Your (Half Yearly Compliance Report) has been Submitted with following details	
Proposal No	SIA/JH/INFRA2/472702/2024
Compliance ID	1227538664
Compliance Number(For Tracking)	EC/COMPLIANCE/1227538664/2026
Reporting Year	2026
Reporting Period	01 Jun(01 Oct - 31 Mar)
Submission Date	15-05-2026
RO/SRO Name	Shri Senthil Kumar Sampath
RO/SRO Email	agmu156@ifs.nic.in
State	JHARKHAND
RO/SRO Office Address	Integrated Regional Offices, Ranchi

Note:- SMS and E-Mail has been sent to Shri Senthil Kumar Sampath, JHARKHAND with Notification to Project Proponent.

Half Yearly Compliance Report
2026
01 Jun(01 Oct - 31 Mar)

Acknowledgement

Proposal Name	Proposed Multistoried Residential Project "AHANA" (B+G+11) over Revenue Khata no. 439 and Khesra no. 54 & 56 at village -Sonari, P.O. Sonari, PS- Sonari, District-East Singhbhum -Jharkhand by M/s. ADLN Superstructure LLP.
Name of Entity / Corporate Office	ADLN SUPERSTRUCTURE LLP
Village(s)	SONARI
District	EAST SINGHBUM

Proposal No.	SIA/JH/INFRA2/472702/2024
Plot / Survey / Khasra No.	439
State	JHARKHAND
MoEF File No.	

Category	INFRA-2
Sub-District	Golmuri-Cum-Jugsalai
Entity's PAN	*****5496L
Entity name as per PAN	ADLN SUPERSTRUCTURE LLP

Compliance Reporting Details

Reporting Year	2026
Remarks (if any)	Period: 1st October 2025 to 31st March 2026
Reporting Period	01 Jun(01 Oct - 31 Mar)

Details of Production and Project Area

Name of Entity / Corporate Office ADLN SUPERSTRUCTURE LLP

	Project Area as per EC Granted	Actual Project Area in Possession
Private	0.717	0.717
Revenue Land	0	0
Forest	0	0
Others	N/A	N/A
Total	0.717	0.717

Others Area

Sr. no	Other Name	Area Granted	Area Actual

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Multistoried Residential Project " AHANA" of M/s ADLN Superstructure LLP	Others:SQM	N/A	7169.57 m2	NIL	Nil

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	WATER QUALITY MONITORING AND PRESERVATION	All recharge should be limited to shallow aquifer.

PPs Submission: Agreed to Comply Agreed and assure to comply.	Date: 14/05/2026

2	WATER QUALITY MONITORING AND PRESERVATION	No ground water shall be used during construction phase of the project.

PPs Submission: Being Complied Being Complied. No usage of groundwater in the project. Water sourced from TSUISL. Raw water is being used for construction purpose. Drinking water supplied from TSUISL is used for domestic purpose.	Date: 14/05/2026

3	Statutory compliance	This Environmental Clearance is valid subject to the following condition below That this project has a. Obtained all legal rights to operate at concerned place. b. Complied with all existing concerned laws of the land and c. Complied with the decisions of SEIAA on the issue of Environmental Clearance till date.

PPs Submission: Complied Complied. Construction or related activities started at site after 30th September 2024 after obtaining all relevant clearances. Following are attached as Annexure 1: 1. CTE 2. Fire Advisory 3. Airport Authority (NOC for building height) 4. Structural Stability Certificate	Date: 13/05/2026

4	Statutory compliance	Ground water to be drawn for use in the project only after obtaining permission from the Competent Authority.

PPs Submission: Agreed to Comply Agreed and assure to comply. No ground water utilization in project. Water sourced from TSUISL. Raw water is being used for construction purpose. Drinking water supplied from TSUISL is used for domestic purpose. Copy of permission is attached as Annexure 2	Date: 13/05/2026

5	Statutory compliance	Only rooftop water to be recharged in to ground water after necessary filtration process.

PPs Submission: Agreed to Comply Agreed and assure to comply. Will be completed along with implementation of the project.	Date: 13/05/2026

6	Statutory compliance	Environment management system including organization structure

		to be drawn to ensure compliance of EC conditions stipulated based on principles of Continuous Improvement and periodical management review.
PPs Submission: Complied Complied. Environment Management Cell and Environment Management System are in place for compliance of EC conditions. Documents attached as Annexure 3.		Date: 13/05/2026
7	Statutory compliance	All raw material to be stored only under covered shed.
PPs Submission: Being Complied Being complied to the extent possible for raw materials such as cement, dust etc. Other raw materials such as sand, bricks, etc. are stored in demarcated areas. RMC sourced from outside is being used for concreting purpose. TMT bars are being kept in open in demarcated areas, and cement bags are stored in covered shed.		Date: 13/05/2026
8	Statutory compliance	PAs to offset (upto20 percentage) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.
PPs Submission: Agreed to Comply Will be Complied. Solar energy, passive energy utilization, optimum fenestration, shading effect envisaged in the project for offsetting conventional energy requirement. It will be implemented along with the project completion.		Date: 13/05/2026
9	Statutory compliance	Developers to promote energy conservation measures such that it offsets not less than 02 percentage of connected load. It is to be achieved by solar panels etc. meeting ECBC norms.
PPs Submission: Agreed to Comply Will be Complied. Solar energy, passive energy utilization, natural lighting and other provision envisaged in the project for energy conservation measures meeting ECBC norms. It will be implemented along with the project completion.		Date: 13/05/2026
10	GREENBELT	Trees should be planted and maintained not less than 15 percentage of project area.
PPs Submission: Agreed to Comply Agreed and assure to comply. Plantation over the 15 percentage of project area will be done within 3 years of completion of the project. Plantation will be initiated in the upcoming monsoon season.		Date: 13/05/2026
11	Statutory compliance	Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio - degradable) generated is used as compost manure.
PPs Submission: Agreed to Comply Agreed and assure to comply. Will be installed along with completion of the project.		Date: 13/05/2026
12	Statutory compliance	Developers/Company to install STP of sufficient capacity such that all the sewage generated is treated and reused.
PPs Submission: Agreed to Comply Agreed and assure to comply. STP of 100 KLD capacity will be installed along with completion of the project.		Date: 13/05/2026
13	Statutory compliance	Developers/Company to install Rain water harvesting/trench structures such that all the roof top water runoff is collected and harvested including reuse on 100 percentage basis.

PPs Submission: Agreed to Comply Agreed and assure to comply. Will be installed along with completion of the project.		Date: 13/05/2026
14	Statutory compliance	Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.
PPs Submission: Complied Complied. Predicted Carbon Footprint and Carbon Sequestration Report is attached as Annexure 4.		Date: 13/05/2026
15	Statutory compliance	Water runoff originating from open non constructed areas of project premises to be harvested/guided in such a way that it does not create water logging condition outside.
PPs Submission: Agreed to Comply Agreed and assure to comply. Will be implemented along with completion of the project.		Date: 13/05/2026
16	Statutory compliance	Sufficient number of EV fast charging point to be installed.
PPs Submission: Agreed to Comply Agreed and assure to comply. Will be installed along with completion of the project.		Date: 13/05/2026
17	Statutory compliance	MSW Collection centre should be located in isolated and preferably unmanned area. Movement of the vehicle carrying waste should be under tarpaulin covered condition only. Route of vehicle should be such that it avoids residential areas as far as practical.
PPs Submission: Agreed to Comply Agreed and assure to comply. The collection areas have been demarcated. Other conditions/ requirements will be complied along with completion of the project and occupancy.		Date: 13/05/2026
18	Statutory compliance	ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr. management.
PPs Submission: Complied Complied. Environment Management Cell and Environment Management System are in place for compliance of EC conditions. Documents already attached as Annexure 3.		Date: 13/05/2026
19	Statutory compliance	A cycling tract to be provided in residential complex so as to save on fuel and make in campus movement environment friendly.
PPs Submission: Agreed to Comply Agreed and assure to comply. Will be implemented along with completion of the project.		Date: 13/05/2026
20	Statutory compliance	Install the required STP, if project start functioning before commencing or functioning of CETP of Municipal Corporation.
PPs Submission: Agreed to Comply Agreed and assure to comply. STP of 100 KLD capacity will be installed along with completion of the project.		Date: 13/05/2026
21	Statutory compliance	This Environmental Clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT, MoEF CC and any other Court of Law, if any, as may be applicable to this project.

PPs Submission: Agreed to Comply Agreed. The project proponent assures compliance with the condition and shall abide by the final orders directions issued by the Honourable Supreme Court of India, Honourable High Courts, Honourable NGT, MoEFCC, or any other competent Court Authority, as applicable to the project.		Date: 13/05/2026
22	Statutory compliance	Environmental clearance is subject to obtaining prior clearance from forestry and Wildlife angle including clearance from standing committee of NBWL, as may be applicable to this project (in case any fauna occurs/is found in the Project area or if the area involves forest land or Wildlife habitat i.e. core zone of elephant/tiger reserve etc. and or located with in 10 km. of protected area).
PPs Submission: Complied Not Applicable. No such clearance applicable as the site is more than 1 km away from the notified ESZ.		Date: 13/05/2026
23	Statutory compliance	The project proponent may apply simultaneously for forest and NBWL clearance, in order to complete the formalities without undue delay, which till process on their respective merits, no rights will vest in or accrue to them unless all clearance are obtained.
PPs Submission: Complied Not Applicable. No such clearance applicable as the site is more than 1 km away from the notified ESZ.		Date: 13/05/2026
24	Statutory compliance	This Environmental Clearance shall be valid subject to the sustainable environmental management.
PPs Submission: Agreed to Comply Agreed. The project proponent shall ensure sustainable environmental management and shall comply with all environmental safeguards and conditions stipulated under the Environmental Clearance.		Date: 13/05/2026
25	Statutory compliance	The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building byelaws.
PPs Submission: Complied Complied. Construction or related activities started at site after 30th September 2024 after obtaining all relevant clearances. Already submitted as Annexure 1: 1. CTE 2. Fire Advisory 3. Airport Authority (NOC for building height) 4. Structural Stability Certificate		Date: 13/05/2026
26	WASTE MANAGEMENT	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.
PPs Submission: Agreed to Comply Agreed and assure to comply. Any hazardous waste generated during the construction phase shall be managed and disposed of in accordance with applicable rules and norms, with necessary approvals obtained from the State Pollution Control Board.		Date: 14/05/2026
27	Statutory compliance	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc as per National Building Code including protection measures from lightening etc.

PPs Submission: Complied Complied. Structural Stability certificate is attached as Annexure 5.		Date: 13/05/2026
28	Statutory compliance	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act. 1980, in case of the diversion of forest land for non-forest purpose involved in the project.
PPs Submission: Complied Not Applicable. No such clearance applicable. No forestland involved.		Date: 13/05/2026
29	Statutory compliance	In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to".
PPs Submission: Complied Not applicable As per the order dated 03.06.2022 in W.P. (C) No. 202/1995 (T.N. Godavarman Thirumulpad vs. Union of India and Ors.), it is confirmed that no Eco-Sensitive Zone (ESZ) of any National Park or Wildlife Sanctuary falls within 1 km of the project site. Hence, the said condition is not applicable to this project.		Date: 13/05/2026
30	Statutory compliance	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
PPs Submission: Complied Not applicable. No such clearance applicable as the project site falls neither in any ESZ or within 1 Km of ESZ boundary.		Date: 13/05/2026
31	Statutory compliance	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention and Control of Pollution) Act. 1981 and the Water (Prevention and Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.
PPs Submission: Complied Complied. CTE for the project has been obtained from JSPCB vide letter no. JSPCB/HO/RNC/CTE-19406122/2024/ 407, dated 22.08.2024. Copy of the same is attached as Annexure 6. CTO will be obtained after the completion of the project and occupancy.		Date: 13/05/2026
32	Statutory compliance	The project proponent shall obtain the necessary permission for drawl of ground water/surface water required for the project from the competent authority.
PPs Submission: Agreed to Comply Agreed. The necessary permission from the competent authority for drawal of ground water/surface water will be obtained, if required. Water supplied by TSUISL at present.		Date: 13/05/2026
33	Statutory compliance	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
PPs Submission: Agreed to Comply Agreed and assure to comply along with completion of the project. Permission from concerned authority for supply of power will be obtained. Current power permission for 20 kw for construction purpose and bill for the same is attached as Annexure 7.		Date: 13/05/2026
34	Statutory compliance	All other statutory clearances such as the approvals for storage of

		diesel from Chief Controller of Explosives, Fire Department. Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.
PPs Submission: Complied Complied. Construction related activities started at site after 30th September 2024 after obtaining all relevant clearances. Already submitted as Annexure 1: 1. CTE 2. Fire Advisory 3. Airport Authority (NOC for building height) 4. Structural Stability Certificate		Date: 13/05/2026
35	Statutory compliance	The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.
PPs Submission: Agreed to Comply Agreed and assure to comply along with completion of the project and occupancy.		Date: 13/05/2026
36	Statutory compliance	The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.
PPs Submission: Agreed to Comply Agreed and assure to comply in implementation and completion of the project and occupancy.		Date: 13/05/2026
37	Statutory compliance	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel (kerosene/gas) for cooking, safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after completion of the project.
PPs Submission: Complied Complied. Temporary structures housing and other facilities for labourers are provided.		Date: 13/05/2026
38	Statutory compliance	Provision of drinking water, waste water disposal, solid wastes management and primary health facilities shall be ensured for labour force. Proper sanitation facilities shall be provided at the construction site to prevent health related problems. Domestic as well as sanitary wastes from construction camps shall be cleared regularly.
PPs Submission: Complied Complied. Provision of drinking water, sanitation, first aid are provided at site for the labour force.		Date: 13/05/2026
39	Statutory compliance	All the labourers to be engaged for construction works shall be screened for health and adequately treated before issue of work permits. The contractor shall ensure periodic health check-up of construction workers
PPs Submission: Complied Complied. Health check up of construction workers carried out by contractors.		Date: 13/05/2026
40	Statutory compliance	All vehicles/equipment deployed during construction phase shall be ensured in good working condition and shall conform to applicable air and noise emission standards. These shall be operated only during non-peaking hours.
PPs Submission: Being Complied Being Complied. PUC of vehicles checked regularly and made mandatory and attached as Annexure 8		Date: 13/05/2026

41	Statutory compliance	Accumulation/stagnation of water shall be avoided ensuring vector control.
PPs Submission: Complied Complied. No stagnant water in the premises. Regular inspection and cleaning done.		Date: 13/05/2026
42	Statutory compliance	Water during construction phase should be preferred from Municipal supply.
PPs Submission: Complied Complied. Water sourced from TSUISL. Raw water is being used for construction purpose. Drinking water supplied from TSUISL is used for domestic purpose. Copy of permission already submitted as Annexure 2.		Date: 13/05/2026
43	Statutory compliance	Unskilled construction labourers shall be recruited from the local areas.
PPs Submission: Complied Complied. Unskilled construction labourers recruited through contractors.		Date: 13/05/2026
44	Statutory compliance	Monitoring of ground water table and quality once in three months shall be carried out. Construction of tube wells, bore wells shall be strictly regulated.
PPs Submission: Agreed to Comply Agreed. No use of groundwater in Construction phase.		Date: 14/05/2026
45	Statutory compliance	Adequate provision shall be made to cater the parking needs. Parking spaces standards as given in "Manual on Norms and Standards for Environmental Clearance of Large Construction Projects" issued by Ministry of Environment and Forests, Government of India shall be adopted.
PPs Submission: Agreed to Comply Agreed and assure to comply		Date: 14/05/2026
46	Statutory compliance	Rest room facilities shall be provided for service population.
PPs Submission: Complied Complied. Rest rooms provided.		Date: 14/05/2026
47	Statutory compliance	Water body falling within premises (if any) shall not be lined or no embankment shall be cemented. The water bodies, if any, shall be kept in natural conditions without disturbing the ecological habitat.
PPs Submission: Complied Complied. No such water body is present in the project premises.		Date: 14/05/2026
48	Statutory compliance	Construction shall conform to the requirements of local seismic regulations. The project proponent shall obtain permission for the plans and designs including structural design, standards and specifications of all construction work from concerned authority.
PPs Submission: Complied Complied. Structural Stability certificate is attached as Annexure 5.		Date: 14/05/2026

49	AIR QUALITY MONITORING AND PRESERVATION	Notification GSR 94(E) dated 25.01.2018 of MoEFCC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.

PPs Submission: Being Complied Being complied. Wind breaker installed, water sprinkling is followed, transportation through covered trucks, approach road has been made pucca, loose material storage are covered.	Date: 14/05/2026

50	AIR QUALITY MONITORING AND PRESERVATION	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.

PPs Submission: Being Complied Being complied. Management plan for control of ambient air quality at site is attached as Annexure 9.	Date: 14/05/2026

51	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25) covering upwind and downwind directions during the construction period.

PPs Submission: Complied Complied. Third party laboratory engaged for AAQ monitoring for PM10, PM2.5, SO2 and NOx. All the mentioned parameters are within limits (PM10: 66.72 to 82.60, PM2.5: 28.66 to 36.56, SO2: 10.99 to 14.83 and NOx: 22.60 to 31.51. All the units are in ug/m3). Report attached as Annexure 10.	Date: 14/05/2026

52	AIR QUALITY MONITORING AND PRESERVATION	Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

PPs Submission: Agreed to Comply Agreed and assure to comply. presently. 25 KVA DG set is installed. LDO is used as fuel for operation. DG set is operated only in case of emergency.	Date: 14/05/2026

53	AIR QUALITY MONITORING AND PRESERVATION	Construction site shall be adequately barricaded before the construction begins. Dust, smoke and other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

PPs Submission: Being Complied Being complied. Wind breaker installed, water sprinkling is followed, transportation through covered trucks, approach road has been made pucca, loose material storages are covered.	Date: 14/05/2026

54	AIR QUALITY MONITORING AND PRESERVATION	Sand, murram, loose soil. cement, stored on site shall be covered adequately so as to prevent dust pollution.

PPs Submission: Being Complied Being complied. Cement is stored in covered shed. Loose material storages are covered.	Date:

		14/05/2026
55	AIR QUALITY MONITORING AND PRESERVATION	Wet jet shall be provided for grinding and stone cutting.
PPs Submission: Complied Complied. Water or wet jet used for the purpose.		Date: 14/05/2026
56	AIR QUALITY MONITORING AND PRESERVATION	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
PPs Submission: Being Complied Being complied. Water sprinkling done as and when required.		Date: 14/05/2026
57	AIR QUALITY MONITORING AND PRESERVATION	All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
PPs Submission: Being Complied Being complied. It is already being implemented with start of construction at site.		Date: 14/05/2026
58	AIR QUALITY MONITORING AND PRESERVATION	The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.
PPs Submission: Being Complied Agreed. Presently, only 25 KVA DG set is installed. LDO is used as fuel for operation. DG set is operated only in case of emergency.		Date: 14/05/2026
59	AIR QUALITY MONITORING AND PRESERVATION	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
PPs Submission: Being Complied Being complied. Stack height as per CPCB norms. DG set within acoustic enclosure installed.		Date: 14/05/2026
60	AIR QUALITY MONITORING AND PRESERVATION	For indoor air quality the ventilation provisions as per National Building Code of India.
PPs Submission: Agreed to Comply Agreed and assure to comply. Will be installed along with the project completion.		Date: 14/05/2026
61	WATER QUALITY MONITORING AND PRESERVATION	The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.

PPs Submission: Being Complied Being Complied. No construction is obstructing the natural drainage through site. SUDS maintained.		Date: 14/05/2026
62	WATER QUALITY MONITORING AND PRESERVATION	Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
PPs Submission: Complied Complied. Building designed accordingly.		Date: 14/05/2026
63	WATER QUALITY MONITORING AND PRESERVATION	Total fresh water use shall not exceed the proposed requirement as provided in the project details.
PPs Submission: Being Complied Being Complied. Total fresh water use maintained within the proposed requirement. It will be maintained in future also.		Date: 14/05/2026
64	WATER QUALITY MONITORING AND PRESERVATION	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEFCC along with six monthly Monitoring reports.
PPs Submission: Agreed to Comply Agreed and assure to comply with completion of the project.		Date: 14/05/2026
65	WATER QUALITY MONITORING AND PRESERVATION	A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.
PPs Submission: Agreed to Comply Agreed and assure to comply. Water sourced from TSUISL. Raw water is being used for construction purpose. Drinking water supplied from TSUISL is used for domestic purpose. Copy of permission already submitted as Annexure 2.		Date: 14/05/2026
66	WATER QUALITY MONITORING AND PRESERVATION	At least 20 percentage of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50 percentage opening, landscape etc. would be considered as pervious surface.
PPs Submission: Being Complied Being complied. Pervious spaces maintained.		Date: 14/05/2026
67	WATER QUALITY MONITORING AND PRESERVATION	Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
PPs Submission: Being Complied Being Complied. Same is being installed along with implementation of the project.		Date: 14/05/2026
68	WATER QUALITY	Use of water saving devices/ fixtures (viz. low flow flushing

	MONITORING AND PRESERVATION	systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
PPs Submission: Agreed to Comply Agreed and assure to comply with implementation of the project.		Date: 14/05/2026
69	WATER QUALITY MONITORING AND PRESERVATION	Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
PPs Submission: Being Complied Being Complied. Same is being installed along with implementation of the project.		Date: 14/05/2026
70	WATER QUALITY MONITORING AND PRESERVATION	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
PPs Submission: Being Complied Being complied. RMC is sourced from outside parties for casting. Curing agents and covering with jute sacks are practiced for reducing water demand.		Date: 14/05/2026
71	WATER QUALITY MONITORING AND PRESERVATION	The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
PPs Submission: Agreed to Comply Agreed and assure to comply. Rainwater harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms along with completion of the project.		Date: 14/05/2026
72	WATER QUALITY MONITORING AND PRESERVATION	A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built-up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
PPs Submission: Agreed to Comply Agreed and assure to comply. Rainwater harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms along with completion of the project.		Date: 14/05/2026
73	WATER QUALITY MONITORING AND PRESERVATION	Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
PPs Submission: Complied Not applicable. As no such activity. Ground water dewatering neither done nor proposed.		Date: 14/05/2026
74	WATER QUALITY MONITORING AND PRESERVATION	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEFCC along with six monthly Monitoring reports.

PPs Submission: Agreed to Comply Agreed and assure to comply. Water sourced from TSUISL. Raw water is being used for construction purpose. Drinking water supplied from TSUISL is used for domestic purpose. water usage, water recycling and rainwater harvesting will be measured and records submitted to the Regional Office, MoEFCC along with six monthly Monitoring reports.		Date: 14/05/2026
75	WATER QUALITY MONITORING AND PRESERVATION	Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
PPs Submission: Agreed to Comply Agreed and assure to comply. Will be implemented along with the completion of the project.		Date: 14/05/2026
76	WATER QUALITY MONITORING AND PRESERVATION	No sewage or untreated effluent water would be discharged through storm water drains.
PPs Submission: Agreed to Comply Agreed and assure to comply. No untreated water will be discharged. No discharge at present. STP will be installed for operation phase.		Date: 14/05/2026
77	WATER QUALITY MONITORING AND PRESERVATION	Onsite sewage treatment of capacity of treating 100 percentage waste water to be installed based on the MBBR/MBR/SBR technology. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment. Forest and Climate Change. Natural treatment systems shall be promoted.
PPs Submission: Agreed to Comply Agreed and assure to comply. It will be installed along with completion and occupancy of the project. Reuse and discharge maintained as specified in the condition.		Date: 14/05/2026
78	WATER QUALITY MONITORING AND PRESERVATION	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
PPs Submission: Agreed to Comply Agreed and assure to comply. It will be installed along with completion and occupancy of the project. Monitoring done as specified.		Date: 14/05/2026
79	WATER QUALITY MONITORING AND PRESERVATION	Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
PPs Submission: Agreed to Comply Agreed and assure to comply. Sludge will be handle as specified.		Date: 14/05/2026
80	Noise Monitoring & Prevention	Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be

		made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/SPCB.
PPs Submission: Being Complied Being complied. Third party laboratory engaged for Noise monitoring. All values are found within limits (Day time: 57.6 to 65.7 dB(A) and Night time: 43.6 to 53.8 dB(A). Report attached as Annexure 11.		Date: 14/05/2026
81	Noise Monitoring & Prevention	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
PPs Submission: Being Complied Being complied. Report submitted along with the six-monthly compliance.		Date: 14/05/2026
82	Noise Monitoring & Prevention	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
PPs Submission: Being Complied Being complied. DG set provided with acoustic enclosure. PPE provided to operators and workers.		Date: 14/05/2026
83	ENERGY PRESERVATION MEASURES	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
PPs Submission: Agreed to Comply Agreed and assure to comply along with the implementation and completion of the project.		Date: 14/05/2026
84	ENERGY PRESERVATION MEASURES	Outdoor and common area lighting shall be LED.
PPs Submission: Being Complied Being Complied. LED lighting used and will be maintained on completion of project also.		Date: 14/05/2026
85	ENERGY PRESERVATION MEASURES	Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
PPs Submission: Being Complied Being Complied. Solar energy, passive energy utilization, natural lighting and other provision envisaged in the project for energy conservation measures meeting ECBC norms. Being implemented along with the project.		Date: 14/05/2026
86	ENERGY PRESERVATION MEASURES	Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building should be integral part of the project design and should be in place before project commissioning.
PPs Submission: Being Complied Being Complied. LED lighting used and will be maintained on completion of project also.		Date: 14/05/2026
87	ENERGY PRESERVATION MEASURES	Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1 percentage of the demand load

		or as per the state level/ local building bye-laws requirement, whichever is higher.
PPs Submission: Agreed to Comply Assure to comply. Rooftop solar panels will be installed to meet the solar/renewable energy norms. It will be implemented along with completion of the project.		Date: 14/05/2026
88	ENERGY PRESERVATION MEASURES	Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20 percentage of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.
PPs Submission: Agreed to Comply Assure to comply. Rooftop solar panels will be installed to meet the solar/renewable energy norms. It will be implemented along with completion of the project. Separate meter will be provided as specified.		Date: 14/05/2026
89	WASTE MANAGEMENT	A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.
PPs Submission: Agreed to Comply Agreed and assure to comply along with the project completion and occupancy.		Date: 14/05/2026
90	WASTE MANAGEMENT	Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
PPs Submission: Being Complied Being complied. There is no muck disposal outside the premises.		Date: 14/05/2026
91	WASTE MANAGEMENT	Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste shall be segregated into wet garbage and inert materials.
PPs Submission: Agreed to Comply Agreed and assure to comply along with the project completion.		Date: 14/05/2026
92	WASTE MANAGEMENT	Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg/ person/day must be installed.
PPs Submission: Agreed to Comply Agreed and assure to comply along with the project completion and occupancy.		Date: 14/05/2026
93	WASTE MANAGEMENT	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.
PPs Submission: Agreed to Comply Agreed and assure to comply All non-biodegradable waste shall be handed over to authorized		Date: 14/05/2026

recyclers, and a formal written agreement maintained. Will be complied along with completion of the project and occupancy.		
94	WASTE MANAGEMENT	Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20 percentage of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
PPs Submission: Being Complied Being complied The materials being used meet the specified criteria.		Date: 14/05/2026
95	WASTE MANAGEMENT	Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.
PPs Submission: Being Complied Being complied. Fly ash used and RMC already being used for casting purposes sourced from outside parties.		Date: 14/05/2026
96	WASTE MANAGEMENT	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
PPs Submission: Being Complied Being complied. Construction waste being managed as per the Construction and Demolition Rules, 2016.		Date: 14/05/2026
97	WASTE MANAGEMENT	Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.
PPs Submission: Agreed to Comply Agreed and assure to comply. Used CFLs and TFLs will be collected and disposed as per norms.		Date: 14/05/2026
98	GREENBELT	No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).
PPs Submission: Complied Complied. Tree felling permission obtained from the concerned forest department before felling of trees. Plantation is done accordingly. Copy of permission attached as Annexure 12.		Date: 14/05/2026
99	GREENBELT	A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.
PPs Submission: Complied Agreed and assure to comply. Minimum of one tree for every 80 sqm of land, shall be planted with native species with heavy foliage, broad leaves, and wide canopy cover. Water-intensive and invasive species shall not be used. These measures will be implemented along with the completion		Date: 14/05/2026

of the project			
100	GREENBELT	Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every I tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.	
PPs Submission: Being Complied Being complied. Tree felling permission obtained from the concerned forest department before felling of trees. Compensatory plantation started in association with Paryawaran Pahal of Jamshedpur. 320 nos. of plants have been donated to Paryawaran Pahal and the same area planted at various places in and around Jamshedpur and Adityapur areas. The compensatory plantation in the ratio of 1:10 will be continued in the coming period. Copy of the same has been attached as Annexure 13.			Date: 14/05/2026
101	GREENBELT	Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads. paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.	
PPs Submission: Being Complied Being complied. Top soil stored will be reapplied during plantation of the proposed vegetation on site.			Date: 14/05/2026
102	MISCELLANEOUS	A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria. a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic. b. Traffic calming measures. c. Proper design of entry and exit points. d. Parking norms as per local regulation.	
PPs Submission: Agreed to Comply Agreed and assure to comply. Traffic management plan attached as Annexure 14.			Date: 14/05/2026
103	MISCELLANEOUS	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.	
PPs Submission: Being Complied Being complied. PUC certified of trucks plying at site and carrying raw materials to the site are regularly checked.			Date: 14/05/2026
104	MISCELLANEOUS	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.	

PPs Submission: Being Complied Being Complied. Traffic Management Plan already submitted as Annexure 14. It is being implemented along with the project and finally completed by occupancy of the project.		Date: 14/05/2026
105	Human Health Environment	All workers working at the construction site and involved in loading, unloading. carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.
PPs Submission: Being Complied Being Complied. Dust masks are provided to workers engaged in dusty areas.		Date: 14/05/2026
106	Human Health Environment	For indoor air quality the ventilation provisions as per National Building Code of India.
PPs Submission: Agreed to Comply Agreed and assure to comply with completion of the project.		Date: 14/05/2026
107	Human Health Environment	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
PPs Submission: Being Complied Being Complied. The plan has been prepared and attached as Annexure 15. It is being followed.		Date: 14/05/2026
108	Human Health Environment	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets. mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
PPs Submission: Being Complied Being Complied. Local labourers engaged through contractors.		Date: 14/05/2026
109	Human Health Environment	Occupational health surveillance of the workers shall be done on a regular basis.
PPs Submission: Being Complied Being Complied. Health check up of construction workers carried out by contractors.		Date: 14/05/2026
110	Human Health Environment	A First Aid Room shall be provided in the project both during construction and operations of the project.
PPs Submission: Complied Complied. First aid facilities are provided at site.		Date: 14/05/2026
111	Corporate Environmental Responsibility	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-1A.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
PPs Submission: Agreed to Comply Agreed and assure to comply. CER as applicable will be implemented along with the project completion and occupancy.		Date: 14/05/2026
112	Corporate Environmental	The company shall have a well laid down environmental policy

	Responsibility	duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation/violation of the environmental/forest/wildlife norms/conditions and/ or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEFCC as a part of six-monthly report.
PPs Submission: Being Complied Being complied. Environmental policy duly approved by the Board of Directors is attached as Annexure 16. SOP will be followed, as applicable.		Date: 14/05/2026
113	Corporate Environmental Responsibility	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
PPs Submission: Complied Complied. Environment Management Cell is in place for compliance of EC conditions. Documents attached as Annexure 3.		Date: 14/05/2026
114	Corporate Environmental Responsibility	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
PPs Submission: Agreed to Comply Agreed and assure to comply. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and duly approved by competent authority.		Date: 14/05/2026
115	MISCELLANEOUS	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
PPs Submission: Complied Complied. The notice has been published in the local newspapers: Uditvani and Avenue Mail on 20th November 2024. Copy attached as Annexure 17.		Date: 14/05/2026
116	MISCELLANEOUS	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
PPs Submission: Complied The copy of EC has been submitted to local body Jamshedpur Notified Area Committee on 21.11.2024. Copy of receiving attached as Annexure 18.		Date: 14/05/2026
117	MISCELLANEOUS	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly

		basis.
PPs Submission: Being Complied Being Complied. Company website being developed, compliance including results will be uploaded by 30.06.2026.		Date: 14/05/2026
118	MISCELLANEOUS	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
PPs Submission: Complied Complied. Six-monthly reports on the status of the compliance regularly submitted on MoEFCC website.		Date: 14/05/2026
119	MISCELLANEOUS	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
PPs Submission: Agreed to Comply Agreed and assure to comply along with the project completion and occupancy.		Date: 14/05/2026
120	MISCELLANEOUS	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
PPs Submission: Being Complied Being complied. Funds generated through the Firm and Partners being utilized. There is no loan/financial sanction from any bank or institution. Work at site started after obtaining EC vide File No. EC/SEIAA/2024-25/3114/2024 dated 03.06.2024 and CTE from JSPCB vide letter no JSPCB/HO/RNC/CTE-19406122/2024/ 407, dated 22.08.2024.		Date: 14/05/2026
121	MISCELLANEOUS	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
PPs Submission: Being Complied Being complied. Stipulations made by the State Pollution Control Board and the State Government is being adhered to.		Date: 14/05/2026
122	MISCELLANEOUS	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
PPs Submission: Being Complied Being complied. No EIA prepared or submitted. No public hearing was conducted as this is a building construction project in B2 category. EMP as applicable is being implemented.		Date: 14/05/2026
123	MISCELLANEOUS	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).
PPs Submission: Agreed to Comply Agreed and assure to comply.		Date: 14/05/2026
124	MISCELLANEOUS	Concealing factual data or submission of false/fabricated data may

		result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
PPs Submission: Agreed to Comply Noted. Agreed to comply with correct facts and data.		Date: 14/05/2026
125	MISCELLANEOUS	The Ministry/ SEIAA SEAC may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
PPs Submission: Agreed to Comply Noted and agreed to comply.		Date: 14/05/2026
126	MISCELLANEOUS	The Ministry/SEIAA/SEAC reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
PPs Submission: Agreed to Comply Noted and agreed to comply.		Date: 14/05/2026
127	MISCELLANEOUS	It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEFCC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi/CPCB/SEIAA.
PPs Submission: Being Complied Being complied. Six (06) monthly compliance report being regularly submitted to concerned authorities.		Date: 14/05/2026
128	MISCELLANEOUS	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
PPs Submission: Agreed to Comply Agreed and assure to comply.		Date: 14/05/2026
129	MISCELLANEOUS	The SEIAA. Jharkhand or any other competent Authority may alter modify the above conditions or stipulate any further condition in the interest of Environment Protection.
PPs Submission: Agreed to Comply Noted and agreed to comply.		Date: 14/05/2026
130	MISCELLANEOUS	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
PPs Submission: Complied Complied. No appeal filed.		Date: 14/05/2026

131	MISCELLANEOUS	The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF CC, Govt. of India.

PPs Submission: Agreed to Comply Noted and assure to comply.	Date: 14/05/2026

Visit Remarks

Last Site Visit Report Date:	N/A
Additional Remarks:	EC compliance report attached.

Note: This acknowledgement is as per the details submitted by project proponent. In no way is this document to be considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.

COMPLIANCE OF ENVIRONMENTAL CLEARANCE

M/s. ADLN SUPERSTRUCTURE LLP

Letter No. EC/SEIAA/2024-25/3114/2024, Dated: 03.06.2024

At Village: Sonari, P.O. + P.S.: Sonari, Distt. East Singhbhum, Jharkhand

#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
I.	**Specific Conditions:**	
i.	This Environmental Clearance is valid subject to the following condition below – That this project has- a. Obtained all legal rights to operate at concerned place. b. Complied with all existing concerned laws of the land and c. Complied with the decisions of SEIAA on the issue of Environmental Clearance till date.	**Complied.** Construction or related activities started at site after 30th September 2024 after obtaining all relevant clearances. Following are attached as **Annexure – 1**: 1. CTE 2. Fire Advisory 3. Airport Authority (NOC for building height) 4. Structural Stability Certificate
ii.	Ground water to be drawn for use in the project only after obtaining permission from the Competent Authority.	**Agreed and assure to comply.** No ground water utilization in project. Water sourced from TSUISL. Raw water is being used for construction purpose. Drinking water supplied from TSUISL is used for domestic purpose. Copy of permission is attached as **Annexure – 2**
iii.	Only rooftop water to be recharged in to ground water after necessary filtration process.	**Agreed and assure to comply.** Will be completed along with implementation of the project.
iv.	Environment management system including organization structure to be drawn to ensure compliance of EC conditions stipulated based on principles of Continuous Improvement and periodical management review.	**Complied.** Environment Management Cell and Environment Management System are in place for compliance of EC conditions. Documents attached as **Annexure – 3**.
v.	All raw material to be stored only under covered shed.	**Being complied** to the extent possible for raw materials such as cement, dust etc. Other raw materials such as sand, bricks, etc. are stored in demarcated areas. RMC sourced from outside is being used for concreting purpose. TMT bars are being kept in open in demarcated areas, and cement bags are stored in covered shed.

For ADLN SUPERSTRUCTURE LLP

Partner

#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
vi.	PAs to offset (upto 20%) consumption of conventional energy sources by promoting use of solar energy, passive energy utilization, optimum fenestration, shading effect and heat islands.	**Will be Complied.** Solar energy, passive energy utilization, optimum fenestration, shading effect envisaged in the project for offsetting conventional energy requirement. It will be implemented along with the project completion.
vii.	Developers to promote energy conservation measures such that it offsets not less than 02% of connected load. It is to be achieved by solar panels etc. meeting ECBC norms.	**Will be Complied.** Solar energy, passive energy utilization, natural lighting and other provision envisaged in the project for energy conservation measures meeting ECBC norms. It will be implemented along with the project completion.
viii.	Trees should be planted & maintained not less than 15% of project area.	**Agreed and assure to comply.** Plantation over the 15% of project area will be done within 3 years of completion of the project. Plantation will be initiated in the upcoming monsoon season.
ix.	Organic Waste Converter (OWC) to be installed of sufficient capacity such that all organic waste (bio - degradable) generated is used as compost manure.	**Agreed and assure to comply.** Will be installed along with completion of the project.
x.	Developers/Company to install STP of sufficient capacity such that all the sewage generated is treated and reused.	**Agreed and assure to comply.** STP of 100 KLD capacity will be installed along with completion of the project.
xi.	Developers/Company to install Rain water harvesting/trench structures such that all the roof top water runoff is collected and harvested including reuse on 100% basis.	**Agreed and assure to comply.** Will be installed along with completion of the project.
xii.	Developers/Company to conduct and submit carbon footprint and carbon sequestration study report including mitigation measures as a part of EC compliance.	**Complied.** Predicted Carbon Footprint and Carbon Sequestration Report is attached as **Annexure – 4.**
xiii.	Water runoff originating from open non constructed areas of project premises to be harvested/guided in such a way that it does not create water logging condition outside.	**Agreed and assure to comply.** Will be implemented along with completion of the project.

For ADLN SUPERSTRUCTURE LLP

Partner

#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
xiv.	Sufficient number of EV fast charging point to be installed.	**Agreed and assure to comply.** Will be installed along with completion of the project.
xv.	MSW Collection centre should be located in isolated and preferably unmanned area. Movement of the vehicle carrying waste should be under tarpaulin covered condition only. Route of vehicle should be such that it avoids residential areas as far as practical.	**Agreed and assure to comply.** The collection areas have been demarcated. Other conditions/ requirements will be complied along with completion of the project and occupancy.
xvi.	ISO 14k EMS system standard to be followed for implementation of EMPs with MRM in place for feedback to Sr. management.	**Complied.** Environment Management Cell and Environment Management System are in place for compliance of EC conditions. Documents attached as **Annexure – 3.**
xvii.	A cycling tract to be provided in residential complex so as to save on fuel and make in campus movement environment friendly.	**Agreed and assure to comply.** Will be implemented along with completion of the project.
xviii.	Install the required STP, if project start functioning before commencing or functioning of CETP of Municipal Corporation.	**Agreed and assure to comply.** STP of 100 KLD capacity will be installed along with completion of the project.
xix.	This Environmental Clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT, MoEF & CC and any other Court of Law, if any, as may be applicable to this project.	**Agreed.** The project proponent assures compliance with the condition and shall abide by the final orders/ directions issued by the Hon'ble Supreme Court of India, Hon'ble High Courts, Hon'ble NGT, MoEF&CC, or any other competent Court/Authority, as applicable to the project.
xx.	Environmental clearance is subject to obtaining prior clearance from forestry and Wildlife angle including clearance from standing committee of NBWL, as may be applicable to this project (in case any fauna occurs/is found in the Project area or if the area involves forest land or Wildlife habitat i.e. core zone of elephant/tiger	**Agreed.** No such clearance applicable as the site is more than 1 km away from the notified ESZ.

For ADLN SUPERSTRUCTURE LLP

Partner

#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
	reserve etc. and or located within 10 km of protected area).	
xxi.	The project proponent may apply simultaneously for forest and NBWL clearance, in order to complete the formalities without undue delay, which till process on their respective merits, no rights will vest in or accrue to them unless all clearance are obtained.	**Agreed.** No such clearance applicable as the site is more than 1 km away from the notified ESZ.
xxii.	This Environmental Clearance shall be valid subject to the sustainable environmental management.	**Agreed.** The project proponent shall ensure sustainable environmental management and shall comply with all environmental safeguards and conditions stipulated under the Environmental Clearance.
II.	**Statutory Compliance:**	
i.	The project proponent shall obtain all necessary clearance/ permission from all relevant agencies including town planning authority before commencement of work. All the construction shall be done in accordance with the local building bye-laws.	**Complied.** Construction or related activities started at site after 30th September 2024 after obtaining all relevant clearances. Following are attached as **Annexure – 1**: 1. CTE 2. Fire Advisory 3. Airport Authority (NOC for building height) 4. Structural Stability Certificate
ii.	The approval of the Competent Authority shall be obtained for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.	**Complied.** Structural Stability certificate is attached as **Annexure – 5.**
iii.	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act. 1980, in case of the diversion of forest land for non-forest purpose involved in the project.	**Not Applicable.** No such clearance applicable. No forestland involved.

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
iv.	In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 "National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to".	**Noted.** As per the order dated 03.06.2022 in W.P. (C) No. 202/1995 (T.N. Godavarman Thirumulpad vs. Union of India & Ors.), it is confirmed that no Eco-Sensitive Zone (ESZ) of any National Park or Wildlife Sanctuary falls within 1 km of the project site. Hence, the said condition is not applicable to this project.
v.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	**Noted.** No such clearance applicable as the project site falls neither in any ESZ or within 1 Km of ESZ boundary.
vi.	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act. 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.	**Complied.** CTE for the project has been obtained from JSPCB vide letter no. JSPCB/HO/RNC/CTE-19406122/2024/ 407, dated 22.08.2024. Copy of the same is attached as **Annexure – 6.** CTO will be obtained after the completion of the project and occupancy.
vii.	The project proponent shall obtain the necessary permission for drawl of ground water/surface water required for the project from the competent authority.	**Agreed.** The project proponent shall obtain necessary permission from the competent authority for drawal of ground water/surface water required for the project and shall ensure compliance prior to and during the implementation of the project
viii.	A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.	**Agreed and assure to comply** along with completion of the project. Permission from concerned authority for supply of power will be obtained. Current power permission for 20 kw for construction purpose and bill for the same is attached as **Annexure – 7.**
ix.	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department. Civil Aviation Department shall be obtained, as applicable, by project proponents	**Complied.** Construction or related activities started at site after 30th September 2024 after obtaining all relevant clearances. Following are attached as **Annexure – 1**: 1. CTE

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
	from the respective competent authorities.	2. Fire Advisory 3. Airport Authority (NOC for building height) 4. Structural Stability Certificate
x.	The provisions of the Solid Waste (Management) Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste (Management) Rules, 2016 shall be followed.	**Agreed and assure to comply** along with completion of the project and occupancy.
xi.	The project proponent shall follow the ECBC/ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power strictly.	**Agreed and assure to comply** in implementation and completion of the project and occupancy.
xii.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel (kerosene/gas) for cooking, safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after completion of the project.	**Complied.** Temporary structures housing and other facilities for labors are provided.
xiii.	Provision of drinking water, waste water disposal, solid wastes management and primary health facilities shall be ensured for labour force. Proper sanitation facilities shall be provided at the construction site to prevent health related problems. Domestic as well as sanitary wastes from construction camps shall be cleared regularly.	**Complied.** Provision of drinking water, sanitation, first aid are provided at site for the labour force.
xiv.	All the labourers to be engaged for construction works shall be screened for health and adequately treated before issue of work permits. The contractor shall ensure periodic health check-up of construction workers.	**Complied.** Health checkup of construction workers carried out by contractors.
xv.	All vehicles/equipment deployed during construction phase shall be ensured in good working condition and shall conform to applicable air and noise emission standards. These	**Being Complied.** PUC of vehicles checked regularly and made mandatory and attached as **Annexure - 8**

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
	shall be operated only during non-peaking hours.	
xvi.	Accumulation/stagnation of water shall be avoided ensuring vector control.	**Agreed and assure to comply.**
xvii.	Water during construction phase should be preferred from Municipal supply.	**Complied.** Water sourced from TSUISL. Raw water is being used for construction purpose. Drinking water supplied from TSUISL is used for domestic purpose. Copy of permission is attached as **Annexure – 2.**
xviii.	Unskilled construction labourers shall be recruited from the local areas.	**Complied.** Unskilled construction labourers recruited through contractors.
xix.	Monitoring of ground water table and quality once in three months shall be carried out. Construction of tube wells, bore wells shall be strictly regulated.	**Agreed.** No use of groundwater in Construction phase.
xx.	Adequate provision shall be made to cater the parking needs. Parking spaces standards as given in "Manual on Norms and Standards for Environmental Clearance of Large Construction Projects" issued by Ministry of Environment and Forests, Government of India shall be adopted.	**Agreed and assure to comply.**
xxi.	Rest room facilities shall be provided for service population.	**Agreed and assure to comply.**
xxii.	Water body falling within premises (if any) shall not be lined or no embankment shall be cemented. The water bodies, if any, shall be kept in natural conditions without disturbing the ecological habitat.	**Agreed.** No such water body is present in the project premises.
xxiii.	Construction shall conform to the requirements of local seismic regulations. The project proponent shall obtain permission for the plans and designs including structural design, standards and specifications	**Complied.** Structural Stability certificate is attached as **Annexure – 5.**

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
	of all construction work from concerned authority.	
III.	**Air quality monitoring and preservation:**	
i.	Notification GSR 94(E) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.	**Being complied.** Wind breaker installed, water sprinkling is followed, transportation through covered trucks, approach road has been made pucca, loose material storage are covered.
ii.	A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.	**Being complied.** Management plan for control of ambient air quality at site is attached as **Annexure – 9.**
iii.	The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25) covering upwind and downwind directions during the construction period.	**Complied.** Third party laboratory engaged for AAQ monitoring for PM10, PM2.5, SO2 and NOx. All the mentioned parameters are within limits (PM10 – 66.72 to 82.60, PM2.5 – 28.66 to 36.56, SO2 – 10.99 to 14.83 and NOx – 22.60 to 31.51. All the units are in $\mu g/m^3$). Report attached as **Annexure – 10.**
iv.	Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.	**Agreed and assure to comply.** 25 KVA DG set is installed. LDO is used as fuel for operation. DG set is operated only incase of emergency.
v.	Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under	**Being complied.** Wind breaker installed, water sprinkling is followed, transportation through covered trucks, approach road has been made pucca, loose material storages are covered.

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
	construction, continuous dust/ wind breaking walls all around the site (at least 3meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.	
vi.	Sand, murram, loose soil. cement, stored on site shall be covered adequately so as to prevent dust pollution.	**Being complied.** Cement is stored in covered shed. Loose material storages are covered.
vii.	Wet jet shall be provided for grinding and stone cutting.	**Agreed and assure to comply.**
viii.	Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.	**Being complied.** Water sprinkling done as and when required.
ix.	All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.	**Being complied.** It is already being implemented with start of construction at site.
x.	The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.	**Being complied.** 25 KVA DG set is installed. LDO is used as fuel for operation. DG set is operated only in case of emergency.
xi.	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.	**Being complied.** Stack height as per CPCB norms. DG set within acoustic enclosure installed.

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
xii.	For indoor air quality the ventilation provisions as per National Building Code of India.	**Agreed and assure to comply.** Will be installed along with the project completion.
IV.	**Water quality monitoring and preservation:**	
i.	The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.	**Agreed and assure to comply.**
ii.	Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.	**Agreed and assure to comply.**
iii.	Total fresh water use shall not exceed the proposed requirement as provided in the project details.	**Agreed and assure to comply.**
iv.	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.	**Agreed and assure to comply** with completion of the project.
v.	A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the balance water available. This should be specified separately for ground water and surface water sources, ensuring that there is no impact on other users.	**Agreed and assure to comply.** Water sourced from TSUISL. Raw water is being used for construction purpose. Drinking water supplied from TSUISL is used for domestic purpose. Copy of permission is attached as **Annexure – 2.**

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
vi.	At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.	**Agreed and assure to comply.**
vii.	Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.	**Agreed and assure to comply** with implementation of the project.
viii.	Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.	**Agreed and assure to comply** with implementation of the project.
ix.	Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.	**Agreed and assure to comply** with implementation of the project.
x.	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.	**Being complied.** RMC is sourced from outside parties for casting. Curing agents and covering with jute sacks are practiced for reducing water demand.
xi.	The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.	**Agreed and assure to comply.** Rainwater harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms along with completion of the project.
xii.	A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built-up area and storage capacity of minimum one	**Agreed and assure to comply.** Rainwater harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
	day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.	CGWB norms along with completion of the project.
xiii.	All recharge should be limited to shallow aquifer.	**Agreed and assure to comply.**
xiv.	No ground water shall be used during construction phase of the project.	**Agreed and assure to comply.** No usage of groundwater in the project. Water sourced from TSUISL. Raw water is being used for construction purpose. Drinking water supplied from TSUISL is used for domestic purpose. Copy of permission is attached as **Annexure – 2.**
xv.	Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.	No such activity – ground water dewatering not proposed.
xvi.	The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.	**Agreed and assure to comply.** Water sourced from TSUISL. Raw water is being used for construction purpose. Drinking water supplied from TSUISL is used for domestic purpose. water usage, water recycling and rainwater harvesting will be measured and records submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
xvii.	Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.	**Agreed and assure to comply.** Will be implemented along with the completion of the project.

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
xviii.	No sewage or untreated effluent water would be discharged through storm water drains.	**Agreed and assure to comply.** No untreated water will be discharged.
xix.	Onsite sewage treatment of capacity of treating 100% waste water to be installed based on the MBBR/MBR/SBR technology. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment. Forest and Climate Change. Natural treatment systems shall be promoted.	**Agreed and assure to comply.** It will be installed along with completion and occupancy of the project.
xx.	Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.	**Agreed and assure to comply.** It will be installed along with completion and occupancy of the project.
xxi.	Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.	**Agreed and assure to comply.**
V.	**Noise monitoring and prevention:**	
i.	Ambient noise levels shall conform to residential area/commercial area/industrial area/silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise	**Being complied.** Third party laboratory engaged for Noise monitoring. All values are found within limits (Day time: 57.6 to 65.7 dB(A) & Night time: 43.6 to 53.8 dB(A). Report attached as **Annexure-11.**

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
	quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/SPCB.	
ii.	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	**Being complied.** Report submitted along with the six-monthly compliance.
iii.	Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.	**Being complied.**
VI.	**Energy Conservation measures:**	
i.	Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.	**Agreed and assure to comply** along with the completion of the project.
ii.	Outdoor and common area lighting shall be LED.	Agreed and assure to comply. Presently, LED lighting used.
iii.	Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.	Being Complied. Solar energy, passive energy utilization, natural lighting and other provision envisaged in the project for energy conservation measures meeting ECBC norms. It will be implemented along with the project.
iv.	Energy conservation measures like installation of CFLs/ LED for the lighting the area outside the building	**Agreed and assure to comply** along with the implementation of the project.

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
	should be integral part of the project design and should be in place before project commissioning.	
v.	Solar, wind or other Renewable Energy shall be installed to meet electricity generation equivalent to 1% of the demand load or as per the state level/ local building bye-laws requirement, whichever is higher.	**Will be Complied.** Rooftop solar panels will be installed to meet the solar/renewable energy norms. It will be implemented along with completion of the project.
vi.	Solar power shall be used for lighting in the apartment to reduce the power load on grid. Separate electric meter shall be installed for solar power. Solar water heating shall be provided to meet 20% of the hot water demand of the commercial and institutional building or as per the requirement of the local building bye-laws, whichever is higher. Residential buildings are also recommended to meet its hot water demand from solar water heaters, as far as possible.	**Agreed and assure to comply.**
VII.	**Waste Management:**	
i.	A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project shall be obtained.	**Agreed and assure to comply** along with the project completion and occupancy.
ii.	Disposal of muck during construction phase shall not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	**Being complied.** At present, there is no muck disposal outside the premises.
iii.	Separate wet and dry bins must be provided in each unit and at the ground level for facilitating segregation of waste. Solid waste	**Agreed and assure to comply** along with the project completion.

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
	shall be segregated into wet garbage and inert materials.	
iv.	Organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg/ person/day must be installed.	**Agreed and assure to comply** along with the project completion and occupancy.
v.	All non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.	**Agreed.** All non-biodegradable waste shall be handed over to authorized recyclers, and a formal written agreement/tie-up with such authorized recyclers shall be established and maintained.
vi.	Any hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.	**Agreed.** Any hazardous waste generated during the construction phase shall be managed and disposed of in accordance with applicable rules and norms, with necessary approvals obtained from the State Pollution Control Board.
vii.	Use of environment friendly materials in bricks, blocks and other construction materials, shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.	**Agreed and assure to comply.**
viii.	Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016. Ready mixed concrete must be used in building construction.	**Agreed and assure to comply.** RMC already being used for casting purposes sourced from outside parties.
ix.	Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.	**Agreed and assure to comply.**

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
x.	Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.	**Agreed and assure to comply.**
VIII.	**Green Cover:**	
i.	No tree can be felled/transplant unless exigencies demand. Where absolutely necessary, tree felling shall be with prior permission from the concerned regulatory authority. Old trees should be retained based on girth and age regulations as may be prescribed by the Forest Department. Plantations to be ensured species (cut) to species (planted).	**Complied.** Tree felling permission obtained from the concerned forest department before felling of trees. Copy of permission attached as **Annexure – 12.**
ii.	A minimum of 1 tree for every 80 sqm of land should be planted and maintained. The existing trees will be counted for this purpose. The landscape planning should include plantation of native species. The species with heavy foliage, broad leaves and wide canopy cover are desirable. Water intensive and/or invasive species should not be used for landscaping.	**Agreed.** Minimum of one tree for every 80 sqm of land, including consideration of existing trees. Landscape planning shall prioritize native species with heavy foliage, broad leaves, and wide canopy cover. Water-intensive and invasive species shall not be used. These measures shall be implemented along with the completion of the project
iii.	Where the trees need to be cut with prior permission from the concerned local Authority, compensatory plantation in the ratio of 1:10 (i.e. planting of 10 trees for every I tree that is cut) shall be done and maintained. Plantations to be ensured species (cut) to species (planted). Area for green belt development shall be provided as per the details provided in the project document.	Tree felling permission obtained from the concerned forest department before felling of trees. Compensatory plantation started in association with Paryawaran Pahal of Jamshedpur. 320 nos. of plants have been donated to Paryawaran Pahal and the same area planted at various places in and around Jamshedpur and Adityapur areas. The compensatory plantation in the ratio of 1:10 will be continued in the coming period. Copy of the same has been attached as **Annexure – 13.**

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
iv.	Topsoil should be stripped to a depth of 20 cm from the areas proposed for buildings, roads. paved areas, and external services. It should be stockpiled appropriately in designated areas and reapplied during plantation of the proposed vegetation on site.	**Being complied.**
IX.	**Transport:**	
i.	A comprehensive mobility plan, as per MoUD best practices guidelines (URDPFI), shall be prepared to include motorized, non-motorized, public, and private networks. Road should be designed with due consideration for environment, and safety of users. The road system can be designed with these basic criteria. a. Hierarchy of roads with proper segregation of vehicular and pedestrian traffic. b. Traffic calming measures. c. Proper design of entry and exit points. d. Parking norms as per local regulation.	**Agreed and assure to comply.** Traffic management plan attached as **Annexure – 14**.
ii.	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards be operated only during non-peak hours.	**Being complied.** PUC certified of trucks plying at site and carrying raw materials to the site are regularly checked.
iii.	A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being	**Complied.** Traffic Management Plan has been attached as **Annexure – 14**.

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
	carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.	
X.	**Human Health Issues:**	
i.	All workers working at the construction site and involved in loading, unloading. carriage of construction material and construction debris or working in any area with dust pollution shall be provided with dust mask.	**Being Complied.** Dust masks are provided to workers engaged in dusty areas.
ii.	For indoor air quality the ventilation provisions as per National Building Code of India.	**Agreed and assure to comply** with completion of the project.
iii.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	**Being Complied.** The plan has been prepared and attached as **Annexure – 15.**
iv.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets. mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	**Being Complied.** Local labours engaged through contractors.
v.	Occupational health surveillance of the workers shall be done on a regular basis.	**Being Complied.** Health checkup of construction workers carried out by contractors.

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
vi.	A First Aid Room shall be provided in the project both during construction and operations of the project.	**Complied.** First aid facilities is provided at site.
XI.	**Corporate Environment Responsibility:**	
i.	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-1A.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.	**Will be Complied.** CER as applicable will be implemented along with the project completion and occupancy.
ii.	The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest/wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation/violation of the environmental/forest/wildlife norms/conditions and/ or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.	**Agreed and assure to comply.** Environmental policy duly approved by the Board of Directors is attached as **Annexure – 16.**
iii.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	**Being Complied.** Environment Management Cell is in place for compliance of EC conditions. Documents attached as **Annexure – 3.**
iv.	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other	**Agreed and assure to comply.**

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#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
	purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.	
XII.	**Miscellaneous:**	
i.	The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.	The notice has been published in the local newspapers – Uditvani and Avenue Mail on 20th November 2024. Copy attached as **Annexure – 17.**
ii.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	The copy of EC has been submitted to local body Jamshedpur Notified Area Committee on 21.11.2024. Copy of receiving attached as **Annexure-18.**
iii.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	**Agreed and assure to comply.**
iv.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	**Agreed and assure to comply.**
v.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the	**Agreed and assure to comply** along with the project completion and occupancy.

For ADLN SUPERSTRUCTURE LLP

Partner

#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
	Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	
vi.	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	**Being complied.** Funds generated through the Firm and Partners being utilized. There is no loan/financial sanction from any bank or institution. Work at site started after obtaining EC vide File No. EC/SEIAA/2024-25/3114/2024 dated 03.06.2024 and CTE from JSPCB vide letter no JSPCB/HO/RNC/CTE-19406122/2024/407, dated 22.08.2024.
vii.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	**Agreed and assure to comply.**
viii.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	**Agreed and assure to comply.** No EIA prepared or submitted. No public hearing was conducted as this is a building construction project in B2 category. EMP as applicable is being implemented.
ix.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	**Agreed and assure to comply.**
x.	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	**Noted.**
xi.	The Ministry/ SEIAA SEAC may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	**Noted and Agreed.**
xii.	The Ministry/SEIAA/SEAC reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	**Noted and Agreed.**

For ADLN SUPERSTRUCTURE LLP

Partner

#	CONDITION	COMPLIANCE/ STATUS 1st October 2025 – 31st March 2026
xiii.	It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi/CPCB/SEIAA.	**Agreed and assure to comply.**
xiv.	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.	**Agreed and assure to comply.**
xv.	The SEIAA. Jharkhand or any other competent Authority may alter modify the above conditions or stipulate any further condition in the interest of Environment Protection.	**Noted and Agreed.**
xvi.	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	**Noted.**
xvii.	The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF & CC, Govt. of India.	**Noted.**

For ADLN SUPERSTRUCTURE LLP

Partner

JHARKHAND STATE POLLUTION CONTROL BOARD

TOWNSHIP ADMINISTRATION BUILDING, HEC COMPLEX, DHURWA, RANCHI 834004
Telephone: 0651-2400850 (Fax)/ 2400851/2400852/2401847/2400979/2400139

Ref No.: JSPCB/HO/RNC/CTE-19406122/2024/407 Dated : 2024-08-22

Consent to Establish (CTE) under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981

1. Reference: Application (s) No.- 19406122 / dated : 07/06/2024 of Ahana by M/s ADLN Superstructure LLP, Lalit Agarwal for consent under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981

2. Documents Relied Upon:

(a) The content of Environmental Clearance (EC) issued by SEIAA, Jharkhand vide memo no. EC/SEIAA/2024-25/3114/2024/98, dated 29.05.2024 at Plot no. 54 & 56, Khata no. 439, At+P.O.-Sonari, Area- 7196.57 m2, Total Built up area- 30572.39 sq. m., Green belt- 1482.82 Sq. m., Maximum height of building- 45.26 meter including stair/lift cabin.

(b) The content of an agreement made in between Smt. Mira Devi Agarwal+ 02 others and ADLN Superstructure LLP for construction and development of the land.

(c) The content of DFO, Jamshedpur vide letter no. 143, dated 12.01.2024 certified that the distance of reserved forest/ protected forest is more than 250 meters from the proposed project site.

(d) The content of DCF, Dalma Elephant Project vide letter no. 80, dated 13.01.2024 certified that the proposed project site is outside the Eco sensitive zone of Dalma Wildlife Sanctuary.

(e) The content of CO, East Singhbhum vide letter no. 1446, dated 28.08.2023 has mentioned that the plot no. of the project is not recorded as "Jangal-Jhari" in RS khatiyan and Register-II .

(f) The content of Self certificate regarding procurement of raw material from valid sources.

(g) The content of NOC for height clearance issued by Airport Authority of India Limited vide NOC ID-JAMS/EAST/B/100923/802160, dated 07.11.2023.

(h) The content of Fire advisory issued by Fire Department, Ranchi, Jharkhand vide memo no. 1219/Tech/2024, dated 18.02.2024.

(i) The content of Declaration regarding STP for construction of MBBR bases STP of capacity 100 KLD.

(j) The content of an application for approval of Building plan vide application no. JNAC/GH/0051/W1/2024

3. The consent is granted under section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 to establish the project in Mauza- Sonari ward no 1 jsr, P S -Ghatsila, District-EAST SINGHBUM as follows:

Project	Site-Area	Investment (Rs)/ Year	Product & Capacity	Period of CTE

	Plot Nos.	Area			
Before Expansion	54 & 56, Khata no. 439, At+P.O.- Sonari,	Area- 7196.57 m2, Total Built up area- 30572.39 sq. m.,	98.18 Crores (as per EC)	Multistoried Residential Project With Utility(B+G+11)- 04 Towers, Residental Flats -[3 BHK - 44 Flats + 4 BHK -44 Flats]	As per EC

(A) Specific Conditions:

1. That, the occupier shall construct pucca internal road or pave the approach road so as to avoid generation of dust particles due to vehicular movement and shall be so designed to ensure free movement of vehicles and other machinery.

2. That, the occupier shall ensure that, construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height).

3. That, the occupier shall ensure that, plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

4. That, the occupier shall ensure that, all construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. And all demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.

5. That, the occupier shall ensure that, use of environment friendly materials such as Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, compressed earth blocks shall be used for at least 20% of the construction material quantity.

6. That, the occupier shall ensure that, wet jet shall be provided for grinding and stone cutting.

7. That, the occupier shall ensure that, unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

8. That, the occupier shall ensure that, at least 20% of the open spaces as required by the local building bye laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would

be considered as pervious surface.

9. That, the occupier shall ensure that,adequate provision shall be made to cater the parking needs. Parking spaces standards as given in "Manual on Norms and Standards for Environmental Clearance of Large Construction Projects" issued by Ministry of Environment and Forests, Government of India shall be adopted.

10. That, the occupier shall ensure that,water body falling within premises (if any) shall not be lined or no embankment shall be cemented and shall be kept in natural conditions without disturbing the ecological habitat.

11. That, the occupier shall ensure that, water during construction phase should be preferred from Municipal supply.

12. That, the occupier shall ensure that, accumulation/stagnation of water shall be avoided ensuring vector control.

13. That, the occupier shall ensure that, the natural drain system should be maintained for ensuring unrestricted flow of water.

14. That, the occupier shall ensure that, total fresh water use shall not exceed the proposed requirement as provided in the project details.

15. That, the occupier shall ensure that, installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

16. That, the occupier shall ensure that, use of water saving devices/ fixtures (viz. low flow flushing systems: use of low flow faucets tap acrators etc) for water conservation shall be incorporated in the building plan.

17. That, the occupier shall ensure that, water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred

18. That, the occupier shall ensure that, rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.

19. That, the occupier shall ensure that, the ground water shall not be withdrawn without approval from the Competent Authority.

20. That, the occupier shall ensure that, no ground water shall be used during construction phase of the project.

21. That, the occupier shall install STP and ensure that sewage shall be treated in the STP with tertiary

treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.

22. That, the occupier shall ensure that, acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution and conform to rules made under the Environment (Protection) Act, 1986. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

23. That, the occupier shall ensure thatfor indoor air quality the ventilation provisions as per National Building Code of India.

24. That, the occupier shall ensure thatthe provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.

25. That, the occupier shall ensure that separate bins for dry and wet solid waste must be provided in each unit for facilitating segregation of waste.

26. That, the occupier shall install organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day.

27. That, the occupier shall ensure that,all non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.

28. That, the occupier shall ensure thatany hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

29. That, the occupier shall ensure that, used CFLs and TFLs should be properly collected and disposed off/sent for recycling to authorized TSDFs to avoid mercury contamination.

30. That, the occupier shall ensure that, minimum of one tree for every 80 sqm of land should be planted and maintained.

31. That, the occupier shall submit ambient, noise and effluent analysis report to the Board before and after commissioning of the institution.

32. That, the occupier shall ensure that, all the conditions of Environmental Clearance shall be complied.

33. That, the occupier shall ensure that, no further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).

34. That, the occupier shall comply all the conditions of CTE and shall submit its report to the Board at the time of application made for CTO.

35. That, the occupier shall obtain NOC for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.

36. That, the occupier shall obtain all statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.

(B) General Conditions :

(1) That, the occupier shall construct pucca (i) minimum ten feet high boundary wall and (ii) approach road and internal roads and shall keep the premises neat and clean and tidy.

(2) That, the occupier shall install comprehensive enclosure (s) to cover the places of unloading of raw materials, the equipments of their processing & transferring, the places of loading of products, by products and wastes for prevention of fugitive emission and shall install such automatic inbuilt system(s) that in house dust/ gases collect(s) and undergo (es) cleaning and clean air goes out.

(3) That, the occupier shall install such automatic inbuilt system(s) that process flue gas(es) / process gas(es) and undergo(es) cleaning and clean air go(es) out through the chimney(s), having height(s) as per Central Pollution Control Board norm.

(4) That, the occupier shall have D G Set(s) of the standard as laid in the Environment (protection) Rules, 1986 and shall install it (them) within acoustic enclosure (s) and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm .

(5) That, the occupier shall impart treatment as per Central Pollution Control Board text to wastewater and shall keep process effluent in close-circuit and effluent from other sources in conformity with the standard (s).

(6) That, the occupier shall install Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge.

(7) That, the occupier shall create new water body (ies) / remove deposit(s) of existing water body(ies) and nearby stream(s) and pond(s) and shall maintain the wholesomeness of water.

(8) That, the occupier shall grow greenery in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.

(9) That, this CTE is valid subjected to the validity of mining Lease / Mining Plan / Ecofriendly / Environmental Clearance, if applicable. In case of no renewal of Mining Lease/Mining Plan, this consent shall be treated as revoked automatically.

(10) That, this CTE is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time being in force, rests with the industry/ unit/ occupier.

(11) That, this CTE shall not in any way, adversely affect or jeopardize the legal proceeding , if any, instituted in the past or that could be , instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under.

(12) That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules there under.

4. That, this CTE shall not absolve the occupier from making compliance of other statutory prescribed under any law or direction of courts or any other instrument for the time being in force.

5. That, this CTE is being issued on the basis of information/ documents/ certificate submitted by the unit. This CTE will be revoked if any of the information/ documents/ certificates/ undertaking given by the occupier is found false/fictitious/forged in future.

6. This order shall be valid subject to compliance of all other legal requirements applicable to the unit.

7. The State Board reserves the right to revoke, withdraw or make any reasonable variation / change / alteration in condition of this consent.

This is issued with the approval of the competent authority

Sanjay Kumar Srivastava
Digitally signed by Sanjay Kumar Srivastava
Date: 2024.08.22 13:46:34 +05'30'

[Sanjay Kumar Srivastava]
Officer on Special Duty

Memo No. : JSPCB/HO/RNC/CTE-19406122/2024/407

Dated : 2024-08-22

Copy to : Ahana by M/s ADLN Superstructure LLP, At+P.O.-Sonari, Jamshedpur, East Singhbhum, Jharkhand/ Deputy Commissioner, East Singhbhum/ DFO, East Singhbhum/ Regional Officer, Regional Office, Jamshedpur for information & necessary action.

Sanjay Kumar Srivastava
Digitally signed by Sanjay Kumar Srivastava
Date: 2024.08.22 13:46:11 +05'30'

[Sanjay Kumar Srivastava]
Officer on Special Duty

ज्ञापांक–**1219**/Tech./2024

अग्निशमन सेवा मुख्यालय, झारखण्ड, राँची।

दिनांक–18.02.2024

सेवा में,

ADLN SUPERSTRUCTURE LLP POA HOLER OF,
MIRA DEVI AGARWAL, PRATIBHA AGARWAL,
AND SHRUTI AGARWAL,
THIRD FLOOR, BASANT CENTRAL, SAKCHI, JAMSHEDPUR.

विषयः– मौजा–सोनारी, प्लॉट नं0–54 & 56 खाता नं0–439, वार्ड नं0–1 OF JNAC, थाना नं0–9001, जिला–पूर्वी सिंहभूम में प्रस्तावित बहुमंजिले भवनों के निर्माण हेतु अग्नि–सुरक्षात्मक सलाह।

उपर्युक्त विषयक ऑनलाईन प्राप्त प्रस्ताव के आलोक में प्रस्तावित बहुमंजिले भवनों का स्थल की भौतिक जाँच प्रभारी अग्निशामालय पदाधिकारी, गोलमुरी, जमशेदपुर के माध्यम से प्रस्तावित स्थल का भौतिक जाँच कराई गई। उन्होंने अपने ज्ञापांक–150, दिनांक–13.02.2024 के माध्यम से समर्पित जाँच प्रतिवेदन एवं की गई अनुशंसा के आलोक में उक्त बहुमंजिले भवनों के निर्माण हेतु निम्नांकित अग्नि सुरक्षात्मक सलाह दिये जाते हैं :–

1. प्रस्तावित भवनों के परिसर के सामने वाले भाग में कम से कम 1,50,000 लीटर की क्षमता वाले अंडरग्राउण्ड स्टैटिक वाटर टैंक का निर्माण ऐसे स्थान पर कराया जाय, जहाँ अग्निशमन वाहन आसानी से पहुँचकर पानी ले सके।
2. किसी भी आकस्मिकता की स्थिति में इस टैंक से अग्निशमन वाहनों को पानी लिये जाने हेतु ड्रॉ–आउट कनेक्शन दिये जाने की व्यवस्था की जाय।
3. प्रत्येक भवनों में अग्निशमन कार्य हेतु कम से कम बीस–बीस हजार लीटर क्षमता वाले ओभरहेड वाटर टैंक का निर्माण कराया जाय।
4. प्रत्येक भवनों के चारों तरफ 150mm डाया वाले रिंग मेन्स का निर्माण कराया जाय। जिसमें प्रत्येक 30 मीटर अथवा उसके भाग पर एक–एक यार्ड हाईड्रैण्ट दिये जाने की व्यवस्था की जाय। यार्ड हाईड्रैण्ट के पास डिलिवरी आउटलेट तथा दो अदद डिलिवरी होज एवं एक अदद ब्रांच सहित एक–एक होज बॉक्स की संस्थापन कराया जाय।
5. ओभरहेड टैंक से जुड़ा हुआ प्रत्येक भवनों के दोनों स्टेयरकेश लॉबियों में 150 MM डाया वाला एक–एक वेट राईजर कम डाउन कमर सिस्टम का संस्थापन कराया जाय, जिसमें प्रत्येक तलों पर 30 मी0 लम्बा होज रील होज, 63 MM डाया का डिलिवरी आउटलेट तथा दो–दो अदद डिलिवरी होज एवं एक–एक अदद ब्रांच सहित एक–एक होज बॉक्स का संस्थापन कराया जाय।
6. प्रत्येक भवनों के बेसमेन्ट, सतही तलों को स्वचालित स्प्रिंकलर से सुरक्षित किया जाय। यह सुनिश्चित किया जाय कि स्प्रिंकलर के एक हेड से दूसरे की दूरी मानक से अधिक न हो।
7. स्प्रिंकलर के जलापूर्त्ति हेतु अलग से पाईप लाईन की व्यवस्था की जाय, जिसका संबंध अंडरग्राउण्ड एवं टेरेस टैंक दोनों से रहे।
8. अग्निशमन कार्य हेतु भवनों में पम्प हाउस का निर्माण कराया जाय, जिसमें 2250 Lpm क्षमता का एक–एक फायर पम्प का संस्थापन कराया जाय।
9. प्रत्येक भवनों में 900 Lpm क्षमता वाले टेरेस पम्प का संस्थापन कराया जाय।
10. प्रत्येक भवनों में 180 Lpm क्षमता वाले जॉकी पम्प का संस्थापन कराया जाय।
11. प्रत्येक भवनों में समान क्षमता का वैकल्पिक पावर चालित पम्प आरक्षित अवस्था में रखा जाय।
12. पंपिंग सिस्टम पॉजिटिव सक्शन वाले रहेंगे।

13. उपर्युक्त प्रत्येक भवनों के सभी लिफ्टों को फायर लिफ्ट के रूप में निर्मित किया जाय, जिसकी क्षमता 544 के0जी0 से कम की न हो। इसे स्वतंत्र रूप से वैकल्पिक पावर के माध्यम से जोड़कर रखे जाने की व्यवस्था की जाय। सीढ़ियों को Enclosed Fire Staircase के रूप में निर्मित किया जाय।
14. NBC मानक के अनुरूप सेटबैक एरिया एवं रिफ्यूज एरिया का निर्माण कराया जाय, अग्निशमन एवं बचाव कार्य हेतु प्रत्येक आवासीय भवनों के सामने वाले भाग में 12-12 मीटर चौड़ी, ठोस एवं समतल जगह खुले रूप में हर समय उपलब्ध रखा जाय।
15. प्रत्येक भवनों में दो सीढ़ी होनी चाहिए एवं सीढ़ियों की चौड़ाई NBC मानक के अनुरूप होनी चाहिए।
16. प्रत्येक भवनों में मानक के अनुरूप रिफ्युज एरिया का निर्माण कराया जाय।
17. प्रत्येक भवनों में प्रति 400 वर्गमीटर अथवा उसके भाग के लिए दो की दर से 06 के0जी0 क्षमता का DCP Fire Extinguisher रखे जाने की व्यवस्था की जाय।
18. सतही तल मुख्य प्रवेश द्वार एवं निकास द्वार के पास फोरवेज फायर सर्विस इनलेट का संस्थापन कराया जाय।
19. Exit & Leading to Exit Way को कभी भी किसी प्रकार से बाधित नहीं किया जाय। सुनिश्चित किया जायेगा कि किसी भी स्थिति में ट्रैवेल डिसटेंस 30 मीटर से अधिक नहीं हो।
20. प्रत्येक भवनों की विद्युत व्यवस्था किसी लाइसेंसी इलेक्ट्रिीशियन के माध्यम से हीं कराया जाय।
21. प्रत्येक भवनों के मुख्य स्टेयरकेश लॉबी के प्रत्येक तलों पर 06 के0जी0 क्षमता के 04-04 अदद डी0सी0पी0 अग्निशमन यंत्र रखा जाय।
22. प्रत्येक भवनों के मेन इलेक्ट्रिकल स्वीच बोर्ड को Fire Supression System से सुरक्षित किया जाय।
23. भवनों में बिजली के मेन स्विच बोर्ड के पास 04.5 के0जी0 क्षमता के 02-02 अदद सी0ओ0टू0 तथा 06 के0जी0 क्षमता के 02-02 अदद डी0सी0पी0 अग्निशमन यंत्र रखे जाने की व्यवस्था की जाय।
24. प्रत्येक भवनों में Manually Operated Electronic Fire Alarm लगाये जाने की व्यवस्था की जाय, जिसका कॉल प्वाईंट प्रत्येक तल पर स्टेयरकेश लॉबी में हो।
25. भवनों के प्रत्येक तलों के प्रत्येक स्टेयरकेश लॉबी में कम से कम दो घंटा अग्नि–रोधी फायर चेकडोर का संस्थापन कराया जाय।
26. प्रत्येक भवनों के बेसमेन्ट में Transformer, Boiler, Pressurized Cylinder, Generator, A.C न रखें जाय। भवन में बेसमेन्ट वाले भाग में समुचित Ventilation की व्यवस्था रखी जाय, ताकि प्रति घंटा कम से कम 12 से 15 एयर चेज होता रह सकें एवं आपात स्थिति में इसे 30 एयर चेंज तक बढ़ाया जा सकें। बेसमेन्ट के लिये अलग से सीढ़ी एवं लिफ्ट की व्यवस्था रखी जाय अथवा सतही तल पर ऐसी व्यवस्था रखी जाय कि उपरी तलों से सीढ़ी/लिफ्ट से आने पर सतही तल पर रूकने के बाद ही बेसमेन्ट के लिए प्रस्थान कर सके।
27. भवनों मानक के अनुरूप तड़ित चालक लगाये जाने की व्यवस्था की जाय।
28. प्रत्येक भवनों को उपयोग में लाये जाने के पूर्व प्रत्येक भवन में संस्थापित किये गये अग्नि–सुरक्षात्मक व्यवस्था का विस्तृत प्लान इस कार्यालय को उपलब्ध कराते हुए जॉच प्रतिवेदन अवश्य प्राप्त कर लेंगे साथ हीं आवेदक अनापत्ति प्रमाण–पत्र प्राप्त करने से पूर्व पूरी तरह भरा हुआ सेल्फ अप्रेजल चेक लिस्ट एवं नोटरी पब्लिक के द्वारा जारी एक शपथ पत्र समर्पित करेंगे कि अग्निशमन सेवा मुख्यालय के द्वारा दिये गये सुझावों का अनुपालन पूरी तरह करा लिया गया है।

29. अग्नि–सुरक्षा के दृष्टिकोण से दिये गये सुझावों के अनुपालन की जाँच इस कार्यालय से कराये जाने एवं जाँच में संतोषप्रद पाये जाने के पश्चात हीं अनापत्ति प्रमाणपत्र निर्गत किये जायेंगे।
30. भवनों के किसी भी भाग में बाद में यदि Plan अथवा Nature Of Occupancy में बदलाव किया जाता है तो इस कार्यालय को सूचित करके Clearance अवश्य प्राप्त करेंगे।
31. राष्ट्रीय भवन संहिता भाग IV के नियम 6.1 में वर्णित सुरक्षा व्यवस्थाओं का दृढ़ता से अनुपालन किया जाय।

JAGJEEWAN RAM

Digitally signed by JAGJEEWAN RAM
DN: c=IN, o=GOVERNMENT OF JHARKHAND, ou=HOME JAIL AND DISASTER MANAGEMENT, postalCode=834002, l=Ranchi, st=Jharkhand, street=STATE FIRE OFFICE, 2.5.4.20=fd5bdb31a8b816e885a078b44a26d1dd0c8bf502a1e36320b1b2d89b32d1fa2b, serialNumber=19585870ee67dbaf143b636d6f0c97a7bc8a01d90f3ec025de5383159f431a70, email=jagjivanram83148@gmail.com, cn=JAGJEEWAN RAM
Date: 2024.02.19 11:04:08 +05'30'

(जगजीवन राम)
प्रभारी अपर राज्य अग्निशमन पदाधिकारी,
झारखण्ड, राँची।

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

JAMS/EAST/B/100923/802160

मालिक का नाम एवं पता	M/S ADLN SUPERSTRUCTURE LLP	**दिनांक/DATE:**	07-11-2023
OWNERS Name & Address	Shop No. – 6, 1st floor, Basant Central, Mills & Godown Area, Sakchi, Jamshedpur - 831001. Dist East Singhbhum.	**वैधता/ Valid Up to:**	06-11-2031

ऊँचाई की अनुमति हेतु अनापत्ति प्रमाण पत्र(एनओसी)
No Objection Certificate for Height Clearance

1) यह अनापत्ति प्रमाण पत्र भारतीय विमानपत्तन प्राधिकरण (भाविप्रा) द्वारा प्रदत्त दायित्वों के अनुक्रम तथा सुरक्षित एवं नियमित विमान प्रचालन हेतु भारत सरकार (नागर विमानन मंत्रालय) की अधिसूचना जी. एस. आर. 751 (ई) दिनांक 30 सितम्बर, 2015, जी. एस. आर. 770 (ई) दिनांक 17 दिसंबर 2020 द्वारा संशोधित, के प्रावधानों के अंतर्गत दिया जाता है ।

1. This NOC is issued by Airports Authority of India (AAI) in pursuance of responsibility conferred by and as per the provisions of Govt. of India (Ministry of Civil Aviation) order GSR751 (E) dated 30th Sep.2015 amended by GSR770(E) dated 17th Dec 2020 for safe and Regular Aircraft Operations.

2). इस कार्यालय को निम्नलिखित विवरण के अनुसार प्रस्तावित संरचना के निर्माण पर कोई आपत्ति नहीं है I

2. This office has no objection to the construction of the proposed structure as per the following details:

अनापत्ति प्रमाणपत्र आईडी / NOC ID	JAMS/EAST/B/100923/802160
आवेदक का नाम / Applicant Name*	Ashim Kumar Das
स्थल का पता / Site Address*	Premises no. – Mouza – Sonari, Thana No. – 1156, Khata No. – 7, Plot No. 536, 537, 538, 539, 540 and 541, P.O. and P.S. – Sonari, JNAC, Jamshedpur, Dist East Singhbhum, Jharkhand.,Sonari,Jamshedpur,Jharkhand
स्थल के निर्देशांक / Site Coordinates*	22 49 30.51N 86 10 29.93E, 22 49 30.19N 86 10 30.83E, 22 49 32.23N 86 10 31.17E, 22 49 30.62N 86 10 31.36E, 22 49 31.85N 86 10 31.96E, 22 49 32.51N 86 10 32.61E, 22 49 29.98N 86 10 33.22E, 22 49 32.07N 86 10 34.06E, 22 49 30.28N 86 10 34.11E, 22 49 31.13N 86 10 34.65E, 22 49 32.11N 86 10 35.11E, 22 49 31.68N 86 10 35.31E, 22 49 30.77N 86 10 37.01E, 22 49 31.41N 86 10 37.16E
स्थल की ऊँचाई एएमएसएल मीटर में (औसतन समुद्र तल से ऊपर), (जैसा आवेदक द्वारा उपलब्ध कराया गया) / Site Elevation in mtrs AMSL as submitted by Applicant*	134.74 M
अनुमन्य अधिकतम ऊँचाई एएमएसएल मीटर में (औसतन समुद्र तल से ऊपर) / Permissible Top Elevation in mtrs Above Mean Sea Level(AMSL)	180.06 M (Restricted)

*** जैसा आवेदक द्वारा उपलब्ध कराया गया / As provided by applicant***

3) यह अनापत्ति प्रमाण पत्र निम्नलिखित नियम व शर्तों के अधीन है: -
3. **This NOC is subject to the terms and conditions as given below:**

क) आवेदक द्वारा उपलब्ध कराए गए स्थल की ऊँचाई तथा निर्देशांक को, प्रस्तावित संरचना हेतु अनुमन्य अधिकतम ऊँचाई जारी करने के लिए प्रयोग किया गया है | भारतीय विमान पत्तन प्राधिकरण, आवेदक द्वारा उपलब्ध कराये गए स्थल की ऊँचाई तथा निर्देशांक की यथार्थता का ना तो उत्तरदायित्व वहन करता है, और ना ही इनको प्रमाणीकृत करता है | यदि किसी भी स्तर पर यह पता चलता है कि वास्तविक विवरण, आवेदक द्वारा उपलब्ध कराए गए विवरण से भिन्न है, तो यह अनापत्ति प्रमाण पत्र अमान्य माना जाएगा तथा क़ानूनी कार्यवाही की जाएगी | सम्बंधित विमान क्षेत्र के प्रभारी अधिकारी द्वारा एयरक्राफट नियम 1994 (भवन, वृक्षों आदि के कारण अवरोध का विध्वंस) के अधीन कार्यवाही की जायगी ।

a. Permissible Top elevation has been issued on the basis of Site coordinates and Site Elevation submitted by Applicant. AAI neither owns the responsibility nor authenticates the correctness of the site coordinates & site elevation provided by the applicant. If at any stage it is established that the actual data is different, this NOC will stand null and void and action will be taken as per law. The officer in-charge of the concerned aerodrome may initiate action under the Aircraft (Demolition of Obstruction caused by Buildings and Trees etc.) Rules, 1994",

ख) अनापत्ति प्रमाण पत्र के आवेदन में आवेदक द्वारा उपलब्ध कराए गए स्थल निर्देशांक को सड़क दृश्य मानचित्र और उपग्रह मानचित्र पर अंकित किया गया है जैसा कि अनुलग्नक में दिखाया गया है। आवेदक / मालिक यह सुनिश्चित करे कि अंकित किए गए निर्देशांक उसके स्थल से मेल खाते हैं। किसी भी विसंगति के मामले में, नामित अधिकारी को अनापत्ति प्रमाण पत्र रद्द करने के लिए अनुरोध किया जाएगा।

b. The Site coordinates as provided by the applicant in the NOC application has been plotted on the street view map and satellite map as shown in ANNEXURE. Applicant/Owner to ensure that the plotted coordinates corresponds to his/her site. In case of any discrepancy, Designated Officer shall be requested for cancellation of the NOC.

ग) एयरपोर्ट संचालक या उनके नामित प्रतिनिधि, अनापत्ति प्रमाण पत्र नियमों और शर्तों का अनुपालन सुनिश्चित करने के लिए स्थल (आवेदक या मालिक के साथ पूर्व समन्वय के साथ) का दौरा कर सकते हैं।

c. Airport Operator or his designated representative may visit the site (with prior coordination with applicant or owner) to ensure that NOC terms & conditions are complied with.

घ) संरचना की ऊँचाई (सुपर स्ट्रक्चर सहित) की गणना अनुमन्य अधिकतम ऊँचाई (ए एम एस एल) से स्थल की ऊँचाई को घटाकर की जायेगी | अर्थात, संरचना की अधिकतम ऊँचाई = अनुमन्य अधिकतम ऊँचाई (-) स्थल की ऊँचाई |

d. The Structure height (including any superstructure) shall be calculated by subtracting the Site elevation in AMSL from the Permissible Top Elevation in AMSL i.e. Maximum Structure Height = Permissible Top Elevation minus (-) Site Elevation.

च) अनापत्ति प्रमाण पत्र जारी करना, भारतीय एयरक्राफ्ट एक्ट 1934 , के सैक्शन 9-A तथा इसके अंतर्गत समय-समय पर जारी अधिसूचनाएं तथा एयरक्राफट नियम (1994 भवन, वृक्षों आदि के कारण अवरोध का विध्वंस) के अधीन है ।

e. The issue of the 'NOC' is further subject to the provisions of Section 9-A of the Indian Aircraft Act, 1934 and any notifications issued there under from time to time including, "The Aircraft (Demolition of Obstruction caused by Buildings and Trees etc.) Rules, 1994".

छ) कोई भी रेडियो/ टीवी एन्टीना, लाइटनिंग अरैस्टर, सीढ़िया, मुमटी, पानी की टंकी अथवा कोई अन्य वस्तु तथा किसी भी प्रकार के संलग्नक उपस्कर पैरा 2 में उल्लेखित अनुमन्य अधिकतम ऊँचाई से ऊपर नहीं जानी चाहिए ।

f. No radio/TV Antenna, lightening arresters, staircase, Mumty, Overhead water tank or any other object and attachments of fixtures of any kind shall project above the Permissible Top Elevation as indicated in para 2.

ज) विमानक्षेत्र संदर्भ बिंदु के 8 KM के भीतर तेल, बिजली या किसी अन्य ईंधन का उपयोग जो उड़ान संचालन के लिए धुएं का खतरा पैदा नहीं करता है, ही मान्य है।
g. Use of oil, electric or any other fuel which does not create smoke hazard for flight operation is obligatory, within 8 KM of the Aerodrome Reference Point

झ) यह प्रमाणपत्र इसके जारी होने की तारीख से 8 साल की अवधि के लिए वैध है। एक बार रिवेलीडेशन की अनुमति दी जा सकती है, बशर्ते कि इस तरह का अनुरोध एनओसी की समाप्ति की तारीख से छह महीने के भीतर किया जाए और प्रारंभिक प्रमाणपत्र 8 साल की वैधता अवधि के भीतर प्राप्त किया जाए ।
h. The certificate is valid for a period of 8 years from the date of its issue. One-time revalidation shall be allowed, provided that such request shall be made within six months from the date of expiry of the NOC and commencement certificate is obtained within initial validity period of 8 years.

ट) भवन के निर्माण के दौरान या उसके बाद किसी भी समय स्थल पर ऐसी कोई भी लाइट या लाइटो का संयोजन नहीं लगाया जाएगा जिसकी तीव्रता, आकृति या रंग के कारण वैमानिक ग्राउन्ड लाइटों के साथ भ्रम उत्पन्न हो । विमान के सुरक्षित प्रचालन को प्रभावित करने वाली कोई भी गतिविधि मान्य नहीं होगी |
i. No light or a combination of lights which by reason of its intensity, configuration or colour may cause confusion with the aeronautical ground lights of the Airport shall be installed at the site at any time, during or after the construction of the building. No activity shall be allowed which may affect the safe operations of flights.

ठ) आवेदक द्वारा विमानपत्तन पर या उसके आसपास विमान से उत्पन्न शोर, कंपन या विमान प्रचालन से हुई किसी भी क्षति के विरूद्ध कोई शिकायत/दावा नहीं किया जाएगा ।
j. The applicant will not complain/claim compensation against aircraft noise, vibrations, damages etc. caused by aircraft operations at or in the vicinity of the airport.

ड) डे मार्किंग तथा सहायक विद्युत आपूर्ति सहित नाइट लाइटिंग (डीजीसीए भारत की वेबसाइट www.dgca.nic.in पर उपलब्ध) नागर विमानन आवश्यकताएं श्रंखला 'बी' पार्ट । सैक्शन-4 के चैप्टर 6 तथा अनुलग्नक 6 में विनिर्दिष्ट दिशानिर्देशों के अनुसार उपलब्ध कराई जाएंगी ।
k. Day markings & night lighting with secondary power supply shall be provided as per the guidelines specified in chapter 6 and appendix 6 of Civil Aviation Requirement Series 'B' Part I Section 4, available on DGCA India website: www.dgca.nic.in

ढ) भवन के नक्शे के अनुमोदन सहित अन्य सभी वैधानिक अनापत्ति, संबंधित प्राधिकरणों से लेना आवेदक की जिम्मेदारी होगी, क्योंकि इस ऊँचाई हेतु अनापत्ति प्रमाणपत्र लेने का उद्देश्य सुरक्षित एवं नियमित विमान प्रचालन सुनिश्चित करना है तथा इसे भूमि के स्वामित्व आदि सहित किसी अन्य उद्देश्य/ दावे के लिए दस्तावेज के रूप में प्रयोग नहीं किया जा सकता ।
l. The applicant is responsible to obtain all other statutory clearances from the concerned authorities including the approval of building plans. This NOC for height clearances is only to ensure safe and regular aircraft operations and shall not be used as document for any other purpose/claim whatsoever, including ownership of land etc.

ण) इस अनापत्ति प्रमाणपत्र आईडी का मूल्यांकन Dhalbhumgarh,Jamshedpur विमानक्षेत्रो के संबंध में किया गया है। यह अनापत्ति प्रमाणपत्र भारतीय विमान पत्तन प्राधिकरण के विमानक्षेत्रो और अन्य लाइसेंस प्राप्त सिविल विमानक्षेत्रो, जो जी. एस. आर. 751 (ई) जी. एस. आर. 770 (ई) द्वारा संशोधित के अनुसूची - III, अनुसूची - IV (भाग- I), अनुसूची- IV (भाग -2; केवल RCS हवाई अड्डे) और अनुसूची- VII में सूचीबद्ध हैं, के लिए जारी किया गया है ।
m. This NOC ID has been assessed with respect to theDhalbhumgarh,Jamshedpur Airports. NOC has been issued w.r.t. the AAI Aerodromes and other licensed Civil Aerodromes as listed in Schedule – III, Schedule – IV(Part-I), Schedule- IV (Part-2; RCS Airports Only) and Schedule-VII of GSR 751(E) amended by GSR770(E)

त) यदि स्थल रक्षा विभाग के विमान क्षेत्र के अधिकार क्षेत्र में आता है, जैसा कि जीएसआर 751 (ई) की अनुसूची-V में सूचीबद्ध है, तो आवेदक को रक्षा विभाग से अलग से अनापत्ति प्रमाणपत्र लेना होता है। जीएसआर 751 (ई) जी. एस. आर. 770 (ई) द्वारा संशोधित के नियम 13 के अनुसार, आवेदकों को उन स्थलों के लिये, जो जीएसआर 751 (ई) जी. एस. आर. 770 (ई) द्वारा संशोधित के अनुसूची- IV (भाग -2; आरसीएस हवाई अड्डों के अलावा) के रूप में सूचीबद्ध बिना लाइसेंस वाले विमान क्षेत्र के अधिकार क्षेत्र में आता हैं, तो संबंधित राज्य सरकार से भी अनापत्ति प्रमाणपत्र लेने की आवश्यकता है।

n. Applicant needs to seek separate NOC from Defence, if the site lies within the jurisdiction of Defence Aerodromes as listed in Schedule – V of GSR 751 E amended by GSR770(E). As per rule 13 of GSR 751 E amended by GSR770(E), applicants also need to seek NOC from the concerned state government for sites which lies in the jurisdiction of unlicensed aerodromes as listed in Schedule-IV (Part-2; other than RCS airports) of GSR 751 E amended by GSR770(E)

थ) अनापत्ति प्रमाण पत्र (एनओसी) की किसी भी त्रुटि/व्याख्या की स्थिति में अंगरेजी अनुवाद ही मान्य होगा |

o. In case of any discrepancy/interpretation of NOC letter, English version shall be valid.

द) स्थल की ऊँचाई और/या संरचना की ऊँचाई के किसी भी विवाद में अनुमन्य अधिकतम ऊँचाई एएमएसएल में ही मान्य होगी |

p. In case of any dispute with respect to site elevation and/or AGL height, Permissible Top Elevation in AMSL shall prevail.

1278/23

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

JAMS/EAST/B/100923/802160

क्षेत्र का नाम / Region Name: पूर्व/EAST

पदनामित अधिकारी/Designated Officer नाम/ पदनाम/दिनांक सहित हस्ताक्षर Name/Designation/Sign with date	S. Haldar 07/11/23 महाप्रबंधक (एटीएम) पू.क्षे./ General Manager (ATM) ER भारतीय विमानपत्तन प्राधिकरण/Airports Authority of India ने.सु.च.ब.अं. हवाई अड्डा/N.S.C.B.I. Airport कोलकाता/Kolkata 700052
द्वारा तैयार Prepared by	07.11.23.
द्वारा जांचा गया Verified by	7/11/23

ईमेल आईडी / EMAIL ID : gmatmer@aai.aero
फोन/ Ph: 033-25111293

ANNEXURE/अनुलग्नक

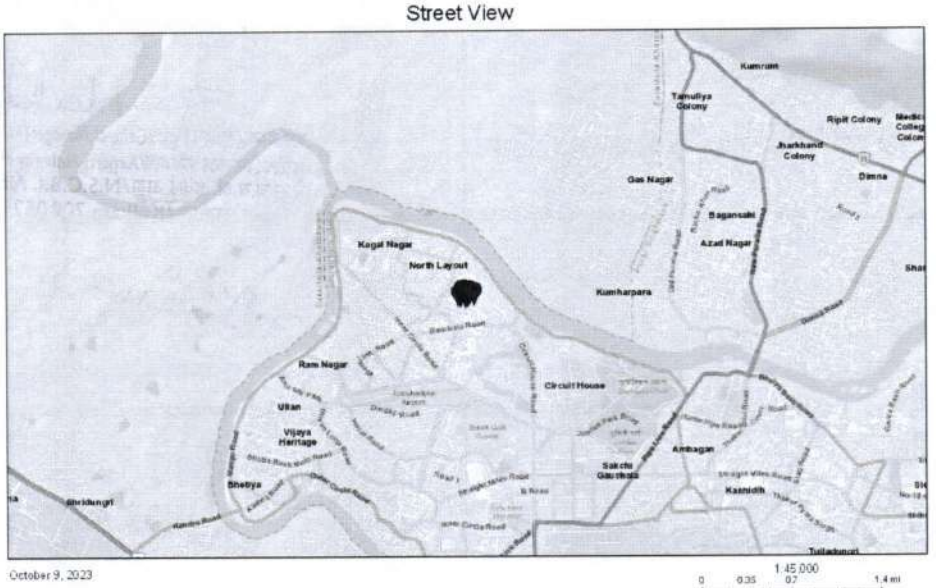
Distance From Nearest Airport And Bearing/निकटतम विमानक्षेत्र से दूरी और बीयरिंग

Airport Name/ विमानक्षेत्र का नाम	Distance (Meters) from Nearest ARP/निकटतम विमानक्षेत्र संदर्भ बिंदु से दूरी (मीटर मे)	Bearing(Degree) from Nearest ARP/निकटतम विमानक्षेत्र संदर्भ बिंदु से बीयरिंग (डिग्री
Dhalbhumgarh	51643.88	311.08
Jamshedpur	1322.38	27.9
NOCID	JAMS/EAST/B/100923/802160	

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

JAMS/EAST/B/100923/802160

Street View



Satellite View

hiren g. desai

M.E. (Str.) M.I.E., M.I.V.

Consulting Structural Engineer

Govt. Registered Valuer (Reg. No. CAT-1/314/98-99)

Structural Expert / Peer Review Consultant

Repair / Rehabilitation Consultant

NDT Testing

Date: 16th January, 2024.

OUT NO./00006/SMC/EC/2024005.

TO WHOM SO IT MAY CONCERN

This is to certify that I am Registered Structural Designer having Registration no: TDO/ ST. DR-42. The building Situated **at Plot No. 536,537,538,539,540 and 541 in khata N.07, Thana No.1156, Sonari, Jamshedpur, Dist.East-Singhbhum.** is to be designed by me. The building is designed for **Single basement + Ground Floor + 11 storied Residential** high-rise building.

The structural design of the said building will incorporate provisions of relevant codes of practice **[i.e. IS-456, IS-875 part-2, IS-1893, IS-13920]** and it is also consider the capacity of terrace water tanks, nearest water body, maximum wind velocity as per IMD data. Maximum intensity of the earthquake recorded in the past.

All building foundations are designed for soil bearing capacity @ **200 KN/m²** as per soil investigation report given by soil consultant.

Buildings having frame structure with R.C.C. members like footings, beams, columns and slab using steel grade **Fe 500** and concrete mix design **M-30 / M-35.**

Building frame is designed as per provisions of earthquake resistant structure for zone-III.

Er. Hiren G. Desai
(Consulting Structural Engineer)

HIREN G. DESAI M.E. (Str.)
Consulting Structural Engineer
& Govt. Approved Valuer
305, Indraprastha Apt., Opp. Sub Jail,
Ring Road, SURAT-2. Phone No. 2357021
SMC Lic. No.: TDO/ST.DR/42 | SUDA Lic. No.: SUDA-L-STR-27
STR. EXP. : TDO-STEX-16
Govt. Regd. Valuer Lic. No.: CAT-1/314/98-99
Chartered Engineer Lic. No.: M061082-2

SAI CONSULTANTS

305, Indraprasth Apartment, Opp. Subjail, Ring Road, Surat-395002. **Ph : 0261 2357021, 98791 09464, 63546 00480**

• e-mail : saiconsultantsurat@gmail.com • website : www.saiconsultant.net

ROW WATER

SUPERSTRUCTURE LLP

Tata Steel Utilities And Infrastructure Services Limited
Recd. No. 101
Date 31.03.25

Date – 29/03/2025

To,

The General Manager

Water and Waste Water Management

TATA STEEL UISL

Subject: - Requirement of raw water

Letter no. ADLN/056/2024-2025

Dear Sir,

We are coming up with our new project (**AHANA**) located at Khata no. 439, with Khesra No. 54 & 56 at Village-Sonari, P.O.+PS Sonari, (Behind Tribal Culture Center) Jamshedpur, District – East Singhbhum- Jharkhand for which we will be requiring **1500 Kilo Liters of raw water** for construction purpose. The tanker required for the transportation of water will be provided by ADLN SUPERSTRUCTURE LLP.

I request your good self to please approve the same from your end and please let us know the formalities to be done.

Thanking you.

Yours Truly
For ADLN Superstructure LLP

Authorized signatory
7209555664

AHANA™
— LIVING REDEFINED —

ADLN SUPERSTRUCTURE LLP, 3rd Floor, Basant Central Holding No.F,
Mills and Godown Area, Sakchi, Jamshedpur - 831001
Contact: +91 92292 55510 | Email: ahana@adln.in

O/C

SUPERSTRUCTURE LLP

ROW WATER

Tata Steel Utilities Limited
Rcvd. No. 101
Date 31.03.25

Date – 29/03/2025

To,

The General Manager

Water and Waste Water Management

TATA STEEL UISL

Subject: - Requirement of raw water

Letter no. ADLN/056/2024-2025

CASH OFFICE / BILLING
PLEASE ACCEPT Rs. 46,695/- FOR 1500 KL
RAW WATER @ Rs. 31.13
KL AT CUSTOMER OWN TANKER AND THEIR OWN RISK
SERVICE PERIOD FROM 16/04/25 TO 30/05/25
16/04

Dear Sir,

We are coming up with our new project (**AHANA**) located at Khata no. 439, with Khesra No. 54 & 56 at Village-Sonari, P.O.+PS Sonari, (Behind Tribal Culture Center) Jamshedpur, District – East Singhbhum- Jharkhand for which we will be requiring **1500 Kilo Liters of raw water** for construction purpose. The tanker required for the transportation of water will be provided by ADLN SUPERSTRUCTURE LLP.

I request your good self to please approve the same from your end and please let us know the formalities to be done.

Thanking you.

Yours Truly
For ADLN Superstructure LLP

Authorized signatory
7209555664

AHANA™
— LIVING REDEFINED —

ADLN SUPERSTRUCTURE LLP, 3rd Floor, Basant Central Holding No.F,
Mills and Godown Area, Sakchi, Jamshedpur - 831001
Contact: +91 92292 55510 | Email: ahana@adln.in

Water Bill for the Compliance Period:
1st October 2025 to 31st March 2026

TATA STEEL LTD.JAMSHEDPUR

(Regd. Office : Bombay House,24, Homi Modi Street,Fort ,Mumbai-400 001)

MONEY RECEIPT (DUPLICATE)

(FOR TEMPORARY SERVICES)

CONSUMER CLASS: Individual | PAN NO. : | BANK ACC NO.:

BANK NAME : | MICR NO. :

RECEIPT NO. : 6240859 | BP NO. : 0010124826 | RECEIPT DATE : 07/10/2025

RECEIVED Rs . 46695.00 | FROM ahana . . | BY CHEQUE

RUPEES FORTY SIX THOUSANDS SIX HUNDRED NINTY FIVE AND PAISE ONLY

CHEQUE NO. : 002009 | CHEQUE DATE . : 2025-10-06 | CHEQUE AMT : 46695.00

BANK NAME : | VOLTAGE LEVEL : | NO. OF CONNECTION :

ESTB. NO : | TEMP . EST NO. :

LETTER NO. : | LOAD : | LETTER DATE :

SERVICE PERIOD FROM : 07/10/2025 | SERVICE PERIOD TO :15/11/2025

SERVICE EXTENDED UPTO :

PARTY ADDRESS

ahana . .
HNo- aahana project , khesra no 54 & 56 BEHIND TRIBAL CULTURE 831011 JHARKHAND

SITE ADDRESS

khesra no 54 & 56 BEHIND TRIBAL CULTURE SONARI ahana project sonari

REF . NO .	SERVICE TYPE	ADV. AMOUNT
053155	WATER SUPPLY CUST.TANKER	46695.0

TOTAL AMOUNT : 46695.0

FOR G.M TOWN SERVICES:

N.B CHEQUES ARE SUBJECTED TO REALISATION ONLY

WITHOUT PREJUDICE

RECEIVED PAYMENT CASH / CHEQUE

For Divisional Manager Utilities Billing TATA STEEL LTD.

Raw water

TATA STEEL LTD.JAMSHEDPUR

(Regd. Office : Bombay House,24, Homi Modi Street,Fo[illegible]Mumbai-400 001)

MONEY RECEIPT (DUPLICATE)

(FOR TEMPORARY SERVICES)

CONSUMER CLASS: Individual | PAN NO. : | BANK ACC NO.:

BANK NAME : | MICR NO. :

RECEIPT NO. : 6340485 | BP NO. : 0010124826 | RECEIPT DATE : 28/11/2025

RECEIVED Rs . 46695.00 | FROM ahana . . | BY CHEQUE

RUPEES FORTY SIX THOUSANDS SIX HUNDRED NINTY FIVE AND PAISE ONLY

CHEQUE NO. : 002062 | CHEQUE DATE . : 2025-11-28 | CHEQUE AMT : 46695.00

BANK NAME : | VOLTAGE LEVEL : | NO. OF CONNECTION :

ESTB. NO : | TEMP . EST NO. :

LETTER NO. : | LOAD : | LETTER DATE :

SERVICE PERIOD FROM : 28/11/2025 | SERVICE PERIOD TO : 30/12/2025

SERVICE EXTENDED UPTO :

PARTY ADDRESS

ahana . .
HNo- aahana project , khesra no 54 & 56 BEHIND TRIBAL CULTURE 831011 JHARKHAND

SITE ADDRESS

khesra no 54 & 56 BEHIND TRIBAL CULTURE SONARI ahana project sonari

REF . NO .	SERVICE TYPE	ADV. AMOUNT
053864	WATER SUPPLY CUST.TANKER	46695

TOTAL AMOUNT : 46695

FOR G.M TOWN SERVICES:

N.B CHEQUES ARE SUBJECTED TO REALISATION ONLY

WITHOUT PREJUDICE

Row
WATER

RECEIVED PAYMENT
CASH / CHEQUE
For Divisional Manager
Utilities Billing
TATA STEEL LTD

TATA STEEL LTD.JAMSHEDPUR

(Regd. Office : Bombay House,24, Homi Modi Street,Fort ,Mumbai-400 001)

MONEY RECEIPT (DUPLICATE)

(FOR TEMPORARY SERVICES)

CONSUMER CLASS: Individual PAN NO. : BANK ACC NO.:
BANK NAME : MICR NO. :

RECEIPT NO. : 6442212 BP NO. : 0010124826 RECEIPT DATE : 24/01/2026
RECEIVED Rs . 46695.00 FROM ahana . . BY CHEQUE
RUPEES FORTY SIX THOUSANDS SIX HUNDRED NINTY FIVE AND PAISE ONLY
CHEQUE NO. : 002125 CHEQUE DATE . : 2026-01-24 CHEQUE AMT : 46695.00
BANK NAME : VOLTAGE LEVEL : NO. OF CONNECTION :
ESTB. NO : TEMP . EST NO. :
LETTER NO. : LOAD : LETTER DATE :
SERVICE PERIOD FROM : 24/01/2026 SERVICE PERIOD TO :28/02/2026

SERVICE EXTENDED UPTO :

PARTY ADDRESS

ahana . .
HNo- aahana project , khesra no 54 & 56 BEHIND TRIBAL CULTURE 831011 JHARKHAND

SITE ADDRESS

khesra no 54 & 56 BEHIND TRIBAL CULTURE SONARI ahana project sonari

REF . NO .	SERVICE TYPE	ADV. AMOUNT
054348	WATER SUPPLY CUST.TANKER	46695.0

TOTAL AMOUNT : 46695.0

FOR G.M TOWN SERVICES:

N.B CHEQUES ARE SUBJECTED TO REALISATION ONLY

WITHOUT PREJUDICE

RECEIVED PAYMENT
CASH / CHEQUE
For Divisional Manager
Utilities Billing
TATA

TATA STEEL LTD.JAMSHEDPUR

(Regd. Office : Bombay House,24, Homi Modi Street,Fort ,Mumbai-400 001)

MONEY RECEIPT (DUPLICATE)

(FOR TEMPORARY SERVICES)

CONSUMER CLASS: Individual **PAN NO. :** **BANK ACC NO.:**

BANK NAME : **MICR NO. :**

RECEIPT NO. : 6521995 **BP NO. :** 0010124826 **RECEIPT DATE :** 09/03/2026

RECEIVED Rs . 46695.00 **FROM** ahana . . **BY CHEQUE**

RUPEES FORTY SIX THOUSANDS SIX HUNDRED NINTY FIVE AND PAISE ONLY

CHEQUE NO. : 002158 **CHEQUE DATE . :** 2026-03-09 **CHEQUE AMT :** 46695.00

BANK NAME : **VOLTAGE LEVEL :** **NO. OF CONNECTION :**

ESTB. NO : **TEMP . EST NO. :**

LETTER NO. : **LOAD :** **LETTER DATE :**

SERVICE PERIOD FROM : 09/03/2026 **SERVICE PERIOD TO :**31/03/2026

SERVICE EXTENDED UPTO :

PARTY ADDRESS

ahana . .
HNo- aahana project , khesra no 54 & 56 BEHIND TRIBAL CULTURE 831011 JHARKHAND

SITE ADDRESS

khesra no 54 & 56 BEHIND TRIBAL CULTURE SONARI ahana project sonari

REF . NO .	SERVICE TYPE	ADV. AMOUNT
054847	WATER SUPPLY CUST.TANKER	46695

TOTAL AMOUNT : 46695

FOR G.M TOWN SERVICES:

N.B CHEQUES ARE SUBJECTED TO REALISATION ONLY

WITHOUT PREJUDICE

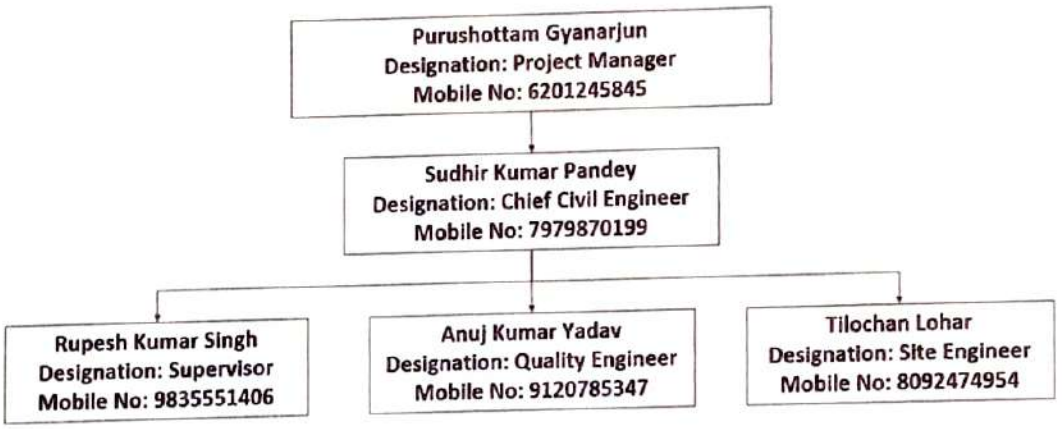
RECEIVED PAYMENT
CASH / CHEQUE
For Divisional Manager
Utilities Billing
TATA STEEL UISL

ADLN
SUPERSTRUCTURE LLP

Environment Management Cell

15/01/2025

Following persons are notified as Environment Management Cell members for the proposed project ***Multistoried Residential Project "AHANA" (B+G+11) over Revenue Khata no. 439 and Khesra no. 54 & 56 at village -Sonari, P.O. Sonari, PS- Sonari, District-East Singhbhum Jharkhand by M/s. ADLN Superstructure LLP***. They will be responsible for the environmental management and compliance both at corporate level and site.



Mr. Lalit Mohan Agarwal

For ADLN SUPERSTRUCTURE LLP

Authorized Partner

Partner

M/s. ADLN Superstructure LLP

AHANA™
— LIVING REDEFINED —

ADLN SUPERSTRUCTURE LLP, 3rd Floor, Basant Central Holding No.F,
Mills and Godown Area, Sakchi, Jamshedpur - 831001
Contact: +91 92292 55510 | Email: ahana@adln.in

M/s. ADLN Superstructure LLP

CARBON FOOTPRINT REPORT

"AHANA" Proposed Multistoried Residential Project [B+G+11] with other Utility over Revenue Khata no. (Old-7), New-439 with Khesra No. (Old-536,537538,539,540&541), New-54&56 at Village-Sonari, P.O. Sonari, District – East Singhbhum- Jharkhand.

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1 Executive Summary

1.1 Introduction

This Carbon Footprint and Sequestration Report aims to assess and quantify carbon emissions associated with construction activities, materials, supply chains, and building lifecycle processes while identifying key emission hotspots for reduction. It also ensures compliance with regulatory standards such as ISO 14064 and the GHG Protocol, while supporting corporate sustainability initiatives such as ESG and CSR. The report covers Scope 1 (direct emissions from on-site fuel combustion and construction equipment), Scope 2 (indirect emissions from purchased electricity and energy use), and Scope 3 (other indirect emissions, including embodied carbon in materials, transportation, and end-of-life impacts).

1.2 GHG Emission Sources

Key sources of emissions in the building construction process include:

- **Energy Use:** Electricity and diesel consumption for machinery, lighting, and temporary site infrastructure.
- **Transportation: Fuel** emissions from the transport of construction materials and equipment to the site.
- **Industrial Processes:** Emissions associated with on-site use of cement, steel, and other construction materials.
- **Combustion:** Fuel burning in construction equipment, generators.
- **Waste Handling:** Emissions from the disposal and treatment of construction and demolition waste, including concrete, metal, and packaging materials.

1.3 Methodology

The following standard methodologies were used to estimate GHG emissions for this building construction project:

1. **GHG Protocol –** For measuring and managing emissions across construction activities.
2. **ISO 14064 –** For standardized GHG quantification and reporting.
3. **Life Cycle Assessment (LCA) –** To assess emissions throughout the building's life cycle.

1.4 Key Findings

The carbon footprint analysis of the building construction project indicates that the majority of emissions arise from Scope 3 activities, primarily driven by supply chain operations and

transportation impacts. Scope 2 emissions follow, largely due to the use of purchased electricity, while Scope 1 emissions contribute the least, stemming from direct on-site fuel combustion and equipment use.

1.5 Reduction Strategies & Initiatives

Reduction Strategies & Initiatives (Point-wise and Explanatory):

1. **Sustainable Procurement and Supplier Engagement**
    - Collaborate with suppliers who have verified sustainability practices and lower-carbon manufacturing methods.
    - Prioritize the use of locally sourced materials to reduce transportation distances and associated emissions.
2. **Transportation Optimization**
    - Optimize logistics by consolidating shipments and using efficient routing systems.
    - Encourage the use of low-emission or electric vehicles for material transport where feasible.
3. **Renewable Energy Integration**
    - Transition the project's electricity supply to renewable sources such as solar power through on-site generation.
    - Install solar panels on-site or purchase renewable energy credits (RECs) to offset conventional electricity usage.
4. **Energy Efficiency Improvements**
    - Implement energy-efficient lighting, HVAC systems, and machinery in temporary site offices and construction zones.
    - Use smart meters and energy management systems to monitor and reduce electricity consumption actively.
5. **Cleaner Fuel Alternatives and Electrification**
    - Switch from diesel or gasoline-powered equipment to electric or hybrid alternatives where possible.
    - Use biofuels or low-sulfur diesel in existing combustion engines to reduce direct emissions.
6. **Maintenance and Operation Optimization**
    - Schedule regular maintenance of construction machinery to ensure peak operational efficiency and reduce unnecessary fuel consumption.

These targeted initiatives aim to significantly reduce the project's carbon footprint while promoting long-term sustainability in construction practices.

1.6 Conclusion & Recommendations

The carbon footprint analysis highlights that Scope 3 emissions from supply chain and transportation dominate the construction project's environmental impact, followed by electricity-related Scope 2 emissions and on-site fuel use under Scope 1. Targeted efforts in these areas can significantly reduce the project's overall emissions.

Recommendations:

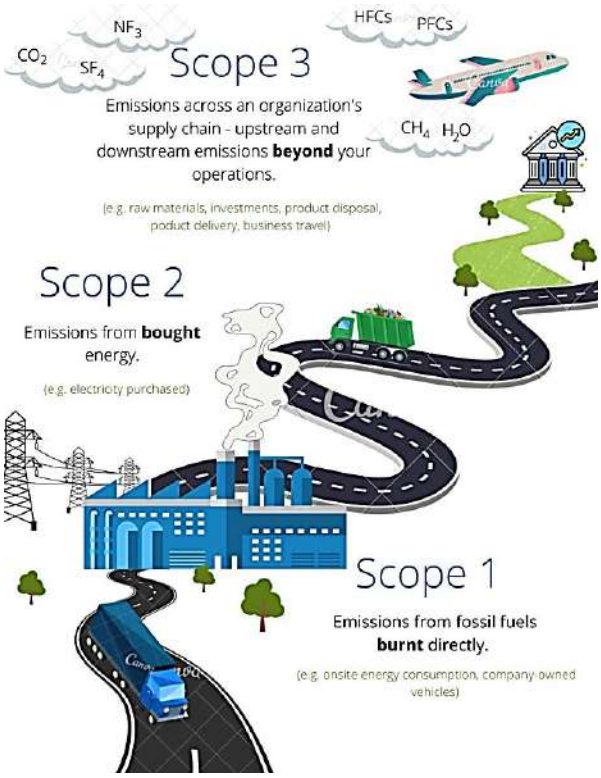
- **Local & Sustainable Procurement:** Use local, recycled materials to cut supply chain emissions by ~160 tons CO_2-eq.
- **On-site Solar Power:** Install up to 1.5 MW solar PV to offset ~234 tons CO_2-eq from electricity use.
- **Green Construction Practices:** Use electric equipment, reduce idling, and train operators to cut ~30 tons CO_2-eq.
- **Expand Renewable Offsets:** Increase solar capacity and explore green PPAs to offset excess emissions.
- **Rainwater Harvesting:** Use existing system (~42.75 m^3/day) to reduce grid-powered water treatment emissions (~50 tons CO_2-eq/year).
- **Tree Plantation & Sequestration:** Plant 1,010+ trees to sequester ~823 tons CO_2-eq; expand to offset an additional 500 tons/year.

2 Context of the Report

2.1 Purpose of the Report

This Carbon Footprint and Sequestration Report has been prepared with following purposes in mind:

- Assess and quantify carbon emissions from operations, supply chain, and specific products.
- Identify emission hotspots to prioritize effective reduction strategies.
- Ensure compliance with regulatory requirements like ISO 14064 and the GHG Protocol.
- Aim to reduce the overall carbon footprint through targeted actions based on the assessment.
- Support corporate sustainability initiatives and fulfill Environmental Clearance (EC) conditions.



2.2 Scope of Emissions

- **Scope 1:** Direct emissions (e.g., fuel used in construction equipment and vehicles).
- **Scope 2:** Indirect emissions from purchased electricity for site operations.
- **Scope 3:** Other indirect emissions, including material production, transportation, employee travel, waste management, and the building's lifecycle impact.

2.3 Methodologies to be used

Over the years various methodologies have developed for carbon footprint calculation and GHG emission estimation. However, for this report, following methodologies have been utilized:

GHG Protocol	ISO 14064	Life Cycle Assessment (LCA)
The most widely used framework for calculating emissions	International standard for carbon footprint verification	Evaluates emissions throughout a product's lifecycle

2.4 Data Sources

Processes and activities as identified by the reporting boundary has been utilized to collect relevant data such as:

- Energy consumption
- Transportation and logistics
- Raw material usage
- Waste generation
- Green Energy Strategies

2.5 Outcomes & Recommendations

1. **Clear Identification of Emission Hotspots**
   The report identifies Scope 1 emissions (especially fuel combustion on-site) as the largest contributor to the carbon footprint, highlighting a major area for intervention.

2. **Holistic Understanding of Emissions**
   Emissions have been quantified across Scope 1, 2, and 3, providing a complete view of the environmental impact—from transportation and supply chain activities to on-site energy use and waste.

3. **Baseline for Future Carbon Reduction**
   The study establishes a baseline for emissions, which can be used to track improvements, set reduction targets, and guide decision-making for future projects.

4. **Strategic Roadmap for Decarbonization**
   The report outlines short-term and long-term strategies to reduce carbon emissions, including the use of green materials, certification processes, and incentive mechanisms.

3 Project Description

"AHANA" Proposed Multistoried Residential Project [B+G+11) with other Utility over Revenue, Khata no. (Old-7), New-439 with Khesra No. (Old-536, 537, 538, 539, 540 & 541), New-54&56 at Village-Sonari, P.O. Sonari, District – East Singhbhum- Jharkhand by M/s. ADLN Superstructure LLP.

The height of the proposed B+G+11 Floors as per plan shall be 41.73 meters excluding the height of the ceiling of the basement roof above the natural ground level.

TABLE 3.1- PROJECT AT A GLANCE

<table>
<tr><th>Item</th><th>Details</th></tr>
<tr><td>Total Built-Up Area</td><td>30572.39 m²</td></tr>
<tr><td>GPS Corner Coordinates</td><td>
<table>
<tr><th>Latitude</th><th>Longitude</th></tr>
<tr><td>22°49'30.51"N</td><td>86°10'29.93"E</td></tr>
<tr><td>22°49'32.23"N</td><td>86°10'31.17"E</td></tr>
<tr><td>22°49'32.51"N</td><td>86°10'31.36"E</td></tr>
<tr><td>22°49'31.85"N</td><td>86°10'31.96"E</td></tr>
<tr><td>22°49'32.51"N</td><td>86°10'32.61"E</td></tr>
<tr><td>86°10'33.22"E</td><td>86°10'33.22"E</td></tr>
<tr><td>22°49'32.07"N</td><td>86°10'34.06"E</td></tr>
<tr><td>22°49'30.28"N</td><td>86°10'34.11"E</td></tr>
<tr><td>22°49'31.13"N</td><td>86°10'34.65"E</td></tr>
<tr><td>22°49'32.11"N</td><td>86°10'35.11"E</td></tr>
<tr><td>22°49'31.68"N</td><td>86°10'35.31"E</td></tr>
<tr><td>22°49'30.77"N</td><td>86°10'37.01"E</td></tr>
<tr><td>22°49'31.41"N</td><td>86°10'37.06"E</td></tr>
</table>
</td></tr>
<tr><td>Number of Towers</td><td>4 towers, each of B+G+11 floors</td></tr>
<tr><td>Plot Area</td><td>7169.57 m² or 1.771 Ac or 0.717 Ha</td></tr>
<tr><td>Proposed Ground Coverage</td><td>1731.46 sqm (24.15 % of the plot area)</td></tr>
<tr><td>Green belt/Plantation Area</td><td>1482.82 sqm (20.68 % of the plot area)</td></tr>
<tr><td>Internal Road & Paved Area</td><td>1676.84 sqm (23.39 % of the plot area)</td></tr>
</table>

<table>
<tr><th>Item</th><th colspan="2">Details</th></tr>
<tr><td>Other services</td><td colspan="2">2278.75 sqm (31.78% of the plot area)</td></tr>
<tr><td>Total Built Up Area</td><td colspan="2">30572.39 sqm</td></tr>
<tr><td>F.A.R</td><td colspan="2">Proposed: 2.98 (permissible: 3.00)</td></tr>
<tr><td>Maximum height of building</td><td colspan="2">41.73 m</td></tr>
<tr><td>Total no. of Dwelling Units</td><td colspan="2">Total: 88
(Residential flats: 3BHK-44 no. & 4BHK-44 Units)</td></tr>
<tr><td>No. of Floors</td><td colspan="2">Basement, Ground Floor and 11 Floors</td></tr>
<tr><td>Population</td><td>Total No. of Occupancy: 572</td><td>Floating Population: 57</td></tr>
<tr><td>Municipal Solid Waste</td><td colspan="2">For construction work – 80-90 kg/day
Total Waste =266 Kg/day (~ 0.266 T/day)
Bio-Degradable = 106 Kg/day or say 0.106 T/day
Non-Biodegradable= 160 Kg/day or say 0.160 T/day</td></tr>
<tr><td>Parking</td><td colspan="2">Total 289 ECS (Equivalent Car Space) provided for residential area and visitors.
Total no. of parking provided for Two-wheeler are 990.
<table>
<tr><th rowspan="2">Vehicle Type</th><th colspan="2">Required</th><th colspan="2">Proposed</th></tr>
<tr><th>No.</th><th>Area in m²</th><th>No.</th><th>Area in m²</th></tr>
<tr><td>Car parking for residential</td><td>132</td><td>1650.0</td><td>268</td><td>3347.74</td></tr>
<tr><td>Car parking for Visitors</td><td>14</td><td>175.0</td><td>21</td><td>266.0</td></tr>
<tr><td>Two-Wheeler - Residential</td><td>88</td><td>176.0</td><td>857</td><td>1714.3</td></tr>
<tr><td>Two-Wheeler - Visitors</td><td>9</td><td>18.0</td><td>133</td><td>266.0</td></tr>
<tr><td>Total Parking</td><td>Cars – 146 Two-wheelers – 97</td><td>2019.0</td><td>Cars – 289 Two-wheelers – 990</td><td>5594.04</td></tr>
</table></td></tr>
<tr><td>Power Requirement</td><td colspan="2">Total Power Required: 781 KW. Connected Load – 1 MVA
The power shall be sourced from TATA Steel Utilities and Infrastructure Services Limited (TSUISL).
DG Set: 03 no. of DG sets 2x250 KVA + 1x100 KVA</td></tr>
</table>

Item	Details
	Total Solar Power/Lighting 80 KW (10% of electricity consumption)
Water Requirement	During constructional phase - 10 KLD (source: JNAC/Authorized private tankers) During operational phase – Fresh water 52 KLD (Source: TSUISL – Application made vide application dated 18/01/2024) Total Water requirement – 90 KLD (fresh water 52 KLD + Flushing 26 KLD + Washing, Plantation, Cooling/discharge etc. – 22 KLD).
Sewage Generation & Treatment	Total Wastewater Generation - 73 KLD Wastewater treated in a STP having capacity - 100 KLD (MBBR Technology) Treated Water recovered – 62 KLD Treated Wastewater will be recycled/re-used (Greenbelt Development - 10 KLD + Flushing 26 KLD + Road and vehicle Washing - 12 and HVAC cooling / Discharge to Nearest Drain - 14 KLD) During rainy season 24 KLD of treated wastewater will be discharge to nearest Drain /Public sewer as per CPCB Standards.
RWH Pits	2 Nos of RWH Recharge pits
Total Project Cost	Rs. 98.18 Crores.
EMP Cost (Construction Phase)	Capital Cost: Rs. 39.60 Lakhs Recurring Cost: Rs. 4.80 Lakhs
EMP Cost (Operational Phase)	Capital Cost: Rs.94.05 Lakhs Recurring Cost: Rs. 12.00 Lakhs

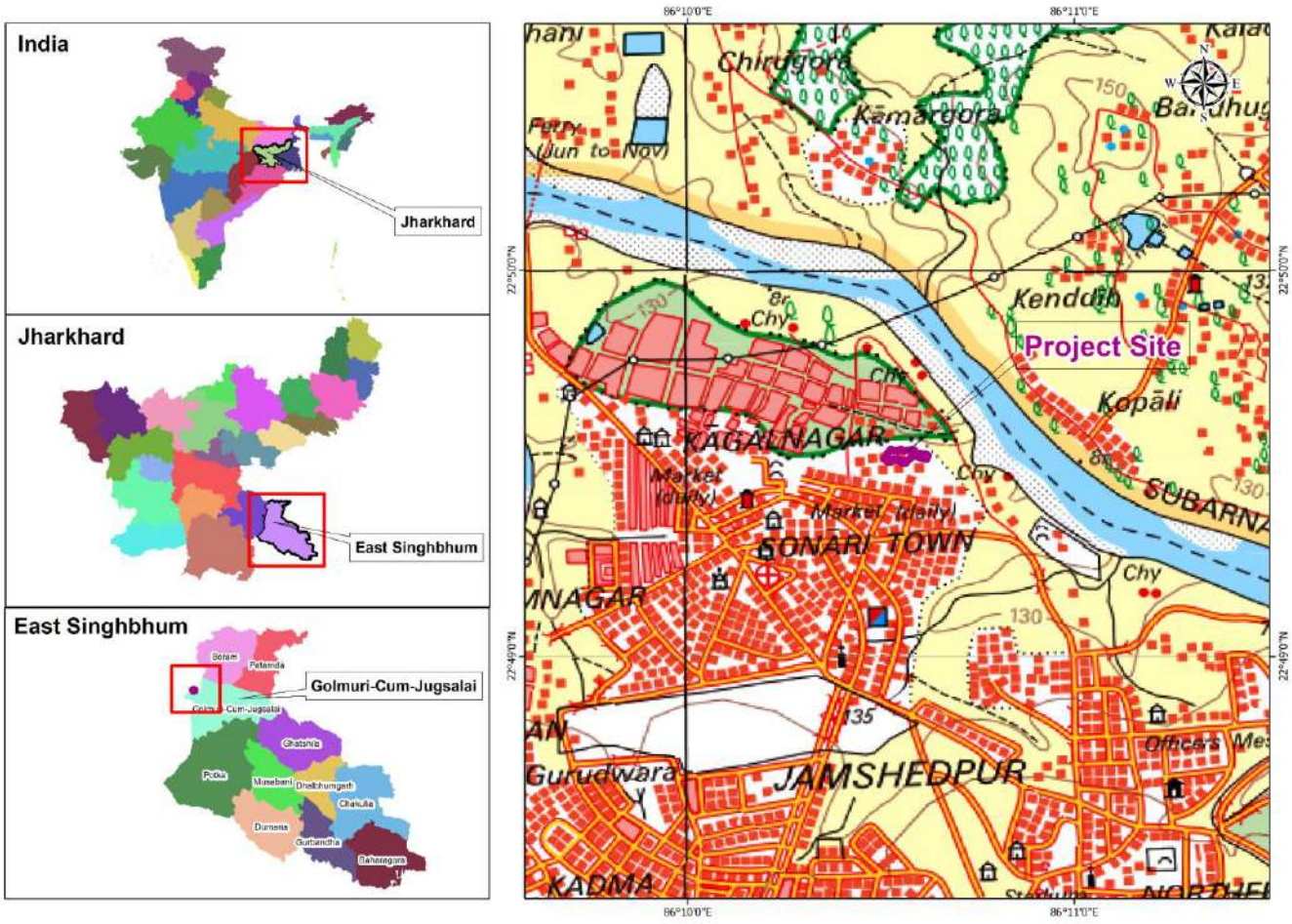


FIGURE 3.1- MAP SHOWING THE LOCATION OF THE PROJECT SITE

3.1 Site Description & Characterization

TABLE 3.2- LAND DETAILS

S. No	Description	Total area (in sq. m)	% of total area
1	Ground coverage area	1731.46	24.15
2	Internal Road and paved area	1676.84	23.39
3	Green belt area	1482.82	20.68
4	Open space & Amenities	1833.75	25.58
5	Other open parking	445.00	06.20
	TOTAL	7169.57	100.00

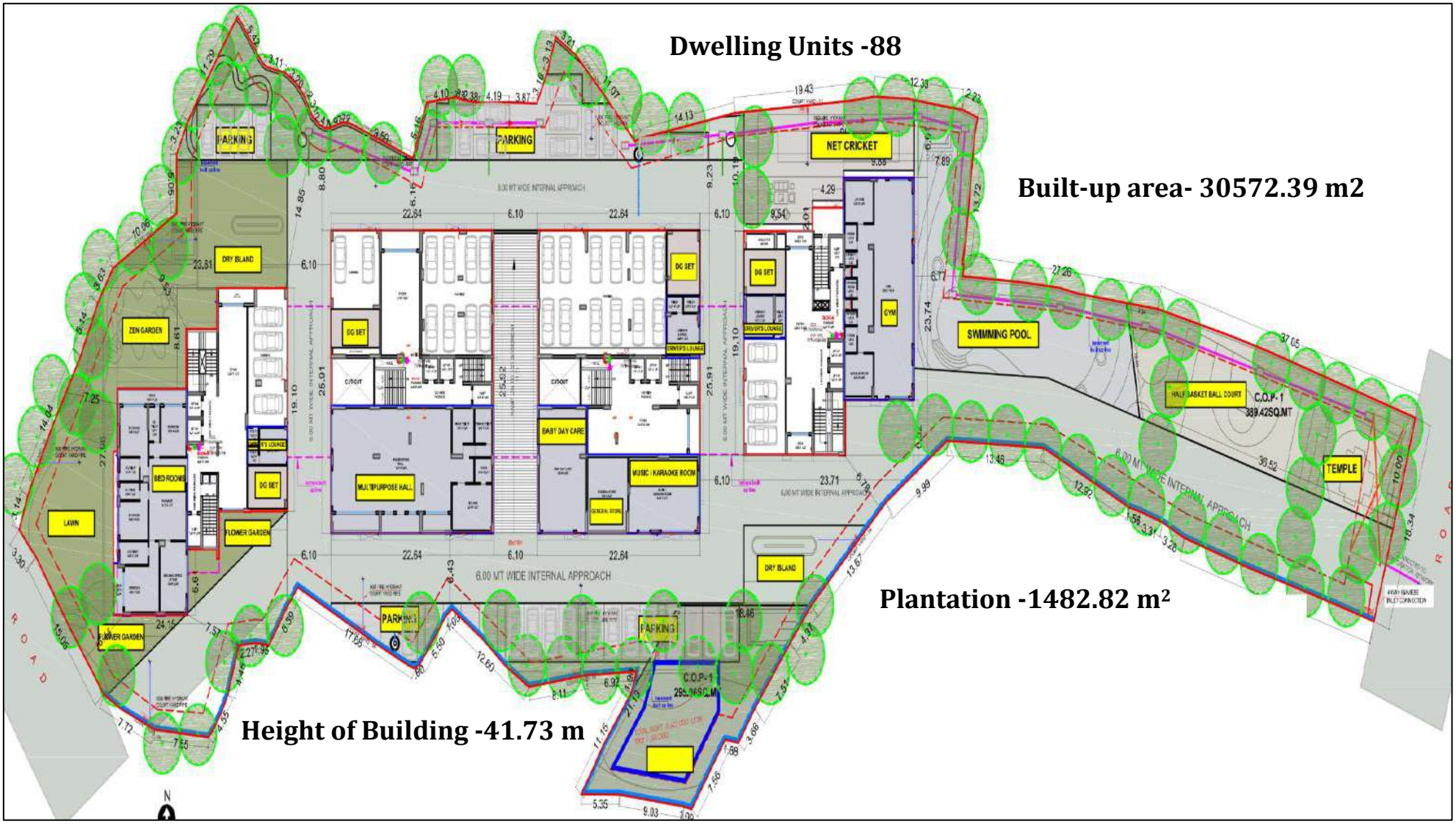


FIGURE 3.2- MASTER LAYOUT PLAN

3.2 Project Size and Complexity

TABLE 3.3- DETAILS OF BUILDING BLOCK

Building block	No. of floors	No. of flats
Tower 1	B+G+11	22
Tower 2	B+G+11	22
Tower 3	B+G+11	22
Tower 4	B+G+11	22
Total		88

TABLE 3.4- DETAILS OF POPULATION

S. No.	Description	Type of flats	Number of flats	Total Population
1	Tower A	3 BHK	22	132
2	Tower B	4 BHK	22	154
3	Tower C	4 BHK	22	154
4	Tower D	3 BHK	22	132
5	Floating population@ 10 %total population			57
	Total			**629**

3.3 Raw Material Quantity & Sources

TABLE 3.5- RAW MATERIAL QUANTITY & SOURCE

Item	Quantity	Source
Fly ash Bricks	10092432 in no.	Local supplier
Sand	22039.35CuM	
Stone chips	1146867.3 cft	
Cement	8468.01MT	
MS Rod	8468.01MT	
Aggregate	23571 MT	
Filling Material	20489.23	

3.4 Manpower Requirement

During the construction phase, a workforce of approximately 115 personnel will be required to ensure smooth and timely execution of activities.

4 Greenhouse Gas Emission Inventory

4.1 Required Information

4.1.1 Facilities, Operations and/or Emissions sources

Facilities	Considered	Omitted
Refrigerator		√
Ventilation & Air Conditioner	√	√
Fuel Handling System	√	
Water System	√	
Compressed Air System		√
Fire Protection System	√	
Powerhouse EOT Crane and hoisting equipment	√	
Electrical System	√	

4.1.2 Reporting period covered by this inventory

The reporting period will commence from the official start date of construction activities on the project site.

4.1.3 Organizational Boundaries

Organisational boundaries are essential for complex building construction projects to ensure consistency in measuring greenhouse gas (GHG) emissions across all phases and parties involved in the project. This is aligned with the concept of a consolidation approach.

When selecting an approach for consolidating GHG emissions in construction projects, it is crucial to consistently define which contractors, subcontractors, and operations are considered part of the project entity. This ensures a complete and accurate representation of the project's carbon footprint.

Consolidation approach options for a construction project include reviewing factors such as:

- Financial Control – assessed based on which party holds financial authority over the construction activities. This could be aligned with accounting practices or determined by who holds operational control over construction processes such as material procurement, site management, and subcontractor coordination.
- Equity Share – where emissions are attributed based on the ownership stake each party holds in the construction project. The emissions are then allocated proportionally to each stakeholder according to their level of investment or share in the project

If there are joint owners, a consistent consolidation approach is applied to avoid over or under calculating emissions, with consideration to the relevant financial reporting principles.

Approach	Defined by	GHG Accounting in Construction Project
Control based	Financial control	**Entity that directs the** financial policies **of the construction project to gain economic benefits.** • **If the entity has financial control:** 100% of emissions **are accounted for.** • **If no financial control:** 0%. • **allocated If joint financial control:** emissions are based on percentage of ownership.
	Operational Control	**Entity that has** authority to introduce and implement operational policies **on the construction site (e.g., site management, procurement, health & safety).** • **If the entity has operational control:** 100% of emissions are accounted for. • **If no operational control:** 0%.
Equity Share	Percentage Ownership	Emissions are attributed based on the **equity stake** or share of ownership in the construction project. • GHG emissions are reported **in proportion to the % ownership.**

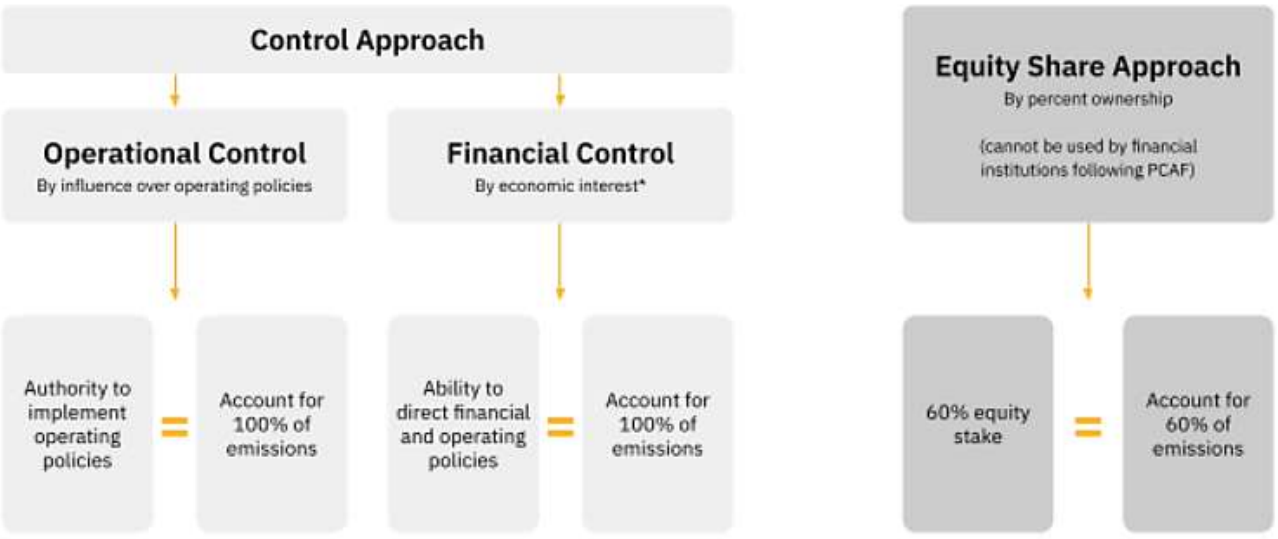


FIGURE 4.1- ORGANIZATIONAL BOUNDARIES

There is no one right (or wrong) approach, and consideration needs to be given to several aspects including:

- Commercial reality
- Influence over emissions
- Program or regulatory requirements
- Liability and risk management
- Financial accounting
- Management information and performance
- Administrative costs and data access, and
- Completeness of reporting.

For this report, we have considered **"Control Approach"** including Operational and Financial Control of the project.

4.1.4 Setting the operational boundary

Setting up operational boundary requires identification of direct and indirect emissions and further by **"Scopes".** This includes determining the emissions sources to include, and their categorisations:

greenhouse gas (GHG) emissions are classified based on their source and the level of control the project entity has over them:

- **Direct Emissions (Scope 1)**
  These are emissions from sources that are **owned or directly controlled** by the construction company or project developer.
  ➤ For example include emissions from construction machinery and equipment, on-**site fuel combustion,** and **vehicles owned** or operated by the company.

- **Indirect Emissions**
  These are emissions that result from the project's activities but occur at sources owned or **controlled by another party**. Indirect emissions are further categorized into:
  - **Scope 2 –** Indirect emissions from the **generation of purchased electricity**, heating, cooling, or steam used on the construction site.
  - **Scope 3 –** All other indirect emissions that are not included in Scope 2. These include emissions across the **construction value chain**, such as:
    ➤ **Upstream:** Emissions from the production and transportation of **construction materials** (e.g., cement, steel, glass), subcontractor activities, and employee commuting.

➤ **Downstream:** Emissions related to the use and maintenance of the completed **building, waste disposal, and demolition** at the end of the building's life cycle.

4.2 Methodology

There are several approaches to estimating a company's carbon footprint. In this case, we have chosen the hybrid and average-data methods. The estimation process follows four key general steps:

1. Selection of the greenhouse gases
2. Setting the boundaries of the study
3. Collection of the necessary data
4. Translation of data into carbon footprint

4.2.1 Calculation of GHG Inventories

$$\boldsymbol{GHG = A\ x\ EF}$$

Where,

GHG = Emissions (e.g., amount of CO_2 or CH_4, etc.)

A = Activity data (e.g., liters of fuel burnt, kg of cement manufactured)

EF = Emission Factor (e.g., kg CO_2 /liter of fuel burnt, kgCO_2/kg)

4.3 Information on Emissions

4.3.1 Scope-1 Emission

TABLE 4.1- EMISSION FROM FUEL CONSUMPTION AFTER PROJECT IMPLEMENTATION

Sl. No.	Fuel Type	Description	CO_2 Emissions	CH_4 Emissions	N_2O Emissions	Units
1	Diesel for Genset	DG Set	2.64	0.15	0.21	Tons CO_2-eq./year
2	LPG	Domestic	44.06	0.34	0.47	
Total			**46.7**	**0.49**	**0.59**	

4.3.2 Scope-2 Emission

TABLE 4.2- EMISSION FROM ELECTRICITY CONSUMPTION FROM GRID AFTER PROJECT IMPLEMENTATION

Sl. No.	Source	Grid	CO_2 Emissions	CH_4 Emissions	N_2O Emissions	Units
1	Electricity Purchased from Grid	India Average	233.75	0.017	0.0027	Tons CO_2-eq./year

4.3.3 Scope-3 Emission

TABLE 4.3- EMISSION FROM WATER CONSUMPTION DURING CONSTRUCTION TIME

Sl. No.	Source	CO_2 Emission	Units
1	Water Consumption	2.58	Tons CO_2-eq./year

TABLE 4.4- EMISSION FROM WATER CONSUMPTION AFTER PROJECT IMPLEMENTATION

Sl. No.	Source	CO_2 Emission	Units
1	Water Consumption	13.42	Tons CO_2-eq./year

TABLE 4.5- EMISSION FROM WASTE AFTER PROJECT IMPLEMENTATION

Sl. No.	Sources	CO_2 Emissions	CH_4 Emissions	N_2O Emissions	Units
1	Solid Waste	80.72	0.0183	0.001128	Tons CO_2-eq./year
2	Biodegradable waste	5.96	0.0014	0.000145	
3	Non-Biodegradable Waste	81.42	0.0234	0.003162	
Total		**168.1**	**0.0431**	**0.004435**	

TABLE 4.6- PASSENGER COMMUTE DURING CONSTRUCTION TIME

S No	Vehicle	CO_2 Emissions	CH_4 Emissions	N_2O Emissions	Units
1	Passenger Car	163.45	0.00468	0.001836	Tons CO_2-eq./year
2	Passenger Motorbike	127.79	0.03083	0.006536	
Total		**291.24**	**0.03551**	**0.008372**	

TABLE 4.7- FREIGHT COMMUTE FOR CONSTRUCTION, PLUMBING & ELECTRIC MATERIAL DURING CONSTRUCTION TIME

Sl. No.	Type of Vehicle	Mode of Data Entry	CO_2 Emissions	CH_4 Emissions	N_2O Emissions	Units
1	Truck for Cement	Distance travelled	28.36	0.0001568	0.0006582	Tons CO_2-eq./year
2	Truck for Sand		18.65	0.0001254	0.0005637	
4	Truck for Aggregate		98.25	0.0001002	0.000301	
5	Truck for Steel Reinforcement		2.16	0.000029	0.000002	
6	Truck for Bricks		17.82	0.0001591	0.000469	
8	Truck for Flooring Tiles		1.25	0.0000147	0.0000472	
9	Paint		0.261	0.0000021	0.0000117	
10	Truck for Plumbing & Electric Material		0.478	0.0000076	0.0000144	
Total			**167.229**	**0.0005949**	**0.0020672**	

4.3.4 Graphical Illustration of Emissions

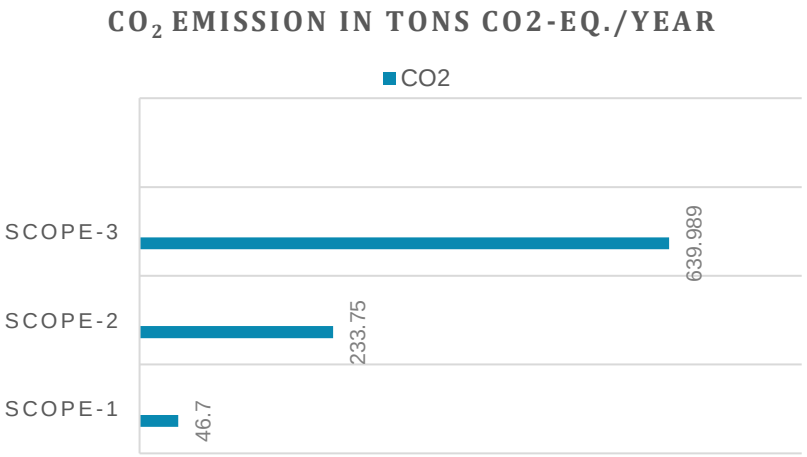


FIGURE 4.3-CO_2 EMISSION IN TONS CO2-EQ./YEAR

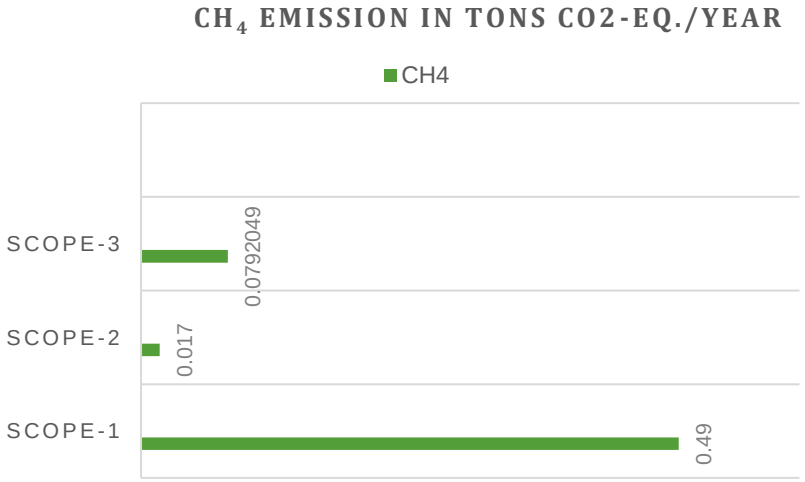


FIGURE 4.2-CH_4 EMISSION IN TONS CO2-EQ./YEAR

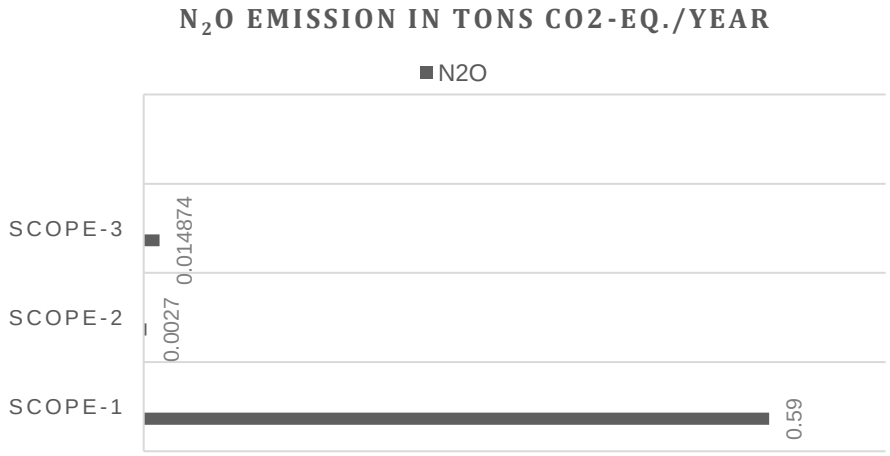


FIGURE 4.4-N_2O EMISSION IN TONS CO2-EQ./YEAR

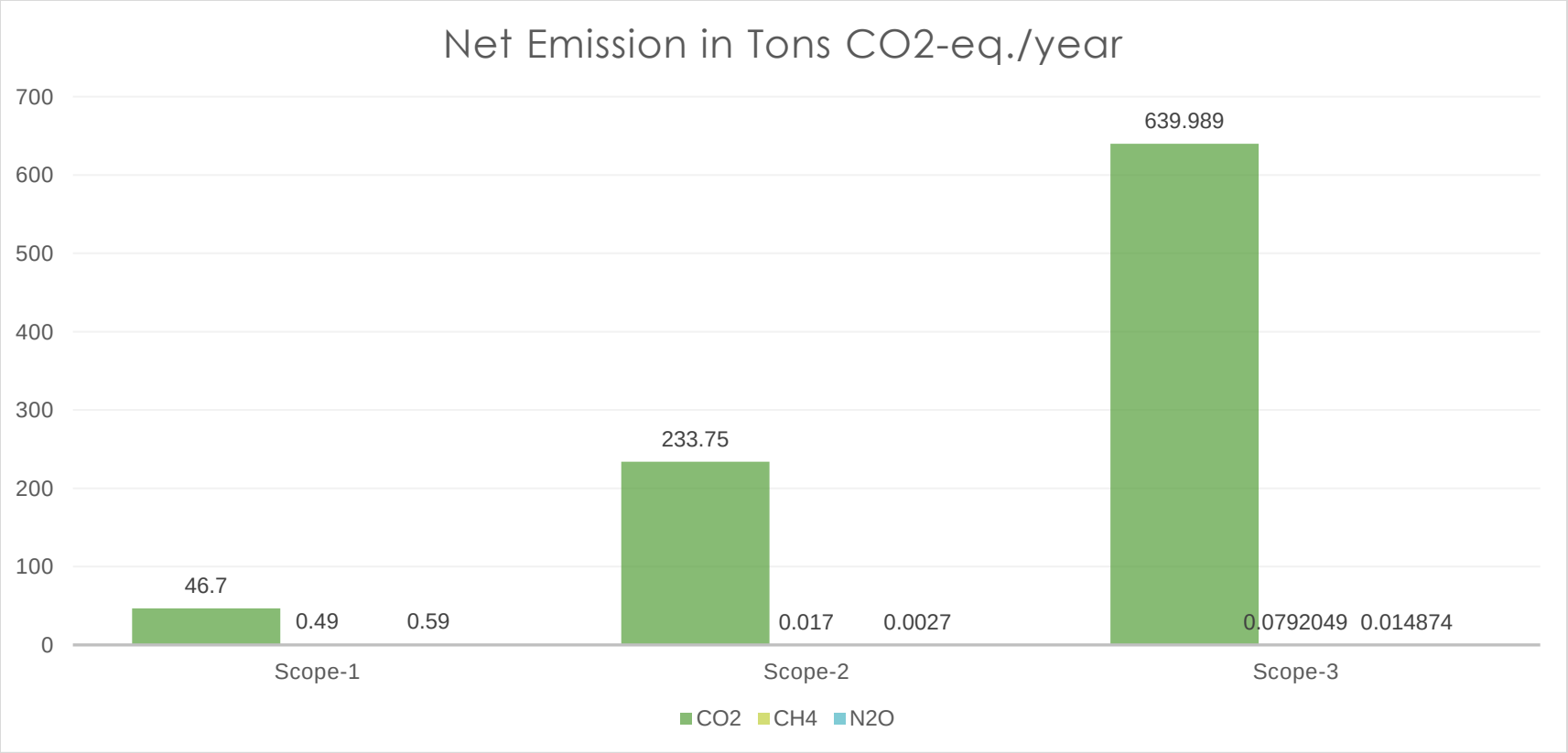


FIGURE 4.5- GRAPHICAL REPRESENTATION OF NET EMISSION IN TONS CO_2-EQ./YEAR

5 Carbon Sequestration

5.1 Biological Carbon Sequestration

Carbon sequestration is the process of transferring carbon dioxide (CO_2) from the atmosphere into stable terrestrial carbon (C) pools.

The process can be driven naturally or anthropogenically. The anthropogenically driven sequestration ensures that there is no net gain in the atmospheric C pool because the CO_2 sequestered comes from the atmosphere. This type of sequestration is reported to fix about 45 Pg C/year.

5.1.1 Terrestrial Sequestration

Trees are among the most effective natural terrestrial sequestration systems because of the massive amounts of CO_2 they capture through photosynthesis. In fact, they have captured nearly 30% of the CO_2 emissions caused by humans over the last several decades.

Instead, there are two directions for human intervention to improve forest tree carbon sequestration:

- planting trees both in previously forested (reforestation) and non-forested (afforestation) areas;
- sustainable management, encompassing practices such as selective logging, timber thinning, and prescribed burning.

5.1.2 Soil Sequestration

Soil carbon originates from CO_2 captured by plants through photosynthesis, forming organic matter that returns to the soil. The carbon fixed by plants—measured as gross primary productivity (GPP)—is partly used for respiration, with the remaining portion termed net primary productivity (NPP), typically 45% of GPP. NPP depends on factors like solar radiation (PAR), leaf area, and light use efficiency. Higher NPP leads to greater carbon transfer into stable soil pools, enhancing long-term carbon sequestration.

5.2 Method of calculating CO_2 Sequestration in Trees

The carbon counting method (Broward County, 2012) estimates a tree's carbon storage based on its physical dimensions and average wood density across species (e.g., hardwoods, shrubs, ornamentals), avoiding species-specific formulas due to density variability.

Steps:

1. Estimate total tree weight using trunk diameter and height.
2. Convert total weight to dry organic matter (~72.5% of total weight).
3. Calculate carbon content as ~50% of the dry weight.
4. CO_2 sequestration is then estimated by converting the carbon amount to its CO_2 equivalent.

5.3 Development of Greenbelt based on Carbon Sequestration Scheme

The following characteristics will be taken into consideration while selecting plant species for green belt development and tree plantation.

- They should be fast growing and tall trees.
- They should be perennial and evergreen.
- They should have a thick canopy cover.
- The planting should be in appropriate alternate rows around the site to prevent lateral pollution dispersion.
- The trees should maintain regional ecological balance and conform to soil and hydrological conditions. Indigenous species should be preferred.

TABLE 5.1- SPECIES RECOMMENDED AS POLLUTION TOLERANT PLANT

S. No.	Type	Common Name	Scientific Name	Family
1.	A2	Acacia-tree	*Acacia auriculiformis*	Fabaceae
2.	A3	Khair	*Acacia catechu*	Fabaceae
3.	A4	Silver wattle	*Acacia dealbata*	Mimoseae
4.	A29	Siris tree	*Acacia lebbeck*	Fabaceae
5.	A44	Neem	*Azadirachta indica*	Meliaceae
6.	B17	Palas	*Butea monosperma*	Fabaceae
7.	C7	Amaltas	*Cassia fistula*	Fabaceae
8.	D1	Shisham	*Dalbergia latifalia*	Fabaceae
9.	D3	Gulmohar	*Delonix regia*	Leguminosae
10.	F3	Rubber Plant	*Ficus elastica*	Moraceae
11.	F9	Pakar	*Ficus virens*	Moraceae
12.	G4	Dikamali	*Gardenia resinifera*	Rubiaceae
13.	H3	China Rose	*Hibiscus rosa-sinensis*	Mallows
14.	L1	Jarul	*Lagerstroemia parviflora*	Lythraceae
15.	M5	Aam	*Mangifera indica*	Anacardiaceae

5.4 Sequestration Results through Trees

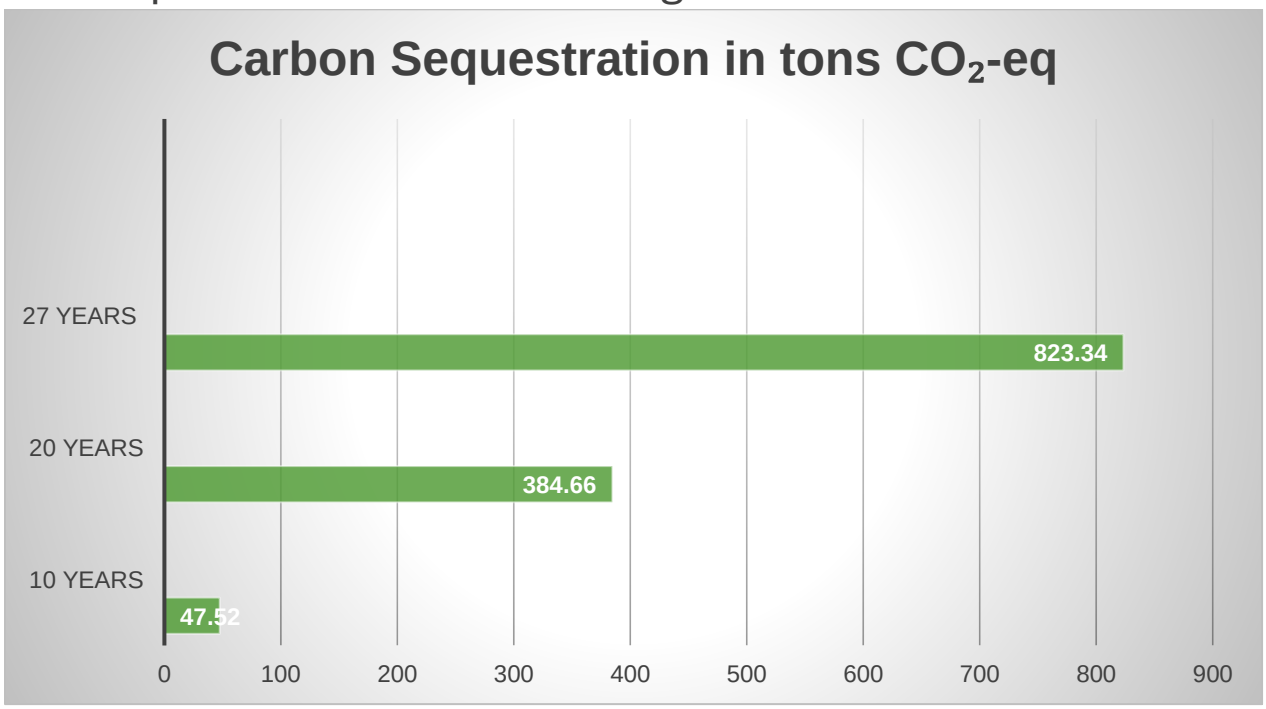
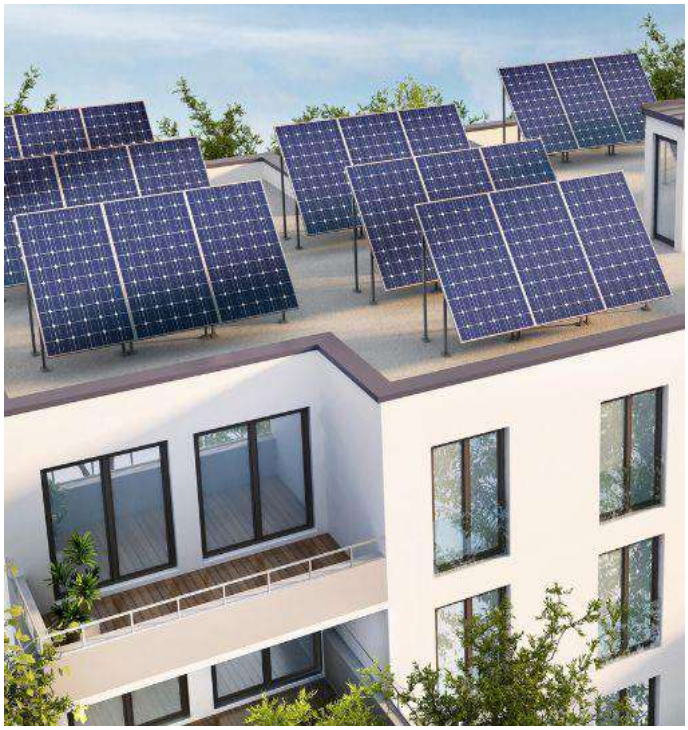


FIGURE 5.1- GRAPHICAL REPRESENTATION OF CARBON SEQUESTRATION THROUGH TREES

6 Carbon Neutrality Strategy

6.1 Renewable Energy Integration – Solar Power Installation

To enhance the project's energy efficiency and reduce reliance on non-renewable energy sources, a solar photovoltaic (PV) system with a capacity to generate 80 kWh/day is proposed. This system will contribute significantly to the building's energy offset, lowering operational carbon footprint and supporting compliance with green building certification criteria (LEED, GRIHA, etc.). The initiative aligns with sustainable design strategies by utilizing clean energy for day-to-day operations.



The solar photovoltaic (PV) system with a solar photovoltaic (PV) system with a capacity to generate 80 kWh to produce approximately 29,200 kWh annually.

TABLE 6.1- SOLAR POWER INSTALLATION

Parameter	Details
System Capacity	Solar PV system generating 80 kWh/day (approximately 29,200 kWh/year)
Estimated Installation Cost	₹14.4–16 lakhs (based on a ~67 kWp system with an approximate cost of ₹50–55 per watt)
Annual Electricity Savings	₹2.04–2.34 lakhs (assuming an electricity tariff of ₹7–8 per unit)
System Lifespan	25+ years with low maintenance requirements
Environmental Impact	Offsets approximately 27–28 tons of CO_2 emissions per year
Certification Alignment	Supports compliance with green building certification standards (e.g., LEED, GRIHA, IGBC).

6.2 Offset with Rainwater Harvesting

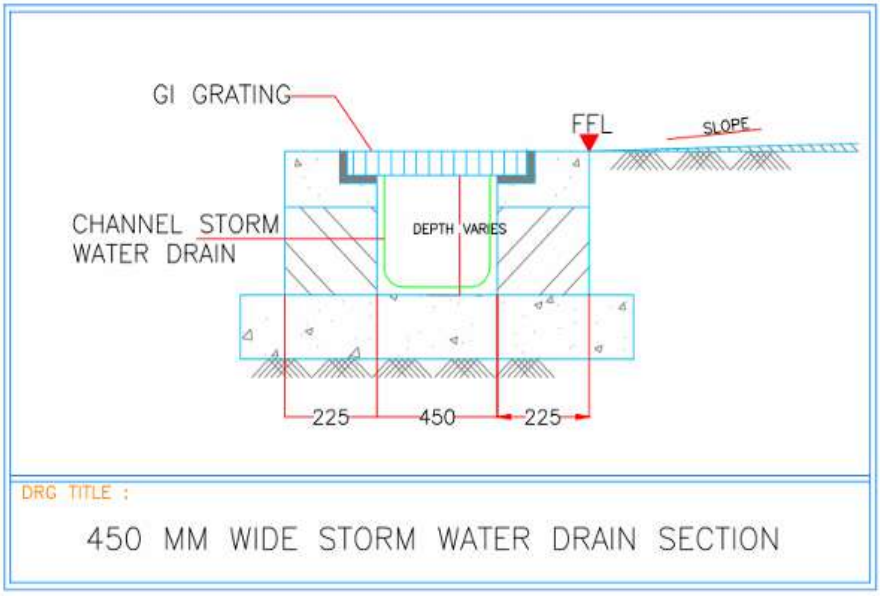
The proposed development at East Singhbhum is estimated to generate approximately 75.19 m^3/day of rainwater runoff post-development, compared to 32.44 m^3/day pre-development — a net increase of 42.75 m^3/day. This additional runoff will be efficiently harvested using a structured rainwater harvesting (RWH) system comprising collection chambers, filtration units, and recharge pits.

FIGURE 6.1-RAINWATER HARVESTING/DRAINAGE PLAN

Integration with Building Services:

The harvested rainwater will be integrated into the building's non-potable water supply system, reducing reliance on municipal water for:

- Landscaping and garden irrigation
- Flushing in toilets
- Cleaning common areas



This integration not only conserves treated water but also supports resilient water infrastructure within the building.

- **Groundwater Recharge:** Reduces over-extraction of groundwater by recharging aquifers.
- **Emission Reduction:** Indirectly reduces **carbon emissions** by lowering energy consumption associated with pumping, treating, and transporting municipal water.
- **Carbon Offset:** By reducing the demand for treated water, the RWH system contributes to the project's **net zero water goal** and can be considered part of the building's **carbon offset strategy** under green certification frameworks like **LEED, GRIHA, or IGBC**. (*Leadership in Energy and Environmental Design, Green Rating for Integrated Habitat Assessment and Indian Green Building Council).

6.3 The 3+30+300 Principle: A Blueprint for Greener, Healthier Cities

The **3+30+300 Principle** - a simple yet powerful framework for building healthier, climate-resilient, and more liveable cities.

Breaking Down 3-30-300 Principle:

- **3 Large Trees**
  Everyone should be able to see at least three large trees from their home, school, or workplace. Research shows that simply looking at greenery reduces stress, improves focus, and enhances well-being.

- **30% Tree Canopy Cover**
  Neighbourhoods should aim for at least 30% tree coverage. More trees mean cooler streets, cleaner air, and better biodiversity. This also helps reduce heat-related deaths-an increasing risk due to climate change.

- **300m to Green Spaces**
  No one should live more than 300 meters away from a park, forest, or accessible green space. Proximity to nature encourages outdoor activities and builds stronger, healthier communities.

The benefits of urban trees and green spaces are profound:

- **Mental health & well-being:** Just seeing trees can reduce stress and improve focus.
- **Social equity: Ensures all communities** - not just the wealthiest - have access to nature.
- **Climate resilience:** Tree canopy helps cool cities and absorb stormwater.
- **Biodiversity:** Supports urban wildlife and ecological balance.

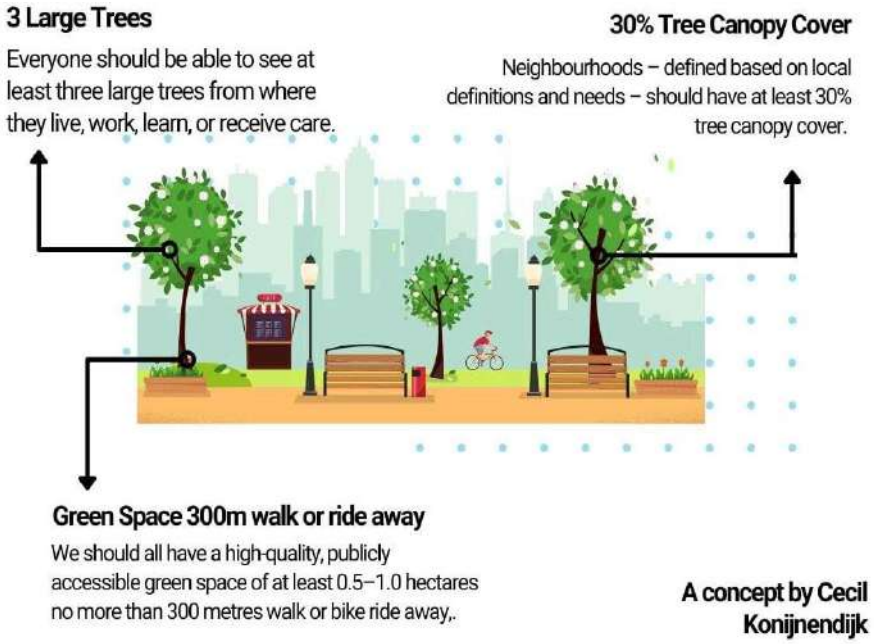


FIGURE 6.2-3-30-300 PRINCIPLE BY UN-HABITAT

7 Conclusion & Recommendations

The comprehensive carbon footprint analysis of the building construction project reveals that the majority of emissions originate from **Scope 3 activities**, totaling **639.989 tons CO_2-eq**, primarily due to supply chain operations and transportation-related impacts. **Scope 2 emissions** account for **233.75 tons CO_2-eq**, largely resulting from the use of purchased electricity. **Scope 1 emissions** contribute **46.7 tons CO_2-eq**, stemming from direct on-site fuel combustion and equipment use.

To counter these emissions and move toward a sustainable development model, several carbon offset and resource optimization initiatives have been integrated into the project. The significant emission reductions can be achieved by focusing on **supply chain optimization (Scope 3)** and **renewable energy integration (Scope 2)** — such as the proposed solar PV system generating 80 kWh/day, which could offset approximately **27–28 tons of CO_2 annually**, directly impacting Scope 2 reductions. Additionally, a robust rainwater harvesting system captures nearly **42.75 m^3 of water per day**, helping to sustainably meet a substantial portion of the building's daily water requirement. Further enhancing the project's environmental impact, **1134 trees planted** throughout the building area contribute **823.34 tons CO_2-eq** to carbon sequestration, supporting long-term ecosystem balance and air quality improvement.

Together, these measures demonstrate a strong commitment to environmental stewardship. The integration of renewable energy, water conservation, and natural sequestration aligns with the broader sustainability vision of M/s. ADLN Superstructure LLP. With continued efforts—such as the adoption of alternative fuels, expansion of green energy solutions, and further enhancement of carbon capture technologies—the project is well-positioned to support the company's goal of achieving complete carbon neutrality by 2050.

7.1 Recommendation for Complete Carbon Neutrality

7.1.1 Reduce Emissions at the Source

a. Optimize Supply Chain and Procurement (Scope 3)

- Prioritize local sourcing of construction materials to minimize transportation-related emissions.
- Shift to recycled or sustainable alternatives (e.g., recycled steel, fly ash cement, low-emission logistics).
- Potential savings: 20–25% of Scope 3 emissions (~130–160 tons CO_2-eq).
- **Target:** Reduce Scope 3 emissions by at least 160 tons CO_2-eq through sustainable procurement strategies.

b. Switch to Renewable Power Sources (Scope 2)

- Implement on-site solar PV systems, beginning with the proposed 80 kWh/day capacity, offsetting ~27–28 tons CO_2-eq/year.
- Expand capacity progressively toward 1 MW+ to achieve deeper Scope 2 reductions.
- **Target:** Offset entire Scope 2 emissions (~234 tons CO_2-eq) with a solar capacity of ~1.3–1.5 MW.
- Co-benefits: Long-term energy cost savings, LEED/IGBC compliance.

c. Green Construction Practices

- Use electric or hybrid construction equipment to reduce diesel consumption.
- Implement anti-idling policies and schedule optimization to reduce fuel use.
- Train workers in fuel-efficient machinery operation and monitor energy use.
- **Target:** Reduce Scope 1 emissions by at least 30 tons CO_2-eq, cutting down ~64% of direct on-site emissions.

7.2 Offset Remaining Emissions

a. Expand Solar Power Use

- Increase on-site solar power to ~1.5 MW to offset up to 1,300–1,500 tons CO_2-eq/year, covering Scope 2 emissions.
- Explore green power purchase agreements (PPA) for further coverage.

b. Rainwater Harvesting and Energy-Water Nexus

- The current system harvests ~42.75 m^3/day, reducing the need for grid-powered pumping and treatment.
- Impact: Offsets minor but meaningful emissions (~50 tons CO_2-eq/year), while improving water sustainability and green certification points.

c. Tree Plantation / Sequestration

- Total 124 tress planted across the building premises and an additional 1,010 trees will be planted, maintaining a 1:10 ratio as per the applicable environmental guidelines, contributing to an estimated **823.34 tons of CO_2-equivalent sequestration**.
- To offset an additional 500 tons/year, plant ~1,000 more trees or support verified reforestation/afforestation projects.

hiren g. desai

M.E. (Str.) M.I.E., M.I.V.

Consulting Structural Engineer

Govt. Registered Valuer (Reg. No. CAT-1/314/98-99)

Structural Expert / Peer Review Consultant

Repair / Rehabilitation Consultant

NDT Testing

Date: 16th January, 2024.

OUT NO./00006/SMC/EC/2024005.

TO WHOM SO IT MAY CONCERN

This is to certify that I am Registered Structural Designer having Registration no: TDO/ ST. DR-42. The building Situated **at Plot No. 536,537,538,539,540 and 541 in khata N.07, Thana No.1156, Sonari, Jamshedpur, Dist.East-Singhbhum.** is to be designed by me. The building is designed for **Single basement + Ground Floor + 11 storied Residential** high-rise building.

The structural design of the said building will incorporate provisions of relevant codes of practice **[i.e. IS-456, IS-875 part-2, IS-1893, IS-13920]** and it is also consider the capacity of terrace water tanks, nearest water body, maximum wind velocity as per IMD data. Maximum intensity of the earthquake recorded in the past.

All building foundations are designed for soil bearing capacity @ **200 KN/m²** as per soil investigation report given by soil consultant.

Buildings having frame structure with R.C.C. members like footings, beams, columns and slab using steel grade **Fe 500** and concrete mix design **M-30 / M-35.**

Building frame is designed as per provisions of earthquake resistant structure for zone-III.

Er. Hiren G. Desai
(Consulting Structural Engineer)

HIREN G. DESAI M.E. (Str.)
Consulting Structural Engineer
& Govt. Approved Valuer
305, Indraprastha Apt., Opp. Sub Jail,
Ring Road, SURAT-2. Phone No. 2357021
SMC Lic. No.: TDO/ST.DR/42 | SUDA Lic. No.: SUDA-L-STR-27
STR. EXP. : TDO-STEX-16
Govt. Regd. Valuer Lic. No.: CAT-1/314/98-99
Chartered Engineer Lic. No.: M061082-2

JHARKHAND STATE POLLUTION CONTROL BOARD

TOWNSHIP ADMINISTRATION BUILDING, HEC COMPLEX, DHURWA, RANCHI 834004
Telephone: 0651-2400850 (Fax)/ 2400851/2400852/2401847/2400979/2400139

Ref No.: JSPCB/HO/RNC/CTE-19406122/2024/407 Dated : 2024-08-22

Consent to Establish (CTE) under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981

1. Reference: Application (s) No.- 19406122 / dated : 07/06/2024 of Ahana by M/s ADLN Superstructure LLP, Lalit Agarwal for consent under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981

2. Documents Relied Upon:

(a) The content of Environmental Clearance (EC) issued by SEIAA, Jharkhand vide memo no. EC/SEIAA/2024-25/3114/2024/98, dated 29.05.2024 at Plot no. 54 & 56, Khata no. 439, At+P.O.-Sonari, Area- 7196.57 m2, Total Built up area- 30572.39 sq. m., Green belt- 1482.82 Sq. m., Maximum height of building- 45.26 meter including stair/lift cabin.

(b) The content of an agreement made in between Smt. Mira Devi Agarwal+ 02 others and ADLN Superstructure LLP for construction and development of the land.

(c) The content of DFO, Jamshedpur vide letter no. 143, dated 12.01.2024 certified that the distance of reserved forest/ protected forest is more than 250 meters from the proposed project site.

(d) The content of DCF, Dalma Elephant Project vide letter no. 80, dated 13.01.2024 certified that the proposed project site is outside the Eco sensitive zone of Dalma Wildlife Sanctuary.

(e) The content of CO, East Singhbhum vide letter no. 1446, dated 28.08.2023 has mentioned that the plot no. of the project is not recorded as "Jangal-Jhari" in RS khatiyan and Register-II .

(f) The content of Self certificate regarding procurement of raw material from valid sources.

(g) The content of NOC for height clearance issued by Airport Authority of India Limited vide NOC ID-JAMS/EAST/B/100923/802160, dated 07.11.2023.

(h) The content of Fire advisory issued by Fire Department, Ranchi, Jharkhand vide memo no. 1219/Tech/2024, dated 18.02.2024.

(i) The content of Declaration regarding STP for construction of MBBR bases STP of capacity 100 KLD.

(j) The content of an application for approval of Building plan vide application no. JNAC/GH/0051/W1/2024

3. The consent is granted under section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 to establish the project in Mauza- Sonari ward no 1 jsr, P S -Ghatsila, District-EAST SINGHBUM as follows:

Project	Site-Area	Investment (Rs)/ Year	Product & Capacity	Period of CTE

	Plot Nos.	Area			
Before Expansion	54 & 56, Khata no. 439, At+P.O.- Sonari,	Area- 7196.57 m2, Total Built up area- 30572.39 sq. m.,	98.18 Crores (as per EC)	Multistoried Residential Project With Utility(B+G+11)- 04 Towers, Residental Flats -[3 BHK - 44 Flats + 4 BHK -44 Flats]	As per EC

(A) Specific Conditions:

1. That, the occupier shall construct pucca internal road or pave the approach road so as to avoid generation of dust particles due to vehicular movement and shall be so designed to ensure free movement of vehicles and other machinery.

2. That, the occupier shall ensure that, construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust/ wind breaking walls all around the site (at least 3 meter height).

3. That, the occupier shall ensure that, plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murram and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.

4. That, the occupier shall ensure that, all construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. And all demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.

5. That, the occupier shall ensure that, use of environment friendly materials such as Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, compressed earth blocks shall be used for at least 20% of the construction material quantity.

6. That, the occupier shall ensure that, wet jet shall be provided for grinding and stone cutting.

7. That, the occupier shall ensure that, unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.

8. That, the occupier shall ensure that, at least 20% of the open spaces as required by the local building bye laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would

be considered as pervious surface.

9. That, the occupier shall ensure that,adequate provision shall be made to cater the parking needs. Parking spaces standards as given in "Manual on Norms and Standards for Environmental Clearance of Large Construction Projects" issued by Ministry of Environment and Forests, Government of India shall be adopted.

10. That, the occupier shall ensure that,water body falling within premises (if any) shall not be lined or no embankment shall be cemented and shall be kept in natural conditions without disturbing the ecological habitat.

11. That, the occupier shall ensure that, water during construction phase should be preferred from Municipal supply.

12. That, the occupier shall ensure that, accumulation/stagnation of water shall be avoided ensuring vector control.

13. That, the occupier shall ensure that, the natural drain system should be maintained for ensuring unrestricted flow of water.

14. That, the occupier shall ensure that, total fresh water use shall not exceed the proposed requirement as provided in the project details.

15. That, the occupier shall ensure that, installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.

16. That, the occupier shall ensure that, use of water saving devices/ fixtures (viz. low flow flushing systems: use of low flow faucets tap acrators etc) for water conservation shall be incorporated in the building plan.

17. That, the occupier shall ensure that, water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred

18. That, the occupier shall ensure that, rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.

19. That, the occupier shall ensure that, the ground water shall not be withdrawn without approval from the Competent Authority.

20. That, the occupier shall ensure that, no ground water shall be used during construction phase of the project.

21. That, the occupier shall install STP and ensure that sewage shall be treated in the STP with tertiary

treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.

22. That, the occupier shall ensure that, acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution and conform to rules made under the Environment (Protection) Act, 1986. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

23. That, the occupier shall ensure thatfor indoor air quality the ventilation provisions as per National Building Code of India.

24. That, the occupier shall ensure thatthe provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, and the Plastics Waste Management Rules, 2016, shall be followed.

25. That, the occupier shall ensure that separate bins for dry and wet solid waste must be provided in each unit for facilitating segregation of waste.

26. That, the occupier shall install organic waste compost/ Vermiculture pit/ Organic Waste Converter within the premises with a minimum capacity of 0.3 kg /person/day.

27. That, the occupier shall ensure that,all non-biodegradable waste shall be handed over to authorized recyclers for which a written tie up must be done with the authorized recyclers.

28. That, the occupier shall ensure thatany hazardous waste generated during construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.

29. That, the occupier shall ensure that, used CFLs and TFLs should be properly collected and disposed off/sent for recycling to authorized TSDFs to avoid mercury contamination.

30. That, the occupier shall ensure that, minimum of one tree for every 80 sqm of land should be planted and maintained.

31. That, the occupier shall submit ambient, noise and effluent analysis report to the Board before and after commissioning of the institution.

32. That, the occupier shall ensure that, all the conditions of Environmental Clearance shall be complied.

33. That, the occupier shall ensure that, no further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).

34. That, the occupier shall comply all the conditions of CTE and shall submit its report to the Board at the time of application made for CTO.

35. That, the occupier shall obtain NOC for structural safety of buildings due to earthquakes, adequacy of firefighting equipment etc. as per National Building Code including protection measures from lightening etc.

36. That, the occupier shall obtain all statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable, by project proponents from the respective competent authorities.

(B) General Conditions :

(1) That, the occupier shall construct pucca (i) minimum ten feet high boundary wall and (ii) approach road and internal roads and shall keep the premises neat and clean and tidy.

(2) That, the occupier shall install comprehensive enclosure (s) to cover the places of unloading of raw materials, the equipments of their processing & transferring, the places of loading of products, by products and wastes for prevention of fugitive emission and shall install such automatic inbuilt system(s) that in house dust/ gases collect(s) and undergo (es) cleaning and clean air goes out.

(3) That, the occupier shall install such automatic inbuilt system(s) that process flue gas(es) / process gas(es) and undergo(es) cleaning and clean air go(es) out through the chimney(s), having height(s) as per Central Pollution Control Board norm.

(4) That, the occupier shall have D G Set(s) of the standard as laid in the Environment (protection) Rules, 1986 and shall install it (them) within acoustic enclosure (s) and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm .

(5) That, the occupier shall impart treatment as per Central Pollution Control Board text to wastewater and shall keep process effluent in close-circuit and effluent from other sources in conformity with the standard (s).

(6) That, the occupier shall install Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge.

(7) That, the occupier shall create new water body (ies) / remove deposit(s) of existing water body(ies) and nearby stream(s) and pond(s) and shall maintain the wholesomeness of water.

(8) That, the occupier shall grow greenery in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.

(9) That, this CTE is valid subjected to the validity of mining Lease / Mining Plan / Ecofriendly / Environmental Clearance, if applicable. In case of no renewal of Mining Lease/Mining Plan, this consent shall be treated as revoked automatically.

(10) That, this CTE is issued from the environmental angle only and does not absolve the occupier from other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility to comply with these conditions laid down in all other laws for the time being in force, rests with the industry/ unit/ occupier.

(11) That, this CTE shall not in any way, adversely affect or jeopardize the legal proceeding , if any, instituted in the past or that could be , instituted against you by the State Board for violation of the provisions of the Act or the Rules made there under.

(12) That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules there under.

4. That, this CTE shall not absolve the occupier from making compliance of other statutory prescribed under any law or direction of courts or any other instrument for the time being in force.

5. That, this CTE is being issued on the basis of information/ documents/ certificate submitted by the unit. This CTE will be revoked if any of the information/ documents/ certificates/ undertaking given by the occupier is found false/fictitious/forged in future.

6. This order shall be valid subject to compliance of all other legal requirements applicable to the unit.

7. The State Board reserves the right to revoke, withdraw or make any reasonable variation / change / alteration in condition of this consent.

This is issued with the approval of the competent authority

Sanjay Kumar Srivastava
Digitally signed by Sanjay Kumar Srivastava
Date: 2024.08.22 13:46:34 +05'30'

[Sanjay Kumar Srivastava]
Officer on Special Duty

Memo No. : JSPCB/HO/RNC/CTE-19406122/2024/407

Dated : 2024-08-22

Copy to : Ahana by M/s ADLN Superstructure LLP, At+P.O.-Sonari, Jamshedpur, East Singhbhum, Jharkhand/ Deputy Commissioner, East Singhbhum/ DFO, East Singhbhum/ Regional Officer, Regional Office, Jamshedpur for information & necessary action.

Sanjay Kumar Srivastava
Digitally signed by Sanjay Kumar Srivastava
Date: 2024.08.22 13:46:11 +05'30'

[Sanjay Kumar Srivastava]
Officer on Special Duty

ADLN SUPERSTRUCTURE LLP

Shop No-6, 1st Floor, Basant Central, Mills & Godown Area, Sakchi, Jamshedpur-831001

To,

The GM
Town Electrical
Tata Steel UISL,
Jamshedpur.

Date: ~~06/12/2023~~ 06/02/2024

Subject:- 1 MVA Power supply in our upcoming New Residential Project at Sonari.

Sir,

We are coming up with our new residential Multi-Storey Building project in Sonari, bearing Plot No - 536, 537, 538, 539, 540 & 541, its Khata No-7, Thana No-1156, Mouza Sonari, Jamshedpur, The land is approx 1.68 Acres..

For this we need huge 1 MVA power supply to smoothly run our above housing project, There for our kind request to please give us assurance to us that, TSUISL will provide us 1 MVA Power Supply in our newly develop project.

Your kind help in this matter is highly appreciated.

An assurance letter is required for the same for grant of EC certificate.

Thanking you

For ADLN Superstructure LLP

Partner

mob - 9334821219
8797781913

OFFICE OF
- 6 FEB 2024
Sl.No. Received
TOWN ELECTRICAL

Power Supply may be given

6/02/2024
Chief Manager
Town Electrical

TATA STEEL LTD.JAMSHEDPUR

(Regd. Office : Bombay House,24, Homi Modi Street,Fort ,Mumbai-400 001)

MONEY RECEIPT (DUPLICATE)

(FOR TEMPORARY SERVICES)

CONSUMER CLASS: Individual PAN NO. : 0000 BANK ACC NO.: 0000

BANK NAME : HDFC BANK LIMITED MICR NO. :

RECEIPT NO. : 5520950 BP NO. : 0010123636 RECEIPT DATE : 11/09/2024

RECEIVED Rs . 811916.00 FROM ADLN SUPERSTRUCTURE LLP . . BY CHEQUE

RUPEES EIGHT LAKH ELEVEN THOUSANDS NINE HUNDRED SIXTEEN AND PAISE ONLY

CHEQUE NO. : 003716 CHEQUE DATE . : 2024-09-11 CHEQUE AMT : 811916.00

BANK NAME : VOLTAGE LEVEL : 0.440 KV NO. OF CONNECTION : 1

ESTB. NO : TEMP . EST NO. :0000

LETTER NO. : LOAD : 20 KW LETTER DATE :

SERVICE PERIOD FROM : 11/09/2024 SERVICE PERIOD TO : 11/09/2025

SERVICE EXTENDED UPTO :

PARTY ADDRESS

ADLN SUPERSTRUCTURE LLP . .
HNo-H NO 5 BEHIND TRIBAL CULTURE SONARI , ,
831011 JHARKHAND

SITE ADDRESS

HNo-H NO 5 BEHIND TRIBAL CULTURE SONARI ,
, JAMSHEDPUR

REF . NO .	SERVICE TYPE	ADV. AMOUNT
049515	TEMP. ELE CONN TO EMP,N.EMPL	811916

TOTAL AMOUNT : 811916

FOR G.M TOWN SERVICES:

N.B CHEQUES ARE SUBJECTED TO REALISATION ONLY

WITHOUT PREJUDICE

RECEIVED PAYMENT
CASH / CHEQUE

For HEAD BILLING
(UTILITIES BILLING)

Electricity Bill for the Compliance Period:
1st October 2025 to 31st March 2026

TAX INVOICE / Bill of Supply

Original for recipient

TATA STEEL UTILITIES AND INFRASTRUCTURE SERVICES LIMITED

TATA STEEL
#WeAlsoMakeTomorrow

Utility Bill Cum Notice Jamshedpur

NAME & ADDRESS				BILL DETAILS			
Recipient (BP) No.	0010123636-Consumer No			Bill Type	Periodic Bill	Bill No.	003042681913
Recipient (BP) Name	ADLN SUPERSTRUCTURE LLP .			Payment Due Date (Current Bill)			29.11.2025
				No. of Pages			01 of 01
Address	HNo-H NO 5 BEHIND TRIBAL CULTURE , SONARI JAMSHEDPUR-831011			Old Balance / SD Req. Amt (Rs.)			0
				Total of all pages (Rs.)			39119.46
				Previous Outstanding (Rs.)			-2041210.88
Jharkhand GST State Code - 20 Recipient GSTIN -				TCS Bill Amount			0
Phone No.	7004986563/			GRAND TOTAL (RS.)			-2002091.42
Email Address				TSL GSTIN - 20AAACT2803M2ZO			
Contracted Demand	20 KW			Period of Bill	07.10.2025	To 05.11.2025	S.Hr. 696
Bill Date	08.11.2025	Bill Month	Nov				
Security Deposit Amount (Elec.)	0			Connection Charges Due (Water)			

METER DETAIL AND CONSUMPTION HISTORY

ELECTRICITY

Meter & MR Details			Consumption History					
Rate Category	TEMPORARY							
Meter Serial No.	23130893	Month	KWH	KVAH	MD			
Meter Card No.	819070LT	OCT(OK)	4235.000					
Multiplying Factor	1.0	SEP(OK)	3457.000					
Meter Status	CONNECTE	AUG(OK)	3946.000					
Reading Status	OK	JUL(OK)	4842.000					
Curr. Reading Date	05.11.2025	JUN(OK)	4624.000					
Last Reading Date	07.10.2025	MAY(OK)	4772.000					
Current Reading	43995.000	KWH		KVAH				
Last Reading	39976.000	KWH		KVAH				
Unit [Diff X MF] (C)	4019.000	KWH		KVAH				

WATER

Meter & MR Details		Consumption History		
Rate Category				
Meter Sl. No.		Month	KL	
Meter Card No.				
M.F.				
Meter Status				
Reading Status				
Current. Rdg. Dt.				
Last Rdg.Dt.				
Current Rdg.		KL	Meter Size (mm)	
Last Rdg.		KL		

Electricity Charges		Water Charges		CGST	SGST
Total Consumed KWH (C+P) or B or D	4019.000000	Charged Units (KL)			
Total Consumed kVAh (C+P) or B or D	0.000000	Consumed/ Flat Charges (Rs.)			
Print MD / Billing MD (KW/kVA)	17.71 / 17.71	Delay Payment Surcharge (Rs.)			
Load factor (%)	0	Meter Service Charges (Rs.)			
Energy Charges (Rs.)	36171	Any Other Charges (Rs.)			
Jharkhand Electricity Duty (Rs.)	2170.26	TOTAL WATER (B)	0		
Fixed/Demand Charges (Rs.)	3453.45	**Other Charges**		**CGST**	**SGST**
Voltage Rebate (Rs.)	0	Non Taxable Rent (Rs.)	0		
Load Factor Surcharge/Rebate (Rs.)	0	Taxable Rent (Rs.)	0	0	0
FPPAS Charges (Rs.)	-2675.25	Municipal Contribution (Rs.)	0	0	0
Adjustment for Excess Demand (Rs.)	0	Conservancy Charges (Rs.)	0	0	0
Delay Payment Surcharge (Rs.)	0	Miscellaneous Charges (Rs.)	0	0	0
Early / Digital Pay Rebate (Rs.)	0	GST Rate (%)		9%	9%
Interest on Security Deposit (Rs.)	0	Any Other Charges (Rs.) *	0	0	0
Any Other Charges (Rs.) *	0	TOTAL OTHERS (C)	0	0	0
TOTAL ELECTRICITY (A)	39119.46	BILL AMOUNT=(A+B+C)	39119.46		

Last Payment Detail	Establishment No.		Service No.		LS-2/
Receipt No.	6079440 -	Receipt Date.	13.05.2025	Receipt Amount	1993841
Cheque No.	011395	Cheque Date	13.05.2025	Bank Name	HDFC BANK LIMIT

NEFT/RTGS Details for Payment

Account No: JUSCTS0010123636; Beneficiary Name: TATA STEEL LIMITED JUSCO TOWN SERVICES; Bank Name: HDFC BANK LTD; Branch Name: Kanjurmarg Branch, Mumbai; IFSC Code: HDFC0004989

TAX INVOICE / Bill of Supply

Original for recipient

TATA STEEL UTILITIES AND INFRASTRUCTURE SERVICES LIMITED

TATA STEEL
#WeAlsoMakeTomorrow

Utility Bill Cum Notice Jamshedpur

NAME & ADDRESS				BILL DETAILS			
Recipient (BP) No.	0010123636-Consumer No			Bill Type	Periodic Bill	Bill No.	003042681913
Recipient (BP) Name	ADLN SUPERSTRUCTURE LLP .			Payment Due Date (Current Bill)			29.11.2025
				No. of Pages			01 of 01
Address	HNo-H NO 5 BEHIND TRIBAL CULTURE , SONARI JAMSHEDPUR-831011			Old Balance / SD Req. Amt (Rs.)			0
				Total of all pages (Rs.)			39119.46
				Previous Outstanding (Rs.)			-2041210.88
Jharkhand GST State Code - 20 Recipient GSTIN -				TCS Bill Amount			0
Phone No.	7004986563/			GRAND TOTAL (RS.)			-2002091.42
Email Address				TSL GSTIN - 20AAACT2803M2ZO			
Contracted Demand	20 KW			Period of Bill	07.10.2025	To 05.11.2025	S.Hr. 696
Bill Date	08.11.2025	Bill Month	Nov				
Security Deposit Amount (Elec.)	0			Connection Charges Due (Water)			

METER DETAIL AND CONSUMPTION HISTORY

ELECTRICITY

Meter & MR Details			Consumption History					
Rate Category	TEMPORARY							
Meter Serial No.	23130893	Month	KWH	KVAH	MD			
Meter Card No.	819070LT	OCT(OK)	4235.000					
Multiplying Factor	1.0	SEP(OK)	3457.000					
Meter Status	CONNECTE	AUG(OK)	3946.000					
Reading Status	OK	JUL(OK)	4842.000					
Curr. Reading Date	05.11.2025	JUN(OK)	4624.000					
Last Reading Date	07.10.2025	MAY(OK)	4772.000					
Current Reading	43995.000	KWH		KVAH				
Last Reading	39976.000	KWH		KVAH				
Unit [Diff X MF] (C)	4019.000	KWH		KVAH				

WATER

Meter & MR Details		Consumption History		
Rate Category				
Meter Sl. No.		Month	KL	
Meter Card No.				
M.F.				
Meter Status				
Reading Status				
Current. Rdg. Dt.				
Last Rdg.Dt.				
Current Rdg.		KL	Meter Size (mm)	
Last Rdg.		KL		

Electricity Charges		Water Charges		CGST	SGST
Total Consumed KWH (C+P) or B or D	4019.000000	Charged Units (KL)			
Total Consumed kVAh (C+P) or B or D	0.000000	Consumed/ Flat Charges (Rs.)			
Print MD / Billing MD (KW/kVA)	17.71 / 17.71	Delay Payment Surcharge (Rs.)			
Load factor (%)	0	Meter Service Charges (Rs.)			
Energy Charges (Rs.)	36171	Any Other Charges (Rs.)			
Jharkhand Electricity Duty (Rs.)	2170.26	TOTAL WATER (B)	0		
Fixed/Demand Charges (Rs.)	3453.45	**Other Charges**		**CGST**	**SGST**
Voltage Rebate (Rs.)	0	Non Taxable Rent (Rs.)	0		
Load Factor Surcharge/Rebate (Rs.)	0	Taxable Rent (Rs.)	0	0	0
FPPAS Charges (Rs.)	-2675.25	Municipal Contribution (Rs.)	0	0	0
Adjustment for Excess Demand (Rs.)	0	Conservancy Charges (Rs.)	0	0	0
Delay Payment Surcharge (Rs.)	0	Miscellaneous Charges (Rs.)	0	0	0
Early / Digital Pay Rebate (Rs.)	0	GST Rate (%)		9%	9%
Interest on Security Deposit (Rs.)	0	Any Other Charges (Rs.) *	0	0	0
Any Other Charges (Rs.) *	0	TOTAL OTHERS (C)	0	0	0
TOTAL ELECTRICITY (A)	39119.46	BILL AMOUNT=(A+B+C)	39119.46		

Last Payment Detail	Establishment No.		Service No.		LS-2/
Receipt No.	6079440 -	Receipt Date.	13.05.2025	Receipt Amount	1993841
Cheque No.	011395	Cheque Date	13.05.2025	Bank Name	HDFC BANK LIMIT

NEFT/RTGS Details for Payment

Account No: JUSCTS0010123636; Beneficiary Name: TATA STEEL LIMITED JUSCO TOWN SERVICES; Bank Name: HDFC BANK LTD; Branch Name: Kanjurmarg Branch, Mumbai; IFSC Code: HDFC0004989

Original for recipient

TATA STEEL UTILITIES AND INFRASTRUCTURE SERVICES LIMITED

TATA STEEL
WeAlsoMakeTomorrow

Utility Bill Cum Notice Jamshedpur

NAME & ADDRESS		BILL DETAILS	
	0010123636-Consumer No	Periodic Bill	003043035390
	ADLN SUPERSTRUCTURE LLP .		18.03.2026
			01 of 01
Address	HNo-H NO 5 BEHIND TRIBAL CULTURE , SONARI JAMSHEDPUR-831011	Adj Balance - SD Req Amt (Rs.)	0
		Total of all charges (Rs.)	17447.99
		Previous Outstanding (Rs.)	-2002091.42
Jharkhand GST State Code - 20 Recipient GSTIN -		TCS Bill Amount	0
Phone No	7004986563/	GRAND TOTAL (RS.)	-1984643.43
Email Address			
Contracted Demand	20 KW	TSL GSTIN - 20AAACT2803M2ZO	

Bill Date	25.02.2026	Bill Month	Feb	Period of Bill	05.11.2025	To	13.02.2026	S.Hr.	2400
Security Deposit Amount (Elec.)	0			Connection Charges Due (Water)					

METER DETAIL AND CONSUMPTION HISTORY

ELECTRICITY

Meter & MR Details		Consumption History			
Rate Category	TEMPORARY				
Meter Serial No.	23130893	Month	KWH	KVAH	MD
Meter Card No.	819070LT	JAN(OK)	4019.000		
Multiplying Factor	1.0	DEC(OK)	4235.000		
Meter Status	CONNECTE	NOV(OK)	3457.000		
Reading Status	OK	OCT(OK)	3946.000		
Curr. Reading Date	13.02.2026	SEP(OK)	4842.000		
Last Reading Date	05.11.2025	AUG(OK)	4624.000		
Current Reading	45749.000	KWH		KVAH	
Last Reading	43995.000	KWH		KVAH	
Unit [Diff X MF] (C)	1754.000	KWH		KVAH	

WATER

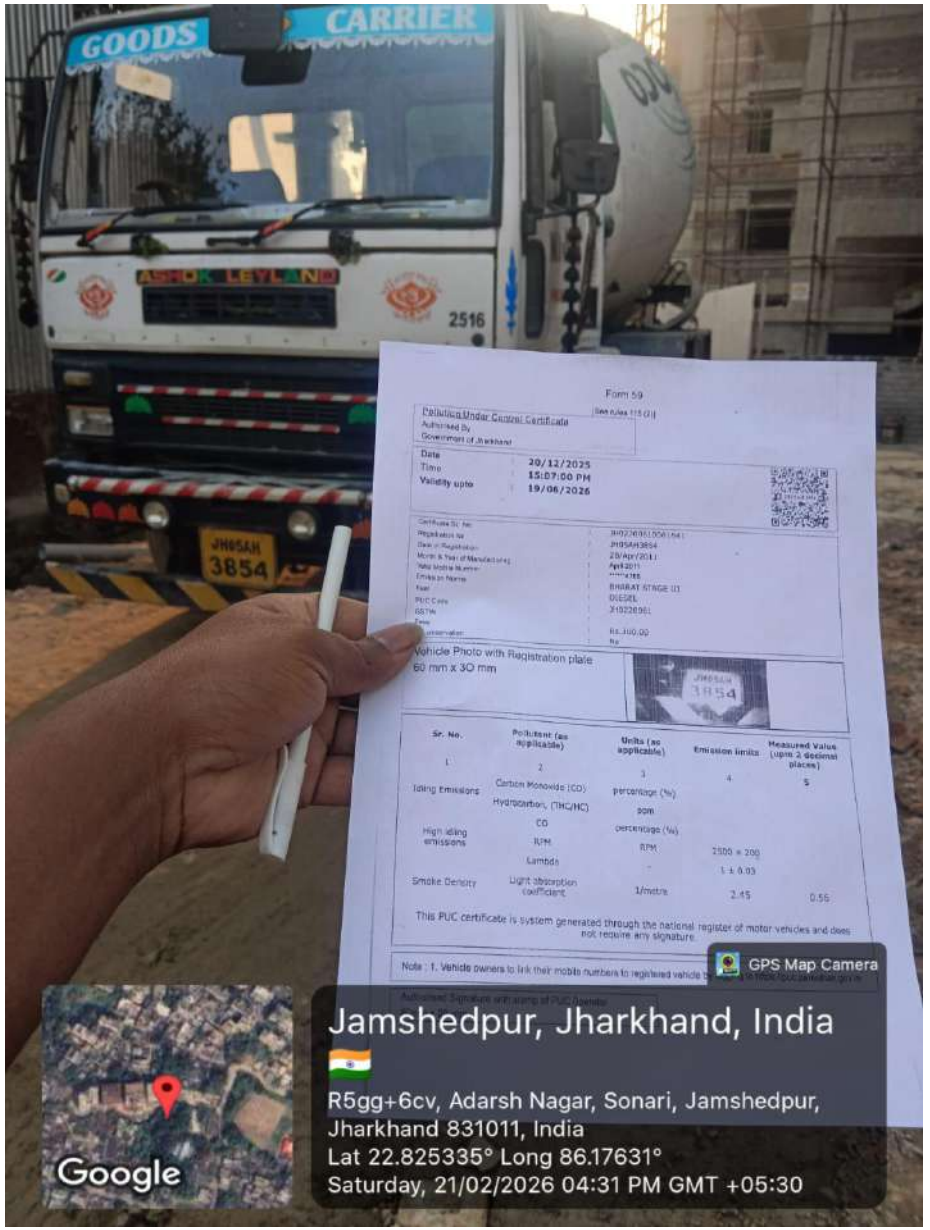
Meter & MR Details		Consumption History			
Rate Category					
Meter Sl. No.		Month	KL		
Meter Card No.					
M.F.					
Meter Status					
Reading Status					
Current. Rdg. Dt.					
Last Rdg.Dt.					
Current Rdg.		KL	Meter Size (mm)		
Last Rdg.		KL			

Electricity Charges		Water Charges		CGST	SGST
Total Consumed KWH (C+P) or B or D	1754.000000	Charged Units (KL)			
Total Consumed kVAh (C+P) or B or D	0.000000	Consumed/ Flat Charges (Rs.)			
Print MD / Billing MD (KW/kVA)	16 / 16	Delay Payment Surcharge (Rs.)			
Load factor (%)	0	Meter Service Charges (Rs.)			
Energy Charges (Rs.)	15786	Any Other Charges (Rs.)			
Jharkhand Electricity Duty (Rs.)	350.8	TOTAL WATER (B)	0		
Fixed/Demand Charges (Rs.)	3120	**Other Charges**		**CGST**	**SGST**
Voltage Rebate (Rs.)	0	Non Taxable Rent (Rs.)	0		
Load Factor Surcharge/Rebate (Rs.)	0	Taxable Rent (Rs.)	0	0	0
FPPAS Charges (Rs.)	-1808.81	Municipal Contribution (Rs.)	0	0	0
Adjustment for Excess Demand (Rs.)	0	Conservancy Charges (Rs.)	0	0	0
Delay Payment Surcharge (Rs.)	0	Miscellaneous Charges (Rs.)	0	0	0
Early / Digital Pay Rebate (Rs.)	0	GST Rate (%)		9%	9%
Interest on Security Deposit (Rs.)	0	Any Other Charges (Rs.) *	0	0	0
Any Other Charges (Rs.) *	0	TOTAL OTHERS (C)	0	0	0
TOTAL ELECTRICITY (A)	17447.99	BILL AMOUNT=(A+B+C)	17447.99		

Last Payment Detail	Establishment No.		Service No.		LS-2/
Receipt No.	6079440 -	Receipt Date.	13.05.2025	Receipt Amount	1993841
Cheque No.	011395	Cheque Date	13.05.2025	Bank Name	HDFC BANK LIMIT

NEFT/RTGS Details for Payment

Account No: JUSCTS0010123636; Beneficiary Name: TATA STEEL LIMITED JUSCO TOWN SERVICES; Bank Name: HDFC BANK LTD; Branch Name: Kanjurmarg Branch, Mumbai; IFSC Code: HDFC0004989



PUC of the Transit Mixer

M/s. ADLN Superstructure LLP

AMBIENT AIR QUALITY MONITORING PLAN

"AHANA" Proposed Multistoried Residential Project [B+G+11] with other Utility over Revenue Khata no. (Old-7), New-439 with Khesra No. (Old-536,537538,539,540&541), New-54&56 at Village-Sonari, P.O. Sonari, District – East Singhbhum- Jharkhand.

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1 Introduction

An Ambient Air Quality Monitoring Plan is a critical component of environmental management for building construction projects. Its primary purpose is to assess and manage the impact of construction activities on the surrounding air quality, ensuring compliance with environmental regulations and safeguarding public health.

Construction activities often generate airborne pollutants such as particulate matter (PM_{10} and $PM_{2.5}$), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), carbon monoxide (CO), and volatile organic compounds (VOCs). These pollutants can adversely affect the health of construction workers and nearby residents, as well as contribute to environmental degradation.

2 Objective of Monitoring

Implementing an air quality monitoring plan involves:

- **Identifying Key Pollutants**: Determining which pollutants are most likely to be emitted during construction activities.
- **Selecting Monitoring Locations**: Strategically placing monitoring stations to capture representative air quality data, considering factors like prevailing wind directions and proximity to sensitive receptors.
- **Establishing Monitoring Schedules**: Setting regular intervals for data collection to track pollutant levels over time.
- **Utilizing Appropriate Monitoring Equipment**: Employing reliable instruments to accurately measure pollutant concentrations.
- **Analyzing Data and Reporting**: Interpreting the collected data to identify trends and ensure compliance with air quality standards.
- **Implementing Mitigation Measures**: Developing strategies to reduce pollutant emissions, such as dust suppression techniques and equipment maintenance protocols.

3 Technical Aspects of AAQ Monitoring for Mitigation Effectiveness

1. **Baseline & Post-Mitigation Monitoring**:
   - Establish pre-construction pollutant levels.
   - Conduct regular monitoring during and after implementing mitigation measures to assess their impact.

2. **Strategic Placement of Monitoring Stations**:
   - Position monitors at least 25 meters away from direct emission sources.
   - Ensure locations have unobstructed airflow and are representative of the site's air quality.

3. **Appropriate Monitoring Equipment**:
   - Use High-Volume Samplers for PM10 and PM2.5.
   - Employ gas analyzers for pollutants like SO_2, NO_2, and CO.
   - Implement Continuous Ambient Air Quality Monitoring Systems (CAAQMS) for real-time data.

4. **Monitoring Schedule & Frequency**:
   - Conduct monitoring twice a week for 24-hour durations, totaling 104 observations annually, as per CPCB guidelines.
   - Increase frequency during high-risk construction activities.

5. **Data Analysis & Reporting**:
   - Analyze trends to evaluate the effectiveness of mitigation measures.
   - Prepare reports in prescribed formats for submission to regulatory authorities.

6. **Quality Assurance & Control (QA/QC)**:
   - Regularly calibrate instruments and maintain them according to standards.
   - Train personnel in proper sampling and analysis techniques.

7. **Integration with Meteorological Data**:
   - Monitor wind speed, direction, temperature, and humidity to understand pollutant dispersion patterns.

8. **Documentation & Transparency**:
   - Maintain detailed records of monitoring activities and findings.
   - Ensure transparency by sharing information with stakeholders and the public.

4 Methodologies of measurement

4.1 Monitoring Location

Monitoring stations are strategically positioned based on the presence of sensitive receptors such as residential areas, schools, and hospitals. The selection considers prevailing wind directions, topography, and proximity to emission sources to accurately assess pollutant dispersion and exposure levels.

TABLE 4.1- AAQ MONITORING LOCATIONS

Location	Latitude	Longitude	Distance	Direction	Wind Direction	Justification
AAQ-1	22°49'31.20"N	86°10'35.02"E	-	-	Project Site	Source
AAQ-2	22°49'56.78"N	86°10'5.49"E	1.05 km	NW	Housing cooperative, Swarn Vihar	1st predominant -Up wind direction
AAQ-3	22°49'18.48"N	86°10'42.61"E	0.39 km	SE	Near Union Motors Service, Sonari	1st predominant- down wind direction
AAQ-4	22°48'49.59"N	86° 9'40.21"E	1.90 km	SW	Sahid Nimal Mahato Stadium	Crosswind direction

FIGURE 4.1-AAQ LOCATION-1

FIGURE 4.2-AAQ LOCATION-2

FIGURE 4.3-AAQ LOCATION-3

FIGURE4.4-AAQ LOCATION-4

4.2 Analytical Methods and Standards

The following standardized methods are employed for analyzing specific pollutants:

- **Particulate Matter (PM_{10} and $PM_{2.5}$):**
  Measured using the Gravimetric Method as per IS 5182 Part 23. This involves collecting air samples on pre-weighed filters and determining the particulate concentration by calculating the weight difference after sampling.
- **Sulphur Dioxide (SO_2):**
  Analyzed using the Improved West & Gaeke Method outlined in IS 5182 Part 2. In this method, SO_2 is absorbed in a solution of potassium tetrachloromercurate, forming a stable complex that is measured calorimetrically.
- **Nitrogen Oxides (NO_x):**
  Determined through the Modified Jacob & Hochheiser Method as specified in IS 5182 Part 6. This technique involves absorbing NO_2 in a sodium hydroxide-sodium arsenite solution, followed by colorimetric analysis to quantify the concentration.
- **Carbon Monoxide (CO):**
  Measured using the Non-Dispersive Infrared (NDIR) Method in accordance with IS 5182 Part 10. This method detects CO by measuring the absorption of infrared radiation at specific wavelengths characteristic of CO molecules.

5 Performance Monitoring

5.1.1 Monitoring Schedule during Operation Phase

The following parameters will be monitored with schedule and duration of monitoring.

TABLE 5.1- MONITORING PARAMETERS & FREQUENCY

Sl. No.		Particulars	Monitoring Frequency	Duration of Sampling	Important Monitoring Parameters
1.	**Air Pollution and Meteorology**				
	A	Ambient Air Quality in the Project site			
		Selected 1 locations in and around project area specified by JSPCB	Once in a Quarter Twice a week	24 hr continuously	PM_{10}, $PM_{2.5}$, SO_2, NO_x, & CO.
	B	Ambient Air Quality Monitoring Outside the project area			
		Selected 3 locations outside the project area specified by JSPCB	Once in a quarter Twice a week	24 hr continuously	PM_{10}, $PM_{2.5}$, SO_2, NO_x, & CO.
	C	Meteorology			
		Meteorological data to be monitored at project site	Daily	Continuous monitoring	Wind speed, direction, temperature, relative humidity and rainfall

6 Post-Construction Ambient Air Quality Monitoring Plan

6.1.1 Analysis of Monitoring Data

Post-construction monitoring is essential to evaluate the long-term impacts of the building project on ambient air quality and to ensure that pollutant levels remain within permissible limits. Analysis will be done as per CPCB guidelines and will be submitted to concerned authority as specified in Environmental Clearance (EC) and Consent to Operate (CTO) issued by MoEF & CC and SPCB respectively.

TABLE 6.1- MONITORING FREQUENCY AND DURATION

Sl. No.	Particulars	Monitoring Frequency	Duration of Sampling	Monitoring Parameters
1	Ambient Air Quality within Project Site	Twice a week	24-hour continuous	PM_{10}, $PM_{2.5}$, SO_2, NO_x, CO
2	Ambient Air Quality Outside Project Area	Once every quarter	24-hour continuous	PM_{10}, $PM_{2.5}$, SO_2, NO_x, CO
3	Meteorological Monitoring	Daily	Continuous	Wind speed, wind direction, temperature, humidity, rainfall

7 Reporting Schedules of Monitoring Data

The Environmental Monitoring Cell (EMC) will coordinate all environmental monitoring activities as outlined in the Environmental Management Plan (EMP). Monitoring data will be compiled and submitted to the relevant State Pollution Control Board (SPCB) and the Ministry of Environment, Forest and Climate Change (MoEF&CC) Regional Office on a six-monthly basis.

Each report will include:

- Monitoring results for air, water, noise, and other relevant parameters.
- Compliance status with respect to the conditions stipulated in the Environmental Clearance (EC).
- Details of mitigation measures implemented and their effectiveness.
- Any corrective actions taken in response to non-compliance or environmental incidents.

These reports will also be made available to the public through the company's official website and at the project site, ensuring transparency and community engagement.

7.1 Cost of AAQ Monitoring Plan

TABLE 7.1-ESTIMATED COST OF AAQ MONITORING

Component	Description	Estimated Cost
Monitoring Equipment		
Portable Air Quality Monitor	Devices capable of measuring $PM_{2.5}$, PM_{10}, CO, SO_2, and NO_x.	60,000
Consumables & Accessories		
Sampling Filters & Cartridges	Necessary for collecting particulate samples; includes filters for PM measurements.	6,000
Data Management		
Data Logging & Analysis Tools	Software or tools required for recording and analysing collected data.	2,000
Logistics & Miscellaneous		
Transportation & Setup	Costs associated with transporting equipment to the site and setting up monitoring stations.	3,000
Miscellaneous Expenses	Includes calibration gases, batteries, and other unforeseen expenses.	2,000
Total		**73,000**

TC-12887

EPIC LabTech Private Limited

Address:-
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CIN:-U74999JH2022PTC019685
PAN:-AAHCE3611M
GST:-20AAHCE3611M1ZX

Accredited by :-
NABL vide certificate Number TC - 12887
Jharkhand State Pollution Control Board
Certified by :-
ISO 9001:2015 and ISO 45001:2018

EPIC

Test Report

Unique Lab Report No.	*TC1288726000000308*	**Discipline**	*Chemical*
Report Unique ID	*RL04902611011*	**Group**	*Atmospheric Pollution*
Issue date/time	*13.03.2026/ 15:54*	**Sub Group**	*Ambient Air (Ambient Air Quality)*

Report Issue to

M/s - ADLN SUPERSTRUCTURE LLP
3RD FLOOR, BASANT CENTRAL, MILLS AND GODOWN AREA, SAKCHI, JAMSHEDPUR-831001, JAMSHEDPUR, EAST SINGHBHUM, JHARKHAND, INDIA, 831001

Contact Person	*Mr. Lalit Jee*
Contact Number	*+91 9334821219*
Email Id	*N/A*
Order Date	*06.03.2026/ 18:30*
Order Number	***EPIC/QUOT/2026/012***

References of Quality Management System (Steps of Traceability Chain)

Customer Registration No.	*EPIC/OTH/0490*	Sample Booking Number	*EPIC-2611011*
Sample(s) Code	*2611011 (A) (B) (C) (D)*	Sample Receipt (D/T)	*09.03.2026/ 15:33*

Sampling References

Type of Industry	*Construction*	Status while Sampling	*Operational ☑ Non-Operational ☒*
Sampling Start (D/T)	*07.03.2026/ 11:45*	Sampling End (D/T)	*08.03.2026/ 09:35*
Mode of Sampling	*Conducted by Laboratory*	Sample collected by	*Mr. Basant Prajapati & Team*
Sampling method used	*EPIC/SOP/SM/01/00*	Ref. of Sampling Plan	*EPIC/LAB/R/036*
Description/condition of sample	*Receipt sample(s) were fit for analysis.*		

Environmental Condition during sampling

Weather condition	*Clear*	Temperature (°C)	*27*	Humidity %	*49*	Wind direction	*140°-320°*

Sampling Location(s) with GPS coordinate(s)

S. Location A	*Near Main Gate of Unit*	GPS coordinate	*22° 49' 31.03"/ 86° 10' 41.07"*
S. Location B	*Near Garden of Unit*	GPS coordinate	*22° 49' 36.03"/ 86° 10' 37.10"*
S. Location C	*Near DG of Unit*	GPS coordinate	*22° 49' 33.42"/ 86° 10' 41.56"*
S. Location D	*South Corner of Unit*	GPS coordinate	*22° 49' 35.07"/ 86° 10' 39.10"*

Date(s) of performance of the laboratory activities

Test start date	*09.03.2026/ 16:35*	Test completion date	*13.03.2026/ 13:20*

--Test Results Start--

Sl	Tested Parameters	Method used	Unit	LoQ	Results A	B	C	D	Limits
1.	Respirable Suspended Particulate Matter (as PM_{10})	*IS:5182 (P-23) 2006*	$\mu g/m^3$	*10*	76.83	66.72	73.96	82.60	100 (24 hr)
2.	Fine Particulate Matter (as $PM_{2.5}$)	*IS 5182 (P-24) 2019*	$\mu g/m^3$	*8*	32.98	28.66	30.42	36.56	60 (24 hr)
3.	Sulphur Dioxide (as SO_2)	*IS:5182 (P-02/Sec-1) 2023*	$\mu g/m^3$	*5*	11.59	10.99	14.83	12.75	80 (24 hr)
4.	Dioxide of Nitrogen (as NO_2)	*IS:5182 (P-06) 2006*	$\mu g/m^3$	*6*	28.38	22.60	31.51	28.76	80 (24 hr)

--Test Results End --

Prescribed Limit Environmental (Protection) Rules-1986, Schedule –VII.

Statement of conformity: *The sample(s) collected for analysis was tested in accordance with the requirements of Environmental (Protection) Rules, 1986, SCHEDULE VII. Based on the results obtained, the sample* ***Comply*** *with the specified limits for National Ambient Air Quality Standards, Page 396. This statement of conformity is based on the laboratory's established decision rule documented in EPIC/LAB/SOP/DR/01/01, which takes into account measurement uncertainty where applicable. This conformity assessment applies only to the parameters tested. No conclusion is drawn for the untested parameters.*

Analysed by = Rajesh Varma

EPIC LABTECH PRIVATE LIMITED & RANCHI

Reviewed by
(B.N. Kumar)
Technical Head

13/03/26
Issue by
(Umesh Das)
Laboratory Head

******Test Report End******

Authorized Signatory
EPIC LabTech Pvt. Ltd.
Ranchi, Jharkhand

TC-12887

EPIC LabTech Private Limited

Address:-
Indrapuri, Road No. - 5,
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CIN:-U74999JH2022PTC019685
PAN:-AAHCE3611M
GST:-20AAHCE3611M1ZX

Accredited by :-
NABL vide certificate Number TC- 12887
Jharkhand State Pollution Control Board
Certified by :-
ISO 9001:2015 and ISO 45001:2018

EPIC

Test Report

Unique Lab Report No.	*TC1288726000000309*	**Discipline**	*Chemical*
Report Unique ID	*RL04902611012*	**Group**	*Atmospheric Pollution*
Issue date/time	*13.03.2026/ 15:58*	**Sub Group**	*Ambient Noise Levels (Excluding Vibration)*

Report Issue to

M/s - ADLN SUPERSTRUCTURE LLP
3RD FLOOR, BASANT CENTRAL, MILLS AND GODOWN AREA, SAKCHI, JAMSHEDPUR-831001, JAMSHEDPUR, EAST SINGHBHUM, JHARKHAND, INDIA, 831001

Contact Person	*Mr. Lalit Jee*
Contact Number	*+91 9334821219*
Email Id	*N/A*
Order Date	*06.03.2026/ 18:30*
Order Number	***EPIC/QUOT/2026/012***

References of Quality Management System (Steps of Traceability Chain)

Customer Registration No.	*EPIC/OTH/0490*	Sample Booking Number	*EPIC-2611012*
Sample(s) Code	*2611012 (A) (B) (C) (D)*	Sample Receipt (D/T)	*09.03.2026/ 15:36*

Sampling References

Type of Industry	*Construction*	Status while Sampling	*Operational ☑ Non-Operational ☒*
Sampling Start (D/T)	*07.03.2026/ 11:45*	Sampling End (D/T)	*08.03.2026/ 09:35*
Mode of Sampling	*Conducted by Laboratory*	Sample collected by	*Mr. Basant Prajapati & Team*
Sampling method used	*EPIC/SOP/SM/01/00*	Ref. of Sampling Plan	*EPIC/LAB/R/036*
Description/condition of sample	*Receipt sample(s) were fit for analysis.*		

Environmental Condition during sampling

Weather condition	*Clear*	Temperature (°C)	*27*	Humidity %	*49*	Wind direction	*140°-320°*

Sampling Location(s) with GPS coordinate(s)

S. Location A	*Near Main Gate of Unit*	GPS coordinate	*22° 49' 31.03"/ 86° 10' 41.07"*
S. Location B	*Near Garden of Unit*	GPS coordinate	*22° 49' 36.03"/ 86° 10' 37.10"*
S. Location C	*Near DG of Unit*	GPS coordinate	*22° 49' 33.42"/ 86° 10' 41.56"*
S. Location D	*South Corner of Unit*	GPS coordinate	*22° 49' 35.07"/ 86° 10' 39.10"*

Date(s) of performance of the laboratory activities

Test start date	*09.03.2026/ 17:10*	Test completion date	*13.03.2026/ 13:35*

--Test Results Start--

Sl	Tested Parameters	Method used	Unit	LoQ	Results A	B	C	D	Limits
1.	L_{eq}(Day time)	*IS: 9989:1981*	dB (A)	*30*	65.7	57.6	58.4	64.9	75
2.	L_{eq}(Night time)	*IS: 9989:1981*	dB (A)	*30*	53.8	45.4	43.6	48.7	70

--Test Results End --

Prescribed Limit Environmental (Protection) Rules-1986, Schedule –III.

Statement of conformity: *The sample(s) collected for analysis was tested in accordance with the requirements of Environmental (Protection) Rules, 1986, SCHEDULE III. Based on the results obtained, the sample* ***Comply*** *with the specified limits for Ambient Air Quality in respect of Noise, Page 373. This statement of conformity is based on the laboratory's established decision rule documented in EPIC/LAB/SOP/DR/01/01, which takes into account measurement uncertainty where applicable. This conformity assessment applies only to the parameters tested. No conclusion is drawn for the untested parameters.*

Analysed by – Rajesh Varma

EPIC LAB TECH PRIVATE LIMITED ★ RANCHI ★

Reviewed by
(B.N. Kumar)
Technical Head

13/03/26
Issue by
(Umesh Das)
Laboratory Head

******Test Report End******

Authorized Signatory
EPIC LabTech Pvt. Ltd.
Ranchi, Jharkhand

Government of Jharkhand

Department of Forest, Environment and Climate Change

Permission for Felling of trees

Registration No: ACK551115INS

Issue Date: 05-15-2024

This is to certify that *M/s* **MIRA DEVI AGARWAL** having address has been granted permission to fell 60 tree(s) from

Tree Details

Sl. No	Village Ward No/Khata No	Thana Name /Thana No.	Plot No /Land Revenue Slip No.	Species	Circumference at Breast Height (in cm)	Height of Tree (in cm)
1	SONARI 7	GHATSHILA 1156	536 CRSLP18013535	Sagwan	129	1036
2	SONARI 7	GHATSHILA 1156	536 CRSLP18013535	Sagwan	99	974
3	SONARI 7	GHATSHILA 1156	536 CRSLP18013535	Sagwan	114	974
4	SONARI 7	GHATSHILA 1156	536 CRSLP18013535	Sagwan	150	1066
5	SONARI 7	GHATSHILA 1156	536 CRSLP18013535	Sagwan	132	1492
6	SONARI 7	GHATSHILA 1156	536 CRSLP18013535	Sagwan	63	761
7	SONARI 7	GHATSHILA 1156	536 CRSLP18013535	Sagwan	124	1401
8	SONARI 7	GHATSHILA 1156	536 CRSLP18013535	Sagwan	102	974
9	SONARI 7	GHATSHILA 1156	536 CRSLP18013535	Sagwan	114	974
10	SONARI 7	GHATSHILA 1156	536 CRSLP18013535	Sagwan	89	974
11	SONARI 7	GHATSHILA 1156	536 CRSLP18013535	Sagwan	71	761

12	SONARI	GHATSHILA	536	Sagwan	79	974
	7	1156	CRSLP18013535			
13	SONARI	GHATSHILA	536	Sagwan	94	609
	7	1156	CRSLP18013535			
14	SONARI	GHATSHILA	536	Sagwan	68	761
	7	1156	CRSLP18013535			
15	SONARI	GHATSHILA	536	Sagwan	99	974
	7	1156	CRSLP18013535			
16	SONARI	GHATSHILA	536	Sagwan	74	961
	7	1156	CRSLP18013535			
17	SONARI	GHATSHILA	536	Sagwan	112	974
	7	1156	CRSLP18013535			
18	SONARI	GHATSHILA	536	Sagwan	48	426
	7	1156	CRSLP18013535			
19	SONARI	GHATSHILA	536	Sagwan	46	396
	7	1156	CRSLP18013535			
20	SONARI	GHATSHILA	536	Sagwan	66	761
	7	1156	CRSLP18013535			
21	SONARI	GHATSHILA	537	Sagwan	78	761
	7	1156	CRSLP18013535			
22	SONARI	GHATSHILA	537	Sagwan	76	731
	7	1156	CRSLP18013535			
23	SONARI	GHATSHILA	537	Sagwan	56	396
	7	1156	CRSLP18013535			
24	SONARI	GHATSHILA	537	Sagwan	66	761
	7	1156	CRSLP18013535			
25	SONARI	GHATSHILA	537	Sagwan	99	1035
	7	1156	CRSLP18013535			
26	SONARI	GHATSHILA	537	Sagwan	48	396
	7	1156	CRSLP18013535			
27	SONARI	GHATSHILA	537	Sagwan	86	944
	7	1156	CRSLP18013535			
28	SONARI	GHATSHILA	537	Sagwan	63	731
	7	1156	CRSLP18013535			
29	SONARI	GHATSHILA	537	Sagwan	129	944
	7	1156	CRSLP18013535			
30	SONARI	GHATSHILA	537	Sagwan	99	944
	7	1156	CRSLP18013535			

31	SONARI	GHATSHILA	537	Sagwan	68	548
	7	1156	CRSLP18013535			
32	SONARI	GHATSHILA	537	Sagwan	74	731
	7	1156	CRSLP18013535			
33	SONARI	GHATSHILA	537	Sagwan	76	670
	7	1156	CRSLP18013535			
34	SONARI	GHATSHILA	537	Sagwan	46	487
	7	1156	CRSLP18013535			
35	SONARI	GHATSHILA	537	Sagwan	66	761
	7	1156	CRSLP18013535			
36	SONARI	GHATSHILA	537	Sagwan	46	396
	7	1156	CRSLP18013535			
37	SONARI	GHATSHILA	537	Sagwan	104	975
	7	1156	CRSLP18013535			
38	SONARI	GHATSHILA	537	Sagwan	68	761
	7	1156	CRSLP18013535			
39	SONARI	GHATSHILA	537	Sagwan	69	731
	7	1156	CRSLP18013535			
40	SONARI	GHATSHILA	537	Sagwan	84	974
	7	1156	CRSLP18013535			
41	SONARI	GHATSHILA	538	Sagwan	77	731
	7	1156	CRSLP18013535			
42	SONARI	GHATSHILA	538	Sagwan	63	548
	7	1156	CRSLP18013535			
43	SONARI	GHATSHILA	538	Sagwan	104	731
	7	1156	CRSLP18013535			
44	SONARI	GHATSHILA	538	Sagwan	66	548
	7	1156	CRSLP18013535			
45	SONARI	GHATSHILA	538	Sagwan	46	335
	7	1156	CRSLP18013535			
46	SONARI	GHATSHILA	538	Sagwan	48	426
	7	1156	CRSLP18013535			
47	SONARI	GHATSHILA	538	Sagwan	58	518
	7	1156	CRSLP18013535			
48	SONARI	GHATSHILA	538	Sagwan	61	426
	7	1156	CRSLP18013535			
49	SONARI	GHATSHILA	538	Sagwan	107	975
	7	1156	CRSLP18013535			

50	SONARI 7	GHATSHILA 1156	538 CRSLP18013535	Sagwan	104	974
51	SONARI 7	GHATSHILA 1156	538 CRSLP18013535	Sagwan	86	974
52	SONARI 7	GHATSHILA 1156	538 CRSLP18013535	Sagwan	114	1005
53	SONARI 7	GHATSHILA 1156	538 CRSLP18013535	Sagwan	81	944
54	SONARI 7	GHATSHILA 1156	538 CRSLP18013535	Sagwan	51	396
55	SONARI 7	GHATSHILA 1156	538 CRSLP18013535	Sagwan	41	396
56	SONARI 7	GHATSHILA 1156	538 CRSLP18013535	Sagwan	74	761
57	SONARI 7	GHATSHILA 1156	538 CRSLP18013535	Sagwan	107	974
58	SONARI 7	GHATSHILA 1156	538 CRSLP18013535	Sagwan	61	579
59	SONARI 7	GHATSHILA 1156	538 CRSLP18013535	Sagwan	61	426
60	SONARI 7	GHATSHILA 1156	538 CRSLP18013535	Sagwan	53	305

Name in Full* Mamta Priyadarshi IFS

Division Jamshedpur Forest Division

Signature

Seal Divisional Forest Officer
Jamshedpur Forest Division
Jamshedpur

*The certificate to be issued by the Divisional Forest Officer of the respective Divisions and upload

Government of Jharkhand

Department of Forest, Environment and Climate Change

Permission for Felling of trees

Registration No: ACK379372INS

Issue Date: 05-15-2024

This is to certify that M/s **MIRA DEVI AGARWAL** having address has been granted permission to fell 41 tree(s) from

Tree Details

Sl. No	Village / Ward No/Khata No	Thana Name /Thana No.	Plot No /Land Revenue Slip No.	Species	Circumference at Breast Height (in cm)	Height of Tree (in cm)
1	SONARI / 7	GHATSHILA / 1156	539 / CRSLP180213535	Others	109	975
2	SONARI / 7	GHATSHILA / 1156	539 / CRSLP180213535	Others	124	1097
3	SONARI / 7	GHATSHILA / 1156	539 / CRSLP180213535	Others	150	975
4	SONARI / 7	GHATSHILA / 1156	539 / CRSLP180213535	Others	168	1280
5	SONARI / 7	GHATSHILA / 1156	539 / CRSLP180213535	Others	168	975
6	SONARI / 7	GHATSHILA / 1156	539 / CRSLP180213535	Others	150	1524
7	SONARI / 7	GHATSHILA / 1156	539 / CRSLP180213535	Others	132	1067
8	SONARI / 7	GHATSHILA / 1156	539 / CRSLP180213535	Others	94	549
9	SONARI / 7	GHATSHILA / 1156	539 / CRSLP180213535	Others	91	427
10	SONARI / 7	GHATSHILA / 1156	539 / CRSLP180213535	Others	86	610
11	SONARI / 7	GHATSHILA / 1156	539 / CRSLP180213535	Others	348	2012
12	SONARI / 7	GHATSHILA / 1156	539 / CRSLP180213535	Others	63	610

13	SONARI	GHATSHILA	539	Others	89	671
	7	1156	CRSLP180213535			
14	SONARI	GHATSHILA	539	Others	96	671
	7	1156	CRSLP180213535			
15	SONARI	GHATSHILA	540	Others	104	1006
	7	1156	CRSLP180213535			
16	SONARI	GHATSHILA	540	Others	134	1067
	7	1156	CRSLP180213535			
17	SONARI	GHATSHILA	540	Others	79	884
	7	1156	CRSLP180213535			
18	SONARI	GHATSHILA	540	Others	51	427
	7	1156	CRSLP180213535			
19	SONARI	GHATSHILA	540	Others	127	1067
	7	1156	CRSLP180213535			
20	SONARI	GHATSHILA	540	Others	86	671
	7	1156	CRSLP180213535			
21	SONARI	GHATSHILA	540	Others	183	1006
	7	1156	CRSLP180213535			
22	SONARI	GHATSHILA	540	Others	119	975
	7	1156	CRSLP180213535			
23	SONARI	GHATSHILA	540	Others	127	640
	7	1156	CRSLP180213535			
24	SONARI	GHATSHILA	540	Others	79	610
	7	1156	CRSLP180213535			
25	SONARI	GHATSHILA	540	Others	89	701
	7	1156	CRSLP180213535			
26	SONARI	GHATSHILA	540	Others	109	1006
	7	1156	CRSLP180213535			
27	SONARI	GHATSHILA	540	Others	127	1006
	7	1156	CRSLP180213535			
28	SONARI	GHATSHILA	541	Others	91	762
	7	1156	CRSLP180213535			
29	SONARI	GHATSHILA	540	Others	162	1067
	7	1156	CRSLP180213535			
30	SONARI	GHATSHILA	541	Others	81	518
	7	1156	CRSLP180213535			
31	SONARI	GHATSHILA	541	Others	84	640
	7	1156	CRSLP180213535			

32	SONARI 7	GHATSHILA 1156	541 CRSLP180213535	Others	112	975
33	SONARI 7	GHATSHILA 1156	541 CRSLP180213535	Others	109	884
34	SONARI 7	GHATSHILA 1156	541 CRSLP180213535	Others	102	975
35	SONARI 7	GHATSHILA 1156	541 CRSLP180213535	Others	122	1006
36	SONARI 7	GHATSHILA 1156	541 CRSLP180213535	Others	107	823
37	SONARI 7	GHATSHILA 1156	541 CRSLP180213535	Others	147	1006
38	SONARI 7	GHATSHILA 1156	541 CRSLP180213535	Others	127	1006
39	SONARI 7	GHATSHILA 1156	541 CRSLP180213535	Others	165	1067
40	SONARI 7	GHATSHILA 1156	541 CRSLP180213535	Others	94	610
41	SONARI 7	GHATSHILA 1156	541 CRSLP180213535	Others	152	762

Name in Full* Nandan Priyadarshi, IFS

Division Jamshedpur Forest Division

Signature

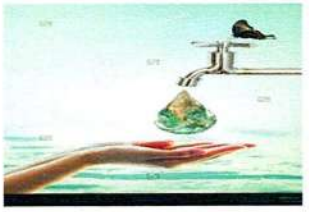
Seal Divisional Forest Officer
Jamshedpur Forest Division
Jamshedpur

*The certificate to be issued by the Divisional Forest Officer of the respective Divisions and upload

एक साझा प्रयास

पर्यावरण पहल

(संबद्ध : स्वदेशी जागरण मंच)



पत्रांक : .....

दिनांक : .....

TO WHOM IT MAY CONCERN

Paryawaran Pahal is working to conservation of environment since last 6 years. We are organized several plantation derive during these years and have planted more than 2500 plants in and around Jamshedpur.

We hereby certify that M/s. ADLN Superstructure LLP, 3rd floor, Basant Central, Sakchi, Jamshedpur-831001 has donated 320 plants in August 2025 to our organization and the same are planted at various places in and around Jamshedpur and Adityapur (also in School and Colleges).

We thank you for your support for Tree Plantation in Jamshedpur, Adityapur etc.

Thanks & Regards,

Manoj Kumar Singh
Convenor
Paryawaran Pahal, Jamshedpur

Date : 10/09/2025

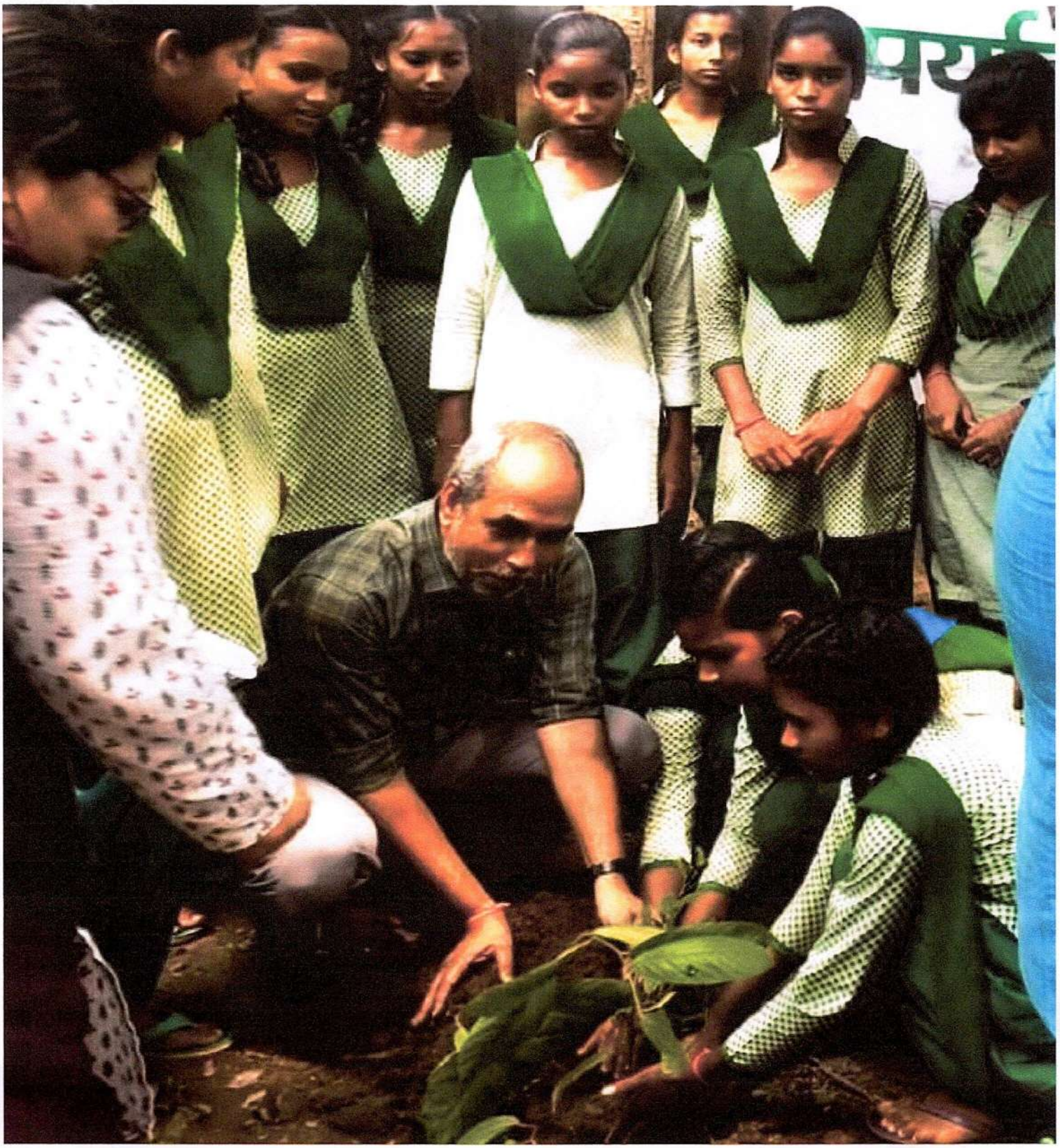
पता : एच 5/26, के रोड, बिस्टुपुर, जमशेदपुर – 831001 दूरभाष : 0657–2249372
मोबाईल : 9431110510, 9334430441, 9430337883, 9386103631

पटमदा प्रोजेक्ट बालिका उच्च विद्यालय माचा में पौधरोपण

पटमदा , संवाददाता, 12 अगस्त:पटमदा प्रखंड के प्रोजेक्ट बालिका उच्च विद्यालय माचा में शनिवार को वृहत पौधरोपण सह पर्यावरण संरक्षण के प्रति जागरूकता कार्यक्रम का आयोजन किया गया. जिसमें लगभग 100 औषधीय और फलदार पौधे लगाए गए. कार्यक्रम में बतौर मुख्य अतिथि खादी ग्रामोद्योग आयोग के पूर्वी क्षेत्र के चेयरमैन मनोज कुमार सिंह एवं विशिष्ट अतिथि के रूप में भाजपा नेता मुचीराम बाउरी उपस्थित रहे. कार्यक्रम में औषधीय पौधे संजय अग्रवाल के द्वारा दिये गए और राही ट्रस्ट के द्वारा बच्चियों के बीच खाद्य सामग्री का वितरण किया गया. कार्यक्रम की शुरुवात बच्चों ने पारंपरिक तरीके से अतिथियों का स्वागत करते हुए किया गया. भाजपा नेता मुचीराम बाउरी ने कहा कि स्कूल की बच्चियों में खेदकूद की अपार प्रतिभा है साथ ही उनमें प्रकृति के प्रति प्रेम भी है. कार्यक्रम का संचालन अमरनाथ सिंह और धन्यवाद ज्ञापन अमित मिश्रा ने किया. कार्यक्रम में मुख्य रूप से अनिल राय, गुरजीत सिंह, अशोक सिंह, विकास साहिनी, मनोज सकुजा, सुनीता सचदेवा, स्कूल के शिक्षक गण एवं स्कूल की बच्चियां उपस्थित रहीं.

प्रोजेक्ट बालिका उच्च विद्यालय में किए गए कई तरह के पौधरोपण

पटमदा: पटमदा प्रखंड के प्रोजेक्ट बालिका उच्च विद्यालय माचा में शनिवार को वृहत पौधरोपण सह पर्यावरण संरक्षण के प्रति जागरूकता कार्यक्रम का आयोजन किया गया. जिसमें लगभग 100 औषधीय और फलदार पौधे लगाए गए. कार्यक्रम में बतौर मुख्य अतिथि खादी ग्रामोद्योग आयोग के पूर्वी क्षेत्र के चेयरमैन मनोज कुमार सिंह एवं विशिष्ट अतिथि के रूप में भाजपा नेता मुचीराम बाउरी उपस्थित रहे. कार्यक्रम में औषधीय पौधे संजय अग्रवाल के द्वारा दिये गए और राही ट्रस्ट के द्वारा बच्चियों के बीच खाद्य सामग्री का वितरण किया गया. कार्यक्रम की शुरुवात बच्चों ने पारंपरिक तरीके से अतिथियों का स्वागत करते हुए किया गया. भाजपा नेता मुचीराम बाउरी ने कहा कि स्कूल की सभी बच्चीयों में खेदकूद की अपार प्रतिभा है साथ ही उनमें प्रकृति के प्रति प्रेम भी है. कार्यक्रम का संचालन अमरनाथ सिंह और धन्यवाद ज्ञापन अमित मिश्रा ने किया. कार्यक्रम में मुख्य रूप से अनिल राय, गुरजीत सिंह, अशोक सिंह, विकास साहिनी, मनोज सकुजा, सुनीता सचदेवा, स्कूल के शिक्षक गण एवं स्कूल की बच्चियां उपस्थित रहीं.




एक साझा प्रयास
संबद्ध : स्वदेशी जागरण मंच

M/s. ADLN Superstructure LLP

TRAFFIC MANAGEMENT PLAN

"AHANA" Proposed Multistoried Residential Project [B+G+11] with other Utility over Revenue Khata no. (Old-7), New-439 with Khesra No. (Old-536,537538,539,540&541), New-54&56 at Village-Sonari, P.O. Sonari, District – East

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1 Introduction

1.1 Need of the Traffic Impact Study

The proposed development will attract and generate the additional trips as an add-on to the existing traffic during its construction and operational period. In order to analyze the traffic conditions during the construction and throughout the project lifespan, a traffic impact assessment is performed. The traffic impact assessment (TIA) is a technical analysis of traffic problems and issues relating to the specific development. The chief objective of the TIA report is to identify whether a particular development project will have an impact on the safety and efficiency of adjacent roads.

1.2 Need for the Traffic Impact Study

The proposed Multistoried Residential Project "AHANA" Proposed Multistoried Residential Project [B+G+11) with other Utility over Revenue, Khata no. (Old-7), New-439 with Khesra No. (Old-536, 537, 538, 539, 540 & 541), New-54&56 at Village-Sonari, P.O. Sonari, District – East Singhbhum-Jharkhand, will introduce additional trips to the existing and additional traffic network, impacting roads during both construction and operational phases. The Traffic Management plan is essential to:

- Quantify the existing and additional traffic load.
- Assess the safety and efficient of adjacent roads to the project.
- Identify potential congestion points.
- Propose management strategies to maintain acceptable Levels of Service (LOS)

1.3 Objective

The objectives of the traffic management plan are as follows:

- Reconnaissance of the proposed site.
- To assess the internal and external traffic management
- To review the existing traffic conditions of the adjacent road network
- To estimate the potential traffic generation due to the proposed development
- To assess the future traffic situation in the surrounding road network
- To appraise the potential traffic impact of the proposed development on the surrounding road network
- To consider road improvement proposals, if required; and to propose a feasible special traffic arrangement plan
- To suggest proposals to alleviate or minimize the impact.

1.4 Scope

- Baseline Traffic Surveys to understand current road usage patterns.
- Project Traffic Impact Analysis, predicting how new development will influence traffic volumes.

- Level of Service (LOS) Analysis to determine the operational efficiency of key road links and intersections.
- Development of Mitigation Measures to address projected traffic issues.
- Preparation of a traffic impact assessment (TIA) or Traffic management Plan Report, in compliance with planning authority requirements.

2 Site Appreciation & Existing Transport Network & Base Traffic

2.1 Site Location and Connectivity

- **Service Road:** The site is directly accessible via a paved service road that connects to local road networks, supporting routine traffic movement for residential and commercial activities.
- **Marine Drive Road:** Approximately 1.03 km towards the North-East, the Marine Drive Road serves as a vital arterial road providing rapid connectivity to the wider city and peripheral areas.
- **NH-33 (National Highway 33):** The project site is connected to NH-33 via Marine Drive Road, offering a direct link to the regional highway network. NH-33 is a significant corridor for inter-city and inter-state traffic, improving logistics and vehicular mobility.

2.2 Vehicle Population

The area exhibits a mixed vehicular profile comprising personal, commercial, and public transport vehicles. Due to its residential density, proximity to commercial hubs, and accessible road network, the vehicle population in Sonari has grown steadily over the past decade.

TABLE 2.1- ESTIMATED VEHICLE COMPOSITION IN SONARI (BASED ON LOCAL RTO DATA TRENDS)

Vehicle Type	Estimated Share (%)	Common Use
Two-Wheelers	60%	Personal mobility, delivery services
Passenger Cars	20%	Private vehicles for family/personal use
Auto Rickshaws	8%	Intermediate public transport
Light Commercial Vehicles (LCVs)	6%	Local goods delivery and logistics
Buses (Private/Local)	3%	Limited public transportation service
Heavy Commercial Vehicles (HCVs)	3%	Occasional movement for goods via NH-33

2.3 Existing Traffic Conditions

2.3.1 Regional & City Connectivity

Project site is well connected with service road. Site also connects to NH-33 through marine drive road which is Nearer (1.03 Km) to the project site towards North East direction.

2.3.2 Survey Locations

Traffic surveys were conducted at the following critical locations:

- Road A
- Road B
- Entry/Exit Points of the proposed site

FIGURE 2.1- SITE VISIT PHOTOGRAPH OF THE PROJECT SITE

FIGURE 2.2- TRAFFIC LOCATION MAP

3 Methodology

Transportation modelling is a critical component in assessing the impact of a proposed building development on the surrounding road network. This study adopts the conventional four-step transportation modelling process, as outlined below:

3.1.1 Trip Generation

- Identifies the number of trips originating from and attracted to the proposed development.
- Factors considered include land use type, household demographics, and socio-economic parameters.
- Using ITE Handbook rates for mixed-use developments (residential and commercial):
    - Residential: 7 trips per dwelling unit/day (50% entering, 50% exiting).
    - Commercial: 40 trips per 1,000 sq.ft/day (50% entering, 50% exiting).

3.1.2 Trip Distribution

- Determines the likely destinations of generated trips.
- A gravity model is used, incorporating factors such as activity intensity and travel cost/time.
- Parameters Include:
    - Marin Drive Road: 30 trips/hr.

3.1.3 Modal Split

- Establishes the proportion of trips using various transportation modes (e.g., private vehicles, public transport, NMT).
- Influenced by accessibility, availability of modes, and user preferences. • Based on Deoghar's transportation patterns:
    - Private Vehicles: 55% (16 trips/hr).
    - Two-Wheelers: 35% (10 trips/hr).
    - Public Transport: 5% (1 trips/hr).
    - Non-Motorized Transport (NMT): 5% (1 trips/hr).

3.1.4 Trip Assignment

- Assigns generated and distributed trips to specific routes in the local network.

- Traffic volumes are forecasted for each road segment to evaluate potential congestion and required improvements.
- Trips are assigned to the road network using shortest-path algorithms. Key routes:
- Marin Drive Road: 30 trips/hr.

Post-Development Traffic:

- Existing peak volume: 829 PCUs/hr.
- Additional volume: 30 trips/hr × 1.2 (average PCU/trip) = 36 PCUs/hr.
- **Total:** 865 PCUs/hr.
- **New V/C Ratio:** 865 / 1,500 = 0.576 (LOS C, stable flow).

This methodology facilitates a comprehensive traffic impact assessment and supports decision-making for infrastructure planning and design.

3.1.5 Codes, Manuals, and Guidelines

- **Indo-HCM 2017:** For road capacity (v/c ratio) and Level of Service (LOS) analysis.
- **IRC Codes:** Applicable road design standards.
- **MoUD SLBs for Urban Transport:** Benchmarks for assessing urban transport services.
- **NBC & Local Bye-laws:** For building access, ramp design, fire path, and evacuation.
- **Development Control & Promotion Regulations:** Governs development and construction in the area.
- **EVCI Bye-laws (MoHUA):** Mandates 20% EV parking and charging provisions.
- **ITE Handbook:** Standard reference for trip generation based on building use types.

3.2 Key Observation at Site

Parameter	Assumption PCUs/hr.
Road Capacity (Urban Arterial)	1,500 PCUs/hr.
Total Volume Observed	829 PCUs/hr.
V/C Ratio	0.552

TABLE 3.1- MONITORED CUMULATIVE DATA OF TRAFFIC

2-wheeler (PCU 0.5)		LMV (PCU 1.5)		HMV (PCU 4.5)		Bus (PCU 3.0)	
Incoming	**Outgoing**	**Incoming**	**Outgoing**	**Incoming**	**Outgoing**	**Incoming**	**Outgoing**
132	128	95	86	41	46	7	5
66	64	142.5	129	184.5	207	21	15
1584	1536	3420	3096	4428	4968	504	360

TABLE 3.2- LOS ANALYSIS

Parameter	Value	LOS Rating	Remarks
Estimated Peak Volume	829 PCUs/hr.	C	Stable flow
V/C Ratio	0.552		
Road Type	Urban Arterial		

4 Traffic De-Congestion Plan

To mitigate the projected increase in traffic volume and maintain LOS C or better, a multi-faceted de-congestion plan is proposed, incorporating infrastructure improvements, traffic management, and sustainable transport initiatives.

4.1 Road A & B– Local Arterial Road

Challenges Identified:

- Moderate congestion during peak hours (V/C = 0.576 post-development).
- Mixed vehicle types (2-wheelers, LMVs, HMVs).
- Limited pedestrian infrastructure.

Management Measures:

- **Traffic Calming Measures:** Install speed humps, lane narrowing, and visual cues to reduce vehicle speed in sensitive areas.
- **Pedestrian Crossings:** Mark zebra crossings, add pedestrian signals, and improve footpaths for safe pedestrian movement.
- **Peak Hour Enforcement:** Deploy traffic staff, restrict heavy vehicles, and monitor violations using CCTV during peak hours.
- **Widening:** Proposal for a 178-meter long, 30-foot-wide road (including paver blocks) from the proposed project site gate to the Ashiana Adarsh Nagar Colony gate.

4.2 Entry/Exit Points of the Proposed Site

Challenges Identified:

- Limited road width may cause turning conflicts at entry/exit.
- Peak hour congestion due to additional turning movements.
- Safety risks for pedestrians and two-wheelers during merging/diverging.
- Potential obstruction to through-traffic during vehicle entry/exit.

Management Measures:

- **Separate Entry and Exit Gates:** Designate distinct gates for entry and exit to streamline vehicle movement and avoid conflicts at access points.

- **Flagmen During Construction:** Deploy trained flagmen during construction phases to regulate vehicle movement and ensure safety for both site traffic and through traffic.
- **Signage and Lighting:** Install clear directional signage and adequate lighting at entry/exit points to enhance visibility, especially during night hours and poor weather conditions.
- **Queue Holding Area:** Provide internal holding bays for construction vehicles or visitor vehicles with a capacity of 10 vehicles (mixed) to prevent on-road queuing.

Impacts:

- Improved traffic flow and minimized entry/exit delays.
- Enhanced safety for road users and site visitors.

4.3 Intersection and Parking Management

4.3.1 Intersection Improvements

- **Installation of Traffic Signals:** Optimize signal timing to reduce delays and regulate vehicle flow.
- **Provision of Dedicated Turning Lanes:** Separate turning movements from through traffic to minimize conflicts.
- **Improved Signage and Road Markings:** Enhance driver guidance and awareness.
- Pedestrian Crossing Facilities: Provide zebra crossings and refuge islands for pedestrian safety.
- **Surveillance Cameras:** CCTV systems will be installed to monitor traffic behavior, enforce traffic rules, and assist in incident management.
- **Peak Hour Monitoring and Enforcement:** Deploy personnel to manage congestion and ensure traffic rule compliance.

Proposed Intersections:

- **Main Site Access Intersection:** Signalized intersection at the primary entry/exit point to manage vehicle movements effectively.
- **Nearby Major Junction Upgrade:** Widen and improve the adjacent key junction to accommodate increased turning volumes from the project. i.e., Junction of Balichela Road.

Impact:

- Intersection delay reduced by 30%.
- LOS improved to B at key junctions.

4.3.2 Parking Strategy

Component	Description
Separate Visitor Parking	Provision for 100 vehicles to cater to the building occupants.
On-site Parking Provision	Adequate off-street parking to accommodate residents and visitors, reducing need for street parking.
Dedicated Loading/Unloading Bays	Marked and managed bays to facilitate commercial deliveries without obstructing live lanes.
On-Street Parking Restrictions	Enforcement of no-parking zones during peak hours to maintain flow.

Impact:

- Reduced on-street congestion by 20%.
- Streamlined delivery operations.

4.4 Installation of Road Signs and Marking

To ensure safe and organized movement of vehicles and pedestrians in and around the building construction site, the following road signage and pavement marking strategies will be implemented in compliance with IRC (Indian Roads Congress) and local urban traffic norms:

4.4.1 Regulatory Signs

These are mandatory signs that help control traffic flow and ensure compliance:

- **Speed Limit Signs:** Installation of speed limit boards (e.g., 20–30 km/h) around the construction zone to reduce vehicle speed.

- **No Entry/One-Way Signs:** To manage restricted or directional access, especially near construction gates and diversion routes.
- **No Parking Signs:** Clearly marked around the site's frontage and approach roads to prevent roadside obstruction.
- **Stop and Give Way Signs:** At site exit points to ensure safe merging with live traffic.

4.4.2 Warning Signs

Used to alert road users of temporary or permanent hazards near the construction site:

- Men at Work signs placed at active construction zones.
- Construction Vehicle Crossing signs near entry/exit points.
- Uneven Surface or Slippery Road warnings if surface conditions are affected by construction.
- Pedestrian Ahead signs where pedestrian activity is expected.

4.4.3 Informational Signs

These signs assist with navigation and site awareness:

- Site Entry / Site Exit Direction Boards for construction vehicles.
- Diversion Arrows guiding traffic to alternative routes (coordinated with local authorities).
- Visitor Parking, Material Delivery, and Emergency Exit indicators inside the site.

4.4.4 Road Markings

Pavement markings will enhance visibility and flow management:

- Centreline and Edge Lines to guide traffic, especially in two-way roads near the site.
- Pedestrian Crosswalks near access gates for safe pedestrian movement.
- Stop Lines at junctions and site exits.
- Chevron and Diagonal Markings to denote restricted or hazardous zones.
- Loading/Unloading Zones marked with yellow paint inside the site.

4.4.5 Temporary Signage During Construction

Temporary signage will be used during different phases of construction:

- Detour and Lane Closure Notices with reflective boards and blinking warning lights.
- Night Visibility Enhancements using retro-reflective paint, solar blinkers, and cat's eyes.

4.4.6 Maintenance and Visibility

- All signs and markings will be maintained regularly for visibility and clarity.
- Obstructions such as construction material or hoardings near signs will be avoided.
- Signs will be installed at standard heights and setbacks to meet safety regulations.

4.5 Environmental Considerations

To minimize the environmental impact of construction and traffic operations, the following measures will be adopted:

- **Dust and Emission Control:** Regular water sprinkling will be conducted at the site and along access roads. Construction vehicles will be covered to reduce dust dispersion and emissions.
- **Noise Mitigation:** Noisy activities and operation of heavy machinery will be restricted to daytime hours. Noise barriers will be considered where necessary.
- **Green Buffer Zones:** Vegetated buffers and tree planting will be implemented along the project boundary to serve as visual screens, absorb air pollutants, and improve the urban aesthetic.

5 Traffic Modelling and Calculations

5.1 Capacity Analysis

Using Indo-HCM 2017:

- **Urban Arterial Capacity:** 1,500 PCUs/hr/lane for 2-lane roads.

V/C Calculation:

Existing: 829 / 1,500= 0.552 (LOS C).

Post-Development: 865 / 1,500 = 0.576 (LOS C)

5.2 Delay Analysis

Using Webster's delay formula for signalized intersections:

$$\left[d = \left\{C\left(\frac{1-g}{C}\right)^2\right\}\left\{2\left(\frac{1-g}{C}\right) * x\right)\right\} + \{x^2\}\{2q(1-x)\}]$$

Where:

(C): Cycle length (120 sec).

(g/C): Green time ratio (0.5).

(x): Degree of saturation (V/C = 0.576).

(q): Flow rate (865 PCUs/hr).

Delay:

- Existing: 15 sec/vehicle.
- Post-Development: 22 sec/vehicle.
- With smart signals: 12 sec/vehicle.

6 Recommendations

The traffic Management plan that will be followed for construction and operational phase are given as follows:

6.1 During Construction

1. It should be imperative that the ingress and egress points are staffed all the time to facilitate smooth traffic movement.
2. To provide adequate parking provision within the site premises during the construction phase for staff as well as visitors.
3. To schedule trailers/heavy vehicles to flow on the road during non-peak traffic hours to avoid congestions.
4. Use of Public transport should be encouraged for the working and visiting personnel.
5. Traffic signage's within the premises to be maintain, wherever required.
6. Two different lanes for up and down direction for flows of vehicles during construction phase is desired under ideal conditions.
7. Material requiring higher loading and unloading time should be placed in interiors of the site or in such a location that the incoming traffic is not hindered and bottlenecks are not formed.
8. Encouraging the use of Electric vehicles for internal movements like site- inspections.

6.2 During Building Operations

Below are the recommendations at building level:

1. Safety Convex Mirrors for blind corners can be installed within the complex and at the ingress- egress point.
2. Internal driveways & ramps with recommended widths are provided to facilitate free flowing internal traffic.
3. Driveway complying with fire tender path norms.
4. Provision of pedestrian walkway accessing to the building.
5. Traffic calming measures such as speed bumps, speed tables, etc.
6. Directional signage's to guide pedestrians and vehicles in normal operations as well as in emergencies.
7. Provision of fleet/ cab pick-up and drop- off facility within site premises or at the access road.

Road Marking and Signage:

As mentioned above, Street design shall incorporate parameters and shall use road markings, signage's as per IRC guidelines, lighting, shading, safety convex mirror, etc.

6.3 Conclusion

The proposed Multistoried Residential Project "AHANA" development will increase traffic volumes by 865 PCUs/hr, raising the V/C ratio to 0.576 (LOS C). The proposed de-congestion plan, including road widening, smart signals, roundabouts, and sustainable transport initiatives, will restore LOS B or better, ensuring efficient and safe traffic operations. The plan aligns with Indo-HCM 2017, IRC, and local regulations, supporting Jamshedpur's transportation needs.

Furthermore, the integration of smart mobility solutions and pedestrian-friendly infrastructure will promote a shift towards sustainable and inclusive urban transport. The project not only addresses immediate traffic concerns but also strengthens the long-term resilience of the local road network. Coordination with city traffic management authorities and continuous monitoring will ensure adaptive traffic responses as the area evolves. Ultimately, the implementation of this plan will enhance road safety, reduce travel delays, and improve overall quality of life for residents and commuters alike.

M/s. ADLN Superstructure LLP

DISASTER MANAGEMENT PLAN

"AHANA" Proposed Multistoried Residential Project [B+G+11] with other Utility over Revenue Khata no. (Old-7), New-439 with Khesra No. (Old-536,537538,539,540&541), New-54&56 at Village-Sonari, P.O. Sonari, District – East Singhbhum- Jharkhand.

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1 Introduction

Disaster management is an essential component of any building construction project, particularly for large-scale developments involving complex structural and operational challenges. In the context of the "AHANA" Proposed Multistoried Residential Project [B+G+11) with other Utility over Revenue, Khata no. (Old-7), New-439 with Khesra No. (Old-536, 537, 538, 539, 540 & 541), New-54&56 at Village-Sonari, P.O. Sonari, District – East Singhbhum- Jharkhand by M/s. ADLN Superstructure LLP., the implementation of a comprehensive Disaster Management Plan (DMP) is crucial. This project spans a total built-up area of 30572.39 m^2, indicating its scale and the corresponding need for robust safety and emergency response mechanisms.

Construction activities of this magnitude inherently involve a range of risks — including fire hazards, structural failures, equipment-related accidents, and exposure to natural calamities such as earthquakes or floods. Without appropriate preparedness, such incidents can lead to significant human, material, and financial losses, as well as delays in project execution.

The Disaster Management Plan for "AHANA" is designed to function as a proactive framework that identifies potential threats, outlines preventive measures, and establishes clear response and recovery protocols. It aims to ensure the safety of all personnel on site, protect the surrounding community, and minimize disruption to the construction timeline.

This plan includes risk assessments, emergency procedures, training programs, and coordination with local authorities. By integrating disaster management strategies from the early planning and design stages through to the final execution, the project aims to maintain the highest safety standards and demonstrate resilience against unforeseen events. The plan further aligns with applicable national building codes and disaster preparedness guidelines, reinforcing the commitment of M/s. ADLN Superstructure LLP. to safety, sustainability, and operational integrity.

1.1 Objective

- **Ensure Safety:** Prioritize the safety of workers, equipment, and property by enforcing safety protocols, using PPE, conducting training, and protecting assets from hazards like fire, collapse, or natural disasters.
- **Minimize Disruption:** Reduce the impact of disasters through proactive measures like proper site planning, fire safety systems, secure hazardous material storage, and resilient construction methods.
- **Define Roles and Procedures:** Establish a Disaster Management Committee with clear roles and procedures for effective emergency response, including evacuation, first aid, and coordination with authorities.
- **Enable Quick Recovery:** Facilitate rapid restoration through damage assessment, medical aid, site security, and resumption of construction, ensuring continuity and minimizing delays or liabilities.

2 Hazard Identification and Risk Assessment (HIRA)

A comprehensive assessment of potential hazards was conducted to identify and evaluate risks that could affect the construction site. This forms the basis for creating specific mitigation and response strategies.

2.1 Identified Hazards and Risk Levels

Hazard Type	Description of Potential Hazards	Risk Level
Physical Hazards	Includes risks such as falling from heights, being struck by falling objects, and slips/trips due to uneven surfaces or wet conditions.	High
Chemical Hazards	Exposure to harmful substances like cement dust, paint fumes, and fuel used on-site.	Medium
Mechanical Hazards	Injuries from machinery and equipment such as cranes, lifts, and hand tools.	Medium
Electrical Hazards	Contact with live wires, improper insulation, and short circuits from temporary electrical setups.	High
Fire Hazards	Potential fire risks from flammable materials and faulty electrical installations.	High
Natural Hazards	Earthquakes (Zone IV vulnerability), extreme heat, and seasonal thunderstorms common in Jharkhand.	High
Health Hazards	Respiratory problems from dust exposure and noise-induced hearing loss from construction machinery.	Medium

2.2 Risk Evaluation

Each identified hazard is evaluated based on:

- Probability of occurrence: High / Medium / Low
- Severity of impact: Critical / Major / Moderate / Minor
- Risk priority: Combining probability and severity to prioritize response planning.

Hazard Type	Probability	Severity	Risk Priority
Earthquake	Medium	Major	High
Fire outbreak	Medium	Critical	High
Structural collapse	Low-Medium	Major	Medium
Flooding	Low	Moderate	Medium
Equipment failure	Medium	Major	High
Fall from height	Medium-High	Critical	Very High
Electrocution	Medium	Major	High
Chemical exposure	Low	Moderate	Medium

2.3 Risk Assessment

The scale of the project—B+G+11 floors with a total built-up area of 30572.39 m^2—the assessment takes into account both natural and man-made risks, their likelihood of occurrence, and the potential impact on human life, property, and project continuity.

The following are key hazards identified during the construction phase:

Natural Hazards

- **Earthquakes:** Jamshedpur (Sonari) lies in Seismic Zone II, indicating a low seismic risk, but basic precautions are still incorporated into the project design for safety.
- **Flooding:** While the project site is not in a designated high-flood zone, but the presence of the Subarnarekha River just 0.34 km to the northeast increases the risk of temporary waterlogging during periods of heavy rainfall, especially if local drainage is inadequate.
- **Lightning and Storms:** Seasonal storms pose a threat to workers, especially those operating at height or near scaffolding and cranes.

Man-Made Hazards

- **Fire Hazards:** Risk due to electrical faults, welding/cutting operations, and storage of flammable materials such as paints, diesel, and solvents.
- **Structural Collapse:** Temporary structures like scaffolding, centering, and formwork can fail if not erected or maintained properly.
- **Machinery and Equipment Failure:** Cranes, hoists, concrete mixers, and other heavy machinery can pose a danger if they malfunction or are misused.

- **Fall Hazards:** Work at height (above 10 floors) increases the risk of serious injuries from slips, trips, or falls.
- **Electrocution:** Exposure to live wires or improper electrical installation during ongoing MEP works.
- **Chemical Exposure:** Workers may be exposed to hazardous construction materials such as adhesives, thinners, or acids.

2.4 Risk Mitigation Strategy

- **Design & Engineering Controls:** Incorporate seismic-resistant design and drainage systems.
- **Administrative Controls:** Regular site inspections, clear signage, worker safety orientation.
- **Technical Controls:** Use of fall arrest systems, fire extinguishers, ground-fault circuit interrupters (GFCIs).
- **Personal Protective Equipment (PPE):** Helmets, harnesses, gloves, boots, and safety goggles mandatory for workers.

3 Emergency Preparedness Plan (EPP)

EPP provides a detailed plan to respond to various types of emergencies that may occur during the construction phase. It includes the formation of an Emergency Control Organization, emergency contact details, resource availability, and protocols for different types of incidents.

3.1 Emergency Control Organization

A designated team with defined roles and responsibilities will lead the emergency response on-site. The key members include:

Role	Responsibilities
Site Project Manager	Leads the entire emergency response and decision-making process.
Safety Officer	Coordinates emergency activities and ensures compliance with safety protocols.
First Aid Coordinator	Provides first aid and coordinates medical help.
Fire Marshal	Handles fire emergencies and ensures all fire-fighting equipment is functional.
Evacuation Team	Guides workers to safety and assists in headcounts at assembly points.

3.2 Types of Emergencies and Response Plans

The Emergency Management Committee (EMC), led by Incident Commander Amit Mukherjee (Project Manager), will implement tailored response plans for each identified hazard to ensure rapid, coordinated action and minimize harm.

3.2.1 Natural Hazards Response Plan

1. **Earthquake**
    - Immediate evacuation of all buildings and elevated work platforms.
    - Designated open areas to be used as assembly points.
    - Structural safety checks before re-entry.
2. **Flooding**
    - Installation of water pumps and improvement of site drainage.

- Elevated storage of electrical equipment and materials.
- Shutdown of electrical systems during waterlogging.
- Provision of waterproof PPE and designated safe shelters.

3. **Lightning and Storms**
   - Suspension of crane and scaffolding work during storm alerts.
   - All workers to move to safe shelters away from metal structures.
   - Disconnection of temporary electrical setups.
   - Use of lightning arrestors and weather monitoring systems.

3.2.2 Man-made Hazards Response Plan

1. **Fire Hazard**
   - Deployment of fire extinguishers at high-risk zones (welding stations, fuel storage).
   - Fire Warden-led evacuation drills and response coordination.
   - Fire detection and alarm systems across the site.
   - No-smoking policies and flammable material segregation.
2. **Structural Collapse**
   - Immediate rescue operations under supervision of Safety Officer.
   - Securing of site and halting ongoing work.
   - Structural inspection before resumption.
   - Pre-use checks and third-party certification for temporary structures.
3. **Machinery and Equipment Failure**
   - Operator shutdown of machinery upon noticing faults.
   - First Aid Officer to assess and assist injured personnel.
   - Lockout/tagout procedures for faulty equipment.
   - Preventive maintenance schedules and operator training.
4. **Fall Hazard**
   - Rescue operation using safety nets, harnesses, and cranes.
   - First Aid Officer intervention and hospital transport if required.
   - Investigation of cause and re-inspection of fall protection systems.
   - Mandatory PPE and fall arrest systems for work at height.
5. **Electrocution**
   - Immediate power cutoff and use of insulated tools for rescue.
   - CPR and first aid by certified personnel on-site.
   - Inspection of work areas by Electrical Safety Officer.
   - Training and signage on electrical hazards.

6. **Chemical Exposure Response Plan**
    - On-site eyewash stations and showers in handling areas.
    - Immediate medical evaluation and reporting.
    - MSDS (Material Safety Data Sheets) availability for all chemicals.
    - Safe storage, handling training, and proper labelling.

3.3 Emergency Contact Numbers

Maintain updated contact information at all access points on-site.

Service	Contact Number
Fire Brigade/ Local Fire Department	112/ 0657 230 0862
Ambulance/ Local Hospital	645323 /08401469487
Police/Local Thana	100/ 9431706507
Railway Enquiry	139
DC Office	099542 99334
SP Office	9471190203

3.4 Evacuation Plan

A structured evacuation plan is critical for ensuring the safety of all personnel during an emergency. The following components are integral to the evacuation procedure:

- **Escape Routes:** All escape routes are clearly marked and unobstructed, with signs illuminated using emergency lighting.
- **Assembly Points:** Safe locations have been designated outside the high-risk zones where personnel can gather post-evacuation.
- **Exit Maps:** Site maps showing escape paths are posted at every floor and access point.
- **Trained Wardens:** Designated employees are trained to lead and assist in evacuation efforts.
- **Roll Call & Headcount:** Attendance registers and headcount sheets are maintained to account for everyone.
- **Communication:** Public address systems and handheld radios are available for coordination.

- Tower wise and project site **assembly points – total 5 nos.**
- Marking of fire exists, assembly points and exist from premises

FIGURE 3.1- MASTER LAYOUT PLAN SHOWING THE ASSEMBLY POINT & EVACUATION PLAN

3.5 Training and Drills

Training and periodic mock drills are conducted to enhance the awareness and response capability of all staff and workers.

- **Induction Training:** New workers receive training on fire safety, evacuation, and emergency procedures.
- **Toolbox Talks:** Daily briefings cover safe practices and emergency scenarios based on current site work.
- **Mock Drills:** Monthly fire and evacuation drills test emergency readiness.
- **First Aid Training:** Selected staff members receive certified first aid training. Periodic refresher courses are provided to maintain proficiency.
- **Earthquake Preparedness:** Although Sonari falls under Seismic Zone II (low seismic risk), awareness sessions and annual earthquake drills are conducted to ensure basic preparedness and build awareness among workers.
- **Feedback Sessions:** After each training or drill, review meetings assess gaps and improve the emergency response plan.

3.6 Emergency Resources

The site is equipped with emergency equipment and supplies as listed below:

- **Fire Extinguishers:** Multi-purpose (ABC type) extinguishers placed at regular intervals.
- **First Aid Kits:** Stocked and maintained at all active work zones.
- **Stretcher & Blankets:** Kept at site control rooms for use during rescues.
- **Fire Buckets & Sand Bins:** Located near fuel storage and welding zones.
- **Water Supply Tanks:** For fire suppression and general use in emergencies.
- **Emergency Lighting:** Installed at key locations to support night evacuations.
- **Backup Power Supply:** Generator set available to maintain lighting and communications.

3.7 Review and Continuous Improvement

To keep the Emergency Preparedness Plan up to date and responsive to new threats or lessons learned, the following actions are undertaken:

- **Quarterly Safety Review Meetings**: Led by the Project Manager and Safety Officer.
- **Incident Audits:** Each emergency or near-miss is reviewed and documented.
- **Continuous Training:** Schedule adapted to changing site conditions or new risk assessments.
- **Liaison with Authorities:** Coordination with the local fire station, police, and hospitals is maintained.
- **Document Control:** Updates to procedures and contacts are maintained with version control and regular audits.

4 Risk Mitigation and Preventive Measures

This section outlines proactive strategies that are designed to reduce both the likelihood and the impact of disasters during the execution of the "AHANA" residential project, ensuring a safe and resilient construction environment. These measures integrate technical standards, engineering solutions, and operational controls aligned with national codes and best practices.

4.1 Seismic-Resistant Design

The structural framework of the project is being designed in full compliance with IS 1893:2016 (Criteria for Earthquake Resistant Design of Structures) and IS 13920:2016 (Ductile Detailing of Reinforced Concrete Structures). These standards ensure that the building can withstand seismic forces expected in Zone II, where Sonari, Jamshedpur is located. Although Zone II represents a low seismic risk or, the incorporation of ductile detailing and proper load path distribution enhances the building's structural integrity, ensuring safety and minimizing damage during potential seismic events.

4.2 Temporary Structure Safety

All temporary structures such as scaffolding, shuttering, and formwork will be constructed using high-quality, certified materials. These will be:

- Subject to routine inspections, especially after heavy winds or rains.
- Erected under supervision of qualified engineers or safety officers.
- Anchored properly to prevent toppling.
  Safety nets and guardrails will be installed to protect workers in and around these structures.

4.3 Fuel and Chemical Storage

To prevent fire hazards and environmental contamination:

- All flammable fuels, solvents, and chemicals will be stored in designated, ventilated areas with secondary containment trays to catch leaks or spills.
- Storage will be clearly labeled with hazard signs.
- Proper distance will be maintained from ignition sources such as welding areas or electrical panels.
- Only trained personnel will handle these materials, using appropriate PPE.

4.4 Lightning Protection System

A comprehensive lightning protection system will be installed on:

- Tower cranes
- Tall vertical formwork
- Lift cores and rebar towers
- These systems include air terminals, down conductors, and grounding rods, ensuring any lightning strike is safely discharged into the ground, preventing injury or structural damage during thunderstorms.

4.5 Drainage Management

The site will be equipped with a planned network of stormwater drains to:

- Prevent flooding, waterlogging, and foundation erosion, particularly during monsoon months.
- Maintain dry and stable working conditions across the construction site. Drains will be regularly cleaned and inspected to ensure debris does not block water flow, and temporary bunds or trenches may be installed in excavation areas for additional control.

4.6 Weather Alerts

The site's communication system will be integrated with real-time weather updates and alerts issued by the India Meteorological Department (IMD). Key actions include:

- Suspension of high-risk activities (like lifting with cranes, formwork at height) during strong winds or lightning warnings.
- Pre-emptive securing of loose materials and temporary structures in anticipation of storms.
- Notifying all site personnel via public address systems, mobile alerts, or loudspeakers.

These mitigation and preventive measures form a key layer of defence in the overall Disaster Management Plan and are critical for ensuring uninterrupted construction progress, workforce safety, and long-term structural integrity.

5 Roles and Responsibilities

5.1 Roles and Responsibilities

The Emergency Management Committee (EMC) is chaired by Mr. Sudheer, Project Manager, who also serves as the Incident Commander during emergencies. The roles within the EMC are as follows:

- **Incident Commander:** Mr. Sudheer (Project Manager), who takes overall charge during emergencies and leads the EMC.
- **Emergency Response Team (ERT):** A dedicated group within the EMC including, Fire Warden, First Aid Officer, Evacuation Lead, Communication Officer, and Security Head.
- **Liaison Officer:** Interfaces with government authorities, hospitals, and other agencies.
- **Documentation Officer:** Rresponsible for accurately recording all incident-related information for reporting and review.

5.2 Business Continuity Plan (BCP)

Add a basic framework for continuing or quickly resuming construction activities post-disaster:

- Damage Assessment Teams to evaluate the structural integrity of partially completed buildings.
- Alternate Work Plans to shift work to unaffected areas or off-site prefabrication.
- Insurance and Financial Provisions for disaster recovery.
- IT and Data Backup strategies for construction drawings, project schedules, and communication logs.

5.3 Coordination with Local Disaster Authorities

- Register the construction project with the District Disaster Management Authority (DDMA), Jamshedpur, East Singhbhum.
- Participate in district-level drills and integrate their recommendations into the site plan.
- Maintain updated information with:
    - District Hospital
    - Local Police Station
    - Fire Station
    - Jharkhand State Disaster Response Force (SDRF)

5.4 Environmental Protection Measures (as part of disaster mitigation)

- Prevent contamination of soil and water during a disaster (e.g., chemical spill).
- Dust and smoke suppression plans for post-fire incidents.
- Waste segregation and disposal procedures for disaster debris.

ADLN
SUPERSTRUCTURE LLP

Environmental Policy

15 /01/2025

We, **M/s. ADLN Superstructure LLP** are dedicated to protecting the environment. We commit to sustainable practices across all project phases — **Construction, Operation, and Maintenance** —by implementing effective environmental controls and adhering to all relevant regulations.

Our commitments include:

- Complying with environmental laws and standards.
- Promoting transparency in environmental practices.
- Raising awareness among employees and stakeholders about environmental responsibilities.
- Operating responsibly to support long-term sustainability.
- Reducing environmental impact through efficient resource use, robust waste management, and renewable energy adoption where possible.
- Building expertise and resources to align with industry best practices.
- Continuously improving environmental performance through clear objectives, targets, and certifications.
- Regularly reviewing this policy to ensure it remains relevant and effective.

This policy underscores our dedication to environmental stewardship, sustainable development, and further improvements.

Mr. Lalit Mohan Agarwal

For ADLN SUPERSTRUCTURE LLP

Authorized Partner

M/s. ADLN Superstructure LLP

Partner

AHANA™
— LIVING REDEFINED —

ADLN SUPERSTRUCTURE LLP, 3rd Floor, Basant Central Holding No.F,
Mills and Godown Area, Sakchi, Jamshedpur - 831001
Contact: +91 92292 55510 | Email: ahana@adln.in

के साथ चुनावी आकलन कर रहे हैं, यहां के दृश्य देखने से ऐसा लगता है मानो सारी लड़ाई चुनाव तक ही थी. समर्थकों के बीच दलों के दीवार ढह गई नजर आ रही.

परसुडीह फायरिंग मामले में मुख्य आरोपी गिरफ्तार

वारदात में प्रयुक्त हथियार अब तक बरामद नहीं

जमशेदपुर : परसुडीह थाना अंतर्गत राहरगोड़ा में ईंट भट्ठा मालिक अजीत सिंह पर फायरिंग के मामले में पुलिस ने मुख्य नामजद आरोपी भरत कामत को गिरफ्तार कर लिया है. हालांकि, पुलिस अब तक घटना में इस्तेमाल किए गए हथियार को बरामद नहीं कर सकी है. घटना 12 नवंबर की रात की है, जब अजीत सिंह पर जानलेवा हमला किया गया था. इस फायरिंग में अजीत के हाथ में दो गोलियां लगी थीं. इसके बाद पुलिस ने अजीत के बयान पर भरत कामत, बिट्टू कामत और विकास कामत के खिलाफ प्राथमिकी दर्ज की थी. अजीत सिंह ने अपने बयान में बताया था कि घटना से दो दिन पहले उससे 50 लाख रुपये की रंगदारी मांगी गई थी. जब रंगदारी देने से इंकार किया गया, तो उस पर यह हमला किया गया.

मानगो के टोनी नामजद आरोपी

■ अन्य आरोपियों की गि

जमशेदपुर : मानगो के उलीडी थाना क्षेत्र के उमा टिफिन के पा 15 नवंबर को हुई टोनी सिंह ह हत्या के मामले में नामजद आरो अविनाश कुमार सिंह ने प्रथम श्रे न्यायिक दंडाधिकारी आल कुमार के समक्ष आत्मसम किया. घटना के दौरान टोनी साथ मौजूद विष्णु भी गोलीबा घायल हुआ था. विष्णु ने ब कि हत्या से पहले टोनी का नाम के युवक से विवाद हुआ विवाद के बाद उत्तम साथियों अविनाश और निति साथ वहां पहुंचा और हाथापा

मुद्रक, प्रकाशक एवं स्वत्वाधिकारी उदित अग्रवाल द्वारा मेसर्स **उदित वाणी** के लिये बाबू
सम्पादक : उदित

from Gandey in Giridih district. Kalpana entered politics earlier this year after Hemant faced legal challenges. Having won a [illegible] emerged as an energetic campaigner for the JMM. Her opponent, BJP's Munia Devi, a former district parishad president, has a strong local base, setting up a contest between a rising JMM star and an experienced leader.

Adding complexity to the family's electoral narrative is Sita Soren, Shibu Soren's daughter-in-law, who parted ways with the JMM earlier this year. Now contesting under the BJP banner from Jamtara, she faces Congress candidate Irfan Ansari, a Minister in Hemant Soren's cabinet. This high-stakes battle sees Sita [illegible] politically outside the Soren family's traditional fold.

For the Soren family, these elections are more than just a test of political dominance; they are a defining moment in shaping the future of the JMM and the INDIA Bloc's strength in Jharkhand. The outcomes will not only influence the political landscape of the state but also determine the trajectory of one of Jharkhand's most prominent political families.

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rajit Mahto)
has put up
, son of
and Mahto.

PUBLIC NOTICE

The Ministry of Environment, Forest and Climate Change (Issued by the State Environment, Impact Assessment Authority (SEIAA) Jharkhand under the provision of EIA notification 2006 has accorded Environmental Clearance (EC) to **M/s ADLN Superstructure LLP for proposed B+G+11 Multistoried Residential Project "Ahana"** at Khata no. 439 & Khesra no. 54 & 56 at Sonari, Jamshedpur, East Singhbhum.

The copies of above mentioned Environmental Clearance (EC) EC/SEIAA/2024-25/3114/2024 dated 3rd June 2024 are available for reference with SEIAA, Jharkhand and may be seen at the website of SEIAA, Jh at www.jseiaa.org. Copies of the same are also available at Jharkhand State Pollution Control Board (JPSCB) Head Office Ranchi and Regional Office Jamshedpur.

For, M/s ADLN Superstructure LLP
Sonari, Jamshedpur

ADLN SUPERSTRUCTURE LLP

Reg. Office: 3rd Floor, Basant Central, Mills & Godown Area, Sakchi, Jamshedpur-831001

LLP Identifion No. ABC-3753
Pan ABZFA5496L
E-mail: adln2022@rediffmail.com

To,
The Deputy Municipal Commissioner,
Jamshedpur Notified Area Committee,
Jamshedpur, Jharkhand

Date: 19th November 2024

Subject: Regarding submission of Environmental Clearance Certificate of our project "Ahana" by ADLN Superstructure LLP at Plot no. 54/56, Sonari

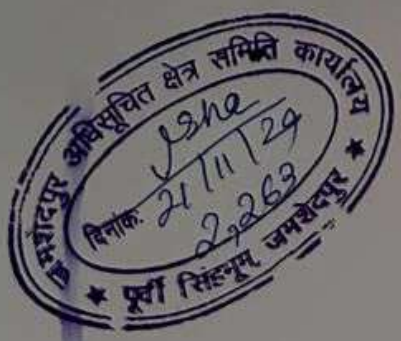
Dear Sir,

With the above subject we have to inform you that we have received Environmental Clearance for our proposed B+G+11 multistoried residential project "Ahana" by ADLN Superstructure LLP at Khata no. 439 and Khesra no. 54 and 56 at Sonari, Jamshedpur, East Singhbhum by letter no: EC-EC/SEIAA/2024-25/3114/2024 dated 3/6/24

A xerox copy of the Environmental Clearance is attached for your kind perusal and needful.

Thanking you,

ADLN Superstructure LLP



saveComp

Jharkhand
State Pollution Control Board

Online Consent Management & Monitoring System

Ministry of Environment, Forest and Climate Change
Government of India

Home | Laboratory Management | Waste Management | Batteries Registration | Construction & Demolition Authorization | CESS Management | Knowledge Base | Logout

- Industry Profile
- Compliance Management
- Laboratory Monitoring Report
- Online Payment Verification
- Fee Calculator
- e-Wallet Management
- Delete InProgress Applications
- Delete InProgress LAB Applications
- View Notices 0

Send us your feedback and suggestions

click here for any kind complaints or query

Welcome Ahana by M/s ADLN Superstructure LLP — Date : 15-5-2026

Your Compliance details has been Submitted. Your Acknowledgement Number is 25976939.
Thank You!.

General

General Details

Industry Name:	Ahana by M/s ADLN Superstructure LLP
Industry Address:	Village-Sonari, P.O. Sonari, Jamshedpur, District – East Singhbhum- Jharkhand
Industry Pin:	831011
Industry S.T.D. Code(Phone):	91
Industry Phone No:	9334821219
Industry E-Mail Address:	ahana@adln.in
Occupier Name:	Lalit Agarwal
Occupier Designation:	Partner
Occupier Address:	House No 22, Ladhuram Kedia Niwas, Marwari para road, Jugsalai, Jamshedpur
Occupier Pin:	831006
Occupier Mobile No:	7542025453
Occupier Email Address:	ahana@adln.in
Industry Category:	ORANGE
Industry Type:	Building and construction project more than 20,000 sq. m built up area
Last Consent Granted App. No:	19406122
Last Consent Granted Uploaded Certificate:	View Uploaded Certificate
Last Consent Granted App. Type:	CTE
Authorization to file Compliance:	View File

Proposal No.	State	Proposal Name	Category	User Agency Name	Proposal Recieved on	File No	Date of grant

Proposal No. SIA/JH/INFRA2/472702/2024
State - Jharkhand
Proposal Name - M/s. ADLN SUPERSTRUCTURE LLP.
Category - INFRA-2
File No EC/SEIAA/2024-25/3114/2024
Date of grant - 03.06.2024

General Condition: View

Specific Condition: View