

# **SIX-MONTHLY COMPLIANCE**

**(01-04-2021 to 31-12-2021)**

**of**

## **ENVIRONMENTAL CLEARANCE**

**(J.13012/86/2010-IA.II (T) dated 21-3-2011**

**ISSUED TO**

**225 MW GAS BASED COMBINED  
CYCLE POWER PLANT**

**GAMA INFRAPROP PVT LTD**

**Mahuakheraganj, Kashipur,  
Uttarakhand**

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BY SPEED POST

J-13012/86/2010-LA.II (T)  
Government of India  
Ministry of Environment & Forests

Paryavaran Bhawan  
CGO Complex, Lodi Road  
New Delhi-110 003  
Dated: March 21, 2011.

To  
M/s Gama Infraprop Pvt. Ltd.  
M-3, First Floor, Aurobindo Marg  
Hauz Khas  
New Delhi - 110 016.

**Sub: 225 MW Gas Based Combined Cycle Power Plant in notified industrial area at village Mahuakherganj, in Kashipur Taluk, in Udham Singh nagar Distt., in Uttarakhand - reg. Environmental Clearance.**

Sir,

The undersigned is directed to refer to letters dated 20.01.2011 on the subject mentioned above.

2. The Ministry of Environment & Forests has examined the application. It has been noted that the proposal is for setting of 225 MW Gas Based Combined Cycle Power Plant M/s Gama Infraprop (P) Ltd. at village Mahuakheraganj, in Kashipur Taluk, in Udham Singh Nagar Distt., in Uttarakhand. Land requirement will be 25 acres, which is in notified industrial area. The co-ordinates of the site are at Latitude 29°08'21.92" N to 29°08'37.96"N and Longitude 78°57'44.21"E to 78°58'03.17"E. Natural gas requirement will be 0.90 MMSCMD. Water requirement will be 600 m<sup>3</sup>/day and will be sourced from ground water within the plant. There are no national parks, wildlife sanctuaries, heritage sites, tiger/biosphere reserves etc. within 10 km of the site. Public hearing is not required as the unit is located in the notified industrial area. Cost of the project will be Rs. 850 Crores.

3. The project has been considered in accordance with the provisions of the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated September 14, 2006.

4. Based on the information submitted by you, as at Para 2.0 above and others and presentation made by you and your consultant before the Expert Appraisal Committee (thermal Power) in its 17<sup>th</sup> Meeting held during February 7-8, 2011, the Ministry of Environment and Forests hereby accords environmental clearance under the provisions of EIA notification dated September 14, 2006, subject to the compliance of the following Specific and General conditions:

**A. Specific Conditions:**

- (i) Vision document specifying prospective plan for the site shall be formulated and submitted to the Ministry **within six months**.
- (ii) In case fuel for running the power plant is proposed to be changed from natural gas to other fuel (liquid or solid) the project proponent shall apply for such a change in environmental clearance along with necessary documents as required under EIA notification, 2006 (and its amendments). In such a case the necessity for holding public hearing again or otherwise will be determined by the Ministry in consultation with the Expert Appraisal Committee (Thermal Power).
- (iii) The project proponent shall submit **within three months** to the Ministry a certificate / confirmation from the Office of the Chief Wildlife Warden to the effect that the area does not fall in the corridor of migratory route of elephants.
- (iv) The project proponent shall in association with other Gas Based Thermal Power Plants coming up in the District, initiate a study through a reputed institution to assess the cumulative impact of the power plants on the AAQ of the area and submit its report to the Ministry within two years. The study shall in particular assess the impact of emission of the gas power plant on the chemistry of upper troposphere and stratosphere of the atmosphere and the impact on radiation budget. It shall be ensured that the study takes into account the worst seasonal atmospheric conditions. The project proponent shall ensure that the Ministry is informed of the commissioning of the study and shall submit status report every quarterly. The report of the study shall be submitted to the Ministry for further action as may be necessary.
- (v) Local employable youth shall be trained in skills relevant to the project for eventual employment in the project itself. The action taken report and details thereof to this effect shall be submitted to the Regional Office of the Ministry and the State Govt. Dept. concerned from time to time.
- (vi) Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- (vii) Hydro geological study of the area shall be reviewed annually and report submitted to the Ministry. No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting up / operation of the power plant.
- (viii) COC of 5.0 shall be adopted.



- (ix) A well designed rainwater harvesting shall be constructed. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a **period of three months** from the date of issue of clearance and details shall be furnished to the Regional Office of the Ministry. Subsequently water requirement for running the plant shall be met from harvested rain water and use ground water shall be dispensed with thereafter.
- (x) Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring shall also be carried out particularly for heavy metals (Cr,As,Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.
- (xi) Monitoring surface water quantity and quality (if any nearby) shall also be regularly conducted and records maintained. The monitored data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall be undertaken.
- (xii) The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon. Arrangements shall be made that effluents and storm water do not do not get mixed.
- (xiii) A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.
- (xiv) The project proponent shall set up permanent monitoring stations for measurement of PAN, NMHC besides criteria pollutants.
- (xv) Dry Low NO<sub>x</sub> Burners shall be installed.
- (xvi) A stack of 40 m height shall be provided with continuous online monitoring equipments for ambient air quality parameters notified by the Ministry including NO<sub>x</sub>. Exit velocity of flue gases shall not be less than 22 m/sec.
- (xvii) Green Belt consisting of three tiers of plantations of native species around plant constituting 33% of total area. Tree density shall not less than 2500 per ha with survival rate not less than 80 %.
- (xviii) In addition to development of green belt, social forestry measures shall be taken up in close consultation with the District Forests Department. The project proponent shall accordingly identify blocks of degraded forests and generation of degraded forests shall be

undertaken at a large scale. In pursuance to this the project proponent shall formulate time bound action plan along with financial allocation and shall submit status of implementation to the Ministry every six months.

- (xix) The project proponent shall also adequately contribute in the development of the neighbouring villages. Special package with implementation schedule for free potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner.
- (xx) An amount of Rs 3.4 Crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs 0.68 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted **within three month** along with road map for implementation.
- (xxi) While identifying CSR programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.
- (xxii) It shall be ensured that in-built monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time.

**B. General Conditions:**

- (i) Adequate safety measures shall be provided in the plant area to check/minimize fires and other hazards. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.
- (ii) Storage facilities for auxiliary liquid fuel such as LDO and/ HFO/LSHS (if any) shall be made in the plant area in consultation with Department of Explosives, Nagpur. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.
- (iii) First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.

- (iv) Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/car muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non noisy/less noisy areas.
- (v) Regular monitoring of ground level concentration of NO<sub>x</sub> & PM<sub>10</sub> shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.
- (vi) Provision shall be made for the housing of construction labour (as applicable) 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.
- (vii) The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>.
- (viii) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, urban local Body and the Local NGO, if any, from whom suggestions/representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- (ix) An Environmental Cell shall be created at the project site itself and shall be headed by an officer of appropriate seniority and qualification. It shall be ensured that the head of the Cell shall directly report to the Head of the Organization. The status report on the functioning of the Cell shall be submitted to the regional office of the Ministry periodically.

- (x) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely RSPM, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.
- (xi) The environment statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.
- (xii) The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests.
- (xiii) Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly basis. Criteria pollutants levels including NO<sub>x</sub> (from stack & ambient air) shall be displayed at the main gate of the power plant.
- (xiv) Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.
- (xv) The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.

(xvi) Full cooperation shall be extended to the Scientists/Officers from the Ministry / Regional Office of the Ministry at Bangalore / CPCB/ SPCB who would be monitoring the compliance of environmental status.

4. The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. The Ministry may also impose additional environmental conditions or modify the existing ones, if necessary.

5. The environmental clearance accorded **shall be valid for a period of 5 years** to start operations by the power plant.

6. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

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

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

Yours faithfully,

  
(Dr. P.L. Ahujara)  
Director

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001.
2. The Secretary (Environment), Forests and Environment Department Government of Uttarakhand.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
4. The Chairman, Uttarakhand Environment Protection & Pollution Control Board, Paryavaran Bhavan, E-115; Nehru Colony, Dehradun-248001.
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi- 110032.







6. The Chief Conservator of Forests, Ministry of Environment and Forests, Regional Office(CZ), Kendriya Bhawan, 5<sup>th</sup> Floor, Sector "H", Aliganj, Lucknow-226020.
7. The District Collector, Udham Singh Nagar District, Govt. of Uttarakhand.
8. Guard file/Monitoring file.

(Dr. P.L. Ahujara)  
Director

**COMPLIANCE WITH ENVIRONMENTAL CONDITIONS STIPULATED BY MOEF**

**A. Specific Conditions:**

	<b>EC Conditions</b>	<b>Compliance</b>
1.	Vision Document specifying prospective plan for the site shall be formulated and submitted to the Ministry <b>within six months.</b>	Complied (vide submission dated 7 <sup>th</sup> Sep 2020)
2.	In case of fuel for running the power plant is proposed to be changed from natural gas to other fuel (liquid or solid) the project proponent shall apply for such a change in environmental clearance along with necessary documents as required under EIA notification, 2006 (and its amendments). In such a case the necessity for holding public hearing again or otherwise will be determined by the Ministry in consultation with the Expert Appraisal Committee (Thermal Power).	The fuel for running the power plant is Natural Gas.
3.	The project proponent shall submit within three months to the Ministry a certificate / confirmation from the office of the chief of migratory Warden to the effect that area does not fall in the corridor of migratory route of elephants.	Complied (vide submission dated 7 <sup>th</sup> Sep 2020)
4.	The project proponent shall in association with other Gas Based Thermal Power Plants coming up in the District, initiate a study through a reputed institution to assess the cumulative impact of the power plants on the AAQ of the area and submit its report to the Ministry within two years. The study shall in particular assess the impact of emission of the gas power plant on the chemistry of upper troposphere and stratosphere of the atmosphere and the impact on radiation budget. It shall be ensured that the study takes into account the worst seasonal atmospheric conditions. The project proponent shall ensure that the Ministry is informed of the Commissioning of the study and shall submit status report every quarterly. The report of the study shall be submitted to the Ministry for further action as may be necessary.	<p>Complied (vide submission dated 17<sup>th</sup> Dec 2020)</p> <p>There are 3 power plants in the area which are :</p> <ol style="list-style-type: none"> <li>1. M/s Gama Infraprop Pvt. Ltd. (installed capacity 225, commissioned capacity 107 MW)</li> <li>2. M/s Shrawanthi Energy (installed capacity 450 MW, commissioned capacity 225 MW)</li> <li>3. M/s Beta Infratech (installed capacity 225 MW, not commissioned)</li> </ol> <p>Of all the 3 projects in the area M/s Beta could not commission the project yet and M/s Gama &amp; M/s Shrawanthi are 50% commissioned, however we tried to contact M/s SEPL for assessment of cumulative impact of power plants on the ambient air quality of the area but as per them they are already complying the same individually. Hence we have done the assessment at 4 different points of the plant vicinity</p>

		to assess the ambient air quality of the area, the report is attached as <b>Annexure-1</b> . AAQ is continuously being monitored at regular intervals within plant area in different locations latest test report also attached herewith as Annexure-1.
5.	Local employable youth shall be trained in skills relevant to the project for eventual employment in the project itself. The action taken report and details thereof to this effect shall be submitted to the Regional Office of the Ministry and the state Govt. Dept. concerned from time to time.	Local employable youth are trained in specific skills and are employed at best positions in the project, the list of the same is attached herewith as <b>Annexure-2</b> .
6.	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.	<b>Complied.</b> No soil was brought from outside the premises. Natural drainage of the area is not affected, as plant is zero discharge.
7.	Hydro geological study of the area shall be reviewed annually and report submitted to the Ministry. No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting up / operation of the power plant.	<b>Complied.</b> Hydro Geological Survey is conducted and the report is compiled in compliance to CGWA attached as <b>Annexure - 3</b> . No water bodies including natural drainage system in the area is disturbed due to activities associated with the setting up / operation of the power plant and the same is maintained without disturbing any water body including natural drainage system in the area.
8.	COC of 5.0 shall be adopted.	COC is not applicable, as we have installed Air Cooled Condensers.
9.	A well-designed rainwater harvesting shall be constructed. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of <b>three months</b> from the date of issue of clearance and details shall be furnished to the Regional Office of the Ministry. Subsequently water requirement for running the plant shall be met from harvested rain water and use ground water shall be dispensed with thereafter.	Complied. Detailed rain water harvesting and re-charge done after approval from CGWB is incorporated in report of Hydro-geological study in Annexure-3. Approval letter from CGWB is attached as <b>Annexure-4</b> .
10.	Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring shall	Complied. (Water level records attached as <b>Annexure-5</b> ). Photographs of new Piezometers

**COMPLIANCE WITH ENVIRONMENTAL CONDITIONS STIPULATED BY MOEF**

	also be carried out particularly for heavy metals (Cr, As,Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.	installed at site are attached as <b>Annexure-6</b> . Water monitoring reports attached as <b>Annexure-7</b> .
11.	Monitoring surface water quantity and quality (if any nearby) shall also be regularly conducted and records maintained. The monitored data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall be undertaken.	<b>Complied.</b> Monitoring of surface water is not required since it is zero discharge plant and hence no monitoring points for sample are required. Hence we request Ministry to re-examine this clause as plant is zero discharge unit.
12.	The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon. Arrangements shall be made that effluents and storm water do not get mixed.	<b>Complied</b> as treated water used for internal consumption and also we have Air cooled condenser to reduce almost 95% water consumption as in case of conventional cooling tower.
13.	A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.	<b>Complied.</b> The total manpower strength is around 60 people on 3 shift basis and the domestic water consumption is around 2 to 3 KL/day. Since STP is not technically possible to operate at such a low load hence soak pit and septic tanks system is provisioned. However we undertake in the event the manpower is increased or the consumption of domestic water exceeds then the STP system would be installed. However we request Ministry to re-examine this clause as STP is technically not feasible.
14.	The project proponent shall set up permanent monitoring stations measurement of PAN, NHMC besides criteria pollutants.	We have installed CEMS system (continuous emission monitoring system) to monitor Sox, Nox & CO which are major pollutants in Gas Based Power Plants, latest Stack emission report monitoring major pollutants during plant operation is attached as <b>Annexure-8</b> & PAN & NMHC are not the pollutant in natural gas fired power plant. Hence we have requested the Ministry to re-examine this clause.
15.	Dry Low NOx Burners shall be installed.	<b>Complied.</b> DLN is inbuilt system

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		in the Gas Turbine, design document attached as <b>Annexure-9</b> .
16.	A stack of 40 m height shall be provided with continuous online monitoring equipments for ambient air quality parameters notified by the Ministry including NOx. Exit velocity of flue gases shall not be less than 22 m/sec	Complied. Stack emission monitoring analysis report is attached as Annexure – 8.
17.	Green Belt consisting of three tiers of plantations of native species around plant constituting 33% of total area. Tree density shall not less than 2500 per ha with survival rate not less than 80%.	Green belt in three tiers around the plant is under continuous development process in consultation of DFO, written communication in the matter is attached as <b>Annexure-10</b> . Area developed - 3.5 Acres with 2300 trees in the majority of the allocated area of plant periphery, the species planted are mainly Poplar, Mango, Eucalyptus, Sagaun, Ashok, Arjuna tree, Ficus, Gulmohar, Karanja, Silver Oak, Kadam, Kachnar trees.
18.	In addition to development of green belt, social forestry measures shall be taken up in close consultation with the District Forests Department. The project proponent shall accordingly identify blocks of degraded forests and generation of degraded forests shall be undertaken at a large scale. In pursuance to this the project proponent shall formulate time bound action plan along with financial allocation and shall submit status of implementation to the Ministry every six months.	We are in continuous and regular consultation with DFO for identifying the degraded forest to develop the same; latest written communication to DFO is attached as Annexure-10. As per our verbal communication with forest officials the suitable land is currently not identified in the area and they will intimate us as soon as they locate the same. We assure Ministry that we are ready to do the compliance as soon as suitable land is identified and given by forest department.
19.	The project proponent shall also adequately contribute in the development of the neighbouring villages. Special package with implementation schedule for free potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner.	We have taken up the matter with nearby villages like Kataiya, Barkhera Pandey, Khaikhera, Birpur for any requirement of drinking water, copy of letters to Gram Pradhan are enclosed herewith as <b>Annexure-12</b> . We also did the need-based analysis with nearby villages regarding requirement of drinking water and installed 4 hand pumps. We have also approached nearby schools



		for any requirement of drinking water, copy of letters to Gram Pradhan and nearby Schools are enclosed herewith as <b>Annexure-12</b> . We assure Ministry that we are working on the scheme and once we get the requirement from schools and villages we will do the compliance as we have taken up the matter.
20.	An amount of Rs 3.4 Crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs 0.68 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within three month along with road map for implementation.	Since company's average net profit is in negative, the company could not spend much towards CSR activity as such company has regularly made the contribution towards CSR as per the availability of funds from time to time such as arrangement of mass marriage for poor people, medical help to poor, food distribution camp, education, healthcare etc. During Pandemic Company has given 1000 no's of Oxymeter Equipment's to Government of Uttarakhand. Charity of Rs.6 Lac to a charitable trust for medical help to poor, transfer proof attached as <b>Annexure-13</b> . Although we assure Ministry that we will definitely increase the CSR once company is profitable.
21.	While identifying CSR programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.	We have provided employment to various poor sections of society from nearby area, the copy of employed poor people on regular salaries are enclosed herewith as <b>Annexure-14</b> . We have also taken up the matter with nearby villages by doing a need based analysis and same is under consideration. As such we assure Ministry that we will increase the CSR activity once company is profitable.
22.	It shall be ensured that in-built monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time.	Monitoring is being done, developed and once the scheme is identified in place we assure ministry the, we will get the audit done.

## B. General Conditions

	Point wise Compliance	
1.	Adequate safety measures shall be provided in the plant area check/minimize fires and other hazards. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.	<b>Complied.</b>  EIA Report separately submitted to RO-MOEF Dehradun
2.	Storage facilities for auxiliary liquid fuel such as LDO and/ HFO/ LSHS (if any) shall be made in the plant area in consultation with Department of Explosives, Nagpur. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	No Liquid fuel is being handled or stored inside the plant premises.
3.	First Aid and Sanitation arrangements shall be made for the drivers and other contract workers during contract workers during construction phase.	<b>Complied.</b> First aid box placed and septic tanks provided for toilets.
4.	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/ ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non noisy / less noisy areas.	<b>Complied.</b> The GT is inbuilt with noise reduction system i.e. acoustic enclosure.  We have kept Ear Plugs, which shall be provided, to workers who are operating and maintaining the GT and Air Compressors.
5.	Regular monitoring of ground level concentration of NO <sub>x</sub> & PM <sub>10</sub> shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.	<b>Complied</b>
6.	Provision shall be made for the housing of construction labour (as applicable) within the	<b>Complied.</b>

**COMPLIANCE WITH ENVIRONMENTAL CONDITIONS STIPULATED BY MOEF**

	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.	
7.	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of the which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board/Committee and may also be seen at website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> .	<b>Complied</b>
8.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	<b>Complied.</b>
9.	An Environmental Cell shall be created at the project site itself and shall be headed by an officer of appropriate seniority and qualification. It shall be ensured that the Head of the Cell shall directly report to the Head of the Organisation. The status report on the functioning of the Cell shall be submitted to the Regional Office of the Ministry periodically.	Environment cell was formed after commissioning of the project and is headed by GM site, the copy of recent Environment cell committee meeting members along with minutes of meeting are attached herewith as <b>Annexure-15</b> .
10.	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely RSPM, SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the	<b>Complied.</b>

**COMPLIANCE WITH ENVIRONMENTAL CONDITIONS STIPULATED BY MOEF**

	company in the public domain.	
11.	The environment statement for each financial year ending 31 <sup>st</sup> March in Form-V as in mandated to be submitted by the project proponent to the concerned State Pollution Control Board as Prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.	<b>Complied.</b> Form V is attached as Annexure –16.
12.	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests.	<b>Complied.</b> We undertake to submit the compliance reports with monitored data on regular basis; we apologize for the delay in submission of current report as the same could not be submitted due to Corona Virus Pandemic.
13.	Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environmental Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will up-load the compliance status in their website and update the same from time to time at least six monthly basis. Criteria pollutants level including NOx (from stack & ambient air) shall be displayed at the main gate of the power plant.	<b>Complied.</b> EIA – EMP Report separately submitted to RO-MOEF Dehradun
14.	Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	We have earmarked separate funds for environment protection, the same is regulated by Environment cell also the same is monitored in quarterly review meetings. The expenses done/planned towards Environment protection in various heads along with bills are enclosed as

**COMPLIANCE WITH ENVIRONMENTAL CONDITIONS STIPULATED BY MOEF**

		<b>Annexure-18.</b>
15.	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.	<b>Complied</b>
16.	Full Cooperation shall be extended to the Scientist / Officers from the Ministry / Regional Office of the Ministry at Bangalore/CPCB/SPCB who would be Monitoring the compliance of Environmental status.	<b>Complied</b>





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email : etslab2012@gmail.com | Website : www.etslab.in | Ph : 9811516076 9811730083



## TEST REPORT

TEST REPORT NO : ETS/KAS-44404/2021

DATE OF REPORT : 20-04-2021

### AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address Of Customer : M/s GAMA INFRAPROP PVT.LTD.  
KHASRA NO. 948, U.I.P., VILLAGE - MAHUAKHERA GANJ,  
TEH. KASHIPUR, U.S. NAGAR, UTTARA KHAND, INDIA -

Date Of Sampling : 14/04/2021  
Analysis Start Date : 16-04-2021  
Analysis End Date : 20-04-2021  
Duration Of Monitoring : 14-04-2021 10:30 Hr To 14/04/2021 16:30 Hr 8 HRS  
Sample ID No : 444/04  
Sampling Done By : ETS LAB  
Sampling Location : NEAR GT-02 AREA

Sampling Method : ETS/SIP/AIR-01  
Sampling Machine Placed At Height : 1.5 mtr (From Ground)  
Weather Condition : clear Ambient Temperature : 32°C  
Wind Direction : E - W

S.No.	Parameter	Unit	Result	Specification/ Limit (As Per CPCB)	Test Method
1	Particulate Matters (Size Less Than 10µm) (PM <sub>10</sub> )	µg/m <sup>3</sup>	83.4	For 24 Hrs=100	IS:5182 (Part 23)-2006
2	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	18.2	For 24 hrs= 80	IS:5182 (Part 2)-2012
3	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	21.3	For 24 Hrs=20	IS:5182 (Part 6)-2006
4	Carbon Monoxide (CO)	mg/m <sup>3</sup>	0.16	For 08 hrs=02, For 01 Hrs=04	IS:5182 (Part 10)-2009

\*\*\* End Of Report\*\*\*

For ENVIRO-TECH SERVICES  
Anil Kumar Chaudhary  
(Technical Manager)

FOR ENVIRO-TECH SERVICES

Page 1 Of 1

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1. This test report shall not be used in any advertising media or as evidence in the courts of Law without prior written permission of the laboratory.
  2. The sample shall be destroyed after 15 days of Biological / Perishable sample shall be destroyed immediately after issue of test report.
  3. The results indicated only refer to the tested samples and listed applicable parameters.
  4. Our liability is limited to invoice value only.
  5. No complaint will be entertained if received after 7 days of issue of test report.





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## TEST REPORT

TEST REPORT NO : ETS/KAS-445/04/2021

DATE OF REPORT : 28-04-2021

### AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address Of Customer : M/s GAMA INFRAPROP PVT.LTD.  
KHASRA NO. 948, U.P., VILLAGE - MAHUAKHERA GANJ,  
TEH.-KASHIPUR, U.S. NAGAR, UTTAR KHAND, INDIA -

Date Of Sampling : 14/04/2021  
Analysis Start Date : 16-04-2021  
Analysis End Date : 20-04-2021  
Duration Of Monitoring : 14-04-2021 11:00 Hr To 14/04/2021 19:00 Hr - 8 HRS  
Sample ID No : 445/04  
Sampling Done By : ETS LAB  
Sampling Location : NEAR ETP AREA

Sampling Method : ETS/STP/AIR-01  
Sampling Machine Placed At Height : 1.5 mb (From Ground)  
Weather Condition : clear Ambient Temperature : 32°C  
Wind Direction : E - W

S.No.	Parameter	Unit	Result	Specification/ Limit (As Per CPCB)	Test Method
1	Particulate Matter (Size Less Than 10µm) (PM <sub>10</sub> )	µg/m <sup>3</sup>	54.8	For 24 Hrs=100	IS 5182 (Part 23)-2005
2	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	11.6	For 24 hrs= 80	IS 5182 (Part 2)-2012
3	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	12.4	For 24 Hrs=80	IS 5182 (Part 6)-2005
4	Carbon Monoxide (CO)	mg/m <sup>3</sup>	0.07	For 08 hrs=0.2 For 01 Hrs=0.4	IS 5182 (Part 10)-2005

\*\*\* End Of Report \*\*\*

For ENVIROTECH SERVICES

Anil Kumar Chaudhary  
(Technical Manager)

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Plot No. 1/32, South Side G.T. Road Industrial Area, Ghaziabad (U.P.) - 201001

email: eyslab2012@gmail.com ; Website: www.eyslab.in ; Ph: 9911516076, 9811736063

## TEST REPORT

TEST REPORT NO : EYS/KAS-446/04/2020

DATE OF REPORT : 20-04-2021

### AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address Of Customer : M/s GAMA INFRAPROP PVT.LTD.  
 KHASRA NO: 948, U.P. VILLAGE, MAHUAKHERA GANJ,  
 TEH. KASHIPUR, U.S. NAGAR, UTTARA KHAND, INDIA -

Date Of Sampling : 15/04/2020  
 Analysis Start Date : 16-04-2021  
 Analysis End Date : 20-04-2021  
 Duration Of Monitoring : 15-04-2020 10:00 Hr To 15/04/2021 16:00 Hr 6 HRS  
 Sample ID No : 446/04  
 Sampling Done By : EYS LAB  
 Sampling Location : IN FRONT OF DM PLANT

Sampling Method : EYS/STP/AIR-01  
 Sampling Machine Placed At Height : 1.5 mtr (From Ground)  
 Weather Condition : clear Ambient Temperature : 32°C  
 Wind Direction : E-W

S.No.	Parameter	Unit	Result	Specification/ Limit (As Per CPCB)	Test Method
1	Particulate Matters (Size Less Than 10µm) (PM <sub>10</sub> )	µg/m <sup>3</sup>	65.5	For 24 Hrs=100	IS 5182 (Part 23)-2006
2	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	8.4	For 24 hrs=60	IS 5182 (Part 2)-2012
3	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	12.1	For 24 Hrs=60	IS 5182 (Part 6)-2006
4	Carbon Monoxide (CO)	mg/m <sup>3</sup>	0.06	For 08 hrs=02, For 01 Hrs=04	IS 5182 (Part 10)-2006

\*\*\* End Of Report \*\*\*



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Anil Kumar Chaudhary  
(Technical Manager)

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## TEST REPORT

TEST REPORT NO.: ETS/KAS-447/04/2021

DATE OF REPORT : 20-04-2021

### AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address Of Customer

M/s. GAMMA INFRAPROP PVT.LTD.

KHASRA NO. 048, U.P., VILLAGE-MAHUAKHERA GANJ,  
TEH. KASHIPUR, U.S. NAGAR, UTTAR KHAND, INDIA -

Date Of Sampling

: 15/04/2021

Analysis Start Date

: 16-04-2021

Analysis End Date

: 20-04-2021

Duration Of Monitoring

: 15-04-2021 10:30 Hr To 16/04/2021 16:30 Hr 8 HRS

Sample ID No

: 447/04

Sampling Done By

: ETS LAB

Sampling Location

: NEAR MAIN GATE OF FACTORY

Sampling Method

: ETS/STP/AIR-01

Sampling Machine Placed At Height

: 1.5 mtr (From Ground)

Weather Condition

: clear

Ambient Temperature : 32°C

Wind Direction

: E - W

S.No.	Parameter	Unit	Result	Specification/ Limit (As Per CPCB)	Test Method
1	Particulate Matter (Size Less Than 10µm) (PM <sub>10</sub> )	µg/m <sup>3</sup>	89.5	For 24 Hrs=100	IS:5182 (Part 2)-2005
2	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	24.1	For 24 hrs=80	IS:5182 (Part 2)-2012
3	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	26.7	For 24 Hrs=80	IS:5182 (Part 6)-2005
4	Carbon Monoxide (CO)	mg/m <sup>3</sup>	0.22	For 08 hrs=02, For 04 Hrs=04	IS:5182 (Part 10)-2009

\*\*\* End Of Report \*\*\*

FOR ENVIRO-TECH SERVICES

Page 3 Of 5

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Anil Kumar Chaudhary  
(Technical Manager)

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## TEST REPORT

URL : TC877120000001536F

TEST REPORT NO : ETS/135/12/2020

DATE OF REPORT : 16-12-2020

### AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address Of Customer

: M/s GAMA INFRAPROP PVT.LTD.

KHASRA NO. 948, U.I.P., VILLAGE - MAHUAKHERA GANJ,  
TEH. KASHIPUR, U.S. NAGAR, UTTAR KHAND, INDIA

Date Of Sampling

: 12-12-2020

Analysis Start Date

: 14-12-2020

Analysis End Date

: 16-12-2020

Duration Of Monitoring

: 12-12-2020 14:40 Hr To 13-12-2020 14:40 Hr 24 HRS

Sample ID No

: 135/12

Sampling Done By

: ETS LAB

Sampling Location

: ROOF OF HOUSE OF MR. SUBHASH S/O SHAJAY KUMAR, VILL. PRAKASH  
HARMONY DARIYAL ROAD, KASHIPUR, 3 KM EAST

Sampling Method

: ETS/STP/AIR-01

Sampling Machine Placed At Height

: 1.5 mtr (From Ground)

Weather Condition

: clear

Ambient Temperature : 13°C

Wind Direction

: E - W

S.No.	Parameter	Unit	Result	Specification/ Limit (As Per CPCB)	Test Method
1	Particulate Matters (Size Less Than 10µm) (PM <sub>10</sub> )	µg/m <sup>3</sup>	82.4	For 24 Hrs=100	IS:5182 (Part 23)-2008
2	Particulate Matters (Size Less Than 2.5 µm) (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	41.6	For 24 Hrs=80	ETS/STP/AIR-03-2019
3	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	18.4	For 24 hrs= 80	IS:5182 (Part 2)-2012
4	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	32.4	For 24 Hrs=80	IS:5182 (Part 6)-2008
5	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	3.9	For 8hrs=100 For 1 hr= 180	IS:5182 (Part-9)-1986
6	Relative Humidity	%	66	Not Specified	Hygrometer
7	Wind Speed	M/Sec	1.6	Not Specified	Anemometer
8	Suspended Particulate Matters (SPM)	µg/m <sup>3</sup>	170.9	Not Specified	IS:5182 (Part-4)-2012
9	Mercury (Hg)	µg/m <sup>3</sup>	0.0019	Not Specified	A.A.S Method

Remarks: Distance & Direction are w.r.t. Factory

\*\*\*\* End Of Report\*\*\*\*

For Enviro-Tech Services

Md Humrai  
Quality Manager

AUTHORIZED SIGNATORY

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Page 1 Of 1

Format no ETS/LAB/TR-01 Issue No 05 dt 01/04/2019 Rev No 04 dt 01/04/2019

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2. The samples received shall be destroyed after 15 days from the date of test report issued.
3. The results indicated only refer to the tested samples and listed applicable parameters.
4. Our liability is limited to invoice value only.
5. Head Office : G-222 M.C. Road Industrial Area, Hazratganj, Ghaziabad (U.P.)-201015

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URL : TC877120000001534F

## TEST REPORT

TEST REPORT NO : ETS/133/12/2020

DATE OF REPORT : 16-12-2020

### AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address Of Customer

: M/s GAMA INFRAPROP PVT.LTD.

KHASRA NO. 948, U.P., VILLAGE-MAHUAKHERA GANJ,  
TEH.-KASHIPUR, U.S. NAGAR,UTTRA KHAND, INDIA -

Date Of Sampling

: 11-12-2020

Analysis Start Date

: 14-12-2020

Analysis End Date

: 16-12-2020

Duration Of Monitoring

: 11-12-2020 14:00 Hr To 12-12-2020 14:00 Hr 24 HRS

Sample ID No

: 133/12

Sampling Done By

: ETS LAB

Sampling Location

: ROOF OF HOUSE OF MRS NISHA, D/O SH BIJENDER SINGH,  
VILL-VEERPUR, KASHIPUR, 3 KM SOUTH

Sampling Method

: ETS/STP/AIR-01

Sampling Machine Placed At Height

: 1.5 mtr (From Ground)

Weather Condition

: clear

Wind Direction

: S - N

Ambient Temperature : 13°C

S.No.	Parameter	Unit	Result	Specification/ Limit (As Per CPCB)	Test Method
1	Particulate Matters (Size Less Than 10µm) (PM <sub>10</sub> )	µg/m <sup>3</sup>	92.7	For 24 Hrs=100	IS:5182 (Part 2)-2006
2	Particulate Matters(Size Less Than 2.5 µm) (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	51.7	For 24 Hrs=60	ETS/STP/AIR-03:2019
3	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	15.4	For 24 hrs=60	IS:5182 (Part 2)-2012
4	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	32.1	For 24 Hrs=80	IS:5182 (Part 6)-2006
5	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	4.1	For 8hrs=100 For 1 hr= 180	IS:5182 (Part-6)-1986
6	Relative Humidity	%	65	Not Specified	Hygrometer
7	Wind Speed	M/Sec	1.3	Not Specified	Anemometer
8	Suspended Particulate Matters (SPM)	µg/m <sup>3</sup>	179.4	Not Specified	IS:5182 (Part-4)-2012
9	Mercury (Hg)	µg/m <sup>3</sup>	0.0016	Not Specified	A.A.S Method

Remarks: Distance & Direction are w.r.t. Factory

\*\*\*\* End Of Report\*\*\*\*

For Enviro-Tech Services

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Md Humraj  
Quality Manager

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5. Head Office : G-232, M.G. Road Industrial Area, Hapur-Ghaziabad (U.P.) 201015

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URL : TC877120000001535F

TEST REPORT  
TEST REPORT NO : ETS/134/12/2020

DATE OF REPORT : 16-12-2020

## AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address Of Customer

M/s GAMA INFRAPROP PVT.LTD,  
KHASRA NO. 948, U.I.P., VILLAGE- MAHUAKHERA GANJ,  
TEH.-KASHIPUR, U.S. NAGAR, UTTARA KHAND, INDIA -

Date Of Sampling

: 12-12-2020

Analysis Start Date

: 14-12-2020

Analysis End Date

: 16-12-2020

Duration Of Monitoring

: 12-12-2020 14:10 Hr To 13-12-2020 14:10 Hr 24 HRS

Sample ID No

: 134/12

Sampling Done By

: ETS LAB

Sampling Location

: ROOF OF HOUSE OF MR. CHIRMAL SINGH S/O SH. HARNAM SINGH,  
VILL.-BARKHERA PANDEY, KASHIPUR, 4 KM, NORTH

Sampling Method

: ETS/STP/AIR-01

Sampling Machine Placed At Height

: 1.5 mtr (From Ground)

Weather Condition

: clear

Ambient Temperature : 13°C

Wind Direction

: E - W

S.No.	Parameter	Unit	Result	Specification/ Limit (As Per CPCB)	Test Method
1	Particulate Matters (Size Less Than 10µm) (PM <sub>10</sub> )	µg/m <sup>3</sup>	87.0	For 24 Hrs=100	IS:5182 (Part 23)-2006
2	Particulate Matters (Size Less Than 2.5 µm) (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	45.6	For 24 Hrs=60	ETS/STP/AIR-03-2019
3	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	14.4	For 24 hrs= 80	IS:5182 (Part 2)-2012
4	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	29.4	For 24 Hrs=80	IS:5182 (Part 6)-2006
5	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	3.1	For 8hrs=100 For 1 hr= 180	IS:5182 (Part-9)-1986
6	Relative Humidity	%	65	Not Specified	Hygrometer
7	Wind Speed	M/Sec	1.2	Not Specified	Anemometer
8	Suspended Particulate Matters (SPM)	µg/m <sup>3</sup>	197.6	Not Specified	IS:5182 (Part-4)-2012
9	Mercury (Hg)	µg/m <sup>3</sup>	0.0001	Not Specified	A.A.S.Method

Remarks: Distance & Direction are w.r.t. Factory

\*\*\*\* End Of Report \*\*\*\*

For Enviro-Tech Services



Page 1 Of 1

Md. Humayun  
Quality Manager  
AUTHORIZED SIGNATORY

Format no ETS/LAB/TR-01 Issue No 05 dt 01/04/2019 Rev. No 04 dt 01/04/2019

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# ENVIRO-TECH SERVICES

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Plot No. 1/32, South Side G.T. Road Industrial Area, Ghaziabad (U.P.)-201001

email : etslab2012@gmail.com | Website : www.etslab.in | Ph: 9911516076, 9811736063



## TEST REPORT

URL : TC877120000001533F

TEST REPORT NO : ETS/132/12/2020

DATE OF REPORT : 16-12-2020

### AMBIENT AIR QUALITY MONITORING AND ANALYSIS REPORT

Name And Address Of Customer

: M/s GAMA INFRAPROP PVT.LTD.

KHASRA NO. 948, U.I.P., VILLAGE - MAHUAKHERA GANJ,  
TEH. KASHIPUR, U.S. NAGAR, UTTARA KHAND, INDIA -

Date Of Sampling

: 11-12-2020

Analysis Start Date

: 14-12-2020

Analysis End Date

: 16-12-2020

Duration Of Monitoring

: 11-12-2020 13:30 Hr To 12-12-2020 13:30 Hr 24 HRS

Sample ID No

: 132/12

Sampling Done By

: ETS LAB

Sampling Location

: ROOF OF HOUSE OF MR. YOGESH, S/O SH. RAM SINGH,  
VILL - MAHUAKHERA GANJ, KASHIPUR, U.S. NAGAR, 3 KM. WEST

Sampling Method

: ETS/STP/AIR-01

Sampling Machine Placed At Height

: 1.5 mtr (From Ground)

Weather Condition

: clear

Ambient Temperature : 13°C

Wind Direction

: E - W

S.No.	Parameter	Unit	Result	Specification/ Limit (As Per CPCB)	Test Method
1	Particulate Matters (Size Less Than 10µm) (PM <sub>10</sub> )	µg/m <sup>3</sup>	87.5	For 24 Hrs=100	IS:5182 (Part 23)-2000
2	Particulate Matters (Size Less Than 2.5 µm) (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	49.7	For 24 Hrs=60	ETS/STP/AIR-03-2019
3	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	13.4	For 24 hrs=80	IS:5182 (Part 2)-2012
4	Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	28.5	For 24 Hrs=80	IS:5182 (Part 6)-2006
5	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	3.7	For 8hrs=100 For 1 hr=180	IS:5182 (Part 9)-1986
6	Relative Humidity	%	65	Not Specified	Hygrometer
7	Wind Speed	M/Sec	1.25	Not Specified	Anemometer
8	Suspended Particulate Matters (SPM)	µg/m <sup>3</sup>	182.2	Not Specified	IS:5182 (Part 4)-2012
9	Mercury (Hg)	µg/m <sup>3</sup>	0.0012	Not Specified	A.A.S.Method

Remarks: Distance & Direction are w.r.t. Factory

\*\*\*\* End Of Report\*\*\*\*

For Enviro-Tech Services

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Page 1 Of 1

\* : Md Humayun  
Quality Manager

CHECKED BY

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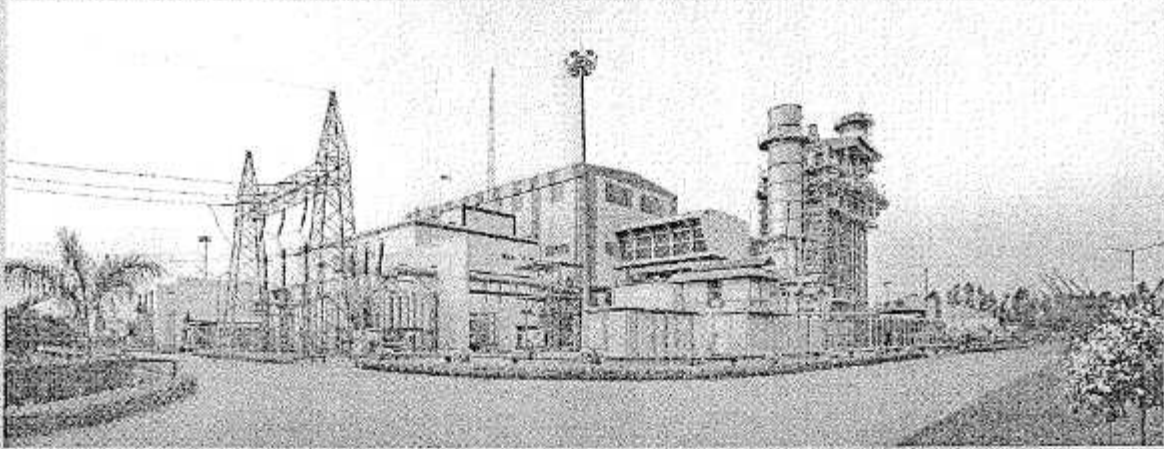
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S.No	Name	Location	Designation
1	Mr.Akash Sharma	Kashipur	Accounts/Finance Officer
2	Mr.Kunadn Suyal	Kashipur	Asst. Manager Mechanical
3	Mr.Ankit Sharma	Kashipur	Asst. Manager Mechanical
4	Mr.Ravikant Chauhan	Kashipur	HR/Admin Officer

**Hydrogeology of the area around Gama Infraprop  
Private Limited, Mahua Khera Ganj, Kashipur,  
Uttarakhand**



**Submitted to**

**Gama Infraprop Private Limited, Mahua Khera Ganj,  
Kashipur, Uttarakhand**



**Prepared By**

**Doon Hydrological and Environmental Solutions, 16,  
Kalindi Enclave, Balliwala, Dehradun, Uttarakhand,**

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**Mobile Nos. 09412941256, 09149154985**

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## **Hydrogeology of the area around Gama Infraprop Private Limited, Mahua Khera Ganj, Kashipur, Uttarakhand**

### **1.0 Introduction**

M/s Gama Infraprop Private Limited (GIPL) is a gas based power generation industry. It is located at Mahua Khera Ganj Notified Industrial Park, Kashipur. The coordinates of the site are N Latitude 29° 08' 21" and E Longitude 78° 57' 53.75". Administratively, it is located in Kashipur block of District Udham Singh Nagar. The industry is approachable from Kashipur by all- weather connecting roads. Kashipur is very well connected with the National Capital New Delhi, State Capital Dehradun and other parts of the country by rail and road. Kashipur is the nearest railway station which is about 6.0 km away from the industry. Pantnagar, the nearest domestic airport is about 55.0 km away from the industry. The location map and the satellite views are given in Fig.1 and Fig.2, respectively. A view of the Gama Infraprop (P) Limited has been given in Fig.3.

The terrain is plain with fertile soils and an annual rainfall of 1283.5 mm. Agriculture is the main occupation of the local populace. District Statistical Records show that sixty four per cent of the district's population is engaged in agricultural activities. Rabi and Kharif are the two main cropping seasons. The Rabi crops are wheat, barley, gram, massor (lentil), mustard and sunflower and the main Kharif crops are paddy, soya bean, urad, moong and till. The paddy crops are grown twice a year which indicates that water intensive crops are prevalent in the area. Besides the two main cropping seasons there is an extra season known as Jayad season. The main crops of this season are water melon, kakri and cucumber. In addition to all these crops sugarcane is also grown which remains in the field for the entire year and requires high quantity of water. Paddy and sugarcane are the cash crops. The annual rainfall increases northwards north and the average rainfall at Ramnagar is 1930.72mm which is significantly higher in comparison to Kashipur. Besides

the agricultural activities, the industrial development around Kashipur is going on at a very faster pace.

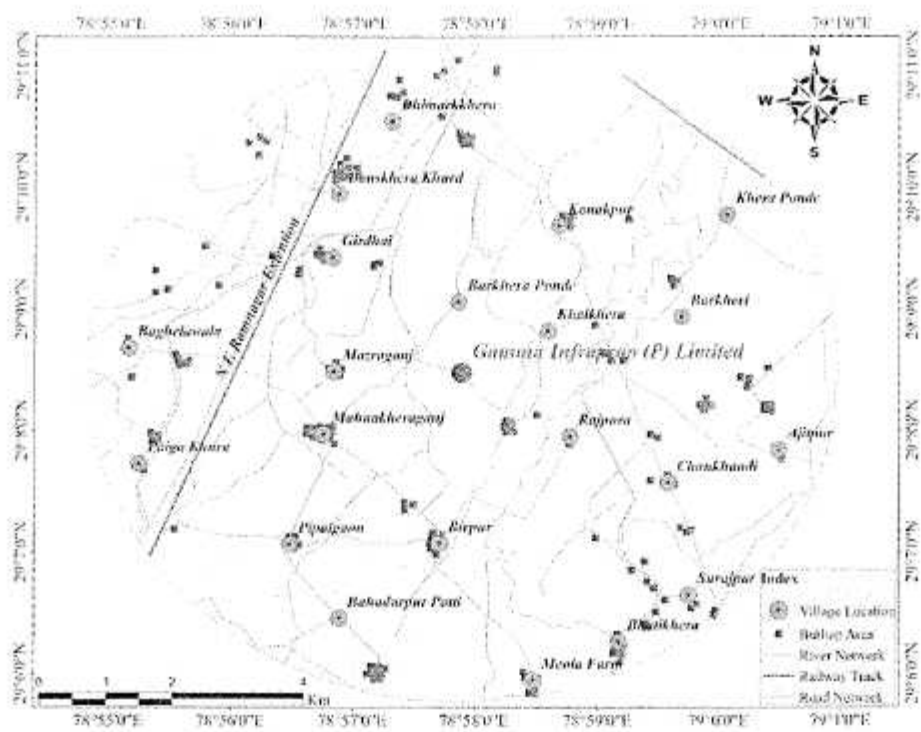
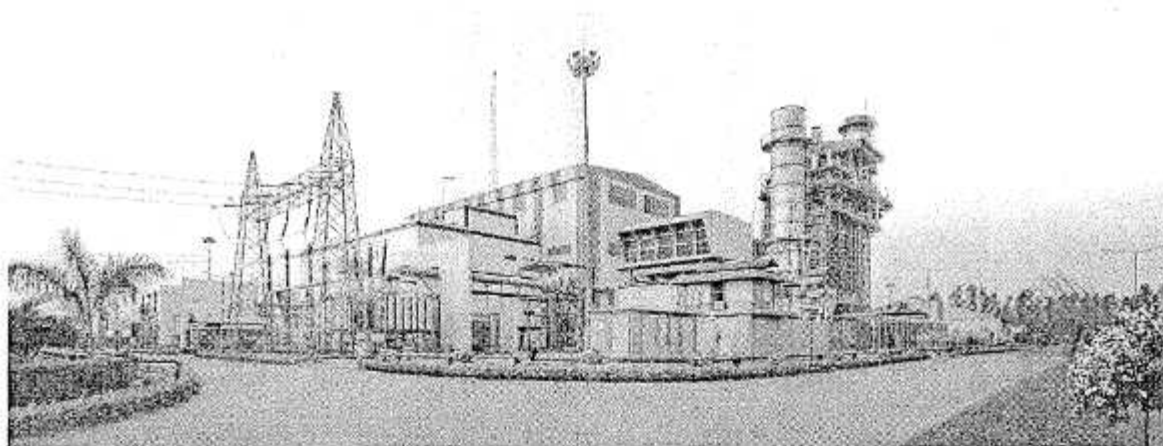


Figure 1. Location map of the study area



Figure 2. Satellite view of the surroundings of Gama Infraprop (P) Limited



**Figure 3. A view of Gama Infraprop (P) Limited**

## **2.0 Objective of the Report**

The objective of the report is to bring out the hydrogeology of the area around M/s Gama Infraprop (P) Limited, Village Mahua Khera Gang. The contents of the report focus on the geology of the area, hydrogeological properties of the rock formations, groundwater conditions and water management through artificial recharge. Since groundwater is a dynamic resource, it is continuously in motion. The replenishment of the resource depends upon the rainfall which is variable. In addition to this there is groundwater withdrawal for domestic, irrigation and industrial purposes and hence there are seasonal and long term changes in the groundwater regime. Keeping this in view the Depth to Water map for Pre-monsoon Period, 2020 has been brought out.

## **3.0 Land use**

M/s Gama Infraprop (P) Limited is spread over an area of 121406.0m<sup>2</sup>, the breakup of which has been given in Table 1.

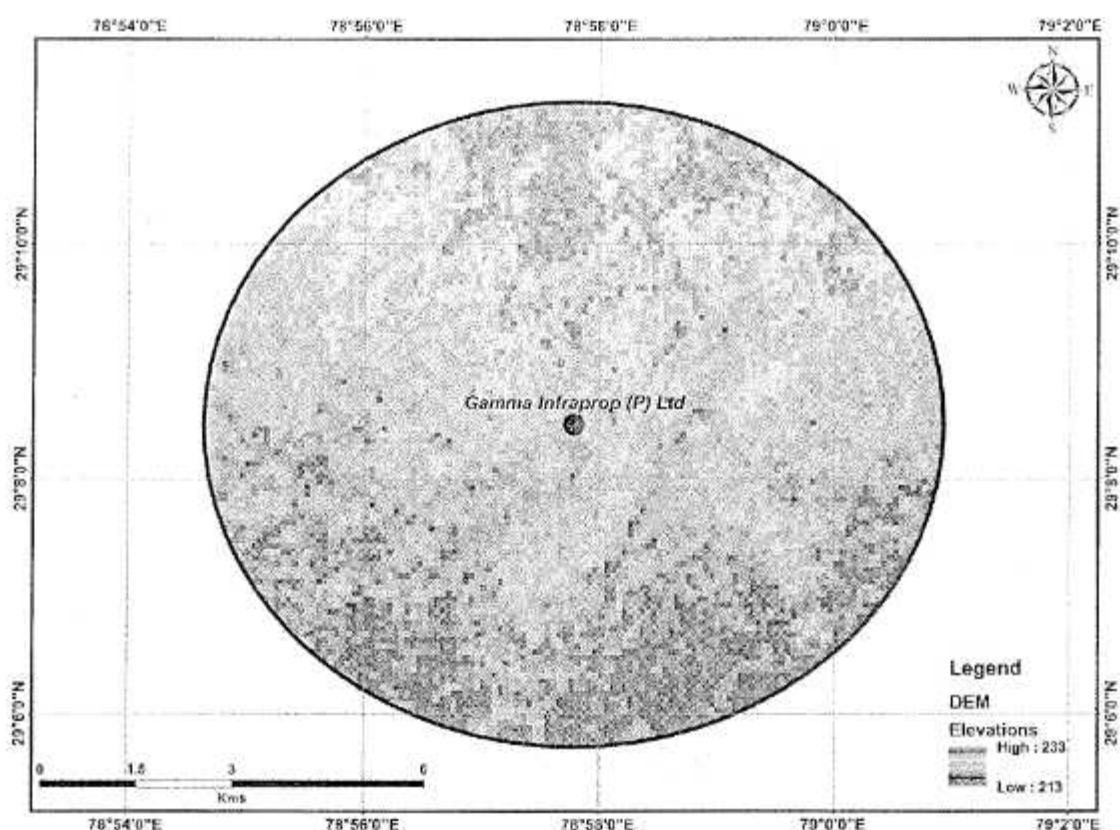
**Table 1. Land use break up, M/s Gama Infraprop (P) Limited, Kashipur**

Land use detail	Existing (m <sup>2</sup> )	Proposed (m <sup>2</sup> )	Grand Total (m <sup>2</sup> )
Green belt area	48562.0	-	48562.0
Open land	31566.0	-	31566.0

Road and paved area	16997.0	-	16997.0
Roof top area of building/sheds	24281.0	-	24281.0
Total	121406.0	-	121406.0

#### 4.0 Physiography and Drainage

The area regionally shows sharp variations in its physiography. There is a sharp change in the altitude of the ground surface. The northern part is as high as 850m amsl. The altitude at Mahuawa Khera Ganj is 220.0m amsl. The Digital Elevation Model (DEM) of the area in 5km radius of the industry has been shown in Fig.4. The DEM shows the decreasing altitude from North to South. The area is drained by Kosi River and its tributaries. The main tributaries flowing across the study area are Dhela River and Bahalla River.



**Figure 4. Digital Elevation Model of the study area**

### 5.0 Hydrogeology

Hydrogeology of an area depends upon its geology as the groundwater flows through the geological formations. So, its imperative to know the geological formations of the area and their hydrogeological properties. The general geological sequence is given in Table 2. The disposition of the rock formations has been shown in Fig.5.

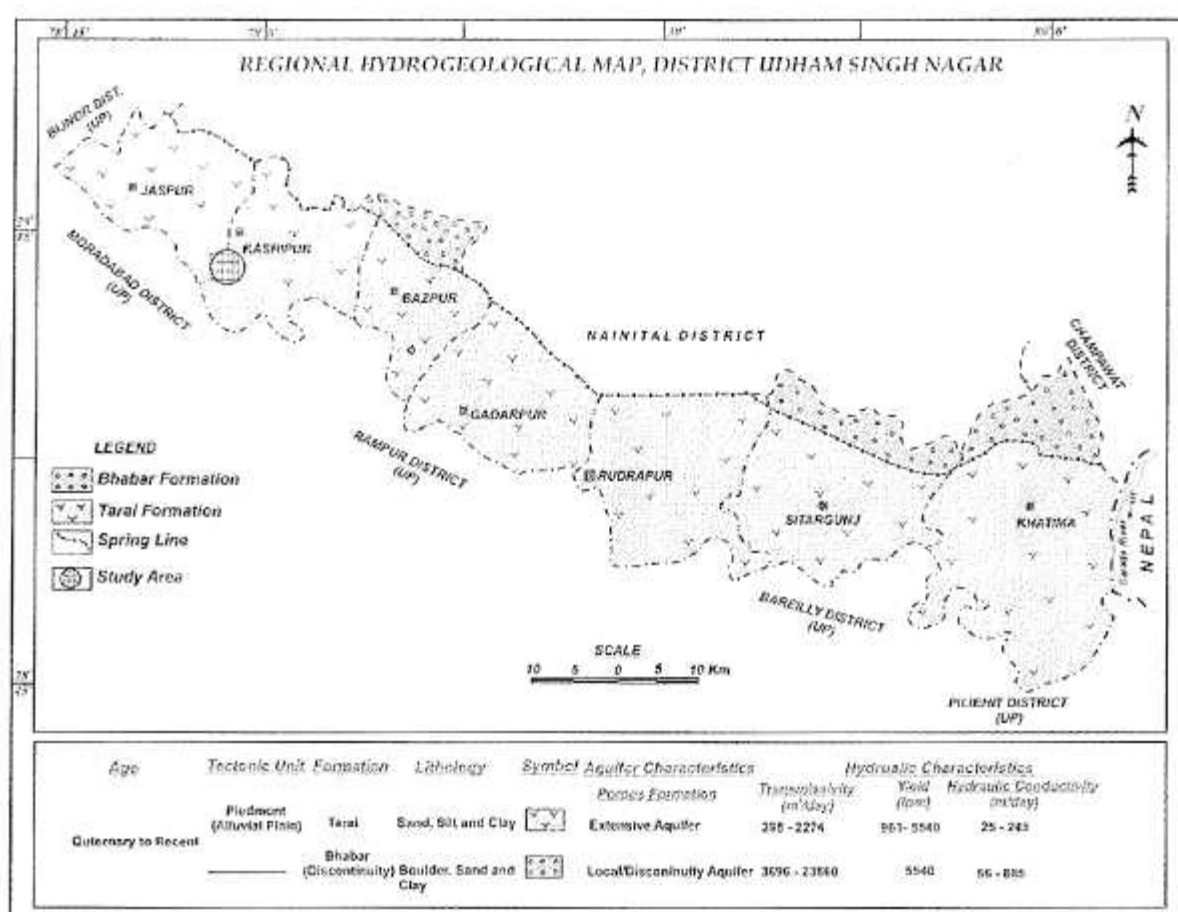
**Table 2. General Geological Succession**

<b>Age</b>	<b>Geological Formation</b>	<b>Lithology</b>	<b>Morphotectonic Unit</b>
Recent to Quaternary	Bhabhar	Boulder, pebbles, gravel, sand and clay	Piedmont
	Tarai	Sand, silt and clay	Alluvial Plain
Middle	Sivalik	Massive boulder	Hills Ranges



<i>Miocene to Pleistocene</i>	<i>Group of Rocks</i>	conglomerates, thick earthy clay, sand and pebble grit. Soft massive sandstones interbedded with thin dull colored sandy clays	
-----------------------------------	---------------------------	--	--

M/s Gama Infraprop Private Limited is located on the Tarai Formation but the groundwater flows in the area around the industry are solely dependent on the regional flows and a broader view of the regional geology/hydrogeology has been given. The regional groundwater flow is from northern direction. A NE-SW geological is given in Fig.6. The physiography of the area exhibits sharp changes. The altitude is very high in the Sivalik Hills. The altitudinal difference creates hydraulic gradients which cause the groundwater movement from north to south.



**Figure 5. Hydrogeological map, District Udhamsingh Nagar**

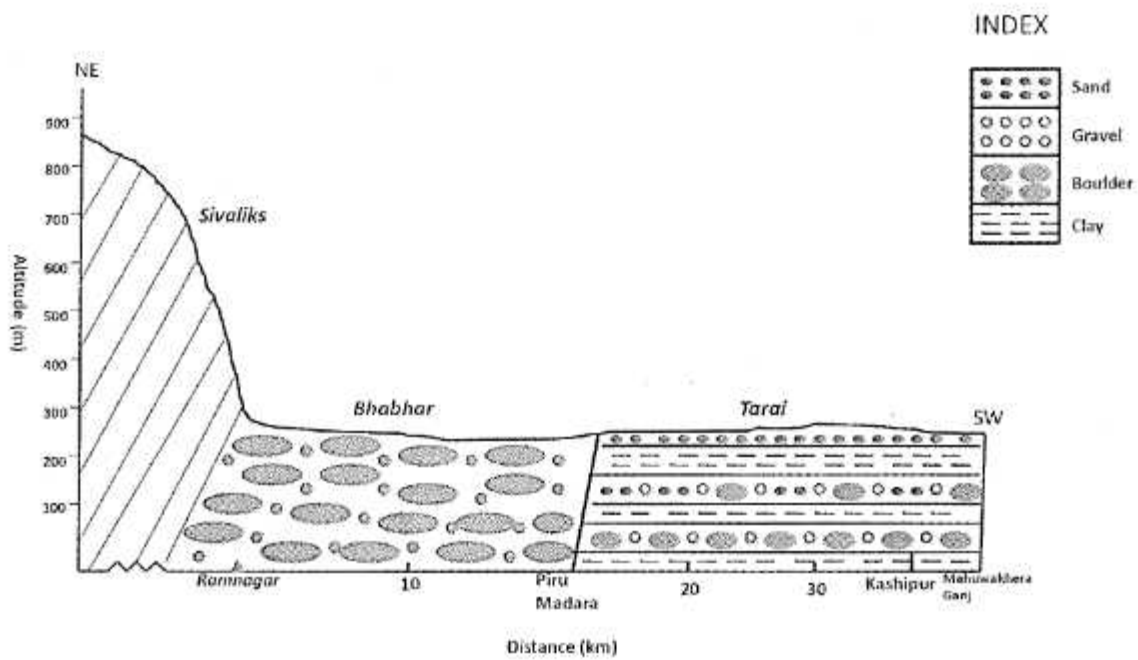


Figure 6. Geological section across the area

### 5.1 Hydrogeological properties of geological formations

The hydrogeological properties of Sivalik Formations, Bhabahar and Tarai are discussed below in separate sub heads.

#### 5.1.1 Sivaliks:

Sivalik Group of rocks form hill ranges where the slopes are more than 20% and hence they do not form potential aquifers as the hydraulic gradients are very high. The rocks of Sivalik Group are exposed along the northern boundary of the study area. The main rock types, in the area, are unconsolidated sandstones, conglomerate beds and earthy clay beds. Barring conglomerate beds on the top of Upper Sivaliks, the rocks of Sivalik Group do

not form good aquifers. However, the Sivalik Hills play a vital role in recharging the downslope aquifers of Bhabhar, Tarai occurring southwards since the rainfall in hilly area is higher than rest of the area. The alluvial fans existing on the southern slopes of the Sivalik hills are capable of receiving a large volume of run off water flowing across the southern slopes of the Shivaliks.

#### **5.1.2. Bhabhar:**

The boulder sediments deposited immediately south of the Sivalik hills have been named as Bhabhar. This formation has a NW-SE extension and forms a highly potential hydrogeologic unit. Bhabhars are poorly sorted unconsolidated sediments constituted of boulders, cobbles, pebbles, sand, gravel, silt and clay. Bhabhar formation gradually merges with the Tarai occurring south of it. The contact between these two is characterized by the change in slope and groundwater effluents, which form the spring line. Groundwater in Bhabhars, generally occurs under phreatic conditions. The depth to water is up to 75.0 m bgl. The aquifers are with high potential, a suitably constructed tubewell may yield up to 2500lpm.

#### **5.1.3 Tarai:**

Tarai Formation lies south of Bhabhars and comprised predominantly of clay and silt horizons of well sorted granular material such as sand, gravel with the occasional presence of boulders, cobbles and pebbles. The boundary between Bhabhar and Tarai is characterized by a '**spring line**', which is characterized by auto flow conditions. Water logging and marshy conditions are very common along the spring line, which aggravate during the monsoon period. Groundwater, in shallow aquifers, occurs under unconfined conditions, which is developed through dug wells. Groundwater occurs under confined and artesian conditions in deeper aquifers and it is developed through tubewells. North of Kashipur on Ram Nagar road artesian conditions prevail. Artesian conditions in a hand pump near village Dhanauri Patti on Ram Nagar road has been shown in Fig.7.



**Figure 7. Artesian conditions, near village Dhanauri Patti**

#### **6.0 Local Hydrogeology (5km radius area)**

Geologically, M/s Gama Infraprop (P) Limited is located on Tarai Formation. The traverses taken around the industry reveal that the area included within 5.0 km radius, also falls on Tarai Formation. Tarai formation is exposed south of the Bhabhar Belt and occurs parallel to it all along the Himalayan Mountain. Its width ranges between 12 and 15 km. Southwards the Tarai formation is limited by the Central Ganga Alluvium, they are also known as Varanasi Alluvium. On regional scale the contact between Bhabhar and Tarai is marked by the spring line.

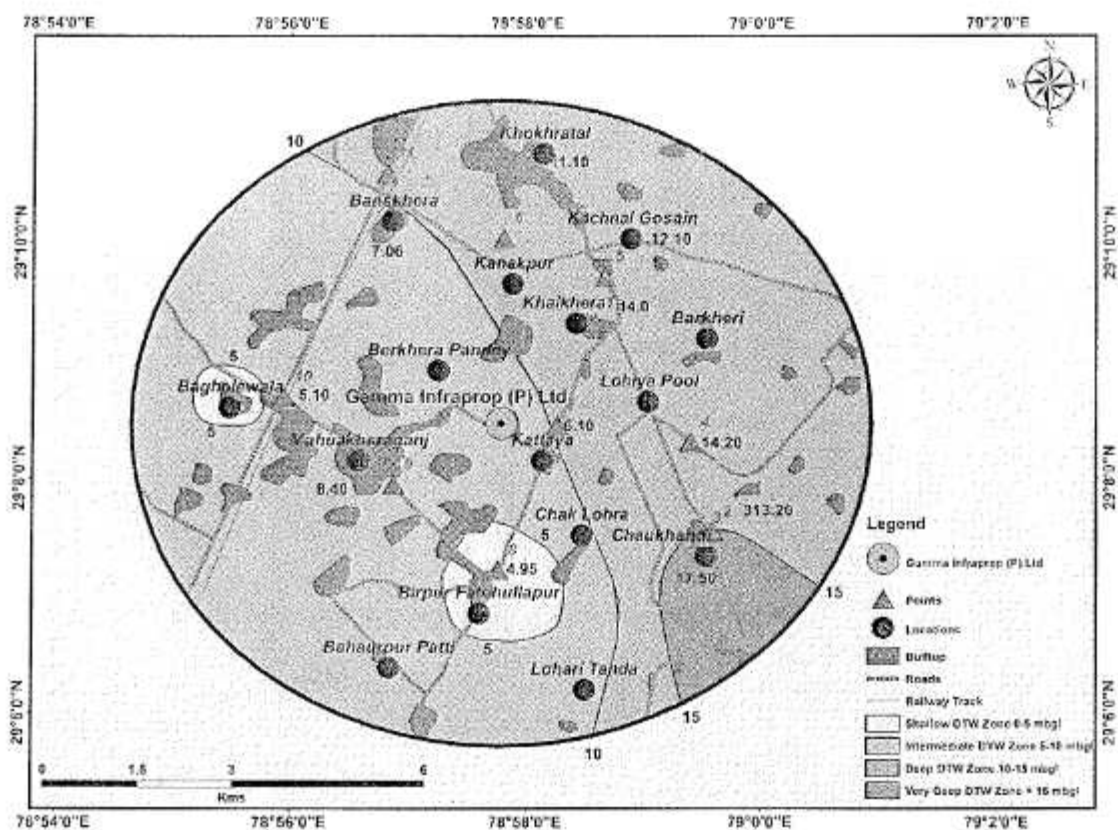
Tarai formation is constituted of sand, silt and clay with the occasional presence of gravel. In the study area, clay dominates over the sand/gravel horizons. Groundwater, in the area, is developed through tube wells and hand pumps. Old dug wells are abandoned now. Besides the government tubewells for water-supply and irrigation there are private tubewells constructed by farmers, individuals and industries.

Hydrogeological traverses were taken in the area around Gama Infraprop Private Limited, Mahuawa Khera Ganj. Depth to Water has been taken from the groundwater structures around the industry. These structures mainly tap the top unconfined aquifer or the first permeable layer where semi-confined groundwater conditions prevail. Depth to water map has been prepared (Period: Pre-monsoon, 2020). Depth to water ranges from 4.9 to 17.50 m bgl which has been shown in **Fig 8**. The Depth to Water has been divided into three zones as given below:

Shallow DTW Zone	: < 5m bgl
Intermediate Zone	: 5- 10 m bgl
Deep DTW Zone	: 10- 15 m bgl
Very Deep DTW zone	: > 15 mbgl

Gama Infraprop (P) Limited is located on Intermediate DTW Zone.





**Figure 8. Depth to Water map for the area around Gama Infraprop (P) Limited (Period: Pre-monsoon, 2020)**

## 7.0 Water Requirement

M/s Gama Infraprop (P) Limited requires water for industrial, domestic and green belt development purposes. Total water requirement, water usages break up and recycle/ reuse have been given in Table 3, Table 4 and Table 5, respectively. The water balance chart has been given in Fig.9.

**Table 3. Total Water Requirement (m<sup>3</sup>/day), Gama Infraprop Pvt Ltd, Kashipur**

		Existing	Proposed	Total
Water Requirement details (fresh water) (m <sup>3</sup> /day)				
A	Ground water requirement (m <sup>3</sup> /day)	800.0	-	800.0
b	Surface water available, canal, rivers, ponds etc (M <sup>3</sup> /Day)	0.0	-	0.0
C	Water supply form any agency (M <sup>3</sup> /Day)	0.0	-	0.0
Total Water requirement (A+B+C) (m <sup>3</sup> /day)		800.0	-	800.0
D	Recycled water usage(m <sup>3</sup> /day)	66.0	-	66.0
Total water requirements (a+b+c+d) (m <sup>3</sup> /day)		866.0	-	866.0

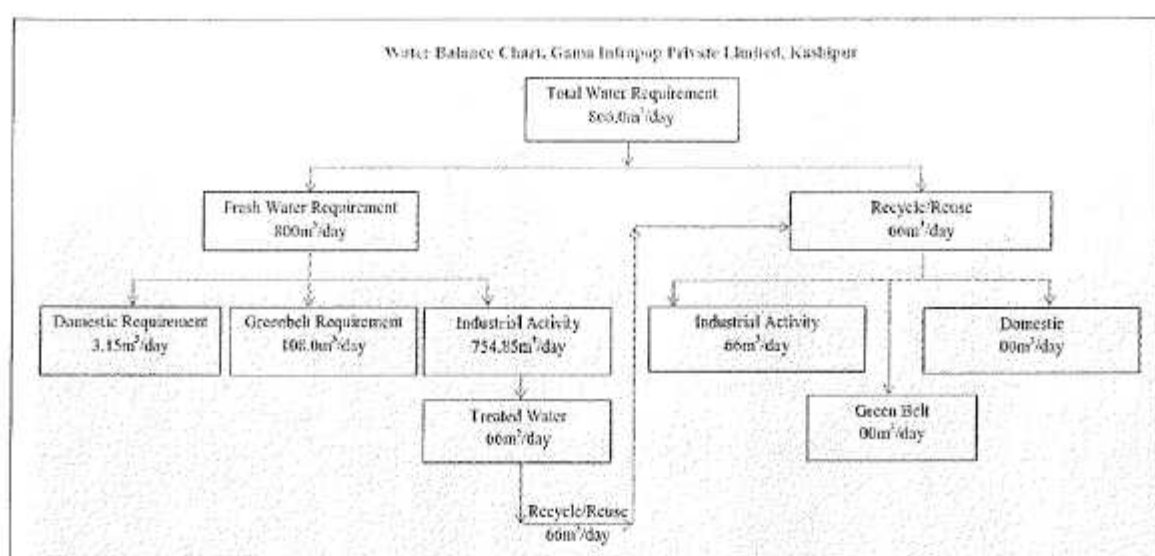
**Table 4. Breakup of water requirement and usages, Gama Infraprop Pvt Ltd, Kashipur**

Activity	Existing requirement (m <sup>3</sup> /day)	Proposed requirement (m <sup>3</sup> /day)	Total requirement (m <sup>3</sup> /day)	No. of Operational days in a year	Annual requirement (m <sup>3</sup> /year)
Industrial activity	754.85	-	754.85	350.0	264197.5
Residential/ domestic	3.15	-	3.15	365	1149.75
<b>Green belt</b>	108.0	-	108	316.0	34128.0

Development/Environmental maintenance					
Other Use	-	-	-	-	-
<b>Grand Total</b>	<b>866.0</b>		<b>866.0</b>		<b>299475.25</b>

**Table 5. Break up of recycle water, Gama Infraprop Private Limited, Kashipur**

Breakup of recycled water usages		m <sup>3</sup> /day	Days	m <sup>3</sup> /year
a	Total waste water generated	66.0	350	23100.0
b	Quantity of treated water available	66.0	350	23100.0
	I) Reuse in industrial activity	66.0	350	23100.0
	ii) Reuse in green belt	0.0	0.0	0.0
	iii) Other usages(Dust Suppression, ash quenching)	0.0	0.0	0.0
c	Total Treated Water Utilized	66.0	350	23100.0
<b>Net Ground Water Requirement:</b>		<b>800.0m<sup>3</sup>/day, 276375.25 m<sup>3</sup>/year</b>		



**Figure 9 Water Balance Chart, Gama Infraprop (P) Limited, Kashipur**

### 8.0 Water Availability

M/s Gama Infraprop (P) Ltd has constructed three tubewells in its compound. All the tubewells are fitted with digital flow meters. The details of the tubewells are given in Table 6.

**Table 6. Details of the tubewells constructed by Gama Infraprop (P) Limited**

S. N O	Type of Structure/Year of Construction	Depth(m)/Diameter (mm)	Discharge (m <sup>3</sup> /hr)	Operational Hours /Days in a year	Mode of Lift	Horse Power of Pump	Whether Fitted with meter	Depth to Water (m bgl)	Whether registered with CGWA
1.	Tubewell /2010	120/250	60.0	6/365	Submersible pump	20.0	yes	6.90 (As on March, 2017)	No
2.	Tubewell /2010	120/250	60	6/365	Submersible pump	20.0	yes	-d0-	No
3	Tubewell /2010	120/250	60	6/365	Submersible	20.0	yes	-do-	No

#### **9.0 Water Management**

Meteoric water is the sole source of water in the area which could be utilized to recharge the aquifers. M/s Gama Infraprop (P) Limited is aware about the importance of water and hence fully committed to manage this valuable and

renewable resource. The industry has constructed artificial recharge structures in its compound and outside the compound both with an objective to recharge a volume of water more than it withdraws from the common pool of groundwater resource. Artificial Recharge structures constructed within the compound and outside both are discussed below:

### 9.1 Artificial Recharge in the compound of GIPL:

The industry falls on Tarai Formation where groundwater, in deeper aquifers, occurs under confined conditions. It was speculated that the aquifer being under pressure wouldn't receive recharge. To know the recharge acceptability an experiment was conducted by connecting a clean water source to the bore hole in the compound of GIPL. The water was lifted using 0.5HP pump. The experiment was continued for more than an hour. The aquifer continued receiving water which helped ensuring the acceptability of recharge water.

The area receives an annual rainfall of 1283.5mm which may be collected from different surfaces existing in the compound of the industry. The run-off water is received from the roof top and actually Run-off water from roof-top

$$: 24281.0 \times 1.2835 \times 0.85 = 26489.96\text{m}^3$$

$$\text{Run-off water from road and paved area} : 16997.0 \times 1.2835 \times 0.65 = 14180.17\text{m}^3$$

$$\text{Total run-off volume of water} : 40670.13\text{m}^3/\text{year}$$

The design of the Artificial Recharge structure is given in Fig10. It has three chambers the collection chamber, filtration chamber and the storage cum recharge chamber. Storage cum recharge chamber has been provided with a shaft which hydraulically connects the filtered water to the aquifer. Rain water collection from the roof, its transposition through down pipes and



accumulation in a sump has been shown in Fig.11, Fig.12 and Fig.13, respectively.

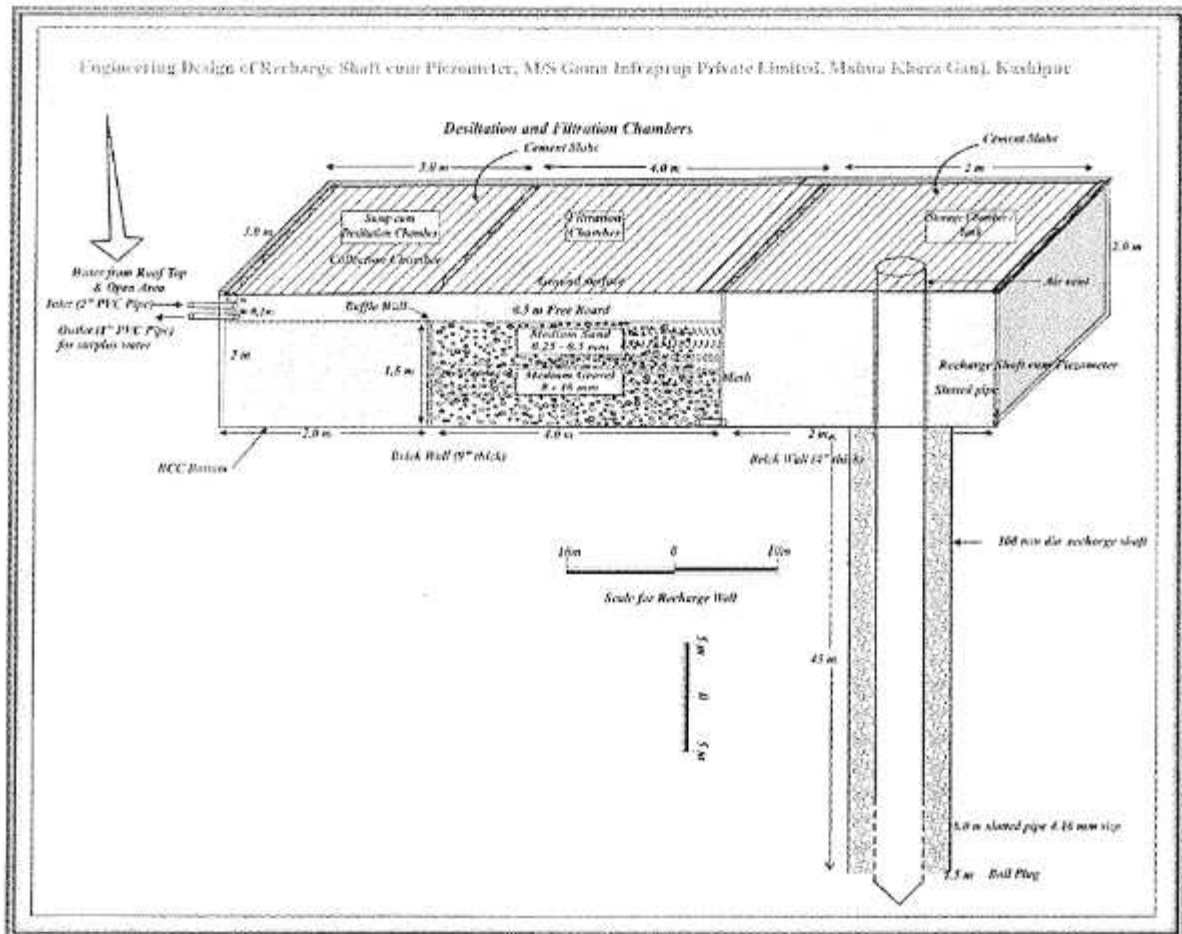


Figure 10. Artificial Recharge Design GIPL compound

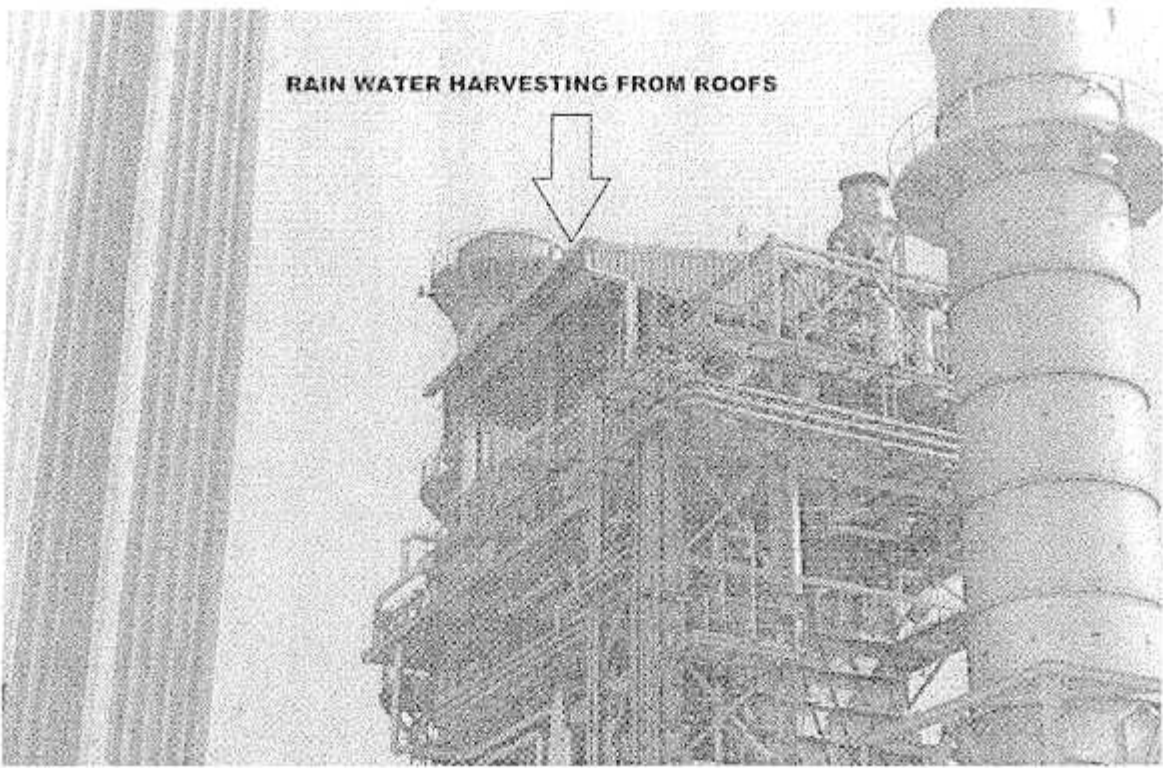


Figure 11. Rain water collection through gutters

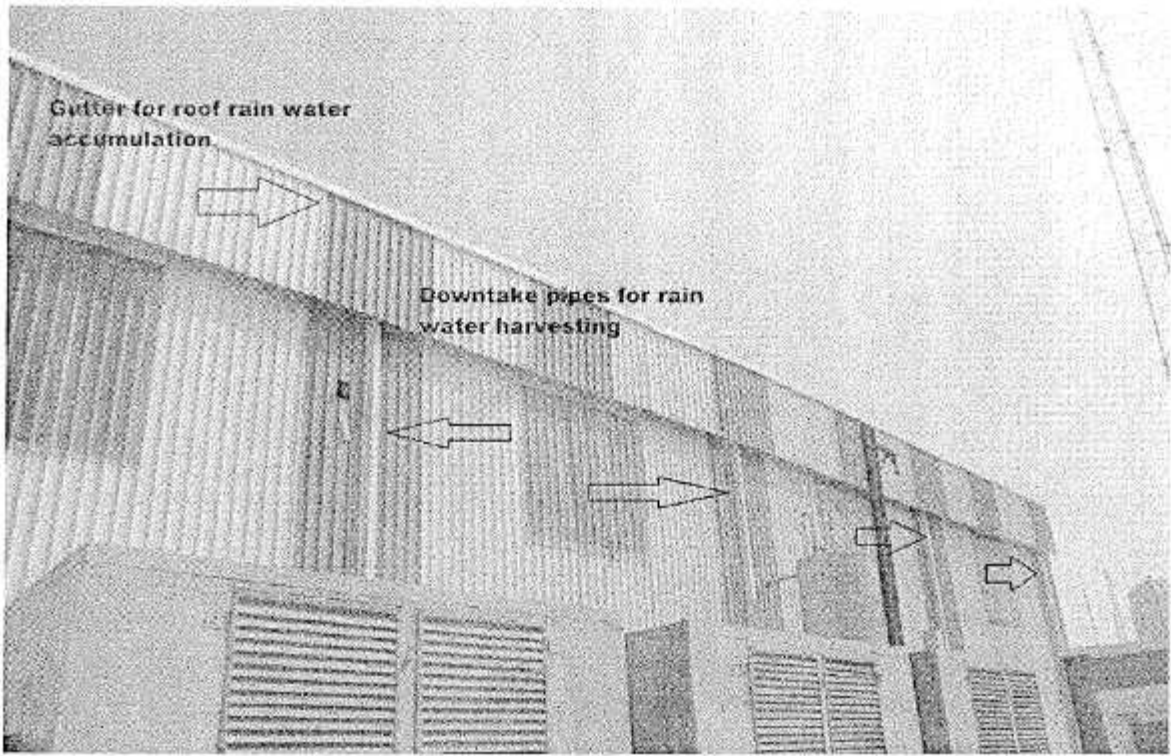
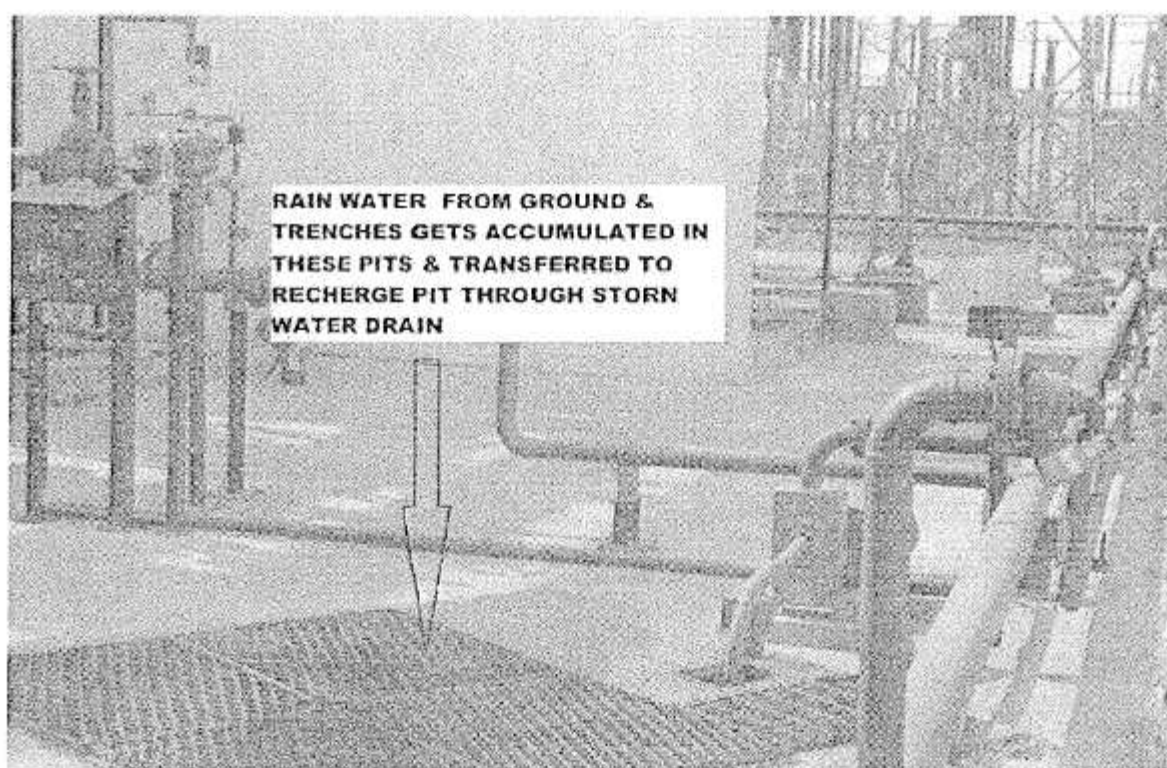


Figure 12. Transposition of water through rain water pipes



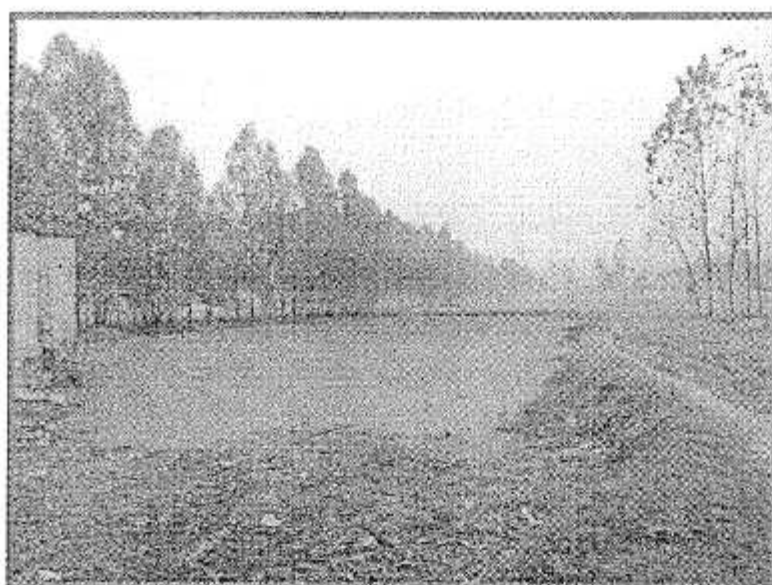
**Figure 13. Run off water collection in a sump for artificial recharge**

#### **9.2 Artificial Recharge on the pond at village Jamalganj:**

M/s Gama Infraprop Private Limited proposes to construct Artificial Recharge Project on the pond located at village Surajpur. The pond is located behind the Primary-School Jamalganj (Surajpur). The location of the pond is shown on the satellite map in Fig.14. The west-east and east-west views of the pond are shown in Fig.15 and Fig.16, respectively. The pond receives water from the pond and the fields both as shown in Figs 15 and 16.



**Figure 14. Satellite view of the recharge pond at Jamalganj (Surajpur) and its surroundings**



**Figure 15. West to east view of the pond at Jamalganj (Surajpur)**



**Figure 16. East-west view of the pond at Jamalganj (Surajpur)**

The village is formed of lintel roofs and mostly concrete/cemented roads. The pond receives run off water from an area of  $1.54\text{km}^2$  (village) and  $0.2\text{km}^2$  from fields' area. The run -off water is estimated as below:

Run-off from the village :  $1.13 \times 1.283 \times .6 \times 10^6 = 869864.0\text{m}^3/\text{year}$

Run-off from the fields :  $0.2 \times 1.283 \times 0.2 \times 10^6 = 51320.0 \text{ m}^3/\text{year}$

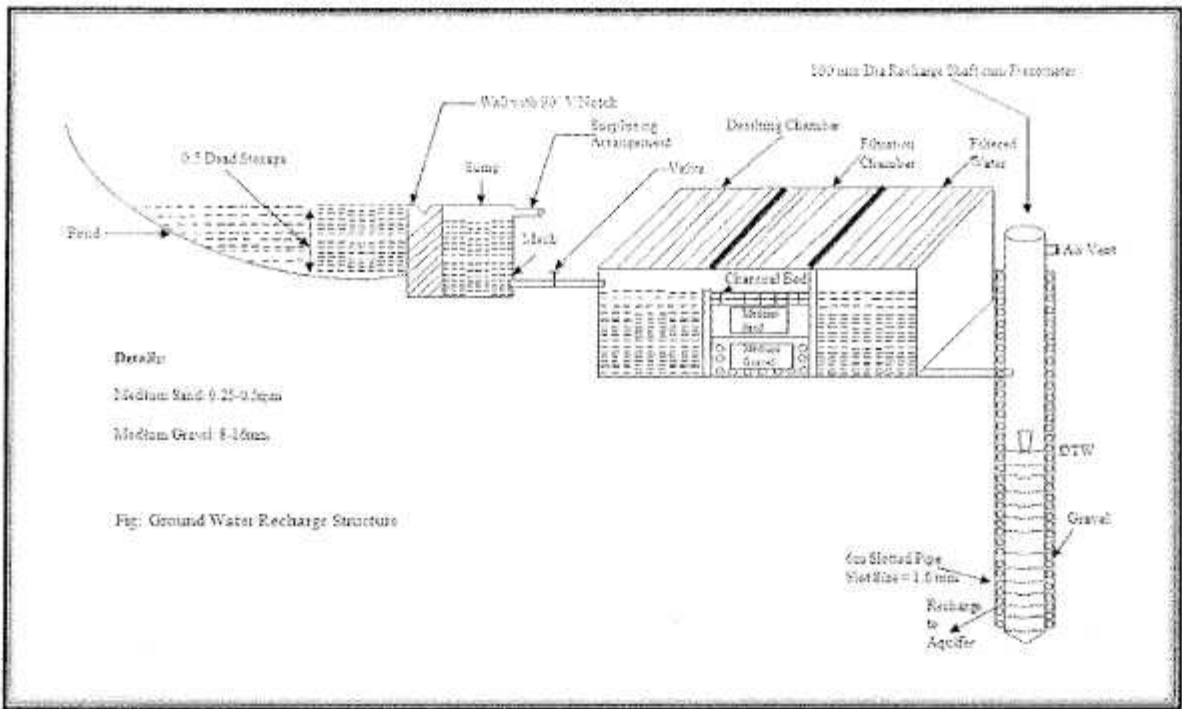
Evaporation losses :  $0.004 \times 2270 = 3314.2\text{m}^3/\text{year}$

Dead Storage :  $0.5 \times 2270 = 1135.0\text{m}^3/\text{year}$

Actual water available for recharge :  $916734.8\text{m}^3/\text{year}$

The industry proposes to filter and recharge the aquifer as shown in the design given in Fig.17. The construction activities of the artificial recharge structure on the pond at village Jamalpur are shown in Fig.18.





**Figure 17. Artificial Recharge Design for the pond**



**Figure 18. AR structure, Construction activities**

#### **10. 0 Total Water Available for Artificial Recharge**

The water available for artificial Recharge is  $957404.93\text{m}^3/\text{year}$ . The water requirement of the industry is  $800\text{m}^3/\text{day}$  for 350 days in a year which comes out to be  $276375.25\text{ m}^3/\text{year}$ . The recharge water volume is more than the water requirement of the industry.

#### **10.1 CGWA – NOC and Conditions**

M/s Gama Infraprop Private Limited, Kashipur is a gas based power generation industry. The industry had been granted '**NO OBJECTION CERTIFICATE**' to abstract groundwater @  $800\text{m}^3/\text{day}$  by the **Central Ground Water Authority (CGWA)**, New Delhi to meet its industrial, domestic and green belt development requirements vide its letter NO. 21-4(47)/CGWA/UR/2010-56 dated 14<sup>th</sup> January, 2011. The CGWA laid down conditions to comply upon in order to avoid any long term effect on the groundwater regime. These conditions are as given below:

1. Groundwater withdrawal shall not exceed the proposed quantity of 800m<sup>3</sup>/day.
2. All abstraction structures should be fitted with meter by the industry and monitoring of groundwater abstraction to be undertaken accordingly on regular basis, at least once in a month. The data may be submitted on a yearly basis to the Regional Director, Central Ground Water Board, Uttaranchal Region, Dehradun for perusal and record.
3. The industry should adopt and implement artificial recharge measures/rain water harvesting measures for augmenting the groundwater resources of the area as per the hydrogeological investigations.
4. The industry shall ensure proper conservation measures, recycling and reuse of waste water after adequate treatment.

The industry shall monitor the ambient groundwater regime of the area through piezometers and submit the data on a yearly basis to the Regional Director, Central Ground Water Board, Uttaranchal Region, Dehradun for perusal and record.

#### 11.0 Compliances of CGWA –conditions

Gama Infraprop (P Limited has complied upon all the conditions given in the CGWA-NOC. The details of the compliances are summarized in Table 7.

**Table 7. Details of the CGWA compliances**

S. NO.	CGWA-conditions	Compliances
1.	Groundwater withdrawal shall not exceed the proposed quantity of 800m <sup>3</sup> /day.	The industry is maintaining the logbook of the flow meters fitted on the tubewells. The groundwater withdrawal by the industry didn't exceed the permitted volume of 800.0m <sup>3</sup> /day.
2.	All abstraction structures should be fitted with meter by the industry and	All the three tubewells are fitted with digital flow meters. The daily meter readings are

	monitoring of groundwater abstraction to be undertaken accordingly on regular basis, at least once in a month. The data may be submitted on a yearly basis to the Regional Director, Central Ground Water Board, Uttarakhand Region, Dehradun for perusal and record.	being maintained. The water consumption details/monitoring data are being submitted to the Regional Director, Central Ground Water Board on yearly basis for perusal and record.
3.	The industry should adopt and implement artificial recharge measures/rain water harvesting measures for augmenting the groundwater resources of the area as per the hydrogeological investigations.	The industry is harvesting the rain water in its compound by constructing one artificial recharge structure. In addition to this one artificial recharge structure has been constructed on a pond located at village Jamaganj. The total water recharge volume is estimated to be 957404.93m <sup>3</sup> /year which is more than the net water requirement of the industry (276375.25 m <sup>3</sup> /year).
4.	The industry shall ensure proper conservation measures, recycling and reuse of waste water after adequate treatment.	The industry has installed Effluent Treatment Plant which is effectively in operation. The industry is recycling the treated water.
5.	The industry shall monitor the ambient groundwater regime of the area through piezometers and submit the data on a yearly basis to the Regional Director, Central Ground Water Board, Uttarakhand Region, Dehradun for perusal and	The industry has constructed one piezometer in its compound. The monitored data are being regularly submitted to the Regional Director, Central Ground Water Board, UR, Dehradun.

	record.	
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## 12.0 Conclusions

M/s Gama Infraprop Private Limited (GIPL) is a gas based power generation industry. It is located at Mahua Khera Ganj Notified Industrial Park, Kashipur. The industry requires water for industrial, domestic and green belt development purposes. M/s Gama Infraprop (P) Limited is located on Tarai Formation. Tarai forms potential aquifers. The industry has been issued NOC by the Central Ground Water Authority to abstract groundwater @800.0m<sup>3</sup>/day. The industry has complied with all the conditions mentioned in the CGWA-NOC and submitted a compliance report to the Regional Director, CGWB, UR, Dehradun. M/s has constructed artificial recharge structure in its compound and out- side on a pond as a part of the water management program. The volume of water estimated for artificial recharge is more than the water requirement of the industry.

Respected Sir

This is in reference to the trailing emails and our continuous follow-ups (verbal, email, letter) in the matter of renewal of our NOC letter no. 21-4(47)/CGWA/UR/2010-56 dated 14<sup>th</sup> Jan, 2011.

We would like to bring to your kind knowledge that we were waiting for your confirmation on your artificial recharge proposal and now we came to know vide your email dated 1st Nov 2019 that the email confirmation by you on 25th June 2019 was sent to incorrect email address ([delhi@rigggroup.co.in](mailto:delhi@rigggroup.co.in)) and hence we could not receive the same and so the approved design could not be executed.

However now we have started the execution of approved design and we assure you that we will be able to commission the recharge design within 1 month. The same will be informed to yourself after completion. Hence please grant us time for 1 month to execute the design. Please help us with your tentative date of visit and allow us for any arrangements suitable for you.

We will be highly obliged.

Our correct email address are -: [ddh@rigggroup.co.in](mailto:ddh@rigggroup.co.in) & [delhi@rigggroup.co.in](mailto:delhi@rigggroup.co.in)  
For support -: ([DELHI@RLGGROUP.CO.IN](mailto:DELHI@RLGGROUP.CO.IN))

Regards

**For Gama Infraprop Pvt. Ltd.**

**Arpit Agarwal**  
**(Authorized Signatory)**  
Mob:-8650502297

**From:** [rdur-cgwb@nic.in](mailto:rdur-cgwb@nic.in) [mailto:[rdur-cgwb@nic.in](mailto:rdur-cgwb@nic.in)]  
**Sent:** 01 November 2019 16:31  
**To:** ARPIT AGARWAL  
**Subject:** Fwd: Approval of the AR design-regarding

Sir,

With reference to the trailing mail, the desired information has already been mailed to you on 25 June 2019 regarding the artificial recharge measures to groundwater through the village pond. However, by this time the implementation of the recharge measures through the pond as well as In-house RWH should have been submitted, yet you let the monsoon runoff wasted without implementing it. You are hereby advised to submit the compliance along with the photographs at the earliest.

--

Regards

TS to Regional Director

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CGWB, UR, Dehradun

----- Original Message -----

From: "**Rdur-cgwb**" <[rdur-cgwb@nic.in](mailto:rdur-cgwb@nic.in)>  
Date: Jun 25, 2019 11:56:35 AM  
Subject: Approval of the AR design-regarding  
To: [delhi@rigggroup.co.in](mailto:delhi@rigggroup.co.in)

Sir,

with reference to your letter dated 17/06/2019, it is to inform you that the artificial recharge proposal through inhouse RWH and adopted pond outside Industry submitted by you in compliance report is feasible and you may implement the same before the onset of monsoon and submit the compliance report to this office along with the photographs so that your renewal case may be forwarded for grant of NOC at the earliest.

--

Regards

TS to Regional Director

CGWB, UR, Dehradun

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**PEIZOMETER DATA**  
**(01-04-2021 TO 31-12-2021)**

ANNEXURE - 5

Date	Time	Height(m)
01-04-2021	00:00	8.45
01-04-2021	06:00	8.5
01-04-2021	12:00	9.25
01-04-2021	18:00	8.48
02-04-2021	00:00	8.39
02-04-2021	06:00	8.38
02-04-2021	12:00	8.33
02-04-2021	18:00	8.34
03-04-2021	00:00	8.47
03-04-2021	06:00	8.47
03-04-2021	12:00	8.52
03-04-2021	18:00	8.6
04-04-2021	00:00	8.85
04-04-2021	06:00	8.83
04-04-2021	12:00	8.63
04-04-2021	18:00	8.71
05-04-2021	00:00	8.87
05-04-2021	06:00	8.82
05-04-2021	12:00	8.66
05-04-2021	18:00	9.56
06-04-2021	00:00	8.8
06-04-2021	06:00	8.92
06-04-2021	12:00	8.79
06-04-2021	18:00	8.69
07-04-2021	00:00	8.91
07-04-2021	06:00	8.88
07-04-2021	12:00	9.5
07-04-2021	18:00	8.67
08-04-2021	00:00	8.77
08-04-2021	06:00	8.85
08-04-2021	12:00	8.93
08-04-2021	18:00	8.97
09-04-2021	00:00	9.33
09-04-2021	06:00	9.49
09-04-2021	12:00	9.36
09-04-2021	18:00	9.49
10-04-2021	00:00	9.62
10-04-2021	06:00	9.81
10-04-2021	12:00	9.92
10-04-2021	18:00	9.98
11-04-2021	00:00	10.58
11-04-2021	06:00	10.89
11-04-2021	12:00	10.8
11-04-2021	18:00	10.64
12-04-2021	00:00	11.3
12-04-2021	06:00	11.58
12-04-2021	12:00	12.34
12-04-2021	18:00	11.41
13-04-2021	00:00	11.92
13-04-2021	06:00	12.11

(63)

Date	Time	Height(m)
13-04-2021	12:00	12.93
13-04-2021	18:00	11.68
14-04-2021	00:00	12.21
14-04-2021	06:00	12.72
14-04-2021	12:00	12.67
14-04-2021	18:00	12.36
15-04-2021	00:00	12.83
15-04-2021	06:00	12.92
15-04-2021	12:00	13.15
15-04-2021	18:00	12.73
16-04-2021	00:00	13.08
16-04-2021	06:00	13.69
16-04-2021	12:00	13.77
16-04-2021	18:00	13.95
17-04-2021	00:00	13.44
17-04-2021	06:00	13.57
17-04-2021	12:00	13.77
17-04-2021	18:00	13.69
18-04-2021	00:00	14.22
18-04-2021	06:00	14.39
18-04-2021	12:00	14.52
18-04-2021	18:00	14.15
19-04-2021	00:00	14.78
19-04-2021	06:00	15.34
19-04-2021	12:00	15.54
19-04-2021	18:00	14.96
20-04-2021	00:00	15.44
20-04-2021	06:00	15.77
20-04-2021	12:00	16.72
20-04-2021	18:00	16.25
21-04-2021	00:00	16.12
21-04-2021	06:00	15.5
21-04-2021	12:00	15.69
21-04-2021	18:00	16.23
22-04-2021	00:00	15.82
22-04-2021	06:00	15.59
22-04-2021	12:00	15.19
22-04-2021	18:00	15.04
23-04-2021	00:00	15.11
23-04-2021	06:00	15.11
23-04-2021	12:00	15.08
23-04-2021	18:00	15.6
24-04-2021	00:00	15.24
24-04-2021	06:00	15.05
24-04-2021	12:00	15.17
24-04-2021	18:00	15.79
25-04-2021	00:00	15.5
25-04-2021	06:00	15.21
25-04-2021	12:00	15.26
25-04-2021	18:00	15.78
26-04-2021	00:00	16.23
26-04-2021	06:00	16.27
26-04-2021	12:00	16.55

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Date	Time	Height(m)
26-04-2021	18:00	16.93
27-04-2021	00:00	17.13
27-04-2021	06:00	17.13
27-04-2021	12:00	17.39
27-04-2021	18:00	17.19
28-04-2021	00:00	17.46
28-04-2021	06:00	17.34
28-04-2021	12:00	17.3
28-04-2021	18:00	17.26
29-04-2021	00:00	17.2
29-04-2021	06:00	17.11
29-04-2021	12:00	16.62
29-04-2021	18:00	16.72
30-04-2021	00:00	16.8
30-04-2021	06:00	16.74
30-04-2021	12:00	17.25
30-04-2021	18:00	17.23
01-05-2021	00:00	17.73
01-05-2021	06:00	18.02
01-05-2021	12:00	18.63
01-05-2021	18:00	18.68
02-05-2021	00:00	18.91
02-05-2021	06:00	18.9
02-05-2021	12:00	19.05
02-05-2021	18:00	19.01
03-05-2021	00:00	18.91
03-05-2021	06:00	18.68
03-05-2021	12:00	18.83
03-05-2021	18:00	19.04
04-05-2021	00:00	18.94
04-05-2021	06:00	18.56
04-05-2021	12:00	18.66
04-05-2021	18:00	18.77
05-05-2021	00:00	18.87
05-05-2021	06:00	18.58
05-05-2021	12:00	18.45
05-05-2021	18:00	18.61
06-05-2021	00:00	18.68
06-05-2021	06:00	18.61
06-05-2021	12:00	18.65
06-05-2021	18:00	18.94
07-05-2021	00:00	18.43
07-05-2021	06:00	18.3
07-05-2021	12:00	18.55
07-05-2021	18:00	18.43
08-05-2021	00:00	18.51
08-05-2021	06:00	18.68
08-05-2021	12:00	19.15
08-05-2021	18:00	18.76
09-05-2021	00:00	18.78
09-05-2021	06:00	18.77
09-05-2021	12:00	18.93
09-05-2021	18:00	19.26

65

Date	Time	Height(m)
10-05-2021	00:00	19.52
10-05-2021	06:00	19.46
10-05-2021	12:00	19.43
10-05-2021	18:00	19.7
11-05-2021	00:00	19.67
11-05-2021	06:00	19.56
11-05-2021	12:00	20.02
11-05-2021	18:00	19.69
12-05-2021	00:00	19.8
12-05-2021	06:00	19.66
12-05-2021	12:00	20.04
12-05-2021	18:00	19.83
13-05-2021	00:00	19.77
13-05-2021	06:00	19.38
13-05-2021	12:00	19.53
13-05-2021	18:00	19.72
14-05-2021	00:00	19.76
14-05-2021	06:00	19.64
14-05-2021	12:00	19.82
14-05-2021	18:00	20.06
15-05-2021	00:00	20.03
15-05-2021	06:00	19.84
15-05-2021	12:00	19.77
15-05-2021	18:00	20.01
16-05-2021	00:00	20.04
16-05-2021	06:00	19.98
16-05-2021	12:00	20.45
16-05-2021	18:00	20.29
17-05-2021	00:00	20.4
17-05-2021	06:00	20.35
17-05-2021	12:00	20.28
17-05-2021	18:00	20.79
18-05-2021	00:00	20.28
18-05-2021	06:00	20.14
18-05-2021	12:00	20.63
18-05-2021	18:00	20.3
19-05-2021	00:00	20.22
19-05-2021	06:00	20.09
19-05-2021	12:00	20.02
19-05-2021	18:00	19.55
20-05-2021	00:00	18.72
20-05-2021	06:00	18.13
20-05-2021	12:00	17.56
20-05-2021	18:00	17.6
21-05-2021	00:00	16.63
21-05-2021	06:00	16.25
21-05-2021	12:00	16.49
21-05-2021	18:00	15.58
22-05-2021	00:00	15.35
22-05-2021	06:00	15.16
23-05-2021	00:00	14.71
23-05-2021	06:00	14.48
23-05-2021	12:00	14.4

Date	Time	Height(m)
23-05-2021	18:00	14.7
24-05-2021	00:00	14.61
24-05-2021	06:00	14.68
24-05-2021	12:00	14.66
24-05-2021	18:00	14.81
25-05-2021	00:00	14.98
25-05-2021	06:00	15.14
25-05-2021	12:00	15.34
25-05-2021	18:00	15.59
26-05-2021	00:00	15.83
26-05-2021	06:00	15.88
26-05-2021	12:00	16.15
26-05-2021	18:00	16.49
27-05-2021	00:00	16.73
27-05-2021	06:00	16.69
27-05-2021	12:00	16.86
27-05-2021	18:00	16.88
28-05-2021	00:00	16.79
28-05-2021	06:00	16.77
28-05-2021	12:00	16.96
28-05-2021	18:00	17.19
29-05-2021	00:00	17.34
29-05-2021	06:00	17.44
29-05-2021	12:00	17.31
29-05-2021	18:00	17.43
30-05-2021	00:00	17.31
30-05-2021	06:00	16.77
30-05-2021	12:00	16.6
30-05-2021	18:00	17.27
31-05-2021	00:00	16.65
31-05-2021	06:00	16.58
31-05-2021	12:00	16.83
02-06-2021	00:00	15.3
02-06-2021	06:00	14.97
02-06-2021	12:00	14.83
02-06-2021	18:00	14.85
03-06-2021	00:00	14.87
03-06-2021	06:00	15
03-06-2021	12:00	15.06
03-06-2021	18:00	15.16
04-06-2021	00:00	15.3
04-06-2021	06:00	15.36
04-06-2021	12:00	15.38
04-06-2021	18:00	15.58
05-06-2021	00:00	15.75
05-06-2021	06:00	15.88
05-06-2021	12:00	15.99
05-06-2021	18:00	16.1
06-06-2021	00:00	16.34
06-06-2021	06:00	16.3
06-06-2021	12:00	16.39
06-06-2021	18:00	16.64
07-06-2021	00:00	16.86

(67)



Date	Time	Height(m)
07-06-2021	06:00	16.92
07-06-2021	12:00	16.93
07-06-2021	18:00	17.24
08-06-2021	00:00	17.42
08-06-2021	06:00	17.35
08-06-2021	12:00	17.45
08-06-2021	18:00	17.6
09-06-2021	00:00	17.79
09-06-2021	06:00	17.72
09-06-2021	12:00	17.82
09-06-2021	18:00	17.93
10-06-2021	00:00	17.95
10-06-2021	06:00	17.75
10-06-2021	12:00	17.44
10-06-2021	18:00	17.53
11-06-2021	00:00	17.4
11-06-2021	06:00	16.9
11-06-2021	12:00	16.91
11-06-2021	18:00	17
12-06-2021	00:00	17.08
12-06-2021	06:00	17.12
12-06-2021	12:00	16.66
12-06-2021	18:00	16.6
13-06-2021	00:00	16.15
13-06-2021	06:00	15.78
13-06-2021	12:00	15.87
13-06-2021	18:00	15.98
14-06-2021	00:00	15.63
14-06-2021	06:00	15.62
14-06-2021	12:00	15.77
14-06-2021	18:00	16.27
15-06-2021	00:00	15.67
15-06-2021	06:00	15.73
15-06-2021	12:00	15.99
15-06-2021	18:00	16.34
16-06-2021	00:00	16.52
16-06-2021	06:00	16.58
16-06-2021	12:00	16.5
16-06-2021	18:00	16.73
17-06-2021	00:00	16.82
17-06-2021	06:00	16.88
17-06-2021	12:00	16.98
17-06-2021	18:00	17.11
18-06-2021	00:00	16.69
18-06-2021	06:00	16.3
18-06-2021	12:00	15.93
18-06-2021	18:00	15.73
19-06-2021	00:00	15.45
19-06-2021	06:00	15.12
19-06-2021	12:00	14.79
19-06-2021	18:00	14.53
20-06-2021	00:00	14.26
20-06-2021	06:00	14.03

Date	Time	Height(m)
20-06-2021	12:00	13.77
20-06-2021	18:00	13.64
21-06-2021	00:00	13.46
21-06-2021	06:00	13.22
21-06-2021	12:00	13.04
21-06-2021	18:00	13.12
22-06-2021	00:00	12.99
22-06-2021	06:00	12.83
22-06-2021	12:00	12.75
22-06-2021	18:00	12.86
23-06-2021	00:00	12.83
23-06-2021	06:00	12.65
23-06-2021	12:00	12.68
23-06-2021	18:00	12.66
24-06-2021	00:00	12.67
24-06-2021	06:00	12.63
24-06-2021	12:00	12.58
24-06-2021	18:00	12.7
25-06-2021	00:00	12.83
25-06-2021	06:00	12.98
25-06-2021	12:00	12.95
25-06-2021	18:00	12.87
26-06-2021	00:00	12.93
26-06-2021	06:00	12.87
26-06-2021	12:00	12.83
26-06-2021	18:00	13.32
27-06-2021	00:00	13.21
27-06-2021	06:00	13.47
27-06-2021	12:00	14.19
27-06-2021	18:00	13.98
28-06-2021	00:00	14.38
28-06-2021	06:00	14.17
28-06-2021	12:00	14.15
28-06-2021	18:00	14.29
29-06-2021	00:00	14.52
29-06-2021	06:00	14.54
29-06-2021	12:00	14.54
29-06-2021	18:00	14.65
30-06-2021	00:00	14.7
30-06-2021	06:00	14.74
30-06-2021	12:00	14.85
30-06-2021	18:00	14.97
01-07-2021	00:00	15.15
01-07-2021	06:00	15.3
01-07-2021	12:00	15.33
01-07-2021	18:00	15.58
02-07-2021	00:00	15.74
02-07-2021	06:00	15.85
02-07-2021	12:00	15.95
02-07-2021	18:00	16.21
03-07-2021	00:00	16.11
03-07-2021	06:00	15.97
03-07-2021	12:00	16.02

Date	Time	Height(m)
03-07-2021	18:00	16.24
04-07-2021	00:00	16.36
04-07-2021	06:00	16.33
04-07-2021	12:00	16.36
04-07-2021	18:00	16.92
05-07-2021	00:00	16.98
05-07-2021	06:00	17.07
05-07-2021	12:00	17.64
05-07-2021	18:00	18.51
06-07-2021	00:00	18.25
06-07-2021	06:00	18.44
06-07-2021	12:00	18.7
06-07-2021	18:00	18.81
07-07-2021	00:00	18.73
07-07-2021	06:00	18.78
07-07-2021	12:00	18.7
07-07-2021	18:00	19.02
08-07-2021	00:00	19.26
08-07-2021	06:00	19.31
08-07-2021	12:00	19.44
08-07-2021	18:00	19.74
09-07-2021	00:00	19.53
09-07-2021	06:00	19.3
09-07-2021	12:00	19.48
09-07-2021	18:00	19.95
10-07-2021	00:00	20.01
10-07-2021	06:00	20.1
10-07-2021	12:00	20.04
10-07-2021	18:00	20.32
11-07-2021	00:00	20.56
11-07-2021	06:00	20.29
11-07-2021	12:00	19.73
11-07-2021	18:00	20.19
12-07-2021	00:00	20.46
12-07-2021	06:00	20.53
12-07-2021	12:00	20.69
12-07-2021	18:00	20.87
13-07-2021	00:00	21.04
13-07-2021	06:00	21.14
13-07-2021	12:00	21.4
13-07-2021	18:00	21.46
14-07-2021	00:00	21.59
14-07-2021	06:00	21.72
14-07-2021	12:00	21.54
14-07-2021	18:00	21.18
15-07-2021	00:00	20.94
15-07-2021	06:00	20.71
15-07-2021	12:00	20.66
15-07-2021	18:00	20.82
16-07-2021	00:00	20.95
16-07-2021	06:00	20.9
16-07-2021	12:00	20.9
16-07-2021	18:00	21.04

70

Date	Time	Height(m)
17-07-2021	00:00	21.02
17-07-2021	06:00	20.89
17-07-2021	12:00	21.2
17-07-2021	18:00	21.52
18-07-2021	00:00	21.54
18-07-2021	06:00	21.47
18-07-2021	12:00	21.31
18-07-2021	18:00	20.63
19-07-2021	00:00	20.08
19-07-2021	06:00	19.48
19-07-2021	12:00	18.91
19-07-2021	18:00	18.47
20-07-2021	00:00	18.03
20-07-2021	06:00	17.58
20-07-2021	12:00	17.18
20-07-2021	18:00	16.88
21-07-2021	00:00	16.61
21-07-2021	06:00	16.3
21-07-2021	12:00	16.04
21-07-2021	18:00	15.85
22-07-2021	00:00	15.66
22-07-2021	06:00	15.43
22-07-2021	12:00	15.24
22-07-2021	18:00	15.04
23-07-2021	00:00	14.97
23-07-2021	06:00	14.8
23-07-2021	12:00	14.76
23-07-2021	18:00	14.94
24-07-2021	00:00	15.04
24-07-2021	06:00	15.11
24-07-2021	12:00	15.4
24-07-2021	18:00	15.72
25-07-2021	00:00	15.86
25-07-2021	06:00	15.86
25-07-2021	12:00	16.04
25-07-2021	18:00	16.3
26-07-2021	00:00	16.23
26-07-2021	06:00	16.31
26-07-2021	12:00	16.23
26-07-2021	18:00	16.23
27-07-2021	00:00	15.99
27-07-2021	06:00	15.86
27-07-2021	12:00	16.28
27-07-2021	18:00	16.72
28-07-2021	00:00	15.75
28-07-2021	06:00	15.55
28-07-2021	12:00	15.83
28-07-2021	18:00	16.24
29-07-2021	00:00	16.54
29-07-2021	06:00	16.62
29-07-2021	12:00	16.87
29-07-2021	18:00	17.11
30-07-2021	00:00	17.01

71

Date	Time	Height(m)
30-07-2021	06:00	16.99
30-07-2021	12:00	17.12
30-07-2021	18:00	17.46
31-07-2021	00:00	17.75
31-07-2021	06:00	17.54
31-07-2021	12:00	17.69
31-07-2021	18:00	17.86
01-08-2021	00:00	17.9
01-08-2021	06:00	17.32
01-08-2021	12:00	16.9
01-08-2021	18:00	16.74
02-08-2021	00:00	16.25
02-08-2021	06:00	16.05
02-08-2021	12:00	16.06
02-08-2021	18:00	15.96
03-08-2021	00:00	16.13
03-08-2021	06:00	16.05
03-08-2021	12:00	16.09
03-08-2021	18:00	16.17
04-08-2021	00:00	16.25
04-08-2021	06:00	16.31
04-08-2021	12:00	16.63
04-08-2021	18:00	17.13
05-08-2021	00:00	17.42
05-08-2021	06:00	17.69
05-08-2021	12:00	17.84
05-08-2021	18:00	18.05
06-08-2021	00:00	18.06
06-08-2021	06:00	18.19
06-08-2021	12:00	18.25
06-08-2021	18:00	18.58
07-08-2021	00:00	18.51
07-08-2021	06:00	18.5
07-08-2021	12:00	19.04
07-08-2021	18:00	18.75
08-08-2021	00:00	18.74
08-08-2021	06:00	18.57
08-08-2021	12:00	18.68
08-08-2021	18:00	18.83
09-08-2021	00:00	18.63
09-08-2021	06:00	18.26
09-08-2021	12:00	17.97
09-08-2021	18:00	17.85
10-08-2021	00:00	17.38
10-08-2021	06:00	16.89
11-08-2021	00:00	16.87
11-08-2021	06:00	16.74
11-08-2021	12:00	16.57
11-08-2021	18:00	16.89
12-08-2021	00:00	16.8
12-08-2021	06:00	16.67
12-08-2021	12:00	16.64
12-08-2021	18:00	16.74

72

Date	Time	Height(m)
13-08-2021	00:00	16.94
13-08-2021	06:00	16.93
13-08-2021	12:00	16.88
13-08-2021	18:00	17.1
14-08-2021	00:00	17.26
14-08-2021	06:00	17.3
14-08-2021	12:00	17.36
14-08-2021	18:00	17.63
15-08-2021	00:00	17.91
15-08-2021	06:00	17.93
15-08-2021	12:00	17.87
15-08-2021	18:00	18.21
16-08-2021	00:00	18.5
16-08-2021	06:00	18.59
16-08-2021	12:00	18.51
16-08-2021	18:00	18.63
17-08-2021	00:00	18.68
17-08-2021	06:00	18.79
17-08-2021	12:00	18.95
17-08-2021	18:00	18.86
18-08-2021	00:00	18.84
18-08-2021	06:00	18.78
18-08-2021	12:00	18.89
18-08-2021	18:00	18.78
19-08-2021	00:00	19.01
19-08-2021	06:00	19.02
19-08-2021	12:00	19.11
19-08-2021	18:00	19.32
20-08-2021	00:00	19.26
20-08-2021	06:00	19.22
20-08-2021	12:00	19.25
20-08-2021	18:00	19.27
21-08-2021	00:00	19.12
21-08-2021	06:00	18.98
21-08-2021	12:00	18.82
02-10-2021	00:00	11.41
02-10-2021	06:00	11.31
02-10-2021	12:00	11.68
02-10-2021	18:00	11.86
03-10-2021	00:00	12
03-10-2021	06:00	12.04
03-10-2021	12:00	12.01
03-10-2021	18:00	12.14
04-10-2021	00:00	11.76
04-10-2021	06:00	11.61
04-10-2021	12:00	11.95
04-10-2021	18:00	12.02
05-10-2021	00:00	11.94
05-10-2021	06:00	11.6
05-10-2021	12:00	11.42
05-10-2021	18:00	11.4
06-10-2021	00:00	11.38
06-10-2021	06:00	11.31

73



Date	Time	Height(m)
06-10-2021	12:00	11.36
06-10-2021	18:00	11.69
07-10-2021	00:00	12.03
07-10-2021	06:00	12.21
07-10-2021	12:00	12.13
07-10-2021	18:00	12.4
08-10-2021	00:00	12.21
08-10-2021	06:00	12.2
08-10-2021	12:00	12.7
08-10-2021	18:00	12.44
09-10-2021	00:00	12.59
09-10-2021	06:00	12.54
09-10-2021	12:00	12.66
09-10-2021	18:00	12.43
10-10-2021	00:00	12.47
10-10-2021	06:00	12.51
10-10-2021	12:00	12.76
10-10-2021	18:00	12.9
11-10-2021	00:00	12.92
11-10-2021	06:00	12.97
11-10-2021	12:00	13.05
11-10-2021	18:00	13.02
12-10-2021	00:00	13.39
12-10-2021	06:00	13.55
12-10-2021	12:00	12.99
12-10-2021	18:00	13.08
13-10-2021	00:00	13.32
13-10-2021	06:00	13.06
13-10-2021	12:00	12.95
13-10-2021	18:00	13
14-10-2021	00:00	12.84
14-10-2021	06:00	12.98
14-10-2021	12:00	13
14-10-2021	18:00	12.92
15-10-2021	00:00	12.75
15-10-2021	06:00	12.59
15-10-2021	12:00	12.82
15-10-2021	18:00	12.84
16-10-2021	00:00	12.66
16-10-2021	06:00	12.57
16-10-2021	12:00	12.71
16-10-2021	18:00	12.86
17-10-2021	00:00	12.47
17-10-2021	06:00	12.45
17-10-2021	12:00	12.5
17-10-2021	18:00	12.08
18-10-2021	00:00	11.75
18-10-2021	06:00	11.44
18-10-2021	12:00	11.11
18-10-2021	18:00	10.88
19-10-2021	00:00	10.64
19-10-2021	06:00	10.44
19-10-2021	12:00	10.25

74

Date	Time	Height(m)
19-10-2021	18:00	10.13
20-10-2021	00:00	9.94
20-10-2021	06:00	9.79
20-10-2021	12:00	9.64
20-10-2021	18:00	9.57
21-10-2021	00:00	9.43
21-10-2021	06:00	9.32
21-10-2021	12:00	9.18
21-10-2021	18:00	9.19
22-10-2021	00:00	9.1
22-10-2021	06:00	8.96
22-10-2021	12:00	8.74
22-10-2021	18:00	8.75
23-10-2021	00:00	8.66
23-10-2021	06:00	8.55
23-10-2021	12:00	8.36
24-10-2021	00:00	8.31
24-10-2021	06:00	8.24
24-10-2021	12:00	8.1
24-10-2021	18:00	8.13
25-10-2021	00:00	8.03
25-10-2021	06:00	8
25-10-2021	12:00	7.86
25-10-2021	18:00	7.87
26-10-2021	00:00	7.86
26-10-2021	06:00	7.77
27-10-2021	00:00	7.56
27-10-2021	06:00	7.49
27-10-2021	12:00	7.35
27-10-2021	18:00	7.43
28-10-2021	00:00	7.47
28-10-2021	06:00	7.4
28-10-2021	12:00	7.21
28-10-2021	18:00	8.15
29-10-2021	00:00	7.41
29-10-2021	06:00	7.28
29-10-2021	12:00	7.11
29-10-2021	18:00	7.19
30-10-2021	00:00	7.12
30-10-2021	06:00	7.02
30-10-2021	12:00	6.88
30-10-2021	18:00	6.96
31-10-2021	00:00	6.96
31-10-2021	06:00	6.9
31-10-2021	12:00	6.74
31-10-2021	18:00	6.78
01-11-2021	00:00	6.78
01-11-2021	06:00	6.73
01-11-2021	12:00	6.63
01-11-2021	18:00	6.65
02-11-2021	00:00	6.68
02-11-2021	06:00	6.62
02-11-2021	12:00	6.5

75

Date	Time	Height(m)
02-11-2021	18:00	6.56
03-11-2021	00:00	6.61
03-11-2021	06:00	6.53
03-11-2021	12:00	6.36
03-11-2021	18:00	6.48
04-11-2021	00:00	6.5
04-11-2021	06:00	6.45
04-11-2021	12:00	6.38
04-11-2021	18:00	6.5
05-11-2021	00:00	6.52
05-11-2021	06:00	6.49
05-11-2021	12:00	6.4
05-11-2021	18:00	6.49
06-11-2021	00:00	6.47
06-11-2021	06:00	6.42
06-11-2021	12:00	6.26
06-11-2021	18:00	6.32
07-11-2021	00:00	6.37
07-11-2021	06:00	6.31
07-11-2021	12:00	6.22
07-11-2021	18:00	6.2
08-11-2021	00:00	6.19
08-11-2021	06:00	6.18
08-11-2021	12:00	6.01
08-11-2021	18:00	6
09-11-2021	00:00	6.01
09-11-2021	06:00	5.97
09-11-2021	12:00	5.98
09-11-2021	18:00	6.01
10-11-2021	00:00	5.99
10-11-2021	06:00	5.96
10-11-2021	12:00	5.84
10-11-2021	18:00	5.94
11-11-2021	00:00	5.93
11-11-2021	06:00	5.92
11-11-2021	12:00	5.85
11-11-2021	18:00	5.94
12-11-2021	00:00	5.96
12-11-2021	06:00	5.92
12-11-2021	12:00	5.75
12-11-2021	18:00	5.95
13-11-2021	00:00	5.92
13-11-2021	06:00	5.89
13-11-2021	12:00	5.76
13-11-2021	18:00	5.89
14-11-2021	00:00	5.88
14-11-2021	06:00	5.82
14-11-2021	12:00	5.69
14-11-2021	18:00	5.85
15-11-2021	00:00	5.89
15-11-2021	06:00	5.89
15-11-2021	12:00	5.81
15-11-2021	18:00	5.9

Date	Time	Height(m)
16-11-2021	00:00	5.91
16-11-2021	06:00	5.9
17-11-2021	00:00	5.8
17-11-2021	06:00	5.75
17-11-2021	12:00	5.63
17-11-2021	18:00	5.73
18-11-2021	00:00	5.72
18-11-2021	06:00	5.7
18-11-2021	12:00	5.59
18-11-2021	18:00	5.69
19-11-2021	00:00	5.68
19-11-2021	06:00	5.63
19-11-2021	12:00	5.59
19-11-2021	18:00	5.68
20-11-2021	00:00	5.69
20-11-2021	06:00	5.64
20-11-2021	12:00	5.53
20-11-2021	18:00	5.54
21-11-2021	00:00	5.57
21-11-2021	06:00	5.53
21-11-2021	12:00	5.41
21-11-2021	18:00	5.6
22-11-2021	00:00	5.57
22-11-2021	06:00	5.53
22-11-2021	12:00	5.45
22-11-2021	18:00	5.64
23-11-2021	00:00	5.64
23-11-2021	06:00	5.62
23-11-2021	12:00	5.47
23-11-2021	18:00	5.59
24-11-2021	00:00	5.58
24-11-2021	06:00	5.55
24-11-2021	12:00	5.44
24-11-2021	18:00	5.51
25-11-2021	00:00	5.52
25-11-2021	06:00	5.51
25-11-2021	12:00	5.64
25-11-2021	18:00	5.53
26-11-2021	00:00	5.56
26-11-2021	06:00	5.52
26-11-2021	12:00	5.39
26-11-2021	18:00	5.57
27-11-2021	00:00	5.57
27-11-2021	06:00	5.51
27-11-2021	12:00	5.77
27-11-2021	18:00	5.63
28-11-2021	00:00	5.58
28-11-2021	06:00	5.56
28-11-2021	12:00	5.66
28-11-2021	18:00	5.56
29-11-2021	00:00	5.57
29-11-2021	06:00	5.52
29-11-2021	12:00	5.39

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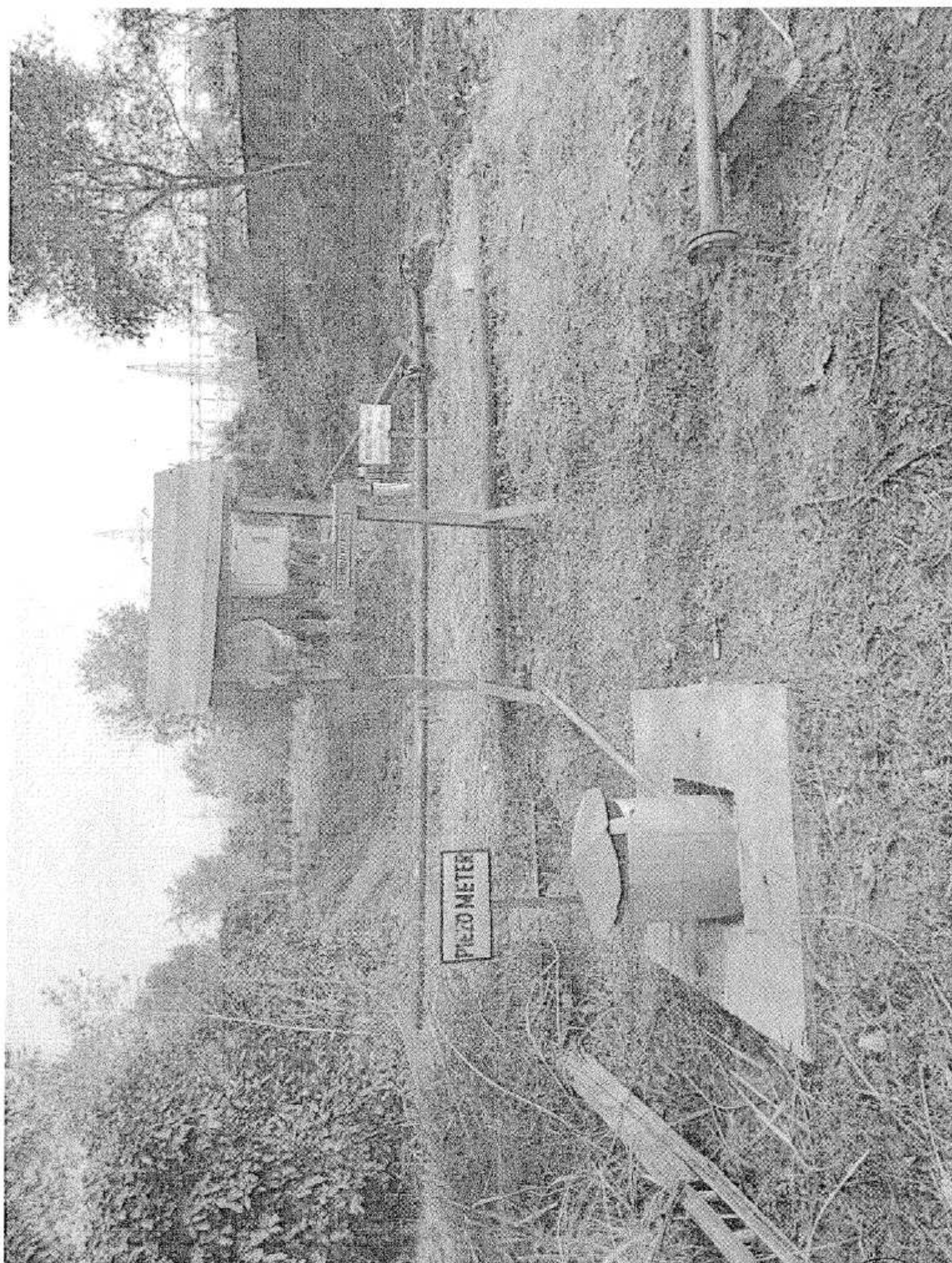
Date	Time	Height(m)
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30-11-2021	00:00	5.65
30-11-2021	06:00	5.65
30-11-2021	12:00	5.49
30-11-2021	18:00	5.75
01-12-2021	00:00	5.78
01-12-2021	06:00	5.76
01-12-2021	12:00	5.75
01-12-2021	18:00	5.87
02-12-2021	00:00	5.86
02-12-2021	06:00	5.78
02-12-2021	12:00	5.75
02-12-2021	18:00	5.91
03-12-2021	00:00	5.9
03-12-2021	06:00	5.81
03-12-2021	12:00	5.76
03-12-2021	18:00	5.75
04-12-2021	00:00	5.71
04-12-2021	06:00	5.64
04-12-2021	12:00	5.5
04-12-2021	18:00	5.69
05-12-2021	00:00	5.6
05-12-2021	06:00	5.52
05-12-2021	12:00	5.44
05-12-2021	18:00	5.55
06-12-2021	00:00	5.52
06-12-2021	06:00	5.46
06-12-2021	12:00	5.44
06-12-2021	18:00	5.74
07-12-2021	00:00	5.78
07-12-2021	06:00	5.75
07-12-2021	12:00	6.17
07-12-2021	18:00	6.78
08-12-2021	00:00	6.52
08-12-2021	06:00	6.63
08-12-2021	12:00	6.94
08-12-2021	18:00	7.37
09-12-2021	00:00	7.09
09-12-2021	06:00	6.92
09-12-2021	12:00	7.37
09-12-2021	18:00	7.65
10-12-2021	00:00	7.79
10-12-2021	06:00	7.57
10-12-2021	12:00	7.64
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11-12-2021	00:00	8.3
11-12-2021	06:00	8.24
11-12-2021	12:00	8.25
11-12-2021	18:00	8.7
12-12-2021	00:00	8.64
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12-12-2021	12:00	8.53
12-12-2021	18:00	8.68

78

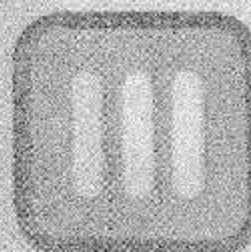
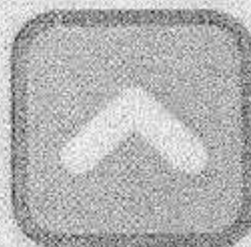
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14-12-2021	12:00	8.62
14-12-2021	18:00	8.84
15-12-2021	00:00	8.46
15-12-2021	06:00	8.47
15-12-2021	12:00	8.47
15-12-2021	18:00	8.84
16-12-2021	00:00	8.74
17-12-2021	00:00	8.67
17-12-2021	06:00	8.54
17-12-2021	12:00	8.8
17-12-2021	18:00	9.06
18-12-2021	00:00	8.77
18-12-2021	06:00	8.54
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18-12-2021	18:00	8.83
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19-12-2021	12:00	8.67
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20-12-2021	00:00	8.4
20-12-2021	06:00	8.24
20-12-2021	12:00	8.27
20-12-2021	18:00	8.45
21-12-2021	00:00	8.3
21-12-2021	06:00	8.19
21-12-2021	12:00	8.11
21-12-2021	18:00	8.37
22-12-2021	00:00	8.44
22-12-2021	06:00	8.33
22-12-2021	12:00	8.16
22-12-2021	18:00	8.29
23-12-2021	00:00	8.33
23-12-2021	06:00	8.25
23-12-2021	12:00	8.03
23-12-2021	18:00	8.09
24-12-2021	00:00	8.07
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24-12-2021	12:00	7.74
24-12-2021	18:00	7.77
25-12-2021	00:00	7.75
25-12-2021	06:00	7.69
25-12-2021	12:00	7.42
25-12-2021	18:00	7.45
26-12-2021	00:00	7.46
26-12-2021	06:00	7.39
26-12-2021	12:00	7.24
26-12-2021	18:00	7.28

Date	Time	Height(m)
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31-12-2021	12:00	6.38
31-12-2021	18:00	6.47





# Ground Water Level Recorder







# ENVIRO-TECH SERVICES

An Analytical Laboratory

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Plot No. 1/32, South Side G.T. Road Industrial Area, Ghaziabad (U.P.) - 201001

email: etstab2012@gmail.com | Website: www.etslab.in | Ph: 9911516075, 9811736063



## TEST REPORT

TEST REPORT NO : ETS/KAS-454/04/2021

DATE OF REPORT : 20-04-2021

### WATER SAMPLE ANALYSIS REPORT

Name And Address Of Customer : M/s GAMA INFRAPROP PVT.LTD.

KHASRA NO. 948, U.P. VILLAGE - MAHUAKHERA GANJ, TEH. KASHIPUR, U.S. NAGAR, UTTAR KHAND, INDIA -

Date of Sampling : 15-04-2021

Analysis Start Date : 16/04/2021

Analysis End Date : 20/04/2021

Sampling ID No. : 454/04

Sampling Done By : ETS LAB

Sampling Description : GROUND WATER

Sampling Location : BOREWELL

Sampling Method : ETS/STP/WATER-02

Sampling Quantity : TWO LI

Packing Condition : Sealed

Packed In : PVC Bottle

S.No.	Parameter	Unit	Result	Drinking Water Standards / Limit (IS:10500-2012)		Test Method
				Desirable Limit	Permissible Limit	
1	Colour	Hazen	< 5	5	15	APHA 2150 (C)
2	Odour	-	AGREEABLE	Agreeable	Agreeable	APHA 2150 (C)
3	Taste	-	AGREEABLE	Agreeable	Agreeable	APHA 2150 (C)
4	Turbidity	NTU	< 1	1	5	APHA 2150 (C)
5	pH	-	7.37	6.5 - 8.5	No Relaxation	APHA 2150 (C)
6	Total Hardness	mg/L	224.1	200	500	APHA 2150 (C)
7	Chloride (Cl)	mg/L	28.0	250	1000	APHA 2150 (C)
8	Sulphate (SO <sub>4</sub> )	mg/L	22.1	200	400	APHA 2150 (C)
9	Fluoride (F)	mg/L	0.30	1.0	1.5	APHA 2150 (C)
10	Total Alkalinity	mg/L	175.6	200	500	APHA 2150 (C)
11	Total Dissolved Solids	mg/L	438.4	500	2000	APHA 2150 (C)
12	Residual Free Chlorine	mg/L	< 0.02	0.2	1.0	APHA 2150 (C)
13	Iron (Fe)	mg/L	0.11	0.3	No Relaxation	APHA 2150 (C)
14	Copper (Cu)	mg/L	< 0.01	0.05	1.5	APHA 2150 (C)
15	Manganese (Mn)	mg/L	< 0.1	0.1	0.3	APHA 2150 (C)
16	Mercury (Hg)	mg/L	< 0.001	0.001	No Relaxation	APHA 2150 (C)
17	Cadmium (Cd)	mg/L	< 0.002	0.003	No Relaxation	APHA 2150 (C)
18	Selenium (Se)	mg/L	< 0.01	0.01	No Relaxation	APHA 2150 (C)

FOR ENVIROTECH SERVICES

Page 1 of 2

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FOR ENVIROTECH SERVICES  
AUTHORIZED SIGNATORY

ANIL KUMAR CHAUDHARY  
(Technical Manager)

Form no ETS/LAB/TH-05 Issue No 05 dt 01/04/2019 Rev. No 04 dt 01/04/2019

Note:-

1. This test report shall not be used in any advertising media or as evidence in the court of Law without prior written permission of the laboratory.
2. The sample shall be destroyed after 15 days & Biological & Perishable sample shall be destroyed immediately after issue of test report.
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Plot No. 1/32, South Side G.T. Road Industrial Area, Ghaziabad (U.P.) - 201001

Email: etslab2312@gmail.com | Website: www.etslab.in | Ph: 9511516070-9811738863



ISO 9001:2015/45001

## TEST REPORT

TEST REPORT NO.: ETS/KAS-454/04/2021

DATE OF REPORT: 20-04-2021

					DATE OF REPORT: 20-04-2021	
19	Arsenic (As)	mg/L	<0.01	0.01	0.05	APPCB/11/1/01
20	Cyanide (CN)	mg/L	<0.05	0.05	No Relaxation	APPCB/11/1/01
21	Cadmium (Cd)	mg/L	<0.001	0.01	No Relaxation	APPCB/11/1/01
22	Zinc (Zn)	mg/L	1.48	5	15	APPCB/11/1/01
23	Aluminium (Al)	mg/L	<0.01	0.03	0.2	APPCB/11/1/01
24	Chromium Hexavalent (Cr+6)	mg/L	<0.001	0.05	No Relaxation	APPCB/11/1/01
25	Boron (B)	mg/L	0.10	0.5	1.0	APPCB/11/1/01
26	Barium (Ba)	mg/L	<0.01	0.1	No Relaxation	APPCB/11/1/01
27	Molybdenum (Mo)	mg/L	<0.005	0.05	No Relaxation	APPCB/11/1/01
28	Nickel (Ni)	mg/L	<0.001	0.02	No Relaxation	APPCB/11/1/01
29	Silver (Ag)	mg/L	<0.05	0.1	No Relaxation	APPCB/11/1/01

\*\*\* End Of Report \*\*\*

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Format No ETS/LAS-TR-09 Issue No 05 dt 01/04/2019 Rev No 01 dt 04/04/2019

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email: etslab2012@gmail.com | Website: www.etslab.in | Ph: 9911516075, 9811736053



ISO 9001:2015/43001

## TEST REPORT

TEST REPORT NO. ETS/KAS-443/04/2021

DATE OF REPORT: 20-04-2021

### STACK EMISSION MONITORING AND ANALYSIS REPORT

Name And Address Of Customer : M/s GAMA INFRABOP PVT. LTD.  
KHASRA NO. 948, U.P., VILLAGE-MAHUAKHERA GANJ, TEH.-KASHIPUR, U.S.  
NAGAR, UTTARA KHAND, INDIA -

Date Of Sampling : 14-04-2021  
Analysis Start Date : 16/04/2021  
Analysis End Date : 20-04-2021  
Duration Of Sampling : 30 MIN  
Sample ID No : 443/04  
Sampling Done By : ETS LAB  
Sampling Method : ETS/STP/STACK-01  
Stack Attached To : BOILER NO. 1 (PHO-441)  
Capacity : 113 TPH  
Type Of Fuel Used : NATURAL GAS  
Quantity Of Fuel Used : 18254 SM3/HR  
Stack Height Above The Ground : 40 Mtr  
Stack Dia At The Top : 3000 mm  
Material Of Construction : MS  
Normal Operation Schedule : 24 HRS  
Attached APCS : IN BUILT SYSTEM WITH TURBINE  
Equipments Used : Stack Kit (LES AFM 100), ...  
Ambient Temperature : 32°C  
Velocity Of Flue Gases : 12.5 Mtr/Sec

Flue Gas Temperature : 53°C  
Quantity Of Emission : 537293.25m<sup>3</sup>/hr

S.No.	Parameter	Unit	Result	Specification/ Limit (As Per CPCB)	Test Method
1	Particulate Matters (PM)	mg/Nm <sup>3</sup>	24.6	150	IS:11255 (P-1)-2009
2	Sulphur Dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	7.2	800	IS:11255 (P-2)-2009
3	Oxides of Nitrogen (NO <sub>x</sub> )	mg/Nm <sup>3</sup>	5.1	600	IS:11255 (P-7)-2012
4	Carbon Monoxide (CO)	% by Vol	0.05	1% by vol	IS:12270-2008
5	Oxygen (O <sub>2</sub> )	% by Vol	11.4	Not Specified	IS:13270 - 2008

\*\*\* End Of Report \*\*\*



FOR ENVIRO-TECH SERVICES

For ENVIROTECH SERVICES

Anil Kumar Chaudhary  
(Technical Manager)

Page 1 Of 1

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#### AUTHORIZED SIGNATORY

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## 8. Description of Equipment

### 8.1 Description of Gas Turbine and Auxiliary Equipment

#### 8.1.1 Description of Gas Turbine

##### 8.1.1.1 General

The MS 6111 FA gas turbine utilizes the advanced technology developed during the design of MS 7001F/FA. The configuration is a single shaft, bolted rotor with the generator connected to the gas turbine through a speed reduction gear at the compressor or "cold" end. This feature provides for an axial exhaust to optimize the plant arrangement for combined cycle or waste heat recovery applications. The major features of the MS 6111 FA are described below.

##### 8.1.1.1.1 Compressor

The compressor is an 18 stage axial flow design with 1 row of modulating inlet guide vanes and a pressure ratio of 15.8:1 in ISO conditions. Interstage extraction is used for cooling and sealing air (turbine nozzles, wheelspaces) and for compressor surge control during start-up/shutdown. Construction employs 15 full length tie bolts that compress the discs at the bolt circle thereby forming a rigid rotor. The discs are centered by means of rabbets. The compressor blades are attached to the discs with locked-in dovetails. High strength, corrosion resistant GTD450 stainless steel blading material is provided on the first nine stages. The remaining blading, except stage 17 stator and EGV, is of high strength AISI 4034Cb alloy. Stage 17 stator and EGV are cast from high strength 403CB. Because the blading material in the compressor has high corrosion resistance, a coating is not required. The compressor wheel webs are coated with corrosion resistant paint.

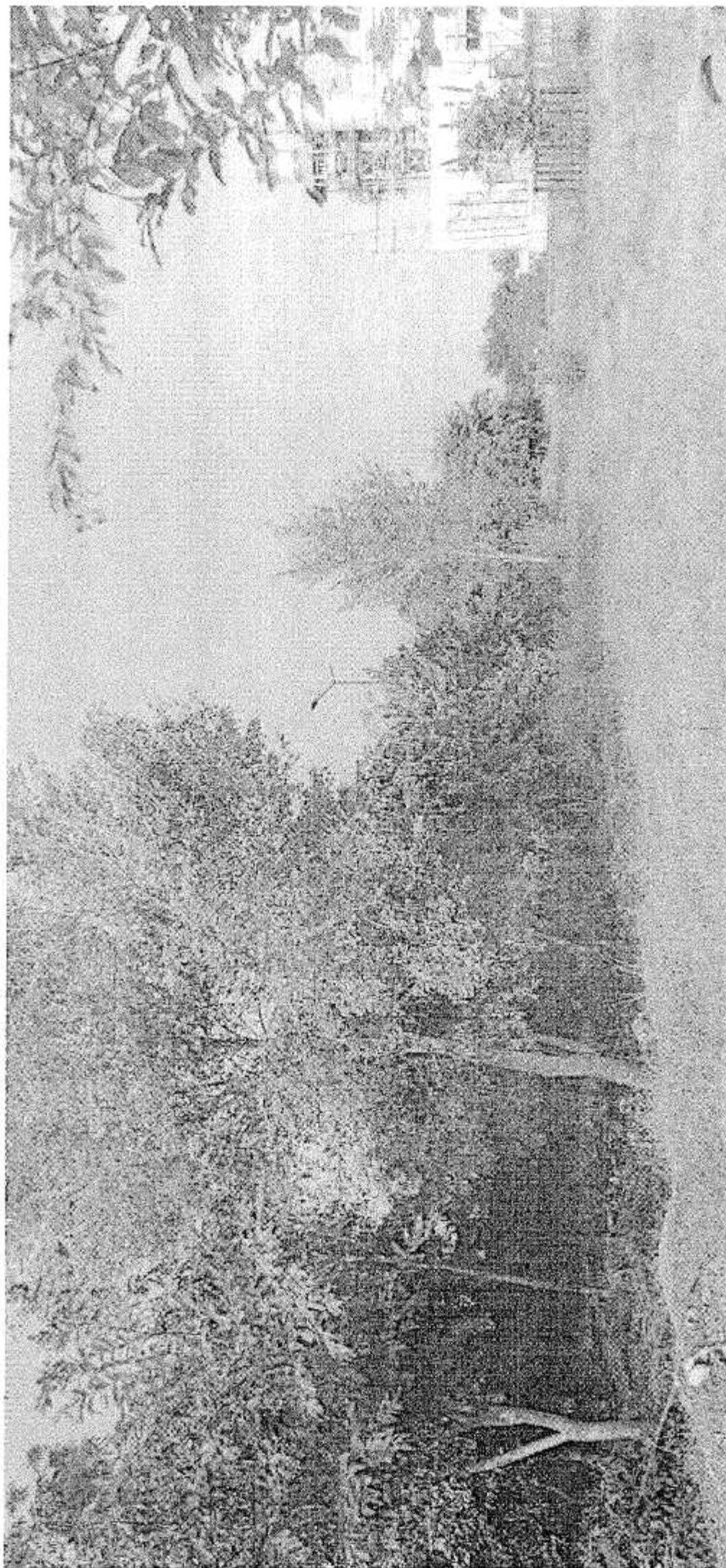
##### 8.1.1.1.2 Combustion System

A reverse flow, six chambers second generation Dry Low NOx (DLN-2.6) combustion system is standard with six fuel nozzles per chamber. Two retractable spark plugs and four flame detectors are a standard part of the combustion system. Crossfire tubes connect each combustion chamber to adjacent chambers on both sides. Transition pieces are cooled by air impingement. Thermal barrier coatings are applied to the inner walls of the combustion liners and transition pieces for longer inspection intervals. Each chamber, liner and transition piece can be individually replaced.

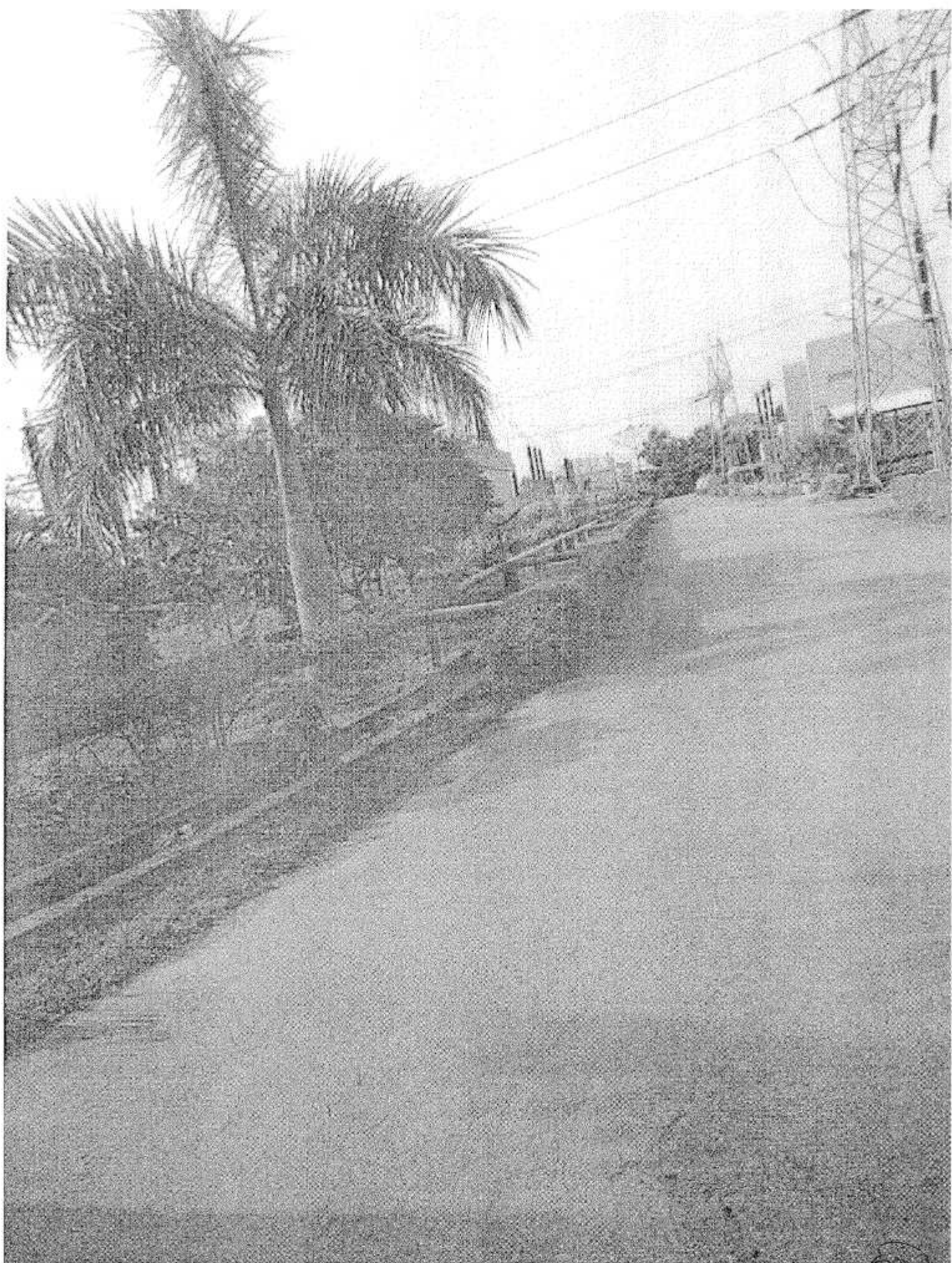
##### 8.1.1.1.3 Turbine Section

The turbine section has three stages with air-cooling on all three nozzle stages and the first and second bucket stages. The first stage bucket has an advanced cooling system to withstand the higher firing temperature. It utilizes turbulated serpentine passages with cooling air discharging through the tip, leading and trailing edges. The buckets are designed with long shanks to isolate the turbine wheel rim from the hot gas path and integral tip shrouds are incorporated on the

For Luna Infraprop Private Limited





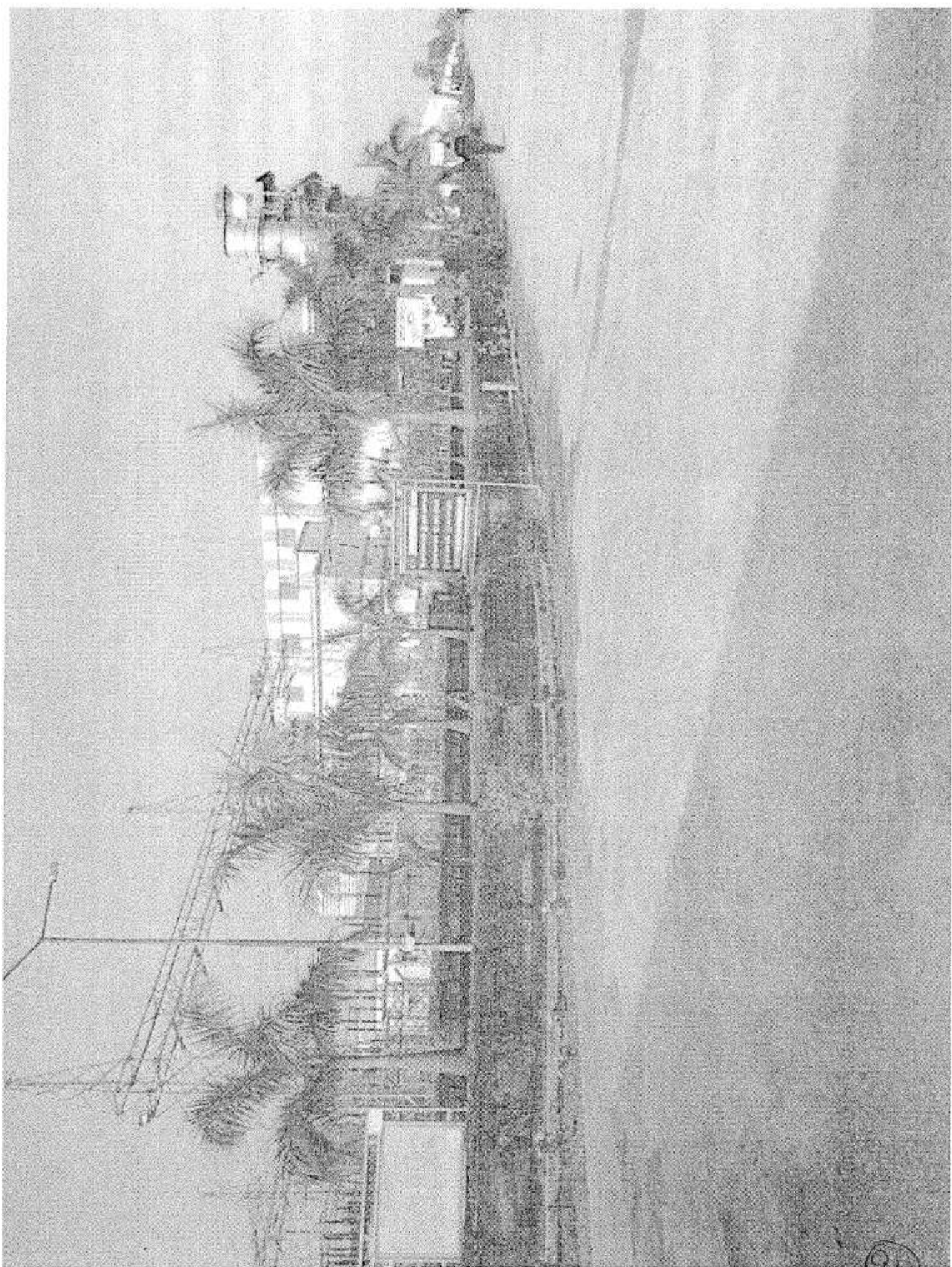






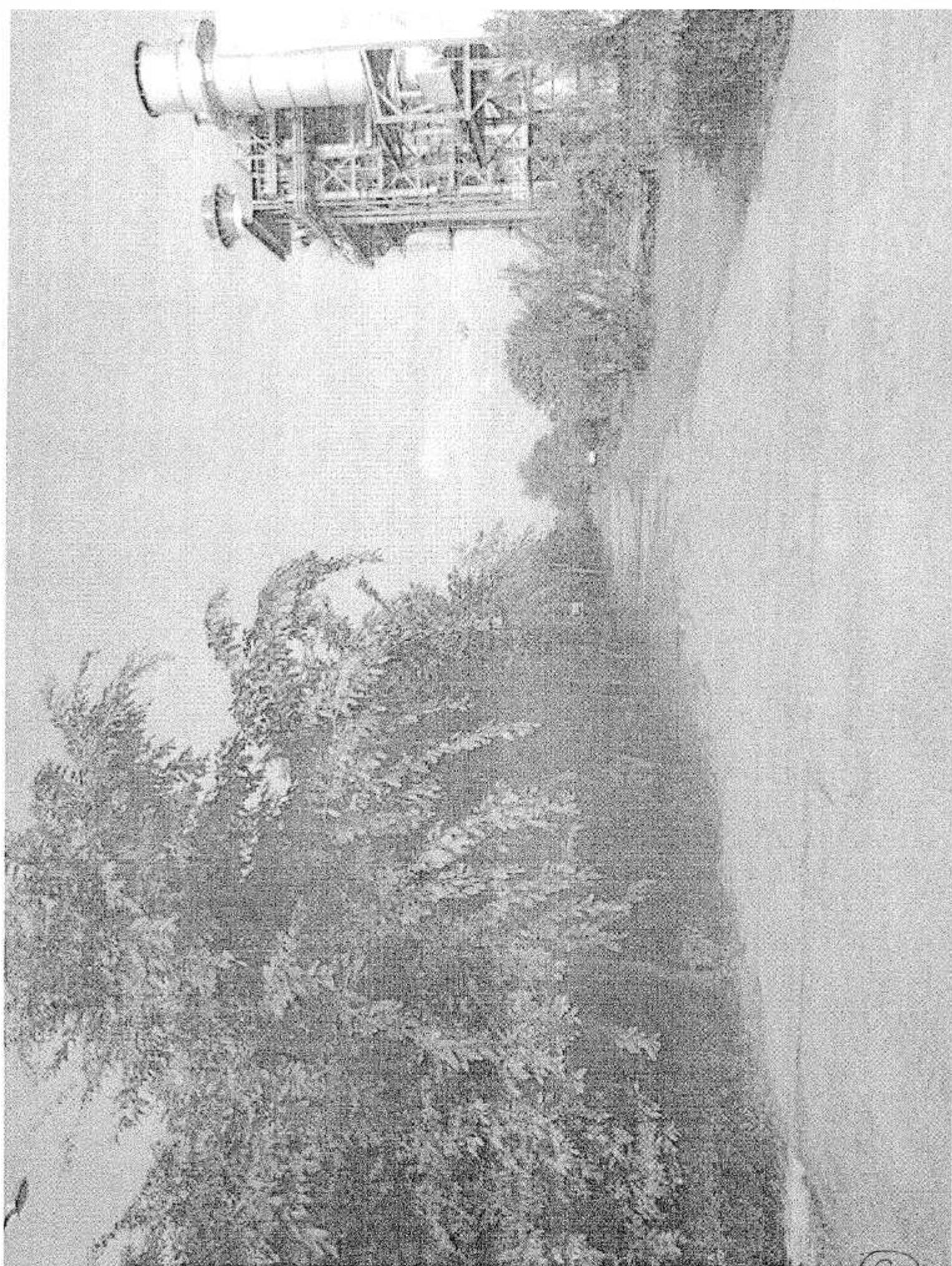


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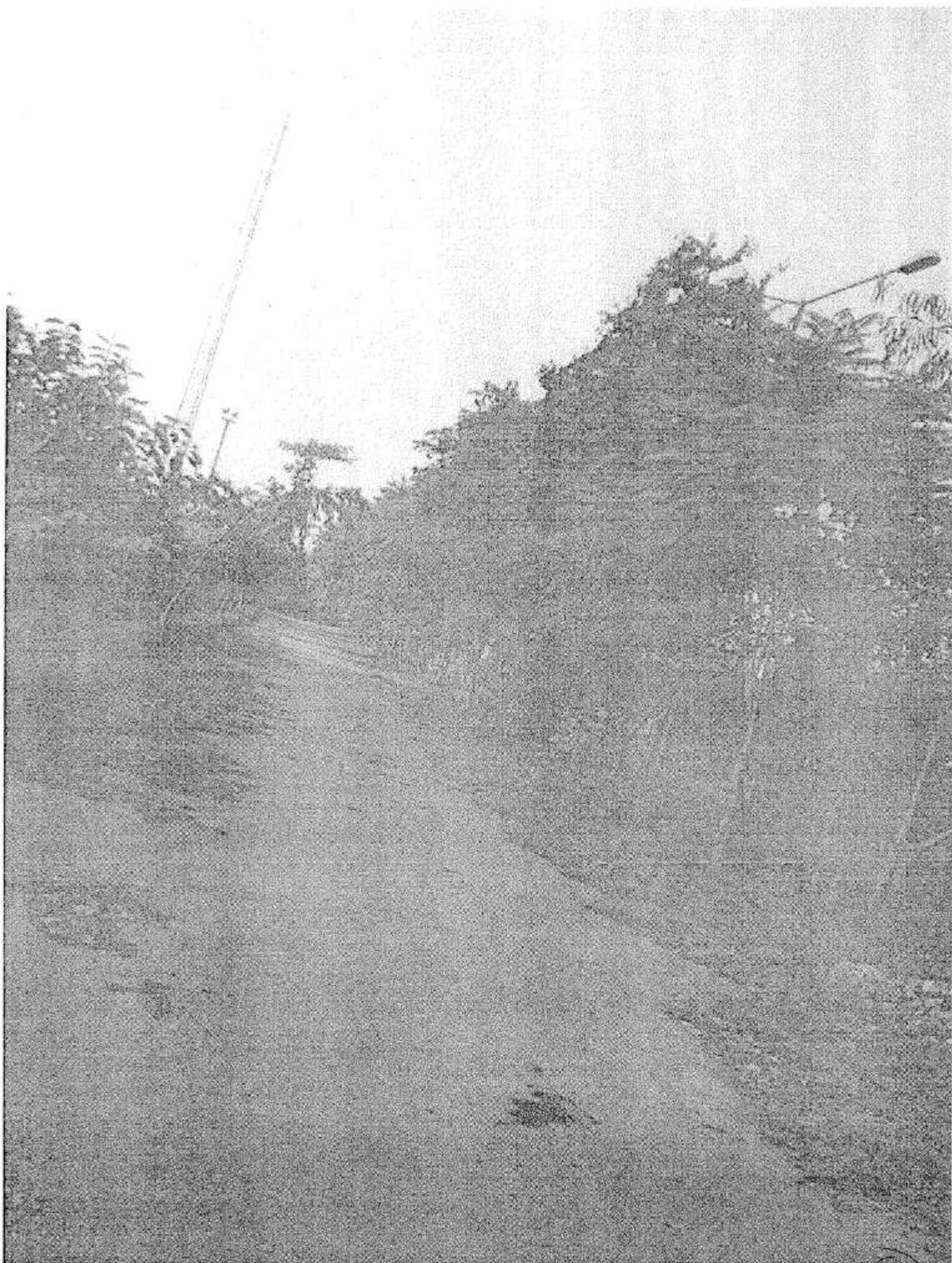




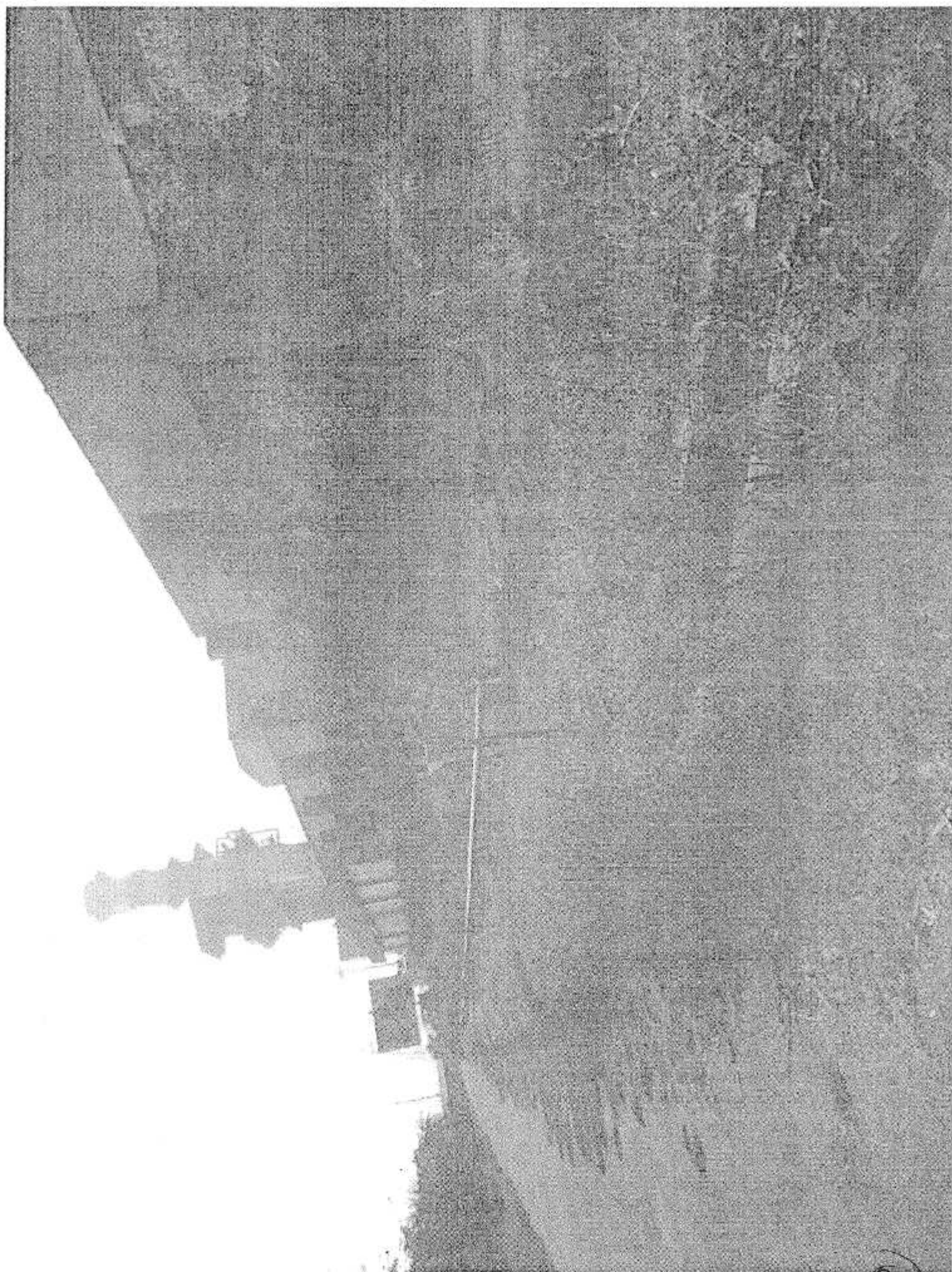


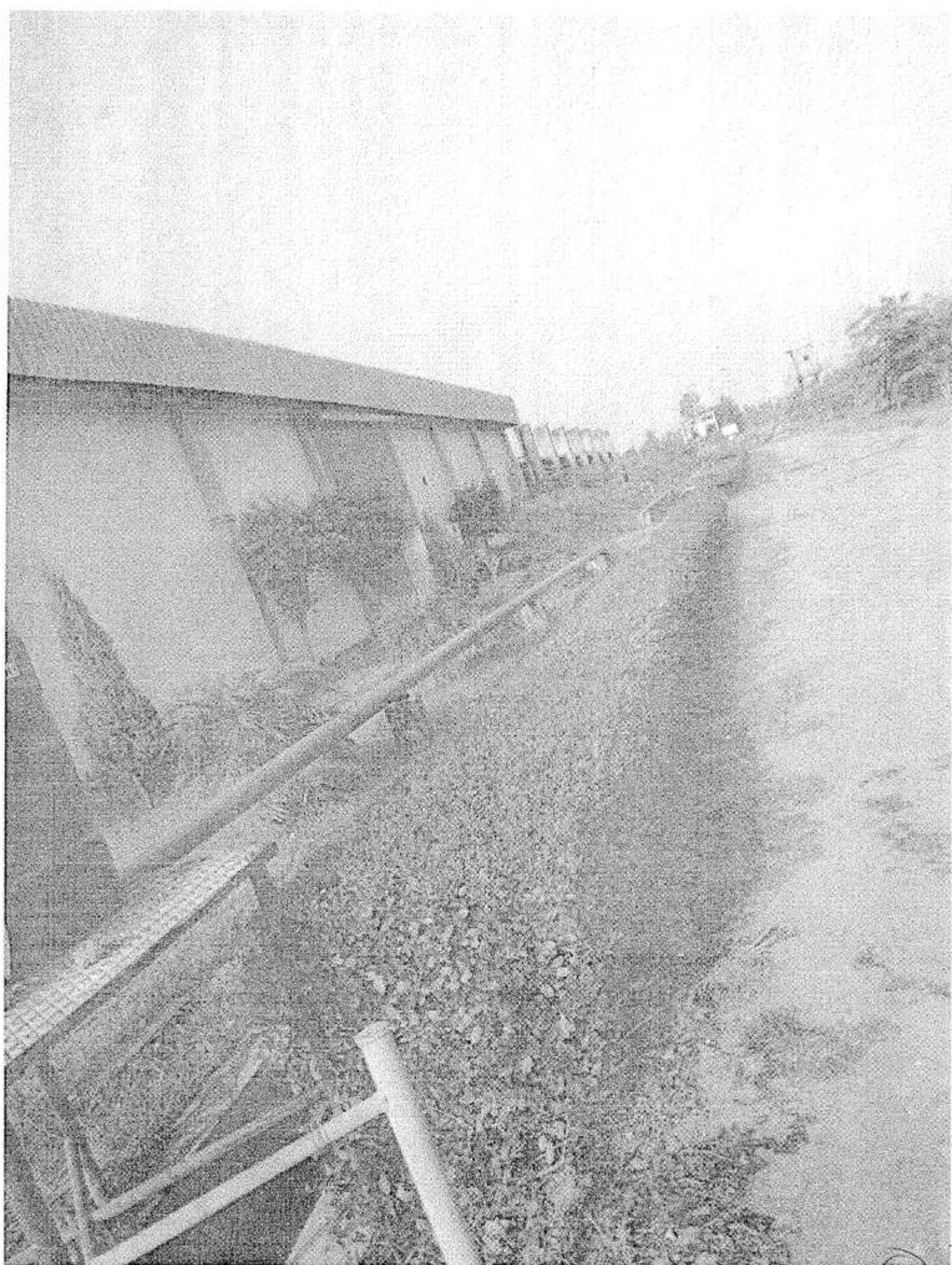




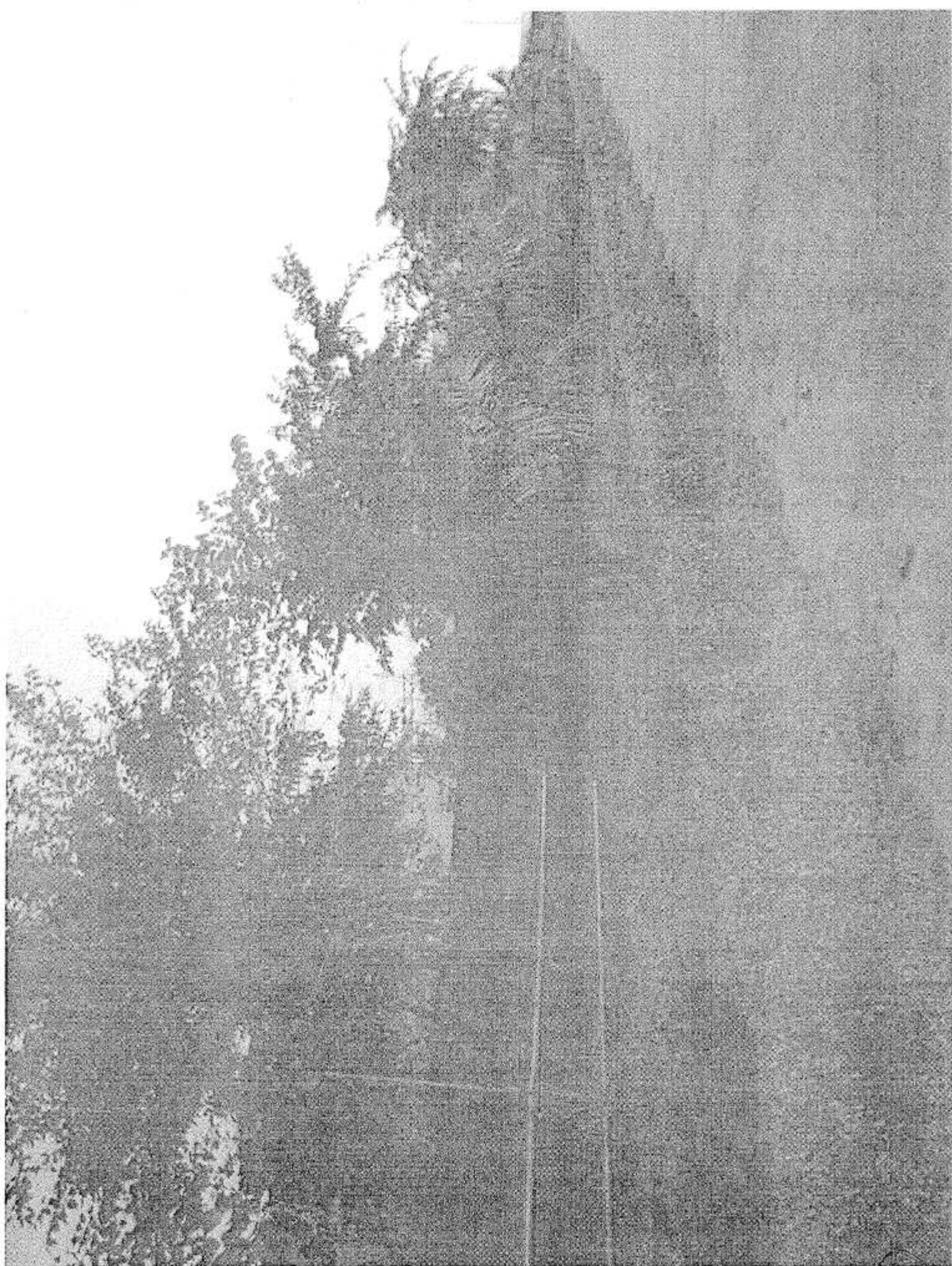












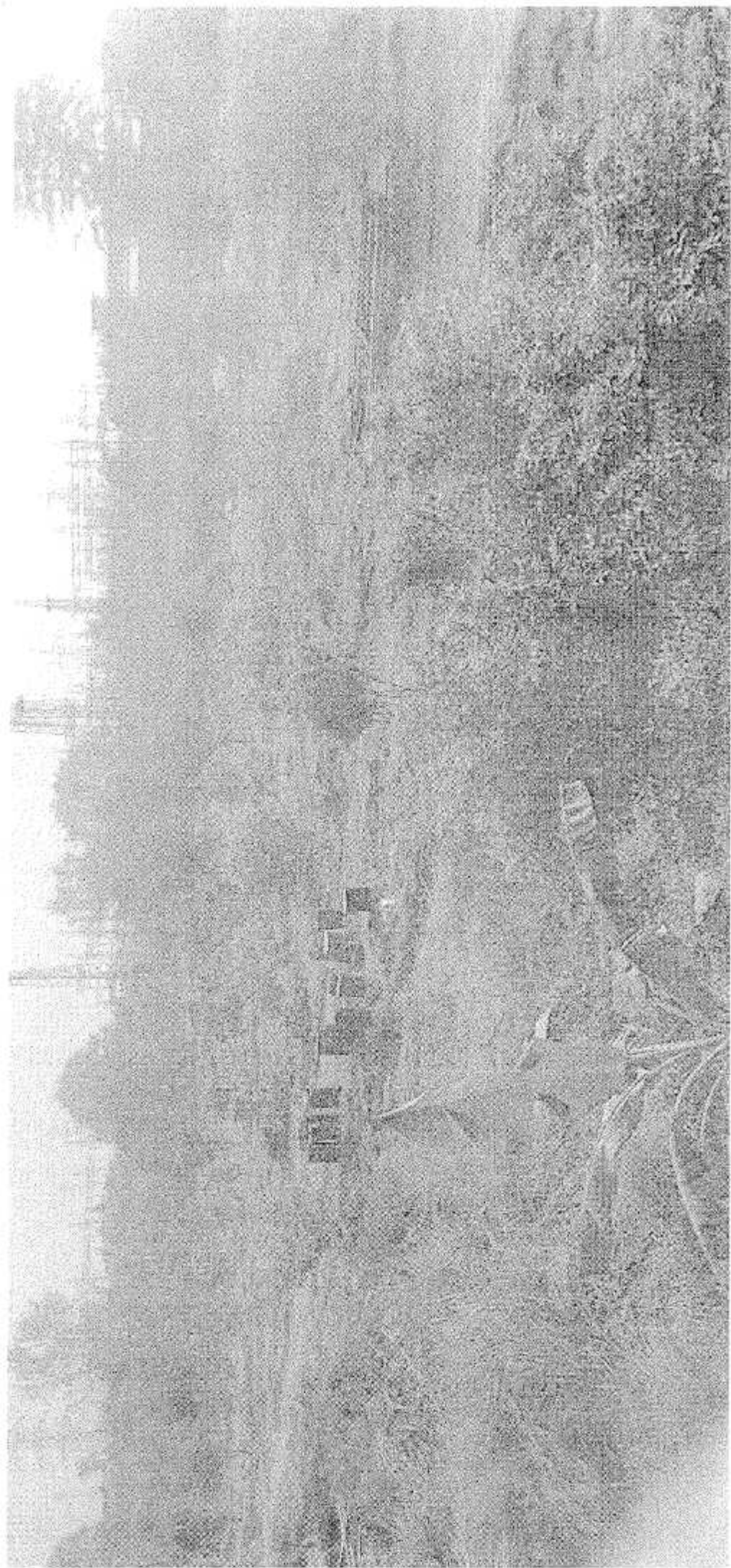


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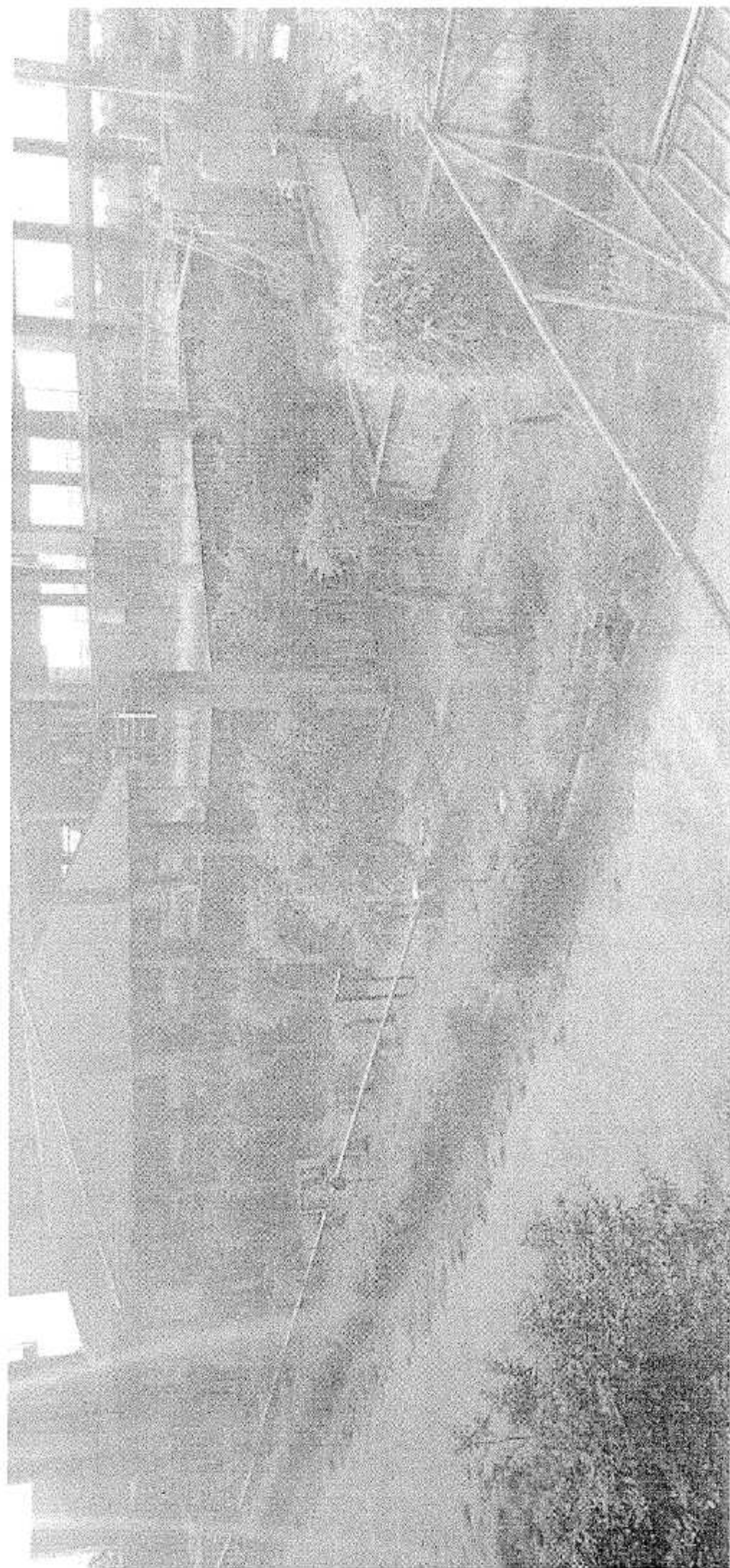






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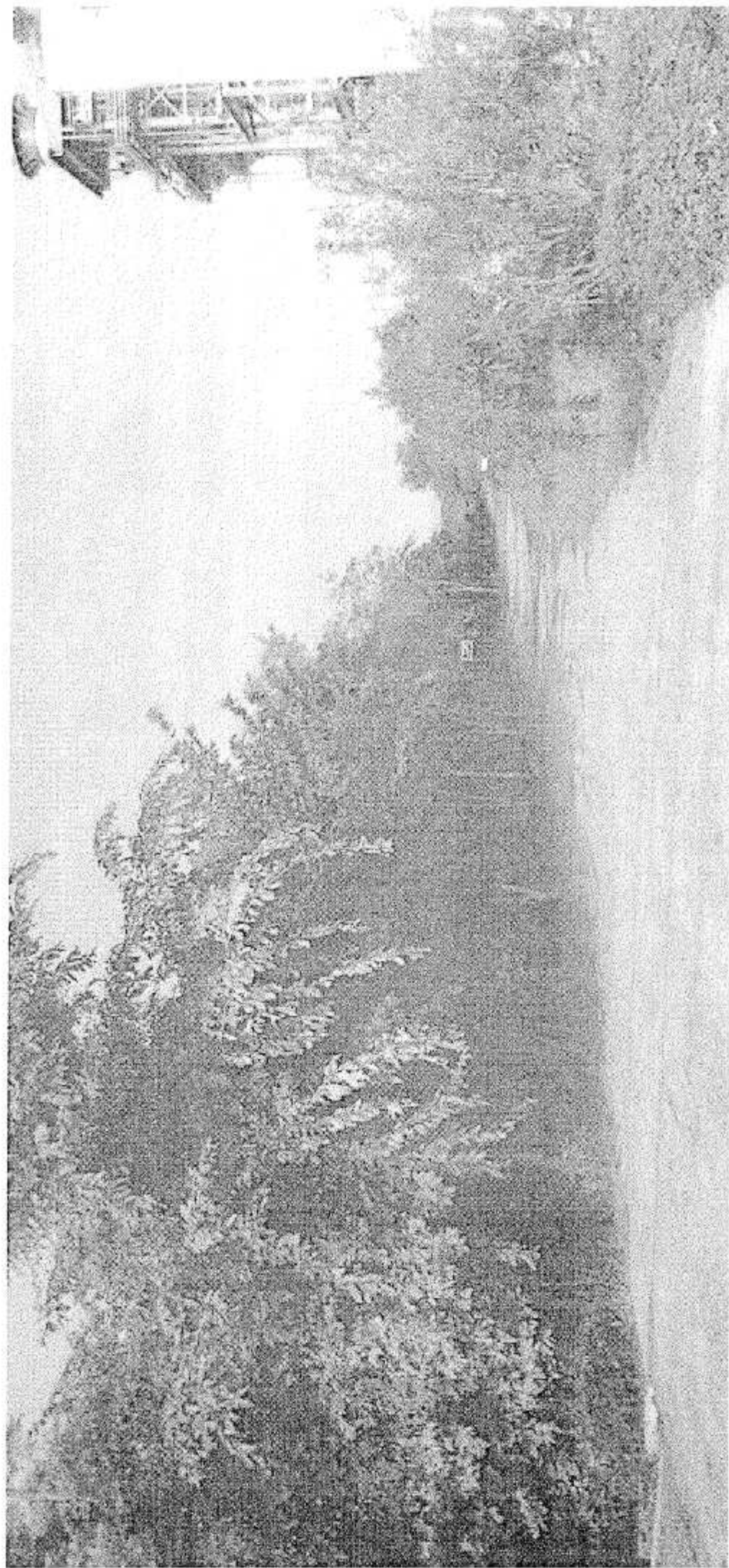




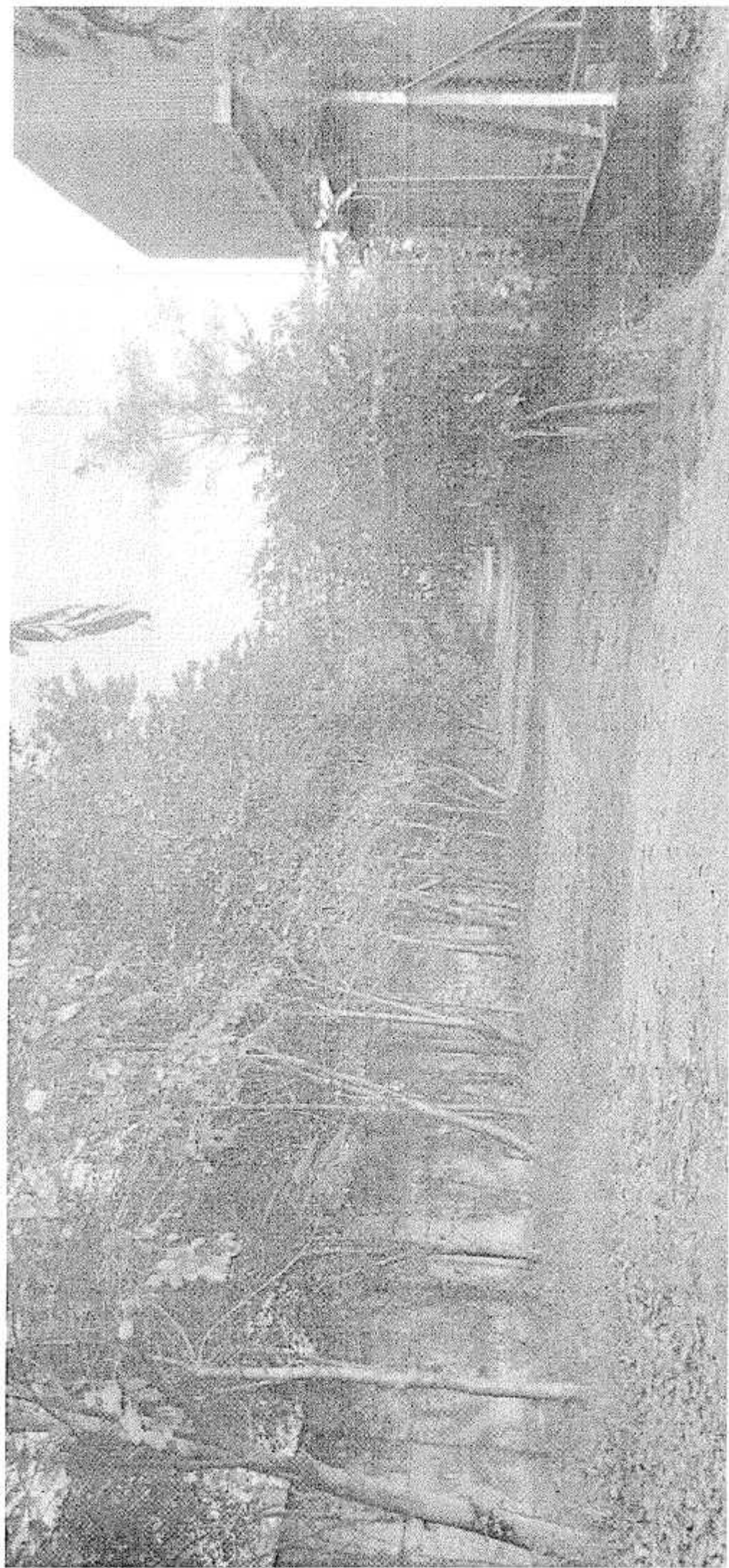
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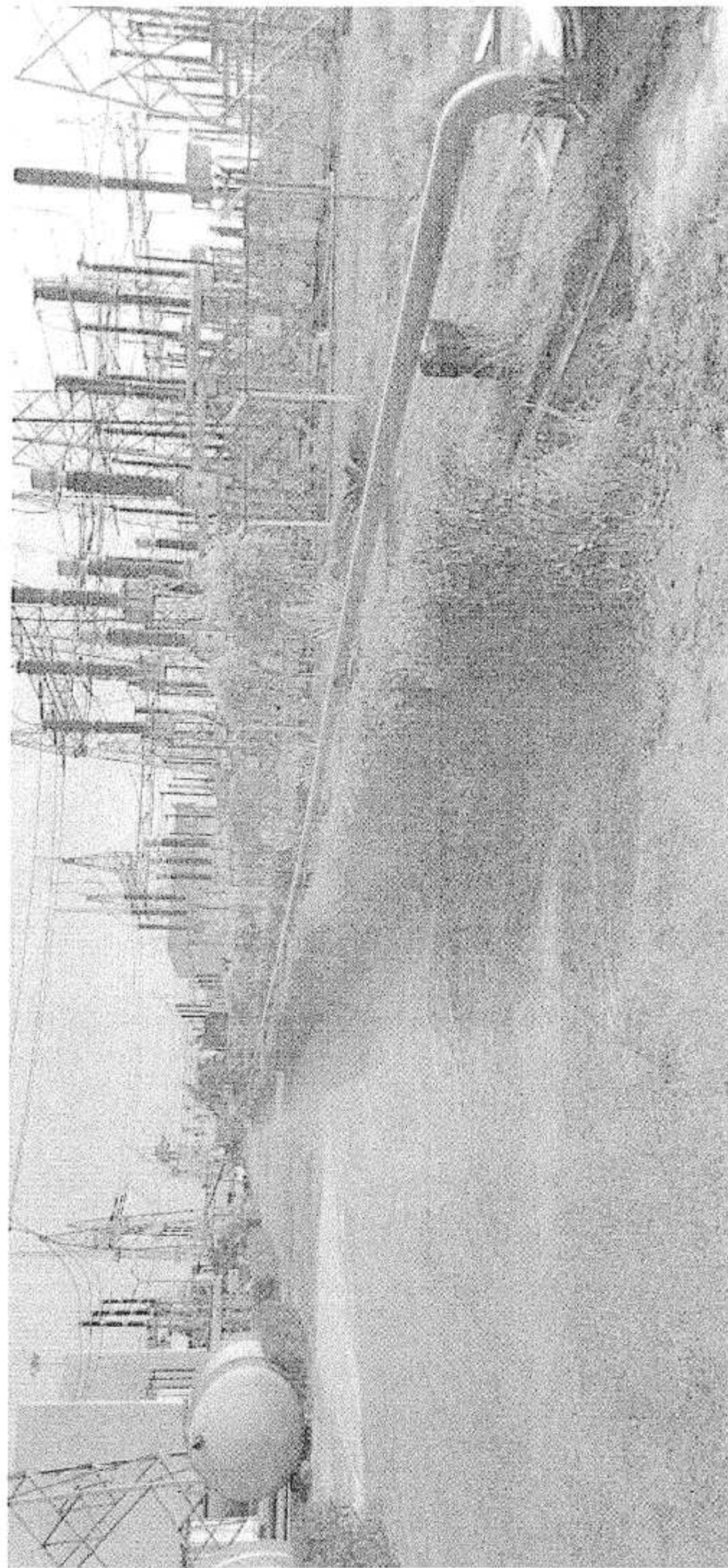


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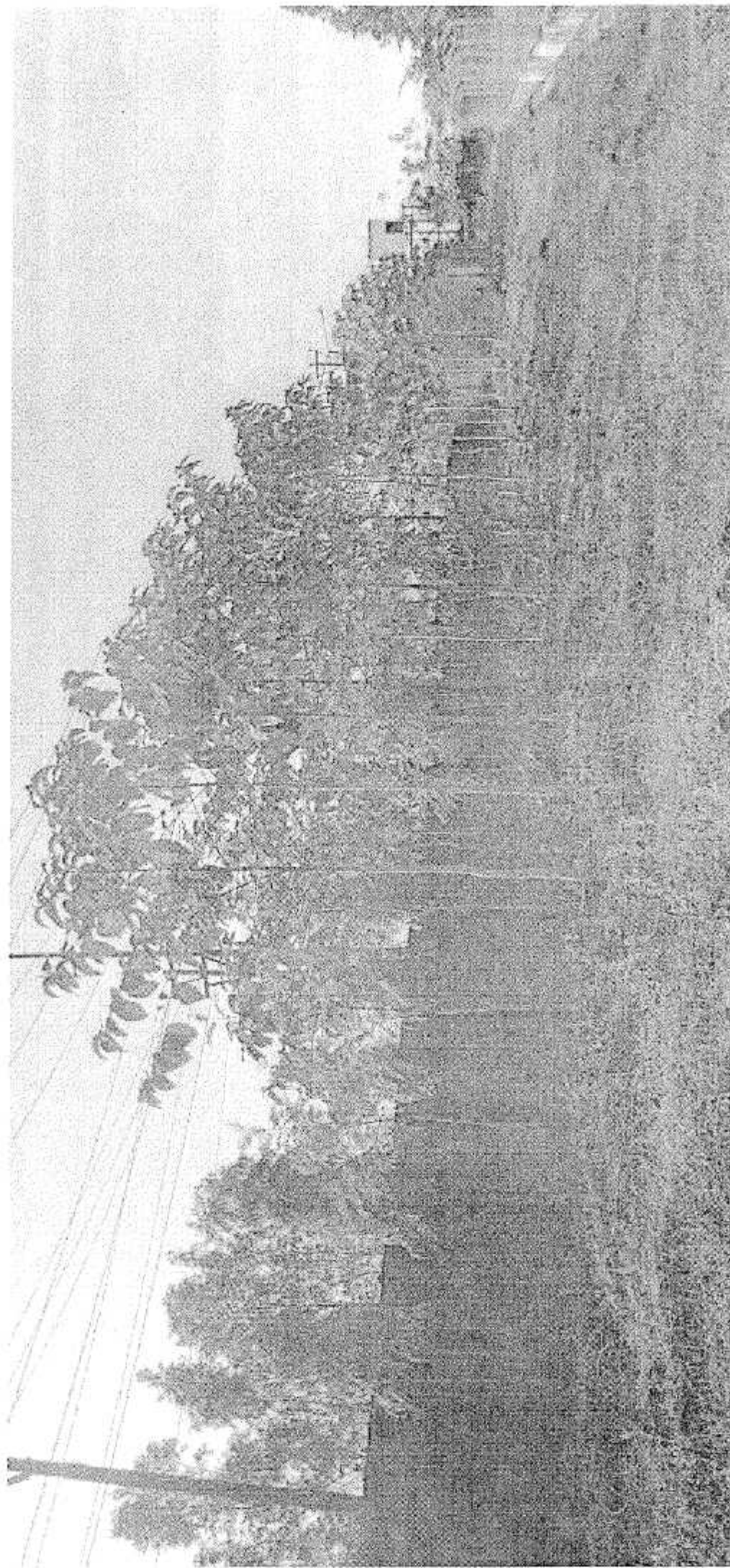


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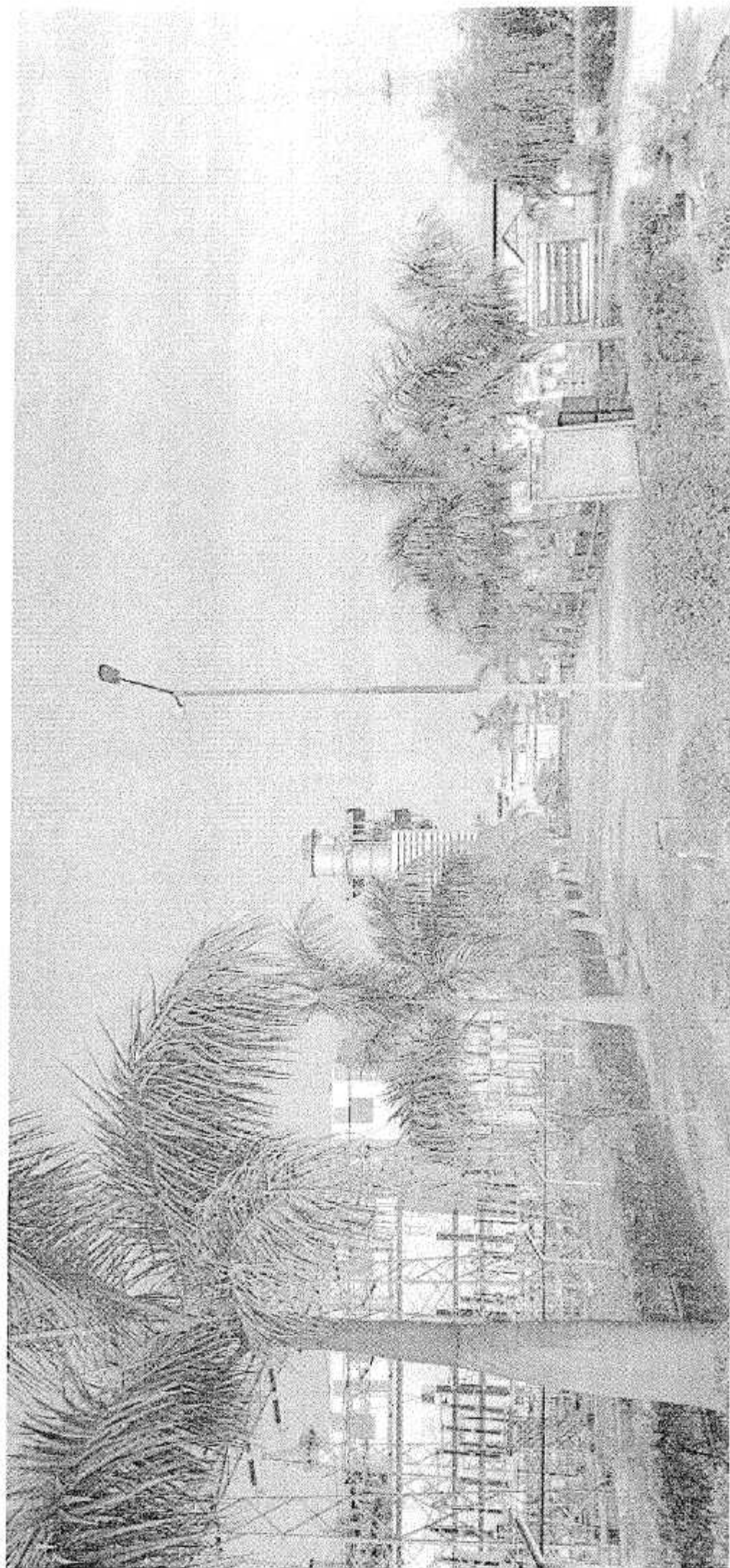








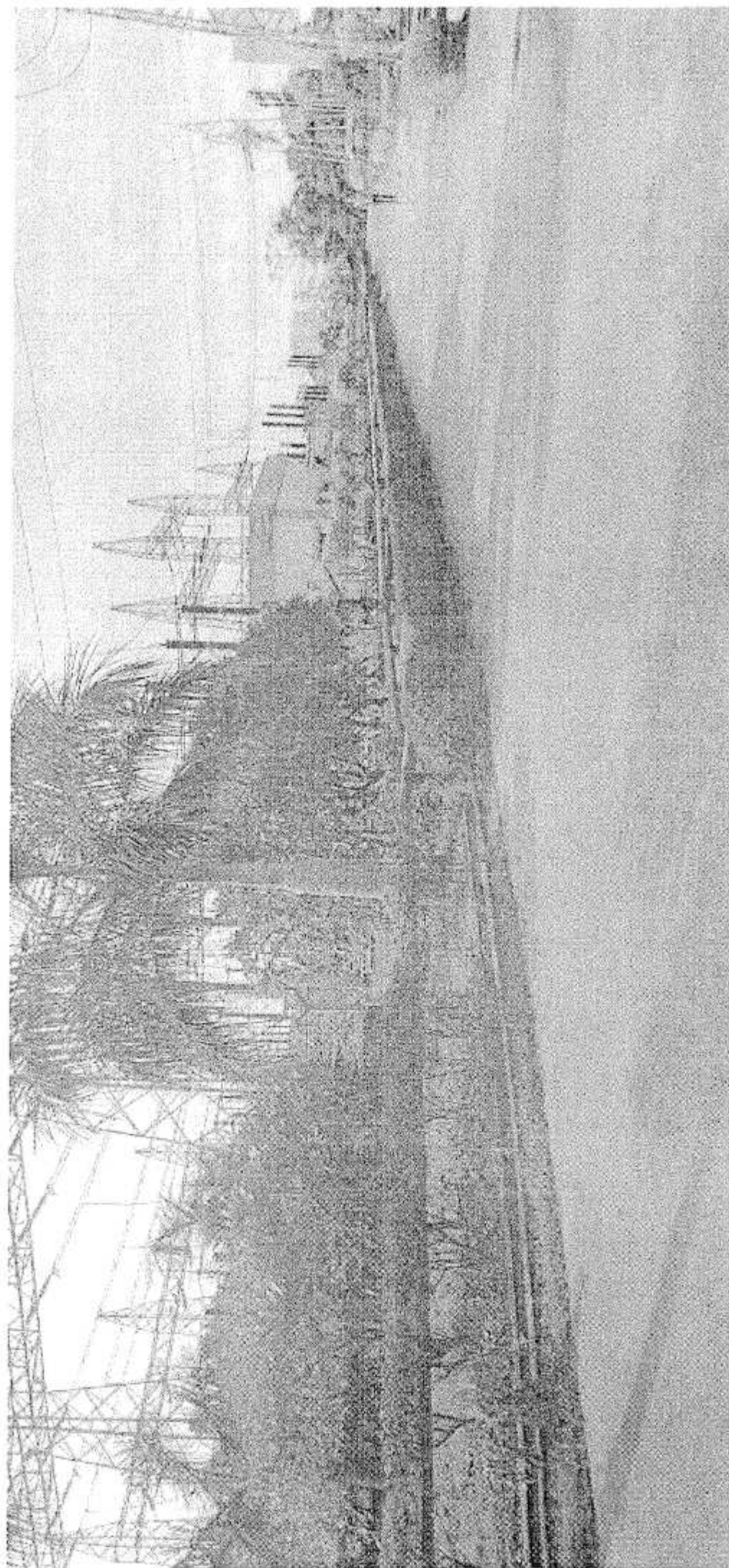
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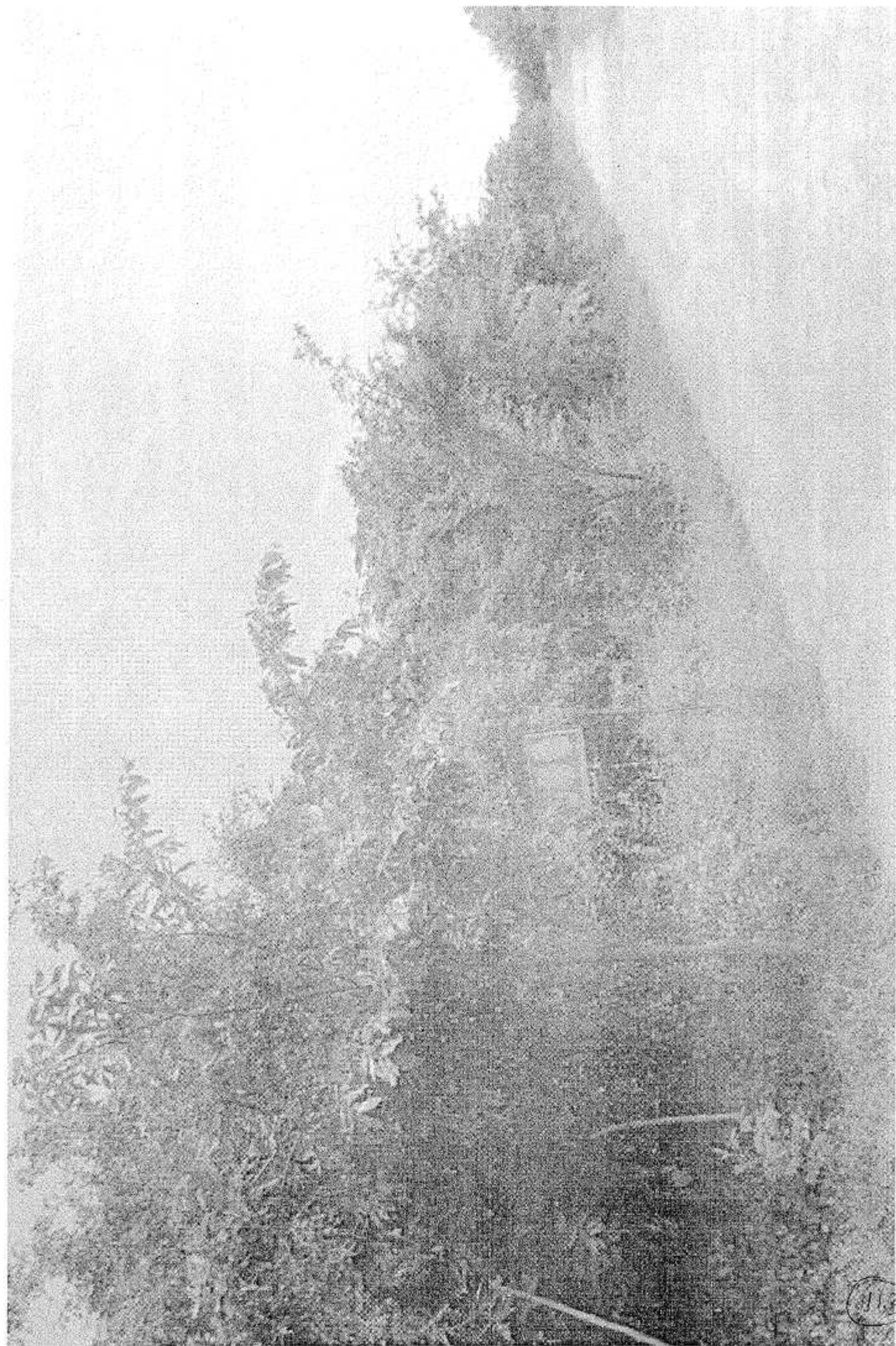
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**GAMA INFRAPROP (P) LTD.**

M-3, (First Floor) Hauz Khas, Aurbindo Marg,  
New Delhi - 110016  
E-mail: delhi@riggroup.co.in

Ph : 91-11-26515126/27  
Fax : 91-11-26515128  
Web : www.rigggroup.co.in

CIN No. : U70200DL2010PTC202754

सेवा में

Date: - 05-08-2021

श्रीमान प्रभागीय वन अधिकारी महोदय

तराई पश्चिमी वन प्रभागीय रामनागर

महोदय,

विनम्र निवेदन के साथ आपको सूचित करते हैं कि हम वर्षा के इस मौसम में वन और हरियाली विकसित करने की योजना बना रहे हैं, जैसा की हम हर वर्ष करते हैं और इस वर्ष भी करना चाहते हैं।

अतः कृपया इस उद्देश्य के लिए उद्योग दायित्व के हिस्से के रूप में हरियाली व वनों के विकास के लिए आस-पास के कुछ क्षेत्र में वृक्षारोपण की अनुमति दें, और इसके अलावा हमारी फैक्ट्री क्षेत्र में भी कुछ हमारी अपनी जमीन है, जिस पर हम हरियाली के लिए घने व छायादार पौधे लगाना चाहते हैं, अतः महोदय से निवेदन है की उपरोक्त कार्य के लिए हमें आवश्यकता अनुसार पौधे उपलब्ध कराने की कृपा करें, तथा आपसे अनुरोध है की उपरोक्त मामले में हमारी साहयता करें ताकि हम अपना कार्य प्रारम्भ कर सकें।



सवदीय,  
बी०के० आनन्द  
प्रबन्धक,  
गामाइन्फ्राप्रोप प्रा०लि०  
महुआखेडागंज, काशीपुर।  
जिला उधम सिंह नगर।



Site Address:-Khasara No-948,Uttarakhand Industrial Park(UIP),Mahuakhera Ganj, Kashipur 244713,  
District - Udhm Singh Nagar, Uttarakhand .

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# GAMA INFRAPROP (P) LTD.

M-3, (First Floor) Hauz Khas, Aurbindo Marg,  
New Delhi - 110016  
E-mail: delhi@fggroup.co.in

Ph : 91-11-26515126/27  
Fax : 91-11-26515128  
Web : www.fggroup.co.in

CIN No. : U70200DL2010PTC202754

सेवा में

Date: - 09-12-2020

श्रीमान प्रभागीय वन अधिकारी महोदय

तराई पश्चमी वन प्रभागीय रामनागर

महोदय,

विनम्र निवेदन के साथ आपको सूचित करते हैं कि हम वन और हरियाली विकसित करने की योजना बना रहे हैं, जैसा की हम हर वर्ष करते हैं और इस वर्ष भी करना चाहते हैं किन्तु Lockdown COVID-19 के कारण हम इस वर्ष समय से नहीं कर पाए।

अतः कृपया इस उद्देश्य के लिए उद्योग दायित्व के हिस्से के रूप में हरियाली व वनों के विकास के लिए आस-पास के कुछ क्षेत्र में वृक्षारोपण की अनुमति दे, और इसके अलावा हमारी फैक्ट्री क्षेत्र में भी कुछ हमारी अपनी जमीन है, जिस पर हम हरियाली के लिए घने व छायादार पौधे लगाना चाहते हैं, अतः महोदय से निवेदन हैं की उपरोक्त कार्य के लिए हमें आवश्यकता अनुसार पौधे उपलब्ध कराने की कृपा करे, तथा आपसे अनुरोध हैं की उपरोक्त मामले में हमारी साहयता करे जिससे की हम जल्द अपना कार्य प्रारम्भ कर सके।



भवदीय,  
बी०के० आनन्द  
प्रबन्धक,  
गामाइन्फ्राप्रोप प्रा०लि०  
महुआखेडागंज, काशीपुर।  
जिला उधम सिंह नगर।

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Site Address:-Khasara No-948,Uttarakhand Industrial Park(UIP),Mahuakhera Ganj, Kashipur 244713,  
Distric - Udhm Singh Nagar, Uttarakhand.

# GAMA INFRAPROP (P) LTD.

M-3, (First Floor) Hauz Khas, Aurbindo Marg,  
New Delhi - 110016  
E-mail: delhi@riggroup.co.in

Ph : 91-11-26515126/27  
Fax : 91-11-26515128  
Web : www.rfggroup.co.in

CIN No. : U70200DL2010PTC202754

सेवा में

दिनांक- 06-06-2019

श्रीमान प्रभागीय वन अधिकारी महोदय

तराई पश्चमी वन प्रभागीय रामनागर

महोदय,

विनम्र निवेदन के साथ आपको सूचित करते हैं कि हम आगे आने वाले दिनों में वन और हरियाली विकसित करने की योजना बना रहे हैं, जैसा की हम हर वर्ष करते हैं और इस वर्ष भी करना चाहते हैं।

अतः कृपया इस उद्देश्य के लिए उद्योग दायित्व के हिस्से के रूप में हरियाली व वनों के विकास के लिए आस-पास के कुछ क्षेत्र में वृक्षारोपण की अनुमति दे, और इसके अलावा हमारी फैक्ट्री क्षेत्र में भी कुछ हमारी अपनी जमीन है, जिस पर हम हरियाली के लिए घने व छायादार पौधे लगाना चाहते हैं, अतः महोदय से निवेदन है की उपरोक्त कार्य के लिए हमें आवश्यकता अनुसार पौधे उपलब्ध कराने की कृपा करे, तथा आपसे अनुरोध है की उपरोक्त मामले में हमारी साहयता करे ताकि हम बारिश सुरु होने से पहले अपना कार्य प्रारम्भ कर सके।



भवदीय,  
बी०के० आनन्द  
प्रबन्धक,  
गामाइन्फ्राप्रोप प्रा०लि०  
महुआखेडागंज, काशीपुर।  
जिला उधम सिंह नगर।



RE-काशीपुर  
21/6/19

# GAMA INFRAPROP (P) LTD.

M-3 (First Floor) Hauz Khas, Arbindo Marg,  
New Delhi - 110016  
E-mail: delhi@riggroup.co.in

Ph: 91-11-26515126/27  
Fax: 91-11-26515128  
Web: www.riggroup.co.in

CIN No. U70200DL2010PTC202754

सेवा में

दिनांक-25-04-2018

श्रीमान प्रभागीय वन अधिकारी महोदय

तराई पश्चिमी वन प्रभागीय रामनगर

महोदय,

विनम्र निवेदन के साथ आपको सूचित करते हैं कि हम आगे आने वाले दिनों में वन और हरियाली विकसित करने की योजना बना रहे हैं।

अतः कृपया इस उद्देश्य के लिए उद्योग दायित्व के हिस्से के रूप में हरियाली व वनों के विकास के लिए आस-पास के कुछ क्षेत्र में वृक्षारोपण की अनुमति दें, और इसके अलावा हमारी फैक्ट्री क्षेत्र में कुछ हमारी अपनी जमीन है, जिस पर हम हरियाली के लिए घने व छायादार पौधे लगाना चाहते हैं, अतः महोदय से निवेदन है की उपरोक्त कार्य के लिए हमें आवश्यकता अनुसार पौधे उपलब्ध कराने की कृपा करें, तथा आपसे अनुरोध है की उपरोक्त मामले में हमारी साहयता करें ताकि हम बारिश सुरु होने से पहले अपना कार्य प्रारम्भ कर सकें।

भवदीय,

वी०के० आनन्द

प्रबन्धक,

गामाइन्फ्राप्रोप प्रा०लि०

महुआखेडागंज, काशीपुर।

जिला उधम सिंह नगर।

पत्रांक-2-7677/7-1 100-18-05-18

प्रतिभागीय मूल में वृक्षारोपण काशीपुर को उपरोक्तानुसार प्रभागीय वन पर पौधे उपलब्ध कराना सुनिश्चित करने हेतु अनुरोध है।

प्रभागीय वनाधिकारी  
तराई पश्चिमी वन प्रभाग रामनगर

Site Address: Khasara No-948, Uttarakhand Industrial Park (UIP), Village - Mahuakhara Ganj, Teshil - Kashipur, District - Udham Singh Nagar, Uttarakhand-244713.

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# ग्राम पंचायत कटैया वि० स्व० काशीपुर

जिला उद्यम सिंह नगर (उत्तराखण्ड)

सौफ अली

"प्रधान"

मो. 8449151761

नियाम:

ग्राम कटैया पो. महुआखेड़ागंज

जिला उद्यम सिंह नगर

पत्रांक : 01

दिनांक : 20/01/2021

सेवा में

Gama Infrastructure (P) Ltd.

महुआखेड़ा, गंज काशीपुर क.सिंहनगर  
(उत्तराखण्ड)

विषय:- ग्राम पंचायत कटैया में निम्न समस्या के संबंध में।

महोदय

निवेदन इस प्रकार है कि आपके फाय दिए गये

पत्र को देखते हुए निम्न समस्याओं के समाधान करने की कृपा करें।

- (1) गाँव के मेन चौराहे से गाँव की होली चौक तक लैन्ड रोड बनाना।
- (2) गाँव के समस्त चौराहे व बिल्ली के खंगे पर स्टीर लॉस्ट।
- (3) गाँव के सार्वजनिक विद्यालय में सौकरिकरण का कार्य।
- (4) सार्वजनिक स्थानों पर हार्डपेप की सुविधा।

धन्यवाद

भवदीय

सौफ अली  
(ग्राम प्रधान-कटैया)  
Saf Ali



# ग्राम पंचायत कटैया वि० ख० काशीपुर

जिला उधम सिंह नगर (उत्तराखण्ड)

सौफ अली

"प्रधान"

मो. 8449151761

निवास:

ग्राम कटैया पो. महुआखेड़ागंज

जिला उधम सिंह नगर

पत्रांक :

दिनांक : २५/०३/२०२१

दीवा से

(Vijaya Infotop Pvt Ltd

Near Kattiya, Kaashipur U.S.

Nagar Uttarakhand (२५५५५३)

विषय:- ग्रामीण शासक हैं व ग्राम पंचायत कटैया में  
सामाजिक कार्य कराने हैं

महोदय जीवन-य निवेदन उस प्रकार है कि ग्राम पंचायत  
कटैया गाँव के समीप बसी एक छोटी सी ग्राम  
पंचायत है। जो ग्रामीण विषयों में निवास करती है। इस  
ग्राम के माध्यम से गाँव में ५ हैं उपस्थित ७ ग्रामीण के घर  
के पास ७ मित्रपाल सिंह के घर के पास ७ हीरेश्वर सिंह  
के घर के पास ७ निर्मल सिंह के घर के पास ७ शहिद  
के घर के पास, प्राईवरी विद्यालय में टॉल्स, गैर व  
गाँव के मुख्य चौक पर लॉन्ग बेंच ७ मुख्य चौक  
७ अग्रस्तान चौक ७ हीली चौक ७ सोनपाल सिंह  
के घर के पास चौक ७ इलाहिर से पुष्पन के पास  
चौक छोटे सार्व गाँव में कराने गाँव की सामाजिक  
स्थिति में सुधारने की कृपा करें।  
धन्यवाद

119

२५/०३/२०२१



## View Transaction Details

GAMA I(INR)-24790500000044

Value Date: 06/07/2021

Entry Date: 06/07/2021

Amount Type: Dr.

Amount: INR 2,50,000.00

Sending Bank Reference: S6815616

Supplementary Details:

Additional Details (Tag 86):

Reference for Account  
Owner:Transaction Remarks: RTGS-BARB202107061187890876-  
AAROHI AROGYA KENDRA-CTransaction Time: 06/07/2021 05:35:55 PM  
IST

Branch Name: CFS,BARODA

Account Balance(INR): -4,32,02,645.57

Account Type: Cash Credit

120



## View Transaction Details

GAMA I(INR)-24790500000044

Value Date: 07/05/2021

Entry Date: 07/05/2021

Amount Type: Dr.

Amount: INR 11,76,000.00

Sending Bank Reference: S36241802

Supplementary Details:

Additional Details (Tag 86):

Reference for Account  
Owner:

Transaction Remarks: NEFT-BARBW21127671306-  
JAIPADAM SHREE TRADEX PVT  
LT

Transaction Time: 07/05/2021 01:45:41 PM  
IST

Branch Name: CFS,BARODA

Account Balance(INR): -5,74,82,833.80

Account Type: Cash Credit



## View Transaction Details

GAMA I(INR)-24790200000539

Value Date: 06/07/2021

Entry Date: 06/07/2021

Amount Type: Dr.

Amount: INR 3,50,000.00

Sending Bank Reference: 00959179

Supplementary Details:

Additional Details (Tag 86):

Reference for Account  
Owner:

Transaction Remarks: DR J M HANS CENTRE FOR ENT  
AND HEARING CARE AND VE

Transaction Time: 06/07/2021 05:18:25 PM  
IST

Branch Name: CFS,BARODA

Account Balance(INR): 14,00,344.84

Account Type: Current

122



GAMA INFRAPROP PVT LTD					
LIST OF LOCAL YOUTH EMPLOYED FOR THE UPLIFTMENT OF POOR SECTION					
S. No.	EMPLOYEE'S NAME	FATHER'S NAME	M/F	JOB DESCRIPTION	SALARY (Rs.Monthly)
1	AMIT KUMAR	RAMESH SHISRHVAL	M	House keeping	9860
2	MANOJ KUMAR	SHIMLA SINGH	M	Office Boy	9860
3	RAJU SINGH	JAGTAR SINGH	M	DM Plant Helper	9860
4	ROHITASH	RAGHUVVEER SINGH	M	Grinderman	20896
5	ARVIND	AVTAR SINGH	M	Welder	30247
6	VINOD	SHIV CHARAN	M	Mech Helper	9860
7	SUNIL KUMAR	HARKISHAN SINGH	M	House keeping	9860
8	RAKESH	BANVARI	M	House keeping	9860
9	VIKASH KUMAR	OM PRAKASH	M	House keeping	9860
10	PITAMBAR	DHYAN SINGH	M	House keeping	9860
					130023

	Gama Infraprop Pvt Ltd 225 MW CCPP Kashipur, Uttarakhand	
	<b>Minutes of Safety Committee Meeting</b>	

Minutes of the EHS committee meeting held on 24.12.2021, 15:00Hrs

Place of Meeting: Central Control Room Building Conference Room

Sr. No.	Safety Committee Member	Designation	Individual Designation	Signature
1	Mr. B. K. Anand	GM, GIPL	Chairman	
2	Mr. Rajiv Dhenge	GGM, Steag	Vice Chairman	
3	Mr. Diwakar Rai P.	EHS Officer, Steag	Member	
4	Mr. Satish Ajmera	Manager - Operation, Steag	Member	ON LEAVE
5	Mr. Ankit Sharma	Assist. Manager, Mech. GIPL	Member	
6	Mr. Kundan Suyal	Assist. Manager, Mech. GIPL	Member	ABSENT
7	Mr. Suri Babu	Assist. Manager, Elect. GIPL	Member	
8	Mr. Makarand R. Patil	Manager - MMD, Steag	Member	
9	Mr. Vinod Kumar Pandey	Manager - I & C, Steag	Member	
10	Mr. Mahesh Ghatge	Manager - EMD, Steag	Member	
11	Mr. Arvind Kumar Pandey	Store Keeper, Steag	Member	
12	Mr. Subhasish Sarkar	HR & Admin, Steag	Member	ON LEAVE
13	Mr. Ravikant Chauhan	HR, GIPL	Member	ABSENT
14	Mr. Ramadas Reddy	Sr. Chemist- Steag	Member	
15	Mr. Ram Badan Prasad	Sr. Technician - I&C, Steag	Member	
16	Mr. Om Singh Bhati	Sr. Technician - EMD, Steag	Member	ABSENT
17	Mr. Ashok Mehta	Sr. Technician - MMD- Steag	Member	ABSENT

Sr. No	Suggested by	Points Discussed and Agreed	Action to be taken by	Pending Since	STATUS
1	Amit Auddy	Cable trench cover to be provided in switch yard, GT-1 & GT-2 area.	Management	19.04.2016	Completed on 03.10.2019 As per GM sir, the gap between the two trench cover will remain like this
2	Manoj Singh	Reinforcing iron wall must be provided in transformers & Gas SVID area.	Management	19.04.2016	Deferred by management
3	Kasturi Raju	Speed limit board to be located for vehicle speed.	Management	18 days	Completed on 17.08.2018
4	G. H. Reddy	Provide ear earthing system (HRS/GT-1 & 2, BM plant).	Management	29.05.2016	Completed on 27.01.2020
5	B. K. Anand	Checker plate to be provided in 6.6 KV.	Management	29.05.2016	Completed
6	Kasturi Raju	POC wall to be provided in primary gas shed.	Management	29.05.2016	Completed
8	R. Dhenge	Double boarding to be done in all gas line.	Mechanical	25.10.2016	Completed
9	Kasturi Raju	Fire exit must be available for emergency purpose.	Management	25.11.2016	Completed on 03.02.2020
10	Vishnu Murthy	Fire fighting system to be implemented.	Management	28.12.2016	Paper Pending
11	Diwakar Raj	Flash back arrestor must be available in piping sec.	Mechanical	28.12.2016	Completed
12	Kasturi Raju	Stand by CO2 cylinder to be available for emergency purpose.	Management	24.01.2017	Completed
13	Ankit Sharma	Exit path to be covered in different location of plant.	Management	24.01.2017	Completed on 30.06.2018
14	Vishnu Murthy	Restricting pit to be covered in DM plant.	Management	24.01.2017	Grating has been provided
15	Nemagias Reddy	Anti ground flies to be provided in DM plant & Battery room.	Management	24.01.2017	Completed on 01.12.2020
16	Vishnu Murthy	Access points to be closed	Management	27.02.2017	reviewed and under planning for necessary locations only
17	Kasturi Raju	Ambulance must be arranged for emergency purpose.	Management	27.02.2017	Deferred by management
18	Kasturi Raju	Fire tender must be arranged for emergency purpose.	Management	27.02.2017	Deferred by management
19	Kasturi Raju	First aid centre to be provided.	Management	27.02.2017	Deferred by management
20	Ravi Kumar	Bed sheet must be removed from Switch yard area.	Management	27.02.2017	Completed on 04.04.2018
21	Ravi Kumar	Equipment name to be marked.	Management	27.02.2017	Completed on 15.04.2021
22	Kasturi Raju	First aid box to be provided in different location.	Management	27.02.2017	Available at CCR & Main Gate
24	Kasturi Raju	Plant railing to be provided at control room terrace for fall protection.	Management	28.11.2017	Terrace door to be locked, hand railing not required.
25	Manoj Kumar Singh	Rainbar net to be provided near electrical panel.	Management	16.05.2017	Completed on 22.02.2019
26	Ravi Kumar	Handring to be provided in GT-1 & 2.	Management	24.05.2017	Completed on 29.06.2018
27	Ravi Kumar	Platform for lighting maintenance to be provided in STG maintenance bay.	Management	24.05.2017	Deferred by management
28	P. P. Bhattacharya	Access to be provided near HRS/GT-1 & 2 bypass.	Management	24.05.2017	Point shifted to Access points
29	Diwakar Raj	Emergency area must be installed for emergency purpose.	Management	25.03.2017	Installed but sound not sufficient.
31	Kasturi Raju	Unlifting to be done in AGC & switch gear.	Management	29.08.2017	Completed on 01.12.2020
32	Ravi Kumar	Water leakage to be avoided in DM plant cable trench.	Management	27.10.2017	Completed on 05.04.2018
33	Ravi Kumar	Proper hand railing not available near STG area too.	Mechanical	27.10.2017	Completed on 17.11.2018
34	Ravi Kumar	Exhaust fan must be installed in battery room & switch gear room.	Management	27.10.2017	Completed on 21.12.2017
35	Vishnu Murthy	Industrial incident to be arranged for employees.	Management	27.10.2017	This is not part of safety meeting.
36	R. Dhenge	Dog must be removed from plant area.	Management	22.12.2017	All dogs has been removed
37	Ravi Kumar	Ties to be done in 6.6 KV area for dust.	Management	22.12.2017	Completed on 29.10.2020
38	Ravi Kumar	Excess smoking inside the electrical lab & switch gear room from opening.	Management	22.12.2017	Completed on 08.04.2018
39	Rahul Choubey	Water hose light to be changed.	Management	21.01.2018	Completed on 19.04.2019
40	Ram Badan	Drain line to be extended in all Deluge system.	Mechanical	23.01.2018	Completed on 05.02.2020
41	B. K. Anand	Gas cylinder trolley to be available for cylinders.	Mechanical / Store	23.01.2018	Completed on 28.02.2019



42	Ram Badan	Monkey ladder of Gas turbine top floor hand hold is not good in GT#1 & GT#2 area.	Mechanical	23.01.2018	Completed on 03.01.2020
43	Ravi Kumar	STG covering sheet to be replaced towards HRSG#2 side.	Management	24.02.2018	Completed on 13.06.2018
44	A. Sivalingam	HRSG#2 Honey Bees to be removed.	Management	24.02.2018	Completed on 25.06.2018
45	Dushyant Kumar	Water coming inside the SFC compartment through cable from battery room.	Management	18.05.2018	Completed on 10.09.2019
46	B. K. Anand	Overhead pipe cover to be prepared before monsoon.	Mechanical	18.05.2018	Completed on 23.06.2018
47	Diwakar Rai	Overhead opening at ACC Room & Lector floor.	Management / Mechanical	18.05.2018	Completed on 05.07.2018
48	Diwakar Rai	Gas cylinder stand to be provided for cylinder storage.	Mechanical	21.07.2018	Completed on 14.11.2018
49	Vishnu Murthy	PEEC#162 window AC connection not properly covered.	ESO	17.08.2018	Completed on 28.11.2018
50	George Jacob	Water leakage inside SHAG#1.	Management	17.08.2018	Completed on 14.09.2019
51	Subhasish Sarkar	Air intake filter to be removed from GT#162 areas.	Management	17.08.2018	Completed on 11.12.2018
52	Ram Badan	Approach not available at STG over head tank.	Management	21.09.2018	Completed on 02.05.2019
53	A. Sivalingam	Approach not available at STG ACW/CCW vent (vent line to be extended).	Management	21.09.2018	Completed on 04.12.2018
54	Ankit sharma	Bulk wash basin area to be cleaned in cabinet.	Admin	20.10.2018	Completed on 31.10.2018
55	Ram Badan	Proper approach to be provided at De-aerator.	Management	27.11.2018	Completed on 13.01.2020
56	Ravi Kumar	At EDC terrace, AC outdoor strengthening to be done.	Management	27.11.2018	Completed on 18.06.2020
57	Ramadas Reddy	Proper platform to be provided for doing Asbestos Handling (TSP) at HRSG#1 & 2.	Mechanical	27.11.2018	Completed on 07.01.2020
58	Ravi Kumar	Due to unwanted opening pipes came inside the Switch gear and Electrical Laboratory, opening to be closed.	Management	10.12.2018	Opening has been closed in Switch gear room
59	Ankit sharma	Step ladder to be provided in place of monkey ladder for Gas turbine floor approach.	Management / Mechanical	10.12.2018	After discussion step ladder not required
60	Ankit sharma	Proper walkway to be arranged in store near Pipe rack.	Store	24.01.2019	Completed on 05.03.2019
61	Subhasish Sarkar	Earth pit to be covered near EDC area.	Management	29.01.2019	Completed on 04.02.2019
62	Diwakar Rai	Brm Damage cluster to be repaired immediately.	Management	30.04.2019	Completed on 12.01.2021
63	Diwakar Rai	ACC Damage sheet to be repaired immediately.	Management	30.04.2019	Completed on 15.06.2019
64	A. Sivalingam	Control room emergency exit staircase, unweakened door to be removed.	Management	16.05.2019	Not required as per V. P. Arora Sr (VP).
65	B. K. Anand	MS connection to be changed from CCS terrace to another place.	Management	17.05.2019	Cannot shifted
66	Ravi Kumar	Control room, 6.6 KV and cable gallery & meter to be Safe door to be changed with metal door.	Management	16.06.2019	Aluminium door has been provided
67	Ram Badan	Approach not available in battery level transition floor / wall etc.	Management	30.07.2019	Portable ladder can be used.
68	G. N. Murthy	Hydrogen fumes accumulated in battery bank area.	Management	30.07.2019	Completed on 23.01.2020
69	Ankit sharma	GR to be covered properly near UAT#1 transition & PEECC#2 area.	Management	28.08.2019	UAT#1 completed, Grating strengthening has been done in PEECC#2 area.
70	Mukesh Kumar	Beclives to be removed from GT#1, GLB area.	HR / Admin	28.08.2019	Completed on 17.09.2019
71	Mukesh Kumar	Test control to be done in STG ground floor for removing of spider web.	HR / Admin	28.08.2019	Completed on 17.09.2019
72	B. K. Anand	Oil shed to be removed from PTCUL wall side.	Mechanical	24.09.2019	Oil drum has been shifted to other place
73	Arvind Pandey	Rein water coming inside the store due to sheet damage. It should be replaced.	Management	24.09.2019	Completed on 03.06.2020
74	Ankit sharma	Roof to be covered properly.	Mechanical	23.09.2019	Completed on 02.01.2020
75	B. K. Anand	Apple with dummy to be provided in all MCC room line.	Mechanical	27.12.2019	Completed on 14.01.2020
76	Rajiv Dheega	CCR 1-3rd floor ceiling to be placed. There are many papers inside that area, therefore that area is very dirty and very bad smell coming.	Management	29.01.2020	Alkaster provided in place of fall ceiling.
77	Diwakar Rai	The battery water falls down near the staircase on the ground floor.	Management	25.02.2020	Completed on 27.05.2020



78	B. K. Anand	Gate oil to be stored in one place	Mechanical	25.02.2020	Completed on 03.03.2020
79	Mahesh Kharche	Carbide water tank to be replaced due to damage	Management	15.05.2020	Completed on 26.05.2020
80	Diwakar Rai	STG damage sheet to be repaired	Management	15.05.2020	Completed on 02.06.2020
81	Ram Badan	HRSG#2 Highways dropping and back not available in COT equipment	Mechanical	25.06.2020	Completed on 22.01.2021
84	Jaykar Bandaru	STG ground floor staircase top landing step not comfortable	Management	25.06.2020	Completed on 19.11.2020
83	Diwakar Rai	Fire wall to be provided in all fire deluge valve station.	Management	24.07.2020	discussed and reviewed it to execute...a/p
84	Jaykar Bandaru	Strip ladder to be provided from STG floor to MOT top floor.	Mechanical	24.07.2020	Completed on 22.10.2020
85	Om Singh Bhatti	Proper ventilation required at Battery room.	Management	25.07.2020	Wooden piece cut towards STG and filter media installed on 24.08.2021
86	Mahesh Ghatge	Canopy required in GT#1 & 2 CCW fin fan pool switch.	Mechanical	25.09.2020	Completed on 28.12.2020
87	Mahesh Kharche	Height of blow down drain line is approx 6 inch from the ground.	Mechanical	25.09.2020	Completed on 26.09.2020
88	Mahesh Ghatge	GT#01 & 02, approach to be provided for BT fin motor.	Mechanical	24.10.2020	Completed on 22.03.2021
89	Mahesh Ghatge	GT#01 & 02, approach to be provided for CCW fin fan motor.	Mechanical	24.10.2020	Completed on 12.01.2021
90	Diwakar Rai	GT#01 & 02, CCW fin fan area walkway opening to be covered.	Management	24.10.2020	Point shifted to Access points sr. no.#16
91	B. K. Anand	GT#2 & 04#2 fire deluge system relocation for air filter house modification.	Management	30.11.2020	Not required as per Y. P. Arora Sir (VP).
92	Ankit Sharma	Insulation to be provided in hogger steam line.	Mechanical	30.12.2020	Completed on 31.12.2020
93	Diwakar Rai	Cable trench to be covered fully in switch yard, GT#1 & GT#2 areas.	Management	30.01.2021	Completed on 20.12.2021
94	Om Singh Bhatti	Drainage of GT#1, GT#2 & STG transformer drainage to be provided for fire action machine.	Management	30.01.2021	completed
95	Subhasish Sarkar	Unvented filters to be removed from GT#1, GT#2 & STG areas.	Management	30.01.2021	Completed
96	Ankit sharma	Electrical extension board to be replaced for safe operation.	Electrical	30.01.2021	Completed on 24.02.2021
97	S. Dhayalan	Due to heavy wind STG sheet dislocated. Repairing required immediately.	Management	25.02.2021	Completed on 07.04.2021
98	M. Kharche	Single phase socket to be provided at different locations AOC for area for maintenance purpose (at least 1 place).	Management	25.03.2021	Completed
99	B. K. Anand	AOC for area of stairs provision to be provided for material shifting from ground.	Mechanical	20.03.2021	completed
100	Om Singh Bhatti	Approach to be provided in GT#1 & 2 TK fan.	Mechanical	21.04.2021	Completed on 29.11.2021
101	B. K. Anand	Chalkups to be fixed in GT#1 filter house staircase to GCB approach.	Mechanical	21.04.2021	Completed on 31.05.2021
102	M. Kharche	Cable trench cover missing on valve near GT#1 transformer compartment towards CO2 compartment.	Mechanical	21.04.2021	Completed
103	Mahesh Ghatge	Define fan to be provided in electrical lab.	Management	26.05.2021	AC installed on 10.09.2021
104	S. Dhayalan	DN transfer valve to DAC (Active ATM Bash Line) approach to be provided.	Management	26.05.2021	Stool type arrangement has been done.
105	Diwakar Rai	Due to heavy wind STG sheet dislocated towards AOC & CCR terrace, repairing required.	Management	26.05.2021	Completed on 08.10.2021
106	Ram Badan	STG over head tank area fall protection required.	Management	26.05.2021	Point shifted to Access points sr. no.#16
107	Satish Ajmera	STG CCW system PHC, ACW discharge valve approach removed.	Management	26.07.2021	Completed on 05.08.2021
108	Arvind Pandey	Water leakage from Store roof in GT compartment.	Management	26.07.2021	Attended
109	Ram Badan	HRSG#1&2 by pass approach ladder step distance is more (Approx 12-15 inch).	Mechanical	27.08.2021	reviewed and under planning for necessary correction
110	Mahesh Ghatge	Cable to be provided on UST, SST, WSP & WOC Transformer duct for electric safety.	Management	28.10.2021	Not required as per IS
111	Ashok Mehra	Proper approach to be provided at HRSG # 1 & 2 Fire fighting riser air vent valve.	Mechanical	25.11.2021	listed in s/d list and shall be done shortly
112	Mahesh Ghatge	Rain water coming at GCB in GT#1 & GT#2 areas (Dropper to be provided).	Mechanical	25.11.2021	Reviewed and will be taken up
113	Mahesh Ghatge	GCB door not open proper due to hand radio at GT#2.	Mechanical	20.12.2021	completed
114	Praveen Chandra Bha	GT#1 & 2, Battery bank platform to be extended.	Management	24.12.2021	Completed

## ANNEXURE

## ENVIRONMENTAL STATEMENT FORM- V

(Sec rule 14)

Environmental Statement for the financial year ending with 31<sup>st</sup> March'2021

## PART-A

- i. Name and address of the owner/ occupier of the industry :  
**Gama Infraprop Pvt Ltd, khasra no-948, Mahuakheraganj, Kashipur**  
**- 244714, Dist: Udham Singh Nagar, Uttarakhand**

Operation or process.

- ii. Industry category : Primary ( STC) / Secondary ( SIC) : **RED**
- iii. Production category – **Power Generation / Energy.**
- iv. Year of establishment - **2011**
- v. Date of the last environmental statement submitted...**FY'2019-20**

## PART -B

Water and Raw Material Consumption:

- i. Water consumption in m<sup>3</sup>/d (Plant running at part load)

Process : **130**Cooling : **95**Domestic : **25**

Name of Products	Process water consumption per unit of products	
	During the previous financial year	During the current financial year
<b>1. POWER/ ENERGY</b>	<b>0.05 LTR/KWH</b>	<b>0.05 LTR/KWH</b>
2.		
3.		

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ii. *Raw material consumption*

Name of raw materials*	Name of Products	Consumption of raw material per unit of output	
		During the previous financial year	During the current financial year
NATURAL GAS	POWER /Electricity	0.208 SCM/KWH	0.210 SCM/KWH

\* Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

**PART-C**

**Pollution discharged to environment/unit of output**  
(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of Pollutants discharged (mass/volume)	Percentage of variation from prescribed standards with reasons.
(a) Water	NIL	NIL	NIL
(b) Air	As attached AAQ report in EC compliance		No deviation

**PART-D**

**HAZARDOUS WASTES**

(As specified under Hazardous Wastes (Management & Handling Rules, 1989).

Hazardous Wastes	Total Quantity (Kg)	
	During the previous financial year 19-20	During the current financial year 20-21
1. From Process-used oil	Nil	Nil
2. From Pollution cont. Facilities	Nil	Nil



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**PART - E**

**SOLID WASTES:**

Solid Wastes	Total Quantity (Kg)	
	During the previous financial year 19-20	During the current financial year 20-21
a. From process	NIL	NIL
b. From Pollution Control Facility: Sludge	NIL	NIL
c. Quantity recycled or re-utilized within the unit:- sludge landfill/ horticulture	35	25

**PART - F**

*Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes. As follows...*

Sr. No	Description	Approx. Qty	Method of disposal
1	ETP sludge - Kg	0	UEPPCB approved vendor- Bharat oil & waste management Ltd, Delhi
2	Waste Oil mix with water - Kg	0	
3	Waste oil soaked Cloths, cotton Waste, Used Hand Gloves etc- Kg	365	
4	E-waste - Kg	8.0	
5	Used Air/Oil filter - Nos	0	
6	Used Oil less than 200 litres qty - Kg	0	
7	Empty small Containers -Nos	10	

**PART-G**

*Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production. As follows...*

1. Effluent treatment and recycling of treated water into the gardening and horticulture and hence less qty of additional raw water uses- saving in pumping energy and less ground water extraction from bore well.
2. Minimum blow down in cooling water and boiler maintaining the norms and hence optimization of water as process. Results into less hours of WTP/ DM plant and hence saving in aux power, less chemicals uses- saving in O&M cost etc.



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#### **PART - H**

*Additional measures/investment proposal for environmental protection including abatement of pollution. As follows....*

- 1. Plantation and dense greenery development surrounding the plant.*
- 2. Rain water recharging sump inside premises and Selection of pond for rain water harvesting outside the plant premises also nearby area to mitigate water uses from bore well.*

#### **PART -I**

##### **MISCELLANEOUS:**

*Any other particulars in respect of environmental protection and abatement of pollution. As follows.....*

- 1. AAQ study in surrounding area in association with the nearby power plant / industry. Beta one of the three Power Plant yet to start and hence activity postponed as on today. However we are in touch with second Power Plant i.e. M/S SIPL.*
- 2. Plantation of oxygen reach plants in nearby villages and govt. plots, attached DFO committed.*

