

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI  
ORIGINAL APPLICATION NO. 119/2025<sup>5</sup>  
(IA No. 189/2025)**

**IN THE MATTER OF:**

**MURSLEEN**

**APPLICANT**

**VERSUS**

**STATE OF UTTAR  
PRADESH & ORS.**

**RESPONDENT(S)**

**WITH**

**ORIGINAL APPLICATION NO. 134/2025  
(IA NO. 239/2025)**

**ARIF KHAN & ORS.**

**APPLICANT(S)**

**VERSUS**

**STATE OF UTTAR  
PRADESH & ORS.**

**RESPONDENT(S)**

**INDEX**

<b>Sl. No.</b>	<b>Particulars</b>	<b>Pages</b>
<b>1.</b>	Reply On Behalf Of SEIAA, Uttar Pradesh (U.P.) alongwith affidavit	<b>1-8</b>
<b>2.</b>	<b>Annexure-A/1</b>	<b>9-10</b>

	Letter dated 16.11.2023 from Directorate of Geology & Mining to MoEF&CC	
<b>3.</b>	<b>Annexure-A/2</b> MoEF&CC Clarification Letter dated 04.12.2023	<b>11</b>
<b>4.</b>	<b>Annexure-A/3</b> Minutes of Joint Meeting of SEIAA and SEAC dated 02.02.2024 (SOP)	<b>12-34</b>
<b>5.</b>	<b>Annexure-A/4</b> Minutes of Joint SEAC Meeting dated 03.05.2024 approving Saharanpur DSR	<b>35-39</b>
<b>6.</b>	<b>Annexure-A/5</b> Letter from SEIAA to DGM dated 07.06.2024 confirming DSR approval	<b>40</b>
<b>7.</b>	<b>Annexure-A/6</b> Copies of Replenishment Study Reports submitted by District Magistrate Saharanpur	<b>41-224</b>

**Date:11/11/2025**

**THROUGH**

*Priyanka*

**Place: New Delhi**

**Priyanka swami**  
**Advocate**  
**Standing Counsel For State of U.P**  
**F-13, Jangpura, New Delhi**  
**110014**

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI  
ORIGINAL APPLICATION NO. 119/2025  
(IA No. 189/2025)**

**IN THE MATTER OF:**

**MURSLEEN**

**APPLICANT**

**VERSUS**

**STATE OF UTTAR  
PRADESH & ORS.**

**RESPONDENT(S)**

**WITH**

**ORIGINAL APPLICATION NO. 134/2025  
(IA NO. 239/2025)**

**ARIF KHAN & ORS.**

**APPLICANT(S)**

**VERSUS**

**STATE OF UTTAR  
PRADESH & ORS.**

**RESPONDENT(S)**

**REPLY ON BEHALF OF SEIAA U.P**

**MOST RESPECTFULLY SHOWETH:**

- 1.** That the present reply is being filed on behalf of the State Environment Impact Assessment Authority, Uttar Pradesh (hereinafter referred to as "SEIAA, UP") in compliance with the Order dated 07.05.2025 passed by this Hon'ble Tribunal in the above-captioned Original Applications.
- 2.** The Applicant in O.A. No. 119/2025 has challenged the e-Auction notice dated 28.02.2025 on the ground that no Replenishment Study was conducted and no valid DSR (District Survey Report) approved by SEIAA exists.
- 3.** That As per Para 4 of the Hon'ble Tribunal's order dated 07.05.2025, SEIAA, UP was directed to disclose if the revised District Survey Report (DSR) of District Saharanpur has been approved by SEIAA. The following factual narrative is submitted to confirm such compliance.
- 4.** That the Ministry of Environment and Forest (MoEF&CC), Government of India issued Notification dated 14.09.2006 mandating Prior Environmental Clearance (EC) for all new and expansion projects beyond threshold limits.
- 5.** That category 'B' projects, including mining leases, fall under the jurisdiction of SEIAA, subject to evaluation and recommendation by SEAC (State Expert Appraisal Committee).

6. That SEIAA and SEAC for Uttar Pradesh were constituted vide Notification S.O. 2276(E) dated 11.06.2021 and reconstituted via Notification S.O. 3921(E) dated 26.08.2025. The Directorate of Environment functions as the Secretariat for both.
7. That the EIA Notification, 2006 (as amended) did not explicitly mandate SEIAA's approval of DSRs. In light of conflicting interpretations, a formal clarification was sought by Directorate of Geology & Mining, UP from MoEF&CC via letter dated 16.11.2023. **True copy of Letter dated 16.11.2023 from Directorate of Geology & Mining to MoEF&CC is attached herewith and marked as Annexure-A/1**
8. That MoEF&CC, through its clarification letter dated 04.12.2023, confirmed that all DSRs must be prepared in consonance with Sustainable Sand Management Guidelines, 2016 and Enforcement & Monitoring Guidelines, 2020. Furthermore, such DSRs must be appraised by SEAC and approved by SEIAA. **True copy of MoEF&CC Clarification Letter dated 04.12.2023 is attached herewith and marked as Annexure-A/2.**
9. That a joint meeting of SEIAA and SEAC held on 02.02.2024 resolved to formulate a Standard Operating Procedure (SOP) for the preparation and approval of DSRs across Uttar Pradesh. The SOP

confirmed that DSRs must be prepared by District-level committees and approved by SEIAA based on SEAC's recommendation. **True copy of Minutes of Joint Meeting of SEIAA and SEAC dated 02.02.2024 (SOP) is attached herewith and marked as Annexure-A/3**

- 10.** The revised DSR for District Saharanpur was submitted by the District Magistrate and placed before the SEAC in its joint meeting held on 03.05.2024. After presentation and evaluation, SEAC recommended its approval. **True copy of Minutes of Joint SEAC Meeting dated 03.05.2024 approving Saharanpur DSR is attached herewith and marked as Annexure-A/4**
- 11.** In the 814th SEIAA meeting held on 24.05.2024, SEIAA accepted the recommendation and formally approved the DSR for District Saharanpur.
- 12.** A communication to this effect was issued by the Member Secretary, SEIAA, to the Director, Directorate of Geology & Mining, U.P., via letter no. 159/Parya./DSR/Saharanpur/2024 dated 07.06.2024. **True copy of Letter from SEIAA to DGM dated 07.06.2024 confirming DSR approval is attached herewith and marked as Annexure-A/5**

13. That as per Para 4.1.1(a) of the Enforcement & Monitoring Guidelines for Sand Mining, 2020, a replenishment study is required prior to issuance of mining lease or LoI.
14. That in compliance, the District Magistrate in coordination with DGM conducted replenishment studies for pre- and post-monsoon periods of 2023. These reports were uploaded on the official District Mining Portal and incorporated in the DSR. **True copies of Replenishment Study Reports submitted by District Magistrate Saharanpur is attached herewith and marked as Annexure-A/6**
15. That the revised DSR for District Saharanpur has been duly prepared by the competent district-level committee, appraised by SEAC, and approved by SEIAA, U.P., fulfilling the requirement set forth by MoEF&CC and reinforced by the Hon'ble NGT in its Order dated 07.05.2025.
16. The replenishment study has been conducted and is part of the DSR, and the process followed was in accordance with the Sustainable Sand Mining Guidelines, 2016, and EMGSM, 2020.
17. That the answering Respondent remains at the disposal of this Hon'ble Tribunal and undertakes to ensure due and strict

compliance with any further orders, directions, or clarifications that may be issued in the present matter.

**Date: 11/11/2025**

**THROUGH**

A handwritten signature in blue ink that reads "Priyanka" with a horizontal line underneath it.

**Place: New Delhi**

**Priyanka swami  
Advocate  
Standing Counsel For State of U.P  
F-13, Jangpura, New Delhi 110014**

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI  
ORIGINAL APPLICATION NO. 119/2025  
(IA No. 189/2025)**

**IN THE MATTER OF:**

**MURSLEEN**

**APPLICANT**

**VERSUS**

**STATE OF UTTAR  
PRADESH & ORS.**

**RESPONDENT(S)**

**AFFIDAVIT**

I, Vidhyotma Bharti, aged about 49 years, W/o Dr. G.L. Nigam, presently posted as Assistant Director, Regional Office, Noida, Directorate of Environment, U.P., having an office at E-12/1, Noida, U.P., presently at New Delhi do hereby solemnly affirm and State on oath as under:

1. That I am posted as stated above and well conversant with the facts of the present case and as such competent to swear this affidavit before this Tribunal.
2. That the accompanying Reply has been drafted by our counsel upon my instructions.
3. That the contents of the accompanying Reply are true and correct, and the knowledge has been derived from official records and nothing material has been concealed therefrom.
4. That the Deponent will continue to extend her full cooperation and shall abide by any further directions that the Hon'ble Tribunal may issue.



5. That the deponent has been duly authorised by member secretary SEIAA, UP to file this present affidavit

*[Signature]*

DEPONENT

*UP/5411/2014  
I identified the deponent who  
has signed in my presence*

**VERIFICATION**

Verified on solemn affirmation at New Delhi on this 12 day of NOV 2025,  
that the contents of the foregoing affidavit are true and correct to the best of my  
knowledge and no part of it is false and nothing material has been concealed  
therefrom.

**ATTESTED**

**NOTARY PUBLIC  
(INDIA)**

*[Signature]*

DEPONENT



12 NOV 2025

*[Signature]*

**PANSHU CHANDRA  
UP5411/14**

*I identified the deponent who  
has signed in my presence*

प्रेषक,

निदेशक / सदस्य-सचिव,  
राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति, उ०प्र०,  
पर्यावरण निदेशालय, उ०प्र०,  
विनीत खण्ड-1, गोमती नगर, लखनऊ।

ANNEXURE-1

सेवा में,

संयुक्त सचिव,  
आई०ए० डिवीजन,  
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय,  
भारत सरकार, नई दिल्ली।

पत्रांक: 656 / सिविल अपील सं०-6463 / 2021

दिनांक: 16 नवम्बर, 2023

**विषय:** District Survey Report (DSR) के अनुमोदन के सम्बन्ध में।

महोदय,

कृपया पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार की अधिसूचना सं०-2276 दिनांक 11-06-2021 द्वारा राज्य स्तरीय पर्यावरण प्रभाव ऑकलन प्राधिकरण, उ०प्र० एवं राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति, उ०प्र० ( 1 व 2) का गठन किया गया है। पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार से निर्गत ई०आई०ए० अधिसूचना 2006 (यथा संशोधित) में एस०ई०ए०सी०/ए०ई०आई०ए०ए० के कार्य-दायित्वों में जिला सर्वेक्षण रिपोर्ट (DSR) का अप्रैजल/अनुमोदन किये जाने का कोई प्राविधान नहीं है।

2- पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार से निर्गत ई०आई०ए० अधिसूचना संख्या- S.O. 141(E) दिनांक 15 जनवरी, 2016 में जिला सर्वेक्षण रिपोर्ट के सम्बन्ध में निम्नवत् उल्लेख किया गया है:-

"The District Survey Report shall be prepared for each minor mineral in the district separately and its draft shall be placed in the public domain by keeping its copy in Collectorate and posting it on district's website for twenty one days. The comments received shall be considered and if found fit, shall be incorporated in the final Report to be finalised within six months by the DEIAA." उल्लेखनीय है कि वर्तमान में डी०आई०ए०ए० अस्तित्व में नहीं है।

Original Application No. 403/2022 (I.A. No.133/2022) Daljeet Singh Applicant Versus State of Uttar Pradesh & Ors. में मा० एन०जी०टी० नई दिल्ली द्वारा दिनांक 30-05-2022 (संलग्न) आदेश पारित किया गया जिसके सुसंगत अंश निम्नवत् है :-

"8. In the meanwhile no lease shall be granted and also no mining shall be commenced in any of the mining sites in District Saharanpur, Uttar Pradesh before completion of replenishment study, updation of DSR and grant of environmental clearance/CTE/CTO on the basis thereof in accordance with SSMG, 2016 and EMGSM, 2020."

3- उक्त के क्रम में अवगत कराना है कि मा० उच्चतम न्यायालय, नई दिल्ली द्वारा सिविल अपील No 3661-3662 of 2022, The State of Bihar and others Vs. Pawan Kumar and Others & Ors. में District Survey Report (DSR) के सम्बन्ध में दिनांक 10-11-2021 को बिहार स्टेट के संबंध में निम्नवत् आदेश पारित किया गया है:-

The directions issued by the Tribunal vide judgment and order dated 14th October 2020, are substituted as follows:

(i) The exercise of preparation of DSR for the purpose of mining in the State of Bihar in all the districts shall be undertaken afresh. The draft DSRs shall be prepared by the sub-divisional

committees consisting of the Sub-Divisional Magistrate, Officers from Irrigation Department, State Pollution Control Board or Committee, Forest Department, Geological or mining officer. The same shall be prepared by undertaking site visits and also by using modern technology. The said draft DSRs shall be prepared within a period of 3 6 weeks from the date of this order. After the draft DSRs are prepared, the District Magistrate of the concerned District shall forward the same for examination and evaluation by the SEAC. The same shall be examined by the SEAC within a period of 6 weeks and its report shall be forwarded to the SEIAA within the aforesaid period of 6 weeks from the receipt of it. The SEIAA will thereafter consider the grant of approval to such DSRs within a period of 6 weeks from the receipt thereon;

(ii) Needless to state that while preparing DSRs and the appraisal thereof by SEAC and SEIAA, it should be ensured that a strict adherence to the procedure and parameters laid down in the policy of January 2020 should be followed;

4- पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार नई दिल्ली द्वारा निर्गत दिशा-निर्देश "Enforcement and Monitoring Guidelines for Sand Mining" 2020 के पैरा 4.1.1 (a) में निम्नवत् उल्लेखित हैं:-

**"District Survey Report for sand mining shall be prepared before the auction/e-auction/grant of the mining lease/Letter of Intent (Loi) by Mining department or department dealing the mining activity in respective states."**

5- उपरोक्त से स्पष्ट है कि "Enforcement and Monitoring Guidelines for Sand Mining" 2020 के प्राविधानों के अनुसार जिला सर्वेक्षण रिपोर्ट (DSR) खनन विभाग द्वारा तैयार की जायेगी, परन्तु उसके अनुमोदन हेतु सक्षम स्तर के संबंध में ई0आई0ए0 अधिसूचना में कोई प्राविधान न होने के कारण उक्त मा0 न्यायालय/मा0 एन0जी0टी0 के आदेशों के दृष्टिगत संशय की स्थिति उत्पन्न हो गयी है।

अतः अनुरोध है कि जिला सर्वेक्षण रिपोर्ट (DSR) खनन विभाग द्वारा ही तैयार की जायेगी, की पुष्टि करने का कष्ट करें तथा मा0 उच्चतम न्यायालय, नई दिल्ली द्वारा बिहार स्टेट के संदर्भ में पारित आदेश दिनांक 10-11-2021 एवं पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार द्वारा निर्गत ई0आई0ए0 अधिसूचना, 2006 के प्राविधानों को दृष्टिगत रखते हुए जिला सर्वेक्षण रिपोर्ट (DSR) के अनुमोदन के सक्षम स्तर के संबंध में मार्गदर्शन प्रदान करने का कष्ट करें।

भवदीय,

**संलग्न-यथोक्त।**

(आशीष तिवारी)

निदेशक/ सदस्य-सचिव

पत्रांक: /सिविल अपील सं0-6463/2021, तददिनांक

प्रतिलिपि: निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यावही हेतु प्रेषित है।

1. अपर मुख्य सचिव, पर्यावरण, वन एवं जलवायु परिवर्तन अनुभाग-7, उ0प्र0 शासन, लखनऊ।
2. निदेशक, भूतत्व एवं खनिकर्म निदेशालय, उ0प्र0 लखनऊ

(आशीष तिवारी)

निदेशक/ सदस्य-सचिव

IA-L-11011/13/2021-IA-II(M)

9011/2023

F.No. L-11011/13/2021-IA-II (M)  
 Government of India  
 Ministry of Environment, Forest and Climate Change  
 Impact Assessment Division

2nd Floor, Prithvi Wing,  
 Indira Paryavaran Bhawan,  
 Jorbagh Road, Aliganj,  
 New Delhi-110 003  
 Dated: 4th December, 2023

To,  
 The Member Secretary  
 State Level Environment Impact Assessment Authority  
 Directorate of Environment  
 Vineet Khand 1, Gomti Nagar,  
 Lucknow, Uttar Pradesh 226010  
 Email: doeuplko@yahoo.com

Sub: Clarification regarding District Survey Report-reg.

Sir,

This is with reference to the letter no. 656/Civil Appeal no. 6463/2021 dated 16.11.2023 regarding seeking clarification on District Survey Report (DSR).

2. The matter has been examined in the Ministry. In this context, it is informed that, as per Ministry's notification dated 25.07.2018, the DSR is prepared by the District Authorities and it should be in sync with Sustainable Sand Management Guidelines 2016 & Enforcement and monitoring Guidelines for sand mining 2020.

3. Further, the Hon'ble NGT vide its order dated 29/9/2022 in OA No. 34 of 2022 titled Subhash Bhai Ishwar Bhai Parmar vs State of Gujarat & Ors. observed that they would like to follow the principle laid down by the Hon'ble Supreme Court in order dated 10.11.2021 in Civil Appeal Nos. 3661-3662 of 2020 titled State of Bihar v/s Pawan Kumar. The above-referred order of Hon'ble SC mandates submission of DSR to State Expert Appraisal Committee (SEAC) for examination and evaluation and State Environment Impact Assessment Authority (SEIAA) for approval.

4. This is issued with the approval of the Competent Authority.

Yours faithfully,



(Dr. Saurabh Upadhyay)  
 Scientist C

E-mail: saurabh.upadhyay85@gov.in

*Handwritten notes:*  
 To  
 Saurabh  
 21/12/2023

Copy to:

- Scientist E(PV)/ Guard File

**Minutes of the Joint meeting of SEIAA and SEAC, U.P. held on 02.02.2024**

The Joint Meeting of State Environment Impact Assessment Authority (SEIAA) & State Expert Appraisal Committee (SEAC-1&2) was held in Directorate of Environment, U.P. on 02.02.2024, following members were present in the meeting:

1. Smt. Mamta Sanjeev Dubey	Chairman, SEIAA, U.P
2. Shri Rajive Kumar	Chairman, SEAC-1
3. Dr. Harikesh Bahadur Singh	Chairman, SEAC-2
4. Shri Ashish Tiwari	Member Secretary, SEAC-1&2
5. Shri Sanjeev Kumar Singh	Member Secretary, SEIAA, U.P
6. Shri Paras Nath	Member, SEIAA, U.P
7. Dr. Brij Bihari Awasthi	Member, SEAC-1
8. Shri Umesh Chandra Sharma	Member, SEAC-1
9. Dr. Ratan Kar	Member, SEAC-1
10. Shri Om Prakash Srivastava	Member, SEAC-1
11. Dr. Amrit Lal Halder	Member, SEAC-2
12. Dr. Dineshwar Prasad Singh	Member, SEAC-2
13. Shri Tansar Ullah Khan	Member, SEAC-2
14. Prof. Jaswant Singh	Member, SEAC-2
15. Dr. Shiv Om Singh	Member, SEAC-2
16. Shri Amit Kaushik	Joint Director, Mining Directorate, UP
17. Dr. Ajai Mishra	MEMBER SEAC-1

In the joint committee following agenda were discussed and resolved:-

**Agenda-1 - Regarding procedure for approval of D.S.R. (District Survey Report)**

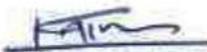
1. The detailed Standard Operating Procedure (S.O.P.) regarding preparation and modification of D.S.R. for Sand Mining or R.B.M. and for in-situ rocks were discussed and formulated.
2. It was resolved that the Secretariat shall forward the approved SOP for preparation and modification of D.S.R. for Sand Mining or R.B.M. and for in-situ rocks to Director – Geology & Mining for its effective implementation by respective Districts. (SOP attached as Annexure1 &2)
3. It was further resolved that all DSR received by SEIAA/SEAC shall be forwarded to D.G.M. by Member Secretary/Nodal officer SEAC for comments and suggestions.

**Agenda-2 - Regarding grant of Standard-TOR as per MoEF&CC O.M. dated 6-May-2022**

1. It was deliberated that Standard-TOR issued by MoEF&CC can be issued by MS-SEAC adding some additional conditions approved by SEIAA/SEAC, on the basis of experience gained in past 1 to 2 years.
2. In case of Mining of Minor Mineral Projects, the Standard-TOR can be granted on case to case basis, as per MoEFCC circular F. No. IA3-22/15/2022-IA-3 dated 06.05.2022 Mining Department, UP will certify whether the case under consideration is a green field project or a brown field project. If the case under consideration is a brown field project then details of previous E.C. should also be submitted by Mining Department.



**(Shri Sanjeev Kumar Singh)  
Member Secretary, SEIAA**



**(Shri Ashish Tiwari)  
Member Secretary, SEAC-1&2**

# **STANDARD OPERATING PROCEDURE**

**Preparation/Modification of D.S.R. for in-situ rocks by**

**District Level Sub-Divisional Committee and**

**its Appraisal/Approval by SEAC/SEIAA, U.P.**

**Issued by – Joint Committee of SEAC, SEIAA and DGM, U.P.**

**Background:-**

- The SOP for in-situ rocks has been prepared as per MoEF&CC, GoI, Notification No. S.O. 3611 (E), dated 25-July-2018 regarding DSR.
- As per Schedule-II of the Appendix—X of the MoEF&CC, GoI, Notification No. S.O. 3611 (E), dated 25-July-2018 the District Survey Report shall be prepared for each minor mineral in the district separately.
- The Schedule-II provides format for preparation of DSR for minor minerals other than sand mining or river bed mining.

**Short Titles:-**

<b>Detailed Title</b>	<b>Short Title to be read hereafter</b>
District Level Sub-Divisional Committee	SDC
Hon'ble Supreme Court Judgement delivered in Civil Appeal – 3661-3662 of 2020 in the matter of State of Bihar and Others Vs. Pawan Kumar and Others Etc.	Pawan Kumar
State Level Expert Appraisal Committee	SEAC
State Level Environment Impact Assessment Authority	SEIAA
District Survey Report	DSR

• Procedure for Preparation of DSR by respective District of Uttar Pradesh

Sl. No / Step	Details	Action Required
1	<p>Formation of Sub-Divisional Committee (SDC) in the district by District Magistrate comprising Sub-Divisional Magistrate, Officers from Irrigation Department, State Pollution Control Board or Committee, Forest Department, Geological or Mining Officer.</p> <p><i>Reference – Para 14(i) of the Hon'ble Supreme Court Judgement delivered in Civil Appeal – 3661-3662 of 2020 in the matter of State of Bihar and Others Vs. Pawan Kumar and Others Etc.</i></p>	<ul style="list-style-type: none"> <li>• D.M. shall issue an Office Memorandum regarding nomination and formation of Sub-Divisional committee in the district.</li> </ul>
2	<p><b>Preparation of DSR</b> – DSR which is a technical document shall be prepared in line with the Schedule-II of the MoEF&amp;CC Notification dated 25-July-2018. The contents of DRAFT DSR shall be as under:-</p> <ul style="list-style-type: none"> <li>• <b>Contents of Report</b> <ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Overview of Mining Activity in the District (brief history of old working, pre-existing and proposed mining activities).</li> <li>3. General Profile of the District</li> <li>4. Geology of the District</li> <li>5. Drainage of Irrigation pattern.</li> <li>6. Land Utilisation Pattern in the District: Forest, Agricultural, Horticultural, Mining etc.</li> <li>7. Surface Water and Ground Water scenario of the district</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>• The sub-divisional committee (SDC) will prepare the draft DSR. If required the SDC may take help/assistance of QC/NABET Consultants, DGM Approved Exploration Agencies as per Government Order ref. no 1659/86-2023 dated 17-May-2023 issued by Secretary Geology &amp; Mining.</li> <li>• Additionally, the SDC may also take help/assistance of renowned academic institutions/ Universities</li> </ul>

	<p>8. Rainfall of the district and climatic condition</p> <p>9. details of the mining leases in the District as per the following format:-</p> <ol style="list-style-type: none"> <li>a) Sl. No.</li> <li>b) Name of the Mineral</li> <li>c) Name of the Lessee</li> <li>d) Address &amp; Contact No. of Lessee</li> <li>e) Mining lease Grant Order No. &amp; date</li> <li>f) Area of Mining lease (ha)</li> <li>g) Period of Mining lease (Initial) – [From till To]</li> <li>h) Period of Mining lease (1st /2nd ...renewal) - [From till To]</li> <li>i) Date of commencement of Mining Operation</li> <li>j) Status (Working/Non-Working/Temp. Working for dispatch etc.)</li> <li>k) Captive/Non-Captive</li> <li>l) Obtained Environmental Clearance (Yes/No), If Yes Letter No with date of grant of EC.</li> <li>m) Location of the Mining lease (Latitude &amp; Longitude)</li> <li>n) Method of Mining (Opencast/Underground)</li> </ol> <p>10. Details of Royalty or Revenue received in last three years</p> <p>11. Details of Production of Minor Mineral in last three years</p> <p>12. Mineral Map of the District</p>	<p>having domain expertise in Environment/ Geology and Mining.</p> <ul style="list-style-type: none"> <li>• It will be the responsibility of SDC/hired agency to collect primary and secondary data, DSR drafting with Annexure-I to Annexure-VII and conduct presentation before SEAC/SEIAA and DGM.</li> <li>• Whenever a new lease is identified for adding in the DSR, the SDC/hired agency will follow the entire procedure every time on the basis of existing DSR. The validity of amended or modified DSR will be upto the validity of the original DSR.</li> <li>• The SDC/hired agency will update the data in the revised DSR with reference to the primary DSR. Special focus on collection of latest data will be done w.r.t. land use pattern.</li> </ul>
--	---	---

<p>13. list of Letter of Intent (LOI) Holders in the District along with its validity as per the following format :-</p> <p>14. Total Mineral Reserve available in the District.</p> <ol style="list-style-type: none"> <li>a) Sl. No.</li> <li>b) Name of the Mineral</li> <li>c) Name of the Lessee</li> <li>d) Address &amp; Contact No. of Letter of Intent Holder</li> <li>e) Letter of Intent Grant Order No.&amp; date</li> <li>f) Area of Mining lease to be allotted</li> <li>g) Validity of LoI</li> <li>h) Use (Captive/Non-Captive)</li> <li>i) Location of the Mining lease (Latitude &amp; Longitude)</li> </ol> <p>15. Quality /Grade of Mineral available in the District</p> <p>16. Use of Mineral</p> <p>17. Demand and Supply of the Mineral in the last three years</p> <p>18. Mining leases marked on the map of the district</p> <p>19. Details of the area of where there is a cluster of mining leases viz. number of mining leases, location (latitude and longitude)</p> <p>20. Details of Eco-Sensitive Area, if any, in the District</p> <p>21. Impact on the Environment (Air, Water, Noise, Soil, Flora &amp; Fauna, land use, agriculture, forest etc.) due to mining activity</p>	<p>rainfall, IMD data, river geometry, updated geology (if any), water table, population data etc. as such parameters generally change in every 5 years.</p> <ul style="list-style-type: none"> <li>• The source of secondary data used in DSR should have proper citation reference and in case primary data has been collected, then the name and details of experts involved in collection and synthesis and interpretation of data will be mentioned in the DSR.</li> <li>• It should be specifically ensured that DSR is the district specific environmental document in which all the environmental and safety parameters as per the guidelines and notifications should be covered and reflected in the DSR document.</li> <li>• For this a district specific mineral resource map shall be prepared in</li> </ul>
---	---

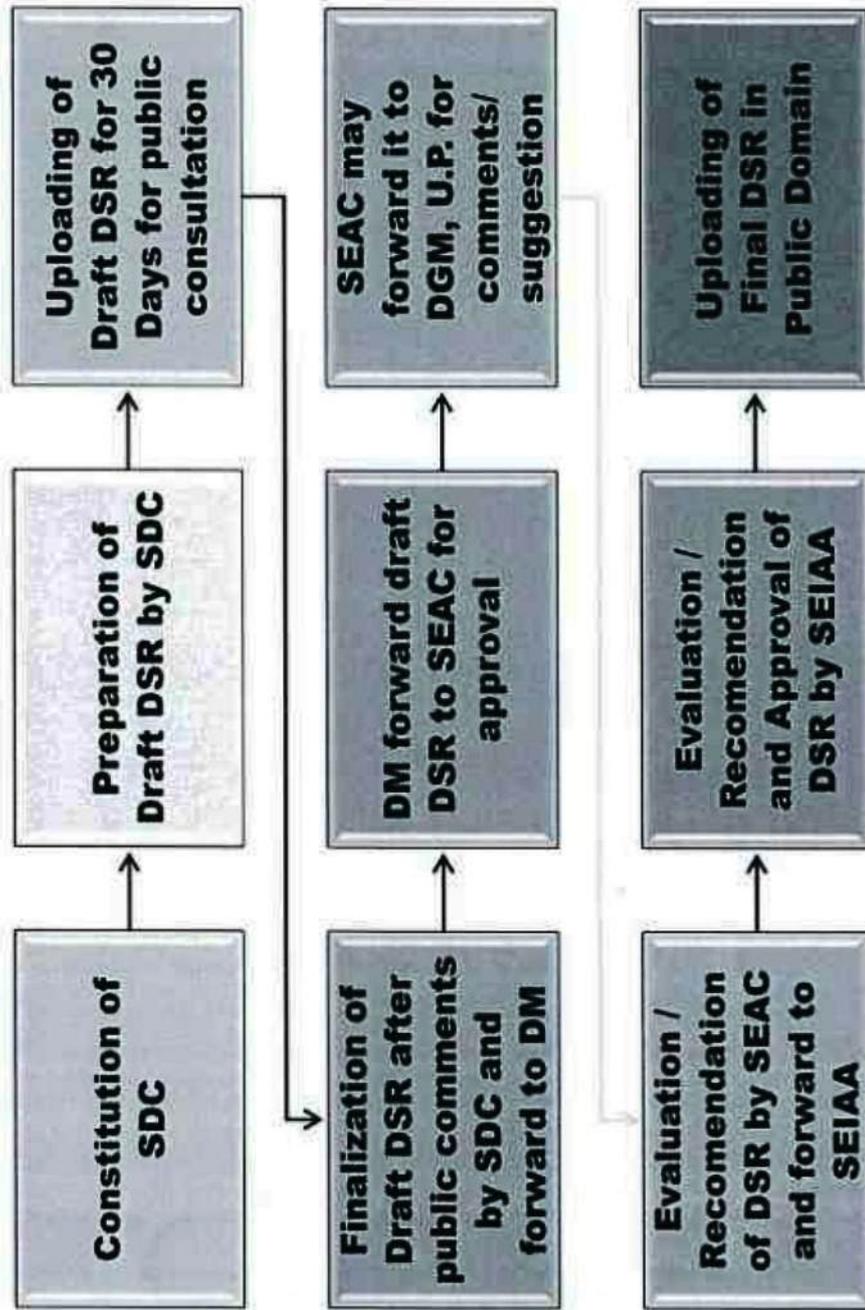
	<p>22. Remedial Measures to mitigate the impact of mining on the Environment</p> <p>23. Reclamation of Mined out area (best practice already implemented in the district, requirement as per rules and regulation, proposed reclamation plan)</p> <p>24. R&amp; Disaster Management Plan</p> <p>25. Details of the Occupational Health issues in the District. (Last five-year data of number of patients of Silicosis &amp; Tuberculosis is also needs to be submitted)</p> <p>26. Plantation and Green Belt development in respect of leases already granted in the District</p> <p>27. Any other information</p> <ul style="list-style-type: none"> <li>• After this <b>Annexure-I to Annexure-IV</b> shall also be prepared as per the format provided in Enforcement &amp; Monitoring Guidelines for Sand Mining-2020, which will be enclosed as annexure to the Draft DSR (<i>Reference – Page- 64 to 67 of EMGSM-2020</i>)</li> <li>• Lease wise NOC will be taken from Irrigation and Forest Department and Deposit Verification/Estimation reports shall also be prepared by SDC.</li> <li>• The proposed lease should clearly identify and mark the mineable deposit on satellite image/drone image.</li> <li>• The mineable resource is to be calculated based on field investigation,</li> </ul>	<p>which the drainage patterns of rivers along with explored mineral resources shall be reflected.</p>
--	--	--

	<p>geology of the area, site conditions locations, depth of mineral availability and other geomorphic features.</p>	
3	<p>Once the Draft DSR and Annexure I to IV is prepared, then all the SDC members evaluate and approve it, which will be uploaded in the District Website for 30 days for public comments/objections as well as DM/ADM/MO office. <i>For this the notification should be issued by District Authority about draft DSR for suggestions/comments /objections from public in minimum two newspapers having wide circulation. Date of uploading and last date of receiving suggestions/comments/objections should be clearly mentioned in the notification.</i> <i>(Reference - EMGSM-2020, Section 4.1.1 (clause - o &amp; p; Page-19)</i></p>	<p>For this a letter to the District Information Office will be issued for uploading the draft DSR in District Website for 30 days.</p>
4	<p>The Draft DSR shall be withdrawn from District Website after 30 days and SDC Members shall conduct a joint meeting to mitigate/resolve the public comments/objections received, if any. <i>(Reference - EMGSM-2020, Section 4.1.1 (clause - p; Page-19)</i> <i>In case no objection/comments are received then Mining Officer will issue a Certificate that no comments/objections have been received in the period of uploading.</i></p>	<p>For this a joint meeting of SDC Members is required for final draft DSR examination/evaluation.</p>
5	<p>Thereafter, the draft DSR shall be finalized including Annexure-I to Annexure-VII which will be signed by all SDC Members and then forwarded to D.M. for perusal and approval.</p>	<p>For this a recommendation of SDC Members is required who will finalize the draft DSR and forward it to the D.M.</p>
6	<ul style="list-style-type: none"> <li>• The DM shall forward the proposed DSR to SEAC</li> </ul>	<ul style="list-style-type: none"> <li>• The DM of respective district</li> </ul>

	<p>for examination and approval.</p> <ul style="list-style-type: none"> <li>• The Member Secretary/Nodal Officer will forward it to DGM, U.P. for comments and suggestions. The SEAC will evaluate after getting the comments and suggestions of DGM, U.P.</li> <li>• The SEAC may invite a representative of DGM, U.P. to assist SEAC in appraisal of the draft DSR.</li> <li>• The SEAC will evaluate and recommend for approval of the draft DSR on the basis of SDC recommendations as well as DGM, U.P. comments/suggestions.</li> <li>• The SEIAA may approve the draft DSR on the basis of recommendations of SEAC.</li> </ul> <p><i>Reference – (Para 14(i) &amp; ii) of the Hon'ble Supreme Court Judgement delivered in Civil Appeal – 3661-3662 of 2020 in the matter of State of Bihar and Others Vrs. Pawan Kumar and Others Etc.)</i></p>	<p>shall send the draft DSR, along with following documents <u>Following shall be the Annexures of the DM letter:-</u></p> <ol style="list-style-type: none"> <li>1. Primary DSR which requires addition/modification.</li> <li>2. Draft Modified/ Revised DSR Document.</li> <li>3. Annexure-1 to VII.</li> <li>4. Lease wise NOC from Irrigation and Forest Department.</li> <li>5. Revenue report and resource evaluation/ reserve estimation.</li> <li>6. Notification regarding the constitution of the SDC.</li> <li>7. Minutes of the SDC about draft DSR.</li> <li>8. Office order for uploading the draft DSR in the district website for a period of 30 days along with newspaper notification.</li> <li>9. Minutes of the SDC recommending draft DSR.</li> </ol>
--	---	---

7	<ul style="list-style-type: none"> <li>• The SEAC shall examine the draft DSR within a period of 6 weeks and its report shall be forwarded to SEIAA.</li> <li>• The SEIAA on receipt of SEAC recommendation report shall consider the grant of approval of DSR within a period of 6 weeks.</li> </ul> <p><i>Reference – (Section 14(i) &amp; ii) of the Hon'ble Supreme Court Judgement delivered in Civil Appeal – 3661-3662 of 2020 in the matter of State of Bihar and Others Vs. Pawan Kumar and Others Etc.)</i></p>	<p>The DSR being a public document after approval shall be signed with seal (<i>in each page of DSR</i>) by the competent authority of SEIAA and will be uploaded in the respective district portal within a week.</p>
---	---	--

**Process Flow Chart**



### Checklist for examination / approval of DSR by SEAC/SEIAA of Uttar Pradesh

Sl. No	Checklist/ Examination Details	Yes / No
1	Office Order of DM/ADM regarding formation of Sub-Divisional Committee in District	
2	<p>DSR technical document signed by all the Sub-Divisional Members having following annexure:</p> <ol style="list-style-type: none"> <li>1. Primary DSR which requires addition/modification.</li> <li>2. Draft Modified/ Revised DSR Document.</li> <li>3. Annexure-1 to VII.</li> <li>4. Lease wise NOC from Irrigation and Forest Department.</li> <li>5. Revenue report and resource evaluation/ reserve estimation.</li> <li>6. Notification regarding the constitution of the SDC.</li> <li>7. Minutes of the SDC about draft DSR.</li> <li>8. Office order for uploading the draft DSR in the district website for a period of 30 days along with newspaper notification.</li> <li>9. Minutes of the SDC recommending draft DSR.</li> </ol>	
4	Office Order of DM/ADM/Competent Authority regarding uploading of Draft DSR in District Website for 30 days for public comments/objections.	
5	Period/Dates of DSR uploaded in District Website.	
6	Minutes of joint meeting of Sub-Divisional Members to mitigate/resolve the public comments/objections received, if any. After 30 days.	
7	Lease wise NOC from Irrigation and Forest Department.	
8	Deposit verification/estimation Report, Revenue report	

# **STANDARD OPERATING PROCEDURE**

**Preparation/Modification of D.S.R. for Sand Mining or R.B.M. by**

**District Level Sub-Divisional Committee and**

**its Appraisal/Approval by SEAC/SEIAA, U.P.**

863

**Issued by – Joint Committee of SEAC, SEIAA and DGM, U.P.**

**Background and Scope of Work:** - The SOP has been prepared as per MoEF&CC, GoI, Notification No. S.O. 141(E), dated 15-Jan-2016, S.O. 3611 (E), dated 25-July-2018, Sustainable Sand Mining Management Guidelines 2016 and Enforcement & Monitoring Guidelines for Sand Mining 2020 & Hon'ble Supreme Court Judgement passed in Civil Appeal – 3661-3662 of 2020 in the matter of State of Bihar and Others Vs. Pawan Kumar and MoEF&CC, GoI letter dated 04/12/2023 regarding DSR.

**Short Titles:-**

<b>Detailed Title</b>	<b>Short Title to be read hereafter</b>
Sustainable Sand Mining Management Guidelines 2016	SSMMG-2016
Enforcement & Monitoring Guidelines for Sand Mining -2020	EMGSM-2020
District Level Sub-Divisional Committee	SDC
Hon'ble Supreme Court Judgement delivered in Civil Appeal – 3661-3662 of 2020 in the matter of State of Bihar and Others Vs. Pawan Kumar and Others Etc.	Pawan Kumar
State Level Expert Appraisal Committee	SEAC
State Level Environment Impact Assessment Authority	SEIAA
District Survey Report	DSR

• Procedure for Preparation of DSR by respective District of Uttar Pradesh

Sl. No / Step	Details	Action Required
1	<p>Formation of Sub-Divisional Committee (SDC) in the district by District Magistrate comprising Sub-Divisional Magistrate, Officers from Irrigation Department, State Pollution Control Board or Committee, Forest Department, Geological or Mining Officer.</p> <p><i>Reference – Para 14(i) of the Hon'ble Supreme Court Judgement delivered in Civil Appeal – 3661-3662 of 2020 in the matter of State of Bihar and Others Vs. Pawan Kumar and Others Etc.</i></p>	<ul style="list-style-type: none"> <li>D.M. shall issue an Office Memorandum regarding nomination and formation of Sub-Divisional committee in the district.</li> </ul>
2	<p><b>Preparation of DSR</b> – DSR which is a technical document shall be prepared in line with the MoEF&amp;CC Notification, dated 15/01/20216, dated 25-July-2018 and ESMMG 2020. The contents of DRAFT DSR shall be as under:-</p> <ul style="list-style-type: none"> <li><b>Contents of Report</b> <ol style="list-style-type: none"> <li>Introduction</li> <li>Overview of Mining Activity in the District (brief history of old working, pre-existing and proposed mining activities).</li> <li>List of Mining Leases in the District with location, area and period of validity.</li> <li>Details of Royalty or Revenue received in last three years.</li> <li>Detail of Production of Sand/Morrum/RBM or other minor mineral in last three years.</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>The sub-divisional committee (SDC) will prepare the draft DSR. If required the SDC may take help/assistance of QCI/NABET Consultants, DGM Approved Exploration Agencies as per Government Order ref. no 1659/86-2023 dated 17-May-2023 issued by Secretary Geology &amp; Mining.</li> <li>Additionally, the SDC may also take help/assistance of renowned academic institutions/ Universities</li> </ul>

<p>6. Process of deposition of sediments in the Rivers of the District (River Geometry).</p> <p>7. General Profile of the District.</p> <p>8. Land utilization Pattern in the district: Forest, Agriculture, Horticulture, Mining etc.</p> <p>9. Physiography of the District.</p> <p>10. Rainfall: month-wise.</p> <p>11. Geology and Mineral Wealth.</p> <p>12. The report shall also contain:-</p> <p>a) District wise detail of river or stream and other sand source;</p> <p>b) District wise availability of sand or gravel or aggregate resources;</p> <p>c) District wise detail of existing mining leases of sand and aggregates.</p> <p>13. Drainage system with description of main rivers</p> <p>a) Name of the river.</p> <p>b) Area drained (sq. km)</p> <p>c) Percentage area drained in the District.</p> <p>14. Salient Features of Important Rivers and Streams:-</p> <p>a) Name of the river or stream.</p> <p>b) Total length in the district.(in Km.)</p> <p>c) Place of origin.</p> <p>d) Altitude at origin.</p> <p>e) Portion of the river or stream recommended for mineral concession.</p>	<p>having domain expertise in Environment/ Geology and Mining.</p> <ul style="list-style-type: none"> <li>• It will be the responsibility of SDC/hired agency to collect primary and secondary data, DSR drafting with Annexure-I to Annexure-VII and conduct presentation before SEAC/SEIAA and DGM.</li> <li>• Whenever a new lease is identified for adding in the DSR, the SDC/hired agency will follow the entire procedure every time on the basis of existing DSR. The validity of amended or modified DSR will be upto the validity of the original DSR.</li> <li>• The SDC/hired agency will update the data in the revised DSR with reference to the primary DSR. Special focus on collection of latest data will be done w.r.t. landuse pattern.</li> </ul>
--	--

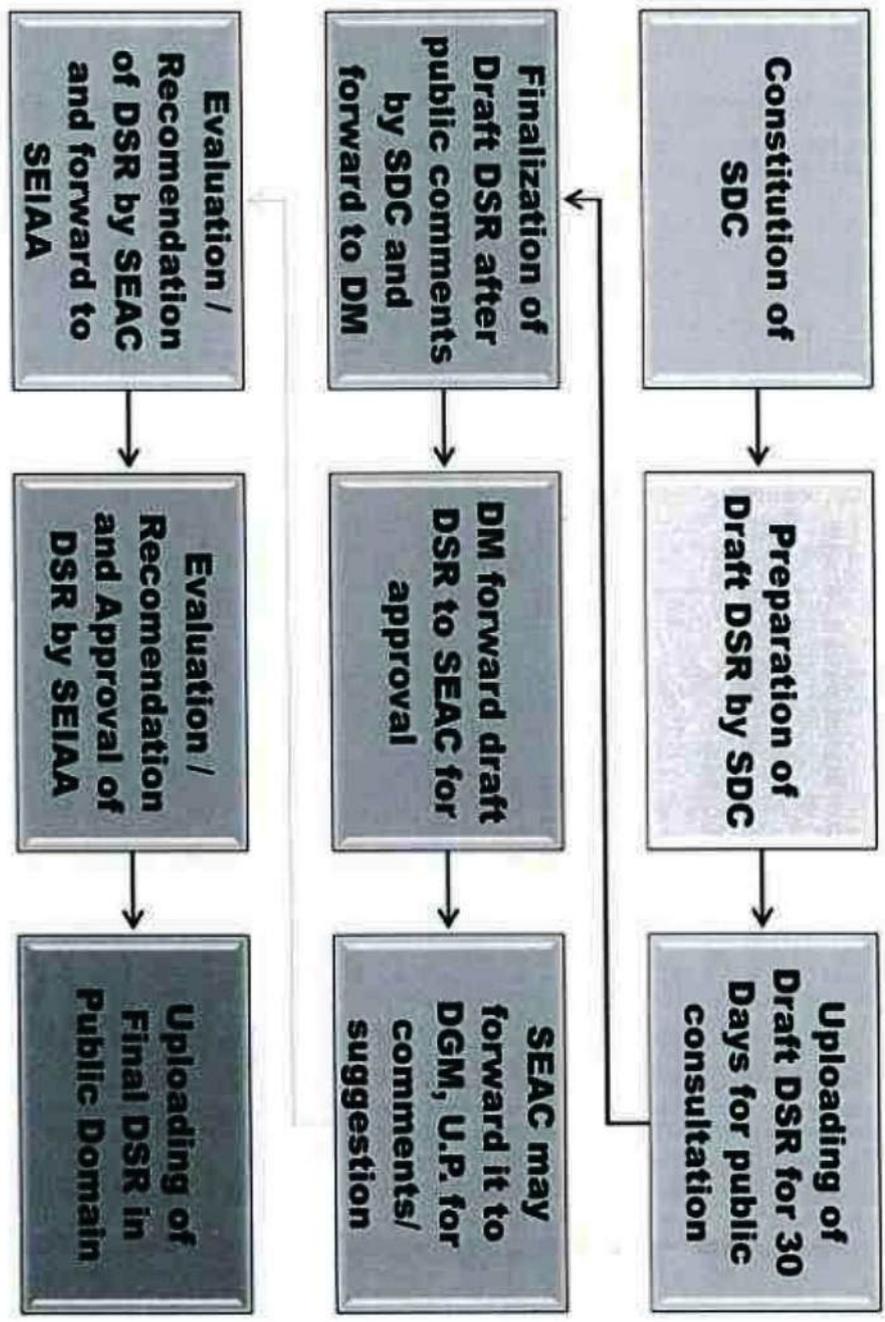
<p>f) Length of area recommended for mineral concession.(in Kms)</p> <p>g) Average width of area recommended for mineral concession (in meters)</p> <p>h) Area recommended for mineral concession (in square meter)</p> <p>i) Mineable mineral potential (in metric tonne) (60% of total mineral potential)</p> <p>15. Mineral Potential:-</p> <p>a) Boulder (MT)</p> <p>b) Bajari (MT)</p> <p>c) Sand (MT)</p> <p>d) Total Mineable Mineral Potential (MT)</p> <p>16. Annual Deposition:-</p> <p>a) River or Stream.</p> <p>b) Portion of the river or stream recommended for mineral concession.</p> <p>c) Length of area recommended for mineral concession.(in Kms)</p> <p>d) Average width of area recommended for mineral concession (in meters)</p> <p>e) Area recommended for mineral concession (in square meter)</p> <p>f) Mineable mineral potential (in metric tonne) (60% of total mineral potential)</p> <p>g) Total for the District</p> <ul style="list-style-type: none"> <li>• After this <b>Annexure-I to Annexure-IV</b> shall also be prepared as per the format provided in Enforcement &amp; Monitoring Guidelines for Sand Mining-2020, which will be enclosed as annexure to the Draft DSR</li> </ul>	<p>rainfall, IMD data, river geometry, updated geology (if any), water table, population data etc. as such parameters generally change in every 5 years.</p> <ul style="list-style-type: none"> <li>• The source of secondary data used in DSR should have proper citation reference and in case primary data has been collected, then the name and details of experts involved in collection and synthesis and interpretation of data will be mentioned in the DSR.</li> <li>• It should be specifically ensured that DSR is the district specific environmental document in which all the environmental and safety parameters as per the guidelines and notifications should be covered and reflected in the DSR document.</li> <li>• For this a district specific mineral resource map shall be prepared in</li> </ul>
--	---

	<p><i>(Reference – Page- 64 to 67 of EMGSM-2020)</i></p> <ul style="list-style-type: none"> <li>• Lease wise NOC will be taken from Irrigation and Forest Department and Deposit Verification/Estimation reports shall also be prepared by SDC.</li> <li>• The proposed lease should clearly identify and mark the mineable deposit on satellite image/drone image.</li> <li>• The mineable resource is to be calculated based on field investigation, geology of the catchment area, site conditions locations, depth of mineral availability and other geomorphic features. The mineable resource should be 50 to 60 % of the total resource available.</li> </ul>	<p>which the drainage patterns of rivers along with explored mineral resources shall be reflected.</p>
3	<p>Once the Draft DSR and Annexure 1 to IV is prepared, then all the SDC members evaluate and approve it, which will be uploaded in the District Website for 30 days for public comments/objections as well as DM/ADM/MO office.</p> <p><i>For this the notification should be issued by District Authority about draft DSR for suggestions/comments /objections from public in minimum two newspapers having wide circulation. Date of uploading and last date of receiving suggestions/comments/objections should be clearly mentioned in the notification.</i></p> <p><i>(Reference - EMGSM- -2020, Para 4.1.1 (clause – O &amp; P; Page-19)</i></p>	<p>For this a letter to the District Information Office will be issued for uploading the draft DSR in District Website for 30 days.</p>
4	<p>The Draft DSR shall be withdrawn from District Website after 30 days and SDC Members shall conduct a joint meeting to mitigate/resolve the public comments/objections received, if any. <i>(Reference - EMGSM- -2020, Para 4.1.1 (clause – p; Page-19)</i></p>	<p>For this a joint meeting of SDC Members is required for final draft DSR examination/evaluation.</p>

	<p><i>In case no objection/comments are received then Mining Officer will issue a Certificate that no comments/objections have been received in the period of uploading.</i></p>	
5	<p>Thereafter, the draft DSR shall be finalized including Annexure-I to Annexure-VII which will be signed by all SDC Members and then forwarded to D.M. for perusal and approval.</p>	<p>For this a recommendation of SDC Members is required who will finalize the draft DSR and forward it to the D.M.</p>
6	<ul style="list-style-type: none"> <li>• The DM shall forward the proposed DSR to SEAC for examination and approval.</li> <li>• The Member Secretary/Nodal Officer will forward it to DGM, U.P. for comments and suggestions. The SEAC will evaluate after getting the comments and suggestions of DGM, U.P.</li> <li>• The SEAC may invite a representative of DGM, U.P. to assist SEAC in appraisal of the draft DSR.</li> <li>• The SEAC will evaluate and recommend for approval of the draft DSR on the basis of SDC recommendations as well as DGM, U.P. comments/suggestions.</li> <li>• The SEIAA may approve the draft DSR on the basis of recommendations of SEAC.</li> </ul> <p><i>Reference – (Para 14(i) &amp; ii) of the Hon'ble Supreme Court Judgement delivered in Civil Appeal – 3661-3662 of 2020 in the matter of State of Bihar and Others Vs. Pawan Kumar and Others Etc.)</i></p>	<ul style="list-style-type: none"> <li>• The DM of respective district shall send the draft DSR, along with following documents</li> </ul> <p><u>Following shall be the Annexures of the DM letter:-</u></p> <ol style="list-style-type: none"> <li>1. Primary DSR which requires addition/modification.</li> <li>2. Draft Modified/ Revised DSR Document.</li> <li>3. Annexure-1 to VII.</li> <li>4. Lease wise NOC from Irrigation and Forest Department.</li> <li>5. Revenue report and resource evaluation/ reserve estimation.</li> <li>6. Notification regarding the constitution of the SDC.</li> <li>7. Minutes of the SDC about draft</li> </ol>

		<p>DSR.</p> <p>8. Office order for uploading the draft DSR in the district website for a period of 30 days along with newspaper notification.</p> <p>9. Minutes of the SDC recommending draft DSR.</p>
7	<ul style="list-style-type: none"> <li>• The SEAC shall examine the draft DSR within a period of 6 weeks and its report shall be forwarded to SEIAA.</li> <li>• The SEIAA on receipt of SEAC recommendation report shall consider the grant of approval of DSR within a period of 6 weeks.</li> </ul> <p><i>Reference – (Para 14(i &amp; ii) of the Hon'ble Supreme Court Judgement delivered in Civil Appeal – 3661-3662 of 2020 in the matter of State of Bihar and Others Vrs. Pawan Kumar and Others Etc.)</i></p>	<p>The DSR being a public document after approval shall be signed with seal (<i>in each page of DSR</i>) by the competent authority of SEIAA and will be uploaded in the respective district portal within a week.</p>

### Process Flow Chart



### Checklist for examination / approval of DSR by SEAC/SEIAA of Uttar Pradesh

Sl. No	Checklist/ Examination Details	Yes / No
1	Office Order of DM/ADM regarding formation of Sub-Divisional Committee in District	
2	<p>DSR technical document signed by all the Sub-Divisional Members having following annexure:</p> <ol style="list-style-type: none"> <li>1. Primary DSR which requires addition/modification.</li> <li>2. Draft Modified/ Revised DSR Document.</li> <li>3. Annexure-1 to VII.</li> <li>4. Lease wise NOC from Irrigation and Forest Department.</li> <li>5. Revenue report and resource evaluation/ reserve estimation.</li> <li>6. Notification regarding the constitution of the SDC.</li> <li>7. Minutes of the SDC about draft DSR.</li> <li>8. Office order for uploading the draft DSR in the district website for a period of 30 days along with newspaper notification.</li> <li>9. Minutes of the SDC recommending draft DSR.</li> </ol>	
4	Office Order of DM/ADM/Competent Authority regarding uploading of Draft DSR in District Website for 30 days for public comments/objections.	
5	Period/Dates of DSR uploaded in District Website.	
6	Minutes of joint meeting of Sub-Divisional Members to mitigate/resolve the public comments/objections received, if any. After 30 days.	
7	Lease wise NOC from Irrigation and Forest Department.	
8	Deposit verification/estimation Report, Revenue report	

**Minutes of the Joint Meeting of SEAC -1 and SEAC-2, U.P. held on 03/05/2024**

The Joint Meeting of State Expert Appraisal Committee (SEAC – 1 & 2) was held in Directorate of Environment, U.P. on 03/05/2024, following members were in the meeting:

1. Shri Rajive Kumar,	Chairman, SEAC-1
2. Dr. Harikesh Bahadur Singh,	Chairman, SEAC-2
3. Shri Ashish Tiwari,	Member-Secretary, SEAC - 1 & 2
4. Dr. Ajai Mishra,	Member, SEAC-1
5. Shri Om Prakash Srivastava,	Member, SEAC-1
6. Shri Umesh Chand Sharma,	Member, SEAC-1
7. Dr. Ratan Kar,	Member, SEAC-1
8. Dr. Brij Bihari Awasthi,	Member, SEAC-1
9. Dr. Amrit Lal Haldar,	Member, SEAC-2
10. Shri Tanzar Ullah Khan,	Member, SEAC-2
11. Prof. Jaswant Singh,	Member, SEAC-2
12. Dr. Shiv Om Singh,	Member, SEAC-2
13. Shri Subhash Singh,	Mining Officer, Saharanpur
14. Shri Deveshwar Kain	Senior Assistant, Mining Office, Saharanpur
15. Shri Vimlesh Jaiswal,	DGM, Lucknow
16. Dr. Anju Verma,	DGM, Lucknow

The Nodal Officers welcomed the Chairman's, Members and Officers of Mining Department in the meeting which was conducted via dual-mode (virtually/physically).

In the Joint committee meeting of SEAC-1 and SEAC-2 following agenda were discussed and resolved:-

**Agenda: - Evaluation/Appraisal of District Survey Report (DSR) of District Saharanpur.****Background:**

In the joint meeting of SEIAA, SEAC-1 & SEAC-2 the detailed Standard Operating Procedure was formulated for the preparation and modification of D.S.R. for Sand Mining or R.B.M., as well as in-situ rocks, which was send to Director, Geology and Mining by SEIAA. This SoP was prepared in accordance with various guidelines such as MoEF&CC, GoI, Notification No. S.O. 141(E) dated 15-Jan-2016, S.O. 3611 (E) dated 25-July-2018, Sustainable Sand Mining Management Guidelines 2016, Enforcement & Monitoring Guidelines for Sand Mining 2020, and the Hon'ble Supreme Court Judgement passed in Civil Appeal – 3661-3662 of 2020 in the matter of State of Bihar and Others Vrs. Pawan Kumar, along with MoEF&CC, GoI letter dated 04/12/2023.

The District Magistrate, Saharanpur submitted the draft DSR vide its letter no. 2613/kha anu/DSR/2023-24, dated 18/12/2023 for evaluation /appraisal/approval before SEIAA/SEAC. The draft DSR was forwarded to the Director – Geology & Mining by Secretariat for comments and suggestions. The Director, Geology & Mining has provided his comments and suggestions vide letter no. 85/DSR, dated 19/04/2024 and mentioned as follows:

“...उत्तर प्रदेश शासन द्वारा गठित तकनीकी समिति एवं निदेशालय स्तर पर गठित समिति द्वारा जनपद सहारनपुर द्वारा प्रस्तुत ड्राफ्ट डी0एस0आर0 का परीक्षण किया गया। परीक्षण में प्रस्ताव Sustainable Sand Mining Management Guideline-2016, पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय की अधिसूचना दिनांक 15-01-2016 एवं दिनांक 25-4-2018 Enforcement

and Monitoring Guidelines for Sand Mining -2020 एवं SEIAA/SEAC द्वारा जारी SOP के अनुरूप पाया गया....”

The Secretariat put up this DSR in joint meeting of SEAC-1 & SEAC-2 in dated 03/05/2024. During the meeting a presentation was given by Shri Subhash Singh, Mining Officer along with other senior officers of DGM.

**Evaluation/Appraisal in Joint Meeting of SEAC-1 & SEAC-2 on 03/05/2024**

Joint meeting of SEAC-1 & SEAC-2 was convened on 03/05/2024 for evaluation/appraisal of DSR of District-Saharanpur. Based on the documents submitted, a presentation on DSR Saharanpur for minor mineral River Bed Material - RBM (Sand/Bajri/Boulder) / Sand Mining-2022 was made by Shri Subhash Singh, District Mining Officer- Saharanpur along with Senior Officials of D.G.M. –UP.

Para wise response and compliance as per the “Standard Operating Procedure” formulated by the Joint committee of SEAC/SEIAA was presented before the SEAC-1&2. On the basis of documents and presentation the following facts have emerged:-

1. The initial District Survey Report of District-Saharanpur having 37 areas was prepared in Year- 2017 in line with the MoEF Notification dated 15-Jan-2016.
2. Thereafter the updated DSR of District-Saharanpur was prepared by Sub-Divisional Committee of District-Saharanpur in Year-2022 and total 22 areas have been proposed.
3. It was informed that out of 22 areas in the updated DSR, NOC for 01 area (Village – Rahena, Lot No-3, area 8.050 ha.) has not been provided by Forest Department. Accordingly, the revised DSR Saharanpur now has total 21 Areas. Lease wise area, gata/khand no., proposed minable quantity, geo-coordinates are proposed in Annexure-1 to Annexure-7 of proposed DSR.
4. As per the information provided vide District Magistrate, Saharanpur letter no. 3154/kha anu/DSR/2023-24, dated 28/03/2024 the DSR was uploaded in public domain for more than 30 days and 03 complaints were received in this period and 01 PIL was filed by the complainant. The details of complaint and its disposal is narrated as under:-

SL.NO	Complaint/PIL details	Details of reply/disposal
1	Shri Daljeet Singh of Yamunanagar Haryana vide letter dated 18.01.2022 submitted 20 points complaint letter on issues related to revision of DSR in 5 years, wrong process of e-tender, non compliance of Hon'ble Supreme Court order in Deepak Kumars Vs State of Haryana, separate DSR for each minor mineral required, non-compliance of formats, non-compliance of Hon'ble Supreme Court order in The State of Bihar Vs Pawan Kumar, Cluster Analysis, requirement of replenishment studies and stake holding of DSR with adjoining district in case of inter-state/inter-district boundaries.	The District Magistrate vide letter no. 2016/Kha Anu/Shikayat-DSR2022-2023 dated 27/02/2023 responded point wise reply and compliances to Shri Daljeet Singh of Yamunanagar Haryana as per the comments provided by Sub-Divisional Committee and disposed the complaint.
2	Shri Gaurav Kumar of Yamunanagar Haryana vide letter dated 25.01.2022 submitted 19 points complaint letter and	The District Magistrate vide letter no. 2017/Kha Anu/Shikayat-DSR2022-2023 dated 27/02/2023

	the issues were identical as mentioned in Sl. No.1	responded point wise reply and compliances to Shri Gaurav Kumar of Yamunanagar Haryana as per the comments provided by Sub-Divisional Committee and disposed the complaint.
3	Shri Sumit Singh Rana of Yamunanagar Haryana submitted 14 points complaint letter and the issues were identical as mentioned in Sl. No.1. Apart from this various NGT orders specific to DSR and Sand Mining were cited in the complaint letter.	The District Magistrate vide letter no. 2064/Kha Anu/Shikayat-DSR2022-2023 dated 03/03/2023 responded point wise reply and compliances to Shri Gaurav Kumar of Yamunanagar Haryana and disposed the complaint.
4	Civil Writ PIL no. 595/2023 Sumit Singh Rana Vs State of U.P and Ors.	The Hon'ble High Court vide order date 28/03/2023 dismissed the petition of Shri Sumit Singh Rana. The operative para of the same is as under:- <i>"At this stage, in this circumstances , interference claimed under Article 226 of the Constitution of India is declined. Present petition is accordingly dismissed, leaving it open to the petitioner to approach National Green Tribunal"</i>

5. The Updated DSR of District-Saharanpur has been also examined by the Director, Directorate of Geology & Mining, U.P.
6. Lease wise NOC from Forest and Irrigation Department for 21 areas has been obtained for existing and proposed leases.

#### **SEAC Deliberation:**

1. **SEAC asked about the current scenario/status of the leases as DSR was updated in year-2022?**
  - District Mining Officer, Saharanpur vide letter dated 03/05/2024 informed the DSR of district Saharanpur was prepared in year-2022 after conducting replenishment studies in which the reserves were calculated on the basis of replenishment in the post-monsoon – 2022 scenario. Lease wise replenishment studies were also conducted in year – 2023 which depicts that the rate of replenishment is good in the area. Geologically the area is part of shivalik region and there is no significant change in the formation of leases. The leases are getting over replenished and requires removal of deposits to maintain channel of river. The maximum leases are fresh for which LoI has been issued to project proponents who are in the process of securing E.C.
2. **SEAC asked about the status of utilization of DMF Funds?**
  - District Mining Officer Saharanpur informed that funds amounting to Rs. 9.32 Crores approx. have been allotted and phase wise utilized since 2017 from DMF funds which were used as per the objectives of DMF Rules.

3. **SEAC while evaluating presentation suggested that lease should be demarcated after each monsoon period.**
  - District Mining Officer Saharanpur informed that as a matter of practice the lease holders are directed to get demarcation of lease after each monsoon period and erect pillars (in case damaged in monsoon) under the supervision of Mining and Revenue officials. A demarcation report in this aspect is prepared and issued to lease holder.
4. **SEAC suggested that composite digital mapping of all the leases should be done and displayed in the district website.**
  - District Mining Officer Saharanpur informed that mapping of lease has been done in SOI toposheet, Drainage pattern sheet, Google satellite images and cadastral revenue maps. It was informed that the concept of uploading composite digital mapping of all the leases shall be implemented and uploaded in district web site along with approval of DSR of SEIAA/SEAC.
5. **SEAC asked on the method adopted for verification of mineral deposits which are recommended in DSR?**
  - District Mining Officer Saharanpur informed that pre and post monsoon replenishment studies were conducted by Sub-Divisional committee prior preparing DSR. The studies included physical survey, DGPS survey and Drone based survey in pre and post monsoon periods. Accordingly lease wise recommendation reports were made as compliances.
6. **SEAC suggested that demarcation report of the lease only includes corner pillar coordinates and should also mention details of non-working/restricted zone in case active water channel is observed in the lease while conducting demarcation?**
  - District Mining Officer Saharanpur informed that as per the Rule of UPMPCR-2021, geo-coordinates of the lease area are published in e-tender and initial demarcation report of corner pillar coordinates is issued to project proponent along with LoI and Lease Map. The RQP/Consultant prepares the surface and geological maps in mine plan in which the features of non-working/restricted zone is presented. The DGM-Lucknow after satisfaction approves such mine plans and such zones are shown in EIA and salient features of E.C. under workable / non-workable area category.
7. **SEAC asked about the further mineral development in district Saharanpur?**
  - Shri Deveshwar Kain, Senior Assistant, Mining Office, Saharanpur informed that three new areas has been identified in the district which has mineral potential. The SEAC informed that Sub-Divisional Committee has to follow the entire procedure every time, in case any new lease is identified, as per SOP issued by SEIAA/SEAC.

**The joint committee after detailed deliberation recommended to approve the District Survey Report (DSR) of District-Saharanpur along with following conditions:**

1. The period of validity of Revised DSR Saharanpur-2022 shall be for the remaining balance period of 03 years from the date of its approval.
2. The submitted DSR has 22 areas. NOC for 01 area (Village – Rahena, Lot No-3, area 8.050 ha.) has not been provided by Forest Department. Accordingly, approval of only 21 areas (except Village – Rahena, Lot No-3, area 8.050 ha.) is recommended in the revised DSR Saharanpur.
3. If any new lease is identified, its validity will be co-terminous with the validity period of current DSR and Sub-Divisional Committee will follow the entire procedure every time on the basis of existing DSR.

4. After approval of DSR from SEIAA, the District Administration shall upload the DSR in public domain along with Lease Wise Digital Maps showing the status of deposits and pillar wise coordinates of existing and proposed areas.
5. The District Administration shall utilize the District Mineral Foundation Funds as per notification no. 866/86-2017-132/2016 dated 15/05/2017 issued by Department of Geology and Mining, Government of U.P. or any modification in it by competent authority.
6. The District Administration shall periodically conduct audits of operative mine leases using drone based survey and take corrective measures in case of adverse observations and a quarterly report on this shall be send to SEIAA as compliance.

The meeting ended with a vote of thanks of Chairman.

**(Ashish Tiwari)**  
Member Secretary, SEAC-1 & 2

**(Dr. Ajai Mishra)**  
Member, SEAC-1

**(Dr. Brij Bihari Awasthi)**  
Member, SEAC-1

**(Dr. Ratan Kar)**  
Member, SEAC-1

**(Umesh Chandra Sharma)**  
Member, SEAC-1

**(Om Prakash Srivastava)**  
Member, SEAC-1

**(Dr. Amrit Lal Haldar)**  
Member, SEAC-2

**(Tanzar Ullah Khan)**  
Member, SEAC-2

**Prof. Jaswant Singh)**  
Member, SEAC-2

**(Dr. Shiv Om Singh)**  
Member, SEAC-2

**(Rajive Kumar)**  
Chairman, SEAC-1

**(Dr. Harikesh Bahadur Singh)**  
Chairman, SEAC-2

**Nodal, SEAC-1 & Nodal, SEAC-2**

MoM prepared by Secretariat in consultation with Chairman & Members on the basis of decisions taken by joint committee during the meeting.

प्रेषक,

सदस्य सचिव,  
राज्य स्तरीय पर्यावरण प्रभाव निर्धारण प्राधिकरण, उ०प्र०  
विनीत खण्ड-1, गोमती नगर,  
लखनऊ।

सेवा में,

निदेशक,  
भूतत्व एवं खनिकर्म निदेशालय, उ०प्र०  
खनिज भवन, लखनऊ।

पत्रांक: 159/पर्या०/डी०एस०आर०/सहारनपुर/2024

दिनांक: 07 जून, 2024

**विषय: जिला सर्वेक्षण रिपोर्ट (डी०एस०आर०) के अनुमोदन के संबंध में।**

महोदया,

कृपया उपर्युक्त विषयक अपने पत्र सं०-85/डी०एस०आर०, दिनांक 19-04-2024 का सन्दर्भ ग्रहण करना चाहें, जिसके साथ जनपद-सहारनपुर का ड्राफ्ट डी०एस०आर० मूल रूप में संलग्न कर आवश्यक कार्यवाही हेतु प्रेषित किया गया था।

जनपद-सहारनपुर की ड्राफ्ट डी०एस०आर० अप्रेजल हेतु राज्य स्तरीय पर्यावरण मूल्यांकन समिति (SEAC-1&2) की संयुक्त बैठक दिनांक 03-05-2024 को सूचीबद्ध था तथा जिसको राज्य स्तरीय मूल्यांकन समिति द्वारा कुछ शर्तों के साथ अनुमोदन हेतु संस्तुत किया गया। तदोपरान्त राज्य स्तरीय पर्यावरण प्रभाव निर्धारण प्राधिकरण (SEIAA) की 814वी० बैठक दिनांक 24-05-2024 में सहारनपुर की डी०एस०आर० अन्य शर्तों के अतिरिक्त इस शर्त के साथ अनुमोदित की गई कि:-

*SEIAA noted that in draft DSR unit of quantity is not similar, like under list of potential mining lease (existing and proposed) rivers and cluster and contiguous detail, total excavation is given in MT/Year whereas in final list of cluster geological reserve is given in cubic meter, hence a clarification must be submitted and it should be same as given in Lol.*

अनुरोध है कि खनन अधिकारी, सहारनपुर के ई०-मेल दिनांकित 03-06-2024 द्वारा प्रेषित इकाईयों को डी०एस०आर० में प्रतिस्थापित किया जाये।

भवदीय,

(संजीव कुमार सिंह)

सदस्य सचिव, एस०ई०आई०ए०ए०

9c

प्रेषक,

अपर जिलाधिकारी (वि०/रा०)/  
प्रभारी अधिकारी(खनन)  
सहारनपुर।

सेवा में,

सदस्य सचिव,  
राज्य पर्यावरण प्रभाव आंकलन प्राधिकरण, (SEIAA)  
लखनऊ।

पत्र संख्या: 126/ख०अनु०/पुनः पूर्ति अध्ययन /2023-24 दिनांक: 09 अप्रैल, 2025

विषय: जनपद सहारनपुर में बालू, बजरी, बोल्टर (मिश्रित अवस्था में) उपलब्ध खनन क्षेत्रों की वर्ष 2024 में की पुनः पूर्ति अध्ययन (Replenishment Study) के संबंध में।

महोदय,

कृपया अवगत कराना है कि जनपद-सहारनपुर में नदी तल में उपलब्ध बालू, बजरी, बोल्टर (मिश्रित अवस्था में) RBM की निकासी हेतु रेत खनन प्रबंधन दिशा निर्देश-2016 और MoEF&CC द्वारा प्रकाशित Enforcement & Monitoring Guideline For Sand Mining-2020 के निर्देशों के अन्तर्गत 22 खनन क्षेत्रों का पुनः पूर्ति अध्ययन (Replenishment Study) गठित तकनीकी समिति वर्ष 2024 हेतु पुनः पूर्ति अध्ययन (Replenishment Study) की रिपोर्ट प्रस्तुत किया गया है। जिसकी प्रति इस पत्र के साथ संलग्न कर सादर सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित की जा रही है।

संलग्नक: उपरोक्तानुसार।

भवदीय,

  
अपर जिलाधिकारी(वि०/रा०)  
प्रभारी अधिकारी(खनन)  
सहारनपुर।

प्रतिलिपि:-

1. निदेशक, भूतत्व एवं खनिकर्म निदेशालय, खनिज भवन, उ० प्र० लखनऊ।
2. सदस्य सचिव, राज्य स्तरीय विशेषज्ञ मूल्यांकन समिति (SEAC), लखनऊ।

  
अपर जिलाधिकारी(वि०/रा०)  
प्रभारी अधिकारी(खनन)  
सहारनपुर।

## SUB-DIVISIONAL COMMITTEE, DISTRICT – SAHARANPUR

Line of Action for conducting Replenishment Study (Year-2024) in conformity to directions provided in Chapter 05 of Enforcement & Monitoring Guidelines for Sand Mining -2020 issued by MoEF&CC.

➤ Timelines for Pre and Post Monsoon Replenishment Study - 2024

Sl.No.	Details of Works	Approx. No. of Work Days in Pre-monsoon	Approx. No. of Work Days in Post-monsoon
1	Geotagging , Physical Survey and D.G.P.S Survey for Mineral Reserve estimation of various leases and baseline data collection for ground elevations.	12 days	15 days
2	Interpretation and Analysis of Geotagged data , Physical Survey data and D.G.P.S Survey data in software server /software processing tools for preparation of output records.	10 days	12 days
3	Preparation of Ground Control Point Record / Field Survey Report on the basis of survey data and software processed data.	7 days	8 days
<b>TOTAL Work Days</b>		<b>29 days</b>	<b>35 days</b>

  
Mines Inspector  
Saharanpur (Member)

  
Mines Officer  
Saharanpur (Member)

  
Executive Engineer  
Irrigation Construction Division  
Saharanpur (Member)

  
Regional Officer  
U.P. Pollution Control Board.  
Saharanpur (Member)

  
SDO Forest/DFO  
Saharanpur (Member)

  
SDM Nakur  
Saharanpur (Member)

  
DFO  
SHIVALIK (Member)

  
SDM Behat  
Saharanpur (Member)

  
Geologist/Regional Officer  
Geology And Mining Dept  
Ghaziabad/Saharanpur

  
Additional District Magistrate  
(F&R)  
Saharanpur (Chairman)

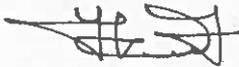
**Pre & Post-Monsoon <sup>881</sup>plenishment Study**  
**With**  
**Reserve Estimation Report of**  
**R.B.M. / Sand Mining Leases - District Saharanpur**  
**Study Period — 2024**



  
**Mines Inspector**  
 Saharanpur (Member)

  
**Mines Officer**  
 Saharanpur (Member)

  
**Executive Engineer**  
 Irrigation Construction Division  
 Saharanpur (Member)

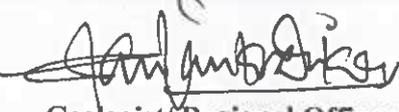
  
**Regional Officer**  
 U.P. Pollution Control Board  
 Saharanpur (Member)

  
**SDO Forest / DFO**  
 Saharanpur (Member)  
 सहायनपुर

  
**SDM Nakur**  
 Saharanpur (Member)

  
**DFO**  
 SHIVALIK (Member)

  
**SDM Behat**  
 Saharanpur (Member)

  
**Geologist/ Regional Officer**  
 Geology And Mining  
 Department  
 Ghaziabad/Saharanpur

  
**Additional District Magistrate**  
 (F&R)  
 Saharanpur (Chairman)

**Prepared by- Sub-Divisional Committee – District Saharanpur**

Formed vide. D.M. Office Order dated 05/01/2023 , ref. no. 1617/ ख० अनु०/ जिला०सर्वे० रिपो/2021

# TABLE OF CONTENT

Sl. No	Content
1	Background & Introduction
2	Objective of Study
3	Methodology
4	District and River Profile
5	Sediment Composition
6	Inventory of R.B.M. Leases in District Saharanpur
7	The concept of Natural Resource Accounting with Monitoring Mechanism
8	Lease wise analysis of Pre & Post monsoon (2024) replenishment study results with recommendation
9	Conclusion & Recommendation of Sub-Divisional Committee
10	Environmental Observations and Enforcement Monitoring recommendation
11	Annexures <ul style="list-style-type: none"> <li>• Study Area Maps in SOI Toposheet</li> <li>• Survey Maps in Satellite Images with Geo-coordinates and River Flow</li> <li>• Ground Control Records of Leases</li> <li>• Lease wise Index of profile Sections</li> </ul>



**Replenishment Study Report – 2024 (District Saharanpur)**

## 1 - Background & Introduction

### Background

- A replenishment study, particularly in the context of sand mining, aims to assess the rate at which sand is naturally replenished in a river or stream, ensuring that extraction doesn't exceed the river's capacity to naturally replenish itself, thereby preventing ecological damage.
- The Chapter-5 of the Enforcement & Monitoring Guidelines for Sand Mining (EMGSM-2020) issue by MoEF&CC provides generic structure and mechanism for conducting Replenishment Studies.
- The replenishment study in district Saharanpur was earlier conducted in Year-2022 and Year-2023 by Sub-Divisional Committee. Final reports were prepared in compliance the provisions of Sustainable Sand Management Guidelines – 2016 and its latest guidelines EM Guidelines for Sand Mining – 2020.
- Important details related to sediment transport and composition, purpose of study, methodology , district profile , ground water scenario, regional geology of district, mineral resources, rainfall & climate , description of study area rivers, analysis of particle size distribution, gradient analysis , list of software / manpower and equipment's, inventory of leases were incorporated in the Report of Year-2022.
- In total Twenty-Two (22) leases measuring 422.635 ha. were surveyed and studied in various River Channels.



**Replenishment Study Report – 2024 (District Saharanpur)**

- The findings of Replenishment Studies of year 2023 is summarized as under:-

Sl.	Teshil	River	Village	Gata / Khand	Area (in Ha.)	Pre Monsoon Reserve - 2023 (A) - cum	Post Monsoon Replenishment - 2023 (B) - cum	Total Resource in - 2023 (A+B) - cum	Annual Production proposed in DSR out of Total Resource - cum
1	Behat	Badshahibagh Rao	Mayapur Rooppur	Gata No. 14/1	3.100	99980	29039	129019	69750
2	Behat	Yamuna	Bartha Korsi	Gata No. - 1	36.000	174518	802800	977318	756000
3	Behat	Badkala Ra	Haidarpur Hindwala	Khand No / Gata No. - 8/1, 19 & 22	4.200	64708	100004	164712	94500
4	Behat	Khurwali Ra	Sherpur Pelon	Gata No. - 378/2 & 379/2	7.000	218677	202300	420977	197500
5	Behat	Yamuna	Nuniyari Achatmal	Gata No. - 1/1/1 Laa 38	24.290	950600	456773	1407373	437247
6	Bchat	Yamuna	Rchna	Khand No. / Gata no. - 03, Lot No - 03	8.050	266780	139265	406045	138462
7	Behat	Gaisara Rao	Rahena	Gata No. 179/2	3.750	119102	71813	190915	67500
8	Nukur	Yamuna	Dhikkan Kalan	Gata No. - 839, 841 to 856, 858, 859, 860, 861, 863, 864, 865, 866, 867, 871, 872, 888, 889, 406, 407	52.630	158700	1089441	1248141	947368
9	Behat	Khurwali Ra	Sherpur Pelon	403, 404/1, 405, 406/1, 416/2, 421/1, 422/2, 423/2, 424/2, 429 and 431	6.475	296450	104895	401345	77700
10	Behat	Kaluwala	Kaluwala Pahadipur	119/1, 120/1, 192/1, 193/1, 125/4	14.900	489972	299490	789462	178800
11	Behat	Yamuna	Akbarpur Bans Achatmal	1	17.900	734092	345470	1079562	322200
12	Behat	Yamuna	Arazi Jevadi Ahatmal and Masoodpur Garh Achatmal	1 and 1	13.800	532096	251160	783256	248400
13	Behat	Yamuna	Shebjadpur Bans Achatmal	1	13.000	572455	129740	702195	234000
14	Behat	Yamuna	Alauddinpur Bans Achatmal	1/1	9.580	480653	189684	670337	172440
15	Behat	Yamuna	Mehmoodpur Nangli Achatmal	1	15.700	709400	284170	993570	282600

### Replenishment Study Report – 2024 (District Saharanpur)



Sl.	Teshil	River	Village	Gata / Khand	Area (in Ha.)	Pre Monsoon Reserve - 2023 (A) - cum	Post Monsoon Replenishment - 2023 (B) - cum	Total Resource in Lease - 2023 (A+B) - cum	Annual Production proposed in DSR out of Total Resource - cum
16	Behat	Yamuna	Shahpur Bans Achatmal	1/1	15.600	495866	291876	787742	280800
17	Behat	Yamuna	Nityanandpur Achatmal and Said-mohamadpur Achatmal	1 and 1ma	17.700	921500	350460	1271960	318600
18	Behat	Yamuna	Abutalibpur Garh Achatmal	1	37.000	2201550	713360	2914910	666000
19	Behat	Yamuna	Nuniyari Athmal - Khand Second	1/1/1	19.000	745000	375250	1120250	342000
20	Behat	Yamuna	Aslampur Bartha - First	1/1 M	36.600	1665200	688080	2353280	658800
21	Behat	Yamuna	Rasoolpur Urf Rasooli	1/1	34.000	1262100	631380	1893480	612000
22	Behat	Yamuna	Aslampur Bartha - Second	1/1 M	28.160	951900	520960	1472860	506880



### Replenishment Study Report - 2024 (District Saharanpur)

Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left and several smaller ones on the right.

### Introduction of Replenishment Study Report – Year-2024

- The current studies are report has been prepared by taking the methodology, references and baseline date of Report published in Year-2022 and 2023.
- On the basis of same, fresh field investigation and D.G.P.S based survey were conducted in pre & post monsoon period of year 2024 in 22 leases and results are reported on the basis of collected baseline data.
- Out of total 22 leases, three (03) leases were operational which attained production and mineral dispatch in this period. Rest 19 leases were closed/vacant which replenished in past year as well as this year.
- Final interpretation on leases, replenished quantity, mineral reserves estimation with conclusion and recommendation has been reported in this replenishment study report.

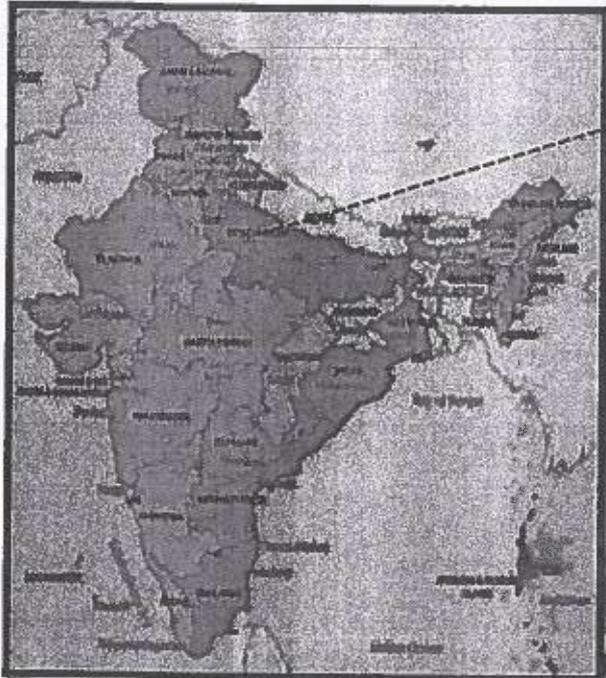
### ➤ Comparison actual Total available Resource, D.S.R. planned production and Actual production done by lease holders from 1-Oct-2023 till 30-June-2024.

Sl.	Teshil	River	Village	Gata / Khand	Area (in Ha.)	Total Resource in – 2023 post-monsoon (A+B) - cum	Annual Production proposed in DSR out of Total Resource - cum	Actual production done on Period of 1-Oct-2023 till 30-June-2024 - cum
2	Behat	Yamuna	Bartha Korsi	Gata No. - 1	36.000	977318	756000	754962
3	Behat	Badkala Ra	Haidarpur Hindwala	Khand No / Gata No. - 8/1, 19 & 22	4.200	164712	94500	95500
8	Nukur	Yamuna	Dhikkan Kalan	Gata No. - 839, 841 to 856, 858, 859, 860, 861, 863, 864, 865, 866, 867, 871, 872, 888, 889, 406, 407	52.630	1248141	947368	542947



### Replenishment Study Report – 2024 (District Saharanpur)

### Study Area - Saharanpur, Uttar Pradesh



### Replenishment Study Report – 2024 (District Saharanpur)

Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left and several smaller ones on the right.

## 2 - Objective of Study

- ❖ A replenishment study, particularly in the context of sand mining, aims to assess the rate at which sand is naturally replenished in a river or stream, ensuring that extraction doesn't exceed the river's capacity to naturally replenish itself, thereby preventing ecological damage.
- ❖ The primary goal of a replenishment study is to determine the "sustainable yield" of a river, meaning the amount of sand that can be extracted without causing long-term harm to the river's ecosystem or its physical characteristics.
- ❖ Sand mining can have significant impacts on riverbeds, including changes in channel geometry, bed elevation, and substratum composition. A replenishment study helps to understand these impacts and ensure that mining activities do not lead to unsustainable practices.
- ❖ The Chapter-5 of the Enforcement & Monitoring Guidelines for Sand Mining (EMGSM-2020) issue by MoEF&CC provides generic structure and mechanism for conducting Replenishment Studies.
- ❖ The main emphasis for the need for replenishment study for river bed sand is required in order to nullify the adverse impacts arising due to excessing sand extraction.
- ❖ Removal of excess sand and stone from river bed helps to maintain the carrying capacity and provides protection from flooding during monsoon season. Further, continuous flow of river is essential for ecological and economic needs such as irrigation and biodiversity etc. Therefore, drainage study of the river helps to understand potential carrying capacity of water during monsoon season which is generated from rainfall in the watershed and quantity of di-siltation of rivers under mining affected areas.

Replenishment Study Report – 2024 (District Saharanpur)



Page 7 of 163

Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left and several smaller ones on the right.

- ❖ In line with same, Replenishment study was carried out for Sand/R.B.M. leases of District Saharanpur. Quantification and estimation of river bed material (RBM) was accomplished by following three scientific approaches as envisaged in Sustainable Sand Management Guidelines – 2016 (SSMG-2016) and its contemporary guidelines Enforcement & Monitoring Guidelines for Sand Mining (EMSM-2020) issued by MoEF&CC in January-2020.
- ❖ Mining areas were geo-tagged and surveyed for analysis of study of the availability/potential of sand and gravel. Estimation of deposition and safe limit for extraction/ removal of deposited river bed material (RBM) available in the various rivers/streams were done by analysing elevation profiles and pit profiles at regular intervals with the help of D.G.P.S. based Survey.
- ❖ The pre and post monsoon data were collected and analysed and co-related and final results with river wise recommendation has been recommended in the report.



**Replenishment Study Report – 2024 (District Saharanpur)**









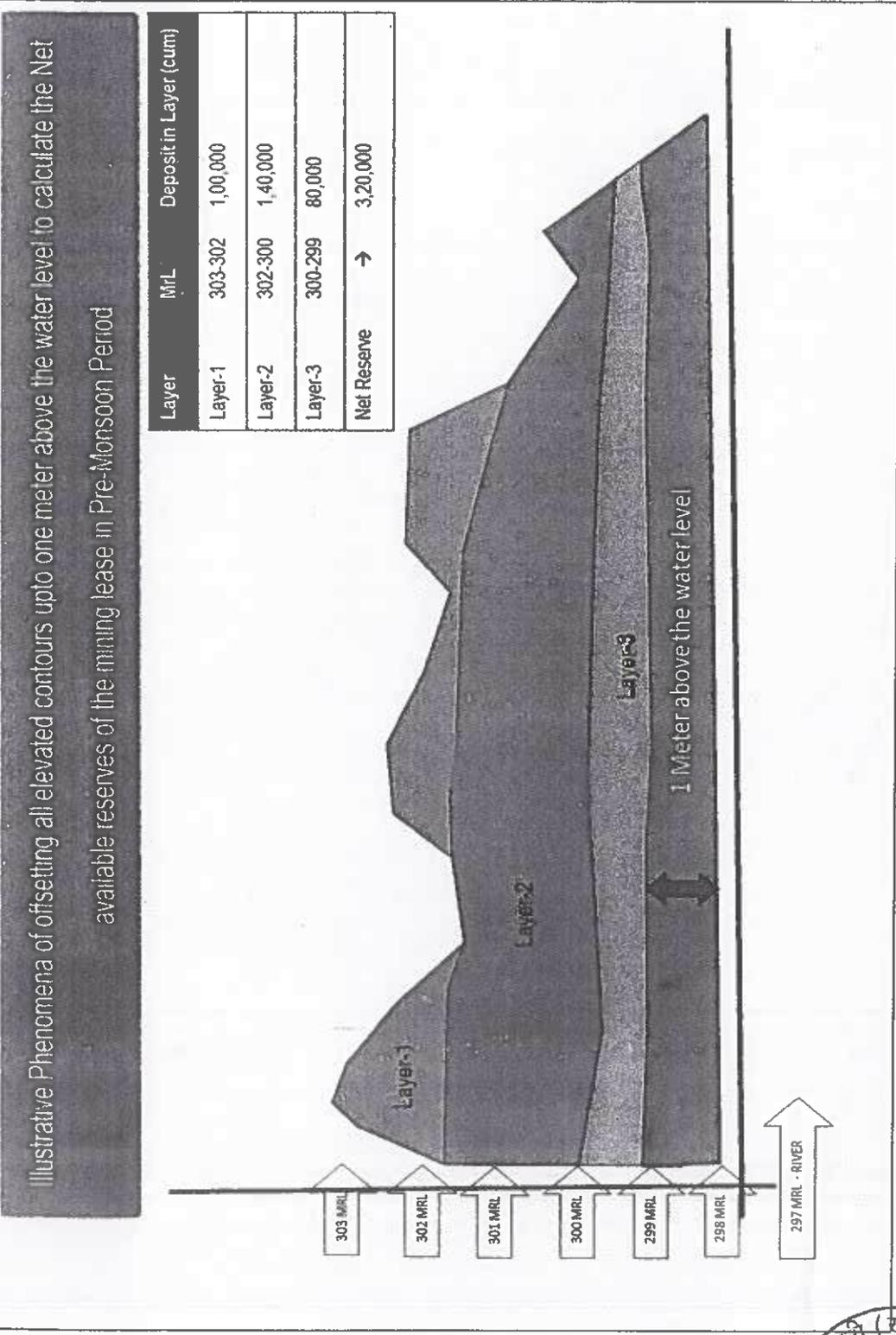

### 3 - Methodology

- **For Resource estimation in pre-monsoon period.**
  - ❖ The main aim of the survey work and measurements is to carry out the collection of baseline data in pre-monsoon period which will be repeated in post-monsoon period to assess the quantum of replenishment.
  - ❖ For river R.B.M. reserve estimation the river was surveyed at the ground and the corner coordinates were determined with the help of D.G.P.S. so that the lease area boundaries are obtained.
  - ❖ Deposits 1 meter above the river water level was considered as existing resource deposits in pre-monsoon period. For this base flow level of river was determined.
  - ❖ Physical survey of lease and collection of information related to existing reserves and by conducting pit profiles are regular intervals with the help of JCB Machine and digging equipment's such as Auger, spade, hand shovel, hammer, measuring tape etc. were done.
  - ❖ The factors considered for Reserve Estimation were Bed Thickness, Area, Water Levels, Grading of mineral with wentworth scale.
  - ❖ For estimating reserves, geological modelling on the basis of data collected from field were done in Geological and Mining software. For geomodelling and resource estimation AutoCad and Microsoft Excel were used.



Replenishment Study Report – 2024 (District Saharanpur)

Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left and several smaller ones on the right.



Replenishment Study Report – 2024 (District Saharanpur)

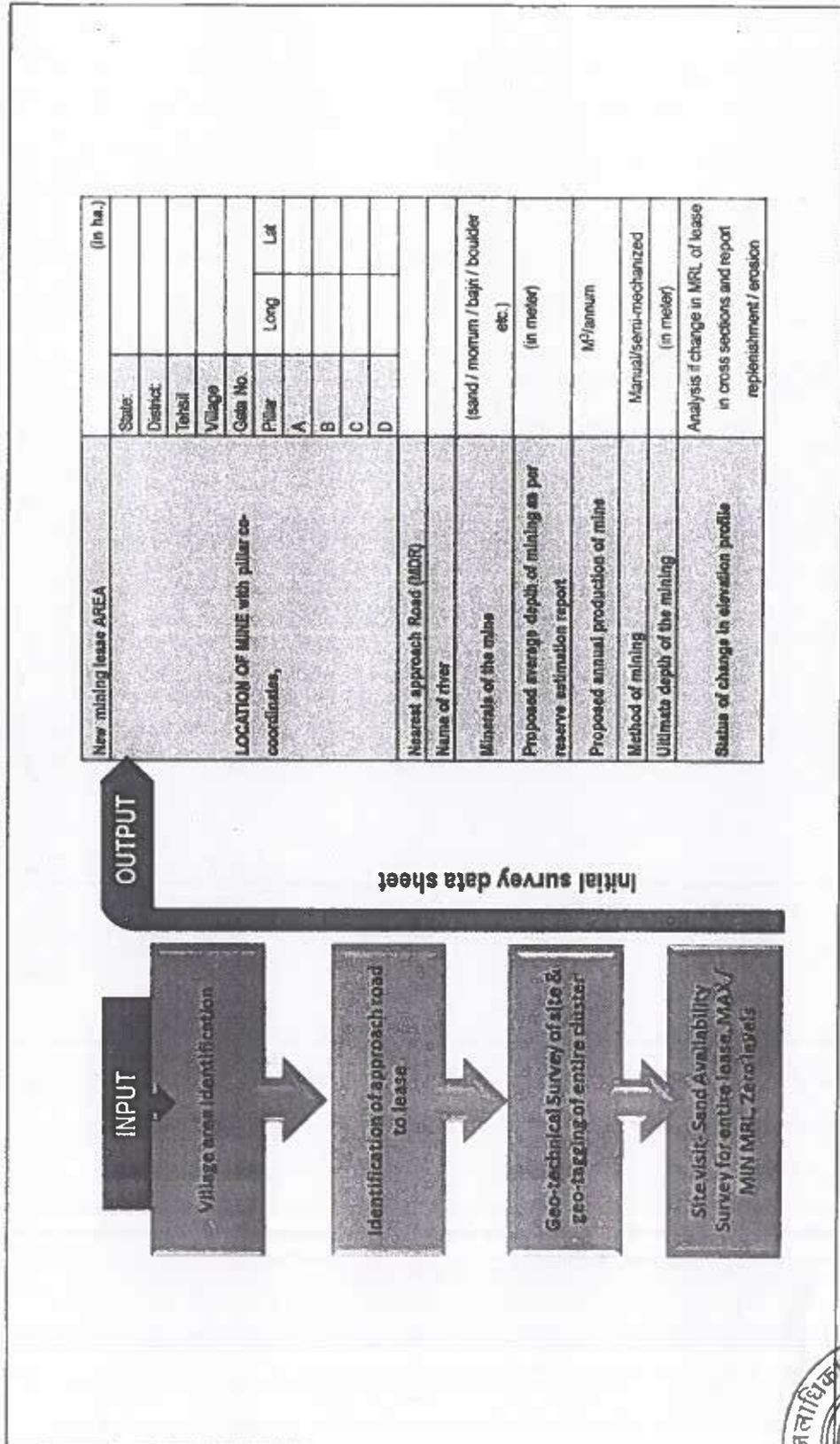
*Handwritten signature and scribbles in blue ink.*

Page 10 of 163  
*Handwritten signature and scribbles in blue ink.*

- **Methodology of Replenishment Study in pre and post monsoon periods**
  - ❖ The main aim of the survey work and measurements was to carry out the collection of baseline data in pre-monsoon period which was repeated in post-monsoon period to assess the quantum of replenishment.
  - ❖ The leases were divided in a grid of regular intervals for point specific D.G.P.S. survey. A number of Ground Control Points in each corner of grid were established on each site. The D.G.P.S. survey observations were taken at regular grid intervals in longitudinal direction and in perpendicular across direction depending on the geological conditions of leases. The number of sections along and across the river depend on the length and width of lease, its dimension as well as ground conditions.
  - ❖ The studies were done on the basis of individual mines approach. Study plans were prepared for all the leases and each lease was surveyed with DGPS and elevation records in regular intervals were recorded. Inventory of the recorded "Elevation Index" of leases were prepared in pre and post monsoon period.
  - ❖ Changes in the elevation in pre and post monsoon period in each interval (called Ground Control Point- GCP) was tabulated. Area of deposition for each cross section was calculated and summation deposition at each GCP was done to report the overall thickness observed in the post-monsoon period.
  - ❖ The methodology followed is in conformity to the Enforcement & Monitoring Guidelines for Sand Mining – 2020 issued by MoEF in January-2020 which envisages that Regular Replenishment study needs to be carried out to keep a balance between deposition and extraction.
  - ❖ Specific emphasis has been given to the norms provided in the Section-5 of Enforcement & Monitoring Guidelines for Sand Mining – 2020 which provides procedure to be followed for conducting replenishment study.

Replenishment Study Report – 2024 (District Saharanpur)





Replenishment Study Report – 2024 (District Saharanpur)

Handwritten signatures and initials are present across the bottom of the page, including a prominent signature on the right side.

#### 4 - District and River Profile

- District Saharanpur is north-western part of Uttar Pradesh, lying between 29°34' and 30°24' N latitude and 77°07' and 77°58' E longitude falling within the survey of India toposheet nos. 53F and 53G. River Yamuna marks the western boundary of the district separating U.P. from adjoining state of Haryana. The extreme north-western part like beak structure touches with Sirmaur district of Himanchal Pradesh. In north lies Dehradun (Uttarakhand) and in the east it faces Haridwar district also being the part of Uttarakhand State. Muzaffar Nagar and Shamli districts marks southern boundary.
- Saharanpur forms the most northerly position of the Doab land which stretches between the holy rivers of the Ganges and the Yamuna, The Shivalik hills rise above it on the northern frontier. The portion of Doab in which Saharanpur is situated was probably one of the first region of upper India occupied by the Aryans colonisers as they spread eastward from the Punjab.
- Saharanpur district attained the status as Saharanpur division in 1997 of Uttar Pradesh. As regards its physical features the north and the north east of the district is surrounded by Shivalik hills and separates it from the Dehradun district in the recently created state of Uttranchal. The river Yamuna forms its boundary in the west which separates it from Karnal and Yamunanagar districts of Haryana. In the East lies the district of Haridwar which was the part of district Saharanpur before 1989 and in the south lies the district Muzafarnagar. At the time of the British Rule District Muzafarnagar was also a part of district Saharanpur.



Replenishment Study Report – 2024 (District Saharanpur)

- The district presents many varieties of features and differs in general appearance than any other portion of the Doab and Gangetic plain as a whole. It is true that most of the area belongs to the upland Bangar which stretches in a continuous line up to Allahabad i.e. Junction of the two great rivers and on the either side is the broad and low lying valley full of swamps and back waters with wide open grass plains and Tamarisk jungle but in the north, There are the steep hills of Shivalik chain which appear in a far more marked form in Saharanpur than any other district of Uttar Pardesh while below the hills are to be seen in a modified form the prevailing characteristics of the Bhabar and Tarai region.
- The main characteristics of the district can be divided into four parts.
  - Shivalik Hill Tract
  - The Bhabar Land
  - Bangar Land
  - Khadar Land (Yamuna, Hindon)
- Yamuna is the important river of the district. Apart from this Solani, Hindon, Ratmau, Nagdev have also played an important role in the physical reconstruction of the district. All the rivers of the district submerge either in Yamuna or in the Ganges.



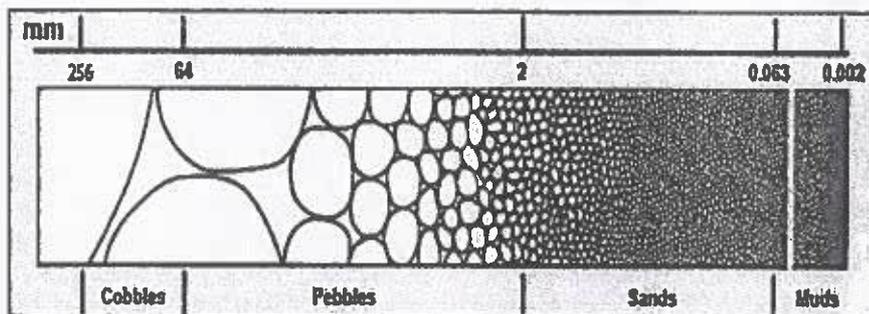
**Replenishment Study Report – 2024 (District Saharanpur)**

## 5 - Sediment Composition

District Saharanpur can be divided into three physiographic divisions, the **structural hills**, the upper physiographic divisions, the structural hills, the upper piedmont plains or the **Bhabar**, and the **Terai** or the lower piedmont plains.

### Structural Hills:

The entire northern part of the district is formed structural hills named



Siwaliks. In this area the relief is high with steep and sharp hill slopes. The rugged topography of the area affords well for high run off. In the area the upper and middle Siwaliks are encountered but the lower Siwaliks are missing. Lithologically the Siwaliks here are composed of sand stones, conglomerates, sand, clays and silts. There are several major and minor faults.

### The Bhabar:

The second units lying just below the foothills of Siwalik locally called as Bhabhar, is characterized by boulders, pebbles, cobbles etc. with relatively dry terrains fringing. The Siwalik foot hills with gradient around 5 m/km. which is much higher than the southern plains.

Geologically the term Bhabhar is used to deposits formed along the foothill zone by coalescence of series of alluvial and talus cones, composed of heterogeneous materials ranging in texture from boulder, gravel to sand and silt. These Bhabhars in Saharanpur district are known as 'Dhar' covering



mostly the 'Muzaffarabad' and 'SadauliQuadim' blocks.

### Tarai:

Just south of Bhabar zone lies the 'Tarai' or the plains of piedmont plain. The plains sloping gradually by southward have around 1.5m/km. gradient.

Lithologically, the area is characterized by coarse sand & gravel.

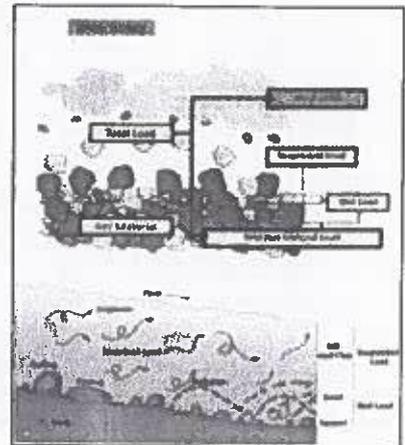
These plains are further divided into lower piedmont plains the older alluvial plains and the younger alluvial plains. The lower piedmont plains show flat to undulating plains with gradient towards southwest.

The older alluvial plains also show flat to undulating topography characterized by sediments brought by rivers Yamuna and Ganga.

The younger alluvial plains lie along river Yamuna exhibiting gently sloping and slightly undulating terrains. It comprises younger unconsolidated alluvial material of varying lithology consisting of fluvial land formed as paleo-channels, meanness scar and point bars. The younger alluvial plains also consist of sand bars flood plains and ravines along river Yamuna.

### SEDIMENT TRANSPORT

Sediment transport is the movement of solid particles (sediment), typically due to a combination of gravity acting on the sediment, and/or the movement of the fluid in which the sediment is entrained. Sediment transport occurs in natural systems where the particles are clastic rocks (sand, gravel, boulders, etc.), mud or clay; the fluid is air, or water, and the force of gravity acts to move the particles along the sloping surface on which they are resting. Sediment transport due to fluid motion occurs in rivers, oceans, lakes, seas, and other bodies of water due to currents and tides. Sediment transport due only to gravity can occur on sloping surfaces in general, including hill- slopes, scarps, cliffs, and the continental shelf. continental slope boundary.



Replenishment Study Report – 2024 (District Saharanpur)

## TYPES OF SEDIMENT LOAD

- **Bed-load:** That portion of the sediment load that is transported along the bed by sliding, rolling or hopping. The bed-load moves at velocities slower than the flow and spends most of its time on or near the stream bed. The mechanisms of grain motion are as follows:
  - **Traction (rolling and sliding):** Important factors: frictional drag and lift forces exerted by the flow and slope.
  - **Saltation (hopping):** Grains are temporarily suspended by fluid vortices or by ballistic impact and then released. Grain movement may be continuous or intermittent depending on the flow regime.

**Suspended load:** They are particulate sediment that is carried in the body of the flow and moves at the same velocity as the flow. A small particle (e.g. clay and fine silt), with a large relative surface area, is held in suspension more easily because of the electrostatic attraction between the unsatisfied charges on grain's surface and the water molecules. This force, tending to keep the particle in the flow, is large compared to the weight of the particle. The Hjulstrom curve shows that a much higher velocity is required to entrain clay and fine silt than coarse sand. However, once the fine sediment is in suspension, a much lower velocity is required to maintain it in suspension. The quantity and quality of the load is defined in terms of competence and capacity.

**Dissolved load:** material that is chemically carried in the water. The factors that govern the percentage of dissolved and suspended load include:

- Climate: temperature, precipitation, vegetation
- Vegetation: type and amount
- Activity by man: mining, construction, clear cutting, etc.



Replenishment Study Report – 2024 (District Saharanpur)

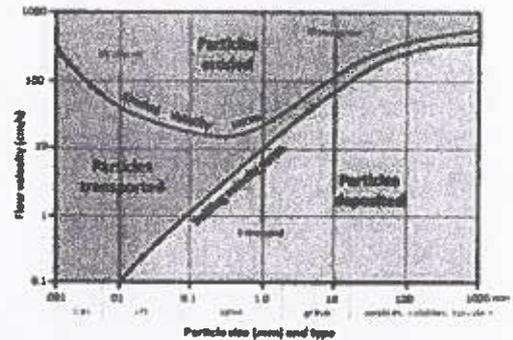
Page 17 of 163

- Rock solubility: e.g. hard water in carbonate terranes
- Erodibility of materials in the drainage basin
- Relief and slope (affects PE of flow)

**Wash Load:** Sometimes finer particles from upland catchment (sizes which are not present in the bed material), called wash load, are also transported in suspension. The combined bed material and wash load is called Total load.

### TRANSPORT RATE

When the velocity of water flowing over a bed of non-cohesive sediment flow overcomes the resistance offered by the grain due to its mass, cohesion and other forces. Properties like shape and position of centre of gravity of the grain play important roles in



determining the degree of resistance offered. A diagram compiled by Hjulstrom (1935) revealed the relationship between critical erosion velocity and grain size. The field above the curve indicates the condition suitable for entrainment of grains.

Formulas to calculate sediment transport rate exist for sediment moving in several different parts of the flow. These formulas are often segregated into bed load, suspended load, and wash load. They may sometimes also be segregated into bed material load and wash load.

### DEFINING BED LOAD

Bed load moves by rolling, sliding, and hopping (or saltating) over the bed, and moves at a small fraction of the fluid flow velocity. Bed load is generally thought to constitute 5 -10% of the total sediment load in a stream, making it less important in terms of mass balance. However, the bed material load (the bed load plus the portion of the suspended load which comprises material

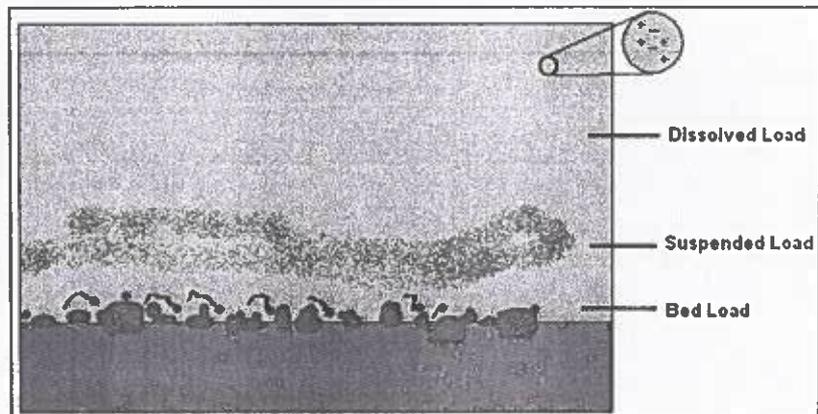
Replenishment Study Report – 2024 (District Saharanpur)



derived from the bed) is often dominated by bed load, especially in gravel - bed rivers. This bed material load is the only part of the sediment load that actively interacts with the bed. As the bed load is an important component of that, it plays a major role

in controlling the morphology of the channel. Bed load transport rates are usually expressed as being related to excess dimensionless shear stress raised to some power. Excess dimensionless shear stress is a non -dimensional measure of bed shear stress about the threshold for motion.

Dissolved load is not sediment. It is composed of disassociated ions moving along with the flow. It may, however, constitute a significant



proportion (often several percent, but occasionally greater than half) of the total amount of material being transported by the stream.

### DEFINING WASHLOAD

The distinction between bed-material-load and wash-load components of the total load adopted here is that wash load is not found in appreciable quantities in the bed of channel. However, the precise definition of what constitutes an appreciable quantity is unclear, meaning that the threshold grain size separating bed- material load and wash load may be defined in several ways. Wash load is the grain size of which 10 percent of the bed mixture is finer. This basically different behaviour of the fine and the coarse particles in the same channel has led the author and collaborators to assume that the fine particles

Replenishment Study Report – 2024 (District Saharanpur)



*[Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left and several smaller ones on the right.]*

in the flows till behave like material called Wash load in the concrete channel whereas the coarse particle act like the sediment in a strictly alluvial channel.

**Composition:** The composition of wash load is distinct because it is almost entirely made up of grains that are only found in small quantities in the bed. Wash load grains tend to be very small (mostly clays & silts but some fine sands) and therefore have a small settling velocity, being kept in suspension by the flow turbulence.

**Velocity:** Wash load is carried within the water column as part of the flow, and therefore moves with the mean flow velocity of main stream. Because there is little or no interaction with the bed, the particles extract only negligible momentum from the flow.

**Wash Load Dynamics:** There is no universally accepted definition of wash load, yet despite this, the wider concept that sediment in transport that is finer than that making up the bed of the channel behaves differently and plays a different role in the sediment transfer system is widely perceived to have merit and has often proven useful in river engineering studies. In this respect, there are three tenants within the wash load and bed-material load concept that are relevant from a practical regional sediment management perspective. It follows that changes in the quantity of wash load in transport (due to the addition or removal of washload sources) will seldom trigger significant morphological responses and marked changes to the stability of the channel. Conversely, imbalances in the bed-material load will usually drive local morphological response through channel scour (where transport capacity exceeds supply) or fill (where supply exceeds transport capacity). Second, the quantity of wash load carried by a stream is limited not by the streams's sediment transport capacity, but by the available supply. It follows that it is only the bed-material load that most sediment transport equations can calculate on the basis of the transport capacity indicated by the local flow hydraulics. Wash load

**Replenishment Study Report – 2024 (District Saharanpur)**



transport cannot be predicted this way, but can only be estimated on the basis of comprehensive, quantitative assessment of wash-load sediment sources. Third, the movement of wash load is relatively rapid compared to that of the bed-material load. In a sand-bed channel, where the wash load is composed of fine sands, silts and clays that are fairly evenly distributed throughout the water column, wash load may move through the channel.



Replenishment Study Report – 2024 (District Saharanpur)

Handwritten signatures and initials are present below the title. On the right side, the text 'Page 21 of 163' is printed.

## 6 - Inventory of R.B.M./Sand Leases in District Saharanpur

Sl. No	Tehsil	River	Village	Gata No. / Khand No.	Area (ha.)	Pillar	Latitude	Longitude
1	Behat	Badshahibagh Rao	Mayapur Rooppur	Gata No. 14/1	3.100	A	30° 19' 21.41" N	77° 38' 26.35" E
						B	30° 19' 17.62" N	77° 38' 30.56" E
						C	30° 19' 13.68" N	77° 38' 25.07" E
						D	30° 19' 17.44" N	77° 38' 20.78" E
2	Behat	Yamuna	Bartha Korsi	Gata No. - 1	36.000	A	30° 14' 00.94" N	77° 31' 13.91" E
						B	30° 14' 16.50" N	77° 31' 24.43" E
						C	30° 14' 13.69" N	77° 31' 31.19" E
						D	30° 14' 19.59" N	77° 31' 37.85" E
						E	30° 14' 37.10" N	77° 31' 40.80" E
						F	30° 14' 39.19" N	77° 31' 36.25" E
						G	30° 14' 26.08" N	77° 31' 29.05" E
						H	30° 14' 09.19" N	77° 31' 02.18" E
3	Behat	Badkala Ra	Haidarpur Hindwala	Khand No / Gata No. - 8/1, 19 & 22	4.200	A	30° 15' 20.64" N	77° 40' 42.10" E
						B	30° 15' 20.54" N	77° 41' 00.42" E
						C	30° 15' 17.98" N	77° 41' 01.84" E
						D	30° 15' 17.71" N	77° 40' 42.89" E
4	Behat	Khurwali Ra	Sherpur Pelon	Gata No. - 378/2 & 379/2	7.000	A	30° 15' 52.04" N	77° 39' 22.56" E
						B	30° 15' 51.84" N	77° 39' 27.43" E
						C	30° 16' 06.24" N	77° 39' 31.26" E
						D	30° 16' 07.18" N	77° 39' 25.07" E
5	Behat	Yamuna	Nuniyari Achatmal	Gata No. - 1/1/1 Laat 38	24.290	A	30° 11' 00.90" N	77° 29' 25.83" E
						B	30° 11' 12.98" N	77° 29' 12.21" E
						C	30° 11' 24.95" N	77° 29' 26.28" E
						D	30° 11' 21.79" N	77° 29' 29.68" E
						E	30° 11' 20.39" N	77° 29' 33.03" E
						F	30° 11' 18.64" N	77° 29' 33.83" E
						G	30° 11' 17.01" N	77° 29' 34.70" E
						H	30° 11' 14.93" N	77° 29' 32.01" E
						I	30° 11' 09.54" N	77° 29' 31.55" E
						J	30° 11' 03.46" N	77° 29' 30.00" E



**Replenishment Study Report – 2024 (District Saharanpur)**

Page 22 of 163

Sl. No	Tehsil	River	Village	Gata No. / Khand No.	Area (ha.)	Pillar	Latitude	Longitude
6	Behat	Yamuna	Rehna	Khand No. / Gata no. - 03, Lot No - 03	8.050	A	30° 21' 36.45" N	77° 36' 05.61" E
						B	30° 21' 29.62" N	77° 36' 00.26" E
						C	30° 21' 37.95" N	77° 35' 50.38" E
						D	30° 21' 41.71" N	77° 36' 02.50" E
7	Behat	Gaisara Rao	Rahena	Gata No. 179/2	3.750	A	30° 19' 56.17" N	77° 36' 33.21" E
						B	30° 19' 52.90" N	77° 36' 33.93" E
						C	30° 19' 50.54" N	77° 36' 20.87" E
						D	30° 19' 53.90" N	77° 36' 20.01" E
8	Nukur	Yamuna	Dhikkan Kalan	Gata No. - 839, 841 to 856, 858, 859, 860, 861, 863, 864, 865, 866, 867, 871, 872, 888, 889, 406, 407	52.63	A	30° 1' 20.61" N	77° 17' 23.68" E
						B	30° 1' 24.58" N	77° 17' 15.45" E
						C	30° 1' 32.77" N	77° 17' 19.87" E
						D	30° 1' 42.25" N	77° 17' 24.49" E
						E	30° 1' 41.34" N	77° 17' 31.04" E
						F	30° 1' 52.02" N	77° 17' 39.09" E
						G	30° 1' 54.80" N	77° 17' 51.61" E
						H	30° 1' 56.88" N	77° 17' 52.96" E
						I	30° 2' 27.71" N	77° 18' 5.82" E
						J	30° 1' 59.86" N	77° 18' 8.25" E
						K	30° 1' 57.85" N	77° 18' 7.25" E
						L	30° 1' 58.76" N	77° 18' 5.82" E
						M	30° 1' 57.46" N	77° 18' 4.89" E
						N	30° 1' 57.00" N	77° 18' 1.96" E
						O	30° 1' 53.50" N	77° 18' 0.53" E
						P	30° 1' 47.64" N	77° 17' 52.52" E
Q	30° 1' 42.10" N	77° 17' 46.53" E						
R	30° 1' 32.38" N	77° 17' 39.44" E						
S	30° 1' 27.11" N	77° 17' 31.55" E						
9	Behat	Khairawali Ra	Sherpur Pelon	403, 404/1, 405, 406/1, 416/2, 421/1, 422/2, 423/2, 424/2, 429 and 431	6.475	A	30° 16' 35.16" N	77° 39' 44.44" E
						B	30° 16' 32.34" N	77° 39' 51.41" E
						C	30° 16' 21.11" N	77° 39' 36.26" E
						D	30° 16' 22.11" N	77° 39' 34.41" E



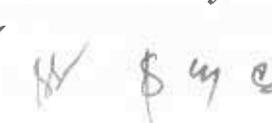
### Replenishment Study Report – 2024 (District Saharanpur)

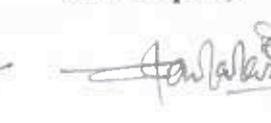
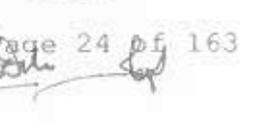
Page 23 of 163

Sl. No	Tehsil	River	Village	Gata No. / Khand No.	Area (ha.)	Pillar	Latitude	Longitude
10	Behat	Kaluwala	Kaluwala Pahadipur	119/1, 120/1, 192/1, 193/1, 125/4	14.900	A	30°12'08.76"N	77°45'37.77"E
						B	30°12'06.03"N	77°45'42.25"E
						C	30°12'00.52"N	77°45'38.93"E
						D	30°11'40.91"N	77°45'32.39"E
						E	30°11'41.72"N	77°45'25.51"E
						F	30°12'02.80"N	77°45'33.06"E
11	Behat	Yamuna	Akbarpur Bans Achatmal	1	17.900	A	30°16'27.80"N	77°32'46.96"E
						B	30°16'34.01"N	77°32'47.53"E
						C	30°16'42.58"N	77°32'53.94"E
						D	30°16'43.84"N	77°32'58.19"E
						E	30°16'50.96"N	77°32'47.76"E
						F	30°16'46.69"N	77°32'43.28"E
						G	30°16'39.98"N	77°32'41.04"E
						H	30°16'36.08"N	77°32'33.91"E
12	Behat	Yamuna	Arazi Jevadi Ahatmal and Masoodpur Garh Achatmal	1 and 1	13.800	A	30°15'51.33"N	77°32'21.84"E
						B	30°15'58.45"N	77°32'08.63"E
						C	30°15'45.65"N	77°32'03.15"E
						D	30°15'41.84"N	77°32'13.01"E
13	Behat	Yamuna	Shehjadpur Bans Achatmal	1	13.000	A	30°15'24.84"N	77°31'57.01"E
						B	30°15'12.32"N	77°31'47.88"E
						C	30°15'16.91"N	77°31'36.94"E
						D	30°15'28.43"N	77°31'48.83"E
14	Behat	Yamuna	Alauddinpur Bans Achatmal	1/1	9.580	A	30°16'14.92"N	77°32'39.76"E
						B	30°16'17.99"N	77°32'32.74"E
						C	30°16'08.09"N	77°32'23.84"E
						D	30°16'02.92"N	77°32'31.72"E
15	Behat	Yamuna	Mehmoodpur Nangli Achatmal	1	15.700	A	30°16'02.98"N	77°32'30.74"E
						B	30°16'10.84"N	77°32'18.84"E
						C	30°16'00.40"N	77°32'11.56"E
						D	30°15'51.70"N	77°32'23.64"E



Replenishment Study Report – 2024 (District Saharanpur)

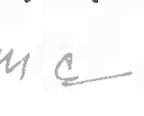



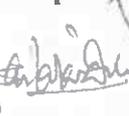



Sl. No	Tehsil	River	Village	Gata No. / Khand No.	Area (ha.)	Pillar	Latitude	Longitude
16	Behat	Yamuna	Shahpur Bans Achatmal	1/1	15.600	A	30°16'27.75"N	77°32'46.14"E
						B	30°16'16.01"N	77°32'38.50"E
						C	30°16'20.43"N	77°32'28.70"E
						D	30°16'35.53"N	77°32'33.20"E
17	Behat	Yamuna	Nityanandpur Achatmal and Said-mohamadpur Achatmal	1 and 1ma	17.700	A	30°15'25.77"N	77°31'57.79"E
						B	30°15'41.32"N	77°32'12.89"E
						C	30°15'46.16"N	77°32'00.64"E
						D	30°15'28.87"N	77°31'50.13"E
18	Behat	Yamuna	Abutalibpur Garh Achatmal	1	37.000	A	30°14'41.78"N	77°31'38.30"E
						B	30°14'49.46"N	77°31'21.34"E
						C	30°15'16.20"N	77°31'36.25"E
						D	30°15'11.96"N	77°31'46.05"E
19	Behat	Yamuna	Nuniyari Athmal – Khand Second	1/1/1	19.000	A	30°11'6.47"N	77°29'18.52"E
						B	30°11'4.27"N	77°29'16.54"E
						C	30°10'59.70"N	77°29'14.05"E
						D	30°10'55.77"N	77°29'10.53"E
						E	30°10'46.29"N	77°29'4.02"E
						F	30°10'39.87"N	77°29'0.42"E
						G	30°10'46.96"N	77°28'51.89"E
						H	30°10'51.56"N	77°28'56.26"E
						I	30°10'49.46"N	77°28'58.83"E
						J	30°11'2.30"N	77°29'11.12"E
						K	30°11'7.26"N	77°29'5.46"E
						L	30°11'12.52"N	77°29'11.64"E
20	Behat	Yamuna	Aslampur Bartha – First	1/1M	36.600	A	30°13'45.87"N	77°31'09.07"E
						B	30°13'23.05"N	77°30'53.85"E
						C	30°13'13.45"N	77°30'42.33"E
						D	30°13'16.67"N	77°30'36.60"E
						E	30°13'50.98"N	77°30'57.80"E
21	Behat	Yamuna	Rasoolpur Urf Rasooli	1/1	34.000	A	30°12'17.09"N	77°30'18.81"E
						B	30°12'16.42"N	77°30'17.32"E
						C	30°12'05.34"N	77°30'13.17"E
						D	30°11'59.82"N	77°30'01.24"E
						E	30°11'46.33"N	77°29'58.50"E
						F	30°11'59.32"N	77°29'43.47"E
						G	30°12'21.10"N	77°29'43.47"E

### Replenishment Study Report – 2024 (District Saharanpur)



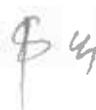


Sl. No	Tehsil	River	Village	Gata No. / Khand No.	Area (ha)	Pillar	Latitude	Longitude
	Behat	Yamuna	Aslampur Bartha - Second	1/1M	28.160	A	30°13'04.93"N	77°30'44.59"E
						B	30°12'35.50"N	77°30'28.50"E
						C	30°12'38.19"N	77°30'18.84"E
						D	30°13'09.39"N	77°30'35.57"E



**Replenishment Study Report – 2024 (District Saharanpur)**





## 7 - The concept of Natural Resource Accounting with Monitoring Mechanism

The Sub-Divisional committee in past studies of year 2022 went through following references while conducting Replenishment Study of the leases prior recommending the promulgation of the concept of Natural Resource Accounting with Monitoring Mechanism: -

Sl. No	Reference	Details
1	Section-3 of the Enforcement & Monitoring Guidelines for Sand Mining-2020	The Section deals with the Objective of Guidelines wherein Identification and Quantification of Mineral Resource and its optimal utilization, To regulate the Sand & Gravel Mining in the Country since its identification to its final end-use by the consumers and the general public, Reduction in demand & supply gaps. To control the instance of illegal mining and other factors has been recommended.
2	Uttar Pradesh Sand Mining Policy – 2017 and subsequent G.O.'s	The said policies and G.O.'s deals with the identification and allotment of long term lease for a period of 5 (five) years on e-auction basis.
3	Section-9 of the Enforcement & Monitoring	The Section deals with the Monitoring Mechanism by referring the provisions of 23(C) of MMDR Act empowering State



**Replenishment Study Report – 2024 (District Saharanpur)**

	Guidelines for Sand Mining- 2020	Government to make rules to prevent illegal mining and transportation (9.1) , standard practice for assessing illegal mining and Monitoring Mechanism ( 9.4)
4	EAC meeting Minutes Dated 24 & 25 – October – 2016 (non-coal mining)	Wherein the EAC opined the issues related to replenishment study for perennial and non-perennial rivers.
5	Sand Mining Framework 2018 issued by Ministry of Mines	Registration of lease holder, stock holders and transporters in portal, assessment of quantity by joint inspection team, geo-fencing, monitoring the de-casting of river beds, e-permits, transportation monitoring using CCTV/Drone.

**The Sub-Divisional Committee opined and suggests following: -**

1. Time to time identification of lease with mineral potential is required to canalize river.
2. Time to time identification of lease with mineral potential is required to address the market needs and demand/supply gaps.
3. Time to time identification of lease with mineral potential and its timely auction is required; as there are larger chances of illegal mining in vacant lease areas.
4. Time to time identification of lease with mineral potential is required to generate employment, state royalties to enable development.



**Replenishment Study Report – 2024 (District Saharanpur)**

*[Handwritten mark]*

*[Handwritten signature]*

5. However, there has to be balance between exploitation and conservation of mineral resources and the same has to be closely monitored.
6. The exploitation / conservation monitoring to promote and regulate sustainable mining can be achieved by a check-n-balance model.
7. The studies has shown that leases in its existing form are mineral rich and surface removal is required for occurrence of new replenishment and river channelization.
8. The Sub-Divisional Committee suggests the concept of Natural Resource Accounting with Monitoring Mechanism.

**Concept of Natural Resource Accounting with Monitoring Mechanism:-**

1. The concept shall work in the simple but effective principals of accounting methods wherein the existing mineral potential shall be treated as opening balance and replenished quantity shall be treated as a income.
2. The addition of existing mineral potential and replenished quantity shall be treated a Total Mineral Balance available on the lease.
3. A life of mine (in years) shall be derived by dividing Total Mineral Balance with the sanctioned annual production.
4. The Total Mineral Balance will then be reduced by subtracting the actual mineral dispatches and revised life of mine (in years) shall be derived on yearly basis.
5. If the life of mine (in years) at any juncture of point shall be observed to be less than 3 (three) months , a red alert shall be raised and the Monitoring Mechanism shall be implemented as per the recommended clause ***“Project Proponent shall decrease / stop the mining in case replenishment is lower than the approved rate of production till the replenishment is completed”***



**Replenishment Study Report – 2024 (District Saharanpur)**

Page 29 of 163

## 8 - Lease wise analysis of Year 2024 Replenishment Study Results with Recommendation

Sl.	Teshil	River	Village	Gata/ Khand	Area (in Ha.)	Pre- Monsoon Reserve - 2024 (A) - cum	Post Monsoon Replenishm ent - 2024 (B) - cum	Total Resource in Lease - 2024 (A+B) - cum	Annual Production proposed in DSR out of Total Resource - cum
1	Behat	Badshahibagh Rao	Mayapur Rooppur	Gata No. 14/1	3.100	129190	29884	159074	69750
2	Behat	Yamuna	Bartha Korsi	Gata No. - 1	36.000	222583	817200	1039783	756000
3	Behat	Badkala Ra	Haidarpur Hindwala	Khand No / Gata No. - 8/1, 19 & 22	4.200	70255	68292	138547	94500
4	Behat	Khurwali Ra	Sherpur Pelon	Gata No. - 378/2 & 379/2	7.000	420910	107100	528010	197500
5	Behat	Yamuna	Nuniyari Achatmal	Gata No. - 1/1/1 Laat 38	24.290	1407390	408558	1815948	437247
6	Behat	Yamuna	Rehna	Khand No. / Gata no. - 03, Lot No - 03	8.050	406100	121555	527655	138462
7	Behat	Gaisara Rao	Rahena	Gata No. 179/2	3.750	190877	50850	241727	67500
8	Nukur	Yamuna	Dhikkan Kalan	Gata No. - 839, 841 to 856, 858, 859, 860, 861,863,864,865,86 6,867, 871, 872, 888, 889, 406, 407 403, 404/1, 405, 406/1, 416/2, 421/1 , 422/2, 423/2, 424/2, 429 and 431	52.630	705163	973655	1678818	947368
9	Behat	Khurwali Ra	Sherpur Pelon	119/1, 120/1, 192/1 , 193/1, 125/4	6.475	401290	58275	459565	77700
10	Behat	Kaluwala	Kaluwala Pahadipur	119/1, 120/1, 192/1 , 193/1, 125/4	14.900	789388	171350	960738	178800
11	Behat	Yamuna	Akbarpur Bans Achatmal	1	17.900	1079510	286400	1365910	322200
12	Behat	Yamuna	Arazi Jevadi Achatmal and Masoodpu r Garh Achatmal	1 and 1	13.800	783200	230460	1013660	248400
13	Behat	Yamuna	Shehjadpu r Bans Achatmal	1	13.000	702180	216840	919020	234000
14	Behat	Yamuna	Alauddin pur Bans Achatmal	1/1	9.580	670350	161902	832252	172440
15	Behat	Yamuna	Mehmood pur Nangli Achatmal	1	15.700	993545	265330	1258875	282600
16	Behat	Yamuna	Shahpur Bans Achatmal	1/1	15.600	787766	270660	1058426	

Replenishment Study Report – 2024 (District Saharanpur)



Sl.	Teshil	River	Village	Gata/ Kband	Area (in Ha.)	Pre- Monsoon Reserve - 2024 (A) - cum	Post Monsoon Replenishm ent - 2024 (B) - cum	Total Resource in Lease -2024 (A+B) -cum	Annual Production proposed in USR out of Total Resource -cum
17	Behat	Yamuna	Nityanand pur Aehatmal and Said- mohamad pur Aehatmal	1 and 1ma	17.700	1271990	279660	1551650	318600
18	Behat	Yamuna	Abutalibp ur Garh Aehatmal	1	37.000	2914855	457320	3372175	666000
19	Behat	Yamuna	Nuniyari Athmal - Khand Second	1/1/1	19.000	1120200	324900	1445100	342000
20	Behat	Yamuna	Aslampur Bartha - First	1/1 M	36.600	2353270	552660	2905930	658800
21	Behat	Yamuna	Rasoolpur Uff Rasooli	1/1	34.000	1893430	499460	2392890	612000
22	Behat	Yamuna	Aslampur Bartha - Second	1/1 M	28.160	1472880	368896	1841776	506880

### IMPORTANT NOTE:-

- Total Quantity available in each lease in year 2024 is result of pre-monsoon existing reserves and post monsoon replenishment.
- Pre-monsoon existing reserves in 14 leases are higher in quantity as they have not been operated in past many years and are getting replenished every years. It is again recommended that deposits from these lease needs to be timely removed to ensure river channelization and river diversion. (mainly Sl. No. 9 to Sl. No.22)
- However, after applying the principals of SSMG-2016 and EMGSM-2020 Guidelines, only a sustainable volume of less than 60% of total resource has been proposed for annual production. Hence the balance resource and quantity due to forthcoming replenishments in coming years will be used in phased to ensure sustainable productions and mineral conservation to ensure demand supply gaps.



Replenishment Study Report – 2024 (District Saharanpur)

Page 31 of 163

## 9 - Conclusion & Recommendation of Sub-Divisional Committee

### Conclusion:-

- In year-2024, Pre & Post-monsoon study of total Twenty-Two (22) leases in district Saharanpur where done as per the methodology elaborated in the Report.
- The Study was done to report the quantity of new mineral arriving / depleting after monsoon after interpreting the pre and post-monsoon baseline data collection of elevation profiles through D.G.P.S. at regular intervals.
- Since the district is located in foothills of Himalaya's and Downstream of Hatnikund Barrage the rate of replenishment in all the leases is substantial due to supportive gradient levels and discharges of mineral from Barrage in monsoon.
- The results of such year wise surveys will help the state government to establish the replenishment rate of the river based on which future action may be planned.
- Pit profiles up-to the depth of 3 meters in each lease were done to estimate the quantity of reserve and analyse sustainable mining to be recommended for grant/operations of leases. No water intersection was observed.

### Recommendation on River Yamuna -

- Out of 22 leases, 16 leases admeasuring 383.21 ha. are located in river Yamuna which is a perennial river.
- It was observed that 12 out of 16 leases in river Yamuna are non operational since past 5-6 years which are currently over replenished. The elevation levels of such leases above the water level are much high.



**Replenishment Study Report – 2024 (District Saharanpur)**

Page 32 of 163

as a result of which the replenishment has now started in its adjoining areas. It is recommended that removal of existing deposits in such leases should be done in a timely manner so as to maintain the natural river course. In such manner time-to-time surface removal of excessive deposits will enable to maintain the geometry of river and invite proper replenishment in coming times.

- The timely operations of such lease is also recommended to control the illegal mining (if any) in the vacant areas which are having existing substantial deposits.
- It is recommended that keeping in the view the concept of Natural Resource Accounting method and long term operations of leases in a sustainable manner, the mining in lease areas of river Yamuna can be permitted upto a depth of 3 meters from mineral deposit surface and one meter above the water level of river channel whichever reaches out earlier.
- However, on aspect of environment protection, mineral conservation and long term sustainable operations of lease, it is also recommended that out of the total available net reserve ; not more that 60% of the mineral potential volume available upto a depth of 3 meters should be recommended for annual production at one point of time.

#### **Recommendation on other Five Rivers**

- The remaining 6 leases admeasuring 39.425 ha. are located in five rivers namely Badkala Ra , Badshahibagh Rao , Gaisara Rao Kaluwala and Khurwali Ra.
- The study results show that all these five rivers are non- perennial in nature. All the five rivers expericnced adequate water flow in current monsoon period.



Replenishment Study Report – 2024 (District Saharanpur)

Page 33 of 163

- The committee observed that these five rivers do not replenish annually as they are non-perennial in nature.
- Hence the study of annual replenishment in such rivers has to be more specific and nature based due to non-periodic rainfall. With the pit profiles conducted while physical survey, study results, elevation profiles, river geometry and stake holding with local villagers it was observed that these rivers in the recent past of 5-10 years got over replenished due to sudden one time occurrence of huge rainfall due to which substantial quantum's of RBM has come from the from the upstream and eventually got deposited in the leases.
- The present levels of deposits show that it can be utilised over a spread of next years, however the operations of these mines is to be critically evaluated while recommending annual production. This is due to the fact that after operations of mines if they are not replenished property the leases may turn into permanent depressions leading to change in natural channel geometry.
- It is recommended that keeping in the view the concept of Natural Resource Accounting method and long term operations of leases in a sustainable manner, the mining in identified lease areas can be permitted upto a depth of 3 meters from mineral deposit surface and one meter above the water level of river channel whichever reaches out earlier, as there are substantial existing reserves, due to sudden one-time occurrence explained above.
- However, on aspect of environment protection, mineral conservation and long term sustainable operations of lease, it is also recommended that out of the total available net reserve; not more than 40% of the mineral potential volume available upto a depth of 3 meters should be recommended for annual production at one point of time.



**10 - Environmental Observations and Enforcement  
Monitoring recommendation**

1. The Sub-Divisional committee shall periodically monitor the results of replenishment study, levels of mineral production, erosion levels and erosion points.
2. Management and maintenance plans of erosion levels and erosion points shall be prepared and implemented on the basis of observations made.
3. Mining shall only be permitted upto a depth of 3 meters or 1 meter above the water level whichever is reached earlier.
4. The results of scientific replenishment study shall be co-related with production levels and a mineral resource accounting systems will be implemented.
5. The monitoring and evaluation of such results shall be done once in three months by Sub-Divisional Committee.
6. The minable production and permissible depth of mining will be evaluated further on the basis of trend analysis in years to come and recommendations, as so, shall be made.
7. The mineral resource accounting system model is proposed to be implemented to keep the checks and balances on minerals deposits.



Replenishment Study Report – 2024 (District Saharanpur)

Page 35 of 163



# Lease wise Study Area Maps

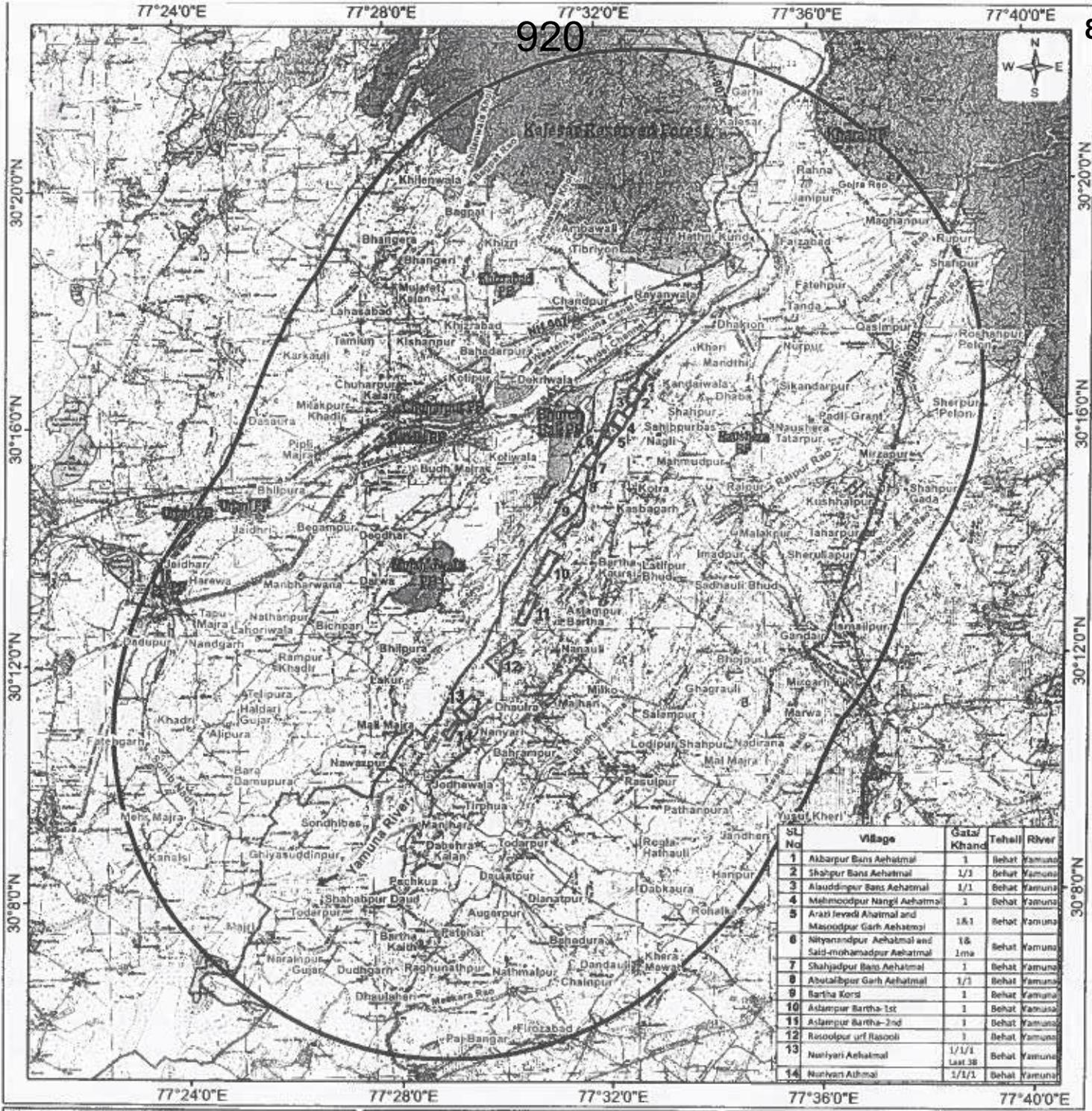


*[Handwritten signatures and initials]*

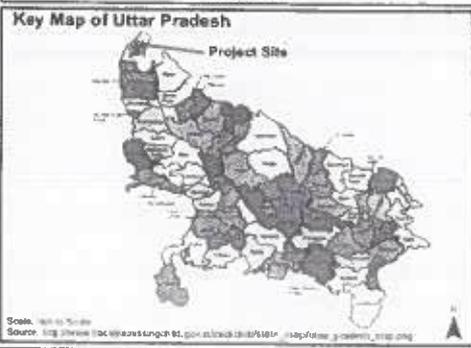
# Site on S.O.I. Toposheet Covering 5 Km Catchment Area



Handwritten signatures and initials in blue ink, including a large stylized signature on the left and several smaller initials and signatures on the right.



SL No	Village	Gata/ Khand	Tehsil	River
1	Akbarpur Bans Aehatmal	1	Behat	Yamuna
2	Shapur Bans Aehatmal	1/3	Behat	Yamuna
3	Alauddinpur Bans Aehatmal	1/1	Behat	Yamuna
4	Mahmoodpur Nangl Aehatmal	1	Behat	Yamuna
5	Arati Jevdi Aehatmal and Masoodpur Garh Aehatmal	1&1	Behat	Yamuna
6	Nityanandpur Aehatmal and Said-mohammadpur Aehatmal	1& 1ma	Behat	Yamuna
7	Shahjampur Bans Aehatmal	1	Behat	Yamuna
8	Abulajpur Garh Aehatmal	1/3	Behat	Yamuna
9	Bartha Kord	1	Behat	Yamuna
10	Aslampur Bartha-1st	1	Behat	Yamuna
11	Aslampur Bartha-2nd	1	Behat	Yamuna
12	Rasoolpur urf Rasooli	1	Behat	Yamuna
13	Nuriyari Aehatmal	1/1/1	Behat	Yamuna
14	Nuriyari Aehatmal	1/1/1	Behat	Yamuna



**Legend**

- Village/Town
- Project Site
- 10km Buffer

**Source:**

- Sol Toposheet No. 53F/7, 53F/8, 53F/11 & 53F/12
- Project Layout Plan, RBM
- Google Satellite Imagery, 2021

**Software Used:**

- ArcGIS 10.1
- AutoCAD 2012
- Erdas Imagine 10

**RF:- 1:115,000**

**Graphic Scale:**

**Figure 0.00: Drainage and Study Area Map**

**Project:**  
R.B.M. Mining Project  
Tehsil: Behat, District: Saharanpur, Uttar Pradesh

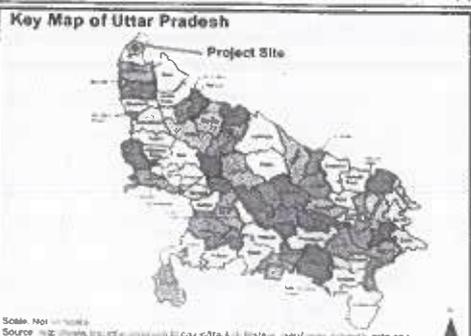
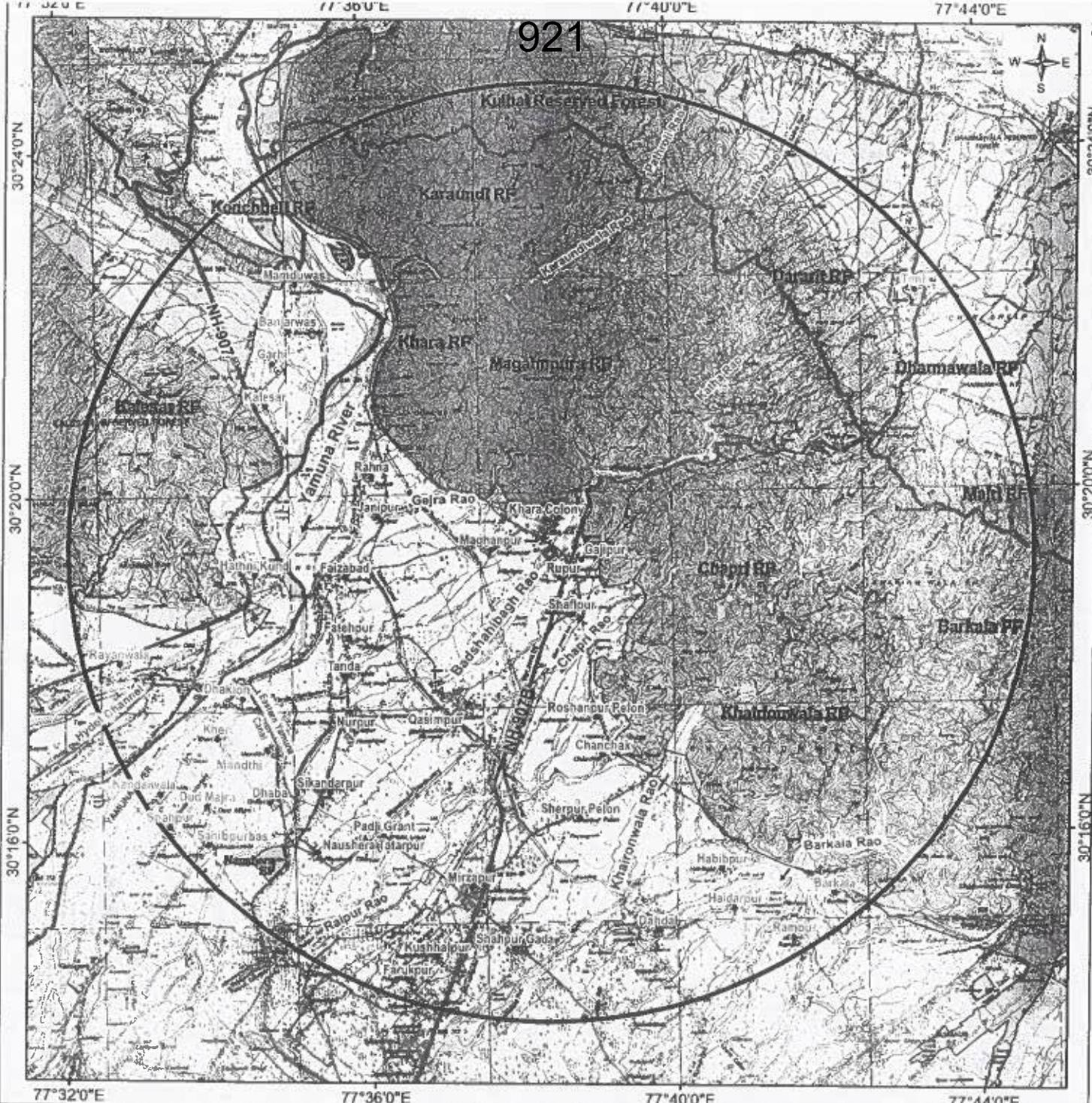
**Sub Divisional Committee Saharanpur**

Drafted By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_

Date: \_\_\_\_\_ Revision: \_\_\_\_\_



Handwritten signatures and notes at the bottom of the page.



**Legend**

- Village/Town
- Project Site
- 10km Buffer

**Source:**

1. Sol Toposheet No. 53F/11, 53F/12, 53F/15 & 53F/16
2. Project Layout Plan, RBM
3. Google Satellite Imagery, 2021

**Software Used:**

1. ArcGIS 10.1
2. AutoCAD 2012
3. Erdas Imagine 10

**RF:- 1:80,000**

**Graphic Scale:**

0 500 1,000 2,000 4,000 m

**Figure 0.00: Drainage and Study Area Map**

**Project:**  
R.B.M. Mining Project  
Tehsil: Behal, District: Saharanpur, Uttar Pradesh

Village: Mayapur Rooppur, Gola No./Khand No.: 14/1, Area: 3.10ha

**Sub Divisional Committee Saharanpur**

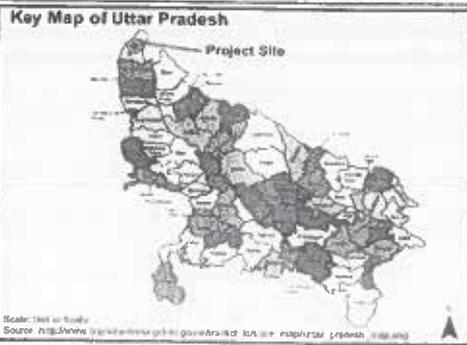
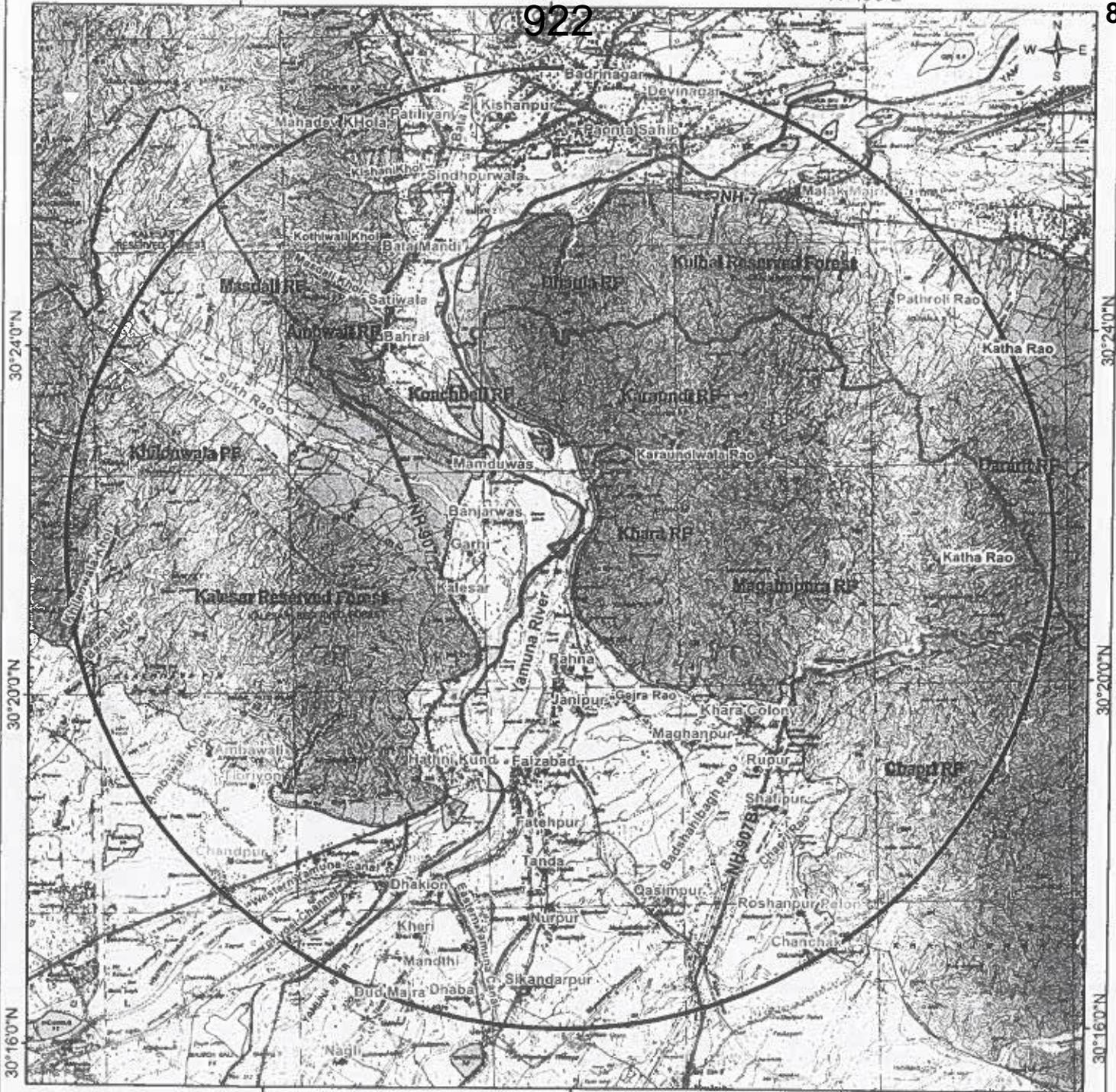
Drafted By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

Revision: \_\_\_\_\_

Page 40 of 163





**Legend**

- Village/Town
- Project Site
- 10km Buffer

**Source:**

- Sol Toposheet No. 53F/7 & 53F/11
- Project Layout Plan, RBM
- Google Satellite Imagery, 2021

**Software Used:**

- ArcGIS 10.1
- AutoCAD 2012
- Erdes Imagine 10

**RF:- 1:80,000**

**Graphic Scale:**

0 800 1,600 4,000 m

**Figure 0.00: Drainage and Study Area Map**

Project:  
R B M Mining Project  
Tehsil, Behal, District: Saharanpur, Uttar Pradesh

Village: Kehna, Cata No./Block No: 03, Loc No-03, Area: 8.05ha

**Sub Divisional Committee Saharanpur**

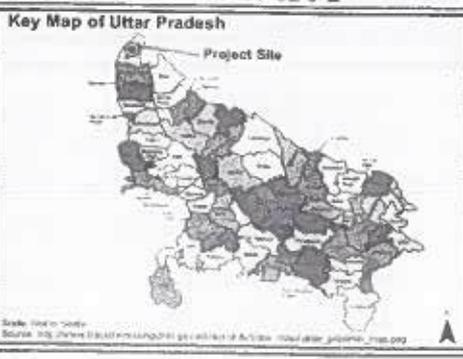
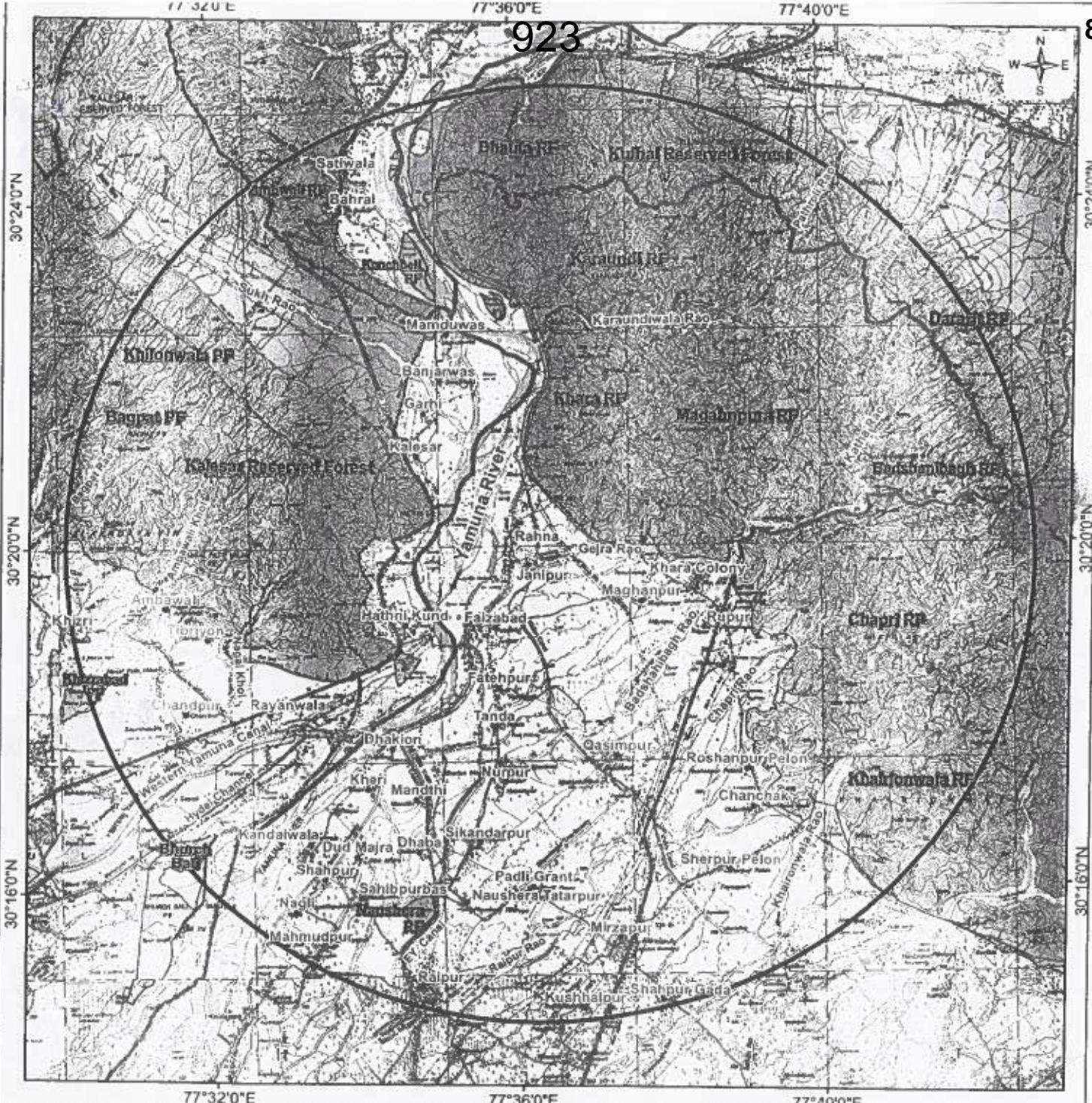
Drafted By: \_\_\_\_\_ Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

Revision: \_\_\_\_\_

Page 01 of 163

*Handwritten signatures and notes at the bottom of the page.*



**Legend**

- Village/Town
- Project Site
- 10km Buffer

**Source:**

- Sol Toposheet No. 53F/7, 53F/8, 53F/11 & 53F/12
- Project Layout Plan, R&M
- Google Satellite Imagery, 2021

**Software Used:**

- ArcGIS 10.1
- AutoCAD 2012
- Erdas Imagine 10

**RF:- 1:80,000**

**Graphic Scale:**

0 500 1000 4000 m

**Figure 0.00: Drainage and Study Area Map**

**Project:**  
R.B.M. Mining Project

**Tehsil:** Behat, District: Saharanpur, Uttar Pradesh

**Village:** Rohia, Gola No. (Kand) No. 1/9/2, Area: 3.750ha

**Sub Divisional Committee Saharanpur**

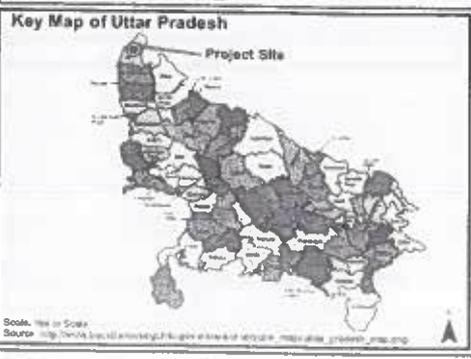
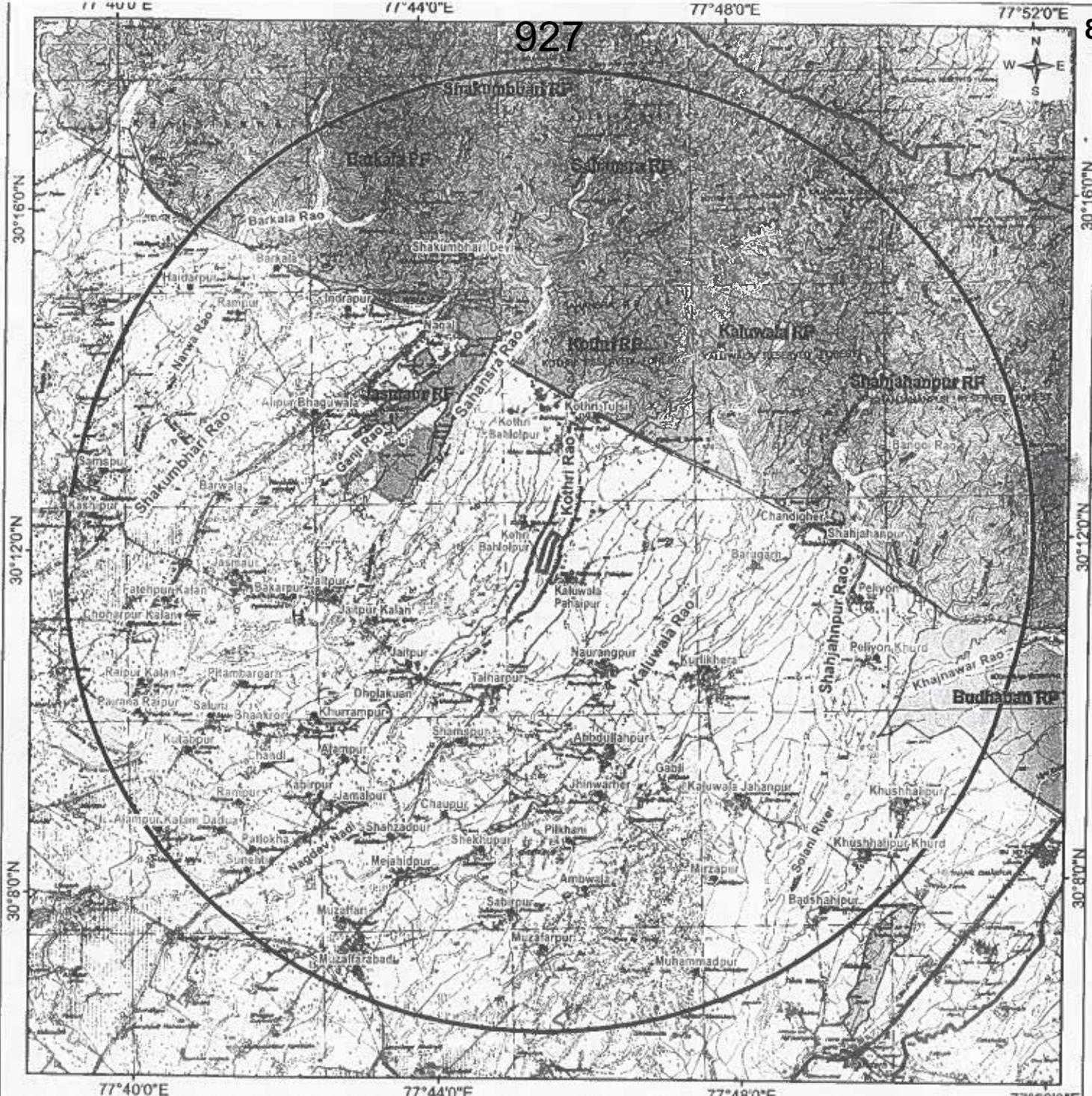
Drafted By:	Checked By:	Approved By:
Date:		
Revision:		

Page 62 of 163









**Legend**

- Village/Town
- Project Site
- 10km Buffer

**Source:**

- Sol Toposheet No. 53F/11, 53F/12, 53F/15 & 53F/16
- Project Layout Plan, RBM
- Google Satellite Imagery, 2021

**Software Used:**

- ArcGIS 10.1
- AutoCAD 2012
- Erdas Imagine 10

**RF:- 1:80,000**

**Graphic Scale:**

**Figure 0.00: Drainage and Study Area Map**

**Project:**  
R.B.M. Mining Project  
Tehsil: Behat, District: Saharanpur, Uttar Pradesh

Village: Kaluwala Pahadipur, Gola to /Khand No., 119/1, 120/1, 192/1, 193/1, 125/4  
Area: 14.90ha

**Sub Divisional Committee Saharanpur**

Drafted by: \_\_\_\_\_ Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_

Date: \_\_\_\_\_

Revision: \_\_\_\_\_

Page 46 of 163



Handwritten signature and notes at the bottom of the page.

# Replenishment Study Survey

Sheet superimposed on

Satellite Imaginary showing

—

Lease Area, Boundary Pillar

Coordinates and Basic Drainage

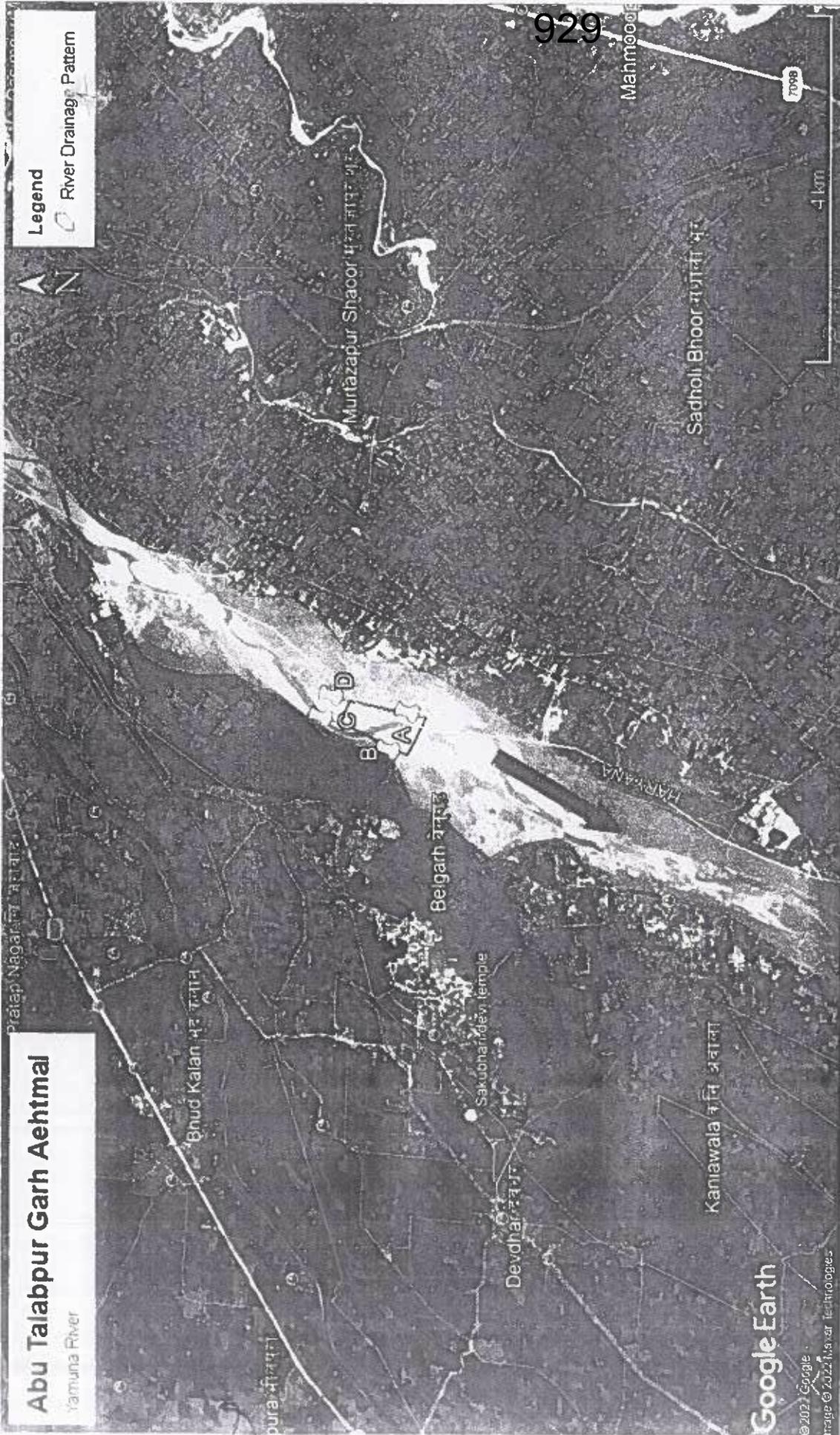
Pattern of River with Flow Direction



Handwritten signatures and initials in blue ink, including a large signature on the left and several smaller ones on the right.

# Abu Talabpur Garh Aehtmal

Yamuna River



929

## Legend

River Drainage Pattern

Pillars	Latitude (N)	Longitude (E)
Sanctioned Mining Lease Area (37.00 ha)	30°14'41.78"N	77°31'38.30"E
	30°14'49.46"N	77°31'21.34"E
	30°14'16.20"N	77°31'36.25"E
	30°14'11.96"N	77°31'46.05"E

LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Riverbed Material: Yamuna River	
Survey	Physical, Drone and DGPS
Survey Area	37.00 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil District
Abu Talabpur Garh	Behat Saharanpur
Survey By:	
Verified By:	

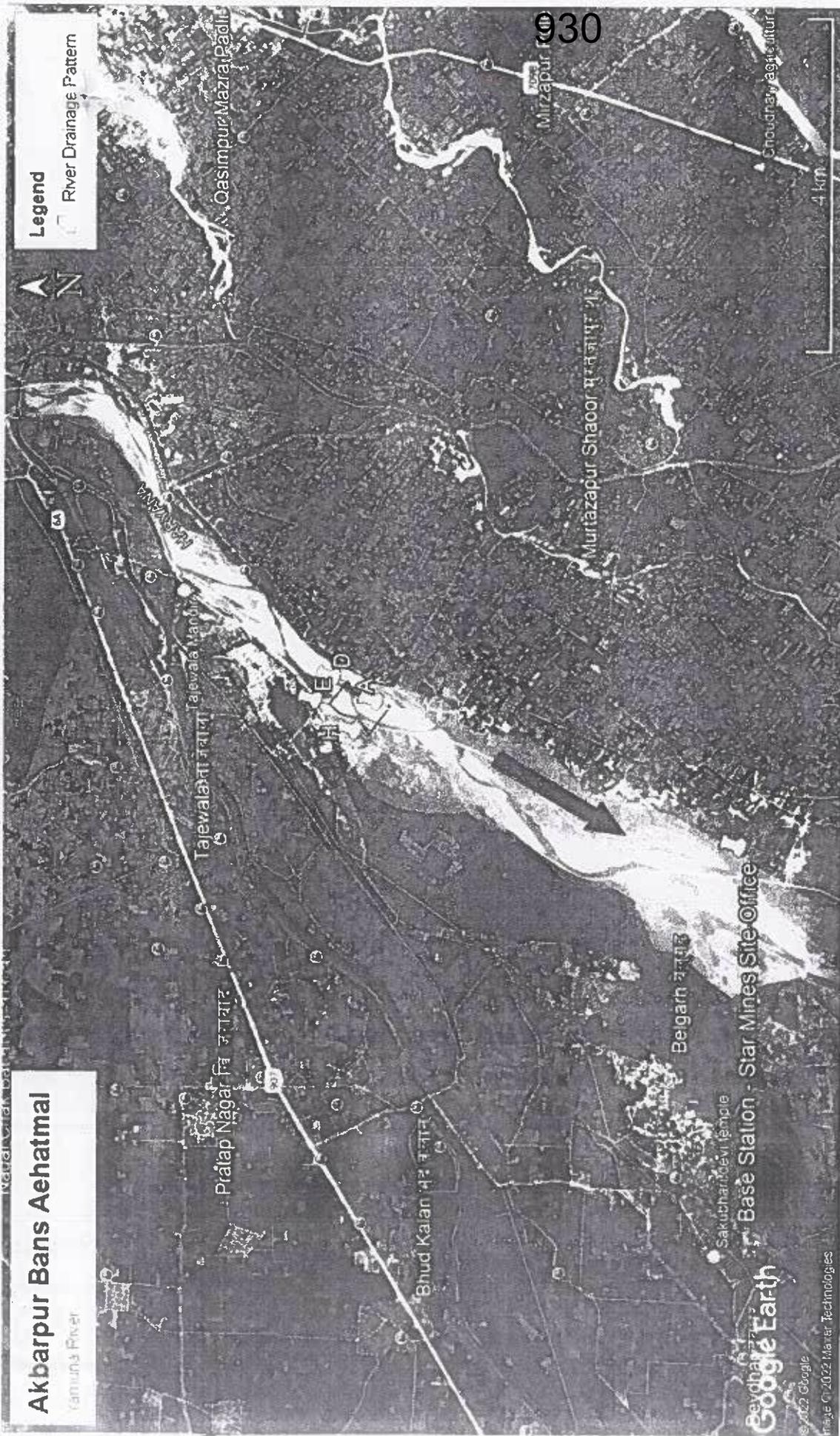


# Akbarpur Bans Aehatmal

Yamuna River

## Legend

River Drainage Pattern



Pillars	Latitude (N)	Longitude (E)
<b>Mining Lease Area (17.90 ha)</b>		
A	30°16'27.80"N	77°32'46.96"E
B	30°16'34.01"N	77°32'47.53"E
C	30°16'42.58"N	77°32'53.94"E
D	30°16'43.84"N	77°32'58.19"E
E	30°16'50.96"N	77°32'47.76"E
F	30°16'46.69"N	77°32'43.28"E
G	30°16'39.98"N	77°32'41.04"E
H	30°16'36.08"N	77°32'33.91"E

Sl. No.	Symbol	Description
1		Mine Lease Area
2		Drainage Pattern of River
3		Boundary Pillars
4		River Flow Direction
5		Map Scale

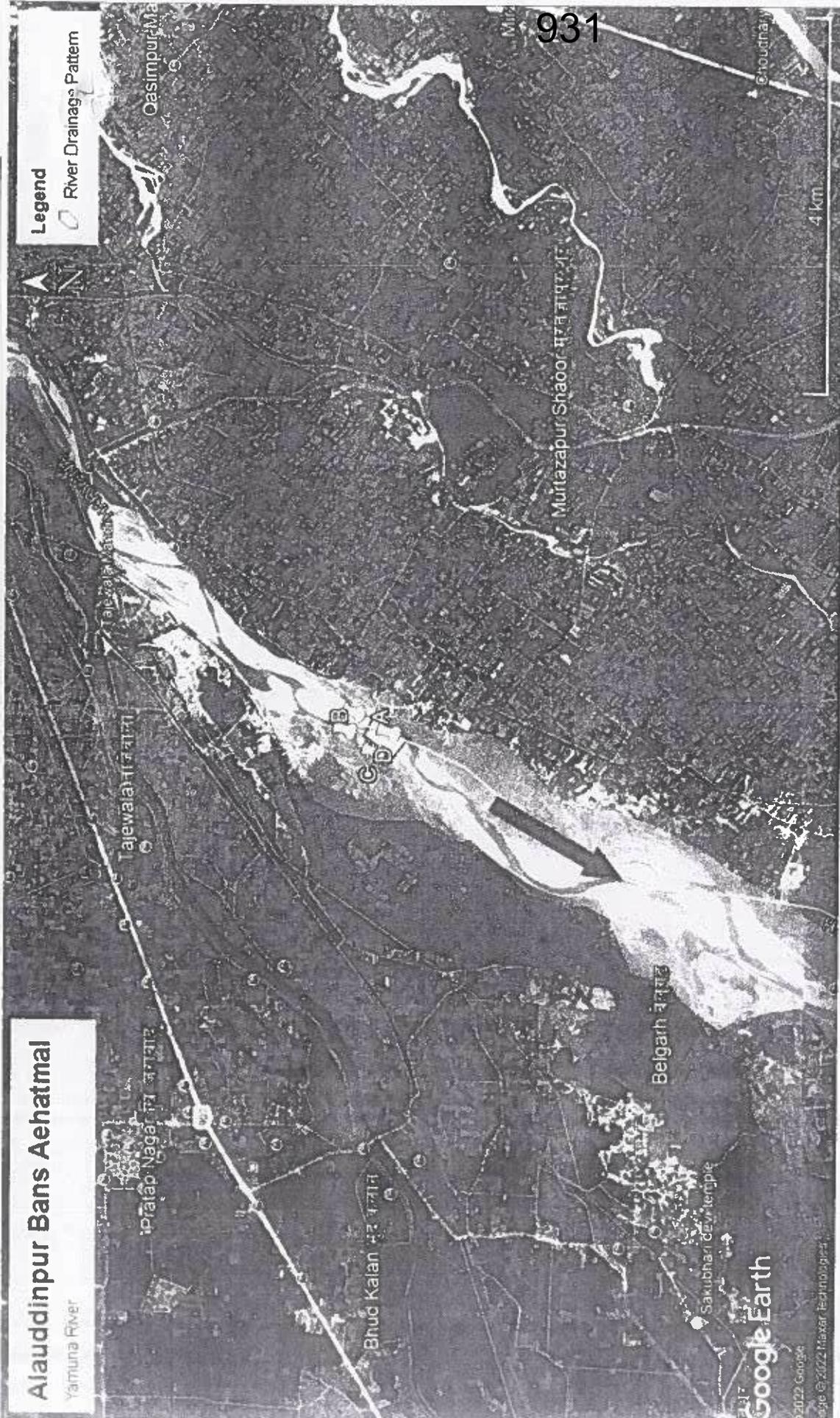
Riverbed Material: Yamuna River	
Survey	Physical, Drone and DGPS
Survey Area	17.90 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil District
Akbarpur Bans Aehatmal	Behat Saharanpur
Survey By:-	
Verified By:-	



*Handwritten signature and notes at the bottom of the page.*

# Alauddinpur Bans Aehatmal

Yamuna River



## Legend

River Drainage Pattern

931

Pillars	Latitude (N)	Longitude (E)
<b>Mining Lease Area (9.58 ha)</b>		
A	30°16'14.92"N	77°32'39.76"E
B	30°16'17.99"N	77°32'32.74"E
C	30°16'08.09"N	77°32'23.84"E
D	30°16'02.92"N	77°32'31.72"E

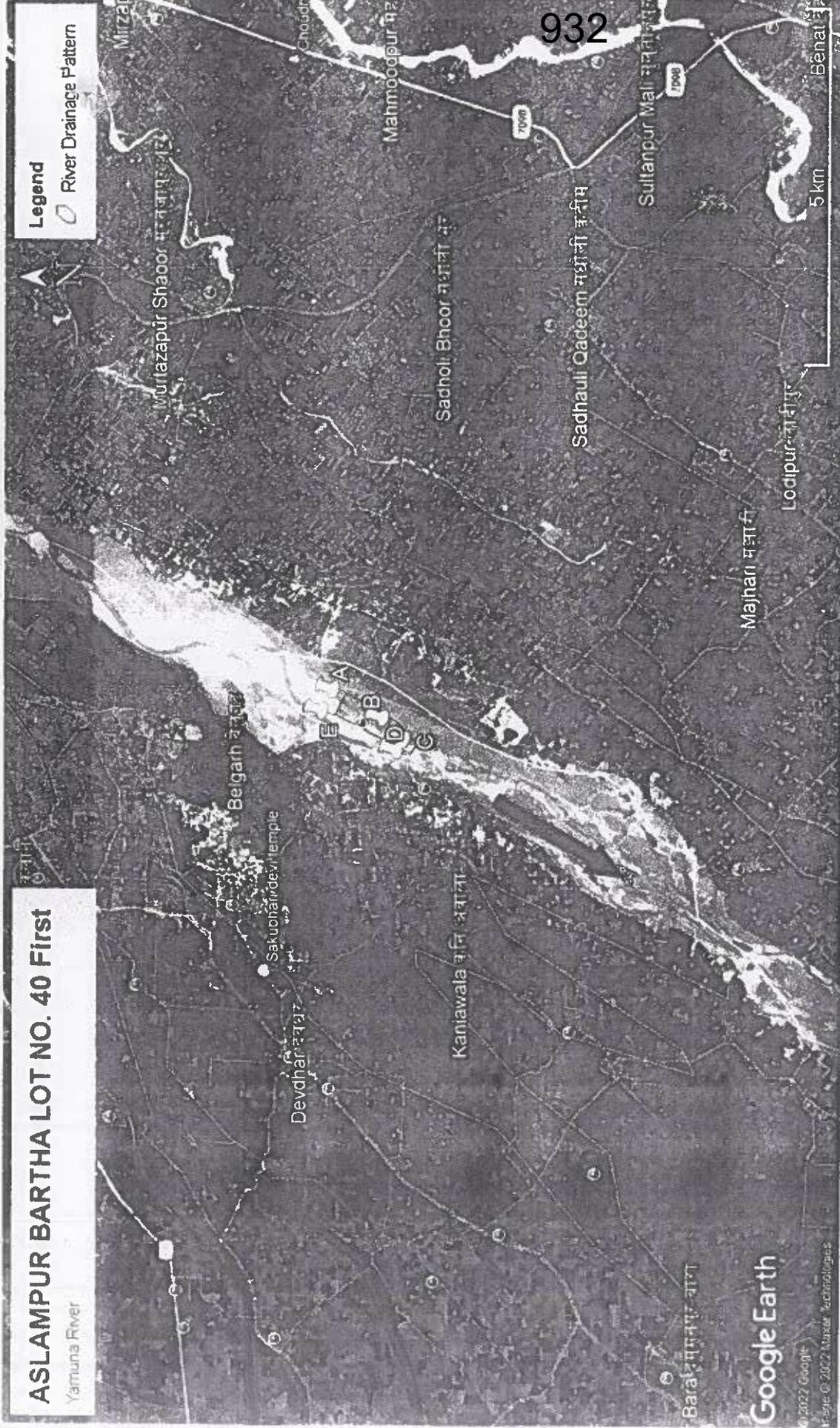
LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Riverbed Material: Yamuna River		
Survey	Physical, Drone and DGPS	
Survey Area	9.58 ha (Upto 3.0 m depth)	
Date of Survey		
Village	Tehsil	District
Alauddinpur Bans Aehatmal	Behat	Saharanpur
Survey By:-		
Verified By:-		



# ASLAMPUR BARTHA LOT NO. 40 First

Yamuna River



932

Pillars	Latitude (N)	Longitude (E)
Mining Lease Area (36.60 ha)	30°13'45.87"N	77°31'09.07"E
	30°13'23.05"N	77°31'53.85"E
	30°13'13.45"N	77°31'42.33"E
	30°13'16.67"N	77°31'36.60"E
	30°13'50.98"N	77°31'57.80"E

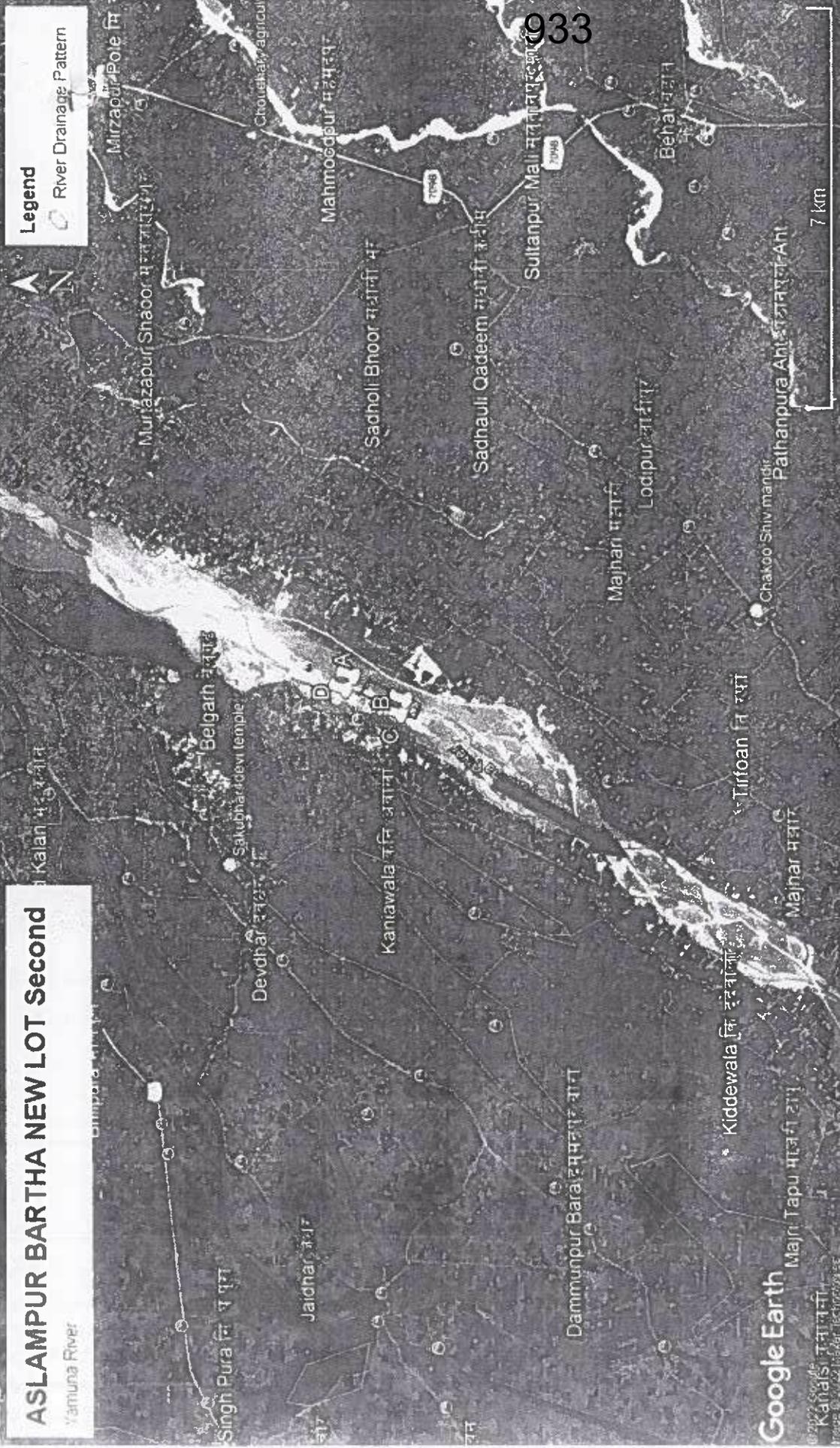
LEGEND	
SI. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Riverbed Material: Yamuna River	
Survey	Physical, Drone and DGPS
Survey Area	36.60 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil District
Aslampur Bartha Lot No. 40 First	Behat Saharanpur
Survey By:-	
Verified By:-	



# ASLAMPUR BARTHA NEW LOT SECOND

Yamuna River

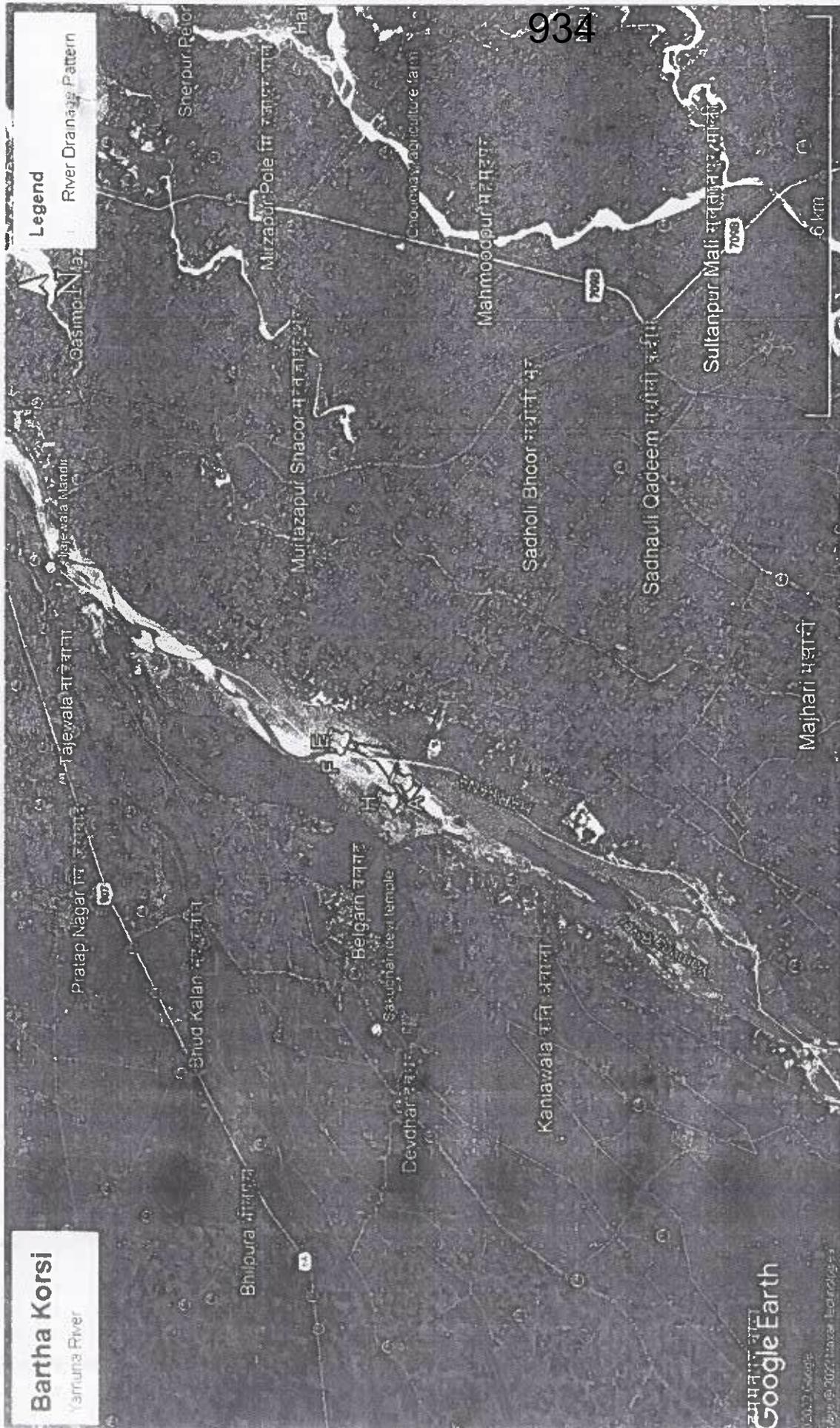


Pillars	Latitude (N)	Longitude (E)
Mining Lease Area (28.16 ha)	30°13'04.93"N	77°30'44.59"E
B	30°12'35.50"N	77°30'28.50"E
C	30°12'38.19"N	77°30'18.84"E
D	30°13'09.39"N	77°30'35.57"E

LEGEND	
SL. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Riverbed Material: Yamuna River	
Survey	Physical, Drone and DGPS
Survey Area	28.16 ha (Upto 3.0-m depth)
Date of Survey	
Village	Tehsil
Aslampur Bartha New Lot Second	Behat
Survey By:-	District
Verified By:-	Saharanpur





**Bartha Korsi**  
Yamuna River

**Legend**  
River Drainage Pattern

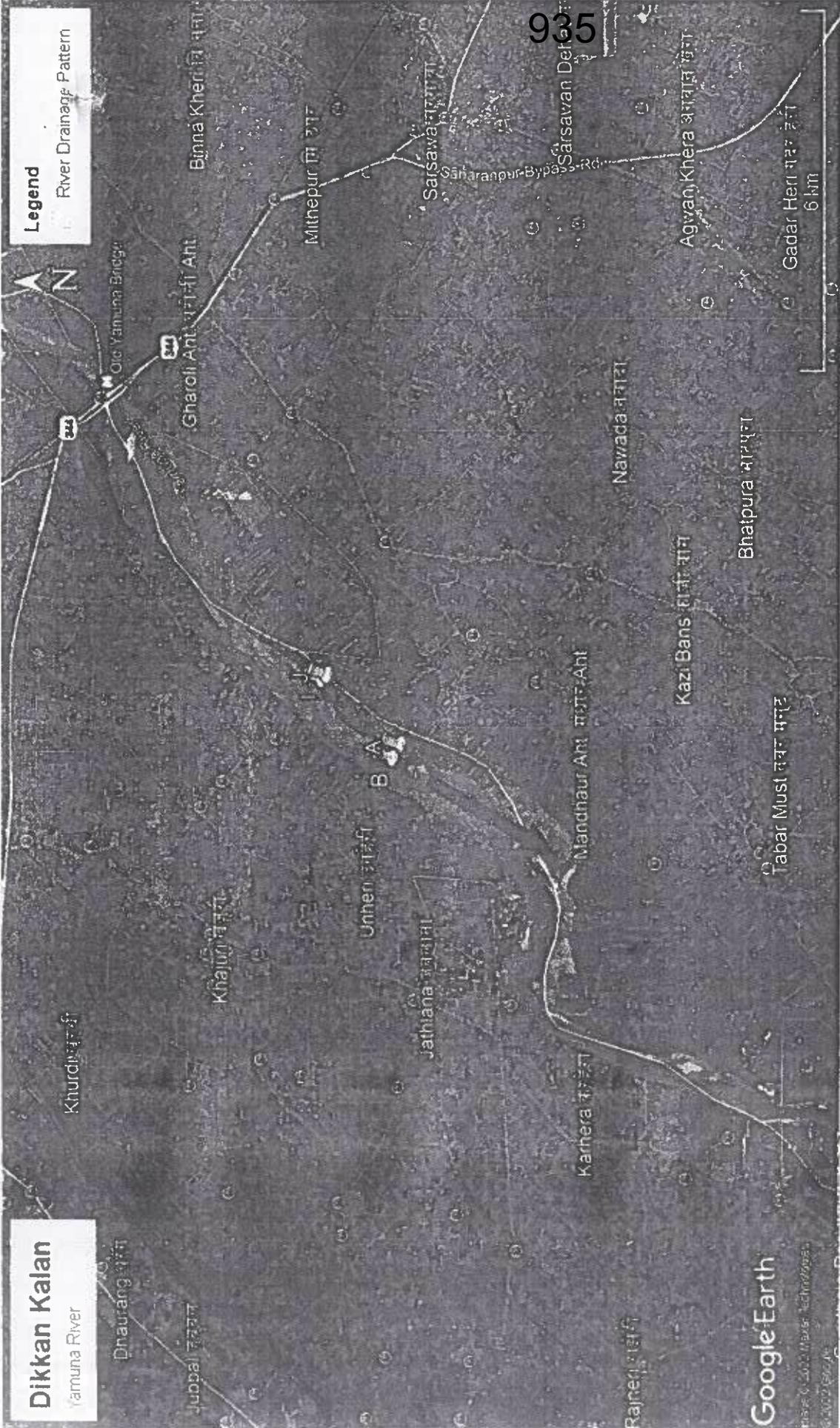
Pillars	Latitude (N)	Longitude (E)
<b>Mining Lease Area (36.00 ha)</b>		
A	30° 14' 00.94" N	77° 31' 13.91" E
B	30° 14' 16.50" N	77° 31' 24.43" E
C	30° 14' 13.69" N	77° 31' 31.19" E
D	30° 14' 19.59" N	77° 31' 37.85" E
E	30° 14' 37.10" N	77° 31' 40.80" E
F	30° 14' 39.19" N	77° 31' 36.25" E
G	30° 14' 26.08" N	77° 31' 29.05" E
H	30° 14' 09.19" N	77° 31' 02.18" E

LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Riverbed Material: Yamuna River	
Survey	Physical, Drone and DGPS
Survey Area	36.0 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil District
Bartha Korsi	Behat Saharanpur
Survey By:-	
Verified By:-	

*Handwritten signatures and notes at the bottom of the page.*





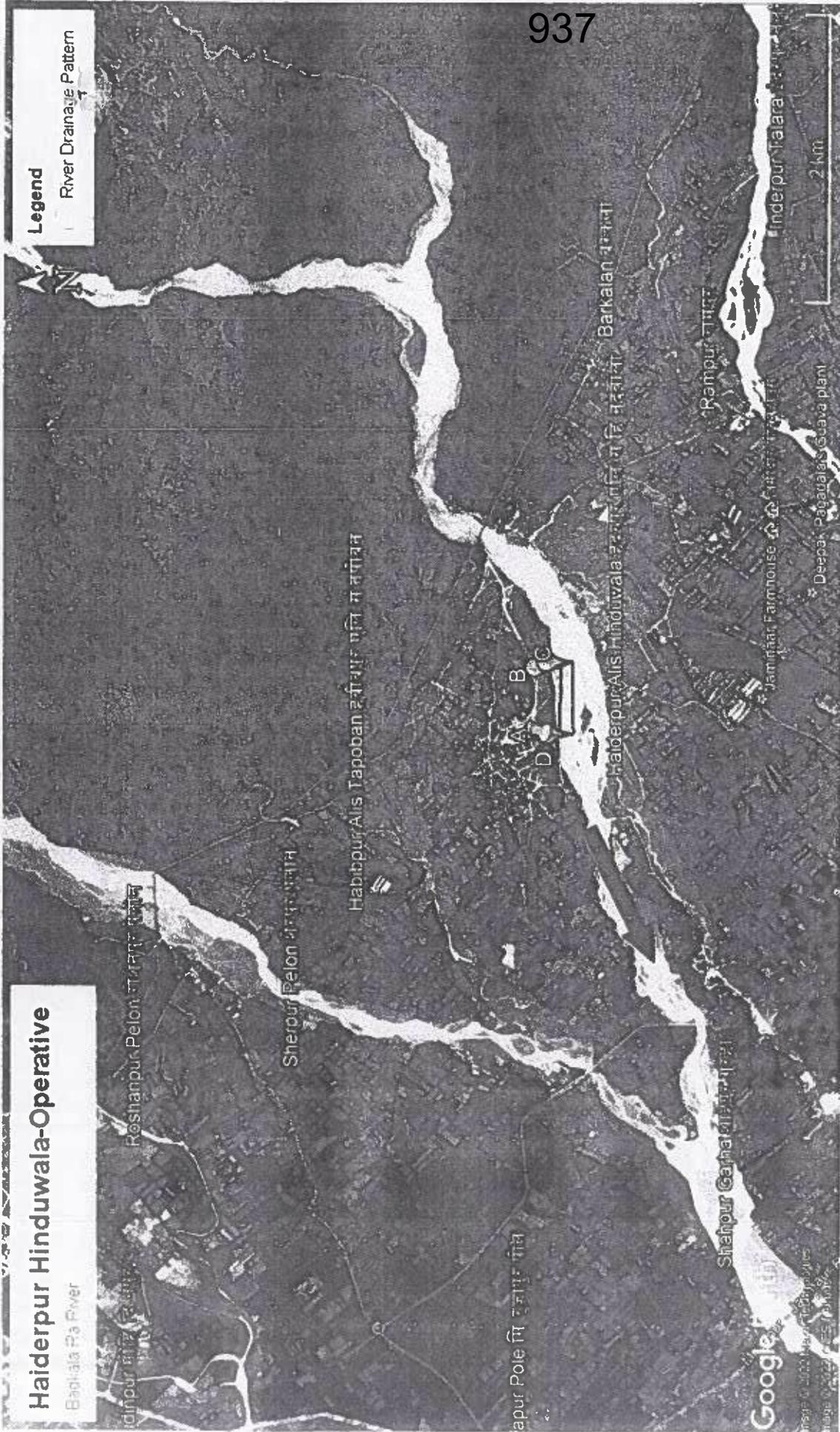
Riverbed Material: Yamuna River	
Survey	Physical, Drone and DGPS
Survey Area	52.63 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil
Dikkan Kalan	Nukur
Survey By:-	District
Verified By:-	Saharanpur

LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

*[Handwritten signatures and notes in Hindi script, including the name 'Sudhakar' and other illegible text.]*

Pillars	Latitude (N)	Longitude (E)
Mining Lease Area (52.63 ha)		
A	30° 1'20.61"N	77° 17'23.68"E
B	30° 1'24.58"N	77° 17'15.45"E
C	30° 1'32.77"N	77° 17'19.87"E
D	30° 1'42.25"N	77° 17'24.49"E
E	30° 1'41.34"N	77° 17'31.04"E
F	30° 1'52.02"N	77° 17'39.09"E
G	30° 1'54.80"N	77° 17'51.61"E
H	30° 1'56.88"N	77° 17'52.96"E
I	30° 2'2.71"N	77° 18'5.82"E
J	30° 1'59.86"N	77° 18'8.25"E
K	30° 1'57.85"N	77° 18'7.25"E
L	30° 1'58.76"N	77° 18'5.82"E
M	30° 1'57.46"N	77° 18'4.89"E
N	30° 1'57.00"N	77° 18'1.96"E
O	30° 1'53.50"N	77° 18'0.53"E
P	30° 1'47.64"N	77° 17'52.52"E
Q	30° 1'42.10"N	77° 17'46.53"E
R	30° 1'32.38"N	77° 17'39.44"E
S	30° 1'27.11"N	77° 17'31.55"E





**Haiderpur Hinduwala Operative**

Badkala Ra River

**Legend**

River Drainage Pattern

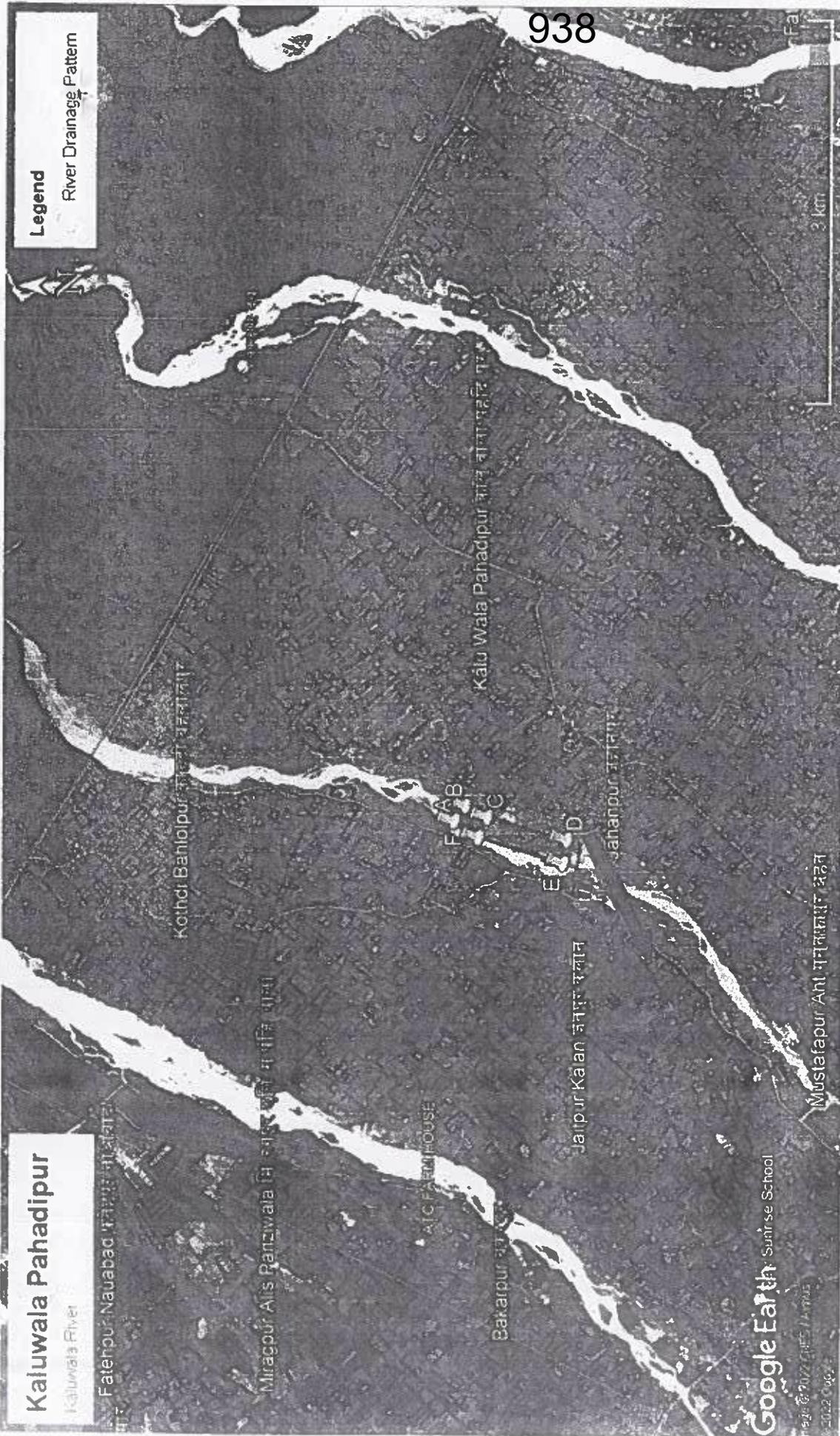
Pillars	Latitude (N)	Longitude (E)
<b>Sanctioned Mining Lease Area (4.20 ha)</b>		
A	20.64" N	77° 40' 42.10" E
B	20.54" N	77° 41' 00.42" E
C	19.98" N	77° 41' 01.84" E
D	19.71" N	77° 40' 42.89" E



LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Riverbed Material: Badkala Ra River		
Survey	Physical, Drone and DGPS	
Survey Area	4.20 ha (Upto 3.0 m depth)	
Date of Survey		
Village	Tehsil	District
Haidepur Hinduwala	Behat	Saharanpur
Survey By:		
Verified By:		

*Handwritten signatures and notes at the bottom of the page, including names like 'Saharade' and 'Red'.*



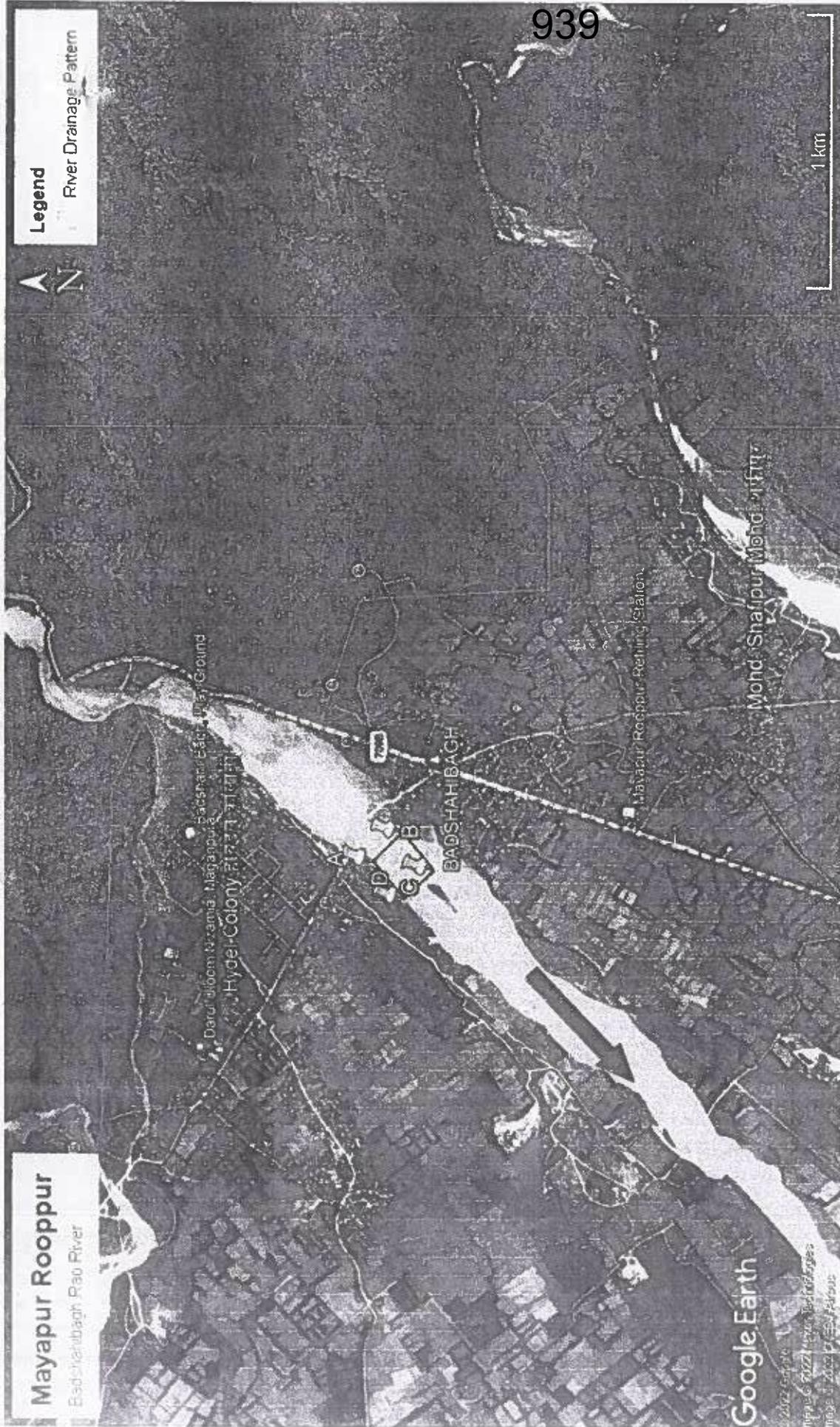
<b>Riverbed Material: Kaluwala River</b>	
<b>Survey</b>	Physical, Drone and DGPS
<b>Survey Area</b>	14.90 ha (Upto 3.0 m depth)
<b>Date of Survey</b>	
<b>Village</b>	
Kaluwala Pahadipur	<b>Tehsil</b> Behat
<b>Survey By:</b>	<b>District</b> Saharanpur
<b>Verified By:</b>	

LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Pillars	Latitude (N)	Longitude (E)
<b>Sanctioned Mining Lease Area (14.90 ha)</b>		
A	30°12'08.76"N	77°45'37.77"E
B	30°12'06.03"N	77°45'42.25"E
C	30°12'00.52"N	77°45'38.93"E
D	30°11'40.91"N	77°45'32.39"E
E	30°11'41.72"N	77°45'25.51"E
F	30°12'02.80"N	77°45'33.06"E

*Handwritten signatures and notes at the bottom of the page.*





**Mayapur Rooppur**

Badshahibagh Rao River

Pillars	Latitude (N)	Longitude (E)
Sanctioned Mining Lease Area (3.10 ha)		
A	30° 19' 21.41" N	77° 38' 26.35" E
B	30° 19' 17.62" N	77° 38' 30.56" E
C	30° 19' 13.68" N	77° 38' 25.07" E
D	30° 19' 17.44" N	77° 38' 20.78" E

LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

<b>Riverbed Material: Badshahibagh Rao River</b>	
Survey	Physical, Drone and DGPS
Survey Area	3.10 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil
Mayapur Rooppur	Behat
Survey By:	Saharanpur
Verified By:	

*Handwritten signatures and notes at the bottom of the page.*

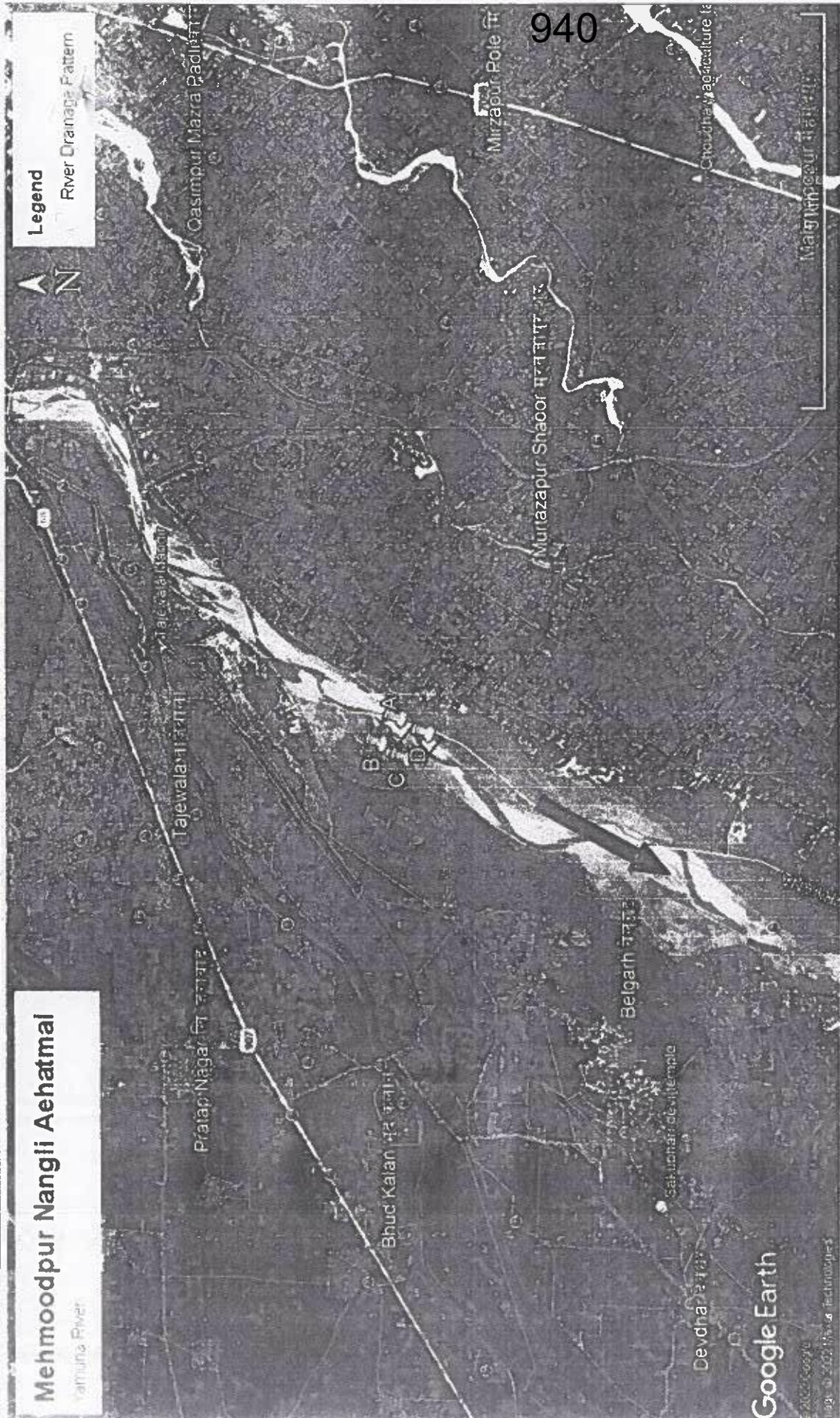


# Mehmoodpur Nangli Aehatmal

Yamuna River

## Legend

River Drainage Pattern



940

Pillars	Latitude (N)	Longitude (E)
Sanctioned Mining Lease Area (15.70 ha)		
A	30°16'02.98"N	77°32'30.74"E
B	30°16'10.84"N	77°32'18.84"E
C	30°16'00.40"N	77°32'11.56"E
D	30°15'51.70"N	77°32'23.64"E

LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Riverbed Material: Yamuna River	
Survey	Physical, Drone and DGPS
Survey Area	15.70 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil
Mehmoodpur Nangli Aehatmal	Behat
Survey By:	District
Verified By:	Saharanpur

*Handwritten signature and notes in Hindi script.*



# Nityanandur Aehatmal & Said Mohamadpur Aehatmal

Yamuna River

## Legend

River Drainage Pattern



941

Pillars	Latitude (N)	Longitude (E)
<b>Mining Lease Area (17.70 ha)</b>		
A	30°15'25.77"N	77°31'57.79"E
B	30°15'41.32"N	77°32'12.89"E
C	30°15'46.16"N	77°32'00.64"E
D	30°15'28.87"N	77°31'50.13"E

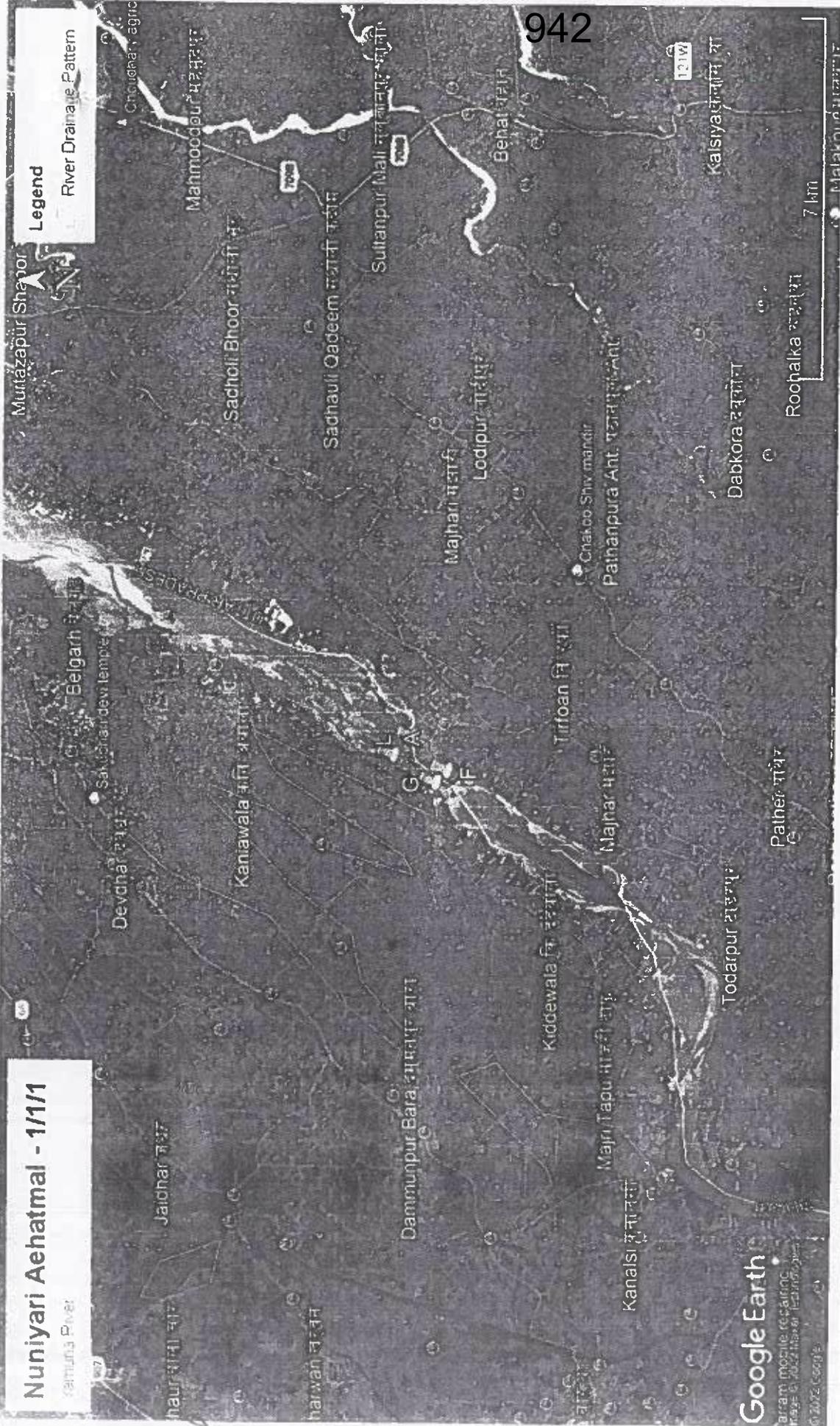
LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Riverbed Material: Yamuna River	
Survey	Physical, Drone and DGPS
Survey Area	17.70 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil District
Nityanandur Aehatmal & Said Mohamadpur Aehatmal; Behat; Saharanpur.	
Survey By:-	
Verified By:-	

103

*Handwritten signatures and notes in Hindi script.*





<b>Riverbed Material: Yamuna River</b>	
Survey	Physical, Drone and DGPS
Survey Area	19.00 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil
Nuniyari Aehatmal	Behat
Survey By:-	Saharanpur
Verified By:-	

LEGEND	
Sl. No.	Description
1	Mine Lease Area
	Drainage Pattern of River
	Boundary Pillars
	River Flow Direction
	Map Scale



*Handwritten signature and notes at the bottom of the page.*

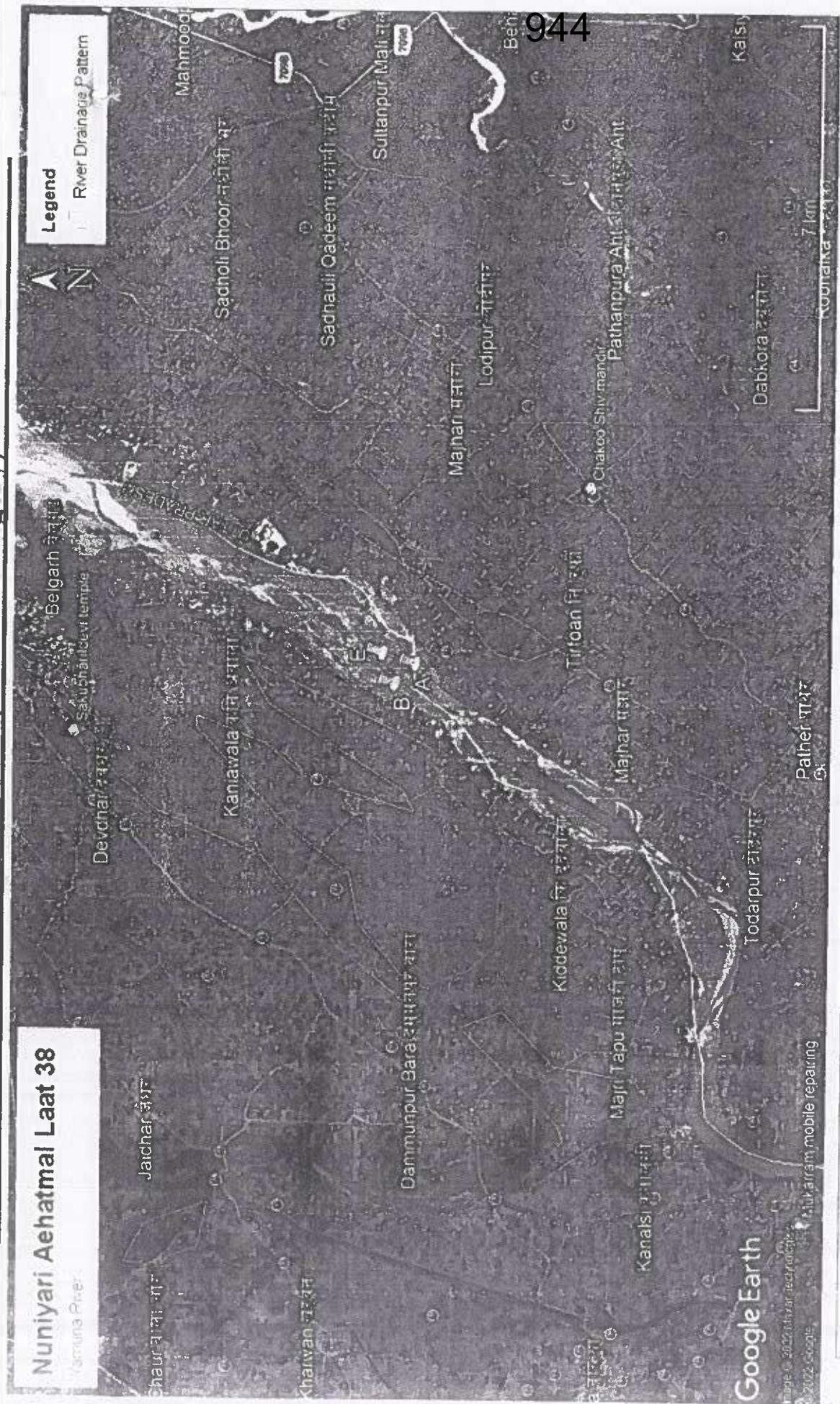
Pillars	Latitude (N)	Longitude (E)
Mining Lease Area (23.20 ha)		
A	30°11'00.50"N	77°29'25.19"E
B	30°10'59.39"N	77°29'23.26"E
C	30°10'58.86"N	77°29'15.55"E
D	30°10'55.77"N	77°29'10.53"E
E	30°10'46.29"N	77°29'04.02"E
F	30°10'39.87"N	77°29'00.42"E
G	30°10'46.96"N	77°29'51.89"E
H	30°10'51.56"N	77°29'56.86"E
I	30°10'49.46"N	77°29'58.83"E
J	30°11'02.30"N	77°29'11.12"E
K	30°11'07.26"N	77°29'05.46"E
L	30°11'12.52"N	77°29'11.64"E



Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left and several smaller initials and signatures on the right.

**Nuniyari Aehatmal Laat 38**

**Legend**  
River Drainage Pattern



LEGEND	
Sl. No.	Description
1	Mine Lease Area
	Drainage Pattern of River
	Boundary Pillars
	River Flow Direction
	Map Scale

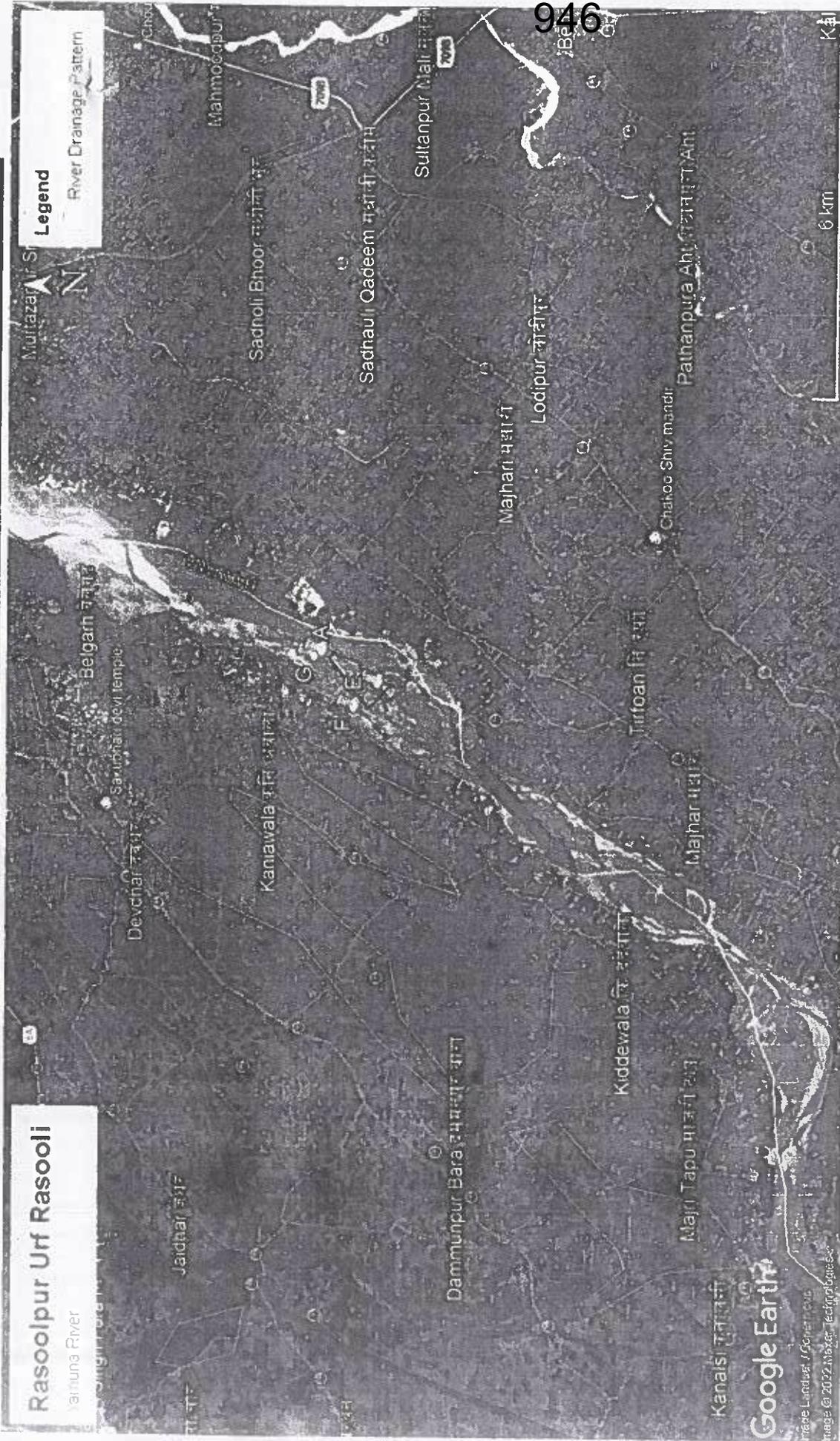
Riverbed Material: Yamuna River	
Survey	Physical, Drone and DGPS
Survey Area	24.29 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil District
Nuniyari Aehatmal	Behat Saharanpur
Survey By:-	
Verified By:-	

*Handwritten signatures and notes in Hindi script.*



Pillars	Latitude (N)	Longitude (E)
Mining Lease Area (24.29 ha)		
A	30°11'00.90" N	77°29'25.83" E
B	30°11'12.98" N	77°29'12.21" E
C	30°11'24.95" N	77°29'26.28" E
D	30°11'21.79" N	77°29'29.68" E
E	30°11'20.39" N	77°29'33.03" E
F	30°11'18.64" N	77°29'33.83" E
G	30°11'17.01" N	77°29'34.70" E
H	30°11'14.93" N	77°29'32.91" E
I	30°11'09.54" N	77°29'31.35" E
J	30°11'03.46" N	77°29'29.55" E





**Rasoolpur Urf Rasooli**  
Yamuna River

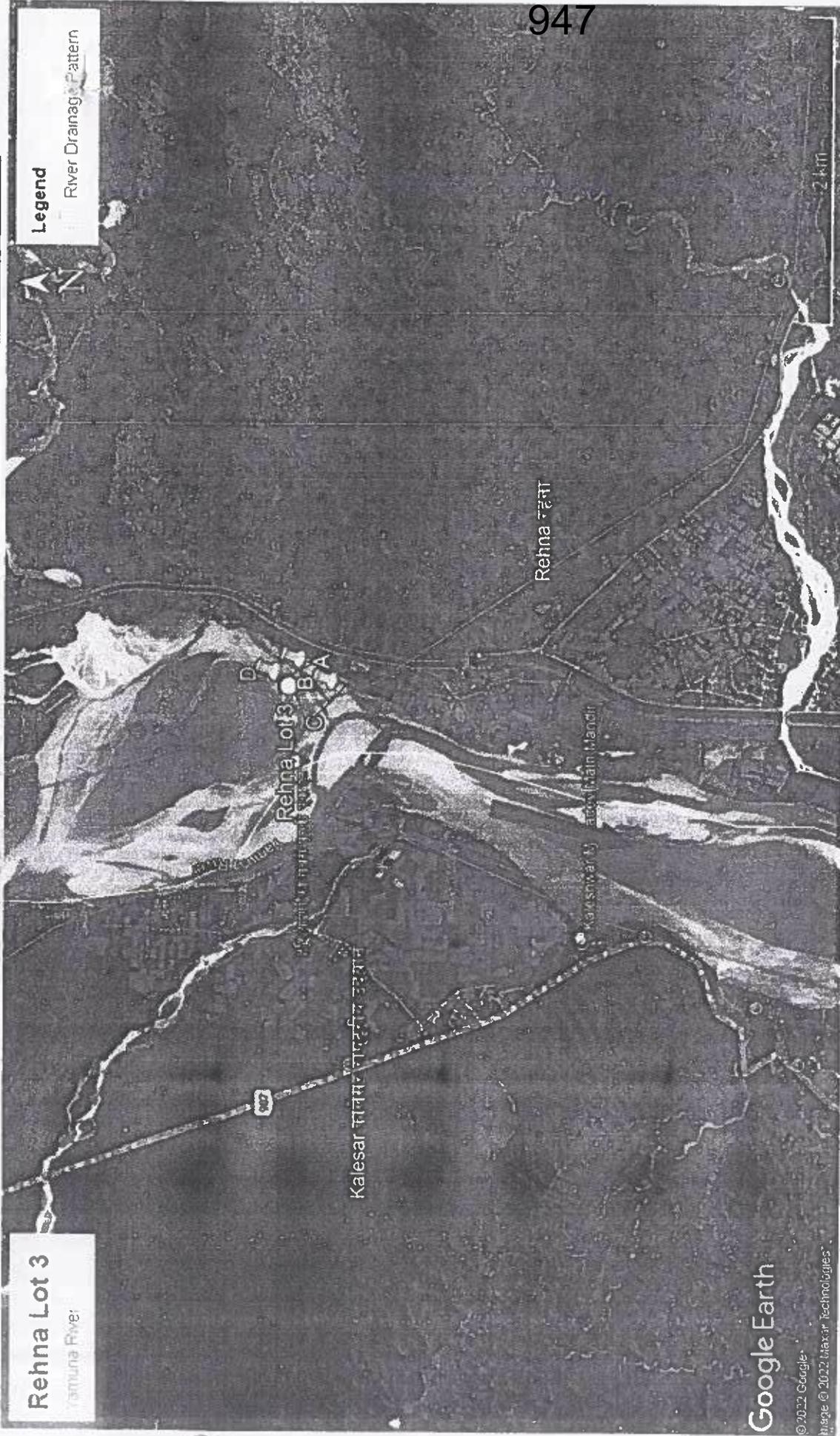
Pillars	Latitude (N)	Longitude (E)
<b>Sanctioned Mining Lease Area (34.00 ha)</b>		
A	30°12'17.09"N	77°30'18.81"E
B	30°12'16.42"N	77°30'17.32"E
C	30°12'05.34"N	77°30'13.17"E
D	30°11'59.82"N	77°30'01.24"E
E	30°11'46.33"N	77°29'58.50"E
F	30°11'59.32"N	77°29'43.47"E
G	30°12'21.10"N	77°30'16.04"E

LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Riverbed Material: Yamuna River	
Survey	Physical, Drone and DGPS
Survey Area	34.00 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil
Rasoolpur Urf Rasooli	Behat
Survey By:	District
	Saharanpur
Verified By:	



*Handwritten signature and notes in Hindi script.*



**Rehna Lot 3**  
Yamuna River

**Legend**  
River Drainage Pattern

Pillars	Latitude (N)	Longitude (E)
<b>Sanctioned Mining Lease Area (8.05 ha)</b>		
A	30° 21' 36.45" N	77° 36' 05.61" E
B	30° 21' 29.62" N	77° 36' 00.26" E
C	30° 21' 37.95" N	77° 35' 50.38" E
D	30° 21' 41.71" N	77° 36' 02.50" E

LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

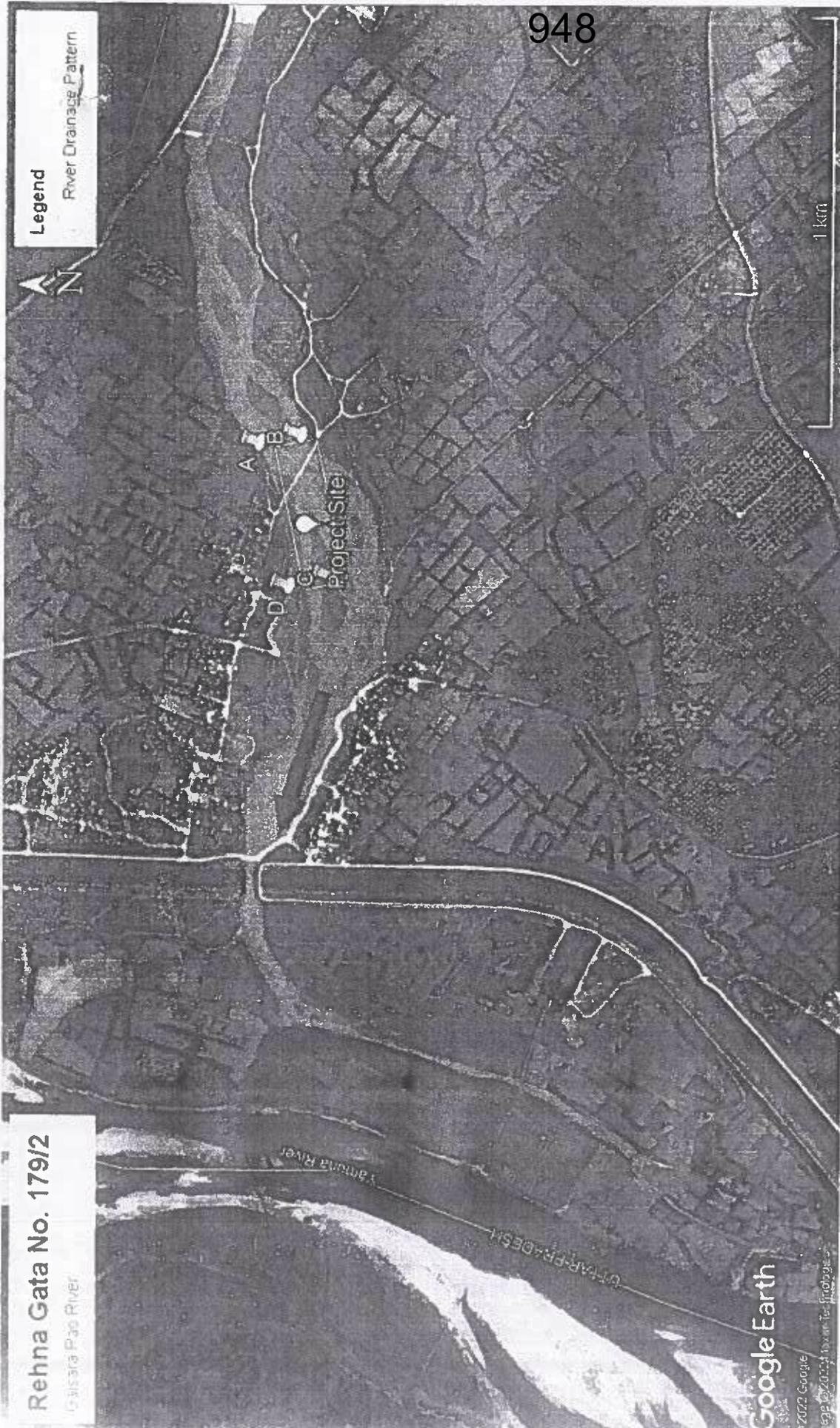
Riverbed Material: Yamuna River	
Survey	Physical, Drone and DGPS
Survey Area	8.05 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil District
Rehna	Behat Saharanpur
Survey By:	
Verified By:	

*Handwritten signatures and notes at the bottom of the page.*



Rehna Gata No. 179/2

Gaisara Rao River



Pillars	Latitude (N)	Longitude (E)
Sanctioned Mining Lease Area (3.75 ha)		
A	30° 19' 56.61" N	77° 36' 32.69" E
B	30° 19' 54.45" N	77° 36' 35.03" E
C	30° 19' 47.72" N	77° 36' 20.40" E
D	30° 19' 49.81" N	77° 36' 18.31" E

LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Riverbed Material: Gaisara Rao River	
Survey	Physical, Drone and DGPS
Survey Area	3.75 ha (Upto 3.0 m depth)
Date of Survey	
Village	Rehna
Tehsil	Behat
District	Saharanpur
Survey By:	
Verified By:	

*Handwritten signature and notes at the bottom of the page.*

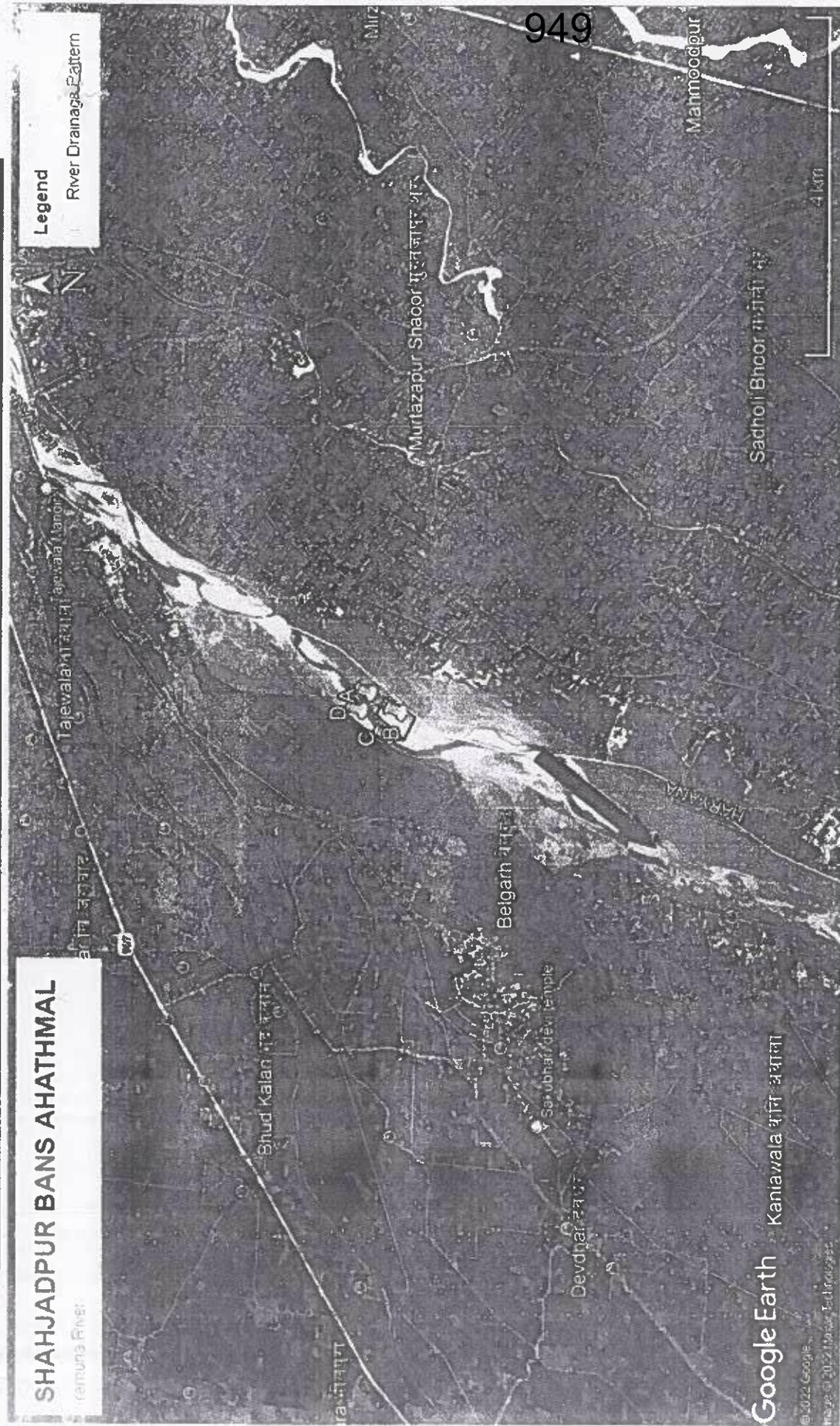


# SHAHJADPUR BANS AHATHMAL

Yamuna River

## Legend

River Drainage Pattern



Google Earth

Kanawala अति अक्षात्

Pillars	Latitude (N)	Longitude (E)
Sanctioned Mining Lease Area (13.0 ha)		
A	30°15'24.84"N	77°31'57.01"E
B	30°15'12.32"N	77°31'47.88"E
C	30°15'16.91"N	77°31'36.94"E
D	30°15'28.43"N	77°31'48.83"E

## LEGEND

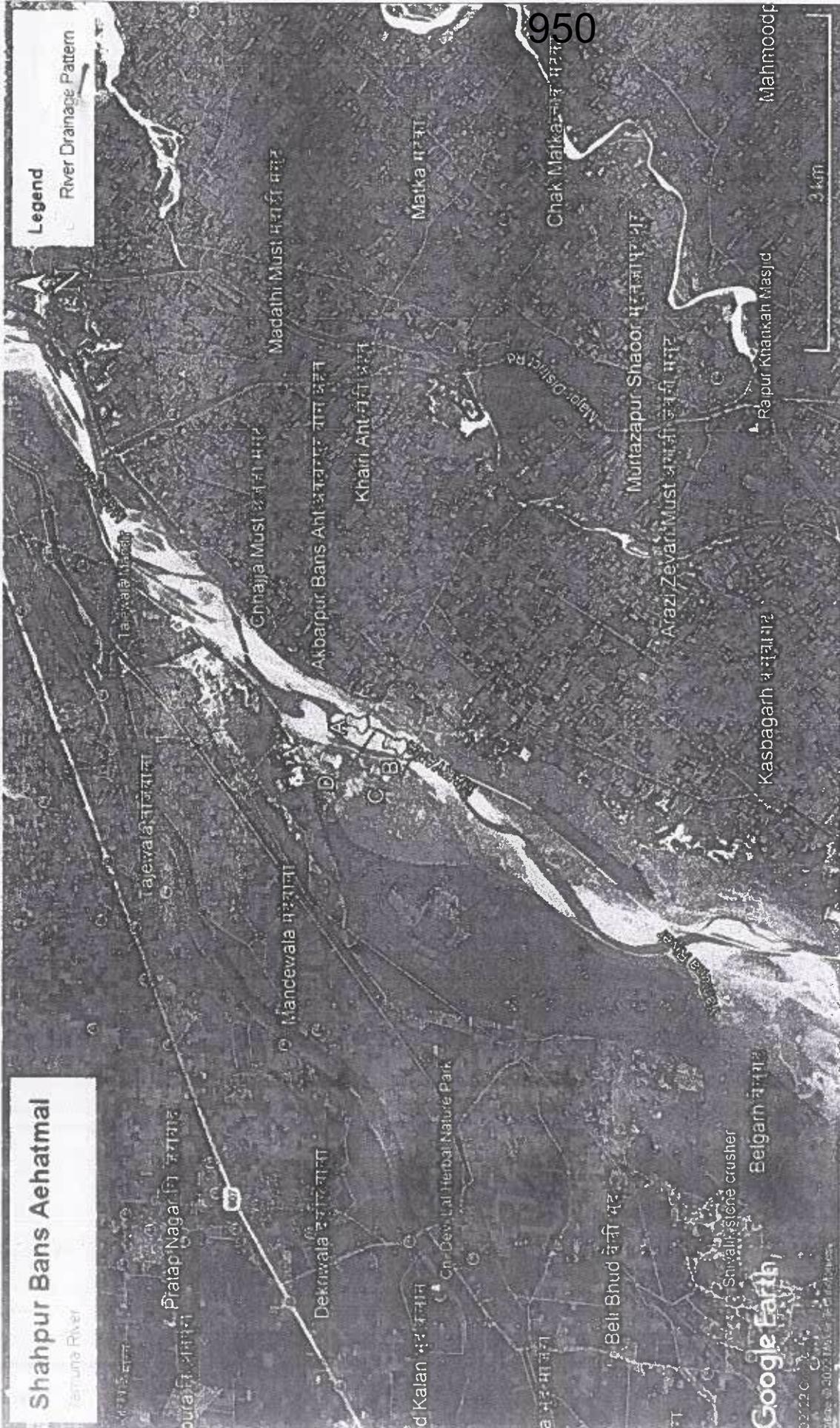
Sl. No.	Symbol	Description
1		Mine Lease Area
2		Drainage Pattern of River
3		Boundary Pillars
4		River Flow Direction
5		Map Scale

## Riverbed Material: Yamuna River

Survey	Physical, Drone and DGPS	
Survey Area	13.0 ha (Upto 3.0 m depth)	
Date of Survey		
Village	Tehsil	District
Shahjadpur Bans Ahathmal	Behat	Saharanpur
Survey By:		
Verified By:		

*Handwritten signature and notes at the bottom of the page.*





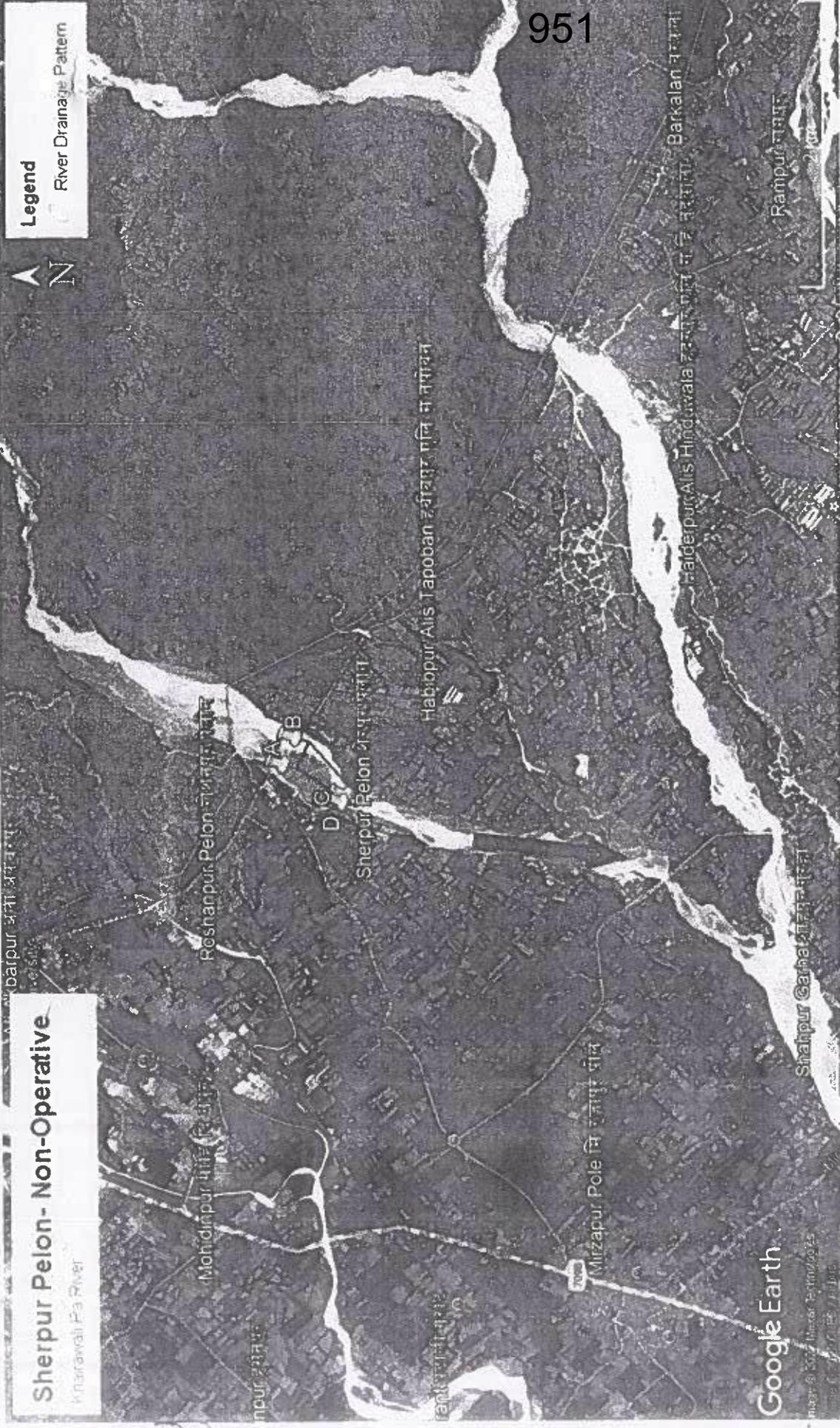
**Shahpur Bans Aehatmal**  
Yamuna River

Pillars	Latitude (N)	Longitude (E)
<b>Sanctioned Mining Lease Area (15.60 ha)</b>		
A	30°16'27.75"N	77°32'46.14"E
B	30°16'16.01"N	77°32'38.50"E
C	30°16'20.43"N	77°32'28.70"E
D	30°16'35.53"N	77°32'33.20"E

LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Riverbed Material: Yamuna River	
Survey	Physical, Drone and DGPS
Survey Area	15.60 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil
Shahpur Bans Aehatmal	Behat
Survey By:	Saharanpur
Verified By:	

*(Handwritten signatures and stamps)*



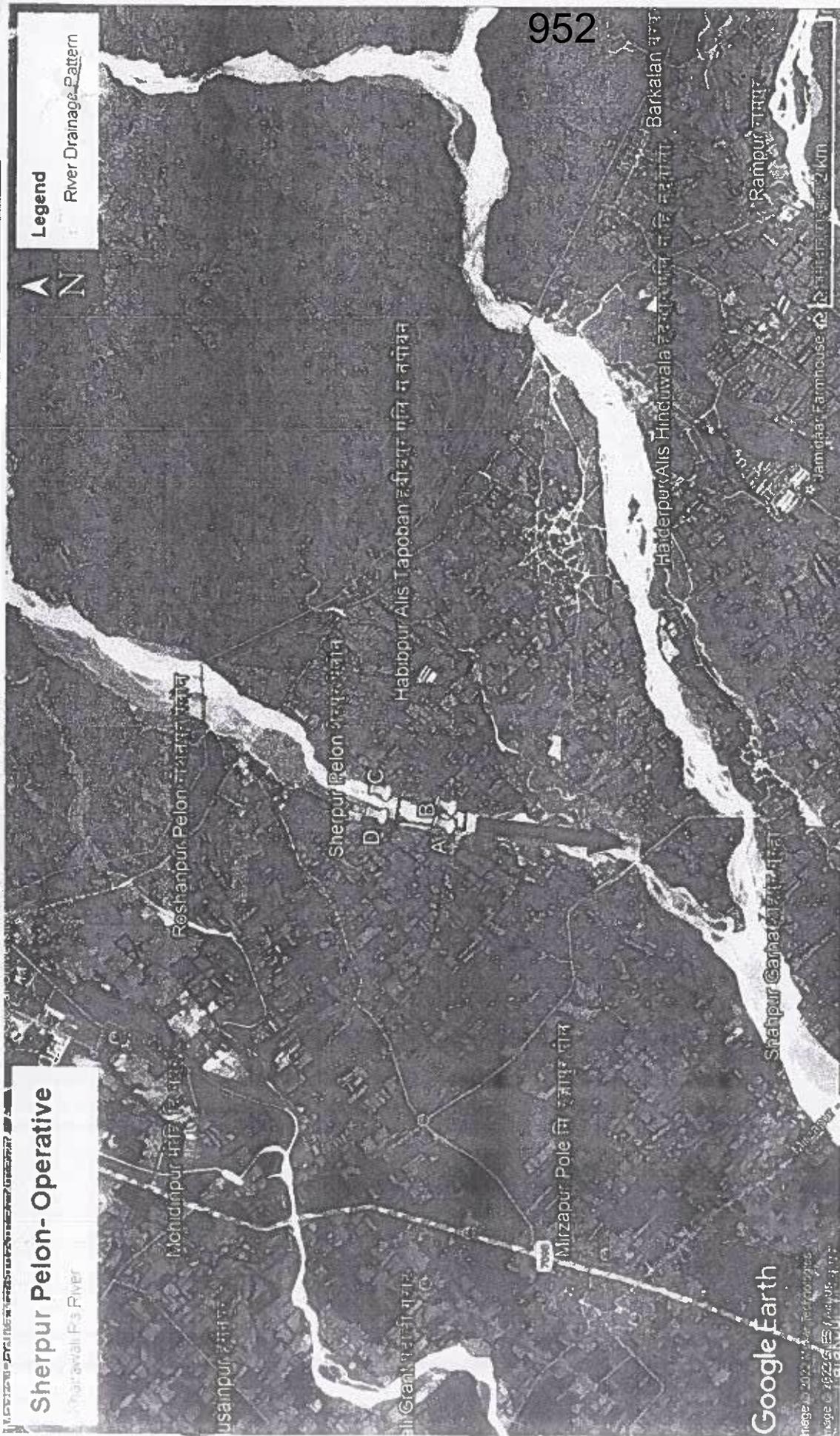
<b>Riverbed Material: Khairawali Ra River</b>	
<b>Survey</b>	Physical, Drone and DGPS
<b>Survey Area</b>	6.475 ha (Upto 3.0 m depth)
<b>Date of Survey</b>	
<b>Village</b>	
Sherpur Pelon	Tehsil
	Bebat
Survey By:	District
Verified By:	Saharanpur

LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Pillars	Latitude (N)	Longitude (E)
<b>Sanctioned Mining Lease Area (6.475 ha)</b>		
Gata No. 403, 404/1, 405, 406/1, 416/2, 421/1, 422/2, 423/2, 424/2, 429 & 431		
A	30°16'35.16"N	77°39'44.44"E
B	30°16'32.34"N	77°39'51.41"E
C	30°16'21.11"N	77°39'36.26"E
D	30°16'22.11"N	77°39'34.41"E

### Sherpur Pelon- Operative

Khairawali Ra River



### Legend

River Drainage Pattern

Pillars	Latitude (N)	Longitude (E)
Sanctioned Mining Lease Area (7.00 ha)		
Gata No. 378/2 & 379/2		
A	30° 15' 52.04" N	77° 39' 22.56" E
B	30° 15' 51.84" N	77° 39' 27.43" E
C	30° 16' 06.24" N	77° 39' 31.26" E
D	30° 16' 07.18" N	77° 39' 25.07" E

LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Riverbed Material: Khairawali Ra River	
Survey	Physical, Drone and DGPS
Survey Area	7.00 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil
Sherpur Pelon	Behat
Survey By:	Saharanpur
Verified By:	

# Replenishment Study: Survey Sheet (Satellite Imagery)



953

**AARAJI JEWRI AHATMAL AND MAHMOODPUR GARH AHATMAL**  
 Yamuna River

Pillars	Latitude (N)	Longitude (E)
Sanctioned Mining Lease Area (13.80 ha)		
A	30°15'51.33"N	77°32'21.84"E
B	30°15'58.45"N	77°32'08.63"E
C	30°15'45.65"N	77°32'03.15"E
D	30°15'41.84"N	77°32'13.01"E

LEGEND	
Sl. No.	Description
1	Mine Lease Area
2	Drainage Pattern of River
3	Boundary Pillars
4	River Flow Direction
5	Map Scale

Riverbed Material: Yamuna River	
Survey	Physical, Drone and DGPS
Survey Area	13.80 ha (Upto 3.0 m depth)
Date of Survey	
Village	Tehsil District
Aaraji Jewri Ahatmal And Mahmoodpur Garh Ahatmal; Behat ; Saharanpur	
Survey By:	
Verified By:	

**LEASE WISE 2024 D.G.P.S.**

**SURVEY RECORDS**

- **D.G.P.S. Ground Control Points (GCP)**

**Record Sheet in tabular format**

- **Mapping / Elevation Section of D.G.P.S.**

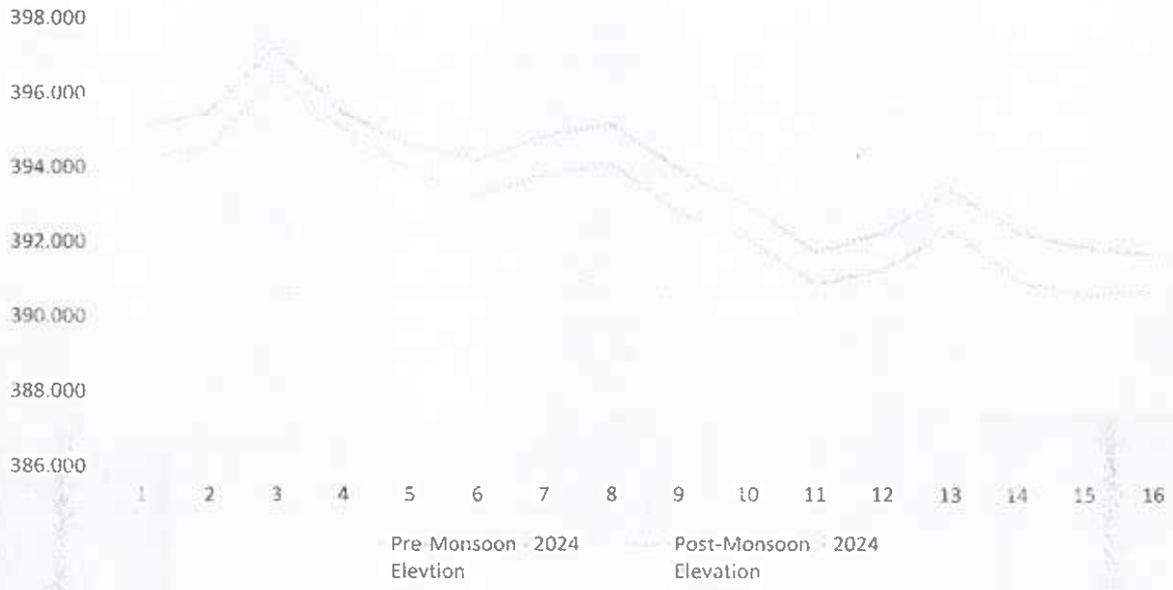
**Ground Control Points (GCP)**



Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
1	Behat	R.B.M.	Badshahibagh Rao	Mayapur Rooppur	Gata No. 14/1	3.100

Cross Section	Sl.No	Lat.	Long.	Pre-Monsoon -	Post-Monsoon
				2024 Elevation	- 2024 Elevation
1-1	1	30°19'20.38"N	77°38'26.16"E	394.290	395.112
1-1	2	30°19'19.45"N	77°38'27.07"E	394.512	395.510
1-1	3	30°19'18.40"N	77°38'28.27"E	396.501	397.255
1-1	4	30°19'17.34"N	77°38'29.43"E	395.052	395.500
2-2	5	30°19'16.58"N	77°38'28.32"E	394.001	394.654
2-2	6	30°19'17.48"N	77°38'27.08"E	393.266	394.261
2-2	7	30°19'18.65"N	77°38'25.70"E	393.844	394.894
2-2	8	30°19'19.55"N	77°38'24.90"E	394.108	395.188
3-3	9	30°19'18.83"N	77°38'24.11"E	392.822	393.969
3-3	10	30°19'18.04"N	77°38'25.22"E	392.088	393.054
3-3	11	30°19'16.90"N	77°38'26.20"E	390.884	391.766
3-3	12	30°19'15.59"N	77°38'27.21"E	391.310	392.276
4-4	13	30°19'14.63"N	77°38'25.62"E	392.320	393.410
4-4	14	30°19'15.78"N	77°38'24.18"E	390.992	392.327
4-4	15	30°19'16.69"N	77°38'23.24"E	390.608	391.874
4-4	16	30°19'17.65"N	77°38'22.23"E	390.722	391.688





*[Handwritten signatures and scribbles]*

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
2	Behat	R.B.M.	Yamuna	Bartha Korsi	Gata No. - 1	36.000

Section	Sl. No	Lat.	Long.	Pre Monsoon 2024 Elevation	Post Monsoon 2024 Elevation
1-1	1	30°14'1.39"N	77°31'13.73"E	292.760	294.668
1-1	2	30°14'2.47"N	77°31'12.26"E	292.782	294.756
1-1	3	30°14'3.55"N	77°31'10.78"E	293.366	295.596
1-1	4	30°14'4.64"N	77°31'9.30"E	293.505	295.741
1-1	5	30°14'5.74"N	77°31'7.82"E	294.708	296.852
1-1	6	30°14'6.82"N	77°31'6.34"E	292.329	294.694
1-1	7	30°14'7.91"N	77°31'4.86"E	292.505	294.893
1-1	8	30°14'9.01"N	77°31'3.38"E	293.717	295.788
1-1	9	30°14'9.68"N	77°31'2.47"E	292.886	294.894
2-2	10	30°14'10.63"N	77°31'4.09"E	293.350	295.650
2-2	11	30°14'9.97"N	77°31'4.98"E	293.625	295.762
2-2	12	30°14'8.88"N	77°31'6.46"E	292.354	294.566
2-2	13	30°14'7.83"N	77°31'7.91"E	292.302	294.595
2-2	14	30°14'6.74"N	77°31'9.40"E	293.804	295.972
2-2	15	30°14'5.62"N	77°31'10.90"E	296.698	297.741
2-2	16	30°14'4.57"N	77°31'12.38"E	295.275	297.562
2-2	17	30°14'3.44"N	77°31'13.86"E	296.390	298.755
3-3	18	30°14'4.53"N	77°31'15.44"E	296.600	298.928
3-3	19	30°14'5.57"N	77°31'13.95"E	295.257	297.182
3-3	20	30°14'6.63"N	77°31'12.46"E	293.778	295.417
3-3	21	30°14'7.72"N	77°31'10.98"E	295.260	297.691
3-3	22	30°14'8.84"N	77°31'9.46"E	295.439	297.556
3-3	23	30°14'9.89"N	77°31'7.98"E	294.568	296.922
3-3	24	30°14'10.94"N	77°31'6.57"E	295.740	297.884
3-3	25	77°31'6.57"E	77°31'5.69"E	295.581	297.889
4-4	26	30°14'12.50"N	77°31'7.29"E	295.497	297.714
4-4	27	30°14'11.91"N	77°31'8.13"E	294.622	296.625
4-4	28	30°14'10.88"N	77°31'9.53"E	294.497	296.915
4-4	29	30°14'9.87"N	77°31'10.95"E	293.343	295.482



4-4	30	30°14'8.75"N	77°31'12.46"E	293.647	295.714
4-4	31	30°14'7.70"N	77°31'13.95"E	294.811	296.718
4-4	32	30°14'6.63"N	77°31'15.48"E	296.728	298.828
4-4	33	30°14'5.53"N	77°31'17.01"E	296.944	298.728
5-5	34	30°14'7.64"N	77°31'17.06"E	295.575	297.766
5-5	35	30°14'8.74"N	77°31'15.55"E	295.380	297.668
5-5	36	30°14'9.79"N	77°31'14.04"E	294.500	296.714
5-5	37	30°14'10.87"N	77°31'12.50"E	293.622	295.661
5-5	38	30°14'11.87"N	77°31'11.14"E	292.520	294.782
5-5	39	30°14'12.87"N	77°31'9.72"E	293.394	295.996
5-5	40	30°14'13.46"N	77°31'8.90"E	293.829	295.855
6-6	41	30°14'14.42"N	77°31'10.49"E	293.468	295.704
6-6	42	77°31'10.49"E	77°31'11.30"E	294.537	296.441
6-6	43	30°14'12.85"N	77°31'12.72"E	295.586	297.632
6-6	44	30°14'11.91"N	77°31'14.08"E	293.906	296.482
6-6	45	30°14'10.85"N	77°31'15.62"E	296.668	298.952
6-6	46	30°14'9.79"N	77°31'17.09"E	296.769	298.775
6-6	47	30°14'8.68"N	77°31'18.64"E	294.403	296.656
7-7	48	30°14'10.61"N	77°31'18.88"E	294.511	296.882
7-7	49	30°14'11.65"N	77°31'17.37"E	293.359	295.242
7-7	50	30°14'12.76"N	77°31'15.79"E	293.424	295.272
7-7	51	30°14'13.76"N	77°31'14.35"E	293.730	295.352
7-7	52	30°14'14.83"N	77°31'12.88"E	294.492	296.102
7-7	53	30°14'15.36"N	77°31'12.11"E	294.860	296.285
8-8	54	30°14'16.31"N	77°31'13.72"E	295.500	297.992
8-8	55	30°14'15.79"N	77°31'14.48"E	295.551	297.991
8-8	56	30°14'14.72"N	77°31'16.00"E	294.851	296.667
8-8	57	30°14'13.75"N	77°31'17.38"E	293.943	296.456
8-8	58	30°14'12.69"N	77°31'18.90"E	294.697	296.658
8-8	59	30°14'11.67"N	77°31'20.41"E	295.501	297.714
9-9	60	30°14'12.71"N	77°31'21.92"E	296.124	298.328
9-9	61	30°14'13.70"N	77°31'20.47"E	296.748	298.955
9-9	62	30°14'14.74"N	77°31'18.97"E	295.517	297.652
9-9	63	30°14'15.68"N	77°31'17.60"E	295.500	297.672
9-9	64	30°14'16.72"N	77°31'16.10"E	294.843	297.682
9-9	65	30°14'17.26"N	77°31'15.33"E	296.808	298.652
10-10	66	30°14'18.21"N	77°31'16.94"E	297.358	299.697
10-10	67	30°14'17.69"N	77°31'17.71"E	293.460	296.741
10-10	68	30°14'16.67"N	77°31'19.22"E	293.977	296.692



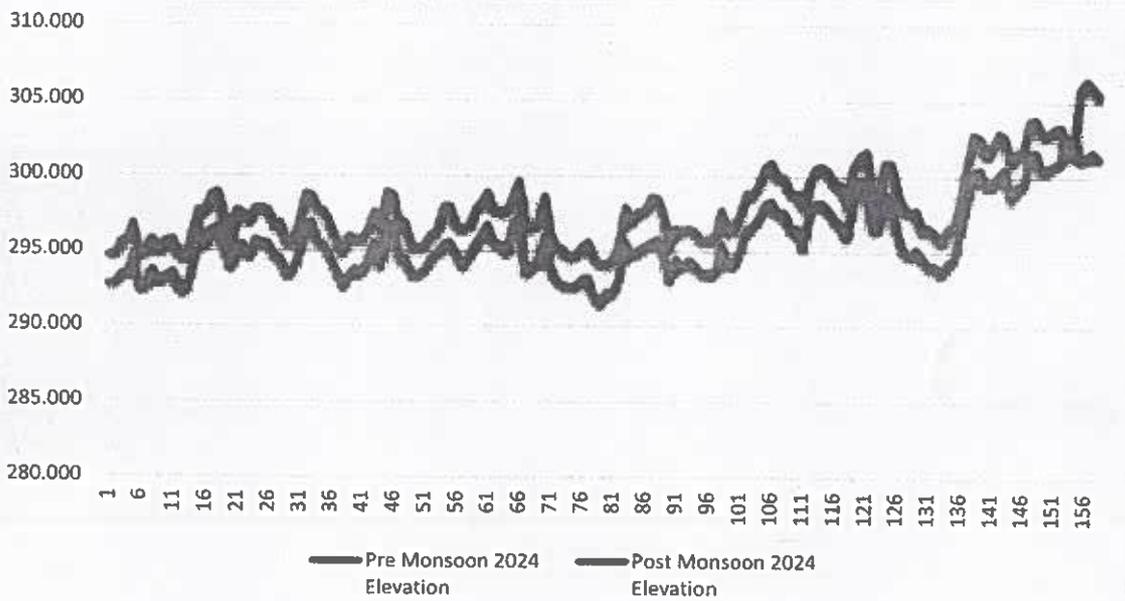
10-10	69	30°14'15.75"N	77°31'20.61"E	294.179	296.782
10-10	70	30°14'14.81"N	77°31'22.04"E	295.992	298.666
11-11	71	30°14'15.79"N	77°31'23.56"E	293.942	296.272
11-11	72	30°14'16.69"N	77°31'22.18"E	293.072	295.382
11-11	73	30°14'17.66"N	77°31'20.78"E	292.800	295.166
11-11	74	30°14'18.63"N	77°31'19.31"E	292.668	294.582
11-11	75	30°14'19.18"N	77°31'18.56"E	292.660	294.733
12-12	76	30°14'20.11"N	77°31'20.20"E	293.176	295.301
12-12	77	30°14'19.59"N	77°31'20.92"E	293.267	295.652
12-12	78	30°14'18.59"N	77°31'22.46"E	292.042	294.542
12-12	79	30°14'17.53"N	77°31'24.00"E	291.448	294.177
12-12	80	30°14'16.52"N	77°31'25.55"E	292.318	294.222
12-12	81	30°14'15.46"N	77°31'27.08"E	292.202	294.446
13-13	82	30°14'14.37"N	77°31'31.83"E	293.190	295.362
13-13	83	30°14'15.39"N	77°31'30.25"E	295.633	297.952
13-13	84	30°14'16.45"N	77°31'28.69"E	294.741	296.992
13-13	85	30°14'17.47"N	77°31'27.16"E	295.035	297.668
13-13	86	30°14'18.50"N	77°31'25.62"E	295.378	297.642
13-13	87	30°14'19.54"N	77°31'24.07"E	295.624	298.646
13-13	88	30°14'20.55"N	77°31'22.51"E	295.800	298.572
13-13	89	30°14'21.07"N	77°31'21.78"E	294.918	297.481
14-14	90	30°14'22.03"N	77°31'23.41"E	292.992	295.358
14-14	91	30°14'21.55"N	77°31'24.12"E	294.535	296.561
14-14	92	30°14'20.51"N	77°31'25.66"E	293.994	296.444
14-14	93	30°14'19.50"N	77°31'27.19"E	294.471	296.571
14-14	94	30°14'18.47"N	77°31'28.69"E	294.107	296.392
14-14	95	30°14'17.42"N	77°31'30.28"E	293.542	295.722
14-14	96	30°14'16.35"N	77°31'31.84"E	293.621	295.844
14-14	97	30°14'15.49"N	77°31'33.15"E	293.461	295.876
15-15	98	30°14'17.33"N	77°31'33.44"E	295.496	297.806
15-15	99	30°14'18.40"N	77°31'31.86"E	294.191	296.366
15-15	100	30°14'19.40"N	77°31'30.39"E	294.089	296.461
15-15	101	30°14'20.44"N	77°31'28.79"E	295.055	297.472
15-15	102	30°14'21.49"N	77°31'27.25"E	296.499	298.891
15-15	103	30°14'22.48"N	77°31'25.69"E	296.682	298.822
15-15	104	30°14'22.96"N	77°31'25.01"E	297.277	299.466
16-16	105	30°14'23.94"N	77°31'26.62"E	298.219	300.664
16-16	106	30°14'23.47"N	77°31'27.33"E	298.402	300.941
16-16	107	30°14'22.45"N	77°31'28.86"E	297.513	299.966



16-16	108	30°14'21.41"N	77°31'30.41"E	297.669	299.981
16-16	109	30°14'20.39"N	77°31'31.94"E	296.490	298.867
16-16	110	30°14'19.36"N	77°31'33.43"E	296.594	298.881
16-16	111	30°14'18.35"N	77°31'34.98"E	295.234	297.982
17-17	112	30°14'19.32"N	77°31'36.60"E	297.714	299.572
17-17	113	30°14'20.38"N	77°31'35.04"E	298.200	300.625
17-17	114	30°14'21.39"N	77°31'33.52"E	298.287	300.682
17-17	115	30°14'22.38"N	77°31'32.06"E	297.827	300.382
17-17	116	30°14'23.44"N	77°31'30.50"E	297.222	299.471
17-17	117	30°14'24.47"N	77°31'28.95"E	296.835	299.551
17-17	118	30°14'24.89"N	77°31'28.24"E	295.916	298.228
18-18	119	30°14'25.89"N	77°31'29.91"E	298.546	300.746
18-18	120	30°14'24.87"N	77°31'31.47"E	299.820	301.418
18-18	121	30°14'23.82"N	77°31'33.04"E	299.669	301.733
18-18	122	30°14'22.78"N	77°31'34.58"E	296.618	298.639
18-18	123	30°14'21.73"N	77°31'36.14"E	296.486	298.428
18-18	124	30°14'20.71"N	77°31'37.68"E	298.894	300.972
19-19	125	30°14'22.37"N	77°31'37.96"E	298.429	300.883
19-19	126	30°14'23.34"N	77°31'36.64"E	296.344	298.994
19-19	127	30°14'24.40"N	77°31'35.15"E	295.152	297.938
19-19	128	30°14'25.44"N	77°31'33.60"E	294.758	297.658
19-19	129	30°14'26.41"N	77°31'32.16"E	295.235	297.811
19-19	130	30°14'27.44"N	77°31'30.79"E	294.632	296.381
20-20	131	30°14'28.95"N	77°31'31.66"E	294.089	296.682
20-20	132	30°14'27.97"N	77°31'33.08"E	294.117	296.284
20-20	133	30°14'26.95"N	77°31'34.54"E	293.500	295.633
20-20	134	30°14'25.88"N	77°31'36.06"E	294.266	296.611
20-20	135	30°14'24.82"N	77°31'37.56"E	294.577	296.844
21-21	136	30°14'26.32"N	77°31'38.48"E	296.606	298.551
21-21	137	30°14'27.37"N	77°31'36.98"E	298.525	300.992
21-21	138	30°14'28.45"N	77°31'35.44"E	300.359	302.881
21-21	139	30°14'29.47"N	77°31'33.99"E	300.520	302.668
21-21	140	30°14'30.48"N	77°31'32.52"E	299.516	301.448
22-22	141	30°14'32.01"N	77°31'33.40"E	299.430	301.993
22-22	142	30°14'30.98"N	77°31'34.88"E	300.242	302.995
22-22	143	30°14'29.99"N	77°31'36.38"E	300.597	302.711
22-22	144	30°14'28.85"N	77°31'37.93"E	298.541	300.998
23-23	145	30°14'30.34"N	77°31'38.81"E	299.500	301.716
23-23	146	30°14'31.44"N	77°31'37.28"E	299.391	301.839



23-23	147	30°14'32.49"N	77°31'35.78"E	301.617	303.806
23-23	148	30°14'33.51"N	77°31'34.28"E	301.739	303.905
24-24	149	30°14'35.03"N	77°31'35.17"E	300.460	302.955
24-24	150	30°14'33.98"N	77°31'36.69"E	300.715	302.907
24-24	151	30°14'32.96"N	77°31'38.18"E	300.886	303.338
24-24	152	30°14'31.85"N	77°31'39.75"E	301.142	303.428
25-25	153	30°14'34.43"N	77°31'39.09"E	302.438	301.776
25-25	154	30°14'35.48"N	77°31'37.57"E	302.646	301.775
25-25	155	30°14'36.54"N	77°31'36.03"E	301.289	305.869
26-26	156	30°14'38.05"N	77°31'36.89"E	301.481	306.521
26-26	157	30°14'36.99"N	77°31'38.49"E	301.769	306.099
26-26	158	30°14'35.91"N	77°31'40.02"E	301.310	305.490



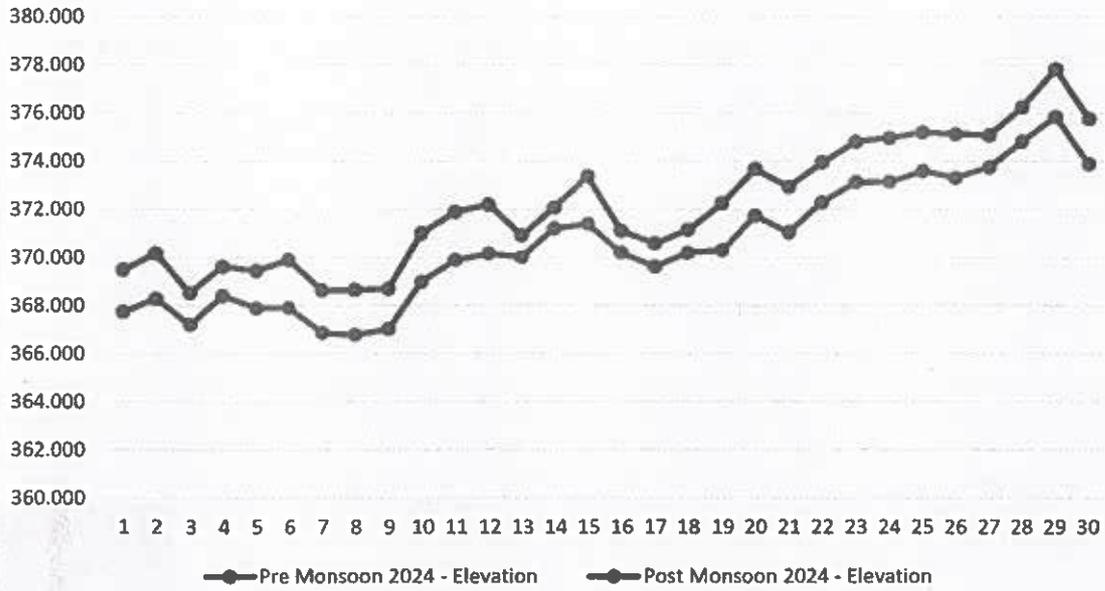
Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left and several smaller ones on the right.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
3	Behat	R.B.M.	Badkala Ra	Haidarpur Hindwala	Khand No / Gata No. - 8/1 , 19 & 22	4.200

Cross Section	Ref. Point	Lat.	Long.	Pre Monsoon 2024 - Elevation	Post Monsoon 2024 - Elevation
1-1	1	30°15'20.17"N	77°40'42.82"E	367.725	369.483
1-1	2	30°15'19.28"N	77°40'43.06"E	368.274	370.161
1-1	3	30°15'18.26"N	77°40'43.32"E	367.207	368.541
2-2	4	30°15'18.29"N	77°40'45.06"E	368.405	369.628
2-2	5	30°15'19.30"N	77°40'45.01"E	367.891	369.447
2-2	6	30°15'20.35"N	77°40'44.83"E	367.907	369.905
3-3	7	30°15'20.32"N	77°40'46.72"E	366.867	368.633
3-3	8	30°15'19.35"N	77°40'46.73"E	366.778	368.662
3-3	9	30°15'18.30"N	77°40'46.74"E	367.022	368.701
4-4	10	30°15'18.32"N	77°40'48.28"E	368.989	370.999
4-4	11	30°15'19.30"N	77°40'48.29"E	369.884	371.886
4-4	12	30°15'20.35"N	77°40'48.26"E	370.155	372.185
5-5	13	30°15'20.32"N	77°40'50.23"E	370.012	370.904
5-5	14	30°15'19.32"N	77°40'50.20"E	371.185	372.066
5-5	15	30°15'18.34"N	77°40'50.28"E	371.386	373.378
6-6	16	30°15'18.34"N	77°40'52.50"E	370.186	371.098
6-6	17	30°15'19.37"N	77°40'52.53"E	369.618	370.590
6-6	18	30°15'20.32"N	77°40'52.51"E	370.197	371.148
7-7	19	30°15'20.31"N	77°40'54.36"E	370.299	372.243
7-7	20	30°15'19.14"N	77°40'54.42"E	371.729	373.667
7-7	21	30°15'18.17"N	77°40'54.38"E	371.029	372.930
8-8	22	30°15'18.36"N	77°40'56.30"E	372.287	373.945
8-8	23	30°15'19.38"N	77°40'56.26"E	373.126	374.808
8-8	24	30°15'20.31"N	77°40'56.24"E	373.134	374.962
9-9	25	30°15'20.22"N	77°40'57.84"E	373.582	375.189
9-9	26	30°15'19.26"N	77°40'57.97"E	373.297	375.118



9-9	27	30°15'18.41"N	77°40'58.03"E	373.740	375.082
10-10	28	30°15'18.42"N	77°41'0.14"E	374.808	376.254
10-10	29	30°15'19.34"N	77°41'0.13"E	375.830	377.821
10-10	30	30°15'20.20"N	77°40'59.96"E	373.878	375.759



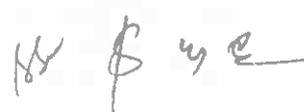
Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left and several smaller ones on the right.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
4	Behat	R.B.M.	Khurwali Ra	Sherpur Pelon	Gata No. - 378/2 & 379/2	7.000

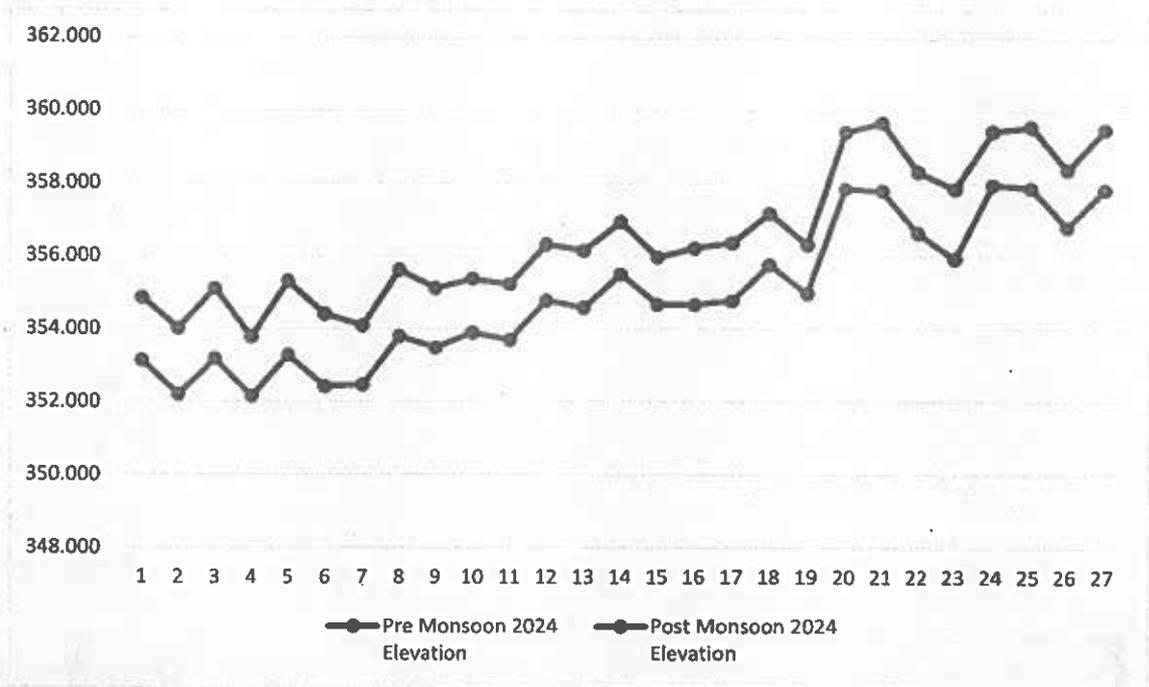
Cross Section	Ref. Point	Lat.	Long.	Pre Monsoon 2024	Post Monsoon 2024
				Elevation	Elevation
1-1	1	30°15'52.54"N	77°39'23.28"E	353.128	354.848
1-1	2	30°15'52.42"N	77°39'24.88"E	352.199	354.019
1-1	3	30°15'52.35"N	77°39'26.74"E	353.182	355.117
2-2	4	30°15'53.58"N	77°39'27.13"E	352.156	353.784
2-2	5	30°15'53.80"N	77°39'25.40"E	353.281	355.321
2-2	6	30°15'54.18"N	77°39'23.49"E	352.422	354.414
3-3	7	30°15'55.51"N	77°39'23.68"E	352.472	354.100
3-3	8	30°15'55.22"N	77°39'25.61"E	353.799	355.616
3-3	9	30°15'54.83"N	77°39'27.59"E	353.490	355.122
4-4	10	30°15'56.25"N	77°39'27.92"E	353.901	355.372
4-4	11	30°15'56.76"N	77°39'25.93"E	353.708	355.236
4-4	12	30°15'57.17"N	77°39'24.12"E	354.789	356.327
5-5	13	30°15'58.74"N	77°39'24.28"E	354.593	356.159
5-5	14	30°15'58.41"N	77°39'26.30"E	355.506	356.947
5-5	15	30°15'58.05"N	77°39'28.36"E	354.667	355.975
6-6	16	30°15'59.44"N	77°39'28.78"E	354.670	356.233
6-6	17	30°15'59.85"N	77°39'26.66"E	354.782	356.374
6-6	18	30°16'0.17"N	77°39'24.66"E	355.772	357.189
7-7	19	30°16'1.97"N	77°39'24.80"E	354.988	356.326
7-7	20	30°16'1.49"N	77°39'26.86"E	357.858	359.424
7-7	21	30°16'1.43"N	77°39'29.36"E	357.804	359.676
8-8	22	30°16'2.96"N	77°39'28.97"E	356.647	358.329
8-8	23	30°16'3.24"N	77°39'27.39"E	355.933	357.860
8-8	24	30°16'3.71"N	77°39'25.23"E	357.972	359.443
9-9	25	30°16'5.22"N	77°39'25.54"E	357.882	359.564
9-9	26	30°16'4.79"N	77°39'27.71"E	356.801	358.382
9-9	27	30°16'4.34"N	77°39'29.78"E	357.825	359.489









Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left and several smaller ones on the right.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
5	Behat	R.B.M.	Yamuna	Nuniyari Achatmal	Gata No. - 1/1/1 Laat 38	24.290

Cross Section	Sl.No	Lat.	Long.	Pre Monsoon 2024 Elevation	Post Monsoon 2024 Elevation
1-1	1	30°11'1.66"N	77°29'25.53"E	291.242	292.921
1-1	2	30°11'2.63"N	77°29'24.46"E	291.455	292.944
1-1	3	30°11'3.73"N	77°29'23.32"E	290.478	292.406
1-1	4	30°11'4.95"N	77°29'22.02"E	290.292	292.114
1-1	5	30°11'6.36"N	77°29'20.73"E	291.655	293.323
1-1	6	30°11'7.32"N	77°29'19.44"E	292.681	294.439
1-1	7	30°11'8.60"N	77°29'18.09"E	293.652	293.270
1-1	8	30°11'9.60"N	77°29'16.84"E	293.594	292.913
1-1	9	30°11'10.94"N	77°29'15.32"E	293.227	293.117
1-1	10	30°11'11.83"N	77°29'14.40"E	292.386	292.184
1-1	11	30°11'12.75"N	77°29'13.23"E	290.554	290.682
2-2	12	30°11'13.80"N	77°29'14.38"E	290.294	291.222
2-2	13	30°11'12.89"N	77°29'15.35"E	290.793	292.075
2-2	14	30°11'11.73"N	77°29'16.53"E	290.387	292.067
2-2	15	30°11'10.55"N	77°29'18.05"E	290.741	292.425
2-2	16	30°11'9.54"N	77°29'19.41"E	289.595	291.250
2-2	17	30°11'8.40"N	77°29'20.55"E	289.291	290.673
2-2	18	30°11'7.01"N	77°29'22.04"E	290.452	292.136
2-2	19	30°11'5.81"N	77°29'23.42"E	292.381	293.963
2-2	20	30°11'4.75"N	77°29'24.83"E	292.289	293.843
2-2	21	30°11'3.55"N	77°29'25.96"E	292.641	294.179
2-2	22	30°11'2.35"N	77°29'27.10"E	292.292	293.985
3-3	23	30°11'3.53"N	77°29'28.73"E	292.314	293.958
3-3	24	30°11'4.57"N	77°29'27.51"E	293.538	295.199
3-3	25	30°11'5.58"N	77°29'26.29"E	293.577	294.961
3-3	26	30°11'6.95"N	77°29'24.85"E	292.444	293.883
3-3	27	30°11'7.89"N	77°29'23.43"E	293.593	295.261
3-3	28	30°11'9.22"N	77°29'22.11"E	292.508	293.901
3-3	29	30°11'10.29"N	77°29'20.84"E	290.593	292.511



Page 85 of 163

3-3	30	30°11'11.71"N	77°29'19.42"E	289.238	291.226
3-3	31	30°11'12.86"N	77°29'17.80"E	289.645	291.727
3-3	32	30°11'13.98"N	77°29'16.64"E	288.282	290.288
3-3	33	30°11'14.73"N	77°29'15.73"E	288.167	290.164
4-4	34	30°11'15.98"N	77°29'16.67"E	288.249	290.134
4-4	35	30°11'14.91"N	77°29'17.94"E	288.128	290.094
4-4	36	30°11'14.04"N	77°29'19.00"E	287.988	289.932
4-4	37	30°11'12.80"N	77°29'20.52"E	286.291	288.116
4-4	38	30°11'11.54"N	77°29'21.80"E	286.362	288.290
4-4	39	30°11'10.55"N	77°29'23.12"E	287.476	289.326
4-4	40	30°11'9.16"N	77°29'24.65"E	287.559	289.500
4-4	41	30°11'8.07"N	77°29'26.06"E	288.544	290.464
4-4	42	30°11'6.95"N	77°29'27.39"E	288.661	290.475
4-4	43	30°11'5.80"N	77°29'28.64"E	289.642	291.296
4-4	44	30°11'5.09"N	77°29'29.60"E	289.299	290.962
5-5	45	30°11'7.05"N	77°29'30.19"E	289.408	294.033
5-5	46	30°11'8.04"N	77°29'29.07"E	290.896	292.416
5-5	47	30°11'9.33"N	77°29'27.62"E	290.241	291.834
5-5	48	30°11'10.56"N	77°29'25.82"E	291.189	292.681
5-5	49	30°11'11.63"N	77°29'24.30"E	291.405	293.097
5-5	50	30°11'12.93"N	77°29'23.03"E	291.147	292.735
5-5	51	30°11'14.07"N	77°29'21.70"E	291.558	293.491
5-5	52	30°11'15.39"N	77°29'20.27"E	291.638	293.467
5-5	53	30°11'16.11"N	77°29'19.21"E	292.594	294.255
5-5	54	30°11'16.99"N	77°29'17.96"E	292.280	294.262
6-6	55	30°11'18.47"N	77°29'19.59"E	293.314	294.648
6-6	56	30°11'17.63"N	77°29'20.71"E	292.871	293.965
6-6	57	30°11'16.48"N	77°29'22.02"E	292.449	293.774
6-6	58	30°11'15.37"N	77°29'23.17"E	293.822	294.817
6-6	59	30°11'14.29"N	77°29'24.21"E	292.592	293.520
6-6	60	30°11'13.40"N	77°29'25.79"E	292.173	293.106
6-6	61	30°11'12.46"N	77°29'27.22"E	290.182	291.038
6-6	62	30°11'10.99"N	77°29'28.61"E	290.608	291.536
6-6	63	30°11'10.11"N	77°29'29.90"E	291.749	292.683
7-7	64	30°11'11.06"N	77°29'31.36"E	292.228	293.512
7-7	65	30°11'11.97"N	77°29'30.27"E	292.506	293.890
7-7	66	30°11'13.29"N	77°29'28.78"E	292.104	293.899
7-7	67	30°11'14.22"N	77°29'27.54"E	291.317	292.799
7-7	68	30°11'15.36"N	77°29'26.20"E	290.622	291.987

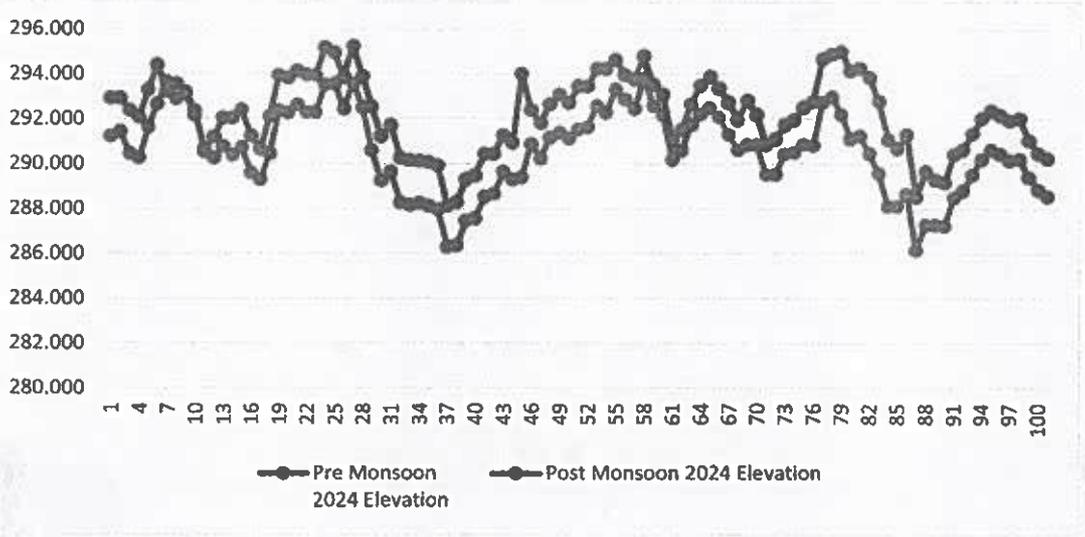


7-7	69	30°11'16.53"N	77°29'24.54"E	290.869	292.851
7-7	70	30°11'17.89"N	77°29'23.18"E	290.871	292.205
7-7	71	30°11'18.95"N	77°29'21.90"E	289.538	290.901
7-7	72	30°11'19.72"N	77°29'20.95"E	289.549	291.131
8-8	73	30°11'21.02"N	77°29'22.36"E	290.450	291.744
8-8	74	30°11'20.04"N	77°29'23.59"E	290.522	291.978
8-8	75	30°11'19.12"N	77°29'24.53"E	290.881	292.563
8-8	76	30°11'18.16"N	77°29'25.91"E	290.828	292.813
8-8	77	30°11'16.84"N	77°29'27.52"E	292.741	294.699
8-8	78	30°11'15.64"N	77°29'28.96"E	292.990	294.918
8-8	79	30°11'14.64"N	77°29'30.17"E	292.208	295.036
8-8	80	30°11'13.44"N	77°29'31.78"E	291.117	294.158
9-9	81	30°11'15.28"N	77°29'32.06"E	291.280	294.288
9-9	82	30°11'16.59"N	77°29'30.84"E	290.478	293.869
9-9	83	30°11'17.88"N	77°29'29.22"E	289.587	292.815
9-9	84	30°11'18.86"N	77°29'27.64"E	288.122	291.080
9-9	85	30°11'19.86"N	77°29'26.37"E	288.138	290.696
9-9	86	30°11'20.97"N	77°29'24.89"E	288.666	291.330
9-9	87	30°11'22.12"N	77°29'23.71"E	286.161	288.543
10-10	88	30°11'23.32"N	77°29'25.06"E	287.298	289.679
10-10	89	30°11'22.24"N	77°29'25.86"E	287.306	289.304
10-10	90	30°11'21.04"N	77°29'27.45"E	287.242	289.194
10-10	91	30°11'19.99"N	77°29'28.70"E	288.517	290.445
10-10	92	30°11'19.20"N	77°29'29.79"E	288.838	290.675
10-10	93	30°11'17.96"N	77°29'31.33"E	289.539	291.391
10-10	94	30°11'16.79"N	77°29'32.60"E	290.218	292.055
11-11	95	30°11'17.45"N	77°29'33.97"E	290.638	292.400
11-11	96	30°11'18.89"N	77°29'33.05"E	290.463	292.185
11-11	97	30°11'20.16"N	77°29'31.97"E	290.182	291.947
11-11	98	30°11'20.80"N	77°29'30.31"E	290.225	292.041
11-11	99	30°11'22.01"N	77°29'28.85"E	289.416	291.069
11-11	100	30°11'23.28"N	77°29'27.17"E	288.841	290.485
11-11	101	30°11'24.28"N	77°29'26.23"E	288.558	290.246



*[Handwritten signature]*

*[Handwritten signature]* Page 87 of 163



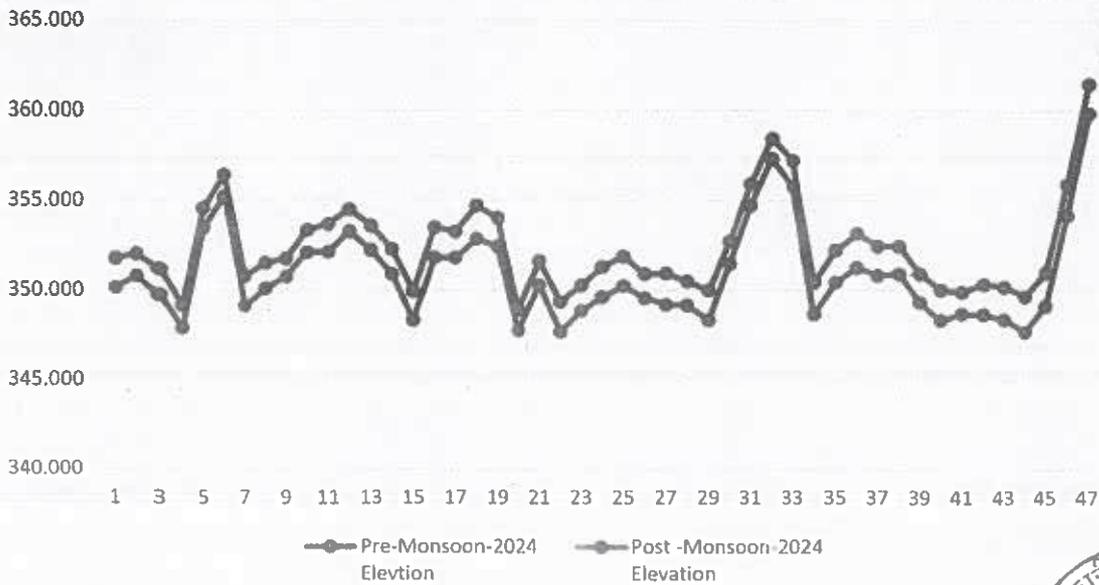
*[Handwritten signatures and initials]*

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
6	Behat	R.B.M.	Yamuna	Rehna	Khand No. / Gata no. - 03, Lot No - 03	8.050

Cross Section	Sl.No	Lat.	Long.	Pre-Monsoon-2024 Elevation	Post-Monsoon-2024 Elevation
1-1	1	30°21'36.29"N	77°36'5.48"E	350.125	351.747
1-1	2	30°21'37.76"N	77°36'4.62"E	350.765	351.990
1-1	3	30°21'39.20"N	77°36'3.73"E	349.741	351.183
1-1	4	30°21'40.65"N	77°36'2.86"E	347.902	349.171
1-1	5	30°21'41.68"N	77°36'2.29"E	353.422	354.563
2-2	6	30°21'40.97"N	77°36'0.08"E	355.202	356.416
2-2	7	30°21'40.03"N	77°36'1.12"E	349.122	350.784
2-2	8	30°21'38.73"N	77°36'2.31"E	350.088	351.502
2-2	9	30°21'37.65"N	77°36'3.46"E	350.733	351.747
2-2	10	30°21'36.45"N	77°36'4.74"E	352.104	353.328
2-2	11	30°21'35.93"N	77°36'5.21"E	352.106	353.678
3-3	12	30°21'34.57"N	77°36'4.12"E	353.244	354.482
3-3	13	30°21'35.70"N	77°36'3.01"E	352.211	353.578
3-3	14	30°21'36.95"N	77°36'1.72"E	350.856	352.284
3-3	15	30°21'38.08"N	77°36'0.52"E	348.341	349.937
3-3	16	30°21'39.27"N	77°35'59.25"E	351.795	353.477
3-3	17	30°21'40.32"N	77°35'58.12"E	351.799	353.242
4-4	18	30°21'39.75"N	77°35'56.31"E	352.831	354.687
4-4	19	30°21'38.65"N	77°35'57.51"E	352.428	354.010
4-4	20	30°21'37.44"N	77°35'58.74"E	347.757	348.931
4-4	21	30°21'36.27"N	77°35'59.95"E	350.276	351.614
4-4	22	30°21'35.11"N	77°36'1.18"E	347.682	349.350
4-4	23	30°21'33.92"N	77°36'2.49"E	348.822	350.263
4-4	24	30°21'33.58"N	77°36'3.38"E	349.628	351.296
5-5	25	30°21'32.07"N	77°36'2.17"E	350.228	351.889
5-5	26	30°21'33.27"N	77°36'0.87"E	349.551	350.892
5-5	27	30°21'34.51"N	77°35'59.55"E	349.192	350.944



5-5	28	30°21'35.64"N	77°35'58.32"E	349.174	350.511
5-5	29	30°21'36.80"N	77°35'57.03"E	348.335	350.003
5-5	30	30°21'38.00"N	77°35'55.71"E	351.492	352.719
5-5	31	30°21'39.15"N	77°35'54.48"E	354.714	355.906
6-6	32	30°21'38.58"N	77°35'52.65"E	357.288	358.434
6-6	33	30°21'37.34"N	77°35'53.96"E	355.771	357.211
6-6	34	30°21'36.19"N	77°35'55.27"E	348.662	350.430
6-6	35	30°21'34.96"N	77°35'56.62"E	350.441	352.220
6-6	36	30°21'33.79"N	77°35'57.90"E	351.277	353.162
6-6	37	30°21'32.58"N	77°35'59.32"E	350.820	352.451
6-6	38	30°21'31.38"N	77°36'0.53"E	350.922	352.459
6-6	39	30°21'30.80"N	77°36'1.16"E	349.336	350.932
7-7	40	30°21'29.58"N	77°36'0.22"E	348.331	350.012
7-7	41	30°21'30.73"N	77°35'58.92"E	348.690	349.907
7-7	42	30°21'31.93"N	77°35'57.56"E	348.655	350.339
7-7	43	30°21'33.13"N	77°35'56.25"E	348.382	350.196
7-7	44	30°21'34.29"N	77°35'54.87"E	347.714	349.685
7-7	45	30°21'35.54"N	77°35'53.58"E	349.138	350.995
7-7	46	30°21'36.75"N	77°35'52.26"E	354.155	355.888
7-7	47	30°21'37.96"N	77°35'50.83"E	359.850	361.495

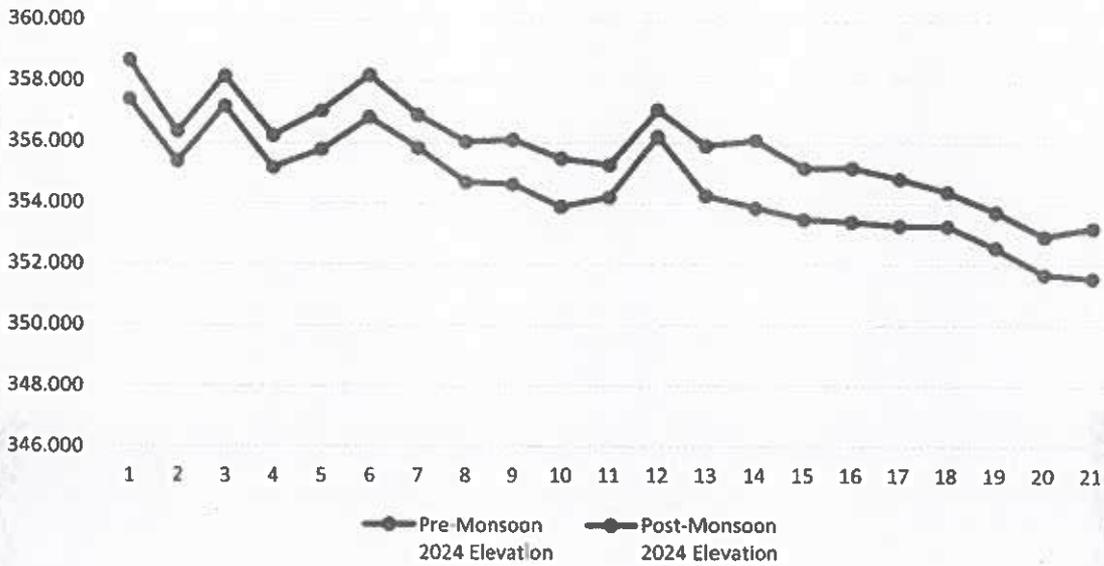


Handwritten signatures and initials are present at the bottom of the page.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
7	Behat	R.B.M.	Gaisara Rao	Rahena	Gata No. 179/2	3.750

Cross Section	Sl.No	Lat.	Long.	Pre-Monsoon 2024 Elevation	Post-Monsoon 2024 Elevation
1-1	1	30°19'55.66"N	77°36'32.17"E	357.412	358.694
1-1	2	30°19'54.29"N	77°36'32.46"E	355.382	356.363
1-1	3	30°19'52.92"N	77°36'32.76"E	357.208	358.200
2-2	4	30°19'52.60"N	77°36'30.90"E	355.188	356.246
2-2	5	30°19'53.97"N	77°36'30.62"E	355.766	357.051
2-2	6	30°19'55.34"N	77°36'30.35"E	356.831	358.213
3-3	7	30°19'55.01"N	77°36'28.53"E	355.822	356.906
3-3	8	30°19'53.65"N	77°36'28.79"E	354.698	356.033
3-3	9	30°19'52.27"N	77°36'29.07"E	354.632	356.101
4-4	10	30°19'51.96"N	77°36'27.24"E	353.895	355.489
4-4	11	30°19'53.34"N	77°36'26.96"E	354.208	355.274
4-4	12	30°19'54.70"N	77°36'26.68"E	356.212	357.084
5-5	13	30°19'54.39"N	77°36'24.82"E	354.266	355.910
5-5	14	30°19'53.02"N	77°36'25.10"E	353.864	356.088
5-5	15	30°19'51.66"N	77°36'25.37"E	353.492	355.173
6-6	16	30°19'51.35"N	77°36'23.55"E	353.408	355.182
6-6	17	30°19'52.69"N	77°36'23.28"E	353.288	354.829
6-6	18	30°19'54.07"N	77°36'22.98"E	353.272	354.400
7-7	19	30°19'53.74"N	77°36'21.13"E	352.571	353.746
7-7	20	30°19'52.38"N	77°36'21.44"E	351.683	352.935
7-7	21	30°19'51.05"N	77°36'21.72"E	351.552	353.207





*[Handwritten marks]*

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
8	Nukur	Sand	Yamuna	Dhikkan Kalan	Gata No. - 839, 841 to 856, 858, 859, 860, 861, 863, 864, 865, 866, 867, 871, 872, 888, 889, 406, 407	52.630

Cross Section	Ref. Point	Lat.	Long.	Pre-Monsoon 2024 Elevation	Post-Monsoon 2024 Elevation
1-1	1	30° 1'22.85"N	77° 17'23.37"E	260.807	262.215
1-1	2	30° 1'23.84"N	77° 17'21.30"E	260.284	261.617
1-1	3	30° 1'24.91"N	77° 17'18.92"E	261.695	262.977
1-1	4	30° 1'25.69"N	77° 17'16.86"E	264.079	265.726
2-2	5	30° 1'27.34"N	77° 17'17.57"E	264.989	266.313
2-2	6	30° 1'26.79"N	77° 17'19.74"E	261.176	262.258
2-2	7	30° 1'26.03"N	77° 17'21.90"E	260.125	261.229
2-2	8	30° 1'25.14"N	77° 17'24.02"E	262.278	263.406
2-2	9	30° 1'24.38"N	77° 17'25.78"E	261.577	263.229
3-3	10	30° 1'24.36"N	77° 17'27.99"E	262.946	264.898
3-3	11	30° 1'26.29"N	77° 17'27.02"E	266.256	267.589
3-3	12	30° 1'27.23"N	77° 17'25.43"E	266.521	269.449
3-3	13	30° 1'28.23"N	77° 17'23.17"E	266.504	268.492
3-3	14	30° 1'28.99"N	77° 17'21.02"E	267.400	269.366
3-3	15	30° 1'29.64"N	77° 17'18.88"E	264.900	266.181
4-4	16	30° 1'31.61"N	77° 17'19.93"E	266.612	267.859
4-4	17	30° 1'30.92"N	77° 17'21.69"E	263.970	265.305
4-4	18	30° 1'30.30"N	77° 17'23.64"E	265.462	267.120
4-4	19	30° 1'29.44"N	77° 17'25.55"E	262.321	263.762
4-4	20	30° 1'28.69"N	77° 17'27.66"E	261.882	263.213
4-4	21	30° 1'27.78"N	77° 17'29.43"E	260.211	261.836
4-4	22	30° 1'27.11"N	77° 17'31.29"E	259.082	260.254
5-5	23	30° 1'28.46"N	77° 17'32.82"E	259.274	261.036
5-5	24	30° 1'29.66"N	77° 17'30.88"E	273.854	275.382
5-5	25	30° 1'30.48"N	77° 17'29.16"E	266.335	267.669
5-5	26	30° 1'31.50"N	77° 17'27.29"E	266.229	268.170
5-5	27	30° 1'32.58"N	77° 17'25.18"E	261.465	262.908
5-5	28	30° 1'33.16"N	77° 17'23.15"E	265.776	267.084
5-5	29	30° 1'33.91"N	77° 17'21.22"E	261.333	262.828



6-6	30	30° 1'35.90"N	77°17'22.10"E	261.662	262.886
6-6	31	30° 1'35.18"N	77°17'23.89"E	264.137	265.471
6-6	32	30° 1'34.54"N	77°17'25.78"E	263.327	264.911
6-6	33	30° 1'33.77"N	77°17'27.58"E	263.238	264.804
6-6	34	30° 1'32.90"N	77°17'29.29"E	262.617	264.168
6-6	35	30° 1'31.88"N	77°17'31.07"E	268.971	270.653
6-6	36	30° 1'31.18"N	77°17'32.87"E	271.869	273.386
6-6	37	30° 1'30.13"N	77°17'34.69"E	259.953	261.334
7-7	38	30° 1'30.97"N	77°17'36.38"E	261.759	262.765
7-7	39	30° 1'32.22"N	77°17'35.22"E	261.121	262.749
7-7	40	30° 1'33.19"N	77°17'33.51"E	274.558	276.305
7-7	41	30° 1'34.05"N	77°17'31.73"E	267.301	268.962
7-7	42	30° 1'35.06"N	77°17'30.11"E	268.128	269.661
7-7	43	30° 1'36.01"N	77°17'28.40"E	268.574	270.196
7-7	44	30° 1'36.79"N	77°17'26.43"E	270.880	272.481
7-7	45	30° 1'37.49"N	77°17'24.58"E	264.630	266.224
7-7	46	30° 1'38.13"N	77°17'22.84"E	262.436	264.391
8-8	47	30° 1'39.92"N	77°17'23.64"E	265.026	266.618
8-8	48	30° 1'39.38"N	77°17'25.60"E	267.899	269.487
8-8	49	30° 1'38.81"N	77°17'27.46"E	266.628	268.294
8-8	50	30° 1'37.95"N	77°17'29.22"E	269.264	270.645
8-8	51	30° 1'37.09"N	77°17'30.96"E	266.826	268.008
8-8	52	30° 1'36.15"N	77°17'32.70"E	269.739	271.401
8-8	53	30° 1'35.21"N	77°17'34.43"E	268.998	270.279
8-8	54	30° 1'34.26"N	77°17'36.15"E	264.022	265.363
8-8	55	30° 1'33.20"N	77°17'37.72"E	271.086	272.533
8-8	56	30° 1'32.29"N	77°17'39.22"E	268.984	270.950
9-9	57	30° 1'33.99"N	77°17'40.42"E	267.509	269.334
9-9	58	30° 1'35.08"N	77°17'38.90"E	272.439	274.186
9-9	59	30° 1'36.32"N	77°17'37.28"E	274.777	276.743
9-9	60	30° 1'37.33"N	77°17'35.50"E	275.505	277.007
9-9	61	30° 1'38.05"N	77°17'33.74"E	261.962	263.773
9-9	62	30° 1'39.02"N	77°17'32.00"E	261.112	262.224
9-9	63	30° 1'39.91"N	77°17'30.14"E	263.343	264.571
9-9	64	30° 1'40.71"N	77°17'28.18"E	267.136	268.680
9-9	65	30° 1'41.41"N	77°17'26.37"E	266.023	267.684
9-9	66	30° 1'41.88"N	77°17'24.51"E	265.296	267.177
10-10	67	30° 1'41.59"N	77°17'31.65"E	265.790	267.306
10-10	68	30° 1'40.60"N	77°17'33.40"E	264.365	265.646



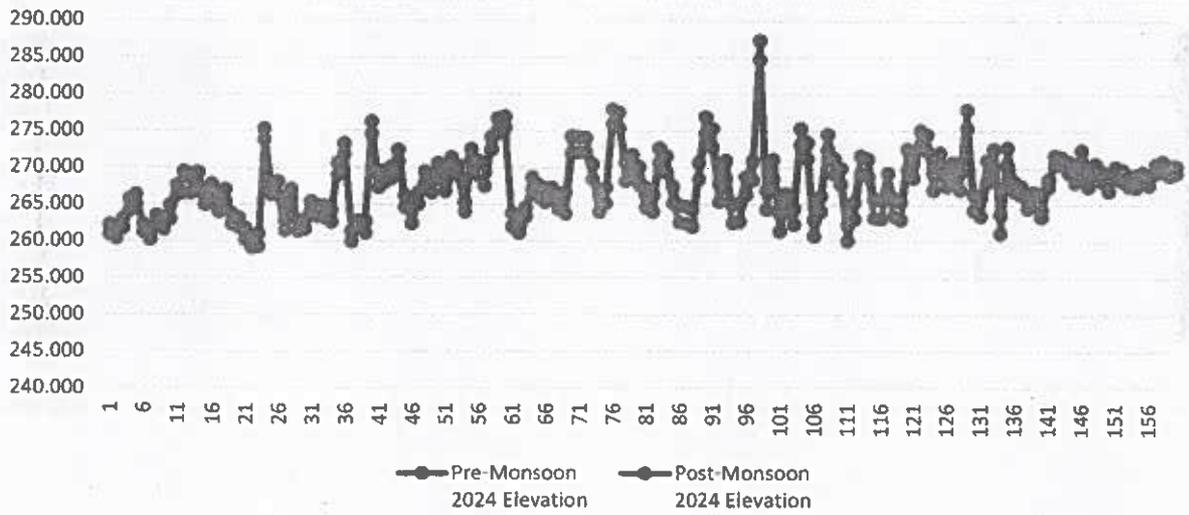
10-10	69	30° 1'39.81"N	77°17'35.07"E	263.746	266.673
10-10	70	30° 1'38.99"N	77°17'36.98"E	271.920	274.244
10-10	71	30° 1'38.03"N	77°17'38.82"E	272.112	274.120
10-10	72	30° 1'36.89"N	77°17'40.16"E	272.028	274.042
10-10	73	30° 1'35.89"N	77°17'41.75"E	268.408	270.522
11-11	74	30° 1'37.58"N	77°17'42.90"E	263.993	266.221
11-11	75	30° 1'38.76"N	77°17'41.62"E	265.213	267.301
11-11	76	30° 1'39.92"N	77°17'39.89"E	275.955	277.961
11-11	77	30° 1'41.13"N	77°17'38.02"E	275.422	277.541
11-11	78	30° 1'42.16"N	77°17'35.41"E	268.172	270.700
11-11	79	30° 1'43.42"N	77°17'33.32"E	269.116	271.780
12-12	80	30° 1'45.32"N	77°17'34.46"E	267.713	270.156
12-12	81	30° 1'44.26"N	77°17'36.11"E	264.553	267.275
12-12	82	30° 1'43.32"N	77°17'37.81"E	264.027	266.255
12-12	83	30° 1'42.39"N	77°17'39.71"E	270.667	272.671
12-12	84	30° 1'41.31"N	77°17'41.63"E	269.417	271.598
12-12	85	30° 1'40.18"N	77°17'43.25"E	265.212	267.437
12-12	86	30° 1'39.37"N	77°17'44.48"E	262.576	264.958
13-13	87	30° 1'40.97"N	77°17'45.61"E	262.360	264.756
13-13	88	30° 1'42.04"N	77°17'44.13"E	261.986	264.318
13-13	89	30° 1'43.23"N	77°17'42.58"E	268.458	270.759
13-13	90	30° 1'44.22"N	77°17'40.95"E	274.622	276.966
13-13	91	30° 1'45.19"N	77°17'39.20"E	272.848	275.350
13-13	92	30° 1'46.14"N	77°17'37.48"E	265.375	267.813
13-13	93	30° 1'47.22"N	77°17'35.80"E	268.580	271.027
14-14	94	30° 1'48.79"N	77°17'37.05"E	262.469	264.912
14-14	95	30° 1'47.94"N	77°17'38.68"E	262.715	265.160
14-14	96	30° 1'46.92"N	77°17'40.38"E	266.382	268.822
14-14	97	30° 1'45.95"N	77°17'42.23"E	268.342	271.002
14-14	98	30° 1'44.89"N	77°17'44.10"E	284.711	287.373
14-14	99	30° 1'43.75"N	77°17'45.74"E	264.366	266.907
14-14	100	30° 1'43.42"N	77°17'47.98"E	268.546	271.139
15-15	101	30° 1'45.31"N	77°17'47.54"E	261.392	263.833
15-15	102	30° 1'46.46"N	77°17'45.84"E	264.428	266.516
15-15	103	30° 1'47.58"N	77°17'44.14"E	262.318	264.417
15-15	104	30° 1'48.59"N	77°17'42.07"E	273.175	275.389
15-15	105	30° 1'49.55"N	77°17'40.30"E	271.269	273.506
15-15	106	30° 1'50.73"N	77°17'38.65"E	260.715	262.899
16-16	107	30° 1'52.00"N	77°17'40.07"E	264.067	266.173



16-16	108	30° 1'51.33"N	77°17'41.83"E	272.450	274.594
16-16	109	30° 1'50.39"N	77°17'43.54"E	269.141	271.307
16-16	110	30° 1'49.47"N	77°17'45.55"E	267.780	269.968
16-16	111	30° 1'48.14"N	77°17'47.22"E	260.097	262.286
16-16	112	30° 1'47.16"N	77°17'49.10"E	263.083	265.374
16-16	113	30° 1'46.16"N	77°17'50.81"E	269.300	271.688
17-17	114	30° 1'47.66"N	77°17'52.27"E	268.884	271.240
17-17	115	30° 1'48.49"N	77°17'50.36"E	263.165	265.816
17-17	116	30° 1'49.72"N	77°17'48.89"E	263.100	265.686
17-17	117	30° 1'50.67"N	77°17'47.43"E	266.700	269.294
17-17	118	30° 1'51.63"N	77°17'45.79"E	263.439	265.939
17-17	119	30° 1'52.63"N	77°17'44.21"E	262.924	265.372
18-18	120	30° 1'53.45"N	77°17'46.74"E	269.712	272.596
18-18	121	30° 1'52.56"N	77°17'48.13"E	268.664	270.888
18-18	122	30° 1'51.65"N	77°17'49.56"E	273.134	275.137
18-18	123	30° 1'50.67"N	77°17'51.19"E	272.392	274.593
18-18	124	30° 1'49.87"N	77°17'52.65"E	267.016	269.362
18-18	125	30° 1'49.01"N	77°17'54.27"E	269.283	272.081
19-19	126	30° 1'50.34"N	77°17'55.95"E	267.544	270.155
19-19	127	30° 1'51.43"N	77°17'54.29"E	268.569	270.793
19-19	128	30° 1'52.29"N	77°17'52.95"E	267.040	269.367
19-19	129	30° 1'52.96"N	77°17'51.66"E	275.403	277.959
19-19	130	30° 1'54.18"N	77°17'50.14"E	264.218	266.451
20-20	131	30° 1'54.89"N	77°17'51.93"E	263.488	266.042
20-20	132	30° 1'54.24"N	77°17'53.41"E	268.147	271.069
20-20	133	30° 1'53.40"N	77°17'54.80"E	270.200	272.624
20-20	134	30° 1'52.52"N	77°17'56.29"E	261.145	263.713
20-20	135	30° 1'51.65"N	77°17'57.83"E	270.521	272.802
21-21	136	30° 1'52.96"N	77°17'59.61"E	266.837	268.162
21-21	137	30° 1'53.80"N	77°17'58.20"E	266.325	267.543
21-21	138	30° 1'54.71"N	77°17'56.73"E	264.489	265.666
21-21	139	30° 1'55.60"N	77°17'55.51"E	265.526	266.747
21-21	140	30° 1'56.44"N	77°17'54.01"E	263.360	264.366
22-22	141	30° 1'57.42"N	77°17'55.40"E	267.400	268.494
22-22	142	30° 1'56.84"N	77°17'57.04"E	270.499	271.740
22-22	143	30° 1'55.96"N	77°17'58.62"E	270.342	271.480
22-22	144	30° 1'55.04"N	77°18'0.35"E	269.402	270.950
23-23	145	30° 1'56.64"N	77°18'1.23"E	268.050	269.715
23-23	146	30° 1'57.69"N	77°17'59.99"E	271.058	272.475



23-23	147	30° 1'58.60"N	77°17'58.08"E	267.507	268.929
24-24	148	30° 1'59.70"N	77°17'59.99"E	269.276	270.575
24-24	149	30° 1'58.80"N	77°18'1.50"E	268.212	269.544
24-24	150	30° 1'57.79"N	77°18'2.77"E	266.880	268.219
25-25	151	30° 1'58.37"N	77°18'4.85"E	268.699	270.191
25-25	152	30° 1'59.22"N	77°18'3.90"E	268.313	269.871
25-25	153	30° 2'0.37"N	77°18'2.68"E	267.608	269.079
26-26	154	30° 2'1.31"N	77°18'3.98"E	267.422	269.050
26-26	155	30° 2'0.30"N	77°18'5.18"E	268.031	269.516
26-26	156	30° 1'59.40"N	77°18'6.20"E	267.675	268.916
26-26	157	30° 1'58.49"N	77°18'7.40"E	269.427	270.589
27-27	158	30° 2'0.33"N	77°18'7.69"E	269.490	270.975
27-27	159	30° 2'1.44"N	77°18'6.70"E	268.966	270.348
27-27	160	30° 2'2.48"N	77°18'5.67"E	269.292	270.360



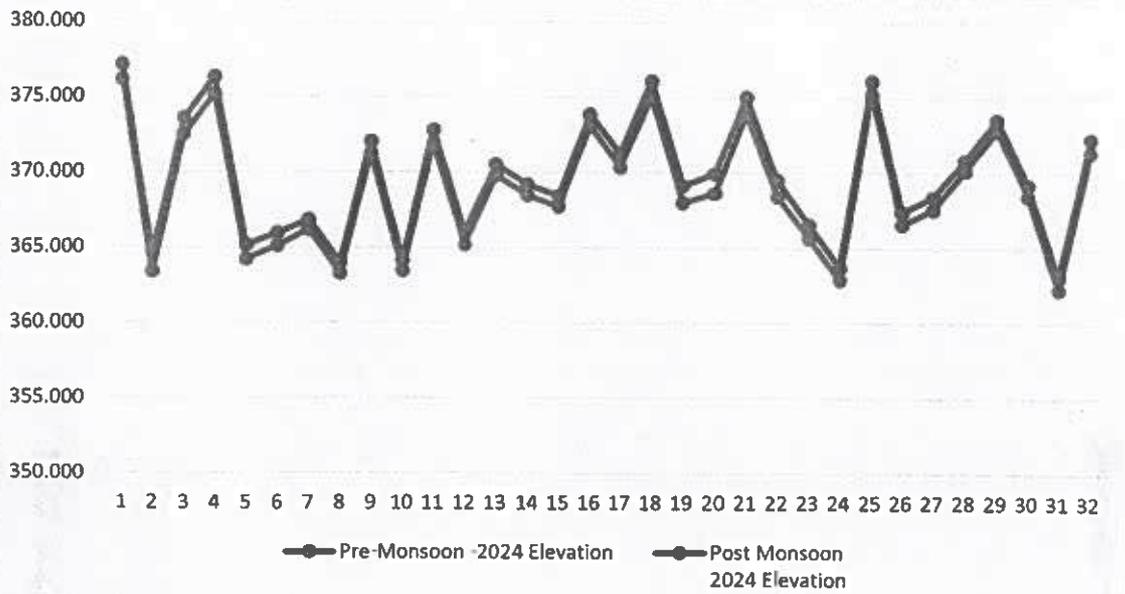
Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left and several smaller ones on the right.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
9	Behat	R.B.M.	Khurwali Ra	Sherpur Pelon	403 , 404/1 , 405 , 406/1 , 416/2 , 421/1 , 422/2 , 423/2 , 424/2 , 429 and 431	6.475

Cross Section	Ref. Point	Lat.	Long.	Pre-Monsoon -2024 Elevation	Post Monsoon 2024 Elevation
1-1	1	30°16'34.34"N	77°39'44.70"E	376.158	377.141
1-1	2	30°16'33.75"N	77°39'46.29"E	363.389	364.635
1-1	3	30°16'33.05"N	77°39'48.42"E	372.554	373.638
1-1	4	30°16'32.24"N	77°39'50.15"E	375.190	376.364
2-2	5	30°16'31.30"N	77°39'48.97"E	364.236	365.191
2-2	6	30°16'32.06"N	77°39'47.41"E	365.122	365.963
2-2	7	30°16'33.00"N	77°39'45.72"E	366.202	366.850
2-2	8	30°16'33.59"N	77°39'44.15"E	363.265	364.013
3-3	9	30°16'32.38"N	77°39'43.09"E	371.248	372.076
3-3	10	30°16'31.59"N	77°39'44.74"E	363.452	364.145
3-3	11	30°16'30.92"N	77°39'46.34"E	371.909	372.835
3-3	12	30°16'30.11"N	77°39'47.62"E	365.210	366.032
4-4	13	30°16'29.00"N	77°39'46.19"E	369.811	370.555
4-4	14	30°16'29.80"N	77°39'44.95"E	368.493	369.221
4-4	15	30°16'30.60"N	77°39'43.58"E	367.763	368.453
4-4	16	30°16'31.40"N	77°39'41.99"E	373.084	373.897
5-5	17	30°16'29.83"N	77°39'40.81"E	370.344	371.282
5-5	18	30°16'28.82"N	77°39'42.80"E	375.056	376.116
5-5	19	30°16'27.72"N	77°39'44.55"E	368.014	369.142
6-6	20	30°16'26.73"N	77°39'43.12"E	368.648	369.936
6-6	21	30°16'27.79"N	77°39'41.76"E	373.928	375.075
6-6	22	30°16'28.76"N	77°39'39.99"E	368.411	369.515
7-7	23	30°16'27.32"N	77°39'38.87"E	365.655	366.577
7-7	24	30°16'26.47"N	77°39'40.60"E	362.911	363.740
7-7	25	30°16'25.79"N	77°39'41.91"E	375.256	376.119
8-8	26	30°16'24.63"N	77°39'40.19"E	366.581	367.403
8-8	27	30°16'25.36"N	77°39'39.15"E	367.566	368.410
8-8	28	30°16'26.15"N	77°39'37.80"E	370.138	370.846



9-9	29	30°16'24.31"N	77°39'36.68"E	372.833	373.569
9-9	30	30°16'23.44"N	77°39'38.60"E	368.491	369.232
10-10	31	30°16'22.02"N	77°39'36.90"E	362.272	363.094
10-10	32	30°16'22.82"N	77°39'35.47"E	371.411	372.339



Handwritten signatures and initials are present at the bottom of the page, including a large stylized signature on the left and several smaller ones on the right.

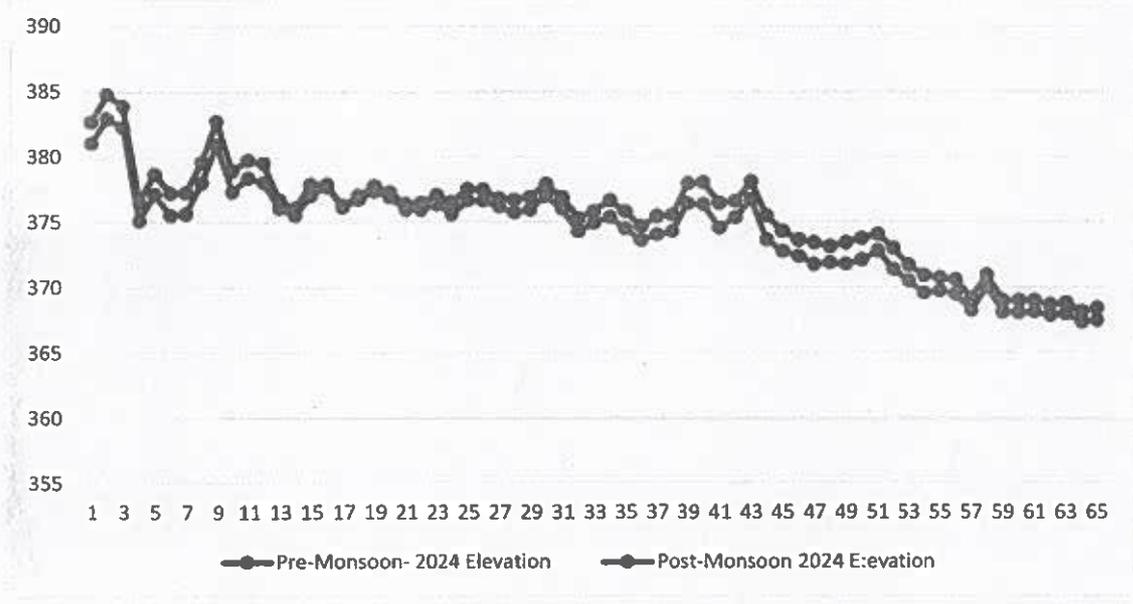
Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
10	Behat	R.B.M.	Kaluwala	Kaluwala Pahadipur	119/1, 120/1, 192/1, 193/1, 125/4	14.900

Cross Section	Sl.No	Lat.	Long.	Pre-Monsoon- 2024 Elevation	Post-Monsoon 2024 E:evation
1-1	1	30°12'8.17"N	77°45'37.79"E	381.046	382.666
1-1	2	30°12'7.26"N	77°45'39.14"E	382.945	384.775
1-1	3	30°12'6.38"N	77°45'40.54"E	382.218	383.878
1-1	4	30°12'5.50"N	77°45'41.89"E	375.086	376.526
2-2	5	30°12'4.10"N	77°45'40.90"E	377.108	378.688
2-2	6	30°12'5.03"N	77°45'39.50"E	375.536	377.236
2-2	7	30°12'5.93"N	77°45'38.10"E	375.638	377.298
2-2	8	30°12'6.84"N	77°45'36.78"E	378.028	379.608
3-3	9	30°12'5.41"N	77°45'35.62"E	380.948	382.768
3-3	10	30°12'4.54"N	77°45'36.99"E	377.319	378.959
3-3	11	30°12'3.66"N	77°45'38.38"E	378.358	379.768
3-3	12	30°12'2.76"N	77°45'39.82"E	378.042	379.512
4-4	13	30°12'1.36"N	77°45'38.74"E	376.043	376.701
4-4	14	30°12'2.27"N	77°45'37.25"E	375.494	376.048
4-4	15	30°12'3.13"N	77°45'35.84"E	377.010	377.895
4-4	16	30°12'3.96"N	77°45'34.48"E	377.710	377.936
5-5	17	30°12'2.61"N	77°45'33.43"E	376.136	376.268
5-5	18	30°12'1.79"N	77°45'34.76"E	376.680	377.044
5-5	19	30°12'0.94"N	77°45'36.19"E	377.349	377.790
5-5	20	30°12'0.04"N	77°45'37.69"E	376.896	377.287
6-6	21	30°11'58.60"N	77°45'36.64"E	375.942	376.403
6-6	22	30°11'59.56"N	77°45'35.10"E	375.940	376.498
6-6	23	30°12'0.38"N	77°45'33.63"E	376.366	377.060
7-7	24	30°11'59.07"N	77°45'32.55"E	375.606	376.556
7-7	25	30°11'58.18"N	77°45'34.00"E	376.646	377.554
7-7	26	30°11'57.24"N	77°45'35.56"E	376.638	377.488
7-7	27	30°11'56.37"N	77°45'36.92"E	376.186	376.824
8-8	28	30°11'55.03"N	77°45'35.88"E	375.724	376.715
8-8	29	30°11'55.87"N	77°45'34.50"E	375.961	376.923
8-8	30	30°11'56.85"N	77°45'32.93"E	376.974	377.915



8-8	31	30°11'57.74"N	77°45'31.48"E	376.018	376.874
9-9	32	30°11'55.50"N	77°45'31.84"E	374.288	375.282
9-9	33	30°11'54.54"N	77°45'33.46"E	374.908	375.831
9-9	34	30°11'53.69"N	77°45'34.89"E	375.362	376.646
9-9	35	30°11'52.87"N	77°45'36.28"E	374.476	375.812
10-10	36	30°11'51.53"N	77°45'35.31"E	373.582	374.667
10-10	37	30°11'52.35"N	77°45'33.90"E	374.035	375.427
10-10	38	30°11'53.22"N	77°45'32.43"E	374.279	375.545
10-10	39	30°11'54.19"N	77°45'30.79"E	376.391	377.949
11-11	40	30°11'52.85"N	77°45'29.72"E	376.342	378.041
11-11	41	30°11'51.85"N	77°45'31.37"E	374.538	376.466
11-11	42	30°11'50.97"N	77°45'32.85"E	375.341	376.591
11-11	43	30°11'50.11"N	77°45'34.23"E	376.745	378.113
12-12	44	30°11'47.85"N	77°45'34.63"E	373.654	375.507
12-12	45	30°11'48.73"N	77°45'33.20"E	372.738	374.312
12-12	46	30°11'49.60"N	77°45'31.81"E	372.375	373.625
12-12	47	30°11'50.47"N	77°45'30.31"E	371.746	373.410
13-13	48	30°11'49.12"N	77°45'29.27"E	371.840	373.124
13-13	49	30°11'48.23"N	77°45'30.78"E	371.751	373.416
13-13	50	30°11'47.39"N	77°45'32.19"E	372.071	373.762
13-13	51	30°11'46.51"N	77°45'33.67"E	372.774	374.054
14-14	52	30°11'45.14"N	77°45'32.65"E	371.349	372.990
14-14	53	30°11'46.02"N	77°45'31.15"E	370.475	371.703
14-14	54	30°11'46.85"N	77°45'29.75"E	369.526	370.891
14-14	55	30°11'47.76"N	77°45'28.20"E	369.704	370.712
15-15	56	30°11'45.47"N	77°45'28.70"E	369.469	370.559
15-15	57	30°11'44.64"N	77°45'30.10"E	368.189	369.156
15-15	58	30°11'43.74"N	77°45'31.62"E	369.983	370.938
15-15	59	30°11'42.90"N	77°45'32.99"E	368.062	368.970
16-16	60	30°11'41.54"N	77°45'32.00"E	368.046	368.984
16-16	61	30°11'42.39"N	77°45'30.58"E	368.106	368.961
16-16	62	30°11'43.31"N	77°45'29.08"E	367.841	368.666
16-16	63	30°11'44.13"N	77°45'27.68"E	367.967	368.779
17-17	64	30°11'42.69"N	77°45'26.59"E	367.302	368.138
17-17	65	30°11'41.88"N	77°45'28.01"E	367.452	368.374





Handwritten signatures and initials in black ink, including a large signature on the left and several smaller ones on the right.

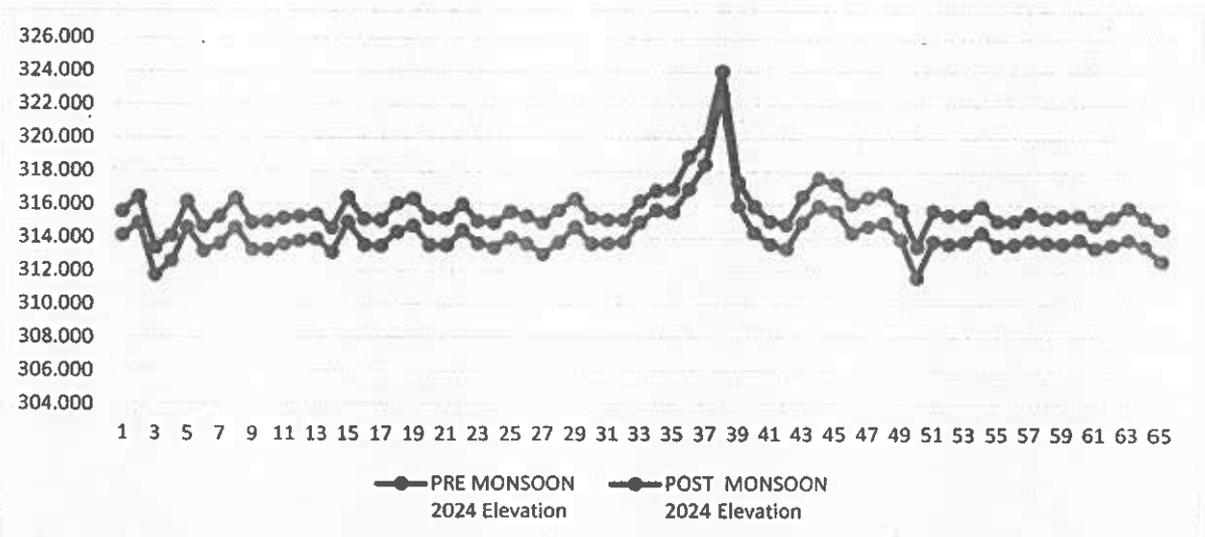
Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
11	Behat	R.B.M.	Yamuna	Akbarpur Bans Achatmal	1	17.900

Cross Section	Ref. Point	Lat.	Long.	PRE MONSOON 2024 Elevation	POST MONSOON 2024 Elevation
1-1	1	30°16'29.02"N	77°32'45.75"E	314.118	315.568
1-1	2	30°16'29.95"N	77°32'44.21"E	314.855	316.445
1-1	3	30°16'31.03"N	77°32'42.74"E	311.722	313.382
1-1	4	30°16'31.96"N	77°32'41.18"E	312.608	314.128
1-1	5	30°16'32.92"N	77°32'39.64"E	314.621	316.201
1-1	6	30°16'33.91"N	77°32'38.08"E	313.211	314.691
1-1	7	30°16'34.89"N	77°32'36.58"E	313.628	315.318
1-1	8	30°16'35.84"N	77°32'35.04"E	314.602	316.372
2-2	9	30°16'36.77"N	77°32'36.56"E	313.260	314.920
2-2	10	30°16'35.85"N	77°32'38.12"E	313.298	314.987
2-2	11	30°16'35.00"N	77°32'39.66"E	313.611	315.193
2-2	12	30°16'34.06"N	77°32'41.16"E	313.815	315.307
2-2	13	30°16'33.05"N	77°32'42.75"E	313.923	315.405
2-2	14	30°16'32.07"N	77°32'44.34"E	313.128	314.583
2-2	15	30°16'31.03"N	77°32'45.96"E	314.938	316.437
3-3	16	30°16'32.58"N	77°32'46.73"E	313.548	315.130
3-3	17	30°16'33.56"N	77°32'45.21"E	313.514	315.078
3-3	18	30°16'34.61"N	77°32'43.67"E	314.368	316.062
3-3	19	30°16'35.47"N	77°32'42.03"E	314.725	316.363
3-3	20	30°16'36.53"N	77°32'40.53"E	313.574	315.218
3-3	21	30°16'37.74"N	77°32'38.69"E	313.541	315.163
4-4	22	30°16'38.76"N	77°32'40.23"E	314.459	316.017
4-4	23	30°16'37.83"N	77°32'41.88"E	313.666	315.010
4-4	24	30°16'36.87"N	77°32'43.60"E	313.428	314.902
4-4	25	30°16'35.92"N	77°32'45.36"E	314.008	315.584
4-4	26	30°16'34.92"N	77°32'47.02"E	313.633	315.311
5-5	27	30°16'36.49"N	77°32'48.48"E	313.014	314.907
5-5	28	30°16'37.42"N	77°32'46.61"E	313.722	315.706
5-5	29	30°16'38.26"N	77°32'44.82"E	314.648	316.341
5-5	30	30°16'39.22"N	77°32'43.47"E	313.638	315.226



5-5	31	30°16'40.21"N	77°32'41.72"E	313.665	315.106
6-6	32	30°16'41.95"N	77°32'42.62"E	313.758	315.096
6-6	33	30°16'40.89"N	77°32'44.53"E	314.952	316.234
6-6	34	30°16'39.86"N	77°32'46.23"E	315.670	316.869
6-6	35	30°16'38.99"N	77°32'47.96"E	315.566	316.950
6-6	36	30°16'38.23"N	77°32'49.75"E	316.960	318.900
7-7	37	30°16'40.06"N	77°32'50.59"E	318.428	319.827
7-7	38	30°16'40.93"N	77°32'48.88"E	322.637	324.025
7-7	39	30°16'41.86"N	77°32'47.14"E	315.922	317.381
7-7	40	30°16'42.84"N	77°32'45.24"E	314.314	315.911
7-7	41	30°16'43.88"N	77°32'43.31"E	313.628	315.036
8-8	42	30°16'45.92"N	77°32'43.88"E	313.349	314.837
8-8	43	30°16'44.76"N	77°32'46.02"E	314.955	316.521
8-8	44	30°16'43.61"N	77°32'47.83"E	315.934	317.611
8-8	45	30°16'42.52"N	77°32'49.70"E	315.638	317.280
8-8	46	30°16'41.53"N	77°32'51.66"E	314.339	316.080
9-9	47	30°16'42.73"N	77°32'54.20"E	314.717	316.505
9-9	48	30°16'43.47"N	77°32'52.44"E	314.919	316.718
9-9	49	30°16'44.59"N	77°32'50.82"E	313.924	315.729
9-9	50	30°16'45.59"N	77°32'48.99"E	311.622	313.513
9-9	51	30°16'46.55"N	77°32'47.28"E	313.838	315.694
9-9	52	30°16'47.62"N	77°32'45.10"E	313.668	315.406
10-10	53	30°16'49.03"N	77°32'46.71"E	313.776	315.420
10-10	54	30°16'47.83"N	77°32'48.54"E	314.347	315.938
10-10	55	30°16'46.64"N	77°32'50.26"E	313.565	315.062
10-10	56	30°16'45.47"N	77°32'51.89"E	313.628	315.066
10-10	57	30°16'44.40"N	77°32'53.39"E	313.877	315.505
10-10	58	30°16'43.32"N	77°32'54.87"E	313.740	315.268
11-11	59	30°16'44.03"N	77°32'57.12"E	313.703	315.387
11-11	60	30°16'45.08"N	77°32'55.63"E	313.922	315.406
11-11	61	30°16'46.08"N	77°32'54.16"E	313.456	314.839
11-11	62	30°16'47.16"N	77°32'52.55"E	313.611	315.292
11-11	63	30°16'48.26"N	77°32'50.81"E	313.934	315.875
11-11	64	30°16'48.26"N	77°32'50.81"E	313.539	315.233
11-11	65	30°16'50.55"N	77°32'48.17"E	312.668	314.590





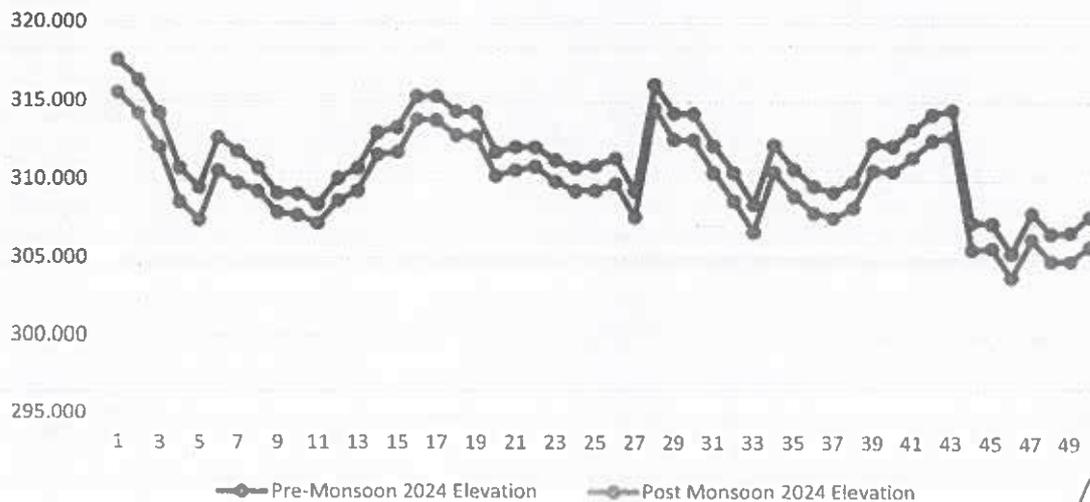
Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left and several smaller ones on the right.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
12	Behat	R.B.M.	Yamuna	Arazi Jevadi Ahatmal and Masoodpur Garh Aehatmal	1 and 1	13.800

Cross Section	Ref. Point	Lat.	Long.	Pre-Monsoon 2024 Elevation	Post Monsoon 2024 Elevation
1-1	1	30°15'50.69"N	77°32'20.15"E	315.562	317.642
1-1	2	30°15'51.87"N	77°32'17.96"E	314.215	316.360
1-1	3	30°15'52.91"N	77°32'15.82"E	312.088	314.256
1-1	4	30°15'53.71"N	77°32'14.21"E	308.595	310.777
1-1	5	30°15'54.83"N	77°32'12.39"E	307.443	309.535
1-1	6	30°15'55.83"N	77°32'10.43"E	310.576	312.723
1-1	7	30°15'56.46"N	77°32'8.75"E	309.782	311.820
2-2	8	30°15'54.87"N	77°32'7.72"E	309.273	310.765
2-2	9	30°15'54.20"N	77°32'9.51"E	307.897	309.155
2-2	10	30°15'53.23"N	77°32'11.75"E	307.741	309.107
2-2	11	30°15'52.41"N	77°32'13.51"E	307.215	308.456
2-2	12	30°15'51.54"N	77°32'15.02"E	308.681	310.114
2-2	13	30°15'50.75"N	77°32'17.13"E	309.299	310.768
2-2	14	30°15'49.64"N	77°32'19.25"E	311.606	313.034
3-3	15	30°15'48.44"N	77°32'18.27"E	311.772	313.364
3-3	16	30°15'49.41"N	77°32'16.06"E	313.868	315.367
3-3	17	30°15'50.26"N	77°32'14.45"E	313.820	315.351
3-3	18	30°15'50.90"N	77°32'12.75"E	312.873	314.381
3-3	19	30°15'51.59"N	77°32'10.95"E	312.788	314.332
3-3	20	30°15'52.60"N	77°32'8.66"E	310.256	311.789
3-3	21	30°15'53.00"N	77°32'6.96"E	310.633	312.110
4-4	22	30°15'51.46"N	77°32'6.25"E	310.855	312.121
4-4	23	30°15'50.79"N	77°32'7.87"E	309.908	311.277
4-4	24	30°15'50.08"N	77°32'9.99"E	309.304	310.782
4-4	25	30°15'49.25"N	77°32'11.91"E	309.322	310.906
4-4	26	30°15'48.68"N	77°32'13.64"E	309.744	311.413
4-4	27	30°15'47.94"N	77°32'15.16"E	307.612	309.294



4-4	28	30°15'47.11"N	77°32'17.28"E	314.564	316.105
5-5	29	30°15'45.90"N	77°32'16.09"E	312.595	314.290
5-5	30	30°15'46.64"N	77°32'14.20"E	312.578	314.259
5-5	31	30°15'47.14"N	77°32'12.76"E	310.489	312.233
5-5	32	30°15'47.75"N	77°32'11.07"E	308.683	310.505
5-5	33	30°15'48.43"N	77°32'9.34"E	306.684	308.453
5-5	34	30°15'48.93"N	77°32'7.71"E	310.541	312.282
5-5	35	30°15'49.84"N	77°32'5.79"E	309.006	310.714
6-6	36	30°15'48.31"N	77°32'5.26"E	307.904	309.637
6-6	37	30°15'47.38"N	77°32'7.14"E	307.592	309.216
6-6	38	30°15'46.81"N	77°32'8.76"E	308.241	309.878
6-6	39	30°15'46.34"N	77°32'10.10"E	310.649	312.333
6-6	40	30°15'45.22"N	77°32'13.14"E	310.576	312.214
6-6	41	30°15'44.62"N	77°32'14.77"E	311.482	313.241
7-7	42	30°15'42.97"N	77°32'13.10"E	312.590	314.249
7-7	43	30°15'43.74"N	77°32'11.98"E	312.783	314.520
7-7	44	30°15'45.06"N	77°32'9.20"E	305.593	307.359
7-7	45	30°15'45.50"N	77°32'7.73"E	305.685	307.284
7-7	46	30°15'46.39"N	77°32'6.10"E	303.829	305.373
7-7	47	30°15'47.06"N	77°32'4.49"E	306.256	307.942
8-8	48	30°15'45.55"N	77°32'4.65"E	304.889	306.630
8-8	49	30°15'44.39"N	77°32'7.37"E	304.884	306.712
8-8	50	30°15'43.27"N	77°32'10.50"E	305.808	307.760



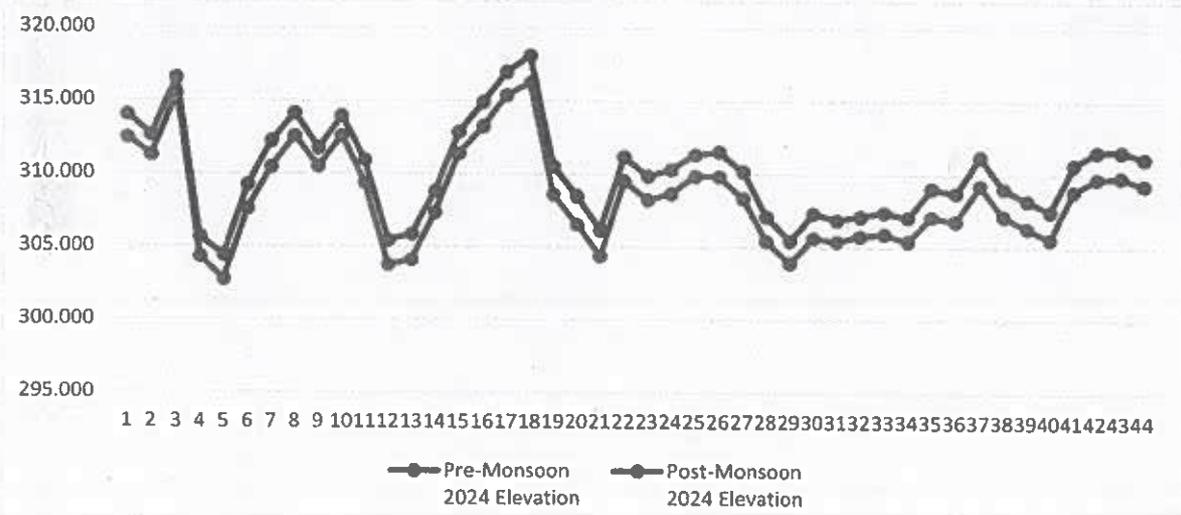
Handwritten signatures and stamps are present at the bottom of the page, including a large signature on the left and several smaller ones on the right.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
13	Behat	R.B.M.	Yamuna	Shehjadpur Bans Aehatmal	1	13.000

Cross Section	Ref. Point	Lat.	Long.	Pre-Monsoon	Post-Monsoon
				2024 Elevation	2024 Elevation
1-1	1	30°15'24.53"N	77°31'55.65"E	312.444	314.026
1-1	2	30°15'25.44"N	77°31'53.87"E	311.255	312.613
1-1	3	30°15'26.27"N	77°31'52.03"E	315.508	316.590
1-1	4	30°15'27.50"N	77°31'49.92"E	304.312	305.694
2-2	5	30°15'26.82"N	77°31'48.99"E	302.749	304.434
2-2	6	30°15'25.58"N	77°31'50.27"E	307.588	309.250
2-2	7	30°15'24.55"N	77°31'52.53"E	310.462	312.236
2-2	8	30°15'23.73"N	77°31'54.76"E	312.595	314.177
3-3	9	30°15'22.23"N	77°31'53.84"E	310.492	311.763
3-3	10	30°15'23.39"N	77°31'51.64"E	312.582	313.970
3-3	11	30°15'24.36"N	77°31'49.46"E	309.372	310.953
3-3	12	30°15'25.50"N	77°31'47.57"E	303.744	305.438
4-4	13	30°15'24.30"N	77°31'46.04"E	304.122	305.877
4-4	14	30°15'23.07"N	77°31'48.25"E	307.366	308.848
4-4	15	30°15'21.93"N	77°31'50.83"E	311.391	312.864
4-4	16	30°15'20.73"N	77°31'53.06"E	313.255	314.937
5-5	17	30°15'19.42"N	77°31'52.14"E	315.407	317.000
5-5	18	30°15'20.56"N	77°31'50.12"E	316.266	318.113
5-5	19	30°15'21.59"N	77°31'47.50"E	308.614	310.542
5-5	20	30°15'22.98"N	77°31'45.08"E	306.532	308.487
6-6	21	30°15'21.90"N	77°31'43.83"E	304.377	306.200
6-6	22	30°15'20.33"N	77°31'46.29"E	309.498	311.206
6-6	23	30°15'19.41"N	77°31'49.03"E	308.238	309.870
6-6	24	30°15'18.14"N	77°31'51.28"E	308.682	310.323
7-7	25	30°15'16.70"N	77°31'50.29"E	309.872	311.331
7-7	26	30°15'17.66"N	77°31'48.10"E	309.855	311.546
7-7	27	30°15'18.95"N	77°31'45.72"E	308.369	310.223
7-7	28	30°15'19.84"N	77°31'43.73"E	305.428	307.120
7-7	29	30°15'20.95"N	77°31'41.67"E	303.908	305.490



8-8	30	30°15'19.84"N	77°31'40.64"E	305.652	307.336
8-8	31	30°15'18.67"N	77°31'42.66"E	305.417	306.890
8-8	32	30°15'17.78"N	77°31'44.94"E	305.784	307.139
8-8	33	30°15'16.40"N	77°31'47.32"E	305.938	307.417
8-8	34	30°15'15.33"N	77°31'49.66"E	305.458	307.095
9-9	35	30°15'14.23"N	77°31'48.77"E	307.121	309.073
9-9	36	30°15'15.32"N	77°31'46.53"E	306.822	308.777
9-9	37	30°15'16.67"N	77°31'44.22"E	309.292	311.279
9-9	38	30°15'17.81"N	77°31'41.94"E	307.173	309.081
9-9	39	30°15'18.95"N	77°31'39.73"E	306.359	308.273
10-10	40	30°15'17.71"N	77°31'38.49"E	305.588	307.511
10-10	41	30°15'16.70"N	77°31'40.66"E	308.874	310.712
10-10	42	30°15'15.47"N	77°31'43.47"E	309.741	311.600
10-10	43	30°15'14.18"N	77°31'45.61"E	309.866	311.635
10-10	44	30°15'13.32"N	77°31'47.88"E	309.299	311.151



Handwritten signatures and stamps are present at the bottom of the page, including a date stamp '24' and a page number 'Page 109 of 163'.

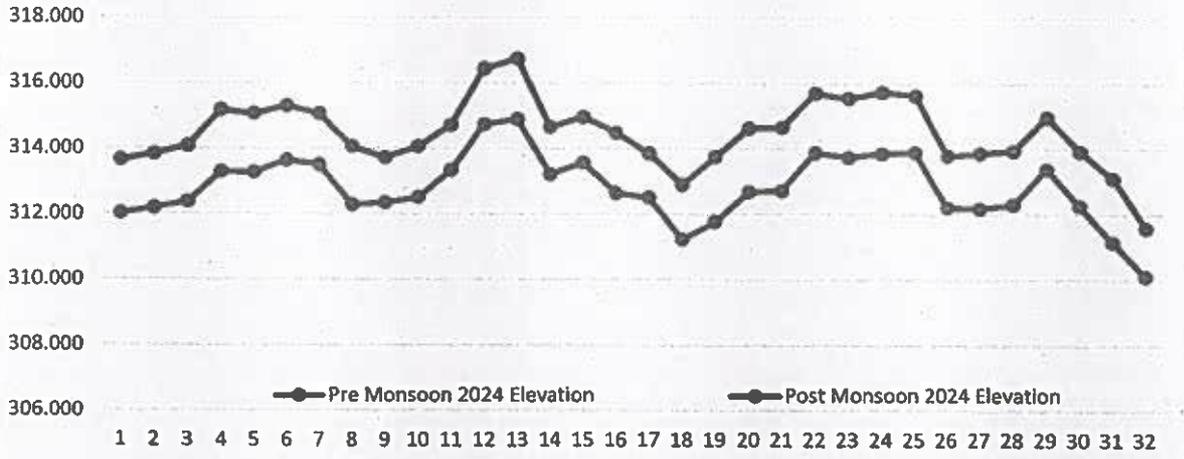
Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
14	Behat	R.B.M.	Yamuna	Alauddinpur Bans Aehatmal	1/1	9.580

Cross Section	Ref. Point	Lat.	Long.	Pre Monsoon 2024 Elevation	Post Monsoon 2024 Elevation
1-1	1	30°16'14.66"N	77°32'38.47"E	312.009	313.650
1-1	2	30°16'15.32"N	77°32'36.96"E	312.188	313.836
1-1	3	30°16'16.37"N	77°32'35.03"E	312.369	314.083
1-1	4	30°16'17.03"N	77°32'33.17"E	313.299	315.191
2-2	5	30°16'15.68"N	77°32'32.07"E	313.272	315.071
2-2	6	30°16'15.09"N	77°32'33.98"E	313.644	315.299
2-2	7	30°16'14.26"N	77°32'35.89"E	313.508	315.066
2-2	8	30°16'13.45"N	77°32'37.56"E	312.282	314.057
3-3	9	30°16'12.08"N	77°32'36.59"E	312.344	313.726
3-3	10	30°16'12.97"N	77°32'34.85"E	312.508	314.066
3-3	11	30°16'13.89"N	77°32'33.07"E	313.341	314.723
3-3	12	30°16'14.70"N	77°32'31.31"E	314.744	316.442
4-4	13	30°16'13.62"N	77°32'30.25"E	314.892	316.745
4-4	14	30°16'12.81"N	77°32'32.20"E	313.208	314.656
4-4	15	30°16'11.85"N	77°32'33.82"E	313.577	314.971
4-4	16	30°16'10.91"N	77°32'35.64"E	312.642	314.489
5-5	17	30°16'9.32"N	77°32'34.45"E	312.510	313.860
5-5	18	30°16'10.31"N	77°32'32.62"E	311.227	312.895
5-5	19	30°16'11.42"N	77°32'31.10"E	311.766	313.748
5-5	20	30°16'12.58"N	77°32'29.38"E	312.692	314.633
6-6	21	30°16'11.16"N	77°32'28.31"E	312.718	314.656
6-6	22	30°16'9.97"N	77°32'30.13"E	313.882	315.704
6-6	23	30°16'9.03"N	77°32'31.86"E	313.738	315.546
6-6	24	30°16'7.96"N	77°32'33.75"E	313.856	315.730
7-7	25	30°16'5.97"N	77°32'32.68"E	313.892	315.630
7-7	26	30°16'7.16"N	77°32'31.08"E	312.208	313.792
7-7	27	30°16'8.26"N	77°32'29.39"E	312.177	313.868
7-7	28	30°16'9.68"N	77°32'27.25"E	312.312	313.956
8-8	29	30°16'8.37"N	77°32'25.93"E	313.382	314.966
8-8	30	30°16'6.98"N	77°32'28.34"E	312.269	313.936

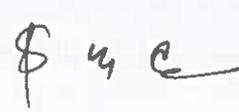


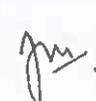
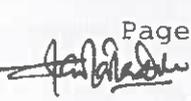
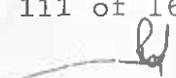
Page 110 of 163

8-8	31	30°16'5.71"N	77°32'30.11"E	311.144	313.102
8-8	32	30°16'4.62"N	77°32'31.59"E	310.108	311.590







Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
15	Behat	R.B.M.	Yamuna	Mehmoodpur Nangli Aehatmal	1	15.700

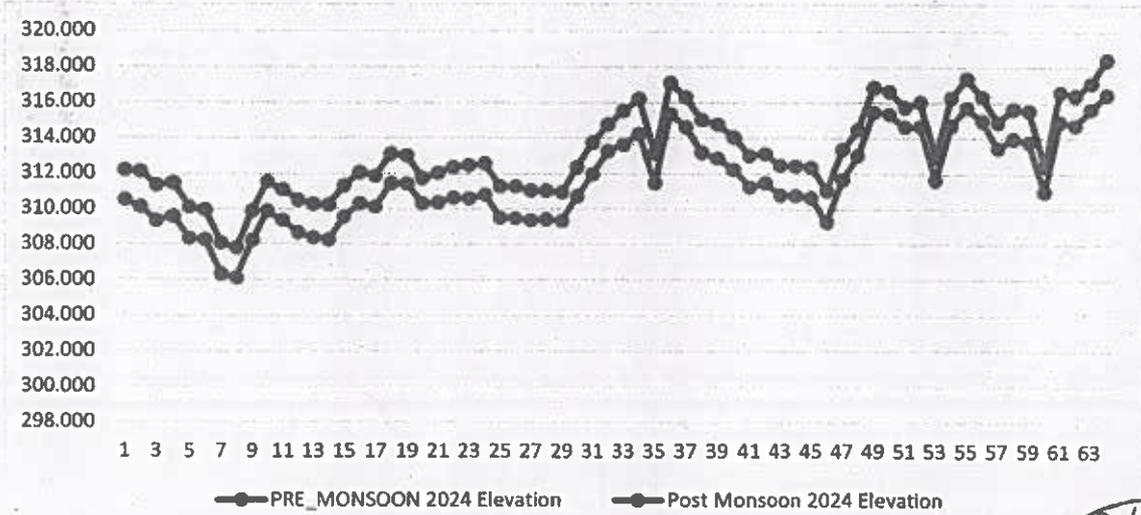
Cross Section	Ref. Point	Lat.	Long.	PRE_MONSOON	Post
				2024 Elevation	Monsoon 2024 Elevation
1-1	1	30°16'2.81"N	77°32'30.11"E	310.508	312.182
1-1	2	30°16'3.71"N	77°32'28.50"E	310.111	312.093
1-1	3	30°16'4.75"N	77°32'26.89"E	309.322	311.316
1-1	4	30°16'5.78"N	77°32'25.29"E	309.566	311.459
1-1	5	30°16'6.76"N	77°32'23.74"E	308.341	310.103
1-1	6	30°16'7.83"N	77°32'22.12"E	308.265	309.947
1-1	7	30°16'8.81"N	77°32'20.51"E	306.337	308.091
1-1	8	30°16'9.67"N	77°32'19.00"E	306.102	307.793
2-2	9	30°16'8.28"N	77°32'17.87"E	308.232	309.876
2-2	10	30°16'7.39"N	77°32'19.43"E	309.866	311.534
2-2	11	30°16'6.45"N	77°32'21.12"E	309.341	311.085
2-2	12	30°16'5.43"N	77°32'22.95"E	308.635	310.491
2-2	13	30°16'4.19"N	77°32'24.75"E	308.375	310.274
2-2	14	30°16'3.10"N	77°32'26.36"E	308.245	310.227
2-2	15	30°16'2.13"N	77°32'28.02"E	309.533	311.295
2-2	16	30°16'1.19"N	77°32'29.49"E	310.308	312.046
3-3	17	30°15'59.73"N	77°32'28.53"E	310.102	311.851
3-3	18	30°16'0.75"N	77°32'27.05"E	311.432	313.100
3-3	19	30°16'1.74"N	77°32'25.54"E	311.413	313.005
3-3	20	30°16'2.69"N	77°32'23.95"E	310.278	311.720



3-3	21	30°16'3.60"N	77°32'22.35"E	310.368	312.037
3-3	22	30°16'4.70"N	77°32'20.72"E	310.622	312.363
3-3	23	30°16'5.92"N	77°32'18.86"E	310.577	312.459
3-3	24	30°16'6.95"N	77°32'16.98"E	310.796	312.537
4-4	25	30°16'5.51"N	77°32'15.86"E	309.512	311.268
4-4	26	30°16'4.34"N	77°32'17.71"E	309.472	311.271
4-4	27	30°16'3.28"N	77°32'19.42"E	309.363	311.028
4-4	28	30°16'2.11"N	77°32'21.16"E	309.409	311.037
4-4	29	30°16'1.11"N	77°32'22.70"E	309.327	310.935
4-4	30	30°15'59.93"N	77°32'24.27"E	310.696	312.351
4-4	31	30°15'58.85"N	77°32'25.82"E	311.958	313.747
4-4	32	30°15'57.95"N	77°32'27.44"E	313.264	314.772
5-5	33	30°15'56.55"N	77°32'26.40"E	313.631	315.515
5-5	34	30°15'57.58"N	77°32'24.86"E	314.223	316.214
5-5	35	30°15'58.69"N	77°32'23.38"E	311.441	313.122
5-5	36	30°15'59.78"N	77°32'21.72"E	315.359	317.108
5-5	37	30°16'0.99"N	77°32'20.06"E	314.606	316.298
5-5	38	30°16'1.97"N	77°32'18.40"E	313.182	315.023
5-5	39	30°16'3.16"N	77°32'16.86"E	312.841	314.769
5-5	40	30°16'4.28"N	77°32'15.08"E	312.214	314.061
6-6	41	30°16'2.72"N	77°32'13.94"E	311.238	313.014
6-6	42	30°16'1.75"N	77°32'15.69"E	311.458	313.113
6-6	43	30°16'0.72"N	77°32'17.23"E	310.776	312.459
6-6	44	30°15'59.68"N	77°32'18.95"E	310.749	312.433
6-6	45	30°15'58.69"N	77°32'20.69"E	310.631	312.367
6-6	46	30°15'57.70"N	77°32'22.49"E	309.248	311.019
6-6	47	30°15'56.37"N	77°32'24.15"E	311.652	313.360
6-6	48	30°15'55.16"N	77°32'25.63"E	312.991	314.473
7-7	49	30°15'53.78"N	77°32'24.66"E	315.470	316.853



7-7	50	30°15'55.11"N	77°32'23.26"E	315.351	316.632
7-7	51	30°15'56.10"N	77°32'21.78"E	314.634	315.726
7-7	52	30°15'57.24"N	77°32'20.15"E	314.649	316.031
7-7	53	30°15'58.22"N	77°32'18.49"E	311.612	312.959
7-7	54	30°15'59.38"N	77°32'16.74"E	314.708	316.290
7-7	55	30°16'0.30"N	77°32'15.02"E	315.711	317.375
7-7	56	30°16'1.64"N	77°32'13.13"E	314.977	316.326
8-8	57	30°16'0.06"N	77°32'11.98"E	313.433	314.904
8-8	58	30°15'58.75"N	77°32'14.05"E	313.958	315.639
8-8	59	30°15'57.61"N	77°32'15.77"E	313.768	315.559
8-8	60	30°15'56.47"N	77°32'17.43"E	310.959	312.442
8-8	61	30°15'55.38"N	77°32'19.09"E	314.916	316.600
8-8	62	30°15'54.20"N	77°32'20.78"E	314.739	316.408
8-8	63	30°15'53.07"N	77°32'22.32"E	315.644	317.117
8-8	64	30°15'51.96"N	77°32'23.60"E	316.456	318.444



Handwritten signatures and initials are present at the bottom of the page, including a large stylized signature on the left and several smaller ones on the right.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
16	Behat	R.B.M.	Yamuna	Shahpur Bans Aehatmal	1/1	15.600

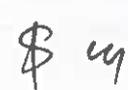
Cross Section	Ref. Point	Lat.	Long.	Elevation	
				Pre Monsoon 2024	Post Monsoon 2024
1-1	1	30°16'27.69"N	77°32'45.53"E	312.260	313.955
1-1	2	30°16'28.59"N	77°32'43.93"E	311.342	313.125
1-1	3	30°16'29.65"N	77°32'42.20"E	310.621	311.955
1-1	4	30°16'30.50"N	77°32'40.57"E	310.908	312.366
1-1	5	30°16'31.46"N	77°32'38.97"E	310.905	312.471
1-1	6	30°16'32.39"N	77°32'37.38"E	313.820	315.602
1-1	7	30°16'33.42"N	77°32'35.69"E	315.722	317.603
1-1	8	30°16'34.42"N	77°32'33.99"E	315.661	317.653
2-2	9	30°16'32.73"N	77°32'33.27"E	319.348	321.100
2-2	10	30°16'31.71"N	77°32'34.83"E	318.541	320.196
2-2	11	30°16'30.88"N	77°32'36.55"E	318.692	320.574
2-2	12	30°16'29.96"N	77°32'38.07"E	314.833	316.266
2-2	13	30°16'28.97"N	77°32'39.74"E	314.547	316.088
2-2	14	30°16'27.84"N	77°32'41.33"E	314.392	316.069
2-2	15	30°16'27.06"N	77°32'43.07"E	312.108	313.964
2-2	16	30°16'26.16"N	77°32'44.63"E	312.332	313.924
3-3	17	30°16'24.58"N	77°32'43.45"E	312.394	314.085
3-3	18	30°16'25.39"N	77°32'41.89"E	311.224	312.888
3-3	19	30°16'26.32"N	77°32'40.16"E	311.226	312.981
3-3	20	30°16'27.43"N	77°32'38.53"E	312.756	314.747
3-3	21	30°16'28.54"N	77°32'36.52"E	315.951	317.785
3-3	22	30°16'29.85"N	77°32'34.38"E	319.806	321.614
3-3	23	30°16'30.94"N	77°32'32.58"E	320.892	322.630
4-4	24	30°16'29.36"N	77°32'32.00"E	320.955	322.696
4-4	25	30°16'28.36"N	77°32'33.70"E	319.514	321.153
4-4	26	30°16'27.27"N	77°32'35.49"E	311.825	313.469
4-4	27	30°16'26.16"N	77°32'37.25"E	310.822	312.746
4-4	28	30°16'25.09"N	77°32'39.08"E	312.628	314.469
4-4	29	30°16'24.02"N	77°32'40.92"E	312.755	314.707
4-4	30	30°16'23.08"N	77°32'42.65"E	311.221	312.777
5-5	31	30°16'21.80"N	77°32'41.65"E	310.122	311.810



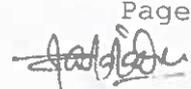
5-5	32	30°16'22.87"N	77°32'39.93"E	310.334	312.106
5-5	33	30°16'23.75"N	77°32'38.13"E	312.581	314.222
5-5	34	30°16'24.79"N	77°32'36.39"E	311.537	313.492
5-5	35	30°16'25.64"N	77°32'34.86"E	311.266	313.032
5-5	36	30°16'26.58"N	77°32'33.17"E	314.702	316.530
5-5	37	30°16'27.73"N	77°32'31.69"E	316.663	318.304
6-6	38	30°16'26.08"N	77°32'31.02"E	315.741	317.485
6-6	39	30°16'25.05"N	77°32'32.85"E	315.489	317.222
6-6	40	30°16'23.99"N	77°32'34.40"E	314.953	316.717
6-6	41	30°16'22.99"N	77°32'35.97"E	312.671	314.353
6-6	42	30°16'22.07"N	77°32'37.63"E	312.455	314.354
6-6	43	30°16'20.97"N	77°32'39.15"E	311.622	313.525
6-6	44	30°16'20.00"N	77°32'40.81"E	311.893	313.711
7-7	45	30°16'18.46"N	77°32'39.84"E	310.796	312.618
7-7	46	30°16'19.44"N	77°32'38.23"E	310.274	312.115
7-7	47	30°16'20.50"N	77°32'36.81"E	310.665	312.349
7-7	48	30°16'21.41"N	77°32'35.17"E	309.441	311.140
7-7	49	30°16'22.72"N	77°32'33.30"E	310.733	312.492
7-7	50	30°16'23.76"N	77°32'31.80"E	310.224	312.052
7-7	51	30°16'24.69"N	77°32'30.34"E	312.384	314.025
8-8	52	30°16'23.13"N	77°32'29.88"E	312.573	313.967
8-8	53	30°16'22.33"N	77°32'31.25"E	312.224	313.877
8-8	54	30°16'21.46"N	77°32'32.81"E	317.266	318.910
8-8	55	30°16'20.25"N	77°32'34.43"E	317.551	319.276
8-8	56	30°16'19.19"N	77°32'36.36"E	315.008	316.728
8-8	57	30°16'18.04"N	77°32'37.92"E	313.327	315.060
8-8	58	30°16'16.97"N	77°32'38.86"E	310.175	311.966
9-9	59	30°16'16.84"N	77°32'37.06"E	308.417	310.225
9-9	60	30°16'17.69"N	77°32'35.35"E	308.821	310.654
9-9	61	30°16'18.60"N	77°32'33.43"E	318.555	320.483
9-9	62	30°16'19.81"N	77°32'31.68"E	312.592	314.236
9-9	63	30°16'20.51"N	77°32'30.42"E	315.382	316.936
9-9	64	30°16'21.41"N	77°32'29.30"E	312.722	314.606

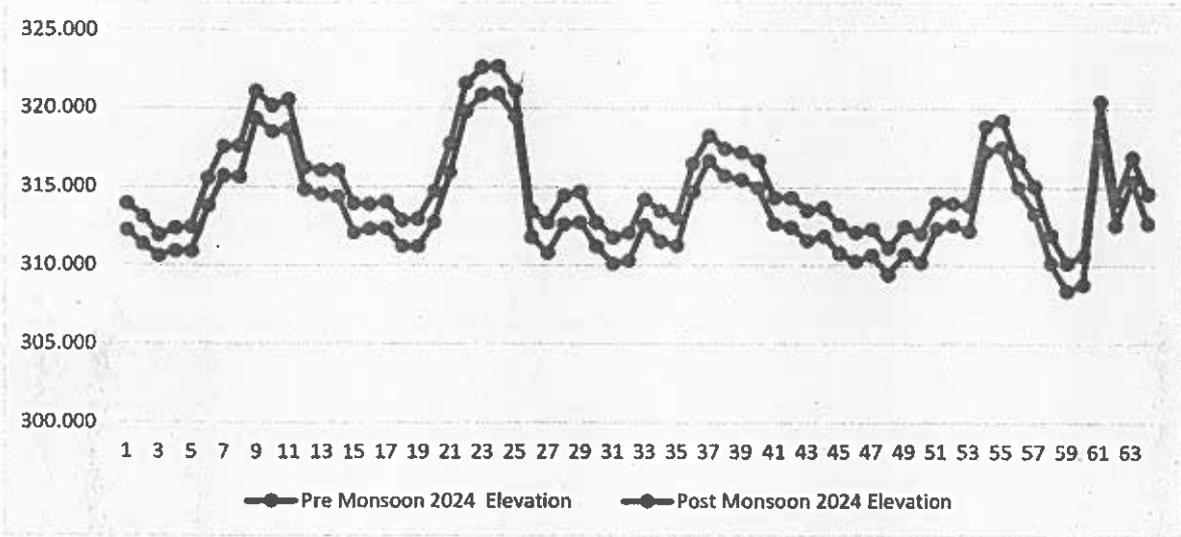










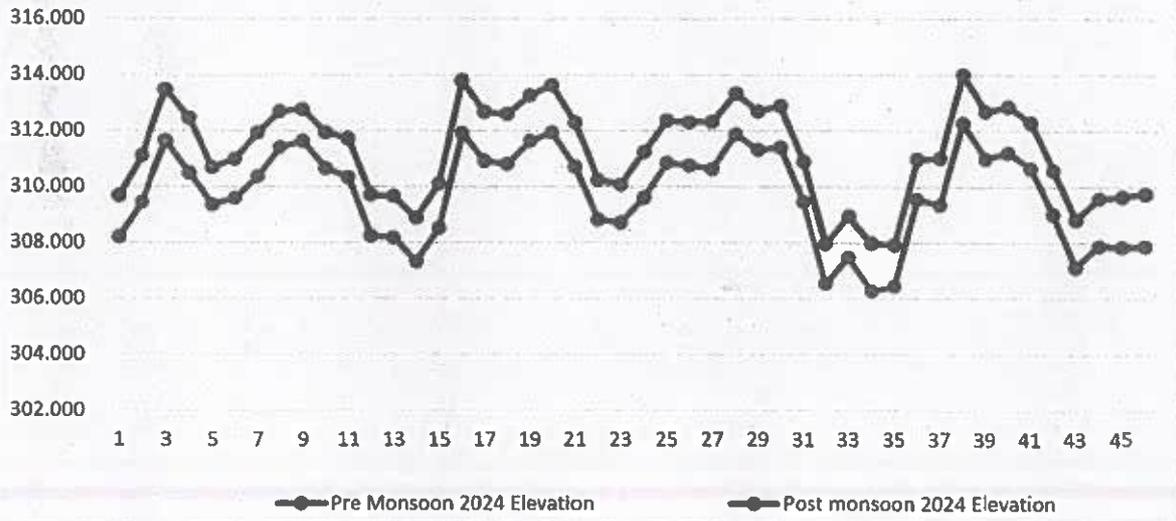
Handwritten signatures and initials are present at the bottom of the page, including a large stylized signature on the left and several smaller initials and signatures in the center and right.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
17	Behat	R.B.M.	Yamuna	Nityanandpur Aehatmal and Said- mohamadpur Aehatmal	1 and Ima	17.700

Cross Section	Ref. Point	Lat.	Long.	Pre Monsoon 2024 Elevation	Post monsoon 2024 Elevation
1-1	1	30°15'26.82"N	77°31'57.60"E	308.188	309.668
1-1	2	30°15'27.65"N	77°31'55.69"E	309.428	311.108
1-1	3	30°15'28.45"N	77°31'54.03"E	311.641	313.481
1-1	4	30°15'29.51"N	77°31'51.85"E	310.508	312.478
2-2	5	30°15'31.22"N	77°31'53.04"E	309.367	310.697
2-2	6	30°15'30.36"N	77°31'54.92"E	309.588	311.008
2-2	7	30°15'29.58"N	77°31'56.74"E	310.367	311.947
2-2	8	30°15'28.64"N	77°31'58.52"E	311.414	312.694
3-3	9	30°15'30.03"N	77°32'0.13"E	311.632	312.772
3-3	10	30°15'31.07"N	77°31'58.30"E	310.658	311.948
3-3	11	30°15'31.99"N	77°31'56.55"E	310.338	311.718
3-3	12	30°15'32.94"N	77°31'54.46"E	308.241	309.701
4-4	13	30°15'34.74"N	77°31'55.28"E	308.174	309.664
4-4	14	30°15'33.88"N	77°31'57.14"E	307.306	308.876
4-4	15	30°15'33.08"N	77°31'58.97"E	308.510	310.120
4-4	16	30°15'32.17"N	77°32'0.74"E	311.912	313.792
4-4	17	30°15'31.26"N	77°32'2.60"E	310.918	312.678
5-5	18	30°15'32.67"N	77°32'3.83"E	310.809	312.609
5-5	19	30°15'33.74"N	77°32'2.07"E	311.644	313.274
5-5	20	30°15'34.67"N	77°32'0.40"E	311.931	313.641
5-5	21	30°15'35.66"N	77°31'58.60"E	310.722	312.302
5-5	22	30°15'36.63"N	77°31'56.64"E	308.821	310.251
6-6	23	30°15'38.31"N	77°31'57.31"E	308.708	310.088
6-6	24	30°15'37.39"N	77°31'59.68"E	309.611	311.251
6-6	25	30°15'36.43"N	77°32'1.81"E	310.855	312.375
6-6	26	30°15'35.34"N	77°32'3.87"E	310.766	312.316
6-6	27	30°15'34.29"N	77°32'5.66"E	310.638	312.328
7-7	28	30°15'35.95"N	77°32'7.04"E	311.875	313.345
7-7	29	30°15'37.23"N	77°32'5.26"E	311.317	312.707



7-7	30	30°15'38.40"N	77°32'3.06"E	311.419	312.899
7-7	31	30°15'39.31"N	77°32'1.23"E	309.455	310.895
7-7	32	30°15'40.20"N	77°31'59.02"E	306.538	307.968
8-8	33	30°15'42.07"N	77°31'59.38"E	307.479	308.949
8-8	34	30°15'41.42"N	77°32'1.35"E	306.288	307.978
8-8	35	30°15'40.46"N	77°32'3.62"E	306.446	307.926
8-8	36	30°15'39.39"N	77°32'5.54"E	309.550	310.990
8-8	37	30°15'38.43"N	77°32'7.39"E	309.344	311.034
8-8	38	30°15'37.47"N	77°32'9.04"E	312.269	314.019
9-9	39	30°15'39.20"N	77°32'10.61"E	311.006	312.696
9-9	40	30°15'40.15"N	77°32'8.93"E	311.215	312.875
9-9	41	30°15'41.15"N	77°32'7.10"E	310.655	312.295
9-9	42	30°15'42.31"N	77°32'4.78"E	309.003	310.593
9-9	43	30°15'43.08"N	77°32'2.85"E	307.115	308.825
9-9	44	30°15'44.21"N	77°32'0.92"E	307.879	309.588
10-10	45	30°15'42.23"N	77°32'9.55"E	307.841	309.646
10-10	46	30°15'41.00"N	77°32'11.95"E	307.868	309.760



Handwritten signatures and initials are present at the bottom of the page, including a large stylized signature on the left and several smaller ones on the right.

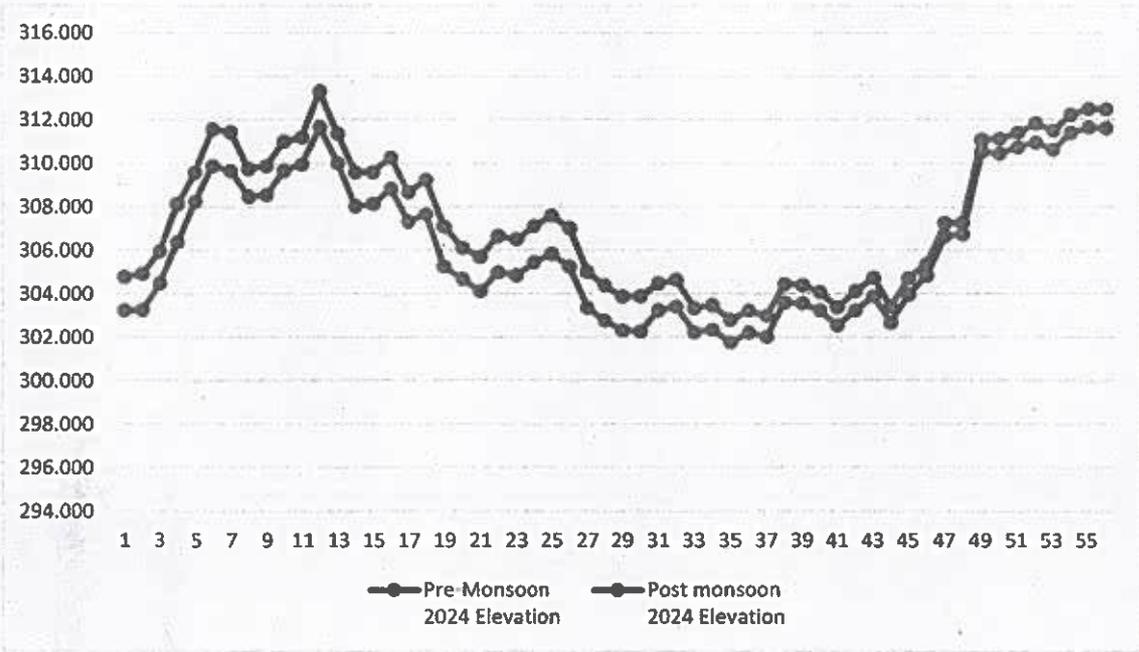
Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
18	Behat	R.B.M.	Yamuna	Abutalibpur Garh Aehatmal	1	37.000

Cross Section	Ref. Point	Lat.	Long.	Pre-Monsoon 2024 Elevation	Post monsoon 2024 Elevation
1-1	1	30°14'44.37"N	77°31'37.14"E	303.239	304.787
1-1	2	30°14'45.33"N	77°31'34.98"E	303.247	304.916
1-1	3	30°14'46.45"N	77°31'32.64"E	304.479	305.961
1-1	4	30°14'47.77"N	77°31'29.70"E	306.383	308.152
1-1	5	30°14'49.19"N	77°31'26.83"E	308.261	309.603
1-1	6	30°14'50.81"N	77°31'23.75"E	309.887	311.581
2-2	7	30°14'53.23"N	77°31'25.10"E	309.653	311.444
2-2	8	30°14'51.69"N	77°31'27.64"E	308.479	309.745
2-2	9	30°14'50.48"N	77°31'30.39"E	308.543	309.887
2-2	10	30°14'48.94"N	77°31'32.96"E	309.665	311.014
2-2	11	30°14'47.94"N	77°31'35.40"E	309.952	311.199
2-2	12	30°14'46.80"N	77°31'38.06"E	311.659	313.312
3-3	13	30°14'49.00"N	77°31'38.83"E	310.011	311.368
3-3	14	30°14'50.29"N	77°31'36.17"E	308.027	309.596
3-3	15	30°14'51.37"N	77°31'33.71"E	308.128	309.585
3-3	16	30°14'52.67"N	77°31'31.12"E	308.833	310.279
3-3	17	30°14'54.16"N	77°31'28.44"E	307.314	308.683
3-3	18	30°14'55.64"N	77°31'26.20"E	307.658	309.240
4-4	19	30°14'57.49"N	77°31'27.32"E	305.252	307.099
4-4	20	30°14'56.60"N	77°31'29.44"E	304.669	306.118
4-4	21	30°14'55.57"N	77°31'31.96"E	304.119	305.700
4-4	22	30°14'54.17"N	77°31'34.62"E	304.987	306.671
4-4	23	30°14'52.91"N	77°31'37.14"E	304.846	306.523
4-4	24	30°14'52.10"N	77°31'39.53"E	305.452	307.111
5-5	25	30°14'54.79"N	77°31'40.19"E	305.837	307.591
5-5	26	30°14'56.01"N	77°31'38.01"E	305.239	307.031
5-5	27	30°14'57.16"N	77°31'35.70"E	303.349	305.010
5-5	28	30°14'58.84"N	77°31'33.11"E	302.766	304.394
5-5	29	30°15'0.05"N	77°31'31.11"E	302.319	303.877



5-5	30	30°15'1.59"N	77°31'28.68"E	302.258	303.905
6-6	31	30°15'3.88"N	77°31'30.17"E	303.251	304.495
6-6	32	30°15'2.75"N	77°31'32.53"E	303.418	304.657
6-6	33	30°15'1.33"N	77°31'34.99"E	302.233	303.361
6-6	34	30°14'59.98"N	77°31'37.02"E	302.359	303.488
6-6	35	30°14'58.92"N	77°31'39.37"E	301.747	302.805
6-6	36	30°14'57.66"N	77°31'41.97"E	302.222	303.220
7-7	37	30°15'0.46"N	77°31'42.60"E	302.006	302.988
7-7	38	30°15'1.76"N	77°31'40.20"E	303.599	304.455
7-7	39	30°15'2.87"N	77°31'37.88"E	303.557	304.400
7-7	40	30°15'4.25"N	77°31'35.60"E	303.239	304.082
7-7	41	30°15'5.36"N	77°31'33.73"E	302.546	303.385
7-7	42	30°15'6.84"N	77°31'31.67"E	303.241	304.138
8-8	43	30°15'9.26"N	77°31'32.88"E	303.877	304.743
8-8	44	30°15'7.90"N	77°31'35.33"E	302.669	303.423
8-8	45	30°15'6.61"N	77°31'37.57"E	303.958	304.716
8-8	46	30°15'5.44"N	77°31'40.20"E	304.846	305.374
8-8	47	30°15'4.26"N	77°31'42.69"E	306.661	307.260
9-9	48	30°15'6.91"N	77°31'43.57"E	306.747	307.294
9-9	49	30°15'8.09"N	77°31'41.20"E	310.538	311.085
9-9	50	30°15'9.30"N	77°31'38.84"E	310.452	311.133
9-9	51	30°15'10.66"N	77°31'36.82"E	310.746	311.423
9-9	52	30°15'12.10"N	77°31'34.50"E	310.964	311.848
10-10	53	30°15'14.40"N	77°31'35.82"E	310.618	311.515
10-10	54	30°15'13.23"N	77°31'38.31"E	311.411	312.249
10-10	55	30°15'12.17"N	77°31'40.85"E	311.666	312.513
10-10	56	30°15'10.89"N	77°31'43.79"E	311.619	312.508





Handwritten signature or mark.

Handwritten signature or mark.

Handwritten signature or mark.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
19	Behat	R.B.M.	Yamuna	Nuniyari Athmal – Khand Second	1/1/1	19.000

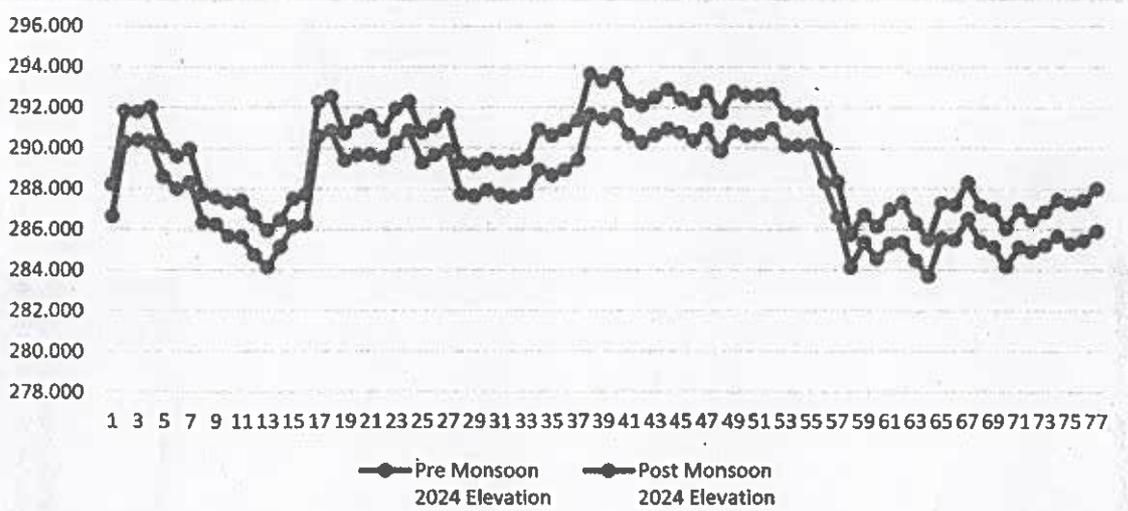
Cross Section	Ref. Point	Lat.	Long.	Pre Monsoon 2024 Elevation	Post Monsoon 2024 Elevation
1-1	1	30°11'0.53"N	77°29'23.73"E	286.644	288.226
1-1	2	30°11'1.62"N	77°29'22.30"E	290.305	291.813
1-1	3	30°11'2.75"N	77°29'20.96"E	290.421	291.801
1-1	4	30°11'3.95"N	77°29'19.57"E	290.322	292.006
1-1	5	30°11'5.11"N	77°29'18.19"E	288.592	290.120
1-1	6	30°11'6.27"N	77°29'16.81"E	288.033	289.625
1-1	7	30°11'7.46"N	77°29'15.40"E	288.311	289.978
1-1	8	30°11'8.75"N	77°29'14.07"E	286.363	287.747
1-1	9	30°11'9.92"N	77°29'12.84"E	286.268	287.606
1-1	10	30°11'11.19"N	77°29'11.39"E	285.667	287.348
2-2	11	30°11'9.94"N	77°29'10.01"E	285.641	287.433
2-2	12	30°11'8.73"N	77°29'11.37"E	284.752	286.647
2-2	13	30°11'7.49"N	77°29'12.77"E	284.138	285.966
2-2	14	30°11'6.41"N	77°29'14.15"E	285.144	286.482
2-2	15	30°11'5.23"N	77°29'15.55"E	286.136	287.530
2-2	16	30°11'4.02"N	77°29'16.98"E	286.244	287.726
2-2	17	30°11'2.85"N	77°29'18.35"E	290.611	292.292
2-2	18	30°11'1.66"N	77°29'19.78"E	290.874	292.556
2-2	19	30°11'0.59"N	77°29'21.14"E	289.422	290.760
2-2	20	30°10'59.51"N	77°29'22.72"E	289.664	291.348
3-3	21	30°10'59.48"N	77°29'20.29"E	289.692	291.591
3-3	22	30°11'0.60"N	77°29'18.84"E	289.554	290.885
3-3	23	30°11'1.80"N	77°29'17.47"E	290.256	291.953
3-3	24	30°11'2.96"N	77°29'15.97"E	290.871	292.309
3-3	25	30°11'4.24"N	77°29'14.45"E	289.285	290.777
3-3	26	30°11'5.43"N	77°29'13.01"E	289.664	291.102
3-3	27	30°11'6.51"N	77°29'11.42"E	289.928	291.599
3-3	28	30°11'7.67"N	77°29'9.74"E	287.734	289.314
3-3	29	30°11'8.87"N	77°29'8.28"E	287.645	289.211
4-4	30	30°11'7.66"N	77°29'6.69"E	287.956	289.463
4-4	31	30°11'6.51"N	77°29'8.18"E	287.695	289.273



4-4	32	30°11'5.18"N	77°29'9.55"E	287.602	289.355
4-4	33	30°11'4.04"N	77°29'11.26"E	287.755	289.511
4-4	34	30°11'2.97"N	77°29'12.84"E	288.941	290.923
4-4	35	30°11'1.69"N	77°29'14.46"E	288.673	290.639
4-4	36	30°11'0.74"N	77°29'15.85"E	288.939	290.911
4-4	37	30°10'59.72"N	77°29'17.54"E	289.444	291.377
5-5	38	30°10'59.36"N	77°29'15.20"E	291.677	293.671
5-5	39	30°11'0.52"N	77°29'13.42"E	291.449	293.317
5-5	40	30°11'1.75"N	77°29'11.65"E	291.658	293.652
6-6	41	30°11'0.41"N	77°29'10.16"E	290.673	292.340
6-6	42	30°10'59.11"N	77°29'11.71"E	290.291	292.119
6-6	43	30°10'57.93"N	77°29'13.59"E	290.667	292.514
7-7	44	30°10'56.94"N	77°29'11.96"E	290.977	292.918
7-7	45	30°10'58.15"N	77°29'10.52"E	290.783	292.441
7-7	46	30°10'59.27"N	77°29'8.80"E	290.392	292.198
8-8	47	30°10'57.87"N	77°29'7.53"E	290.928	292.810
8-8	48	30°10'56.90"N	77°29'9.11"E	289.869	291.760
8-8	49	30°10'55.91"N	77°29'10.70"E	290.806	292.788
9-9	50	30°10'54.37"N	77°29'9.27"E	290.631	292.586
9-9	51	30°10'55.39"N	77°29'7.79"E	290.679	292.617
9-9	52	30°10'56.58"N	77°29'6.12"E	290.971	292.642
10-10	53	30°10'55.17"N	77°29'4.77"E	290.128	291.709
10-10	54	30°10'54.10"N	77°29'6.33"E	290.133	291.581
10-10	55	30°10'52.93"N	77°29'8.10"E	290.162	291.752
11-11	56	30°10'51.35"N	77°29'7.05"E	288.344	290.013
11-11	57	30°10'52.44"N	77°29'5.40"E	286.593	288.365
11-11	58	30°10'53.75"N	77°29'3.74"E	284.117	285.784
12-12	59	30°10'52.40"N	77°29'2.35"E	285.352	286.733
12-12	60	30°10'51.15"N	77°29'4.05"E	284.558	286.142
12-12	61	30°10'49.83"N	77°29'5.87"E	285.299	286.986
13-13	62	30°10'48.27"N	77°29'4.76"E	285.382	287.337
13-13	63	30°10'49.35"N	77°29'3.17"E	284.471	286.304
13-13	64	30°10'51.06"N	77°29'1.18"E	283.685	285.513
14-14	65	30°10'49.51"N	77°28'59.72"E	285.568	287.311
14-14	66	30°10'48.22"N	77°29'1.52"E	285.473	287.228
14-14	67	30°10'46.74"N	77°29'3.39"E	286.531	288.319
15-15	68	30°10'45.14"N	77°29'2.52"E	285.369	287.166
15-15	69	30°10'46.59"N	77°29'0.61"E	285.141	286.908
15-15	70	30°10'47.88"N	77°28'59.09"E	284.168	286.068



15-15	71	30°10'49.29"N	77°28'57.33"E	285.128	286.994
15-15	72	30°10'50.52"N	77°28'55.60"E	284.909	286.463
16-16	73	30°10'49.06"N	77°28'54.44"E	285.216	286.885
16-16	74	30°10'47.87"N	77°28'56.03"E	285.667	287.465
16-16	75	30°10'46.62"N	77°28'57.64"E	285.293	287.286
16-16	76	30°10'45.36"N	77°28'59.34"E	285.448	287.439
16-16	77	30°10'43.92"N	77°29'1.20"E	285.928	288.008



Handwritten signatures and initials are present at the bottom of the page, including a large stylized signature on the left and several smaller ones on the right.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
20	Behat	R.B.M.	Yamuna	Aslampur Bartha - First	1/1 M	36.600

Cross Section	Sl.No	Lat.	Long.	Pre-Monsoon	Post-Monsoon
				2024 Elevation	2024 Elevation
1-1	1	30°13'45.78"N	77°31'8.43"E	310.872	312.352
1-1	2	30°13'46.53"N	77°31'6.68"E	308.158	309.598
1-1	3	30°13'47.28"N	77°31'4.95"E	307.233	308.853
1-1	4	30°13'48.05"N	77°31'3.21"E	306.196	307.966
1-1	5	30°13'48.81"N	77°31'1.49"E	301.193	302.783
1-1	6	30°13'49.55"N	77°30'59.76"E	301.524	303.116
1-1	7	30°13'50.29"N	77°30'58.01"E	301.155	302.785
2-2	8	30°13'48.85"N	77°30'57.13"E	301.152	302.812
2-2	9	30°13'48.08"N	77°30'58.85"E	299.788	301.528
2-2	10	30°13'47.35"N	77°31'0.57"E	300.314	302.007
2-2	11	30°13'46.56"N	77°31'2.31"E	302.738	304.393
2-2	12	30°13'45.81"N	77°31'4.03"E	305.148	306.876
2-2	13	30°13'45.06"N	77°31'5.79"E	304.466	306.048
2-2	14	30°13'44.31"N	77°31'7.50"E	305.149	306.617
3-3	15	30°13'42.81"N	77°31'6.56"E	301.172	302.516
3-3	16	30°13'43.55"N	77°31'4.84"E	302.598	303.980
3-3	17	30°13'44.33"N	77°31'3.12"E	302.301	303.670
3-3	18	30°13'45.08"N	77°31'1.39"E	299.561	300.842
3-3	19	30°13'45.86"N	77°30'59.64"E	300.143	301.398
3-3	20	30°13'46.60"N	77°30'57.95"E	298.156	299.589
3-3	21	30°13'47.36"N	77°30'56.20"E	297.722	298.989



4-4	22	30°13'45.88"N	77°30'55.27"E	298.747	300.129
4-4	23	30°13'45.10"N	77°30'57.01"E	298.155	299.521
4-4	24	30°13'44.36"N	77°30'58.71"E	299.285	300.613
4-4	25	30°13'43.59"N	77°31'0.46"E	302.267	303.659
4-4	26	30°13'42.84"N	77°31'2.19"E	299.328	300.675
4-4	27	30°13'42.08"N	77°31'3.93"E	303.376	304.743
4-4	28	30°13'41.32"N	77°31'5.64"E	308.392	309.758
5-5	29	30°13'39.82"N	77°31'4.73"E	300.708	302.166
5-5	30	30°13'40.52"N	77°31'2.97"E	302.114	303.555
5-5	31	30°13'41.33"N	77°31'1.27"E	304.114	305.636
5-5	32	30°13'42.08"N	77°30'59.55"E	301.122	302.526
5-5	33	30°13'42.87"N	77°30'57.78"E	300.217	301.850
5-5	34	30°13'43.63"N	77°30'56.11"E	299.742	301.390
5-5	35	30°13'44.39"N	77°30'54.35"E	297.905	299.664
6-6	36	30°13'42.93"N	77°30'53.44"E	298.261	299.883
6-6	37	30°13'42.16"N	77°30'55.17"E	300.189	301.741
6-6	38	30°13'41.40"N	77°30'56.88"E	300.349	301.930
6-6	39	30°13'40.62"N	77°30'58.65"E	298.194	299.832
6-6	40	30°13'39.88"N	77°31'0.35"E	301.114	302.535
6-6	41	30°13'39.11"N	77°31'2.10"E	298.542	299.939
6-6	42	30°13'38.35"N	77°31'3.81"E	297.149	298.817
7-7	43	30°13'36.87"N	77°31'2.88"E	301.255	302.590
7-7	44	30°13'37.62"N	77°31'1.18"E	299.917	301.261
7-7	45	30°13'38.41"N	77°30'59.46"E	297.284	298.578
7-7	46	30°13'39.16"N	77°30'57.74"E	296.808	298.147
7-7	47	30°13'39.92"N	77°30'55.96"E	298.245	299.727
7-7	48	30°13'40.71"N	77°30'54.27"E	299.204	300.649
7-7	49	30°13'41.45"N	77°30'52.52"E	296.219	297.558
8-8	50	30°13'39.96"N	77°30'51.60"E	297.355	298.909



Handwritten signatures and initials at the bottom left of the page.

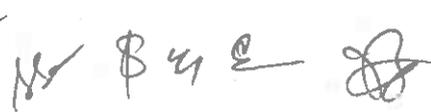
8-8	51	30°13'39.19"N	77°30'53.33"E	295.804	297.471
8-8	52	30°13'38.42"N	77°30'55.02"E	296.325	297.791
8-8	53	30°13'37.64"N	77°30'56.80"E	296.416	297.944
8-8	54	30°13'36.87"N	77°30'58.51"E	299.255	300.882
8-8	55	30°13'36.11"N	77°31'0.24"E	299.264	300.916
8-8	56	30°13'35.38"N	77°31'1.97"E	301.006	302.700
9-9	57	30°13'33.88"N	77°31'1.04"E	302.241	303.840
9-9	58	30°13'34.62"N	77°30'59.32"E	301.322	302.860
9-9	59	30°13'35.42"N	77°30'57.64"E	300.829	302.316
9-9	60	30°13'36.17"N	77°30'55.89"E	302.104	303.542
9-9	61	30°13'36.96"N	77°30'54.13"E	297.794	299.483
9-9	62	30°13'37.71"N	77°30'52.43"E	296.855	298.597
9-9	63	30°13'38.48"N	77°30'50.68"E	296.644	297.982
10-10	64	30°13'36.99"N	77°30'49.75"E	296.875	298.357
10-10	65	30°13'36.22"N	77°30'51.49"E	297.694	299.388
10-10	66	30°13'35.45"N	77°30'53.20"E	297.334	298.989
10-10	67	30°13'34.67"N	77°30'54.94"E	301.753	303.394
10-10	68	30°13'33.90"N	77°30'56.67"E	299.281	300.948
10-10	69	30°13'33.11"N	77°30'58.38"E	300.206	301.898
10-10	70	30°13'32.35"N	77°31'0.09"E	298.104	299.771
11-11	71	30°13'30.86"N	77°30'59.07"E	299.459	301.043
11-11	72	30°13'31.60"N	77°30'57.45"E	297.228	298.779
11-11	73	30°13'32.40"N	77°30'55.73"E	298.209	299.686
11-11	74	30°13'33.17"N	77°30'54.01"E	296.444	297.913
11-11	75	30°13'33.97"N	77°30'52.28"E	298.062	299.504
11-11	76	30°13'34.73"N	77°30'50.58"E	295.003	296.596
11-11	77	30°13'35.54"N	77°30'48.84"E	294.893	296.474
12-12	78	30°13'34.02"N	77°30'47.89"E	295.447	296.983
12-12	79	30°13'33.23"N	77°30'49.65"E	295.668	297.303



12-12	80	30°13'32.45"N	77°30'51.34"E	299.563	301.240
12-12	81	30°13'31.65"N	77°30'53.08"E	299.144	300.703
12-12	82	30°13'30.89"N	77°30'54.80"E	297.809	299.317
12-12	83	30°13'30.11"N	77°30'56.52"E	297.744	299.278
12-12	84	30°13'29.39"N	77°30'58.10"E	298.661	300.258
13-13	85	30°13'27.95"N	77°30'57.13"E	300.692	302.201
13-13	86	30°13'28.63"N	77°30'55.61"E	295.608	297.292
13-13	87	30°13'29.39"N	77°30'53.88"E	300.006	301.678
13-13	88	30°13'30.19"N	77°30'52.17"E	298.264	299.645
13-13	89	30°13'30.97"N	77°30'50.43"E	296.743	298.109
13-13	90	30°13'31.76"N	77°30'48.71"E	297.249	298.577
13-13	91	30°13'32.53"N	77°30'46.98"E	298.558	299.888
14-14	92	30°13'31.05"N	77°30'46.07"E	297.255	298.654
14-14	93	30°13'30.27"N	77°30'47.79"E	300.322	301.647
14-14	94	30°13'29.50"N	77°30'49.51"E	301.541	302.925
14-14	95	30°13'28.70"N	77°30'51.26"E	299.819	301.184
14-14	96	30°13'27.93"N	77°30'52.97"E	299.464	300.892
14-14	97	30°13'27.15"N	77°30'54.69"E	296.703	298.172
14-14	98	30°13'26.50"N	77°30'56.16"E	295.638	297.130
15-15	99	30°13'25.81"N	77°30'53.83"E	297.249	298.707
15-15	100	30°13'26.44"N	77°30'52.04"E	298.064	299.502
15-15	101	77°30'52.04"E	77°30'50.33"E	298.422	300.004
15-15	102	30°13'28.01"N	77°30'48.59"E	297.599	299.266
15-15	103	30°13'28.77"N	77°30'46.85"E	296.757	298.416
15-15	104	30°13'29.56"N	77°30'45.13"E	297.438	298.909
16-16	105	30°13'28.07"N	77°30'44.21"E	297.525	299.224
16-16	106	30°13'27.27"N	77°30'45.94"E	296.222	297.947
16-16	107	30°13'26.52"N	77°30'47.65"E	297.539	299.207
16-16	108	30°13'25.73"N	77°30'49.42"E	297.819	299.370







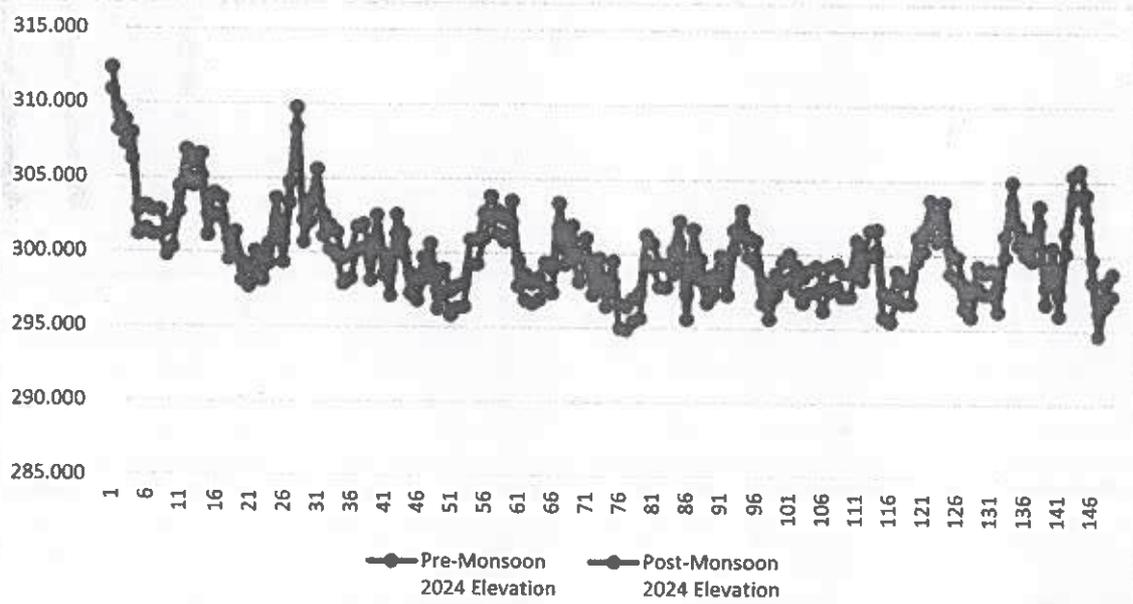



16-16	109	30°13'24.96"N	77°30'51.13"E	297.183	298.776
16-16	110	30°13'24.17"N	77°30'52.85"E	297.166	298.765
17-17	111	30°13'22.70"N	77°30'51.97"E	299.372	300.956
17-17	112	30°13'23.49"N	77°30'50.24"E	298.324	300.015
17-17	113	30°13'24.23"N	77°30'48.49"E	299.962	301.636
17-17	114	30°13'25.03"N	77°30'46.74"E	300.309	301.701
17-17	115	30°13'25.81"N	77°30'45.01"E	295.818	297.462
17-17	116	30°13'26.56"N	77°30'43.27"E	295.533	297.174
18-18	117	30°13'25.09"N	77°30'42.35"E	297.267	298.919
18-18	118	30°13'24.29"N	77°30'44.10"E	296.762	298.156
18-18	119	30°13'23.50"N	77°30'45.81"E	296.759	298.453
18-18	120	30°13'22.74"N	77°30'47.58"E	299.643	301.201
18-18	121	30°13'21.94"N	77°30'49.28"E	300.274	301.720
18-18	122	30°13'21.17"N	77°30'51.00"E	302.009	303.676
19-19	123	30°13'20.45"N	77°30'48.36"E	300.951	302.589
19-19	124	30°13'21.23"N	77°30'46.64"E	301.947	303.586
19-19	125	30°13'22.03"N	77°30'44.88"E	298.769	300.358
19-19	126	30°13'22.80"N	77°30'43.14"E	298.349	299.912
19-19	127	30°13'23.56"N	77°30'41.43"E	296.447	298.038
20-20	128	30°13'22.10"N	77°30'40.50"E	295.893	297.375
20-20	129	30°13'21.35"N	77°30'42.26"E	297.888	299.296
20-20	130	30°13'20.54"N	77°30'43.97"E	297.443	298.835
20-20	131	30°13'19.77"N	77°30'45.73"E	297.415	299.012
20-20	132	30°13'19.00"N	77°30'47.46"E	296.264	297.932
21-21	133	30°13'17.49"N	77°30'46.53"E	299.904	301.315
21-21	134	30°13'18.26"N	77°30'44.81"E	303.615	304.951
21-21	135	30°13'19.04"N	77°30'43.04"E	300.719	302.018
21-21	136	30°13'19.83"N	77°30'41.30"E	300.048	301.266
21-21	137	30°13'20.61"N	77°30'39.59"E	299.692	300.848



Handwritten signature or mark.

22-22	138	30°13'19.10"N	77°30'38.65"E	302.173	303.339
22-22	139	30°13'18.36"N	77°30'40.38"E	296.774	297.917
22-22	140	30°13'17.57"N	77°30'42.11"E	299.409	300.564
22-22	141	30°13'16.75"N	77°30'43.88"E	296.003	297.372
23-23	142	30°13'15.28"N	77°30'42.96"E	300.228	301.583
23-23	143	30°13'16.06"N	77°30'41.20"E	303.841	305.423
23-23	144	30°13'16.84"N	77°30'39.46"E	304.129	305.798
23-23	145	30°13'17.61"N	77°30'37.71"E	302.588	304.136
24-24	146	30°13'16.93"N	77°30'37.32"E	298.258	299.750
24-24	147	30°13'16.06"N	77°30'38.97"E	294.652	296.251
24-24	148	30°13'15.16"N	77°30'40.63"E	296.667	298.159
24-24	149	30°13'14.28"N	77°30'42.33"E	297.314	298.796



Handwritten signatures and marks at the bottom of the page.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
21	Behat	R.B.M.	Yamuna	Rasoolpur Urf Rasooli	1/1	34.000

Cross Section	Ref. Point	Lat.	Long.	Pre Monsoon 2024 Elevation	Post Monsoon 2024 Elevation
1-1	1	30°12'17.38"N	77°30'17.68"E	290.216	291.871
1-1	2	30°12'18.66"N	77°30'16.77"E	294.228	295.908
1-1	3	30°12'20.17"N	77°30'15.80"E	291.311	292.891
2-2	4	30°12'18.66"N	77°30'13.62"E	294.714	296.204
2-2	5	30°12'17.42"N	77°30'14.76"E	293.668	295.008
2-2	6	30°12'16.04"N	77°30'16.30"E	293.321	294.651
3-3	7	30°12'14.20"N	77°30'15.87"E	293.847	295.337
3-3	8	30°12'15.34"N	77°30'14.74"E	292.669	294.249
3-3	9	30°12'16.52"N	77°30'13.39"E	293.199	294.859
3-3	10	30°12'17.76"N	77°30'12.01"E	293.182	294.752
4-4	11	30°12'16.29"N	77°30'10.11"E	294.411	295.901
4-4	12	30°12'15.15"N	77°30'11.42"E	294.721	296.301
4-4	13	30°12'13.80"N	77°30'12.91"E	293.439	295.109
4-4	14	30°12'12.64"N	77°30'14.50"E	293.149	294.639
5-5	15	30°12'10.22"N	77°30'14.03"E	293.909	295.549
5-5	16	30°12'10.83"N	77°30'13.17"E	292.822	294.202
5-5	17	30°12'11.77"N	77°30'12.12"E	292.927	294.385
5-5	18	30°12'12.94"N	77°30'10.98"E	293.908	295.188
5-5	19	30°12'13.87"N	77°30'10.30"E	293.935	295.155
5-5	20	30°12'15.48"N	77°30'8.90"E	293.944	295.614
6-6	21	30°12'14.03"N	77°30'7.27"E	294.108	296.038
6-6	22	30°12'12.92"N	77°30'8.38"E	294.437	296.287
6-6	23	30°12'11.58"N	77°30'9.74"E	294.139	295.909



Handwritten signatures and initials at the bottom of the page, including a large signature on the left and several smaller ones on the right.

6-6	24	30°12'9.94"N	77°30'11.32"E	292.549	294.209
6-6	25	30°12'8.76"N	77°30'12.39"E	293.231	294.594
6-6	26	30°12'7.80"N	77°30'13.21"E	292.428	294.020
7-7	27	30°12'5.80"N	77°30'11.96"E	292.517	293.664
7-7	28	30°12'7.16"N	77°30'10.99"E	292.239	293.495
7-7	29	30°12'8.28"N	77°30'10.03"E	292.566	294.234
7-7	30	30°12'9.41"N	77°30'8.84"E	292.167	293.725
7-7	31	30°12'11.02"N	77°30'7.50"E	292.254	293.923
7-7	32	30°12'12.99"N	77°30'5.92"E	294.539	296.121
8-8	33	30°12'12.03"N	77°30'3.51"E	293.984	295.378
8-8	34	30°12'11.08"N	77°30'4.32"E	294.228	295.700
8-8	35	30°12'9.77"N	77°30'5.45"E	293.109	294.776
8-8	36	30°12'8.52"N	77°30'6.56"E	293.266	294.756
8-8	37	30°12'7.19"N	77°30'8.04"E	292.542	294.234
8-8	38	30°12'6.12"N	77°30'9.34"E	292.331	294.083
8-8	39	30°12'4.72"N	77°30'10.75"E	293.422	295.181
9-9	40	30°12'3.93"N	77°30'9.19"E	292.511	294.320
9-9	41	30°12'5.18"N	77°30'7.99"E	292.160	293.904
9-9	42	30°12'6.67"N	77°30'6.54"E	292.121	293.789
9-9	43	30°12'8.25"N	77°30'4.69"E	292.404	293.955
9-9	44	30°12'9.42"N	77°30'3.70"E	293.438	294.666
9-9	45	30°12'11.25"N	77°30'2.05"E	293.256	294.624
10-10	46	30°12'10.01"N	77°30'0.65"E	293.991	295.335
10-10	47	30°12'8.58"N	77°30'1.88"E	293.933	295.328
10-10	48	30°12'7.34"N	77°30'3.02"E	292.968	294.282
10-10	49	30°12'5.71"N	77°30'4.57"E	292.958	294.325
10-10	50	30°12'4.28"N	77°30'5.94"E	292.982	294.629
10-10	51	30°12'2.92"N	77°30'6.80"E	292.514	294.052
11-11	52	30°12'2.17"N	77°30'5.31"E	292.338	293.882



11-11	53	30°12'3.60"N	77°30'4.06"E	292.416	294.049
11-11	54	30°12'5.03"N	77°30'2.96"E	292.527	294.119
11-11	55	30°12'6.56"N	77°30'1.34"E	292.339	293.787
11-11	56	30°12'7.95"N	77°30'0.19"E	292.444	294.112
11-11	57	30°12'9.21"N	77°29'59.24"E	292.967	294.659
12-12	58	30°12'8.16"N	77°29'57.41"E	292.464	294.108
12-12	59	30°12'6.71"N	77°29'58.72"E	292.952	294.560
12-12	60	30°12'5.41"N	77°30'0.06"E	292.441	294.064
12-12	61	30°12'4.08"N	77°30'1.38"E	292.365	293.906
12-12	62	30°12'2.76"N	77°30'2.49"E	292.439	293.969
12-12	63	30°12'1.50"N	77°30'3.81"E	292.274	293.765
13-13	64	30°12'0.85"N	77°30'2.02"E	292.486	293.808
13-13	65	30°12'2.10"N	77°30'0.92"E	292.449	293.677
13-13	66	30°12'3.27"N	77°29'59.90"E	292.428	293.709
13-13	67	30°12'4.68"N	77°29'58.38"E	292.464	293.758
13-13	68	30°12'6.01"N	77°29'57.38"E	295.359	296.507
13-13	69	30°12'7.18"N	77°29'56.21"E	298.448	299.714
14-14	70	30°12'5.58"N	77°29'54.01"E	297.551	298.790
14-14	71	30°12'4.53"N	77°29'55.29"E	294.537	295.781
14-14	72	30°12'3.47"N	77°29'56.62"E	292.447	293.756
14-14	73	30°12'2.10"N	77°29'58.35"E	292.366	293.732
14-14	74	30°12'0.76"N	77°29'59.82"E	292.439	293.877
14-14	75	30°11'59.94"N	77°30'0.77"E	293.526	295.346
15-15	76	30°11'57.93"N	77°29'59.85"E	293.404	294.698
15-15	77	30°11'59.34"N	77°29'58.25"E	293.412	294.811
15-15	78	30°12'0.87"N	77°29'56.71"E	292.437	294.084
15-15	79	30°12'2.38"N	77°29'55.21"E	292.458	294.002
15-15	80	30°12'3.76"N	77°29'54.18"E	292.311	293.819
15-15	81	30°12'4.97"N	77°29'52.99"E	292.558	294.103



Handwritten signature and scribbles.

Handwritten symbols and marks.

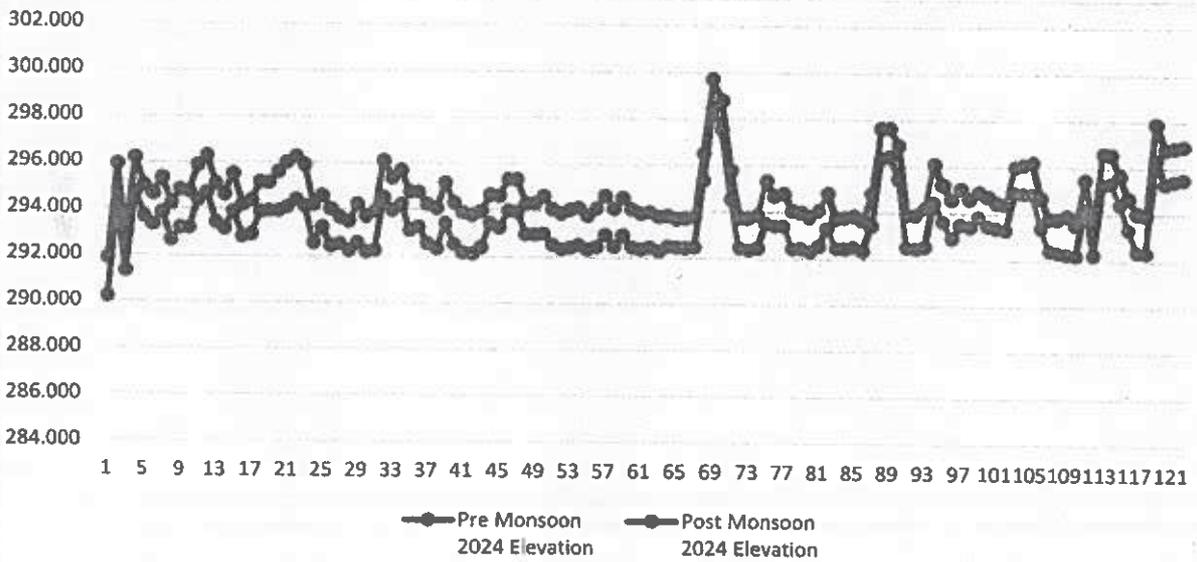
Handwritten signature.

Page 134 of 163  
Handwritten signature and date.

16-16	82	30°12'3.78"N	77°29'51.01"E	293.334	294.826
16-16	83	30°12'2.41"N	77°29'52.53"E	292.466	293.755
16-16	84	30°12'1.06"N	77°29'53.88"E	292.449	293.793
16-16	85	30°11'59.73"N	77°29'55.41"E	292.519	293.883
16-16	86	30°11'58.54"N	77°29'56.88"E	292.369	293.697
16-16	87	30°11'57.20"N	77°29'58.61"E	293.442	294.835
16-16	88	30°11'56.29"N	77°29'59.94"E	296.355	297.644
17-17	89	30°11'53.99"N	77°29'59.39"E	296.440	297.648
17-17	90	30°11'55.30"N	77°29'57.62"E	295.469	296.924
17-17	91	30°11'56.84"N	77°29'55.79"E	292.528	293.927
17-17	92	30°11'58.34"N	77°29'53.88"E	292.464	293.935
17-17	93	30°11'59.58"N	77°29'52.43"E	292.549	294.233
17-17	94	30°12'0.76"N	77°29'51.11"E	294.466	296.122
17-17	95	30°12'2.68"N	77°29'49.50"E	293.637	295.227
18-18	96	30°12'1.30"N	77°29'47.74"E	292.928	294.589
18-18	97	30°12'0.16"N	77°29'49.17"E	293.517	295.069
18-18	98	30°11'58.49"N	77°29'50.70"E	293.415	294.643
18-18	99	30°11'57.14"N	77°29'52.14"E	293.856	294.929
18-18	100	30°11'55.84"N	77°29'53.42"E	293.455	294.744
18-18	101	30°11'54.26"N	77°29'55.69"E	293.372	294.476
18-18	102	30°11'53.14"N	77°29'57.21"E	293.288	294.407
18-18	103	30°11'52.05"N	77°29'58.90"E	294.892	296.015
19-19	104	30°11'50.47"N	77°29'58.89"E	294.888	296.116
19-19	105	30°11'51.11"N	77°29'57.78"E	294.834	296.218
19-19	106	30°11'52.42"N	77°29'56.07"E	293.396	294.691
19-19	107	30°11'53.70"N	77°29'54.44"E	292.430	293.796
19-19	108	30°11'55.37"N	77°29'52.57"E	292.339	293.794
19-19	109	30°11'56.36"N	77°29'51.27"E	292.273	293.937
19-19	110	30°11'57.55"N	77°29'49.88"E	292.224	293.562



19-19	111	30°11'58.85"N	77°29'48.39"E	294.221	295.479
19-19	112	30°12'0.20"N	77°29'46.56"E	292.257	293.621
20-20	113	30°11'59.36"N	77°29'44.87"E	295.292	296.631
20-20	114	30°11'57.88"N	77°29'46.76"E	295.353	296.577
20-20	115	30°11'56.21"N	77°29'48.25"E	294.441	295.670
20-20	116	30°11'54.97"N	77°29'49.70"E	293.359	294.723
20-20	117	30°11'53.79"N	77°29'50.84"E	292.392	294.057
20-20	118	30°11'52.15"N	77°29'52.77"E	292.324	293.952
20-20	119	30°11'50.94"N	77°29'54.25"E	296.366	297.894
20-20	120	30°11'49.53"N	77°29'56.25"E	295.309	296.812
20-20	121	30°11'48.32"N	77°29'57.36"E	295.429	296.862
20-20	122	30°11'47.25"N	77°29'58.14"E	295.504	296.945



Handwritten signatures and initials are present at the bottom of the page, including a large signature on the left and several smaller ones in the center and right.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
22	Behat	R.B.M.	Yamuna	Aslampur Bartha - Second	1/1 M	28.160

Cross Section	Sl.No	Lat.	Long.	Pre Monsoon 2024 Elevation	Post Monsoon 2024 Elevation
1-1	1	30°13'4.33"N	77°30'43.84"E	304.415	306.062
1-1	2	30°13'5.18"N	77°30'42.16"E	301.244	302.798
1-1	3	30°13'6.00"N	77°30'40.47"E	300.609	302.591
1-1	4	30°13'6.82"N	77°30'38.81"E	298.162	300.156
1-1	5	30°13'7.66"N	77°30'37.13"E	295.511	297.569
1-1	6	30°13'8.50"N	77°30'35.43"E	294.162	296.210
2-2	7	30°13'6.98"N	77°30'34.61"E	293.461	295.799
2-2	8	30°13'6.15"N	77°30'36.30"E	293.188	295.380
2-2	9	30°13'5.31"N	77°30'37.98"E	294.404	297.072
2-2	10	30°13'4.47"N	77°30'39.64"E	293.956	295.954
2-2	11	30°13'3.63"N	77°30'41.33"E	296.916	298.982
2-2	12	30°13'2.80"N	77°30'43.02"E	296.611	298.456
3-3	13	30°13'1.21"N	77°30'42.15"E	295.632	297.330
3-3	14	30°13'2.05"N	77°30'40.46"E	297.282	299.274
3-3	15	30°13'2.90"N	77°30'38.80"E	297.424	299.111
3-3	16	30°13'3.75"N	77°30'37.13"E	296.138	298.030
3-3	17	30°13'4.59"N	77°30'35.45"E	294.001	295.699
3-3	18	30°13'5.43"N	77°30'33.76"E	295.174	296.928
4-4	19	30°13'3.94"N	77°30'32.96"E	294.129	295.387
4-4	20	30°13'3.11"N	77°30'34.64"E	294.236	295.474
4-4	21	30°13'2.26"N	77°30'36.33"E	293.128	294.356
4-4	22	30°13'1.39"N	77°30'37.96"E	295.133	296.527
4-4	23	30°13'0.51"N	77°30'39.64"E	294.584	295.930
4-4	24	30°12'59.69"N	77°30'41.31"E	296.511	297.877
5-5	25	30°12'58.20"N	77°30'40.48"E	295.466	297.056
5-5	26	30°12'59.05"N	77°30'38.83"E	295.764	297.123
5-5	27	30°12'59.89"N	77°30'37.13"E	294.428	295.675
5-5	28	30°13'0.75"N	77°30'35.49"E	294.179	295.422
5-5	29	30°13'1.60"N	77°30'33.81"E	293.449	294.596
5-5	30	30°13'2.44"N	77°30'32.15"E	293.142	294.427
6-6	31	30°13'0.94"N	77°30'31.32"E	292.854	294.103



6-6	32	30°13'0.07"N	77°30'32.99"E	292.972	294.208
6-6	33	30°12'59.25"N	77°30'34.68"E	293.984	295.361
6-6	34	30°12'58.39"N	77°30'36.32"E	292.915	294.270
6-6	35	30°12'57.54"N	77°30'37.99"E	294.341	295.690
6-6	36	30°12'56.67"N	77°30'39.68"E	295.468	296.925
7-7	37	30°12'55.15"N	77°30'38.82"E	294.759	296.083
7-7	38	30°12'56.00"N	77°30'37.15"E	293.576	294.785
7-7	39	30°12'56.85"N	77°30'35.46"E	292.744	293.888
7-7	40	30°12'57.68"N	77°30'33.82"E	292.338	293.446
7-7	41	30°12'58.52"N	77°30'32.15"E	292.833	293.937
7-7	42	30°12'59.38"N	77°30'30.48"E	292.581	293.690
8-8	43	30°12'57.87"N	77°30'29.64"E	293.423	294.411
8-8	44	30°12'56.98"N	77°30'31.30"E	294.647	304.197
8-8	45	30°12'56.16"N	77°30'32.96"E	292.367	293.329
8-8	46	30°12'55.31"N	77°30'34.63"E	292.761	293.620
8-8	47	30°12'54.45"N	77°30'36.33"E	296.784	297.670
8-8	48	30°12'53.61"N	77°30'37.95"E	296.792	297.633
9-9	49	30°12'52.08"N	77°30'37.16"E	297.766	298.651
9-9	50	30°12'52.90"N	77°30'35.46"E	296.655	297.482
9-9	51	30°12'53.74"N	77°30'33.79"E	294.722	295.591
9-9	52	30°12'54.63"N	77°30'32.15"E	294.372	295.246
9-9	53	30°12'55.48"N	77°30'30.48"E	294.652	295.415
9-9	54	30°12'56.31"N	77°30'28.79"E	293.271	294.012
10-10	55	30°12'54.82"N	77°30'27.97"E	293.596	294.351
10-10	56	30°12'53.96"N	77°30'29.64"E	294.884	295.623
10-10	57	30°12'53.10"N	77°30'31.32"E	293.667	294.395
10-10	58	30°12'52.26"N	77°30'32.96"E	292.523	293.278
10-10	59	30°12'51.41"N	77°30'34.64"E	293.291	294.024
10-10	60	30°12'50.54"N	77°30'36.32"E	294.766	295.485
11-11	61	30°12'49.03"N	30°12'49.03"N	295.641	296.360
11-11	62	30°12'49.90"N	77°30'33.81"E	294.238	294.995
11-11	63	30°12'50.72"N	77°30'32.13"E	294.596	295.251
11-11	64	30°12'51.58"N	77°30'30.48"E	293.458	294.086
11-11	65	30°12'52.42"N	77°30'28.81"E	292.342	292.983
11-11	66	30°12'53.25"N	77°30'27.12"E	291.869	292.492
12-12	67	30°12'51.74"N	77°30'26.31"E	291.983	292.677
12-12	68	30°12'50.90"N	77°30'27.97"E	292.646	293.291
12-12	69	30°12'50.06"N	77°30'29.62"E	292.734	293.377
12-12	70	30°12'49.19"N	77°30'31.27"E	292.633	293.277

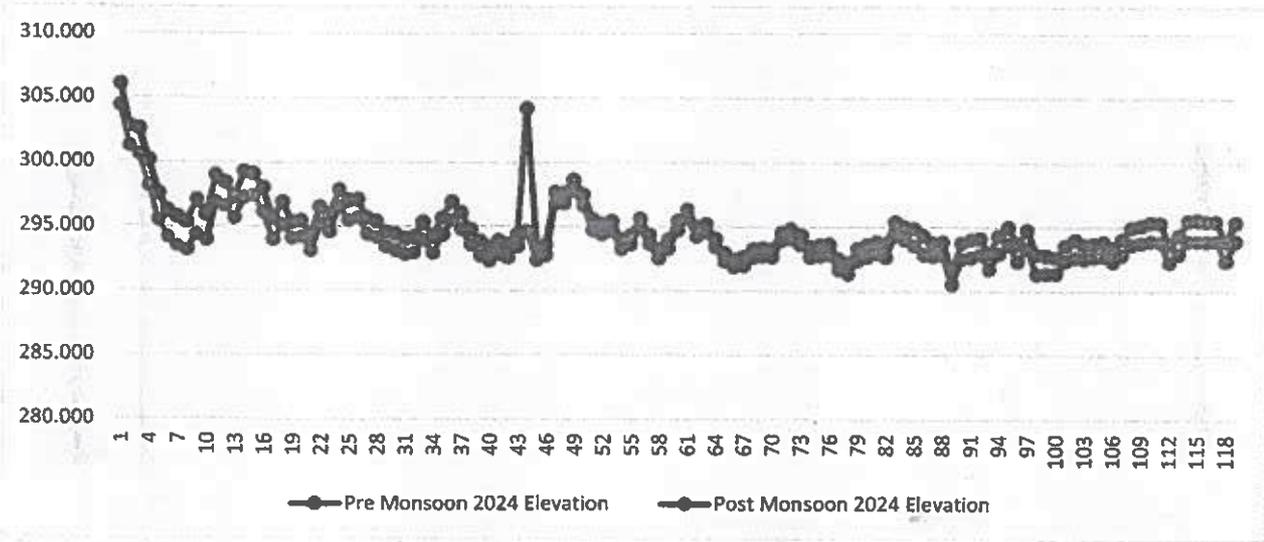


12-12	71	30°12'48.36"N	77°30'32.97"E	293.937	294.565
12-12	72	30°12'47.47"N	77°30'34.66"E	294.077	294.832
13-13	73	30°12'45.97"N	77°30'33.81"E	293.639	294.388
13-13	74	30°12'46.83"N	77°30'32.15"E	292.633	293.432
13-13	75	30°12'47.67"N	77°30'30.46"E	292.749	293.605
13-13	76	30°12'48.51"N	77°30'28.82"E	292.847	293.656
13-13	77	30°12'49.36"N	77°30'27.16"E	291.655	292.473
13-13	78	30°12'50.24"N	77°30'25.48"E	291.329	292.223
14-14	79	30°12'48.58"N	77°30'24.59"E	292.421	293.329
14-14	80	30°12'47.76"N	77°30'26.28"E	292.650	293.641
14-14	81	30°12'46.94"N	77°30'27.96"E	292.917	293.869
14-14	82	30°12'46.12"N	77°30'29.62"E	292.649	293.739
14-14	83	30°12'45.30"N	77°30'31.30"E	294.347	295.407
14-14	84	30°12'44.45"N	77°30'32.99"E	294.009	295.029
15-15	85	30°12'42.96"N	77°30'32.14"E	293.519	294.909
15-15	86	30°12'43.74"N	77°30'30.48"E	292.839	294.319
15-15	87	30°12'44.59"N	77°30'28.79"E	292.735	293.775
15-15	88	30°12'45.39"N	77°30'27.13"E	292.856	293.866
15-15	89	30°12'46.25"N	77°30'25.45"E	290.544	291.548
15-15	90	30°12'47.06"N	77°30'23.76"E	292.519	293.804
16-16	91	30°12'45.59"N	77°30'22.93"E	292.642	294.036
16-16	92	30°12'44.76"N	77°30'24.63"E	292.899	294.148
16-16	93	30°12'43.94"N	77°30'26.33"E	291.727	292.982
16-16	94	30°12'43.08"N	77°30'27.98"E	292.943	294.335
16-16	95	30°12'42.19"N	77°30'29.67"E	293.667	295.011
16-16	96	30°12'41.36"N	77°30'31.33"E	292.352	293.701
17-17	97	30°12'39.92"N	77°30'30.50"E	293.341	294.797
17-17	98	30°12'40.74"N	77°30'28.82"E	291.323	292.877
17-17	99	30°12'41.58"N	77°30'27.15"E	291.381	292.809
17-17	100	30°12'42.39"N	77°30'25.50"E	291.373	292.609
17-17	101	30°12'43.23"N	77°30'23.80"E	292.361	293.589
17-17	102	30°12'44.06"N	77°30'22.12"E	292.649	294.040
18-18	103	30°12'42.49"N	77°30'21.25"E	292.557	293.645
18-18	104	30°12'41.67"N	77°30'22.94"E	292.659	293.755
18-18	105	30°12'40.84"N	77°30'24.63"E	292.728	293.854
18-18	106	30°12'40.03"N	77°30'26.30"E	292.337	293.457
18-18	107	30°12'39.21"N	77°30'27.98"E	292.842	294.075
18-18	108	30°12'38.37"N	77°30'29.66"E	293.654	295.003
19-19	109	30°12'36.81"N	77°30'28.82"E	293.773	295.121



Page 139 of 163

19-19	110	30°12'37.65"N	77°30'27.13"E	293.929	295.384
19-19	111	30°12'38.49"N	77°30'25.44"E	293.841	295.338
19-19	112	30°12'39.31"N	77°30'23.78"E	292.267	293.694
19-19	113	30°12'40.14"N	77°30'22.11"E	292.945	294.384
20-20	114	30°12'40.98"N	77°30'20.42"E	293.941	295.518
20-20	115	30°12'39.46"N	77°30'19.59"E	293.929	295.612
20-20	116	30°12'38.61"N	77°30'21.28"E	293.921	295.470
20-20	117	30°12'37.78"N	77°30'22.96"E	293.944	295.486
20-20	118	30°12'36.98"N	77°30'24.62"E	292.382	293.930
20-20	119	30°12'36.15"N	77°30'26.31"E	293.967	295.433



*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

**Lease Profile's**

**Pre-Monsoon**

**and**

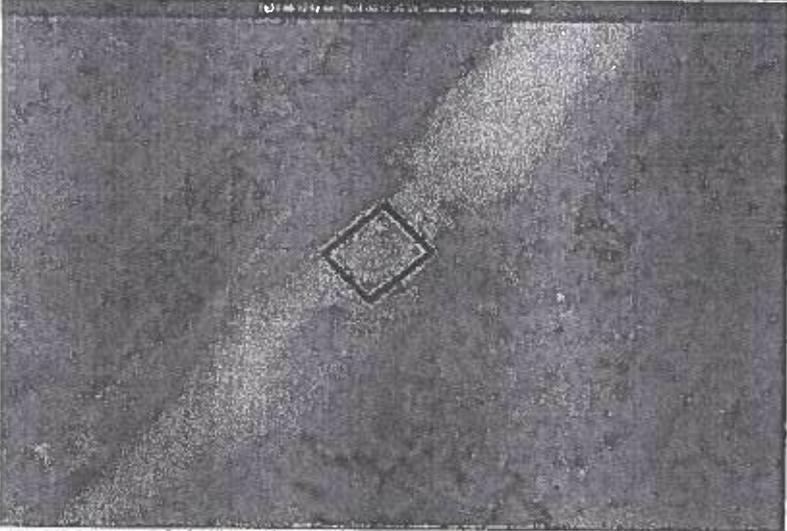
**Post-Monsoon 2024**

**Source:- Sentential-2 L2A Satellite**



*Handwritten signatures and initials, including 'B u' and 'r'.*

Page 141 of 163  
*Handwritten signature and initials.*

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
1	Behat	R.B.M.	Badshahibagh Rao	Mayapur Rooppur	Gata No. 14/1	3.100
Pre-Monsoon (12-June-2024)						
						
Post-Monsoon (25-Oct-2024)						
						

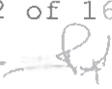






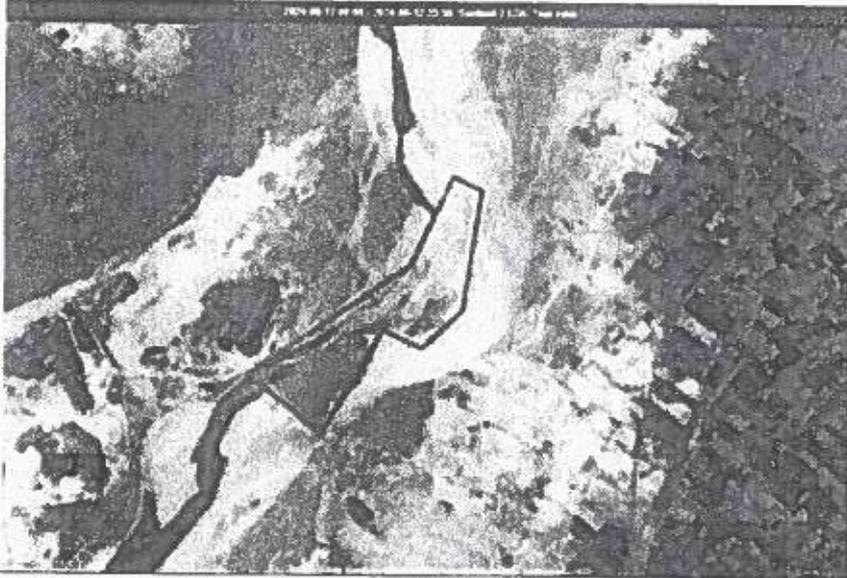






Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
2	Behat	R.B.M.	Yamuna	Bartha Korsi	Gata No. - 1	36.000

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)



*Handwritten scribbles and marks.*

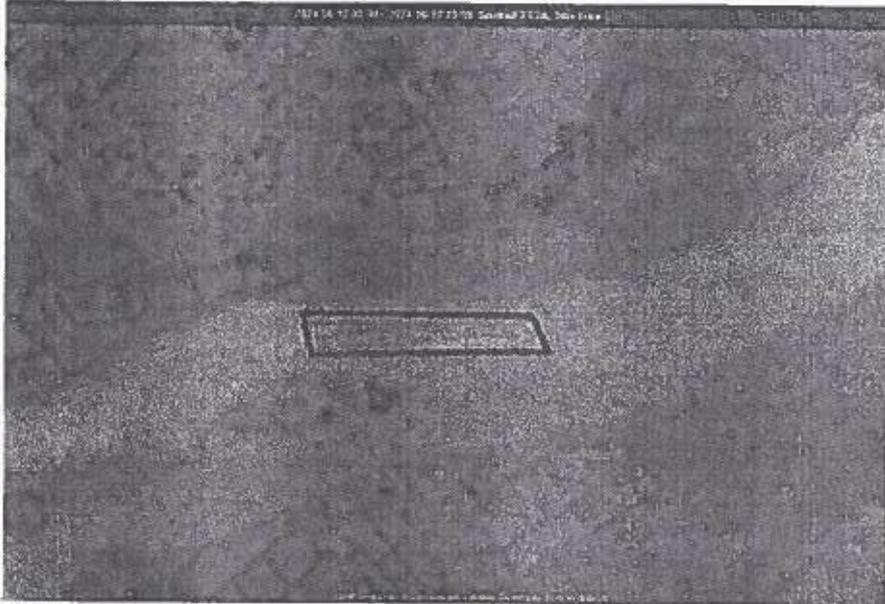
*Handwritten signature or initials.*



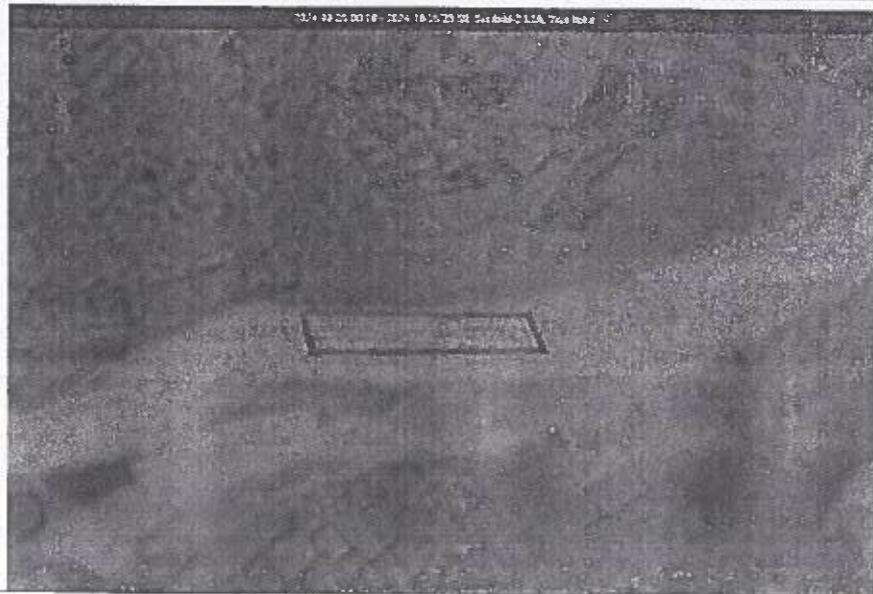
*Handwritten signature and date: 12/10/24*

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
3	Behat	R.B.M.	Badkala Ra	Haidarpur Hindwala	Khand No / Gata No. - 8/1, 19 & 22	4.200

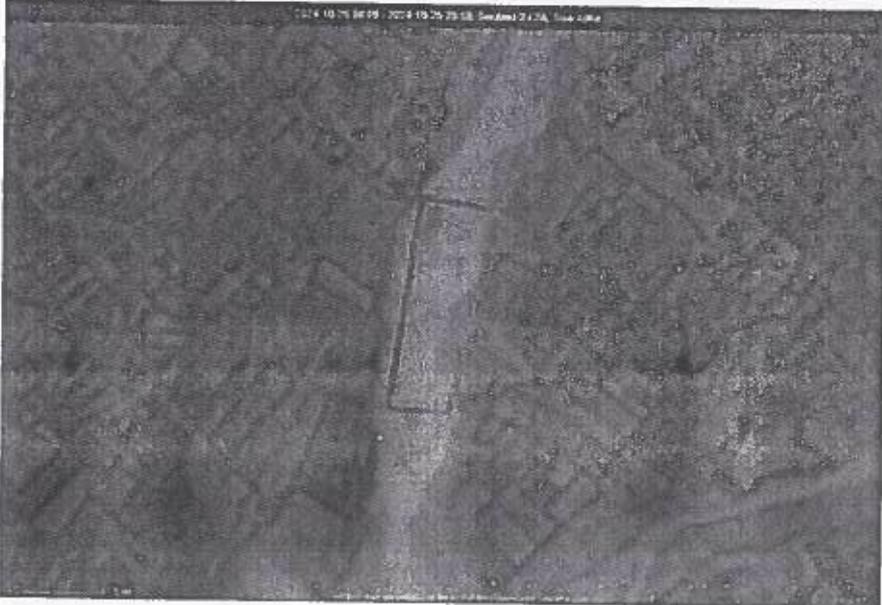
Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)



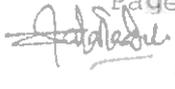
Handwritten signatures and initials are present at the bottom of the page, including a large stylized signature on the left and several smaller initials and signatures on the right.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
4	Behat	R.B.M.	Khurwali Ra	Sherpur Pelon	Gata No. - 378/2 & 379/2	7.000
Pre-Monsoon (12-June-2024)						
						
Post-Monsoon (25-Oct-2024)						
						







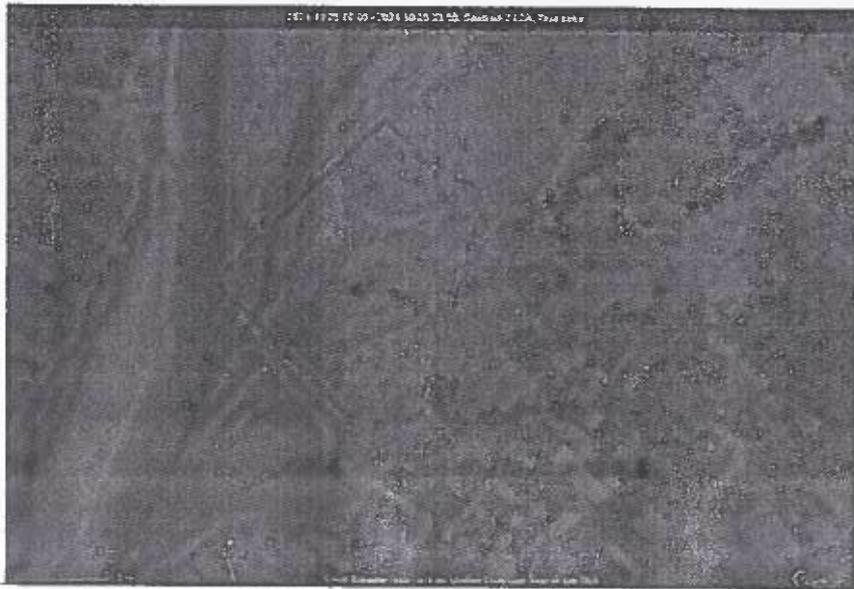




Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
5	Behat	R.B.M.	Yamuna	Nuniyari Aehatmal	Gata No. - 1/1/1 Laat 38	24.290

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)





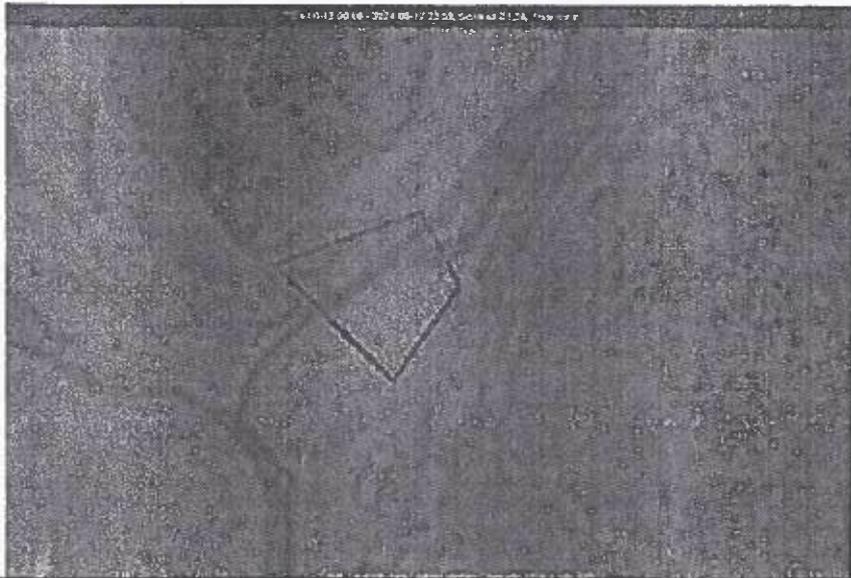







Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
6	Behat	R.B.M.	Yamuna	Rehna	Khand No. / Gata no. - 03, Lot No - 03	8.050

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)



Handwritten scribbles and marks.

Handwritten signatures and initials.



Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
7	Behat	R.B.M.	Gaisara Rao	Rahena	Gata No. 179/2	3.750

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)



Handwritten signatures and initials at the bottom of the page, including a large 'R' and several other scribbles.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
8	Nukur	Sand	Yamuna	Dhikkan Kalan	Gata No. - 839, 841 to 856, 858, 859, 860, 861, 863, 864, 865, 866, 867, 871, 872, 888, 889, 406, 407	52.630

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)



Handwritten signatures and initials are present at the bottom of the page, including a large '3' and various scribbles.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
9	Behat	R.B.M.	Khurwali Ra	Sherpur Pelon	403 , 404/1 , 405 , 406/1 , 416/2 , 421/1 , 422/2 , 423/2 , 424/2 , 429 and 431	6.475

Pre-Monsoon (12-June-2024)



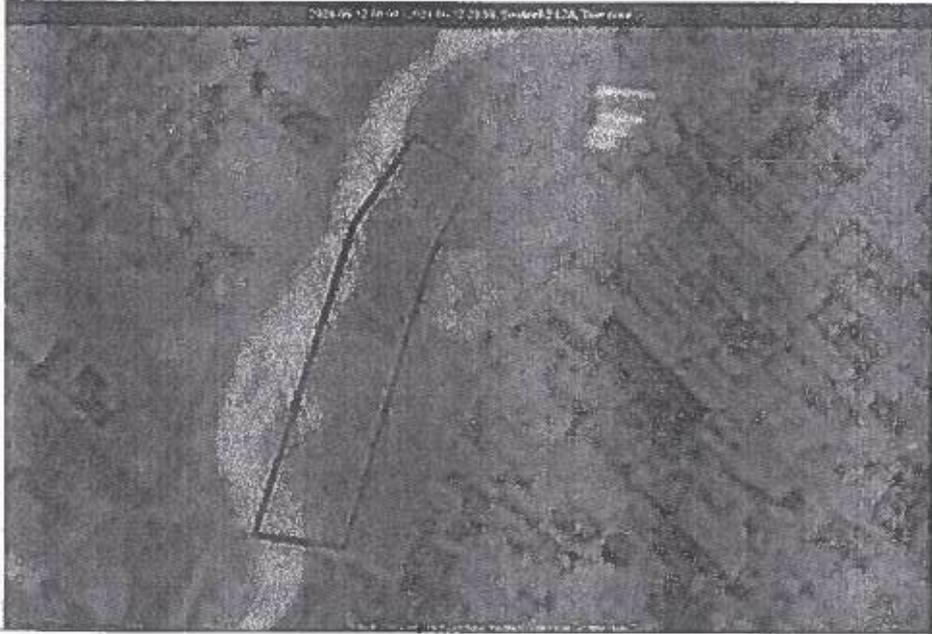
Post-Monsoon (25-Oct-2024)



Handwritten signatures and initials at the bottom of the page, including a large signature on the left and several smaller ones on the right.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
10	Behat	R.B.M.	Kaluwala	Kaluwala Pahadipur	119/1, 120/1, 192/1, 193/1, 125/4	14.900

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)



Handwritten signatures and scribbles at the bottom of the page, including a large '7' and various illegible marks.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
11	Behat	R.B.M.	Yamuna	Akbarpur Bans Aehatmal	1	17.900

Pre-Monsoon (12-June-2024)



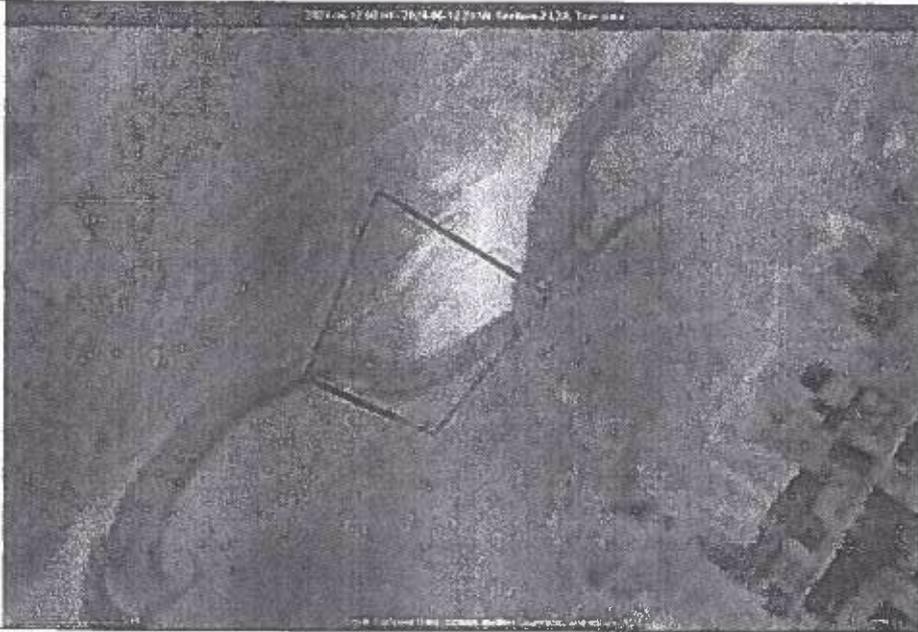
Post-Monsoon (25-Oct-2024)



*Handwritten signatures and initials.*

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
12	Behat	R.B.M.	Yamuna	Arazi Jevadi Ahatmal and Masoodpur Garh Aehatmal	1 and 1	13.800

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)

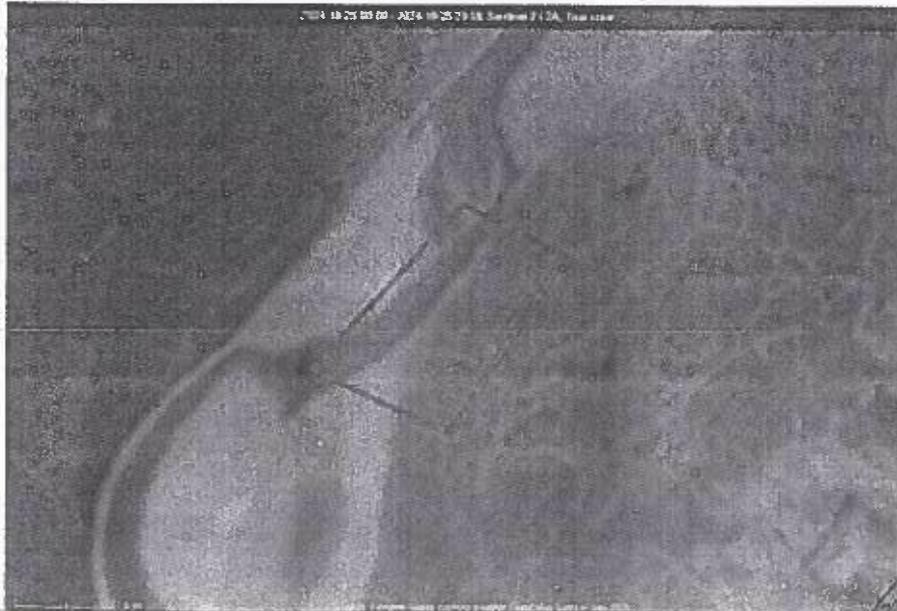


Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
13	Behat	R.B.M.	Yamuna	Shehjadpur Bans Aehatmal	1	13.000

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)



Handwritten signatures and initials are present at the bottom of the page, including a large '7' and several illegible scribbles.

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
14	Behat	R.B.M.	Yamuna	Alauddinpur Bans Aehatmal	1/1	9.580

Pre-Monsoon (12-June-2024)



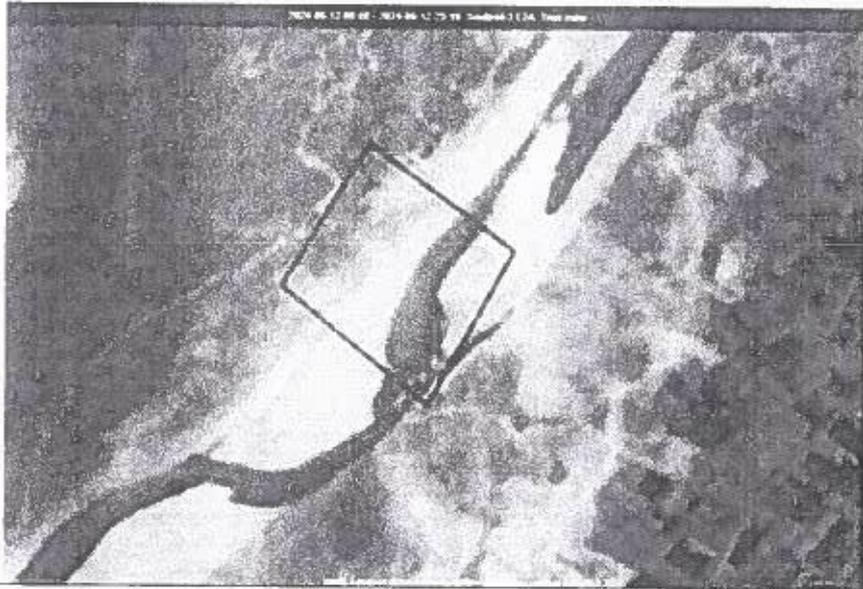
Post-Monsoon (25-Oct-2024)



*Handwritten signature and scribbles.*

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
15	Behat	R.B.M.	Yamuna	Mehmoodpur Nangli Aehatmal	1	15.700

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)



Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
16	Behat	R.B.M.	Yamuna	Shahpur Bans Aehatmai	1/1	15.600

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)

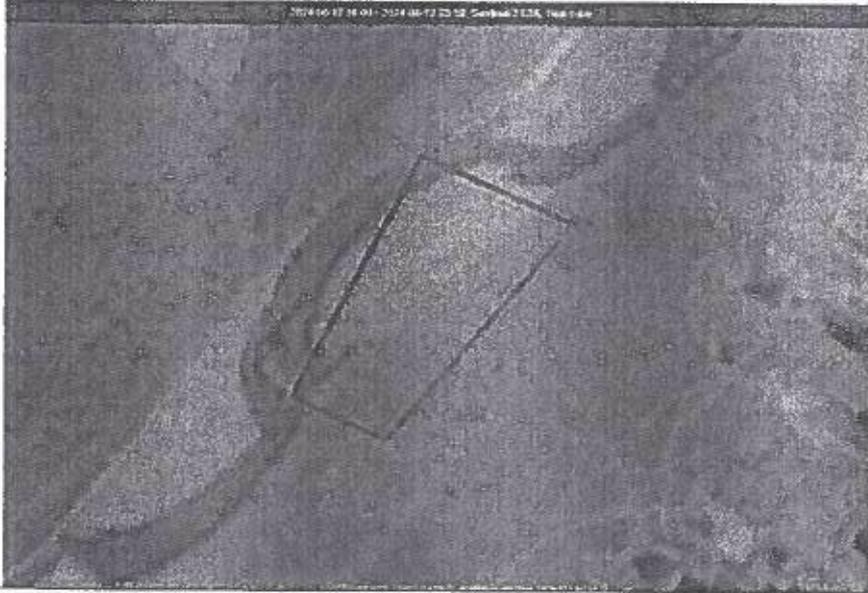


Handwritten signatures and initials in the bottom left corner of the page.

Handwritten text at the bottom right, possibly a name or date, including "21".

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
17	Behat	R.B.M.	Yamuna	Nityanandpur Aehatmal and Said-mohamadpur Aehatmal	1 and 1ma	17.700

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)



*Handwritten signatures and scribbles at the bottom of the page.*

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
18	Behat	R.B.M.	Yamuna	Abutalibpur Garh Aehatmal	1	37.000

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)



Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
19	Behat	R.B.M.	Yamuna	Nuniyari Athmal – Khand Second	1/1/1	19.000

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)



Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
20	Behat	R.B.M.	Yamuna	Aslampur Bartha - First	1/1 M	36.600

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)



*[Handwritten signatures and scribbles]*

Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
21	Behat	R.B.M.	Yamuna	Rasoolpur Urf Rasooli	1/1	34.000

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)



Sl.	Teshil	Minor Mineral	River	Village	Gata/Khand/Zone	Area (in Ha.)
22	Behat	R.B.M.	Yamuna	Aslampur Bartha - Second	1/1 M	28.160

Pre-Monsoon (12-June-2024)



Post-Monsoon (25-Oct-2024)

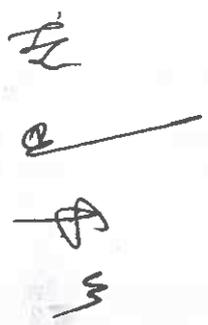


Handwritten signatures and notes at the bottom of the page, including a signature that appears to be 'S. K. Singh' and another signature to the right.



# Replenishment Study- 2024

## Site Photograph's


  
**डॉ० गीतम कुमार दिनकर**  
 सहायक (क्षेत्रीय अधिकारी) खनिज एवं खनन  
 भूतत्व एवं खनिकर्म विभाग, CSOPO  
 क्षेत्रीय कार्यालय, गाजियाबाद, उत्तर प्रदेश





# Pre-Monsoon

# Site Photograph's

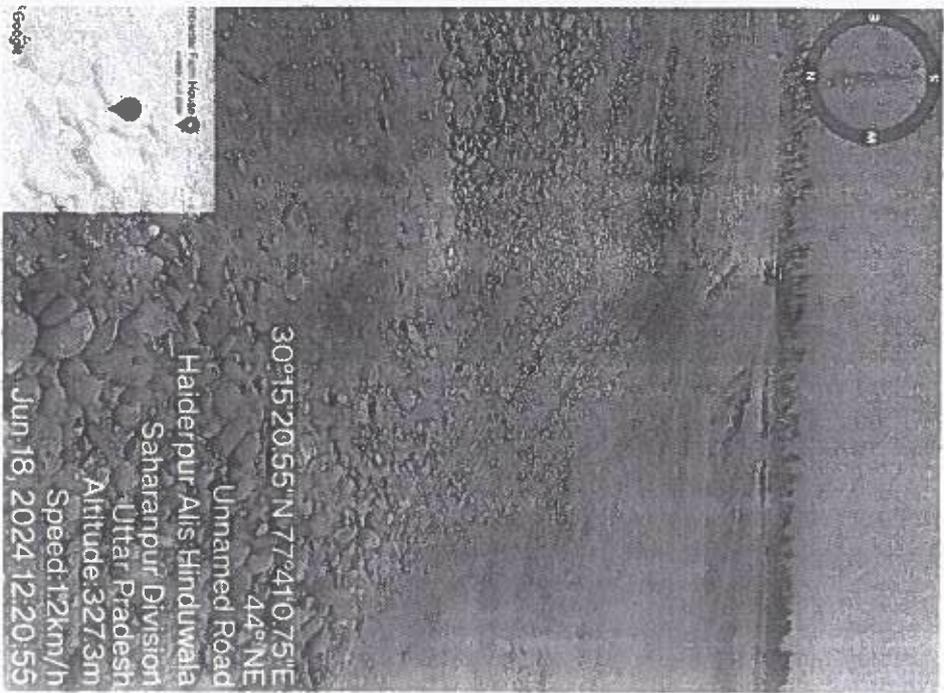
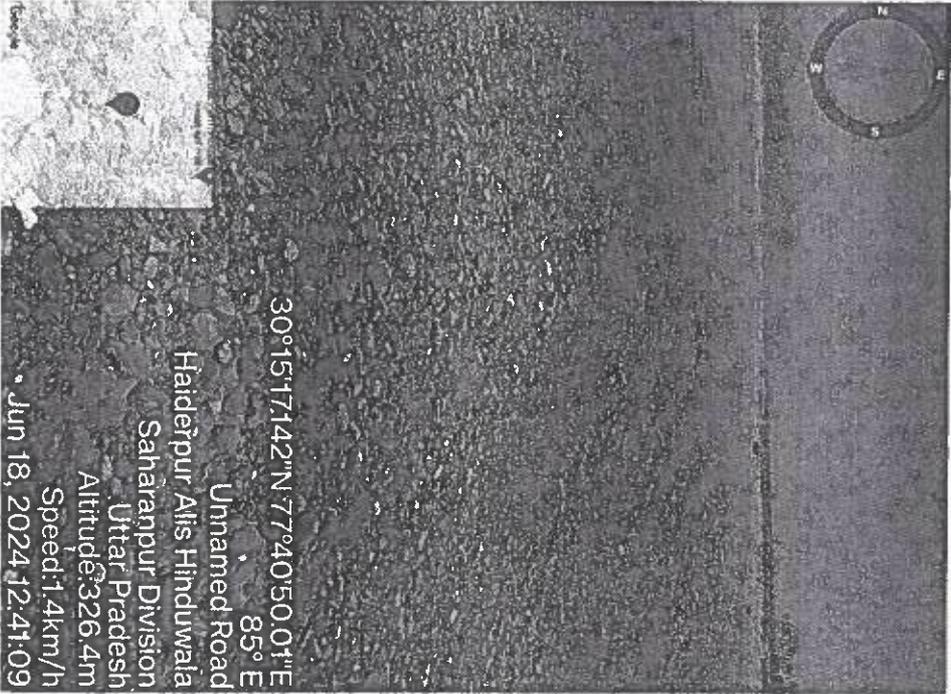
Handwritten marks and scribbles at the top left of the page.

Handwritten marks and scribbles in the middle left of the page.

Handwritten signature or name at the bottom left.



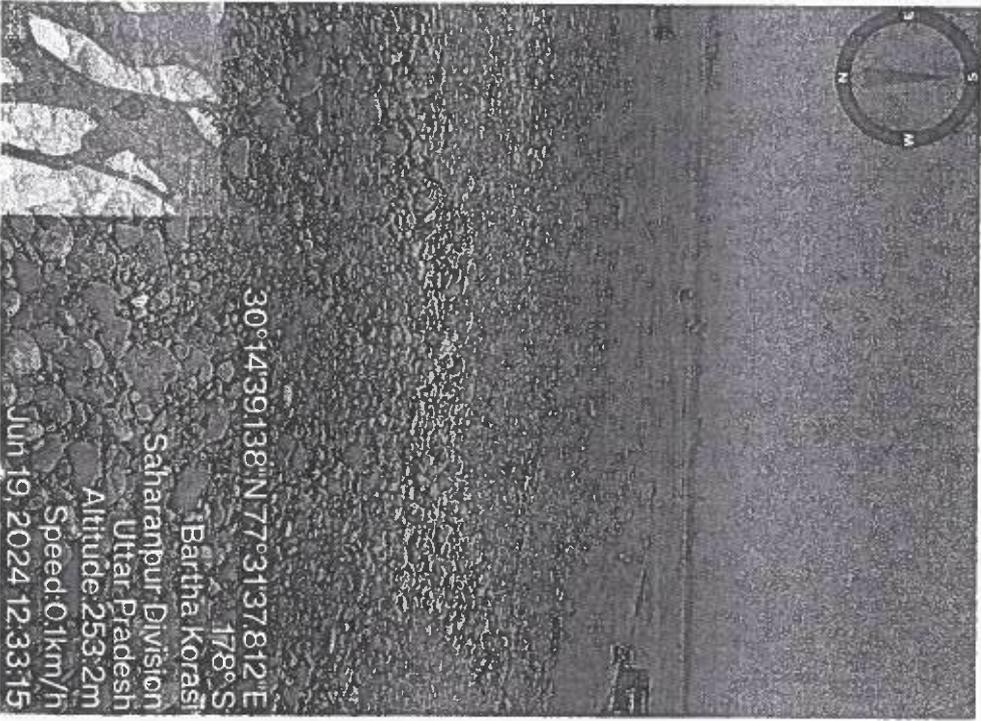
Handwritten mark at the bottom left corner.



Handwritten notes and signatures in the left margin, including a large 'R' and other illegible scribbles.

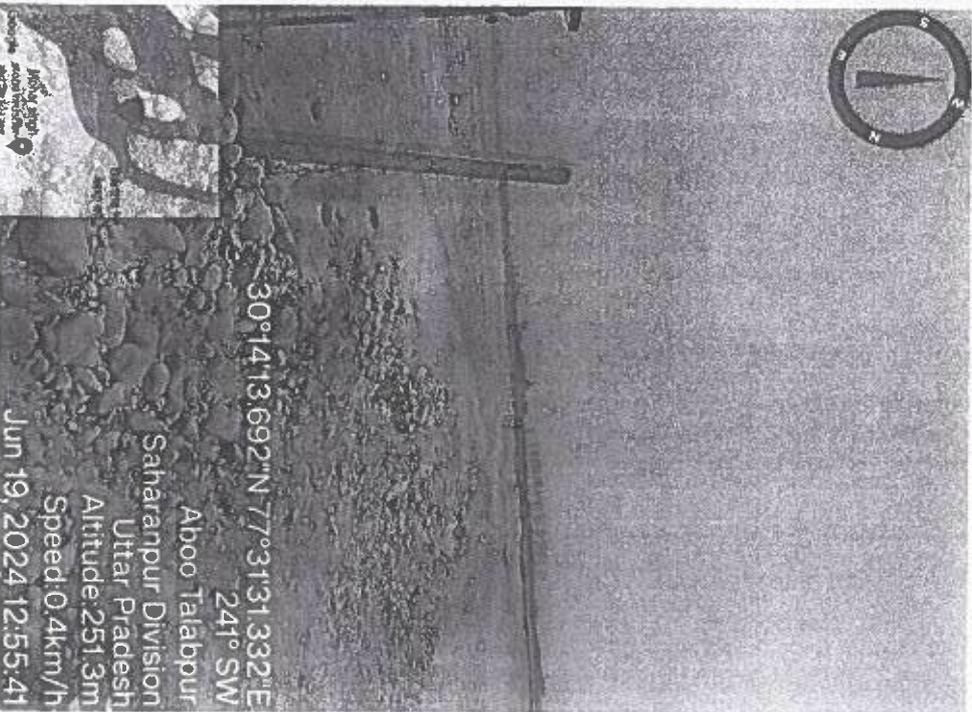
Handwritten signature or initials.





30°14'39.138\"/>

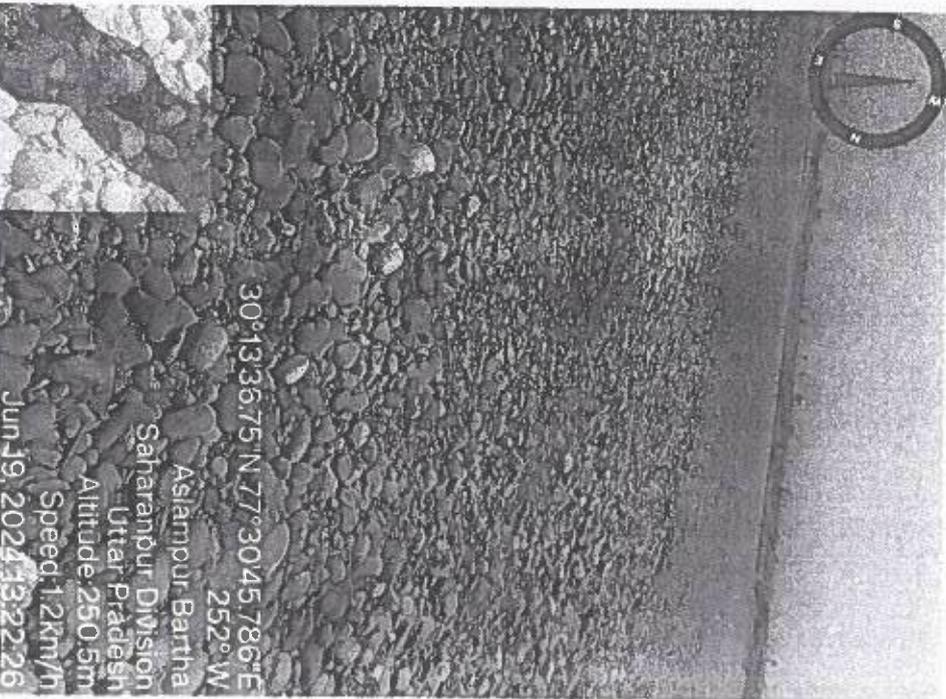
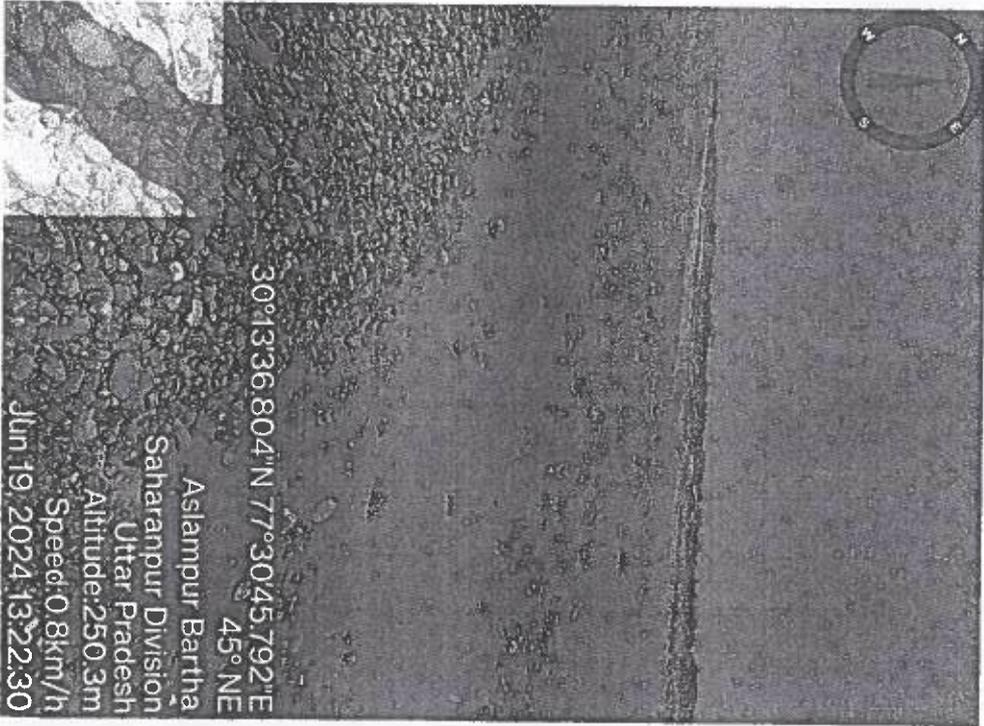
Handwritten notes in Devanagari script:   
 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.



30°14'13.692\"/>

Handwritten notes in Devanagari script:   
 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.





Handwritten notes and symbols including a checkmark, a scribble, and the letters 'HW' and 'W'.

Handwritten notes including a checkmark and a scribble.

Handwritten signature or name.





**Post-Monsoon**  
**Site Photograph's**  
**Showing Replenishment**

6

2

W P m

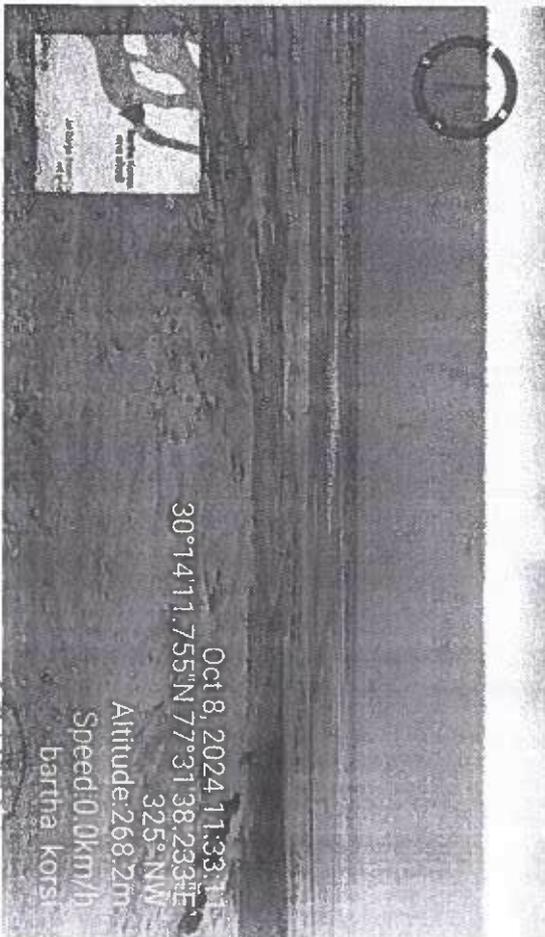
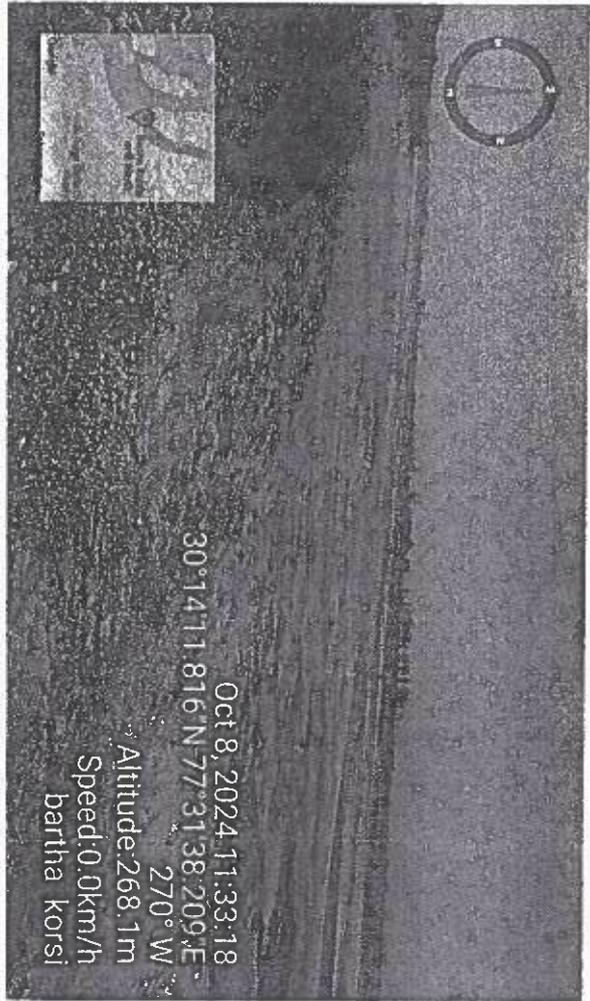
6

2

6

2

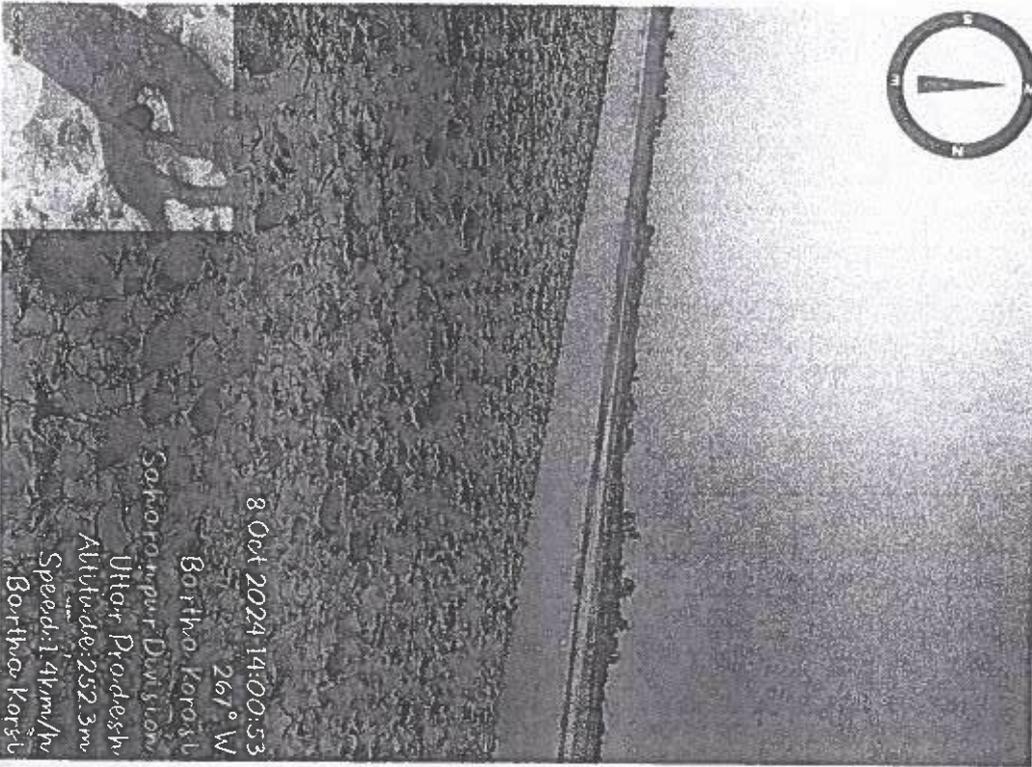




*Handwritten notes:*  
 2  
 2  
 2  
 2  
 2

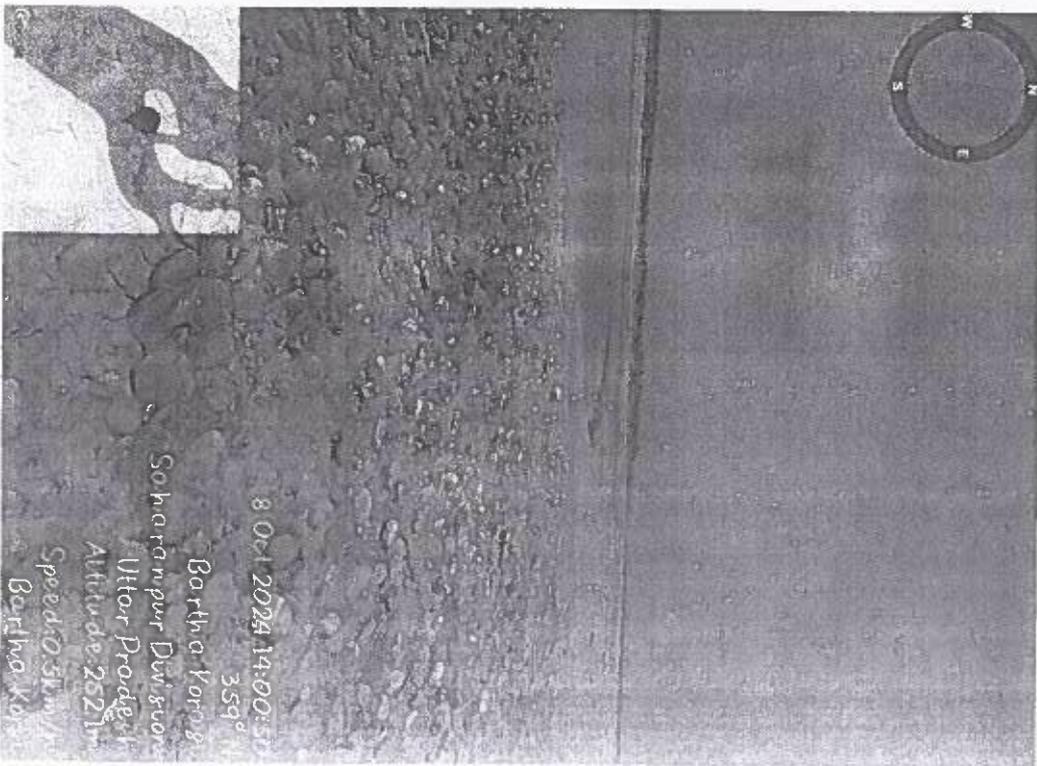
*Handwritten notes:*  
 ✓  
 ✓  
 ✓  
 ✓





8 Oct 2024 14:00:53  
 261° W  
 Bartha Korog  
 Saharapur Division  
 Uttar Pradesh  
 Altitude: 252.3m  
 Speed: 1.4km/h  
 Bartha Korog

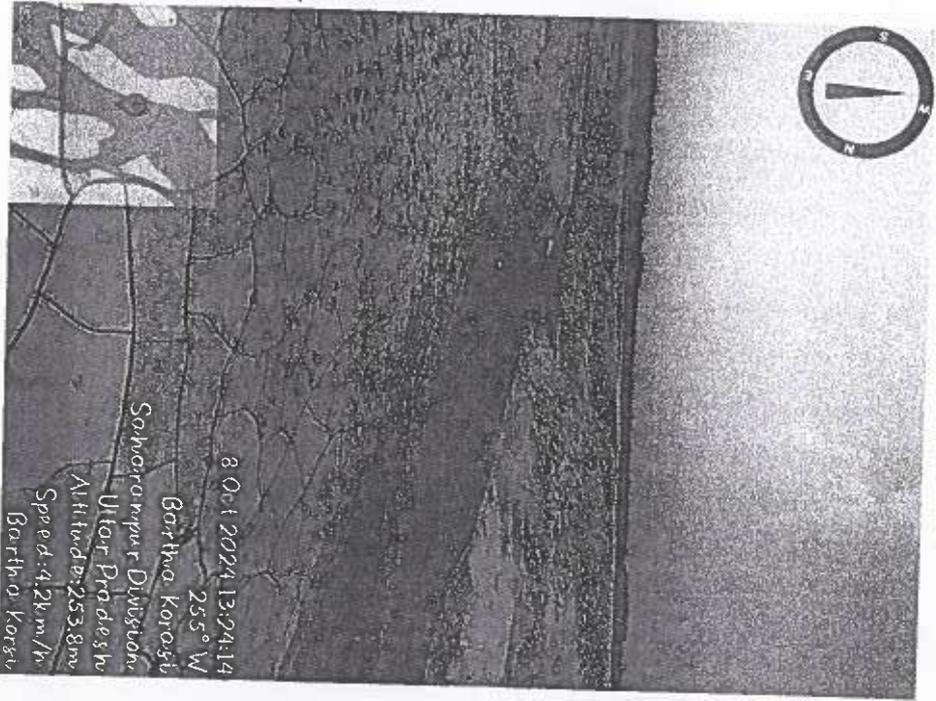
*Handwritten notes:*  
 2  
 2  
 W  
 P  
 W



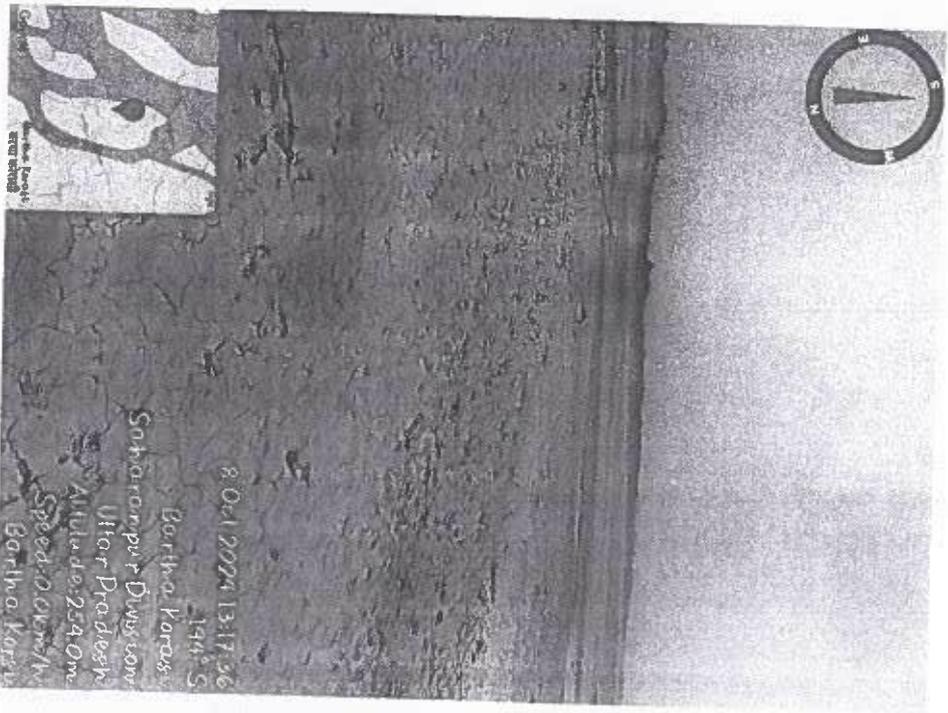
8 Oct 2024 14:00:50  
 359°  
 Bartha Korog  
 Saharapur Division  
 Uttar Pradesh  
 Altitude: 252.1m  
 Speed: 0.5km/h  
 Bartha Korog

*Handwritten notes:*  
 ✓  
 W  
 P  
 W



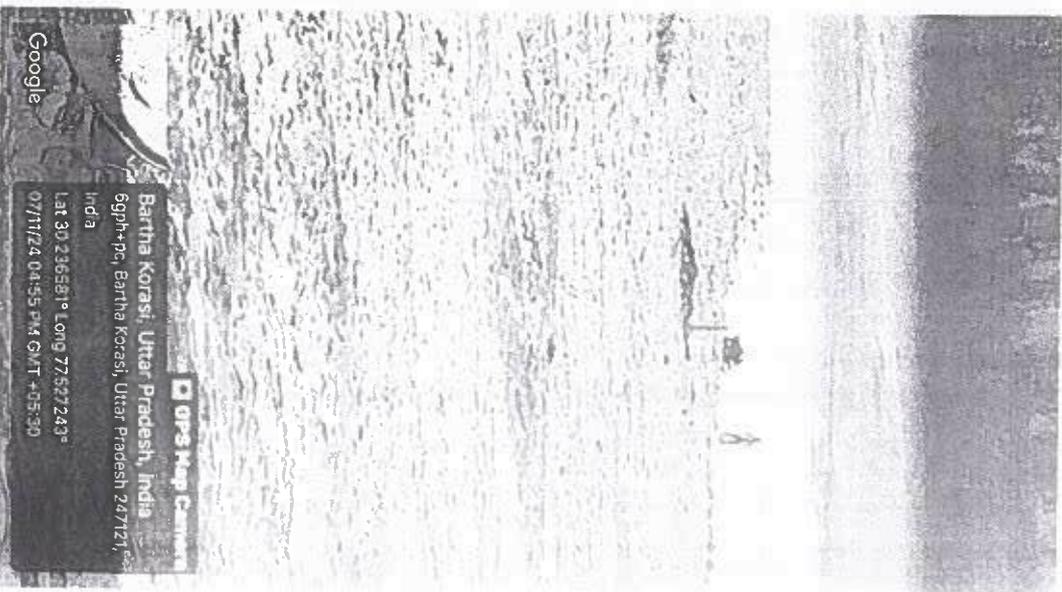


Handwritten notes in Hindi: 'सड़क' (Road), 'उत्तर प्रदेश' (Uttar Pradesh), 'कोशी' (Koshi), 'बारथो' (Bartho).



Handwritten notes in Hindi: 'सड़क' (Road), 'उत्तर प्रदेश' (Uttar Pradesh), 'कोशी' (Koshi), 'बारथो' (Bartho).





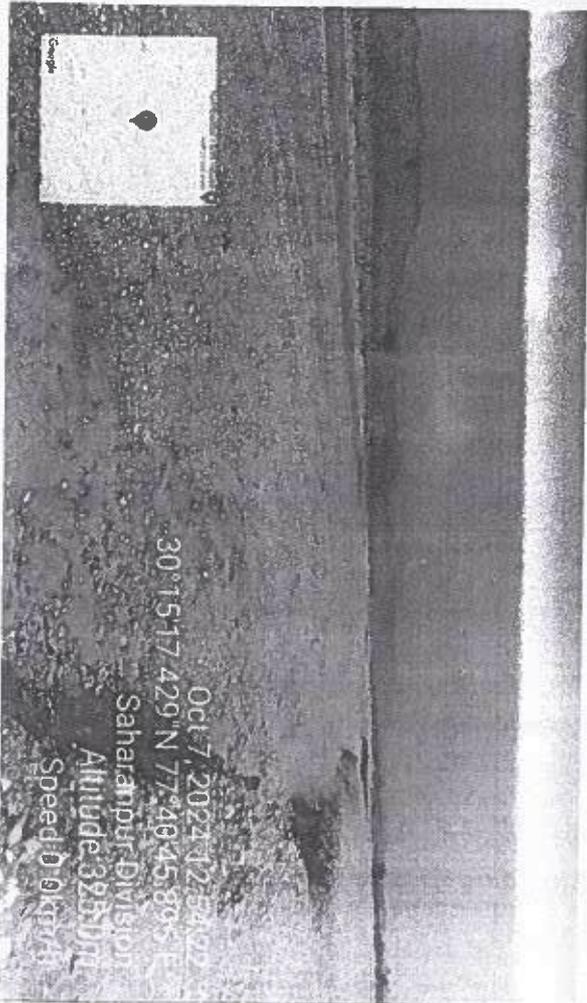
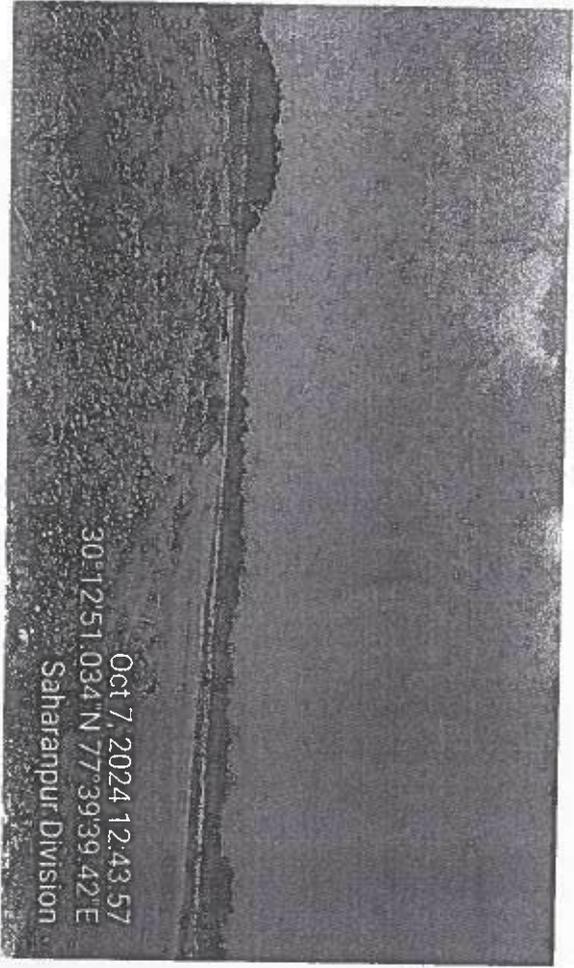
*Handwritten marks: a scribble and the number '7'.*

*Handwritten text: 'H & W'.*

*Handwritten marks: a scribble and a checkmark.*

*Handwritten signature.*

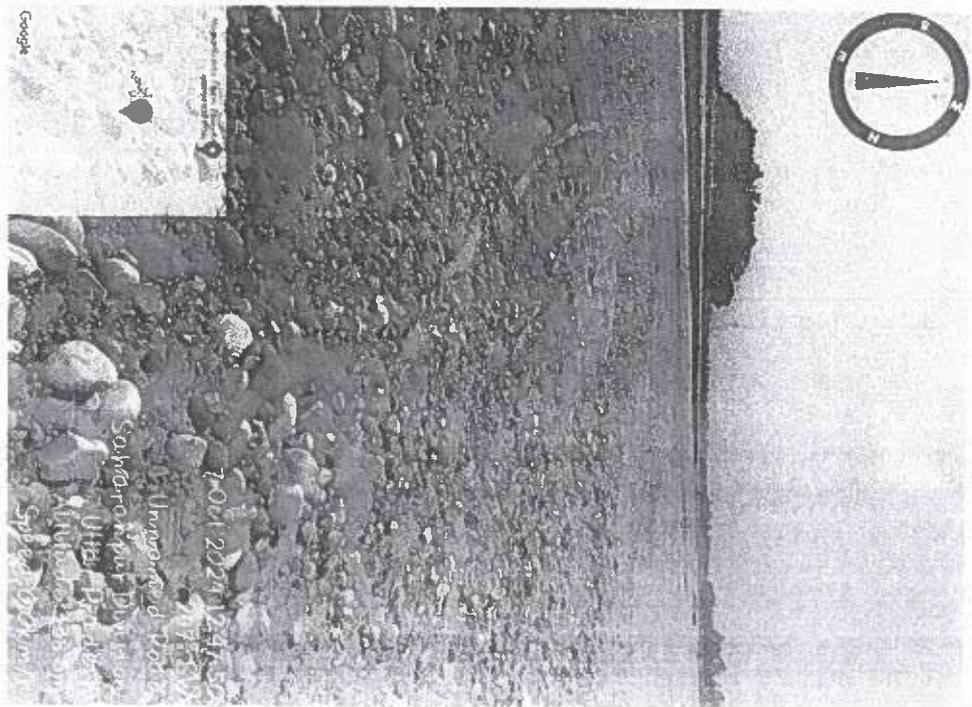
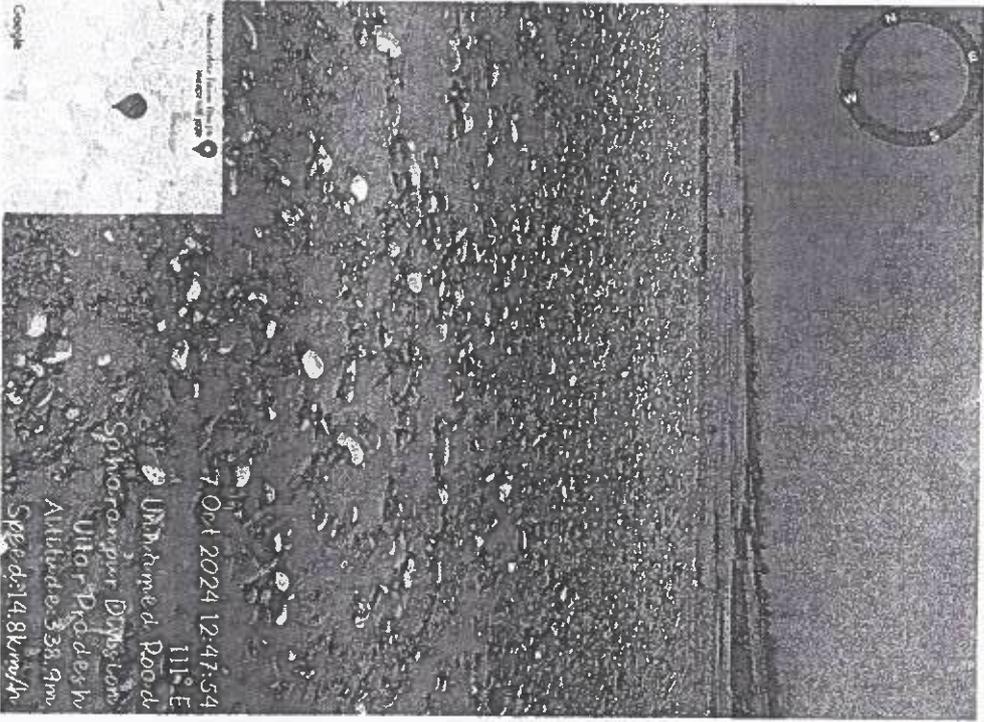




*Handwritten notes:*  
 1  
 2  
 3  
 4  
 5

*Handwritten signatures and initials:*  
 [Signature]  
 [Signature]  
 [Signature]

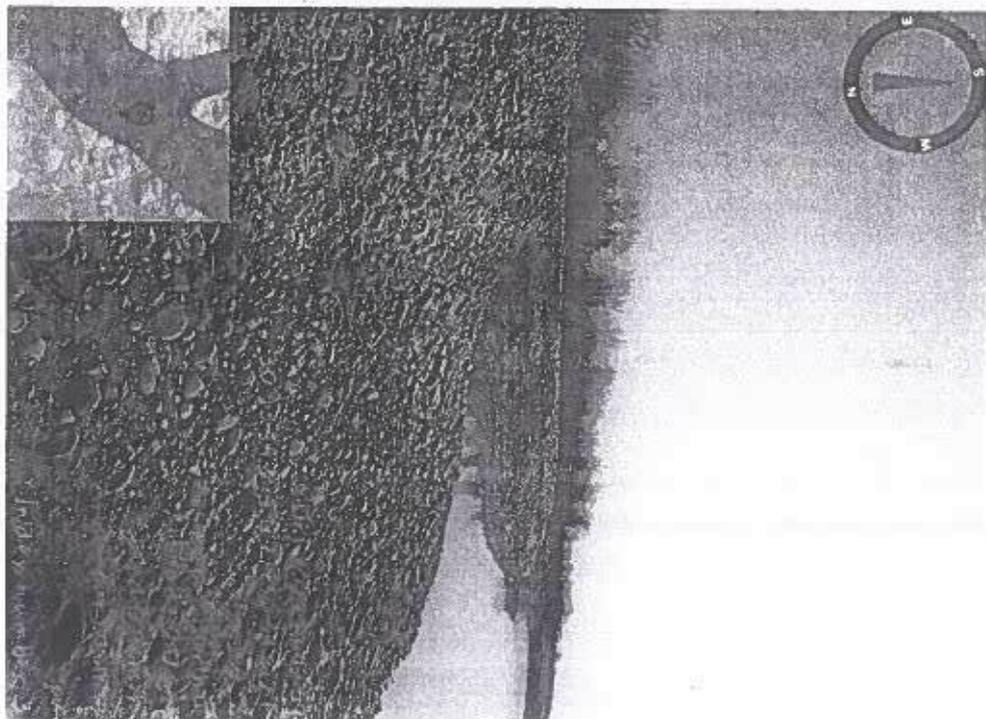
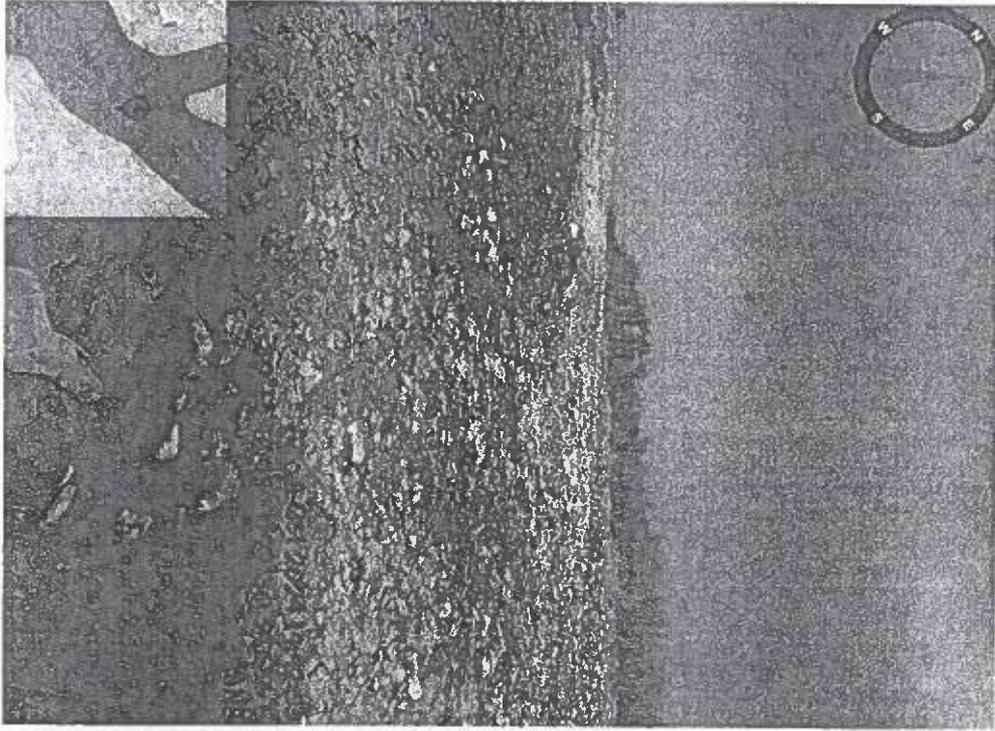




*[Handwritten signatures and scribbles]*

*[Handwritten signatures and scribbles]*





Handwritten mark resembling a stylized 'B' or '8'.

Handwritten mark resembling a stylized '2'.

Handwritten mark resembling a stylized 'A'.

Handwritten mark resembling a stylized 'm'.

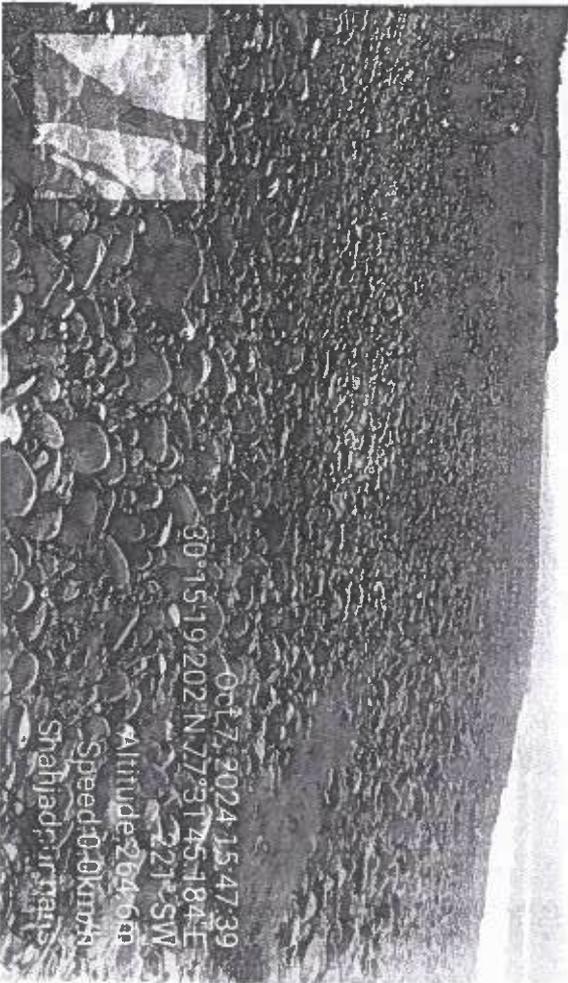
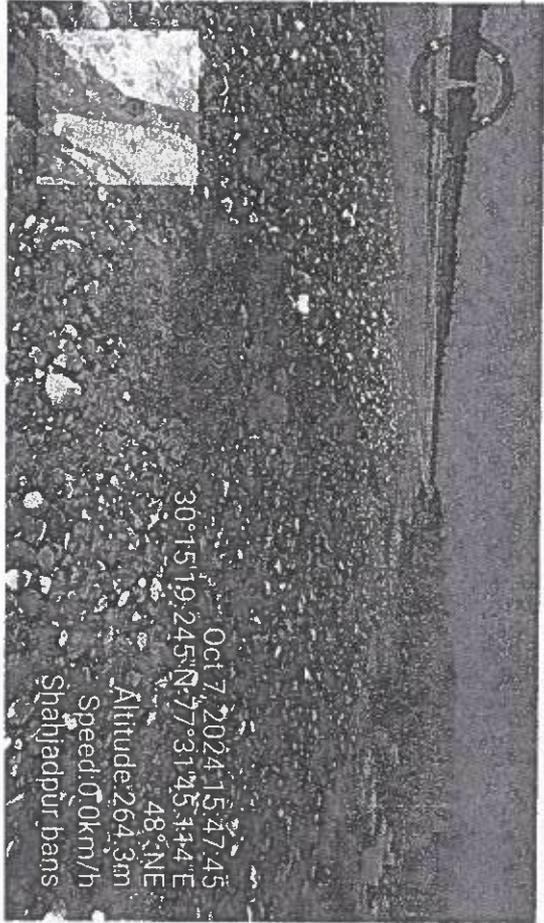
Handwritten mark resembling a stylized 'R'.

Handwritten mark resembling a stylized 'o'.

Handwritten signature or name.

Handwritten mark resembling a stylized 'S'.

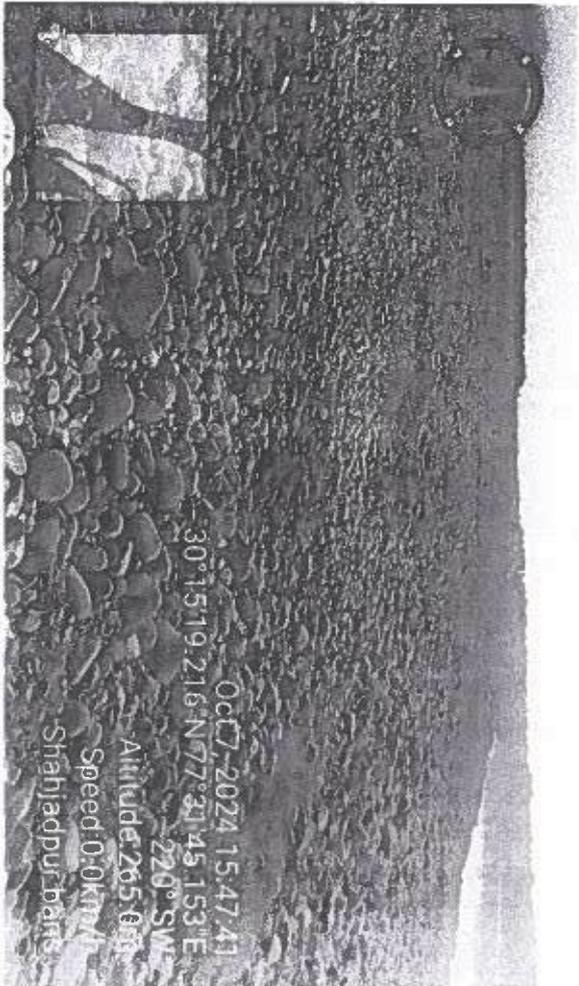




Handwritten notes in the left margin, including a large 'N' and other illegible scribbles.

Handwritten notes in the left margin, including a checkmark and other illegible scribbles.

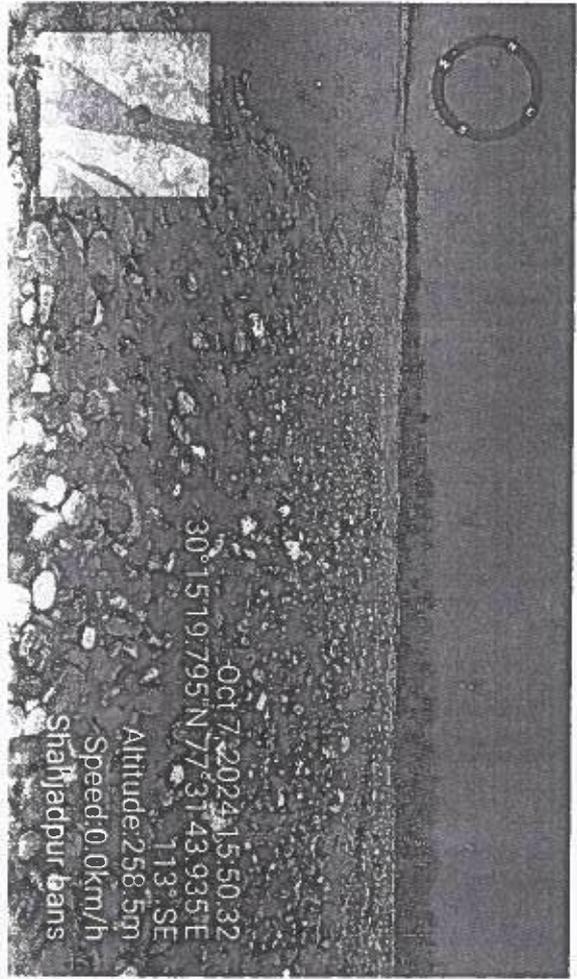




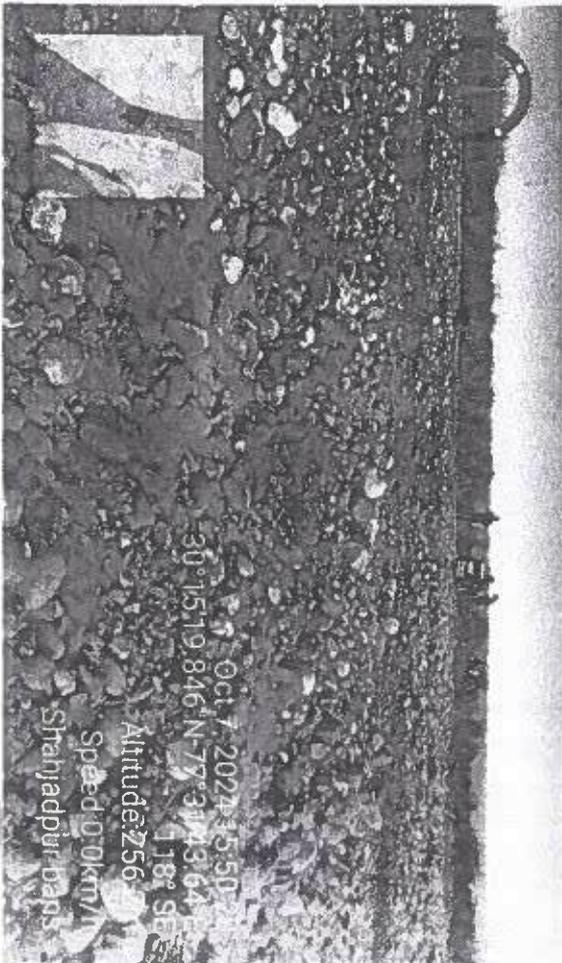
Handwritten notes on the left side of the page, including a checkmark and the letters 'A B C'.

Handwritten notes on the left side of the page, including a checkmark and a signature.



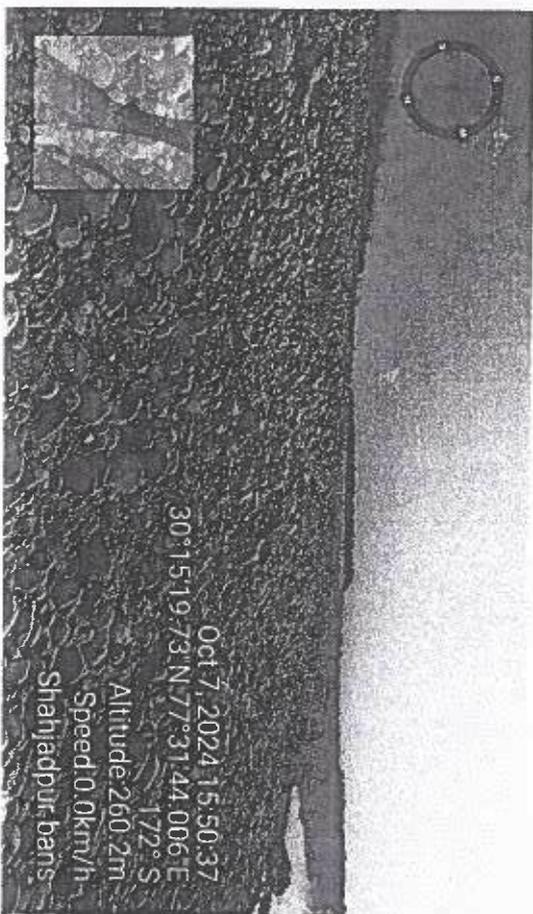


Handwritten notes and symbols: a checkmark, a wavy line, a circle with a cross, and a small 'u'.

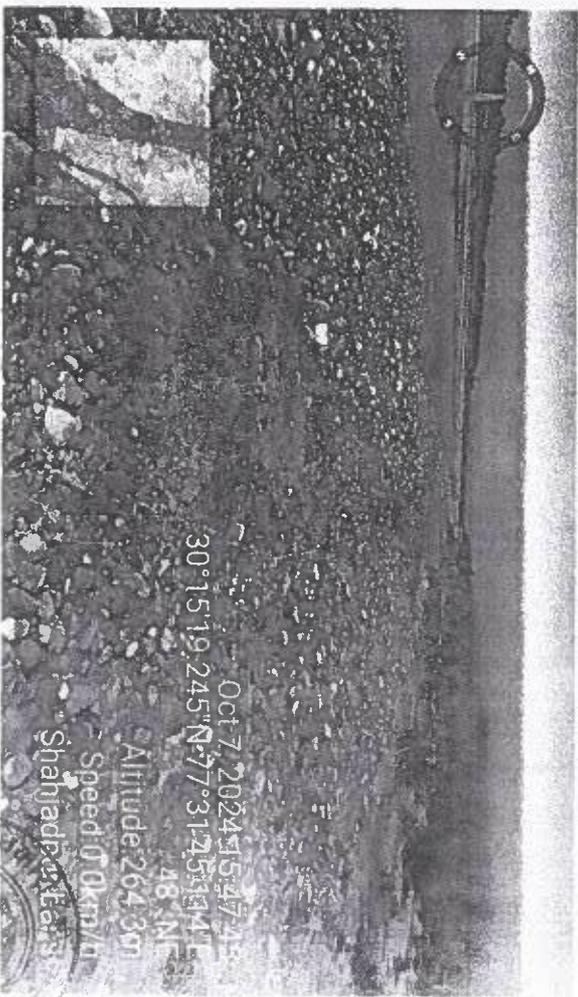


Handwritten notes and symbols: a circle with a cross, a checkmark, and a wavy line.

Handwritten signature and a circular official stamp of the Government of Karnataka, Department of Forests, Wildlife and Fisheries, Bangalore.



Oct 7, 2024 15:50:37  
 30°15'19.73"N 77°31'44.006"E  
 172° S  
 Altitude: 260.2m  
 Speed: 0.0km/h  
 Shahjapur, bars



Oct 7, 2024 15:47:45  
 30°15'19.245"N 77°31'25.314"E  
 48° NE  
 Altitude: 264.3m  
 Speed: 0.0km/h  
 Shahjapur, Bars

Handwritten notes and signatures in the left margin, including a large 'K' and other illegible scribbles.

डॉ० गीतम कुमार दिनकर  
 नृवाणिक (बीबी सीआर) ऑडिटर एवं एडिटर  
 भारत एवं खनिज विभाग, 30510  
 क्षेत्रीय कार्यालय, गीताबाबाद, उत्तर प्रदेश

