16), 12(5-2), 13(10-0), 14(8-0), 91//1(8-0), 2(8-0), 3(8-0), 4(8-0), 5/2(7-12), 6(5-9), 7(7-2), 8(8-0), 9(8-0), 10(8-0), 11(7-18), 12(9-18), 13(8-15), 92//2/2(5-18), 3/1(5-8), 3/2(2-0), 3/3(0-12), 4(8-0), 5(8-0), 6(8-0), 7(8-0), 8/1(3-8), 8/2(4-12), 9/1(0-8), 9/2(7-12), 12/1(7-12), 12/2(0-8), 13(8-0), 14/1(1-14), 15(5-7), 18(6-0), 19/1(4-16), 19/2(3-4), 20/1(7-10), 22(4-15), 98//215-17), 3(8-0), 4(8-0), 5(7-12), 6(7-12), 7(8-16), 8(3-13), 15(6-2), 78//1(8-0), 2(8-0), 3(8-0), 4/1(7-0), 6/3(0-2), 7/2(2-0), 8(8-0), 9(8-0), 10(8-0), 11(8-0), 12(8-0), 13(8-0), 14/1/1(2-3), 18/1(4-0), 19(8-0), 20/1(1-11), 93//15/3(2-0), 16/1(3-1), 20/2min(1-5), 21min(1-12), 89//1min(1-12), 10/1min(0-12), 10/2min (0-19), 11/1min(0-8), 77//16min(1-5) Land Measurements 135.0125 (Acre) Land Location Village Sidhrawali, District Gurugram made a proposal to use this land for Residential and Commercial Project. It is made clear that:

A. As per records available above said land is not part of notified Reserved Forest, Protected Forest under Indian Forest Act, 1927 or any area closed under section 4 of Punjab Land Preservation Act, 1900.

B. It is clarified that by the notification No. SOR/PA 2/1900/5 dated 04.01.2013 Revenue Estate of Gurugram is notified u/s 4 of PLPA 1900 and 50-81/PA 2/1900/5 dated 03.05.2012 u/s 3 of PLPA 1900. The area is however not recorded as forest in the Government record but felling of any tree is strictly prohibited without the permission of Divisional Forest Officer, Gurugram.

C. If approach is required from Protected Forest by the user agency, the clearance/regularization under Forest Conservation Act 1980 will be required. Without prior clearance from Forest Department, the use of forest land for approach road is strictly prohibited. M/s SIGNATUREGLOBAL (INDIA) LIMITED, whose land is located at Village/City Sidhrawali, District Gurugram must obtain clearance as applicable under Forest Conservation Act, 1980.

D. As per the records available with the Forest Department Gurugram the area does not fall in areas where plantations were raised by the Forest Department under Aravalli Project.

E. All other statutory clearances mandated under the Environment Protection Act, 1986, as per the notification of Ministry of Environment and Forest, Government of India dated 07.05.1992 or any other Act/Order shall be obtained as applicable by the project proponents from the concerned authorities.

F. The project proponent will not violate any Judicial Order/Direction issued by the Hon'ble Supreme Court/High Courts.

G. It is clarified that the Hon'ble Supreme Court has issued various judgments dated 07.05.2002, 29.10.2002, 16.12.2002, 18.03.2004, 14.05.2008 etc., pertaining to Aravalli region in Haryana, which should be complied with.

H. It shall be the responsibility of user agency/applicant to get necessary clearances/permissions under various Acts and Rules applicable if any, from the respective authorities/department.

I. This certificate is not applicable in case of Environment Department notification dated 10.03.2016 for Screening Plant, and notification dated 11.05.2016 for Stone Crusher. Investor/Applicant has to take clearance from Environment Department in case of Screening Plant and Stone Crusher.

It is subject to the following conditions:

1. Clarification is hereby issued subject to the conditions mentioned above.

Therefore, as per the conditions described in the reports of the Tehsildar, Manesar and Deputy Forest Conservator, Gurugram, except the Murabba/Killa Nos. where land acquisition proceedings/award/Section 3-A have already been completed, issuance of Aravalli Clearance/Non-Forest Land report for the remaining land is considered appropriate, subject to the condition that if in future any land acquisition proceedings under Sections 4, 6 or award are found by any department of Haryana Government, then the Aravalli NOC of the concerned numbers shall be deemed cancelled, for which the applicant company shall itself be responsible.

Sd/-

Deputy Commissioner, Gurugram

//True Translated Copy//

Annexure P-5

FORM LC -V
(See Rule 12)
HARYANA GOVERNMENT
TOWN AND COUNTRY PLANNING DEPARTMENT

Licence No. 104. of 2024

This License has been granted under the Haryana Development and Regulation of Urban Areas Act, 1975 & the Rules 1976, made thereunder to Sungold Heights and Developers LLP. in collaboration with Signatureglobal (India) Limited, 13th Floor, Dr. Gopal Das Bhawan, 28 Barakhamba Road, Connaught Place, New Delhi-110001. for setting up of Industrial Plotted Colony over an area measuring 129.65625 acres in the revenue estate of village Sidhrawali, Tehsil- Manesar, District Gurugram.

1. The particulars of the land, wherein the aforesaid Industrial Plotted Colony is to be set up, are given in the Schedule annexed hereto and duly signed by the Director, Town & Country Planning, Haryana.

2. The License is granted subject to the following conditions:

(i) To deposit a sum of Rs. 16,56,63,060/- on account of Infrastructural Development Charges in two equal installments. First within 60 days from issuance of license and second within six months online at www.tcpharyana.gov.in. In failure of which, an interest @ 18% per annum for delay period shall be paid.

(ii) The licencee shall maintain and upkeep of all roads, open spaces, public park and public health services for a period of five years from the date of issue of the completion certificate unless earlier relieved of this responsibility and thereupon to transfer all such roads, open spaces, public parks and public health services free of cost to the Govt. or the local authority, as the case may be, in accordance with the provisions of Section 3(3)(a)(iii) of the Haryana Development and Regulation of Urban Areas Act, 1975.

(iii) The licencee has not submitted any other application for grant of license for development of the said land or part thereof for any purpose under the provisions of the Haryana Development and Regulation of Urban Areas Act, 1975 or any application seeking permission for change of land use under the provision of the Punjab Scheduled Roads and Controlled Areas Restriction of Unregulated Development Act, 1963.

(iv) The licencee shall obtain NOC/Clearance as per provisions of notification dated 14.09.2006 issued by Ministry of Environment & Forest, Govt. of India, if applicable before execution of development works at site.

(v) The licencee shall make own arrangements for water supply, sewerage, drainage etc. to the satisfaction of DTCP.

(vi) The licencee shall obtain clearance from competent authority, if required under Punjab Land Preservation Land Act, 1900 and any other clearance required under any other law.

(vii) That the rain water harvesting system shall be provided as per Central Ground Water Authority Norms/Haryana Govt. notification as applicable.

Director
Town & Country Planning
Haryana, Chandigarh

(viii) That the provision of solar water heating system shall be as per guidelines of Haryana Renewable Energy Development Agency and shall be made operational where applicable before applying for an Occupation Certificate.

(ix) The licencee shall use only LED fitting for internal lighting as well as campus lighting.

(x) The licencee shall convey the 'Ultimate Power Load Requirement' of the project to the concerned power utility, with a copy to the Director, within two months period from the date of grant of license to enable provision of site in licensed land for Transformers/Switching Stations/Electric Sub Stations as per the norms prescribed by the power utility in the zoning plan of the project.

(xi) The licencee shall keep pace of development atleast in accordance with sale agreement executed with the buyers of the plots as and when scheme is launched.

(xii) The licencee shall arrange power connection from UHBVNL/DHBVNL for electrification of the colony and shall install the electricity distribution infrastructure as per the peak load requirement of the colony for which licencee shall get the electrical (distribution) service plan/estimates approved from the agency responsible for installation of external electric services i.e. UHBVNL/DHBVNL and complete the same before obtaining completion certificate for the colony.

(xiii) The licencee will pay the labour cess as per policy instructions issued by Haryana Government vide Memo No. Misc. 2057-5/25/2008/2TCP dated 25.02.2010, as amended from time to time.

(xiv) The licencee shall submit compliance of Rule 24, 26, 27 & 28 of Rules 1976 & Section 5 of Haryana Development and Regulation of Urban Areas Act, 1975, and shall inform account number and full particulars of the scheduled bank wherein you have to deposit thirty percentum of the amount received from the plot holders for meeting the cost of Internal Development Works in the colony.

(xv) That no further sale has taken place after submitting application for grant of license.

(xvi) The licencee shall not give any advertisement for sale of plots/commercial area before the approval of zoning plan.

(xvii) That no provision of the Haryana Ceiling on Land Holding Act, 1972 has been violated due to purchase of applied land.

(xviii) That the revenue rasta/khal if passing through the site shall not be encroached upon and shall be kept free from all hindrances for easy movement of general public.

(xix) That the licencee shall follow the provisions of the Real Estate (Regulations and Development) Act, 2016 and Rules framed thereunder shall be followed by the applicant in letter and spirit.

(xx) The licencee shall comply with the terms and conditions of policy dated 01.10.2015, 09.03.2019 and other direction given by the Director time to time to execute the project.

(xxi) The licencee shall obtain the permission from competent authority for construction of culvert over dhana/ nala / drain / water channel what so ever, if passing through licenced land.

(xxii) The licencee shall integrate the services with Haryana Shehri Vikas Pradhikaran Development Authority services as and when made available.

(xxiii) That area coming under the sector roads and restricted belt / green belt, if any, which forms part of licensed area and in lieu of which benefit to the extent permissible as per policy towards FAR is being granted, shall be transferred free of cost to the Govt.

(xxiv) The licencee will transfer 10% area of the licenced colony free of cost to the Government for provision of community facilities. This will give flexibility to the Director to workout the requirement of community infrastructure at sector level and accordingly make provisions. The said area will be earmarked on the layout plan to be approved alongwith the license.

(xxv) The licencee understand that the development/ construction cost of 24 m/18 m major internal roads is not included in the EDC rates and they shall pay the proportionate cost for acquisition of land, if any, alongwith the construction cost of 24 m/18 m wide major internal roads as and when finalized and demanded by the Department.

(xxvi) That it will be made clear at the time of booking of plots/commercial space that specified rates include or do not include EDC. In case of non inclusion of EDC in the booking rates, then it may be specified that same are to be charged separately as per rate fixed by the Govt. applicant company shall also provide detail of calculation of EDC per sqm/per sft to the allottees while raising such demand from the plot owners.

(xxvii) That no clubbing of residential plots for approval of integrated zoning plan of two adjoining plots under same ownership shall be permitted.

(xxviii) The licencee shall abide by the terms and conditions of the policy notified on 01.04.2016.

(xxix) The licencee shall abide by the terms and conditions of policy dated 08.02.2016 (DDJAY) and other direction given by the Director time to time to execute the project.

(xxx) The licencee shall execute the development works as per Environmental Clearance and company with the provisions of Environment Protection Act, 1986, Air (Prevention and Control of Pollution of Act 1981) and Water (Prevention and Control of Pollution of 1974). In case of any violation of the provisions of said statutes, applicant shall be liable for penal action by Haryana State Pollution Control Board or any other Authority Administering the said Act.

(xxxi) That no pre-launch/sale of commercial plot will be undertaken before approval of the building plans. That the owner/developer shall integrate the bank account in which 70 percent allottee receipts are credited under Section-4(2)(l)(D) of the Real Estate Regulation and Development Act, 2016 with the online application/payment gateway of the Department, in such manner, so as to ensure that 10% of the total receipt from each payment made by an allottee is automatically deducted and gets credited to the EDC head in the State treasury.

(xxxii) That such 10% of the total receipt from each payment made by the allottee, which is received by the Department shall get automatically credited, on the date of receipt in the Government treasury against EDC dues.

(xxxiii) That such 10% deduction shall continue to operate till the total EDC dues get recovered from the owner/developer.

(xxxiv) The implementation of such mechanism shall, however, have no bearing on EDC installment schedule conveyed to the owner/developer. The owner/developer shall continue to supplement such automatic EDC deductions with payments from its own funds to ensure that by the EDC installments that are due for payment get paid as per the prescribed schedule.

(xxxv) The licencee shall take prior permission from the Divisional Forest Officer, Gurugram regarding cutting of any tree in their applied site.

(xxxvi) Only green category industry shall be allowed in the area of the licensed industrial colony which is falling within 2 kilometers from the boundary of urbanisable zone of the development plan, excluding the peripheral roads, if proposed along urbanisable boundary. All categories of industries will be allowed in the industrial colony outside 2KM belt subject to the condition of obtaining certificate from Haryana pollution Control Board.

(xxxvii) You shall pay at least the cost of infrastructure made available by various agencies/Department of the state Government, including infrastructure sought and availed in the agriculture zone as and when demanded by the competent authority.

(xxxviii) That you shall also take necessary measures for setting up of an effluent treatment plant of appropriate size and its appropriate use and also for safe disposal of effluents after proper treatment.

3. The area/pocket-1 measuring 11.56875 acres which derives approach from land acquired for RRTS, shall be kept frozen till submission of the NOC /access permission from NCRTC/competent authority.

4. That you shall not raised any construction within 20 mtr buffer zone on either side of acquired alignment of RRTS and the same shall be kept as green/buffer zone.

5. That no third party rights shall be created over any frozen area till such area is de-freezed.

6. That plots beneath the 3 nos. nos. of 11 KV HT line and 1 no. of 200 KV HT line falling in the licensed land shall be kept frozen till shifting of respective HT lines.

7. The license is valid up to 31.07.2029.

(Amit Khatri, IAS)
Director,
Town & Country Planning
Haryana, Chandigarh

Dated: The 01.08.2024.
Chandigarh

Endst. No. LC-5139/Asstt(MS)/2024/ 24309 Dated: 01-08-2024

A copy along with a copy of schedule of land is forwarded to the following for information and necessary action: -

1. Sungold Heights and Developers LLP. In collaboration with Signatureglobal (India) Limited, 13th Floor, Dr. Gopal Das Bhawan, 28 Barakhamba Road, Connaught Place, New Delhi-110001 along with a copy of agreement, LC-IV & Bilateral Agreement and Layout Plan.
2. Chairman, Pollution Control Board, Haryana, Sector-6, Panchkula.
3. Chief Administrator, HSVP, Panchkula.
4. Managing Director, HVPN, Planning Directorate, Shakti Bhawan, Sector-6, Panchkula.
5. Joint Director, Environment Haryana-Cum-Secretary, SEAC, Paryavaran Bhawan, Sector -2, Panchkula.
6. Addl. Director Urban Estates, Haryana, Panchkula.
7. Administrator, HSVP, Panchkula.
8. Chief Engineer, HSVP, Panchkula.
9. Superintending Engineer, HSVP, Gurugram along with a copy of agreement.
10. Land Acquisition Officer, Gurugram.
11. Senior Town Planner, Gurugram along with a copy of Layout Plan.
12. Senior Town Planner (Enforcement), Haryana, Chandigarh.
13. District Revenue Officer, Gurugram.
14. District Town Planner, Gurugram along with a copy of agreement & Layout Plan.
15. Chief Accounts Officer (Monitoring) O/o DTCP, Haryana.
16. Accounts Officer, O/o DTCP along with a copy of agreement.
17. Project Manager (IT) for updation on the website.

(Sanjay Narang)
District Town Planner (HQ)
For: Director, Town & Country Planning
Haryana Chandigarh

To be read with License No.....104.....Dated.....01/08/.....of 2024

Village	OWNERSHIP	REC.NO	KILLA NO	KANAL	MARLA
Sidhrawali	SUNGOLD HEIGHTS AND DEVELOPERS LLP	74	15/3/2/2	0	16
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	74	16/2/2/1/2	0	2
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	2/2/2/2	3	11
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	3	7	11
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	4/3.	1	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	5/3.	2	3
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	6	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	7/1.	2	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	7/2.	5	2
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	8/1.	3	2
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	8/2.	4	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	9	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	11/2/2.	7	9
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	12/1.	2	9
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	12/2.	5	11
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	13	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	14	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	15	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	16	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	17	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	18	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	19/1	2	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	19/1.	2	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	20/1.	2	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	23	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	24	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	25	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	1/4.	3	11
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	2/2.	1	5
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	4/2.	2	10
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	5/1.	6	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	5/2.	2	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	6	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	7	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	8/1/1	2	5
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	8/3/2	0	13
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	9/1/2	0	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	10	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	11	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	12	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	13	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	14	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	15	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	16	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	17	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	18	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	19	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	20	8	0

D.T.C.P (HR)

Sidhrawali	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	21/1	2	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	21/2	5	16
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	22	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	23	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	24	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	25/1/1	3	16
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	25/1/2	0	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	25/2	4	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	1	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	10	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	11	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	12	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	19	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	20	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	21	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	22	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	23	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	24	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	25	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	66	1	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	66	10	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	66	11	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	66	20	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	66	21	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	67	5	7	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	67	6	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	67	15/3	1	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	67	17	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	67	23/3	0	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	67	24/1	7	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	67	25	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	11/2.	6	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	16	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	17	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	18	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	19/3	4	3
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	19/1	0	7
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	20/1	7	9
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	21/1	2	14
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	21/3	0	5
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	22/2	7	8
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	23	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	24	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	25	7	11
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	98	2	5	17
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	98	3	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	98	4	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	98	5	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	98	7/2	0	10
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	98	8	3	13
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	1	8	0

D.T.C.P (HR)

Sidhrawali	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	2	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	3	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	4	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	5	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	6/1.	4	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	6/2.	3	8
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	7	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	8	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	9/1.	1	7
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	9/3.	5	3
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	9/2.	0	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	9/4.	1	6
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	10	8	16
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	12	5	2
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	13	10	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	14	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	1	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	2	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	3	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	4	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	5/2.	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	6	5	9
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	7	7	2
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	8	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	9	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	10	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	11	7	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	12	9	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	13	8	15
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	2/2.	5	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	3/1.	5	8
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	3/2.	2	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	3/3.	0	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	4	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	5	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	6	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	7	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	8/1.	3	8
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	8/2.	4	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	9/1.	0	8
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	9/2.	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	12/1.	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	12/2.	0	8
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	13	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	14/1.	1	14
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	15	5	7
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	18	6	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	19/1	4	16
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	19/2	3	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	20/1	7	10
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	22	4	15

D.T.C.P (HR)

Sidhrawali	SUNGOLD HEIGHTS AND DEVELOPERS LLP	65	21/2.	7	19
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	65	22	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	65	23	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	65	24	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	1	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	2	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	3	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	4/1.	7	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	7/2.	2	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	8	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	9	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	10	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	11	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	12	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	13	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	14/1/1.	2	3
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	18/1.	4	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	19	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	20/1.	1	11
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	93	15/3.	2	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	93	16/1.	3	1
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	20/2min	1	5
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	21min	1	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	1 min	1	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	10/1 min	0	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	10/2 min	0	19
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	11/1 min	0	8
				1037	5
				AREA 129.65625 ACRES	

Director
Town & Country Planning
Haryana

Annexure P-6

SIGNATURE GLOBAL
REALTY. RELIABILITY. RESPONSIBILITY.
AN ISO 9001:2015; 14001:2015; 45001:2018; 27001:2022 CERTIFIED COMPANY

To,
The Director,
Town and Country Planning,
Haryana, Chandigarh.

Date: 03/06/2024

SUBJECT: APPLICATION FOR GRANT OF LICENSE TO SET UP INDUSTRIAL PLOTTED COLONY OVER LAND ADMEASURING 6.06875 ACRES (IN ADDITION TO THE AREA MEASURING 129.66875 ACRES) SITUATED AT THE REVENUE ESTATE OF VILLAGE SIDHRAWALI TEHSIL MANESAR, DISTRICT GURUGRAM, HARYANA

Respected Sir,

We are applying for Grant of License to set up Industrial Plotted Colony of the Haryana Government on land admeasuring 6.06875 acres (in addition to the area measuring 129.66875 acres) situated in the revenue estate of Village Sidhrawali Tehsil Manesar, District Gurugram, Haryana are hereby submitting the following documents:

1. Name of Bank YES BANK and ~~UTR~~ DD No. 201622 for Rs. 2,51,785 (Rs. _____) in favour of Director General Town & Country Planning, Haryana, payable at Chandigarh on account of scrutiny Fee.
2. Name of Bank YES BANK and ~~UTR~~ DD No. 201623 for Rs. 33,18,848 (Rs. _____) in favour of "Director General Town & Country Planning, Haryana" payable at Chandigarh towards the License fees.
3. Form LC – 1, duly notarized.
4. Schedule of Land, duly notarized.
5. Revenue documents consisting of latest Jamabandis, mutations (intequals) and notarized copy of sale deed.
6. Sazra Plan signed by Patwari
7. Site Plan
8. Survey Plan
9. Guide Map
10. Layout Plan
11. Deed of Undertaking, duly notarized
12. Board Resolution
13. List of Shareholders
14. List of Directors
15. Memorandum and Article of Association of the Company
16. Document showing financial capacity (PAS-3) to develop the project
17. Document showing technical capacity to develop the project.
18. Copy of Sizra plan showing Khasra Nos of the site and width of approach road.
19. Explanatory Note

For SIGNATUREGLOBAL (INDIA) LIMITED

Authorised Signatory/Director

20. Non-Encumbrance Certificate
21. Non-Encumbrance Undertaking
22. Indemnity Bond

Thanking you,

For SignatureGlobal (India) Limited
(*Formerly Known as SignatureGlobal (India) Private Limited*)

FOR SIGNATUREGLOBAL (INDIA) LIMITED

Authorised Signatory/Director

Authorized Signatory
(Vijay Pal)

FORM LC-I
(See Rule 3 (1))

To,
The Director,
Town & Country Planning,
Haryana, Chandigarh

We, M/s SignatureGlobal (India) Limited (*Formerly Known as SignatureGlobal (India) Private Limited*) in collaboration with Sungold Heights and Developers LLP beg to apply for grant of License for development of Industrial Plotted Colony on land measuring 6.06875 acres (in addition to the area measuring 129.66875 acres) situated at revenue estate of Village Sidhrawali Tehsil Manesar, District Gurugram, Haryana.

1.	Name of Applicant	M/s SignatureGlobal (India) Limited (*Formerly Known as SignatureGlobal (India) Private Limited*) in collaboration with Sungold Heights and Developers LLP
2.	Occupation	Real Estate Developer
3.	Permanent Registered Address	13th Floor, Dr. Gopal Das Bhawan, 28 Barakhamba Road, Connaught Place, New Delhi – 110001
4.	Address for the purpose of Correspondence	13th Floor, Dr. Gopal Das Bhawan, 28 Barakhamba Road, Connaught Place, New Delhi – 110001
5.	Whether Applicant is Income Tax payee, and if so, the amount of Income Tax paid during the last three years	Income Tax Documents enclosed
6.	Details of moveable/immoveable property held by the applicant.	Balance Sheet and other documents showing details of property enclosed
7.	Whether the applicant has ever established a colony or is establishing a colony, and if so details thereof	Yes License 33 of 2018 dated 26/05/2018 License 69 of 2019 dated 26/06/2019 License 04 of 2017 dated 02/02/2017 License 89 of 2019 dated 02/08/2019 License 40 of 2020 dated 11/12/2020 License 22 of 2022 dated 11/03/2022 License 02 of 2022 dated 06/01/2022 License 110 of 2021 dated 17/12/2021 License 80 of 2018 dated 02/12/2018 License 09 of 2010 dated 23/01/2010
8.	Any other information the applicant company would like to furnish	N.A

We enclose the following documents in triplicate:

I. Copies of title deeds and other documents showing the interest of the applicant in the land under the colony, along with a list of such deeds and documents ENCLOSED

II. A copy of the Shajra plan showing the location of the colony along with the names of the revenue estate, Khasra number of each field and area of each field ENCLOSED

III. A guide map on a scale of not less than 10cm to 1 kilometer showing the location of the colony in relation to surrounding geographic features to enable the identification of the site ENCLOSED

NOTARY S. C. SHARMA CHANDIGARH Regd. No. 631 Expiry Date 2026 GOVT. OF INDIA

IV A survey map of the land under the colony on a scale of 1 cm to 10 meters showing the spot levels at a distance of 30 meters and where necessary showing the contour plans. The survey will also show the boundaries and dimensions of the said land, the location of the streets, buildings and premises within a distance of at least 30 meter of the said land and existing means of access to it from existing roads ENCLOSED

V Layout plan of the colony on a scale of 1 cm to 10 meters showing the existing and proposed means of access to the colony, the width of streets, sizes and types of plots, sites reserved for open spaces, community buildings and schools with area of each and proposed building lines on the front and sides of plots. ENCLOSED

VI An explanatory note explaining the salient features of the colony, in particular the sources of wholesome water supply, arrangements and sites for disposal and treatment of storm and sullage water. ENCLOSED

VII Plans showing the cross sections of the proposed roads showing in particular the width of the proposed carriage ways, cycle tracks and footpaths, green verges, position of electric poles and any other works connected with such roads ENCLOSED

VIII Plans as required under sub clause (vii) above indicating in addition the position of sewers, storm water channels, water supply and other public health services
SHALL BE FURNISHED AT TIME OF APPROVAL OF SERVICE PLAN ESTIMATES

IX Detailed specifications and design of road work shown under sub clause (vii) and estimated costs thereof
SHALL BE FURNISHED AT TIME OF APPROVAL OF SERVICE PLAN ESTIMATES

X Detailed specifications and designs of sewerage, storm water and water supply scheme with estimated cost of each.
SHALL BE FURNISHED AT TIME OF APPROVAL OF SERVICE PLAN ESTIMATES

XI Detailed specifications and designs for disposal and treatment of storm and sullage water and estimated cost of works
SHALL BE FURNISHED AT TIME OF APPROVAL OF SERVICE PLAN ESTIMATES

XII Detailed specifications and designs for electric supply including street lighting
SHALL BE FURNISHED AT TIME OF APPROVAL OF SERVICE PLAN ESTIMATES

NOTARY S. C. SHARMA CHANDIGARH Regd. No. 69 Expiry Date 29-11-2026 GOVT. OF INDIA

The names and qualifications of the Engineers responsible for the execution of the development works of the colony are given below and the engineer has also signed below in token of his engagement:

Name of Engineer/Architect	Qualification	Signature
GIAN P. MATHUR	B. ARCH	

1.

For SIGNATUREGLOBAL (INDIA) LIMITED

Authorised Signatory/Director

GIAN P. MATHUR ARCHITECT B. Arch., M.C.A. I.I.A CA No. 80/5769

For Sungold Heights and Developers LLP

Partner

2. Dinesh Jhamb B Tech.

Prabhat Mann B.Tech

We also enclose the following documents:

1. E-payment dated for Rs. -2,51,785/- (Rs. _____) in favour of "Director Town & Country Planning, Haryana" payable at Chandigarh as Scrutiny Fee.

2. E-payment dated for Rs 33,18,848/- (Rs. _____) in Favor of "Director Town & Country Planning Haryana payable at Chandigarh as License Fee.

We solemnly affirm that the particulars given in Para I above are correct and to the best of our knowledge and belief.

Place: New Delhi
Date:

For M/s SignatureGlobal (India) Limited (*formerly known as SignatureGlobal (India) Private Limited*) For SIGNATUREGLOBAL (INDIA) LIMITED Authorised Signatory/Director **AUTHORIZED SIGNATORY** **(Vijay Pal)**	**For M/s Sungold Heights and Developers LLP** For Sungold Heights and Developers LLP Partner **AUTHORIZED SIGNATORY**

NOTARY S. C. SHARMA CHANDIGARH Regd. No. 631 Expiry Date 29-11-2026 GOVT. OF INDIA

Attested As Identified
NOTARY GOVT OF INDIA
CHANDIGARH

06 JUN 2024

Annexure P-7

Directorate of Town and Country Planning, Haryana

Nagar Yojana Bhavan, Plot No.3, Sector-18A, Madhya Marg, Chandigarh, Chandigarh,
Phone: 0172-2549349; e-mail: tcpharyana6@gmail.com

Regd.

LC-III
(See Rule 10)

To

Sungold Heights Developers LLP.,
In collaboration with Signature Global (India) Ltd.,
13th Floor, Dr. Gopal Das Bhawan,
28 Barakhamba Road, Connaught Place,
New Delhi-110001.

Memo No. LC-5139-B-DS (AK)/2024/ 38456 Dated: 06-12-24

Subject: **Letter of Intent:-Request for grant of licence for setting up of Industrial Plotted Colony over an area measuring 6.06875 acres (in addition to licence no. 104 of 2024 dated 01.08.2024) falling in the revenue estate of village Sidhrawali, Tehsil Manesar, District Gurugram- Signature Global (India) Ltd.**

Please refer to your application dated 07.06.2024 on the above cited subject.

Your request for grant of licence under section 3 of the Haryana Development and Regulation of Urban Areas Act, 1975, and Rules framed there under for development of Industrial Plotted Colony over an area measuring 6.06875 acres (in addition to licence no. 104 of 2024 dated 01.08.2024) falling in the revenue estate of village Sidhrawali, Tehsil Manesar, District Gurugram has been considered and it is proposed to grant license for setting up of aforesaid Industrial Plotted Colony. You are, therefore, called upon to fulfill the following requirements/ pre-requisites laid down in Rule 11 of the Haryana Development and Regulation of Urban Areas Rule, 1976 within a period of 60 days from the date of issue of this letter, failing which request for grant of licence shall be refused:-

1. To deposit an amount of **Rs. 1,69,054/-** on account of scrutiny charges in favour of the Director, Town & Country Planning, Haryana through online mode.

2. You have an option to either to deposit an amount of **Rs. 76,89,89,881/-** Crore on account of External Development Charges in favour of Director, Town and Country Planning, Haryana, Chandigarh through online on e-payment portal of the Department before grant of licence or furnish 25% Bank Guarantee of Rs.**19,22,47,470/- lacs** on account of External Development Charges before grant of licence and shall pay the amount of EDC in the ten half yearly installments each with normal interest of 12% p.a. and penal interest of 3% for the delayed period in favour of Director, Town & Country Planning, Haryana, payable at Chandigarh.

D.T.C.P.(Hr).

3. To furnish bank guarantee amounting **64.48075 lacs** against 25% of the total cost of Internal Development Works amounting Rs. 257.923 lacs.

**It is made clear that bank guarantee of Internal Development Works has been worked out on the interim rates and you will have to submit the additional bank guarantee, if any required, at the time of approval of Service Plan/Estimate. With an increase in the cost of construction, you would be required to furnish an additional bank guarantee within 30 days on demand.

4. To execute two agreements i.e. LC-IV & Bilateral Agreement on Non-Judicial Stamp Paper of 100/-. Further, following additional clauses shall be added in LC-IV agreement as per Government instruction dated 14.08.2020.

I. *That the owner/developer shall integrate the bank account in which 70 percent allottee receipts are credited under Section-4(2)(l)(D) of the Real Estate Regulation and Development Act, 2016 with the online application/payment gateway of the Department, in such manner, so as to ensure that 10% of the total receipt from each payment made by an allottee is automatically deducted and gets credited to the EDC head in the State treasury.*

II. *That such 10% of the total receipt from each payment made by the allottee, which is received by the Department shall get automatically credited, on the date of receipt in the Government treasury against EDC dues.*

III. *That such 10% deduction shall continue to operate till the total EDC dues get recovered from the owner/developer.*

IV. *The implementation of such mechanism shall, however, have no bearing on EDC instalment schedule conveyed to the owner/developer. The owner/developer shall continue to supplement such automatic EDC deductions with payments from its own funds to ensure that by the EDC instalments that are due for payment that paid as per the prescribed schedule.*

5. To submit an undertaking that:-

i) That you shall pay External Development Charges as and when the site comes in urbanizable limits.

ii) That you shall maintain and upkeep of all roads, open spaces, public park and public health services for a period of five years from the date of issue of the completion certificate unless earlier relieved of this responsibility and thereupon to transfer all such roads, open spaces, public parks and public health services free of cost to the Govt. or the local authority, as the case may be, in accordance with the provisions of Section 3(3)(a)(iii) of the Haryana Development and Regulation of Urban Areas Act, 1975.

iii) That you shall construct 18/24/30 m wide internal circulation road forming part of licenced area at your own costs and transfer the same free of cost to the Government as and when site comes in urbanizable limit.

iv) That you shall integrate the services with the HSVP services as per the approved service plans and as and when made available.

v) That you shall have no objection to the regularization of the boundaries of the licence through give and take with the land that HSVP is finally able to acquire any land in the interest of planned development and integration of services. The decision of the Competent Authority shall be binding upon you.

vi) That you shall provide basic facilities (sewer, water etc) in the colony upto the satisfaction of the Director, as on date the services are not being provided by HSVP.

vii) That you shall make your own arrangements for water supply, sewerage, drainage etc. to the satisfaction of DTCP till these services are made available and the same is made functional from External Infrastructure to be laid by Haryana Urban Development Authority or any other execution agency.

viii) That you shall submit NOC as required under notification dated 14.09.2006.

ix) That you shall convey "Ultimate Power Load Requirement" of the project to the concerned power utility, with a copy to the Director, with in two month period from the date of grant of licence to enable provision of site in your land for Transformers/Switching Station/ Electric Sub-Stations as per the norms prescribed by the power utility in the zoning plan of the project.

x) There is no further sale of the land applied for licence after submission of licence application till date.

xi) That you shall provide the Solar water heating system as per by HAREDA and shall be made operational where applicable before applying for an occupation certificate.

xi) That you shall provide the Solar water heating system as per by HAREDA and shall be made operational where applicable before applying for an occupation certificate.

xii) That you shall not encroach the revenue rasta passes through the site and shall provide appropriate access to the land of others situated in between the applied land.

xiii) That you shall comply with the terms and conditions of policy dated 01.10.2015 and other direction given by the Director time to time to execute the project.

xiv) That you shall submit compliance of Rule 24, 26, 27 & 28 of Rules 1976 & Section 5 of Haryana Development and Regulation of Urban Areas Act, 1975, and shall inform account number and full particulars of the scheduled bank wherein you have to deposit seventy percentum of the amount received from the plot holders for meeting the cost of Internal Development Works in the colony.

xv) That you have not violated the provision of the Haryana Ceiling of Land Holdings Act, 1972

xvi) That you have not submitted any other application for applied site for CLU /licence.

xvii) That you shall abide by the terms and condition of policy dated 01.10.2015 and 03.09.2019.

xviii) That the owner/developer shall integrate the bank account in which 70% allottee receipts are credited under Section-4(2)(l)(D) of the Real Estate Regulation and Development Act, 2016 with the online application/payment gateway of the Department, in such manner, so as to ensure that 10% of the total receipt from each payment made by an allottee is automatically deducted and gets credited to the EDC head in the State treasury.

xix) That such 10% of the total receipt from each payment made by the allottee, which is received by the Department shall get automatically credited, on the date of receipt in the Government treasury against EDC dues.

xx) That you shall follow the provisions of the Real Estate (Regulations and Development) Act, 2016 and Rules framed thereunder shall be followed by the applicant in letter and spirit.

xxi) That you shall provide the entire master services at your own cost.

D.T.C.P.(Hr).

xxii) You shall not encroach the revenue rasta passes through the applied site if any and keep it thoroughfare movement of general public.

xxiii) That you shall take prior permission from the Divisional Forest Officer, Gurugram regarding cutting of any tree in their applied site.

6. That you shall submit the NOC from the Divisional Forest Officer, Gurugram regarding applicability of any forest law/ notification on the applied site in revenue estate of village Sidhrawali at NH-48 road, before issuance of final permission.

7. That you shall submit an indemnity bond indemnifying DTCP from any loss, if occurs due to submission of undertaking submitted in respect of non-creation of third party rights on the applied land.

8. That you shall undertake to indemnify State Govt./ Department for loss occurred or legal complication arising due to pending litigation and the land owning/ developer company will be responsible for the same in respect of applied land.

9. That you shall submit an affidavit duly attested by 1st Class Magistrate, to the effect that applicants have not submitted any other application for grant of licence for development of the said land or part thereof for any purpose under the provisions of the Haryana Development and Regulation of Urban Areas Act, 1975 or any application seeking permission for change of land use under the provision of the Punjab Schedule Roads and Controlled Areas restrictions of

Unregulated Development Act, 1963 or have not applied for licence/ permission under any other law for the time being in force.

10. That you shall submit an undertaking from the land owning companies/ owners that this land has not been sold to any person after entering into collaboration agreement with the colonizer to whom LOI is being issued and also that presently there is no collaboration agreement enforced with any other person for the same land.

11. That certificate from DRO/Deputy Commissioner, Gurugram will be submitted certifying that the applied land is still under ownership of applicant company, encumbrance free and not under acquisition proceedings.

12. That you shall submit the NOC/Access permission from NCRTC/competent authority regarding R.O.W of RRTS, before issuance of final permission.

13. You shall submit an indemnity bond indemnifying Director w.r.t. final outcome of the SLP(C) no. 15439 of 2022 of Hon'ble Supreme Court of India.

14. That company will intimate their official Email ID and the correspondence on this Email ID by the Deptt. will be treated as receipt of such correspondence.

(Amit Khatri, IAS)
Director,
Town & Country Planning,
Haryana, Chandigarh

Endst no. LC-5139-B-DS(AK)/2024/ Dated:

A copy is forwarded to the following for information and necessary action:-

i. Deputy Commissioner, Gurugram.
ii. Senior Town Planner, Gurugram.
iii. District Town Planner, Gurugram.
iv. District Town Planner(E), Gurugram.
v. Director Urban Estate Haryana, Sector-6, Panchkula.
vi. Project Manager (IT) with a request to update the status on website.

D.T.C.P.(Hr.)

(Sanjay Narang)
District Town Planner (HQ)
For Director, Town & Country Planning
Haryana Chandigarh

To be read with LOI Memo No.38456.....Dated.....06/12/.....of 2024.

Village	Name of owner	Rect. No.	Killa No.	Area (K-M)
Sidhrawali	Sungold Heights and developers LLP.	78	20/2min	5-4
			21min	6-8
		89	1min	6-8
			10/1min	2-10
			10/2min	3-19
			11/1min	1-12
		76	9/2/1	3-6
		66	22	8-0
		77	2/1	7-6
			9/2	3-18
			Total	48-11 Or 6.06875 Acres

Director
Town & Country Planning
Haryana, Chandigarh

FORM LC –V **Annexure P-8**

(See Rule 12)

HARYANA GOVERNMENT

TOWN AND COUNTRY PLANNING DEPARTMENT

Licence No. 38 of 2025

This license is being granted under the provisions of Haryana Development and Regulation of Urban Areas Act, 1975 & the Rules framed thereunder in favour of Sungold Heights and Developers LLP in collaboration with Signatureglobal (India) Limited, 13th Floor, Dr. Gopal Das Bhawan, 28 Barakhamba Road, Connaught Place, New Delhi-110001 for setting up of Industrial Plotted Colony over an additional area measuring 6.06875 acres in addition to licence no. 104 of 2024 dated 01.08.2024 (having area 129.65625 acres) thereby making total area of the colony as 135.725 acres, situated in the revenue estate of village Sidhrawali, Tehsil- Manesar, District Gurugram.

1. The particulars of the land, wherein the aforesaid Industrial Plotted Colony is to be set up are given in the schedule annexed hereto and duly signed by the undersigned.

2. The license is granted subject to the following conditions:

(i) The licencee shall maintain and upkeep of all roads, open spaces, public park and public health services for a period of five years from the date of issue of the completion certificate unless earlier relieved of this responsibility and thereupon to transfer all such roads, open spaces, public parks and public health services free of cost to the Govt. or the local authority, as the case may be, in accordance with the provisions of Section 3(3)(a)(iii) of the Haryana Development and Regulation of Urban Areas Act, 1975.

(ii) The licencee shall obtain NOC/Clearance as per provisions of notification dated 14.09.2006 issued by Ministry of Environment & Forest, Govt. of India, if applicable before execution of development works at site.

(iii) The licencee shall make its own arrangements for water supply, sewerage, drainage etc. to the satisfaction of DTCP.

(iv) The licencee shall obtain clearance from competent authority, if required under Punjab Land Preservation Land Act, 1900 and any other clearance required under any other law.

(v) That the rain water harvesting system shall be provided as per Central Ground Water Authority Norms/Haryana Govt. notification as applicable.

(vi) That the provision of solar water heating system shall be as per guidelines of Haryana Renewable Energy Development Agency and shall be made operational where applicable before applying for an Occupation Certificate.

(vii) The licencee shall use only LED fitting for internal lighting as well as campus lighting.

(viii) The licencee shall arrange power connection from DHBVNL for electrification of the colony and shall install the electricity distribution infrastructure as per the peak load requirement of the colony for which licencee shall get the electrical (distribution) service plan/estimates approved from the agency responsible for installation of external electric services i.e. DHBVNL and complete the same before obtaining completion certificate for the colony.

Director
Town & Country Planning
Haryana, Chandigarh

(ix) The licencee shall submit compliance of Rule 24, 26, 27 & 28 of Rules 1976 & Section 5 of Haryana Development and Regulation of Urban Areas Act, 1975, and shall inform account number and full particulars of the scheduled bank, wherein thirty percent of the amount received from the plot holders for meeting the cost of Internal Development Works in the colony will be deposited.

(x) The licencee shall not give any advertisement for sale of plots/commercial area before the approval of zoning plan.

(xi) That the revenue rasta/water course, passing through the site, if any, shall not be encroached upon and shall be kept free from all hindrances for easy movement of general public.

(xii) That the provisions of the Real Estate (Regulations and Development) Act, 2016 and Rules framed thereunder shall be followed in letter and spirit.

(xiii) That the terms and conditions of policy dated 01.10.2015 & 09.03.2019 and other directions given by the Director time to time shall be followed to execute the project.

(xiv) The pace of development shall be kept atleast in accordance with sale agreement executed with the buyers of the plots as and when scheme is launched.

(xv) The labour cess shall be paid as per policy instructions issued by Haryana Government vide Memo No. Misc. 2057-5/25/2008/2TCP dated 25.02.2010 as amended from time to time.

(xvi) That the permission from competent authority shall be obtained for construction of culvert over dhana/ nala / drain / water course etc, passing through the licenced land, if any.

(xvii) That the services shall be integrated with the services laid down by concerned development agency in the vicinity of the area in near future.

(xviii) That area coming under the sector roads and restricted belt / green belt, if any, which forms part of licensed area and in lieu of which benefit to the extent permissible as per policy towards saleable area has been granted, shall be transferred free of cost to the Govt.

(xix) That the 10% area of the residential component proposed under DDJAY shall be transferred to the Government free of cost for provision of community facilities or the said site shall be developed for community facilities in accordance with the policy provisions dated 25.08.2022 after seeking prior approval of the Department.

(xx) That it will be made clear at the time of booking of plots/commercial space that specified rates include or do not include EDC. In case of non inclusion of EDC in the booking rates, then it may be specified that same are to be charged separately as per rate fixed by the Govt. applicant company shall also provide detail of calculation of EDC per sqm/per sft to the allottees while raising such demand from the plot owners.

(xxi) That no clubbing of plots of residential component, to be developed under DDJAY shall be permitted and the terms and conditions of the policy notified on 01.04.2016 shall be adhered.

(xxii) The licencee shall execute the development works as per Environmental Clearance and company with the provisions of Environment Protection Act, 1986,

Air (Prevention and Control of Pollution of Act 1981) and Water (Prevention and Control of Pollution of 1974). In case of any violation of the provisions of said statutes, applicant shall be liable for penal action by Haryana State Pollution Control Board or any other Authority Administering the said Act.

(xxiii) That no pre-launch/sale of commercial plot will be undertaken before approval of the building plans or the layout plan as the case may be.

(xxiv) That the owner/developer shall integrate the bank account in which 70 percent allottee receipts are credited under Section-4(2)(l)(D) of the Real Estate Regulation and Development Act, 2016 with the online application/payment gateway of the Department, in such manner, so as to ensure that 10% of the total receipt from each payment made by an allottee is automatically deducted and gets credited to the EDC head in the State treasury.

(xxv) That such 10% of the total receipt from each payment made by the allottee, which is received by the Department shall get automatically credited, on the date of receipt in the Government treasury against EDC dues.

(xxvi) That such 10% deduction shall continue to operate till the total EDC dues get recovered from the owner/developer.

(xxvii) The implementation of such mechanism shall, however, have no bearing on EDC installment schedule conveyed to the owner/developer. The owner/developer shall continue to supplement such automatic EDC deductions with payments from its own funds to ensure that by the EDC installments that are due for payment get paid as per the prescribed schedule.

(xxviii) That red category industries shall not be permissible within 2 Kilometers from the boundary of urbanisable zone of the Dharuhera Development Plan, whereas all categories of units are permissible beyond the said limit subject to obtaining permission from Haryana Pollution Control Board.

(xxix) That necessary measures shall be taken for setting up of an Effluent Treatment Plant of appropriate size and also ensure safe disposal of effluents after proper treatment.

3. That the plots situated in pocket-1 having area measuring 11.56875 acres, which derives approach from land acquired for RRTS, shall be kept freezed and no third party rights shall be created on the same till submission of the NOC /access permission from competent authority.

4. That the licence is being granted subject to final outcome of the SLP (C) No. 15439 of 2022 of Hon'ble Supreme Court of India.

5. The license is valid up to 24-03-2030

Dated: The 25-03-2025
Chandigarh

(Amit Khatri, IAS)
Director,
Town & Country Planning
Haryana, Chandigarh

Endst. No. LC-5139(B)/JE(AK)/2025/10865-877 Dated: 25-03-2025

A copy along with a copy of schedule of land is forwarded to the following for information and necessary action: -

1. Sungold Heights Developers LLP in collaboration with Signatureglobal (India) Limited, 13th Floor, Dr. Gopal Das Bhawan, 28 Barakhamba Road, Connaught Place, New Delhi-110001 along with a copy of agreement, LC-IV & Bilateral Agreement and Layout Plan.
2. Chairman, Pollution Control Board, Haryana, Sector-6, Panchkula.
3. Chief Administrator, HSVP, Panchkula.
4. Managing Director, HVPNL, Planning Directorate, Shakti Bhawan, Sector-6, Panchkula.
5. Joint Director, Environment Haryana–Cum-Secretary, SEAC, Paryavaran Bhawan, Sector -2, Panchkula.
6. Addl. Director Urban Estates, Haryana, Panchkula.
7. Superintending Engineer, HSVP, Gurugram along with a copy of agreement.
8. Land Acquisition Officer, Gurugram.
9. Senior Town Planner, Gurugram along with a copy of Layout Plan.
10. District Revenue Officer, Gurugram with the request to make red entry in this regard in the relevant revenue record.
11. District Town Planner, Gurugram along with a copy of agreement & Layout Plan.
12. Chief Accounts Officer O/o DTCP, Haryana, Chandigarh.
13. Project Manager (IT) for updation on the website.

(Rakesh Bansal)
District Town Planner (HQ)
For: Director, Town & Country Planning
Haryana Chandigarh

To be read with License No. 38 ...Dated 25-03 .of 2025.

Village	Name of owner	Rect. No.	Killa No.	Area (K-M)
Sidhrawali	Sungold Heights and developers LLP.	78	20/2min	5-4
			21min	6-8
		89	1min	6-8
			10/1min	2-10
			10/2min	3-19
			11/1min	1-12
		76	9/2/1	3-6
		66	22	8-0
		77	2/1	7-6
			9/2	3-18
			Total	48-11 Or 6.06875 Acres

Director
Town & Country Planning
Haryana, Chandigarh

Annexure P-9

CONCEPTUAL PLAN

w.r.t.

INDUSTRIAL PLOTTED COLONY PROJECT

At

Village- Shidrawali, Tehsil- Manesar, District- Gurugram, Haryana

Project Proponent:

M/s Signatureglobal India Limited

Schedule: 8(b), Category: B1

Proposed Built-up Area = 7, 24,895.645 m^2

Submission Period: August, 2024

QCI Certificate no. NABET/EIA/21-24/SA 0211

Validity Extension letter no. QCI/NABET/ENV/ACO/24/3338

ENVIRONMENT CONSULTANT:

GRASS ROOTS RESEARCH & CREATION INDIA (P) LTD.

QCI Certificate no. NABET/EIA/2124/SA0211

(Accredited by QCI/NABET, Approved by MoEFCC, GoI, ISO 9001:2015 Certified Co.)

F-374-375, Sector-63, Noida, U.P.

Ph.: 0120- 4044630, Telefax: 0120- 2406519

Email: md@grc-india.com,eia@grc-india.com

Website: http://www.grc-india.com

GRC INDIA TRAINING & ANALYTICAL LABORATORY

(Accredited by NABL, Recognized by MoEF&CC, GoI)

A unit of GRC India

Contents

S. NO.	DESCRIPTION	PAGE Nos.
1.	Introduction	85
2.	Site location & surroundings	85
3.	Connectivity	85
4.	Project Cost	87
5.	Landform Land Form & ownership details	87
6.	Area statement	87
7.	Population density	88
8.	Water requirement & Supply system	90
9.	Wastewater requirement & Sewage treatment technology	97
10.	Rain water harvesting	100
11.	Parking Facilities	101
12.	Power requirement	101
13.	Solid Waste Generation	101
14.	Green Area	105
15.	Environment Management Plan	105

CONCEPTUAL PLAN

INTRODUCTION

The Industrial Plotted Colony Project is to be developed by M/s Signatureglobal India Limited. The project site is located at Village- Shidrawali, Tehsil Manesar, District-Gurugram, Haryana on a land measuring 135.7250 acres.

The company has vast experience in planning and construction of Industrial Parks. We will propose Category B industries. The project facilities include:

- Industrial Plotted Development
- Residential Plotted Development
- Community facilities
- Commercial Plots

SITE LOCATION AND SURROUNDINGS

The project site is located at Village-Shidrawali, Tehsil Manesar, Gurugram, Haryana. The Geographical coordinates of the project are 28° 14' 46.93' N and 76° 49' 29.40' E.

CONNECTIVITY

The Nearest Highway is NH-48 which is adjacent to the 8.7 km site in North west direction, SH-28 is 0.58 km towards SW direction, SH-25 which is 4.1 km (S), NH-919 is 3.8 km towards S direction, Western Peripheral Expressway is 8.7 km towards NE direction, MDR 132 is 5.1km towards NE direction, & NH-352W which is 9.8 km (S) direction away from project site.

The nearest railway station being Inchhapuri Railway Station is about 12.6 km (NW) away from the project site.

The nearest Airport is Indira Gandhi International Airport 40 km (NE) from the project site.

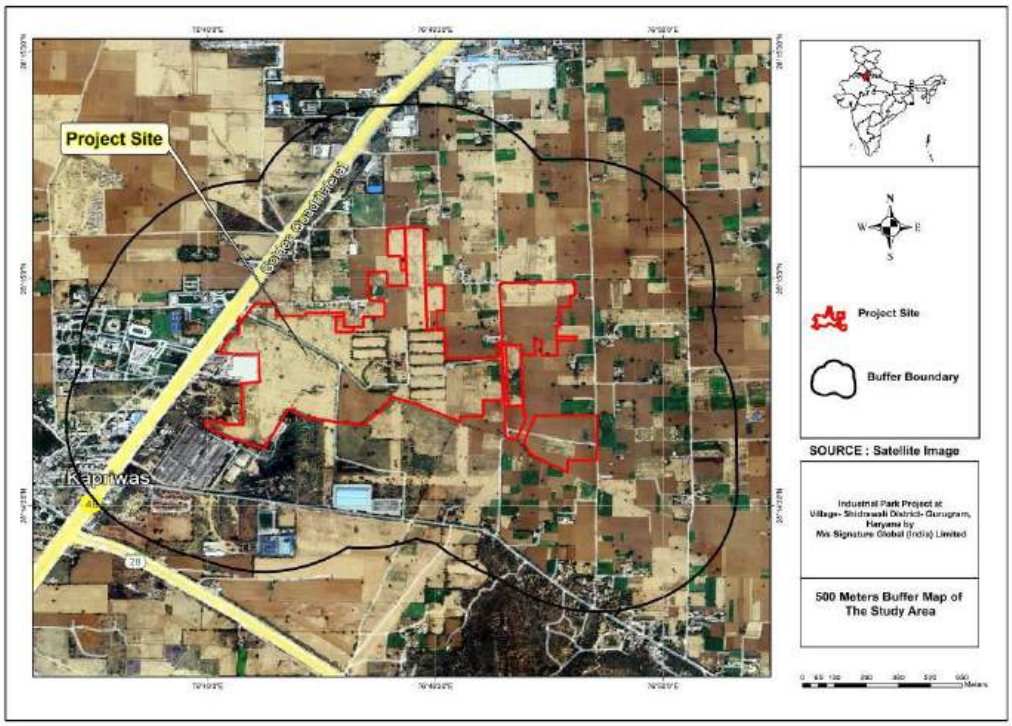

Fig.1: 500 m Radius Map

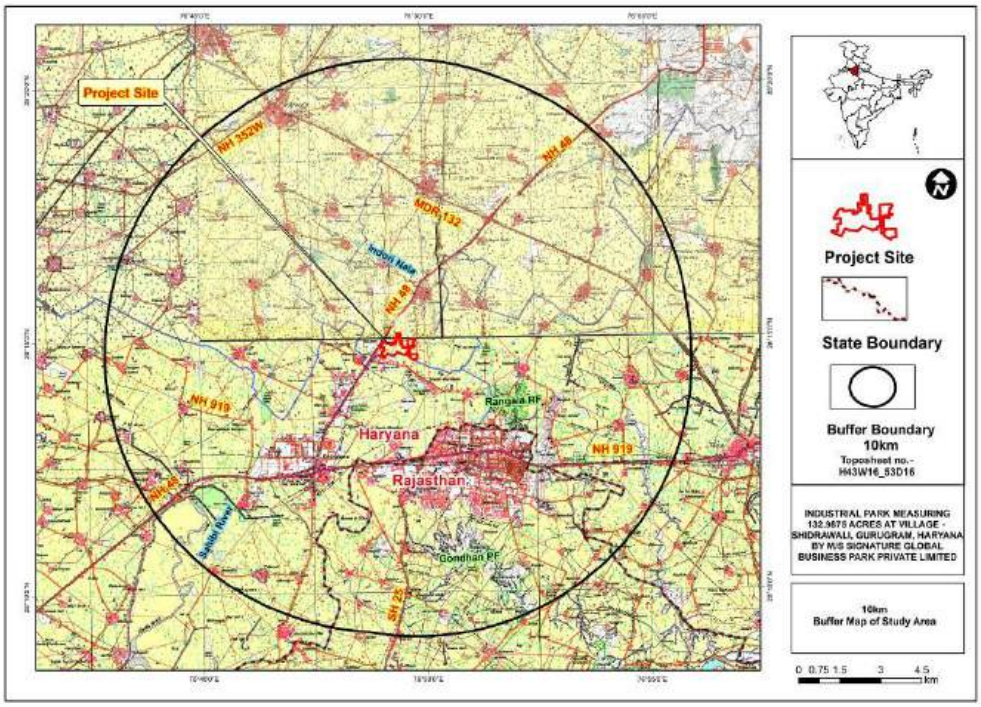

Fig. 2: SoI Toposheet Showing 10 km radius

PROJECT COST

The Total Cost of the proposed project will be INR 1593.7 Crore including the land and development cost.

LANDFORM, LANDUSE AND OWNERSHIP DETAILS

Total land is 135.7250 acres, and the Land has been allotted by Directorate of Town and Country Planning, Haryana to M/s Signatureglobal (India Limited to set-up Industrial Park.

The land use break-up of site is provided below in Table 1.

Table 1: Land use break-up of Site

S. No	Description	Area (acre)	Area (m^2)	Percentage of Net planned area (%)
1	Area under Industrial Plots	45.537	1,84,280.882	33.55
2	Area under DDJAY Residential Component	31.490	1,27,433.845	23.02
3	Area under Commercial Plots	1.903	7701.339	1.402
4	Area under Road/Road widening/Open/Green /Public Facilities etc	56.795	2,29,842.913	41.84
	Total land area	135.7250	**5,49,258.716**	**100**

AREA STATEMENT

The total area of the site is **5,49,258.716** m^2 (135.7250 acre). The detailed area statement is provided below in Table 2:

Table 2: Detailed Area Statement

S. No.	Particulars	Area (in m^2)
1.	**Total Licensed area**	**5,49,258.716**
2	Area under Road (Delhi –Jaipur Road) Widening	10,194.015
3	Area under proposed Green Belt of Delhi –Jaipur Road (considering 60 m wide on either side)	13677.139
4	Area under green belts of RRTS (considering 20m on either side)	5293.280
5.	Total area to be deducted (2+3+4)	29,164.434
6.	**Balance area (1-5)**	**5,20,094.282**
7.	**50% benefit of area under road** (Delhi –Jaipur Road) Widening, Green Belt of Delhi –Jaipur Road & green belts of	**11,935.577**

	RRTS	
8.	**Net Area (6+7)**	**5,32,029.859**
9.	Area under undetermined use	5,516.641
10.	**Net Planned area (8-9)**	**5,26,513.219**
11.	**Proposed Area under plots**	**319,416.066**
	• Area under Industrial Plots	1,84,280.882
	• Area under Residential plots	1,27,433.845
	• Area under Commercial plots	7701.339
12.	**Total Permissible FAR**	**5,78,220.453**
	• Industrial Permissible FAR (1.250)	2,30,351.102
	• Commercial Permissible FAR (4.2857/Plot)	11,417
	• Residential Permissible FAR (2.64)	3,36,452.351
13.	**Total Proposed FAR**	**5,78,220.453**
	• Industrial FAR	2,30,351.102
	• Commercial FAR	11,417
	• Residential FAR	3,36,452.351
14.	NON-FAR Area	**1,46,675.192**
15.	**Total Built up area**	**7,24,895.645**
16.	**Green Area (7.073% of Plot area)**	**37,241.664**
	❖ Green Area under DDJAY	14942.433
	❖ Green Area under Green Belt	13677.139
	❖ Green Area Metro/RRTS Green Belt	5293.280

POPULATION DENSITY

The total population of the project will be 61,489 persons. The detailed population break-up is given in Table 3:

Table 3(a): Population Break-up for Residential Population

S. No.	Description	Total no. of floors per plot	DUs/FAR (sqm)	PPU	Total Population
A.	**Residential plots (Type 1)**				
1.	Residential plots	4	285	18	5130

2.	Visitor's	10% of Residential population			513
3.	Staff (Operation & Maintenance)				200
B.	**Residential plots (Type 2)**				
4.	Residential plot Population	4	677	18	12186
5.	Visitor's	10% of Residential population			1219
6.	Staff (Operation & Maintenance)				200
	Grand Total of Residential Population				**19,448**

Table 3(b): Population Break-up for Community buildings, Commercial & Population

S. No.	Description	Area (m^2)	PPU/ Person/m^2 FAR	Total Population
C.	**Community Building -1**			
7.	**Community Building Population**	9351.919	1.4	**6680**
8.	**Staff**	10% of Community Building 1 population		668
9.	**Visitors**	90% of Community Building 1 population		6012
D.	**Community Building -2**			
10.	**Community Building Population**	10290.508	1.4	**7351**
11.	**Staff**	10% of Community Building 2 population		736
12.	**Visitors**	90% of Community Building 2 population		6615
	Total Community buildings population			**14,031**
E.	**Commercial Building**			
13.	**Retail Shops (Ground Floor)**	4,566.8	(@ 1 Person/3 m^2)	**1522**
	• Staff	(@10% of the Retail shop population)		152
	• Visitors	(@90% of the Retail shop		1370

		population)		
14.	**Retail Shops (Above Floors)**	6,850.2	(@ 1 Person/6m^2)	**1142**
	• Staff	(@10% of the Retail shop population)		114
	• Visitors	(@90% of the Retail shop population)		1028
	Total Commercial building population			**2664**
	Grand total of Community buildings & Commercial buildings population			**16,695**

Table 3(c): Population Break-up for Industrial Population

S. No.	Description	Area (m^2)	PPU/ Person/m^2 FAR	Total Population
F.	**Industrial Plots**			
	Industrial plots population	2,30,351.102	(@ 1 Person/10 m^2)	23,035
	Visitors	10% of Industrial plots population		2303
	Total Industrial plots population			**25,338**

WATER REQUIREMENT & SUPPLY SYSTEM

During the Construction Phase the Source of water will be Ground water. During operation phase, the source of water supply will be GMDA. The total water requirement for the project will be approx. 3475 KLD.

The domestic water demand for Residential (Type 1 & 2), Community Buildings, Commercial Buildings, & industrial Plots is 2905 KLD. The freshwater requirement for Residential (Type1 &2), Community Buildings, Commercial Buildings, & industrial Plots will be 1943 KLD. However, one-time freshwater demand for the project will be 3475 KLD.

The calculation of daily water requirement and wastewater is given below in Table 4 to 7 respectively.

Table 4: Calculations for Daily Water Demand

S. No.	Description	Occupancy	Rate of water demand (lpcd)		Total Water Requirement (KLD)		
			Fresh	Flushing	Fresh	Flushing	Total
A.	**Domestic Water for Residential plots (Type 1)**						

	Residential plots	5130	@ 65 lpcd	@ 21 lpcd	333	108	441
	• Staff	200	@25 lpcd	@20 lpcd	5	4	9
	• Visitors	513	@ 10 lpcd	@5 lpcd	5	3	8
					343 KLD	**115 KLD**	**458 KLD**
	Total Domestic Water= 458 KLD						
B.	**Domestic Water for Residential plots (Type 2), Community buildings, & Commercial buildings**						
	Residential plots (Type 2)	12186	@ 65 lpcd	@ 21 lpcd	792	256	1048
	• Staff (for Community buildings, Operation & Maintenance for residential plots (type 2) & Commercial building)	1870	@25 lpcd	@20 lpcd	47	37	84
	• Visitors (for Community buildings, Residential Plots, & Commercial building)	16,244	@ 10 lpcd	@5 lpcd	162	81	243
					1001 KLD	**374 KLD**	**1375 KLD**
Total Domestic Water for Residential plots (Type 2), Community buildings & Commercial Buildings = 1375 KLD							
C.	**Domestic Water for Industrial plots**						
	• Industrial Plots	23,035	@25 lpcd	@20 lpcd	576	461	1037
	• Visitors (for Industrial	2303	@ 10 lpcd	@5 lpcd	23	12	35

	plots)						
					599 KLD	**473 KLD**	**1072 KLD**
	Total Domestic Water for Industrial plots						**1072 KLD**
D.	**Horticulture**	37,241.664 m^2	3 l/sqm		112 KLD		
Grand Total (A+B +C+D) 3,475 KLD							

Table 5: Wastewater Calculation for Residential plots (Type 1)

Domestic Water	**458 KLD**
• Fresh water	343 KLD
• Flushing water	115 KLD
Waste water [@80% fresh + 100% flushing]	274.4 +115 = **389 KLD**
STP Capacity	500 KLD

Table 6: Wastewater Calculation for Residential plots (Type 2), Community buildings, & Commercial buildings

Domestic Water	**1375 KLD**
• Fresh water	1001 KLD
• Flushing water	374 KLD
Waste water [@80% fresh + 100% flushing]	801 + 374= **1175 KLD**
STP Capacity	1410 KLD

Table 7: Wastewater Calculation for Industrial plots

Domestic Water	**1072 KLD**
• Fresh water	599 KLD
• Flushing water	473 KLD
Waste water [@80% fresh + 100% flushing]	479 + 473= **952 KLD**
STP Capacity	1150 KLD

WASTE WATER & TREATEMENT

Approx. 2516 KLD wastewater will be generated from the **Residential plots (Type 1 & 2), Community buildings, Commercial buildings & Industrial plots**. Wastewater will be treated in an in-house STP of total capacity 3060 KLD (500 KLD +1410 KLD +1150 KLD).

STP 1 [For Residential plots (Type 1)]: 500KLD

STP 2 [For Residential plots (Type 2), Community buildings, & Commercial buildings]: 1410 KLD

STP 3 [For Industrial plot]:1150 KLD

Treated wastewater will be used for flushing and horticulture and remaining water will discharge to External sewer.

Water balance diagram for summer, monsoon & winter season is presented below:

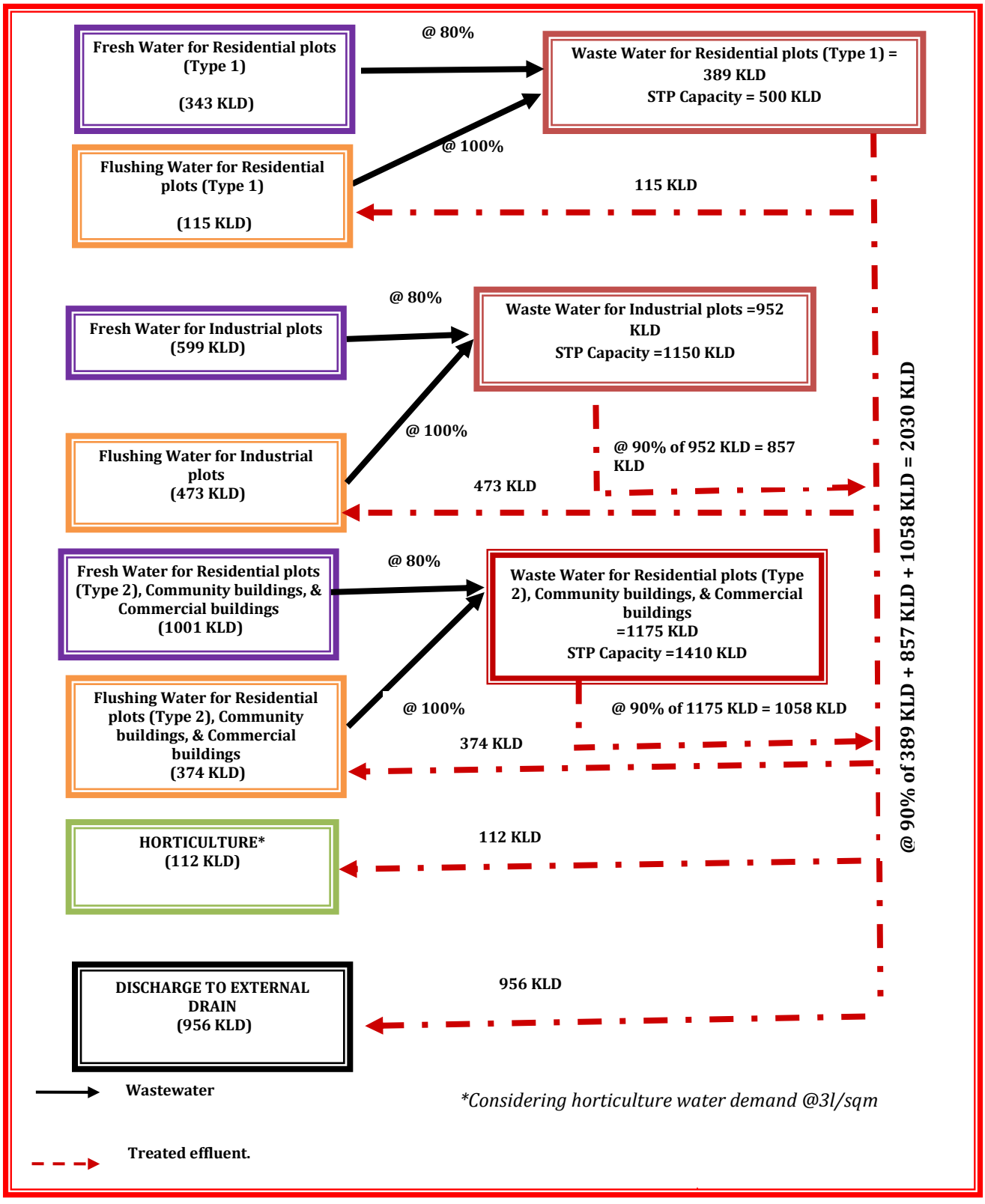

Figure 3: Water Balance Diagram (Summer Season)

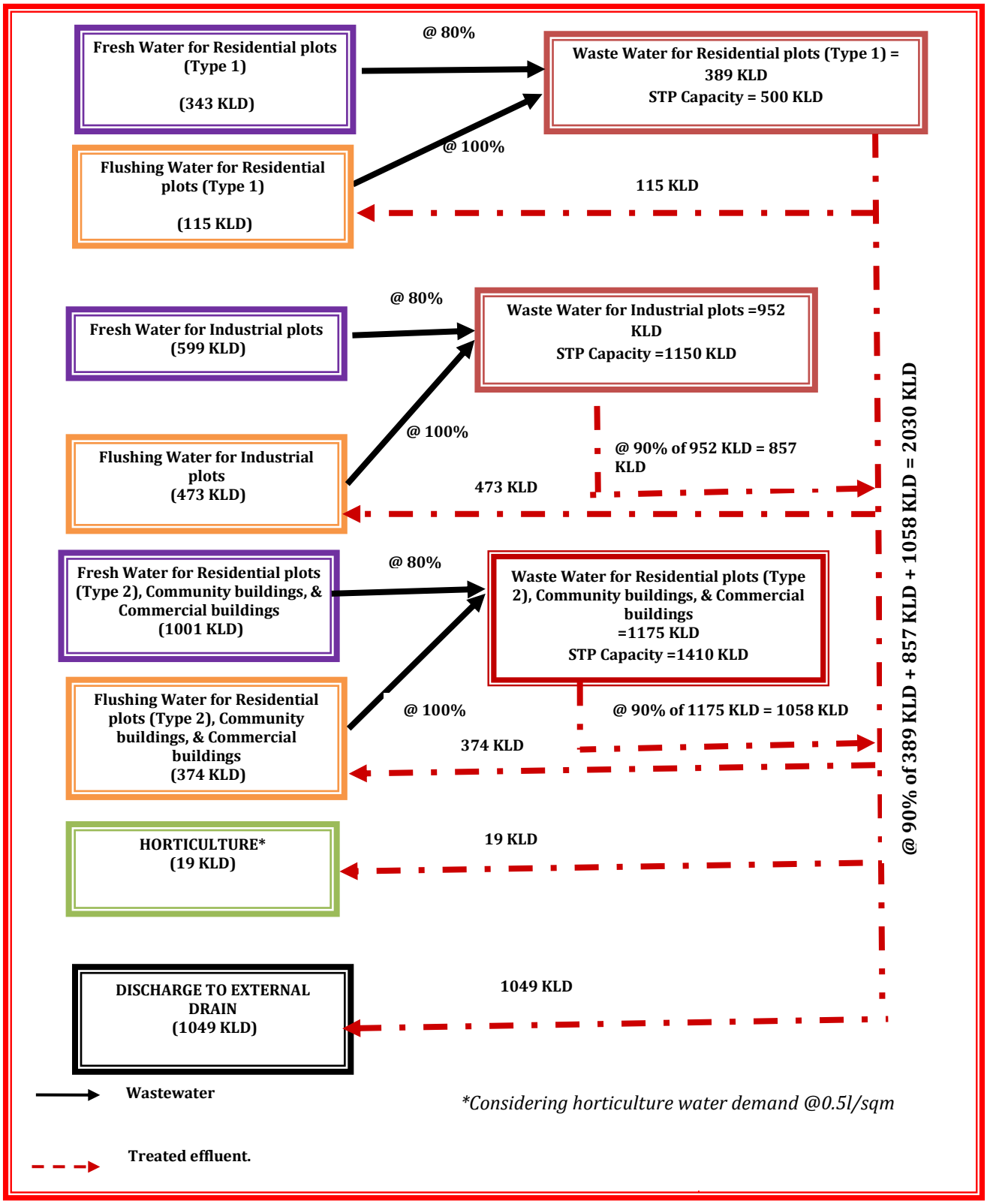

Figure 4: Water Balance Diagram (Monsoon Season)

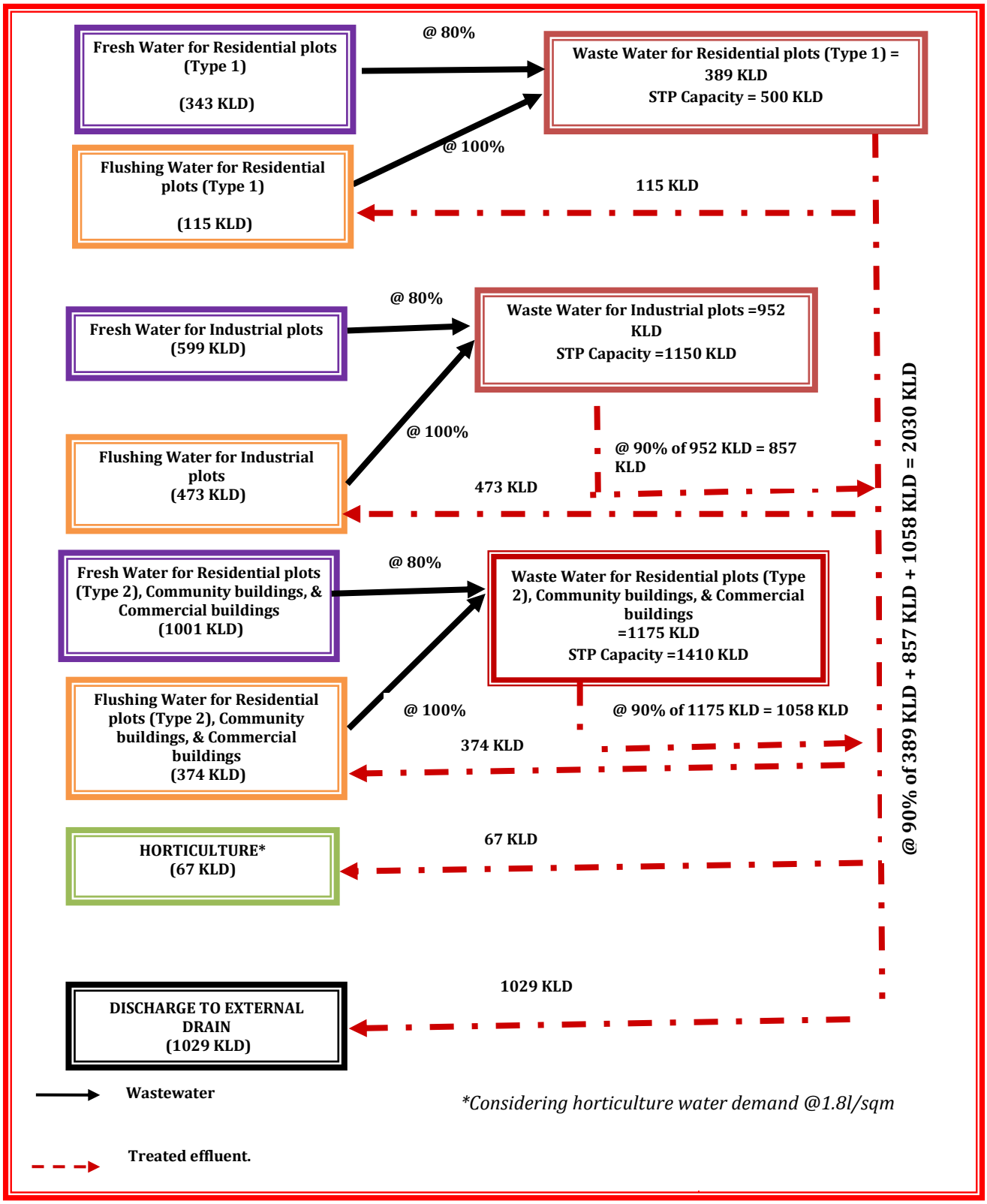

Figure 5: Water Balance Diagram (Winter Season)

SEWAGE TREATMENT PLANT

MBBR TECHNOLOGY

An external sewage network shall collect the sewage from all units, 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. Wastewater Details

(a)	Daily load	:	2516 KLD
(b)	Duration of flow to STP	:	24 hours
(c)	Temperature	:	Maximum 32^{o}C
(d)	pH	:	6.5-8.5
(e)	Colour	:	Mild
(f)	T.S.S. (mg/l)	:	250-400 mg/l
(g)	BOD_5 (mg/l)	:	300-400 mg/l
(h)	COD (mg/l)	:	600-700 mg/l

b. Treated effluent

(a)	pH	:	6.0 to 8.5
(b)	B.O.D.	:	<10 mg/l
(c)	C.O.D.	:	<30 mg/l
(d)	Total Suspended Solids	:	<20mg/l

c. Treatment Technology

MBBR TECHNOLOGY

Moving bed biofilm reactor technology is based on the principle of attached growth process. Raw sewage will be collected under gravity into the equalization tank after allowing to pass through the bar screen. Screens will be provided in screen chambers and it will be manually cleaned by going down to a platform. The bar screen, by removing coarse solids from the sewage help in protecting the raw sewage pump.

Fully submersible centrifugal non clog sewage handling pump will be provided in the collection cum equalization tank to pump the collected waste water to the next MBBR tanks. Automatic level controller will be provided in the tank to turn the pump off at the low water level in the tank and to start the pump when water level is high automatically. Air will be introduced in this tank to prevent any potential foul smell problem & to provide the mixing of wastewater to avoid the sedimentation of solids in this tank. Air Grid used for aeration purpose shall be non-clog.

The sewage collected in equalization tank is pumped the moving bed bioreactor. There shall be two nos. of bioreactors in series for the efficient working and removal of BODs for the required retention time. The process inside the moving bed bioreactors consists of adding small cylindrical-shaped polyethylene/polypropylene carrier elements in aerated basins to support biofilm growth. The small cylinders are provided with a cross inside the cylinder and longitudinal fins on the outside. The biofilm carriers are maintained in the reactor by the use of a perforated plate with appropriate slot at the tank outlet. Air agitation or mixers are applied in a manner to continuously circulate the packing. The packing may fill 25 to 50 percent of the tank volume. Specific surface area of the packing is about 450-500m^2/m^3 of bulk packing volume. The waste water from first bioreactor flows by gravity through the perforated plate/mesh to the next bioreactor kept in series. Inside the bioreactors, aerobic bacteria grow in an attached growth from around the moving plastic media inside the reactors. The bacteria have to reduce BOD & COD of waste water in the presence of oxygen provided through the air

grids located at the bottom of the reactors. The Process does not require any return activated sludge flow or backwashing.

From the bio-reactors, the effluent passes by gravity into the clarifier (Tube Settling Tank). Clarifier will be a hopper bottom sedimentation tank provided with appropriate size PVC tube deck media. The suspended solids will settle at the bottom of the tank & clear supernatant will overflow to filter feed tank through outlet launder. The collected sludge at bottom shall be transferred through pumps to sludge holding tank.

The clear supernatant after clarifier will be collected in to filter feed tank. This tank will act as housing tank for filter feed pumps. The clarified & dis-infected water will be then fed to filtration unit.

Filtration unit consisting of Dual Media sand filter, activated carbon filter and ultra-filtration system (optional) will remove the residual impurities such as odor/color, suspended solids, BOD/COD. The treated water after the filtration unit will be collected in Irrigation cum Flushing water storage tank from where it is transferred to flushing water tank at terrace & Irrigation System.

Excess sludge from the bottom of the settling tank will be removed and transferred to sludge holding tank. Air grid shall be provided in this tank to avoid conversion into anaerobic conditions, thickening of sludge and keep sludge in homogenous condition. The digested & thickened sludge shall be further thickened through Sludge Dewatering System (Filter press with screw pump) and disposed-off periodically through closed tanker or can be reused as manure.

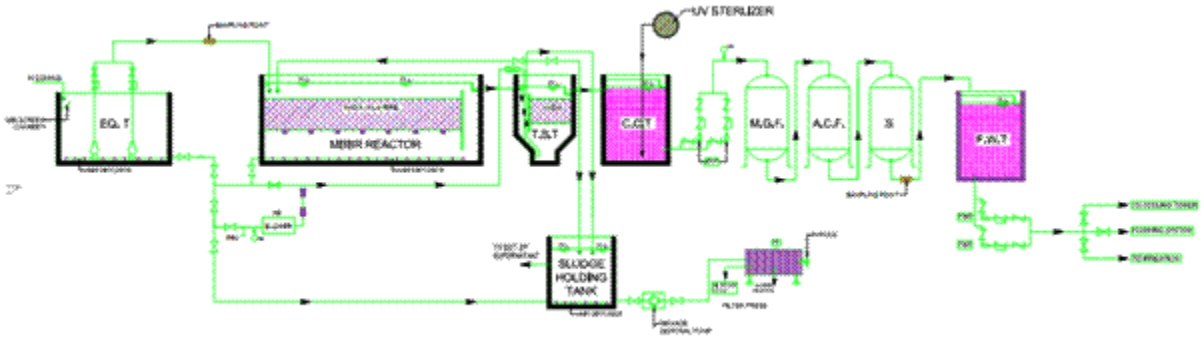

Figure 6: Schematic Diagrams for STP Based on MBBR Technology

RAINWATER HARVESTING

The storm water collection 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 carriageway along either side of the roads. Taking advantage of road camber, the rainfall run off from roads shall flow towards the drains. Storm water from various plots/shall be connected to adjacent drain by a pipe through catch basins. Therefore, it has been calculated to provide 65 rainwater harvesting pits at selected locations, which will catch the maximum run-off from the site.

1) Since the existing topography is congenial to surface disposal, a network of storm water pipe drains is planned adjacent to roads. All building roof water will be brought down through rainwater pipes.
2) Proposed storm water system consists of pipe drain, catch basins and seepage pits at regular intervals for rainwater harvesting and ground water recharging.
3) The peak hourly rainfall of 45 mm/hr shall be considered for designing the storm water drainage system.

Rainwater harvesting has been catered to and designed as per the guideline of CGWA. Peak hourly rainfall has been considered as 45 mm/hr. The recharge pit of 2.5m diameter and 4 m depth is constructed for recharging the water. Inside the recharge pit, a recharge bore is constructed having adequate diameter and depth. The bottom of the recharge structure will be kept 5 m above this level. At the bottom of the recharge well, a filter media is provided to avoid choking of the recharge bore. Design specifications of the rainwater harvesting plan are as follows:

- Catchments/roofs would be accessible for regular cleaning.
- The roof will have a smooth, hard and dense surface which is less likely to be damaged allowing the release of material into the water. Roof painting has been avoided since most paints contain toxic substances and may peel off.
- All gutter ends will be fitted with a wire mesh screen and a first flush device would be installed. Most of the debris carried by the water from the rooftop like leaves, plastic bags and paper pieces will get arrested by the mesh at the terrace outlet and to prevent contamination by ensuring that the runoff from the first 20 minutes of rainfall is flushed off.
- No sewage or wastewater would be admitted into the system.
- No wastewater from areas likely to have oil, grease, or other pollutants has been connected to the system.

Calculations for storm water load:

Green Area = 37,241.664m^2

Paved Area = 1,69,855.489m^2
Mean monthly rainfall for District as per IMD = 45 mm
Run-off from Green area = 37,241.664 x 0.045 x 0.20
= 335.174m^3
Run-off from Paved area = 1, 69,855.489 x 0.045 x 0.70
= 5,350.447m^3
Total runoff load from green and paved area = 335.174 + 5,350.447**= 5,685.621m^3**
Taking 20 minutes Retention Time, Total volume of storm water = 5,685.621/3
= 1,895.207m^3
Taking the effective diameter and depth of a Recharge pit 2.5m and 4 m respectively, Volume of a single Recharge pit = πr^2h = 3.14 × 1.25× 1.25× 4= 29 m^3
Hence No. of pits required = 1,895.207/29 = 65 pits
A total of 65 no. of pits proposed for artificial ground water recharge.

PARKING FACILITIES

Adequate provision will be made for car/vehicle parking at the project site. There shall also be adequate parking provisions for visitors so as not to disturb the traffic and allow smooth movement at the site.
For plotted development the parking shall be within the plots by the individual plot owners.

POWER REQUIREMENT

The power shall be supplied by the State Electricity Board. The maximum load demand for the project will be approx. 12,883 KW.

Details of D.G Sets
There is provision of 2no. of DG set of total capacity 1100kVA for Commercial Facility which includes 1 x 750kVA +1x 350 kVA and 2no. of DG set of total capacity 1750 kVA for Common Services which includes 1 x 750kVA +1x 1000 kVA are proposed for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

SOLID WASTE GENERATION

Solid waste would be generated both during the construction as well as 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 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 topsoil will be stored in a temporarily 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.

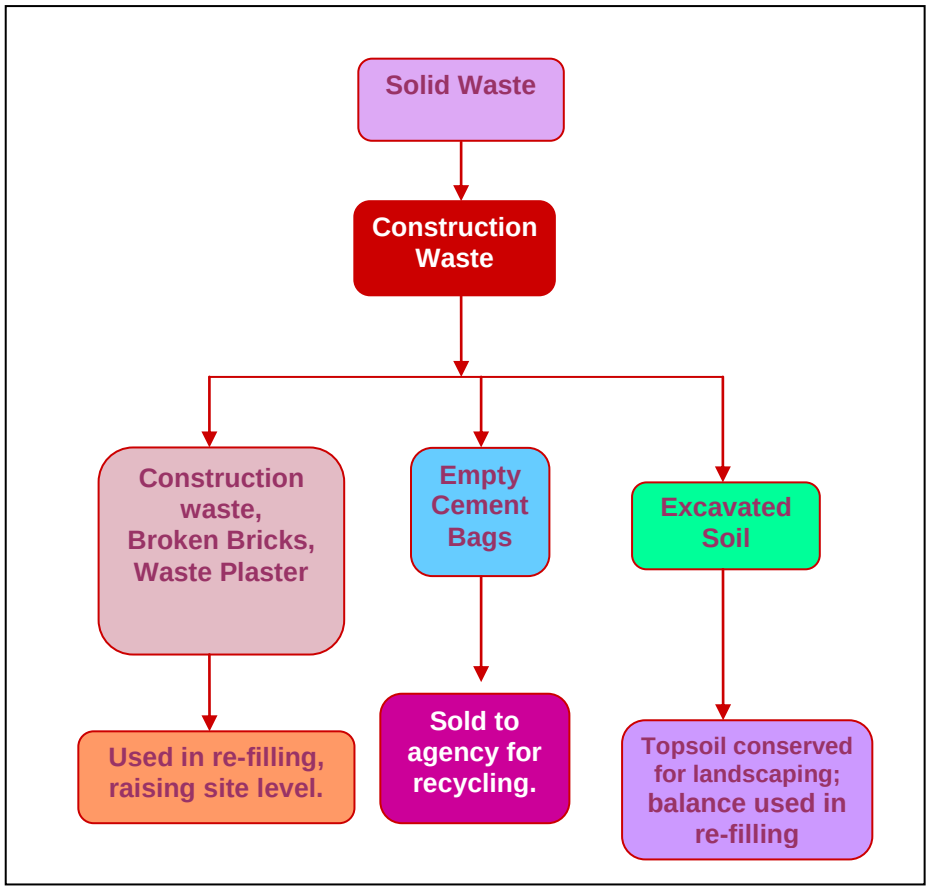

Fig. 7: Solid Waste Management Scheme (Construction Phase)

During the operation phase, approx. 18,139 kg/day of domestic waste will be generated. Calculation for domestic solid waste is provided in table below:

Table 8: Daily Solid Waste Generation

S. No.	Description	Occupancy	Norms (kg/capita/day)	Waste Generated (kg/day)
1.	**Domestic Solid Waste for Residential plots**			
	• Residential plots	17316	0.5	8658

2.	**Domestic Solid Waste for Industrial plots**			
	• Industrial Plots	23035	0.25	5759
3.	Staff (Residential Maintenance, Community, Commercial, & Industrial)	2070	0.25	518
4.	Visitors(Residential, Community, Commercial, & Industrial)	19060	0.15	2,859
5.	Horticultural Waste (9.20 acres)	@ 0.2 kg/acre/day		1.84
6.	STP Sludge	Sludge generated x 0.35 x B.O.D difference/1000		343.434
Total Solid Waste Generation = 18,139kg/day				

Following arrangements will be made at the site in accordance to Solid Waste Management Rules, 2016:

❖ **Collection and Segregation of waste**

1. Door to door collection system will be provided for collection of domestic waste.
2. Separate colored bins will be provided for Dry recyclable and Bio-Degradable waste.
3. Local vendor will be hired for collection and disposal of waste.
4. Litter bin will also be provided in open areas like parks etc.

❖ **Treatment of waste**

- Bio-Degradable waste

1. Bio-degradable waste will be subjected to composting by organic waste converter and the compost will be used as manure.
2. STP sludge is proposed to be used for horticultural purposes as manure.
3. Horticultural Waste is proposed to be composted and will be used for gardening purposes.

- Recyclable waste

i. Grass Recycling – The cropped grass will be spread on the green area. It will act as manure after decomposition.
ii. Recyclable waste like paper, plastic, metals etc. will be sold off to recyclers.

❖ **Disposal**

Recyclable and non-recyclable waste will be disposed of through a local agency. Solid waste management scheme is depicted in the following figure:

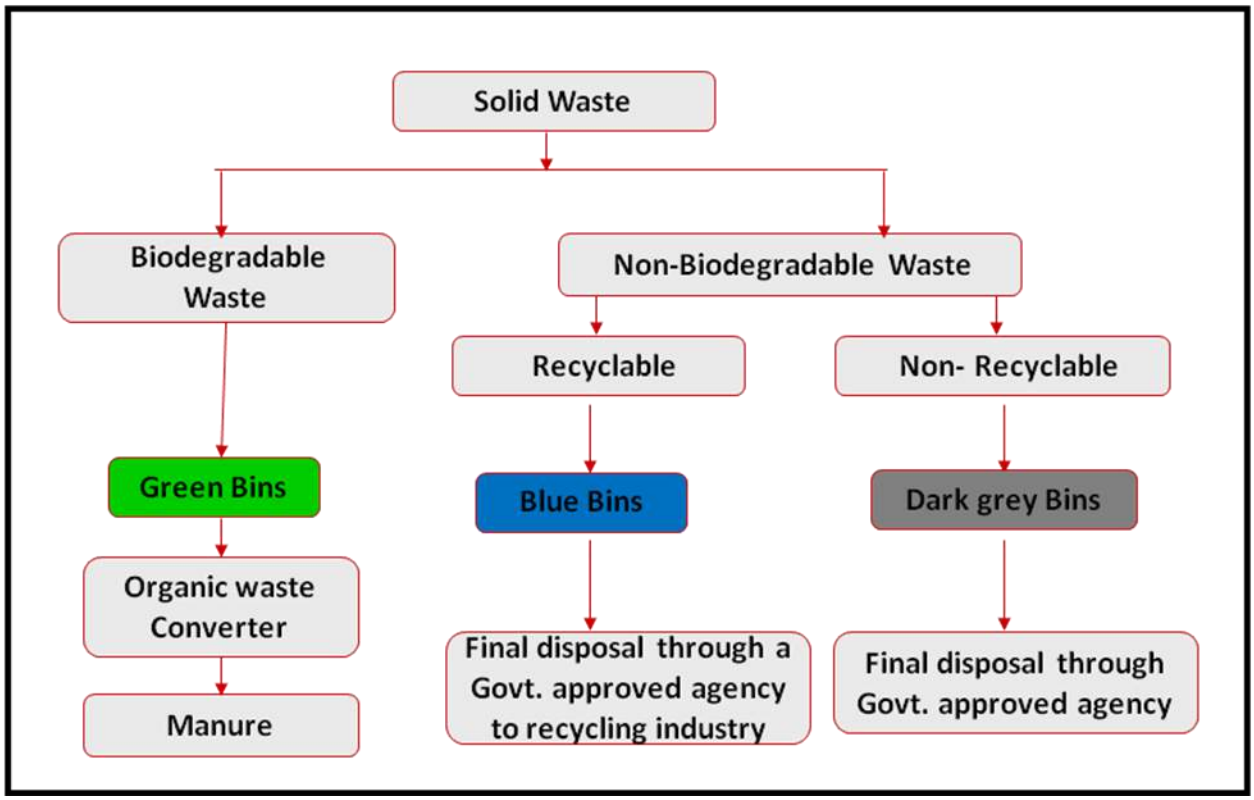

Fig. 8: Solid Waste Management Scheme (Operation Phase)

Organic Waste Converter

A waste converter is a machine used for the treatment and recycling of solid and liquid refuse material. A converter is a self-contained system capable of performing the following functions: pasteurization of organic waste; sterilization of pathogenic or biohazard waste; grinding and pulverization of refuse into unrecognizable output; trash compaction; dehydration.

Benefits of organic waste converter:

1. Large quantity of solid waste is converted to manure in a very short period
2. Manure can be used as compost for gardening
3. Machine requires less space, and the efficiency is high
4. Manpower and maintenance are very less
5. This is one of the latest techniques of managing biodegradable solid waste.

Organic Waste Converter - 300 (Dim. 3m × 4m) 2 machines are proposed to be used for composting waste 120kg/batch or 3000 kg/day & it requires electricity of about 13.5 HP.
No. of batches /day = 3000/120 = 25

Biodegradable Waste to be converted = 40% of total solid waste generated = 7256 kg/ day
Taking 20% higher = 8707kg
No. of batches to convert 8707 kg = 8707 /120 = 73

Operation Cost-monthly per capita:

The operating cost of OWC - 300 = 1, 80,000 INR/month
Cost/day = 1, 80,000/30
= 6000/-
1 batch/day cost = 6000/25
= 240 INR
Cost for 73 batch/day = 73 × 240/-
= 17520 /-
Monthly operating cost = 30 ×17520
= INR 5, 25,600 /- per month

GREEN AREA

Total green area measures **37,241.664** m^2 which will include green belt, Avenue plantation and lawn.
Evergreen tall and ornamental trees have been proposed to be planted inside the premises.
No. of trees required = 1 tree/80 sq.m. of plot area =5,49,258.716/80 = 6866 Nos
No. of trees proposed to be planted = 6,870 trees.

As per OM dated 24.07.2024 we will plant one additional tree "EK Ped Maa Ke Naam."

ENVIRONMENT MANAGEMENT PLAN

The total cost (Land Cost + Development Cost) of the proposed project will be INR 1593.7 Crores. The capital cost for environmental management of the proposed project is estimated to be INR 796 lakhs (Construction and operation). INR 132.75 lakhs (operation and construction) per year will be required as annual recurring expenses to meet the recurring expenditure for implementing the measures.

Table 9 ENVIRONMENT MANAGEMENT PLAN BUDGET

COMPONENT	Capital Cost (INR Lakh)	Recurring Cost (INR Lakh/Yr)
Labor Sanitation & Wastewater Management	35	8.75

Dust Mitigation Measures Including site barricading, water sprinkling & anti-smog gun)	25	6
Storm Water Management (temporary drains & sedimentation basin)	10	2.5
Solid Waste Management	5	1
TOTAL	**75**	**18.25**

COMPONENT	**Capital Cost (INR Lakh)**	**Recurring Cost (INR Lakh/Yr)**
Sewage Treatment Plant	190	47.5
Rain Water Harvesting System	115	28.75
Solid Waste Management	80	20
Environmental Monitoring	6	9
Green Area/ Landscape Area	50	12.5
Others (Energy saving System, miscellaneous)	60	15
Sub-Total	**576**	**108**
CER		
Plantation in nearby School	30	--
Drinking Water facilities in nearby schools	15	--
Arrangement of Medical Camp	15	--
Renovation work of School Nearby Village	80	--
Distribution of School Bags/Uniform/ and accessories	**25**	--
Road and Others Infra development in School/Village	**35**	--
Training/Promotion of Green Buildings technology / Environment Monitoring and Sustainability.	**20**	--
Total	**721**	**132.75**

TOTAL EMP BUDGET		
COMPONENT	**CAPITAL COST (INR LAKH)**	**RECURRING COST (INR LAKH/YR)**
During Construction Phase	75	18.25

During Operation Phase	721	**132.75**
TOTAL	**796**	**151**

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File No.: SEAC/HR/2024/190

Government of India

Ministry of Environment, Forest and Climate Change

(Issued by the State Level Expert Appraisal Committee(SEAC), HARYANA)

****

Annexure P-10

Dated **10/09/2024**

To,

M/s Sungold Height and Developers LLP in Collaboration with M/s SIGNATUREGLOBAL INDIA LIMITED
13th Floor, Dr. Global Das Bhawan, 28 Barakhamba Road , 28 Barakhamba Road, Connaught Place, New Delhi, GURUGRAM, HARYANA, 110001
vineet.signatureglobal@gmail.com

Subject: Standard Terms of Reference (ToR) to the proposed Industrial Plotted Colony at Village Shidrawali, Tehsil Manesar District Gurugram, Haryana Project under the EIA Notification 2006-and as amended thereof-regarding.

Sir/Madam,

This is in reference to your application submitted to SEAC vide proposal number SIA/HR/INFRA2/494250/2024 dated 10/09/2024 for grant of Terms of Reference (ToR) to the project under the provision of the EIA Notification 2006-and as amended thereof.

2. The particulars of the proposal are as below :

(i) ToR Identification No.	TO24B3813HR5427969N
(ii) File No.	SEAC/HR/2024/190
(iii) Clearance Type	Fresh ToR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	8(b) Townships/ Area Development Projects / Rehabilitation Centres,8(b) Townships/ Area Development Projects / Rehabilitation Centres
(vii) Name of Project	Industrial Plotted Colony at Village Shidrawali, Tehsil-Manesar, District-Gurugram, Haryana by M/s Signatureglobal India Limited
(viii) Name of Company/Organization	SIGNATUREGLOBAL INDIA LIMITED
(ix) Location of Project (District, State)	GURUGRAM, HARYANA
(x) Issuing Authority	SEAC
(xii) Applicability of General Conditions	NO

3. The **SEAC** has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after detailed examination hereby decided to grant Standard Terms of Reference to the instant proposal of **M/s. SIGNATUREGLOBAL INDIA LIMITED** under the provisions of the aforementioned Notification.

4. The brief about products and by products as submitted by the Project proponent in Form-1 (Part A, B) and Standard Terms of Reference are annexed to this letter as Annexure (1).

5. The Ministry reserves the right to stipulate additional TORs, if found necessary.

6. The Standard Terms of Reference (ToR) to the aforementioned project is under provisions of EIA Notification, 2006 and as amended thereof. It does not tantamount to approvals/consent/permissions etc required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

7. The granted letter, all the documents submitted as a part of application viz. Form-1 Part A and Part B are available on PARIVESH portal which can be accessed by scanning the QR Code above.

Copy To

vineet.signatureglobal@gmail.com
scy.seachr@gmail.com

Annexure 1

Standard Terms of Reference for conducting Environment Impact Assessment Study for Townships/ Area Development Projects / Rehabilitation Centres and information to be included in EIA/EMP report

1. Project Details

Sr. No.	Terms of Reference
1.1	Need and benefits of the project.
1.2	Submit data for built-up area for each building, the use and occupancy classification in line with NBC 2016 also to be indicated [for differential functional requirements].
1.3	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

2. Land Environment

Sr. No.	Terms of Reference
2.1	Examine details of land use as per Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images. Check on flood plain of any river.

3. Land acquisition and R&R

Sr. No.	Terms of Reference
3.1	Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/villages and present status of such activities.

4. Environmental Monitoring and Management

Sr. No.	Terms of Reference
4.1	Examine baseline environmental quality along with projected incremental load due to the project.
4.2	Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
4.3	Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.
4.4	Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
4.5	Possible carbon footprint contribution from each activities and mitigation measures proposed shall be included as part of Environment Management Plan.

5. Drainage

Sr. No.	Terms of Reference
5.1	Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project.

6. Forest

Sr. No.	Terms of Reference
6.1	Submit the details of the trees to be felled for the project, if any .
6.2	Submit the present land use and permission required for any conversion such as forest, agriculture etc.

7. Water Environment

Sr. No.	Terms of Reference
7.1	Ground water classification as per the Central Ground Water Authority.

8. Water Management

Sr. No.	Terms of Reference
8.1	Examine the details of Source of water, water requirement, use of treated waste water and prepare a water

Sr. No.	Terms of Reference
	balance chart.
8.2	Rain water harvesting proposals should be made with due safeguards for ground water quality.
8.3	Maximize recycling of water and utilization of rain water. Examine details.
8.4	Examine soil characteristics and depth of ground water table for rainwater harvesting
8.5	Permission from CGWA for abstraction of groundwater, if any, including dewatering during basement excavation.

9. Waste Management

Sr. No.	Terms of Reference
9.1	Examine details of solid waste generation treatment and its disposal.
9.2	Construction & Demolition Waste Management Plan shall be prepared as part of EMP providing details of demolition activities involved along with quantification and disposal mechanism.

10. Energy Requirements

Sr. No.	Terms of Reference
10.1	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
10.2	Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption. Energy conservation and energy efficiency.
10.3	DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment.

11. Road and Traffic

Sr. No.	Terms of Reference
11.1	Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.
11.2	A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
11.3	Examine the details of transport of materials for construction which should include source and availability.

12. Disaster Management Plan

Sr. No.	Terms of Reference
12.1	Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster. This should cover details of vulnerabilities due to natural and manmade hazards (earthquake, flooding, cyclone, landslides, fire etc.) and details of disaster mitigation efforts for buildings and infrastructure through structural sufficiency and Fire and Life Safety compliance in line with National Building Code NBC, 2016.

13. Court Cases

Sr. No.	Terms of Reference
13.1	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

14. Miscellaneous

Sr. No.	Terms of Reference
14.1	Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website http://moef.nic.in/Manual/Townships.

Additional Terms of Reference

N/A

Annexure 2

Details of Products & By-products

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
Built up area	By-Product	72.48	Hectares (Ha)	Road	---

File No. TO24B3813HR5427969N dated 10.09.2024.

POINT-WISE COMPLIANCE OF TERMS OF REFERENCE CONDITIONS

S. No	Standard ToR Points	ToR Compliance	Reference
1.	**Project Details**		
1.1	Need and benefits of the project.	**Need of the project:** The project will provide direct or indirect employment opportunities for a large section of society. The employment will have positive impact thereby improving the standard of living. The project need details are discussed in Chapter 2 section 2.2. **Benefits of the Project:** The proposed project will generate employment opportunities, improves physical infrastructure, social infrastructure, etc. The details of benefits are discussed in Chapter 8.	Details are covered in Chapter 2 of EIA/EMP Report. Details are covered in Chapter 8 of EIA/EMP Report.
1.2	Submit data for built-up area for each building, the use and occupancy classification in line with NBC 2016 also to be indicated [for differential	Details of built-up area for each building, its use and its occupancy in line with NBC are covered in Chapter 2.	Details are covered in Chapter 2 of EIA/EMP Report.

	functional requirements].		
1.3	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.	Cost of the project is estimated to be about Rs. 1593.7 crore and Cost for EMP is furnished in EIA/EMP report.	Details are covered in Chapter 10 of EIA/EMP Report.
2.	**Land Environment**		
2.1	Examine details of land use as per Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images. Check on flood plain of any river.	Proposed Project will be developed as per the Master Plan of the region. Details of land use study of 10 km radius of the project site with the satellite imagery is provided in Chapter 3.	Details are covered in Chapter 3 of EIA/EMP report
3.	**Land acquisition and R&R**		
3.1	Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/villages and present status of such activities.	Details of environmentally sensitive places are provided in Chapter 3 of the report. The License is attached as **Annexure -II** There are no human settlements at site, so rehabilitation of communities/village is not involved.	Details are covered in Chapter 3 of EIA/EMP report. Annexure-II
4.	**Environmental Monitoring and Management**		
4.1	Examine baseline environmental quality along with projected	Details of Baseline environmental quality with respect to major environmental	Details are covered in Chapter 3 & 4.

	incremental load due to the project.	components, viz. air, noise, water, land, soil, biological and socio-economic components is provided in chapter 3 & details of projected incremental load due to the project is provided in chapter 4. The baseline environment study for the project has been done during Winter season (1st Dec, 2023 to 29th Feb, 2024).	The baseline data study report is attached as **Annexure-III.**
4.2	Environmental data to be considered in relation to the project development would be: (a) land, (b) groundwater, (c) surface water, (d) air, (e) biodiversity, (f) noise and vibrations, (g) socio economic and health.	Environmental data has been considered in relation to the project development with respect to (a) land, (b) groundwater, (c) surface water, (d) air, (e) biodiversity, (f) noise and vibrations, (g) socio economic and health. The description of the environment is furnished in EIA/EMP report.	Details are covered in Chapter 3 of EIA/EMP report. The baseline data study report is attached as **Annexure-III.**
4.3	Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.	The Company has a well-defined Environment policy. Structure of Environment Management Cell (EMC). EMC will be responsible for the following**:** 1. Interaction with the State Pollution Control Board 2. Provide Training	Details are covered in Chapter-10 of EIA/EMP report
4.4	Examine separately the details for	A budget for monitoring of Air, water, Noise	Details are covered in Chapter-6

	construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.	and Soil will be Rs. 7.0 Lakhs (during construction Phase) and Rs. 9.0 Lakhs (during Operation Phase) to be incurred by the project proponent for undertaking pollution prevention measures during the construction and operation activities. The capital cost for environmental management of the proposed project is estimated to be Rs.3187 lakhs. Rs.444 lakhs per year will be required as annual recurring expenses to meet the recurring expenditure for implementing the measures.	&10 of EIA/EMP report
4.5	Possible carbon footprint contribution from each activities and mitigation measures proposed shall be included as part of Environment Management Plan.	To reduce the carbon footprint from the township a total area of **37,241.664** sqm is proposed for landscape which will be area under tree plantation within the project site and area under organized. 6730 no. of trees are proposed to be planted within project site which will sequester the carbon emissions from project.	--
5.	**Drainage**		
5.1	Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project.	The Geology of the study area and contour plan with slopes, drainage Pattern of the study area and drainage map of the site and surrounding area has been furnished in EIA/EMP report.	Geology of the study area and Contour Map is covered in Chapter-3 of EIA/EMP report Drainage Pattern of the study area

			and drainage map is covered in Chapter-3 of EIA/EMP report
6.	**Forest**		
6.1	Submit the details of the trees to be felled for the project, if any.	There are few trees present at the project site which will be transplanted in the greenbelt.	---
6.2	Submit the present land use and permission required for any conversion such as forest, agriculture etc.	The proposed project will be developed within 54.92 ha. Land has been purchased by M/s Signatureglobal India Limited for Industrial plotted colony Project. No change in land use is proposed.	License is attached as **Annexure-II.**
7.	**Water Environment**		
7.1	Ground water classification as per the Central Ground Water Authority.	As per the Central Ground Water Authority ground water classification, the project falls in over exploited zone.	Details are covered in Chapter-3 of EIA/EMP report
8.	**Water Management**		
8.1	Examine the details of Source of water, water requirement, use of treated wastewater and prepare a water balance chart.	Water supply will be provided through private water tankers and during Operational phase, the source of water will be GMDA. Further details of water requirement, use of treated wastewater and a water balance chart is furnished in EIA/EMP Report.	Details of water requirement is given in Chapter-2
8.2	Rainwater harvesting proposals should be made with due safeguards	65 no. of pits proposed for artificial ground water recharge.	Details of Rainwater harvesting scheme is provided in Chapter 2 of

	for ground water quality.		EIA/EMP report
8.3	Maximize recycling of water and utilization of rainwater. Examine details.	65 no. of pits proposed for artificial ground water recharge.	Details of Rainwater harvesting scheme is provided in Chapter 2 of EIA/EMP report
8.4	Examine soil characteristics and depth of ground water table for rainwater harvesting.	Details of soil characteristics is provided in chapter 3. Details of Rainwater harvesting scheme is provided in Chapter 2.	Details are covered in Chapter-2 & 3 of EIA/EMP report
8.5	Permission from CGWA for abstraction of groundwater, if any, including dewatering during basement excavation.	Not Applicable. The source of water supply will be from GMDA.	--
9.	**Waste Management**		
9.1	Examine details of solid waste generation treatment and its disposal.	Total Solid waste generated in operation Phase is 18139 kg/day. Treatment: **Bio-degradable waste** 1. Bio-degradable waste will be subjected to composting through Organic Waste Converter and the compost will be used as manure. 2. STP sludge is proposed to be used in horticulture. 3. Horticultural Waste is proposed to be	Details are covered in Chapter-2 of EIA/EMP report

		composted and used for gardening. **<u>Recyclable waste</u>** i. Recyclable waste like paper, plastic, metal etc. will be disposed through local approved recyclers. Waste will be handled inline to 5R principle and we will try to attain Zero waste to Landfill. Details of generation of Solid waste, treatment & its disposal is Provided in chapter 2.	
9.2	Construction & Demolition Waste Management Plan shall be prepared as part of EMP providing details of demolition activities involved along with quantification and disposal mechanism.	Demolition is not involved. A budget for monitoring of Air, water, Noise and Soil will be Rs. 7.0 Lakhs (during construction Phase) and Rs. 9.0 Lakhs (during Operation Phase) to be incurred by the project proponent for undertaking pollution prevention measures during the construction and operation activities.	Details are covered in Chapter-6 of EIA/EMP report
10.	**Energy Requirements**		
10.1	A certificate of adequacy of available power from the agency supplying	The total load of the project is 12883 kW. The power will be supplied by State	Details of power requirement is given in Chapter-2.

	power to the project along with the load allowed for the project.	Electricity Board.	
10.2	Examine and submit details of use of solar energy and alternative source of energy to reduce fossil energy consumption. Energy conservation and energy efficiency.	To conserve the energy resources, good practices will be followed during the construction phase such as turning off lights when not in use, ensuring fuel efficiency of motors and vehicles through proper maintenance and minimal work at night. The principles of energy conservation will also be embedded in the buildings through use of energy efficient fixtures, maximum availability of natural light and use of solar energy for street lighting.	Details are covered in Chapter-7 of EIA/EMP report
10.3	DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment.	There is provision of 2no. of DG set of total capacity 1100kVA for Commercial Facility which includes 1 x 750kVA +1x 350 kVA and 2no. of DG set of total capacity 1750 kVA for Common Services which includes 1 x 750kVA +1x 1000 kVA are proposed for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion. 24-hours average maximum Incremental GLC of NO_2, SO_2, PM_{10}, $PM_{2.5}$ and CO were 0.66	Details are covered in Chapter-4 of EIA/EMP report

		µg/m^3, 0.07µg/m^3, 0.68µg/m^3, 0.43 µg/m^3 & 0.73 µg/m^3, occurred respectively at (700m distance) from the DG sets occurred at the same distance. It was found that GLC of SO_2 was less than the permissible limit of 80µg/m^3 (as per CPCB guidelines) under worst meteorological condition with meteorological data monitored from 1st Dec,2023 to 29th Feb 2024	
11.	**Road and Traffic**		
11.1	Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble-free system to reach different destinations in the city.	The Nearest Highway is NH-48 which is adjacent to the 8.7 km site in North west directi3.8 km28 is 0.58 km towards SW direction, SH-25 which is 4.1 km (S), NH-919 is 3.8 km towards S direction, Western Peripheral Expressway is 8.7 km towards NE direction, MDR 132 is 5.1km towards NE direction, & NH-352W which is 9.8 km (S) direction away from project site. The nearest railway station being Inchhapuri Railway Station is about 12.6 km (NW) away from the project site. The nearest Airport is Indira Gandhi International Airport 40 km (NE) from the project site.	Details are covered in Chapter-7 of EIA/EMP report

11.2	A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.	Traffic Management Plan is provided in chapter 7.	Traffic Management Plan is provided in chapter 7.
11.3	Examine the details of transport of materials for construction which should include source and availability.	Construction materials will be purchased from local supply chain.	--
12.	**Disaster Management Plan**		
12.1	Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster. This should cover details of vulnerabilities due to natural and manmade hazards (earthquake, flooding, cyclone, landslides, fire etc.) and details of disaster mitigation efforts for buildings and infrastructure through structural sufficiency and Fire and Life Safety compliance in line with National Building Code NBC, 2016.	Details of Disaster Management plan including emergency evacuation during natural and man-made disaster is provided in chapter 7.	Details are covered in Chapter-7 of EIA/EMP report
13.	**Court Cases**		
(xxv)	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.	No Litigation is pending against the project.	

14.	**Miscellaneous**		
14.1	Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "http://moef.nic.in/Manual/Townships".	Complied	--

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Annexure P-12

Date: 12.09.2024

To,
The Member Secretary,
State Level Expert Appraisal Committee (SEAC),
Bays No. 55-58, Sector-2,
Panchkula, Haryana

Sub: Regarding Environment Clearance for Industrial Plotted Colony Project at Village – Shidrawali, Tehsil –Manesar, District -Gurugram Haryana by M/s Signatureglobal India Limited.

Dear Sir,

This is in reference with the above mentioned subject, it is kindly intimated that we had applied an application for Terms of Reference to SEAC, Haryana on 10/09/2024 (Proposal No. SIA/HR/INFRA2/494250/2024).

Then, SEAC, Haryana awarded the standard TOR Letter vide letter no. TO24B3813HR5427969N dated 10/09/2024. We have already generated baseline data considering monitoring period of winter season from December 2023 to February 2024 for the preparation of Final EIA/EMP report.

As per the guidelines of MOEFCC vide (S.O 1533 E) dated 14.09.2006 & its amendment till date "All projects and activities listed as category "B" in item 8 of the Schedule (Construction or Township or Commercial Complexes or Housing)" shall require Environmental Clearance from State level.

Hence, we are herewith submitting EIA/EMP report as per the latest guidelines and Notification along with compliance to the Standard Terms of Reference issued by SEAC, Haryana for your kind perusal.

Kindly consider the case and award the Environmental Clearance at your earliest.

Thanking you,

Yours truly,

For M/s Signatureglobal India Limited

Name: Vineet Kumar V
Designation: **Authorized Signatory**
Encl: As stated

Environment Impact Assessment & Environment Management Plan Report

w.r.t.

INDUSTRIAL PLOTTED COLONY PROJECT

At

Village- Shidrawali, Tehsil-Manesar, District- Gurugram, Haryana

Schedule: 8(b), Category: B1

Sector-39 as per QCI/NABET Scheme

Built-up area = 7,24,895.645m²

(Study Period – Dec. 2023 to Feb. 2024)

(Submission Period – September 2024)

Project Proponent:

M/s Signatureglobal India Limited

Environment Consultant:

GRASS ROOTS RESEARCH & CREATION INDIA (P) LTD

QCI Certificate no. NABET/EIA/21-24/SA 0211

Validity Extension letter no. QCI/NABET/ENV/ACO/24/3338

Valid till-11th Nov, 2024
F-374 & 375, Sector-63, Noida, U.P.
Ph.: 0120- 4044630, Telefax: 0120- 2406519
Email: info@grc-india.com
Website: http://www.grc-india.com

GRC INDIA TRAINING & ANALYTICAL LABORATORY
(NABL ACCREDITED & MoEFCC NO. S.O. 388 (E))
A unit of GRC India

TABLE OF CONTENT

i. QCI Experts Signature Sheet

CHAPTER-1 : INTRODUCTION 8

1.1 PREAMBLE 8
1.1.1 GENERAL 8
1.2 PURPOSE OF REPORT 8
1.3 IDENTIFICATION OF PROJECT & PROJECT PROPONENT 9
1.3.1 IDENTIFICATION OF PROJECT 9
1.3.2 PROJECT PROPONENT 10
1.4 BRIEF DESCRIPTION OF NATURE, SIZE, LOCATION OF THE PROJECT AND ITS IMPORTANCE TO THE COMPANY REGION 10
1.4.1 NATURE & SIZE OF PROJECT 10
1.4.2 LOCATION OF PROJECT 10
1.4.3 IMPORTANCE OF PROJECT 11
1.5 SCOPE OF THE STUDY 11
1.5.1 ENVIRONMENTAL CLEARANCE PROCESS 11
1.6 STRUCTURE OF EIA REPORT 13

CHAPTER-2 : PROJECT DESCRIPTION 15

2.1 GENERAL DESCRIPTION 15
2.1.1 TYPE OF THE PROJECT 15
2.1.2 SALIENT FEATURES OF THE PROJECT 15
2.2 NEED OF THE PROJECT 16
2.3 LOCATION OF THE PROJECT (MAPS SHOWING GENERAL LOCATION, SPECIFIC LOCATION, PROJECT BOUNDARY & PROJECT SITE LAYOUT) 16
2.4 JUSTIFICATION FOR THE PROJECT SITE 16
2.5 SIZE OR MAGNITUDE OF OPERATION 21
2.5.1 COMPLETE AREA STATEMENT 21
2.5.2 TOTAL POPULATION DETAILS 22
2.5.3 WATER REQUIREMENT 24
2.6 SEWAGE TREATMENT TECHNOLOGY 29
2.7 POWER REQUIREMENT& BACKUP 32
2.8 VEHICLE PARKING & FACILITY 33
2.9 SOLID WASTE GENERATION 33
2.10 GREEN AREA 36
2.11 RIAN WATER HARVESTING 36

CHAPTER-3 : DESCRIPTION OF THE ENVIRONMENT 38

3.1 INTRODUCTION 38
3.2 STUDY PERIOD 40
3.3 ESTABLISHMENT OF BASELINE FOR VALUED ENVIRONMENTAL COMPONENTS, AS IDENTIFIED IN THE SCOPE 40

3.3.1 METEOROLOGICAL DATA 40
3.3.2 CLIMATE CONDITION 40
3.3.3 REGIONAL METEOROLOGY 40
3.3.4 WIND 41
3.3.5 WIND ROSE 41
3.3.6 CLOUD COVER 42
3.3.7 TEMPERATURE 42
3.3.8 RELATIVE HUMIDITY 42
3.4 AIR QUALITY 42
3.4.1 ANALYTICAL TECHNIQUES FOR AIR QUALITY MONITORING 42
3.4.2 METHODOLOGY ADOPTED FOR THE STUDY 43
3.4.3 AMBIENT AIR QUALITY OF STUDY AREA 46
3.4.4 OBSERVATIONS 46
3.5 NOISE ENVIRONMENT 47
3.5.1 OBSERVATIONS 48
3.6 WATER ENVIRONMENT 48
3.6.1 RECONNAISSANCE SURVEY 48
3.6.2 OBSERVATIONS 57
3.7 SOIL ENVIRONMENT 57
3.7.1 SOIL QUALITY 57
3.7.2 CRITERIA ADOPTED FOR SELECTION OF SAMPLING LOCATIONS 57
3.7.3 METHODOLOGY AND SAMPLING 57
3.7.4 SOIL SAMPLING LOCATIONS 58
3.7.5 OBSERVATIONS 62
3.8 LAND USE PATTERN 62
3.8.1 DATA USED 62
3.8.2 METHODOLOGY 62
3.8.3 FINDINGS 62
3.9 GEOLOGY 67
3.10 HYDROGEOLOGY ..... **ERROR! BOOKMARK NOT DEFINED.**
3.11DRAINAGE PATTERN 69
3.12 SEISMIC STATUS 72
3.13 SOCIO-ECONOMICS OF THE STUDY AREA 73
3.14 ECOLOGY AND BIODIVERSITY 89

CHAPTER-4 : ANTICIPATED ENVIRONMENTAL IMPACT AND ITS MITIGATION MEASURES 95

4.1 INTRODUCTION 95
4.1.1 OBJECTIVE 95
4.1.2 IDENTIFICATION OF IMPACTS 95
4.2 IMPACT IDENTIFICATION 97
4.2.1 ENVIRONMENTAL ASPECTS OF DEVELOPMENT & CONSTRUCTION OPERATION 99
4.2.2 ENVIRONMENTAL ASPECTS OF OPERATION PHASE 99

4.3 ASSESSMENT OF THE ENVIRONMENTAL IMPACTS DURING CONSTRUCTION & OPERATION PHASE 101
4.3.1 LAND ENVIRONMENT 101
4.3.2 WATER ENVIRONMENT 101
4.3.3 AIR ENVIRONMENT 102
4.3.4 NOISE ENVIRONMENT 108
4.3.5 BIOLOGICAL ENVIRONMENT 108
4.3.6 SOCIO ECONOMIC ENVIRONMENT 109
4.3.7 SOLID WASTE 109
4.4 CONCLUSION 110

CHAPTER-5 : ANALYSIS OF ALTERNATIVE (TECHNOLOGY & SITE) 112

CHAPTER-6 : ENVIRONMENTAL MONITORING PROGRAM 113

6.0 INTRODUCTION 113
6.1 PARAMETERS TO BE MONITORED 113
6.1.1 AMBIENT AIR QUALITY 113
6.1.2 EFFLUENT QUALITY 114
6.1.3 NOISE MONITORING 114
6.2 PLANTATION 115
6.3 OCCUPATIONAL HEALTH & SAFETY MONITORING 115
6.4 TRAINING 116
6.5 PERIODIC PREVENTIVE MAINTENANCE 116
6.6 SOCIO-ECONOMIC DEVELOPMENT 116
6.7 BUDGET AND PROCUREMENT SCHEDULE 117
6.8 SUMMARY 118

CHAPTER-7 : ADDITIONAL STUDIES 119

7.1 GENERAL 119
7.2 RISK ASSESSMENT AND DISASTER MANAGEMENT PLAN 119
7.3 NATURAL RESOURCES CONSERVATION 121
7.4 RESETTLEMENT AND REHABILITATION 123
7.5 TRAFFIC STUDY 123
7.5 SOCIO ECONOMIC ENVIRONMENT 123

CHAPTER-8 : PROJECT BENEFIT 127

8.0 EMPLOYMENT GENERATION 127
8.1 IMPROVEMENTS IN THE PHYSICAL INFRASTRUCTURE 127
8.2 IMPROVEMENTS IN THE SOCIAL INFRASTRUCTURE 127
8.3 ENVIRONMENT MANAGEMENT PLAN BUDGET 127

CHAPTER-9 : ENVIRONMENTAL COST BENEFIT ANALYSIS 129

CHAPTER-10 : ENVIRONMENTAL MANAGEMENT PLAN 130

10.0 INTRODUCTION 130

10.1 ENVIRONMENT POLICY & ENVIRONMENT MANAGEMENT CELL 130
10.2 EMP DURING CONSTRUCTION PHASE 132
10.2.1 LAND ENVIRONMENT 132
10.2.2 AIR ENVIRONMENT 132
10.2.3 WATER ENVIRONMENT 132
10.2.4 NOISE ENVIRONMENT 133
10.2.5 SOLID WASTE MANAGEMENT 133
10.2.6 SANITATION AND SAFETY MEASURES OF CONSTRUCTION WORKERS 133
10.3 EMP DURING OPERATION PHASE 133
10.3.1 AIR POLLUTION MANAGEMENT PLAN 133
10.3.2 NOISE POLLUTION MANAGEMENT PLAN 133
10.4 WATER POLLUTION MANAGEMENT PLAN 134
10.5 MEASURES FOR IMPROVEMENT OF ECOLOGY 134
10.5.1 GREENBELT DEVELOPMENT 134
10.5.2 ACTION PLAN FOR GREENBELT DEVELOPMENT 135
10.6 RAINWATER HARVESTING PLAN 136
10.7 BUDGET FOR EMP 136

CHAPTER-11 : SUMMARY & CONCLUSION 138

11.1 GENERAL 138
11.2 PROJECT DESCRIPTION 138
11.3 DESCRIPTION OF BASELINE ENVIRONMENT 139
11.4 ENVIRONMENTAL MONITORING PROGRAM 139
11.5 ADDITIONAL STUDIES 140
11.6 PROJECT BENEFITS 140
11.7 ENVIRONMENTAL MANAGEMENT PLAN 140
11.8 CONCLUSION 140

CHAPTER-12 : DISCLOSURE OF CONSULTANT ENGAGED 142

12.1 GENERAL ..... **ERROR! BOOKMARK NOT DEFINED.**
12.2 INTRODUCTION OF ORGANIZATION ..... **ERROR! BOOKMARK NOT DEFINED.**
12.3 ADDRESS & CONTACTS 142
12.4 EIA COORDINATORS & TEAM MEMBERS ..... **ERROR! BOOKMARK NOT DEFINED.**
12.5 LABORATORY INVOLVED FOR BASELINE MONITORING AND OTHER ANALYSIS . 144

LIST OF FIGURES

FIGURE 1-1 PILLAR CO-ORDINATE MAP OF SITE..... **ERROR! BOOKMARK NOT DEFINED.**
FIGURE 2-1 LOCATION OF THE PROJECT SITE 17
FIGURE 2-2: 500 M RADIUS MAP 18
FIGURE 2-3 10 & 15 KM RADIUS AROUND PROJECT SITE 19
FIGURE 2-4 SITE PLAN 20
FIGURE 2-5 WATER BALANCE DIAAGRAM (SUMMER SEASON) 27
FIGURE 2-6 WATER BALANCE DIAAGRAM (MONSOON SEASON) 28
FIGURE 2-7 WATER BALANCE DIAAGRAM (WINTERSEASON) 29
FIGURE 2-8 SEWAGE WATER TREATMENT 29
FIGURE 2-9 SCHEMATIC DIAGRAM OF STP 32
FIGURE 2-10SOLID WASTE MANAGEMENT SCHEME (CONSTRUCTION PHASE) 33
FIGURE 2-11 SOLID WASTE MANAGEMENT SCHME (OPERATION PHASE) 35
FIGURE 3-1WIND ROSE DIAGRAM OF 1ST DEC, 2023 TO 29TH FEB, 2024 42
FIGURE 3-2 AMBIENT AIR QUALITY MONITORING LOCATION MAP 45
FIGURE 3-3 AMBIENT NOISE QUALITY MONITORING LOCATIONS..... **ERROR! BOOKMARK NOT DEFINED.**
FIGURE 3-4 GROUND WATER SAMPLING LOCATIONS 50
FIGURE 3-5 SURFACE WATER QUALITY MONITORING LOCATIONS 51
FIGURE 3-6 SOIL QUALITY MONITORING LOCATIONS ..... **ERROR! BOOKMARK NOT DEFINED.**
FIGURE 3-7 LAND USE/ LAND COVER ANALYSIS 64
FIGURE 3-8 DEM MAP OF STUDY AREA 65
FIGURE 3-9 FALSE COLOR COMPOSITE (FCC) MAP OF STUDY AREA 66
FIGURE 3-10 DRAINAGE MAP OF 10 KM BUFFER 71
FIGURE 3-11 SEISMIC ZONE MAP OF INDIA 72
FIGURE 4-1 WINDROSE DIAGRAM 104
FIGURE 4-2 SPATIAL DISTRIBUTION OF 24-HOURS AVERAGE NO_2 CONCENTRATIONS ($\mu G/M^3$) 105
FIGURE 4-3 SPATIAL DISTRIBUTION OF 24-HOURS AVERAGE CO CONCENTRATIONS ($\mu G/M^3$) 106
FIGURE 4-4 SPATIAL DISTRIBUTION OF 24-HOURS AVERAGE PM_{10} CONCENTRATIONS ($\mu G/M^3$) 106
FIGURE 4-5 SPATIAL DISTRIBUTION OF 24-HOURS AVERAGE $PM_{2.5}$ CONCENTRATIONS ($\mu G/M^3$) 107
FIGURE 4-6 SPATIAL DISTRIBUTION OF 24-HOURS AVERAGE SO_2 CONCENTRATIONS ($\mu G/M^3$) 107
FIGURE 10-1 STRUCTURE OF EMC 130

LIST OF TABLES

TABLE 1-1 DETAILS OF PP 10
TABLE 1-2 PILLAR CO-ORDINATES OF PROJECT SITE 10
TABLE 2-1 SALIENT FEATURES OF THE PROPOSED PROJECT 15
TABLE 2-2 DETAILED AREA STATEMENT 21
TABLE 2-3 LAND USE BREAK-UP OF SITE 22
TABLE 2-4: POPULATION BREAK-UP 22
TABLE 2-5 CALCULATION OF DAILY WATER DEMAND ..... **ERROR! BOOKMARK NOT DEFINED.** TABLE 2-6: WASTEWATER CALCULATIONS FOR RESIDENTIAL, COMMERCIAL & COMMUNITY PLOTS 24
TABLE 2-7: WASTEWATER CALCULATIONS FOR INDUSTRIAL PLOTS 26
TABLE 2-8 CALCULATION OF SOLID WASTE 34
TABLE 3-1 TECHNIQUES USED FOR AIR QUALITY MONITORING 43
TABLE 3-2 AMBIENT AIR SAMPLING STATIONS 44
TABLE 3-3 SUMMARY OF AMBIENT AIR QUALITY CONCENTRATION IN THE STUDY AREA (1ST DEC, 2023 TO 29TH FEB, 2024) 46
TABLE 3-4 NOISE MONITORING LOCATIONS WERE LOCATED WITHIN THE STUDY AREA ..... **ERROR! BOOKMARK NOT DEFINED.**
TABLE 3-5 NOISE LEVELS IN STUDY AREA 48
TABLE 3-6 WATER SAMPLING LOCATIONS (SURFACE & GROUND WATER) 49
TABLE 3-7 WATER QUALITY ANALYSIS RESULT (GROUND WATER FEB -2024) 52
TABLE 3-8 WATER QUALITY ANALYSIS RESULT (SURFACE WATER FEB- 2024) 54
TABLE 3-9 SOIL SAMPLING LOCATION 58
TABLE 3-10 SOIL QUALITY RESULT 63
TABLE 3-11 LAND USE/ LAND COVER ANALYSIS 64
TABLE 3-12 SUMMARY OF DEMOGRAPHIC FEATURES OF RURAL AREA UNDER STUDY 73
TABLE 3-13 DEMOGRAPHIC FEATURES AND OTHER STATISTICS FOR THE STUDY AREA (RURAL AREA) AS PER CENSUS 2011 78
TABLE 3-14 SUMMARY OF DEMOGRAPHIC FEATURES OF URBAN AREA UNDER STUDY 79
TABLE 3-15 SUMMARY OF DEMOGRAPHIC FEATURES RURAL VS URBAN AREA UNDER STUDY 80
TABLE 3-16LIST OF TREES IN THE STUDY AREA 89
TABLE 3-17 LIST OF SHRUBS IN THE STUDY AREA 91
TABLE 3-18 LIST OF HERBS IN THE STUDY AREA 92
TABLE 3-19 LIST OF MAMMALS IN THE STUDY AREA 93
TABLE 3-20 LIST OF REPTILES IN THE STUDY AREA 93
TABLE 3-21LIST OF BIRDS IN THE STUDY AREA 93
TABLE 4-1 POLLUTION SOURCES 96
TABLE 4-2 IDENTIFICATION OF POTENTIAL IMPACTS DURING CONSTRUCTION & OPERATION PHASE 97
TABLE 4-3 POTENTIAL ENVIRONMENTAL IMPACTS OF THE PROJECT 100
TABLE 4-4 DG STACK AND EMISSION DETAILS 104
TABLE 4-5 CALCULATION OF SOLID WASTE 110
TABLE 6-1 AMBIENT AIR QUALITY – FREQUENCY AND PARAMETERS 114
TABLE 6-2 INSTRUMENTS REQUIRED FOR ENVIRONMENTAL MONITORING 114
TABLE 6-3 WATER QUALITY – FREQUENCY AND PARAMETERS 114
TABLE 6-4 PROPOSED PLANTATION LIST 115
TABLE 6-5 COST OF ENVIRONMENTAL MONITORING PROGRAM 117
TABLE 7-1 FIRES - CLASSIFICATION & EXTINGUISHING MEDIA 120
TABLE 7-2: TRAFFIC DENSITY AT THE NH- 48 123
TABLE 7-3: EXISTING TRAFFIC SCENARIO & LOS 124
TABLE 7-4: CAPACITY AS PER IRC: 106-1990 PAGE NO. 11 TABLE-2 FOR ARTERIAL ROAD/ HIGHWAYS 124
TABLE 7-5: MODIFIED TRAFFIC SCENARIO 125
TABLE 8-1 ENVIRONMENT MANAGEMENT PLAN BUDGET 127
TABLE 10-1 INVESTMENT ON ENVIRONMENTAL PROTECTION MEASURES (RS. IN LAKHS) ..... **ERROR! BOOKMARK NOT DEFINED.**

List of Annexures

Annexure no.	Description
1	Standard ToR letter
2	LICENSE
3	Lab report
4	NABL certificate
5	Conservation plan

Annexure – VII

Declaration by Experts contributing to the EIA report of Industrial Park Project at Village- Shidrawali, District- Gurugram, Haryana by M/s Signature Global (India) Limited. (Category - B Project as Per EIA Notification 2006)

I, hereby, certify that I was a part of the EIA team in the following capacity that developed the above EIA.

EIA coordinator: Mr. Sonu

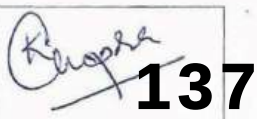
Signature and Date:

Period of involvement: December 2023 to till date

Functional area experts:

S. No.	Functional areas	Name of the expert/s	Involvement (period and task**)	Signature and date
1	AP*	Ms. Monika Gupta	December 2023 to February 2024	
2	WP*	Mr. Sonu	December 2023 to February 2024	
3	SHW*	Dr. Dhiraj Kr Singh	December 2023 to February 2024	
4	SE*	Mr. Rajiv Rastogi	December 2023 to February 2024	
5	EB*	Dr. Ashok Kr Rathoure	December 2023 to February 2024	
6	HG*	Prof. Tapan Majumder	December 2023 to February 2024	
7	GEO*	Prof. Tapan Majumder	December 2023 to February 2024	
8	SC*	Mr. N P S Varde	December 2023 to February 2024	
9	AQ*	Mr. Sonu	December 2023 to February 2024	
10	NV*	Mr. K.D. Choudhury	December 2023 to February 2024	
11	LU*	Mr. N. P. S. Varde	December 2023 to February 2024	
12	RH*	Mr. K.D. Choudhury	December 2023 to February 2024	

*One TM against each FAE may be shown

13.	EB* (Category B Expert)	Ms. Kavita Chopra	December 2023 to February 2024 (Assisting in EB report preparation)	
14.	Team Member: AP	Ms. Kavita Chopra	December 2023 to February 2024 (Assisting in Air pollution under approved Expert Ms. Monika Gupta)	

*One TM against each FAE may be shown
**Please attach additional sheet if required

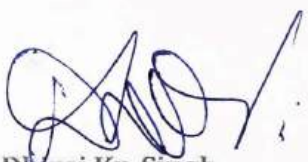
Declaration by the Head of the accredited consultant organization/ authorized person

I, Dr. Dhiraj Kr. Singh hereby, confirm that the above-mentioned experts prepared the EIA of Industrial Park Project at Village- Shidrawali, District- Gurugram, Haryana by M/s Signature Global (India) Limited.

I also confirm that EIA Coordinator (EC) has gone through the report, and the consultant organization shall be fully accountable for any misleading information.

It is certified that no unethical practices, plagiarism involved in carrying out the work and external data / text has not been used without proper acknowledgement while preparing this EIA report.

Signature:



Name: **Dr. Dhiraj Kr. Singh**

Designation: **Managing Director**

Name of the EIA consultant organization: **Grass Roots Research & Creation India (P) Ltd**

NABET Certificate No. & Issue Date: **NABET/EIA/2124/SA 0211 dated: - 18.12.2023 and valid till:- 15.08.2024**

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Title of EIA Report:	Industrial Plotted Colony Project at Village-Shidrawali, Tehsil –Manesar, District-Gurugram, Haryana by M/s Signatureglobal India Limited
Name of Accredited Organization:	M/s GRC India Pvt. Ltd, Noida
Name of EIA Coordinator:	Mr. Sonu
Name of the Software:	Plagiarism Checker X
Date of Check:	14.09.2024
Time of Check:	4.30 PM

EIA Co-ordinator:

Name : Mr. Sonu

Signature :

Head of ACO / authorised person:

Name : Dr. Dhiraj Kr. Singh (MD)

Signature :

Name of the EIA Consultant Organization: M/s GRC India Pvt. Ltd, Noida, 201301

NABET Certificate no. & Issue date: NABET/EIA/21-24/SA 0211 dated Aug 12, 2024 valid till Nov 11, 2024.
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सत्यमेव जयते

File No.: SEAC/HR/2024/190

Government of India

Ministry of Environment, Forest and Climate Change

(Issued by the State Level Expert Appraisal Committee(SEAC), HARYANA)

****

Dated **10/09/2024**

To,

M/s Sungold Height and Developers LLP in Collaboration with M/s SIGNATUREGLOBAL INDIA LIMITED
13th Floor, Dr. Global Das Bhawan, 28 Barakhamba Road , 28 Barakhamba Road, Connaught Place, New Delhi, GURUGRAM, HARYANA, 110001
vineet.signatureglobal@gmail.com

Subject: Standard Terms of Reference (ToR) to the proposed Industrial Plotted Colony at Village Shidrawali, Tehsil Manesar District Gurugram, Haryana Project under the EIA Notification 2006-and as amended thereof-regarding.

Sir/Madam,

This is in reference to your application submitted to SEAC vide proposal number SIA/HR/INFRA2/494250/2024 dated 10/09/2024 for grant of Terms of Reference (ToR) to the project under the provision of the EIA Notification 2006-and as amended thereof.

2. The particulars of the proposal are as below :

(i) ToR Identification No.	TO24B3813HR5427969N
(ii) File No.	SEAC/HR/2024/190
(iii) Clearance Type	Fresh ToR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	8(b) Townships/ Area Development Projects / Rehabilitation Centres,8(b) Townships/ Area Development Projects / Rehabilitation Centres
(vii) Name of Project	Industrial Plotted Colony at Village Shidrawali, Tehsil-Manesar, District-Gurugram, Haryana by M/s Signatureglobal India Limited
(viii) Name of Company/Organization	SIGNATUREGLOBAL INDIA LIMITED
(ix) Location of Project (District, State)	GURUGRAM, HARYANA
(x) Issuing Authority	SEAC
(xii) Applicability of General Conditions	NO

3. The **SEAC** has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after detailed examination hereby decided to grant Standard Terms of Reference to the instant proposal of **M/s. SIGNATUREGLOBAL INDIA LIMITED** under the provisions of the aforementioned Notification.
4. The brief about products and by products as submitted by the Project proponent in Form-1 (Part A, B) and Standard Terms of Reference are annexed to this letter as Annexure (1).
5. The Ministry reserves the right to stipulate additional TORs, if found necessary.
6. The Standard Terms of Reference (ToR) to the aforementioned project is under provisions of EIA Notification, 2006 and as amended thereof. It does not tantamount to approvals/consent/permissions etc required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.
7. The granted letter, all the documents submitted as a part of application viz. Form-1 Part A and Part B are available on PARIVESH portal which can be accessed by scanning the QR Code above.

Copy To

vineet.signatureglobal@gmail.com
scy.seachr@gmail.com

Annexure 1

Standard Terms of Reference for conducting Environment Impact Assessment Study for Townships/ Area Development Projects / Rehabilitation Centres and information to be included in EIA/EMP report

1. Project Details

Sr. No.	Terms of Reference
1.1	Need and benefits of the project.
1.2	Submit data for built-up area for each building, the use and occupancy classification in line with NBC 2016 also to be indicated [for differential functional requirements].
1.3	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

2. Land Environment

Sr. No.	Terms of Reference
2.1	Examine details of land use as per Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images. Check on flood plain of any river.

3. Land acquisition and R&R

Sr. No.	Terms of Reference
3.1	Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/villages and present status of such activities.

4. Environmental Monitoring and Management

Sr. No.	Terms of Reference
4.1	Examine baseline environmental quality along with projected incremental load due to the project.
4.2	Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
4.3	Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.
4.4	Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
4.5	Possible carbon footprint contribution from each activities and mitigation measures proposed shall be included as part of Environment Management Plan.

5. Drainage

Sr. No.	Terms of Reference
5.1	Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project.

6. Forest

Sr. No.	Terms of Reference
6.1	Submit the details of the trees to be felled for the project, if any .
6.2	Submit the present land use and permission required for any conversion such as forest, agriculture etc.

7. Water Environment

Sr. No.	Terms of Reference
7.1	Ground water classification as per the Central Ground Water Authority.

8. Water Management

Sr. No.	Terms of Reference
8.1	Examine the details of Source of water, water requirement, use of treated waste water and prepare a water

Sr. No.	Terms of Reference
	balance chart.
8.2	Rain water harvesting proposals should be made with due safeguards for ground water quality.
8.3	Maximize recycling of water and utilization of rain water. Examine details.
8.4	Examine soil characteristics and depth of ground water table for rainwater harvesting
8.5	Permission from CGWA for abstraction of groundwater, if any, including dewatering during basement excavation.

9. Waste Management

Sr. No.	Terms of Reference
9.1	Examine details of solid waste generation treatment and its disposal.
9.2	Construction & Demolition Waste Management Plan shall be prepared as part of EMP providing details of demolition activities involved along with quantification and disposal mechanism.

10. Energy Requirements

Sr. No.	Terms of Reference
10.1	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
10.2	Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption. Energy conservation and energy efficiency.
10.3	DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment.

11. Road and Traffic

Sr. No.	Terms of Reference
11.1	Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.
11.2	A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
11.3	Examine the details of transport of materials for construction which should include source and availability.

12. Disaster Management Plan

Sr. No.	Terms of Reference
12.1	Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster. This should cover details of vulnerabilities due to natural and manmade hazards (earthquake, flooding, cyclone, landslides, fire etc.) and details of disaster mitigation efforts for buildings and infrastructure through structural sufficiency and Fire and Life Safety compliance in line with National Building Code NBC, 2016.

13. Court Cases

Sr. No.	Terms of Reference
13.1	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

14. Miscellaneous

Sr. No.	Terms of Reference
14.1	Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website http://moef.nic.in/Manual/Townships.

Additional Terms of Reference

N/A

Annexure 2

Details of Products & By-products

Name of the product /By-product	Product / By-product	Quantity	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)
Built up area	By-Product	72.48	Hectares (Ha)	Road	---

File No. TO24B3813HR5427969N dated 10.09.2024.

POINT-WISE COMPLIANCE OF TERMS OF REFERENCE CONDITIONS

S. No	Standard ToR Points	ToR Compliance	Reference
1.	**Project Details**		
1.1	Need and benefits of the project.	**Need of the project:** The project will provide direct or indirect employment opportunities for a large section of society. The employment will have positive impact thereby improving the standard of living. The project need details are discussed in Chapter 2 section 2.2. **Benefits of the Project:** The proposed project will generate employment opportunities, improves physical infrastructure, social infrastructure, etc. The details of benefits are discussed in Chapter 8.	Details are covered in Chapter 2 of EIA/EMP Report. Details are covered in Chapter 8 of EIA/EMP Report.
1.2	Submit data for built-up area for each building, the use and occupancy classification in line with NBC 2016 also to be indicated [for differential	Details of built-up area for each building, its use and its occupancy in line with NBC are covered in Chapter 2.	Details are covered in Chapter 2 of EIA/EMP Report.

	functional requirements].		
1.3	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.	Cost of the project is estimated to be about Rs. 1593.7 crore and Cost for EMP is furnished in EIA/EMP report.	Details are covered in Chapter 10 of EIA/EMP Report.
2.	**Land Environment**		
2.1	Examine details of land use as per Master Plan and land use around 10 km radius of the project site. Analysis should be made based on latest satellite imagery for land use with raw images. Check on flood plain of any river.	Proposed Project will be developed as per the Master Plan of the region. Details of land use study of 10 km radius of the project site with the satellite imagery is provided in Chapter 3.	Details are covered in Chapter 3 of EIA/EMP report
3.	**Land acquisition and R&R**		
3.1	Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/villages and present status of such activities.	Details of environmentally sensitive places are provided in Chapter 3 of the report. The License is attached as **Annexure -II** There are no human settlements at site, so rehabilitation of communities/village is not involved.	Details are covered in Chapter 3 of EIA/EMP report. Annexure-II
4.	**Environmental Monitoring and Management**		
4.1	Examine baseline environmental quality along with projected	Details of Baseline environmental quality with respect to major environmental	Details are covered in Chapter 3 & 4.

	incremental load due to the project.	components, viz. air, noise, water, land, soil, biological and socio-economic components is provided in chapter 3 & details of projected incremental load due to the project is provided in chapter 4. The baseline environment study for the project has been done during Winter season (1st Dec, 2023 to 29th Feb, 2024).	The baseline data study report is attached as **Annexure-III.**
4.2	Environmental data to be considered in relation to the project development would be: (a) land, (b) groundwater, (c) surface water, (d) air, (e) biodiversity, (f) noise and vibrations, (g) socio economic and health.	Environmental data has been considered in relation to the project development with respect to (a) land, (b) groundwater, (c) surface water, (d) air, (e) biodiversity, (f) noise and vibrations, (g) socio economic and health. The description of the environment is furnished in EIA/EMP report.	Details are covered in Chapter 3 of EIA/EMP report. The baseline data study report is attached as **Annexure-III.**
4.3	Submit Roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.	The Company has a well-defined Environment policy. Structure of Environment Management Cell (EMC). EMC will be responsible for the following**:** 1. Interaction with the State Pollution Control Board 2. Provide Training	Details are covered in Chapter-10 of EIA/EMP report
4.4	Examine separately the details for	A budget for monitoring of Air, water, Noise	Details are covered in Chapter-6

	construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.	and Soil will be Rs. 7.0 Lakhs (during construction Phase) and Rs. 9.0 Lakhs (during Operation Phase) to be incurred by the project proponent for undertaking pollution prevention measures during the construction and operation activities. The capital cost for environmental management of the proposed project is estimated to be Rs.3187 lakhs. Rs.444 lakhs per year will be required as annual recurring expenses to meet the recurring expenditure for implementing the measures.	&10 of EIA/EMP report
4.5	Possible carbon footprint contribution from each activities and mitigation measures proposed shall be included as part of Environment Management Plan.	To reduce the carbon footprint from the township a total area of **37,241.664** sqm is proposed for landscape which will be area under tree plantation within the project site and area under organized. 6730 no. of trees are proposed to be planted within project site which will sequester the carbon emissions from project.	--
5.	**Drainage**		
5.1	Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project.	The Geology of the study area and contour plan with slopes, drainage Pattern of the study area and drainage map of the site and surrounding area has been furnished in EIA/EMP report.	Geology of the study area and Contour Map is covered in Chapter-3 of EIA/EMP report Drainage Pattern of the study area

			and drainage map is covered in Chapter-3 of EIA/EMP report
6.	**Forest**		
6.1	Submit the details of the trees to be felled for the project, if any.	There are few trees present at the project site which will be transplanted in the greenbelt.	---
6.2	Submit the present land use and permission required for any conversion such as forest, agriculture etc.	The proposed project will be developed within 54.92 ha. Land has been purchased by M/s Signatureglobal India Limited for Industrial plotted colony Project. No change in land use is proposed.	License is attached as **Annexure-II.**
7.	**Water Environment**		
7.1	Ground water classification as per the Central Ground Water Authority.	As per the Central Ground Water Authority ground water classification, the project falls in over exploited zone.	Details are covered in Chapter-3 of EIA/EMP report
8.	**Water Management**		
8.1	Examine the details of Source of water, water requirement, use of treated wastewater and prepare a water balance chart.	Water supply will be provided through private water tankers and during Operational phase, the source of water will be GMDA. Further details of water requirement, use of treated wastewater and a water balance chart is furnished in EIA/EMP Report.	Details of water requirement is given in Chapter-2
8.2	Rainwater harvesting proposals should be made with due safeguards	65 no. of pits proposed for artificial ground water recharge.	Details of Rainwater harvesting scheme is provided in Chapter 2 of

	for ground water quality.		EIA/EMP report
8.3	Maximize recycling of water and utilization of rainwater. Examine details.	65 no. of pits proposed for artificial ground water recharge.	Details of Rainwater harvesting scheme is provided in Chapter 2 of EIA/EMP report
8.4	Examine soil characteristics and depth of ground water table for rainwater harvesting.	Details of soil characteristics is provided in chapter 3. Details of Rainwater harvesting scheme is provided in Chapter 2.	Details are covered in Chapter-2 & 3 of EIA/EMP report
8.5	Permission from CGWA for abstraction of groundwater, if any, including dewatering during basement excavation.	Not Applicable. The source of water supply will be from GMDA.	--
9.	**Waste Management**		
9.1	Examine details of solid waste generation treatment and its disposal.	Total Solid waste generated in operation Phase is 18139 kg/day. Treatment: **Bio-degradable waste** 1. Bio-degradable waste will be subjected to composting through Organic Waste Converter and the compost will be used as manure. 2. STP sludge is proposed to be used in horticulture. 3. Horticultural Waste is proposed to be	Details are covered in Chapter-2 of EIA/EMP report

		composted and used for gardening. **<u>Recyclable waste</u>** i. Recyclable waste like paper, plastic, metal etc. will be disposed through local approved recyclers. Waste will be handled inline to 5R principle and we will try to attain Zero waste to Landfill. Details of generation of Solid waste, treatment & its disposal is Provided in chapter 2.	
9.2	Construction & Demolition Waste Management Plan shall be prepared as part of EMP providing details of demolition activities involved along with quantification and disposal mechanism.	Demolition is not involved. A budget for monitoring of Air, water, Noise and Soil will be Rs. 7.0 Lakhs (during construction Phase) and Rs. 9.0 Lakhs (during Operation Phase) to be incurred by the project proponent for undertaking pollution prevention measures during the construction and operation activities.	Details are covered in Chapter-6 of EIA/EMP report
10.	**Energy Requirements**		
10.1	A certificate of adequacy of available power from the agency supplying	The total load of the project is 12883 kW. The power will be supplied by State	Details of power requirement is given in Chapter-2.

	power to the project along with the load allowed for the project.	Electricity Board.	
10.2	Examine and submit details of use of solar energy and alternative source of energy to reduce fossil energy consumption. Energy conservation and energy efficiency.	To conserve the energy resources, good practices will be followed during the construction phase such as turning off lights when not in use, ensuring fuel efficiency of motors and vehicles through proper maintenance and minimal work at night. The principles of energy conservation will also be embedded in the buildings through use of energy efficient fixtures, maximum availability of natural light and use of solar energy for street lighting.	Details are covered in Chapter-7 of EIA/EMP report
10.3	DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment.	There is provision of 2no. of DG set of total capacity 1100kVA for Commercial Facility which includes 1 x 750kVA +1x 350 kVA and 2no. of DG set of total capacity 1750 kVA for Common Services which includes 1 x 750kVA +1x 1000 kVA are proposed for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion. 24-hours average maximum Incremental GLC of NO_2, SO_2, PM_{10}, $PM_{2.5}$ and CO were 0.66	Details are covered in Chapter-4 of EIA/EMP report

		µg/m^3, 0.07µg/m^3, 0.68µg/m^3, 0.43 µg/m^3 & 0.73 µg/m^3, occurred respectively at (700m distance) from the DG sets occurred at the same distance. It was found that GLC of SO_2 was less than the permissible limit of 80µg/m^3 (as per CPCB guidelines) under worst meteorological condition with meteorological data monitored from 1st Dec,2023 to 29th Feb 2024	
11.	**Road and Traffic**		
11.1	Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble-free system to reach different destinations in the city.	The Nearest Highway is NH-48 which is adjacent to the 8.7 km site in North west directi3.8 km28 is 0.58 km towards SW direction, SH-25 which is 4.1 km (S), NH-919 is 3.8 km towards S direction, Western Peripheral Expressway is 8.7 km towards NE direction, MDR 132 is 5.1km towards NE direction, & NH-352W which is 9.8 km (S) direction away from project site. The nearest railway station being Inchhapuri Railway Station is about 12.6 km (NW) away from the project site. The nearest Airport is Indira Gandhi International Airport 40 km (NE) from the project site.	Details are covered in Chapter-7 of EIA/EMP report

11.2	A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.	Traffic Management Plan is provided in chapter 7.	Traffic Management Plan is provided in chapter 7.
11.3	Examine the details of transport of materials for construction which should include source and availability.	Construction materials will be purchased from local supply chain.	--
12.	**Disaster Management Plan**		
12.1	Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster. This should cover details of vulnerabilities due to natural and manmade hazards (earthquake, flooding, cyclone, landslides, fire etc.) and details of disaster mitigation efforts for buildings and infrastructure through structural sufficiency and Fire and Life Safety compliance in line with National Building Code NBC, 2016.	Details of Disaster Management plan including emergency evacuation during natural and man-made disaster is provided in chapter 7.	Details are covered in Chapter-7 of EIA/EMP report
13.	**Court Cases**		
(xxv)	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.	No Litigation is pending against the project.	

14.	**Miscellaneous**		
14.1	Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "http://moef.nic.in/Manual/Townships".	Complied	--

CHAPTER-1 : INTRODUCTION

1.1 PREAMBLE

1.1.1 General

Early identification and characterization of critical environmental impacts allow the public and the government to form a view about the environmental acceptability of a developmental project and what conditions should apply to migrate or reduce those risks and impacts.

EIA is technical exercise, to establish baseline environmental conditions to predict environmental impacts assess their significance and provide recommendations for their mitigation. The impact assessment covers both construction and operation phase of the development. The report covers areas such as noise, air quality, ecology, water quality & hydrology, local architecture, landscape & visual character, sustainability and socio-economics. The report describes how the project has been improved, through the EIA process. This report has been prepared as per the EIA Notification, 2006 & amendments, EIA Guidance manual for Building, Construction and Area Development projects as guiding documents.

1.2 PURPOSE OF REPORT

The Industrial Plotted Colony projects have the potential in altering environmental resources of any area. They cause stress on local environmental assets of the rural area and thus become the potential source for limiting the growth of the city. Unplanned construction and operation of such projects usually result in impacts on various facilities of the Environment. Keeping the above issues under consideration, an Environmental Impact Assessment (EIA) study is conducted.

The basic objective of this EIA study is to collect the baseline data within the impact zone to identify the associated impacts and propose suitable mitigation measures due to the construction and operation of the development. The objectives of the EIA study can be summarized as follows:

- To identify and describe the elements of surroundings and environment likely to be affected by the project
- To establish the baseline environmental and social scenario of the project surroundings
- To identify, predict and evaluate environmental and social impacts expected to arise during the construction and operation phase of the project in relation to the sensitive receptors.
- To develop EMP mitigation measures so as to minimize pollution, environmental disturbance and nuisance during construction and operation of the project.
- To design and specify the monitoring and auditing requirements necessary to ensure the implementation and effectiveness of the mitigation measures adopted.

The Ministry of Environment, Forests & Climate Change (MoEFCC) introduced the Environment Impact Assessment (EIA) Notification, 2006 on 14th September 2006, which not only re-engineered the entire Environment Clearance (EC) process specified under the EIA notification 1994, but also introduced a number of new developmental sectors which would require prior environmental clearance. The EIA Notification, 2006, and its amendments has notified a list of developmental Sectors which have been further categorized as A or B based on the spatial extent of potential impacts and potential impacts on human health and natural and manmade resources.

Category B projects have been categorized as B1 and B2. In this regard, township and area development projects are covered in Category-B1, Schedule 8 (b) and require clearance from Ministry of Environment, Forests & Climate Change (MoEFCC).

1.3 IDENTIFICATION OF PROJECT & PROJECT PROPONENT

1.3.1 Identification of Project

M/s Signatureglobal India Limited aims to develop an Industrial Plotted Colony Project keeping in mind the growing demand of the local population. We will propose Category B industries.
The Project site is located Village- Shidrawali, Tehsil –Manesar, District- Gurugram, Haryana on a land measuring 54.92 ha or 5,49,258.716 m^2.
The project facilities include:

- Industrial Plotted Development
- Residential Plotted Development
- Community facilities
- Commercial facilities

The baseline environment study was done for the period from December 2023 to February, 2024 as per standard ToR of MoEFCC.

Standard ToR application was online submitted to MoEFCC, New Delhi vide online application No. SIA/HR/INFRA2/494250/2024 on 10.09.2024.

Standard ToR letter issued by SEAC Haryana vide Letter No. TO24B3813HR5427969N dated 10.09.2024. (Copy attached as Annexure**-I**).

EIA/EMP report is being submitted to SEIAA, Haryana for grant of EC to the project.

Environment in EIA context mainly focuses, but is not limited to physical, chemical, biological, geological, social, economical and aesthetic dimensions along with their complex interactions, which affect individuals, communities and ultimately determines their forms, character, relationship and survival. In EIA context, effect and impact can

often be used interchangeably. However, impact is considered as a value judgment of the significance of an effect.

1.3.2 Project Proponent

M/s Signatureglobal India Limited, is promoted by a group of experienced businessmen.

The registered address of M/s Signatureglobal India Limited is 13th Floor, Dr. Gopal Das Bhawan, 28 Barakhamba Road, New Delhi- 110001.

Table 1-1 Details of PP

Name	Designation
Mr. Vineet Kumar	Authorised Signatory, M/s Signatureglobal India Limited

1.4 BRIEF DESCRIPTION OF NATURE, SIZE, LOCATION OF THE PROJECT AND ITS IMPORTANCE TO THE COMPANY REGION

1.4.1 Nature & Size of Project

The present proposal is for construction of Industrial Plotted Colony Project with Plot area = 5, 49,258.716 m^2 (135.7250 acre) and total built-up area = **7,24,895.645**m^2

Total Project cost is INR 1593.7 Cr including Land, Development and Machinery Cost.

1.4.2 Location of Project

The project site is located at Village- Shidrawali, Tehsil –Manesar, District- Gurugram, Haryana.
The geographical co-ordinates of centre of project site are 28° 14' 59.529" N and 76° 49' 48.329"E.

The Co-ordinates of the project site are given below:

Table 1-2 Pillar Co-ordinates of Project Site

Pillar No.	Longitude	Latitude
1	28° 14' 59.529" N	76° 49' 48.329" E
2	28° 14' 53.282" N	76° 49' 31.206" E
3	28° 15' 6.792" N	76° 49' 28.441" E
4	28° 14' 56.620" N	76° 49' 6.138" E
5	28° 14' 50.247" N	76° 49' 1.477" E
6	28° 14' 40.487" N	76° 48' 59.748" E
7	28° 14' 37.528" N	76° 49' 7.433" E
8	28° 14' 40.625" N	76° 49' 20.454" E
9	28° 14' 41.016" N	76° 49' 33.251" E
10	28° 14' 38.555" N	76° 49' 40.599" E
11	28° 14' 32.254" N	76° 49' 51.380" E
12	28° 14' 41.918" N	76° 49' 51.222" E

13	28° 14' 49.836" N	76° 49' 46.127" E

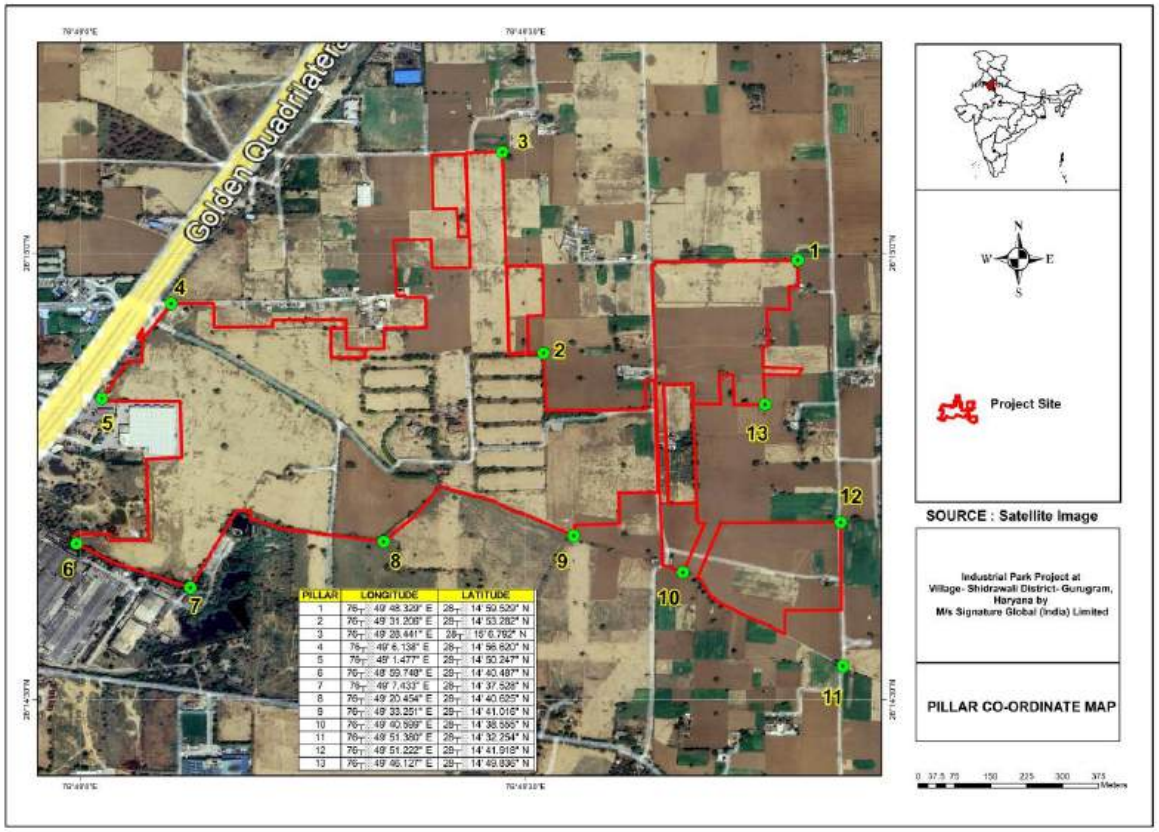

Figure 1-1 Pillar Co-ordinate Map of Site

1.4.3 Importance of Project

The project is being developed to meet the growing demand of industrial Plotted Colony projects of the local community in the region.

1.5 SCOPE OF THE STUDY

1.5.1 Environmental Clearance Process

The Ministry of Environment, Forests & Climate Change, Govt. of India, through EIA notification No. SO.1533 (E) dated 14th September 2006 and subsequent amendments under the Environment Protection Act 1986 have placed Townships and Area Development Projects at Sl. No. 8(b) in the list of projects requiring prior environmental clearance. Further, as the built-up area of the of the proposed project is more than 1,50,000 m^2, it falls under category 'B' of the schedule and shall require prior environmental clearance from the State Environment Impact Assessment Authority.

The Environmental Clearance process for the project will comprise of three stages. These stages in sequential order are given below:

1. Screening
2. Scoping
3. Appraisal

Screening and Scoping of the project has already been completed and it has been granted Standard Terms of Reference (ToR) by MoEF&CC, New Delhi.

M/s Signatureglobal India Limited has engaged M/s GRC India Pvt. Ltd., Noida to carry out Environmental Impact Assessment (EIA) Study for the project. The assessment covers the baseline data generation, predictions and evaluation of impact on various environmental components and formulation of Environmental Management Plan and Disaster Management Plan.

The EIA report has been prepared as per the Generic Structure of Environmental Impact Assessment Notification, 2006 (Appendix III) and Standard Terms of Reference issued by SEAC Haryana.

The report has been prepared based on the following reference documents:-

- ✓ Technical EIA Guidance Manual for Building & Construction project, Prepared by Ministry of Environment and Forests.
- ✓ National Building Code

The EIA/EMP study consists of the following elements:-

1. To generate baseline information regarding status of environment by carrying out (a) baseline survey of environmental parameters like air, water, noise and soil and (b) secondary data required for impact assessment from the available sources.
2. To identify set of activities which have a potential impact on the environment or the public and to provide the mitigation measures for the same, on the basis of the details of the project
3. To carry out Land Use / Land Cover (LULC) pattern studies in project site and within 10 km radius study area to identify the impact on land due to the operation of the plant
4. To predict pollution load/stress level in air, water, land and other environmental matrixes due to the sources identified.
5. To examine the availability and adequacy of the envisaged measures for control of pollution/sources of stress, so as to meet the statutory provisions, and propose mitigate measures, if needed
6. To analyze the consequences of potential accidents and the steps adopted to avert accidents and the plans to mitigate consequences in the case of severe accidents.
7. To specify the environmental monitoring required in the operational phase of the plant to evaluate the effectiveness of the various environmental control measures adopted.
8. To assess the benefits arising from the project
9. To delineate the administrative mechanisms warranted to oversee (a) the implementation of control/EMP mitigative measures during operation of the plant, (b) operation and maintenance of such systems subsequently, (c) compliance with monitoring programs and (d) provision of required budget

1.6 STRUCTURE OF EIA REPORT

The EIA report has been structured as per Appendix-III of the EIA Notification, 2006 complying with Standard ToR prescribed by SEAC, Haryana. Structure of the EIA report is as below:

CHAPTER 1 – INTRODUCTION

The chapter provides description of project background, site and surroundings, objectives, scope and organization of the study.

CHAPTER 2 – PROJECT DESCRIPTION

This chapter provides information on project and capacity; need for the project; location; size or magnitude of operation; technology and process description; maps showing project layout, component of projects etc.

CHAPTER 3 – DESCRIPTION OF THE ENVIRONMENT

This chapter deals with the methodology and findings of field studies undertaken with respect to ambient air quality, meteorology, water quality, soils characteristics, noise levels and ecology to define the various existing environmental status in the area of the project. This also deals with the infrastructural development as a part of project and sources of pollution from the proposed new project.

CHAPTER 4 – ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

In this chapter, the potential impacts of the proposed new project, which could cause significant environmental concerns, are identified and discussed. This discussion will form the basis for environmental management activities.

CHAPTER 5 – ANALYSIS OF ALTERNATIVES (TECHNOLOGY AND SITE)

Not prescribed in Standard ToR letter issued by SEAC, Haryana

CHAPTER 6 – ENVIRONMENTAL MONITORING PROGRAM

This chapter will include ascertaining the environmental impacts; state of pollution within the project area and in its vicinity; planning for predictive or corrective actions in respect of pollution to keep it within permissible limits.

CHAPTER 7 – ADDITIONAL STUDIES

This chapter will include outcomes of public consultation, Identification of hazards and risk assessment, social impact assessment, R&R action plan, biodiversity conservation plan, watershed management etc.

CHAPTER 8 – PROJECT BENEFITS

This chapter deals with improvements in the physical infrastructure, social infrastructure, employment potential and other tangible benefits due to proposed project activity.

CHAPTER 9 – ENVIRONMENTAL COST BENEFIT ANALYSIS

Not prescribed in Standard ToR letter issued by SEAC, Haryana

CHAPTER 10 – ENVIRONMENTAL MANAGEMENT PLAN

This chapter will include the description of administrative aspects of ensuring that the mitigation measures suggested are implemented and their effectiveness is monitored, after approval of the EIA.

CHAPTER 11 – SUMMARY& CONCLUSION

This will constitute the summary of the EIA Report.

CHAPTER 12 – DISCLOSURE OF CONSULTANT

This will include the names of the consultants engaged in preparation of EIA and nature of consultancy rendered by the experts.

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CHAPTER-2 : PROJECT DESCRIPTION

2.1 GENERAL DESCRIPTION

2.1.1 Type of the Project

M/s Signatureglobal India Limited aims to develop Industrial Plotted Colony Project. We will propose Category B industries.

The Project site is located Village- Shidrawali, Tehsil –Manesar, District- Gurugram, Haryana on a land measuring 54.92 ha or 5,49,258.716 m^2.

The company has vast experience in planning and construction of Industrial Plotted Colony. The project facilities include:

- Plotted Development
- Community facilities
- Commercial facilities
- Plotted Industries

2.1.2 Salient Features of the Project

Salient features of the Project are given below in Table-2.1:

Table 2-1 Salient Features of the Proposed Project

S. N.	Items	Details
1	Name of the Project	Industrial Plotted Colony Project
2	S. No. in the schedule	8 (b), Townships and Area Development Projects
3	Proposed capacity / area / length /tonnage to be handled/command area/lease area/number of wells to be drilled	Plot Area = 5,49,258.716 m^2(135.7250 acres) Built-Up Area = **7,24,895.645**m^2
4	Category of Project	Category B1
5	Toposheet	H43W16_53D16 & H43W15_53D15
6	Sanctuaries / National Parks/ Biospheres, etc	No Sanctuaries / National Parks/ Biospheres, etc. falling within 10 km of the project site.
7	Project Cost	INR 1593.7 Cr
8	Nearest Airpoprt	IGI Airport is approx. 40 km (NE)
9	Nearest Railway Station	Inchhapuri Railway Station is approx. 12.6 km (NW)
10	Road Connectivity	NH-48 adjacent (NW), SH 28 approx. 0.58 km (SW), SH 25 approx. 4.1 km (S), NH 919 approx. 3.8 km (S) NH 352W approx.. 9.5 km (NW)

		Western Periphery Expressway approx.. 8.7 km (NE)

2.2 NEED OF THE PROJECT

The project will provide direct or indirect employment opportunities for a large section of society.
Employment will have positive impact thereby improving the standard of living.

2.3 LOCATION OF THE PROJECT (MAPS SHOWING GENERAL LOCATION, SPECIFIC LOCATION, PROJECT BOUNDARY & PROJECT SITE LAYOUT)

The project site is located at Village-Shidhrawali, Tehsil-Manesar, District Gurugram, Haryana.
The Nearest Highway is NH-48 which is adjacent to the project site , SH-28 is 0.58 km towards SW direction, SH-25 which is 4.1 km (S), NH-919 is 3.8 km towards S direction, Western Peripheral Expressway is 8.7 km towards NE direction, MDR 132 is 5.1km towards NE direction, & NH-352W which is 9.5 km (S) direction away from project site.
The nearest railway station being Inchhapuri Railway Station is about 12.6 km (NW) away from the project site.
The nearest Airport is Indira Gandhi International Airport 40 km (NE) from the project site.
The geographical co-ordinates of centre of project site are 28° 14' 59.529" N and 76° 49' 48.329"E.

2.4 JUSTIFICATION FOR THE PROJECT SITE

The operation of project and other allied facilities will provide direct or indirect employment opportunities for a large section of society. The employment will have positive impact thereby increasing the quality of life.

The other factors considered while selecting the project site are:

a) Availability of adequate land.
b) Availability of required quantity of water throughout the year
c) Good connectivity to the highway
d) Availability of local labour during construction phase
e) No environmentally sensitive location in vicinity
f) Good law and order situation

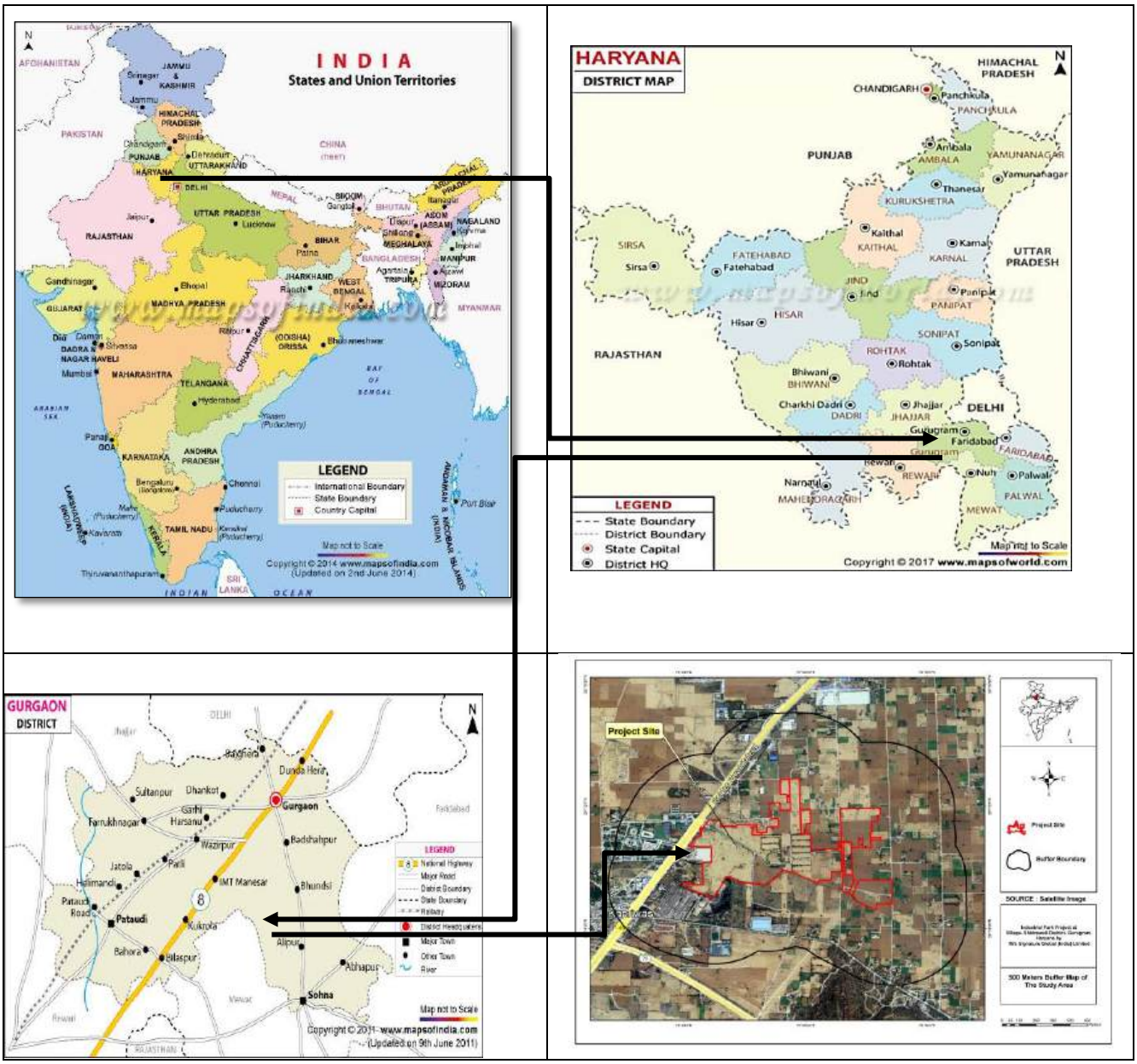

Figure 2-1 Location of the Project Site

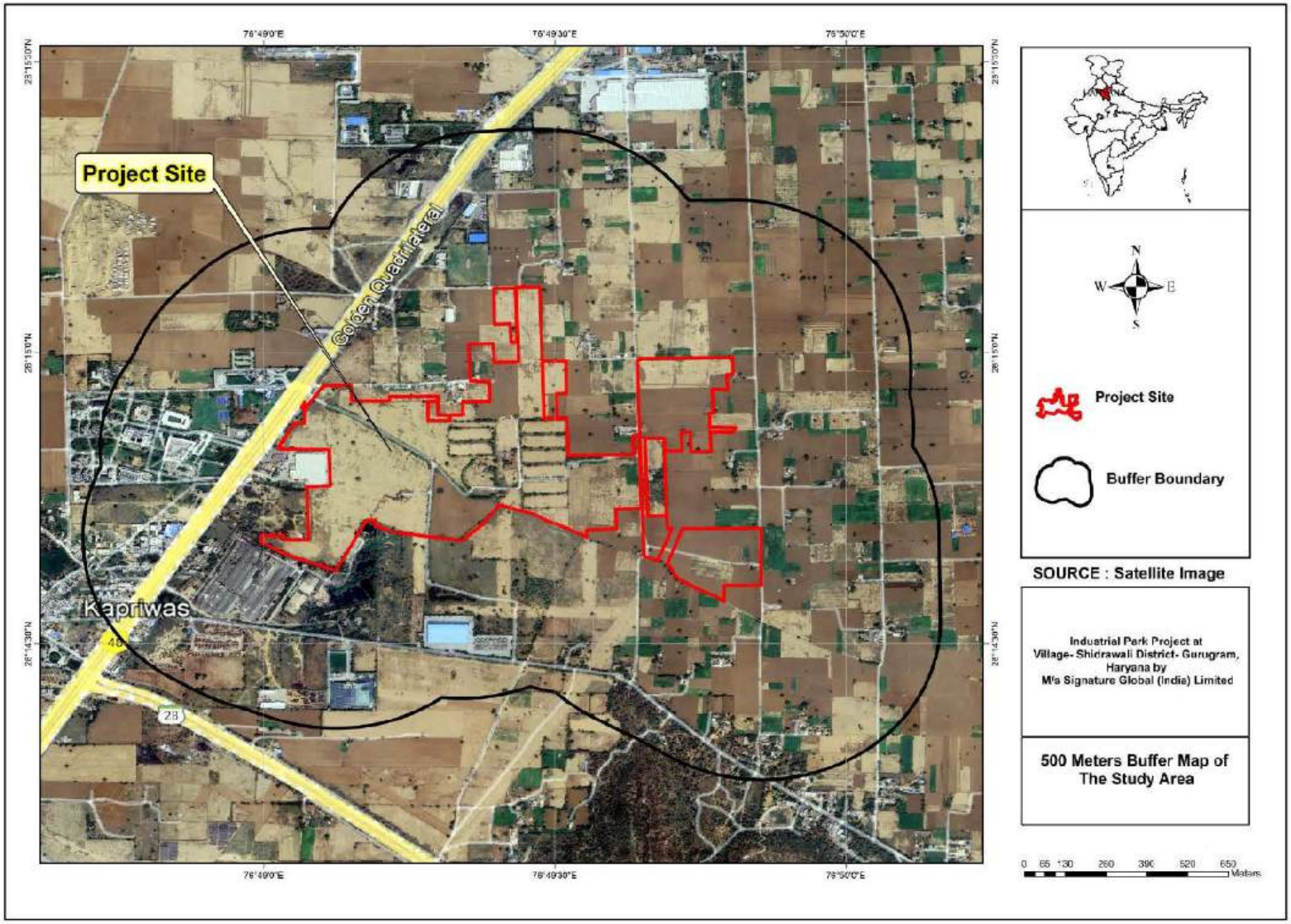

Figure 2-2: 500 m radius map

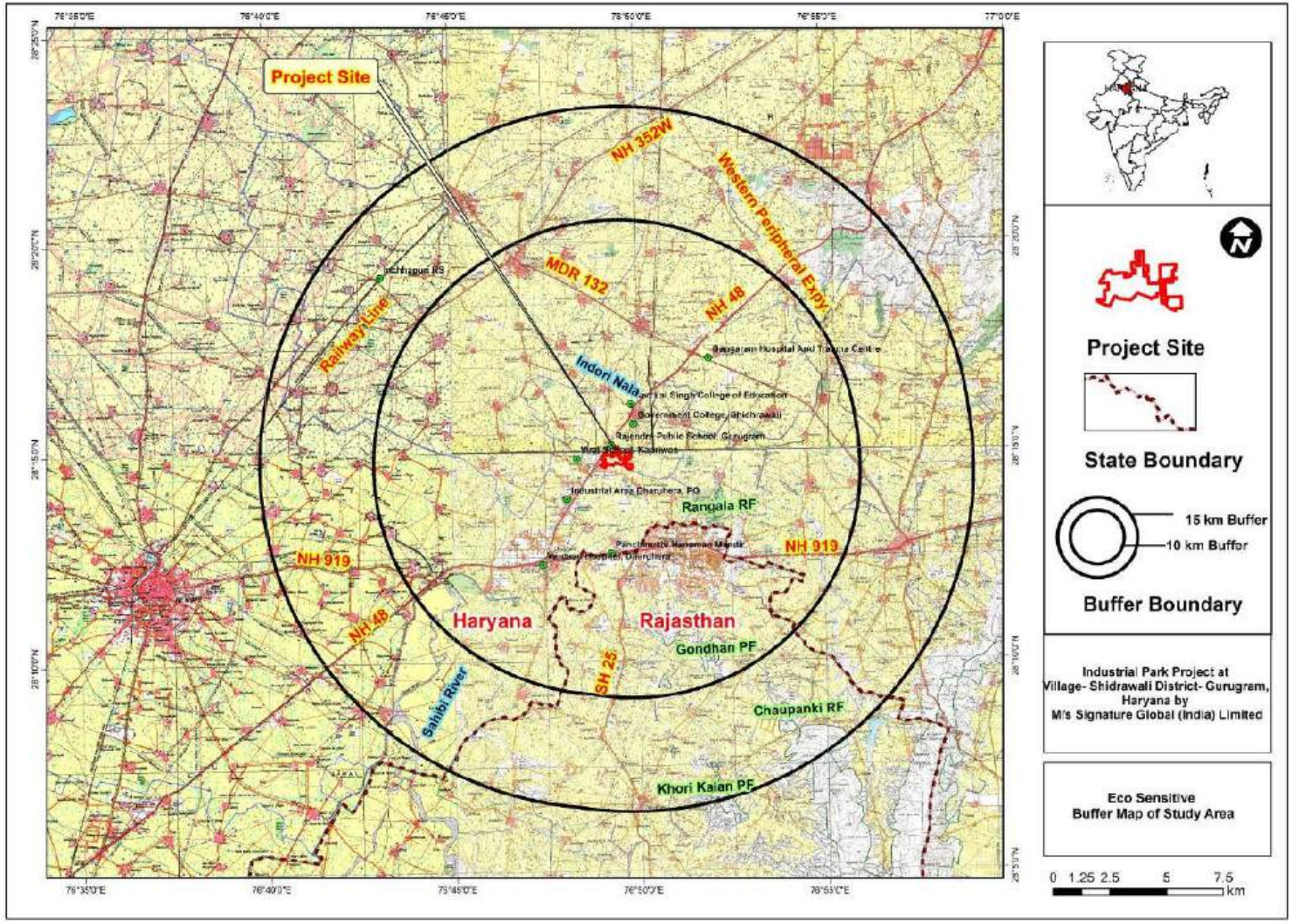

Figure 2-3 10 & 15 km radius around Project Site

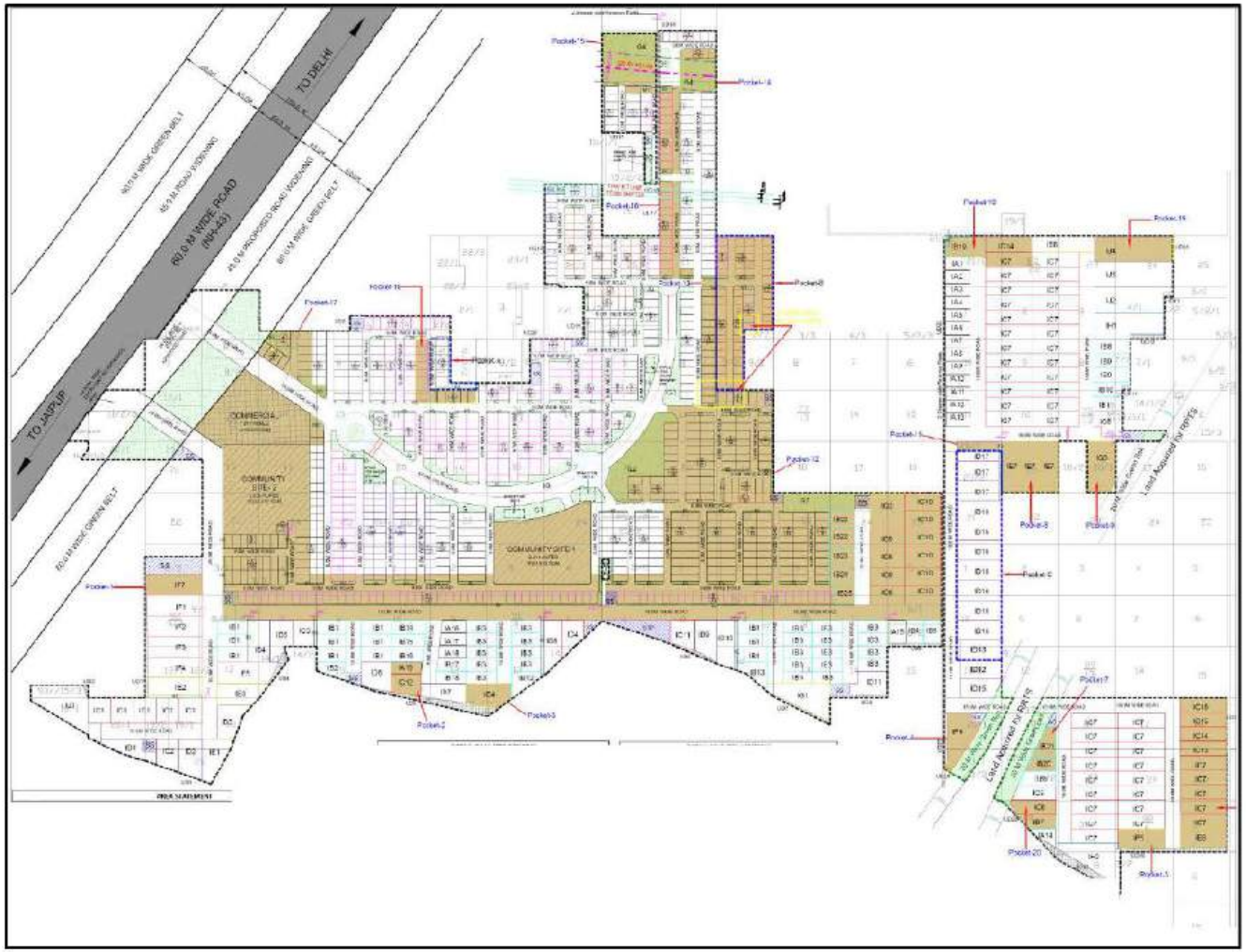

Figure 2-4 Site Plan

2.5 SIZE OR MAGNITUDE OF OPERATION

2.5.1 Complete Area Statement

The total area of the site is 5,49,258.716 **m² (135.7250 acre).** The detailed Area Statement is provided below in Table 2.2:

Table 2-2 Detailed Area Statement

S. No.	Particulars	Area (in m²)
1.	**Total Licensed area**	**5,49,258.716**
2	Area under Road (Delhi –Jaipur Road) Widening	10,194.015
3	Area under proposed Green Belt of Delhi –Jaipur Road (considering 60 m wide on either side)	13677.139
4	Area under green belts of RRTS (considering 20m on either side)	5293.280
5.	Total area to be deducted (2+3+4)	29,164.434
6.	**Balance area (1-5)**	**5,20,094.282**
7.	**50% benefit of area under road** (Delhi –Jaipur Road) Widening, Green Belt of Delhi –Jaipur Road & green belts of RRTS	**11,935.577**
8.	**Net Area (6+7)**	**5,32,029.859**
9.	Area under undetermined use	5,516.641
10.	**Net Planned area (8-9)**	**5,26,513.219**
11.	**Proposed Area under plots**	**319,416.066**
	• Area under Industrial Plots	1,84,280.882
	• Area under Residential plots	1,27,433.845
	• Area under Commercial plots	7701.339
12.	**Total Permissible FAR**	**5,78,220.453**
	• Industrial Permissible FAR (1.250)	2,30,351.102
	• Commercial Permissible FAR (4.2857/Plot)	11,417
	• Residential Permissible FAR (2.64)	3,36,452.351
13.	**Total Proposed FAR**	**5,78,220.453**
	• Industrial FAR	2,30,351.102
	• Commercial FAR	11,417
	• Residential FAR	3,36,452.351
14.	NON-FAR Area	**1,46,675.192**

15.	**Total Built up area**	**7,24,895.645**
16.	**Green Area (7.073% of Plot area)**	**37,241.664**
	❖ Green Area under DDJAY	14942.433
	❖ Green Area under Green Belt	13677.139
	❖ Green Area Metro/RRTS Green Belt	5293.280

Table 2-3 Land use break-up of Site

S. No	Description	Area (acre)	Area (m^2)	Percentage of Net planned area (%)
1	Area under Industrial Plots	45.537	1,84,280.882	33.55
2	Area under DDJAY Residential Component	31.490	1,27,433.845	23.02
3	Area under Commercial Plots	1.903	7701.339	1.402
4	Area under Road/Road widening/Open/Green /Public Facilities etc	56.795	2,29,842.913	41.84
	Total land area	135.7250	**5,49,258.716**	**100**

2.5.2 Total Population Details

The total population of the project will be 61,489 persons. The detailed population breakup is given below in the following **Table 2-4.**

Table 2-4: Population Break-up

Table 2-4(a): Population Break-up for Residential Population

S. No.	Description	Total no. of floors per plot	DUs/FAR (sqm)	PPU	Total Population
A.	**Residential plots (Type 1)**				
1.	Residential plots	4	285	18	5130
2.	Visitor's	10% of Residential population			513
3.	Staff (Operation & Maintenance)				200
B.	**Residential plots (Type 2)**				
4.	Residential plot Population	4	677	18	12186
5.	Visitor's	10% of Residential population			1219
6.	Staff (Operation & Maintenance)				200
	Grand Total of Residential Population				**19,448**

Table 2-4(b): Population Break-up for Community buildings, Commercial & Population

S. No.	Description	Area (m^2)	PPU/ Person/m^2 FAR	Total Population
C.	**Community Building -1**			
7.	**Community Building Population**	9351.919	1.4	**6680**
8.	**Staff**	10% of Community Building 1 population		668
9.	**Visitors**	90% of Community Building 1 population		6012
D.	**Community Building -2**			
10.	**Community Building Population**	10290.508	1.4	**7351**
11.	**Staff**	10% of Community Building 2 population		736
12.	**Visitors**	90% of Community Building 2 population		6615
	Total Community buildings population			**14,031**
E.	**Commercial Building**			
13.	**Retail Shops (Ground Floor)**	4,566.8	(@ 1 Person/3 m^2)	**1522**
	• Staff	(@10% of the Retail shop population)		152
	• Visitors	(@90% of the Retail shop population)		1370
14.	**Retail Shops (Above Floors)**	6,850.2	(@ 1 Person/6m^2)	**1142**
	• Staff	(@10% of the Retail shop population)		114
	• Visitors	(@90% of the Retail shop population)		1028
	Total Commercial building population			**2664**
	Grand total of Community buildings & Commercial buildings population			**16,695**

Table 2-4(c): Population Break-up for Industrial Population

S. No.	Description	Area (m^2)	PPU/ Person/m^2 FAR	Total Population
F.	**Industrial Plots**			

	Industrial plots population	2,30,351.102	(@ 1 Person/10 m^2)	23,035
	Visitors	10% of Industrial plots population		2303
	Total Industrial plots population			**25,338**

2.5.3 Water Requirement

During the Construction Phase the Source of water will be Ground water. During operation phase, the source of water supply will be GMDA. The total water requirement for the project will be approx. 3475 KLD.

The domestic water demand for Residential (Type 1 & 2), Community Buildings, Commercial Buildings, & industrial Plots is 2905 KLD. The freshwater requirement for Residential (Type1 &2), Community Buildings, Commercial Buildings, & industrial Plots will be 1943 KLD. However, one-time freshwater demand for the project will be 3475 KLD.

The calculation of daily water requirement and wastewater is given below in Table 2-5 to 2-8 respectively.

Table 2-5: Calculations for Daily Water Demand

S. No.	Description	Occupancy	Rate of water demand (lpcd)		Total Water Requirement (KLD)		
			Fresh	Flushing	Fresh	Flushing	Total
A.	**Domestic Water for Residential plots (Type 1)**						
	Residential plots	5130	@ 65 lpcd	@ 21 lpcd	333	108	441
	• Staff	200	@25 lpcd	@20 lpcd	5	4	9
	• Visitors	513	@ 10 lpcd	@5 lpcd	5	3	8
					343 KLD	**115 KLD**	**458 KLD**
	Total Domestic Water= 458 KLD						
B.	**Domestic Water for Residential plots (Type 2), Community buildings, & Commercial buildings**						
	Residential plots (Type 2)	12186	@ 65 lpcd	@ 21 lpcd	792	256	1048
	• Staff (for Community buildings, Operation & Maintenance for residential plots (type	1870	@25 lpcd	@20 lpcd	47	37	84

	2) & Commercial building)						
	• Visitors (for Community buildings, Residential Plots, & Commercial building)	16,244	@ 10 lpcd	@5 lpcd	162	81	243
					1001 KLD	**374 KLD**	**1375 KLD**
Total Domestic Water for Residential plots (Type 2), Community buildings & Commercial Buildings = 1375 KLD							
C.	**Domestic Water for Industrial plots**						
	• Industrial Plots	23,035	@25 lpcd	@20 lpcd	576	461	1037
	• Visitors (for Industrial plots)	2303	@ 10 lpcd	@5 lpcd	23	12	35
					599 KLD	**473 KLD**	**1072 KLD**
	Total Domestic Water for Industrial plots						**1072 KLD**
D.	**Horticulture**	37,241.664 m^2	3 l/sqm		112 KLD		
Grand Total (A+B +C+D) 3,475 KLD							

Table 2-6: Wastewater Calculation for Residential plots (Type 1)

Domestic Water	**458 KLD**
• Fresh water	343 KLD
• Flushing water	115 KLD
Waste water [@80% fresh + 100% flushing]	274.4 +115 = **389 KLD**
STP Capacity	500 KLD

Table 2-7: Wastewater Calculation for Residential plots (Type 2), Community buildings, & Commercial buildings

Domestic Water	**1375 KLD**
• Fresh water	1001 KLD
• Flushing water	374 KLD
Waste water [@80% fresh + 100% flushing]	801 + 374= **1175 KLD**
STP Capacity	1410 KLD

Table 2-8: Wastewater Calculation for Industrial plots

Domestic Water	**1072 KLD**
• Fresh water	599 KLD
• Flushing water	473 KLD
Waste water [@80% fresh + 100% flushing]	479 + 473= **952 KLD**
STP Capacity	1150 KLD

WASTE WATER & TREATEMENT

Approx. 2516 KLD wastewater will be generated from the **Residential plots (Type 1 & 2), Community buildings, Commercial buildings & Industrial plots**. Wastewater will be treated in an in-house STP of total capacity 3060 KLD (500 KLD +1410 KLD +1150 KLD).

STP 1 [For Residential plots (Type 1)]: 500KLD

STP 2 [For Residential plots (Type 2), Community buildings, & Commercial buildings]: 1410 KLD

STP 3 [For Industrial plot]:1150 KLD

Treated wastewater will be used for flushing and horticulture and remaining water will discharge to External sewer.

Water balance diagram for summer, monsoon & winter season is presented below:

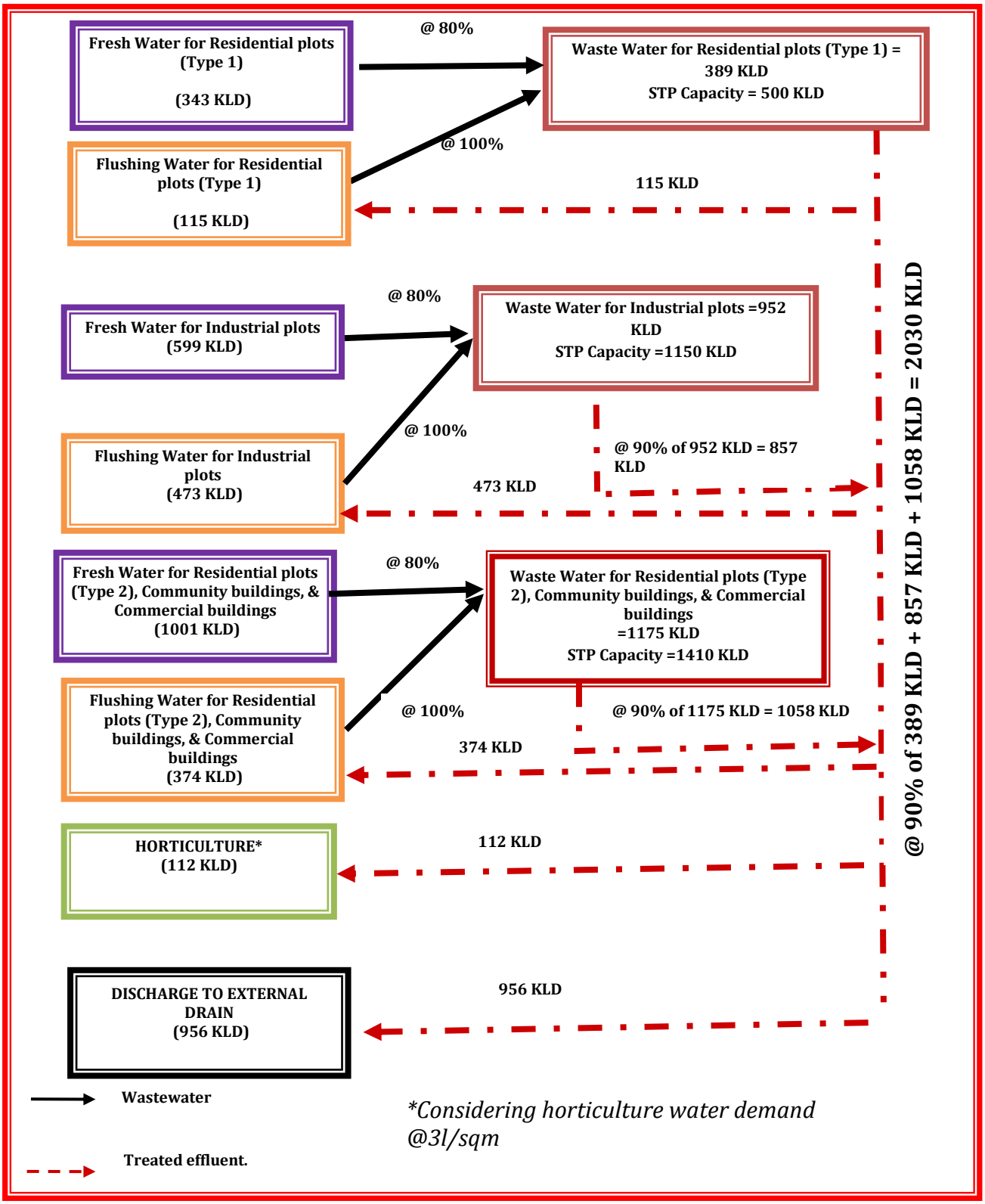

Figure 2-6: <u>Water Balance Diagram</u> (Summer Season)

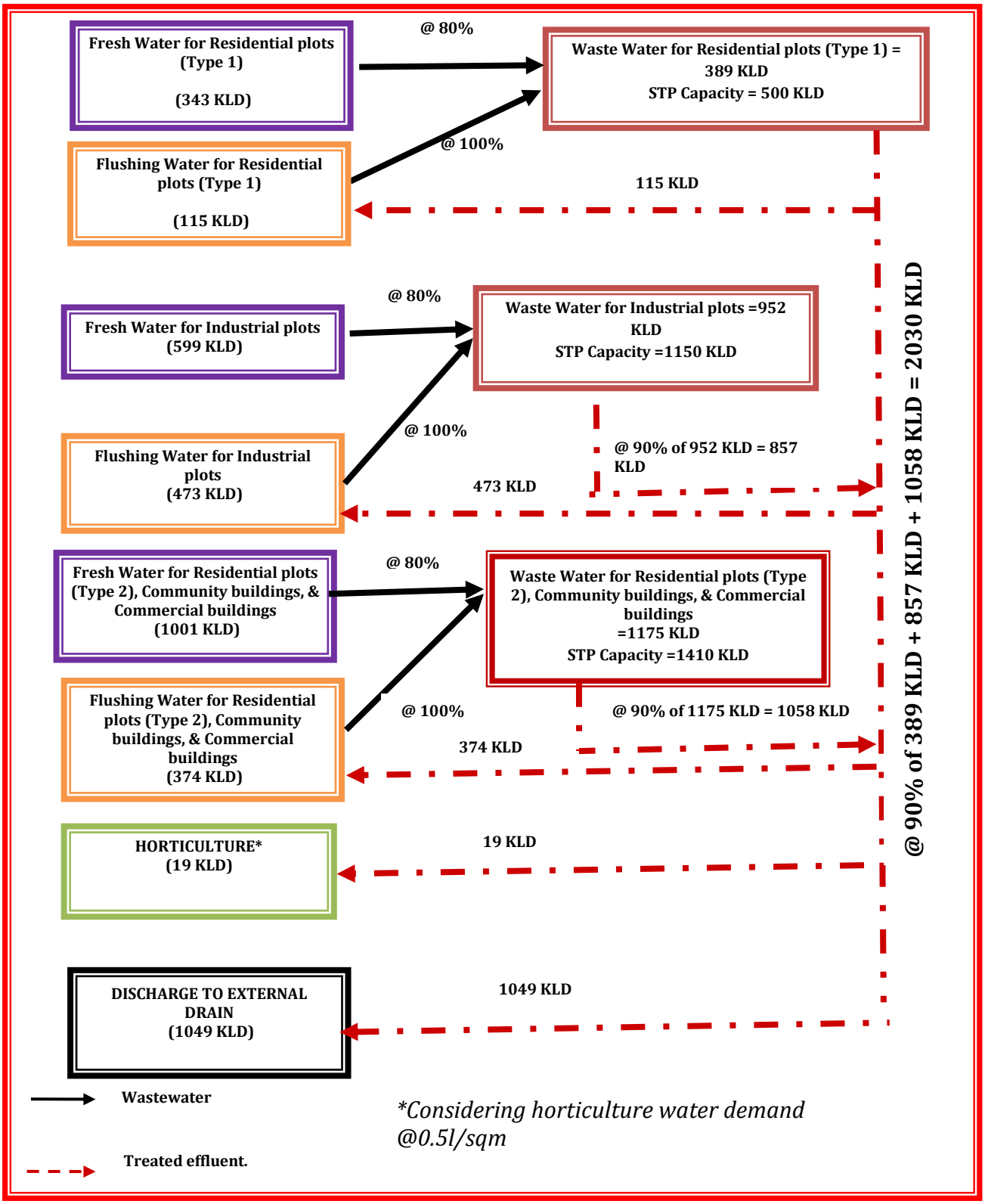

Figure 2-7: Water Balance Diagram (Monsoon Season)

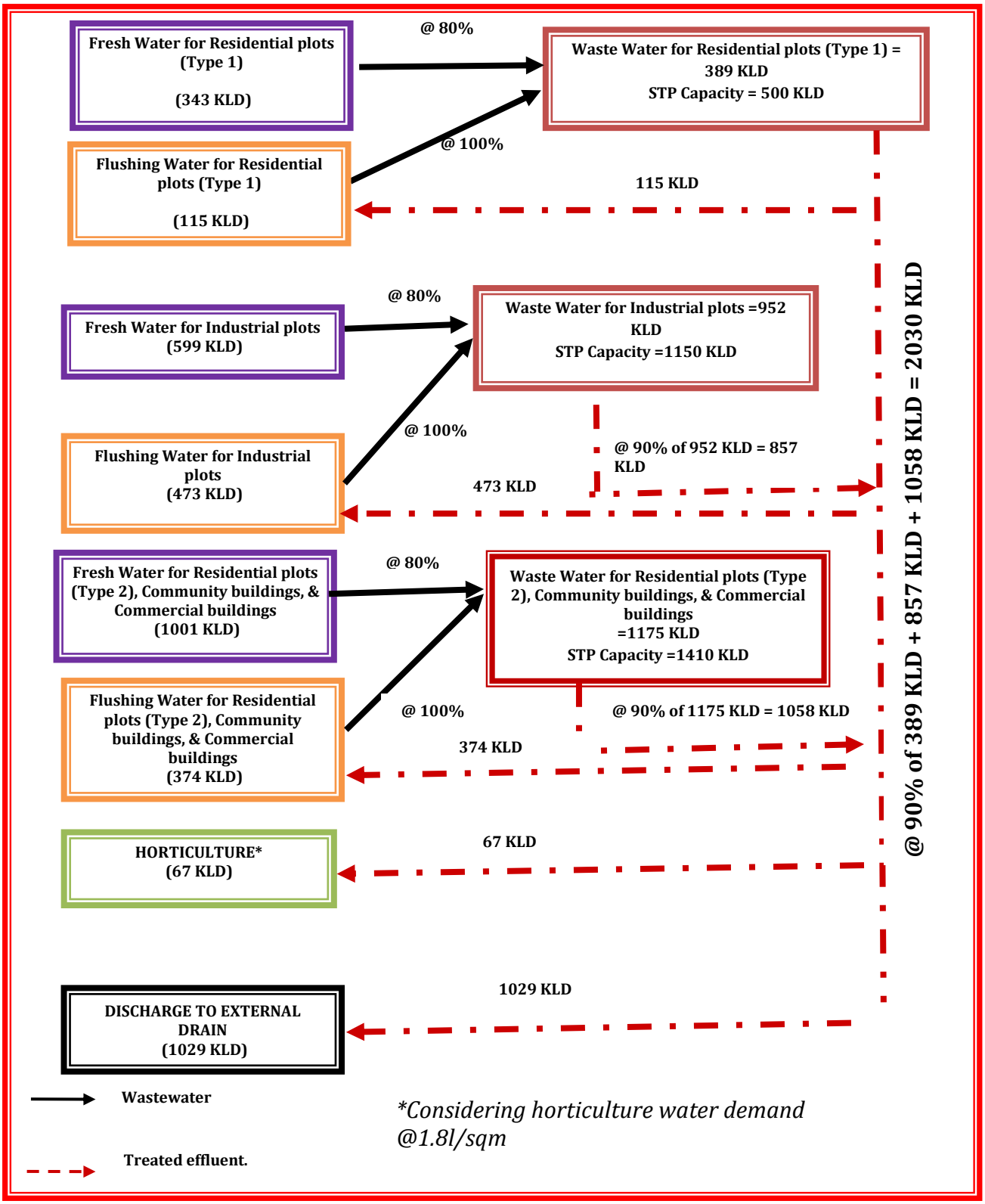

Figure 2-8: Water Balance Diagram (Winter Season)

2.6 SEWAGE TREATMENT TECHNOLOGY

MBBR TECHNOLOGY

An external sewage network shall collect the sewage from all units, 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. Wastewater Details

(a)	Daily load	:	2516 KLD
(b)	Duration of flow to STP	:	24 hours
(c)	Temperature	:	Maximum 32^{o}C
(d)	pH	:	6.5-8.5
(e)	Colour	:	Mild
(f)	T.S.S. (mg/l)	:	250-400 mg/l
(g)	BOD_5 (mg/l)	:	300-400 mg/l
(h)	COD (mg/l)	:	600-700 mg/l

b. Treated effluent

(a)	pH	:	6.0 to 8.5
(b)	B.O.D.	:	<10 mg/l
(c)	C.O.D.	:	<30 mg/l
(d)	Total Suspended Solids	:	<20mg/l

c. Treatment Technology

MBBR TECHNOLOGY

Moving bed biofilm reactor technology is based on the principle of attached growth process. Raw sewage will be collected under gravity into the equalization tank after allowing to pass through the bar screen. Screens will be provided in screen chambers

and it will be manually cleaned by going down to a platform. The bar screen, by removing coarse solids from the sewage help in protecting the raw sewage pump.

Fully submersible centrifugal non clog sewage handling pump will be provided in the collection cum equalization tank to pump the collected waste water to the next MBBR tanks. Automatic level controller will be provided in the tank to turn the pump off at the low water level in the tank and to start the pump when water level is high automatically. Air will be introduced in this tank to prevent any potential foul smell problem & to provide the mixing of wastewater to avoid the sedimentation of solids in this tank. Air Grid used for aeration purpose shall be non-clog.

The sewage collected in equalization tank is pumped the moving bed bioreactor. There shall be two nos. of bioreactors in series for the efficient working and removal of BODs for the required retention time. The process inside the moving bed bioreactors consists of adding small cylindrical-shaped polyethylene/polypropylene carrier elements in aerated basins to support biofilm growth. The small cylinders are provided with a cross inside the cylinder and longitudinal fins on the outside. The biofilm carriers are maintained in the reactor by the use of a perforated plate with appropriate slot at the tank outlet. Air agitation or mixers are applied in a manner to continuously circulate the packing. The packing may fill 25 to 50 percent of the tank volume. Specific surface area of the packing is about 450-500m^2/m^3 of bulk packing volume. The waste water from first bioreactor flows by gravity through the perforated plate/mesh to the next bioreactor kept in series. Inside the bioreactors, aerobic bacteria grow in an attached growth from around the moving plastic media inside the reactors. The bacteria have to reduce BOD & COD of waste water in the presence of oxygen provided through the air grids located at the bottom of the reactors. The Process does not require any return activated sludge flow or backwashing.

From the bio-reactors, the effluent passes by gravity into the clarifier (Tube Settling Tank). Clarifier will be a hopper bottom sedimentation tank provided with appropriate size PVC tube deck media. The suspended solids will settle at the bottom of the tank & clear supernatant will overflow to filter feed tank through outlet launder. The collected sludge at bottom shall be transferred through pumps to sludge holding tank.

The clear supernatant after clarifier will be collected in to filter feed tank. This tank will act as housing tank for filter feed pumps. The clarified & dis-infected water will be then fed to filtration unit.

Filtration unit consisting of Dual Media sand filter, activated carbon filter and ultra-filtration system (optional) will remove the residual impurities such as odor/color, suspended solids, BOD/COD. The treated water after the filtration unit will be collected in Irrigation cum Flushing water storage tank from where it is transferred to flushing water tank at terrace & Irrigation System.

Excess sludge from the bottom of the settling tank will be removed and transferred to sludge holding tank. Air grid shall be provided in this tank to avoid conversion into anaerobic conditions, thickening of sludge and keep sludge in homogenous condition. The digested & thickened sludge shall be further thickened through Sludge Dewatering System (Filter press with screw pump) and disposed-off periodically through closed tanker or can be reused as manure.

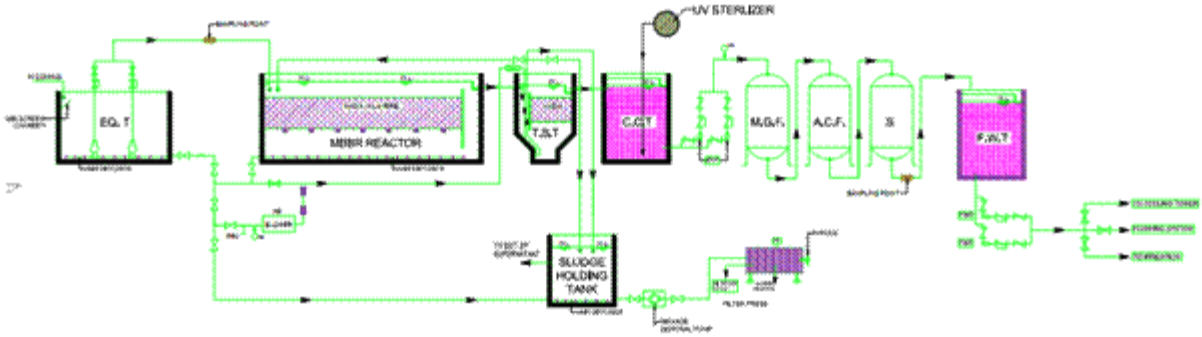

Figure 2-9: Schematic Diagrams for STP Based on MBBR Technology

2.7 POWER REQUIREMENT& BACKUP

The power shall be supplied by the State Electricity Board. The maximum load demand for the project will be approx. 12,883 KW.

Details of D.G Sets

There is provision of 2no. of DG set of total capacity 1100kVA for Commercial Facility which includes 1 x 750kVA +1x 350 kVA and 2no. of DG set of total capacity 1750 kVA for Common Services which includes 1 x 750kVA +1x 1000 kVA are proposed for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

2.8 VEHICLE PARKING & FACILITY

Adequate provision will be made for car/vehicle parking at the project site. There shall also be adequate parking provisions for visitors so as not to disturb the traffic and allow smooth movement at the site.

For plotted development the parking shall be within the plots by the individual plot owners.

2.9 SOLID WASTE GENERATION

Solid waste would be generated both during the construction as well as 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. which would be managed in accordance with Construction & Demolition Waste Management Rules, 2016. The following steps are proposed to be followed for the management of solid waste:

- Construction yards are proposed for storage of construction materials within site
- The excavated material such as topsoil and stones will be stacked for reuse during later stages of construction
- Top soil will be stored in temporary constructed soil bank and will be reused for landscape development and
- Remaining soil shall be utilized for refilling / road work / rising of site level at locations/ selling to authorize agency for disposal at designate sites

Following figure depicts Solid Waste Management scheme during Construction Phase of the project:

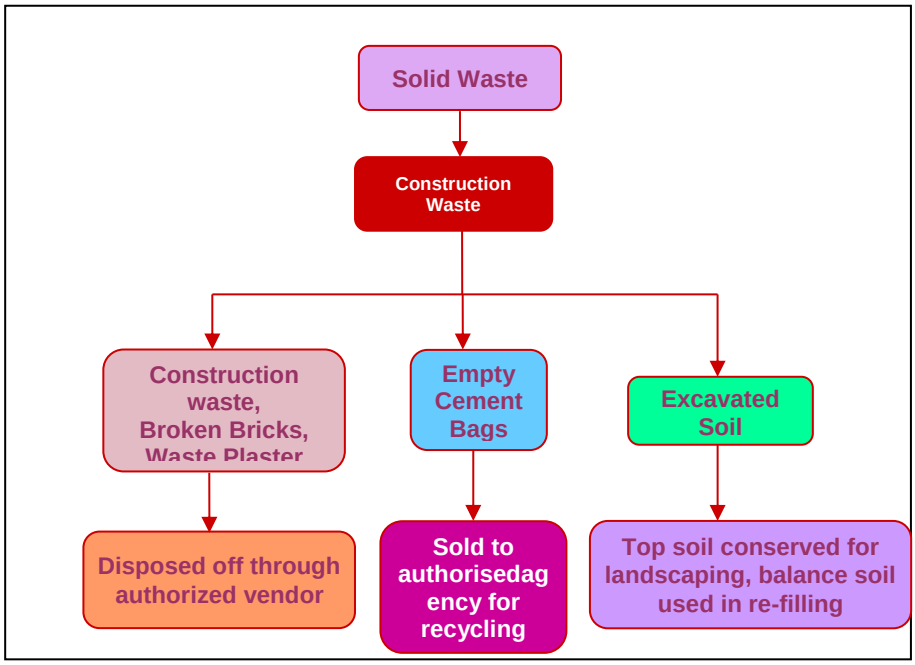

Figure 2-10 Solid Waste Management Scheme (Construction Phase)

During the operation phase, approx. 18,139 kg/day of domestic waste will be generated. Calculation for domestic solid waste is provided in table below:

Table 2-9: Daily Solid Waste Generation

S. No.	Description	Occupancy	Norms (kg/capita/day)	Waste Generated (kg/day)
1.	**Domestic Solid Waste for Residential plots**			
	• Residential plots	17316	0.5	8658
2.	**Domestic Solid Waste for Industrial plots**			
	• Industrial Plots	23035	0.25	5759
3.	Staff (Residential Maintenance, Community, Commercial, & Industrial)	2070	0.25	518
4.	Visitors(Residential, Community, Commercial, & Industrial)	19060	0.15	2,859
5.	Horticultural Waste (9.20 acres)	@ 0.2 kg/acre/day		1.84
6.	STP Sludge	Sludge generated x 0.35 x B.O.D difference/1000		343.434
Total Solid Waste Generation = 18,139kg/day				

Following arrangements will be made at the site in accordance to Solid Waste Management Rules, 2016:

❖ **Collection and Segregation of waste**

1. Door to door collection system will be provided for collection of domestic waste.
2. Separate colored bins will be provided for Dry recyclable and Bio-Degradable waste.
3. Local vendor will be hired for collection and disposal of waste.
4. Litter bin will also be provided in open areas like parks etc.

❖ **Treatment of waste**

- Bio-Degradable waste

1. Bio-degradable waste will be subjected to composting by organic waste converter and the compost will be used as manure.
2. STP sludge is proposed to be used for horticultural purposes as manure.
3. Horticultural Waste is proposed to be composted and will be used for gardening purposes.

- Recyclable waste

i. Grass Recycling – The cropped grass will be spread on the green area. It will act as manure after decomposition.
ii. Recyclable waste like paper, plastic, metals etc. will be sold off to recyclers.

❖ **Disposal**

Recyclable and non-recyclable waste will be disposed of through a local agency. Solid waste management scheme is depicted in the following figure:

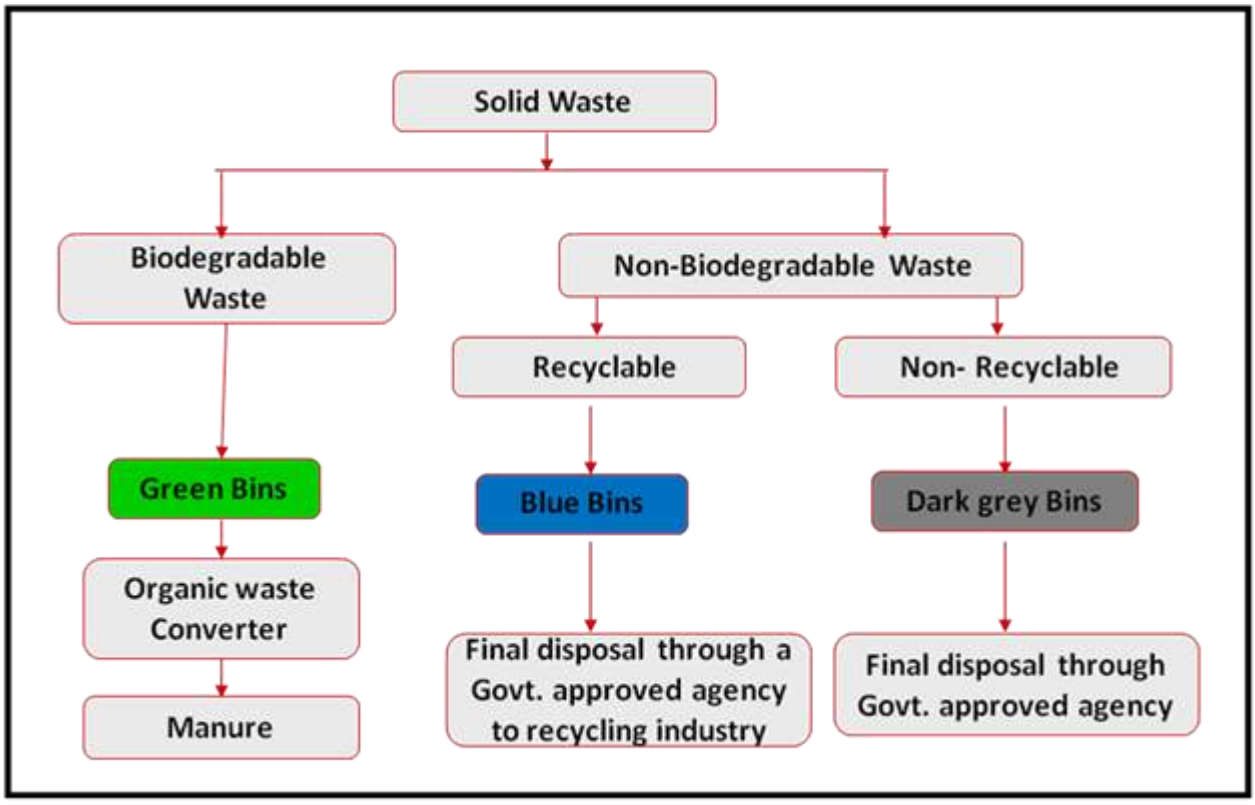

Fig. 2-11: Solid Waste Management Scheme (Operation Phase)

Organic Waste Converter

A waste converter is a machine used for the treatment and recycling of solid and liquid refuse material. A converter is a self-contained system capable of performing the following functions: pasteurization of organic waste; sterilization of pathogenic or biohazard waste; grinding and pulverization of refuse into unrecognizable output; trash compaction; dehydration.

Benefits of organic waste converter:

1. Large quantity of solid waste is converted to manure in a very short period
2. Manure can be used as compost for gardening
3. Machine requires less space, and the efficiency is high
4. Manpower and maintenance are very less
5. This is one of the latest techniques of managing biodegradable solid waste.

Organic Waste Converter - 300 (Dim. 3m × 4m) 2 machines are proposed to be used for composting waste 120kg/batch or 3000 kg/day & it requires electricity of about 13.5 HP.

No. of batches /day = 3000/120 = 25

Biodegradable Waste to be converted = 40% of total solid waste generated = 7256 kg/ day
Taking 20% higher = 8707kg
No. of batches to convert 8707 kg = 8707 /120 = 73

Operation Cost-monthly per capita:

The operating cost of OWC - 300 = 1, 80,000 INR/month
Cost/day = 1, 80,000/30
= 6000/-
1 batch/day cost = 6000/25
= 240 INR
Cost for 73 batch/day = 73 × 240/-
= 17520 /-
Monthly operating cost = 30 ×17520
= INR 5, 25,600 /- per month

2.10 GREEN AREA

Total green area measures **37,241.664** m^2 which will include green belt, Avenue plantation and lawn.
Evergreen tall and ornamental trees have been proposed to be planted inside the premises.
No. of trees required = 1 tree/80 sq.m. of plot area =5,49,258.716/80 = 6866 Nos
No. of trees proposed to be planted = 6,870 trees.

There are few trees present at the project site which will be transplanted in the greenbelt.

As per OM dated 24.07.2024 we will plant one additional tree "EK Ped Maa Ke Naam."

2.11 RAIN WATER HARVESTING

The storm water collection 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 carriageway along either side of the roads. Taking advantage of road camber, the rainfall run off from roads shall flow towards the drains. Storm water from various plots/shall be connected to adjacent drain by a pipe through catch basins. Therefore, it has been calculated to provide 65 rainwater harvesting pits at selected locations, which will catch the maximum run-off from the site.

1) Since the existing topography is congenial to surface disposal, a network of storm water pipe drains is planned adjacent to roads. All building roof water will be brought down through rainwater pipes.
2) Proposed storm water system consists of pipe drain, catch basins and seepage pits at regular intervals for rainwater harvesting and ground water recharging.
3) The peak hourly rainfall of 45 mm/hr shall be considered for designing the storm water drainage system.

Rainwater harvesting has been catered to and designed as per the guideline of CGWA. Peak hourly rainfall has been considered as 45 mm/hr. The recharge pit of 2.5m diameter and 4 m depth is constructed for recharging the water. Inside the recharge pit, a recharge bore is constructed having adequate diameter and depth. The bottom of the recharge structure will be kept 5 m above this level. At the bottom of the recharge well, a filter media is provided to avoid choking of the recharge bore. Design specifications of the rainwater harvesting plan are as follows:

- Catchments/roofs would be accessible for regular cleaning.
- The roof will have a smooth, hard and dense surface which is less likely to be damaged allowing the release of material into the water. Roof painting has been avoided since most paints contain toxic substances and may peel off.
- All gutter ends will be fitted with a wire mesh screen and a first flush device would be installed. Most of the debris carried by the water from the rooftop like leaves, plastic bags and paper pieces will get arrested by the mesh at the terrace outlet and to prevent contamination by ensuring that the runoff from the first 20 minutes of rainfall is flushed off.
- No sewage or wastewater would be admitted into the system.
- No wastewater from areas likely to have oil, grease, or other pollutants has been connected to the system.

Calculations for storm water load:

Green Area = 37,241.664m^2

Paved Area = 1,69,855.489m^2

Mean monthly rainfall for District as per IMD = 45 mm

Run-off from Green area = 37,241.664 x 0.045 x 0.20

= 335.174m^3

Run-off from Paved area = 1, 69,855.489 x 0.045 x 0.70

= 5,350.447m^3

Total runoff load from green and paved area = 335.174 + 5,350.447**= 5,685.621m^3**

Taking 20 minutes Retention Time, Total volume of storm water = 5,685.621/3

= 1,895.207m^3

Taking the effective diameter and depth of a Recharge pit 2.5m and 4 m respectively,

Volume of a single Recharge pit = $\pi r^2 h$ = 3.14 × 1.25× 1.25× 4= 29 m^3

Hence No. of pits required = 1,895.207/29 = 65 pits

A total of 65 no. of pits proposed for artificial ground water recharge.

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CHAPTER-3 : DESCRIPTION OF THE ENVIRONMENT

3.1 INTRODUCTION

Before proceeding for baseline data generation, it is important to know the boundary limits and framework, so that the data generated can be effectively utilized for impact assessment. Baseline data of study area of 10 km radius around the project site is considered for EIA study. Impact zone for industrial actions has been classified into three parts; Core Zone (Project Site), and Buffer Zone (10 km radius from periphery of project site) as illustrated below.

Knowledge of the significance of environmental attributes is useful in selecting appropriate and judicious technique of baseline data generation, so that the generated data is rationally applied for Impact Assessment. The environmental attributes with respect to the consequences of proposed action are pointed below:

AIR ENVIRONMENT

- Determination of impact zone by screening model and developing ambient air quality monitoring network
- Monitoring and analysis of the pollutants as per prescribed procedures within the impacted zone
- Monitoring the site-specific meteorological data
- Estimation of quantities of point source emissions from the proposed actions based on engineering details
- Estimation of quantities of fugitive emissions from the proposed actions and projected emissions from the vehicular traffic
- Prediction of changes in the ambient air quality due to air emissions by following the Guidelines developed by Central Pollution Control Board (PROBES/70/1997-98)
- Evaluation of the adequacy of the proposed air pollution control measures to meet the national standards
- Assessment of impacts of air pollution on historical, cultural and archaeological sites within the impact zone
- Recommendation of air pollution mitigation measures at source, pathways and receptors

NOISE ENVIRONMENT

- Monitoring the present status of noise levels within the impact zone by following standard procedures
- Estimation of noise levels from the proposed actions based on engineering details
- Prediction of changes in the ambient noise quality due to the actions by following noise prediction models

- Evaluation of the adequacy of the proposed noise pollution control measures to meet the national standards
- Recommendation of noise mitigation measures at source, pathways and receptors

WATER ENVIRONMENT

- Study of existing surface water and groundwater resources within the impact zone of the action with respect to quality and quantity as per Primary and Biological Water Quality Criteria developed by CPCB and Drinking Water Quality Standards prescribed by Bureau of Indian Standards
- Prediction of changes in the water quality due to the effluent discharge into water bodies from proposed actions by following water quality prediction models
- Evaluation of the adequacy of the proposed water pollution control measures, wastewater treatment system and other water conservation measures, like recycling and reuse, to meet the various water quality criteria
- Recommendation of water pollution mitigation measures at source, pathways and receptors

BIOLOGICAL ENVIRONMENT

- Survey of terrestrial and aquatic flora and fauna present within the impact zone clearly delineating season and duration
- Assessment of potential damage to terrestrial and aquatic flora and fauna due to the discharge of air and water pollutants and due to landuse and landscape changes
- Recommendation of mitigation measures at source, pathways and receptors to reduce and I or prevent the damage.

LAND ENVIRONMENT

- Survey of existing landuse and topography, geology and hydrogeology, landscape and drainage pattern within the impact zone
- Estimation of impacts of the action on landuse and topography, geology and hydrogeology landscape and drainage pattern within the impact zones
- Qualitative and quantitative characterizations of solid and hazardous wastes and delineation of solid waste management options for minimization of waste, reuse of waste and environment friendly disposal practices
- Study of soil characteristics of the impact zone and impact on it due to the action
- Identification of potential utility of treated wastewater in land application and subsequent impacts
- Identification of land suitable for solid and hazardous waste disposal and subsequent impacts.

3.2 STUDY PERIOD

The standard ToR application was submitted on 10.09.2024 at MoEFCC, New Delhi vide Proposal No- SIA/HR/INFRA2/494250/2024 and the Standard ToR letter was issued by SEAC Haryana on 10.09.2024 vide ToR identification No – TO24B3813HR5427969N.

Accordingly, the baseline environmental study has been done for the period 1st December, 2023 to 29th February, 2024, as well as secondary data also collected from different sources. Baseline data has been collected by M/s GRC India Training & Analytical Laboratory, Noida {NABL Accredited Lab, Certificate No. TC - 7501 & MOEFCC No. S.O. 388 (E) (Certificate enclosed as **Annexure II**)}.

The impact identification always commences with the collection of baseline data such as Ambient Air Quality, Micro-Meteorology, Ground and Surface Water Quality, Noise levels, Soil Quality, Land use pattern, Biological Environment and Socio-economic aspects, Solid and Hazardous waste, Risk Assessment, Geology and Hydrology within the study zone of 10 km radius.

3.3 ESTABLISHMENT OF BASELINE FOR VALUED ENVIRONMENTAL COMPONENTS, AS IDENTIFIED IN THE SCOPE

3.3.1 Meteorological Data

Assessment of the micro and macro meteorology is important from the standpoint of understanding the nature and extent of air pollution in the study area. Climate has an important role in the build-up of pollution levels. The climatic condition of the area may be classified as moderately or seasonally dry, tropical or temperate savanna climate with four seasons in a year. Winter is critical for air pollution build-up because of frequent calm conditions with temperature inversions resulting in poor atmospheric mixing, natural ventilation and high emission loads.

The metrological station was set-up at the project site and baseline data was collected which are reproduced as under:

3.3.2 Climate Condition

The meteorological data recorded during the monitoring period is very useful for proper interpretation of the baseline information as well as for input prediction models for air quality dispersion. A meteorological station equipped with continuous monitoring equipment was installed on at project site, at a height 10 m above ground level to record wind speed, wind direction, relative humidity and temperature.

3.3.3 Regional Meteorology

Historical data on meteorological parameters will play an important role in identifying the general meteorological will also play an important role in identifying the general meteorological regime of the region. The district received an average annual rainfall of 1635 cum. Period from June to September is well known for monsoon. The monthly rainfall data shows that 85% of rainfall comes during monsoon period.

The year broadly is divided into four seasons:-

- Winter season : December to February
- Pre – Monsoon : March to May
- Monsoon Season : June to September
- Post – monsoon : October to December

3.3.4 Wind

Regional meteorological scenario helps to understand the trends of the climatic factors. It also helps in determining the sampling stations and in predicting the post project environmental scenario. Meteorological scenario exerts a critical influence on Air Quality as the pollution arises from the interaction of atmospheric contaminants with adverse meteorological conditions such as temperature inversions, atmospheric stability and topographical features like hills, and valleys.

The critical weather elements that influence air pollution are wind speed, wind direction, temperature, which together determines atmosphere stability. Hence it is an indispensable part of any air pollution studies and required for interpretation of base line information. Wind speed and direction data recorded during the study period is useful in identifying the influence of meteorology on the air quality of the area.

3.3.5 Wind Rose

The meteorological data was collected at the site by installing an automatic weather station during Winter season (Dec, 2023 to Feb 2024). Due care was taken in establishing the monitoring station to ensure free flow of winds without any obstructions.

Wind Speed, Wind Direction, Temperature and Relative Humidity were recorded for the total study period. The data on wind patterns are pictorially represented by means of wind rose diagrams for study period 1st December, 2023 to 29th February, 2024**.** Wind rose from collected data was compared with IMD data based wind rose, which is shown in **Figure 3-1.**

The metrological data reflecting minimum, maximum temperature in ˚C, relative humidity in %, rainfall in mm/hr, wind speed in m/s, for the year 2024 has been appended as **Table-3-1.**

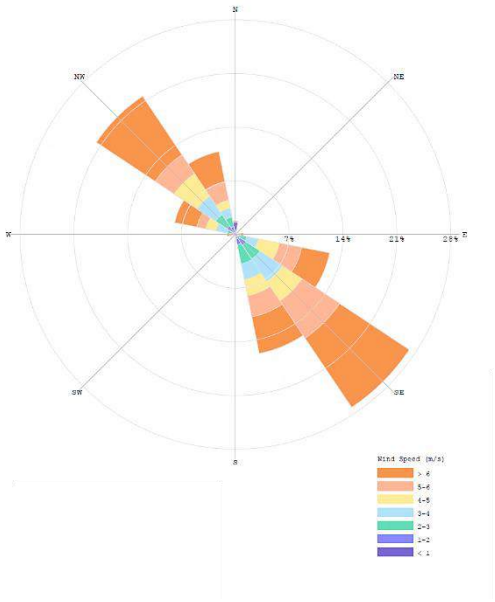


Figure 3-1Wind Rose Diagram of 1st Dec 2023 to 29th Feb, 2024

3.3.6 Cloud Cover

The area remains cloudy between June-September, which is the active period of the monsoon season. The average cloud cover for the study area for the Winter season is 2.2oktas.

3.3.7 Temperature

There is a meteorological observatory in Gurugram. Temperatures begin to increase rapidly from about the beginning of March. June is usually the hottest month with the mean daily maximum temperature at 44.9^{o}C & 21.6^{o}C minimum during December. The heat in May and the early part of June till the onset of monsoon is tiring. The onset of monsoon by about mid-June brings some relief as the temperature decreases appreciably. The temperature begins to decrease rapidly after October. December and January are generally the coldest months. The district is sometimes affected by cold waves in association with passing western disturbances across north India and then the minimum temperature drops down to 2.4^{o}C.

3.3.8 Relative Humidity

The relative humidity (RH) data at Gurugram IMD Station shows highest during January month (82% at 8:30 hr) and lowest during May month (28 % at 17.30 hr).

3.4 AIR QUALITY

3.4.1 Analytical Techniques for Air Quality Monitoring

Criteria pollutants like Fine Particulate Matter ($PM_{2.5}$), Respirable Suspended Particulate Matter (PM_{10}), Sulphur dioxide (SO_2), Nitrogen dioxide (NO_2) and Carbon Monoxide (CO) are monitored within the study area by following CPCB guidelines.

Monitoring is carried out using Respirable& Fine Dust Sampler with attachment for gaseous sampling.

Selections of ambient air quality monitoring stations - Ambient air quality monitoring stations are selected within the impact zone by knowing the upwind and downwind direction (obtained from IMD and previous EIA reports and screen modeling technique). Logistics for operating the instrument like accessibility, electricity connection, security and safety of instruments etc. is another main factor that is used to locate the station. Sampler is not operated using petrol/ diesel Generator Sets and not located on ground or along the road-side. The three broad criteria for selection of ambient air quality monitoring stations are given below.

- **Sampling Height -** Sampler should be located 3 m to 5 m height from ground level
- **Sampling Location** - Sampler should be located >500 m distance from the roads
- **Aerial Clearance** - Minimum clearance satisfactory for sampling is 270°.There should be no high rise structures above the sampler height, like tall trees, tall buildings, hordings or other high obstructions around the sampler (in a circle of 500 m radius)

Eight Ambient Air Quality Monitoring stations were located in the impact area during Winter season (1st December 2023 to 29th February 2024). Standard procedures and frequency prescribed by CPCB were used. The monitoring locations are shown below **Table 3-2.** The summary of AAQ results is shown in **Table 3-3.**

Table 3-1 Techniques Used For Air Quality Monitoring

Parameter	Technique	Technical Protocol	Detectable Limit
Fine Particulate Matter ($PM_{2.5}$)	Gravimetric Method	CPCB	5 µg/m^3
Respirable Particulate Matter (PM10)	Gravimetric Method	CPCB	5 µg/m^3
Sulphur Dioxide (SO_2)	West & Geake Method	IS:5182(P2)	4.0 µg/m^3
Oxides of Nitrogen (NO_2)	Jacob & Hochheisser	IS:5182(P6)	9.0 µg/m^3
Carbon Monoxide (CO)	Gas Chromatography	IS:5182(P-10)	100 µg/m^3

3.4.2 Methodology adopted for the study

The baseline status of the ambient air has been established through a scientifically designed ambient air quality monitoring network. The following criteria were taken into account during selection of the sampling stations:

- Topography of the area
- Human settlements within the study area

- Safety, accessibility and non-interference with general routine of the people residing near the station
- Prediction of maximum concentration of the air pollutants through dispersion modeling for the proposed source details using prevailing meteorological conditions in the region

Table 3-2 Ambient Air Sampling Stations

Code	Location	Description	Distance & Direction from Plant	Latitude /Longitude
AAQ-1	Project Site	Centre	0 km	28° 14' 54.426" N 76° 49' 15.1E
AAQ-2	Bharat Petroleum Petrol Pump, Akerabhiwadi	Upwind	Approx 1.3 km, SE	28° 13' 56.477" N 76° 50' 22.8"E
AAQ-3	Downtown, Palasoli	Down Wind	Approx 2.2 km, NW	28° 15' 35.973" N 76° 47' 55.6" E
AAQ-4	Indraprastha Gas Limited CNG Station, Malpura	Crosswind	Approx 2.5 km, SW	28° 13' 38.848" N 76° 48' 4.47" E
AAQ-5	Near BMU D Block crossing	Downwind	Approx 0.6 km, NW	28°14'55.45"N 76°48'39.86"E

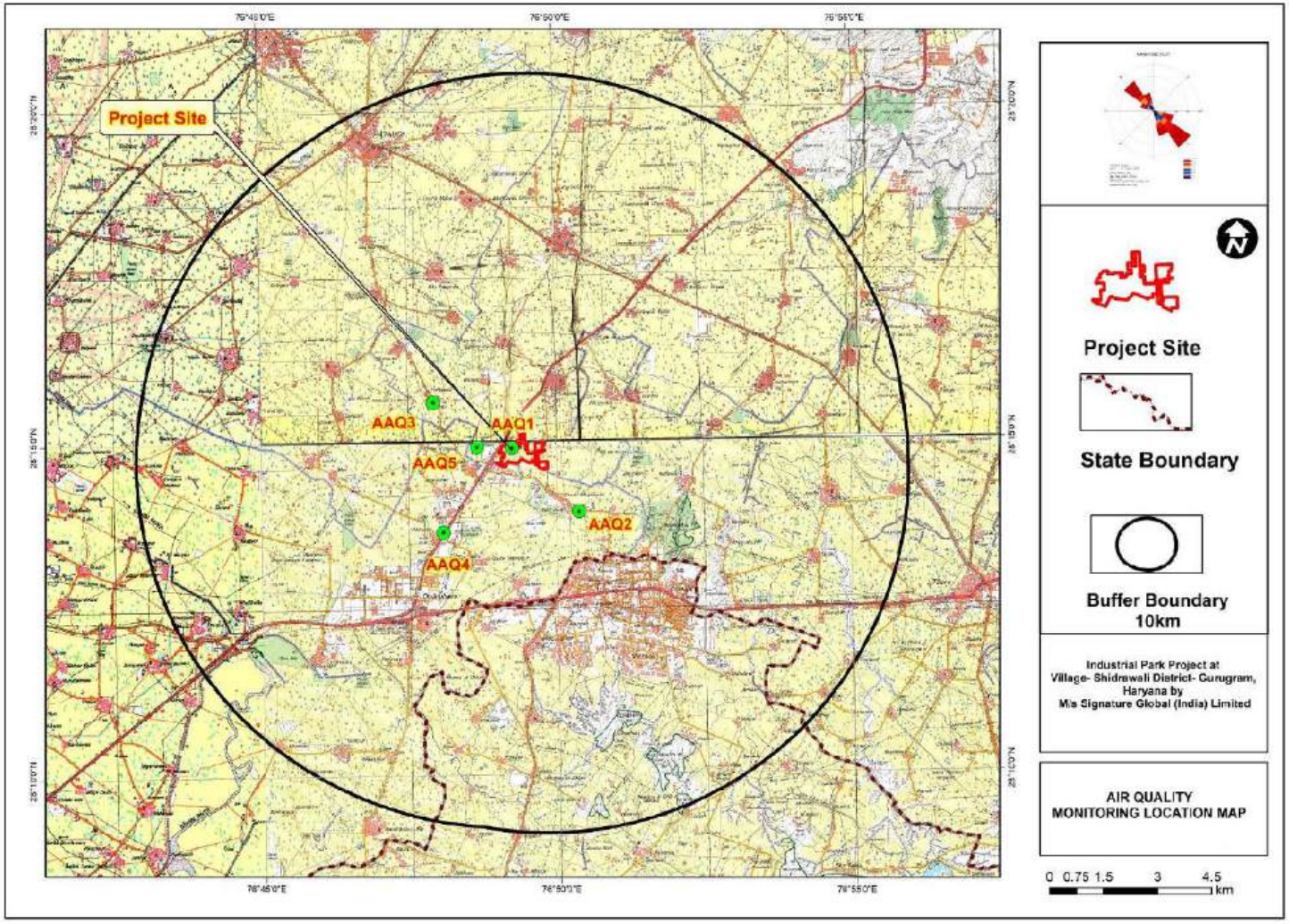


Figure 3-2 Ambient Air Quality Monitoring Location Map

3.4.3 Ambient Air Quality of Study Area

The ambient air quality data is presented in following tables and the analysis reports are attached as **Annexure.**

Table 3-3 Summary of Ambient Air Quality Concentration in the Study Area (1st Dec 2023 to 29th Feb, 2024)

Parameters	PM_{10} (µg/m³)	$PM_{2.5}$ (µg/m³)	SO_2 (µg/m³)	NO_2 (µg/m³)	CO (µg/m³)
AAQM Norms	**100**	**60**	**80**	**80**	**4000**
Project Site					
Min	151.5	78.3	8.6	30.3	710.0
Max	183.7	97.6	11.1	49.7	1030.0
Mean	167.2	87.4	9.7	42.0	903.8
98 Percentile	182.3	97.2	11.0	49.4	1030.0
Bharat Petroleum Petrol Pump, Akerabhiwadi					
Min	117.2	59.7	8.2	26.3	470
Max	145.1	73.9	9.9	35.1	830
Mean	129.8	67.7	9.0	30.5	701
98 Percentile	142.8	73.8	9.9	35.0	830
Downtown, Palasoli					
Min	138.7	68.0	8.2	29.9	450.0
Max	173.2	85.5	10.7	48.6	810.0
Mean	156.2	76.1	9.3	41.6	654.6
98 Percentile	171.9	85.3	10.6	48.6	796.2
Indraprastha Gas Limited CNG Station, Malpura					
Min	147.2	82.5	9.4	32.4	750.0
Max	186.5	103.7	12.7	50.1	1030.0
Mean	165.8	91.3	11.2	43.1	912.1
98 Percentile	185.7	102.7	12.6	50.1	1030.0
Near BMU D Block crossing					
Min	140.7	64.2	9.6	32.9	680.0
Max	174.3	83.4	12.3	41.6	940.0
Mean	155.9	72.6	11.1	36.7	765.4
98 Percentile	170.6	81.5	12.3	41.2	935.4

3.4.4 OBSERVATIONS

Ambient Air Quality Monitoring reveals that the minimum and maximum concentrations of $PM_{2.5}$ for all the 05 AAQM stations were found to be 59.7 µg/m³ to 103.7 µg/m³ respectively, while for PM_{10} it varies between 117.2 µg/m³ to 183.7 µg/m³.

As far as the gaseous pollutants SO_2 and NO_2 are concerned, the prescribed CPCB limit of 80 µg/m³ for residential, rural and industrial areas has never surpassed at any station. The minimum and maximum concentrations of SO_2 were found to be 8.2 µg/m³ to 12.7 µg/m³

respectively. The minimum and maximum concentrations of NO_2 were found to be 26.3 μg/m^3 to 50.1 μg/m^3 respectively. Also, the minimum and maximum concentrations of CO were found to be 450μg/m^3 to 1030μg/m^3 respectively.

High concentration of $PM_{2.5}$ and PM_{10} may be attributed to Vehicular emission and nearby construction activities in the area.

3.5 NOISE ENVIRONMENT

The proposed project is the Industrial Park Project and hence requires movement of raw materials, products, fuels, tools & tackles required for its construction process and also transportation of products to its destination. The movement of personnel from their residence to industry would also result in a moderate increase in the traffic, which would not result in any drastic change in the existing traffic pattern or noise levels of the area. Background noise levels were measured using integrated sound level meter in 05 locations.

Table 3-4 Noise Monitoring Locations were located within the study area

Code	Location	Description	Direction and Distance	Latitude/Longitude
NQ-1	Project Site	Commercial Area	0 km	28° 14' 54.426" N 76° 49' 15.1E
NQ-2	Bharat Petroleum Petrol Pump, Akerabhiwadi	Commercial Area	Approx 1.3 km, SE	28° 13' 56.477" N 76° 50' 22.8E
NQ-3	Downtown, Palasoli	Residential Area	Approx 2.2 km, NW	28° 15' 35.973" N 76° 47' 55.6 E
NQ-4	Indraprastha Gas Limited CNG Station, Malpura	Commercial Area	Approx 2.5 km, SW	28° 13' 38.848" N 76° 48' 4.47 E
NQ-5	Samrat hotel, Bilaspur NH 8, Rathiwas mod	Commercial Area	Approx 3.2 km, NE	28° 16' 31.587" N 76° 50' 38.3E

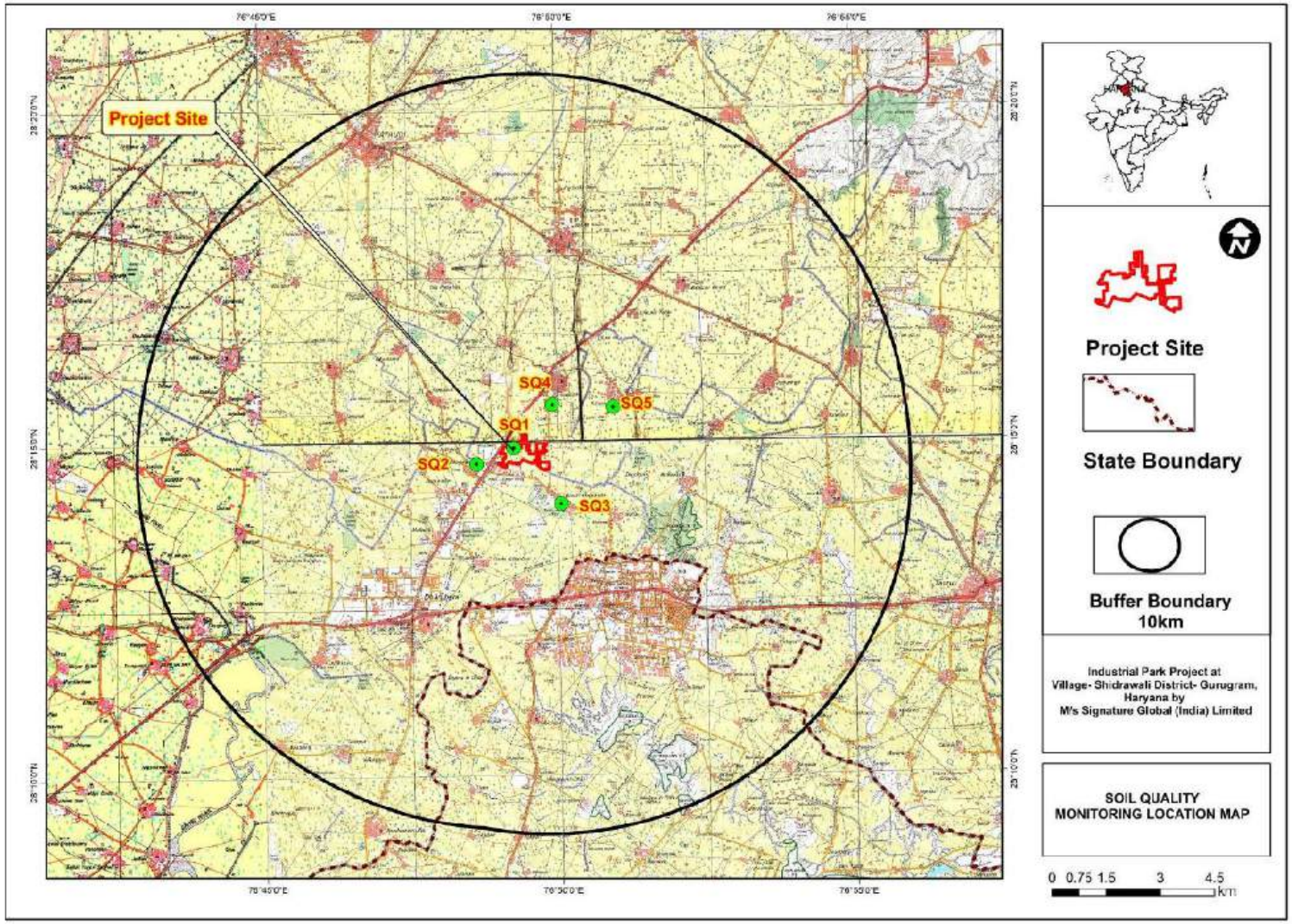


Figure 3-3 Ambient Noise Quality Monitoring Locations

3.5.1 Observations

The baseline noise levels have been monitored at different locations as indicated in Table **3.6** and graphical representation is given in **Figure-3.5**. In rural areas wind blowing and chirping of birds would contribute to noise levels especially during the nights. Assessment of day noise levels around the study area range between 50.5 to 63.6dB(A) during study period whereas the night equivalents were in the range of 42.7 to 52.9 dB (A).

Day and Night equivalents were within the Ambient Noise standards.

Noise Report is attached as **Annexure III.**

Table 3-5 Noise Levels in Study Area

Noise Quality data (DEC-2023)						
S. No.	**Locations**	**ZONE**	**LIMIT as per CPCB Guidelines Leq, dB(A)**		**Observed value Leq, dB(A)**	
			DAY*	**NIGHT****	**DAY***	**NIGHT***
1	Project Site	Commercial Area	65	55	56.8	47.3
2	Bharat Petroleum Petrol Pump, Akerabhiwadi	Commercial Area	65	55	50.5	42.7
3	Downtown Palasoli	Residential Area	55	45	53.2	43.5
4	Indraprastha Gas Limited CNG Station, Malpura	Commercial Area	65	55	63.6	52.9
5	Samrat Hotel, Bilaspur NH-8 Rathiwas Mod	Commercial Area	65	55	60.9	50.5
*	Day time (6.00AM TO 10.00PM)					
**	Nighttime (10.00PM TO 6.00AM)					

3.6 WATER ENVIRONMENT

3.6.1 Reconnaissance Survey

The impact has been assessed on randomly selected surface and ground water sources falling within the impact zone. In order to assess the existing water quality, the water samples were collected from ten different locations within the study area and analyzed as per the procedure specified in standard methods for examination of water and wastewater published by American Public Health Association and Bureau of Indian Standards (APHA/BIS).

Selected water quality parameters for water resources of the study area have been used for describing the water environment and assessing the impacts on it. To assess the water quality impacts, water resources in the impact area have been grouped into 2 classes.

- Ground water resources in the deeper strata of the ground.
- Surface water resources

About 5 ground water and 5 surface water samples were collected from the study area to assess the water quality during the study period. The ground water samples were drawn from the hand pumps and open wells being used by the villagers for their domestic needs. Surface water sampling was carried out from Indori nala, Sahibi river and Untwan village pond within 10 km of the proposed project site.

The details of the locations are given in **Table 3-6** & Lab reports are attached as **Annexure-III.**

Table 3-6 Water Sampling Locations (Surface & Ground Water)

Code	Location	Distance from site (Km)	Direction	Latitude	Longitude
	Ground Water				
GW-1	Near Project Site	0 km	Centre	28°14'54.74"N	76°49'15.44"E
GW-2	Borewell Village Kapriwas	Approx. 0.6 km	W	28°14'40.88"N	76°48'37.63"E
GW-3	Borewell Village Gurjar Ghatal	Approx. 0.9 km	SE	28°14'4.46"N	76°50'3.13"E
GW-4	Borewell Village Sidhrawali	Approx. 1 km	N	28°15'33.36"N	76°49'55.20"E
GW5	Borewell Village Rathiwas	Approx. 2 km	NE	28°15'30.82"N	76°50'56.94"E
	Surface Water				
SW-1	Indori nala u/s	Approx. 2.8 km	N	28° 16' 29.251" N	76° 48' 56.095" E
SW-2	Indori nala d/s	Approx. 2.9 km	NE	28° 15' 34.801" N	76° 51' 13.415" E
SW-3	Sahibi river u/s	Approx. 8.7 km	SW	28° 12' 1.691" N	76° 44' 36.184" E
SW-4	Sahibi river d/s	Approx. 8.8 km	SW	28° 11' 30.345" N	76° 45' 7.498" E
SW-5	Untwan village pond	Approx. 4.6 km	E	28° 15' 4.792" N	76° 52' 35.990" E

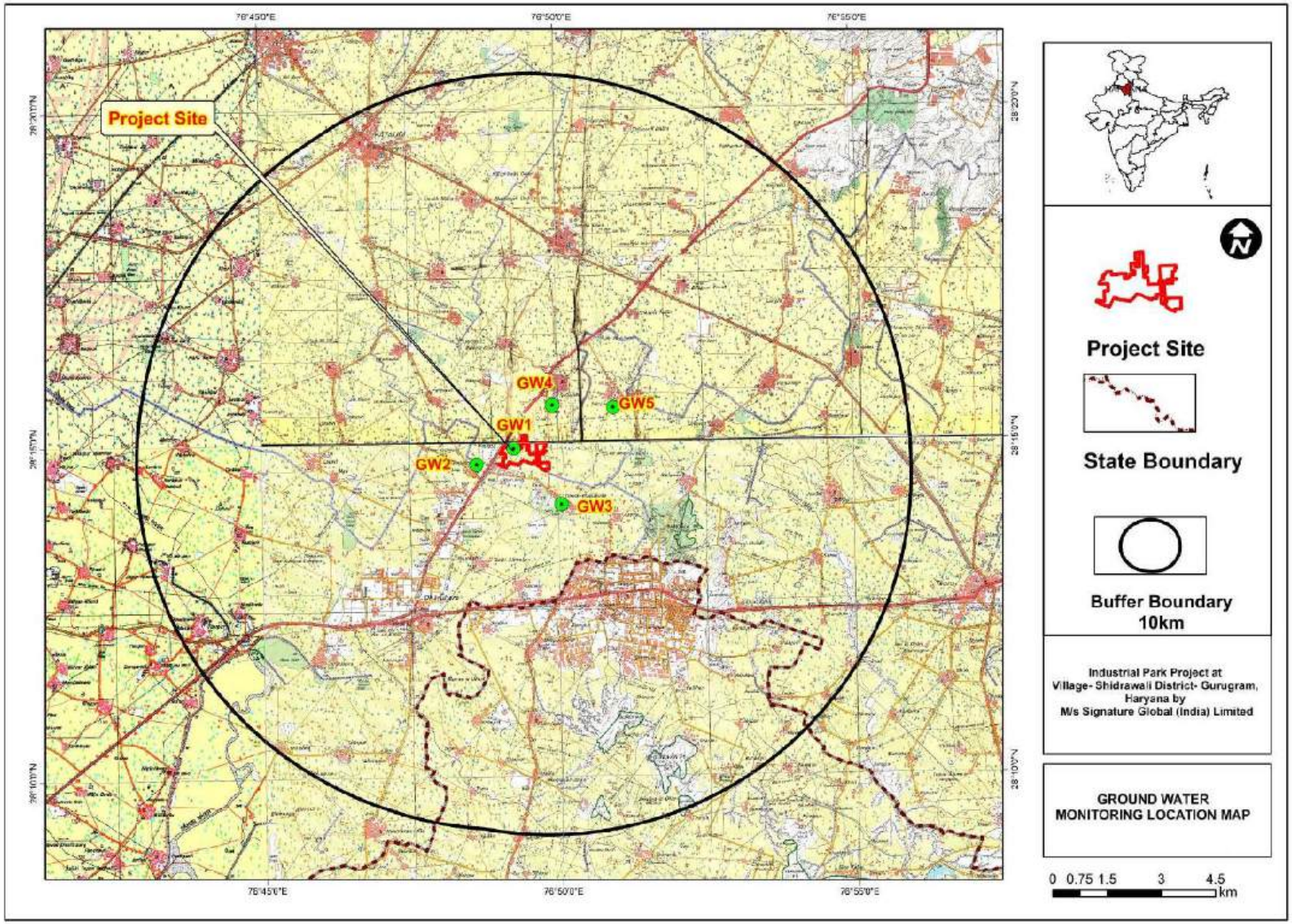


Figure 3-4 Ground Water Sampling Locations

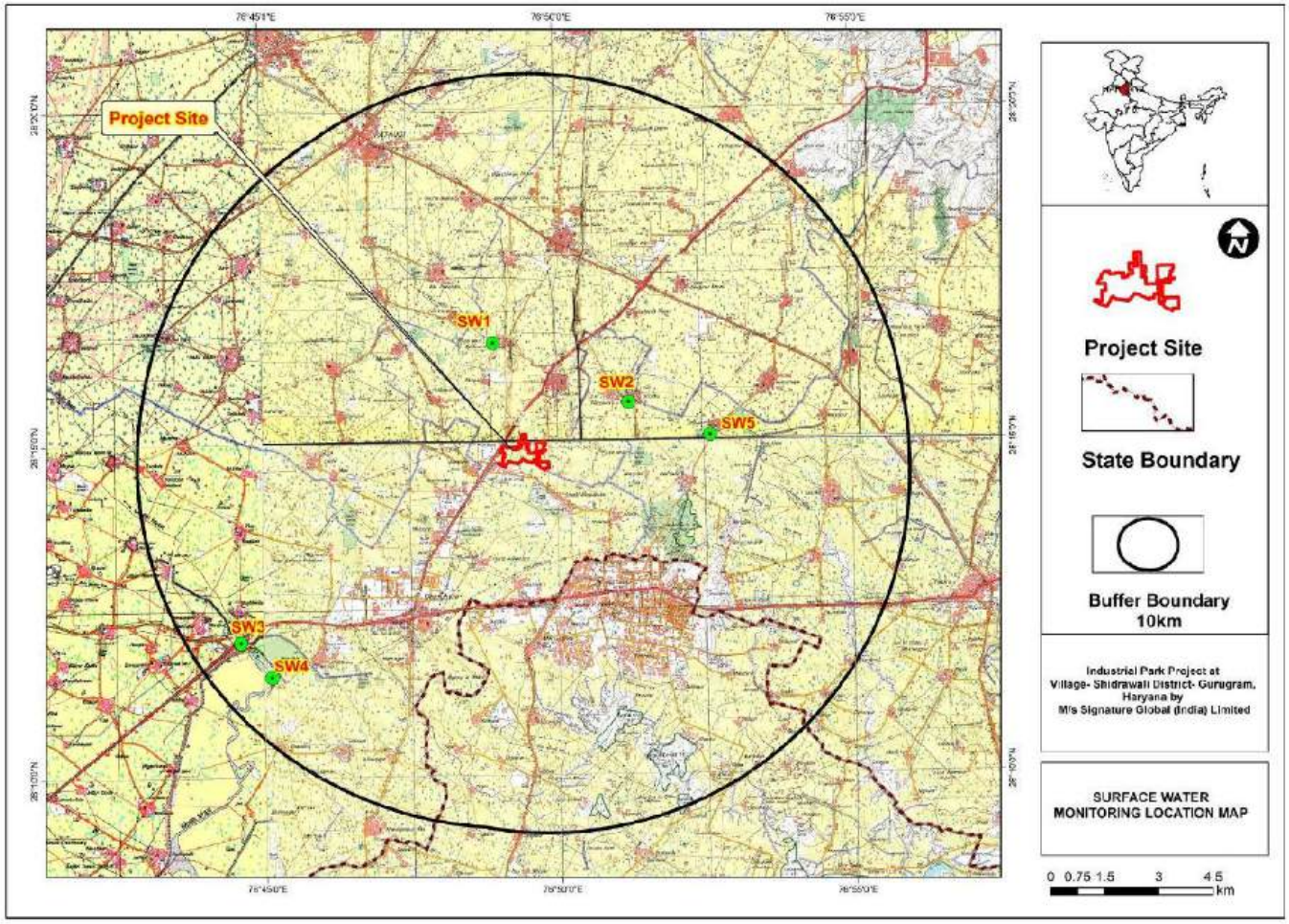


Figure 3-5 Surface Water Quality Monitoring Locations

Table 3-7 Water Quality Analysis Result (Ground Water Dec -2023)

S.No	Parameter	Unit	Standard Limit (IS-10500:2012, RA 2018)		GW-1	GW-2	GW-3	GW-4	GW-5
			Desirable Limit	Permissible Limit	Near Project Site	Borewell Village Kapriwas	Borewell Village Gurjar Ghatal	Borewell Village Sidhrawali	Borewell Village Rathiwas
1	Colour	Hazen	5	15	<5	<5	<5	<5	<5
2	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Turbidity	NTU	1	5	<1	<1	<1	<1	<1
4	pH	-	6.5-8.5	No Relaxation	7.88	7.93	7.89	7.92	7.89
5	Total Dissolved Solids (TDS)	mg/l	500	2000	1420	1450	1440	1480	1580
6	Total Hardness (as CaCO3)	mg/l	200	600	413	447	458	439	466
7	Total Alkalinity (as CaCO3)	mg/l	200	600	426	478	487	467	487
8	Chlorides (as Cl)	mg/l	250	1000	343	330	335	363	378
9	Fluoride (as F)	mg/l	1	1.5	0.7	0.6	0.5	0.7	0.06
10	Calcium(as Ca2+)	mg/l	75	200	100	107	110	105	112
11	Magnesium (as Mg2+)	mg/l	30	100	40	43	44	42	45
12	Sulphate (as SO4)	mg/l	200	400	160	154	136	146	170
13	Nitrate(as NO3)	mg/l	45	No Relaxation	18	20	19	21	17
14	Iron (as Fe)	mg/l	1	No Relaxation	0.68	0.56	0.63	0.54	0.49
15	Aluminum (as Al)	mg/l	0.03	0.2	<0.01	<0.01	<0.01	<0.01	<0.01

16	Copper (as Cu)	mg/l	0.05	1.5	<0.01	<0.01	<0.01	<0.01	<0.01
17	Manganese (as Mn)	mg/l	0.1	0.3	<0.01	<0.01	<0.01	<0..1	<0.01
18	Boron (as B)	mg/l	0.5	1	<0.01	<0.01	<0.01	<0.01	<0.01
19	Zinc (as Zn)	mg/l	5	15	<0.01	<0.01	<0.01	<0.01	<0.01
20	Selenium (as Se)	mg/l	0.01	No Relaxation	<0.01	<0.01	<0.01	<0.01	<0.01
21	Arsenic (as As)	mg/l	0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01
22	Cadmium (as Cd)	mg/l	0.003	No Relaxation	<0.001	<0.001	<0.001	<0.001	<0.001
23	Total Chromium (as Cr3+)	mg/l	0.05	No Relaxation	<0.01	<0.01	<0.01	<0.01	<0.01
24	Cyanide (as CN)	mg/l	0.05	No Relaxation	<0.01	<0.01	<0.01	<0.01	<0.01
25	Lead (as Pb)	mg/l	0.01	No Relaxation	<0.01	<0.01	<0.01	<0.01	<0.01
26	Mercury (as Hg)	mg/l	0.001	No Relaxation	<0.001	<0.001	<0.001	<0.001	<0.001
27	Nickel (as Ni)	mg/l	0.02	No Relaxation	<0.01	<0.01	<0.01	<0.01	<0.01
28	Phenolic Compounds (as C6H5OH)	mg/l	0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001
29	Anionic Detergent (as MBAS)	mg/l	0.2	1	<0.01	<0.01	<0.01	<0.01	<0.01
30	Silica (as SiO_2)	mg/l	,---	,---	5.4	5.1	5.3	4.8	5.7
31	Phosphate (as PO_4)	mg/l	,---	,---	1.1	1.3	1.1	1.3	1.2
32	Specific Conductivity	µS/cm	,---	,---	2130	2170	2150	2220	2360
Bacteriological Parameter									
1	Total Coliform	MPN/100ml	Shall not be detectable in any 100ml Sample		Not Detected (<2)	Not Detected (<2)	Not Detected	Not Detected	Not Detected

						(<2)	(<2)	(<2)
2	E.coli	MPN /100ml	Shall not be detectable in any 100ml Sample	Absent (<2)	Absent (<2)	Absent (<2)	Absent (<2)	Absent (<2)

Table 3-8 Water Quality Analysis Result

SURFACE WATER QUALITY STUDY (Dec 2023)							
S.No.	**Parameter**	**Unit**	**S.W.1**	**S.W.2**	**S.W.3**	**S.W.4**	**S.W.5**
			Indori Nala Upstream	**Indori Nala Downstream**	**Sahibi River Upstream**	**Sahibi River Downstream**	**Untwan Village Pond**
1.	Color	Hazen	6	7	7	8	5
2.	Turbidity	NTU	18	24	44	56	23
3.	Temperature	^{0}C	18.7	19.1	18.7	19.3	19.7
	pH Value	-	7.75	7.78	7.43	8.2	8
5.	Dissolved Oxygen	mg/l	3.8	3.2	1.2	1	5.2
6.	Biochemical Oxygen Demand (BOD) 3 Days at 27^{0}C	mg/l	8.3	8.6	20.4	26.2	6.8
7.	Chemical Oxygen Demand	mg/l	22.8	24.5	62.4	76.4	22.4
8.	Total Dissolved Solids	mg/l	940	950	1200	1350	720
9.	Total Hardness (as $CaCO_3$)	mg/l	367	370	380	410	240
10.	Total Alkalinity (as $CaCO_3$)	mg/l	460	463	360	390	230
11.	Chlorides (as Cl)	mg/l	138	140	280	320	160
12.	Fluoride (as F)	mg/l	0.7	0.7	0.8	0.9	0.7
13.	Calcium (as Ca^{2+})	mg/l	88	89	91	98	58
14.	Magnesium (as Mg^{2+})	mg/l	35	36	36	40	23
15.	Sodium (as Na^{+})	mg/l	190	192	218	245	169
16.	Potassium (as K^{+})	mg/l	20.4	22.5	25.6	28.4	18.6

17.	Sulphate (as SO_4)	mg/l	110	113	180	210	106
18.	Total Kjeldahl Nitrogen (as N)	mg/l	3.8	4.2	5.2	6.5	2.4
19.	Free Ammonia (as NH_3)	mg/l	1.3	1.6	1.9	2.4	1.3
20.	Nitrate (as NO_3)	mg/l	12.6	12.8	24	26	13.3
21.	Silica (as SiO_2)	mg/l	19	22	9.2	9.3	7.5
22.	Phosphate (as PO_4)	mg/l	1.7	2.2	2.8	3.2	1.6
23.	Iron (as Fe)	mg/l	0.87	0.89	0.53	0.56	0.59
24.	Aluminum (as Al)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
25.	Boron (as B)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
26.	Copper (as Cu)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
27.	Manganese (as Mn)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
28.	Zinc (as Zn)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
29.	Selenium (as Se)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
30.	Arsenic (as As)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
31.	Cadmium (as Cd)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
32.	Total Chromium (as Cr^{3+})	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
33.	Cyanide (as CN)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
34.	Lead (as Pb)	mg/l	0.06	0.07	<0.01	<0.01	<0.01
35.	Mercury (as Hg)	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
36.	Nickel (as Ni)	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
37.	Total Suspended Solids	mg/l	38.2	39.6	180	220	40
38.	Sodium Adsorption Ratio	-	3.1	3.2	4.3	4.8	3.2
39.	Phenolic Compounds (as C_6H_5OH)	mg/l	0.06	0.07	<0.001	<0.001	0.002
40.	Anionic Detergent (as MBAS)	mg/l	0.07	0.08	<0.01	<0.01	0.03
41.	Specific Conductivity	µS/cm	1410	1425	1790	2025	1075

42.	Total Coliform	MPN/100ml	1600	1600	1600	1600	840
43.	Faecal Coliform	MPN/100ml	1600	1600	1600	1600	380

3.6.2 Observations

Analysis of results of ground water is as follows;

- pH varies from to 7.88 to 7.93.
- Total Hardness varies from 413 to 466 mg/L.
- Total Dissolved Solids varies from 1420 to 1580 mg/L.

Review of the ground water quality results indicate that there is some variation in chemical composition of water tapped from different sources and the ground water from all sources remains suitable for drinking purposes as all the constituents are within the limits prescribed for drinking water standards promulgated by Indian Standards (IS: 10500).

Analysis of results of surface water is as follows;

- pH varies from to 7.75 to 8.2
- Dissolved Oxygen varies from 1 to 5.2 mg/L
- COD varies from 22.4 to 76.4 mg/L.

Review of the surface water quality results indicate that all the parameters are within the limits specified in Surface Water Standard IS: 2296. With regard to heavy metals, except Arsenic, Mercury, Nickel and Cadmium, all the others were not traceable.

3.7 SOIL ENVIRONMENT

Soil of the Gurugram district are classified as tropical and brown soil, existing in the North Western extreme, Northern and North Eastern parts of the district and water logged and salt affected soils in the Southern parts of the district. The soil are medium textured loamy sand is the average texture in Gurugram and Sohna blocks.

3.7.1 Soil Quality

The present study on soil quality establishes the baseline characteristics in the study area surrounding the project site. The study has been addressed with the following objectives.

- To determine the base line characteristics
- To determine the soil characteristics of proposed project site
- To determine the impact of industrialization/urbanization on soil characteristics
- To determine the impacts on soils from agricultural productivity point of view

3.7.2 Criteria Adopted for Selection of Sampling Locations

For studying the soil types and soil characteristics, five sampling locations were selected to assess the existing soil conditions representing various land use conditions and geological features.

3.7.3 Methodology and Sampling

The homogenized soil samples collected at different locations were packed in a polyethylene plastic bag and sealed. The sealed samples were sent to laboratory for analysis. The physical, chemical parameter concentrations were determined from all samples.

3.7.4 Soil Sampling Locations

Details of the soil sampling locations are given in **Table 3-9.**

Table 3-9 Soil Sampling Location

Code	Location	Distance & Direction from Project Site	Latitude	Longitude
SQ-1	Project Site	0 km	28°14'54.74"N	76°49'15.44"E
SQ-2	NON-Agricultural Land Village Kapriwas	Approx. 0.6 km, W	28°14'40.88"N	76°48'37.63"E
SQ-3	NON-Agricultural Land Village Gurjar Ghatal	Approx. 0.9km, SE	28°14'4.46"N	76°50'3.13"E
SQ-4	Agricultural Land Village Sidhrawali	Approx. 1 km, N	28°15'33.36"N	76°49'55.20"E
SQ-5	Agricultural Land Village Rathiwas	Approx. 2 km, NE	28°15'30.82"N	76°50'56.94"E

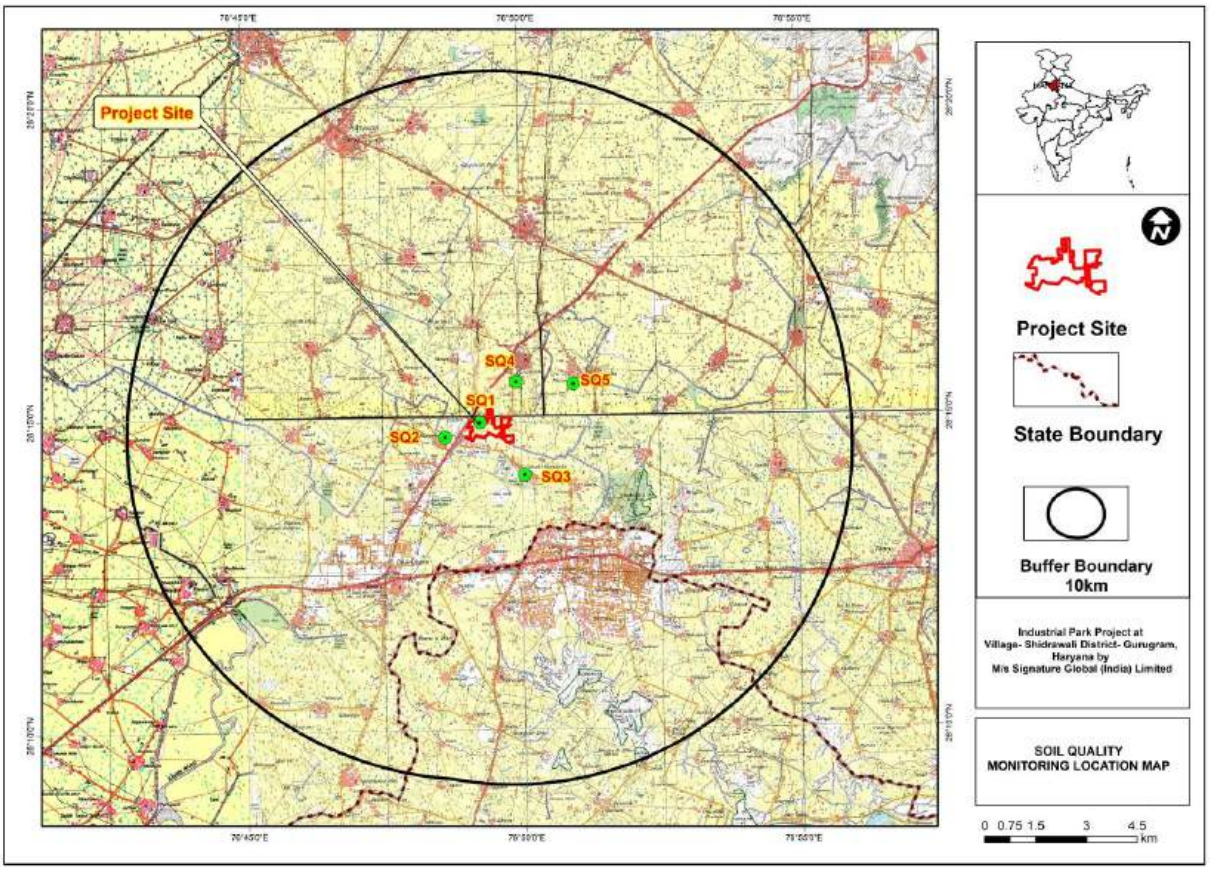


Figure 3-6 : Soil Monitoring locations

Table 3-10 Soil Quality Result

Soil Quality Data (DEC-2023)							
			SQ1	**SQ2**	**SQ3**	**SQ4**	**SQ5**
S.No	**Parameter**	**Unit**	**Project Site**	**Non-Agricultural Land Village Kapriwas**	**Non-Agricultural Land Village Gurjar Ghatal**	**Agricultural Land Village Sidhrawali**	**Agricultural Land Village Rathiwas**
1	Texture	-	Sandy Loam	Sandy Loam	Sandy Loam	Sandy Loam	Sandy Loam
2	Particle Size Distribution						
	Sand	%	63.7	65.3	67.5	63.5	63.8
	Silt	%	16.9	17.2	15.3	16.8	16.9
	Clay	%	19.4	17.5	17.2	19.7	19.3
3	pH (1:2 Suspension)	-	7.59	7.67	7.69	7.78	7.88
4	Electrical Conductivity (1:2 Suspension)	µS/cm	447	443	441	447	437
5	Moisture Content	%	6.9	6.8	6.5	8.7	8.6
6	Cation Exchange Capacity	meq/100gm	13.0	13.6	13.5	14.1	14.1
7	Available Potassium (as K)	mg/kg	69	67	71	87	89
8	Exchangeable Sodium (as Na)	mg/kg	117	114	115	121	127
9	Exchangeable Calcium (as Ca)	mg/kg	1901	1947	1938	2018	2023
10	Exchangeable Magnesium (as Mg)	mg/kg	341	386	378	395	387
11	Sodium Absorption Ratio	-	0.65	0.62	0.62	0.64	0.68
12	Organic Matter	%	0.71	0.83	0.83	0.46	0.68

13	Total Nitrogen (as N)	mg/kg	40	42	38	45	44
14	Nitrate (as NO3)	mg/kg	5.7	5.3	4.9	6.3	6.7
15	Total Phosphorus (as PO4)	mg/kg	6.3	6.1	5.1	6.8	6.9
16	Iron (as Fe)	mg/kg	5.5	4.8	3.2	9.7	10.8
17	Zinc (as Zn)	mg/kg	2.2	2.1	2.3	2.1	2.6
18	Copper (as Cu)	mg/kg	1.1	1.2	1.1	1.3	1.7
19	Boron (as B)	mg/kg	1.8	2.3	2.2	3.1	2.8
20	Manganese (as Mn)	mg/kg	7.6	7.4	6.8	8.9	10.1
21	Water Holding Capacity	%	25.7	25.3	26.4	27.1	26.7
22	Permeability	cm/hr	2.3	2.2	2.3	2.1	2.2
23	Porosity	%	38.7	39.8	39.7	32.6	33.1
24	Bulk Density	gm/cc	1.31	1.31	1.32	1.33	1.33

3.7.5 Observations

Soil is the media for supplying the nutrients for plant growth. Nutrients are available to plants at certain pH and pH of soils can reflect by addition of pollutants in it either by air, or by water or by solid waste or by all of these. In order to establish the baseline status of soil characteristics, soil samples were collected at 05 sampling locations.

The analysis of results shows that soil is basic in nature as pH value ranges from 7.59 to 7.88 with Electrical Conductivity of 437 to 447 µmhos/cm. The concentration of Nitrogen, Phosphorus and Potassium has been found to be in good amount in the soil samples. Soil texture is Sandy loam at project site.

The soil lab report is attached as **Annexure.**

3.8 LAND USE PATTERN

The project area and 10 km radius around project site are encompassing a total area of 35581.43 ha comes under Gurugram District of Haryana. Project site comes under H43X3 Survey of India topo-sheet.

3.8.1 Data Used

United States Geological Survey (USGS) Satellite Data: Landsat 8 cloud free data has been used for Land use /Land cover analysis, Satellite Sensor–OLITIRS multi-spectral digital data has been used for the preparation of land use/ land cover map of present study. Survey of India reference map on 1:50,000 scales have been used for the preparation of base map and geometric correction of satellite data. Ground truthing has been carried out to validate the interpretation accuracy and reliability of remotely sensed data, by enabling verification of the interpreted details and by supplementing with the information, which cannot be obtained directly on satellite imagery.

3.8.2 Methodology

The methodology used for the study consists of following components. Thematic Data Extraction from the Satellite Imageries ERDAS image processing 10.0 software and ARC/GIS 10.0 software were used for the project. ERDAS 10.0 image processing software was used for digital processing of the spatial data. Digital image processing techniques were applied for the mapping of the land use land cover classes of the provided area from the satellite data. Methodology used for Land use Classification and Mapping is presented in Figure shown below.

3.8.3 Findings

The spatial distribution of land use/ land cover is given in **Table 3-11 and Figure 3-9.** The data base on land use/ land cover belongs to project area and 10 km radius of the project area is discussed as follows:

Table 3-11 Land Use/ Land Cover Analysis

LU Class	Area (Ha)
Settlement	11100.24
Industry	906.60
Wetland	134.19
River	35.78
Agricultural Land	22185.39
Open Scrub	709.23
Forest	510.00
Total	35581.43

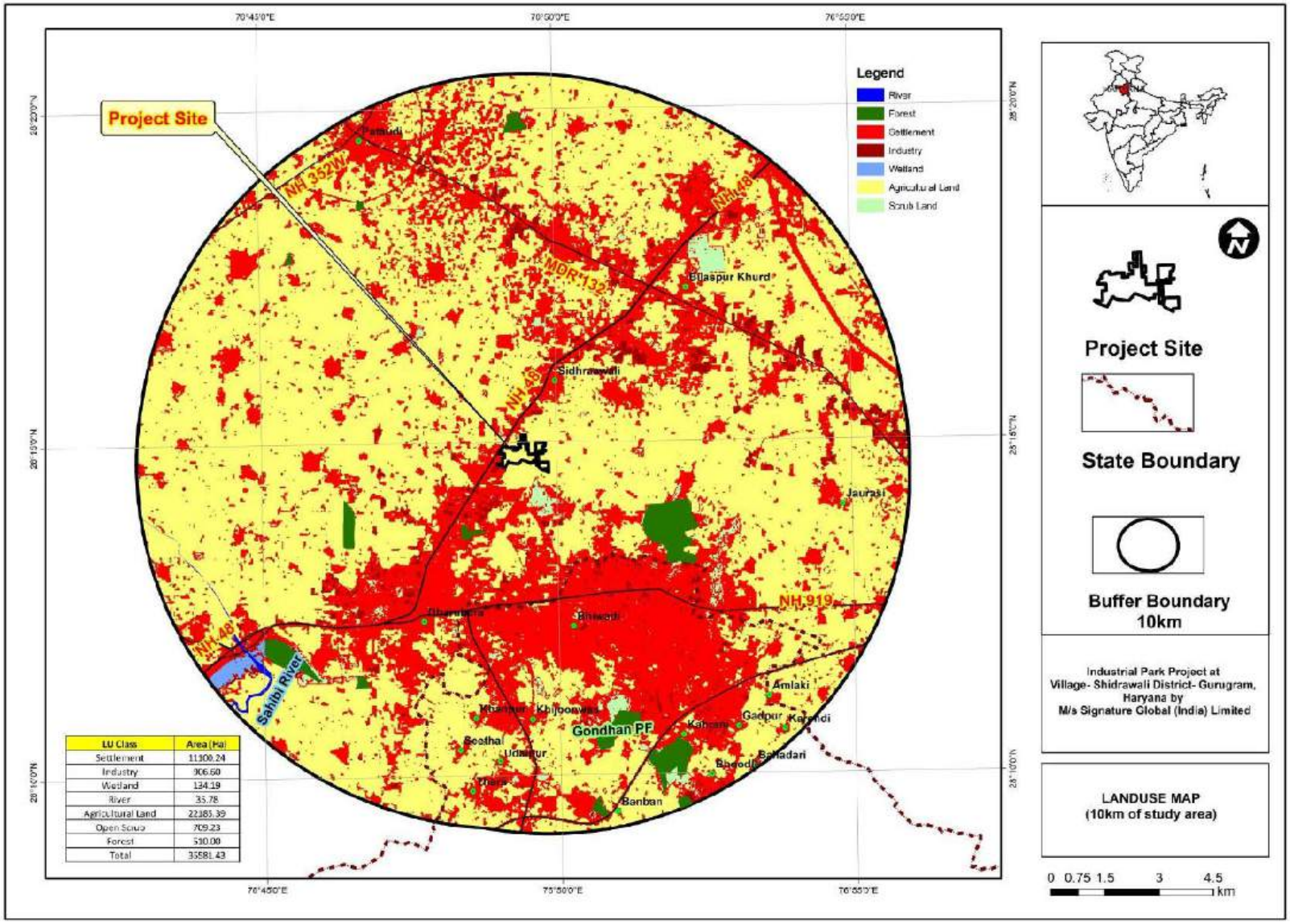


Figure 3-7 Land Use/ Land Cover Analysis

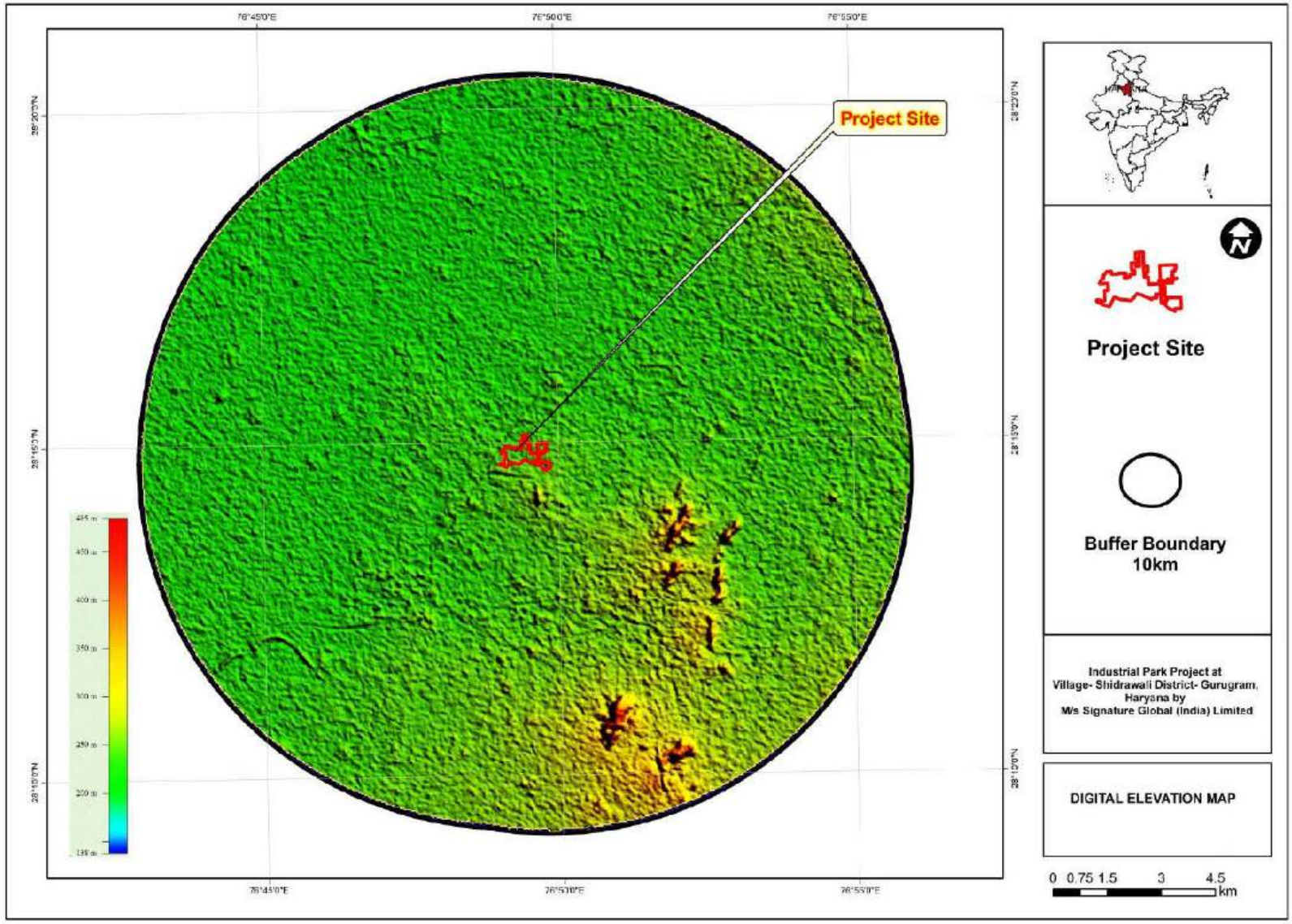


Figure 3-8 DEM Map of Study Area

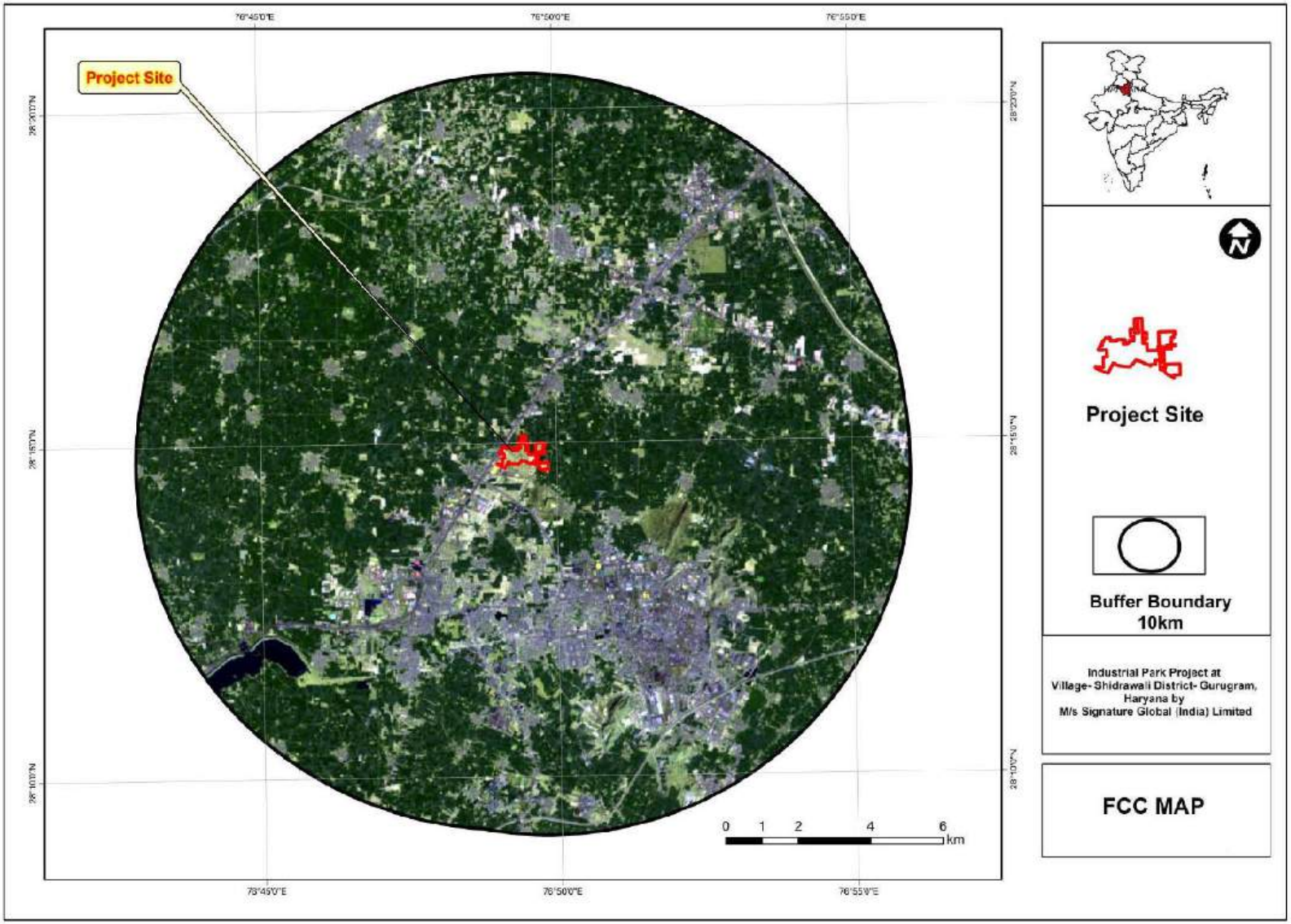


Figure 3-9 False Color Composite (FCC) map of study area

3.9 GEOLOGY

District Gurugram is located 30 km south of National Capital New Delhi, about 10 Kilometers from Dwarka sub-city and 268 Km south of Chandigarh, the State Capital. Over the past 25 years the city has undergone rapid development and construction. The District is one of Delhi's major satellite cities and is part of the National Capital Region. It is within commuting distance of Delhi via an expressway and Delhi Metro. The District is the second largest city in the Indian State of Haryana and is the industrial and financial centre of Haryana. It has the 3rd highest per capita income in India after Chandigarh and Mumbai. It is also the only Indian city to have successfully distributed electricity connections to all its households. It is also the IT hub & center of various BPO companies.

The District has been in existence since the times of Mahabharta. It is said that Yudhishter, the eldest brother among the pandavas, gave the village to his guru, Dronacharya, whose tank still exists on the west side of the Railway Road. Actual village "GURUGRAM" is about 1.5 Km. away from Gurugram town, where the temple of SHEETLA MATA, attracts devotees in large numbers on every Monday and Tuesday.

Gurugram District has witnessed a phenomenal growth in all spheres of developments, particularly in industry and urbanization. Today, it has become a hub of multinational companies, industries giants, call centres, software companies, shopping malls and skyscrapers. Gurugram is strategically located with its boundaries touching Rajasthan, Uttar Pradesh and Delhi. Its excellent connectivity with other state via Delhi- Jaipur-Ahmedabad broad gauge rail link and NH-8, brings thousands of people to Gurugram for the purpose of work, travel and entertainment. Infact with the collaboration of Suzuki Motors of Japan and Maruti Udyog Limited in early eighties, a new area of rapid industrialization of Gurugram started as a result of which the District came on the international map. Maruti Suzuki in India's largest passenger car company. The automobile industry of Gurugram is producing passenger cars, motor cycles, scooters and its components. The Gurugram- Manesar- Bawal belt has emerged as the auto hub of the country, thereby offering ample opportunities to the entrepreneurs. There are many prominent and prestigious units involved in the manufacturing of telecommunication equipments, electical goods, sports goods, rubber products readymade garments and in software development. Other industries include light engineering goods, pharmaceuticals, agro based and foods processing, leather, terry towels, air conditioners, shoes, pesticidies, insecticides, etc. The main industries in these fields are Cosco. Enkay Rubber, Perfetti, Haldiram, HFCL, Martin Haris, TERI, Ranbaxy Laboratories etc. With its rapid development, Gurugram has emerged as an important District in Haryana and has done the State proud with its achievements.

3.10 HYDROGEOLOGY

The Gurugram district is occupied by Quaternary alluvium and Pre-Cambrian meta-sediments of Delhi Super Group. The alluvium comprises of thick beds of fine to coarse-grained sand with alternating layers of thin clays. The ground water in the Jhajjar district occurs in the alluvium of Quaternary age. The permeable granular zones comprising fine to

medium sand and occasionally coarse-grained sand and gravel. Their lateral as well as vertical extent is limited.

Ground water in the Gurugram block occurs in unconfined and semiconfined condition. The upper zone of saturation consists of fine sand with silt varying from place to place. The ground water in the Jhajjar district occurs in the alluvium of Quaternary age. The permeable granular zones comprising fine to medium sand and occasionally coarse grained sand and gravel. The lithological correlation clearly indicates the presence of clay layer at the top of the surface.

3.10.1 Depth to Water Level

During the pre-monsoon the water levels of 40 key observation wells are monitored and the water level ranges between 3.30 to 79.70 mbgl. The deeper water level is observed at Dundahera, Gurugram. . Water level is less than 10 m in small patches in northwestern and southeastern parts adjacent to Jhajjar and Faridabad district and between 10 and 20 m in northwestern and southeastern parts of the district. The water level ranges between 20 and 30 m in major parts viz. central southern and eastern parts of the district. Deepar water level has been observed in Gurugram and northern parts of Sohna blocks which is due to Infrastructural development and industrialization in these areas.

During the post-monsoon, the water levels range between 3.05 to 77.55 m bgl. The deeper water level is recorded at Dundahera, Gurugram.

3.10.2 Ground Water Flow

In general, the water table contours follow the surface topography. The altitude of water table ranges between 176.78 to 274.85 m AMSL. In North and Western parts of the Gurugram district, the water table slopes North and North-West of the area whereas in Southern part water table slopes toward South Eastern direction with an average hydraulic gradient of 1.5 m/km.

The elevation of the water table in the Jhajjar district varies from 206 m to 250 m above mean sea level. The average gradient of the water table is of the order of 0.48 m/km. The general slope of water table in the area is converging towards the center of the district or more precisely around Jhajjar. It is also observed that the flow of water in the Western part of the district is towards South- West to North- East and South-East to North-West.

3.10.3 Ground Water Resources

Ground Water Resources estimation of the district was done in 2009 for Gurugram district. Perusal of the Estimates reveals overall stage of ground water development in the block is of the order of 232% which has exceeded the replenishable recharge and thus the district has been categorized as over exploited. Net annual ground water availability of the district is 23261 ham and existing gross ground water draft for all users is 53927 ham. Details are shown below.

Ground Water Resources and Development Potential, Gurugram District, Haryana (as on 31-03-2009)

District Name	Assessment Unit/Block	Net Ground Water Availability (ham)	Existing Gross Ground Water Draft for irrigation (ham)	Existing gross Ground Water Draft for domestic and industrial water supply (ham)	Existing Gross Ground Water Draft for all uses (ham)	Allocation for domestic and industrial requirement supply upto next 25 years (ham)	Net Ground Water Availability for future irrigation development (ham)	Stage of ground water development %
Gurgaon	Farukhnagar	3649	8053	177	8230	177	-4581	276
	Gurgaon	7585	6254	17128	23382	17128	-15797	308
	Pataudi	7495	11455	438	11893	438	-4398	159
	Sohna	4532	10015	407	10422	407	-5890	230
	Total	23261	35777	18150	53927	18150	-30666	232

3.10.4 Status of Ground Water Development

The water supply to the Gurugram district is mainly based on groundwater through tubewells. 100% of the urban population is covered under drinking water supply scheme. The water supply to the villages is meet out with the installation of hand pumps by the villager as spot and convenient source of water.

The shallow tubewells for irrigation purpose in the district range from 45 to 70m. deep, tapping the aquifer from 31m to 50 m. with a discharge of 400 to 1000 lpm. Most of the shallow tube wells are run either by diesel engines or electric motors. As on February 2009 there are 22207 electric motors and 736 diesel operated tubewells are working. The major part of the district is being irrigated through ground water. The unit draft calculated for irrigation is 1.65 ham.

3.10.5 Water Conservation & Artificial Recharge

The stage of ground water development for the district is 232% that means the net annual withdrawal is more than the net annual recharge. During the last 20 years the ground water level has declined in whole of the area of the district and the decline is in the range of 0.77 to 1.07 m/yr. So, there is an urgent need to take measures to arrest the decline of ground water level and artificial recharge to ground water is one of such measures. Whole of the district is suitable for artificial recharge to ground water. Excess rainwater in agricultural field, surplus canal water and rooftop rain water can be recharged to ground water system. Recharging shafts and injection wells are the most viable recharging structures suitable for the district.

3.11 DRAINAGE PATTERN

There is no perennial river in the district. Seasonal streams are only a few, smaller in size and are inland. The drainage of the district is typical of the arid and semi-arid areas. Because of topographic diversity, the streams do no flow in any uniform direction. The Sahibi Nadi,

which rises in the Sewar hills of Jaipur (Rajasthan), also makes its presence in Gurugram tehsil before losing itself in the topographic depression of Jhajjar tehsil (Jhajjar district) after flowing in northern direction through Rajasthan State and Rewari district. The Nadi disappears in Gurugram tehsil near Rewari-Pataudi road. Owing to its long passage, through arid and sandy areas, the stream flows with strength only during rainy season. However, the stream moves into the level areas of the Gurugram district, its speed slackens and the load deposited raises the bed of stream and checks its flow. Consequently, the stream sometimes changes its course and wanders aimlessly. The Indori Nadi originates from Aravalli hills in Rajasthan near village Indauri flowing in northerly direction. After passing through many villages of the district it joins Sahibi Nadi near Pataudi. It is supplemented with so many tributaries coming from Aravalli hills. Apart from the above Nadis, Badshahpur, Mehndwari, Kasan, Manesar and Landoha nallahs play havoc during heavy rains. To control these nadis/nallahs, 3 bunds are constructed at Indori Nadi and its tributaries in Haryana State and 3 bunds in Rajasthan State and the waters channelised through drains. In normal times, Landoha nala is helpful in draining waters of Sohna valley into Khalilpur depression. Drainage map is presented in below **Figure 3-10.**

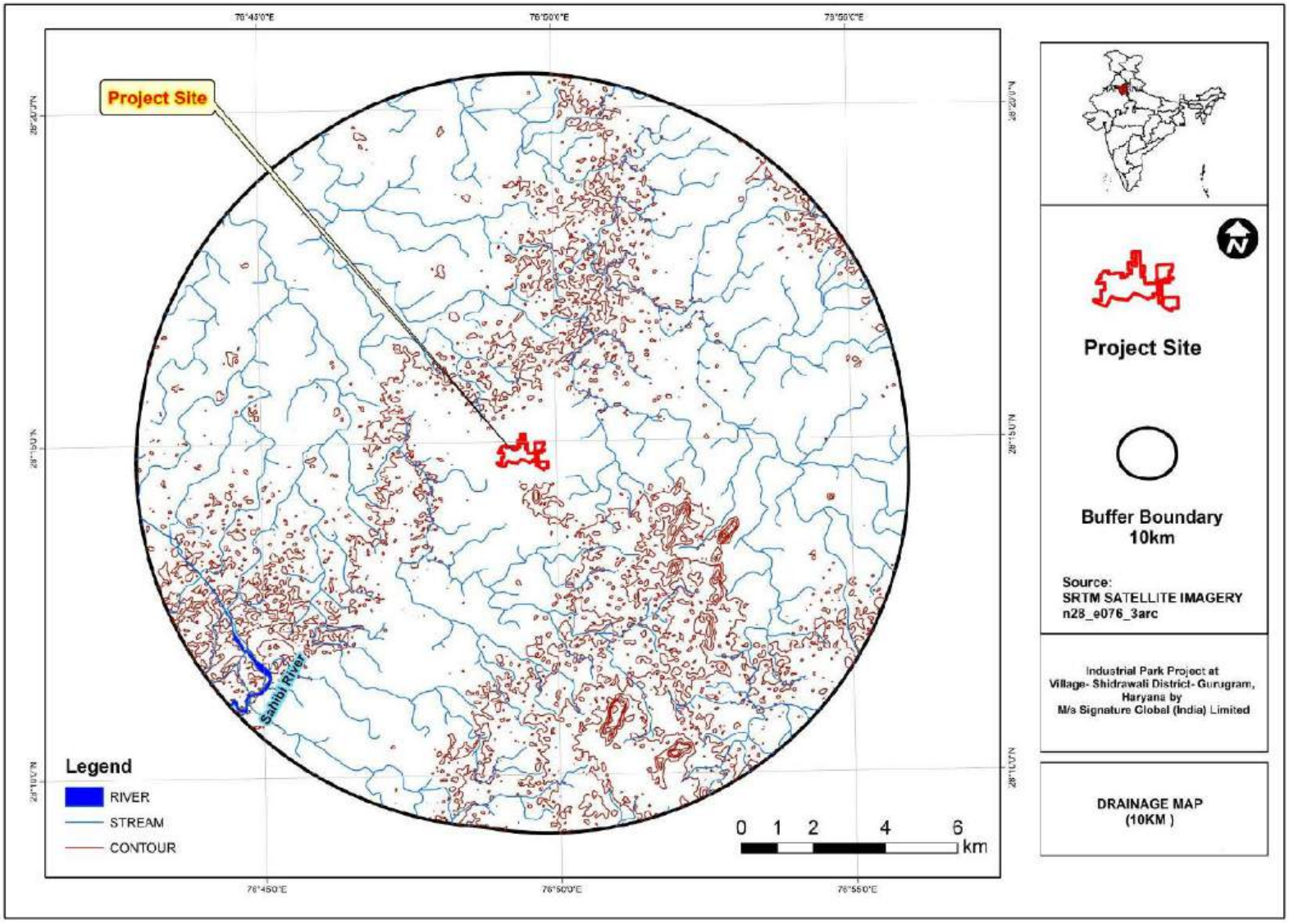


Figure 3-10 Drainage Map of 10 KM buffer

3.12 SEISMIC STATUS

The Project site is located in an area which is falling in seismic Zone IV (Source: IS 1893 (Part 1):2002). The details are given below. According to GSHAP data, the state of Haryana falls in a region of Moderate seismic hazard.

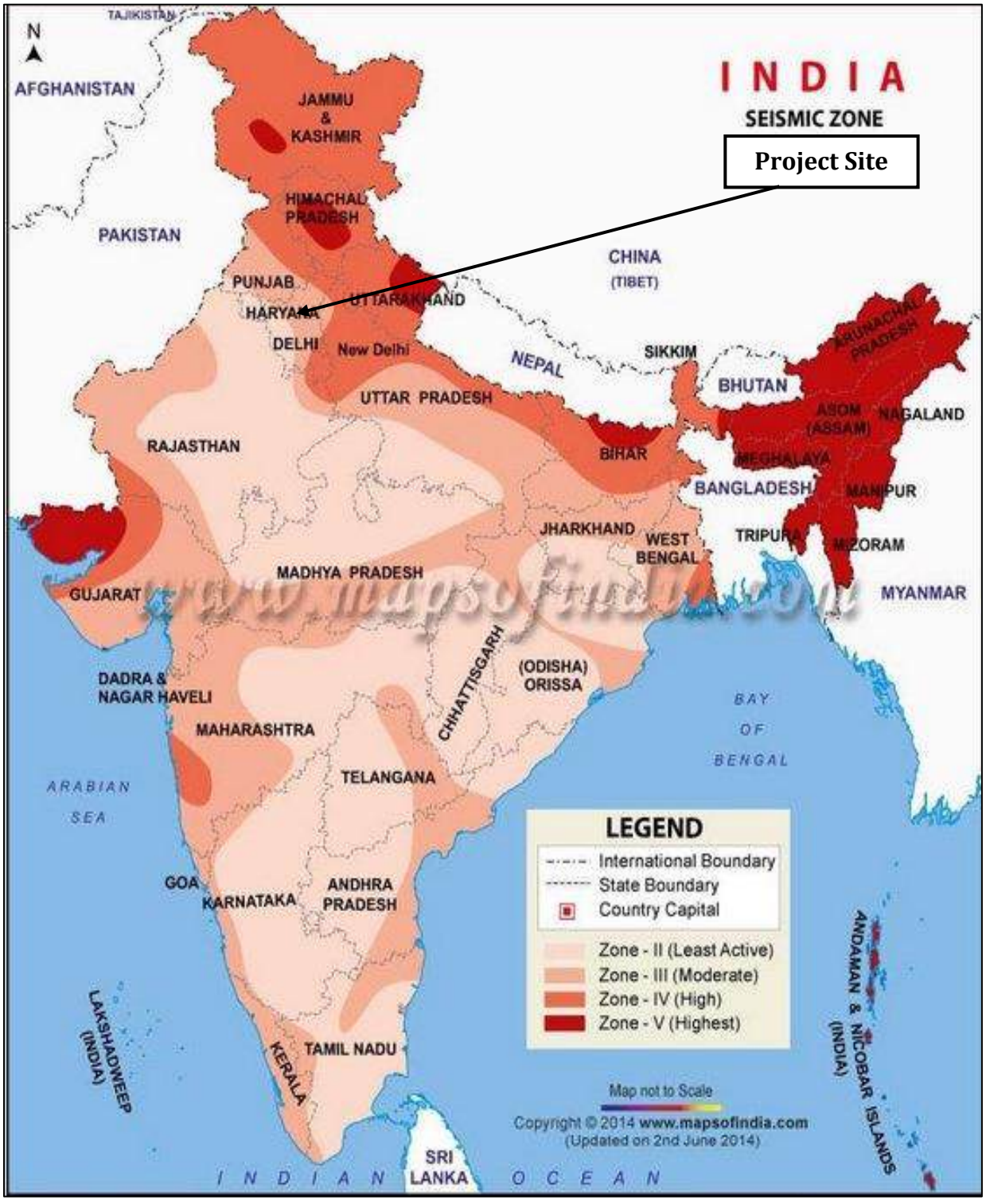


Figure 3-11 Seismic Zone Map of India

3.13 SOCIO-ECONOMICS OF THE STUDY AREA

Scope of the Proposed Study

The scope of the present study includes the followings:

1. Collection of baseline data in the study area
2. To know the socio-economic status of people living in the study area
3. To assess likely impact of the project on social and economic life of the people in the study area
4. To measure the impact of the project on quality of life of the people living in the study area
5. To confirm sustainability of positive impacts
6. To recommend mitigation measures on adverse impacts if any.

Socio-Economic Scenario- Rural area (based on Census 2011 data)

The study area comprises of 42 census villages , with a total population of 177721.This includes rural sub-district Pataudi.

Demographic features of study area: Rural area

The villages falling within the study area are listed in below table along with the demographic features as per the Census 2011.

Table 3-12 Summary of Demographic features of Rural area under study

SL.NO.	VILLAGE	No_HH	TOT_P	TOT_M	TOT_F	P_06	M_06	F_06	P_SC	M_SC	F_SC	P_ST	M_ST	F_ST	P_LIT	M_LIT	F_LIT
1	Bahora Kalan(134)	3413	18961	10084	8877	2741	1496	1245	3761	1993	1768	0	0	0	13410	7863	5547
2	Bahora Khurd(136)	324	1942	1014	928	282	159	123	503	249	254	0	0	0	1356	799	557
3	Bas Padamka (41)	651	3338	1756	1582	405	231	174	662	347	315	0	0	0	2279	1357	922
4	Bastpur(25)	161	806	416	390	131	63	68	344	183	161	0	0	0	540	314	226
5	Bhudka(142)	272	1493	786	707	183	98	85	133	74	59	0	0	0	1041	629	412
6	Bhun Karka(137)	231	1268	648	620	125	60	65	91	48	43	0	0	0	932	537	395
7	Bilaspur(146)	572	3392	1812	1580	506	295	211	293	153	140	0	0	0	2244	1333	911
8	Binola(147)	201	834	469	365	121	69	52	40	22	18	0	0	0	594	373	221
9	Chandla Dungerwas(148)	392	1997	1017	980	249	120	129	335	171	164	0	0	0	1426	829	597
10	Chhawan(2)	159	808	414	394	156	87	69	95	52	43	0	0	0	484	274	210
11	Danokri(141)	155	957	504	453	146	81	65	85	44	41	0	0	0	657	388	269
12	Darapur(288)	236	1203	635	568	120	73	47	257	130	127	0	0	0	923	522	401
13	Fakharpur(133)	295	1688	895	793	224	131	93	243	130	113	0	0	0	1195	703	492
14	Fazalwas(149)	349	1866	973	893	263	144	119	322	162	160	0	0	0	1354	769	585
15	Goriawas(33)	101	509	261	248	65	38	27	35	17	18	0	0	0	343	204	139
16	Hera Heri(36)	177	947	495	452	99	50	49	322	161	161	0	0	0	700	416	284
17	Joniawas(19)	407	2037	1080	957	248	141	107	188	103	85	0	0	0	1436	839	597
18	Kaliawas(41)	359	1926	1012	914	220	132	88	110	59	51	0	0	0	1405	812	593
19	Khanpur(34)	171	745	390	355	106	63	43	345	170	175	0	0	0	524	294	230
20	Kharkhari(131)	341	1907	985	922	247	138	109	507	260	247	0	0	0	1357	774	583
21	Khor(32)	888	4933	2556	2377	624	336	288	1084	559	525	0	0	0	3390	1987	1403
22	Langra(145)	241	1377	708	669	209	101	108	616	308	308	0	0	0	928	536	392
23	Lohchap(26)	301	1442	765	677	163	84	79	250	122	128	0	0	0	1067	642	425
24	Lokra(289)	422	2093	1095	998	270	152	118	388	208	180	0	0	0	1451	847	604
25	Lokri(287)	406	2402	1255	1147	375	197	178	375	193	182	0	0	0	1544	928	616
26	Mao(297)	362	2265	1168	1097	334	174	160	321	174	147	0	0	0	1531	891	640
27	Mubarikpur(37)	541	2944	1548	1396	447	237	210	520	269	251	0	0	0	1916	1111	805
28	Mumtajpur(38)	268	1315	697	618	144	83	61	172	88	84	0	0	0	946	563	383
29	Nanu Khurd(29)	190	1036	542	494	110	67	43	185	87	98	0	0	0	736	435	301
30	Nanukalan(27)	765	4095	2143	1952	557	311	246	644	341	303	0	0	0	2858	1654	1204
31	Narhera(44)	867	4414	2293	2121	688	348	340	1212	623	589	0	0	0	2844	1669	1175
32	Nurpur Bahora(135)	218	1223	639	584	140	74	66	257	132	125	0	0	0	905	539	366
33	Pataudi-SUB DIST	15122	78688	41060	37628	10378	5691	4687	17485	9049	8436	0	0	0	54906	32094	22812
34	Pathrari(143)	884	5014	2601	2413	645	358	287	775	381	394	0	0	0	3482	2038	1444
35	Prasoli(138)	295	1504	797	707	215	125	90	430	235	195	0	0	0	1014	599	415
36	Rathiwas(140)	600	3502	1802	1700	423	236	187	515	256	259	0	0	0	2501	1444	1057
37	Said Shahpur(24)	63	365	191	174	50	30	20	201	101	100	0	0	0	237	134	103
38	Sapedar Nagar(37)	34	207	110	97	23	18	5	10	4	6	0	0	0	159	88	71
39	Sidhrawali(139)	1073	5506	2886	2620	722	407	315	896	464	432	0	0	0	3930	2275	1655
40	Turkapur(40)	173	884	453	431	112	61	51	46	19	27	0	0	0	602	348	254
41	Udepuri(144)	6	31	17	14	0	0	0	31	17	14	0	0	0	29	16	13
42	Uncha Majra(43)	689	3857	1973	1884	546	294	252	908	456	452	0	0	0	2620	1479	1141
			0			0			0			0			0		
	TOTAL	33375	177721	92945	84776	23812	13053	10759	35992	18614	17378	0	0	0	123796	72346	51450
	AVERAGE	795	4231	2213	2018	567	311	256	857	443	414	0	0	0	2948	1723	1225
			0			0			0			0			0		
DISTRI	Gurgaon	88678	472179	251462	220717	67473	37469	30004	90113	47249	42864	0	0	0	324087	192288	131799

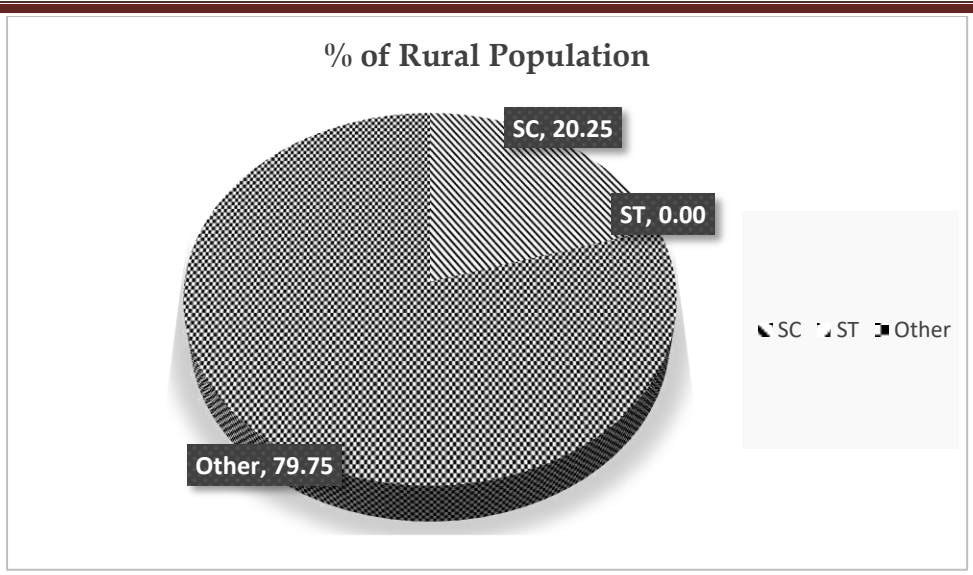
VILLAGE	P_ILL	M_ILL	F_ILL	TOT_WORK_P	TOT_WORK_M	TOT_WORK_F	MAINWORK_P	MAINWORK_M	MAINWORK_F	MAIN_CL_P	MAIN_CL_M	MAIN_CL_F	MAIN_AL_P	MAIN_AL_M	MAIN_AL_F
Bahora Kalan(134)	5551	2221	3330	5866	4809	1057	4760	4175	585	971	839	132	350	283	67
Bahora Khurd(136)	586	215	371	717	516	201	577	495	82	200	191	9	65	53	12
Bas Padamka (41)	1059	399	660	1044	859	185	915	814	101	375	342	33	179	143	36
Bastpur(25)	266	102	164	196	191	5	135	130	5	17	16	1	2	2	0
Bhudka(142)	452	157	295	597	373	224	571	366	205	278	198	80	13	13	0
Bhun Karka(137)	336	111	225	343	282	61	249	195	54	76	43	33	23	15	8
Bilaspur(146)	1148	479	669	1165	806	359	990	771	219	372	299	73	55	32	23
Binola(147)	240	96	144	352	274	78	308	270	38	102	99	3	15	12	3
Chandla Dungerwas(148)	571	188	383	705	510	195	592	458	134	369	259	110	15	11	4
Chhawan(2)	324	140	184	244	188	56	222	175	47	42	39	3	40	34	6
Danokri(141)	300	116	184	370	232	138	321	188	133	145	135	10	1	1	0
Darapur(288)	280	113	167	311	292	19	298	279	19	66	63	3	12	11	1
Fakharpur(133)	493	192	301	444	421	23	427	407	20	186	177	9	7	7	0
Fazalwas(149)	512	204	308	448	422	26	423	401	22	92	89	3	37	34	3
Goriawas(33)	166	57	109	262	134	128	47	39	8	5	5	0	9	7	2
Hera Heri(36)	247	79	168	228	214	14	227	213	14	93	90	3	11	10	1
Joniawas(19)	601	241	360	602	520	82	512	467	45	310	282	28	4	4	0
Kaliawas(41)	521	200	321	639	491	148	466	407	59	194	161	33	56	46	10
Khanpur(34)	221	96	125	347	199	148	172	140	32	72	51	21	13	10	3
Kharkhari(131)	550	211	339	611	479	132	544	457	87	211	146	65	28	23	5
Khor(32)	1543	569	974	1762	1241	521	1111	978	133	439	392	47	244	209	35
Langra(145)	449	172	277	633	361	272	337	272	65	160	107	53	34	28	6
Lohchap(26)	375	123	252	585	382	203	506	320	186	99	86	13	264	112	152
Lokra(289)	642	248	394	530	497	33	409	388	21	147	146	1	20	19	1
Lokri(287)	858	327	531	603	569	34	520	499	21	317	307	10	31	29	2
Mao(297)	734	277	457	666	535	131	580	492	88	225	201	24	3	2	1
Mubarikpur(37)	1028	437	591	1056	764	292	837	637	200	432	325	107	280	196	84
Mumtajpur(38)	369	134	235	489	327	162	352	237	115	14	11	3	15	12	3
Nanu Khurd(29)	300	107	193	371	235	136	226	212	14	145	135	10	1	1	0
Nanukalan(27)	1237	489	748	1035	919	116	780	716	64	62	55	7	46	40	6
Narhera(44)	1570	624	946	1177	1054	123	957	892	65	202	194	8	123	103	20
Nurpur Bahora(135)	318	100	218	620	390	230	499	347	152	184	168	16	73	48	25
Pataudi-SUB DIST	23782	8966	14816	25482	19489	5993	18357	16197	2160	6070	5412	658	2260	1835	425
Pathrari(143)	1532	563	969	1498	1165	333	1354	1060	294	622	461	161	50	43	7
Prasoli(138)	490	198	292	547	375	172	533	364	169	231	102	129	9	8	1
Rathiwas(140)	1001	358	643	1288	835	453	1153	744	409	618	322	296	32	24	8
Said Shahpur(24)	128	57	71	138	90	48	90	78	12	33	28	5	24	22	2
Sapedar Nagar(37)	48	22	26	61	55	6	61	55	6	1	1	0	28	27	1
Sidhrawali(139)	1576	611	965	2057	1404	653	1852	1262	590	364	299	65	31	16	15
Turkapur(40)	282	105	177	214	198	16	199	188	11	97	92	5	28	28	0
Udepuri(144)	2	1	1	11	7	4	7	6	1	0	0	0	1	1	0
Uncha Majra(43)	1237	494	743	1027	929	98	924	845	79	384	371	13	89	66	23
	0			0			0			0			0		
TOTAL	53925	20599	33326	57341	44033	13308	44400	37636	6764	15022	12739	2283	4621	3620	1001
AVERAGE	1284	490	793	1365	1048	317	1057	896	161	358	303	54	110	86	24
	0			0			0			0			0		
Gurgaon	148092	59174	88918	158462	121734	36728	124933	105706	19227	39047	33423	5624	10113	7945	2168

SL.NO.	VILLAGE	MAIN_HH_P	MAIN_HH_M	MAIN_HH_F	MAIN_OT_P	MAIN_OT_M	MAIN_OT_F	MARGWORK_P	MARGWORK_M	MARGWORK_F	MARG_CL_P	MARG_CL_M	MARG_CL_F	MARG_AL_P	MARG_AL_M	MARG_AL_F
1	Bahora Kalan(134)	143	128	15	3296	2925	371	1106	634	472	97	24	73	359	172	187
2	Bahora Khurd(136)	54	20	34	258	231	27	140	21	119	5	3	2	24	12	12
3	Bas Padamka (41)	4	4	0	357	325	32	129	45	84	67	2	65	14	3	11
4	Bastpur(25)	2	2	0	114	110	4	61	61	0	3	3	0	32	32	0
5	Bhudka(142)	6	5	1	274	150	124	26	7	19	12	2	10	9	2	7
6	Bhun Karka(137)	4	2	2	146	135	11	94	87	7	8	6	2	71	70	1
7	Bilaspur(146)	38	21	17	525	419	106	175	35	140	47	5	42	27	6	21
8	Binola(147)	4	4	0	187	155	32	44	4	40	3	2	1	2	2	0
9	Chandla Dungerwas(148)	6	5	1	202	183	19	113	52	61	71	16	55	7	7	0
10	Chhawan(2)	37	32	5	103	70	33	22	13	9	3	1	2	4	3	1
11	Danokri(141)	3	3	0	172	49	123	49	44	5	0	0	0	49	44	5
12	Darapur(288)	4	4	0	216	201	15	13	13	0	0	0	0	1	1	0
13	Fakharpur(133)	7	7	0	227	216	11	17	14	3	0	0	0	11	11	0
14	Fazalwas(149)	11	11	0	283	267	16	25	21	4	0	0	0	4	3	1
15	Goriawas(33)	0	0	0	33	27	6	215	95	120	180	77	103	27	14	13
16	Hera Heri(36)	0	0	0	123	113	10	1	1	0	0	0	0	0	0	0
17	Joniawas(19)	6	6	0	192	175	17	90	53	37	39	8	31	40	35	5
18	Kaliawas(41)	13	12	1	203	188	15	173	84	89	103	38	65	41	23	18
19	Khanpur(34)	14	14	0	73	65	8	175	59	116	78	27	51	65	5	60
20	Kharkhari(131)	30	29	1	275	259	16	67	22	45	49	8	41	0	0	0
21	Khor(32)	27	24	3	401	353	48	651	263	388	318	47	271	259	172	87
22	Langra(145)	4	3	1	139	134	5	296	89	207	143	36	107	110	27	83
23	Lohchap(26)	22	9	13	121	113	8	79	62	17	2	1	1	52	44	8
24	Lokra(289)	1	1	0	241	222	19	121	109	12	6	3	3	56	51	5
25	Lokri(287)	6	5	1	166	158	8	83	70	13	6	3	3	33	30	3
26	Mao(297)	15	14	1	337	275	62	86	43	43	35	2	33	3	3	0
27	Mubarikpur(37)	22	22	0	103	94	9	219	127	92	28	13	15	181	106	75
28	Mumtajpur(38)	87	35	52	236	179	57	137	90	47	8	6	2	13	6	7
29	Nanu Khurd(29)	0	0	0	80	76	4	145	23	122	123	1	122	0	0	0
30	Nanukalan(27)	47	42	5	625	579	46	255	203	52	7	4	3	40	25	15
31	Narhera(44)	12	11	1	620	584	36	220	162	58	9	6	3	30	21	9
32	Nurpur Bahora(135)	1	1	0	241	130	111	121	43	78	39	14	25	23	13	10
33	Pataudi-SUB DIST	490	365	125	9537	8585	952	7125	3292	3833	2554	719	1835	2185	1133	1052
34	Pathrari(143)	21	19	2	661	537	124	144	105	39	21	11	10	81	72	9
35	Prasoli(138)	0	0	0	293	254	39	14	11	3	1	0	1	0	0	0
36	Rathiwas(140)	14	10	4	489	388	101	135	91	44	3	2	1	113	73	40
37	Said Shahpur(24)	0	0	0	33	28	5	48	12	36	18	2	16	29	10	19
38	Sapedar Nagar(37)	5	4	1	27	23	4	0	0	0	0	0	0	0	0	0
39	Sidhrawali(139)	12	12	0	1445	935	510	205	142	63	70	33	37	52	43	9
40	Turkapur(40)	7	7	0	67	61	6	15	10	5	5	2	3	8	6	2
41	Udepuri(144)	0	0	0	6	5	1	4	1	3	0	0	0	1	0	1
42	Uncha Majra(43)	13	10	3	438	398	40	103	84	19	8	7	1	40	31	9
		0			0			0			0			0		
	TOTAL	1192	903	289	23565	20374	3191	12941	6397	6544	4169	1134	3035	4096	2311	1785
	AVERAGE	28	22	7	561	485	76	308	152	156	99	27	72	98	55	43
		0			0			0			0			0		
DISTRI	Gurgaon	3621	2545	1076	72152	61793	10359	33529	16028	17501	11041	3266	7775	8939	4839	4100

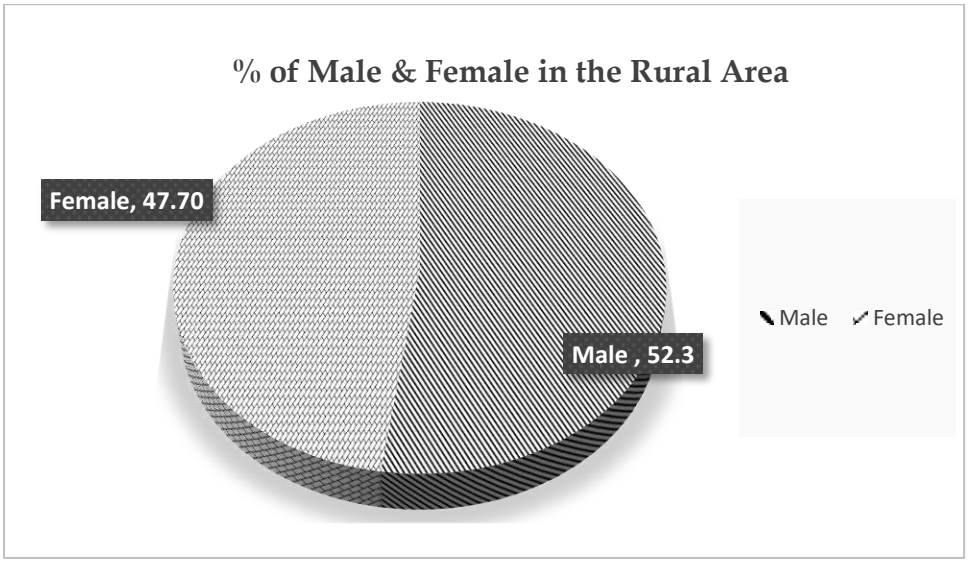
SL.NO.	VILLAGE	MARG_HH_P	MARG_HH_M	MARG_HH_F	MARG_OT_P	MARG_OT_M	MARG_OT_F	NON_WORK_P	NON_WORK_M	NON_WORK_F
1	Bahora Kalan(134)	45	25	20	605	413	192	13095	5275	7820
2	Bahora Khurd(136)	90	0	90	21	6	15	1225	498	727
3	Bas Padamka (41)	1	1	0	47	39	8	2294	897	1397
4	Bastpur(25)	0	0	0	26	26	0	610	225	385
5	Bhudka(142)	0	0	0	5	3	2	896	413	483
6	Bhun Karka(137)	1	0	1	14	11	3	925	366	559
7	Bilaspur(146)	26	3	23	75	21	54	2227	1006	1221
8	Binola(147)	21	0	21	18	0	18	482	195	287
9	Chandla Dungerwas(148)	0	0	0	35	29	6	1292	507	785
10	Chhawan(2)	4	2	2	11	7	4	564	226	338
11	Danokri(141)	0	0	0	0	0	0	587	272	315
12	Darapur(288)	2	2	0	10	10	0	892	343	549
13	Fakharpur(133)	1	0	1	5	3	2	1244	474	770
14	Fazalwas(149)	11	8	3	10	10	0	1418	551	867
15	Goriawas(33)	0	0	0	8	4	4	247	127	120
16	Hera Heri(36)	0	0	0	1	1	0	719	281	438
17	Joniawas(19)	1	1	0	10	9	1	1435	560	875
18	Kaliawas(41)	3	2	1	26	21	5	1287	521	766
19	Khanpur(34)	3	1	2	29	26	3	398	191	207
20	Kharkhari(131)	7	6	1	11	8	3	1296	506	790
21	Khor(32)	7	4	3	67	40	27	3171	1315	1856
22	Langra(145)	5	0	5	38	26	12	744	347	397
23	Lohchap(26)	5	2	3	20	15	5	857	383	474
24	Lokra(289)	2	2	0	57	53	4	1563	598	965
25	Lokri(287)	8	7	1	36	30	6	1799	686	1113
26	Mao(297)	0	0	0	48	38	10	1599	633	966
27	Mubarikpur(37)	1	1	0	9	7	2	1888	784	1104
28	Mumtajpur(38)	7	3	4	109	75	34	826	370	456
29	Nanu Khurd(29)	0	0	0	22	22	0	665	307	358
30	Nanukalan(27)	8	4	4	200	170	30	3060	1224	1836
31	Narhera(44)	7	4	3	174	131	43	3237	1239	1998
32	Nurpur Bahora(135)	0	0	0	59	16	43	603	249	354
33	Pataudi-SUB DIST	136	77	59	2250	1363	887	53206	21571	31635
34	Pathrari(143)	1	0	1	41	22	19	3516	1436	2080
35	Prasoli(138)	0	0	0	13	11	2	957	422	535
36	Rathiwas(140)	1	0	1	18	16	2	2214	967	1247
37	Said Shahpur(24)	0	0	0	1	0	1	227	101	126
38	Sapedar Nagar(37)	0	0	0	0	0	0	146	55	91
39	Sidhrawali(139)	4	1	3	79	65	14	3449	1482	1967
40	Turkapur(40)	0	0	0	2	2	0	670	255	415
41	Udepuri(144)	3	1	2	0	0	0	20	10	10
42	Uncha Majra(43)	1	0	1	54	46	8	2830	1044	1786
		0			0			0		
	TOTAL	412	157	255	4264	2795	1469	120380	48912	71468
	AVERAGE	10	4	6	102	67	35	2866	1165	1702

Population:

The total population of 42 census villages is 177721. This includes rural sub-district Pataudi. The % of Schedule Caste (SC) and Schedule Tribe (ST) to the total population is 20.25 & 0 respectively. There are no Schedule tribes.

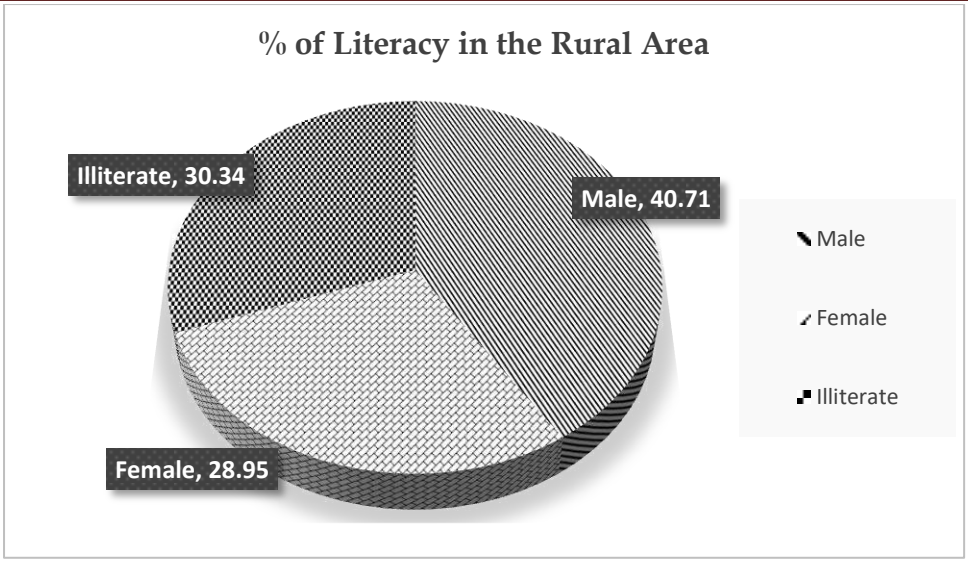


Village size:
The total households in the 42 villages are 33375. The average household per village is 795.
House hold size:
The average household size is 5.32 in rural area.
Sex ratio:
The sex ratio of the study area is 912 females per thousand male population in rural area. The percentage of male and female population to the total population is 52.30 and 47.70 respectively.



Literacy:
The percentage of literacy in the area is 69.66.

The % male and female literacy to the total population is 40.71 & 28.95 respectively.



Occupational structure of the study area: The percentage of total workers to the total population of the rural area is 32.26 in which main workers constitute 24.98 % and marginal workers constitute 7.28 % and remaining 67.74 % constitute non-workers.

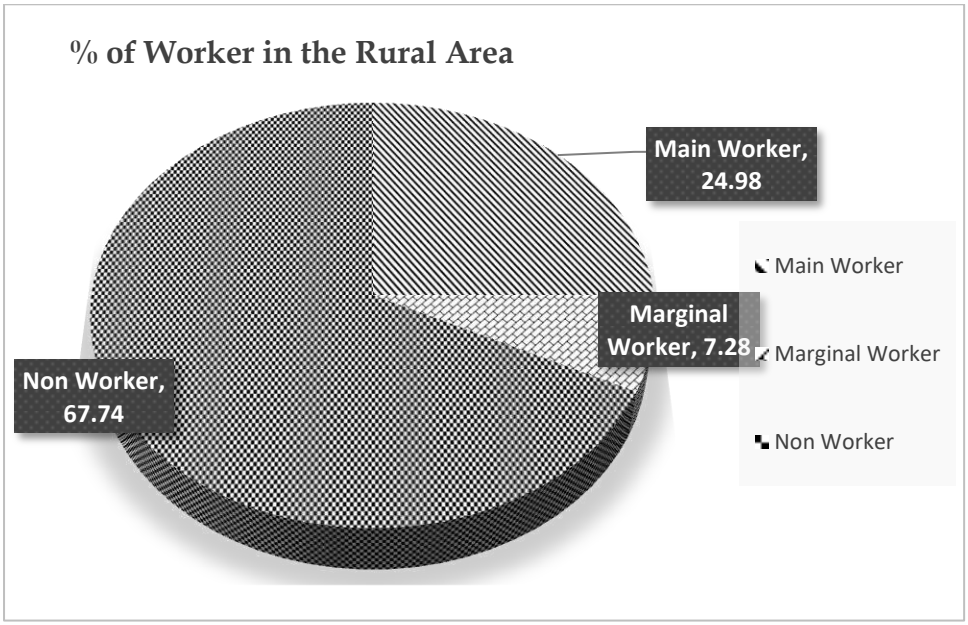


Table 3-13 Demographic features and other Statistics for the Study Area (Rural Area) as per Census 2011

Sl.	Details	No./%
1	Total population	177721
2	No. of House hold	33375
3	Average family size	5.32
4	Average no. of house hold per village	795
5	Average population per village	4231
6	Sex ratio –females per thousand males	912
7	Percent of male population to total population	52.30
8	Percent of female population to total population	47.70
9	Percent of SC population to the total population	20.25

10	Percent of ST population to the total population	0
11	Percent of literate population to the total population	69.66
12	Percent of Male literate population to the total population	40.71
13	Percent of Female literate population to the total population	28.95
14	Percent of total main worker to the total population	24.98
15	Percent of total marginal worker to the total population	7.28
16	Percent of non-worker to the total population	67.74

From the table it is clear that Sex Ratio is on a lower side. There is no ST population.
Gender gap between male and female literacy is approx. 12%.
Employment is a major concern besides literacy.

Demographic features of study area: Urban Area

Further the study area comprises of Sub District Gurugram and Sohna, with a total population of 41324.

Table 3-14 Summary of Demographic features of Urban area under study

Description	**Pataudi -SUB DIST**	**Dist. Gurgoan Urban**
Number of Households	7454	237750
Total Population (Persons)	41324	1042253
Total Population (Males)	21745	565228
Total Population (Females)	19579	477025
Population in age group 0-6 years (Persons)	5729	135129
Population in age group 0-6 years (Males)	3078	73236
Population in age group 0-6 years (Females)	2651	61893
Scheduled Caste Population (Persons)	9825	107824
Scheduled Caste Population (Males)	5124	57083
Scheduled Caste Population (Females)	4701	50741
Scheduled Tribe Population (Persons)	0	0
Scheduled Tribe Population (Males)	0	0
Scheduled Tribe Population (Females)	0	0
Literates (Persons)	28400	787029
Literates (Males)	16254	446378
Literates (Females)	12146	340651
Illiterates (Persons)	12924	255224
Illiterates (Males)	5491	118850
Illiterates (Females)	7433	136374
Total Workers (Persons)	12045	386254
Total Workers (Males)	10340	310722
Total Workers (Females)	1705	75532
Main Workers (Persons)	10099	362508
Main Workers (Males)	8911	294680
Main Workers (Females)	1188	67828
Main Workers - Cultivators (Persons)	709	5382
Main Workers - Cultivators (Males)	645	4796
Main Workers - Cultivators (Females)	64	586

Main Workers - Agricultural Labourers (Persons)	541	5612
Main Workers - Agricultural Labourers (Males)	460	4662
Main Workers - Agricultural Labourers (Females)	81	950
Main Workers - Workers in Household Industries (Persons)	727	12381
Main Workers - Workers in Household Industries (Males)	551	10229
Main Workers - Workers in Household Industries (Females)	176	2152
Main Workers - Other Workers (Persons)	8122	339133
Main Workers - Other Workers (Males)	7255	274993
Main Workers - Other Workers (Females)	867	64140
Marginal Workers (Persons)	1946	23746
Marginal Workers (Males)	1429	16042
Marginal Workers (Females)	517	7704
Marginal Workers - Cultivators (Persons)	75	576
Marginal Workers - Cultivators (Males)	40	357
Marginal Workers - Cultivators (Females)	35	219
Marginal Workers - Agricultural Labourers (Persons)	422	2433
Marginal Workers - Agricultural Labourers (Males)	281	1667
Marginal Workers - Agricultural Labourers (Females)	141	766
Marginal Workers - Workers in Household Industries (Persons)	81	1040
Marginal Workers - Workers in Household Industries (Males)	45	551
Marginal Workers - Workers in Household Industries (Females)	36	489
Marginal Workers - Other Workers (Persons)	1368	19697
Marginal Workers - Other Workers (Males)	1063	13467
Marginal Workers - Other Workers (Females)	305	6230
Non-Workers (Persons)	29279	655999
Non-Workers (Males)	11405	254506
Non-Workers (Females)	17874	401493

Table 3-15 Summary of Demographic features Rural vs Urban area under study

Sl.	**Details**	**No./%**	
		Rural	**Urban**
1	Total population	177721	41324
2	No. of House hold	33375	7454
3	Average family size	5.32	5.54
4	Sex ratio –females per thousand males	912	900
5	Percent of male population to total population	52.30	52.62
6	Percent of female population to total population	47.70	47.38
7	Percent of SC population to the total population	20.25	23.78
8	Percent of ST population to the total population	0	0
9	Percent of literate population to the total population	69.66	68.73
10	Percent of Male literate population to the total	40.71	39.33

	population		
11	Percent of Female literate population to the total population	28.95	29.39
12	Percent of total main worker to the total population	24.98	24.44
13	Percent of total marginal worker to the total population	7.28	4.71
14	Percent of non-worker to the total population	67.74	70.85

SC population is more by 3 to 4 % in urban area as compared to rural area. There is no ST population in both rural and urban area.

Literacy is almost same in rural and urban area . Gender gap between male and female literacy is approx. 10% in urban area as compared to 12 % in rural area.

In urban area marginal workers are less by approx. 2 to 3 % as compared to rural area. Non-workers are more by 3 % in urban area as compared to rural area.

Employment is a major concern besides literacy in both rural and urban area.

Primary Survey

The nearby villages were selected for field survey.

Bhun Karka, Bilaspur, Danokri, Darapur, Joniawas, Lohchap, Lokra, Lokri, Mao, Nurpur Bahora, Jharsa, Prasoli, Rathiwas, Sidhrawali, Pataudi rural and urban sub districts etc.

Further the data for villages surveyed and data available for the same villages of Census 2011 was compared and data found to be validated.

Basic Observations

1. There is termite problem in almost all the villages.
2. Hinduism is the majority religion in Gurugram city with 92 % followers followed by Islam 5 %. There are no ST category people .
3. The villages in the core zone and buffer zone are having primary amenities and infrastructural facilities.
4. Sex Ratio is on a lower side and is alarming for both rural and urban area.
5. Gender gap between male and female literacy is alarming for both rural and urban area.
6. Employment is a major concern besides literacy for both rural and urban area.
7. Primary survey was conducted in nearby villages & data collected based on specific designed Questionnaire & focused group discussions. There has been increase in the population & other related factors since 2011 (male population, female population, SC/ST population, literacy, working population, category of workers etc.). While comparing the house hold survey results with census data 2011 the observations are found to be validated.
8. Gurugram District has witnessed a phenomenal growth in all spheres of developments, particularly in industry and urbanization. Today, it has become a hub of multinational companies, industries giants, call centres, software companies, shopping malls and skyscrapers.

9. The inferences cannot be generalized due to limitation of survey and also cost consideration. As such the inferences cannot be used for any other purpose and is not liable for any legal action.

Demography-Census 2011

Title	Detail
Population	1514085
Area	1253 sq. km.
Rank in India	328/640
Population Density	1241 inhabitants per sq.km.
Population Growth Rate	79.93%
Sex Ratio	853 females per 1000 males
Literacy Rate	84.4%

Economy

The city benefits from its close proximity to Delhi.

Gurugram has the third highest per-capita income in India and is the site of Indian offices for half of Fortune 500 companies.

Maruti Suzuki Private Limited was the first company that set up a manufacturing unit in the city in 1970s making cars.

Eventually, DLF Limited, a real estate company acquired vast stretches of land in the city.

The first major American brand to set up a unit in Gurugram was General Electric in 1997. General Electric's setup in Gurugram prompted other companies, both international as well as domestic, to follow suit providing outsourcing solutions in software, IT, service and sales through delivery facilities and call centres.

Apart from Business process outsourcing and IT sectors, the city is home to several other companies that specialise in domain expertise. Siemens Industry Software, in Gurugram Business Park, made a portfolio of design software that was used by NASA to digitally design, simulate and assemble the vehicle before any physical prototypes were built.

Various international companies, including Coca-Cola, Pepsi, BMW, Agilent Technologies, Hyundai have chosen Gurugram to be their Indian corporate headquarters; this continues to be apparent in the 2020s, with Cargill and Nissan making the same choice. All the major

companies in the city depend on their own backup, given the fact that Gurugram does not have reliable power and water supply, public transport and utilities.
Retail is an important industry in Gurugram, with the presence of more than 25 shopping malls.
All Nippon Airways, a Japanese airline, maintains its Delhi sales office in the Time Tower in Gurugram.
Technology company Lets Track is headquartered in Gurugram.
There are seven industrial areas in Gurugram. Presently there are more than 4200 production units in more than 1700 ha industrial area.

List of Large & Medium Industries of Gurugram

- ASK Automotive (Italy) Gurugram (brake shoes) Aksh Optifibre Limited (Manesar)
- Amtek (UK, Japan) Delhi , Manesar (connecting rods) Ample Auto, Gurugram
- Anand Motors Products (USA) Delhi and Gurugram (components)
- Anand Nishikawa (Japan) Delhi, Gurugram Udyog Vihar Phase 1 (rubber parts) Anu Autos Industries (France, South Korea) Gurugram (locking systems) Apollo Tyres Gurugram
- Arvin Industries) Gurugram (filter) Bharat Seats (Japan) Haryana (seats) BMW (Gurugram, only HQ)
- Bosch Chassis Manesar
- Bosch (Germany) Gurugram (pumps) Caparo Maruti (UK) Gurugram (sheet metal) Climax Overseas Manesar
- Continental, Gurugram
- D.I. Filter Systems (USA, Donaldson Company) Gurugram (air filters) Deadong Gurugram (cables)
- Delphi Automotives (USA) Gurugram (steering systems, wiring harness) Donaldson Company Gurugram (air filters)
- Echlin India (USA) Haryana (brakes) Eicher Faridabad
- FCC Rico (Japan) Gurugram (clutch assembly) Ferodo (UK) Gurugram (brakes)
- Gabriel India Ltd. Gurugram
- Henkel Teroson (Germany) Gurugram (anti-freezing coolant)
- Highway Cycles Industries (Japan, Honda) Gurugram (piston for engines) Hilton Roulunds (Denmark) Haryana (automotive belts)
- Haryana Sheet Glass LTD (UK, Pilikington) Haryana (automotive glass) Haryana DD Autos (Germany) Haryana (shafts)
- Haryana Deepey Autos (UK, Woodhead) Gurugram (shock absorbers) Jay Bharat Maruti (Japan) Gurugram (pipes)
- JBM Sung Hoo (South Korea) Delhi (components) JBM Group Gurugram
- JMA Industries (Germany, Hella) Faridabad (lamps) Jay-Yusin (Japan) Gurugram (door latch)
- Jay Industries (South Korea, Boramtek) Delhi (components) Johnson Matthey (UK) Gurugram (catalysts)
- Johnson Matthey Manesar
- JNS Instruments (Japan) Gurugram (instruments) Krishna Maruti (Japan) Gurugram

(seats) Krishna Toyo (Japan) Gurugram (rear mirrors)

- Lumax GSHP (USA) Gurugram (transmission)
- Laser Lamp (South Korea, Il Lee corp.) Delhi/Haryana (halogene lamps) Machino Polymers (Montell int.) Gurugram (compound cables)
- Machino TSK Nippon Cables (Japan) Gurugram (cables) Machino Basell (Netherlands) Gurugram (polypropylene) Madhusudan Nippon (Japan, Korea, Deadong) Gurugram (cables) Manu Auto, Manesar
- Mark Auto Industries (Italy, Germany, FBN Italy, Roth Abgastechnologie) Gurugram (exhaust systems)
- Metro Tyers Gurugram
- Mindarika (Japan) Gurugram (switches)
- M and M Auto Industries Gurugram (springs) Montell int. Gurugram (compound cables)
- Munjal Showa (Japan) Gurugram (shock absorbers) Nagata (Japan) Gurugram (tools, dies)
- Napino Auto and Electronics Manesar Nelson Industries (USA) Delhi (engine parts) Nikko Auto (Japan) Gurugram (horns)
- Nippon Paint Gurugram (paint) Pilikington (UK) Gurugram
- Purolator (USA, Arvin Industries) Gurugram (filter) Quiton Hazell Gurugram (rods, joints, steering assembly)
- Rasandik Engineering (Japan, Yachiyo) Gurugram (fuel tanks) Roloform Manesar
- Roth Abgastechnologie Gurugram (exhaust systems) Sandhar Gurugram
- Sauer Danfoss, Gurugram Siemens Intron Gurugram
- Sono Koyo (Japan) Gurugram (steering) Sona Okegawa (Japan) Gurugram (gears)
- Sona Somic Lemforder (Japan/Germany) Gurugram (ball point) Sunbeam Auto (Japan, Honda) Gurugram (pistons)
- Sun Steering Wheels (Japan, TS Tech) Gurugram (steering wheels) Sun Petri (Germany) Gurugram (steering wheels)
- Suzuki (Japan) Motor-Bikes
- Talbros (UK, Quiton Hazell) Gurugram (rods, joints, steering assembly) Woodhead Gurugram (shock absorbers)
- WSCP Manesar

Textile

- Didi World of Fashion Express
- House of Pearl/Koutons Orient Craft

Besides there are more than 30 Large Scale Industries. Some prominent are given below

- M/S HERO MOTORS LTD., SECTOR-8, IMT MANESAR,(FERROUS ALLOY DIV.)-MOTORCYCLE PARTS
- M/S HEWETTS ASSOCIATES, DLF, GURUGRAM- INFORMATION TECHNOLOGY
- M/S MARUTI UDYOG LTD., IMT MANESAR, GURUGRAM- PASSEGER CARS
- M/S JINDAL STAINLESS STEELWAY LTD. VILLAGE PATHRERI, GURUGRAM- PIPES
- M/S COSCO INDIA LTD.,RLY. ROAD, GURUGRAM- SPORT GOODS

Major Exportable Item:

Cars, scooters, motorcycles, rice, auto parts, leather products, handicraft item ,readymade garments and plastic parts etc.

Vendorisation / Ancillarisation of the Industry

Auto parts for two and four wheelers

Existing Clusters of Micro & Small Enterprise

Service Sector: Auto Workshop/Service Station, Mobile Repair , Computer Hardware, refrigeration & Air conditioning etc.

Cluster: Auto Rubber parts- Gasket, Seals, washers & V-belts etc.

Cluster: Readymade Garments manufacturing- Trousers, lowers, track suits, T-shirt etc.

Cluster: Auto Parts manufacturing- Piston, crank, rocker arm, sleeve etc.

Cluster: Leather Goods & Garments

Languages and dialect

The main language spoken in Gurugram is Hindi, though a segment of the population understands and speaks English. The dialect used in Hindi is similar to that of Delhi, and is considered neutral, though the regional influences from the states of Haryana, Uttar Pradesh and Punjab adds an accent to the language. English is spoken with an Indian accent, with a primarily North Indian influence. Since Gurugram has many international call centres, the employees are usually given formal training in neutral pronunciation in order to be understandable to native English speakers. Haryanvi and Punjabi are other popular languages spoken in the city.

Art and Culture

Gurugram offers a diverse array of experiences that cater to a wide range of interests and preferences. With its rich history, vibrant culture, and exciting entertainment options, the city promises an unforgettable and enriching journey for every visitor.

Places of Interest in Gurugram

Kingdom Of Dreams

A first of its kind of live entertainment in the country has been set up at Kingdom of Dreams, in the Sector-29, Gurugram.

The Kingdom of Dreams is a must-visit entertainment destination in Gurugram that perfectly blends Indian art, culture, and heritage. This majestic complex features a blend of modern and traditional architecture, with structures like the Nautanki Mahal, Culture Gully, and the Showshaa Theatre. The Nautanki Mahal hosts extravagant Bollywood-style musicals and theatrical performances, while Culture Gully showcases the diverse cuisines and handicrafts from different states of India. The Showshaa Theatre hosts various events, from stand-up comedy to live music performances, ensuring that there is always something exciting happening at the Kingdom of Dreams.

It is a unique cultural centre in itself. In this Opera theatre, one can have the glimpses of European countries, including Paris, America and England, in one place. There is a cultural

lane where glimpses of different traditions, food & dresses of different states of India are showcased. The food of Indian States is also served to the tourists.

Sheetala Mata Temple

One of the nine Shaktipeeths in the country is Sheetala Mata Devi in Gurugram.

The Sheetla Mata Mandir is dedicated to the Hindu goddess Sheetla Devi. This ancient temple is believed to have healing powers and attracts thousands of devotees from across the country. The serene atmosphere and beautiful architecture of the temple make it a must-visit destination for spiritual seekers and tourists alike. The Religious Temple pond, attracts huge crowd, the year around, especially during Navaratri, around Diwali festival. This temple holds melas two times a year in Chaitra and Ashadh months. The situation like Kumbh is experienced during these Melas.

Sheesh Mahal

Step back in time at the Sheesh Mahal, a beautiful 19th-century palace-turned-museum located in the heart of **Gurugram**. This architectural marvel showcases the royal heritage of Haryana, with intricate carvings, mirrored walls, and stunning frescoes adorning its interiors. The museum also houses a collection of artefacts, paintings, and photographs that offer a glimpse into the region's rich history and culture.

Museum of Folk and Tribal Art

One can delve into the fascinating history of Gurugram by visiting the Museum of Folk and Tribal Art. This museum showcases the rich cultural heritage of various Indian tribes and folk communities, providing a unique insight into their lifestyles, customs, and traditions. With a vast collection of artefacts, paintings, sculptures, and textiles, the museum offers an immersive experience for history and art enthusiasts alike.

Heritage Transport Museum

The Heritage Transport Museum is a must-visit attraction for automobile enthusiasts and history buffs. This one-of-a-kind museum showcases the evolution of transportation in India, with a vast collection of vintage cars, motorcycles, buses, aircraft, and even bullock carts. The museum also features interactive exhibits, allowing visitors to engage with the displays and learn about the fascinating history of transportation in the country.

Sultanpur National Bird Sanctuary

In Gurugram district 46 kilometres from the Capital Delhi, is the Sultanpur National Bird Sanctuary on the Gurugram-Farukhnagar Road. There is also an ancient lake here spread over about 265 acres of land. National & International tourists visit this Place.

The Sultanpur National Park is a haven for nature lovers and birdwatchers. This lush park is home to a variety of migratory and resident bird species, including the Siberian crane, greater flamingo, and purple sunbird. The park also features several walking trails, watchtowers, and a well-equipped visitor centre, making it an ideal getaway for those seeking respite from the bustling city.

Aravalli Biodiversity Park

The Aravalli Biodiversity Park is a unique combination of art, nature, and conservation. Spread across 380 acres, this park is home to a variety of flora and fauna native to the Aravalli Range. The park also features several art installations and sculptures created by renowned artists, adding a creative touch to the natural surroundings. With well-

maintained walking and cycling trails, the Aravalli Biodiversity Park is an excellent destination for a rejuvenating outdoor experience.

Ambience Mall

No visit to Gurugram is complete without indulging in some retail therapy at the Ambience Mall. This expansive shopping complex features a diverse range of local and international brands, catering to every fashion and lifestyle preference. The mall also houses a variety of dining options, a multiplex cinema, and an entertainment zone, making it a one-stop destination for a fun-filled day out with family and friends.

Local Cuisine at the Sector 29 Market

The Sector 29 Market is a gastronomic paradise for **food lovers visiting Gurugram**. This bustling market is packed with an array of eateries, offering everything from delectable street food to fine-dining experiences. Sample mouthwatering dishes like chaat, kebabs, and momos, or indulge in a delicious North Indian meal at one of the many restaurants. The market also features a range of pubs and bars, making it a lively nightlife destination.

Cyber Hub

The Cyber Hub is a popular dining and entertainment destination in Gurugram, offering a diverse range of restaurants, cafes, and bars. This lively venue is perfect for food lovers looking to savour flavours from around the world, with options ranging from Italian and Japanese to Indian and Mediterranean cuisines. The Cyber Hub also hosts various live music and cultural events throughout the year, making it a vibrant and bustling hotspot in the city.

Flyboy Aero Park

One can get adrenaline pumping at the Flyboy Aero Park and can indulge in thrilling adventure sports like paramotoring, ziplining, and off-road biking. This recreational park offers a unique opportunity to experience the joy of flying to soar through the sky, taking in breathtaking views of Gurugram's skyline.

Classic Golf and Country Club

Golf enthusiasts visiting Gurugram can enjoy a round at the Classic Golf and Country Club, a sprawling golf resort nestled in the picturesque Aravalli Range. This 27-hole championship golf course, designed by Jack Nicklaus, offers a challenging yet enjoyable experience for both amateurs and seasoned golfers. The club also features a luxurious clubhouse, swimming pool, and fine-dining restaurant, ensuring a memorable day out on the greens.

Leisure Valley Park

The Leisure Valley Park is an urban oasis in the heart of Gurugram, offering a serene setting for visitors looking to escape the hustle and bustle of the city. Spread across 101 acres, the park features lush green lawns, well-maintained gardens, and a picturesque lake. The park also hosts various cultural events and festivals throughout the year, making it a vibrant and lively destination for locals and tourists alike.

SMAAASH Gaming Centre

For a fun and immersive entertainment experience, head to the SMAAASH Gaming Centre. This state-of-the-art gaming hub offers a variety of virtual reality games, arcade games, and simulators that cater to all age groups. With exciting activities like go-karting, bowling, and trampoline parks, the SMAAASH Gaming Centre guarantees a thrilling day out for the entire family.

Neverenuf Garden Railway

The Neverenuf Garden Railway is a unique attraction that transports visitors to a miniature world set amidst a beautiful garden landscape. This charming venue features a model railway village, complete with intricately detailed miniature buildings, landscapes, and working trains. Visitors can also engage in interactive activities like treasure hunts and boat-making workshops, making it a delightful experience for both children and adults.

Mostly the study area is under agriculture.

The Anticipated Impacts of the Expansion Project on Society

There will be positive impact of the project in the area as mentioned below:

•Employment opportunities, both direct and indirect will be increased
•Communication and transport facilities are expected to improve.
•Education facilities will improve
•Medical facilities are likely to improve
•Cultural & sports activities and improvement of social welfare

The socio-economic status of the local people will improve substantially due to additional employment generation. The land rates will improve in the nearby areas due to the proposed expansion activity.

Educational institutions will also come up and will lead to an improvement in the educational status of the people in the area.

Primary health centers and medical facilities will certainly improve due to the proposed expansion of the project.

The proposed project will result in growth of the surrounding areas by increasing ancillary development and supporting infrastructure. State will get revenues in terms of taxes. Business opportunities for the local community will be available like transport, maintenance & house-keeping contract work etc.

The project will need additional several skilled workers. Besides several semiskilled and unskilled workers will also be required for peripheral activities like transport, logistics, engineering, services, commercial services etc.

The unskilled labor will be deployed from local area only.

CSR/CER ACTION PLAN PROPOSED

1. More emphasis on Education specially job-oriented skill development of the youth. Training arrangements will be made to empower youth with skills so that they can take up their own business.
2. Girl Education. BETI BACHAO AND BETI PARAHO considering the gender inequality. Study material, scholarship will be provided to the needy girls, the deserving girls may be sponsored for higher education.
3. Employment generation activities by forming SELF HELP GROUPS.
4. Contribution towards Maintenance of Roads /Schools/ Temples/Primary hospitals including value addition in terms of public facilities.

5. CER will be dealt with as per EC conditions granted by MoEF&CC.

The budget with the proposed activities will be finalized along with consultation of the local authorities.

Opinion of the People of Surrounding Area Regarding Project

People feel that the project will have very much positive impact on their lives. The project will give them employment, infrastructural development including better living conditions & hope for better future. PP will address the issues of poverty, unemployment etc. under its CSR policies in nearby areas for meeting the social demand. People have positive opinion regarding the project & feel that the project will continue peripheral developmental activities besides CSR & CER activities.

3.14 ECOLOGY AND BIODIVERSITY

Methodology Adopted for the Study of Flora and Fauna

Core Zone: Project site

Buffer Zone: 10 km radii w.r.t. project site

Floral Diversity of the Study Area

The objective of this floral inventory of the study area is to provide necessary information on floristic structure in the study area for formulating effective management and conservation measures. The climatic, edaphic and biotic variations with their complex interrelationship and composition of species, which are adapted to these variations, have resulted in different vegetation cover, characteristic of each region (Ohasi, 1975).

Trees: Total 36 species of trees belong to 19 families are enumerated from the study area. List of trees found in study area is given in table below.

Table 3-16 List of Trees in the Study area

S. NO.	FAMILY AND SCIENTIFIC NAME	VERNACULAR NAME
1	**Mimosaceae**	
1/1	*Acacia nilotica*	Kikar
2/2	*Acacia senegal*	Kumat
3/3	*Acacia leucophloea*	Safed babul
4/4	*Albizia lebbeck*	Kala Siras
5/5	*Albizia procera*	Safed Siris
6/6	*Prosopis cineraria*	Khejri
7/7	*Prosopis juliflora*	pahari kikar
2	**Apocynaceae**	
8/1	*Alstonia scholaris*	Chativan
3	**Boraginaceae**	
9/1	*Cordia dichotoma*	Lasora
10/2	*Cordia myxa*	Chota Lasora
4	**Rubiaceae**	
11/1	*Anthocephalus cadamba*	Kadamb

S. NO.	FAMILY AND SCIENTIFIC NAME	VERNACULAR NAME
5	**Meliaceae**	
12/1	*Azadirachta indica*	Neem
13/2	*Melia azedarach*	Bakain
6	**Fabaceae**	
14/1	*Butea monosperma*	Dhaak
15/2	*Leucaena leucocephala*	Subabool
7	**Caesalpiniaceae**	
16/1	*Cassia fistula*	Amaltas
17/2	*Parkinsonia aculeata*	Ram babul
18/3	*Delonix regia*	Gulmohar
19/4	*Tamarindus indica*	Imli
8	**Capparaceae**	
20/1	*Crataeva adansonii*	Barna
9	**Moraceae**	
21/1	*Ficus glomerata*	Gular
22/2	*Ficus religiosa*	Peepal
23/3	*Morus indica*	Shahtut
24/4	*Ficus benghalensis*	Barh
10	**Oleaceae**	
25/1	*Nyctanthes arbor-tristis*	Harsingar
11	**Tamariscineae**	
26/1	*Tamarix articulata*	Farash
12	**Verbenaceae**	
27/1	*Tectona grandis*	Sagon
13	**Combretaceae**	
28/1	*Terminalia arjuna*	Arjun
14	**Papilionaceae**	
29/1	*Dalbergia sissoo*	Shisham
15	**Myrtaceae**	
30/1	*Eucalyptus hybrid*	Eucalyptus
31/2	*Psidium guajava*	Amrud
16	**Moringaceae**	
32/1	*Moringa oleifera*	Saijan
17	**Mimosaceae**	
33/1	*Prosopis cineraria*	Khejri
34/2	*Prosopis juliflora*	pahari kikar
18	**Leguminosae**	
35/1	*Saraca indica*	Sita ashok
19	**Rhamnaceae**	
36/1	*Zizyphus mauritiana*	Ber

Shrubs: Total 24 species of Shrubs belong to 21 families are enumerated from the study area. List of Shrubs in the study area is provided in table below.

Table 3-17 List of Shrubs in the Study area

S. NO.	FAMILY NAME & SCIENTIFIC NAME	VERNACULAR NAME
1	**Fabaceae**	
1/1	*Acacia jacquemontii*	Babool
2	**Apocynaceae**	
2/1	*Thevetia peruviana*	Pili Kaner
3	**Euphorbiaceae**	
3/1	*Ricinus communis*	Arand
4/2	*Ricinus communis*	Castor
4	**Rhamnaceae**	
5/1	*Ziziphus nummularia*	Mallah
5	**Punicaceae**	
6/1	*Punica granatum*	Anar
6	**Mimosaceae**	
7/1	*Prosopis juliflora*	Prosopis
7	**Annonaceae**	
8/1	*Polyalthia longifolia*	Druping Ashok
9/2	*Annona squamosa*	Sita Phal
8	**Caricaceae**	
10/1	*Papaya coorge*	Papeeta
9	**Musaceae**	
11/1	*Musa sapientum*	Kela
10	**Asclepiadoideae**	
12/1	*Leptadenia pyrotechnica*	Khip
11	**Asparagaceae**	
13/1	*Asparagus racemosus*	Shatawar
12	**Solanaceae**	
14/1	*Datura wrightii*	Dhutura
13	**Palmae**	
15/1	*Phoenix acaulis*	Dwarf Date Palm
14	**Malvaceae**	
16/1	*Hibiscus rosa-sinensis*	Gudhal
15	**Verbenaceae**	
17/1	*Duranta repens*	Duranta
16	**Rutaceae**	
18/1	*Citrus medica*	Neebu
17	**Caesalpiniaceae**	
19/1	*Cassia tora*	Panwar
18	**Apocynaceae**	
20/1	*Carissa spinarum*	Hins
21/2	*Carissa carandus*	Karaunda

S. NO.	FAMILY NAME & SCIENTIFIC NAME	VERNACULAR NAME
19	**Capparaceae**	
22/1	*Capparis decidua*	Karir
20	**Polygonaceae**	
23/1	*Calligonum polygonoides*	Phoa
21	**Papaveraceae**	
24/1	*Argemone maxicana*	Brhamadandi

Herbs: Total 18 species of Herbs belong to 12 families are enumerated from the study area. List of Herbs in the study area is provided in table below:

Table 3-18 List of Herbs in the Study Area

S. NO.	FAMILY NAME & SCIENTIFIC NAME	VERNACULAR NAME
1	**Acanthaceae**	
1/1	*Adhatoda vasica*	Bansa
2/2	*Andrographis paniculata*	Kalmegh
2	**Cucurbitaceae**	
3/1	*Citrullus colocynthis*	Indirain
3	**Solanaceae**	
4/1	*Datura stramonium*	Dhatura
5/2	*Solanum nigrum*	Makao
4	**Cannabaceae**	
6/1	*Cannabis sativa*	Bhang
5	**Poaceae**	
7/1	*Saccharum bengalense*	Kana
8/2	*Cenchrus ciliaris*	Anjan
9/3	*Cenchrus setigerus*	Dhamanq
10/4	*Cynodon dactylon*	Bermuda grass
6	**Lamiaceae**	
11/1	*Oscimum basilicum*	Kali Tulsi
7	**Apocynacae**	
12/1	*Catharanthus roseus*	Sadabahar
8	**Fabaceae**	
13/1	*Mimosa pudica*	Lajwanti
14/2	*Desmodium triflorum*	Creeping Tickfoil
9	**Menispermaceae**	
15/1	*Tinospora cordifolia*	Glo
10	**Malvaceae**	
16/1	*Sida acuta*	Kharuthi
11	**Zygophyllaceae**	
17/1	*Tribulus terrestris*	Bhakhra
12	**Asteraceae**	
18/1	*Ageratum conyzoides*	Chick weed

Faunal Diversity of the Study Area

There was no endangered species observed during faunal survey, list of fauna detail summarized in table below.

Table 3-19 List of Mammals in the Study Area

S. NO.	SCIENTIFIC NAME	ENGLISH NAME	SCHEDULE AS PER WPA 1972
1.	*Herpestes edwardsi*	Common mongoose	Schedule II
2.	*Funambulus penanti*	Three striped squirrel	Schedule IV
3.	*Rattus rattus*	Common house Rat	Schedule V
4.	*Mus musculus*	Common mouse	Schedule V
5.	*Chiroptera*	Bat	Schedule V
6.	*Boselaphus tragocamelus*	Blue Bull	Schedule III
7.	*Felis chaus*	Jungle Cat	Schedule II
8.	*Canis aureus*	Indian Jackal	Schedule II
9.	*Scotophilus heathi*	Common yellow bat	Schedule V

Table 3-20 List of Reptiles in the Study Area

S. NO.	SCIENTIFIC NAME	COMMON NAME	SCHEDULE AS PER WPA 1972
1.	*Uromastyx hardwickii*	Sanda	Schedule II
2.	*Ptyas mucosa*	Yellow rat snake	Schedule II
3.	*Lampropholis guichenoti*	Common Skink	-
4.	*Calotes versicolor*	Common Garden Lizard	-

Table 3-21 List of Birds in the Study Area

S. NO.	SCIENTIFIC NAME	ENGLISH NAME	SCHEDULE AS PER WPA 1972
1.	*Acridotheres fuscus*	Jungle Myna	Schedule IV
2.	*Bubulcus ibis*	Cattle egret	Schedule IV
3.	*Corvus splendens*	House Crow	Schedule V
4.	*Centropus sinensis*	Greater coucal	Schedule IV
5.	*Acridotheres tristis*	Common Maina	Schedule IV
6.	*Dicrurus adsimilis*	Black Drongo	Schedule IV
7.	*Lonchura punctulata*	Indian spotted munia	Schedule IV
8.	*Nectarinia asiatica*	Indian purple sunbird	Schedule IV
9.	*Streptopelia senegalensis*	Little Brown Dove	Schedule IV
10.	*Treron phoenicoptera*	Common Green Pigeon	Schedule IV
11.	*Megalaima zeylanica*	Northern green barbet	Schedule IV
12.	*Turdoides caudatus*	Common Babbler	Schedule IV
13.	*Ploceus philippinus*	Baya Weaver Bird	Schedule IV
14.	*Motacilla maderaspatensis*	Pied Wagtail	Schedule IV
15.	*Halcyon smyrnensis*	White breasted kingfisher	Schedule IV
16.	*Pycnonotus cafer*	Red Vent Bulbul	Schedule IV

17.	*Himantopus himantopus*	Black-winged Stilt	Schedule IV
18.	*Pavo cristatus*	Peafowl	Schedule I
19.	*Passer domesticus*	House Sparrow	Schedule IV
20.	*Psittaciformes sps.*	Parrot	Schedule IV

Interpretation of EB Data:

The village groves and existing vegetation in the area serve as habitats for a small number of wildlife species. The wildlife present primarily consists of common mammals, birds, and reptiles. These animal species are known to inhabit areas alongside human settlements and have a relatively wide distribution. However, the natural vegetation in the study area is in a degraded state, and the density of wild mammals is notably low. Despite this, peafowl are prevalent in the region. To ensure the preservation of schedule-I species, a conservation plan has been prepared and copy of the same is enclosed as **Annexure.**

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CHAPTER-4 : ANTICIPATED ENVIRONMENTAL IMPACT AND ITS MITIGATION MEASURES

4.1 INTRODUCTION

4.1.1 Objective

Any developmental activity in its wake will bring about some impacts associated with its origin, which can be broadly classified as reversible, irreversible, long and short-term impacts. In this chapter, an endeavor has been made to identify various Environmental Impacts associated with the plant construction, operation and other activities wherein, there may be a chance of pollution. Based on the possible worst case emissions and waste generation from the proposed project and also taking into consideration the baseline environmental status at the proposed project site and surroundings, the environmental factors that are likely to be affected (Impacts) are assessed and identified.

Both beneficial (positive) and detrimental (negative) impacts are accounted for this purpose. The prediction of impacts helps in the preparation of a sound Environmental Management Plan which has to be executed during the on-going activities for the proposed project to minimize the adverse impacts on the environmental quality. In some case, mathematical models were used to quantitatively describe the cause-effect relationships between the sources of pollution and different components of environment. In case if the mathematical models are not available or it is not possible to identify/validate a model for particular situation, predictions would be made through available scientific knowledge.

The potential impacts on the environment from the proposed project are identified based on the nature of the various activities associated not only with the project implementation and operation, but also on the current status of the environmental quality.

The objectives of impact identification are as follows:-

- To ensure compliance with regulations
- To provide a comprehensive coverage of a full range of impacts, including social, economic and physical
- To distinguish between positive and negative, large and small, long term and short term, reversible and irreversible impacts
- To identify secondary, indirect and cumulative impacts as well as direct impacts and
- To consider impacts within the constraints of an area's carrying capacity.

4.1.2 Identification of Impacts

Pollutants generated from the development of the project during both the construction and operational phase will be solid, liquid and gaseous in nature. Also, the generation of pollution could be continuous, periodic or accidental. Sources of pollutants and their characteristics during the construction and operation phase are given below in **Table 4-1.**

Table 4-1 Pollution Sources

S. No.	Activity/Area	Pollutant	Pollutant Characteristics	Frequency
CONSTRUCTION PHASE				
1.	Ground excavation and leveling	Air emissions: PM_{10}, $PM_{2.5}$ CO, NOx, SO_2	Dust from construction Activities and excavation. Particulates, NOx and CO from vehicle exhaust	It was temporary during the Construction phase Only-bulk of the emissions are expected from ground working and leveling activities.
		Earth / solid waste	Solid waste from Construction activity and excavation.	Periodic.
		Noise	Noise generatedfrom construction equipment and machinery	It will be Temporary during the initial construction phase.
2.	Labour Camps	Sewage	Sewage generated from temporary labour camps on site	It will be Temporary – during the initial construction phase
		Solid Waste	Solid Waste generated from temporary labour camps on site	It will be Temporary – during the initial construction phase
OPERATION PHASE				
1.	Vehicular movement	Air emissions and noise	Vehicle exhaust emissions	Continuous/ Periodic
2.	Diesel power Generators	Air emissions	SO_2, NOx, PM, CO from fuel burning	Continuous
		Noise	Noise due to running of Equipment	Continuous
		Hazardous waste	Used Oil Generation	Periodic,during oil changes
3.	Domestic use	Wastewater		Continuous
		Domestic Solid waste	Garbage / Food waste	Continuous
4.	Project area including common toilets	Sewage	Domestic wastewater	Continuous
		Domestic Solid Wastes	Bio-degradableand non-biodegradable wastes	Continuous–small quantities
5.	Diesel Storage	Solid waste	Settled sludge during tank cleaning	Occasional

6.	Maintenance/ housekeeping	Wastewater	Floor washing	Continuous
		Solid waste	Used equipment parts and garden wastes	Continuous
7.	Vehicle Parking Area	Oil Spills	Minor oil leaks in parking lot	Continuous–small quantities
8.	Storm water drain	Wastewater	Contamination discharge from site – Mainly suspended solids	During rainy season

4.2 IMPACT IDENTIFICATION

The primary function of an environmental impact assessment study is to predict and quantify potential impacts, assess and evaluate the magnitude and their importance in order to develop an environmental management plan to mitigate the impacts. Environmental impacts could be positive or negative, direct or indirect, local or regional and also reversible or irreversible. The areas of environmental concern for which the impacts and their predictions are taken into consideration are mainly:

- Air Environment
- Water Environment
- Noise Environment
- Land Environment
- Biological Environment
- Socio economic Environment

The impacts can be further categorized as positive impacts and negative impacts depending upon their nature, potential and magnitude.

This chapter discusses the incremental environmental impacts on the environmental parameters during the construction and operation phases of the project. The potential impacts have been identified in Table 4-2. The mitigation measures for the adverse impacts are discussed in Chapter 6.

Table 4-2 Identification of potential impacts during construction & operation phase

S. No	Components	Aspect	Potential Impact
Construction Phase			
1	Ambient Air Quality	Dust emissions from site preparation, excavation, material handling and other construction activities at Site.	Minor negative impact inside the premises. No negative impact outside project site. Short term
2	Noise	Noise generated from construction activities, operation of construction Equipment and traffic.	Minor negative impact near noise generation sources inside premises.

			No significant impact on ambient noise levels at sensitive receptors. Short term
3	Water quality	Surface runoff from project site Oil/fuel and waste spills. Improper debris disposal Discharge of sewage from labour camp.	No significant negative impact. Short term
4	Landuse and Aesthetics	Land development	Minor positive impact
5	Topography& Geology	Site development	No Significant Impacts
6	Soil	Construction activity leading to Topsoil removal and erosion.	Minor negative impact
7	Ecology Flora & Fauna	Habitat disturbanceduring construction activity	Minor negative impact short term
8	Socio-economy	Increased job opportunity for locals. Economy related to commercial real estate development, material supply etc. expected to boom.	Overall positive impact
9	Traffic Pattern	Truck movement and possibility of traffic congestion outside site on Gurugram Faridabad Road	Minor negative impact
OPERATION PHASE			
1	Ambient Air Quality	Particulate and gaseous emissions from DG sets and vehicle movement	Minor Negative impact
2	Noise	Noise from vehicle movement and operation of diesel generator sets during power failure.	Minor negative impact inside premises. No significant impact at sensitive receptors.
3	Water Quality	Oil/fuel and waste spills. Discharge of sewage. Discharge of contaminated storm Water	No significant adverse impact
4	Water usage	Use of fresh water at peak demand	Minor negative impact
5	Soil	Storage and disposal of solid and hazardous wastes Discharge of sewage Fuel and material spills Pesticides use	No negative impact

6	Ecology Flora & Fauna	Landuse change Discharge of wastewater to surface water bodies	No negative impact
7	Socio-economy	Increased job opportunity	Overall positive impact
8	Traffic Pattern	The proposed project will increase the load to predicted traffic during peak hours.	Moderate Negative Impact

4.2.1 Environmental Aspects of Development & Construction Operation

- Generation, storage and disposal of construction wastes
- Noise pollution from project site, machinery, equipment's and vehicle movement
- Air pollution from project site, machinery, equipment and vehicle movement
- Generation and discharge of wastewater
- Impact on ecology
- Consumption of resources such as water, electricity, and diesel
- Physical change in landscape due to earth work excavation and related activities
- Soil erosion caused due to loss of vegetation and other construction activities

4.2.2 Environmental Aspects of Operation Phase

- Discharge of Sewage Water
- Disposal of Solid Waste generated
- Increase in noise level due to transport & running of vehicles.
- Consumption of water and impact on water resources
- Impact on traffic
- Storm water during rains

Various activities from the proposed project are likely to have some negative as well as positive impact on the environmental constituents during its construction as well as operational phase. The impact assessment matrix given below in Table 4.3 reveals the impact associated with each activity of the project on various environmental parameters during construction and functional phase respectively before any mitigation measures are implanted. To assess the severity of the impacts, they are categorized as follows:

Table 4-3 Potential Environmental Impacts of the Project

Environmental Parameters	Nature of Potential Impacts during Operation Phases										
	Local	Regional	Short Term	Long Term	Reversible	Irreversible	Adverse	Beneficial	No Impact	Significant	Insignificant
Topography	√								√		
Drainage	√								√		
Soil	√								√		
Water Resources	√		√		√		√				√
Water Quality	√								√		
Land Use	√			√		√		√		√	
Air Quality	√		√		√		√				√
Noise	√		√		√		√				√
Flora	√			√		√		√		√	
Fauna	√			√		√		√		√	
Employment	√			√		√		√		√	

4.3 ASSESSMENT OF THE ENVIRONMENTAL IMPACTS DURING CONSTRUCTION & OPERATION PHASE

4.3.1 Land Environment

Anticipated Impacts

During Construction Phase: In the project site, soil will be excavated from the project location for road construction as well as for other infrastructure services. During the disposal of redundant overburden, soil of filling area will be covered and lost permanently. Impact on the natural drainage system will also be there.

During the operation phase: The soil may get polluted/ contaminated from littering of various kinds of waste generated within the project such as food items, paper, wood pieces, paints, pesticides, oil & grease etc. However, owing to the proposed solid waste management system, no significant impact is anticipated.

Mitigation Measures:

- The soil excavated during construction will be first temporarily stored in an area earmarked and then used to fill up low lying area in and around the project and rest of the soil will be transported by road to fill up low lying areas elsewhere
- Proper drainage system will be provided to deal with the storm water in case of rain. The impact on soil during construction phase will be marginal and reversible in the nature
- It is proposed to remove vegetative cover only from the specific site on which construction is to take place and allowing minimal disturbance to the vegetation in adjacent areas
- Land clearing activities will be confined only to necessary areas. The top soil will be stripped from construction areas and stockpiled for later reuse in landscaping
- The number, frequency and area of movement of heavy machinery will also be restricted.

During Operation Phase: to ensure against any chances of soil pollution, it is imperative to establish a well-planned solid waste collection system covering all areas of the project site. An identified area was designated for storage and segregation of the wastes which will be treated/ disposed.

4.3.2 Water Environment

Surface Water Quality

No significant impact is anticipated as there is no water body in the vicinity of the project site. Therefore, no mitigation measures are suggested during Construction & Operational Phase of the project.

Ground Water Quality

Anticipated Impact:

During development and construction phase: No hazardous chemical and material will be used in the project. Debris and wastes generated during this phase will be collected and disposed suitably. Therefore, possibility of contamination of ground water will be negligible. Hence, no impact is anticipated on the ground water quality during the construction phase.

During Operational Phase: The storm water from the site will be used for recharging groundwater resources after adequate treatment of the storm water through oil, grease traps and filtration. The wastewater of 2376 KLD (1472 KLD from Residential, Commercial & Community plots and 904 KLD from Industrial Plots) from the site is proposed to be used for landscaping and flushing after adequate treatment in Sewage Treatment plant. Hence, no adverse impact is anticipated on the groundwater quality from the project.

Mitigation Measures:

A well-planned solid waste management plan will be followed during the construction phase including timely collection, segregation and disposal as per legal requirements.

Best Solid waste management practices will be adopted and followed to prevent groundwater pollution.

4.3.3 Air Environment

Air Emissions Sources

Emissions Source: The potential sources of air emission during the construction phase of the project are as follows:

- Dust from earth works (during site clearance and preparation)
- Emissions from the operation of construction equipment and machines
- Fugitive emissions from vehicles running to site
- Fugitive emissions during the unloading of material at the site
- Air emissions other than dust arise from combustion of hydrocarbons. The pollutants of concerns are NO_2, SO_2, CO, particulate etc.

Prediction of Impacts

Vehicular emissions and DG set emissions are the major sources of air pollution. During Operation phase, cars, scooter/motorcycle will be owned by the residents of colony. Ground Level Concentration of pollutants (as added by the project) will depend upon the following:

- Emission of pollutants from additional traffic on the roads due to the project
- Meteorological conditions
- Emission sources from D.G. Sets

PM, NO_2, SO_2 and CO will be the main pollutants of primary concern released from traffic movement, DG sets emissions. The dispersion of vehicular emissions would be confined within limited distance from the road and concentration will decrease with the increase in distance from road as worked out by the line source model. It was anticipated that the

contribution of vehicular emissions from the exhaust in ambient air quality will be marginal as Pollution Under Control (PUC) Certified vehicles and branded vehicles with low sulphur diesel will be used. Ground Level Concentration (GLC) of pollutants is found to be well within the stipulated National Ambient Air Quality Standards due to traffic movement and vehicles used inside the premises. Air modeling for DG set using AERMOD Cloud Version 18 has been done for prediction of impacts caused by DG sets operation during Operation Phase. Stack & emission data was used as per design value provided by standard make and stipulated standards. Other primary data used as input for model were hourly meteorological data of Wind speed & direction, temperature, cloud amount and mixing height. Mixing height used in the model was taken from secondary data source "Atlas of Hourly Mixing Height Assimilative Capacity of Atmosphere in India published in 2008 by IMD, Delhi". Hourly meteorological monitored at site during study period data was compared with long term data available from the nearest IMD Station.

There is provision of 2no. of DG set of total capacity 1100kVA for Commercial Facility which includes 1 x 750kVA +1x 350 kVA and 2no. of DG set of total capacity 1750 kVA for Common Services which includes 1 x 750kVA +1x 1000 kVA are proposed for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

In the project, D.G. set will be used only during power failure and low sulphur diesel will be used as fuel to minimize SO_2 emission. Incremental load in the ambient air environment will be found to be very low as given in the report. An adequate stack height for D.G. sets is proposed as per the stipulated guidelines of Central Pollution Control Board (CPCB)/ National Building Code Manual to facilitate adequate dispersion of pollutants and to minimize the impact on Ambient Air Quality under the influence of local meteorology.

Meteorology – Hourly Meteorological data of wind speed & direction, temperature, cloud amount and rainfall were monitored at site for 3months for the dispersion model. Wind rose was prepared in sixteen directions as per standards. It was observed that wind direction from East to West and during the study period. Average wind speed was 4.0 m/s during study period.

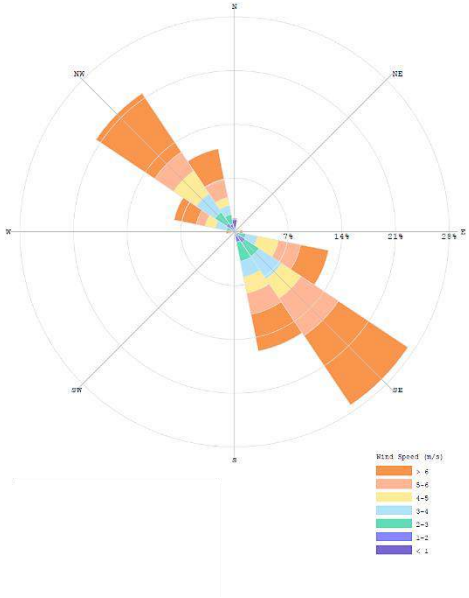

Figure 4-1 Windrose Diagram

Model details and Framework of Computation:

The predictions for air quality during operation phase was carried out using CPCB/MoEFCC approved USEPA, Industrial Source Complex (AERMOD Cloud Version 18) Dispersion model developed by the US Environmental Protection Agency (USEPA) for prediction of pollutants dispersion from single or multiple point sources using emission and hourly meteorological data of the study period. Assumption used in the model was as follows:

The plume rise is limited to that of the mixing layer as published by IMD in the Catalogue of Atlas of Mixing Heights in India for the site:

- Stack down wash is not considered.
- Flat terrain is used for computations.
- It is assumed that the pollutants do not undergo any physico-chemical transformation
- Chemical and scavenging process occurred in the atmosphere in the pollutants released at the stack exit is not considered.
- Prediction is based on single/multiple point sources, pollution released at stack exit and dispersed on the ground under influence of local meteorological conditions during the season.

AERMOD Cloud Version 18 was used to predict GLC caused by a single point source (1 stack) at each receptor of 100 m x 100 m of grid network covering total area of 2000 m x 2000 m around the proposed source with stack & emission values and 1-hourly meteorological data. It was observed that SO_2, NO_2, CO, PM_{10} & $PM_{2.5}$ were significant pollutants released from the fuel of the D.G. sets. Emission of PM_{10}, $PM_{2.5}$, CO and SO_2 were found insignificant with low values. In this proposed project, NO_2 was the worst affected pollutant released into the atmosphere. 24-h GLC were predicted for SO_2, NO_2, CO and PM.

Table 4-4 DG Stack and Emission Details

Stack No.	DG set Capacity (kVA)	Stack & Flue details				Pollutants Emission				
		Height (m)	velocity (m/s)	Temp (K)	Dia (m)	NO_2 (g/s)	SO_2 (g/s)	PM_{10} (g/s)	$PM_{2.5}$ (g/s)	CO (g/s)

1.	2*750	30	25	773	0.332	0.274	0.006	0.0075	0.015	0.063
2.	1*350	30	25	773	0.176	0.595	0.0013	0.003	0.002	0.0136
3.	1*1000	30	25	773	0.271	0.084	1.148	1	0.64	0.04
Total Emission in g/s from 4no. of DG sets of total capacity 2850 kVA [(2 x 750 + 1 x 350 + 1 x 1000 kVA)]						0.953	1.155	1.0105	0.657	0.116

Discussion of Results

AERMOD - Dispersion model was used to predict GLC of all pollutants; SO_2, NO_2, PM_{10}, $PM_{2.5}$ and CO with stack & emission and hourly meteorological data. 24-hours average maximum Incremental GLC of NO_2, SO_2, PM_{10}, $PM_{2.5}$ and CO were 0.66 µg/m³, 0.07µg/m³, 0.68µg/m³, 0.43 µg/m³ & 0.73 µg/m³, occurred respectively at (700m distance) from the DG sets occurred at the same distance. It was found that GLC of SO_2 was less than the permissible limit of 80µg/m³ (as per CPCB guidelines) under worst meteorological condition with meteorological data monitored from 1st Dec,2023 to 29th Feb 2024.

Conclusion

High to moderate wind speed and minimum stack height of 30 m facilitates dispersion at the distance of 500 m under the influence of local meteorology.

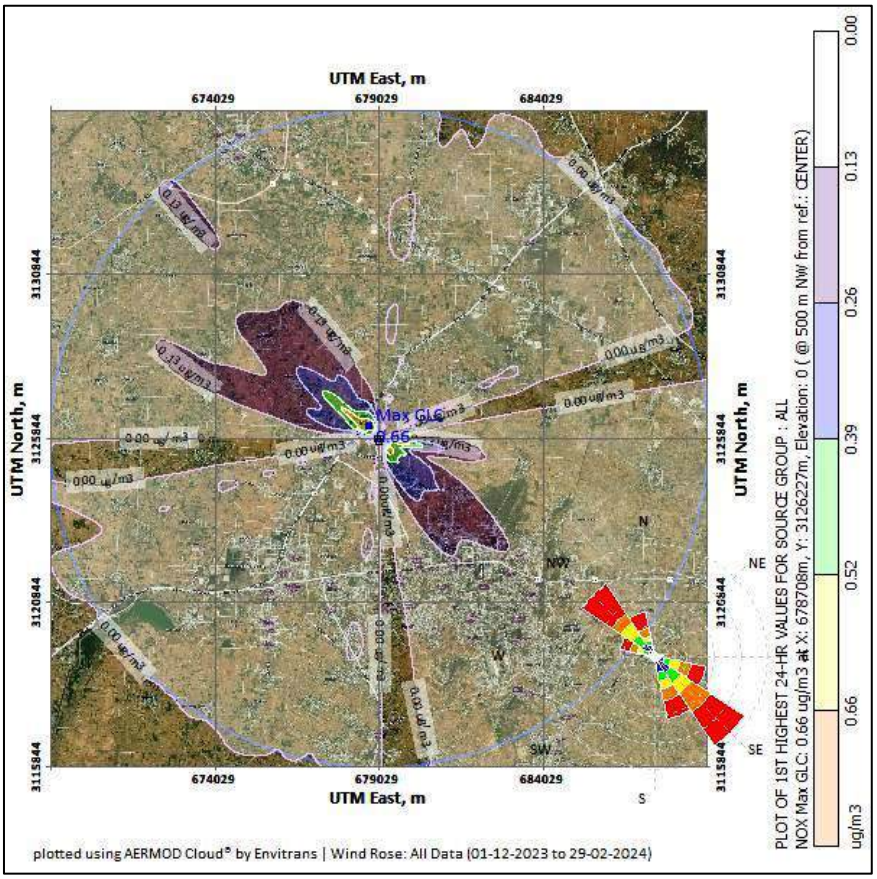

Figure 4-2 Spatial distribution of 24-hours average NO_2 concentrations (µg/m³)

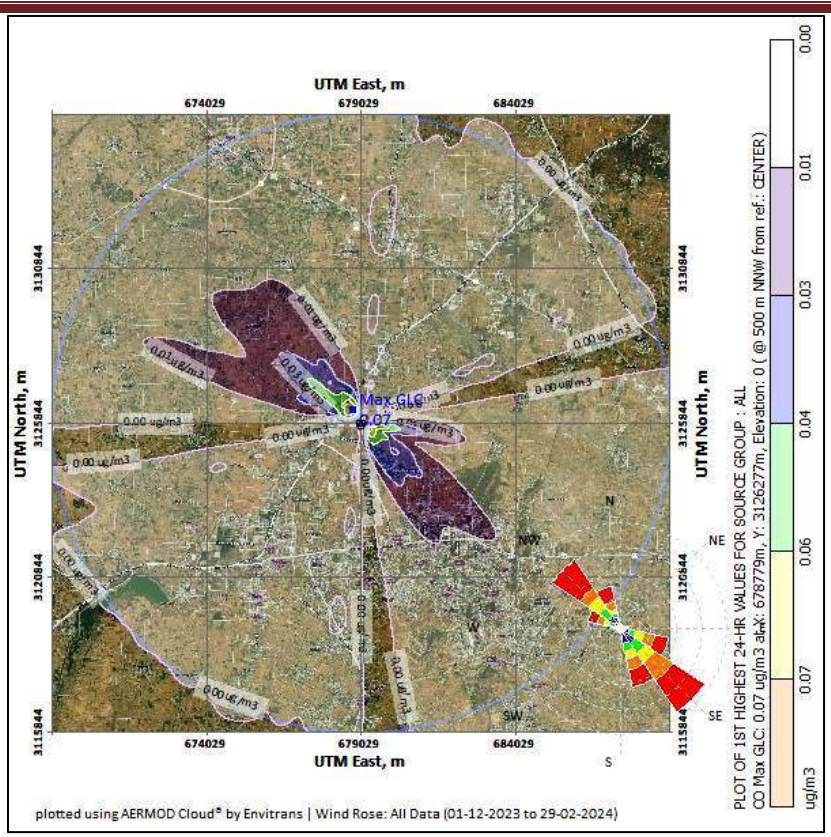

Figure 4-3 Spatial distribution of 24-hours average CO concentrations (µg/m³)

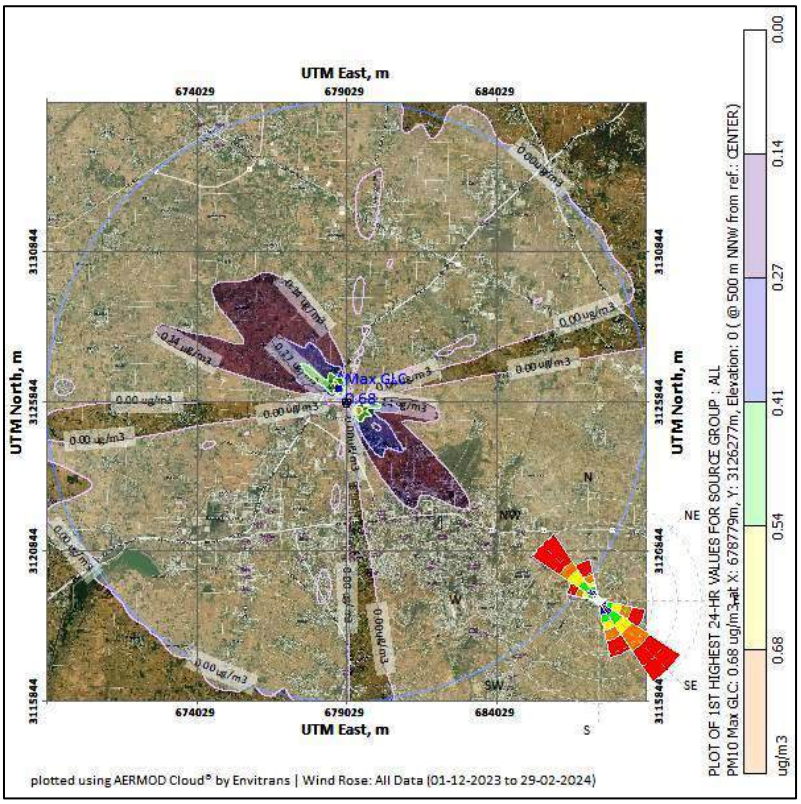

Figure 4-4 Spatial distribution of 24-hours average PM_{10} concentrations (µg/m³)

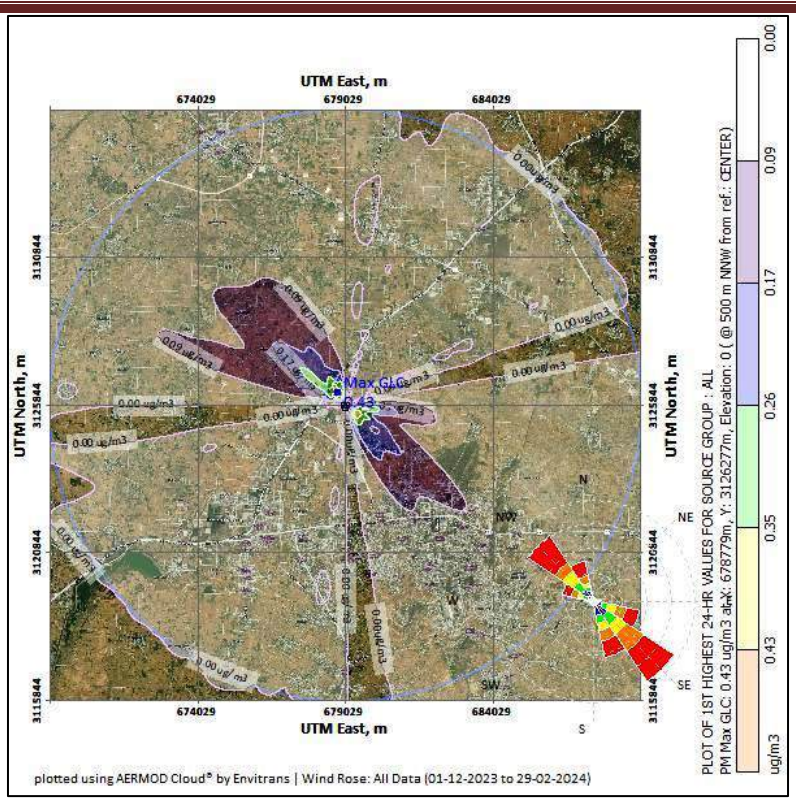

Figure 4-5 Spatial distribution of 24-hours average $PM_{2.5}$ concentrations (µg/m³)

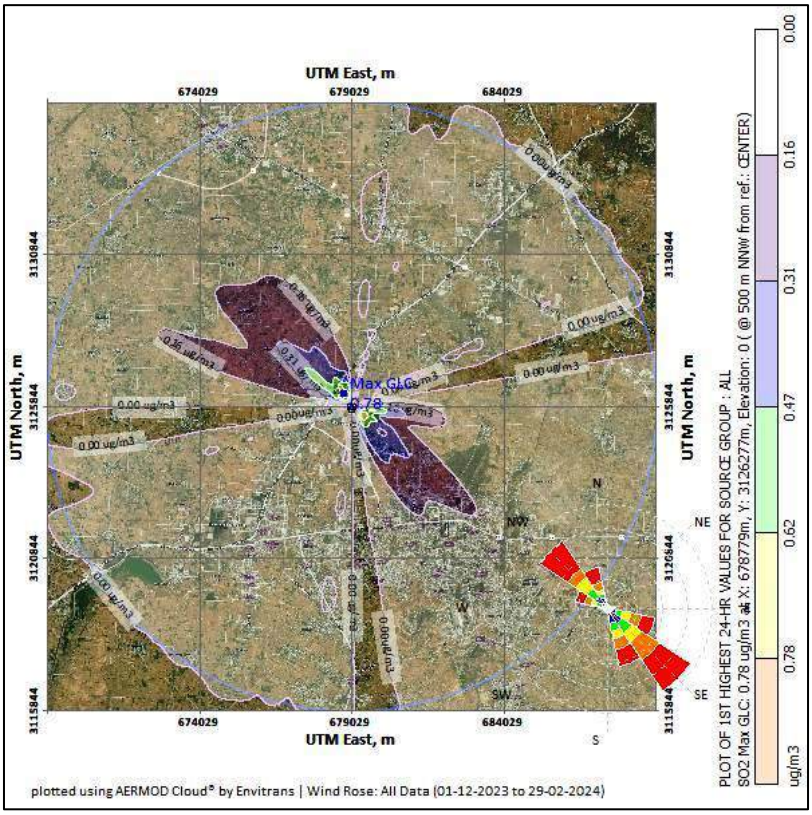

Figure 4-6 Spatial distribution of 24-hours average SO_2 concentrations (µg/m³)

Mitigation Measures: The project proponent will develop a green belt inside the premises of the project site and along the internal road, which will work as barrier for the movement of pollutants and help in pollution control.

Native plants species will be selected for peripheral and avenue plantation.

4.3.4 Noise Environment

During the construction phase: Noise will be generated from the various sources. Some major sources of noise generation at project are listed here under:

- Generation of noise during movement of vehicles carrying materials, loading & unloading activities
- Generation of noise from excavation machines, concrete mixer and other construction machines
- Generation of noise during the operation of D.G. sets
- Generation of noise during concreting, hammering etc.

All the above-mentioned sources of construction activities within the project would be intermittent and experienced occasionally. It may also be noted that most of the construction activities would be carried out only during the daytime.

ANTICIPATED IMPACTS:

Construction Phase:

- Noise due to demolition / construction activities
- Impact due to present and future transportation activities

During Operational Phase: The main sources of noise from the project are running of D.G. Sets and vehicular traffic. D.G. Sets will provide emergency electricity supply during power failure. This will be intermittent and for short durations. Hence, no major impact on noise environment is anticipated.

MITIGATING MEASURES:

Construction Phase: To minimize impacts of noise generation from construction activities, the workers are being provided with earmuffs and other protection devices. D.G. Sets with proper acoustic enclosure for controlling noise would be installed.

Operational Phase: D.G. Sets will be installed in DG room in acoustic enclosure to control the noise generated within 25 dB (A) insertion loss or for meeting the ambient noise standard whichever is on higher side as per E(P) Act, GSR 371 (E) and its amendments. The traffic noise will diminish within a short distance from the source of origin. Honking within the site will be discouraged. Proposed rows of plantation will further restrict the noise.

4.3.5 Biological Environment

Anticipated impact:

During Construction Phase: There is no loss of forestland due to the construction of the Industrial Plotted Colony Project. No tree felling is involved, as the site is devoid of

vegetation. Birds and other domesticated biodiversity observed near the project site are common and already adapted to thrive in human - colonized habitats.

The project will not have any major negative ecological impact. Green belt/greenery shall be developed along most of the periphery of the project area as well as along roads.

During Operational Phase: The green area will be developed with local species that will attract local bird and insect species. The project will add to the greenery and beauty of the region. Green belt will reduce carbon dioxide emissions caused by significant amount of energy consumption due to lighting, heating, cooling and air condition as well as fixed and mobile material handling equipment 2no. of DG set of total capacity 1100kVA for Commercial Facility which includes 1 x 750kVA +1x 350 kVA and 2no. of DG set of total capacity 1750 kVA for Common Services which includes 1 x 750kVA +1x 1000 kVA will be placed in DG room having acoustic enclosure and adequate stack height will be provided with D.G. sets as per CPCB guidelines to provide sufficient dispersion of pollutants. Therefore, there will be no effect on the ecology of the core and buffer zone.

MITIGATION MEASURES:

It is proposed to develop green area in the project site to improve the aesthetics of the area which will also help in reduction of air pollution, noise pollution and provide suitable habitat for local birds and animal species.

4.3.6 Socio Economic Environment

Economic impacts:

Relatively long-lived economic impacts of the construction phase are likely to be experienced in local area for the duration of construction phase of 1-2 years as workers make everyday purchases from local traders in nearby areas. This is likely to give a short-lived stimulus to the traders that may disappear as soon as the construction is complete.

Noticeable, flow-on economic impacts will be experienced in other sectors of economy as a result of purchase of construction materials and the payment of wages and salaries to the personnel engaged in the construction of project.

Once the construction of the Industrial Plotted Colony project is complete, there will be some long-term positive impact on the economic structure of the area. People in the area will get direct and indirect employment opportunities and other benefits from the project.

Therefore, overall positive impact is anticipated on economy of the area due to construction activity of the Project.

Mitigation measures:

To further improve the socio-economic conditions of the area, it may be proposed to employ mainly local people as workers. Much of the maintenance works may also be made with local companies and purchase of new parts from the local market.

4.3.7 SOLID WASTE

Anticipated impact:

During Construction Phase: The construction and demolition waste includes debris, concrete (often recycled and reused at the site), steel and other metals, pallets, packaging and paper products, brick, etc. All waste generated during the construction phase shall be collected and segregated for disposal as per the norms.

During Operation phase: The solid waste generated from the project shall be approx. 18139 kg/day during operation for which calculations are given below:

Table 4-5 Calculation of Solid Waste

S. No.	Description	Occupancy	Norms (kg/capita/day)	Waste Generated (kg/day)
1.	**Domestic Solid Waste for Residential plots**			
	• Residential plots	17316	0.5	8658
2.	**Domestic Solid Waste for Industrial plots**			
	• Industrial Plots	23035	0.25	5759
3.	Staff (Residential Maintenance, Community, Commercial, & Industrial)	2070	0.25	518
4.	Visitors(Residential, Community, Commercial, & Industrial)	19060	0.15	2,859
5.	Horticultural Waste (9.20 acres)	@ 0.2 kg/acre/day		1.84
6.	STP Sludge	Sludge generated x 0.35 x B.O.D difference/1000		343.434
Total Solid Waste Generation = 18,139kg/day				

Mitigation measures:

After waste segregation, Biodegradable waste will be composted by the use of mechanical composter and the compost will be used as manure. Recyclable wastes will be sold off to scrap dealers and vendors, while inert wastes will be disposed-off in landfills. Hazardous wastes will be disposed-off as per the provisions of the Hazardous Waste Rules, 2016 through a local approved vendor.

4.4 CONCLUSION

As discussed, the project has no major adverse impact on surrounding environment; it has thus become quite evident that this project is not likely to cause any significant impact on the ecology of the area, as adequate preventive measures will be adopted to contain the various pollutants within permissible limits. Positive impact will be on socio economic environment.

- Green belt development will be taken up as an effective pollution mitigating technique.
- Adequate stack height for DG sets for better dispersion of air pollutants will be provided.

- Soil conservation measures associated with improved construction techniques would minimize the impacts. Topsoil will be stacked separately and will be used for green belt.
- Proper upkeep and maintenance of vehicles will reduce the impact on air environment. Domestic waste as well as construction debris management will be done properly.
- Adequate arrangements for proper drainage and disposal of wastewater
- Rainwater harvesting
- The wastewater will be treated in STP of 3060 KLD capacity.

Thus, with the effective implementation of the Environment Management Plan (EMP), the project will not have any significant negative impact on the environment.

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CHAPTER-5 : ANALYSIS OF ALTERNATIVE (TECHNOLOGY & SITE)

This Chapter is not applicable as it has not been prescribed in the Standard ToR issued by SEAC, Haryana.

CHAPTER-6 : ENVIRONMENTAL MONITORING PROGRAM

6.0 INTRODUCTION

Environmental Monitoring is an essential tool for sustainable development and ensuring effective most implementation and monitoring of Environmental management plan and mitigation measures. The monitoring and evaluation of the management measures envisaged are critical activities in implementation of the Project. Monitoring involves periodic checking to ascertain whether activities are going according to the plans. It provides the necessary feedback for project management to keep the program on schedule. The purpose of the environmental monitoring plan is to ensure that the envisaged purpose of the project is achieved and results in desired benefits.

To ensure the effective implementation of the proposed mitigation measures, the broad objectives of monitoring plan are:

- To evaluate the performance of mitigation measures proposed in the EMP.
- To evaluate the adequacy of Environmental Impact Assessment
- To suggest improvements in management plan, if required
- To enhance environmental quality
- To implement and manage the mitigative measures defined in EMP.
- To undertake compliance monitoring of the proposed project operation and evaluation of mitigative measures

A detailed monitoring of emissions and effluent sources for different environmental parameters will be carried out as per the present norms and any further notification/direction from Haryana State Pollution Control Board (HSPCB), Central Pollution Control Board (CPCB) and MoEF&CC. Monitoring methodologies will follow standard methods prescribed by CPCB, Bureau of Indian Standards (BIS), USEPA, AWWA etc.

6.1 PARAMETERS TO BE MONITORED

- Ambient Air Quality
- Stack Emission
- Work zone Air quality
- Surface water and Ground Water Quality
- Noise Level

6.1.1 Ambient Air Quality

It is necessary the monitor the air quality at the boundary of the project site specifically with respect to particulate matters. Ambient air quality monitoring stations in and around the premises will be done as per direction by Haryana State Pollution Control Board (HSPCB). The parameters monitored include the parameters as per National Ambient Air Quality Standard, 2009.

Table 6-1 Ambient Air Quality – Frequency and Parameters

Description	Number of Monitoring Stations	Frequency
Ambient Air Quality	2 (upwind and downwind direction inside the plant boundary	Weekly
Parameters – PM_{10}, $PM_{2.5}$, SO_2, NO_2		

Table 6-2 Instruments Required for Environmental Monitoring

	Name of Instruments	Number	Purpose
1	PM_{10}& $PM_{2.5}$ Sampler	3	Ambient Air Quality Monitoring
2	Spectrophotometer	1	Analysis of air and water
3	pH meter	1	pH measurements
4	Conductivity meter	1	Conductivity measurement
5	DO Meter	1	DO measurement
6	BOD Incubator	1	BOD measurement
7	COD Digestion Kit	1	COD measurement
8	Refrigerator	1	Storing samples
9	Electronic Balance	1	Weighing
10	Oven	1	Drying
11	Desiccator	1	Desiccation

6.1.2 Effluent Quality

The total waste generated during the operation phase of the project will be treated in the Sewage treatment Plant of 3060 KLD within the project premises and all the treated water will be reused for the flushing & landscaping activity.

Table 6-3 Water Quality – Frequency and Parameters

Component	Location	Parameter	Monitoring & Analysis Method	Monitoring Frequency
STP Treated water	STP	pH, TDS, DO, COD, BOD & O&G	Standard Methods of APHA	Once during pre-monsoon and once during post monsoon

6.1.3 Noise Monitoring

Noise levels in the work zone environment such as project site should be monitored and shall be compared with as per the requirement of Occupational Safety and Health Administration (OSHA) Standards.

Monitoring of Ambient noise levels will be monitored once every quarter during day time (6 AM to 10 PM) and night time (10 PM to 6 AM) at Project site boundary.

6.2 PLANTATION

Total green area measures **37,241.664** m^2. Plantation will be done at project boundary as well as at peripheral areas & organized green would be developed on land available between blocks.

The indicative list of trees and plants proposed to be planted are given in **Table 6.4.**

Table 6-4 Proposed Plantation List

S. No.	Botanical Name	Common Name
1.	Acacia leucophloea	Raunj
2.	Albizzia lebbek	Siris
3.	Azadirachta indica	Neem
4.	Anogeissus pendula	Dhauk
5.	Bombax ceiba	Semal
6.	Boswelli aserrata	Salai
7.	Butea monosperma	Dhak
8.	Cassia fistula	Amaltas
9.	Cordia dichotoma	Lasura
10.	Dalbergia sissoo	Shisham
11.	Holoptelia integrifolia	Papri
12.	Kigelia pinnata	Kigelia
13.	Melia azedarach	Bakain
14.	Pongamia pinnata	Papri, Karanj
15.	Prosopis cineraria	Jand, Jandi
16.	Salvadora oleoides	Jal
17.	Terminalia arjuna	Arjun
18.	Bauhinia variegata	Kachnar
19.	Ficus religiosa	Peepal
20.	Ficus bengalensis	Bad

No. of trees required = 1 tree/80 sq.m. of plot area =5,49,258.716/80 = 6866 Nos
No. of trees proposed to be planted = 6,870 trees.
As per OM dated 24.07.2024 we will plant one additional tree "EK Ped Maa Ke Naam."

There are few trees present at the project site which will be transplanted in the greenbelt.

6.3 OCCUPATIONAL HEALTH & SAFETY MONITORING

Occupational health and safety monitoring programs shall verify the effectiveness of prevention and control strategies. The selected indicators shall be representative of the most significant occupational, health, and safety hazards, and the implementation of prevention and control strategies. The performance and achievements of the OHSMS responsible for all management of all environments, Health & Safety aspects shall be re-assessed on annual basis. The occupational health and safety-monitoring program shall include: -

- Safety inspection, testing and calibration: Project Proponent shall carryout inspection and testing of all safety features and hazard control measures for plant operation. This shall include regular inspection and testing of all safety features focusing on engineering and personal protective features, work procedures, places of work, installations, equipment, and tools used. The inspection shall verify that issued personal protective equipment (PPE) continues to provide adequate protection and is being worn as required.
- Surveillance of the working environment shall be carried out.
- Surveillance of workers health: When extraordinary protective measures are required, workers shall be provided appropriate and relevant health surveillance. M/s Signatureglobal India Limited, will provide appropriate and relevant health surveillance to workers with special emphasis to the dust prior to first exposure and at regular intervals thereafter.

6.4 TRAINING

Training activities for employees and visitors shall be adequately monitored and documented (curriculum, duration, and participants). Emergency exercises, including fire drills, shall be documented adequately. Service providers and contractors shall be contractually required to submit to the authorized vendor (for training) adequate training documentation before start of their assignment.

6.5 PERIODIC PREVENTIVE MAINTENANCE

A detailed maintenance schedule shall be drawn for all pollution control systems. The maintenance shall be done strictly as per schedule and guidelines furnished by plant manufacturer. All pollution control, monitoring and safety equipment shall be periodically checked and calibrated.

6.6 SOCIO-ECONOMIC DEVELOPMENT

The setting up of the project will improve the socio-economic conditions in the surrounding area. The proposed project will further improve the infrastructure; economic conditions

thus further improve the socio-economic development. It is suggested that M/s Signatureglobal India Limited, should have structured interactions with the community to disseminate the measures taken by them and to elicit suggestions for overall improvement for the development of the area.

6.7 BUDGET AND PROCUREMENT SCHEDULE

On regular basis, Environment Management Cell (EMC) will inspect the necessity and availability. The EMC will make appropriate budget for the purpose. Regular record review for any change in financial requirement of environment management will be done and appropriate budgetary provisions will be made. Along with other budgets, Budget for environmental management will be prepared and revised regularly as per requirement. The budget will include provisions for:

- Environmental Monitoring Program
- Greenbelt development
- Social and Environmental Welfare and Awareness programs / training (CER)
- Annual Environmental Audit

Table 6-5 Cost of Environmental Monitoring Program

S. No.	Particulars	Parameters	Frequency	Approx. Recurring cost / Annum (INR Lakh)
1.	Ambient Air Monitoring	$PM_{2.5}$, PM_{10}, SO_2 & NO_2 & CO	Every Six Month	2.0
2.	Stack Emission Monitoring	$PM_{2.5}$, PM_{10}, SO_2, NO_2, HC & CO	Yearly	2.0
3.	Water Quality Monitoring	Drinking water specification	Every Six Month	2.0
4.	Noise Level Monitoring	24 Hrs. Noise Level	Every Six Month	1.0
TOTAL			**7.0**	

S. No.	Particulars	Parameters	Frequency	Approx. Recurring cost / Annum (INR Lakh)
1.	Ambient Air Monitoring	$PM_{2.5}$, PM_{10} , SO_2 & NO_2 & CO	Half Yearly (24 hr average samples)	2.0

2.	Stack Emission Monitoring	$PM_{2.5}$, PM_{10}, SO_2, NO_2, HC, CO	Every Six Month	2.0
3.	Treated Effluent Monitoring	pH, BOD, COD, Oil, Grease & Total Suspended solids	Daily	2.0
4.	Noise Level Monitoring	24 Hrs. Noise Level	Half Yearly (Hourly day and nighttime Leq levels)	1.0
5.	Ground Water Monitoring	Drinking water specification as per IS10500	Half Yearly	2.0
TOTAL			**9.0**	

6.8 SUMMARY

In order to maintain the environmental quality within the stipulated standards, regular monitoring of various environmental components is necessary which will be complied as per conditions. An Environmental Management Cell will be constituted that will be committed to operate the proposed project with the objectives mentioned in approved Environment Policy. Regular Monitoring of all the environmental parameters *viz.*, air, water, noise and soil as per the formulated program based on CPCB and MoEF&CC guidelines will be carried out every year. The location of the monitoring stations was selected on the basis of prevailing micro meteorological conditions of the area like; wind direction and wind speed, relative humidity, temperature. A budget for monitoring of Air, water, Noise and Soil will be Rs. 7.0 Lakhs (during construction Phase) and Rs. 9.0 Lakhs (during Operation Phase) to be incurred by the project proponent for undertaking pollution prevention measures during the construction and operation activities.

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CHAPTER-7 : ADDITIONAL STUDIES

7.1 GENERAL

This chapter analyses the studies that has been carried out for the purpose of better understanding of disaster during operation of the project. It also highlights the in-advance preparation to face disaster with respect to both onsite and off-site emergencies. The chapter also covers socio economic studies done for the project.

7.2 RISK ASSESSMENT AND DISASTER MANAGEMENT PLAN

Risk assessment forms an integral part of EIA study. Risk assessment study deals with identifying and evaluating the magnitude of impending risks to which the neighboring population is exposed due to occurrence of accidents involved in the project construction and implementation. This assist in illustrating the guidelines for preparation of disaster management plan which will be executed, to handle the situation if any emergency occurs.

Emergency Plan

Since the project may face fire hazards or other emergency situations; an emergency plan is provided to caution the persons during any accidents. The fundamental approach, governing fire safety attempts to ensure that fires do not at all start in the first place and if they occur, to restrain their spread by quick detection and extinguishments.

Fire Detection

Despite many precautions taken, fires may breakout. Hence the industry will establish measures to detect a fire and to extinguish it. Automatic fire detection has many advantages such as speed and reliability and is recommended.

Depending on the nature of the occupancy and the hazard, a variety of detection systems are available. They are activated by one of the effects of fire such as temperature rise, smoke, flame or heat and can be coupled to an alarm system which would provide visual/ audible alarms at designed manned locations. They can also be designed to automatically actuate fire-extinguishing systems. The selection / installation of the detection system should confirm to the applicable national standards.

Extinguishing System

Equipment for the fighting should be chosen with care and suited to the task. Fires are classified depending on the materials involved and appropriate extinguishing agents are also recommended. **Table-7.1** gives the classification/ recommendation as per Indian Standard IS-15683. The extinguishing agents mentioned are applied to the fire using portable or fixed appliances. To fight fires at their incipient stage, portable extinguishers prove very useful. These must be provided in adequate numbers at appropriate locations and persons should be thoroughly trained in their use.

Table 7-1 Fires - Classification & Extinguishing Media

Class of Fire	Description	Extinguishing medium	Indian Standard
A	Fires involving ordinary combustible materials, like woods, paper textiles, etc. where the cooling effect of water is essential for the extinction of fire.	Water	934 940 6234
B	Fire in flammable liquids like oils, solvents, petroleum products, varnishes, pains etc. where a blanketing effects is essential	Foam Carbon dioxide Dry chemical	933 2878 2171 4308
C	Fires involving gaseous substances under pressure where it is necessary to dilute the burning gas at a very fast ate with an inert gas or powder.	Carbon dioxide Dry Chemical powder The best way to extinguish such fires is by stopping the flow of fuel gas to the fire. Container is kept cool with water spray	2878 2171, 4308
D	Fires involving metals like magnesium, aluminium, zinc, potassium etc. where the burning metal is reactive to water and which requires special extinguishing media or technique.	Special dry powders	2171 4861

The task of accident and emergency control can be simplified and made effective if pre planned systems and procedures are available. Without these, important matters may be overlooked at the time of emergency.

Every management must survey the total operation to identify potential for fire losses and develop an action plan to put the business back to normal with minimum loss of time. A fire protection Manual should be prepared, preferably in 3-parts. The first part should outline the fire risks in terms of plant locations, equipment and facilities and indicate the ways in which risks have been minimized. The second part would set out operating procedures, standards of fire protection established, and maintenances of these standards action to be taken in the event of fire by every level of management responsibility for inspection and repair. It should also include instructions for staff responsible for building services. The

third part should outline the training required for existing and new staff, the inspection schedules and checklists, sources of additional information and help.

The Management Cell of the project shall keep ready a plan to alert and take care of persons in case there is any fire. There shall be designated an Emergency Team that shall consist of staff of maintenance department, security supervisor representative. During non-emergencies, this team shall engage in activities as:

- Earmarking Area for Assembling during Emergencies
- Awareness Programme for the on fire, first aid and evacuation
- Identification of Hospitals
- Identification and Displaying Emergency Numbers and Contacts
- Displaying Emergency Symbols
- Updating First Aid Emergency Kit
- Updating Fire Control Systems
- Preparation and Updating of Standard Operating procedures (SOP)

In case member on duty spots the emergency like comes to know about any fire, he will also try his best to find out about the exact location and nature of emergency. In accordance with the SOP, the following activities will immediately begin.

Persons will be informed; necessary Alarms shall be activated to direct the persons to the emergency assembly area if needed.

The external network of District Fire Station, Police and Hospital shall be intimated. Once the emergency is under control, the team will initiate step-by-step restoration of normal operation.

Management Plan

Since the project may face fire hazards or other emergency situations an emergency plan is provided to caution the persons during any accidents. The fundamental approach, governing fire safety attempts to ensure that fires do not at all start in the first place and should they occur, to restrain their spread by quick detection and extinguishments.

7.3 NATURAL RESOURCES CONSERVATION

The project will lead to utilization of various natural resources. As an environmentally responsible corporate, the developers endeavor to conserve these resources by judicious management and recycling and strive to build up these resources where possible.

Limited withdrawal of groundwater: The water will be supplied during operational phase through pipeline.

Reduced use of water: To further minimize the use of available fresh water, various low flow fixtures may be provided in Industrial Plotted Colony Project such as Low flow flushing systems, sensor based fixtures, waterless urinals, tap aerators. Awareness will also be spread amongst the persons on the following lines:

- Timely detection and repair of all leakages
- Avoiding use of running water while handwashing
- Turning off the main valve of water while going outdoor
- Avoiding use of hose for washing floors
- Use of broom may be preferred.
- Watering of lawn or garden during the coolest part of the day (early morning or late evening, hours) when temperature and wind speed are lowest. This reduces losses due to evaporation.
- Planting of native and/or drought tolerant grasses, ground covers, shrubs and trees. Once fully grown, they need not to be watered frequently.
- Avoiding over watering of lawns
- Good rains eliminate the need for watering for more than a week.
- Setting sprinklers to water the lawn or garden only, not the street or sidewalk.
- Avoiding installation or use of ornamental water features unless they recycle the water and avoiding running them during drought or hot weather.
- Installation of high-pressure, low-volume nozzles on spray washers and
- Installation of float-controlled valve on the make-up line, closing filling line during operation, provision of surge tanks for each system avoid overflow.

Treatment and Recycling: The wastewater generated from the project will be treated in proposed Sewage Treatment Plant of capacity 3060 KLD. This will enable the treated wastewater to be used for flushing and landscaping thereby reducing the requirement of freshwater for these purposes.

Rainwater harvesting: It is proposed to harvest the rainwater runoff that will recharge the groundwater resource by providing 65 no. of pits and eventually natural water bodies. Apart from the open spaces, it is proposed to harvest the roof top rainwater and paved area rainwater. The storm water will be treated through an oil and grease trap and allowed to flow through layers of sand and gravel for filtration prior to reaching the water table, to avoid any possibility of groundwater contamination.

Construction materials: It is proposed for prior estimation of required quantities of these materials and procurement only as per requirement. This will also result in cost-efficiency. Excavated soil from the project will be used within the site to the extent feasible. Excess soil will be made available to the construction sites, as per need.

Energy: To conserve the energy resources, good practices will be followed during the construction phase such as turning off lights when not in use, ensuring fuel efficiency of motors and vehicles through proper maintenance and minimal work at night. The principles of energy conservation will also be embedded in the buildings through use of energy efficient fixtures, maximum availability of natural light and use of solar energy for street lighting.

7.4 RESETTLEMENT AND REHABILITATION

The project will not result in displacement of any local population and hence, does not require a resettlement and rehabilitation study.

7.5 TRAFFIC STUDY

Anthropogenic emissions not only contribute to the Greenhouse effect but also participate in the reaction resulting in photochemical oxidants. The effect of photochemical oxidants is well known for forming smog. Among the anthropogenic sources of pollutants forming the greenhouse gases, burning of fossil fuels constitute a major source. Highway mobile sources that contribute significantly to poor quality of air have not been regulated for the past two decades. In India two-wheelers are a very popular mode of personal transport. Most of them are powered by two-stroke engines because of initial and maintenance costs. However, they have high emission levels causing air pollution.

The objective of traffic study and emission quantification is to assess the magnitude of the emissions resulting from two wheelers, three wheelers and four wheelers that are extensively used as a means of common transport.

A detailed traffic survey was conducted in the area at major traffic intersections in order to arrive at the traffic density in the study area and also to evaluate the impacts of the increased traffic due to the proposed activity.

Vehicular emissions are the major source of air quality impacts in the study area. The principal cause of air pollution during the construction phase is the diesel-powered vehicles used in the haulage of aggregates, earth and other construction material. Air quality could be affected by dust and particulate matter arising due to site clearing, vehicular emissions, etc. Gaseous emissions like SO_2, NO_2, CO and HC might be released from the vehicular movement, which has a direct impact on the environment.

Increase in traffic in the study area has a direct impact on the resources as a heavy release of automobile exhaust is envisaged which has a direct impact on the air quality and the ambient noise levels in the study area. The methodology adopted for carrying out the traffic study was to select the major roads around the project site and count the various categories of vehicles moving on the roads.

Table 7-2: Traffic Density at the NH- 48

	2 wheeler	PCU (0.5)	3 wheeler	PCU (1.2)	4 wheeler	PCU (1)	B/L	PCU (3.7)	Total PCU
06:00-07:00	178	89	98	74	126	126	104	312	601
07:00-08:00	198	99	101	76	169	169	108	324	668
08:00-09:00	202	101	123	92	262	262	97	291	746
09:00-10:00	226	113	132	99	301	301	109	327	840
10:00-11:00	245	123	106	80	299	299	112	336	837
11:00-12:00	235	118	124	93	286	286	126	378	875
12:00-13:00	248	124	106	80	249	249	96	288	741

13:00-14:00	256	128	115	86	266	266	107	321	801
14:00-15:00	275	138	119	89	245	245	99	297	769
15:00-16:00	249	125	121	91	265	265	89	267	747
16:00-17:00	246	123	107	80	279	279	96	288	770
17:00-18:00	259	130	108	81	315	315	91	273	799
18:00-19:00	265	133	114	86	299	299	87	261	778
19:00-20:00	245	123	109	82	265	265	79	237	706
20:00-21:00	243	122	95	71	245	245	121	363	801
21:00-22:00	221	111	86	65	212	212	106	318	705
22:00-23:00	156	78	75	56	196	196	86	258	588
23:00-00:00	145	73	74	56	186	186	89	267	581
00:00-01:00	123	62	36	27	175	175	92	276	540
01:00-02:00	142	71	30	23	156	156	83	249	499
02:00-03:00	126	63	28	21	145	145	86	258	487
03:00-04:00	112	56	29	22	115	115	84	252	445
04:00-05:00	146	73	36	27	125	125	110	330	555
05:00-06:00	157	79	51	38	135	135	118	354	606

PCUs as per IRC-106:1990

Table 7-3: Existing Traffic Scenario & LOS

Road	V	C	Existing V/C Ratio	LOS
NH- 48	687	2400	0.286	B

V= Volume in PCUs/hr & C= Capacity in PCUs/ hr

The existing Level of Service is "B" i.e. Very Good

Table 7-4: Capacity as per IRC: 106-1990 page no. 11 table-2 for arterial road/ Highways

V/C	LOS	Performance	V/C
0.0 - 0.2	A	Excellent	0.0 - 0.2
0.2 - 0.4	B	Very Good	0.2 - 0.4
0.4 - 0.6	C	Good / Average / Fair	0.4 - 0.6
0.6 - 0.8	D	Poor	0.6 - 0.8
0.8 - 1.0	E	Very Poor	0.8 - 1.0

- The total proposed parking for the project is **1,168 ECS,** It is estimated that 90% of the vehicles will leave or be operating at the site from (Ready to ply or incoming) 7:00 AM to 8:00 PM i.e. **1,168 x 0.90 = 1,051** and the remaining 10% parking space will remain vacant or parked with Light Motor Vehicles i.e. **1,168 x 0.10 = 117**.

- Since the maximum number of trips will happen between 7:00am to 8:00 PM (i.e.) 12 hours

- Therefore, on average the total number of trips per hour is 1,051/12 = **88 vehicles/ hour.**

Table 7-5: Modified Traffic Scenario

Road	V	C	Modified V/C Ratio	LOS
NH- 48	687 + 88= 775	2400	0.32	B

Modified Traffic Scenario & LOS (after completion of the project)

The modified LOS will be "B", i.e. **"VERY GOOD"**; therefore there will be no change in LOS after completion of the project. The total parking proposed for the project = **1,168 ECS**.

The project proponents will have a failsafe traffic circulation plan for the "Industrial Plotted colony " project so that smooth passage of vehicles can take place.

The support staff will be trained to handle the morning and evening rush. The traffic generated from the project is assumed to be distributed between 6:00 AM to 10:00 AM & 19:00 PM- 00:00 AM and will distributed along all two directions of the project along the road.

7.6 Socio-Economic Environment

Summary of need-based assessment carried out in surrounding villages are given below.

1. Safe Drinking Water

Observations: People use hand pumps and dug well for potable uses (including drinking).

2. Basic Medical Facilities

Observations: Primary health care facilities are available in large villages and hospital is available in Gurugram.

3. Education Facilities

Observations: Education facilities (infrastructure, teaching aids and teachers) are good.

4. Improved Agricultural Practices

Observations: Farming is the main occupation of villagers. The villagers have very good knowledge about the modern agricultural practices for improving the yield.

5. Veterinary Hospital

Veterinary hospital is not available in most of the villages. It is available in Gurugram.

6. Roads

Observations: The quality of existing village road is good.

7. Sewerage System

Observations: Sewerage system is not available in any of the villages of study area. Open drains are almost clogged and overflowing with sewage.

8. Garbage Disposal

Observations: No garbage disposal facility exists in any of the villages of study area. Villagers throw their garbage in the open.

9. Pollution from Industries

Observations: Fugitive emissions are visible from nearby construction activities. Problem of re-suspended road dust and dust from unpaved road is rampant.

10. Employment among Local

Observations: Many local people of nearby villages work in the existing industries. Some conflict among the contractors who supply migratory laborers as well as who supply transport services. No such conflict has been observed in other villages.

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CHAPTER-8 : PROJECT BENEFIT

8.0 EMPLOYMENT GENERATION

The proposed project will generate employment opportunities for the local population during construction phase. The total manpower requirement during construction is about 200 people. This will last for approximately 12 months. Skilled, unskilled and semi-skilled labour will be preferably hired from nearby places.

Estimated manpower requirement during operation shall be 300 workers which will get direct job opportunities. Indirect employment through contractors, like drivers, attendants, mechanics, daily wage labour, housekeeping, horticulture staff, etc. would also be generated.

8.1 IMPROVEMENTS IN THE PHYSICAL INFRASTRUCTURE

The proposed project will enhance the following physical infrastructure facilities in the adjoining areas:

a. **Road Transport:** The existing roads will be maintained to improve the road communication.
b. **Infrastructure:** Creation of community assets (infrastructure) like drinking water facilities, dispensary, shops, etc. as a part of corporate environment responsibility.
c. **Green Belt Development: 37,241.664** m^2 will be developed as green within site. Plantation will be done at project boundary as well as along internal roads.

8.2 IMPROVEMENTS IN THE SOCIAL INFRASTRUCTURE

The Construction in the project area will create rural employment. The project activity will have a positive impact on the social, economic condition of the area by way of providing employment to the local inhabitants; wages paid to them will increase the per capita income, housing, education, medical and transportation facilities, economic status, health and agriculture.

8.3 ENVIRONMENT MANAGEMENT PLAN BUDGET

The total cost (Land Cost + Development Cost) of the proposed project will be INR 1593.7 Crores. The capital cost for environmental management of the proposed project is estimated to be INR 796 lakhs (Construction and operation). INR 126.25 lakhs (operation and construction) per year will be required as annual recurring expenses to meet the recurring expenditure for implementing the measures.

Table 8-1 ENVIRONMENT MANAGEMENT PLAN BUDGET

Component	Capital Cost (INR Lakh)	Recurring Cost (INR Lakh/Yr)
Labor Sanitation & Wastewater Management	35	8.75

Dust Mitigation Measures Including site barricading, water sprinkling & anti-smog gun)	25	6
Storm Water Management (temporary drains & sedimentation basin)	10	2.5
Solid Waste Management	5	1
TOTAL	**75**	**18.25**

During Operation Phase		
COMPONENT	**CAPITAL COST (INR LAKH)**	**RECURRING COST (INR LAKH/YR)**
Sewage Treatment Plant	190	47.5
Rain Water Harvesting System	115	28.75
Solid Waste Management	80	20
Environmental Monitoring	6	9
Green Area/ Landscape Area	50	12.5
Others (Energy saving System, miscellaneous)	60	15
Sub-Total	**576**	**108**
Socio-Economic		
Government Sr. Sec School at Village Rewari/ Shidrawali/ Dhani Bhora Khurd / or in any nearby village • Complete makeover • Construction of toilets • Installation of Solar Panels • Painting of School Building • Replacement of doors and windows • Energy efficient lighting • Smart Classroom equipment	145	--
Total	**721**	**108**

TOTAL EMP BUDGET		
COMPONENT	**CAPITAL COST (INR LAKH)**	**RECURRING COST (INR LAKH/YR)**
During Construction Phase	75	18.25
During Operation Phase	721	**108**
TOTAL	**796**	**126.25**

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CHAPTER-9 : ENVIRONMENTAL COST BENEFIT ANALYSIS

This Chapter has not been prescribed in Standard ToR issued by SEAC, Haryana

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CHAPTER-10 : ENVIRONMENTAL MANAGEMENT PLAN

10.0 INTRODUCTION

Environmental Management Plan details the environmental quality control measures which are proposed for this project by complying with the stipulated standard limits specified by State Pollution Control Board and CPCB. The environmental management plan includes all preventive as well as mitigation measures to minimize impact on environment.

Environmental Management Plan will cover the following:

- Land use pattern and environment.
- Air Environment
- Noise Environment
- Water Management
- Solid Waste Management
- Biological Environment
- Implementation of EMP and Monitoring Program

10.1 ENVIRONMENT POLICY & ENVIRONMENT MANAGEMENT CELL

The Company has a well-defined Environment policy. Structure of Environment Management Cell (EMC) is as shown below in Fig. 10.1:

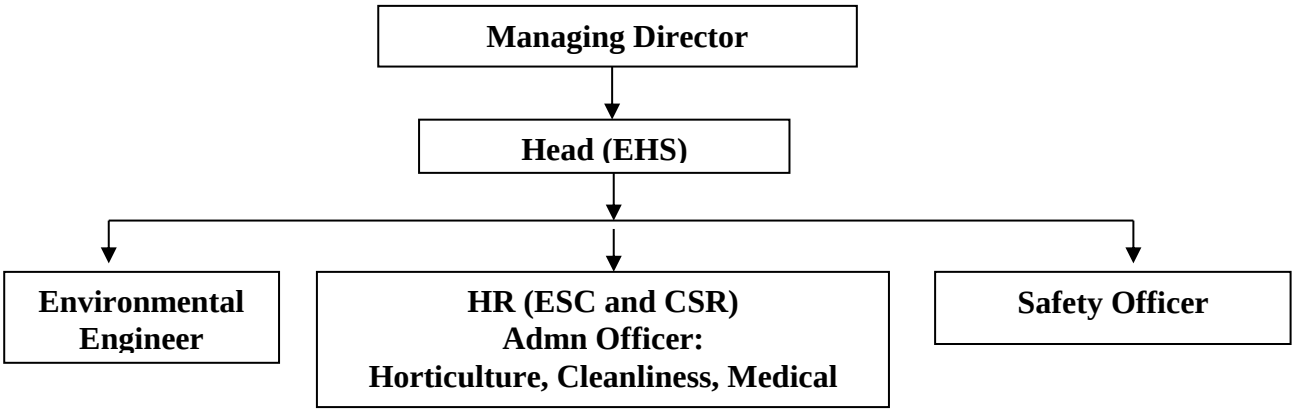

Figure 10-1 Structure of EMC

The Environment Policy of the company is as stated below:

- Follow the National laws and regulations related to Environment Protection and Prevention & Control of Pollution
- Design, construct and operate the project by adopting process that are sustainable and environmentally acceptable in the country.
- Take steps to prevent, minimize and control releases to air, water and land of substances which could adversely affect human health and the environment.

- Reduce waste at source by careful use of materials, energy and other resources and maximize recycling.
- Create the Environment Management Department in its plant, employ experienced staff and empower them to take decisions related to procurement, installation and efficient operation of all pollution control systems.
- Create a suitable system of reporting non-compliance and ensuring compliance.
- Provide and maintain healthy and safe working conditions for all employees.
- Ensure the protection of the health and safety of people affected by its operation.
- Adopt measures to ensure that all its contractors and business associates also comply with National laws and regulations related to Environment Protection and Prevention & Control of Pollution
- Focus on continual improvement of environmental performance and ensure involvement of employees at all levels by providing training & awareness.
- Carry out regular environmental monitoring, assessments and report results for wide dissemination among all stakeholders.

10.1.1 ROLES & RESPONSIBILITIES OF EMC

EMC will be responsible for the following**:**

INTERACTION WITH THE STATE POLLUTION CONTROL BOARD

EMC shall be in regular touch with SPCB and shall send them environmental monitoring reports regularly in the prescribed format.

PROVIDE TRAINING

EMC would be responsible for the implementation of the EMP, needs to be trained on the effective implementation of the environmental issues. To ensure the success of the implementation set up proposed, there is a high requirement of training and skill up-gradation. For the proposed project, additional training facilities will be developed for environmental control. For proper implementation of the EMP, the officials responsible for EMP implementation will be trained accordingly.

To achieve the overall objective of pollution control it is essential not only to provide latest pollution control and monitoring systems but also to provide trained manpower resources to operate and maintain the same. Therefore, apart from the EMC, specific training will be provided to personnel handling the operation and maintenance of different pollution control equipment.

The training will be given to employees to cover the following:

- Awareness of pollution control and environmental protection
- Operation and maintenance of pollution control equipment
- Organize field monitoring, maintenance and calibration of pollution monitoring instruments
- Laboratory testing of pollutants
- Repair of pollution monitoring instruments
- Occupational health/safety
- Disaster management
- Environmental management
- Afforestation / plantation
- Timely renewal of Consents & Authorization.
- Submitting environmental monitoring report to SPCB
- Submit annual Environmental Statement to SPCB
- Prepare and submit six monthly report on the compliance with the conditions of the environmental clearance
- Keeping the management updated on regular basis about the findings / results of monitoring activities and proposes measures to improve environmental performance
- Conducting regular safety drills and training programs to educate employees on safety practices. A qualified and experienced safety officer will be responsible for the issues related to occupational safety and health

10.2 EMP DURING CONSTRUCTION PHASE

10.2.1 LAND ENVIRONMENT

The site is flat hence no levelling is required. Earth excavated during civil foundations will be reused for raising the plinth and backfilling the columns. Dust generated due to earthwork including excavation and transportation activities, especially during dry weather conditions will be controlled by water sprinkling, barricading, etc.

10.2.2 AIR ENVIRONMENT

Dust will be generated at work site during the construction activity like excavation and vehicular movement. Providing suitable surface treatment to ease the traffic flow and regular sprinkling of water will reduce the dust generation. All internal roads will be asphalted and cleaned daily, so there will be less generation of re-suspended road dust.

10.2.3 WATER ENVIRONMENT

STP treated water will be used for construction. Culverts will be provided to maintain the drainage pattern. No water accumulation will be ensured at site. Mobile toilets will be provided for labour.

10.2.4 NOISE ENVIRONMENT

The noise generated during the construction phase will be due to the movement of vehicles and construction equipment. Construction equipment and transport vehicles will be properly maintained so that noise generation is minimized. Regular maintenance schedule will be adopted for all construction equipment and vehicles.

10.2.5 SOLID WASTE MANAGEMENT

Careful design, planning and good site management would minimize waste generation. Construction waste will be segregated at site itself to increase the feasibility of recycling concrete and masonry as filling material and steel pieces as saleable scrap.

Disposal of waste will be done in accordance with C&D Rules, 2016 for which a local approved vendor will be appointed.

Muck shall be generated from drains and sedimentation pits. The muck shall be collected daily and stored at earmarked place. It shall be finally disposed within the project premises for plinth raising purpose. Litter disposal and collection points shall be established around all construction work sites.

10.2.6 SANITATION AND SAFETY MEASURES OF CONSTRUCTION WORKERS

Construction workers will be made aware of possible hazards and safety measures that need to be taken during construction activities through organized training. Personal Protective Equipment (PPEs) such as dust masks, goggles, earplugs/ earmuffs, safety gloves, safety belts, safety shoe with toe protection, gumboots will be made available at construction site. Construction workers and vehicle drivers will be provided with drinking water, canteen and mobile toilet / washroom facility. Rest room facility for truck drivers will also be provided.

10.3 EMP DURING OPERATION PHASE

10.3.1 AIR POLLUTION MANAGEMENT PLAN

The dust emissions will be controlled by regular water sprinkling, use of low sulphur diesel, green belt development and adequate stack height (30 m) for DG sets.

10.3.2 NOISE POLLUTION MANAGEMENT PLAN

10.3.2.1 Development and Construction Phase

During the construction phase, some noise will be generated through the operation of construction machines, excavators, DG sets, etc. Following measures would be taken; into consideration to mitigate the noise at construction site:

- Use of well-maintained equipment fitted with silencers and providing noise shields near the heavy construction operations

- Acoustic enclosures would be provide to DG sets at the construction site,
- Earmuff and other protection devices shall be provided to laborers working in high noise generating machines.
- High noise activities shall be carried out during daytime.

10.3.2.2 Post Construction Phase

The main sources of noise during this phase are the intermittent use of DG Sets and traffic. The principles of noise emission control and screening are proposed for the two different scenarios of noise generation.

10.3.2.3 Noise emission control

All the D.G. Sets will be provided with acoustic enclosures ensuring 25 dB (A) insertion loss or for meeting the ambient noise standards whichever is higher as per CPCB norms. It will be ensured that the manufacturer provides acoustic enclosures as an integral part with Diesel Generator Sets.

Barriers:

Trees having thick and fleshy leaves with flexible petioles having capacity to withstand vibration are suitable. Heavier branches and trunk of the trees also deflect or refract the sound waves. The following species are proposed to be used in a greenbelt especially surrounding industrial Plotted Colony and along the periphery of the project.

- *Anthocepalus cadamba*
- *Kigelia africana*
- *Couroupita guianensis*
- *Polyalthia longifolia*

10.4 WATER POLLUTION MANAGEMENT PLAN

The entire wastewater from the project will be treated in-house STP of 2860 KLD and the treated water will be used in horticulture and flushing.

10.5 MEASURES FOR IMPROVEMENT OF ECOLOGY

There is no ecologically sensitive area within 10 km radius of the proposed plant. No wildlife exists in the vicinity of the project. Plantation programme will be undertaken at several areas. We have proposed 6870 trees as per MoEFCC norms.

10.5.1 GREENBELT DEVELOPMENT

Site Preparation: Careful preparation will enhance vegetation growth overcoming the establishment problems which are often encountered on construction sites. The handling and treatment of soils which are to be used within the potential root zone of the vegetation will take account of the following factors:

- Soil as a medium for plant growth
- Continuity between soil layer

- Proper soil handling avoiding destruction of natural aerobic soil organisms
- Minimum soil compaction without excessive densities

Plant propagation: Planting nursery raised plants and planting cuttings are normally practiced for trees and shrubs. Direct sowing (seeding) is, however, becoming more widely used for herbs and shrubs. Seeds are cheap and versatile but during the establishment phase they are very vulnerable to desiccation and prediction. In each of above-mentioned cases the establishment period is critical because the individual plant is at risk from many sources i.e. drought, predation and damage.

Procurement of Seedlings / Saplings: Seeds will be procured from a certified agency. The seedlings of species selected will be obtained from the nursery of Forest Department or from commercial nurseries. Seeding spots will vary in size from 100-150 mm diameter containing a few seeds only, to 1-2 m^2 patches containing many species. Existing groundcover will be removed before seeding, in order to reduce competition for moisture and nutrients.

Plantation: This will include digging pits with proper spacing, filling pits with prepared soil, plantation of seedlings and watering. The size of the pit will be 1m x 1m x 1 m for grown-up trees and 0.5 m x 0.5 m x 0.5 m for smaller trees and shrubs. The spacing will be as follows.

The pits will be filled with soil mixture. The soil will be irrigated soaking wet prior to placing of seedling. The water required for greenbelt development will be met from the treated effluents generated during plant operation. During construction period water supply will be met from available sources.

Plantation will start from the beginning of construction activity (after the site is made clear and demarcating the green portion). The plant species will be planted using pitting technique Soil proposed to be filled in the pit after plantation will be mixed with compost (1:1). Plantation will be done after first rainfall. Adequate protection will be ensured for achieving high survival rate of the planted saplings. Water and nutrients / manure will be given at appropriate intervals.

10.5.2 ACTION PLAN FOR GREENBELT DEVELOPMENT

The green area measures **37,241.664** sq.m. Greenbelt will be developed around the in and around the project site. There are few trees present at the project site. We will obtained permission for the same from competent authority.

- The tree species to be selected for the plantation are pollutant tolerant, fast growing, wind firm, deep rooted. A three-tire plantation is proposed comprising of an outer most belt of taller trees, which will act as barrier, middle core acting as air cleaner and the innermost core which may be termed as absorptive layer consisting of trees which are known to be particularly tolerant to pollutants.
- Greenbelt will be developed simultaneously with the construction of the plant as per SPCB guidelines and completed within the end of first monsoon.
- 6870 plants will be planted as per the norms.

10.6 RAINWATER HARVESTING PLAN

Company will develop rainwater harvesting structures inside the project premises, where rainwater will be collected. As per CGWB guidelines shaft recharge type rainwater harvesting structures will be suitable for the area. The design of the pits and tanks shall be based on CGWB guidelines (the rainfall collection volume from a defined area multiplied by runoff coefficient). Total of 65 Rainwater Harvesting pits are proposed for artificial ground water recharge.

10.7 BUDGET FOR EMP

The total cost (Land Cost + Development Cost) of the proposed project will be INR 1593.7 Crores. The capital cost for environmental management of the proposed project is estimated to be INR 796 lakhs (Construction and operation). INR 132.75 lakhs (operation and construction) per year will be required as annual recurring expenses to meet the recurring expenditure for implementing the measures.

Table 10-1 ENVIRONMENT MANAGEMENT PLAN BUDGET

COMPONENT	CAPITAL COST (INR LAKH)	RECURRING COST (INR LAKH/YR)
Labor Sanitation & Wastewater Management	35	8.75
Dust Mitigation Measures Including site barricading, water sprinkling & anti-smog gun)	25	6
Storm Water Management (temporary drains & sedimentation basin)	10	2.5
Solid Waste Management	5	1
TOTAL	**75**	**18.25**

During Operation Phase		
COMPONENT	**CAPITAL COST (INR LAKH)**	**RECURRING COST (INR LAKH/YR)**
Sewage Treatment Plant	190	47.5
Rain Water Harvesting System	115	28.75
Solid Waste Management	80	20
Environmental Monitoring	6	9
Green Area/ Landscape Area	50	12.5
Others (Energy saving System, miscellaneous)	60	15
Sub-Total	**576**	**108**
Socio-Economic		
Government Sr. Sec School at Village Rewari/	145	--

Shidrawali/ Dhani Bhora Khurd / or in any nearby village • Complete makeover • Construction of toilets • Installation of Solar Panels • Painting of School Building • Replacement of doors and windows • Energy efficient lighting • Smart Classroom equipment		
Total	**721**	**108**

TOTAL EMP BUDGET		
COMPONENT	**CAPITAL COST (INR LAKH)**	**RECURRING COST (INR LAKH/YR)**
During Construction Phase	75	18.25
During Operation Phase	721	**108**
TOTAL	**796**	**126.25**

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CHAPTER-11 : SUMMARY & CONCLUSION

11.1 GENERAL

This chapter provides the summary of the EIA/EMP report.

11.2 PROJECT DESCRIPTION

The Industrial Plotted Colony Project is to be developed by M/s Signatureglobal (India) Limited. The project site is located at Village- Shidrawali, Tehsil-Manesar, District-Gurugram, Haryana on a land measuring of 135.7250 acres.

The company has vast experience in planning and construction of Industrial Plotted Colony. The project facilities include:

- Industrial Plotted Development
- Residential Plotted Development
- Community facilities
- Commercial facilities

The Nearest Highway is NH-48 which is adjacent to the project site , SH-28 is 0.58 km towards SW direction, SH-25 which is 4.1 km (S), NH-919 is 3.8 km towards S direction, Western Peripheral Expressway is 8.7 km towards NE direction, MDR 132 is 5.1km towards NE direction, & NH-352W which is 9.5 km (S) direction away from project site.
The nearest railway station being Inchhapuri Railway Station is about 12.6 km (NW) away from the project site.
The nearest Airport is Indira Gandhi International Airport 40 km (NE) from the project site.
Total Project cost is INR 1593.7 crores.

During the operation phase, total population of the proposed project is estimated to be 50,766 persons.

The total water requirement for the project will be approx. 3475 KLD. Fresh water demand is 1943KLD. The source of water supply will be GMDA.

The power shall be supplied by the State Electricity Board. The maximum load demand for the project will be approx. 12,883 kW.

There is provision of 2no. of DG set of total capacity 1100kVA for Commercial Facility which includes 1 x 750kVA +1x 350 kVA and 2no. of DG set of total capacity 1750 kVA for Common Services which includes 1 x 750kVA +1x 1000 kVA are proposed for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion

During the operation phase, approx. 18139 kg/day of domestic waste will be generated.

Total no. of 65 Rainwater Harvesting pits are proposed for artificial ground water recharge.

11.3 DESCRIPTION OF BASELINE ENVIRONMENT

Baseline data was generated during winter season from 1st December 2023 to 29th February, 2024. 10 km area around the site was considered as study area. Data was generated by following the standard/ approved procedures of the Ministry of Environment Forests and Climate Change and the Central Pollution Control Board. Meteorological data on wind speed, wind direction, relative humidity and temperature was generated at the project site. Ambient air quality was generated at 5 locations. Noise levels were measured at 5 locations. Surface water quality was collected and analysed at 5 locations; Groundwater quality was analysed at 5 locations. Soil quality was analysed at 5 locations. Data on plants and animals present in the study area was collected from the District Forest Department. Data on landuse, demography, occupation pattern, cropping pattern, infrastructure facilities were collected from District Statistics Handbook and the Tehsil records.

The predominant wind direction is from NW direction towards southeast direction. Annual rainfall is high, about 596 mm. Calm periods are more during night.

Ambient Air Quality Monitoring reveals that the minimum and maximum concentrations of $PM_{2.5}$ for all the 05 AAQM stations were found to be 59.7 $\mu g/m^3$ to 103.7 $\mu g/m^3$ respectively, while for PM_{10} it varies between 117.2 $\mu g/m^3$ to 183.7 $\mu g/m^3$.

As far as the gaseous pollutants SO_2 and NO_2 are concerned, the prescribed CPCB limit of 80 $\mu g/m^3$ for residential, rural and industrial areas has never surpassed at any station. The minimum and maximum concentrations of SO_2 were found to be 8.2 $\mu g/m^3$ to 12.7 $\mu g/m^3$ respectively. The minimum and maximum concentrations of NO_2 were found to be 26.3 $\mu g/m^3$ to 50.1 $\mu g/m^3$ respectively. Also, the minimum and maximum concentrations of CO were found to be 450$\mu g/m^3$ to 1030$\mu g/m^3$ respectively.

High concentration of PM 2.5 and PM 10 may be attributed to Vehicular emission and nearby construction activities in the area.

In rural areas wind blowing and chirping of birds would contribute to noise levels especially during the nights. Assessment of day noise levels around the study area range between 50.5 to 63.6dB(A) during study period whereas the night equivalents were in the range of 42.7 to 52.9 dB (A).

The surface water quality meets the 'C' category classification i.e. Best Designated Use of CPCB, fit for drinking after conventional treatment.

The analysis of results shows that soil is basic in nature as pH value ranges from 7.59 to 7.88 with Electrical Conductivity of 437 to 447 μmhos/cm. The concentration of Nitrogen, Phosphorus and Potassium has been found to be in good amount in the soil samples. Soil texture is Sandy loam at project site.

11.4 ENVIRONMENTAL MONITORING PROGRAM

Environmental Management Cell (EMC) will be set up to undertake routine environmental monitoring. Monitoring will be done to ensure compliance with the prescribed laws and standards. The Head of EMC will report to the Management. Environmental monitoring of

ambient air, DG stack emission, noise levels, groundwater quality, surface water quality and soils will be carried out as per norms.

11.5 ADDITIONAL STUDIES

INR 220 Lakh will be spent under CER activities over three year period. This amount will be spent for making classrooms in local schools, providing teaching aids, making community centres, develop drinking water facility in nearby villages, making rainwater harvesting structures like anicuts and check dams in the area, developing infrastructure facilities and equipment in primary health centres.

11.6 PROJECT BENEFITS

The proposed project will generate employment opportunities to the local populace during construction phase. The total manpower requirement during construction is about 200 people. This will last for approximately 12 months. Skilled, unskilled and semi-skilled labour for constructing the plant will be taken locally or from nearby places.

Estimated manpower requirement after the project operation shall be 61489(Direct on Company payroll). About 200 workers will get indirect employment through contractors, like drivers, attendants, mechanics, daily wage labour, housekeeping, horticulture staff, etc. Local people will be given the opportunity in employment as per their capability and expertise.

11.7 ENVIRONMENTAL MANAGEMENT PLAN

Environmental Management Plan for effective management of environmental impacts and ensuring overall protection of the environment through appropriate management procedures has been developed. In order to implement the recommended mitigation measures and institutionalize the EMP, budgetary provision of Rs. 796 lakhs as capital expenditure has been made. Recurring annual expenditure will be Rs. 126.25 lakhs of the capital expenditure.

Environment Management Cell (EMC) will ensure that all air pollution control devices, effluent treatment plants and water re-circulating systems function effectively. EMC will also supervise disposal of spent oil and lubricants and used batteries to the authorized vendors. Plantation will be started during the construction phase by following the guidelines issued by the Central Pollution Control Board. Schemes for resource conservation (raw materials, water, etc.), rainwater harvesting, and social forestry development will be taken up by EMC. Regular environmental awareness programs for the employees will be conducted.

11.8 CONCLUSION

The proposed project will have marginal impact on the local environment with proper mitigation measures and effective implementation of the environment management

measures. The project has beneficial impact/effects in terms of growth in regional economy, transform the region's economy from predominantly agricultural to significantly industrial, increase Government earnings and revenues and accelerate the pace of industrial development in the region.

The proposed project will provide direct employment to a large number of personnel. This project will also generate indirect employment to a considerable number of families, who will render their services for the employees of the project.

The project will provide comfortable and environment friendly housing facilities for the society.

In view of the above, it is requested that Environment Clearance may please be accorded to the project.

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CHAPTER-12 : DISCLOSURE OF CONSULTANT ENGAGED

12.1 GENERAL

M/s Signatureglobal India Limited has appointed M/s GRC India Pvt Ltd., for carrying out this Environmental Impact Assessment Study as per the EIA notification, 2006 as amended till date. M/s GRC India Pvt Ltd has approved EIA coordinators and Functional Area Experts for undertaking Environmental and related studies in Fifteen (15) approved sectors by NABET, Quality Council of India, New Delhi.

12.2 INTRODUCTION OF ORGANIZATION

GRC India is an ISO 9001:2015, 14001:2015 & ISO 45000:2018 certified pioneer environmental consultancy organization in India. It has been accredited by National Accreditation Board of Education & Training (NABET), Quality Council of India (QCI), which is the highest accreditation authority in India. Accreditation is the formal recognition by an accreditation authority to carry out a specific service in accordance with the standards and technical regulations as prescribed in the scope of accreditation. The accreditation permits the organization to carry out the Environment Impact Assessment (EIA) Studies for obtaining an Environmental Clearance for various development projects. This has been granted following a rigorous inspection based on a number of quality parameters applicable to concerned Environmental Functional Areas and the required infrastructure facilities available in the organization, as prescribed by the MoEF & CC, Govt. of India in its guidelines.

The accreditation certificate number is NABET/EIA/21-24/RA 0211. The Validity Extension letter no. is QCI/NABET/ENV/ACO/24/3338 which is valid till 11th November 2024. Copy of NABET certificate is attached as Annexure with EIA report.

Current Status of ACO is available on below given link: -

http://eia.nabet.qci.org.in/Accredited_EIA_Consultant.aspx

12.3 ADDRESS & CONTACT

Corporate Office
F-374 &375, Sector – 63, Noida-201301, UP
Phone: 91-120-4044630, 4044660, 4323120
Fax: 91-120-2406519
E-Mail: info@grc-india.com

Registered Office

Unit No.102, First Floor, Vardhman Mayur Market,
CSC-1, Mayur Vihar Phase 3, New Delhi – 110096,
Ph: 91-11-22622031

12.4 EIA COORDINATOR AND TEAM MEMBER

The EIA/EMP report has been prepared under the guidance of following Coordinators & Functional Area Experts:

EIA Coordinator	***Mr. Sonu***	***Coordinated the EIA Study with FAEs and Laboratory for data generation, assessment of impacts and preparation of EMP.***
FAE-AP	Ms. Monika Gupta	➢ Identifying the sources of emissions and mitigation measures. ➢ Inventorisation of point source stack emission details ➢ Site specific micro- meteorology monitoring. ➢ Ambient Air Quality (AAQ) monitoring impact predictions and mitigations
FAE-WP	Mr. Sonu	➢ Surface water and ground water quality monitoring and assessment. impacts on water ➢ Environment and mitigations. ➢ Identification, characterization of effluent streams and treatments thereof. ➢ Water balance and conservation measures
FAE-AQ	Mr. Sonu	➢ Visited the site and surroundings, assessed the meteorological data, did predictions on air quality and suggested mitigation measures.
FAE-EB	Ms. Kavita Chopra	➢ Biological environment status in respect of terrestrial fauna and aquatic eco system. ➢ Impact on ecological environment.
FAE-SE	Mr Rajiv Rastogi	➢ Determination of baseline human environment. ➢ Impact on socioeconomic environment & mitigation methods.
FAE-HG	Prof. Tapan Majumder	➢ Ground water resource assessment. ➢ Impact on ground water potential and mitigation measures for avoiding ground water contamination.
FAE-GEO	Prof. Tapan Majumder	➢ Topography and geological aspects ➢ Developing geological maps
FAE-RH	Mr. K.D Choudhury	➢ Visited the site and surroundings, assessed the process details, identified risks / hazards and suggested mitigation measures.
FAE-SHW	Dr. Dhiraj Kr Singh	➢ Non-hazardous solid, wastes generation, recycling and disposal. ➢ Storage and management of hazardous solid waste
FAE- SC	Mr. N P S Varde	➢ Monitoring, analysis & characterization of soil. ➢ Assessment of impact on soil quality and mitigation

EIA Coordinator	***Mr. Sonu***	***Coordinated the EIA Study with FAEs and Laboratory for data generation, assessment of impacts and preparation of EMP.***
		measures.
FAE – NV	Mr. K.D Choudhury	➢ Analysis of ambient noise quality data. ➢ Impact due to plant noise and abatement measures.
FAE – LU	Mr. N P S Varde	➢ Analysis of data related to land-use pattern. ➢ Land-use map development. ➢ Impact on land environment in respect to land form change

Apart from EIA Coordinator and FAE's involved in the project the other technical staff involved in the preparation of EIA is listed below: -

Name of Internal Team Member	**Activity / Area**	**Involvement – Actual Work Performed**	**Under Approved Expert**
Ms. Kavita Chopra (Team Member: AP)	Assistance in Air Pollution part under approved expert Ms. Monika Gupta	➢ Identifying the sources of emissions and mitigation measures. ➢ Inventorisation of point source stack emission details ➢ Site specific micro-meteorology monitoring. ➢ Ambient Air Quality (AAQ) monitoring impact predictions and mitigations	Ms. Monika Gupta

12.5 LABORATORY INVOLVED FOR BASELINE MONITORING AND OTHER ANALYSIS

Baseline Monitoring has been done during December 23 to February 24 by M/s GRC India Training & Analytical Laboratory (A Unit of GRC India Pvt Ltd), accredited by NABL and Recognized by MoEFCC, New Delhi.

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SIGNATURE GLOBAL™
REALTY. RELIABILITY. RESPONSIBILITY.
AN ISO 9001:2015; 14001:2015; 45001:2018; 27001:2022 CERTIFIED COMPANY

Annexure P-13

Date: 12.12.2024

To,
The Member Secretary,
State Expert Appraisal Committee (SEAC),
Bays No. 55-58, Sector -2
Panchkula, Haryana

Sub: Regarding Environmental Clearance for Industrial Plotted Colony Project located at Village- Shidrawali, Tehsil Manesar, District- Gurugram, Haryana by M/s Signatureglobal India Limited.

Ref: Proposal No. SIA/HR/INFRA2/496874/2024

Dear Sir,

This is in reference to above mentioned project we are herewith submitting the point wise reply to the EDS raised dated 17.09.2024.

Hope the reply meets your satisfaction.

Kindly grant us the environmental clearance at your earliest.

Thanking you,

Yours truly,

For, M/s Signatureglobal India Limited

Name: Vineet kumar
Designation: Authorized Signatory

Reply to the EDS raised w.r.t Industrial Plotted Colony Project located at Village- Shidrawali, Tehsil Manesar, District- Gurugram, Haryana by M/s Signatureglobal India Limited

S. No.	Queries	Reply
1.	License for additional area of 6.06875 acres not provided	The License for 129.65625 acres and LOI for 6.06875 acres is enclosed as Annexure-I(a) and Annexure-I (b).
2.	Electrification Plan	The Electricity Plan is enclosed as Annexure-II.
3.	Structural Stability (design) Certificate	The Structural Certificate is not applicable as we are not constructed any building. We will only sell the plots.
4.	Provide the Zoning Plan	The Zoning Plan is enclosed as Annexure-III.
5.	Green belt development plan	The Green belt development plan is enclosed as Annexure IV.
6.	Traffic Circulation Plan/ Traffic Study	The Traffic Study is enclosed as Annexure-V.
7.	Parking Plan	The Parking Plan is enclosed as Annexure-VI.
8.	Safety Plan (Fire & Electricity)	The Fire & Electricity Plan is enclosed as Annexure-VII & Annexure-II.
9.	Air Simulation Plan	The Air Simulation Plan details are enclosed as Annexure-VIII.
10.	Power Mobilization Plan	The Power NOC is enclosed as Annexure-IX.
11.	Water Assurance	The Water Assurance NOC is enclosed as Annexure X.
12.	Sewer Assurance	The Sewer Assurance NOC is enclosed as Annexure-XI.

ANNEXURE-I(A)

FORM LC -V
(See Rule 12)
HARYANA GOVERNMENT
TOWN AND COUNTRY PLANNING DEPARTMENT

Licence No. 104 of 2024

This License has been granted under the Haryana Development and Regulation of Urban Areas Act, 1975 & the Rules 1976, made thereunder to Sungold Heights and Developers LLP. in collaboration with Signatureglobal (India) Limited, 13th Floor, Dr. Gopal Das Bhawan, 28 Barakhamba Road, Connaught Place, New Delhi-110001. for setting up of Industrial Plotted Colony over an area measuring 129.65625 acres in the revenue estate of village Sidhrawali, Tehsil- Manesar, District Gurugram.

1. The particulars of the land, wherein the aforesaid Industrial Plotted Colony is to be set up, are given in the Schedule annexed hereto and duly signed by the Director, Town & Country Planning, Haryana.

2. The License is granted subject to the following conditions:

(i) To deposit a sum of Rs. 16,56,63,060/- on account of Infrastructural Development Charges in two equal installments. First within 60 days from issuance of license and second within six months online at www.tcpharyana.gov.in. In failure of which, an interest @ 18% per annum for delay period shall be paid.

(ii) The licencee shall maintain and upkeep of all roads, open spaces, public park and public health services for a period of five years from the date of issue of the completion certificate unless earlier relieved of this responsibility and thereupon to transfer all such roads, open spaces, public parks and public health services free of cost to the Govt. or the local authority, as the case may be, in accordance with the provisions of Section 3(3)(a)(iii) of the Haryana Development and Regulation of Urban Areas Act, 1975.

(iii) The licencee has not submitted any other application for grant of license for development of the said land or part thereof for any purpose under the provisions of the Haryana Development and Regulation of Urban Areas Act, 1975 or any application seeking permission for change of land use under the provision of the Punjab Scheduled Roads and Controlled Areas Restriction of Unregulated Development Act, 1963.

(iv) The licencee shall obtain NOC/Clearance as per provisions of notification dated 14.09.2006 issued by Ministry of Environment & Forest, Govt. of India, if applicable before execution of development works at site.

(v) The licencee shall make own arrangements for water supply, sewerage, drainage etc. to the satisfaction of DTCP.

(vi) The licencee shall obtain clearance from competent authority, if required under Punjab Land Preservation Land Act, 1900 and any other clearance required under any other law.

(vii) That the rain water harvesting system shall be provided as per Central Ground Water Authority Norms/Haryana Govt. notification as applicable.

Director
Town & Country Planning
Haryana, Chandigarh

(viii) That the provision of solar water heating system shall be as per guidelines of Haryana Renewable Energy Development Agency and shall be made operational where applicable before applying for an Occupation Certificate.

(ix) The licencee shall use only LED fitting for internal lighting as well as campus lighting.

(x) The licencee shall convey the 'Ultimate Power Load Requirement' of the project to the concerned power utility, with a copy to the Director, within two months period from the date of grant of license to enable provision of site in licensed land for Transformers/Switching Stations/Electric Sub Stations as per the norms prescribed by the power utility in the zoning plan of the project.

(xi) The licencee shall keep pace of development atleast in accordance with sale agreement executed with the buyers of the plots as and when scheme is launched.

(xii) The licencee shall arrange power connection from UHBVNL/DHBVNL for electrification of the colony and shall install the electricity distribution infrastructure as per the peak load requirement of the colony for which licencee shall get the electrical (distribution) service plan/estimates approved from the agency responsible for installation of external electric services i.e. UHBVNL/DHBVNL and complete the same before obtaining completion certificate for the colony.

(xiii) The licencee will pay the labour cess as per policy instructions issued by Haryana Government vide Memo No. Misc. 2057-5/25/2008/2TCP dated 25.02.2010, as amended from time to time.

(xiv) The licencee shall submit compliance of Rule 24, 26, 27 & 28 of Rules 1976 & Section 5 of Haryana Development and Regulation of Urban Areas Act, 1975, and shall inform account number and full particulars of the scheduled bank wherein you have to deposit thirty percentum of the amount received from the plot holders for meeting the cost of Internal Development Works in the colony.

(xv) That no further sale has taken place after submitting application for grant of license.

(xvi) The licencee shall not give any advertisement for sale of plots/commercial area before the approval of zoning plan.

(xvii) That no provision of the Haryana Ceiling on Land Holding Act, 1972 has been violated due to purchase of applied land.

(xviii) That the revenue rasta/khal if passing through the site shall not be encroached upon and shall be kept free from all hindrances for easy movement of general public.

(xix) That the licencee shall follow the provisions of the Real Estate (Regulations and Development) Act, 2016 and Rules framed thereunder shall be followed by the applicant in letter and spirit.

(xx) The licencee shall comply with the terms and conditions of policy dated 01.10.2015, 09.03.2019 and other direction given by the Director time to time to execute the project.

(xxi) The licencee shall obtain the permission from competent authority for construction of culvert over dhana/ nala / drain / water channel what so ever, if passing through licenced land.

(xxii) The licencee shall integrate the services with Haryana Shehri Vikas Pradhikaran Development Authority services as and when made available.

(xxiii) That area coming under the sector roads and restricted belt / green belt, if any, which forms part of licensed area and in lieu of which benefit to the extent permissible as per policy towards FAR is being granted, shall be transferred free of cost to the Govt.

(xxiv) The licencee will transfer 10% area of the licenced colony free of cost to the Government for provision of community facilities. This will give flexibility to the Director to workout the requirement of community infrastructure at sector level and accordingly make provisions. The said area will be earmarked on the layout plan to be approved alongwith the license.

(xxv) The licencee understand that the development/ construction cost of 24 m/18 m major internal roads is not included in the EDC rates and they shall pay the proportionate cost for acquisition of land, if any, alongwith the construction cost of 24 m/18 m wide major internal roads as and when finalized and demanded by the Department.

(xxvi) That it will be made clear at the time of booking of plots/commercial space that specified rates include or do not include EDC. In case of non inclusion of EDC in the booking rates, then it may be specified that same are to be charged separately as per rate fixed by the Govt. applicant company shall also provide detail of calculation of EDC per sqm/per sft to the allottees while raising such demand from the plot owners.

(xxvii) That no clubbing of residential plots for approval of integrated zoning plan of two adjoining plots under same ownership shall be permitted.

(xxviii) The licencee shall abide by the terms and conditions of the policy notified on 01.04.2016.

(xxix) The licencee shall abide by the terms and conditions of policy dated 08.02.2016 (DDJAY) and other direction given by the Director time to time to execute the project.

(xxx) The licencee shall execute the development works as per Environmental Clearance and company with the provisions of Environment Protection Act, 1986, Air (Prevention and Control of Pollution of Act 1981) and Water (Prevention and Control of Pollution of 1974). In case of any violation of the provisions of said statutes, applicant shall be liable for penal action by Haryana State Pollution Control Board or any other Authority Administering the said Act.

(xxxi) That no pre-launch/sale of commercial plot will be undertaken before approval of the building plans. That the owner/developer shall integrate the bank account in which 70 percent allottee receipts are credited under Section-4(2)(l)(D) of the Real Estate Regulation and Development Act, 2016 with the online application/payment gateway of the Department, in such manner, so as to ensure that 10% of the total receipt from each payment made by an allottee is automatically deducted and gets credited to the EDC head in the State treasury.

(xxxii) That such 10% of the total receipt from each payment made by the allottee, which is received by the Department shall get automatically credited, on the date of receipt in the Government treasury against EDC dues.

(xxxiii) That such 10% deduction shall continue to operate till the total EDC dues get recovered from the owner/developer.

(xxxiv) The implementation of such mechanism shall, however, have no bearing on EDC installment schedule conveyed to the owner/developer. The owner/developer shall continue to supplement such automatic EDC deductions with payments from its own funds to ensure that by the EDC installments that are due for payment get paid as per the prescribed schedule.

(xxxv) The licencee shall take prior permission from the Divisional Forest Officer, Gurugram regarding cutting of any tree in their applied site.

(xxxvi) Only green category industry shall be allowed in the area of the licensed industrial colony which is falling within 2 kilometers from the boundary of urbanisable zone of the development plan, excluding the peripheral roads, if proposed along urbanisable boundary. All categories of industries will be allowed in the industrial colony outside 2KM belt subject to the condition of obtaining certificate from Haryana pollution Control Board.

(xxxvii) You shall pay at least the cost of infrastructure made available by various agencies/Department of the state Government, including infrastructure sought and availed in the agriculture zone as and when demanded by the competent authority.

(xxxviii) That you shall also take necessary measures for setting up of an effluent treatment plant of appropriate size and its appropriate use and also for safe disposal of effluents after proper treatment.

3. The area/pocket-1 measuring 11.56875 acres which derives approach from land acquired for RRTS, shall be kept frozen till submission of the NOC /access permission from NCRTC/competent authority.

4. That you shall not raised any construction within 20 mtr buffer zone on either side of acquired alignment of RRTS and the same shall be kept as green/buffer zone.

5. That no third party rights shall be created over any frozen area till such area is de-freezed.

6. That plots beneath the 3 nos. nos. of 11 KV HT line and 1 no. of 200 KV HT line falling in the licensed land shall be kept frozen till shifting of respective HT lines.

7. The license is valid up to 31.07.2029.

(Amit Khatri, IAS)
Director,
Town & Country Planning
Haryana, Chandigarh

Dated: The 01.08.2024.
Chandigarh

Endst. No. LC-5139/Asstt(MS)/2024/ 24309 Dated: 01-08-2024

A copy along with a copy of schedule of land is forwarded to the following for information and necessary action: -

1. Sungold Heights and Developers LLP. In collaboration with Signatureglobal (India) Limited, 13th Floor, Dr. Gopal Das Bhawan, 28 Barakhamba Road, Connaught Place, New Delhi-110001 along with a copy of agreement, LC-IV & Bilateral Agreement and Layout Plan.
2. Chairman, Pollution Control Board, Haryana, Sector-6, Panchkula.
3. Chief Administrator, HSVP, Panchkula.
4. Managing Director, HVPN, Planning Directorate, Shakti Bhawan, Sector-6, Panchkula.
5. Joint Director, Environment Haryana-Cum-Secretary, SEAC, Paryavaran Bhawan, Sector -2, Panchkula.
6. Addl. Director Urban Estates, Haryana, Panchkula.
7. Administrator, HSVP, Panchkula.
8. Chief Engineer, HSVP, Panchkula.
9. Superintending Engineer, HSVP, Gurugram along with a copy of agreement.
10. Land Acquisition Officer, Gurugram.
11. Senior Town Planner, Gurugram along with a copy of Layout Plan.
12. Senior Town Planner (Enforcement), Haryana, Chandigarh.
13. District Revenue Officer, Gurugram.
14. District Town Planner, Gurugram along with a copy of agreement & Layout Plan.
15. Chief Accounts Officer (Monitoring) O/o DTCP, Haryana.
16. Accounts Officer, O/o DTCP along with a copy of agreement.
17. Project Manager (IT) for updation on the website.

(Sanjay Narang)
District Town Planner (HQ)
For: Director, Town & Country Planning
Haryana Chandigarh

To be read with License No.....104.....Dated.....01/08/.....of 2024

Village	OWNERSHIP	REC.NO	KILLA NO	KANAL	MARLA
Sidhrawali	SUNGOLD HEIGHTS AND DEVELOPERS LLP	74	15/3/2/2	0	16
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	74	16/2/2/1/2	0	2
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	2/2/2/2	3	11
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	3	7	11
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	4/3.	1	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	5/3.	2	3
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	6	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	7/1.	2	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	7/2.	5	2
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	8/1.	3	2
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	8/2.	4	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	9	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	11/2/2.	7	9
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	12/1.	2	9
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	12/2.	5	11
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	13	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	14	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	15	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	16	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	17	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	18	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	19/1.	2	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	20/1.	2	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	23	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	24	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	75	25	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	1/4.	3	11
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	2/2.	1	5
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	4/2.	2	10
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	5/1.	6	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	5/2.	2	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	6	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	7	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	8/1/1	2	5
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	8/3/2	0	13
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	9/1/2	0	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	10	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	11	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	12	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	13	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	14	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	15	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	16	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	17	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	18	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	19	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	20	8	0

D.T.C.P (HR)

Sidhrawali	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	21/1	2	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	21/2	5	16
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	22	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	23	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	24	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	25/1/1	3	16
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	25/1/2	0	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	76	25/2	4	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	1	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	10	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	11	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	12	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	19	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	20	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	21	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	22	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	23	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	24	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	77	25	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	66	1	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	66	10	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	66	11	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	66	20	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	66	21	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	67	5	7	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	67	6	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	67	15/3	1	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	67	17	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	67	23/3	0	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	67	24/1	7	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	67	25	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	11/2.	6	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	16	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	17	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	18	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	19/3	4	3
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	19/1	0	7
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	20/1	7	9
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	21/1	2	14
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	21/3	0	5
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	22/2	7	8
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	23	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	24	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	25	7	11
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	98	2	5	17
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	98	3	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	98	4	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	98	5	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	98	7/2	0	10
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	98	8	3	13
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	1	8	0

D.T.C.P (HR)

Sidhrawali	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	2	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	3	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	4	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	5	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	6/1.	4	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	6/2.	3	8
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	7	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	8	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	9/1.	1	7
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	9/3.	5	3
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	9/2.	0	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	9/4.	1	6
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	10	8	16
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	12	5	2
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	13	10	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	90	14	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	1	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	2	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	3	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	4	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	5/2.	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	6	5	9
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	7	7	2
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	8	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	9	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	10	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	11	7	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	12	9	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	91	13	8	15
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	2/2.	5	18
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	3/1.	5	8
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	3/2.	2	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	3/3.	0	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	4	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	5	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	6	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	7	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	8/1.	3	8
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	8/2.	4	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	9/1.	0	8
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	9/2.	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	12/1.	7	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	12/2.	0	8
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	13	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	14/1.	1	14
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	15	5	7
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	18	6	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	19/1	4	16
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	19/2	3	4
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	20/1	7	10
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	92	22	4	15

D.T.C.P (HR)

Sidhrawali	SUNGOLD HEIGHTS AND DEVELOPERS LLP	65	21/2.	7	19
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	65	22	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	65	23	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	65	24	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	1	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	2	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	3	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	4/1.	7	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	7/2.	2	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	8	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	9	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	10	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	11	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	12	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	13	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	14/1/1.	2	3
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	18/1.	4	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	19	8	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	20/1.	1	11
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	93	15/3.	2	0
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	93	16/1.	3	1
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	20/2min	1	5
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	78	21min	1	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	1 min	1	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	10/1 min	0	12
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	10/2 min	0	19
	SUNGOLD HEIGHTS AND DEVELOPERS LLP	89	11/1 min	0	8
				1037	5
				AREA 129.65625 ACRES	

Director
Town & Country Planning
Haryana

ANNEXURE-I(B)

Directorate of Town and Country Planning, Haryana

Nagar Yojana Bhavan, Plot No.3, Sector-18A, Madhya Marg, Chandigarh, Chandigarh,
Phone: 0172-2549349; e-mail: tcpharyana6@gmail.com

Regd.

LC-III
(See Rule 10)

To

Sungold Heights Developers LLP.,
In collaboration with Signature Global (India) Ltd.,
13th Floor, Dr. Gopal Das Bhawan,
28 Barakhamba Road, Connaught Place,
New Delhi-110001.

Memo No. LC-5139-B-DS (AK)/2024/ 38456 Dated: 06-12-24

Subject: **Letter of Intent:-Request for grant of licence for setting up of Industrial Plotted Colony over an area measuring 6.06875 acres (in addition to licence no. 104 of 2024 dated 01.08.2024) falling in the revenue estate of village Sidhrawali, Tehsil Manesar, District Gurugram- Signature Global (India) Ltd.**

Please refer to your application dated 07.06.2024 on the above cited subject.

Your request for grant of licence under section 3 of the Haryana Development and Regulation of Urban Areas Act, 1975, and Rules framed there under for development of Industrial Plotted Colony over an area measuring 6.06875 acres (in addition to licence no. 104 of 2024 dated 01.08.2024) falling in the revenue estate of village Sidhrawali, Tehsil Manesar, District Gurugram has been considered and it is proposed to grant license for setting up of aforesaid Industrial Plotted Colony. You are, therefore, called upon to fulfill the following requirements/ pre-requisites laid down in Rule 11 of the Haryana Development and Regulation of Urban Areas Rule, 1976 within a period of 60 days from the date of issue of this letter, failing which request for grant of licence shall be refused:-

1. To deposit an amount of **Rs. 1,69,054/-** on account of scrutiny charges in favour of the Director, Town & Country Planning, Haryana through online mode.

2. You have an option to either to deposit an amount of **Rs. 76,89,89,881/-** Crore on account of External Development Charges in favour of Director, Town and Country Planning, Haryana, Chandigarh through online on e-payment portal of the Department before grant of licence or furnish 25% Bank Guarantee of **Rs.19,22,47,470/-** lacs on account of External Development Charges before grant of licence and shall pay the amount of EDC in the ten half yearly installments each with normal interest of 12% p.a. and penal interest of 3% for the delayed period in favour of Director, Town & Country Planning, Haryana, payable at Chandigarh.

D.T.C.P.(Hr).

3. To furnish bank guarantee amounting **64.48075 lacs** against 25% of the total cost of Internal Development Works amounting Rs. 257.923 lacs.

**It is made clear that bank guarantee of Internal Development Works has been worked out on the interim rates and you will have to submit the additional bank guarantee, if any required, at the time of approval of Service Plan/Estimate. With an increase in the cost of construction, you would be required to furnish an additional bank guarantee within 30 days on demand.

4. To execute two agreements i.e. LC-IV & Bilateral Agreement on Non-Judicial Stamp Paper of 100/-. Further, following additional clauses shall be added in LC-IV agreement as per Government instruction dated 14.08.2020.

I. That the owner/developer shall integrate the bank account in which 70 percent allottee receipts are credited under Section-4(2)(l)(D) of the Real Estate Regulation and Development Act, 2016 with the online application/payment gateway of the Department, in such manner, so as to ensure that 10% of the total receipt from each payment made by an allottee is automatically deducted and gets credited to the EDC head in the State treasury.

II. That such 10% of the total receipt from each payment made by the allottee, which is received by the Department shall get automatically credited, on the date of receipt in the Government treasury against EDC dues.

III. That such 10% deduction shall continue to operate till the total EDC dues get recovered from the owner/developer.

IV. The implementation of such mechanism shall, however, have no bearing on EDC instalment schedule conveyed to the owner/developer. The owner/developer shall continue to supplement such automatic EDC deductions with payments from its own funds to ensure that by the EDC instalments that are due for payment that paid as per the prescribed schedule.

5. To submit an undertaking that:-

i) That you shall pay External Development Charges as and when the site comes in urbanizable limits.

ii) That you shall maintain and upkeep of all roads, open spaces, public park and public health services for a period of five years from the date of issue of the completion certificate unless earlier relieved of this responsibility and thereupon to transfer all such roads, open spaces, public parks and public health services free of cost to the Govt. or the local authority, as the case may be, in accordance with the provisions of Section 3(3)(a)(iii) of the Haryana Development and Regulation of Urban Areas Act, 1975.

iii) That you shall construct 18/24/30 m wide internal circulation road forming part of licenced area at your own costs and transfer the same free of cost to the Government as and when site comes in urbanizable limit.

iv) That you shall integrate the services with the HSVP services as per the approved service plans and as and when made available.

v) That you shall have no objection to the regularization of the boundaries of the licence through give and take with the land that HSVP is finally able to acquire any land in the interest of planned development and integration of services. The decision of the Competent Authority shall be binding upon you.

vi) That you shall provide basic facilities (sewer, water etc) in the colony upto the satisfaction of the Director, as on date the services are not being provided by HSVP.

vii) That you shall make your own arrangements for water supply, sewerage, drainage etc. to the satisfaction of DTCP till these services are made available and the same is made functional from External Infrastructure to be laid by Haryana Urban Development Authority or any other execution agency.

viii) That you shall submit NOC as required under notification dated 14.09.2006.

ix) That you shall convey "Ultimate Power Load Requirement" of the project to the concerned power utility, with a copy to the Director, with in two month period from the date of grant of licence to enable provision of site in your land for Transformers/Switching Station/ Electric Sub-Stations as per the norms prescribed by the power utility in the zoning plan of the project.

x) There is no further sale of the land applied for licence after submission of licence application till date.

xi) That you shall provide the Solar water heating system as per by HAREDA and shall be made operational where applicable before applying for an occupation certificate.

xi) That you shall provide the Solar water heating system as per by HAREDA and shall be made operational where applicable before applying for an occupation certificate.

xii) That you shall not encroach the revenue rasta passes through the site and shall provide appropriate access to the land of others situated in between the applied land.

xiii) That you shall comply with the terms and conditions of policy dated 01.10.2015 and other direction given by the Director time to time to execute the project.

xiv) That you shall submit compliance of Rule 24, 26, 27 & 28 of Rules 1976 & Section 5 of Haryana Development and Regulation of Urban Areas Act, 1975, and shall inform account number and full particulars of the scheduled bank wherein you have to deposit seventy percentum of the amount received from the plot holders for meeting the cost of Internal Development Works in the colony.

xv) That you have not violated the provision of the Haryana Ceiling of Land Holdings Act, 1972

xvi) That you have not submitted any other application for applied site for CLU /licence.

xvii) That you shall abide by the terms and condition of policy dated 01.10.2015 and 03.09.2019.

xviii) That the owner/developer shall integrate the bank account in which 70% allottee receipts are credited under Section-4(2)(l)(D) of the Real Estate Regulation and Development Act, 2016 with the online application/payment gateway of the Department, in such manner, so as to ensure that 10% of the total receipt from each payment made by an allottee is automatically deducted and gets credited to the EDC head in the State treasury.

xix) That such 10% of the total receipt from each payment made by the allottee, which is received by the Department shall get automatically credited, on the date of receipt in the Government treasury against EDC dues.

xx) That you shall follow the provisions of the Real Estate (Regulations and Development) Act, 2016 and Rules framed thereunder shall be followed by the applicant in letter and spirit.

xxi) That you shall provide the entire master services at your own cost.

D.T.C.P(Hr).

xxii) You shall not encroach the revenue rasta passes through the applied site if any and keep it thoroughfare movement of general public.

xxiii) That you shall take prior permission from the Divisional Forest Officer, Gurugram regarding cutting of any tree in their applied site.

6. That you shall submit the NOC from the Divisional Forest Officer, Gurugram regarding applicability of any forest law/ notification on the applied site in revenue estate of village Sidhrawali at NH-48 road, before issuance of final permission.

7. That you shall submit an indemnity bond indemnifying DTCP from any loss, if occurs due to submission of undertaking submitted in respect of non-creation of third party rights on the applied land.

8. That you shall undertake to indemnify State Govt./ Department for loss occurred or legal complication arising due to pending litigation and the land owning/ developer company will be responsible for the same in respect of applied land.

9. That you shall submit an affidavit duly attested by 1st Class Magistrate, to the effect that applicants have not submitted any other application for grant of licence for development of the said land or part thereof for any purpose under the provisions of the Haryana Development and Regulation of Urban Areas Act, 1975 or any application seeking permission for change of land use under the provision of the Punjab Schedule Roads and Controlled Areas restrictions of

Unregulated Development Act, 1963 or have not applied for licence/ permission under any other law for the time being in force.

10. That you shall submit an undertaking from the land owning companies/ owners that this land has not been sold to any person after entering into collaboration agreement with the colonizer to whom LOI is being issued and also that presently there is no collaboration agreement enforced with any other person for the same land.

11. That certificate from DRO/Deputy Commissioner, Gurugram will be submitted certifying that the applied land is still under ownership of applicant company, encumbrance free and not under acquisition proceedings.

12. That you shall submit the NOC/Access permission from NCRTC/competent authority regarding R.O.W of RRTS, before issuance of final permission.

13. You shall submit an indemnity bond indemnifying Director w.r.t. final outcome of the SLP(C) no. 15439 of 2022 of Hon'ble Supreme Court of India.

14. That company will intimate their official Email ID and the correspondence on this Email ID by the Deptt. will be treated as receipt of such correspondence.

(Amit Khatri, IAS)
Director,
Town & Country Planning,
Haryana, Chandigarh

Endst no. LC-5139-B-DS(AK)/2024/ Dated:

A copy is forwarded to the following for information and necessary action:-

i. Deputy Commissioner, Gurugram.
ii. Senior Town Planner, Gurugram.
iii. District Town Planner, Gurugram.
iv. District Town Planner(E), Gurugram.
v. Director Urban Estate Haryana, Sector-6, Panchkula.
vi. Project Manager (IT) with a request to update the status on website.

(Sanjay Narang)
District Town Planner (HQ)
For Director, Town & Country Planning
Haryana Chandigarh

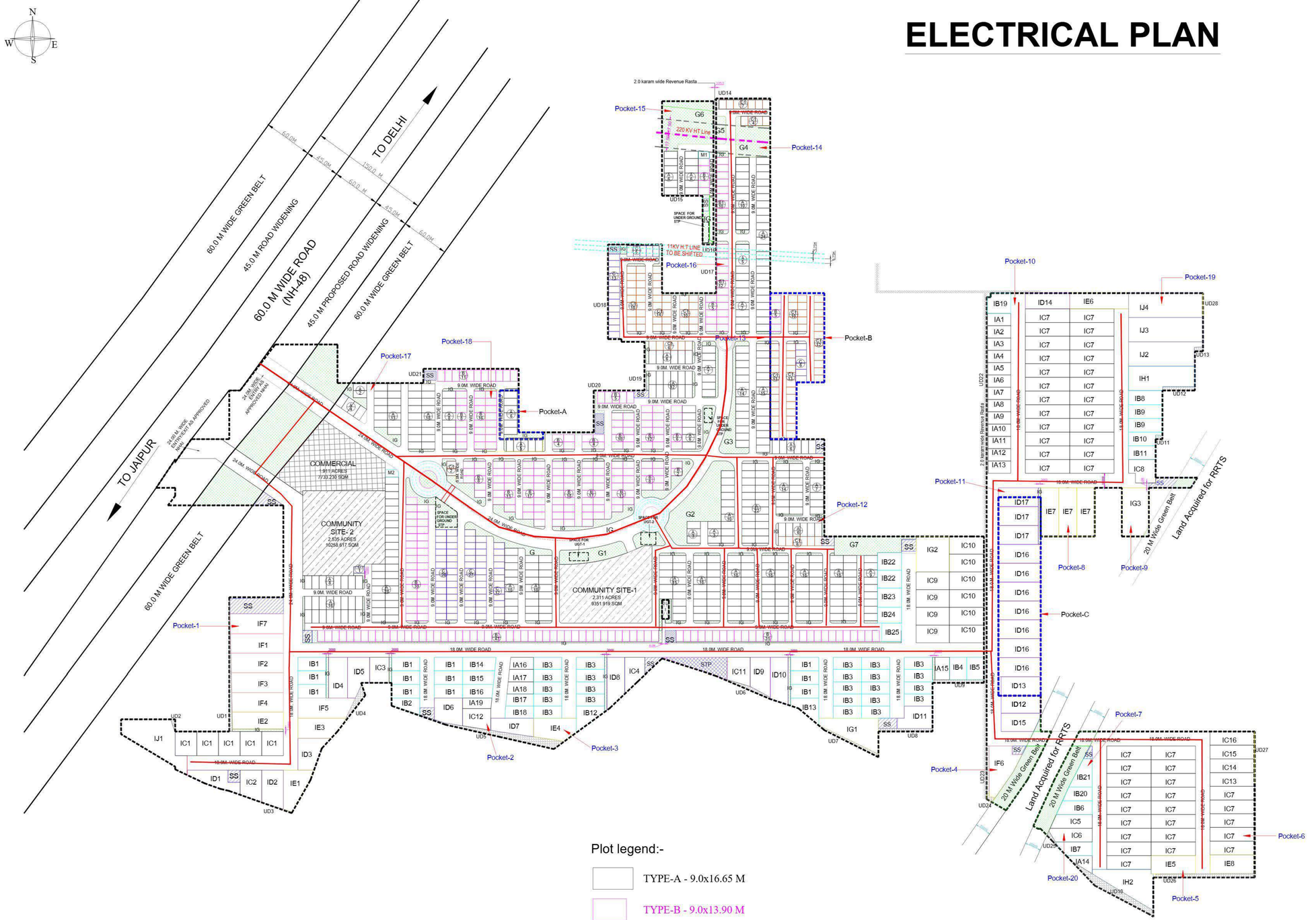
To be read with LOI Memo No.....38456 Dated.....06/12/.....of 2024.

Village	Name of owner	Rect. No.	Killa No.	Area (K-M)
Sidhrawali	Sungold Heights and developers LLP.	78	20/2min	5-4
			21min	6-8
		89	1min	6-8
			10/1min	2-10
			10/2min	3-19
			11/1min	1-12
		76	9/2/1	3-6
		66	22	8-0
		77	2/1	7-6
			9/2	3-18
			Total	48-11 Or 6.06875 Acres

Director
Town & Country Planning
Haryana, Chandigarh

ELECTRICAL PLAN

ANNEXURE-II



LEGEND:-

ELECTRIC LINE

Plot legend:-

- TYPE-A - 9.0x16.65 M
- TYPE-B - 9.0x13.90 M
- TYPE-B1 - 9.0x14.50 M
- TYPE-C - 8.0x13.50 M
- TYPE-C1 - 9.0x11.50 M
- TYPE - M

OWNER :

SUNGOLD HEIGHTS DEVELOPERS LLP IN COLLABRATION WITH SIGNATUREGLOBAL (INDIA) LIMITED

PROJECT :

PROPOSED LAYOUT PLAN FOR ADDITIONAL AREA MEASURING 6.06875 ACRES ADJOINING ALREADY LICENSED AREA OF 129.65625 ACRES VIDE LIC NO. LICENSE NO. OF DATED , TOTAL AREA OF 135.7250 ACRES IN VILLAGE SHIDRAWALI, TEHSIL MANESAR, DISTRICT GURUGRAM. BEING DEVELOPED BY SIGNATUREGLOBAL (INDIA) LTD.

DRAWING TITLE :

LAYOUT PLAN

GIAN P. MATHUR AND ASSOCIATES (P) LTD.
C - 55, East Of Kailash, New Delhi-110065
T : 46599599 I F 46599512
E : info@gpmindia.com I W : www.gpmindia.com

SCALE :- 1 :2000

OWNER'S SIGN

ARCHITECT'S SIGN

ANNEXURE-III

DEMARCATION -CUM-ZONING PLAN OF OF AFFORDABLE PLOTTED COLONY (UNDER DDJAY) & INDUSTRIAL PLOTS FALLING IN THE INDUSTRIAL PLOTTED COLONY ON AN AREA MEASURING 126.65625 ACRES (LICENSE NO.-104 OF 2024 DATED:01/08/2024) IN THE REVENUE ESTATE OF VILLAGE SHIDRAWALI, TEHSIL MANESAR, DISTRICT GURUGRAM. BEING DEVELOPED BY SIGNATUREGLOBAL (INDIA) LTD.

FOR THE PURPOSE OF CODE 1.2 (xcvi) & 6.1 (1) OF THE HARYANA BUILDING CODE, 2017, AMENDED FROM TIME TO TIME.

POCKET 1(11.56875 ACRES), WHICH DERIVES APPROACH FROM LAND ACQUIRED FOR RRTS SHALL BE KEPT FROZEN TILL SUBMISSION OF THE NOC ACCESS PERMISSION FROM NCRTC/COMPETENT AUTHORITY REGARDING ROW OF RRTS.	
Residential Plots(DDJAY)	Industrial Plots
A323 TO A395	IB22
D1 TO D6	IB21
	1B6
	IC5
	IC6
	IB7
	IA14
	1H2
	1D15/1
	1D15/2
	1D15/3
	1D15/4
	IB20/1
	IB20/2
	IB20/3
	IB20/4
	IB20/5
	1B23/1
	1B23/2
	1B23/3
	1B23/4
	1B24
TOTAL 79 Nos	22 Nos.

Plots Fallning under R.O.W. of 11 KV HT Line Freeze till the shifted.	
Residential Plots(DDJAY)	Industrial Plots
A42 to A44	1C13/1
B191 TO B193	IC13/7
B218 TO B220	IC13/8
C01	IC13/9
C27 TO C30	IC13/10
C54 TO C57	IC13/11
A90	IC13/12
A100	1C9/4
A117	IC10/6
A120 TO A122	
C81 TO C85	
B1-11 TO B1-12	
A254 TO A256	
A229 TO A231	
TOTAL 37 Nos.	9 Nos.

LEGEND

LICENCED AREA BOUNDARY 126.65625 ACRES

R.O.

SPACE FOR SUB STATION

POCKET 1(11.56875 ACRES), WHICH DERIVES APPROACH FROM LAND ACQUIRED FOR RRTS SHALL BE KEPT FROZEN TILL SUBMISSION OF THE NOC ACCESS PERMISSION FROM NCRTC/COMPETENT AUTHORITY REGARDING ROW OF RRTS

Plots Fallning under R.O.W. of 11 KV HT Line Freeze till the shifted.

ZONING CLAUSES FOR INDUSTRIAL PLOTS

1. USE ZONE:-
The land shown in this zoning plan shall be utilized in accordance with the marking explained in the table below and no other manner whatsoever:

Notation	Permissible use of land on the portion of the plot marked in column 1	Type of building permissible on land marked in column 1.
	Industrial	Industrial
	Road	Road furniture at approved places.
	Public open space	To be used only for landscape features.
	Public Utility Sites	Utilities such as water tanks, Electric Sub station, Sewage treatment plants as approved in service plan estimates
	Commercial	As per supplementary zoning plan to be approved separately for each site.
	Community buildings	As per supplementary zoning plan to be approved separately for each site.

2. MAXIMUM PERMISSIBLE GROUND COVERAGE, BASEMENT, FAR AND MAXIMUM PERMISSIBLE HEIGHT / INCLUDING STILT PARK NG :-

(a) The building or buildings shall be constructed only with in the portion of the site marked as buildable zone as explained above, and nowhere else.
(b) The Maximum permissible ground coverage, basement,F.A.R and maximum permissible height / including stilt parking on the area of the site mentioned in column-1, according to the table below :-

S.No.	Type of Industry	Maximum permissible Ground Coverage	Permissible Basement	Maximum permissible Floor Area Ratio (FAR)	Maximum permissible height	Remarks
1.	General	60%	Twin Level	150%	30 meters	
2.	Apparel and Footwear	60%				
3	Biotechnology other than Pharmaceuticals	40%	Unrestricted	250%	Unrestricted	To be located on roads with a Right of Way of 18 meters and above.
4	Information Technology/ Information Technology enabled services					
5	Information Technology park, Cyber city, Technology park	40%	Unrestricted	250%	Unrestricted	Subject to condition that they are located on the roads with a Right of way of 30 meters and above.
6	Data Centre Industry	60%	Unrestricted	300%	Unrestricted	There will be no restriction on floor to ceiling height subject to their being no mezzanine floor and compliance with structural and fire safety regulations.

The proportion up to which a site may be covered with building shall be in accordance with the provisions of Haryana Building Code, 2017:-

Note:-
The facility of enhanced FAR beyond the General Level of 125% in the industrial use shall be permitted on the payment of proportionate charges/infrastructure strengthening charges as prescribed by the Government/ Development Agency.

3. **SUB-DIVISION / COMBINATION OF PLOTS.**

(a) No plot shall be sub-divided. However two or more plots under one ownership may be combined to form a single plot subject to the following condition:-
i) The site coverage shall be as per clause number 2 above.
ii) The maximum permissible coverage shall be calculated considering the combined plot as a single plot.

4. BUILDING SETBACK

Building other than boundary wall, Guard room and gates shall be c onstructed only within the portion of the site marked as Industrial buildable zone in clause number 1 above. The cantilever projections as allowed in Haryana Building Code 2017 shall project beyond the portion marked as industrial buildable zone.

5. **HEIGHT OF THE BUILDING AND PERMISSIBLE NUMBER OF STOREY**

The maximum height and number of storey shall be allowed on the plot as per provisions of Haryana Building Code, 2017 and as shown in table under clause 2 (b) of this zoning.

6. **STILT PARKING**

Stilt parking is allowed in all sizes plots. The clear height of the stilt shall be maximum 2.40 metres from the plinth level and below the bottom of the beam. The Stilt will not be permissible for any purpose other than parking.

7. **PARKING:**

(a) Adequate parking spaces, covered, open or in the basement / stilt shall be provided for vehicles of users and occupiers, within the site as per Code 7.1 of the Haryana Building Code,2017.
(b) In no circumstance, the vehicle(s) belonging to the plot shall be parked outside the plot area.

8. **PLINTH LEVEL**

The plinth height of building shall not be less than 45 cms. above the road level as per Haryana Building Code 2017.

9. **BASEMENT:**

Basements within the building zone of the site shall be provided as per Code 6.3(3)(iv) and shall be constructed, used and maintained as per Code 7.16 of the Haryana Building Code, 2017.

10 **RESTRICTION OF ACCESS FROM 45 MTS. WIDE OR MORE SECTOR ROADS AND PUBLIC OPEN SPACES**

In the case of plots which abut on the 45 meters or more wide sector roads and plots which abut on public open spaces, no direct access whatsoever secondary or main shall be allowed into the plots from such roads and open spaces.

11. **BOUNDARY WALL**

(a) The boundary wall shall be constructed as per Code 7.5.
(b) The boundary walls in front courtyard which abut on a road or an open space shall be constructed according to standard design as approved by the DTCP. The boundary wall in the rear courtyard shall not be more than 1.83 meters in height.
(c) In case of corner plots, boundary walls shall be rounded off at such corner by a radius as given below:-
i). 0.5 meters Radius for plots opening on to open space.
ii). 3.5 meters Radius for 125 sq. meters to 420 sq. meters
iii). 2.0 meters. Radius for plots above 420 sq. meters
(d) The owner/applicant if desires, is permitted to not construct boundary wall in front of plot , so that the said area can be utilized for parking.

12. **GATE AND GATE POST**

a) Gate and gate post shall be constructed as per approved standard design, at the position indicated on the zoning plan.

b) An additional wicket gate of standard design not exceeding 1.15 meter width may be allowed in the front and side boundary wall provided further that no gate shall be allowed in the rear boundary wall or towards the sector road and public open space.

13. **DISPLAY OF POSTAL NUMBER OF THE PLOT**

The premises number and postal address shall be written at the space shown for this purpose on the standard design of the gate as per approved design.

14. **GARBAGE COLLECTION POINT**

Every plot holder shall make adequate provision for garbage collection in his own plot and make suitable arrangement for disposal at the towable collection point to be provided by the coloniser.

15. **ACCESS**

No plot or public building will derive an access from less than 15 meters wide road.

16. The community building/buildings shall be constructed by the Coloniser / Owner as per provision of The Haryana Development and Regulation of Urban Areas (Amendment and validation) Act No. 4 of 2012, failing which the said sites shall vest with the Government.

17. **General:-**

(i) That the coloniser/owner shall obtain the clearance/NOC as per the provisions of the Notification No. S.O. 1533 (E) Dated 14.9.2006 issued by Ministry of Environment and Forest, Government of India before starting the construction/execution of development works at site.
(ii) That the rain water harvesting system shall be provided as per Central Ground Water Authority norms/Haryana Govt. notification as applicable.
(iii) That the coloniser/owner shall use only Light-Emitting Diode lamps (LED) fitting for internal lighting as well as Campus lighting.
(iv) That the coloniser/owner shall strictly comply with the directions issued vide Notification No. 15/6/2016-5P dated 31.03.2016 issued by Haryana Government Renewable Energy Department.
(v) That the coloniser/owner shall ensure the installation of Solar Photovoltaic Power Plant as per the provisions of order No. 22/52/2005-5 Power dated 21.08.2016 issued by Haryana Government Renewable Energy Department.
(vi) Fire safety measures shall be regulated by Haryana Fire service Act, 2009 as amended from time to time as per provisions of Haryana Building Code-2017, Chapter 7.17(1).
(vii) The norms applicable for data centre as mentioned in the note F, inserted in code 6.3(3) (vii).

ZONING CLAUSES FOR RESIDENTIAL PLOTS(DDJAY)

1. **USE ZONE**

The land shown in this zoning plan shall be utilized in accordance with the marking explained in the table below and no other manner whatsoever:

Notation	Permissible use of land on the portion of the plot marked in column 1	Type of building permissible on land marked in column 1.
1	2	3
	Road	Road furniture at approved places.
	Public open space	To be used only for landscape features.
	Residential Buildable Zone	Residential building.
	Commercial	As per supplementary zoning plan to be approved separately for each site.

2. **MAXIMUM PERMISSIBLE GROUND COVERAGE, BASEMENT, FAR AND MAXIMUM PERMISSIBLE HEIGHT / INCLUDING STILT PARKING**

(a) The building or buildings shall be constructed only with in the portion of the site marked as buildable zone as explained above, and nowhere else.
(b) The Planning parameter to be adopted is as below:-

Plot Area	Maximum Permissible Ground Coverage	Permissible Basement	Maximum Permissible Floor Area Ratio (FAR)	Maximum permissible Height (in.metres)
Upto 150 square metres	75%	Single Level	200%	14.5

(c) The stilts are permitted parking purpose in residential plots of all sizes, subject to the condition that maximum permissible height of building shall not exceed 16.5 metres as per the terms and conditions of policy circulated vide memo no. Memo- 2309- VCL-II-UJB/7/5/2006-2TCP dated 25-04-2022.

3. **PERMISSIBLE NUMBER OF DWELLING UNIT ON EACH PLOT**

a). No. of Dwelling unit permitted on each plot :3 (Three)
b). Provided that in case the decision dated 23.02.2023 to keep in abeyance the approvals of stilt+4 dwelling units is revoked by the competent authority and building plans approvals for such Stilt+4 units is allowed, the number of dwelling unit permitted on each plot shall be restored to 4 (four) dwelling units.

4. **BAR ON SUB-DIVISION OF PLOT**

Sub-division & clubbing of the plots shall not be permitted any circumstances.

5. **BUILDING SETBACK**

Building other than boundary wall and gates shall be constructed only within the portion of the site marked as residential buildable zone in clause number 1 above.Balcony of a width of maximum 1.80 m in front and rear sides of a plot can be permitted within the plot. No balcony beyond the rear soning shall be permitted.

6. **HEIGHT OF THE BUILDING AND PERMISSIBLE NUMBER OF STOREY**

The maximum height and number of storey shall be allowed on the plot as per provisions of Haryana Building Code, 2017.

7. **STILT PARKING**

Stilt parking is allowed in all sizes plots. The clear height of the stilt shall be 2.4C metres from the plinth level and below the bottom of the beam. The Stilt will not be permissible for any purpose other than parking.

8. **PARKING**

(a) Parking shall be provided as per the provisions of Haryana Building Code - 2017, as amended from time to time.
(b) In no circumstance, the vehicle(s) belonging to the plot shall be parked outside the plot area.

9. **PLINTH LEVEL**

The plinth height of building shall be as per Code No. 7.3 of the Haryana Building Code, 2017.

10. **BASEMENT**

Single level basements within the building zone of the site shall be provided as per Code 6.3(3)(i)(a) and shall be constructed, used and maintained as per Code 7.16 of the Haryana Building Code, 2017.

11. **RESTRICTION OF ACCESS FROM 45 MTS. WIDE OR MORE SECTOR ROADS AND PUBLIC OPEN SPACES**

In the case of plots which abut on the 45 meters or more wide sector roads and plots which abut on public open spaces, no direct access whatsoever secondary or main shall be allowed into the plots from such roads and open spaces.

12. **BOUNDARY WALL**

(a) The boundary wall shall be constructed as per Code 7.5.
(b) The boundary walls in front courtyard which abut on a road or an open space shall be constructed according to standard design as approved by the DTCP. The boundary wall in the rear courtyard shall not be more than 1.80 meters in height.
(c) In case of corner plots, boundary walls shall be rounded off at such corner by a radius as given below:-
i). 0.5 meters Radius for plots opening on to open space.
ii). 1.0 meters Radius for plots upto 125 sq. meters.
iii).1.50 meters Radius for plots above 125 sq. meters to 150 sq. meters.
(d) The owner/applicant if desires, is permitted to not construct boundary wall in front of plot, so that the said area can be utilized for parking.

13. **GATE AND GATE POST**

a) Gate and gate post shall be constructed as per approved standard design, at the position indicated on the zoning plan.
b) An additional wicket gate of standard design not exceeding 1.15 meter width may be allowed in the front and side boundary wall provided further that no gate shall be allowed in the rear boundary wall or towards the sector road and public open space.

14. **DISPLAY OF POSTAL NUMBER OF THE PLOT**

The premises number and postal address shall be written at the space shown for this purpose on the standard design of the gate as per approved design.

15. **GARBAGE COLLECTION POINT**

Every plot holder shall make adequate provision for garbage collection in his own plot and make suitable arrangement for disposal at the towable collection point to be provided by the coloniser.

16. **ACCESS**

No plot or public building will derive an access from less than 9.00 meters wide road.

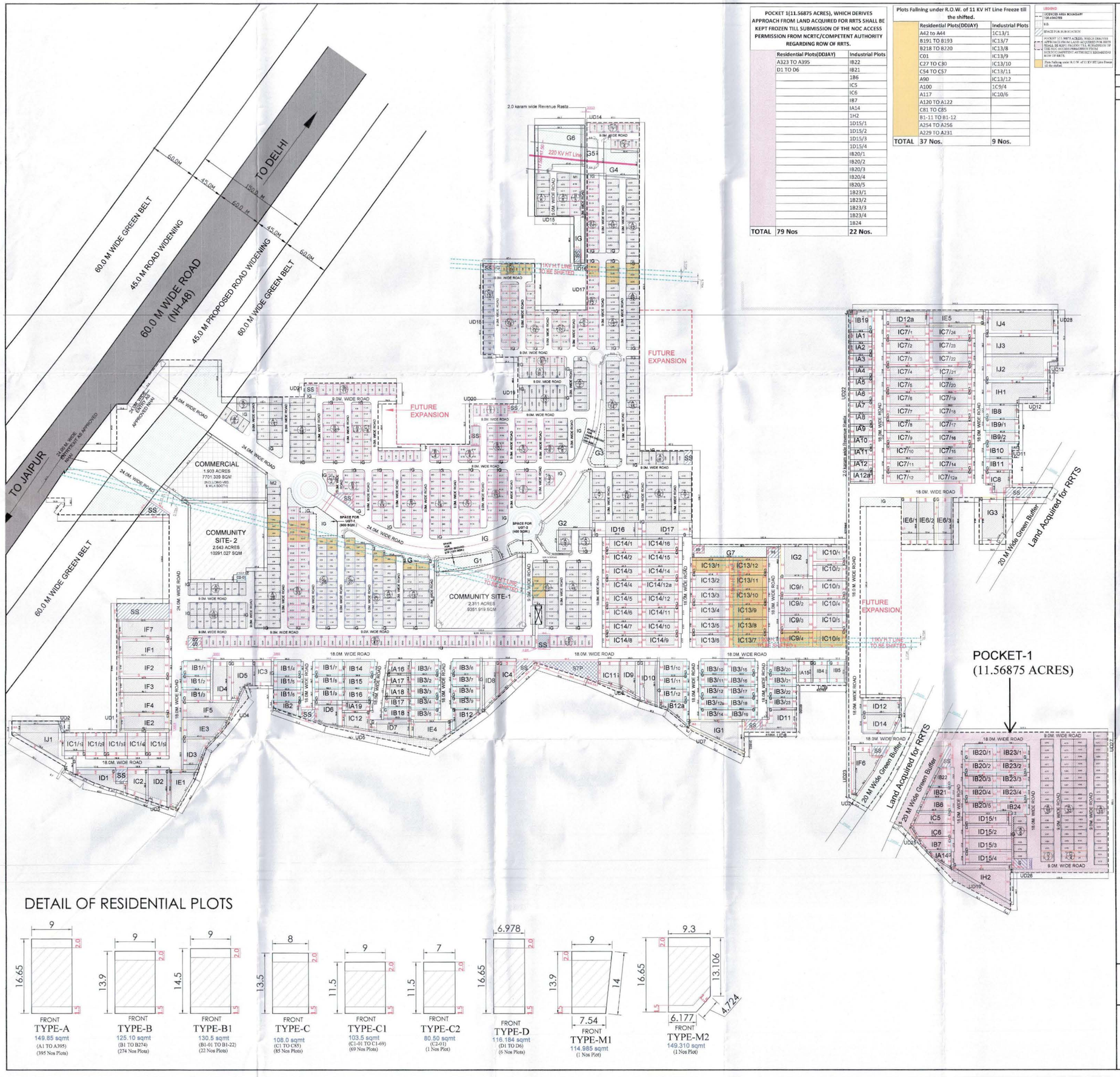
17. **GENERAL**

(i) That the coloniser/owner shall use only Light-Emitting Diode lamps (LED) fitting for internal lighting as well as Campus lighting.
(ii) That the coloniser/owner shall strictly comply with the directions issued vide Notification No. 15/6/2016-5P dated 31.03.2016 issued by Haryana Government Renewable Energy Department, if applicable.
(iii) That the coloniser/owner shall ensure the Installation of Solar Photovoltaic Power Plant as per the provisions of order No. 22/52/2005-5Power dated 21.08.2016 issued by Haryana Government Renewable Energy Department, if applicable.
(iv) Fire safety protection measures shall be regulated by Haryana fire service Act,2009,as amended from time to time.
(v) Rain water harvesting shall be provided as per HBC-2017(if applicable)

NOTES:-
Read this drawing in conjunction with the demarcation plan verified by D.T.P., Gurugram vide Endst no. 8317 dated 10.09.2024

DRG. NO. DTCP 16/09 DATED 19-09-24

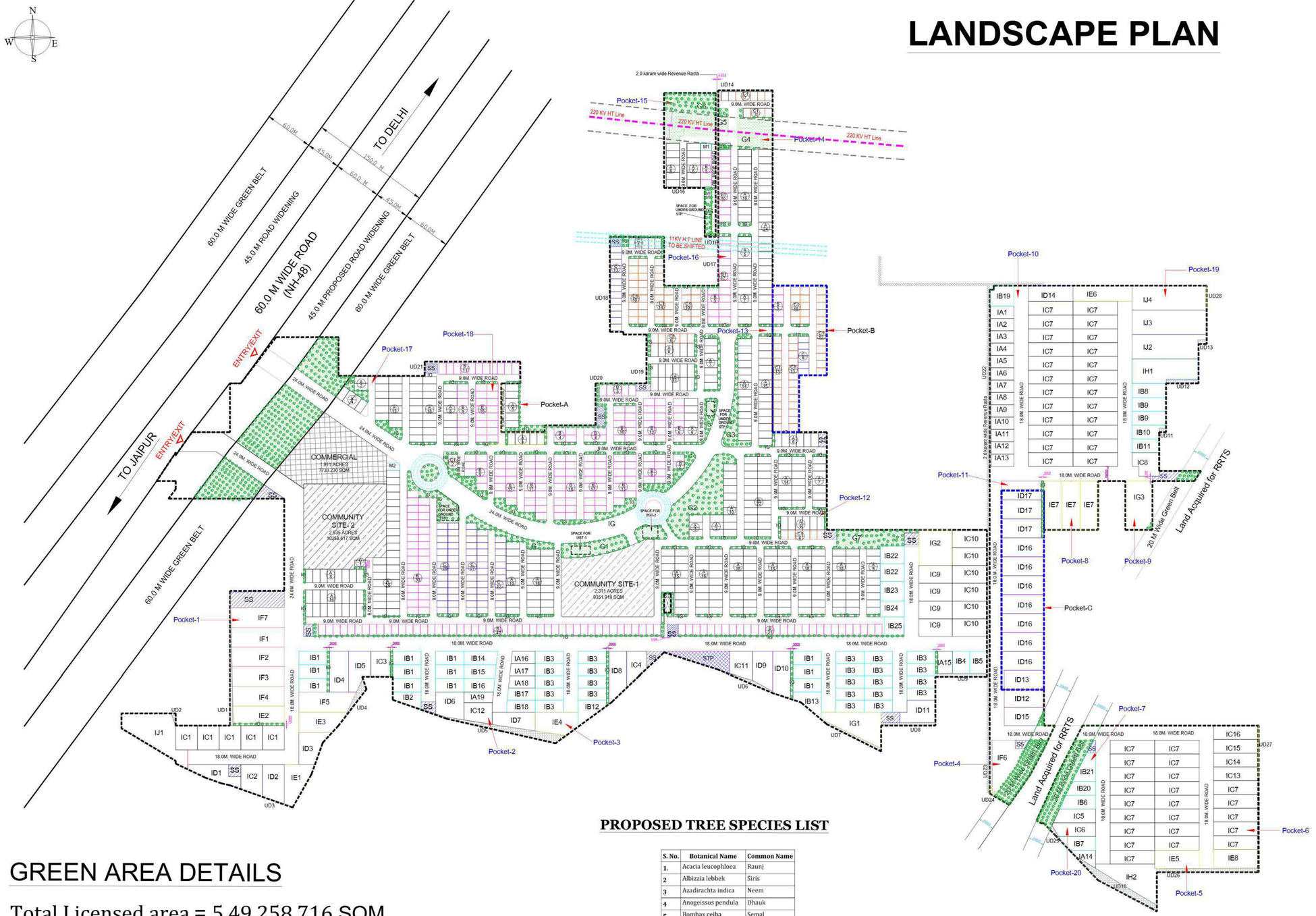
(PARVEEN KUMAR) JD(HQ)	(SANDEEP KUMAR) ATP (HQ)	(SANJAY NARANG) DTP(HQ)	(VIJENDER SINGH) STP(HQ)	(JITENDER SIHAG) CTP(HR)	(AMIT KHATRI, IAS) DTCP(HR)



DETAIL OF RESIDENTIAL PLOTS

Annexure-IV

LANDSCAPE PLAN



GREEN AREA DETAILS

Total Licensed area = 5,49,258.716 SQM.
Net Area = 5,32,029.859 SQM.
Net Planned area = 5,26,513.219 SQM.
Green Area (7.073% of Plot area) = 37,241.664 SQM.
Green Area under DDJAY = 14942.433 SQM.
Green Area under Green Belt = 13677.139 SQM.
Green Area Metro/RRTS Green Belt = 5293.280 SQM.
Proposed no of trees = 6581

PROPOSED TREE SPECIES LIST

S. No.	Botanical Name	Common Name
1.	Acacia leucophloea	Raunj
2	Albizzia lebbek	Siris
3	Azadirachta indica	Neem
4	Anogeissus pendula	Dhauk
5	Bombax ceiba	Semal
6	Boswelli aserrata	Salai
7.	Butea monosperma	Dhak
8.	Cassia fistula	Amaltas
9.	Cordia dichotoma	Lasura
10.	Dalbergia sissoo	Shisham
11.	Holoptelia integrifolia	Papri
12.	Kigelia pinnata	Kigelia
13.	Melia azedarach	Bakain
14.	Pongamia pinnata	Papri, Karanj
15.	Prosopis cineraria	Jand, Jandi
16.	Salvadora oleoides	Jal
17.	Terminalia arjuna	Arjun
18.	Bauhinia variegata	Kachnar
19.	Ficus religiosa	Peepal
20.	Ficus bengalensis	Bad
Total no. of trees= 6581		

Plot legend:-

- TYPE-A - 9.0x16.65 M
- TYPE-B - 9.0x13.90 M
- TYPE-B1 - 9.0x14.50 M
- TYPE-C - 8.0x13.50 M
- TYPE-C1 - 9.0x11.50 M
- TYPE - M

OWNER :

SUNGOLD HEIGHTS DEVELOPERS LLP IN COLLABRATION WITH SIGNATUREGLOBAL (INDIA) LIMITED

PROJECT :

PROPOSED LAYOUT PLAN FOR ADDITIONAL AREA MEASURING 6.06875 ACRES ADJOINING ALREADY LICENSED AREA OF 129.65625 ACRES VIDE LIC NO. LICENSE NO. OF DATED , TOTAL AREA OF 135.7250 ACRES IN VILLAGE SHIDRAWALI, TEHSIL MANESAR, DISTRICT GURUGRAM. BEING DEVELOPED BY SIGNATUREGLOBAL (INDIA) LTD.

DRAWING TITLE :

LAYOUT PLAN

GIAN P. MATHUR AND ASSOCIATES (P) LTD.
C - 55, East Of Kailash, New Delhi-110065
T : 46599599 I F 46599512
E : info@gpmindia.com I W : www.gpmindia.com

SCALE :- 1 :2000

OWNER'S SIGN

ARCHITECT'S SIGN

Annexure-V: TRAFFIC STUDY

Anthropogenic emissions not only contribute to the Greenhouse effect but also participate in the reaction resulting in photochemical oxidants. The effect of photochemical oxidants is well known for forming smog. Among the anthropogenic sources of pollutants forming the greenhouse gases, burning of fossil fuels constitute a major source. Highway mobile sources that contribute significantly to poor quality of air have not been regulated for the past two decades. In India two-wheelers are a very popular mode of personal transport. Most of them are powered by two-stroke engines because of initial and maintenance costs. However, they have high emission levels causing air pollution.

The objective of traffic study and emission quantification is to assess the magnitude of the emissions resulting from two wheelers, three wheelers and four wheelers that are extensively used as a means of common transport.

A detailed traffic survey was conducted in the area at major traffic intersections in order to arrive at the traffic density in the study area and also to evaluate the impacts of the increased traffic due to the proposed activity.

Vehicular emissions are the major source of air quality impacts in the study area. The principal cause of air pollution during the construction phase is the diesel-powered vehicles used in the haulage of aggregates, earth and other construction material. Air quality could be affected by dust and particulate matter arising due to site clearing, vehicular emissions, etc. Gaseous emissions like SO_2, NO_2, CO and HC might be released from the vehicular movement, which has a direct impact on the environment.

Increase in traffic in the study area has a direct impact on the resources as a heavy release of automobile exhaust is envisaged which has a direct impact on the air quality and the ambient noise levels in the study area. The methodology adopted for carrying out the traffic study was to select the major roads around the project site and count the various categories of vehicles moving on the roads.

Table 1: Traffic Density at the NH- 48

	2 wheeler	PCU (0.5)	3 wheeler	PCU (1.2)	4 wheeler	PCU (1)	B/L	PCU (3.7)	Total PCU
06:00-07:00	178	89	98	74	126	126	104	312	601
07:00-08:00	198	99	101	76	169	169	108	324	668
08:00-09:00	202	101	123	92	262	262	97	291	746
09:00-10:00	226	113	132	99	301	301	109	327	840
10:00-11:00	245	123	106	80	299	299	112	336	837
11:00-12:00	235	118	124	93	286	286	126	378	875
12:00-13:00	248	124	106	80	249	249	96	288	741
13:00-14:00	256	128	115	86	266	266	107	321	801
14:00-15:00	275	138	119	89	245	245	99	297	769

15:00-16:00	249	125	121	91	265	265	89	267	747
16:00-17:00	246	123	107	80	279	279	96	288	770
17:00-18:00	259	130	108	81	315	315	91	273	799
18:00-19:00	265	133	114	86	299	299	87	261	778
19:00-20:00	245	123	109	82	265	265	79	237	706
20:00-21:00	243	122	95	71	245	245	121	363	801
21:00-22:00	221	111	86	65	212	212	106	318	705
22:00-23:00	156	78	75	56	196	196	86	258	588
23:00-00:00	145	73	74	56	186	186	89	267	581
00:00-01:00	123	62	36	27	175	175	92	276	540
01:00-02:00	142	71	30	23	156	156	83	249	499
02:00-03:00	126	63	28	21	145	145	86	258	487
03:00-04:00	112	56	29	22	115	115	84	252	445
04:00-05:00	146	73	36	27	125	125	110	330	555
05:00-06:00	157	79	51	38	135	135	118	354	606

PCUs as per IRC-106:1990

Table 2: Existing Traffic Scenario & LOS

Road	V	C	Existing V/C Ratio	LOS
NH- 48	687	2400	0.286	B

V= Volume in PCUs/hr & C= Capacity in PCUs/ hr

The existing Level of Service is "B" i.e. Very Good

Table 3: Capacity as per IRC: 106–1990-page no. 11 table-2 for arterial road/ Highways

V/C	LOS	Performance	V/C
0.0 - 0.2	A	Excellent	0.0 - 0.2
0.2 - 0.4	B	Very Good	0.2 - 0.4
0.4 - 0.6	C	Good / Average / Fair	0.4 - 0.6
0.6 - 0.8	D	Poor	0.6 - 0.8
0.8 - 1.0	E	Very Poor	0.8 - 1.0

- The total proposed parking for the project is 1,168 ECS, It is estimated that 90% of the vehicles will leave or be operating at the site from (Ready to ply or incoming) 7:00 AM to 8:00 PM i.e. 1,168 x 0.90 = 1,051 and the remaining 10%

parking space will remain vacant or parked with Light Motor Vehicles i.e. 1,168 x 0.10 = 117.

- Since the maximum number of trips will happen between 7:00am to 8:00 PM (i.e.) 12 hours

- Therefore, on average the total number of trips per hour is 1,051/12 = 88 vehicles/ hour.

Table 4: Modified Traffic Scenario

Road	V	C	Modified V/C Ratio	LOS
NH- 48	687 + 88= 775	2400	0.32	B

Modified Traffic Scenario & LOS (after completion of the project)

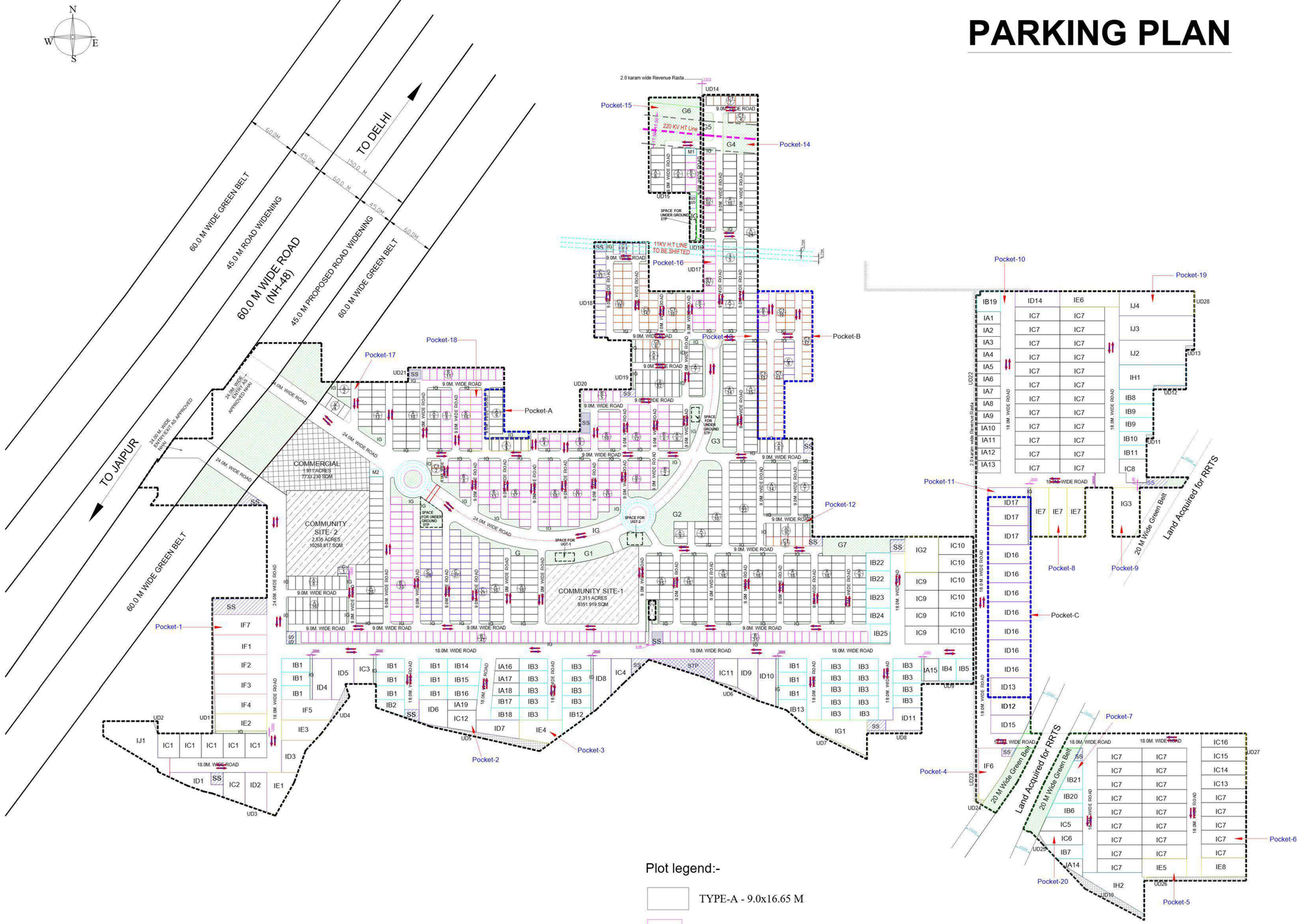
The modified LOS will be "B", i.e. "VERY GOOD"; therefore, there will be no change in LOS after completion of the project. The total parking proposed for the project = 1,168 ECS.

The project proponents will have a failsafe traffic circulation plan for the "Industrial Plotted colony" project so that smooth passage of vehicles can take place.

The support staff will be trained to handle the morning and evening rush. The traffic generated from the project is assumed to be distributed between 6:00 AM to 10:00 AM & 19:00 PM- 00:00 AM and will distribute along all two directions of the project along the road.

Annexure-VI

PARKING PLAN



LEGEND:-

TRAFFIC CIRCULATION

Plot legend:-

- TYPE-A - 9.0x16.65 M
- TYPE-B - 9.0x13.90 M
- TYPE-B1 - 9.0x14.50 M
- TYPE-C - 8.0x13.50 M
- TYPE-C1 - 9.0x11.50 M
- TYPE - M

OWNER :

SUNGOLD HEIGHTS DEVELOPERS LLP IN COLLABRATION WITH SIGNATUREGLOBAL (INDIA) LIMITED

PROJECT :

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DRAWING TITLE :

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T : 46599599 I F 46599512
E : info@gpmindia.com I W : www.gpmindia.com

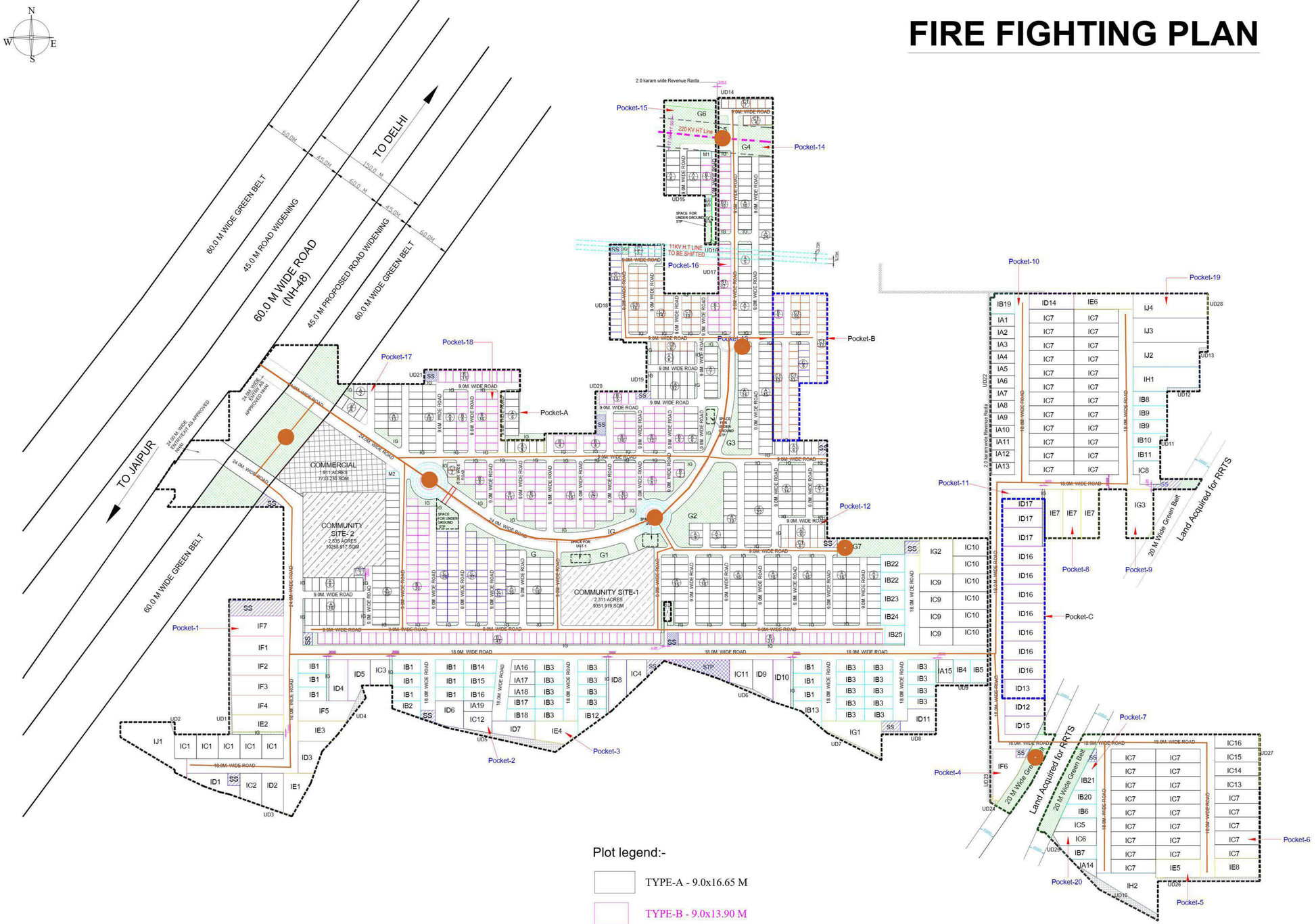
SCALE :- 1 :2000

OWNER'S SIGN

ARCHITECT'S SIGN

FIRE FIGHTING PLAN

ANNEXURE-VII



LEGEND:-

FIRE FIGHTING LINE

FIRE HYDRENT

Plot legend:-

- TYPE-A - 9.0x16.65 M
- TYPE-B - 9.0x13.90 M
- TYPE-B1 - 9.0x14.50 M
- TYPE-C - 8.0x13.50 M
- TYPE-C1 - 9.0x11.50 M
- TYPE - M

OWNER :

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SCALE :- 1 :2000

OWNER'S SIGN

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Annexure VIII: Air Simulation Plan

Vehicular emissions and DG set emissions are the major sources of air pollution. During Operation phase, cars, scooter/motorcycle will be owned by the residents of colony. Ground Level Concentration of pollutants (as added by the project) will depend upon the following:

- Emission of pollutants from additional traffic on the roads due to the project
- Meteorological conditions
- Emission sources from D.G. Sets

PM, NO_2, SO_2 and CO will be the main pollutants of primary concern released from traffic movement, DG sets emissions. The dispersion of vehicular emissions would be confined within limited distance from the road and concentration will decrease with the increase in distance from road as worked out by the line source model. It was anticipated that the contribution of vehicular emissions from the exhaust in ambient air quality will be marginal as Pollution Under Control (PUC) Certified vehicles and branded vehicles with low sulphur diesel will be used. Ground Level Concentration (GLC) of pollutants is found to be well within the stipulated National Ambient Air Quality Standards due to traffic movement and vehicles used inside the premises. Air modeling for DG set using AERMOD Cloud Version 18 has been done for prediction of impacts caused by DG sets operation during Operation Phase. Stack & emission data was used as per design value provided by standard make and stipulated standards. Other primary data used as input for model were hourly meteorological data of Wind speed & direction, temperature, cloud amount and mixing height. Mixing height used in the model was taken from secondary data source "Atlas of Hourly Mixing Height Assimilative Capacity of Atmosphere in India published in 2008 by IMD, Delhi". Hourly meteorological monitored at site during study period data was compared with long term data available from the nearest IMD Station.
There is provision of 2no. of DG set of total capacity 1100kVA for Commercial Facility which includes 1 x 750kVA +1x 350 kVA and 2no. of DG set of total capacity 1750 kVA for Common Services which includes 1 x 750kVA +1x 1000 kVA are proposed for power back up. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion.

In the project, D.G. set will be used only during power failure and low sulphur diesel will be used as fuel to minimize SO_2 emission. Incremental load in the ambient air environment will be found to be very low as given in the report. An adequate stack height for D.G. sets is proposed as per the stipulated guidelines of Central Pollution Control Board (CPCB)/ National Building Code Manual to facilitate adequate dispersion of pollutants and to minimize the impact on Ambient Air Quality under the influence of local meteorology.

The predictions for air quality during operation phase was carried out using CPCB/MoEFCC approved USEPA, Industrial Source Complex (AERMOD Cloud Version 18)

Dispersion model developed by the US Environmental Protection Agency (USEPA) for prediction of pollutants dispersion from single or multiple point sources using emission and hourly meteorological data of the study period. Assumption used in the model was as follows:

The plume rise is limited to that of the mixing layer as published by IMD in the Catalogue of Atlas of Mixing Heights in India for the site:

- Stack down wash is not considered.
- Flat terrain is used for computations.
- It is assumed that the pollutants do not undergo any physico-chemical transformation
- Chemical and scavenging process occurred in the atmosphere in the pollutants released at the stack exit is not considered.
- Prediction is based on single/multiple point sources, pollution released at stack exit and dispersed on the ground under influence of local meteorological conditions during the season.

AERMOD Cloud Version 18 was used to predict GLC caused by a single point source (1 stack) at each receptor of 100 m x 100 m of grid network covering total area of 2000 m x 2000 m around the proposed source with stack & emission values and 1-hourly meteorological data. It was observed that SO_2, NO_2, CO, PM_{10} & $PM_{2.5}$ were significant pollutants released from the fuel of the D.G. sets. Emission of PM_{10}, $PM_{2.5}$, CO and SO_2 were found insignificant with low values. In this proposed project, NO_2 was the worst affected pollutant released into the atmosphere. 24-h GLC were predicted for SO_2, NO_2, CO and PM.

Table 1: DG Stack and Emission Details

Stack No.	DG set Capacity (kVA)	Stack & Flue details				Pollutants Emission				
		Height (m)	velocity (m/s)	Temp (K)	Dia (m)	NO_2 (g/s)	SO_2 (g/s)	PM_{10} (g/s)	$PM_{2.5}$ (g/s)	CO (g/s)
1.	2*750	30	25	773	0.332	0.274	0.006	0.0075	0.015	0.063
2.	1*350	30	25	773	0.176	0.595	0.0013	0.003	0.002	0.0136
3.	1*1000	30	25	773	0.271	0.084	1.148	1	0.64	0.04
Total Emission in g/s from 4no. of DG sets of total capacity 2850 kVA [(2 x 750 + 1 x 350 + 1 x 1000 kVA)]						0.953	1.155	1.0105	0.657	0.116

Discussion of Results

AERMOD - Dispersion model was used to predict GLC of all pollutants; SO_2, NO_2, PM_{10}, $PM_{2.5}$ and CO with stack & emission and hourly meteorological data. 24-hours average maximum Incremental GLC of NO_2, SO_2, PM_{10}, $PM_{2.5}$ and CO were 0.66 µg/m³, 0.07µg/m³, 0.68µg/m³, 0.43 µg/m³ & 0.73 µg/m³, occurred respectively at (700m distance) from the DG sets occurred at the same distance. It was found that GLC of SO_2 was less than the permissible limit of 80µg/m³ (as per CPCB guidelines) under worst meteorological condition with meteorological data monitored from 1st Dec,2023 to 29th Feb 2024.

Conclusion

High to moderate wind speed and minimum stack height of 30 m facilitates dispersion at the distance of 500 m under the influence of local meteorology.

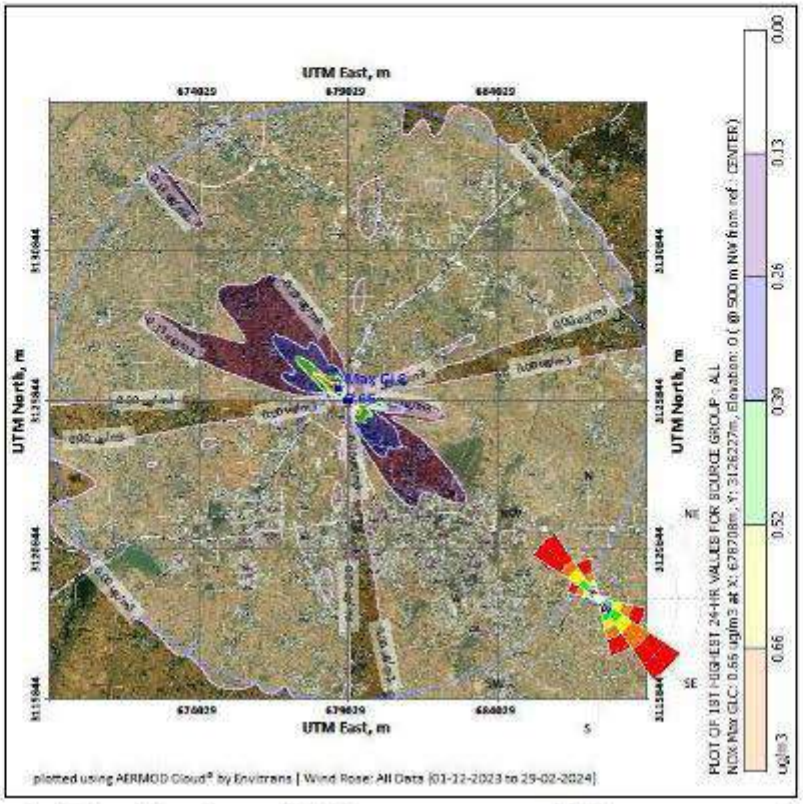

Figure 1- Spatial distribution of 24-hours average NO_2 concentrations (µg/m³)

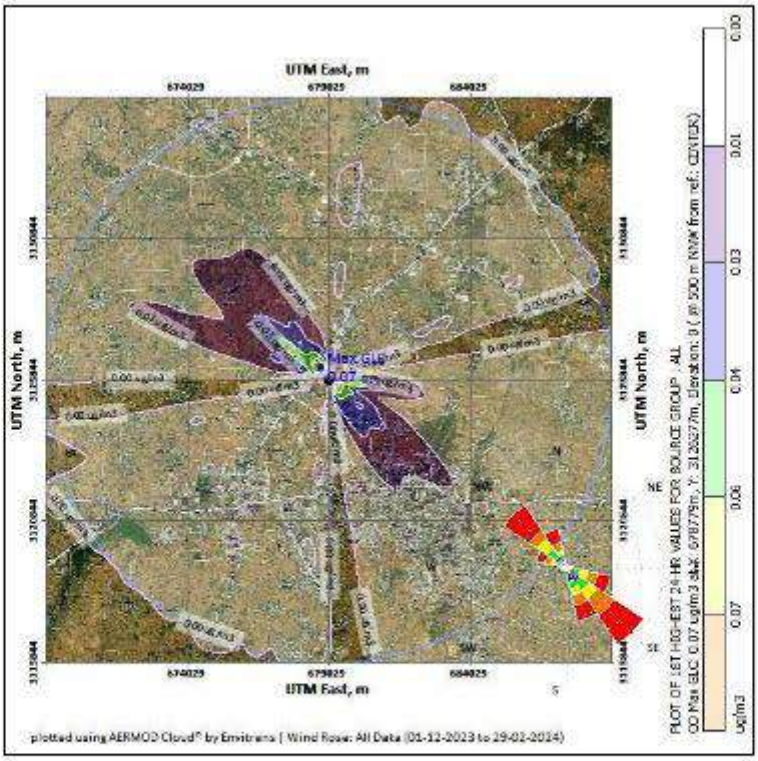

Figure 2 -Spatial distribution of 24-hours average CO concentrations (µg/m³)

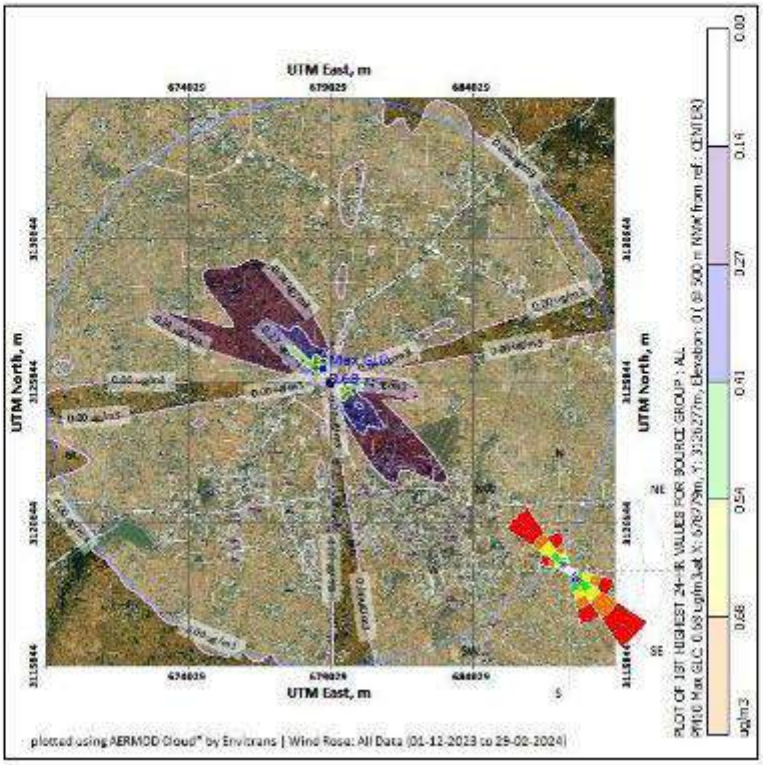

Figure 3- Spatial distribution of 24-hours average PM_{10} concentrations (µg/m³)

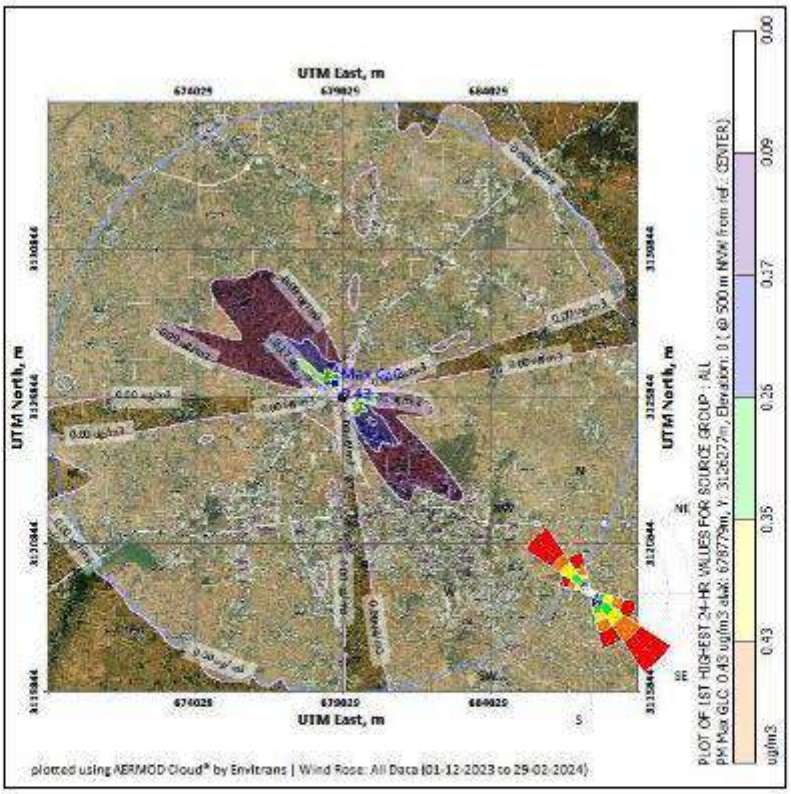

Figure Error! No text of specified style in document.**- Spatial distribution of 24-hours average $PM_{2.5}$ concentrations (µg/m³)**

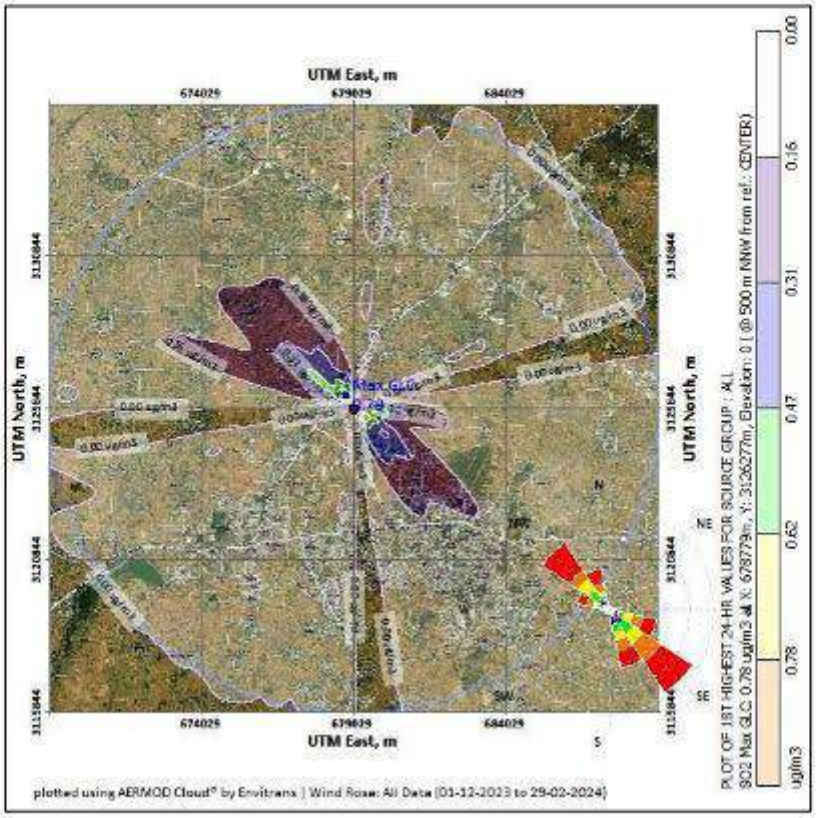

Figure 5- Spatial distribution of 24-hours average SO_2 concentrations (µg/m³)

Mitigation Measures: The project proponent will develop a green belt inside the premises of the project site and along the internal road, which will work as barrier for the movement of pollutants and help in pollution control.

Native plants species will be selected for peripheral and avenue plantation.

DHBVN
DAKSHIN HARYANA BIJLI VITRAN NIGAM
(A Government of Haryana Undertaking)
Office of the good
Superintending Engineer 'OP' Circle-I
Mehrauli Road, Gurugram.
0124-2322427
Tele No. 0124-2306590
e-mail seop1gurugram@dhbvn.org.in

To

M/s Signature Global (India) Ltd.
Ground Floor, Tower-A,
Signature Tower, South City-1
Gurugram-122001.

Memo No. Ch.28 / Drg.-PLC Dated: 06 /09/2024

Sub: **Assurance Certificate of DHBVN for development of Industrial Plotted Colony over an area measuring 129.65625 acres in the revenue estate of village Shidharawali, Tehsil Manesar, Distt. Gurugram (License No.104 of 2024 dated 01.08.2024 valid upto 31.07.2029) to be developed by M/s Signature Global India Ltd. Decalared load 14313.37 KVA.**

Ref : Your Firm Letter No. Nil dated 24.08.2024(Received in this office on dt. 28.08.2024).

It is hereby assured that the power requirement of tentative load of 14313.37 KVA shall be considered from the nearest 220/33KV substation at the time of actual requirement as per DHBVN norms at the voltage level of 33KV subject to the following conditions:-

1. Subject to availability of power and infrastructure at the time of actual release of connection.
2. Necessary charges will be got deposited by your as per latest Nigam instructions and compliance of all other instructions of Nigam will be ensured as per standing instructions of the Nigam/HERC regulation.
3. The necessary infrastructure will be laid by you at your own cost. The piece of land will be provided by you for the switching station / sub-station as per instructions of the Nigam.
4. The letter will be valid till the validity of license in view of Sales Circular No.D-6/2022 issued by CE/Commercial DHBVN, Hisar vide Memo No. Ch-06/SE/C/R-16/380/Vol-I dated 10.03.2022.

06/09/2024
Superintending Engineer
'OP' Circle-I DHBVN, Gurugram

Copy to:-

The XEN 'OP' Divn. DHBVN Manesar for information, please.

ANNEXURE-323

GMDA

OFFICE OF THE EXECUTIVE ENGINEER-V, SEW. DIVISION, GMDA, GURUGRAM
Address : 6th Floor, Plot No. 3, Sector-44, Gurugram,
E-mail -xen4infra2.gmda@gov.in

To,

M/s Signature Global Business Park Pvt. Ltd.,
Ground Floor, Tower -A, Signature Tower,
South City -I, Gurugram, Haryana – 122001
Email – compliance@signatureglobal.in

Memo No. GMDA/SEW/2024/417 Dated. 02-09-2024

Sub: - **Assurance for supply of 1450 KLD STP treated water for construction purpose of the proposed Industrial Plotted Colony over an area measuring 129.65625 acres (License No. 104 of 2024 dated 01.08.2024 valid upto 31.07.2029) falling in the revenue estate of village – Sidhrawali, Tehsil – Manesar, District - Gurugram being developed M/s Signature Global Business Park Pvt. Ltd.**

Ref: - **Your office latter dated 24.08.2024.**

With reference to the above cited subject, it is intimated that 1450 KLD tertiary treated water is available at CETP Manesar Gurugram. The tertiary treated water can be purchased from STP with your own transportation arrangement through online module of GMDA available at www.gmda.gov.in.

Executive Engineer-V,
Sew. Division, GMDA
Gurugram

547
D. Branch / Pawan, Office Asstt.

हरियाणाशहरीविकासप्राधिकरण

HSVP

OFFICE OF THE EXECUTIVE ENGINEER,
HSVP DIVISION No. VI, GURUGRAM
Primary School Building, M-Block, South City-I Near Plot No-M-217.

By Email/By Dak/By Hand

To,

M/s Signature Global India Ltd.,
Corp. Office: Unit No. 101, Ground Floor, Tower-A,
Signature Tower, South City-I, Gurugram.

Memo No: 317249 **Dated:** 26-11-2024

Sub: - **Assurance for Fresh water supply drinking water during operational phase total fresh water Requirement 1823 KLD of for our Industrial Park Project under Scheme (135.7250 Acres) falling in the revenue estate of village Sidhrawali, Tehsil- Manesar, Distt. Gurugram.**

Ref: - **Your application dated 26.11.2024 on the above noted subject.**

In this context, it is intimated that the land for Master Roads, Water Supply, Sewerage & SWD, for master plan of 2031-AD for sohna has yet not been acquired and master services of Water Supply will be planned after acquisition of land accordingly. After approval and execution of Water Supply Scheme, the water supply connection will be sanctioned on your request as per HSVP by law.

This is for your kind information please.

DA/- Nil

Executive Engineer,
HSVP, Division No-VI,
Gurugram.

हरियाणाशहरीविकासप्राधिकरण

HSVP

OFFICE OF THE EXECUTIVE ENGINEER,
HSVP DIVISION No. VI, GURUGRAM
Primary School Building, M-Block, South City-I Near Plot No-M-217.

By Email/By Dak/By Hand

To

M/s Signature Global India Ltd.,
Corp. Office: Unit No. 101, Ground Floor, Tower-A,
Signature Tower, South City-I, Gurugram.

Memo No: 31725 **Dated:** 26-11-2024

Sub: - **Assurance for External Sewerage Connection for discharge of 1195KLD surplus treated domestic effluents after commissioning for our proposed Industrial park Plotted Colony under Scheme (135.7250 Acres) falling in the revenue estate of village Sidhrawali, Tehsil-Manesar, Distt. Gurugram.**

Ref: - **Your application dated 26.11.2024 on the above noted subject.**

In this context, it is intimated that the land for Master Roads, Water Supply, Sewerage & SWD, for master plan of 2031-AD for Pataudi has yet not been acquired and master services of Sewerage Line will be planned after acquisition of land accordingly. After approval and construction of Sewerage Treatment Plant & laying of master sewer line, the Sewerage connection will be sanctioned on your request as per HSVP by law.

This is for your kind information please.

DA/- Nil

Executive Engineer,
HSVP, Division No-VI,
Gurugram

Government of India

Ministry of Environment, Forest and Climate Change

(Issued by the State Level Expert Appraisal Committee(SEAC), HARYANA)

Agenda of 307th Meeting of the State Expert Appraisal Committee, Haryana

Agenda ID	EC/AGENDA/SEAC/541513/12/2024
Agenda Creation Date	13/12/2024
Title of Meeting	Agenda of 307th Meeting of the State Expert Appraisal Committee, Haryana
Meeting Mode	Physical
Meeting Venue	Conference Hall (SEIAA), Bays No.55-58, First Floor, Paryatan Bhawan, Sector-2, Panchkula, Haryana
Meeting Date	**Start Date :** 20/12/2024 **End Date :** 20/12/2024
State	HARYANA

	Meeting Date	Meeting Mode	Start Time	End Time
Day 1	20/12/2024	Physical	10:30 AM	05:00 PM

List of Proposals

Sr. No.	Proposal Details	Location	Meeting Date	Proponent
1	**Proposal No :**SIA/HR/INFRA2/505128/2024 **File No :**SEAC/HR/2024/256 **Project Name :**Proposed Industrial unit over an area measuring 11.0937 Acre in the revenue estate of Village: Bhangrola, Sector M-12 Sub tehsil: Harsaru, District:	**State:** HARYANA **District:** GURUGRAM	20/12/2024	SUNCITY HARYANA SEZ DEVELOPERS PRIVATE LIMITED

	Gurugram, developed by M/s Suncity Haryana SEZ Developers Pvt. Ltd. **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2			**327**
2	**Proposal No :**SIA/HR/INFRA2/508189/2024 **File No :**SEAC/HR/2024/257 **Project Name :**Environment Clearance for Proposed Rainbow Children's Hospital at Plot No. 167P, Sector 44, Gurgaon, Haryana **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	20/12/2024	Rainbow children's Medicare limited
3	**Proposal No :**SIA/HR/INFRA2/508857/2024 **File No :**SEAC/HR/2024/258 **Project Name :**Multi-Specialty Hospital by M/s Fortis Healthcare Limited **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	20/12/2024	FORTIS HEALTHCARE LIMITED
4	**Proposal No :**SIA/HR/INFRA2/512934/2024 **File No :**SEAC/HR/2024/259 **Project Name :**Revision and Expansion of Warehouse/Logistic & Industrial Shed Project **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** PALWAL	20/12/2024	YAEL REAL ESTATES PRIVATE LIMITED
5	**Proposal No :**SIA/HR/INFRA2/503189/2024 **File No :**SEAC/HR/2024/220 **Project Name :**Expansion of Affordable Group Housing Colony Project by M/s Pyramid Propmoto LLP. **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	20/12/2024	PYRAMID PROPMOTO LLP
6	**Proposal No :**SIA/HR/INFRA2/500966/2024 **File No :**SEAC/HR/2024/221 **Project Name :**Revision of Group Housing Colony “Ashiana Mulberry Project” **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	20/12/2024	ASHIANA DWELLINGS PRIVATE LIMITED
7	**Proposal No :**SIA/HR/INFRA2/507513/2024 **File No :**SEAC/HR/2024/260 **Project Name :**Industrial Building Project **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** REWARI	20/12/2024	eglo india production private limited
8	**Proposal No :**SIA/HR/IND2/513507/2024 **File No :** **Project Name :**Proposed 150 KLD Grain based Fuel Ethanol Distillery Plant under EBP program at Village & P.O. - Goria, Tehsil – Matanhail District – Jhajjar,	**State:** HARYANA **District:** JHAJJAR	20/12/2024	k2 ethanol pRIVATE limited

	Haryana by M/s K2 Ethanol Pvt. Ltd. **Proposal For:** Amendment in ToR **Activity:** 5(g) Distilleries **Sector:** IND2			
9	**Proposal No :**SIA/HR/INFRA2/493104/2024 **File No :**SEAC/HR/2024/262 **Project Name :**Revision and Expansion of Mixed Use Development Project **Proposal For:** Fresh EC **Activity:** 8(b) Townships/ Area Development Projects / Rehabilitation Centres **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	20/12/2024	GURGAON REALTECH LIMITED
10	**Proposal No :**SIA/HR/MIN/513679/2024 **File No :**SEAC/HR/2024/263 **Project Name :**Pichopa Kalan-2 Stone Mine at Village- Pichopa Kalan Tehsil—Charkhi Dadri, District : Charkhi Dadri **Proposal For:** Fresh EC **Activity:** 1(a) Mining of minerals **Sector:** MIN	**State:** HARYANA **District:** CHARKI DADRI	20/12/2024	THE warrier mining minerals & infra private limited
11	**Proposal No :**SIA/HR/INFRA2/498759/2024 **File No :**SEAC/HR/2024/210 **Project Name :**Proposed Commercial Colony Project at revenue estate of village-Nawada Fatehpur, Sector-86, District-Gurugram Urban Manesar Urban Complex by Manish Buildwell Pvt. Ltd. and Others **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	20/12/2024	MANISH BUILDWELL PRIVATE LIMITED
12	**Proposal No :**SIA/HR/INFRA2/514022/2024 **File No :**SEAC/HR/2024/264 **Project Name :**Revision & Expansion of Mix Land Use Colony (Residential 90% And Commercial 10%) Project Under TOD Policy Dated 09.02.2016 by M/s Forever Buildtech Pvt. Ltd. **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	20/12/2024	FOREVER BUILDTECH PRIVATE LIMITED
13	**Proposal No :**SIA/HR/INFRA2/514135/2024 **File No :**SEAC/HR/2024/265 **Project Name :**Hotel and Resort Building Project Village-Nimoth, Tehsil Sohna, District, Gurugram, Haryana by M/s Prime Plaza Hotels Pvt. Ltd. **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	20/12/2024	prime plaza hotels private limited
14	**Proposal No :**SIA/HR/INFRA2/496874/2024 **File No :**SEAC/HR/2024/266 **Project Name :**Industrial Plotted Colony at Village Shidrawali, Tehsil-Manesar, District-Gurugram, Haryana by M/s Signatureglobal India Limited	**State:** HARYANA **District:** GURUGRAM	20/12/2024	SIGNATUREGLOBAL INDIA LIMITED

	Proposal For: Fresh EC **Activity:** 8(b) Townships/ Area Development Projects / Rehabilitation Centres **Sector:** INFRA2			**329**
15	**Proposal No :**SIA/HR/MIN/514062/2024 **File No :**SEAC/HR/2024/267 **Project Name :**Kunda Kalan Block Sand Mine **Proposal For:** Application for Validity Extension of EC- Form-6 **Activity:** 1(a) Mining of minerals **Sector:** MIN	**State:** HARYANA **District:** KARNAL	20/12/2024	RM INDUSTRIES
16	**Proposal No :**SIA/HR/INFRA2/514251/2024 **File No :**SEAC/HR/2024/268 **Project Name :**Proposed Expansion cum modification of Mix Land Use Colony (99% Residential Component and 1% Commercial Component) under TOD policy in the revenue estate of Village Dhanwapur, Sector – 103, Gurugram, Haryana by M/s Whiteland Corporation Pvt. Ltd. **Proposal For:** Fresh EC **Activity:** 8(b) Townships/ Area Development Projects / Rehabilitation Centres **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	20/12/2024	WHITELAND CORPORATION PRIVATE LIMITED
17	**Proposal No :**SIA/HR/INFRA2/505916/2024 **File No :**SEAC/HR/2024/269 **Project Name :**Affordable Residential Plotted Colony Project under DDJAY 2016 **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	20/12/2024	nani resorts and floriculture private limited
18	**Proposal No :**SIA/HR/INFRA2/514394/2024 **File No :**SEAC/HR/2024/270 **Project Name :**Commercial Colony under TOD policy in the revenue estate of Village–Pawala Khusrupur, Sector-106, Gurugram Manesar Urban Complex developed by M/s Elan Avenue Ltd. under collaboration with Kay Kay Towers Pvt. Ltd. **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	20/12/2024	ELAN AVENUE LIMITED
19	**Proposal No :**SIA/HR/INFRA2/514357/2024 **File No :**SEAC/HR/2024/271 **Project Name :**Proposed Group Housing Colony Under TOD Policy-2016 over an area measuring 7.50 Acre in Village Badshahpur, Sector-70 Gurugram by Premium Infratech LLP. & Others **Proposal For:** Fresh EC **Activity:** 8(b) Townships/ Area Development Projects / Rehabilitation Centres **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	20/12/2024	PREMIUM INFRATECH LLP

20	**Proposal No :**SIA/HR/INFRA2/514385/2024 **File No :**SEAC/HR/2024/272 **Project Name :**Environment Clearance for Development of the Commercial Building project for Information Technology/ Information Technology Enabled Services area measuring 7878 sqm at “Plot 240-241, Phase IV, Industrial Estate, Udyog Vihar, Gurugram, Haryana **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	20/12/2024	Bhiwadi Estate Private Limited

Any Other Item(s)

Sr. No.	Proposal Name.	Proposal Details	Location

SEAC Members Details

Sr. No.	Name	Designation	Email ID
1	Sh Bhupender Singh Rinwa	Member Secretary, SEAC	scy*******@gmail.com
2	Vijay Kumar Gupta	Chairman, SEAC	vkg*******@gmail.com
3	Shri Prabhakar Kumar Verma	SEAC MEMBER	pra**********@gmail.com
4	Dr Rajbir Singh Bondwal	SEAC MEMBER	raj**********@gmail.com
5	Dr Vivek Saxena	SEAC MEMBER	viv******@gmail.com
6	Sandeep Gupta	SEAC MEMBER	san**********@kuk.ac.in

Remarks	All the participants are requested to attend the meeting at the given date, time and venue, please.

Agenda of 307th Meeting of the State Expert Appraisal Committee, Haryana to be held on 20.12.2024 under the Chairmanship of Sh. Vijay Kumar Gupta in Conference Hall (SEIAA), Bays No. 55-58, First Floor, Paryatan Bhawan, Sector-2, Panchkula, Haryana.

Date of Meeting 20.12.2024 (11:00 AM) on PARIVESH - 2.0

Sr. No.	Proposal Number/ Proponent Name and Address	Name of the Project	Status of Project
307.01	SIA/HR/INFRA2/505128/2024 M/s Suncity Haryana Sez Developers Private Limited, Suncity Business Tower, Second Floor, Sector-54, Golf Course Road, Gurgaon, 122002.	EC for Proposed Industrial unit over an area measuring 11.0937 Acre in the revenue estate of Village: Bhangrola, Sector M-12 Sub Tehsil Harsaru, District Gurugram.	For EC
307.02	SIA/HR/INFRA2/508189/2024 M/s Rainbow Children's Medicare limited, 8-2-19-1/A. Daulet Arcade, Karvy Lane, Road No. 11, Banjara Hills, Hyderabad, Telangana. 500034.	Environment Clearance for Proposed Rainbow Children's Hospital at Plot No. 167P, Sector 44, Gurgaon, Haryana	For EC **EDS Raised on 02.12.2024** **EDS closed on 04.12.2024**
307.03	SIA/HR/INFRA2/508857/2024 M/s Fortis Healthcare Limited, Fortis Hospital, Sector 62, Phase-8, Mohali 160062.	EC for proposed expansion for Super Specialty Hospital Project at Plot No. 2, Sectoe-5, IMT, Manesar, District Gurugram, Haryana	For EC Expansion
307.04	SIA/HR/INFRA2/512934/2024 M/s Yael Real Estates Private Limited, One World Center, 11th Floor, Tower 2A, Senapati Bapat Marg, Mumbai, India.	EC for Revision & Expansion in Warehouse/Logistic & Industrial Shed Project at Village Dhatir & Tehraki, Tehsil & District Palwal, Haryana	For EC Revision & Expansion

Sr. No.	Proposal Number/ Proponent Name and Address	Name of the Project	Status of Project
307.05	SIA/HR/INFRA2/503189/2024 M/s Pyramid Propmoto LLP, Unit No. 131, First Floor , Vatika Tower , Block-A, Wazirabad, Sector-54, Gurugram.	EC for proposed Expansion of Affordable Group Housing Colony Project at Village- Hayatpur, Sector-93, District Gurugram, Haryana.	For EC Expansion Cast taken un in the 304th SEAC Meeting **Observation raised in the 304th SEAC Meeting** **ADS Closed on 03.12.2024**
307.06	SIA/HR/INFRA2/500966/2024 M/s Ashiana Dwellings Private Limited, Ashiana Mulberry, Sector 2, Tehsil Sohna, Gurugram, Haryana.	EC for proposed Revision of Group Housing Colony "Ashiana Mulberry Project" at Sector-2, Tehsil-Sohna, District- Gurugram, Haryana.	For EC Revision Cast taken un in the 304th SEAC Meeting **Observation raised in the 304th SEAC Meeting** **ADS Closed on 03.12.2024**
307.07	SIA/HR/INFRA2/507513/2024 M/s Eglo India Production Private Limited, Plot No. 286-289, Sector 3, Phase II, IMT Bawal, Haryana.	EC for proposed Industrial Building Project at Plot No. 286-289, Sector - 3, Phase - 2, IMT Bawal, Haryana	For EC
307.08	SIA/HR/IND2/513507/2024 M/s K2 Ethanol Pvt. Ltd., Village Khurshid Nagar, PO- Nahar, Tehsil- Kosli, District Rewari, Haryana	Proposed 150 KLD Grain based Fuel Ethanol Distillery Plant under EBP program at Village & P.O. - Goria, Tehsil – Matanhail District – Jhajjar, Haryana	For Amendment ToR
307.09	SIA/HR/INFRA2/493104/2024 M/s Gurgaon Realtech Limited, TRIL	EC for proposed Revision and Expansion of Mixed Use Development project at Sector 72, Gurgaon, Haryana	For EC Revision and Expansion

Sr. No.	Proposal Number/ Proponent Name and Address	Name of the Project	Status of Project
	Commercial Centre, Intellion Edge, Tower A, First Floor, Sector 72, Gurgaon, Haryana-122101.		
307.10	SIA/HR/MIN/513679/2024 M/s The Warrier Mining Minerals & Infra Private Limited, Gali no 3,Singhana Road, Keshav Nagar, Narnaul, District Mahendragarh, Haryana	EC for proposed Stone Mining Project "Pichopa Kalan 2 Stone Mine" at Village- Pichopa Kalan, Tehsil & District-Charkhi Dadri (Haryana) having an area of 22.40 ha.	For EC
307.11	SIA/HR/INFRA2/498759/2024 M/s Manish Buildwell Private Limited, S-1, Usha Chamber, 37-38 Central Market, Ashok Vihar , New Delhi	EC for Proposed Commercial Colony Project at revenue estate of village- Nawada Fatehpur, Sector-86, District-Gurugram Urban Manesar Urban Complex	For EC Case taken up in its 302nd SEAC Meeting Defer on the request of PP Case taken up in its 304th SEAC Meeting Defer on the request of PP **ADS closed on 10.12.2024**
307.12	SIA/HR/INFRA2/514022/2024 M/s Forever Buildtech Private Limited, 13th Floor, Dr. Gopal Das Bhawan , 28, Barakhamba Road, Cannaught Place , New Delhi – 110001.	EC for proposed Revision & Expansion of Mix Land Use Colony (Residential 90% And Commercial 10%) Project Under TOD Policy Dated 09.02.2016 in the Revenue Estate of Village Hayatpur, Sector-84, Gurugram Manesar Urban Complex, District Gurugram, Haryana.	For EC Revision and Expansion
307.13	SIA/HR/INFRA2/514135/2024 M/s Prime Plaza Hotels Private Limited, Hotel Marriott, First Floor, Ramdas Agarwal	EC for proposed Hotel and Resort Building Project Village-Nimoth, Tehsil Sohna, District, Gurugram, Haryana	For EC

Sr. No.	Proposal Number/ Proponent Name and Address	Name of the Project	Status of Project
	Marg, Near Jawahar Circle, Jaipur, Rajasthan.		
307.14	SIA/HR/INFRA2/496874/2024 M/s Signatureglobal Business Park Private Limited, 13th Floor, Gopal Dass, Bhawan, 28, Barakhamba Road, Connaught Place, New Delhi	EC for proposed Industrial Plotted Colony at Village Shidrawali, Tehsil-Manesar, District-Gurugram, Haryana	For EC **EDS raised 17.09.2024** **EDS closed on 11.12.2024**
307.15	SIA/HR/MIN/514062/2024 M/s RM Industries, Flat no A2, Ph 4 ,Nirmal Chhaya Apartments,VIP Road,Zirakpur.	EC for proposed validity extension for our Project of "River Bed mining at Kunda Kalan Block at village Kunda Kalan, Tehsil & District- Karnal (Haryana) Area 42.70 Ha."	For EC Validity Extension
307.16	SIA/HR/INFRA2/514251/2024 M/s Whiteland Corporation Private Limited, 4610, DLF Qutab Enclave Complex, Phase-IV, Village-Chakkarpur, Gurugram, Haryana	EC for proposed Expansion cum modification of Mix Land Use Colony (99% Residential Component and 1% Commercial Component) under TOD policy in the revenue estate of Village Dhanwapur, Sector – 103, Gurugram, Haryana	For EC Expansion
307.17	SIA/HR/INFRA2/505916/2024 M/s Nani Resorts And Floriculture Private Limited, M-18, Greater Kailash, Part-II, New Delhi-110048.	EC for proposed Affordable Residential Plotted Colony located at Revenue Estate of Village Harsaru, Sector-88A, Gurugram Manesar Complex, Gurugram Haryana.	For EC

Sr. No.	Proposal Number/ Proponent Name and Address	Name of the Project	Status of Project
307.18	SIA/HR/INFRA2/514394/2024 M/s Elan Avenue Limited, Reg. Office: 15th Floor, two Horizon Center, DLF Phase-5, Sector-43, Golf Course Road, Gurugram, Haryana-122002, India.	EC for proposed Commercial Colony under TOD policy in the revenue estate of Village–Pawala Khusrupur, Sector-106, Gurugram Manesar Urban Complex developed by M/s Elan Avenue Ltd. under collaboration with Kay Kay Towers Pvt. Ltd.	For EC
307.19	SIA/HR/INFRA2/514357/2024 M/s Premium Infratech LLP, 1204, Indra Prakash Building, 21, Barakhamba road, New Delhi-110001.	EC for proposed Group Housing Colony Under TOD Policy-2016 over an area measuring 7.50 Acre in Village Badshahpur, Sector-70 Gurugram	For EC
307.20	SIA/HR/INFRA2/514385/2024 M/s Bhiwadi Estate Private Limited, Asset 5B, Hospitality District, Delhi Aero City IGI Airport, New Delhi.	Environment Clearance for proposed Development of the Commercial Building project for Information Technology/ Information Technology Enabled Services area measuring 7878 sqm at "Plot 240-241, Phase IV, Industrial Estate, Udyog Vihar, Gurugram, Haryana.	For EC

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Project Proponents should forward the copies of all documents by post as well as through e-mail to all the Members on or before 17.12.2024 positively and PP shall be abide by the timeline for supply of documents. Names and addresses of the Members are given below:

Addresses of Chairman and Members of SEAC

Sr. No.	Name and Address	Designation
1.	Sh. Vijay Kumar Gupta, # 1030, Sector-14, Faridabad vk_gupta14@yahoo.in vkguptavk6@gmail.com	Chairman
2.	Shri Prabhaker Kumar Verma, F-12, Module-9, Mangalam Home, Abhay Khand-3, Indirapuram, Ghaziabad. prabhakerverma56@hotmail.com	Member
3.	Dr. Rajbir Singh Bondwal, IFS (Retd.), #503,Sector-14,Faridabad,121007 rajbir_singh_ifs@yahoo.com rajbirsinghifs@gmail.com	Member
4.	Dr. Vivek Saxena, Res: C210 MahanagarLucknow, U.P-226006 viveksax1@gmail.com	Member
5.	Dr. Sandeep Gupta, Assistant Professor, Institute of Environmental Studies Kurukshetra University, D-28 Kurukshetra University, 136119, Haryana sandeep.gupta@kuk.ac.in	Member
6.	Sh. Bhupender Singh Rinwa, Joint Director, Environment & Climate Change Department, Haryana, Bays no. 55-58, sec-2 Panchkula scy.seachr@gmail.com	Member Secretary, SEAC

NOTE:

1. Sh. Prabhaker Kumar Verma has desired that only soft copy of projects be sent to him only on e-mail address as provided above.
2. Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF& CC/NABL accredited laboratories with all scope of accreditation along with requisite range of testing.
3. All the original analysis/testing reports should be available during appraisal of the project.
4. All the plans must be on A1 size paper.
5. Please avoid delivery of documents by hand and separate meeting with Chairman/Members, in this regard.
6. The meeting shall be convened in physical mode at **Bays No.55-58, First Floor, Paryatan Bhawan, Sector-2, Panchkula**
7. Sh. Ramesh Chander, Care Taker is directed to make necessary arrangements for the meeting.

Government of India

Ministry of Environment, Forest and Climate Change

(Issued by the State Environment Impact Assessment Authority (SEIAA), HARYANA)

195th meeting of State Environment Impact Assessment Authority (SEIAA), Haryana under the Chairmanship of Shri Pranab Kishore Das, IAS (Retd.), Chairman, SEIAA

Agenda ID	EC/AGENDA/SEIAA/547881/1/2025
Agenda Creation Date	27/01/2025
Title of Meeting	195th meeting of State Environment Impact Assessment Authority (SEIAA), Haryana under the Chairmanship of Shri Pranab Kishore Das, IAS (Retd.), Chairman, SEIAA
Meeting Mode	Physical
Meeting Venue	Conference Hall, 1st floor, Bay's No. 55-58, Paryatan Bhawan, Sector-2, Panchkula, Haryana.
Meeting Date	**Start Date :** 28/01/2025 **End Date :** 28/01/2025
State	HARYANA

	Meeting Date	Meeting Mode	Start Time	End Time
Day 1	28/01/2025	Physical	02:30 PM	06:00 PM

List of Proposals

Sr. No.	Proposal Details	Location	Meeting Date	Proponent
1	**Proposal No :**SIA/HR/INFRA2/469852/2024 **File No :**SEAC/HR/2024/182 **Project Name :**Accord Superspeciality Hospital	**State:** HARYANA **District:** FARIDABAD	28/01/2025	SCL HEALTHCARE PRIVATE LIMITED

	Proposal For: Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2			**338**
2	**Proposal No :**SIA/HR/INFRA2/502400/2024 **File No :**SEAC/HR/2024/070 **Project Name :**Mix Land Use Project (87% Group Housing and 13% Commercial) **Proposal For:** Fresh EC **Activity:** 8(b) Townships/ Area Development Projects / Rehabilitation Centres **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	28/01/2025	HERO REALTY PRIVATE LIMITED
3	**Proposal No :**SIA/HR/INFRA2/507513/2024 **File No :**SEAC/HR/2024/260 **Project Name :**Industrial Building Project **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** REWARI	28/01/2025	eglo india production private limited
4	**Proposal No :**SIA/HR/INFRA2/493104/2024 **File No :**SEAC/HR/2024/262 **Project Name :**Revision and Expansion of Mixed Use Development Project **Proposal For:** Fresh EC **Activity:** 8(b) Townships/ Area Development Projects / Rehabilitation Centres **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	28/01/2025	GURGAON REALTECH LIMITED
5	**Proposal No :**SIA/HR/INFRA2/514022/2024 **File No :**SEAC/HR/2024/264 **Project Name :**Revision & Expansion of Mix Land Use Colony (Residential 90% And Commercial 10%) Project Under TOD Policy Dated 09.02.2016 by M/s Forever Buildtech Pvt. Ltd. **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	28/01/2025	FOREVER BUILDTECH PRIVATE LIMITED
6	**Proposal No :**SIA/HR/INFRA2/496874/2024 **File No :**SEAC/HR/2024/266 **Project Name :**Industrial Plotted Colony at Village Shidrawali, Tehsil-Manesar, District-Gurugram, Haryana by M/s Signatureglobal India Limited **Proposal For:** Fresh EC **Activity:** 8(b) Townships/ Area Development Projects / Rehabilitation Centres **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	28/01/2025	SIGNATUREGLOBAL INDIA LIMITED
7	**Proposal No :**SIA/HR/MIN/514062/2024 **File No :**SEAC/HR/2024/267 **Project Name :**Kunda Kalan Block Sand Mine **Proposal For:** Application for Validity Extension of EC- Form-6 **Activity:** 1(a) Mining of minerals **Sector:** MIN	**State:** HARYANA **District:** KARNAL	28/01/2025	RM INDUSTRIES
8	**Proposal No :**SIA/HR/INFRA2/514251/2024 **File No :**SEAC/HR/2024/268	**State:** HARYANA	28/01/2025	WHITELAND CORPORATION

	Project Name : Proposed Expansion cum modification of Mix Land Use Colony (99% Residential Component and 1% Commercial Component) under TOD policy in the revenue estate of Village Dhanwapur, Sector – 103, Gurugram, Haryana by M/s Whiteland Corporation Pvt. Ltd. **Proposal For:** Fresh EC **Activity:** 8(b) Townships/ Area Development Projects / Rehabilitation Centres **Sector:** INFRA2	**District:** GURUGRAM		PRIVATE LIMITED
9	**Proposal No :**SIA/HR/INFRA2/515380/2024 **File No :**SEAC/HR/2024/273 **Project Name :**Proposed Residential Plotted cum Group Housing Project located in the revenue estate of Village- Fazilpur Jharsa, Sector 71 & 72, District- Gurugram, Haryana being developed by M/s Unitech Limited and others. **Proposal For:** Fresh EC **Activity:** 8(b) Townships/ Area Development Projects / Rehabilitation Centres **Sector:** INFRA2	**State:** HARYANA **District:** GURUGRAM	28/01/2025	UNITECH LIMITED
10	**Proposal No :**SIA/HR/INFRA2/516407/2024 **File No :**SEAC/HR/2024/294 **Project Name :**Environment Clearance (Under Violation Category) for Expansion of Development of Modern Bus Terminal NIT, Faridabad, Haryana **Proposal For:** Fresh ToR **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** FARIDABAD	28/01/2025	PACIFIC RETAIL CENTERS INDIA PVT.LTD.
11	**Proposal No :**SIA/HR/INFRA2/516882/2025 **File No :**SEAC/HR/2024/286 **Project Name :**Proposed Baba Sarsai Nath Government Medical College, Sirsa, Haryana **Proposal For:** Fresh EC **Activity:** 8(a) Building / Construction **Sector:** INFRA2	**State:** HARYANA **District:** SIRSA	28/01/2025	HLL INFRA TECH SERVICES LIMITED

Any Other Item(s)

Sr. No.	Proposal Name.	Proposal Details	Location

SEIAA Members Details

Sr. No.	Name	Designation	Email ID
1	Shri Pranab Kishore Das, IAS(Retd.)	Chairman	cha**********@hry.gov.in
2	Dr. R Baskar FGS(Ind)	Expert Member	rba****@ignou.ac.in

3	Dr. Virender Kumar Dahiya, IAS	Member Secretary	vir**********@gmail.com

Remarks	195th meeting of State Environment Impact Assessment Authority (SEIAA), Haryana.

List of Agenda Items/ cases to be taken up in the 195th meeting of State Environment Impact Assessment Authority (SEIAA), Haryana under the Chairmanship of Shri Pranab Kishore Das, IAS (Retd.), Chairman, SEIAA schedule to be held on 28.01.2025 at 2:30 PM at Conference Hall, 1st floor, Bay's No. 55-58, Paryatan Bhawan, Sector-2, Panchkula, Haryana.

Sr. No.	Name and Address of the project with proposal no.	Location of the project	Status of the project/Cases
Defer Cases			
1.	**M/s Raheja Developers Limited** **Address:** Office Space No. 406, 4th floor, Rectangle One, D-4, District Centre, Saket, New Delhi-110017 **E-mail Id:** ajay.mohanty@raheja.com. **SIA/HR/NCP/30539/2017**	Addendum to Environment Impact Assessment Report for Modification and Expansion of Group Housing Project "Atharva at Sector 109, Village Pawala Khusrupur, Gurugram, Haryana.	**For consideration**
2.	**M/s Hero Realty Private Limited,** 264, Okhla Industrial Estate, Phase-III, New Delhi – 110020 Email id:nardev.arya@herorealty.in **SIA/HR/INFRA2/502400/2024**	EC for proposed Mix Land Use Project located at revenue estate of Village Gurugram & Tikampur, Sector-104, Gururgam Manesar Urban Complex, Haryana.	**For consideration**
Fresh Cases			
3.	**M/s Eglo India Production Private Limited** Plot No. 286-289, Sector 3, Phase II, IMT Bawal, Haryana. Email id:pankaj.kumari@eglo.com	EC for proposed Industrial Building Project at PlotNo. 286- 289, Sector - 3, Phase - 2, IMT Bawal, Haryana	**For consideration**

	SIA/HR/INFRA2/507513/2024		
4.	**M/s Gurgaon Realtech Limited**, TRIL Commercial Centre, Intellion Edge, Tower A, First Floor, Sector 72, Gurgaon,Haryana-122101 Email id:akbalsingh@tatarealty.in **SIA/HR/INFRA2/493104/2024**	EC for proposed Revision and Expansion of Mixed Use Development project at Sector 72, Gurgaon, Haryana	**For consideration**
5.	**M/s Forever Buildtech Private Limited** 13th Floor, Dr. Gopal Das Bhawan , 28, Barakhamba Road, Cannaught Place , New Delhi – 110001. Email id: foreverbuildtechenv@gmail.com **SIA/HR/INFRA2/514022/2024**	EC for proposed Revision & Expansion of Mix Land Use Colony (Residential 90% And Commercial 10%) Project Under TOD Policy Dated 09.02.2016 in the Revenue Estate of Village Hayatpur, Sector-84, Gurugram Manesar Urban Complex, District Gurugram, Haryana.	**For consideration**
6.	**M/s Signatureglobal Business Park Private Limited** 13th Floor, Gopal Dass, Bhawan, 28, Barakhamba Road, Connaught Place, New Delhi Email id:vineet.signatureglobal@gmail.com **SIA/HR/INFRA2/496874/2024**	EC for proposed Industrial Plotted Colony atVillage Shidrawali, Tehsil-Manesar, District-Gurugram, Haryana	**For consideration**
7.	**M/s RM Industries**, Flat noA2, Ph4,Nirmal Chhaya Apartments,VIP Road,Zirakpur. Email id:rm.kundakalan@gmail.com	EC for proposed validity extension for our Project of "River Bed mining at Kunda Kalan Block at village Kunda Kalan, Tehsil & District- Karnal (Haryana) Area 42.70 Ha."	**For consideration**

	SIA/HR/MIN/514062/2024		
8.	**M/s Whiteland Corporation Private Limited** 4610, DLF Qutab Enclave Complex, Phase-IV, Village-Chakkarpur, Gurugram, Haryana Email id: whitelandcorporationpvtltd@gmail.com **SIA/HR/INFRA2/514251/2024**	EC for proposed Expansion cum modification of Mix Land Use Colony (99% Residential Component and 1% Commercial Component) under TOD policy in the revenue estate of Village Dhanwapur, Sector – 103, Gurugram, Haryana	**For consideration**
9.	**M/s Unitech Limited** 6, Community Centre, Saket, New Delhi, 110017 Email id: unitechltd165@gmail.com **SIA/HR/INFRA2/515380/2024**	EC for Proposed Residential Plotted cum Group Housing Project located in the revenue estate of Village- Fazilpur Jharsa, Sector 71 & 72, District- Gurugram, Haryana being developed	**For consideration**
10.	**M/s HLL Infra Tech Services Limited** B-14A, Sector -62, Noida 201307 Email id: aiimsrewari@gmail.com **SIA/HR/INFRA2/516882/2025**	EC for proposed Baba Sarsai Nath Government Medical College, Sirsa, Haryana by Directorate Of Medical Education & Research, Haryana	**For consideration**

11.	**M/s Pacific Development Corporation Limited** G-42, Ground Floor, Pacific Metro Mall, Khayala, Near Subhash Nagar Metro Nagar. Email Id: sanjay.bafna99@yahoo.co.in **SIA/HR/INFRA2/516407/2024**	ToR (**under violation**) for proposed Development of Proposed Integrated Bus terminal cum Commercial Facilities at Faridabad.	**For consideration**
12.	**M/s SCL Healthcare Private Limited,** 47, Shubhlaxmi CGHS Ltd., Plot No. 13B, Sector-6, Dwarka Colony, South West Delhi – 110075 Email id: krishan.tyagi1984@gmail.com **SIA/HR/INFRA2/469852/2024**	ToR (**under Violation**) for the "Accord Superspeciality Hospital" located at Village Budhena, Sector 86, Faridabad, Haryana by M/s SCL Healthcare Private Limited.	**For consideration**

All the Project Proponent are hereby directed to **submit scrutiny fee as applicable in accordance to the project cost in compliance of Haryana Government, Environment & Climate Change Department Notification No. DE&CCH/3060 dated 14.10.2021 in the shape of Demand Draft in the name of Member Secretary, SEIAA payable at Panchkula.**

Note: -

1. Names and addresses of the Chairman, Member and Member Secretary are given below. Please avoid delivery of documents by hand and separate meeting with Chairman/Members, in this regard;

Sr. No	Name and Address	Designation

1.	**Shri Pranab Kishore Das, IAS (Retd,)** Bay's No. 55-58, Ist Floor, Prayatan Bhawan, Sector-2, Panchkula, Haryana **Email Id: chairman-seiaa@hry.gov.in**	Chairman
2.	**Dr. R. Baskar, FGS (Ind),** FGGS School of Sciences, Indira Gandhi National Open University (IGNOU) MaidanGarhi, New Delhi-110068 **Email: rbaskar@ignou.ac.in**	Member
3.	**Dr. Virender Kumar Dahiya, IAS** Bays No. 55-58, Ist Floor, Prayatan Bhawan, Sector-2, Panchkula, Haryana **Email: virenderdahiya615@gmail.com**	Member Secretary

2. Project Proponents are requested to provide soft copies of the documents at E-mail Id i.e. immediately

Annexure P-16

From

The Additional Chief Secretary to Government Haryana,
Town & Country Planning Department,
Chandigarh.

To

The Director,
Town and Country Planning Department,
Haryana, Chandigarh.

Memo No. 7/12/2022-2TCP Dated: 05.07.2022

Subject: Policy regarding Change of Land Use permission for setting up of temporary site office in relation to development of licenced colonies.

The matter for framing of policy for setting up of site office in relation to development of licenced colonies has been considered by the Government and after careful consideration of the matter, the Governor of Haryana is pleased to notify a policy under Section 11 of Punjab Scheduled Roads and Controlled Areas Restricted of Unregulated Development Act, 1963 and Rules framed thereunder to be read with Section 9A of Haryana Development and Regulation of Urban Areas Act, 1975.

1. FOREWORD

In order to develop licenced colonies, there is requirement of site office, stores and labour huts etc for execution of project and to fulfill day to day requirements also. The powers of the Director vide orders dated 05.09.1997 with regard to permission of temporary structures were delegated to Senior Town Planners in respect of the buildings constructed by the individuals/companies to whom change of land use permission has been granted under section 7 of the Punjab Scheduled Roads and controlled Areas Restriction of Unregulated Development Act, 1963 and by the individuals and the colonizers in the valid licenced colonies (including the colonies where the exemption under section 23 of the Haryana Development and Regulations of Urban Areas Act, 1975 has been granted) and the zoning plans have been approved.

In continuation of the above delegation of powers, vide instructions dated 25.06.1999, STPs were directed to decide the area of site office as per the situation at site and nature of project. Further, vide instruction dated 20.02.1999, the site offices/store were also permitted in setbacks in addition to zoned areas.

The existing provisions of Haryana Building Code, 2017 as well as repealed Rules, 1965 do not cater to the practical requirements. These

structures are temporary in nature but do not come into the ambit of 'temporary building' as per the provision of Haryana Building Code, 2017 as well as repealed Rules, 1965 as per the definition given below: -

> *"temporary building" mean a building built of unburnt bricks, burnt bricks without mortar, corrugated iron, bamboo, thatch, wood, board or plywood but shall not include a building built of burnt bricks, cement blocks or stones laid in mortar and such structures can be dismantled or re-located;*

In order to meet with the practical requirements, safety of the engineers, labour and other persons related to the construction work, the temporary structures as mentioned in HBC, 2017 are not safe. Infact, the temporary buildings in existence are in contravention to the definition provided in the Code/Rules. Hence, policy with regard to safe temporary buildings needs to be framed.

2. APPLICABILITY OF POLICY

This policy shall be applicable to the licencees/ developers to whom licence has been granted under the provisions of Haryana Development and Regulation of Urban Areas Act, 1975 and the construction of the colony is being undertaken within the validity of licence.

3. POLICY

The eligible licence holders/developers shall be governed by the following policy parameters: -

3.1 Siting Parameters: - The site should be within the licenced area or on self acquired land having freehold title or having ownership through a lease period of minimum five years with adequate independent approach not less than 33 ft. No separate approach shall be required if the site is part of licenced area.

3.2 Area Norms: - The minimum and maximum area norms for site office shall be 0.5 acre and 2.0 acres respectively.

3.3 Application for grant of permission for setting up of Site Office: - Any applicant desiring to set up the site office outside licenced area shall be required to submit application on the

prescribed form CLU-I as appended to Rules, 1965 alongwith scrutiny fee @ Rs. 10/- per Sq. mtr. The application shall be submitted in the office of concerned DTP and shall also be accompanied with BR-I and Building Plans. The building plans shall be in conformity with HBC-2017. In case of sites situated within the licensed colony, the applicant is required to submit only the building plans as per HBC-2017 alongwith scrutiny fee. The concerned DTP shall grant the permission and approve the building plans.

3.4 Applicable Charges: - The conversion charges @ 50% of the prescribed for commercial use as mentioned in Schedule IV appended to Rules, 1965 shall be applicable. This fee shall also be applicable for site office within the licenced colonies not opting for the materials as mentioned for temporary structures.

3.5 Occupation Certificate: - After completing the building of site office, the licensee shall obtain occupation certificate from the office of concerned DTP before occupying the site office. The occupation certificate has to be obtained within a period of two years from the date of grant of permission for setting up of site office as the site is required to be put to use within a period of two years as per the provisions of Rules, 1965.

3.6 Duration of Sanction: - The temporary site office shall be put to use within two years from the date of its sanction. The validity of the temporary permission shall be co-terminus with the validity of licence but not beyond the date of completion of the project. The initial permission shall be for a maximum period of five years, which will be extendable on justifiable circumstances for an another period of maximum five years on payment of fee prescribed for initial permission.

3.7 Permissible ground coverage and FAR: - The permissible ground coverage shall be 60% as per HBC, 2017 and maximum two storeys shall be permitted irrespective of the FAR mentioned in HBC, 2017.

3.8 Construction Material: - Notwithstanding anything contained in the definition of 'temporary building' regarding construction material, the temporary site office, labour huts and stores etc.

should be constructed considering safety norms and other applicable laws.

3.9 Demolition of temporary structures: - The temporary site office shall be demolished within a maximum period of ten years from the date of grant of permission. No completion certificate for the colony concerned shall be granted in case the site office is not demolished even in cases where ten years period has not expired.

3.10 Withdrawal of permission: - The permission is bound to be withdrawn on any kind of violation including the policy parameters and misuse of the permission. However, before withdrawing the permission, an opportunity of being heard shall be granted by the competent authority i.e. DTP of the concerned District.

Director, Town and Country Planning, Haryana may ensure that these policy parameters are adhered to while dealing with the cases of grant of permission for setting up of temporary site offices by the colonizers.

-Sd/-
Devender Singh, IAS
Additional Chief Secretary to Government Haryana,
Town and Country Planning Department,
Chandigarh.

Office of District Town Planner, Enforcement, Gurugram
DEPARTMENT OF TOWN & COUNTRY PLANNING, HARYANA
SECTOR-14, HUDA COMPLEX, 3RD FLOOR, GURUGRAM.
Tel+Fax-0124-2223749
E-mail: dtpenf5.gurugram.tcp@gmail.com

Annexure P-17

Memo No. DTP (E)/2023/ 21001
Dated: 06-11-2023

To

Signature Global (India) Private Limited,
13th Floor, Dr. Gopal Dass Bhawan,
28, Barakhamba Road, Connaught Place,
New Delhi.

Sub:- **Grant of CLU permission and Approval of Building Plan for Temporary Site Office over an area measuring 0.5 acres (4K-0M) falling in the Khasra No. 7//24/1/1 in the revenue estate of village Sidhrawali Tehsil Manesar District Gurugram, being developed by** Signature Global (India) Private Limited **for developing of License No. 110 of 2021 dated 20.12.2021 of Affordable Plotted Colony (Under DDJAY), Sector-63A, Gurugram granted to M/s** Signature Global (India) Private Limited

Ref:- *Your application dated 24.08.2023 and after correction dated 27.10.2023.*

The Building Plan of temporary site office for subjected Affordable Plotted Colony (Under DDJAY) for an area measuring 5.0125 acres (40K-2M) Sector-63A, Gurugram Manesar Urban Complex being developed by Signature Global (India) Private Limited is hereby sanctioned, subject to the following conditions:-

1. The sanction of the CLU & Building Plans are valid for Five years from the date of this permission.
2. That you will get Occupation Certificate from this office before occupying the site office.
3. The temporary structure shall be demolished and bebris shall be removed from the site before applying for occupation certificate.
4. The building shall be constructed strictly as per the provision of Rule 1.2 (xcii) of the Haryana Building Code-2017.
5. The sanction of the Building Plans will be subject to the provisions of the Haryana Building Code-2017.
6. You will not use underground water for construction of temporary site office.
7. That this sanction of plans is subject to strict compliance as contained in order dated 10.04.2015 passed by Hon'ble National Green Tribunal in OA No. 21 of 2014- Vardhman Kaushik Vs. UOI and others as well as MOEF guidelines 2010.
8. That you shall abide by the condition mentioned in Commissioner, Municipal Corporation, Gurugram order Endst No. 2154 dated 21.04.2017 regarding C& D waste. DA/ Building Plans

District Town Planner,
Enforcement, Gurugram

Endst. No. Dated:

A copy is forwarded to the following for information and necessary action please:-

1. Director General, Town & Country Planning, Haryana, Chandigrah w.r.t. this office Memo No. DTP (E)/2023/20992 dated 06.11.2023.
2. Senior Town Planner, Gurugram Circle, Gurugram.

District Town Planner,
Enforcement, Gurugram

GRC INDIA TRAINING & ANALYTICAL LABORATORY
(A unit of Grass Roots Research & Creation India (P) Ltd.)
An ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 (OH&S) Certified
NABL Accredited Laboratory (A Constituent Board of QCI), TC 7501 (Chemical & Biological)
Recognized by Ministry of Environment, Forest & Climate Change (MOEF&CC, GOI), under the E (P) Act, 1986
Head Office: F-375, Sector-63, Noida, Gautam Budh Nagar, U.P – 201 301
Phone No.: 0120 – 4044630, 4044660, 4323120, Fax: 0120 – 2406519, 0120 - 4044675
Website: https://www.grc-india.com, E-mail : lab@grc-india.com; info@grc-india.com

TC-7501

Test Report

Report Code: A20231231-049

Issue Date: 31.12.2023

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 04.12.2023 to 31.12.2023

Sample Description: Ambient Air

Annexure P-18

RESULTS
(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Project Site
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/DEC/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); µg/m³	Particulate Matter ($PM_{2.5}$); µg/m³	Sulphur Dioxide (SO_2); µg/m³	Nitrogen Dioxide (NO_2); µg/m³	Carbon Monoxide, (CO) µg/m³
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	02.12.2023	167.3	83.8	9.3	46.5	910
2	06.12.2023	173.8	91.4	9.7	43.3	1030
3	10.12.2023	178.5	97.6	8.8	48.0	980
4	14.12.2023	168.1	90.7	10.5	41.3	1010
5	18.12.2023	176.7	96.8	9.9	45.6	980
6	21.12.2023	170.5	89.6	10.6	49.0	1030
7	25.12.2023	175.6	96.4	9.8	44.2	980
8	29.12.2023	183.7	91.4	9.0	48.6	930

****End of Report****

Narinder Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

Note: 1.The results indicated only refer to the tested samples and listed parameters and do not endorse any product.
2. This certificate shall not be reproduced wholly or in part without prior written consent of the laboratory.
3. This certificate shall not be used in any advertising media or as evidence in the court of law without prior written consent of the laboratory.
4. The samples received shall be destroyed after 30 days from the date of issue of the report unless specified otherwise and sample for biological testing will be destroyed after 7 days of testing.

GRC INDIA TRAINING & ANALYTICAL LABORATORY
(A unit of Grass Roots Research & Education India (P) Ltd.)
An ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 (OH&S) Certified
NABL Accredited Laboratory (A Constituent Board of QCI), TC 7501 (Chemical & Biological)
Recognized by Ministry of Environment, Forest & Climate Change (MOEF&CC, GOI), under the E (P) Act, 1986
Head Office: F-375, Sector-63, Noida, Gautam Budh Nagar, U.P - 201 301
Phone No.: 0120 - 4044630, 4044660, 4323120, Fax: 0120 - 2406519, 0120 - 4044675
Website: https://www.grc-india.com, E-mail : lab@grc-india.com; info@grc-india.com

TC-7501

Test Report

Report Code: A20240130-049 **Issue Date: 30.01.2024**

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 02.01.2024 to 30.01.2024

Sample Description: Ambient Air

RESULTS

(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Project Site
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/JAN/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); µg/m³	Particulate Matter ($PM_{2.5}$); µg/m³	Sulphur Dioxide (SO_2); µg/m³	Nitrogen Dioxide (NO_2); µg/m³	Carbon Monoxide, (CO) µg/m³
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	01.01.2024	159.2	83.1	8.6	43.8	830
2	05.01.2024	165.1	79.5	10.9	41.6	880
3	08.01.2024	176.9	95.3	8.6	34.3	910
4	12.01.2024	163.2	79.4	10.1	43.8	1010
5	16.01.2024	168.5	86.9	9.3	36.4	840
6	20.01.2024	173.1	93.3	9.7	30.3	780
7	24.01.2024	158.8	83.2	10.0	33.5	880
8	28.01.2024	162.6	86.5	8.8	32.7	740

****End of Report****

Narinder Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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Website: https://www.grc-india.com, E-mail : lab@grc-india.com; info@grc-india.com
TC-7501

Test Report

Report Code: A20240228-049 **Issue Date: 28.02.2024**

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 02.02.2024 to 28.02.2024

Sample Description: Ambient Air

RESULTS

(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Project Site
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/FEB/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); $\mu g/m^3$	Particulate Matter ($PM_{2.5}$); $\mu g/m^3$	Sulphur Dioxide (SO_2); $\mu g/m^3$	Nitrogen Dioxide (NO_2); $\mu g/m^3$	Carbon Monoxide, (CO) $\mu g/m^3$
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	01.02.2024	156.8	82.6	9.3	46.1	950
2	05.02.2024	180.7	94.9	9.7	41.5	880
3	09.02.2024	160.4	86.6	11.1	49.7	710
4	13.02.2024	151.5	78.3	10.2	38.1	850
5	17.02.2024	160.9	80.9	9.9	42.3	870
6	20.02.2024	158.7	84.3	10.8	45.9	980
7	23.02.2024	164.3	83.2	10.1	38.4	880
8	26.02.2024	156.9	81.5	9.2	43.2	850

****End of Report****

Narinder Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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Website: https://www.grc-india.com, E-mail : lab@grc-india.com; info@grc-india.com
TC-7501

Test Report

Report Code: A20231231-050 **Issue Date: 31.12.2023**

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 04.12.2023 to 31.12.2023

Sample Description: Ambient Air

RESULTS

(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Bharat Petroleum Petrol Pump, Akerabhiwadi
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/DEC/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); µg/m³	Particulate Matter ($PM_{2.5}$); µg/m³	Sulphur Dioxide (SO_2); µg/m³	Nitrogen Dioxide (NO_2); µg/m³	Carbon Monoxide, (CO) µg/m³
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	02.12.2023	137.5	72.8	8.5	28.3	630
2	06.12.2023	127.2	66.5	9.6	32.7	700
3	10.12.2023	135.8	70.4	8.2	30.8	730
4	14.12.2023	131.6	67.6	9.2	29.9	600
5	18.12.2023	140.0	73.7	9.4	28.2	660
6	21.12.2023	135.3	70.8	8.8	33.5	710
7	25.12.2023	133.5	69.7	9.5	30.8	830
8	29.12.2023	145.1	73.9	8.9	29.1	810

****End of Report****

Narender Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: A20240130-050 **Issue Date: 30.01.2024**

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 02.01.2024 to 30.01.2024

Sample Description: Ambient Air

RESULTS

(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Bharat Petroleum Petrol Pump, Akerabhiwadi
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/JAN/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); µg/m^3	Particulate Matter ($PM_{2.5}$); µg/m^3	Sulphur Dioxide (SO_2); µg/m^3	Nitrogen Dioxide (NO_2); µg/m^3	Carbon Monoxide, (CO) µg/m^3
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	01.01.2024	134.7	67.6	8.5	26.3	620
2	05.01.2024	134.3	71.1	9.3	29.6	580
3	08.01.2024	136.4	71.4	9.7	33.7	700
4	12.01.2024	128.8	66.9	8.2	27.5	580
5	16.01.2024	136.2	71.2	9.3	29.6	780
6	20.01.2024	123.9	65.6	8.4	27.1	470
7	24.01.2024	124.9	64.9	8.2	31.9	550
8	28.01.2024	125.4	66.2	9.9	31.4	830

****End of Report****

Narinder Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: A20240228-050 **Issue Date: 28.02.2024**

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 02.02.2024 to 28.02.2024

Sample Description: Ambient Air

RESULTS

(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Bharat Petroleum Petrol Pump, Akerabhiwadi
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/FEB/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); µg/m³	Particulate Matter ($PM_{2.5}$); µg/m³	Sulphur Dioxide (SO_2); µg/m³	Nitrogen Dioxide (NO_2); µg/m³	Carbon Monoxide, (CO) µg/m³
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	01.02.2024	118.3	59.7	8.3	27.4	800
2	05.02.2024	117.2	61.6	9.1	28.7	640
3	09.02.2024	126.3	67.2	9.3	32.9	800
4	13.02.2024	124.5	65.4	9.8	30.1	810
5	17.02.2024	130.3	67.7	8.9	32.7	640
6	20.02.2024	121.4	62.6	8.6	28.9	810
7	23.02.2024	127.1	65.4	9.7	35.1	750
8	26.02.2024	120.3	64.1	9.2	34.8	790

****End of Report****

Narinder Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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357
TC-7501

Test Report

Report Code: A20231231-051 **Issue Date: 31.12.2023**

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 04.12.2023 to 31.12.2023

Sample Description: Ambient Air

RESULTS

(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Downtown Palasoli
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/DEC/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); µg/m³	Particulate Matter ($PM_{2.5}$); µg/m³	Sulphur Dioxide (SO_2); µg/m³	Nitrogen Dioxide (NO_2); µg/m³	Carbon Monoxide, (CO) µg/m³
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	02.12.2023	164.8	72.5	8.6	46.7	750
2	06.12.2023	170.3	80.1	9.3	42.9	780
3	10.12.2023	167.6	84.3	8.4	47.6	750
4	14.12.2023	166.4	80.8	10.1	40.9	810
5	18.12.2023	173.2	85.5	9.5	45.2	730
6	21.12.2023	164.5	78.3	10.2	48.6	780
7	25.12.2023	169.8	85.1	9.4	43.8	710
8	29.12.2023	167.2	84.2	8.6	48.2	680

End of Report

Narender Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: A20240130-051 **Issue Date: 30.01.2024**

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 02.01.2024 to 30.01.2024

Sample Description: Ambient Air

RESULTS

(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Downtown Palasoli
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/JAN/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); µg/m³	Particulate Matter ($PM_{2.5}$); µg/m³	Sulphur Dioxide (SO_2); µg/m³	Nitrogen Dioxide (NO_2); µg/m³	Carbon Monoxide, (CO) µg/m³
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	01.01.2024	150.9	75.8	8.2	42.6	640
2	05.01.2024	141.7	69.2	10.5	41.2	610
3	08.01.2024	147.4	73.5	8.2	33.9	600
4	12.01.2024	155.7	69.1	9.7	43.4	640
5	16.01.2024	158.9	76.6	8.9	36.0	590
6	20.01.2024	164.4	83.7	9.3	29.9	530
7	24.01.2024	149.3	72.9	9.6	33.8	630
8	28.01.2024	153.1	76.2	8.4	31.6	490

****End of Report****

Narinder Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: A20240228-051 **Issue Date: 28.02.2024**

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 02.02.2024 to 28.02.2024

Sample Description: Ambient Air

RESULTS

(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Downtown Palasoli
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/FEB/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); µg/m^3	Particulate Matter ($PM_{2.5}$); µg/m^3	Sulphur Dioxide (SO_2); µg/m^3	Nitrogen Dioxide (NO_2); µg/m^3	Carbon Monoxide, (CO) µg/m^3
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	01.02.2024	145.3	72.3	8.9	45.7	750
2	05.02.2024	150.2	74.8	9.3	41.5	630
3	09.02.2024	156.5	76.3	10.7	48.6	450
4	13.02.2024	138.7	68.0	9.8	37.7	600
5	17.02.2024	141.4	70.4	9.5	41.9	620
6	20.02.2024	148.5	74.0	10.4	45.5	730
7	23.02.2024	154.8	72.4	9.7	38.0	620
8	26.02.2024	147.4	71.2	8.8	42.8	590

****End of Report****

Narinder Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: A20231231-052 **Issue Date: 31.12.2023**

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 04.12.2023 to 31.12.2023

Sample Description: Ambient Air

RESULTS

(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Indraprastha Gas Limited CNG Station, Malpura
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/DEC/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); µg/m^3	Particulate Matter ($PM_{2.5}$); µg/m^3	Sulphur Dioxide (SO_2); µg/m^3	Nitrogen Dioxide (NO_2); µg/m^3	Carbon Monoxide, (CO) µg/m^3
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	02.12.2023	165.3	87.9	10.4	47.6	980
2	06.12.2023	181.8	95.5	11.1	44.4	1030
3	10.12.2023	186.5	103.7	10.2	49.1	980
4	14.12.2023	176.1	95.5	11.9	42.4	1030
5	18.12.2023	184.7	100.9	11.3	46.7	980
6	21.12.2023	175.3	93.7	12.7	50.1	1030
7	25.12.2023	180.1	100.5	11.2	45.3	970
8	29.12.2023	184.7	101.6	10.4	49.7	940

****End of Report****

Narinder Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: A20240130-052 **Issue Date: 30.01.2024**

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 02.01.2024 to 30.01.2024

Sample Description: Ambient Air

RESULTS

(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Indraprastha Gas Limited CNG Station, Malpura
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/JAN/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); µg/m^3	Particulate Matter ($PM_{2.5}$); µg/m^3	Sulphur Dioxide (SO_2); µg/m^3	Nitrogen Dioxide (NO_2); µg/m^3	Carbon Monoxide, (CO) µg/m^3
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	01.01.2024	160.1	87.2	9.4	44.1	900
2	05.01.2024	152.2	84.6	12.3	42.7	870
3	08.01.2024	157.9	88.4	10.8	35.4	860
4	12.01.2024	147.2	82.5	11.5	44.9	900
5	16.01.2024	169.5	92.0	10.7	37.5	850
6	20.01.2024	174.1	96.7	11.1	32.4	790
7	24.01.2024	159.8	88.3	11.4	34.6	890
8	28.01.2024	163.6	91.6	10.2	33.1	750

****End of Report****

Narinder Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: A20240228-052 **Issue Date: 28.02.2024**

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 02.02.2024 to 28.02.2024

Sample Description: Ambient Air

RESULTS

(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Indraprastha Gas Limited CNG Station, Malpura
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/FEB/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); µg/m³	Particulate Matter ($PM_{2.5}$); µg/m³	Sulphur Dioxide (SO_2); µg/m³	Nitrogen Dioxide (NO_2); µg/m³	Carbon Monoxide, (CO) µg/m³
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	01.02.2024	155.8	87.7	10.7	47.2	1010
2	05.02.2024	157.7	88.2	11.1	42.6	880
3	09.02.2024	163.6	90.7	12.5	50.1	760
4	13.02.2024	148.5	83.4	11.6	39.2	860
5	17.02.2024	151.9	85.8	11.3	43.4	880
6	20.02.2024	159.7	89.4	12.2	47.8	1010
7	23.02.2024	165.3	87.8	11.5	39.5	880
8	26.02.2024	157.9	86.6	10.6	44.3	860

****End of Report****

Narinder Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: A20231231-053 **Issue Date: 31.12.2023**

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 04.12.2023 to 31.12.2023

Sample Description: Ambient Air

RESULTS

(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Near BMU D Block Crossing
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/DEC/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); µg/m³	Particulate Matter ($PM_{2.5}$); µg/m³	Sulphur Dioxide (SO_2); µg/m³	Nitrogen Dioxide (NO_2); µg/m³	Carbon Monoxide, (CO) µg/m³
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	02.12.2023	160.8	77.5	10.9	34.8	710
2	06.12.2023	153.4	71.8	9.7	39.2	750
3	10.12.2023	162.1	74.9	10.6	36.3	820
4	14.12.2023	157.8	72.1	11.6	36.4	690
5	18.12.2023	166.2	79.2	11.8	34.7	740
6	21.12.2023	161.5	75.3	11.2	39.6	790
7	25.12.2023	159.7	73.5	9.9	37.3	810
8	29.12.2023	174.3	83.4	11.3	36.2	880

****End of Report****

Narinder Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: A20240130-053 **Issue Date: 30.01.2024**

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 02.01.2024 to 30.01.2024

Sample Description: Ambient Air

RESULTS

(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Near BMU D Block Crossing
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/JAN/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); µg/m^3	Particulate Matter ($PM_{2.5}$); µg/m^3	Sulphur Dioxide (SO_2); µg/m^3	Nitrogen Dioxide (NO_2); µg/m^3	Carbon Monoxide, (CO) µg/m^3
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	01.01.2024	156.2	71.8	9.9	32.9	730
2	05.01.2024	160.5	75.6	11.7	36.1	690
3	08.01.2024	162.8	75.9	12.1	40.7	680
4	12.01.2024	155.4	71.4	10.6	34.4	740
5	16.01.2024	162.6	75.7	11.7	36.1	840
6	20.01.2024	150.3	70.9	9.8	33.6	790
7	24.01.2024	151.3	69.4	9.6	38.1	700
8	28.01.2024	151.8	70.7	12.3	37.7	710

****End of Report****

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TC-7501

Test Report

Report Code: A20240228-053 **Issue Date: 28.02.2024**

Issued To: Industrial Park Project by M/s Signature Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Analysis Duration: 02.02.2024 to 28.02.2024

Sample Description: Ambient Air

RESULTS

(Ambient Air Quality Analysis)

SAMPLING DETAILS

Sampling Location	:	Near BMU D Block Crossing
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	GRC/LAB/STP/AIR/01: 2018
Weather Condition	:	Clear Sky
Sampling Duration	:	24 Hours
Sampling Duration for CO	:	1 Hour
Sampler Location w.r.t. Height	:	4.0 Meter above Ground Level
Sample Packing & Marking	:	Plastic Bottle/ Zip Polybag & SGIL/FEB/A001-A008

S. No.	Date	Test Parameters				
		Particulate Matter (PM_{10}); µg/m^3	Particulate Matter ($PM_{2.5}$); µg/m^3	Sulphur Dioxide (SO_2); µg/m^3	Nitrogen Dioxide (NO_2); µg/m^3	Carbon Monoxide, (CO) µg/m^3
		IS 5182 (Part 23):2006 (RA 2022)	IS 5182 (Part 24):2019	IS 5182 (Part 2):2001 (RA 2017)	IS 5182 (Part 6):2006 (RA 2022)	IS 5182 (Part 10):1999 (RA 2019)
1	01.02.2024	140.7	64.2	10.7	33.8	880
2	05.02.2024	143.6	66.5	11.5	35.2	730
3	09.02.2024	152.7	71.7	11.7	39.4	930
4	13.02.2024	150.9	69.5	12.2	36.6	940
5	17.02.2024	156.7	72.2	11.3	38.2	730
6	20.02.2024	147.8	67.8	11.0	35.4	700
7	23.02.2024	153.5	72.9	12.1	41.6	710
8	26.02.2024	149.7	68.6	11.6	37.3	680

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(Seal & Signature)

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TC-7501

Test Report

Report Code: N20231205-049 **Issue Date: 05.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Data Received on: 05.12.2023

Sample Description: Ambient Noise

RESULTS

Ambient Noise Level

MONITORING DETAILS

Date of Monitoring : 04.12.2023
Monitoring Done by : Mr. Maan Singh
Monitoring Protocol : IS 9989: 1981, RA 2020
Weather Condition : Clear Sky
Monitoring Duration : 24 Hours

S. No.	LOCATION	ZONE	Limit As Per Noise Pollution (Regulation & Control) Rules, 2000 Leq, dB (A)		Observed Value Leq, dB (A)	
			Day Time*	Night Time**	Day Time*	Night Time**
1	Project Site	Commercial Area	65	55	56.8	47.3
2	Bharat Petroleum Petrol Pump, Akerabhiwadi	Commercial Area	65	55	50.5	42.7
3	Downtown Palasoli	Residential Area	55	45	53.2	43.5
4	Indraprastha Gas Limited CNG Station, Malpura	Commercial Area	65	55	63.6	52.9
5	Samrat Hotel,Bilaspur NH-8 Rathiwas Mod	Commercial Area	65	55	60.9	50.5
	* Day Time	6.00 a.m. to 10.00 p.m				
	**Night Time	10.00 p.m. to 6.00 a.m.				

****End of Report****

Narender Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

1628

367

Test Report

Report Code: S20231221-049 **Issue Date: 21.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 20.12.2023

Sample Description: Soil Sample

RESULTS
Soil Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Project Site
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: GRC/LAB/STP/SOIL/01; 2018
Weather Condition	: Clear Sky
Sample Quantity	: 5 kg
Sample Packing & Marking	: Zip Polybag; SGIL/DEC /SQ-01

S. No.	Parameters	Units	Results	Test Method
1.	Texture	-	Sandy Loam	GRC-LAB/STP-SOIL/22; 2018
2.	Particle Size Distribution	-		IS 2720 (Part-4): 1985, RA 2020
	Sand	%	63.7	
	Silt	%	16.9	
	Clay	%	19.4	
3.	pH (1:2 Suspension)	-	7.59	IS 2720 (Part-26): 1987, RA 2021
4.	Electrical Conductivity (1:2	µS/cm	447	IS 14767: 2000, RA 2021
5.	Moisture Content	%	6.9	IS 2720 (Part-2): 1973, RA 2020
6.	Cation Exchange Capacity (CEC)	meq/100 gm	13.0	IS 2720 (Part-24): 1976, RA 2020
7.	Available Potassium (as K)	mg/kg	69	GRC-LAB/STP-SOIL/07; 2018
8.	Exchangeable Sodium (as Na)	mg/kg	117	GRC-LAB/STP-SOIL/07; 2018
9.	Exchangeable Calcium (as Ca)	mg/kg	1901	GRC-LAB/STP-SOIL/08; 2018
10.	Exchangeable Magnesium (as Mg)	mg/kg	341	GRC-LAB/STP-SOIL/08; 2018
11.	Sodium Absorption Ratio (SAR)	-	0.65	GRC-LAB/STP-SOIL/19; 2018
12.	Organic Matter	%	0.71	IS 2720 (Part-22): 1972, RA 2020
13.	Total Nitrogen (as N)	mg/kg	40	IS 14684: 1999 RA 2019
14.	Nitrate (as NO_3)	mg/kg	5.7	IS 14684: 1999 RA 2019
15.	Total Phosphate (as PO_4)	mg/kg	6.3	USEPA Method 365.3: 1978
16.	Iron (as Fe)	mg/kg	5.5	USEPA Method 3051-A: 2007
17.	Zinc (as Zn)	mg/kg	2.2	USEPA Method 3051-A: 2007

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Test Report

Report Code: S20231221-049 **Issue Date: 21.12.2023**

18.	Copper (as Cu)	mg/kg	1.1	USEPA Method 3051-A: 2007
19.	Boron (as B)	mg/kg	1.8	USEPA Method 3051-A: 2007
20.	Manganese (as Mn)	mg/kg	7.6	USEPA Method 3051-A: 2007
21.	Water Holding Capacity	%	25.7	GRC-LAB/STP-SOIL/13; 2020
22.	Permeability	cm/hr	2.3	IS 2720 (Part-17): 1986, RA 2021
23.	Porosity	%	38.7	GRC-LAB/STP-SOIL/20; 2020
24.	Bulk Density	gm/cc	1.31	GRC-LAB/STP-SOIL/12; 2018

****End of Report****

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(Seal & Signature)

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TC-7501

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369

Test Report

Report Code: S20231221-050 **Issue Date: 21.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Description: Soil Sample

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 20.12.2023

RESULTS
Soil Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Non-Agricultural Land Village Kapriwas
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: GRC/LAB/STP/SOIL/01; 2018
Weather Condition	: Clear Sky
Sample Quantity	: 5 kg
Sample Packing & Marking	: Zip Polybag; SGIL/DEC /SQ-02

S. No.	Parameters	Units	Results	Test Method
1.	Texture	-	Sandy Loam	GRC-LAB/STP-SOIL/22; 2018
2.	Particle Size Distribution	-		IS 2720 (Part-4): 1985, RA 2020
	Sand	%	65.3	
	Silt	%	17.2	
	Clay	%	17.5	
3.	pH (1:2 Suspension)	-	7.67	IS 2720 (Part-26): 1987, RA 2021
4.	Electrical Conductivity (1:2	µS/cm	443	IS 14767: 2000, RA 2021
5.	Moisture Content	%	6.8	IS 2720 (Part-2): 1973, RA 2020
6.	Cation Exchange Capacity (CEC)	meq/100 gm	13.6	IS 2720 (Part-24): 1976, RA 2020
7.	Available Potassium (as K)	mg/kg	67	GRC-LAB/STP-SOIL/07; 2018
8.	Exchangeable Sodium (as Na)	mg/kg	114	GRC-LAB/STP-SOIL/07; 2018
9.	Exchangeable Calcium (as Ca)	mg/kg	1947	GRC-LAB/STP-SOIL/08; 2018
10.	Exchangeable Magnesium (as Mg)	mg/kg	386	GRC-LAB/STP-SOIL/08; 2018
11.	Sodium Absorption Ratio (SAR)	-	0.62	GRC-LAB/STP-SOIL/19; 2018
12.	Organic Matter	%	0.83	IS 2720 (Part-22): 1972, RA 2020
13.	Total Nitrogen (as N)	mg/kg	42	IS 14684: 1999 RA 2019
14.	Nitrate (as NO_3)	mg/kg	5.3	IS 14684: 1999 RA 2019
15.	Total Phosphate (as PO_4)	mg/kg	6.1	USEPA Method 365.3: 1978
16.	Iron (as Fe)	mg/kg	4.8	USEPA Method 3051-A: 2007
17.	Zinc (as Zn)	mg/kg	2.1	USEPA Method 3051-A: 2007

Narendra Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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Test Report

Report Code: S20231221-050 **Issue Date: 21.12.2023**

18.	Copper (as Cu)	mg/kg	1.2	USEPA Method 3051-A: 2007
19.	Boron (as B)	mg/kg	2.3	USEPA Method 3051-A: 2007
20.	Manganese (as Mn)	mg/kg	7.4	USEPA Method 3051-A: 2007
21.	Water Holding Capacity	%	25.3	GRC-LAB/STP-SOIL/13; 2020
22.	Permeability	cm/hr	2.2	IS 2720 (Part-17): 1986, RA 2021
23.	Porosity	%	39.8	GRC-LAB/STP-SOIL/20; 2020
24.	Bulk Density	gm/cc	1.31	GRC-LAB/STP-SOIL/12; 2018

End of Report

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Test Report

Report Code: S20231221-051 **Issue Date: 21.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 20.12.2023

Sample Description: Soil Sample

RESULTS
Soil Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Non-Agricultural Land Village Gurjar Ghatal
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: GRC/LAB/STP/SOIL/01; 2018
Weather Condition	: Clear Sky
Sample Quantity	: 5 kg
Sample Packing & Marking	: Zip Polybag; SGIL/DEC /SQ-03

S. No.	Parameters	Units	Results	Test Method
1.	Texture	-	Sandy Loam	GRC-LAB/STP-SOIL/22; 2018
2.	Particle Size Distribution	-		IS 2720 (Part-4): 1985, RA 2020
	Sand	%	67.5	
	Silt	%	15.3	
	Clay	%	17.2	
3.	pH (1:2 Suspension)	-	7.69	IS 2720 (Part-26): 1987, RA 2021
4.	Electrical Conductivity (1:2	µS/cm	441	IS 14767: 2000, RA 2021
5.	Moisture Content	%	6.5	IS 2720 (Part-2): 1973, RA 2020
6.	Cation Exchange Capacity (CEC)	meq/100 gm	13.5	IS 2720 (Part-24): 1976, RA 2020
7.	Available Potassium (as K)	mg/kg	71	GRC-LAB/STP-SOIL/07; 2018
8.	Exchangeable Sodium (as Na)	mg/kg	115	GRC-LAB/STP-SOIL/07; 2018
9.	Exchangeable Calcium (as Ca)	mg/kg	1938	GRC-LAB/STP-SOIL/08; 2018
10.	Exchangeable Magnesium (as Mg)	mg/kg	378	GRC-LAB/STP-SOIL/08; 2018
11.	Sodium Absorption Ratio (SAR)	-	0.62	GRC-LAB/STP-SOIL/19; 2018
12.	Organic Matter	%	0.83	IS 2720 (Part-22): 1972, RA 2020
13.	Total Nitrogen (as N)	mg/kg	38	IS 14684: 1999 RA 2019
14.	Nitrate (as NO_3)	mg/kg	4.9	IS 14684: 1999 RA 2019
15.	Total Phosphate (as PO_4)	mg/kg	5.1	USEPA Method 365.3: 1978
16.	Iron (as Fe)	mg/kg	3.2	USEPA Method 3051-A: 2007
17.	Zinc (as Zn)	mg/kg	2.3	USEPA Method 3051-A: 2007

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Test Report

Report Code: S20231221-051 **Issue Date: 21.12.2023**

18.	Copper (as Cu)	mg/kg	1.1	USEPA Method 3051-A: 2007
19.	Boron (as B)	mg/kg	2.2	USEPA Method 3051-A: 2007
20.	Manganese (as Mn)	mg/kg	6.8	USEPA Method 3051-A: 2007
21.	Water Holding Capacity	%	26.4	GRC-LAB/STP-SOIL/13; 2020
22.	Permeability	cm/hr	2.3	IS 2720 (Part-17): 1986, RA 2021
23.	Porosity	%	39.7	GRC-LAB/STP-SOIL/20; 2020
24.	Bulk Density	gm/cc	1.32	GRC-LAB/STP-SOIL/12; 2018

****End of Report****

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1634

373

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Test Report

Report Code: S20231221-052

Issue Date: 21.12.2023

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Description: Soil Sample

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 20.12.2023

RESULTS
Soil Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Agricultural Land Village Sidhrawali
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: GRC/LAB/STP/SOIL/01; 2018
Weather Condition	: Clear Sky
Sample Quantity	: 5 kg
Sample Packing & Marking	: Zip Polybag; SGIL/DEC /SQ-04

S. No.	Parameters	Units	Results	Test Method
1.	Texture	-	Sandy Loam	GRC-LAB/STP-SOIL/22; 2018
2.	Particle Size Distribution	-		IS 2720 (Part-4): 1985, RA 2020
	Sand	%	63.5	
	Silt	%	16.8	
	Clay	%	19.7	
3.	pH (1:2 Suspension)	-	7.78	IS 2720 (Part-26): 1987, RA 2021
4.	Electrical Conductivity (1:2	µS/cm	447	IS 14767: 2000, RA 2021
5.	Moisture Content	%	8.7	IS 2720 (Part-2): 1973, RA 2020
6.	Cation Exchange Capacity (CEC)	meq/100 gm	14.1	IS 2720 (Part-24): 1976, RA 2020
7.	Available Potassium (as K)	mg/kg	87	GRC-LAB/STP-SOIL/07; 2018
8.	Exchangeable Sodium (as Na)	mg/kg	121	GRC-LAB/STP-SOIL/07; 2018
9.	Exchangeable Calcium (as Ca)	mg/kg	2018	GRC-LAB/STP-SOIL/08; 2018
10.	Exchangeable Magnesium (as Mg)	mg/kg	395	GRC-LAB/STP-SOIL/08; 2018
11.	Sodium Absorption Ratio (SAR)	-	0.64	GRC-LAB/STP-SOIL/19; 2018
12.	Organic Matter	%	0.46	IS 2720 (Part-22): 1972, RA 2020
13.	Total Nitrogen (as N)	mg/kg	45	IS 14684: 1999 RA 2019
14.	Nitrate (as NO_3)	mg/kg	6.3	IS 14684: 1999 RA 2019
15.	Total Phosphate (as PO_4)	mg/kg	6.8	USEPA Method 365.3: 1978
16.	Iron (as Fe)	mg/kg	9.7	USEPA Method 3051-A: 2007
17.	Zinc (as Zn)	mg/kg	2.1	USEPA Method 3051-A: 2007

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TC-7501

Test Report

Report Code: S20231221-052 **Issue Date: 21.12.2023**

18.	Copper (as Cu)	mg/kg	1.3	USEPA Method 3051-A: 2007
19.	Boron (as B)	mg/kg	3.1	USEPA Method 3051-A: 2007
20.	Manganese (as Mn)	mg/kg	8.9	USEPA Method 3051-A: 2007
21.	Water Holding Capacity	%	27.1	GRC-LAB/STP-SOIL/13; 2020
22.	Permeability	cm/hr	2.1	IS 2720 (Part-17): 1986, RA 2021
23.	Porosity	%	32.6	GRC-LAB/STP-SOIL/20; 2020
24.	Bulk Density	gm/cc	1.33	GRC-LAB/STP-SOIL/12; 2018

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TC-7501

Test Report

Report Code: S20231221-053 **Issue Date: 21.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Description: Soil Sample

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 20.12.2023

RESULTS
Soil Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Agricultural Land Village Rathiwas
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: GRC/LAB/STP/SOIL/01; 2018
Weather Condition	: Clear Sky
Sample Quantity	: 5 kg
Sample Packing & Marking	: Zip Polybag; SGIL/DEC /SQ-05

S. No.	Parameters	Units	Results	Test Method
1.	Texture	-	Sandy Loam	GRC-LAB/STP-SOIL/22; 2018
2.	Particle Size Distribution	-		IS 2720 (Part-4): 1985, RA 2020
	Sand	%	63.8	
	Silt	%	16.9	
	Clay	%	19.3	
3.	pH (1:2 Suspension)	-	7.88	IS 2720 (Part-26): 1987, RA 2021
4.	Electrical Conductivity (1:2	µS/cm	437	IS 14767: 2000, RA 2021
5.	Moisture Content	%	8.6	IS 2720 (Part-2): 1973, RA 2020
6.	Cation Exchange Capacity (CEC)	meq/100 gm	14.1	IS 2720 (Part-24): 1976, RA 2020
7.	Available Potassium (as K)	mg/kg	89	GRC-LAB/STP-SOIL/07; 2018
8.	Exchangeable Sodium (as Na)	mg/kg	127	GRC-LAB/STP-SOIL/07; 2018
9.	Exchangeable Calcium (as Ca)	mg/kg	2023	GRC-LAB/STP-SOIL/08; 2018
10.	Exchangeable Magnesium (as Mg)	mg/kg	387	GRC-LAB/STP-SOIL/08; 2018
11.	Sodium Absorption Ratio (SAR)	-	0.68	GRC-LAB/STP-SOIL/19; 2018
12.	Organic Matter	%	0.68	IS 2720 (Part-22): 1972, RA 2020
13.	Total Nitrogen (as N)	mg/kg	44	IS 14684: 1999 RA 2019
14.	Nitrate (as NO_3)	mg/kg	6.7	IS 14684: 1999 RA 2019
15.	Total Phosphate (as PO_4)	mg/kg	6.9	USEPA Method 365.3: 1978
16.	Iron (as Fe)	mg/kg	10.8	USEPA Method 3051-A: 2007
17.	Zinc (as Zn)	mg/kg	2.6	USEPA Method 3051-A: 2007

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Test Report

Report Code: S20231221-053 **Issue Date: 21.12.2023**

18.	Copper (as Cu)	mg/kg	1.7	USEPA Method 3051-A: 2007
19.	Boron (as B)	mg/kg	2.8	USEPA Method 3051-A: 2007
20.	Manganese (as Mn)	mg/kg	10.1	USEPA Method 3051-A: 2007
21.	Water Holding Capacity	%	26.7	GRC-LAB/STP-SOIL/13; 2020
22.	Permeability	cm/hr	2.2	IS 2720 (Part-17): 1986, RA 2021
23.	Porosity	%	33.1	GRC-LAB/STP-SOIL/20; 2020
24.	Bulk Density	gm/cc	1.33	GRC-LAB/STP-SOIL/12; 2018

End of Report

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TC-7501

Test Report

Report Code: GW20231220-049(A) **Issue Date: 20.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.
Sample Description: Ground Water

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 19.12.2023

RESULTS

Water Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Near Project site
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: IS-17614 (Part-1):2021
Weather Condition	: Clear Sky
Sample Quantity	: 5 L
Sample Packing & Mark	: Plastic Bottle & SGIL/DEC/GW-01

S. No.	Parameters	Units	Limits (as per IS:10500-2012)		Results	Test Method
			Desirable Limit	Permissible Limit		
1	Color	Hazen	5	15	<5	IS 3025 (Part-4): 2021
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part-5): 2018
3	Turbidity	NTU	1	5	<1	IS 3025 (Part-10): 1984, RA 2017
4	pH Value	-	6.5-8.5	No Relaxation	7.88	IS 3025 (Part-11): 2022
5	Total Dissolved Solids	mg/l	500	2000	1420	IS 3025 (Part-16): 2023
6	Total Hardness (as CaCO3)	mg/l	200	600	413	IS 3025 (Part-21): 2009, RA 2019
7	Total Alkalinity (as CaCO3)	mg/l	200	600	426	IS 3025 (Part-23): 1986, RA 2019
8	Chlorides (as Cl)	mg/l	250	1000	343	IS 3025 (Part-32): 1988 , RA 2019
9	Fluoride (as F)	mg/l	1	1.5	0.7	4500F-D, APHA 24th Ed. 2023
10	Calcium (as Ca2+)	mg/l	75	200	100	IS 3025 (Part-40): 1991, RA 2019
11	Magnesium (as Mg2+)	mg/l	30	100	40	IS 3025 (Part-46): 1994, RA 2019
12	Sulphate (as SO4)	mg/l	200	400	160	IS 3025 (Part-24/Sec-1): 2022
13	Nitrate (as NO3)	mg/l	45	No Relaxation	18	IS 3025 (Part-34/Sec-3): 2021
14	Iron (as Fe)	mg/l	1	No Relaxation	0.68	3120-B, APHA 24th Ed. 2023 (ICP-OES)
15	Aluminium (as Al)	mg/l	0.03	0.2	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
16	Copper (as Cu)	mg/l	0.05	1.5	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
17	Manganese (as Mn)	mg/l	0.1	0.3	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)

Rahul Singh (Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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Test Report

Report Code: GW20231220-049(A) **Issue Date: 20.12.2023**

18	Boron (as B)	mg/l	0.5	1	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
19	Zinc (as Zn)	mg/l	5	15	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
20	Selenium (as Se)	mg/l	0.01	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
21	Arsenic (as As)	mg/l	0.01	0.05	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
22	Cadmium (as Cd)	mg/l	0.003	No Relaxation	<0.001	3120-B, APHA 24th Ed. 2023 (ICP-OES)
23	Total Chromium (as Cr3+)	mg/l	0.05	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
24	Cyanide (as CN)	mg/l	0.05	No Relaxation	<0.01	IS 3025 (Part-27): 1986, RA 2019
25	Lead (as Pb)	mg/l	0.01	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
26	Mercury (as Hg)	mg/l	0.001	No Relaxation	<0.001	3120-B, APHA 24th Ed. 2023 (ICP-OES)
27	Nickel (as Ni)	mg/l	0.02	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
28	Phenolic Compounds (as C6H5OH)	mg/l	0.001	0.002	<0.001	IS 3025 (Part-43): 2022
29	Anionic Detergent (as MBAS)	mg/l	0.2	1	<0.01	IS 3025 (Part-68): 2019
30	Silica (as SiO2)	mg/l	--	--	5.4	4500-SiO2 (C/D), APHA 24th Ed. 2023
31	Phosphate (as PO4)	mg/l	--	--	1.1	4500-P D, APHA 24th Ed. 2023
32	Specific Conductivity	µS/cm	-	-	2130	IS 3025 (Part-14): 2013, RA 2019

**** End of Report ****

Rahul Singh (Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: GW20231209-049(B) **Issue Date: 09.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Description: Ground Water

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 08.12.2023

RESULTS

Water Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Near Project Site
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: IS 1622: 1981, RA 2019
Weather Condition	: Clear Sky
Sample Quantity	: 500 ml
Sample Packing & Mark	: Glass Bottle & SGIL/DEC/GW-01

S. No.	Parameters	Units	Limits (as per IS 10500: 2012)	Results	Test Method
1	Total Coliform	MPN/100ml	shall not be detectable	Not Detected (<2)	IS 1622: 1981, RA 2019
2	E. coli	MPN/100ml	shall not be detectable	Absent (<2)	IS 1622: 1981, RA 2019)

** End of Report **

Ajay Kumar Sharma
(Quality Manager)
Authorized Signatory
(Seal & Signature)

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Website: https://www.grc-india.com, E-mail : lab@grc-india.com; info@grc-india.com

TC-7501

Test Report

Report Code: GW20231220-050(A) **Issue Date: 20.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Description: Ground Water

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 19.12.2023

RESULTS

Water Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Borewell Village Kapriwas
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: IS-17614 (Part-1):2021
Weather Condition	: Clear Sky
Sample Quantity	: 5 L
Sample Packing & Mark	: Plastic Bottle & SGIL/DEC/GW-02

S. No.	Parameters	Units	Limits (as per IS:10500-2012)		Results	Test Method
			Desirable Limit	Permissible Limit		
1	Color	Hazen	5	15	<5	IS 3025 (Part-4): 2021
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part-5): 2018
3	Turbidity	NTU	1	5	<1	IS 3025 (Part-10): 1984, RA 2017
4	pH Value	-	6.5-8.5	No Relaxation	7.93	IS 3025 (Part-11): 2022
5	Total Dissolved Solids	mg/l	500	2000	1450	IS 3025 (Part-16): 2023
6	Total Hardness (as CaCO3)	mg/l	200	600	447	IS 3025 (Part-21): 2009, RA 2019
7	Total Alkalinity (as CaCO3)	mg/l	200	600	478	IS 3025 (Part-23): 1986, RA 2019
8	Chlorides (as Cl)	mg/l	250	1000	330	IS 3025 (Part-32): 1988 , RA 2019
9	Fluoride (as F)	mg/l	1	1.5	0.6	4500F-D, APHA 24th Ed. 2023
10	Calcium (as Ca2+)	mg/l	75	200	107	IS 3025 (Part-40): 1991, RA 2019
11	Magnesium (as Mg2+)	mg/l	30	100	43	IS 3025 (Part-46): 1994, RA 2019
12	Sulphate (as SO4)	mg/l	200	400	154	IS 3025 (Part-24/Sec-1): 2022
13	Nitrate (as NO3)	mg/l	45	No Relaxation	20	IS 3025 (Part-34/Sec-3): 2021
14	Iron (as Fe)	mg/l	1	No Relaxation	0.56	3120-B, APHA 24th Ed. 2023 (ICP-OES)
15	Aluminum (as Al)	mg/l	0.03	0.2	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
16	Copper (as Cu)	mg/l	0.05	1.5	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
17	Manganese (as Mn)	mg/l	0.1	0.3	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)

Rahul Singh (Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: GW20231220-050(A) **Issue Date: 20.12.2023**

18	Boron (as B)	mg/l	0.5	1	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
19	Zinc (as Zn)	mg/l	5	15	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
20	Selenium (as Se)	mg/l	0.01	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
21	Arsenic (as As)	mg/l	0.01	0.05	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
22	Cadmium (as Cd)	mg/l	0.003	No Relaxation	<0.001	3120-B, APHA 24th Ed. 2023 (ICP-OES)
23	Total Chromium (as Cr3+)	mg/l	0.05	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
24	Cyanide (as CN)	mg/l	0.05	No Relaxation	<0.01	IS 3025 (Part-27): 1986, RA 2019
25	Lead (as Pb)	mg/l	0.01	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
26	Mercury (as Hg)	mg/l	0.001	No Relaxation	<0.001	3120-B, APHA 24th Ed. 2023 (ICP-OES)
27	Nickel (as Ni)	mg/l	0.02	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
28	Phenolic Compounds (as C6H5OH)	mg/l	0.001	0.002	<0.001	IS 3025 (Part-43): 2022
29	Anionic Detergent (as MBAS)	mg/l	0.2	1	<0.01	IS 3025 (Part-68): 2019
30	Silica (as SiO2)	mg/l	--	--	5.1	4500-SiO2 (C/D), APHA 24th Ed. 2023
31	Phosphate (as PO4)	mg/l	--	--	1.3	4500-P D, APHA 24th Ed. 2023
32	Specific Conductivity	µS/cm	-	-	2170	IS 3025 (Part-14): 2013, RA 2019

**** End of Report ****

Rahul Singh (Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: GW20231209-050(B) **Issue Date: 09.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Description: Ground Water

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 08.12.2023

RESULTS

Water Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Borewell Village Kapriwas
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: IS 1622: 1981, RA 2019
Weather Condition	: Clear Sky
Sample Quantity	: 500 ml
Sample Packing & Mark	: Glass Bottle & SGIL/DEC/GW-02

S. No.	Parameters	Units	Limits (as per IS 10500: 2012)	Results	Test Method
1	Total Coliform	MPN/100ml	shall not be detectable	Not Detected (<2)	IS 1622: 1981, RA 2019
2	E. coli	MPN/100ml	shall not be detectable	Absent (<2)	IS 1622: 1981, RA 2019)

** End of Report **

Ajay Kumar Sharma
(Quality Manager)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: GW20231220-051(A) **Issue Date: 20.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Description: Ground Water

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 19.12.2023

RESULTS

Water Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Borewell Village Gurjar Ghatal
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: IS-17614 (Part-1):2021
Weather Condition	: Clear Sky
Sample Quantity	: 5 L
Sample Packing & Mark	: Plastic Bottle & SGIL/DEC/GW-03

S. No.	Parameters	Units	Limits (as per IS:10500-2012)		Results	Test Method
			Desirable Limit	Permissible Limit		
1	Color	Hazen	5	15	<5	IS 3025 (Part-4): 2021
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part-5): 2018
3	Turbidity	NTU	1	5	<1	IS 3025 (Part-10): 1984, RA 2017
4	pH Value	-	6.5-8.5	No Relaxation	7.89	IS 3025 (Part-11): 2022
5	Total Dissolved Solids	mg/l	500	2000	1440	IS 3025 (Part-16): 2023
6	Total Hardness (as CaCO3)	mg/l	200	600	458	IS 3025 (Part-21): 2009, RA 2019
7	Total Alkalinity (as CaCO3)	mg/l	200	600	487	IS 3025 (Part-23): 1986, RA 2019
8	Chlorides (as Cl)	mg/l	250	1000	335	IS 3025 (Part-32): 1988 , RA 2019
9	Fluoride (as F)	mg/l	1	1.5	0.5	4500F-D, APHA 24th Ed. 2023
10	Calcium (as Ca2+)	mg/l	75	200	110	IS 3025 (Part-40): 1991, RA 2019
11	Magnesium (as Mg2+)	mg/l	30	100	44	IS 3025 (Part-46): 1994, RA 2019
12	Sulphate (as SO4)	mg/l	200	400	136	IS 3025 (Part-24/Sec-1): 2022
13	Nitrate (as NO3)	mg/l	45	No Relaxation	19	IS 3025 (Part-34/Sec-3): 2021
14	Iron (as Fe)	mg/l	1	No Relaxation	0.63	3120-B, APHA 24th Ed. 2023 (ICP-OES)
15	Aluminum (as Al)	mg/l	0.03	0.2	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
16	Copper (as Cu)	mg/l	0.05	1.5	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
17	Manganese (as Mn)	mg/l	0.1	0.3	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)

Rahul Singh (Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: GW20231220-051(A) **Issue Date: 20.12.2023**

18	Boron (as B)	mg/l	0.5	1	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
19	Zinc (as Zn)	mg/l	5	15	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
20	Selenium (as Se)	mg/l	0.01	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
21	Arsenic (as As)	mg/l	0.01	0.05	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
22	Cadmium (as Cd)	mg/l	0.003	No Relaxation	<0.001	3120-B, APHA 24th Ed. 2023 (ICP-OES)
23	Total Chromium (as Cr3+)	mg/l	0.05	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
24	Cyanide (as CN)	mg/l	0.05	No Relaxation	<0.01	IS 3025 (Part-27): 1986, RA 2019
25	Lead (as Pb)	mg/l	0.01	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
26	Mercury (as Hg)	mg/l	0.001	No Relaxation	<0.001	3120-B, APHA 24th Ed. 2023 (ICP-OES)
27	Nickel (as Ni)	mg/l	0.02	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
28	Phenolic Compounds (as C6H5OH)	mg/l	0.001	0.002	<0.001	IS 3025 (Part-43): 2022
29	Anionic Detergent (as MBAS)	mg/l	0.2	1	<0.01	IS 3025 (Part-68): 2019
30	Silica (as SiO2)	mg/l	--	--	5.3	4500-SiO2 (C/D), APHA 24th Ed. 2023
31	Phosphate (as PO4)	mg/l	--	--	1.1	4500-P D, APHA 24th Ed. 2023
32	Specific Conductivity	µS/cm	-	-	2150	IS 3025 (Part-14): 2013, RA 2019

** End of Report **

Rahul Singh (Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: GW20231209-051(B) **Issue Date: 09.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Description: Ground Water

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 08.12.2023

RESULTS

Water Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Borewell Village Gurjar Ghatal
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: IS 1622: 1981, RA 2019
Weather Condition	: Clear Sky
Sample Quantity	: 500 ml
Sample Packing & Mark	: Glass Bottle & SGIL/DEC/GW-03

S. No.	Parameters	Units	Limits (as per IS 10500: 2012)	Results	Test Method
1	Total Coliform	MPN/100ml	shall not be detectable	Not Detected (<2)	IS 1622: 1981, RA 2019
2	E. coli	MPN/100ml	shall not be detectable	Absent (<2)	IS 1622: 1981, RA 2019)

** End of Report **

Ajay Kumar Sharma
(Quality Manager)
Authorized Signatory
(Seal & Signature)

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Website: https://www.grc-india.com, E-mail : lab@grc-india.com; info@grc-india.com

TC-7501

Test Report

Report Code: GW20231220-052(A) **Issue Date: 20.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 19.12.2023

Sample Description: Ground Water

RESULTS

Water Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Borewell Village Sidhrawali
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: IS-17614 (Part-1):2021
Weather Condition	: Clear Sky
Sample Quantity	: 5 L
Sample Packing & Mark	: Plastic Bottle & SGIL/DEC/GW-04

S. No.	Parameters	Units	Limits (as per IS:10500-2012)		Results	Test Method
			Desirable Limit	Permissible Limit		
1	Color	Hazen	5	15	<5	IS 3025 (Part-4): 2021
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part-5): 2018
3	Turbidity	NTU	1	5	<1	IS 3025 (Part-10): 1984, RA 2017
4	pH Value	-	6.5-8.5	No Relaxation	7.92	IS 3025 (Part-11): 2022
5	Total Dissolved Solids	mg/l	500	2000	1480	IS 3025 (Part-16): 2023
6	Total Hardness (as CaCO3)	mg/l	200	600	439	IS 3025 (Part-21): 2009, RA 2019
7	Total Alkalinity (as CaCO3)	mg/l	200	600	467	IS 3025 (Part-23): 1986, RA 2019
8	Chlorides (as Cl)	mg/l	250	1000	363	IS 3025 (Part-32): 1988 , RA 2019
9	Fluoride (as F)	mg/l	1	1.5	0.7	4500F-D, APHA 24th Ed. 2023
10	Calcium (as Ca2+)	mg/l	75	200	105	IS 3025 (Part-40): 1991, RA 2019
11	Magnesium (as Mg2+)	mg/l	30	100	42	IS 3025 (Part-46): 1994, RA 2019
12	Sulphate (as SO4)	mg/l	200	400	146	IS 3025 (Part-24/Sec-1): 2022
13	Nitrate (as NO3)	mg/l	45	No Relaxation	21	IS 3025 (Part-34/Sec-3): 2021
14	Iron (as Fe)	mg/l	1	No Relaxation	0.54	3120-B, APHA 24th Ed. 2023 (ICP-OES)
15	Aluminum (as Al)	mg/l	0.03	0.2	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
16	Copper (as Cu)	mg/l	0.05	1.5	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
17	Manganese (as Mn)	mg/l	0.1	0.3	<0..1	3120-B, APHA 24th Ed. 2023 (ICP-OES)

Rahul Singh (Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: GW20231220-052(A) **Issue Date: 20.12.2023**

18	Boron (as B)	mg/l	0.5	1	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
19	Zinc (as Zn)	mg/l	5	15	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
20	Selenium (as Se)	mg/l	0.01	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
21	Arsenic (as As)	mg/l	0.01	0.05	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
22	Cadmium (as Cd)	mg/l	0.003	No Relaxation	<0.001	3120-B, APHA 24th Ed. 2023 (ICP-OES)
23	Total Chromium (as Cr3+)	mg/l	0.05	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
24	Cyanide (as CN)	mg/l	0.05	No Relaxation	<0.01	IS 3025 (Part-27): 1986, RA 2019
25	Lead (as Pb)	mg/l	0.01	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
26	Mercury (as Hg)	mg/l	0.001	No Relaxation	<0.001	3120-B, APHA 24th Ed. 2023 (ICP-OES)
27	Nickel (as Ni)	mg/l	0.02	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
28	Phenolic Compounds (as C6H5OH)	mg/l	0.001	0.002	<0.001	IS 3025 (Part-43): 2022
29	Anionic Detergent (as MBAS)	mg/l	0.2	1	<0.01	IS 3025 (Part-68): 2019
30	Silica (as SiO2)	mg/l	--	--	4.8	4500-SiO2 (C/D), APHA 24th Ed. 2023
31	Phosphate (as PO4)	mg/l	--	--	1.3	4500-P D, APHA 24th Ed. 2023
32	Specific Conductivity	µS/cm	-	-	2220	IS 3025 (Part-14): 2013, RA 2019

**** End of Report ****

Rahul Singh (Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: GW20231209-052(B) **Issue Date: 09.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Description: Ground Water

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 08.12.2023

RESULTS

Water Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Borewell Village Sidhrawali
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: IS 1622: 1981, RA 2019
Weather Condition	: Clear Sky
Sample Quantity	: 500 ml
Sample Packing & Mark	: Glass Bottle & SGIL/DEC/GW-04

S. No.	Parameters	Units	Limits (as per IS 10500: 2012)	Results	Test Method
1	Total Coliform	MPN/100ml	shall not be detectable	Not Detected (<2)	IS 1622: 1981, RA 2019
2	E. coli	MPN/100ml	shall not be detectable	Absent (<2)	IS 1622: 1981, RA 2019)

** End of Report **

Ajay Kumar Sharma
(Quality Manager)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: GW20231220-053(A) **Issue Date: 20.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Description: Ground Water

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 19.12.2023

RESULTS

Water Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Borewell Village Rathiwas
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: IS-17614 (Part-1):2021
Weather Condition	: Clear Sky
Sample Quantity	: 5 L
Sample Packing & Mark	: Plastic Bottle & SGIL/DEC/GW-05

S. No.	Parameters	Units	Limits (as per IS:10500-2012)		Results	Test Method
			Desirable Limit	Permissible Limit		
1	Color	Hazen	5	15	<5	IS 3025 (Part-4): 2021
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part-5): 2018
3	Turbidity	NTU	1	5	<1	IS 3025 (Part-10): 1984, RA 2017
4	pH Value	-	6.5-8.5	No Relaxation	7.89	IS 3025 (Part-11): 2022
5	Total Dissolved Solids	mg/l	500	2000	1580	IS 3025 (Part-16): 2023
6	Total Hardness (as CaCO3)	mg/l	200	600	466	IS 3025 (Part-21): 2009, RA 2019
7	Total Alkalinity (as CaCO3)	mg/l	200	600	487	IS 3025 (Part-23): 1986, RA 2019
8	Chlorides (as Cl)	mg/l	250	1000	378	IS 3025 (Part-32): 1988 , RA 2019
9	Fluoride (as F)	mg/l	1	1.5	0.06	4500F-D, APHA 24th Ed. 2023
10	Calcium (as Ca2+)	mg/l	75	200	112	IS 3025 (Part-40): 1991, RA 2019
11	Magnesium (as Mg2+)	mg/l	30	100	45	IS 3025 (Part-46): 1994, RA 2019
12	Sulphate (as SO4)	mg/l	200	400	170	IS 3025 (Part-24/Sec-1): 2022
13	Nitrate (as NO3)	mg/l	45	No Relaxation	17	IS 3025 (Part-34/Sec-3): 2021
14	Iron (as Fe)	mg/l	1	No Relaxation	0.49	3120-B, APHA 24th Ed. 2023 (ICP-OES)
15	Aluminum (as Al)	mg/l	0.03	0.2	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
16	Copper (as Cu)	mg/l	0.05	1.5	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
17	Manganese (as Mn)	mg/l	0.1	0.3	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)

Rahul Singh (Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: GW20231220-053(A) **Issue Date: 20.12.2023**

18	Boron (as B)	mg/l	0.5	1	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
19	Zinc (as Zn)	mg/l	5	15	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
20	Selenium (as Se)	mg/l	0.01	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
21	Arsenic (as As)	mg/l	0.01	0.05	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
22	Cadmium (as Cd)	mg/l	0.003	No Relaxation	<0.001	3120-B, APHA 24th Ed. 2023 (ICP-OES)
23	Total Chromium (as Cr3+)	mg/l	0.05	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
24	Cyanide (as CN)	mg/l	0.05	No Relaxation	<0.01	IS 3025 (Part-27): 1986, RA 2019
25	Lead (as Pb)	mg/l	0.01	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
26	Mercury (as Hg)	mg/l	0.001	No Relaxation	<0.001	3120-B, APHA 24th Ed. 2023 (ICP-OES)
27	Nickel (as Ni)	mg/l	0.02	No Relaxation	<0.01	3120-B, APHA 24th Ed. 2023 (ICP-OES)
28	Phenolic Compounds (as C6H5OH)	mg/l	0.001	0.002	<0.001	IS 3025 (Part-43): 2022
29	Anionic Detergent (as MBAS)	mg/l	0.2	1	<0.01	IS 3025 (Part-68): 2019
30	Silica (as SiO2)	mg/l	--	--	5.7	4500-SiO2 (C/D), APHA 24th Ed. 2023
31	Phosphate (as PO4)	mg/l	--	--	1.2	4500-P D, APHA 24th Ed. 2023
32	Specific Conductivity	µS/cm	-	-	2360	IS 3025 (Part-14): 2013, RA 2019

**** End of Report ****

Rahul Singh (Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: GW20231209-053(B) **Issue Date: 09.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Description: Ground Water

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 08.12.2023

RESULTS

Water Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 04.12.2023
Sampling Location	: Borewell Village Rathiwas
Sample Collected by	: Mr. Maan Singh
Sampling Protocol	: IS 1622: 1981, RA 2019
Weather Condition	: Clear Sky
Sample Quantity	: 500 ml
Sample Packing & Mark	: Glass Bottle & SGIL/DEC/GW-05

S. No.	Parameters	Units	Limits (as per IS 10500: 2012)	Results	Test Method
1	Total Coliform	MPN/100ml	shall not be detectable	Not Detected (<2)	IS 1622: 1981, RA 2019
2	E. coli	MPN/100ml	shall not be detectable	Absent (<2)	IS 1622: 1981, RA 2019)

**** End of Report ****

Ajay Kumar Sharma
(Quality Manager)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: SW20231220-027(A) **Issue Date: 20.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 19.12.2023

Sample Description: Surface Water

RESULTS
(Water Quality Analysis)

SAMPLING DETAILS

Date of Sampling	:	04.12.2023
Sampling Location	:	Untwan Village Pond
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	IS 17614 (Part-1):2021
Weather Condition	:	Clear Sky
Sample Quantity	:	5 L
Sample Packing & Marking	:	Plastic Bottle & SGIL/DEC /SW-05

S. No.	Parameters	Units	Results	Test Method
1.	Color	Hazen	5	IS 3025 (Part-4): 2021
2.	Turbidity	NTU	23	IS 3025 (Part-5): 2018
3.	Temperature	^{0}C	19.7	IS 3025 (Part-10): 1984, RA 2017
4.	pH Value	-	8	IS 3025 (Part-11): 2022
5.	Dissolved Oxygen	mg/l	5.2	IS 3025 (Part-16): 2023
6.	Biochemical Oxygen Demand (BOD) 3 Days at 27^{0}C	mg/l	6.8	IS 3025 (Part-21): 2009, RA 2019
7.	Chemical Oxygen Demand	mg/l	22.4	IS 3025 (Part-23): 1986, RA 2019
8.	Total Dissolved Solids	mg/l	720	IS 3025 (Part-32): 1988 , RA 2019
9.	Total Hardness (as $CaCO_3$)	mg/l	240	4500F-D, APHA 24th Ed. 2023
10.	Total Alkalinity (as $CaCO_3$)	mg/l	230	IS 3025 (Part-40): 1991, RA 2019
11.	Chlorides (as Cl)	mg/l	160	IS 3025 (Part-46): 1994, RA 2019
12.	Fluoride (as F)	mg/l	0.7	IS 4500F-D, APHA 24th Ed.2023
13.	Calcium (as Ca^{2+})	mg/l	58	IS 3025 (Part-34/Sec-3): 2021
14.	Magnesium (as Mg^{2+})	mg/l	23	3120-B, APHA 24th Ed. 2023 (ICP-OES)
15.	Sodium (as Na^+)	mg/l	169	3120-B, APHA 24th Ed. 2023 (ICP-OES)
16.	Potassium (as K^+)	mg/l	18.6	3120-B, APHA 24th Ed. 2023 (ICP-OES)
17.	Sulphate (as SO_4)	mg/l	106	IS 3025 (Part-24): 1986, RA 2022

Rahul Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: SW20231220-027(A) **Issue Date: 20.12.2023**

18.	Total Kjeldahl Nitrogen (as N)	mg/l	2.4	IS 3025 (Part-34/Sec-2): 2021
19.	Free Ammonia (as NH_3)	mg/l	1.3	IS 3025 (Part-34/Sec-2): 2021
20.	Nitrate (as NO_3)	mg/l	13.3	IS 3025 (Part-34/Sec-3): 2021
21.	Silica (as SiO_2)	mg/l	7.5	4500-SiO_2 (C/D), APHA 24rd Ed. 2023
22.	Phosphate (as PO_4)	mg/l	1.6	4500-P D, APHA 24th Ed.2023
23.	Iron (as Fe)	mg/l	0.59	3120-B, APHA 24th Ed.2023 (ICP-OES)
24.	Aluminum (as Al)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
25.	Boron (as B)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
26.	Copper (as Cu)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
27.	Manganese (as Mn)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
28.	Zinc (as Zn)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
29.	Selenium (as Se)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
30.	Arsenic (as As)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
31.	Cadmium (as Cd)	mg/l	<0.001	3120-B, APHA 24th Ed.2023 (ICP-OES)
32.	Total Chromium (as Cr^{3+})	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
33.	Cyanide (as CN)	mg/l	<0.01	IS 3025 (Part-27): 1986, RA 2019
34.	Lead (as Pb)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
35.	Mercury (as Hg)	mg/l	<0.001	3120-B, APHA 24th Ed.2023 (ICP-OES)
36.	Nickel (as Ni)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
37.	Total Suspended Solids	mg/l	40	IS 3025 (Part-17): 1984, RA 2017
38.	Sodium Adsorption Ratio	-	3.2	IS 11624: 2019
39.	Phenolic Compounds (as C_6H_5OH)	mg/l	0.002	IS 3025 (Part-43/Sec-3): 2022
40.	Anionic Detergent (as MBAS)	mg/l	0.03	IS 3025 (Part-68): 2019
41.	Specific Conductivity	µS/cm	1075	IS 3025 (Part-14): 1984, RA 2019

**** End of Report ****

Rahul Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: SW20231209-027(B) **Issue Date: 09.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 08.12.2023

Sample Description: Surface Water

RESULTS
(Water Quality Analysis)

SAMPLING DETAILS

Date of Sampling	:	04.12.2023
Sampling Location	:	Untwan Village Pond
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	IS 1622:1981, RA 2019
Weather Condition	:	Clear Sky
Sample Quantity	:	0.5 L
Sample Packing & Marking	:	Glass Bottle & SGIL/DEC /SW-05

S. No.	Parameters	Units	Results	Test Method
1.	Total Coliform Organism	MPN/100ml	840	IS 1622: 1981, RA 2019
2.	Fecal Coliform Organism	MPN/100ml	380	IS 1622: 1981, RA 2019

**** End of Report ****

Ajay Kr. Sharma
(Quality Manager)
Authorized Signatory
(Seal & Signature)

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Website: https://www.grc-india.com, **E-mail :** lab@grc-india.com; info@grc-india.com

TC-7501

Test Report

Report Code: SW20231220-026(A) **Issue Date: 20.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 19.12.2023

Sample Description: Surface Water

RESULTS
(Water Quality Analysis)

SAMPLING DETAILS

Date of Sampling	:	04.12.2023
Sampling Location	:	Sahibi River Downstream
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	IS 17614 (Part-1):2021
Weather Condition	:	Clear Sky
Sample Quantity	:	5 L
Sample Packing & Marking	:	Plastic Bottle & SGIL/DEC /SW-04

S. No.	Parameters	Units	Results	Test Method
1.	Color	Hazen	8	IS 3025 (Part-4): 2021
2.	Turbidity	NTU	56	IS 3025 (Part-5): 2018
3.	Temperature	^{0}C	19.3	IS 3025 (Part-10): 1984, RA 2017
4.	pH Value	-	8.2	IS 3025 (Part-11): 2022
5.	Dissolved Oxygen	mg/l	1	IS 3025 (Part-16): 2023
6.	Biochemical Oxygen Demand (BOD) 3 Days at 27^{0}C	mg/l	26.2	IS 3025 (Part-21): 2009, RA 2019
7.	Chemical Oxygen Demand	mg/l	76.4	IS 3025 (Part-23): 1986, RA 2019
8.	Total Dissolved Solids	mg/l	1350	IS 3025 (Part-32): 1988 , RA 2019
9.	Total Hardness (as $CaCO_3$)	mg/l	410	4500F-D, APHA 24th Ed. 2023
10.	Total Alkalinity (as $CaCO_3$)	mg/l	390	IS 3025 (Part-40): 1991, RA 2019
11.	Chlorides (as Cl)	mg/l	320	IS 3025 (Part-46): 1994, RA 2019
12.	Fluoride (as F)	mg/l	0.9	IS 4500F-D, APHA 24th Ed.2023
13.	Calcium (as Ca^{2+})	mg/l	98	IS 3025 (Part-34/Sec-3): 2021
14.	Magnesium (as Mg^{2+})	mg/l	40	3120-B, APHA 24th Ed. 2023 (ICP-OES)
15.	Sodium (as Na^{+})	mg/l	245	3120-B, APHA 24th Ed. 2023 (ICP-OES)
16.	Potassium (as K^{+})	mg/l	28.4	3120-B, APHA 24th Ed. 2023 (ICP-OES)
17.	Sulphate (as SO_4)	mg/l	210	IS 3025 (Part-24): 1986, RA 2022

Rahul Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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Test Report

Report Code: SW20231220-026(A) **Issue Date: 20.12.2023**

18.	Total Kjeldahl Nitrogen (as N)	mg/l	6.5	IS 3025 (Part-34/Sec-2): 2021
19.	Free Ammonia (as NH_3)	mg/l	2.4	IS 3025 (Part-34/Sec-2): 2021
20.	Nitrate (as NO_3)	mg/l	26	IS 3025 (Part-34/Sec-3): 2021
21.	Silica (as SiO_2)	mg/l	9.3	4500-SiO_2 (C/D), APHA 24rd Ed. 2023
22.	Phosphate (as PO_4)	mg/l	3.2	4500-P D, APHA 24th Ed.2023
23.	Iron (as Fe)	mg/l	0.56	3120-B, APHA 24th Ed.2023 (ICP-OES)
24.	Aluminum (as Al)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
25.	Boron (as B)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
26.	Copper (as Cu)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
27.	Manganese (as Mn)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
28.	Zinc (as Zn)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
29.	Selenium (as Se)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
30.	Arsenic (as As)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
31.	Cadmium (as Cd)	mg/l	<0.001	3120-B, APHA 24th Ed.2023 (ICP-OES)
32.	Total Chromium (as Cr^{3+})	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
33.	Cyanide (as CN)	mg/l	<0.01	IS 3025 (Part-27): 1986, RA 2019
34.	Lead (as Pb)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
35.	Mercury (as Hg)	mg/l	<0.001	3120-B, APHA 24th Ed.2023 (ICP-OES)
36.	Nickel (as Ni)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
37.	Total Suspended Solids	mg/l	220	IS 3025 (Part-17): 1984, RA 2017
38.	Sodium Adsorption Ratio	-	4.8	IS 11624: 2019
39.	Phenolic Compounds (as C_6H_5OH)	mg/l	<0.001	IS 3025 (Part-43/Sec-3): 2022
40.	Anionic Detergent (as MBAS)	mg/l	<0.01	IS 3025 (Part-68): 2019
41.	Specific Conductivity	µS/cm	2025	IS 3025 (Part-14): 1984, RA 2019

**** End of Report ****

Rahul Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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Website: https://www.grc-india.com E-mail : lab@grc-india.com; info@grc-india.com

TC-7501

Test Report

Report Code: SW20231209-026(B) **Issue Date: 09.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 08.12.2023

Sample Description: Surface Water

RESULTS
(Water Quality Analysis)

SAMPLING DETAILS

Date of Sampling	:	04.12.2023
Sampling Location	:	Sahibi River Downstream
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	IS 1622:1981, RA 2019
Weather Condition	:	Clear Sky
Sample Quantity	:	0.5 L
Sample Packing & Marking	:	Glass Bottle & SGIL/DEC /SW-04

S. No.	Parameters	Units	Results	Test Method
1.	Total Coliform Organism	MPN/100ml	1600	IS 1622: 1981, RA 2019
2.	Fecal Coliform Organism	MPN/100ml	1600	IS 1622: 1981, RA 2019

** End of Report **

Ajay Kr. Sharma
(Quality Manager)
Authorized Signatory
(Seal & Signature)

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Test Report

Report Code: SW20231220-025(A) **Issue Date: 20.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Description: Surface Water

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 19.12.2023

RESULTS
(Water Quality Analysis)

SAMPLING DETAILS

Date of Sampling	:	04.12.2023
Sampling Location	:	Sahibi River Upstream
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	IS 17614 (Part-1):2021
Weather Condition	:	Clear Sky
Sample Quantity	:	5 L
Sample Packing & Marking	:	Plastic Bottle & SGIL/DEC /SW-03

S. No.	Parameters	Units	Results	Test Method
1.	Color	Hazen	7	IS 3025 (Part-4): 2021
2.	Turbidity	NTU	44	IS 3025 (Part-5): 2018
3.	Temperature	^{0}C	18.7	IS 3025 (Part-10): 1984, RA 2017
4.	pH Value	-	7.43	IS 3025 (Part-11): 2022
5.	Dissolved Oxygen	mg/l	1.2	IS 3025 (Part-16): 2023
6.	Biochemical Oxygen Demand (BOD) 3 Days at 27^{0}C	mg/l	20.4	IS 3025 (Part-21): 2009, RA 2019
7.	Chemical Oxygen Demand	mg/l	62.4	IS 3025 (Part-23): 1986, RA 2019
8.	Total Dissolved Solids	mg/l	1200	IS 3025 (Part-32): 1988 , RA 2019
9.	Total Hardness (as $CaCO_3$)	mg/l	380	4500F-D, APHA 24th Ed. 2023
10.	Total Alkalinity (as $CaCO_3$)	mg/l	360	IS 3025 (Part-40): 1991, RA 2019
11.	Chlorides (as Cl)	mg/l	280	IS 3025 (Part-46): 1994, RA 2019
12.	Fluoride (as F)	mg/l	0.8	IS 4500F-D, APHA 24th Ed.2023
13.	Calcium (as Ca^{2+})	mg/l	91	IS 3025 (Part-34/Sec-3): 2021
14.	Magnesium (as Mg^{2+})	mg/l	36	3120-B, APHA 24th Ed. 2023 (ICP-OES)
15.	Sodium (as Na^{+})	mg/l	218	3120-B, APHA 24th Ed. 2023 (ICP-OES)
16.	Potassium (as K^{+})	mg/l	25.6	3120-B, APHA 24th Ed. 2023 (ICP-OES)
17.	Sulphate (as SO_4)	mg/l	180	IS 3025 (Part-24): 1986, RA 2022

Rahul Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: SW20231220-025(A) **Issue Date: 20.12.2023**

18.	Total Kjeldahl Nitrogen (as N)	mg/l	5.2	IS 3025 (Part-34/Sec-2): 2021
19.	Free Ammonia (as NH_3)	mg/l	1.9	IS 3025 (Part-34/Sec-2): 2021
20.	Nitrate (as NO_3)	mg/l	24	IS 3025 (Part-34/Sec-3): 2021
21.	Silica (as SiO_2)	mg/l	9.2	4500-SiO_2 (C/D), APHA 24rd Ed. 2023
22.	Phosphate (as PO_4)	mg/l	2.8	4500-P D, APHA 24th Ed.2023
23.	Iron (as Fe)	mg/l	0.53	3120-B, APHA 24th Ed.2023 (ICP-OES)
24.	Aluminum (as Al)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
25.	Boron (as B)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
26.	Copper (as Cu)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
27.	Manganese (as Mn)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
28.	Zinc (as Zn)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
29.	Selenium (as Se)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
30.	Arsenic (as As)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
31.	Cadmium (as Cd)	mg/l	<0.001	3120-B, APHA 24th Ed.2023 (ICP-OES)
32.	Total Chromium (as Cr^{3+})	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
33.	Cyanide (as CN)	mg/l	<0.01	IS 3025 (Part-27): 1986, RA 2019
34.	Lead (as Pb)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
35.	Mercury (as Hg)	mg/l	<0.001	3120-B, APHA 24th Ed.2023 (ICP-OES)
36.	Nickel (as Ni)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
37.	Total Suspended Solids	mg/l	180	IS 3025 (Part-17): 1984, RA 2017
38.	Sodium Adsorption Ratio	-	4.3	IS 11624: 2019
39.	Phenolic Compounds (as C_6H_5OH)	mg/l	<0.001	IS 3025 (Part-43/Sec-3): 2022
40.	Anionic Detergent (as MBAS)	mg/l	<0.01	IS 3025 (Part-68): 2019
41.	Specific Conductivity	µS/cm	1790	IS 3025 (Part-14): 1984, RA 2019

**** End of Report ****

Rahul Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

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Test Report

Report Code: SW20231209-025(B) **Issue Date: 09.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Description: Surface Water

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 08.12.2023

RESULTS
(Water Quality Analysis)

SAMPLING DETAILS

Date of Sampling	:	04.12.2023
Sampling Location	:	Sahibi River Upstream
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	IS 1622:1981, RA 2019
Weather Condition	:	Clear Sky
Sample Quantity	:	0.5 L
Sample Packing & Marking	:	Glass Bottle & SGIL/DEC /SW-03

S. No.	Parameters	Units	Results	Test Method
1.	Total Coliform Organism	MPN/100ml	1600	IS 1622: 1981, RA 2019
2.	Fecal Coliform Organism	MPN/100ml	1600	IS 1622: 1981, RA 2019

** End of Report **

Ajay Kr. Sharma
(Quality Manager)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: SW20231220-024(A) **Issue Date: 20.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 19.12.2023

Sample Description: Surface Water

RESULTS
(Water Quality Analysis)

SAMPLING DETAILS

Date of Sampling	:	04.12.2023
Sampling Location	:	Indori Nala Downstream
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	IS 17614 (Part-1):2021
Weather Condition	:	Clear Sky
Sample Quantity	:	5 L
Sample Packing & Marking	:	Plastic Bottle & SGIL/DEC /SW-02

S. No.	Parameters	Units	Results	Test Method
1.	Color	Hazen	7	IS 3025 (Part-4): 2021
2.	Turbidity	NTU	24	IS 3025 (Part-5): 2018
3.	Temperature	^{0}C	19.1	IS 3025 (Part-10): 1984, RA 2017
4.	pH Value	-	7.78	IS 3025 (Part-11): 2022
5.	Dissolved Oxygen	mg/l	3.2	IS 3025 (Part-16): 2023
6.	Biochemical Oxygen Demand (BOD) 3 Days at 27^{0}C	mg/l	8.6	IS 3025 (Part-21): 2009, RA 2019
7.	Chemical Oxygen Demand	mg/l	24.5	IS 3025 (Part-23): 1986, RA 2019
8.	Total Dissolved Solids	mg/l	950	IS 3025 (Part-32): 1988 , RA 2019
9.	Total Hardness (as $CaCO_3$)	mg/l	370	4500F-D, APHA 24th Ed. 2023
10.	Total Alkalinity (as $CaCO_3$)	mg/l	463	IS 3025 (Part-40): 1991, RA 2019
11.	Chlorides (as Cl)	mg/l	140	IS 3025 (Part-46): 1994, RA 2019
12.	Fluoride (as F)	mg/l	0.7	IS 4500F-D, APHA 24th Ed.2023
13.	Calcium (as Ca^{2+})	mg/l	89	IS 3025 (Part-34/Sec-3): 2021
14.	Magnesium (as Mg^{2+})	mg/l	36	3120-B, APHA 24th Ed. 2023 (ICP-OES)
15.	Sodium (as Na^{+})	mg/l	192	3120-B, APHA 24th Ed. 2023 (ICP-OES)
16.	Potassium (as K^{+})	mg/l	22.5	3120-B, APHA 24th Ed. 2023 (ICP-OES)
17.	Sulphate (as SO_4)	mg/l	113	IS 3025 (Part-24): 1986, RA 2022

Rahul Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: SW20231220-024(A) **Issue Date: 20.12.2023**

18.	Total Kjeldahl Nitrogen (as N)	mg/l	4.2	IS 3025 (Part-34/Sec-2): 2021
19.	Free Ammonia (as NH_3)	mg/l	1.6	IS 3025 (Part-34/Sec-2): 2021
20.	Nitrate (as NO_3)	mg/l	12.8	IS 3025 (Part-34/Sec-3): 2021
21.	Silica (as SiO_2)	mg/l	22	4500-SiO_2 (C/D), APHA 24rd Ed. 2023
22.	Phosphate (as PO_4)	mg/l	2.2	4500-P D, APHA 24th Ed.2023
23.	Iron (as Fe)	mg/l	0.89	3120-B, APHA 24th Ed.2023 (ICP-OES)
24.	Aluminum (as Al)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
25.	Boron (as B)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
26.	Copper (as Cu)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
27.	Manganese (as Mn)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
28.	Zinc (as Zn)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
29.	Selenium (as Se)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
30.	Arsenic (as As)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
31.	Cadmium (as Cd)	mg/l	<0.001	3120-B, APHA 24th Ed.2023 (ICP-OES)
32.	Total Chromium (as Cr^{3-})	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
33.	Cyanide (as CN)	mg/l	<0.01	IS 3025 (Part-27): 1986, RA 2019
34.	Lead (as Pb)	mg/l	0.07	3120-B, APHA 24th Ed.2023 (ICP-OES)
35.	Mercury (as Hg)	mg/l	<0.001	3120-B, APHA 24th Ed.2023 (ICP-OES)
36.	Nickel (as Ni)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
37.	Total Suspended Solids	mg/l	39.6	IS 3025 (Part-17): 1984, RA 2017
38.	Sodium Adsorption Ratio	-	3.2	IS 11624: 2019
39.	Phenolic Compounds (as C_6H_5OH)	mg/l	0.07	IS 3025 (Part-43/Sec-3): 2022
40.	Anionic Detergent (as MBAS)	mg/l	0.08	IS 3025 (Part-68): 2019
41.	Specific Conductivity	µS/cm	1425	IS 3025 (Part-14): 1984, RA 2019

**** End of Report ****

Rahul Singh
(Sr. Chemist)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: SW20231209-024(B) **Issue Date: 09.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 08.12.2023

Sample Description: Surface Water

RESULTS
(Water Quality Analysis)

SAMPLING DETAILS

Date of Sampling	:	04.12.2023
Sampling Location	:	Indori Nala Downstream
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	IS 1622:1981, RA 2019
Weather Condition	:	Clear Sky
Sample Quantity	:	0.5 L
Sample Packing & Marking	:	Glass Bottle & SGIL/DEC /SW-02

S. No.	Parameters	Units	Results	Test Method
1.	Total Coliform Organism	MPN/100ml	1600	IS 1622: 1981, RA 2019
2.	Fecal Coliform Organism	MPN/100ml	1600	IS 1622: 1981, RA 2019

**** End of Report ****

Ajay Kr. Sharma
(Quality Manager)
Authorized Signatory
(Seal & Signature)

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TC-7501

Test Report

Report Code: SW20231220-023(A) **Issue Date: 20.12.2023**

Issued To: Industrial Park Project by M/s Signature, Global (India) Ltd. at Village-Shidrawali, Distt. Gurugram, Haryana.

Sample Description: Surface Water

Sample Received on: 04.12.2023
Analysis Duration: 05.12.2023 to 19.12.2023

RESULTS
(Water Quality Analysis)

SAMPLING DETAILS

Date of Sampling	:	04.12.2023
Sampling Location	:	Indori Nala Upstream
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	IS 17614 (Part-1):2021
Weather Condition	:	Clear Sky
Sample Quantity	:	5 L
Sample Packing & Marking	:	Plastic Bottle & SGIL/DEC /SW-01

S. No.	Parameters	Units	Results	Test Method
1.	Color	Hazen	6	IS 3025 (Part-4): 2021
2.	Turbidity	NTU	18	IS 3025 (Part-5): 2018
3.	Temperature	^{0}C	18.7	IS 3025 (Part-10): 1984, RA 2017
4.	pH Value	-	7.75	IS 3025 (Part-11): 2022
5.	Dissolved Oxygen	mg/l	3.8	IS 3025 (Part-16): 2023
6.	Biochemical Oxygen Demand (BOD) 3 Days at 27^{0}C	mg/l	8.3	IS 3025 (Part-21): 2009, RA 2019
7.	Chemical Oxygen Demand	mg/l	22.8	IS 3025 (Part-23): 1986, RA 2019
8.	Total Dissolved Solids	mg/l	940	IS 3025 (Part-32): 1988 , RA 2019
9.	Total Hardness (as $CaCO_3$)	mg/l	367	4500F-D, APHA 24th Ed. 2023
10.	Total Alkalinity (as $CaCO_3$)	mg/l	460	IS 3025 (Part-40): 1991, RA 2019
11.	Chlorides (as Cl)	mg/l	138	IS 3025 (Part-46): 1994, RA 2019
12.	Fluoride (as F)	mg/l	0.7	IS 4500F-D, APHA 24th Ed.2023
13.	Calcium (as Ca^{2+})	mg/l	88	IS 3025 (Part-34/Sec-3): 2021
14.	Magnesium (as Mg^{2+})	mg/l	35	3120-B, APHA 24th Ed. 2023 (ICP-OES)
15.	Sodium (as Na^{+})	mg/l	190	3120-B, APHA 24th Ed. 2023 (ICP-OES)
16.	Potassium (as K^{+})	mg/l	20.4	3120-B, APHA 24th Ed. 2023 (ICP-OES)
17.	Sulphate (as SO_4)	mg/l	110	IS 3025 (Part-24): 1986, RA 2022

Rahul Singh
(Sr. Chemist)
Authorized Signatory
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TC-7501

Test Report

Report Code: SW20231220-023(A) **Issue Date: 20.12.2023**

18.	Total Kjeldahl Nitrogen (as N)	mg/l	3.8	IS 3025 (Part-34/Sec-2): 2021
19.	Free Ammonia (as NH_3)	mg/l	1.3	IS 3025 (Part-34/Sec-2): 2021
20.	Nitrate (as NO_3)	mg/l	12.6	IS 3025 (Part-34/Sec-3): 2021
21.	Silica (as SiO_2)	mg/l	19	4500-SiO_2 (C/D), APHA 24rd Ed. 2023
22.	Phosphate (as PO_4)	mg/l	1.7	4500-P D, APHA 24th Ed.2023
23.	Iron (as Fe)	mg/l	0.87	3120-B, APHA 24th Ed.2023 (ICP-OES)
24.	Aluminum (as Al)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
25.	Boron (as B)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
26.	Copper (as Cu)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
27.	Manganese (as Mn)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
28.	Zinc (as Zn)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
29.	Selenium (as Se)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
30.	Arsenic (as As)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
31.	Cadmium (as Cd)	mg/l	<0.001	3120-B, APHA 24th Ed.2023 (ICP-OES)
32.	Total Chromium (as Cr^{3+})	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
33.	Cyanide (as CN)	mg/l	<0.01	IS 3025 (Part-27): 1986, RA 2019
34.	Lead (as Pb)	mg/l	0.06	3120-B, APHA 24th Ed.2023 (ICP-OES)
35.	Mercury (as Hg)	mg/l	<0.001	3120-B, APHA 24th Ed.2023 (ICP-OES)
36.	Nickel (as Ni)	mg/l	<0.01	3120-B, APHA 24th Ed.2023 (ICP-OES)
37.	Total Suspended Solids	mg/l	38.2	IS 3025 (Part-17): 1984, RA 2017
38.	Sodium Adsorption Ratio	-	3.1	IS 11624: 2019
39.	Phenolic Compounds (as C_6H_5OH)	mg/l	0.06	IS 3025 (Part-43/Sec-3): 2022
40.	Anionic Detergent (as MBAS)	mg/l	0.07	IS 3025 (Part-68): 2019
41.	Specific Conductivity	µS/cm	1410	IS 3025 (Part-14): 1984, RA 2019

**** End of Report ****

Rahul Singh
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TC-7501

Test Report

Report Code: SW20231209-023(B) **Issue Date: 09.12.2023**

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Sample Description: Surface Water

RESULTS
(Water Quality Analysis)

SAMPLING DETAILS

Date of Sampling	:	04.12.2023
Sampling Location	:	Indori Nala Upstream
Sample Collected by	:	Mr. Maan Singh
Sampling Protocol	:	IS 1622:1981, RA 2019
Weather Condition	:	Clear Sky
Sample Quantity	:	0.5 L
Sample Packing & Marking	:	Glass Bottle & SGIL/DEC /SW-01

S. No.	Parameters	Units	Results	Test Method
1.	Total Coliform Organism	MPN/100ml	1600	IS 1622: 1981, RA 2019
2.	Fecal Coliform Organism	MPN/100ml	1600	IS 1622: 1981, RA 2019

**** End of Report ****

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Gmail

rohit rajoria <rohitrajoria89@gmail.com>

Advance Service of Reply on behalf of the Respondent No.6 &7 in the matter of "Appeal No. 48 Of 2025 Rajesh Sharma Vs. State Of Haryana & Ors. "

1 message

rohit rajoria <rohitrajoria89@gmail.com> Sat, Jan 24, 2026 at 1:20 PM
To: info@ralo-associates.com, secy-moef@nic.in, psenv2016@gmail.com, seiaa-21.env@hrv.gov.in, hspcbms@gmail.com, tcpharvana7@gmail.com
Cc: Pallav.Mongia@pmlc.in, ishita@pmlc.in

Respected Sir/Ma'am

Please find Attached Reply on behalf of the Respondent No.6 &7 in the matter of "Appeal No. 48 Of 2025 Rajesh Sharma Vs. State Of Haryana & Ors. "

Thanks & regards

Rohit Kumar, Clerk
Pallav Mongia law Chambers

Reply on behalf of R 6 and 7.pdf