Ref: ACC/CH/QRY/ENV/Q/2021 – 74
Date: 07.10.2021

ACC Limited
Chaibasa Cement Works
P.O.-Jhinkpani
Singhbhum(W)- 833215
Jharkhand,India

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To
The Director – IA Division (Non-Coal Mining)
MoEF&CC, Indira Paryavaran Bhawan
Jor Bagh Road
New Delhi – 110003

Subject: Revalidation of EC (granted under EIA Notification 1994) for Rajanka Limestone Mine (Main lease) of ACC Ltd. having an area of 598.88 ha with proposed maximum production of Limestone 1.3 million TPA located at Village- Rajanka, Dakota, Purna Chaibasa, Kondwa & Indikuri etc Tehsil-Tonto , District-West Singhbhum, Jharkhand.

Dear Sir,

In line with MoEF&CC notification ref no: S.O.1530E dated 6th April 2018, ACC Limited, Chaibasa Cement works has initiated the process of revalidation of the above referred EC with MoEF&CC. The proposal was considered during the EAC meeting held on 19th December 2019, Agenda no: 2.14, point no: 5 of the minutes, Ministry has conveyed that *"The committee observed that there are two mine leases. Two agreements but one EC. F Block having mine lease area of 81.50 ha and F2 block having mine lease area of 63.87 ha. Therefore the committee is of the view that the PP should either get the lease deed agreement or apply for a separate ToR / EC for each lease agreement"* (Copy of the minutes attached at the end).

Accordingly, we are herewith submitting the application for obtaining ToR for "Rajanka Limestone Mine" having a lease area of 598.88 ha (the aforementioned block F was part of this lease). The present proposal falls under schedule 1(a) of mining under category 'A' project as per EIA Notification 14th September 2006 and its subsequent amendments.

We are submitting the following documents:

1) Form – 1
2) Pre Feasibility Report Including Executive Summary
3) Brief Summary of the Project
4) Authorization letter / POA
5) KML File
6) Copy of the minutes

We would request your good self to kindly consider our proposal and grant us Terms of Reference (TOR) for obtaining Environment Clearance for the project at the earliest and oblige.

Thanking you

Yours faithfully
For ACC Limited

(Raj Gurung)
Director Plant & Authorized Signatory

Enclosure: As above

Director Plant
ACC Limited
Chaibasa Cement Works

CHAIBASA CEMENT WORKS * ACC LIMITED

FORM-I, EXECUTIVE SUMMARY & PRE-FEASIBILITY REPORT

"RAJANKA LIMESTONE MINES (MAIN LEASE)"

Maximum Proposed Production- 1.3 million TPA of Limestone

Lease Area- 598.88 ha.

Cost of Project - Rs. 7.5 Crore

Item & Category - 1(a), A

Laboratory Assigned: M/s Perfact Researchers Pvt Ltd

Site Address

Village- Rajanka, Dakota, Purna Chaibasa, Kondwa, Indikuri etc

Tehsil- Tonto

District- West Singhbhum

State- Jharkhand

Project Proponent

M/s ACC Limited

Registered Address- ACC Limited, Chaibasa Cement Works, P.O.: Jhinkpani, Distt: West Singhbhum, Jharkhand-833215

Contact Person - Mr. Sanjeev Tripathi

Designation - Authorized Signatory

Phone no. -9771423629

Email ID- sanjeevtripathi.soni@acclimited.com

Environmental Consultant

Perfact Enviro Solutions Pvt. Ltd. (PESPL)

NABET Registered List of Accredited Consultant Organisations/ NABET/EIA/1922/RA 0184

Registered Address:- 5th Floor, Sector 3, Rohini, New Delhi- 110085

Email- info@perfactgroup.in

Website- www.perfactgroup.com

Phone- +91-11-49281360

SECTION- A

Form-I

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FORM – 1

(I) Basic Information

S.No.	Item	Details
1.	Name of the Project/s	Rajanka Limestone Mines (Main Lease) (Area 598.88 Ha) of M/s ACC Limited
2.	S. No. in the schedule	1 (a)
3.	Proposed Capacity/area/ Length/tonnage to be handled/ command area/ lease area/ number of wells to be drilled.	a) Proposed Limestone Production: 1.3 million TPA b) Lease area: 598.88 Ha. c) Maximum excavation in an year- 976046 cum (565217 cum ROM + 410829 cum OB) / 2,162,740 tons (1,300,000 tons ROM + 862,740 tons OB)
4.	New/Expansion/Modernization	New
5.	Existing Capacity/Area etc.	a) Existing Capacity:1.3 million TPA- Existing area : 598.88 Ha
6.	Category of project i.e. 'A' or 'B'	A
7.	Does it attract general conditions? If yes, Please Specify.	Not Applicable
8.	Does it attract the specific condition? If yes, please specify.	Not Applicable
9.	Location	Latitude- 22°15'37.94"N to 22°31'47.40"N Longitude- 85°37'26.66"E to 85°47'32.47"E
	Plot/survey/Khasra No.	Non contiguous blocks A to T, F1 and R1 spread over a length of 32 km
	Village	Rajanka, Dakota, Purna Chaibasa, Kondwa & Indikuri etc.
	Tehsil	Tonto
	District	West Singhbhum
	State	Jharkhand

10.	Nearest Railway station/ airport along with distance in kms.	Nearest Railway Station- Singh Pokhariya Railway Station from Block P- 0.22 km ESE Nearest Airport- Sonari Airport, Jamshedpur from Block Q- 50.78 km NE
11.	Nearest Town/ city/ district Headquarters along with distance in kms.	Chaibasa- 2.30 km from block Q in NE direction
12.	Village panchayats, Zilla parishad, Municipal corporation, Local body (complete postal addresses with telephone nos. to be given)	Village Panchayat- Rajanka, Kondwa, Dokatta, District- West Singhbhum, Chaibasa
13.	Name of the applicant	Mr. Sanjeev Tripathi
14.	Registered Address	ACC Limited, Chaibasa Cement Works, P.O : Jhinkpani-833215 Dist. : West Singhbhum, Jharkhand.
15.	Address for correspondence	
a	Name	Mr. Sanjeev Tripathi
b	Designation (Owner/Partner/CEO)	Manager
c	Address	ACC Limited, Chaibasa Cement Works, P.O : Jhinkpani-833215 Dist. : West Singhbhum, Jharkhand.
d	Pin code	833215
e	E-mail	sanjeevtripathi.soni@acclimited.com
f	Telephone No.	06589-235250 09771423629
g	Fax. No.	06589-235250
16.	Details of alternative Sites examined, if any. Location of these sites should be shown on a Topo sheet.	No
17.	Interlinked Projects	It is a captive mine to ACC Chaibasa Cement Works.
18.	Whether a separate application of an interlinked project has been submitted?	Yes
19.	If Yes, date of submission	J-11011/130/2003-IA.II (I) Date of submission- 14 July 2003 Date of grant of EC- 29.04.2004
20.	If No, reason	Not Applicable

21.	Whether the proposal involves approval/ clearance under: if Yes, details of the same and their status to be given. (a) The forest (conversation) Act, 1980? (b) The wildlife (Protection) Act, 1972? (c) The C.R.Z. notification, 1991?	Not Applicable
22.	Whether there is any Government Order/Policy relevant/ relating to the site?	No
23.	Forest land involved(hectares)	No
24.	Whether there is any litigation pending against the project and/or land in which the project is proposed to be set up. (a) Name of the court (b) Case No. (c) Orders/ directions of the Court, if any and its relevance with the proposed project.	No (a) Not Applicable (b) Not Applicable (c) Not Applicable

(II) Activity

1. **Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)**

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	Yes	The mine comprises 22 non- contiguous blocks over an area of 598.88 ha, mining will be done in F- block only. Out of total mine lease area, 139.74 ha. will be used for mining and allied activities and rest 459.14 ha. will be an undisturbed area. Out of the mining & allied activities area, 55.75 ha. area will be backfilled by waste followed by plantation and 31.95 ha. will be converted into a water reservoir.
1.2	Clearance of existing land, vegetation and buildings?	No	Mining will be carried out in the F-block which is an active mining block. Rest blocks will be untouched hence there will be no clearance of existing land or vegetation present in other blocks.

<table>
<tr><td>1.3</td><td>Creation of new land uses?</td><td>Yes</td><td>Out of total 126.71 ha. of mined out area, 55.75 ha. area will be reclaimed by backfilling and rehabilitated by plantation and 31.95 ha. area will be reclaimed and rehabilitated by converting into a water reservoir which may be used for irrigation purposes by the nearby villagers.</td></tr>
<tr><td>1.4</td><td>Pre-construction investigations e.g. boreholes, soil testing?</td><td>Yes</td><td>Explorations were carried out in F-block (only working block in the main lease area) by drilling boreholes. 49, 22, 63, 11, 13 boreholes were drilled in the year 1957, 1975-76, 1980, 2007, 2017 respectively. Exploration by drilling boreholes in other blocks are as follows:
<table>
<tr><th>Blocks</th><th>No. of boreholes</th><th>Year</th></tr>
<tr><td>S</td><td>14</td><td>2010</td></tr>
<tr><td colspan="3">Virgin blocks</td></tr>
<tr><td>H</td><td>24</td><td>1951</td></tr>
<tr><td>I</td><td>5</td><td>1956</td></tr>
<tr><td>J & K</td><td>33</td><td>1955- 1956</td></tr>
<tr><td>L</td><td>19</td><td>1954-1955</td></tr>
<tr><td>M</td><td>22</td><td>1955-1956</td></tr>
<tr><td>N</td><td>21</td><td>1955-1956</td></tr>
<tr><td>O</td><td>12</td><td>1950</td></tr>
<tr><td>P</td><td>13
6</td><td>2020
1951</td></tr>
<tr><td>R</td><td>34</td><td>1954</td></tr>
<tr><td colspan="3">No exploration has been carried out in Block B, E, F1, R1 & Q till date while A, C, D, G & T are exhausted blocks.</td></tr>
</table>
</td></tr>
</table>

			Exploration has been proposed in Q block by core drilling of boreholes 5 & 6 in the year 2021-22 & 2022-23 respectively.
1.5	Construction works?	No	As it is an old mine where F block is a working block, adequate infrastructure is already present in the mine lease like canteen, rest shelter and offices.
1.6	Demolition works?	No	Infrastructure facilities like office rooms, rest shelters etc. will be utilized by the community after the conceptual mining & if not, it could be demolished.
1.7	Temporary sites used for construction works or housing of construction workers?	No	Rest shelter has already been provided at the mine site for workers. Mine office has been constructed at the mine site for administrative people.
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations	Yes	At present 115.42 ha. area has been excavated which includes block A, C, D, F, G, S & T, during the plan period excavation is proposed only in F block, the total area of 117.71 Ha will be excavated and till conceptual period 126.71 ha. area will be excavated. The working depth of the F block at the end of the conceptual period will be around 277.80 mRL i.e. total 70.1 m depth.
1.9	Underground works including mining or tunneling?	No	No underground workings are proposed. There will be only opencast working.
1.10	Reclamation works?	Yes	Out of total 126.71 ha. of mined out area, 55.75 ha. area will be reclaimed by backfilling and rehabilitated by plantation and 31.95 ha. Area will be reclaimed and rehabilitated by converting into a water reservoir.
1.11	Dredging?	No	Not Applicable
1.12	Offshore structures?	No	Not Applicable
1.13	Production and manufacturing processes?	Yes	Maximum production of limestone will be 1.3 Million TPA. Mining will be carried out

			with drilling and blasting. Details of mining methods are given in the Pre-Feasibility report.
1.14	Facilities for storage of goods or materials?	Yes	The existing facility will be used for storage of goods and material like the store has been provided for keeping tools & lubricants, ANFO shed, the magazine has been provided to store the explosives with permission from the concerned authorities.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	Yes	The maximum quantity of Over Burden generated is estimated to be around 410829 cum/annum. OB generated during the plan period will be used for backfilling of the quarry. 2156 cum of Topsoil will be generated during the plan period from F-block which will be spread over the backfilled area and will be used for plantation. Tailings generated due to flotation of Grey shaly limestone during the plan period will be approx. 595000 cum which will be used for backfilling in the mined out pit of F block. Further generated tailings will be disposed off in the tailing pond proposed at the southern side of the F block.
1.16	Facilities for long term housing of operational workers?	No	Housing has been provided near Chaibasa Cement Plant which is at a distance of 2.5 Km from the Mine. A fully-fledged township exists there, which accommodates the supervisory & managerial staff. The others will be local and will come from the nearby area.
1.17	New road, rail or sea traffic during construction or operation?	No	No new road will be constructed. As mine is already equipped with the necessary infrastructure.

1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	No	No new road, rail, air, waterborne or other transport infrastructure is proposed.
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	Not Applicable
1.20	New or diverted transmission lines or pipelines?	Yes	Not Applicable
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No	Not Applicable
1.22	Stream crossings?	Yes	Gamua Gara is passing through the G & J block of the main lease area, however no mining is proposed in these blocks.
1.23	Abstraction or transfers of water form ground or surface waters?	Yes	Approval will be obtained from CGWA.
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	The Gumua Nala flows from G and J blocks where no mining is proposed. Hence there will be no changes in drainage.
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	All the personnel will come from the colony to the mine by Motorcycle/four-wheeler or from the nearby area. Others will come in Jeep/ van etc.
1.26	Long-term dismantling or decommissioning or restoration works?	No	No such long term dismantling or decommissioning or restoration work will be done.
1.27	Ongoing activity during decommissioning which could have an impact on the Environment?	No	Not Applicable

1.28	Influx of people to an area in either temporarily or permanently?	No	It will be a mechanized open-cast mine and has employment of 100 employees. Out of total, 100 manpower presently employed in the mine, 86 people are skilled/unskilled & semi-skilled persons and 14 are the technical and supervisory staff. The same will be sufficient for present production, no influx of people is envisaged.
1.29	Introduction of alien species?	No	Not proposed.
1.30	Loss of native species or genetic diversity?	No	No such loss is anticipated.
1.31	Any other actions?	No	Not Applicable

2**. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are nonrenewable or in short supply):**

S.No.	Information/checklist confirmation	Yes/ No	Details thereof (with approximate quantities / rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)	Yes	Total land area is 598.88 ha out of which, 108.79 ha is Government Land (Barren Land) and 490.09 ha is Private land (agricultural land). The land is situated on an undulating piece of land over an area of 598.88 ha. comprising 22 blocks from A to T. It is an existing mine where 115.42 ha. area has already been excavated. The mining will be carried out in F & S block.
2.2	Water (expected source & competing users) unit: KLD	Yes	The water requirement of mine is 192 KLD (dust suppression 160 KLD, afforestation work 25 KLD, for machinery washing 2 KLD and drinking & domestic consumption 5 KLD). The drinking water requirement is 5 KLD which will be

			obtained from a nearby cement plant of ACC ltd. via pipeline rest water will be sourced through seepage water from mine sump.
2.3	Minerals (MT)	Yes	This is a mining project, hence mineral will be excavated.
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)	No	No construction material will be required
2.5	Forests and timber (source – MT)	No	Not Applicable
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	Yes	The total diesel requirement is 5 KLD met with local suppliers. Total electricity requirement is 7,80,000 kWh/year which is supplied by the captive power plant.
2.7	Any other natural resources (use appropriate standard units)	No	Not Applicable

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

S.No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	Yes	High speed diesel is being used for running mining machineries & DG sets. (Existing quantity 5 KLD & total after EC will be- 7 KLD). 60 Kg explosive per hole of dimension 3.0m x 5.0m x 9.0m will be used for blasting which will be stored at Mines.
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	Regular medical check-ups will be made. Suitable drainage and waste management measures have been adopted. This restricts stagnation of water or accumulation of water. No occurrence of disease.

3.3	Affect the welfare of people e.g. by changing living conditions?	Yes	PM generation will affect indirectly the living conditions of the people. PM generation will cause respiratory diseases which will impact the health as well as social status of people. However, proper mitigation measures will be adopted such as sprinkling etc.
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	**No**	No such people will be affected by the project as hospital, schools etc are almost 0.5 km from the project site.
3.5	Any other causes	**No**	Not Applicable

4. Production of solid wastes during construction or operation or decommissioning (MT/month)

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
4.1	Soil, overburden or mine wastes	Yes	Total 8,88,113 Cum of overburden and 2156 cum of soil will be generated during the plan period. Mineral rejection of 5,30,435 cum will be used in cement plant after processing through the beneficiation plant.
4.2	Municipal waste (domestic and or commercial wastes)	Yes	For approx. 100 workers, 15 kg/day of municipal solid waste will be generated. Out of which 9 kg/day of biodegradable waste will be used for making compost. Recyclable waste will be given to the authorised recycler. 8 Latrines and 5 Urinals are provided in the quarry office building complex.
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	Yes	Used oil from engines will be carefully stored in HDPE drums in an isolated covered facility. The used oil will be sold to vendors authorized by CPCB for the treatment of the same. Suitable action

			will be taken so that spills/leaks of used oil from storage will be avoided.
4.4	Other industrial process wastes	Yes	Grey Shaly Limestone (between +35% to -38% CaO) is considered sub-grade/mineral reject and used in beneficiation plant. Maximum mineral reject generation will be 217391 cum/year and the same will be temporarily stored at the mine site and will be further used for the beneficiation process.
4.5	Surplus product	No	Not Applicable
4.6	Sewage sludge or other sludge from effluent treatment	No	Not Applicable
4.7	Construction or demolition wastes	No	Not Applicable
4.8	Redundant machinery or equipment	Yes	As per replacement Schedule for the machinery or equipment, which has covered its economic life will be replaced with new equipment and old equipment will be disposed of to scrap dealers with appropriate approval.
4.9	Contaminated soils or other materials	Yes	The surface runoff during the rainy season may cause contamination & also siltation problem in the nearby flowing nallah, this water is diverted through garland drain to settling pond.
4.10	Agricultural wastes	No	No agricultural waste will be generated.
4.11	Other solid wastes	No	Not Applicable

5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)

S. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
5.1	Emissions from the combustion of fossil fuels from stationary or mobile sources	Yes	Diesel is used to run machineries and truck & DG sets. They are likely to produce PM, CO, SO2 & NOx. Proper

			maintenance of the mining equipments will be done.
5.2	Emissions from production processes	Yes	Dust and particulate matters is likely to be generated from the mining process for which sprinkling will be done so that the impact on the environment will be minimal. Development of the Green Belt is also proposed.
5.3	Emissions from materials handling including storage or transport	Yes	Dust and emission will be generated from material handling and transportation for which regular water sprinkling will be done to reduce the emission.
5.4	Emissions from construction activities including plant and equipment	No	No construction is proposed.
5.5	Dust or odours from handling of materials including construction materials, sewage and waste	Yes	Fugitive dust will be generated from handling and loading of material i.e. minerals, wastes, OB & rejects dumping.
5.6	Emissions from the incineration of waste	No	No incineration will be done.
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	No such activity will take place.
5.8	Emissions from any other sources	Yes	Drilling & blasting are the other source of emission. Gases like NOx & dust will be produced during blasting.

6. Generation of Noise and Vibration, and Emissions of Light and Heat:

S.No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	Mechanized mining is proposed. The excavators & tippers will produce noise & vibrations.
6.2	From industrial or similar processes	No	None. Not Applicable.

6.3	From construction or demolition	No	Not Applicable
6.4	From blasting or piling	Yes	Blasting will be carried out for dislodging the rocks which will generate noise and vibration.
6.5	From construction or operational traffic	Yes	Noise will be generated due to the mechanized method of mining and transportation of minerals. Regular maintenance of machinery will be done to keep noise under control.
6.6	From lighting or cooling systems	No	None
6.7	From any other sources	No	None

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	Yes	Explosives will be stored and used as per rule and regulations by DGMS & Controller of Explosives. Proper management of HSD shall be done. The used oil will be sold to vendors authorized by CPCB for the treatment of the same.
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	No	Toilet has been provided within the lease area for the workers & the sewage will be disposed of in soak pits within the area.
7.3	By deposition of pollutants emitted to air into the land or into water	Yes	Dust will be generated due to mining, transportation and proper measures will be taken. Mobile water sprinklers will be provided to suppress the dust.
7.4	From any other sources	No	Not Applicable
7.5	Is there a risk of long-term build up of pollutants in the environment from these sources?	No	Not Applicable

8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment.

S.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	Yes	There is a risk to workers from blasting operations if not carried out in a safe manner. Storage & using explosives will be as per guidelines of DGMS and as per terms and conditions laid out by the Controller of explosives.
8.2	From any other causes	Yes	Road accidents may occur for which proper trained drivers will be employed. Slope stability will be maintained to avoid slope failure.
8.3	Could the project be affected by natural disasters causing environmental damage (e.g: floods, Earthquakes, landslides, cloudburst etc).	No	The area has no flood history. There is no possibility of a landslide. Tatanagar comes in seismic zone III so there are moderate chances of earthquakes. Any new construction there will be as per earthquake-resistant design. Proper measures shall be taken, Possibility of slope failures with mine benches. A safe slope as per prescribed norms will be adhered to.

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality.

S. No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	Lead to development of supporting facilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.:	Yes	Since this is an existing mine therefore maximum infrastructure has already been developed. However, Improvement in infrastructure like roads etc. and activities through CER will have a positive impact.

	•Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.) • housing development • extractive industries • supply industries • other	Yes No No No	Housing is being provided in the cement plant area. Not Applicable Not Applicable Not Applicable
9.2	Lead to after-use of the site, which could have an impact on the environment	Yes	The ultimate land-use proposed is a water reservoir and afforestation /green belt, which will facilitate better agricultural yields and the mined-out will act as a recharge pit. Thus providing a positive effect. It may attract tourists with efforts from municipal authorities.
9.3	Set a precedent for later developments	Yes	Well organised mining along with systematic and thoughtful rehabilitation and after use of land may motivate more mines to improve aesthetics of the area.
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	No	Not Applicable

(III) Environmental Sensitivity

S.No.	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
1.	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	None	None
2.	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	**Water Bodies** Gumua Nala from block G and J Gumua Nala from Block Q Jambira Nala from Block F Dev Nala from Block R Rora Gara from Block Q Aigada Nala from Block R Mongra Nala from Block R Boka Gara from Block N Kachahari Talab from Block Q Surniyan Gara from Block F lli Gara from Block A Pond near Sarda from Block Q Sagarkata Nala from Block E Sogo Nala from Block E Chalpagara Nala from Block R Hon Gara from Block Q Deo River from Block R1 Canal near Unchdih from Block Q Kharkai River from Block Q **Forest** Protective Forest No.68 from Block F Protective Forest from Block F Siringsiya Protective Forest No. 78 from Block E Protective Forest near Baralisia from Block F1 Siringsiya Protective Forest No. 32 from Block E Protective Forest near Dudiabasa from Block A	 Inside the Lease Adjacent to Q block Adjacent to F Block 0.79 Km SSW 0.82 Km NNW 0.82 Km SSW 2.18 Km NNW 2.63 Km NW 2.99 Km NE 4.40 Km WNW 5.51 Km ESE 5.54 Km N 6.32 Km SSW 7.53 Km WSW 8.98 Km NNW 8.18 Km ESE 9.90 Km NNW 10.13 Km NNE 12.37 Km ENE Adjacent To Block F 0.40 Km E 0.68 Km ESE 2.13 Km E 2.32 Km SSW 2.68 Km SE

		Protective Forest near lokasai fron Block F1	3.23 Km ESE
		Durula Protective Forest 31 from Block E	3.31 Km SW
		Protective Forest near Janumpi from Block A	3.55 Km ESE
		Talaburu Protective Forest from Block E	4.12 Km E
		Protective Forest near Nawagaon from Block F1	4.48 Km ESE
		Bidri Protective Forest from Block E	5.44 Km ESE
		Jojokabir Protective Forest No.33 from Block F	6.65 Km WSW
		Protective Forest No. 30 from Block L	6.71 Km E
		Sahedba Reserve Forest from Block Q	7.64 Km NNW
		Bichaburu Protective Forest from Block E	8.09 Km SE
		Kokcho Protective Forest from Block G	9.12 Km ENE
		Anjadbera Protective Forest from Block N	9.23 Km WNW
		Protective Forest No. 30A from Block N	9.53 Km WNW
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, overwintering, migration	None within 15th Km Radius.	None within 15th Km Radius.
4	Inland, coastal, marine or underground waters	None	None
5	State, National boundaries	Jharkhand – Orissa Boundary from Block A	23.31 Km ENE
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	**Road**	
		Pradhanmantri Sadak yojana Road from Block P	0.33 Km ESE
		Chaibasa-Balandia Road from Block P	1.77 Km ESE
		NH-75 from Block A	2.34 Km ESE
		State Highway-4 from Block R	4.08 Km SSE
		State Highway-6 from Block Q	5.64 Km NE
		Railway Station	
		Singh Pokhariya Railway Station from Block P	0.22 Km ESE

		Jhinkpani Railway Station from Block G Talaburu Railway Station from Block E Chaibasa Railway Station from Block Q Kendposi Railway Station from Block E Muluka Railway Station from Block R Dangoaposi Railway Station from Block R Pandrasali Railway Station From Block Q **Airport** Sonari Airport, Jamshedpur from Block Q	2.64 Km ESE 4.45 Km ESE 4.96 Km NNE 7.86 Km SSE 7.95 Km SSE 11.94 Km SSW 12.78 Km NNE 50.78 Km NE
7	Defense installations	None within 15th Km Radius	None within 15th Km Radius
8	Densely populated or built-up area	Rajanka from Block T	0.28 Km NW
9	Areas occupied by sensitive man-made land uses *(hospitals, schools, places of worship, community facilities)*	**Hospital** ACC Hospital,Jhinkpani,Jorapokhar, Jharkhand from Block A Jhinkpani Block Hospital, Jorapokhar, Jhinkpani ,Jharkhand from Block A Samudayik Swasth Kendra Jhinkpani, Jorapokhar, Jharkhand from Block A **Post Office** Post Office (csc), Jhinkpani,Jorapokhar from Block A. Post Office Jhinkpani, Jorapokhar from Block A. Chaibasa Post Office from Block Q, Jharkhand **Place of Worship** ACC Temple, Jorapokhar,Jharkhand from Block A Hanuman Mandir Takta Bazar, Jhinkpani, Jorapokhar,from Block A	 0.51Km NNE 1.62 Km ESE 1.63 Km ESE 1.54 km ENE 2.37 Km ESE 2.69 Km NE 0.56 Km ENE 1.26 Km ENE 1.45 Km E

		Hanuman Mandir, Jorapokhar, Jharkhand from Block A	
		School	0.46 Km NNE
		ACC Middle School, Jhinkpani,Jorapokhar, Jharkhand from Block A.	0.54 Km ENE
		DAV Public School, AAC Colony, Jhinkpani, Jorapokhar from Block A.	1.03 Km ESE
		High School Jhinkpani, Jorapokhar, Jharkhand from Block A.	1.11 Km ESE
		Govt. School, Jhinkpani,Jorapokhar, Jharkhand from Block A.	
		Bank	0.49 Km NE
		State Bank of India-Jhinkpani Branch, Jorapokhar,from Block A.	0.49 Km NNE
		Axis Bank ATM, Chaibasa Cement Works, ACC Limited PO, West Singhbhumi, Jhinkpani from Block A	2.38 Km ESE
		Punjab National Bank, Jhinkpani, Jorapokhr, Jharkhand from Block A.	
10	Areas containing important, high quality or scarce resources *(Ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)*	ASI Monuments none within 15 th Km Radius	ASI Monuments none within 15 th Km Radius
		Water Bodies	
		Gumua Nala from block G and J	Inside the Lease
		Gumua Nala from Block Q	Adjacent to Q block
		Jambira Nala from Block F	Adjacent to F Block
		Dev Nala from Block R	0.79 Km SSW
		Rora Gara from Block Q	0.82 Km NNW
		Aigada Nala from Block R	0.82 Km SSW
		Mongra Nala from Block R	2.18 Km NNW
		Boka Gara from Block N	2.63 Km NW
		Kachahari Talab from Block Q	2.99 Km NE
		Surniyan Gara from Block F	4.40 Km WNW
		lli Gara from Block A	5.51 Km ESE
		Pond near Sarda from Block Q	5.54 Km N

		Sagarkata Nala from Block E	6.32 Km SSW
		Sogo Nala from Block E	7.53 Km WSW
		Chalpagara Nala from Block R	8.98 Km NNW
		Hon Gara from Block Q	8.18 Km ESE
		Deo River from Block R1	9.90 Km NNW
		Canal near Unchdihi from Block Q	10.13 Km NNE
		Kharkai River from Block Q	12.37 Km ENE
		Forest	
		Protective Forest No.68 from Block F	Adjacent to Block F
		Protective Forest from Block F	0.40 Km E
		Siringsiya Protective Forest No. 78 from Block E	0.68 Km ESE
		Protective Forest near Baralisia from Block F1	2.13 Km E
		Siringsiya Protective Forest No. 32 from Block E	2.32 Km SSW
		Protective Forest near Dudiabasa from Block A	2.68 Km SE
		Protective Forest near lokasai fron Block F1	3.23 Km ESE
		Durula Protective Forest 31 from Block E	3.31 Km SW
		Protective Forest near Janumpi from Block A	3.55 Km ESE
		Talaburu Protective Forest from Block E	4.12 Km E
		Protective Forest near Nawagaon from Block F1	4.48 Km ESE
		Bidri Protective Forest from Block E	5.44 Km ESE
		Jojokabir Protective Forest No.33 from Block F	6.65 Km WSW
		Protective Forest No. 30 from Block L	6.71 Km E
		Sahedba Reserve Forest from Block Q	7.64 Km NNW
		Bichaburu Protective Forest from Block E	8.09 Km SE
		Kokcho Protective Forest from Block G	9.12 Km ENE
		Anjadbera Protective Forest from Block N	9.23 Km WNW
		Protective Forest No. 30A from Block N	9.53 Km WNW

11	Areas already subjected to pollution or environmental damage. *(Those where existing legal environmental standards are exceeded)*	None with in 15 th Km Radius	None with in 15 th Km Radius
12	Areas susceptible to natural hazard which could cause the project to present environmental problems *(Earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)*	Earthquake : **Mild earthquake hits Jharkhand** Parts of southern Jharkhand, including Chaibasa and Jamshedpur, were rocked by a mild earthquake measured 3.8 on the Richter scale on 25 March, 2009 morning. Update –March26,2009 02:28PM IST Source : https://www.hindustantimes.com/india/mild-earthquake-hits-jharkhand/story-GkINBQMrucrLL8xuoZpzyJ.html	Area falls in seismic zone II. No flooding in the area according to previous

ACC Limited
Chaibasa Cement Works
P.O.-Jhinkpani
Singhbhum(W)-833215
Jharkhand,India

Phone +91 6589 235224
www.acclimited.com

Undertaking

I hereby give an undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at our risk and cost.

Date: 07.10.2021

For ACC Limited

(Raj Gurung)
Director Plant and Authorized Signatory

Director Plant
ACC Limited
Chaibasa Cement Works

Section- B
Executive Summary

Executive Summary

The proposal is for mining of limestone mineral from Rajanka Limestone Mine (Main Lease) having lease area of 598.88 ha consisting of non-contiguous 22 blocks from A to T, F1 & R1 of M/s ACC Limited located at Village- Rajanka, Dakota, Purna Chaibasa, Kondwa, Indikuri etc Tehsil- Tonto, Post- Jhinkpani, District- West Singhbhum, Jharkhand. It is proposed to mine limestone mineral at the rate of 1.3 Million TPA from only two blocks namely F & S out of 22 blocks of the mining lease area granted to M/s. ACC of area 598.88Ha. The present proposal falls under item 1(a) of mining under category A project as per EIA Notification dated 14.09.2006 subsequent amendment thereof.

The lease area falls in the Survey of India Toposheet no. 73 F/10, 73 F/14, 73 F/11, 73 F/15 at latitude 22°15'37.94"N to 22°31'47.40"N, and longitude 85°37'26.66"E to 85°47'32.47"E. It is proposed to produce limestone to the extent of 1.3 million TPA. ROM will be dispatched to the Cement plant of ACC Chaibasa Works (capacity is 4000TPD) after crushing in Crushing Unit of 1100T/hr situated in F2 block (different lease of the same lessee situated adjacent to the F block of the main lease (598.88 ha.)). Crushed mineral will be sent to cement plant for further treatment by pipe conveyor of capacity 800 T/hr. The Cement Plant is situated at 2.5 kms NE of mine. There will be no mineral processing done at the mine site.

Earlier, EC was granted by MoEF vide Letter no. J-11015/129/2001-IA.II(M) dated 28.01.2004 to produce 2.11 Million TPA from the composite block of 145.37 Ha comprising of separate leases namely block F (81.50) of Rajanka lease 598.88 Ha & block F2 lease having an area 63.87 Ha. Further, the application was submitted for Revalidation under EIA Notification 2006 amended vide Govt. of India Gazette Notification vide S.O. 1530(E) dated 6th April 2018, wherein the MoEF&CC asked to separately apply for EC for both leases. Hence, we are now applying for a separate EC for 598.88 ha. of which F-block is a part.

The main lease was granted on 04.06.1943 valid till 31.12.1970. First renewal of lease was on 01.01.1971 valid till 31.12.1990, second renewal of lease was deemed renewed over an area of 598.88 ha including F block (81.5ha) expired on 31.12.2010. The application for 3rd renewal for 20 years was filed in December 2009. The lease is deemed to be extended vide letter No. 2112/M Dated on 17.10.2017 and is valid till 31.03.2030.

The mining plan of the main lease of Rajanka Limestone of M/s ACC ltd. (598.88 Ha.) consisting of non-contiguous 22 blocks, including the F block was approved by the Controller of Mines, IBM Nagpur vide letter No.314(3)/91/MCCM(C)/ MP-31 dated 28.2.1994, further mine plans were approved for subsequent years. The Mining Plan for the period 2020-21 to 2024-25 has been approved by IBM vide letter No. RAN/WSB/LST/MP-37/2019-20, dated 26.11.2020.

The area is characterized by undulating topography with a general slope towards NNE. The two hill ranges on East and West control the general topography of the area. The highest relief of the F block is 347.00 mRL in the north portion and the lowest relief is 326 mRL is located in the southern part whereas the highest relief of the S block is 278.00mRL in the southern portion and the lowest relief is 272 mRL is located in the northern part of the respective blocks.

The surrounding area is traversed by various Nalas that form a sub dendritic and parallel pattern. The important stream draining the area is Gumua Gara with the SSW-NNE flowing trend. It flows within 1 Km towards the east of the mine. The Gumua Gara which passes to the G and J block of the lease area merges with Surniyan Gara about 13 km downstream to form Raro Gara which drains into the Kharkai River about 27 Km east of the mine.

Mining operations will be carried out in a single pit of F block by a fully mechanised opencast method utilizing heavy earth moving machinery (HEMM) in conjunction with deep hole drilling and blasting with the help of suitable explosives The present dimension of the pit is 584 m x 570 m x 66.99 m with Bottom RL- 278.98 m. The height of the benches will range from 7 - 11.5 m with a minimum width of 15 m. Ultimate pit depth will be 269 mRL & ultimate width of bench will be equal to bench height thereby imparting 45^0 ultimate pit slope. Mining will be carried out for 6 days per week in 2 shifts. Maximum working days will be 300.

During plan period total 8,88,113 Cum of overburden will be generated which will be used in backfilling of mined out pit of F block & and 2156 cum of topsoil will be generated which will be used for plantation. Mineral rejection i.e grey Shaly Limestone of 5,30,435 cum will be used in the cement plant after processing through the beneficiation plant.

Geological reserve of the mine (as on 01.04.2019) is 39.614 million tonnes, however mining

is proposed only in F & S block, hence mineable reserve of F- block (as on 01.04.2019) is 3.549 million tonnes while of S block (as on 01.04.2019) is 1.596 million tonnes. It is proposed to convert the 3.026 million tonnes of feasibility mineral resource (211) (Limestone blocked due to pit slope of safety zone) of F-block into reserve after getting permission to work in 7.5 m statutory zone from the concerned authority. Hence the total mineable reserve of F-block will be 6.575 million tonnes. Life of mine including mineable reserves of F & S blocks is approx. 7 years after this review plan period.

As mining is carried in the past, no additional requirement of mining machinery is required. The total diesel requirement is 7 KLD met with local suppliers. Total electricity requirement is 7,80,000 kWh/year (kindly confirm) , which is supplied by the captive power plant. No additional power is required for the proposed project.

The maximum strength of direct workers will be 100 of which 14 are highly skilled, skilled, semi-skilled and 86 are unskilled workers majority of which will be local people. No additional manpower will be required for the project.

The project cost is Rs 7.5 Crores. The mine will always have economic viability as the market is already assured. There are no litigations against the project.

SECTION -C
PRE-FEASIBILITY REPORT

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PREFEASIBILITY REPORT

1. Introduction of the Project/Background Information

The proposal is for Rajanka Limestone Mine (Main Lease) over an area of 598.88 ha. consisting of non-contiguous 22 blocks from A to T, F1 & R1 of M/s ACC Limited located at Village- Rajanka, Dakota, Purna Chaibasa, Kondwa, Indikuri etc Tehsil- Tonto, Post- Jhinkpani, District- West Singhbhum, Jharkhand. The lease area falls in the Survey of India Toposheet no. 73 F/10, 73 F/14, 73 F/11, 73 F/15 at latitude 22°15'37.94"N to 22°31'47.40"N, and longitude 85°37'26.66"E to 85°47'32.47"E. It is proposed to produce limestone to the extent of 1.3 million TPA. ROM will be dispatched to the Cement plant of ACC Chaibasa Works (capacity is 4000TPD) after crushing in Crushing Unit of 1100T/hr situated in F2 block (different lease of the same lessee situated adjacent to the F block of the main lease (598.88 ha.)). Crushed mineral will be sent to cement plant for further treatment by pipe conveyor of capacity 800 T/hr. The Cement Plant is situated at 2.5 kms NE of mine. There will be no mineral processing done at the mine site.

Earlier, EC was granted by MoEF vide Letter no. J-11015/129/2001-IA.II(M) dated 28.01.2004 to produce 2.11 Million TPA from the composite block of 145.37 Ha comprising of separate leases namely block F (81.50) of Rajanka lease 598.88 Ha & block F2 lease having an area 63.87 Ha. Further, the application was submitted for Revalidation under EIA Notification 2006 amended vide Govt. of India Gazette Notification vide S.O. 1530(E) dated 6th April 2018, wherein the MoEF&CC asked to separately apply for EC for both leases. Hence, we are now applying for a separate EC for 598.88 ha. of which F-block is a part.

1.1 Identification of Project and Project Proponent. In the case of the mining project, a copy of the mining lease/ letter of intent should be given

The main lease covers an area of 598.88 Ha in which 22 non-contiguous blocks A to T, F1 and R1 spread over a length of 32 km in West Singhbhum District. The F block-mining lease of 81.50 hectares is one of these 22 separate blocks. There is no forest land in the mining lease area.

The main lease was granted on 04.06.1943 valid till 31.12.1970. First renewal of lease was on 01.01.1971 valid till 31.12.1990, second renewal of lease was deemed renewed over an area of 598.88 ha including F block (81.5ha) expired on 31.12.2010. The application for 3rd renewal for 20 years was filed in December 2009. The deemed lease extended on order no. Chaibasa vide letter No. 2112/M Dated on 17.10.2017 and is valid till 31.03.2030.

The mining plan of the main lease of Rajanka Limestone of M/s ACC ltd. (598.88 Ha.) consisting of non-contiguous 22 blocks, including the F block was approved by the Controller of Mines, IBM Nagpur vide letter No.314(3)/91/MCCM(C)/ MP-31 dated 28.2.1994, further mine plans were approved for subsequent years. The Mining Plan for the period 2020-21 to 2024-25 has been approved by IBM vide letter No. RAN/WSB/LST/MP-37/2019-20, dated 26.11.2020.

1.2 Brief description of the nature of the project

The present proposal is to mine limestone mineral at the rate of 1.3 Million TPA from only two blocks namely F & S out of 22 blocks of the mining lease area granted to M/s. ACC of area 598.88Ha. The present proposal falls under item 1(a) of mining under category A project as per EIA Notification dated 14.09.2006 subsequent amendment thereof.

1.3 Need for the project and its importance to the country and or region

There is a growing demand for cement in the country. Limestone being the main raw material for manufacturing cement is always in demand in a developing country like India. Since this mine is captive hence ROM will be transported to Cement plant of ACC Chaibasa Works situated at 2.5 km NE from the lease.

1.4 Demand-Supply Gap

8 to 10 % growth of cement is taking place in the country, therefore there will always be demand for limestone in the country. The mine under reference is a captive mine of the Chaibasa Cement plant.

1.5 Imports vs. Indigenous Production

It is the captive limestone mine to the ACC Chaibasa cement works. Limestone will be supplied directly to the cement plant. Therefore the mine is for indigenous production and no import is being made.

1.6 Export Possibility

It is the captive limestone mine to the ACC Chaibasa cement works. Limestone will be supplied directly to the cement plant. There are no chances of export of mineral.

1.7 Domestic /Export Markets

As informed earlier, it is a captive mine. All the limestone from the mine to the crusher plant will be transported by dumpers/ trucks and from crusher to the cement plant will be transported by pipe conveyor. All the ROM will be consumed in ACC Chaibasa cement plant, no export will be done.

1.8 Employment Generation (Direct and indirect) due to the project

There is no need for additional manpower in the mine. The existing category wise manpower detail is mentioned below :

Table 1. Employment Potential

Sl.No.	**Description**	
1	Graduate Mining Engineer/Mines Manager	03
2	Diploma Mining Engineer	03
3	Geologist	01
4	Surveyor	0
5	Other administrative and technical supervisory staff	07
6	Unskilled/Semiskilled workers	86
	Total	**100**

Also, a substantial amount of indirect employment will be generated in the form of dhabas, transporters etc. which will improve the economic conditions of the area.

2 Project Description

2.1 Type of Project including interlinked and interdependent projects, if any.

Present proposal pertains to mining of limestone mineral from F block (81.50 ha) of 598.88 ha. mining lease area by fully-mechanized opencast mining with drilling and blasting. This is a captive limestone mine for the ACC Chaibasa cement plant which is situated at a distance of 2.5 km in the east direction from the limestone mine. Environment Clearance of the cement plant was granted from MoEF vide letter no. J-11011/130/2003-IA.II (I) dated 29th April 2004.

2.2 Location (map showing the general location, specific location, and project boundary & project site layout)

The Rajanka Limestone Mines (Main Lease) is located at village Rajanka, Kondwa, Dakota, Indikuri etc Tonto tehsil of West Singhbhum district in Jharkhand. The mine is about 50 Km from Sonari airport, Jamshedpur from Block Q and 2.64 km from Jhinkpani railway station from Block G. The mine is about 2.34 Km from NH-75. The mine is well connected by a road network. The cement plant is just 2.5 km towards the NE direction of mine. The lease area falls in the Survey of India topo sheet No.73 F/10, 73 F/14, 73 F/11, 73 F/15 and can be located by the following coordinates:

Latitude- 22°15'37.94"N to 22°31'47.40"N

Longitude- 85°37'26.66"E to 85°47'32.47"E

The Location of mine is shown below -

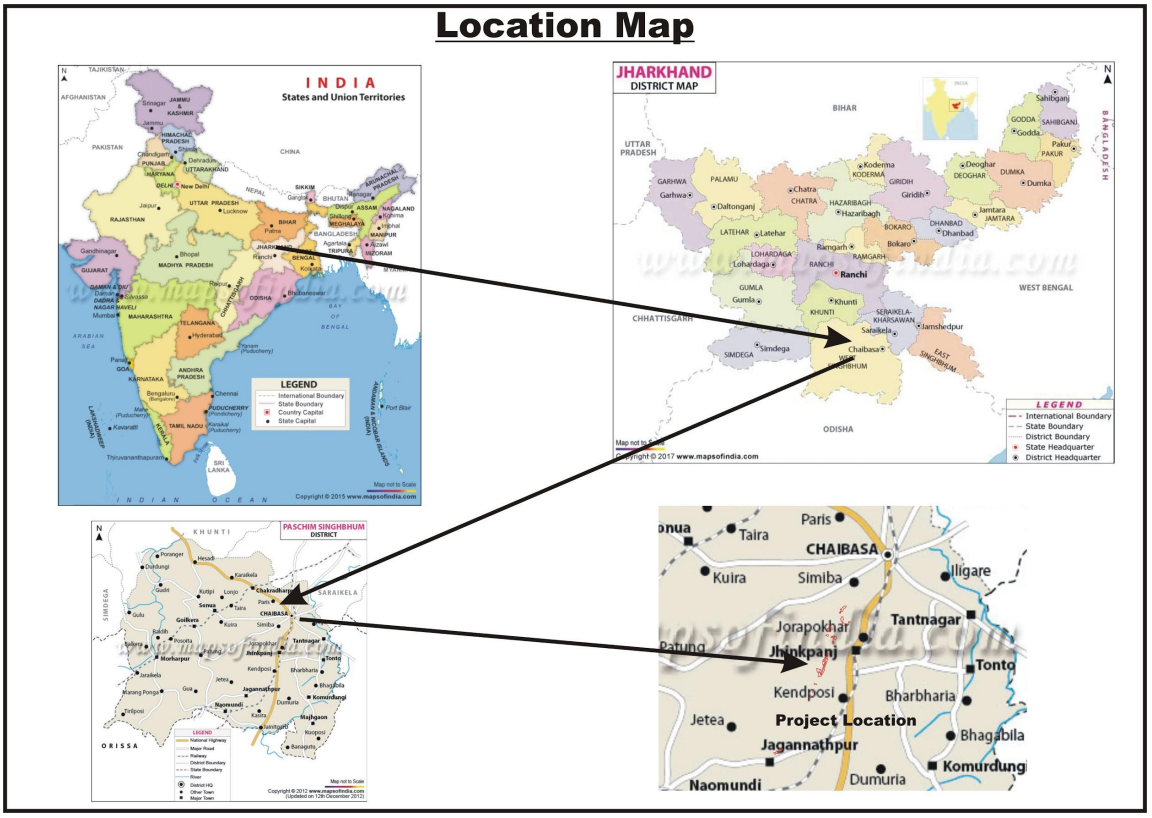


Figure 1. Location map

Lease Details:

Name of Project Proponent : M/s ACC Limited

Name of Applicant : Mr. Sanjeev Tripathi (Manager)

Address: ACC Limited,Chaibasa Cement Works, P.O : Jhinkpani-833215

Dist. : West Singhbhum, Jharkhand.

Table 2. Lease Details

S.No.	Particulars	Details
1.	Lease Area	598.88 Ha
2.	Year of Grant (Mine Lease)	Year 1943
3	Validity of Mine Lease	30-03-2030
4.	Location	Village Rajanka, Dakota, Kondwa, Indukari etc Tehsil Tonto, District- West Singhbhum, Jharkhand.

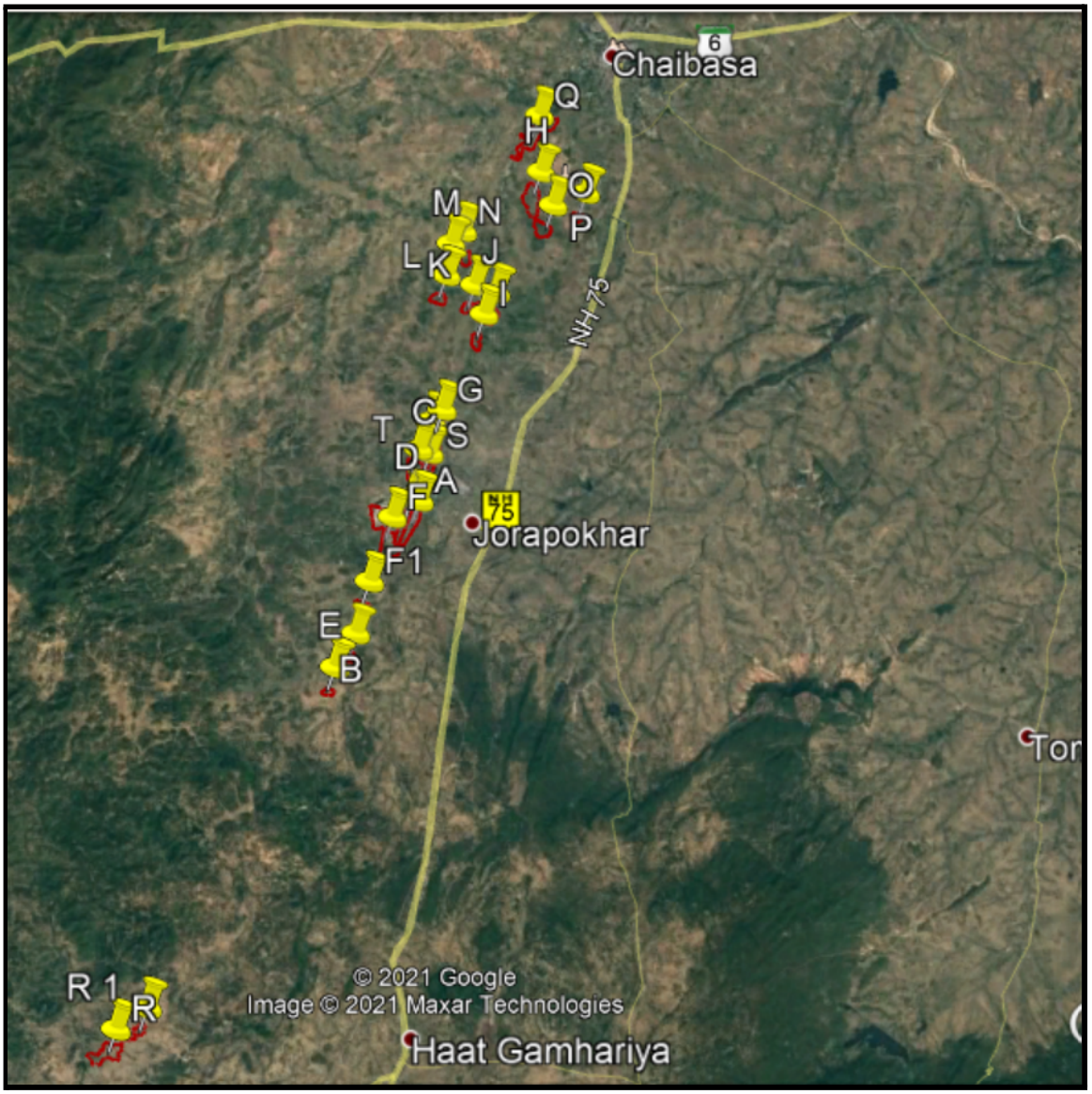


Figure 2. Google Map of Mine area

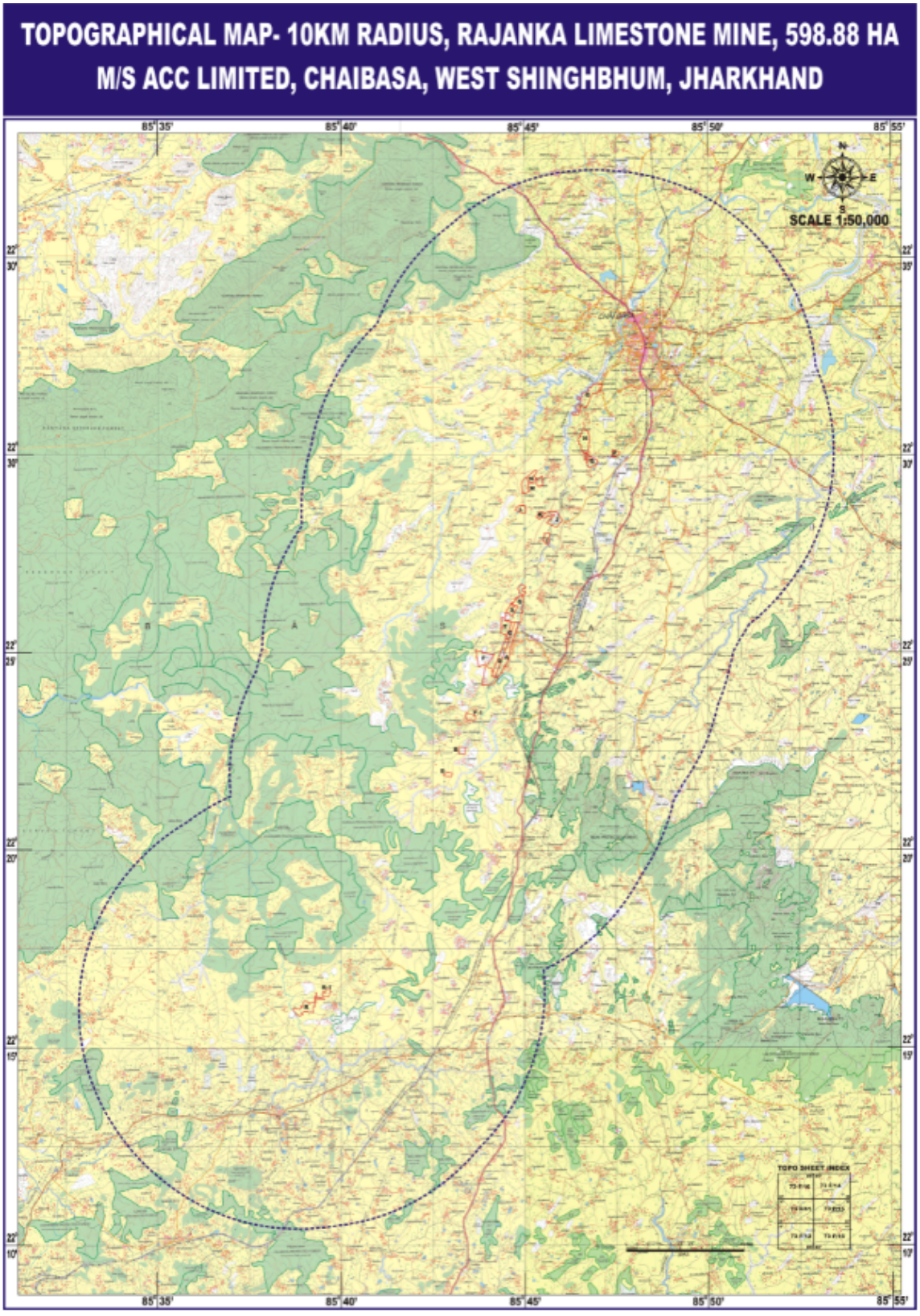


Figure 3. Topographical Map

2.3 Details of alternative sites considered and the basis of selecting the proposed site, particularly the environmental considerations gone into should be highlighted.

The mining of mineral is site specific and is dependent on availability of mineral and grant of mining lease by the State Government. This is a site-specific project and it is a captive mine for the nearby cement plant.

2.4 Size or Magnitude of operation

Mining operations will be done by adopting mechanized opencast method with drilling and blasting with proposed production of Limestone 1.3 million TPA. The average number of working days in the year would be 300 days and working will be done in two shifts per day.

2.4.1 Past Production:

Authenticated past production by DMO vide its letter dated 21.05.2019 is given below:

Sl No.	Year	Production
1.	**1992-93**	66034.58
2.	**1993-94**	45352.59
3.	**1994 -95**	42909.29
4.	**1995-96**	34807.68
5.	**1996-97**	21999.69
6.	**1997-98**	29047.43
7.	**1998-99**	104773.35
8.	**1999-00**	123099.48
9.	**2000-01**	111502.04
10.	**2001-02**	49095.59
11.	**2002-03**	48888.76
12.	**2003-04**	56228.11
13.	**2004-05**	53617.21
14.	**2005-06**	529239.75
15.	**2006-07**	917712.56
16.	**2007-08**	1048264

17.	**2008-09**	1337883
18.	**2009-10**	1196596
19.	**2010-11**	1459574
20.	**2011-12**	1584948
21.	**2012-13**	1291891
22.	**2013-14**	1227516
23.	**2014-15**	475255
24.	**2015-16**	621799
25.	**2016-17**	1093050
26.	**2017-18**	1158099
27.	**2018-19**	1245379

2.4.2 Proposed Production

The maximum proposed production of limestone will be 1.3 million TPA. The proposed year-wise production as per approved mine plan is given below:

Table 3. Proposed Production

Year	Block No.	Production (cum)	Tonnage factor	Production (Tonnes)
Year 1 (2020-21)	F	565,217.00 Limestone=347826 Mineral Reject =217391	2.3	1,299,999.10
Year 2 (2021-22)	F	565,217.00 Limestone=347826 Mineral Reject =217391	2.3	1,299,999.10
Year 3 (2022-23)	F	191,305.00 Limestone=160870 Mineral Reject =30435	2.3	440,001.50
Year 4 (2023-24)	F	186,957.00 Limestone=152174 Mineral Reject =34783	2.3	430,001.10
Year 5 (2024-25)	F	182,609.00 Limestone=152174	2.3	420,000.70

		Mineral Reject =30435		
Total		**1,691,305.00**		**3890001.50**

2.4.3 Past Overburden/Waste Production

Year	Quantity (cum)
Year 1 (2015-16)	1721254
Year 2 (2016-17)	462305
Year 3 (2017-18)	201036
Year 4 (2018-19)	215761
Year 5 (2019-20)	181530
Total	**2,781,886**

2.4.4 Proposed OB/Waste (including Top soil, purple & green shale)

Table 4. Proposed Overburden

Year	Quantity (cum)
Year 1 (2020-21)	410,829.00
Year 2 (2021-22)	313,040.00
Year 3 (2022-23)	52,000.00
Year 4 (2023-24)	50,400.00
Year 5 (2024-25)	64,000.00
Total	**890,269.00**

2.4.5 Equipment Details

A detailed list of types of equipment available in existing mine with its type and capacity:-

Table 5. List of types of equipment

SL No.	Type of Machine	Proposed Units	Capacity/Size	Motive Power

1	HYD. SHOVEL	1	6.5 Cubic M	Diesel Engine
2	HYD.SHOVEL	2	4.0 CUBIC M	Diesel Engine
3	HYD.SHOVEL	2	5.1 CUBIC M	Diesel Engine
4	HYD.BACKHOE	1	3.5 CUBIC M	Diesel Engine
5	Rock Breaker	1	40 Ton class	Diesel Engine
6	Dumper (BEML)	6	50 T	Diesel Engine
7	Dumper (BEML)	3	40 T	Diesel Engine
8	Dumper (Komatsu)	4	60 T	Diesel Engine
9	Dumper (BEML)	2	320 HP	Diesel Engine
10	Dozer (CAT)	1	305 HP	Diesel Engine
11	Drill(ING. RAND ICM 260 & CM 260)	2	100 MM	Diesel Engine
12	Drill (ING.RAND)	1	150 MM	Diesel Engine
13	Maintenance Van (TELCO)	1	115 MM	Diesel Engine
14	Maintenance Van (TELCO)	1	10 Tons	Diesel Engine
15	Water Tanker (TELCO))	1	10000 LTS	Diesel Engine
16	Truck Box Type (BR-18-8005) (TELCO)	1	10 Tons	Diesel Engine
17	Explosive Van (TELCO)	1	4 Tons	Diesel Engine
18	Diesel Tanker (Telco)	1	4 KL	Diesel Engine
19	Explosive Van (Telco)	1	7 Tons	Diesel Engine
20	TATA Pickup mobile service man	1	5 Seater	Diesel Engine
21	Wheel Loader (Hindustan 2071)	1	5 Cubic M	Diesel Engine

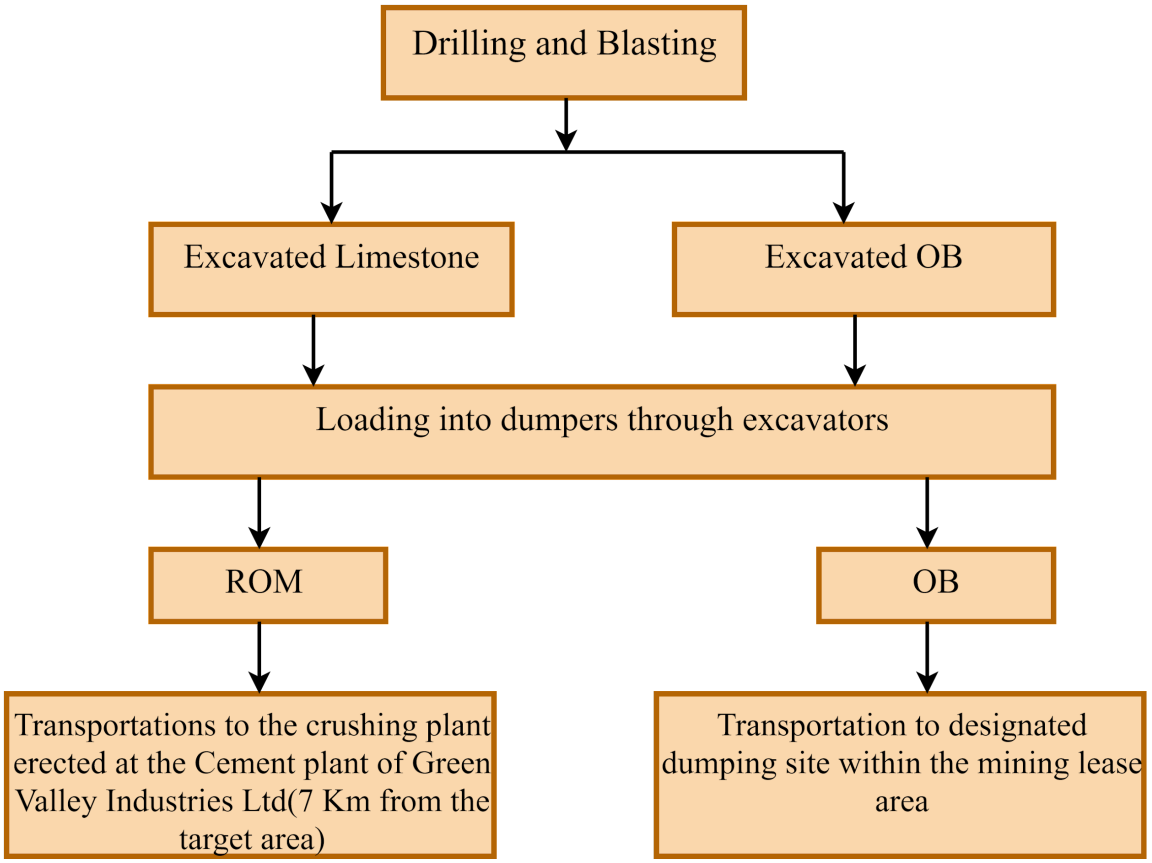
2.5 Process Description with Process Details (A Schematic Diagram/Flow chart showing the Project layout, Components of the Project Etc. should be given)

2.5.1 Salient Features of the Mine Working

As a part of the mine i.e. F block is under operation & further proposed mining during the plan period will be carried out in the F-block, hence the salient description of the present & proposed mining method are given below:

2.5.1.1 Salient description of the present Mining method

- Fully Mechanized open cast mining with drilling & blasting has been carried out by deploying hydraulic excavators of 4 cum bucket capacity, dozers, 115 & 152 mm dia DTH drills, rock breakers & BEML dumpers of 40/50/60 ton capacities for transportation of material.
- Mining is being carried out for 6 days per week in 2 shifts. Average working days in a year are 300.
- Only a single pit of F block is functioning in the whole mine lease.The dimension of pit is 584m x 570 m x 66.99m with bottom RL 278.98 m)
- The height of the bench ranges from 7 - 11.5 m with a minimum width of 15 m
- The pit is approached from a network of roads and a well graded (1 in 16) ramp to pit bottom & there individual benches are connected through gentle ramps & roads.
- Blast holes of 115 mm and 152 mm size are drilled with the help of DTH drills & holes are blasted with column charge i.e. SME/ANFO in conjunction with primer charge i.e. slurry explosive/cast booster & initiated by non-electric detonating fuse. Blasted material is loaded with hydraulic shovels in 40/50/60 Tons dumpers and transported to the crusher hopper situated in F2 block (adjacent lease to F-block of the same lessee). Limestone is crushed through a crusher of 1100 TPH in -50 mm size and conveyed by Pipe conveyor to the ACC Chaibasa Cement plant for manufacturing of cement.
- Waste generated is backfilled in the mined out pit of the F-block.
- The schematic diagram showing the process of mining is given below:



2.5.1.2 Salient Features of the Proposed Mine workings in addition to existing mining

- Ultimate pit limit will be 269 mRL & ultimate width of bench will be equal to bench height thereby imparting 45^0 ultimate pit slope.
- It is proposed to mine within the common boundary of F-block of the main lease i.e. 598.88 ha. & F3 block of the separate lease of the same lessee after obtaining common boundary working permission from DGMS, & the waste generated from F3 block will be used for backfilling the mined out pit of the F block.

Drilling & Blasting Parameter:

Table 6. Drilling and Blasting Parameters

Drilling & Blasting Parameters	
Hole dia	115 mm & 152 mm diameter holes will be drilled
Depth of hole	9.0 m
Spacing	5.0 m
Burden	3.0 m
Output/Hole	Burden x Spacing x Depth of the hole x C.f (2.3) = 3.0 x 5.0 x 9.0 x 2.3 = 135 cum = 310.50 MT

Explosive Requirement	60 kg for one hole
Powder Factor	5.18 MT/kg

2.6 Raw material required along with estimated quantity, likely source, marketing area of final product/s, Mode of transport of raw Material and Finished Product.

2.6.1 Water requirement

The important inputs required for mining are given below:

Table 7. Water Management

1	Dust Suppression	160 KLD
2	Green Belt	26 KLD
3	Machinery Washing	2 KLD
4	Drinking Water	5 KLD
Total Water requirement		**193 KLD**

The water requirement for mine will be approx. 193 KLD which will be mainly consumed for drinking & domestic purpose, sprinkling, plantation & machinery washing. The water will be mainly sourced from the Mine Reservoir sump located nearly to the adjoining lease, whatever water is collected in the pit sump is contributed by seepage through cracks & fissures in rocks shale/limestone & due to direct precipitation. The mine seepage water is approx. 1855 KLD, out of which 960 KLD water is supplied to captive power plant, 707 KLD is discharged to nearby 'A' block reservoir via the drain for agriculture purpose and recharging the ground water & remaining 188 KLD is used in mine for sprinkling (160 KLD), plantation (26 KLD) & machine washing purpose (2 KLD). The daily requirement of drinking water is around 5 KLD which is supplied to the mine from the company's cement plant via pipeline.

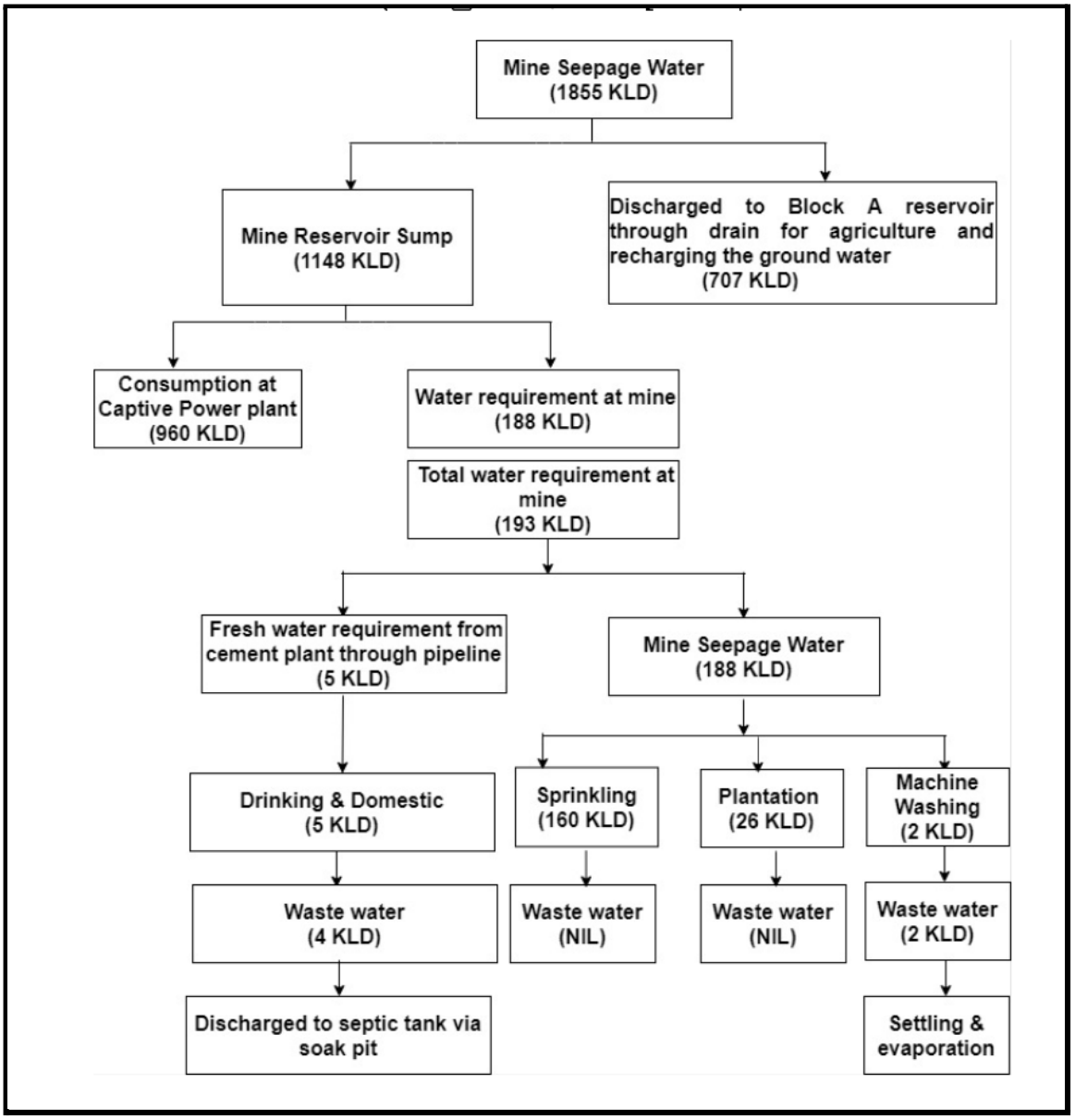


Figure 4. Water Balance

2.6.2 Diesel Requirement

The power or energy is and will be obtained from diesel driven engines. The daily consumption of diesel will be around 7 KLD. There will be no additional requirement in the proposed project.

2.6.3 Power Requirement

At present total electricity requirement is around 7,80,000 KWh/year, which is supplied by the captive power plant. There will be no additional requirement for the proposed project.

2.6.4 Market and Mode of Transport

All the limestone from the mine will be transported by dumpers/ trucks to the crusher plant located at F2 block adjacent to the F block of the same lessee and from the crusher it will be transported to the cement plant by pipe conveyor.

2.7 Resource Optimization/recycling and reuse envisaged in the project, if any, should be briefly outlined.

There is hardly anything that is wasted in a mine except the overburden. The overburden or mine wastes will be used for backfilling the mined out pit which will be further rehabilitated with plantation. Used oil will be stored as per prescribed norms and will be sold to an authorized vendor. Pit water will be conserved in a reservoir from where it is used for sprinkling and gardening purposes.

2.8 Availability of water its source, Energy /Power requirement and source should be given

The requirement of water will be about 193 KLD which will be mainly sourced from the mine water reservoir and drinking water of 5 KLD will be sourced from the company's cement plant. The power or energy will be obtained from diesel driven engines. The daily consumption of diesel will be around 7 KLD which will be met from local stations. At present total electricity requirement is around 7,80,000 KWh/year, which is supplied by the captive power plant. There will be no additional requirement for the proposed project.

2.9 Quantity of wastes to be generated (liquid and solid) and scheme for their Management/disposal

Overburden/waste Around 890269 cum of overburden/waste shall be generated from the F block during the plan period which will be backfilled in the mined out area of the F-block. The year-wise generation of waste from F block during this review of the mining plan period is given below :

Table 8. OB and topsoil generation during plan period

Year	F Block waste-OB+purple shale +Green Shale (cum)	Topsoil(cum)	Total (cum)
2020-21	409929.00	900.00	410,829.00

2021-22	312060.00	980.00	313,040.00
2022-23	51928.00	72.00	52,000.00
2023-24	50256.00	144.00	50,400.00
2024-25	63940.00	60.00	64,000.00
Total	**888113.00**	**2156.00**	**890,269.00**

The waste so generated from the F - block is proposed to be dumped in the exhausted portion of the block for backfilling purposes. The topsoil of 2156.00 cum will be directly spread over this backfilled area.

Solid Waste Management: The solid waste generated as municipal waste will be collected, segregated and will be disposed off through authorized vendors.

Table 9. Solid waste management

S.No	**Particulars**	**Total Quantity generated after expansion (Kg/day)**	**Mode of Disposal**
1 Municipal Solid Waste			
1	**Biodegradable (Organic waste)**	9 Kg	The generated waste will be handed over to the authorized vendor.
2	**Non-Biodegradable (Recyclable waste)**	6 Kg	
3	**Total Municipal Waste**	15 Kg	

3 Site Analysis

3.1Connectivity

Rail connection: The nearest railway station is Singh Pokhariya Railway Station from Block P which is approx. 0.22 km ESE from the mine. Jhinkpani Railway Station is approx. 2.64 km ESE from block G of the mine lease.

Road connection: There is a network of well-knit good roads. The mine is connected by tar roads to Jhinkpani and Chaibasa. NH-75 is 2.34 km ESE from Block A of the mine lease.

3.2 Landform, Land use and Land ownership:

All the land in different blocks is barren, private or government land. There is no forest land within the mine lease. The land use of mine is given below in table no.12 given below:

Table 10. Land Use of mine

Head	Area put on use at the start of mining plan period (Ha)	Total Area (Ha)	At the end of life of the lease (31.03.2030)in Ha
Area Under Mining	115.42	117.71	126.71
Storage of topsoil	Nil	Nil	0.23
Waste Dumpsite	5.29	5.29	6.47
Mineral Storage	3.00 (Included in the area of mining)	3.00 (Included in the area of mining)	Nil
Backfilling of waste	46.2 (Included in the area of mining)	54.48 (Included in the area of mining)	55.75 (Included in the area of mining)
Infrastructure - Workshop, administrative building etc.	1.50	1.50	1.50
Roads	3.91	3.91	3.91
Tailing pond	12.58 (included in the area of mining)	12.58 (included in the area of mining)	19.58 (included in the area of mining)
Green belt/Plantation	8.7 (included in the area of mining)	8.7 (included in the area of mining)	9.72 (included in the area of mining)
Water reservoir	15.64 (included in the area of mining)	15.64 (included in the area of mining)	31.95 (included in the area of mining)
(Protection bund)	Nil	0.92	0.92

Disturbed area	126.12	129.33	139.74
Undisturbed Area	472.76	469.55	459.14
Grand Total	598.88 Ha		

3.3 Topography (along with a map)

The area is characterized by undulating topography with a general slope towards NNE. The two hill ranges on East and West control the general topography of the area. An N-S trending range controls the East and a NE-SW trending range controls the west. Both the range cross over into Orissa on the south to form a part of Gurjhat hills. The highest relief of the F block is 347.00 mRL in the north portion and the lowest relief is 326 mRL is located in the southern part whereas the highest relief of the S block is 278.00mRL in the southern portion and the lowest relief is 272 mRL is located in the northern part of the respective block. The **Surface Plan** of the area is shown in **Annexure 5.**

3.4 Existing land use pattern (agriculture, non-agriculture, forest, water bodies (including area under CRZ), shortest distances from the periphery of the project to the periphery of the forests, national park, wildlife sanctuary, eco-sensitive areas, water bodies (distance from the HFL of the river), CRZ. In the case of notified industrial areas, a copy of the Gazette notification should be given.

Table 11. Existing land Use

Head	Area (Ha) put to use at the start of Review of the mining plan period
Excavated area (void)	29.30
Waste dumpsites	5.29
Mineral storage	3.00
Water reservoir	15.64
Backfilled area	46.2
Tailing pond	12.58
Green Belt /Plantation	8.70
Build-up area (crusher, pipe conveyor, road)	5.41

Others (protection bund)	0.00
Total	126.12
Undisturbed Area	472.76
Grand Total	598.88 Ha

Table 12. Environment Settings of the area

S. NO.	PARTICULARS	DETAILS *(with approximate aerial distance & direction from the plant site)*
1.	Nearest Town / City	Chaibasa- 2.30 km from block Q in NE direction
2.	Nearest National Highway / State Highway	NH-75 from Block A is 2.34 km in ESE direction
3.	Nearest Railway station	Singh Pokhariya Railway Station from Block P- 0.22 km ESE
4.	Nearest Airport	Sonari Airport, Jamshedpur from Block Q- 50.78 km towards NE direction.
5.	National Parks, Wildlife Sanctuaries, Biosphere Reserves within 10 km radius	None within 15 km radius .
6.	Reserve Forests (RF) / Protected Forests (PF) within a 10 km radius	**Protective Forest No. 68 from F block** - Adjacent to Block F **Protective Forest from Block F** - 0.40 Km E **Siringsiya Protective Forest No.78 from Block E** - 0.68 km ESE **Protective Forest near Baralisia from Block F1**- 2.13 km E **Siringsiya Protective Forest No.32 from Block E** - 2.32 km SSW **Protective Forest near Dudiabasa from Block A**- 2.68 km SE **Protective Forest near Loksai from Block F1**.- 3.23 km ESE **Durula Protective Forest 31 from Block E** - 3.31 km SW **Protective Forest near Janumpi from Block A** - 3.55 km ESE **Talaburu Protective Forest from Block E** - 4.12 km E

		Protective Forest near Nawagaon from Block F1 - 4.48 km ESE **Bidri Protective Forest from Block E** - 5.44 km ESE **Jojokabir Protective Forest No.33 from Block F** - 6.65 km WSW **Protective Forest No.30 from Block L** - 6.71 km E **Sahedba Reserve Forest from Block Q** - 7.64 km NNW **Bichaburu Protective Forest from Block E** - 8.09 km SE **Kokcho Protective Forest from Block G** - 9.12 km ENE **Anjadbera Protective Forest from Block N** - 9.23 km WNW **Protective Forest No. 30 A from Block N**- 9.53 km WNW
7.	River / Water Body (within 10 km radius)	**Gumua Nala through G & J block** - Inside the block **Gumua Nala from Block Q-** Adjacent to Block Q **Jambira Nala from Block F -** Adjacent to F block **Dev Nala from Block R-** 0.79 km SSW **Rora Gara from Block Q** - 0.82 Km NNW **Aigada Nala from Block R** - 0.82 Km SSW **Mongra Nala from Block R** - 2.18 Km NNW **Boka Gara from Block N** - 2.63 Km NW **Kachahari Talab from Block Q** - 2.99 Km NE **Surniyan Gara from Block F** - 4.40 Km WNW **lli Gara from Block A** - 5.51 Km ESE **Pond near Sarda from Block Q** - 5.54 Km N **Sagarkata Nala from Block E** - 6.32 Km SSW **Sogo Nala from Block E** - 7.53 Km WSW **Chalpagara Nala from Block R**-8.98 Km NNW **Hon Gara from Block Q** -8.18 Km ESE **Deo River from Block R1-**9.90 Km NNW
8.	Seismic Zone	Area falls in seismic zone II.

Drainage :

The surrounding area is traversed by various Nalas that form a sub dendritic and parallel pattern. The important stream draining the area is Gumua Gara with the SSW-NNE flowing trend. It flows within 1 Km towards the east of the mine. The Gumua Gara which passes to the G and J block of the lease area merges with Surniyan Gara about 13 km downstream to form Raro Gara which drains into the Kharkai River about 27 Km east of the mine.

Regional Geology:

Geologically the area is a part of the Singhbhum belt where rocks of Archaean to Proterozoic age are found to occur. The Singhbhum belt is known for the larger shear zone and accurate thrust fault. The rocks south of this thrust are less metamorphosed than those occurring in the north. The area in and around Jhinkpani and Chaibasa region is mainly occupied by the rocks of Kolhan Group, Singhbhum Granite and rocks of Iron ore Group.

Local Geology:

The limestone formations of the Chaibasa region belong to the Kolhan series which is of the Cuddapah age. The kolhan limestone is mostly thin-bedded and is grey, pink, brown and white in colour. Small quartz veins traverse the limestone at places. The quality of limestone varies with depth.

The Kolhan series in the area is composed of purple shale which is underlain progressively by greenish-grey/green shale, greyish brown-grey high calcareous shale, pink to maroon limestone and off white to white limestone followed by purple sandstone.The strike of the beds is roughly NNE-SSW which coincides with the general strike of the Kolhans. The series is characterized by low dips varying from 5° to 15.°

Local Stratigraphic Sequence

Soil cover
Purple shale
Green shale
Grey Grey shaly limestone
Pink limestone
Off-white limestone
Purple sandstone

Figure 5. Local Stratigraphic sequence

Lithology

The entire sequence of beds in the area under reference is covered by a thin mantle of soil with the exception of a few outcrops of shale and limestone in the northwestern part of the area. The lithology could therefore only be presented from the workings of F-block apart from the borehole logs. The strike of the beds is roughly NNE-SSW which coincides with the general strike of the Kolhans. The series is characterized by low dips varying from 5 ° to 15°.

Exploration Undertaken:

Exploration were carried out in F-block (only working block in the main lease area) by drilling boreholes. 49, 22, 63, 11, 13 boreholes were drilled in the year 1957, 1975-76, 1980, 2007, 2017 respectively. Exploration by drilling boreholes in other blocks are as follows:

Table 13. Exploration done

Blocks	**No. of boreholes**	**Year**
S	14	2010
F	49	1957
	22	1975
	63	1980
	11	2007
	13	2017
Virgin blocks		
H	24	1951
I	5	1956
J & K	33	1955- 1956
L	19	1954-1955
M	22	1955-1956
N	21	1955-1956
O	12	1950

P	13 6	2020 1951
R	34	1954
No exploration has been carried out in Block B, E, F1, R1 & Q till date while A, C, D, G & T are exhausted blocks.		

Exploration has been proposed in Q block by core drilling of boreholes 5 & 6 in the year 2021-22 & 2022-23 respectively.

Quality & Grade of Mineral:

The analysis report of different grade of limestone from Rajanka mine is given below:

Table 14. Grade of Mineral

Types of Limestone	TC%	CaO%	MgO%	SiO2%	Al2O3%	Fe2O3%	LOI%
Off-white Limestone/high grade	81.9 to 82.7	44.5 to 46.9	0.5 to 1.1	11.1 to 12.8	1.6 to 2.8	1.7 to 1.9	34.7 to 36.8
Pink limestone/ blendable limestone	69.1 to 75.2	38.1 to 42.2	0.6 to 1.1	16.9 to 20.0	2.5 to 3.5	2.1 to 2.3	30.0 to 33.7
Grey Shaly limestone/beneficiable & blendable	62.0 to 66.8	34.8 to 37.1	0.8 to 1.4	20.0 to 28.9	3.0 to 6.4	1.6 to 4.4	26.5 to 31.7

Reserves:

UPDATED MINERAL RESOURCES & RESERVES AS PER UNFC

(As on 01.04.2019)

Table 15. Mineral Reserve & resource of mine

	UNFC Code	Quantity in Million TOns	
		Main Lease excluding S Block	**S Block**
Proved Mineral Reserve	111	3.549 (F block)	-
Probable Mineral Reserve	121 & 122	-	1.596
Total Mineral reserve		**3.549**	**1.596**
Feasibility Mineral resource	211 (F & S block)	**3.026** (Limestone blocked due to pit slope of safety zone, these resources will be converted into reserve after getting permission to work in 7.5 m statutory zone from the concerned authority)	0.185
		1.086 (Limestone blocked due to pit slope of safety zone)	-
		2.829 (Limestone blocked due to HT barrier & road barrier)	-
		0.642 (Limestone blocked due to old working)	-
		2.115 (Limestone blocked due to habitation)	-
Prefeasibility Mineral resource	221 & 222	-	-
Measured	331	-	
Indicated	332	-	
Inferred	333	**14.286 (Blocks- P, R, H, M, O, L, J, K, N)**	
Reconnaissance	334	**10.3 (Block B, E, F1, R1, Q)**	

Total Mineral Remaining Resource		**34.284**	**0.185**
Total Reserves & Resources		**37.833**	**1.781**

Anticipated life of F block of the lease area

Table 16. Life of F-block of mine

	F Block
	(Off white+Pink+Grey Shaly) in Million Tons
Proved Reserve as on 01.04.2019	3.549
Resources that needs to be converted into reserve with prior permission (common boundary of F & F3 block)	3.026
Total Reserve + resource as on 01.04.2019	**6.575**
Production proposed (April 2019- March 2020) as per approved modification to the mine plan	1.623
Production proposed (2020-21 to 2024-25)	3.890
Probable remaining resources in F block as on April-2025	[6.575-(1.623+3.890)=1.062]
With anticipated production of @0.5 million tons, life of F block after this review of mining plan	1.062/0.5 = 2.12 years i.e. approx 3 years

Anticipated life of S block of the lease area

Proved reserve as on 01.04.2019= 1.596 million Tons.

as no production from S block is proposed during this review of mining plan, hence with anticipated production of @0.5 million tons, life of S block after this review of mining plan= 1.596/0.5= 3.192 years i.e. approx. 4 years

Hence total life of mine including F & S block after this review of mining plan = 3+4= 7 years

3.5 Existing Infrastructure:

At present, the infrastructure available in the mine area is service roads, workshop building, mining office, canteen, power line, water storage tanks. These will continue to remain till the life of the mine.

3.6 SOIL CLASSIFICATION

The entire sequence of beds in the area under reference is covered by a thin mantle of soil with the exception of a few outcrops of shale and limestone in the northwestern part of the area. Soil is also found in the fractured zones & cracks which is totally not possible to be removed. Topsoil is in a very meagre quantity in this area.

3.7 Climatic data from secondary sources:

Temperature:

Temperature records from Chaibasa indicate that the maximum temperature is 46.7 C in the month of May and the minimum temperature is 4.4 in the month of December & January.

Rainfall: The rainfall records have been studied on the same line as temperature and it indicates that the average annual rainfall is 1192 mm. About 80 % of the rainfall is in between June & September.

Relative Humidity:

The morning and evening variations in relative humidity are given hereunder. In morning hours, the maximum was 83 in the month of August & the minimum was 49 in the month of April. In morning hours, the maximum was 80 in the month of August & the minimum was 28 in the month of April.

Wind Speed:

Winds are generally light in the morning and strong in the evenings. Strengthening in force both in the morning and evening is observed during the summer and monsoon seasons. The wind speeds are generally low in the winter months. The maximum wind speeds were 4.7 Km/h in the month of June and the minimum was 1.6 Km/h in the month of December.

3.8 Social Infrastructure available

Educational Facilities

All the villages in the study area have some education facility. In the study area, the total numbers of educational institutions in various categories are 88. Out of these educational institutions, there are 49 primary schools, 28 middle schools and 11 high schools. The study area does not have any pre-university college for higher education

and no industrial or; vocational training institutes or adult literacy centres. The nearest Graduation College at Chaibasa is about 20 km from the mine. The persons are required to go to Chaibasa, Tananagar or Ranchi for higher education.

Medical Facilities:

A well equipped hospital is provided and maintained at the colony where necessary free medicines and medical aids are available. In addition, an Ambulance Van is available at the mines for emergencies. A First Aid Station is also maintained at the mines office to provide timely First Aid, and other two First Aid Stations are also provided one at the site office near the mining area and second one at crusher area.

Medical assistance is available in some form or the other in only 12 villages of the study area. Hospital in Basahatu, Maternity and Child Welfare Centre in Tuturutu, Health Centre in Basahatu, Primary Health sub-centres in 9 villages with 2 km of the block A, dispensary in Bara Jhinkpani and family planning centre at Siringsia are the only medical facilities available to the local population. The availability of medical facilities in only 12 out of 69 villages indicates that the health facilities are very poor in the study area.

Electric Power Availability

Electric supply from the Jharkhand State Electricity Board is available for domestic purposes to 24 villages and agricultural purposes to 3 villages. Power is available for all purposes to only 2 villages. The type of supply available to different villages depends upon their size and requirement. However, the availability of the supply of electricity through rural feeder is very erratic.

Potable Water

All the villages in the study area have a water supply for domestic purposes. The wells, tanks and Hand-pumps are the predominant sources of drinking water throughout the study area. Additionally, river water is available to 14 villages, nallah water to 15 villages and canal water to 5 villages. Surface water sources like fountains or springs are not available. Tap water supply is not available in any village.

Transport Facilities

The main mode of transportation is by road. A network of both paved (pucca in 13 villages) and unpaved (kuchcha in 56 villages) roads exists in the study area. Both are suitably interconnected. Bus facilities are available in only 5 villages and rail facilities in 2 villages. All the other villagers have to travel between 1 to 5 km to reach a bus stop.

Private jeeps and buses share the major responsibility of local transport in the study area. Some private buses are operating up to Jhinkapani and some up to ACC colony from Chaibasa. Tatanagar and Ranchi. The existing bus facility in the immediate vicinity of the mine is, however, not satisfactory.

Post and Telegraph Facilities

Only 7 villages in the study area have post office facilities. Telegraph and telephone facilities do not exist in most of the villages in the study area. The cement plant and mine have telephone facilities. Villages on the main road have public phone facilities. The communication facilities in villages in the study area are very poor and need improvement.

4 Planning Brief

4.1 Planning Concept (a type of industries, facilities, transportation etc)

Town and Country Planning/Development authority Classification.

A mining project is much different from other industrial projects. Therefore its planning part also differs. It is an opencast mechanized mining and the salient features are as below.

- Fully Mechanized open cast mining with drilling & blasting has been carried out by deploying hydraulic excavators of 4 cum bucket capacity, dozers, 115 & 152 mm dia DTH drills, rock breakers & BEML dumpers of 40/50/60 ton capacities for transportation of material.
- Mining will be carried out for 6 days per week in 2 shift. Maximum working days will be 300.
- The height of the bench will range from 7 - 11.5 m with a minimum width of 15 m.
- Blast holes of 115 mm and 152 mm size will be drilled with the help of DTH drills & holes will be blasted with column charge i.e. SME/ANFO in conjunction with primer charge i.e. slurry explosive/cast booster & initiated by non-electric detonating fuse. Blasted material will be loaded with hydraulic shovels in

40/50/60 Tons dumpers and transported to the crusher hopper situated in F2 block (adjacent lease to F-block of the same lessee). Limestone will be crushed through crusher of 1100 TPH in -50 mm size and conveyed by Pipe conveyor to the ACC Chaibasa Cement plant for manufacturing of cement.

- Waste generated will be backfilled in the mined out pit of the F-block.
- Ultimate pit limit will be 269 mRL & ultimate width of bench will be equal to bench height thereby imparting 45^0 ultimate pit slope.
- It is proposed to mine within the common boundary of F-block of the main lease i.e. 598.88 ha. & F3 block of the separate lease of the same lessee after obtaining common boundary working permission from DGMS, & the waste generated from F3 block will be used for backfilling the mined out pit of the F block.

4.2 Population Projection

The temporary influx of people will be there as the managerial and supervisory staff will generally be from outside.

4.3 Land use planning (breakup along with green belt etc)

Table 17. Land Use

Head	Area put on use at the start of mining plan period (Ha)	Total Area (Ha)	At the end of life of the lease (31.03.2030)in Ha
Area Under Mining	115.42	117.71	126.71
Storage of topsoil	Nil	Nil	0.232
Waste Dumpsite	5.290	5.29	6.475
Mineral Storage	3.00 (Included in the area of mining)	3.00 (Included in the area of mining)	Nil
Backfilling of waste	46.2 (Included in the area of mining)	54.48 (Included in the area of mining)	55.75 (Included in the area of mining)
Infrastructure - Workshop, administrative building etc.	1.50	1.50	1.50
Roads	3.91	3.91	3.91
Tailing pond	12.58	12.58	19.58

	(included in the area of mining)	(included in the area of mining)	(included in the area of mining)
Green belt/Plantation	8.7 (included in the area of mining)	8.7 (included in the area of mining)	9.72 (included in the area of mining)
Water reservoir	15.64 (included in the area of mining)	15.64 (included in the area of mining)	31.95 (included in the area of mining)
(Protection bund)	Nil	0.92	0.92
	126.12	129.33	139.74
Undisturbed Area	472.76	469.55	459.14
Grand Total	598.88 Ha		

4.4 Assessment of Infrastructure Demand (Physical & Social)

Physical infrastructure

At present, the infrastructure available in the mine area is service roads, workshop building, mining office, canteen, power line, water storage tanks. These will continue to remain till the life of the mine. The mine functionaries coming from outside will be accommodated in companies township in the vicinity of lease. No other infrastructure will be required.

Social Infrastructure

All the villages in the study area have some education facility. In the study area, the total numbers of educational institutions in various categories are 88. Out of these educational institutions, there are 49 primary schools, 28 middle schools and 11 high schools. The study area does not have any pre-university college for higher education and no industrial or; vocational training institutes or adult literacy centres. The nearest Graduation College at Chaibasa is about 20 km from the mine. The persons are required to go to Chaibasa, Tananagar or Ranchi for higher education.

4.5 Amenities/ Facilities

ACC has constructed canteen and club etc. for the permanent and contract employees of the plant & mines. The Officers, Staff and Workers of Rajanka Mines are also entitled to welfare amenities provided by Chaibasa Works such as well designed houses with electricity and water connection in well laid out colony, school up to 12th standard, Post Office, Co-operative Society, Play Grounds, Club, Children's park, shopping center, and Company's bus facility etc. Apart from this Company is fulfilling their social obligations by uplifting the standard of living of the nearby area people through different social & cultural activities through different programme taken up by their Rural development center established for the purpose. The developments of the amenities/facilities will be maintained in the nearby area of the plant site as per the requirement of local people under the social development activity programme.

5 Proposed Infrastructure

5.1 Industrial Area (Processing Area)

The limestone produced from the project will be supplied to ACC Chaibasa cement plant. As the mine is already in operation and adequate infrastructure is present in the mine, no additional significant infrastructure is expected due to the proposed mining activity.

5.2 Residential Area (Non-Processing Area)

As most of the workers are employed from nearby villages, no residential area/ housing is proposed. Accommodation will be provided for managerial and statutory personnel in the company's colony located in the vicinity the lease.

5.3 Physical Infrastructure

No additional significant infrastructure is expected due to proposed mining activity. However, under social development activity, the company will provide infrastructure support to nearby schools and other community needs.

5.4 Green Belt

The total green belt area in the existing lease is 8.7 Ha. Besides this, the plantation has been proposed to be carried out in the backfilling area of the mine lease.

Proposed Plantation

The details of the proposed plantation are given in the table no.17 given below:

Table 18. Proposed Plantation

Year	Location	No. of plants	Area to be covered (Ha)	Species of plant	Expected Survival Rate (%)
2020-21	At backfilled area	1000	0.50	Mixed plants i.e. Babul, Sheesham, Teak, Arjun, Subabul, Gulmohar, etc. as available in the locality	60 to 70%
2021-22		1000	0.50		
2022-23		1000	0.50		
2023-24		1000	0.50		
2024-25		1000	0.50		
Total		5000	2.50		

5.5 Social Infrastructure

As mining is already running, all the measures are already being taken for the upliftment of social infrastructure in nearby surroundings which has been described already in the above paragraph.

5.6 Connectivity (Traffic and Transportation Road/Rail/Metro/Waterways etc)

The area is well connected with National Highway 75 through all weather motor-able roads, which is about 2.34 km ESE of this applied leasehold. The nearest town is Chaibasa, which is about 2.30 km NE from the Block Q of the mine.

5.7 Drinking Water Management (Source & Supply of Water)

As far as drinking water is concerned, it would be apt to reiterate here that residential accommodation will not be provided to its workers as there is a colony nearby. The main drinking water requirement will be for mine workers & staff. The proposed strength is 100. It can be seen that daily domestic and drinking water requirements will be about 5 KLD. The drinking water is provided from the company's cement plant.

5.8 Sewerage System

The generated sewage will be sent to a septic tank followed by a soak pit.

5.9 Industrial Waste Management

There are two tailing ponds A & D - Block Tailing pond and Yadav field tailing pond are already present in mine Lease.The capacity of both are mentioned below;-

Table 19. Tailing pond details

	A & D- Block Tailing Pond	**Yadav Field Tailing Pond**	**Proposed Tailing pond in F- block**
Ultimate capacity	6.75 lakh cum	0.63 lakh cum	14.00 lakh cum
Tailing Pond Area	4.5 ha	2.8 ha	7.00 ha
Present Height	8 m	3 m	20 m (proposed)
Height of ultimate filling	15 m	15 m	—

Tailing is generated during the ore beneficiation plant situated outside the lease area. It is transported via pipeline and used again in the backfilling. As per the mine plan, tailing generated due to flotation of Grey Shaly Limestone will be backfilled in F south exhausted block.

5.10 Solid Waste Management:

The overburden waste generated will be stacked on the dumpsite marked on the non-mineralized ground & will be utilized in backfilling when the pit gets matured. The soil will be stacked separately and will be utilized for plantation.

5.11 Power Requirement & Supply/Source:

The company has its captive power plant which supplies full energy to its mine & beneficiation plant.

6. Rehabilitation and resettlement (R &R) Plan:

6.1 Policy to be adopted (Central/State) in respect of the project affected persons including home oustees, land oustees and landless laborers (a brief outline to be given)

The land has already been acquired hence, R&R is not applicable to the project

7. Project Schedule & Cost Estimates

7.1 Likely date of start of construction and likely date of completion (Time schedule for the project to be given)

The proposed mining activity will commence immediately on getting environment clearance and approval of the mining plan.

7.2 Estimated project cost along with analysis in terms of the economic viability of the project.

The Total project cost of mining is about Rs.7.5 Crores. The limestone will be dispatched directly to the cement plant through a pipe conveyor after crushing.

8. Analysis of proposal (Final Recommendations)

8.1 Financial and social benefits with special emphasis on the benefit to the local people including tribal population, if any, in the area

The mine has been operating since 1946. It is a captive mine for its existing cement plant. It will provide direct employment to 100 persons. About 60% of the total employment will be given to locals. Further, the share of indirect employment will likely increase the purchasing power, dhabas and retail shops etc. is largely shared by local residents. The most important aspect of the project is the land undermining is almost barren thus not creating a negative impact on the livelihood of residents. Furthermore, taxes earned by the state government in the form of royalty will be utilized for the development of the area.

9 Environment Management Plan

Any industrial activity has a certain adverse impact on the surrounding environment which has to be assured through baseline studies and mitigation measures shall be adopted. In view of this environment management plan is a very important aspect of any project, for the existing cement plant. The detail of water management, solid waste

management, air environment, Soil Managemeplant and likely impact after the new project are discussed in the following paragraphs:

Air Environment

The following adequate control measures during the mining operation as well as transportation of material is being taken to control dust pollution within the mine area and the same will be carried out during the proposed project.

- Mining operations mainly contribute to dust for which sprinkling of water is proposed.
- Use of Rock breaker for breaking oversize boulders so as to reduce dust and noise levels.
- All the equipment will be of the highest standard of reputed make and adhere to statutory norms.
- Overloading of vehicles will be avoided to avoid spillage.
- Monitoring of air quality in the mine and surrounding villages will be carried out.
- Proper stemming in blast holes will be carried out.
- Regular maintenance of vehicles and machinery will be carried out during the proposed project.
- A wet drilling system in the drills will be carried out to mitigate fugitive dust emissions.
- Spraying of water on blasted material will help to reduce fugitive dust emissions.
- Workers will be provided a dust mask.

Water Management

The water table is shown in the above paragraphs. No wastewater will be generated from the mining activities. Septic tanks followed by soak pits shall be provided for the disposal of effluent generated from the mine.

Solid Waste Management

The generated waste will be handed over to the authorized vendor. Overburden/waste generated will be used for backfilling of the mined out pit in F- block.

Soil Management and Green Belt Development :

The soil will again be used for plantation and green belt development within the mine lease.

- Green Belt / Plantation will be developed around the mining activity area, safety zone, along haul road and other open areas to minimize noise propagation.
- Benches shall be rehabilitated by planting local species in place of existing rocky land.

Noise Management :

- Non-Electronic detonators will be used to control ground vibration.
- Plantation will be done nearby the area in the green belt development to reduce the impact of noise pollution.
- Lubrication of the machinery will be carried out for reducing noise pollution.
- Mufflers shall be provided to the exhaust of wagon drills to minimize the noise.
- The workers employed will be provided with personal hearing protection equipment earmuffs and earplugs combined as protection from the high noise level generated near the mine workings.
- The blasting will be carried out in day time.

SECTION D
ANNEXURES

ANNEXURE-1
LEASE DEED

678 639

INDIA NON JUDICIAL

Government of Jharkhand

e-Stamp

T-2

सत्यमेव जयते

Certificate No.	:	IN-JH07234872354860P
Certificate Issued Date	:	23-Sep-2017 11:18 AM
Account Reference	:	NONACC (FI)/ jhdopjc07/ CHAIBASA/ JH-WS
Unique Doc. Reference	:	SUBIN-JHJHDOPJC0710377685993402P
Purchased by	:	ACC LIMITED
Description of Document	:	Article 35 Lease
Property Description	:	EXECUTION AND REG OF SUPPLEMENTARY LEASE DEED FOR EXTENSION OF MINING LEASE (AREA 598.88 Ha)
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	GOVERNOR OF JHARKHAND
Second Party	:	ACC LIMITED
Stamp Duty Paid By	:	ACC LIMITED
Stamp Duty Amount(Rs.)	:	59,70,610 (Fifty Nine Lakh Seventy Thousand Six Hundred And Ten only)

---------------Please write or type below this line---------------

SUPPLEMENTARY LEASE DEED FOR EXTENSION

The indenture made this -----------17th----------- day of october -2017 between the Government/Governor of Jharkhand (hereinafter referred The Lesser to as the "State Government which expression shall where the context so admits be deemed to include the successors and assigns) of the one part

Lessee	District Mining Officer	Deputy Commissioner
Director Plant ACC Limited Chaibasa Cement Works	West Singhbhum, Chaibasa	West Singhbhum, Chaibasa.

D-3

SHCIL

Warning

"The contents of this certificate can be verified and authenticated world-wide by any members of the public at www.shcilestamp.com or at any Authorised collection center address displayed at www.shcilestamp.com free of cost."

"Any alteration to this certificate renders it invalid. Use of an altered certificate without all the security features could constitute a criminal offence"

"This document contains security features like coloured background with Lacey Geometric Flexible patterns and Subtle Logo images, Complex ornamental design borders, Anti - copy text, the appearance of micro printing, artificial watermarks and other Overt and Covert features."

678 639

Lease 40 years Security 10000/- Royalty 1489572962.00 Surface Rent 36998 x 8 = 295984.00
= 1449263946.00 SD Rs 5990,610/only

Document Registered by the Order of M.O. Chaibasa vide letter No-2112/M Dt 17-10-2017

क्रम 2 के अधीन ग्राह्य भारतीय स्टाम्प अधिनियम 1899 की अनुसुची 1 या 1 क, म0 के अधीन तथा छोटानागपुर कास्तकारी अधिनियम के धारा ... के अधीन यथावत स्टाम्प सहित (या स्टाम्प शुल्क) से विमुक्त या स्टाम्प शुल्क अपेक्षित नहीं।

T-2

Fee paid

and **ACC LIMITED, a company registered under the Indian Companies Act, 1913 and having it's registered office at Cement House, 121, Maharshi Karve Road, Churchgate, Mumbai-400020, (M.S.)** (hereinafter referred to as "the lessee "which expression shall where context so admits be deemed to include his/its/their successors and permitted assigns)of the other part.

WHEREAS the lessee/lessees has /have executed a mining lease deed on date **18.01.1971** in accordance with the Mineral Concession Rules, 1960 (hereinafter referred to as the said Rules), in respect of the land and described in part 1 of the schedule of the said lease of **Lime Stone covering 22 Blocks (Block 'A' to Block 'T') in village Kondwa, Rajanka, etc** over an area of **598.88 Ha. (1479.90 Acres)** which has been registered vide-no 5523/M, dated 25.06.1970 (provision of memo no. 99 dated 24.01.2011 issued by Director, Mines will be binding) herein below at paragraphs 1 to 6 AND, it is hereby mutually agreed between the parties that ;

Director Plant
ACC Limited
Chaibasa Cement Works

जिला खनन पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा

[signature]

Director Plant
ACC Limited
Chaibasa Cement Works
9/11/2017

द्वारा निर्देशक आरएन कुमार
सक्सेना
श्याम मुरारी सक्सेना
ए. सी. सी कालोनी निवासी चाईबासा
अभिज्ञाता
कार्यालय चाईबासा
9.11.17
10.30 1.30
चाईबासा
[signature]
9/11/2017

जिला अवर निबंधक का कार्यालय चाईबासा

श्री अरवा राज कमल.
उपायुक्त, प० सिंहभूम.
चाईबासा.
[signature]
9/11/2017.

AND, WHEREAS this supplementary lease deed is a part and parcel of the said deed and the terms and conditions are in furtherance to the terms and conditions in addition to the terms and conditions agreed to in the said lease deed.

1. The lessee will furnish an under taking that he will make the payment of the demand raised or to be raised under section 21(5) of the MMDR Act or any other provisions of law, in accordance with the directions of the Hon' ble Supreme Court / competent forum within 60 days of passing of such order/direction or such disposal or such other order time to time as may be decided by the Hon' ble Court or the competent forum, as the case may be. This undertaking also forms part of the supplementary mining lease deed as a Special Condition.

2. The extension of validity is without prejudice to ongoing proceedings, if any, for lapsing or determination of lease which have been initiated or may be initiated in accordance to the provisions of MMDR Act, 1957 or rules frame there under.

3. The lessee / lessees shall not undertake mining operation except under and in accordance to the approvals under the Forest (Conservation) Act, 1980 and the Environment (Protection) Act, 1986 and rules framed there under along with approved mining plan.

Director Plant
ACC Limited
Chaibasa Cement Works

जिला खनन पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा

AND, WHEREAS , the party of the second part has agreed to all these terms and conditions and has agreed to execute a supplementary lease deed accepting the extension of the validity period of lease.

NOW, THEREFORE the period of validity of the said lease deed is hereby extended and deemed to have been extended up to **31.03.2030**. Subject to compliance of all terms and conditions of the said lease and the further terms and conditions described in the sanctioning Order shall be part of this supplementary lease deed.

4. For the purpose of the Stamp duty the anticipated royalty from the demised land is **Rs. 14,89,57,962/- (Fourteen Crore Eighty Nine Lakh Fifty Seven Thousand Nine Hundred Sixty Two)** Per year.

5. All the terms and expressions which are used and not specifically defined in this agreement, unless the context otherwise requires, shall bear the same meaning as described to term in the said lease deed and subsequent Amendment thereof.

6. All other terms and conditions of said lease deed dated **18.01.1971** shall remain unchanged.

Director Plant
ACC Limited
Chaibasa Cement Works

जिला खनन पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा

UNDERTAKING

I, Dr. Arun Kumar Saxena Son of late Shyam Murari Saxena aged about 58 Years addressed at P.O. Jhinkpani, West Singhbhum being Director Plant and Authorised Signatory of M/s ACC Limited for mining lease covering 22 Blocks (Block 'A' to Block 'T') over an area of 598.88 hectares in Mauja-Kondwa, Rajanka etc Dist-West Singhbhum hereby undertake to make the payment of the demand raised or to be raised under section 21 (5) of the MMDR Act or any other provision of Law, in accordance with the directions of Hon'ble Supreme Court / competent forum within 60 days of passing of such order / direction or such disposal or such other time to time as may be decided by the Hon'ble Court or the competent forum, as the case may be.

Dr. Arun Kumar Saxena,
(Director Plant and Authorised Signatory)
ACC Limited, Chaibasa Cement Works

Director Plant
ACC Limited
Chaibasa Cement Works

जिला खनन पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा


निर्वाचक का कार्यालय

UNDERTAKING

I, Dr. Arun Kumar Saxena Son of late Shyam Murari Saxena aged about 58 Years addressed at P.O. Jhinkpani, West Singhbhum being Director Plant and Authorised Signatory of M/s ACC Limited for mining lease covering 22 Blocks (Block 'A' to Block 'T') over an area of 598.88 hectares in Mauja-Kondwa, Rajanka etc Dist-West Singhbhum hereby undertake that in case of dispute of boundaries of the extended area, it shall be re-fixed after DGPS survey/Geo-referenced map of the area in accordance with direction of the State Government.

Dr. Arun Kumar Saxena,
(Director Plant and Authorised Signatory)
ACC Limited, Chaibasa Cement Works

जिला खनन पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा

Director Plant
ACC Limited
Chaibasa Cement Works

UNDERTAKING

I, Dr. Arun Kumar Saxena Son of late Shyam Murari Saxena aged about 58 Years addressed at P.O. Jhinkpani, West Singhbhum being Director Plant and Authorised Signatory of M/s ACC Limited for mining lease covering 22 Blocks (Block 'A' to Block 'T') over an area of 598.88 hectares in Mauja-Kondwa, Rajanka etc Dist-West Singhbhum hereby undertake that we will not trespass and, will not conduct mining operation over the land until and unless the consent and permission of the Raiyat has been obtained and the required compensation has been paid to Raiyat as per section 49 of CNT Act.

Dr. Arun Kumar Saxena,
(Director Plant and Authorised Signatory)
ACC Limited, Chaibasa Cement Works

Director Plant
ACC Limited
Chaibasa Cement Works

जिला खनन पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा

IN WITTNESS whereof, the duly authorized representatives of the Parties have signed on the day and year first hereinbefore written

For and on behalf of

Lessee

Director Plant
ACC Limited
Chaibasa Cement Works

(Arun Kumar Saxena)

जिला खनन पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा

For and on behalf of

Governor of Jharkhand

उपायुक्त
पश्चिमी सिंहभूम, चाईबासा

WITNESS:

1.....
(Sanjeev Tripathi)

2.....
(Pankaj Sharma)

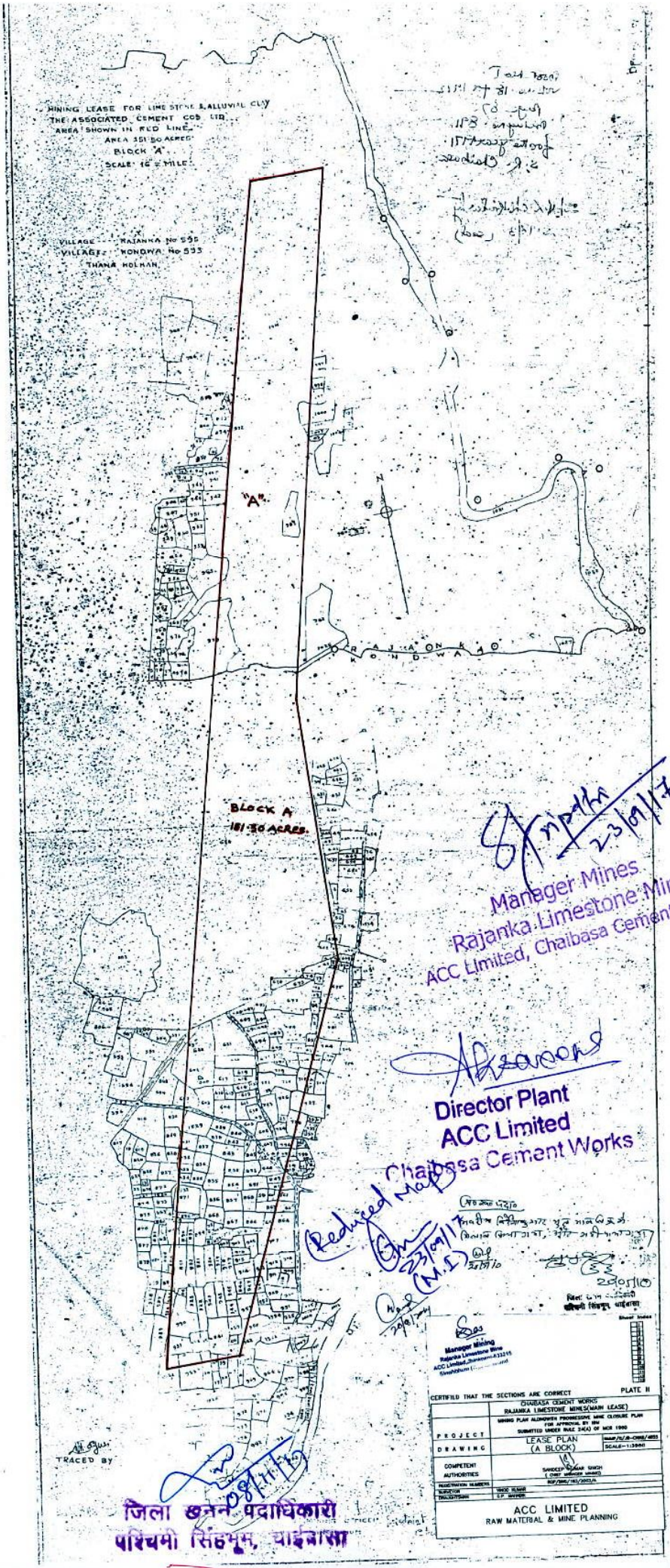
WITNESS:

1..... (AMO)

2..... (AMO)


नियंत्रक का कार्यालय


नियंत्रक का कार्यालय


MINING LEASE FOR LIME STONE & ALLUVIAL CLAY
THE ASSOCIATED CEMENT COS LTD.
AREA SHOWN IN RED LINE.
AREA 151·50 ACRES
BLOCK 'A'.
SCALE 16" = MILE
VILLAGE :- RAJANKA No 535
VILLAGE :- KONDWA No 533
THANA KOLHAN
"A".
BLOCK A
151·50 ACRES.
RAJANKA
KONDWA
Manager Mines
Rajanka Limestone Mine
ACC Limited, Chaibasa Cement Works
Director Plant
ACC Limited
Chaibasa Cement Works
Reduced Map
Manager Mining
Rajanka Limestone Mine
ACC Limited, Chaibasa
TRACED BY
CERTIFIED THAT THE SECTIONS ARE CORRECT
PLATE II
CHAIBASA CEMENT WORKS
RAJANKA LIMESTONE MINES(MAIN LEASE)
PROJECT
MINING PLAN ALONGWITH PROGRESSIVE MINE CLOSURE PLAN
FOR APPROVAL BY IBM
SUBMITTED UNDER RULE 24(4) OF MCR 1960
DRAWING
LEASE PLAN
(A BLOCK)
SCALE=1:2500
COMPETENT AUTHORITIES
SANDEEP KUMAR SINGH
(CHIEF MANAGER MINING)
REGISTRATION NUMBERS
RQP/JHK/165/2003/A
SURVEYOR
VINOD KUMAR
DRAUGHTSMAN
S.P. MAHTO
ACC LIMITED
RAW MATERIAL & MINE PLANNING
जिला खनन पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा


निदेशक का कार्यालय

THE ASSOCIATED CEMENT COMPANIES LTD. (BOMBAY)

MINING LEASE FOR LIME STONE AND ALLUVIAL CLAY

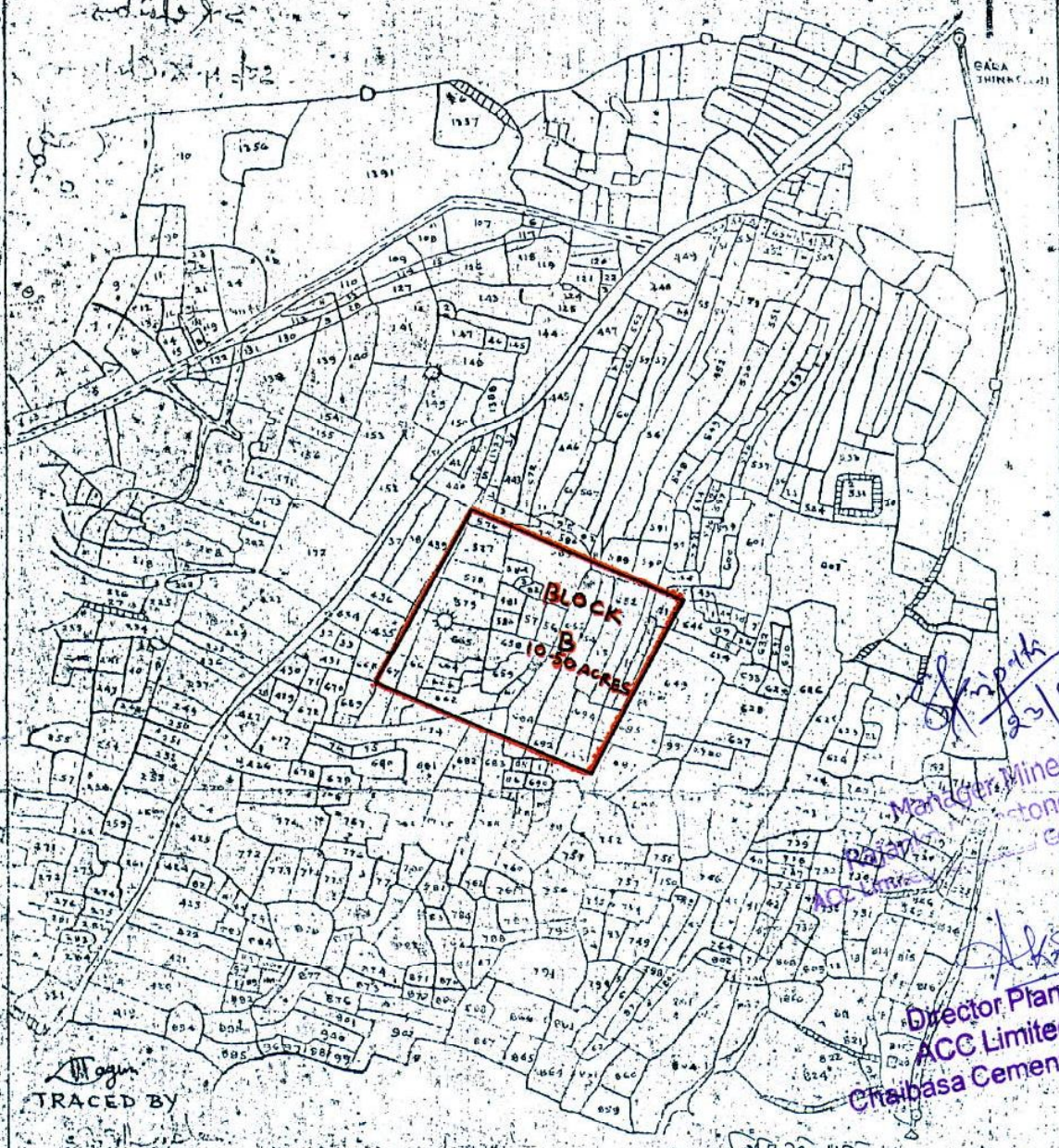
AREA OF THE MINING LEASE IS SHOWN IN RED LINE

AREA - 10.50 ACRES

SCALE : 016 INCHES = 1 MILE

VILLAGE - SAN JHINKPANI

THANA - CHOLHAN NO. 615



TRACED BY

CERTIFIED THAT THE SECTIONS ARE CORRECT

PLATE II

	CHAIBASA CEMENT WORKS RAJANKA LIMESTONE MINES(MAIN LEASE)
PROJECT	MINING PLAN ALONGWITH PROGRESSIVE MINE CLOSURE PLAN FOR APPROVAL BY IBM SUBMITTED UNDER RULE 24(A) OF MCR 1960
DRAWING	LEASE PLAN (B BLOCK)
	RMMP/G/JR-CHAB/4055
	SCALE-1:3960
COMPETENT AUTHORITIES	SANDEEP KUMAR SINGH (CHIEF MANAGER MINING)
REGISTRATION NUMBERS	ROP/BNG/183/2003/A
SURVEYOR	VINOD KUMAR
DRAUGHTSMAN	G.P. MAHADIK

Sheet Index

1 2 3 4 5 6 7 8 9 10 11 12 13

ACC LIMITED

RAW MATERIAL & MINE PLANNING

Manager Mining
Rajanka Limestone Mine
ACC Limited

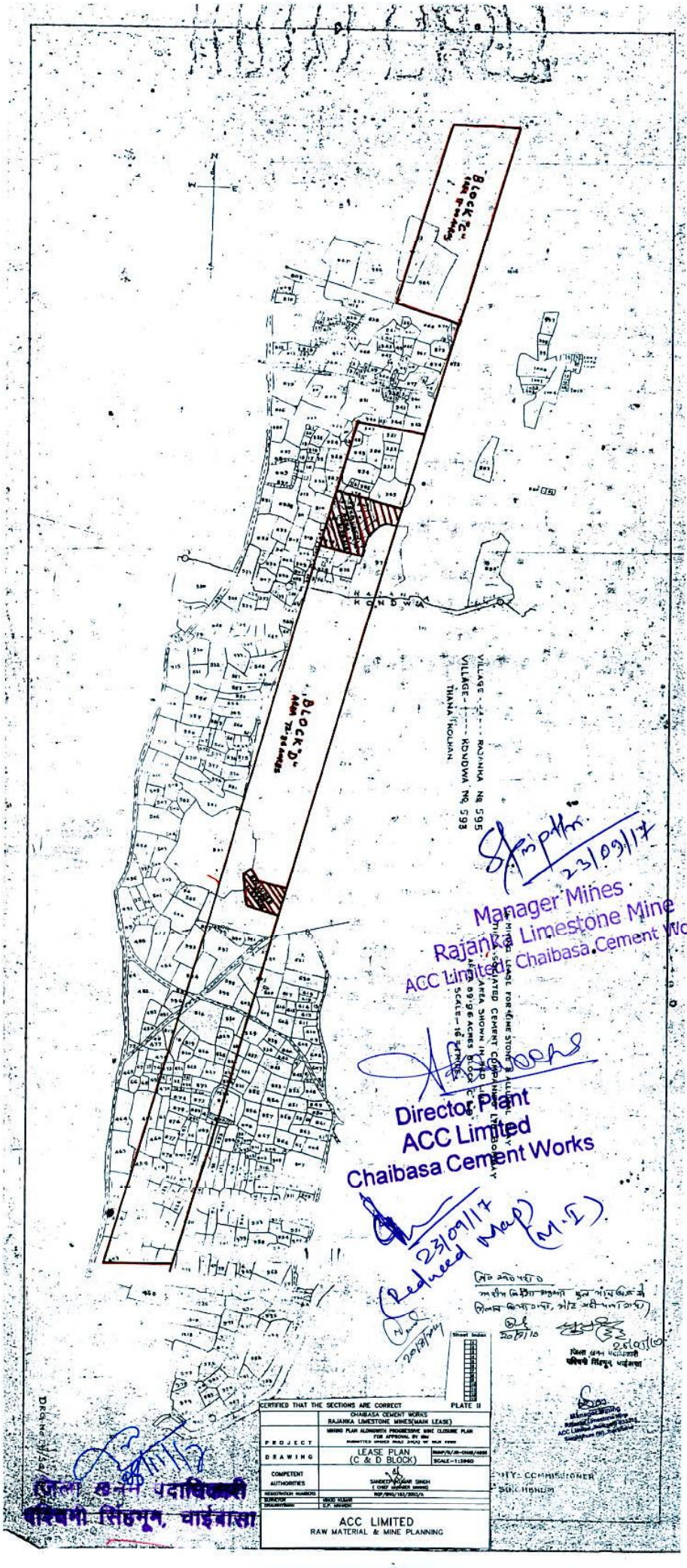
Manager Mines
Limestone Mine
Cement Works
ACC Limited

Director Plant
ACC Limited
Chaibasa Cement Works

जिला उपायुक्त एवं पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा

DEPUTY COMMISSIONER OF SINGHBHUM


कार्यालय
पo सिंहभूम, चाईबासा

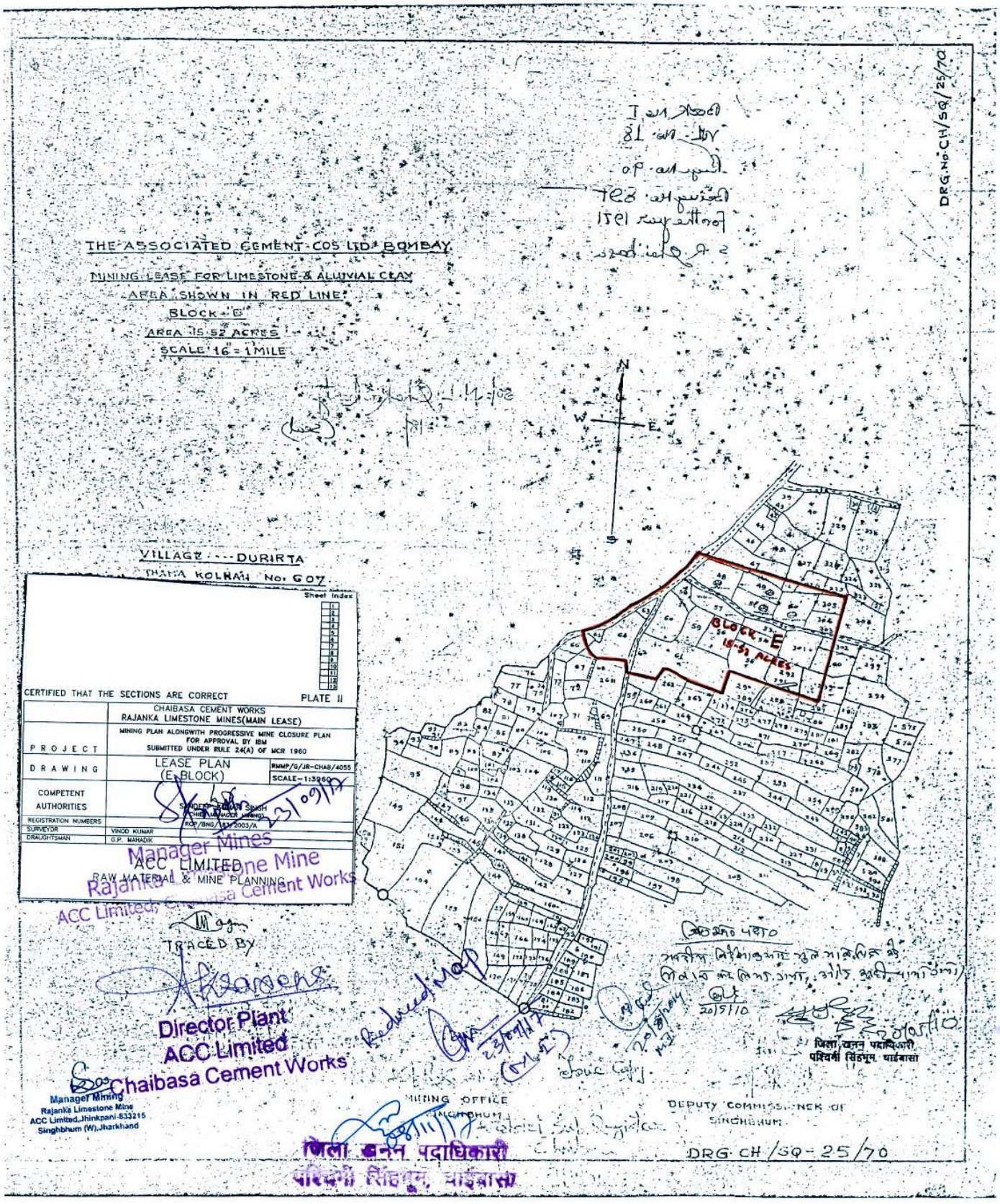


Manager Mines
Rajanka Limestone Mine
ACC Limited, Chaibasa Cement Works

Director Plant
ACC Limited
Chaibasa Cement Works

(Reduced Map)

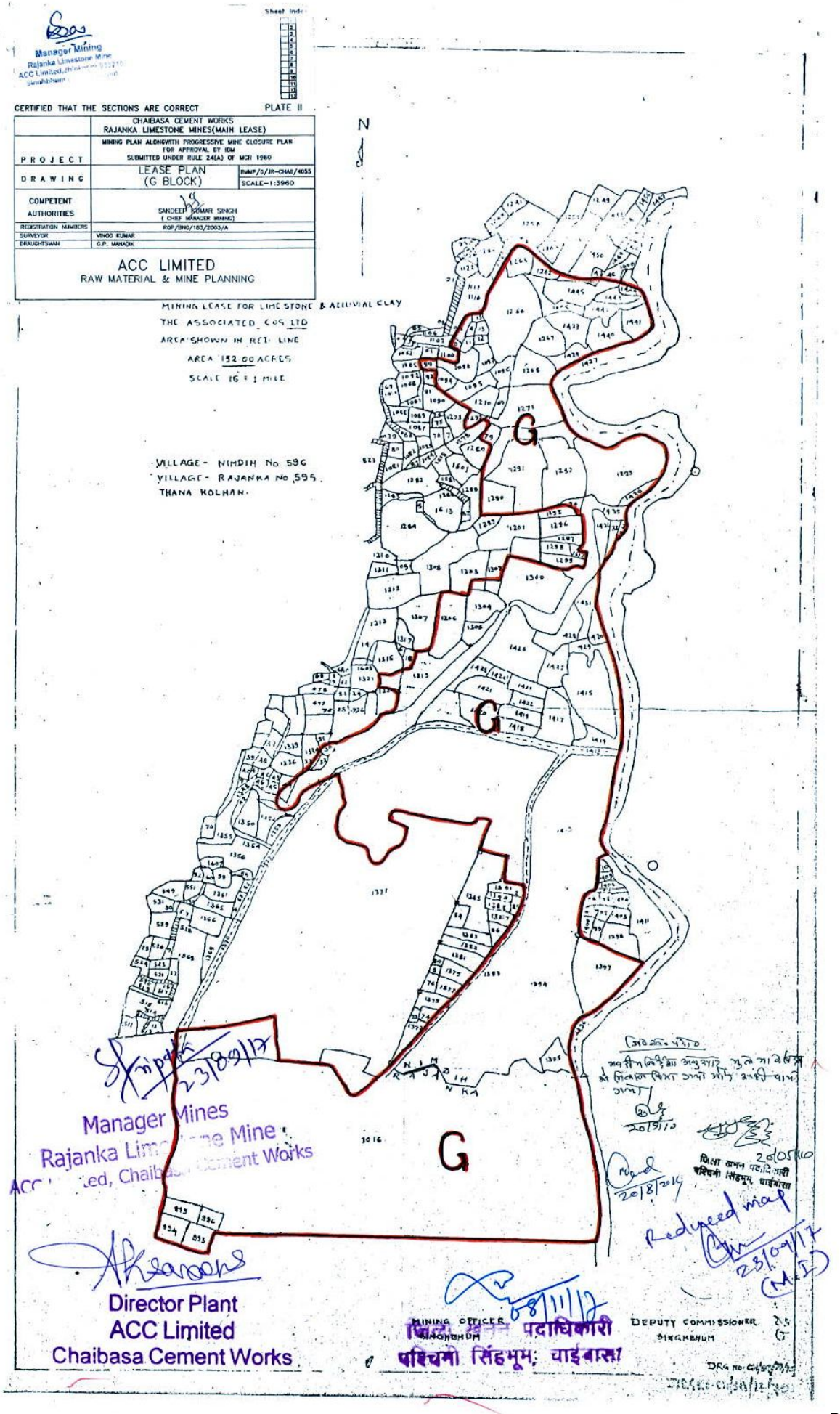
जिला खनन पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा


DRG.No.CH/SG/25/70
THE ASSOCIATED CEMENT COS LTD BOMBAY
MINING LEASE FOR LIMESTONE & ALUVIAL CLAY
AREA SHOWN IN RED LINE
BLOCK 'E'
AREA IS 52 ACRES
SCALE 16" = 1 MILE
N
W
E
S
VILLAGE ---DURIRTA
THANA KOLHAN No. 607
BLOCK E
18-31 ACRES
Sheet Index
CERTIFIED THAT THE SECTIONS ARE CORRECT
PLATE II
CHAIBASA CEMENT WORKS
RAJANKA LIMESTONE MINES(MAIN LEASE)
PROJECT
MINING PLAN ALONGWITH PROGRESSIVE MINE CLOSURE PLAN FOR APPROVAL BY IBM SUBMITTED UNDER RULE 24(A) OF MCR 1960
DRAWING
LEASE PLAN (E BLOCK)
RMP/G/JR-CHAB/4055
SCALE- 1:3960
COMPETENT AUTHORITIES
SARDER BIJAN SINGH (CHIEF MANAGER MINING) ROP/BNG/181/2003/A
REGISTRATION NUMBERS
SURVEYOR VINOD KUMAR
DRAUGHTSMAN G.P. MAHADIK
ACC LIMITED
RAW MATERIAL & MINE PLANNING
TRACED BY
Manager Mines
Rajanka Limestone Mine
ACC Limited, Chaibasa Cement Works
Director Plant
ACC Limited
Chaibasa Cement Works
Reduced Map
MINING OFFICE
SINGHBHUM
DEPUTY COMMISSIONER OF
SINGHBHUM
जिला खनन पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा
DRG. CH/SG-25/70

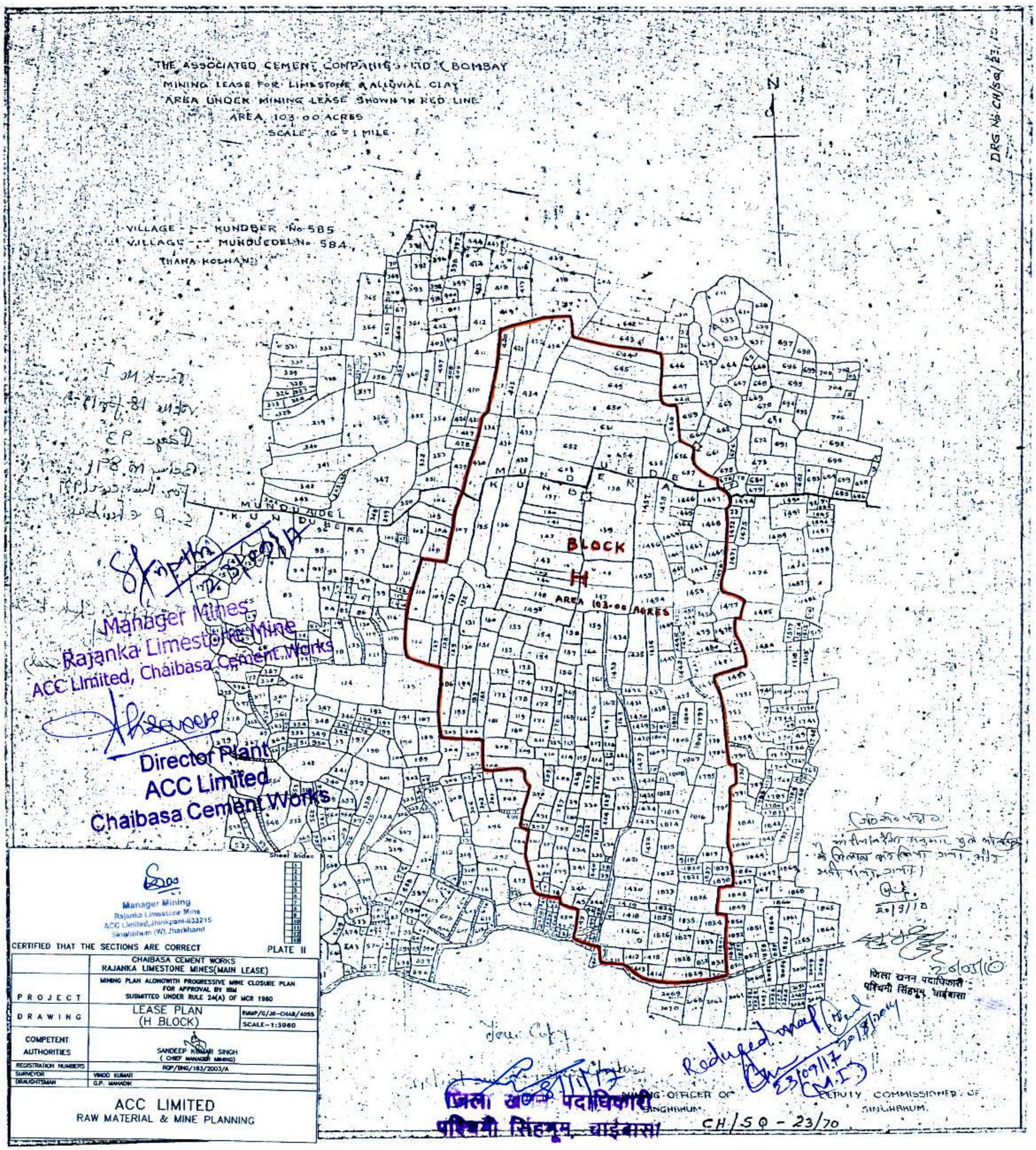
31/09/17

Manager Mines
Rajanka Limestone Mine
ACC Limited, Chaibasa Cement Works

Director Plant
ACC Limited
Chaibasa Cement Works


Manager Mining
Rajanka Limestone Mine
ACC Limited, Chaibasa
Singhbhum
Sheet Index
CERTIFIED THAT THE SECTIONS ARE CORRECT
PLATE II
CHAIBASA CEMENT WORKS
RAJANKA LIMESTONE MINES(MAIN LEASE)
PROJECT
MINING PLAN ALONGWITH PROGRESSIVE MINE CLOSURE PLAN FOR APPROVAL BY IBM SUBMITTED UNDER RULE 24(A) OF MCR 1960
DRAWING
LEASE PLAN (G BLOCK)
RMP/G/JR-CHA0/4055
SCALE-1:3960
COMPETENT AUTHORITIES
SANDEEP KUMAR SINGH (CHIEF MANAGER MINING)
REGISTRATION NUMBERS
RQP/BNG/183/2003/A
SURVEYOR
VINOD KUMAR
DRAUGHTSMAN
G.P. MAHADIK
ACC LIMITED
RAW MATERIAL & MINE PLANNING
MINING LEASE FOR LIME STONE & ALLUVIAL CLAY
THE ASSOCIATED C.O.S. LTD
AREA SHOWN IN RED LINE
AREA 152.00 ACRES
SCALE 16" = 1 MILE
VILLAGE - NIMDIH No. 596
VILLAGE - RAJANKA No. 595.
THANA KOLHAN.
N
G
G
G
Manager Mines
Rajanka Limestone Mine
ACC Limited, Chaibasa Cement Works
Director Plant
ACC Limited
Chaibasa Cement Works
MINING OFFICER
SINGHBHUM
DEPUTY COMMISSIONER
SINGHBHUM
पश्चिमी सिंहभूम, चाईबासा
Redyeed map


निबंधक का कार्यालय


THE ASSOCIATED CEMENT COMPANIES LTD BOMBAY
MINING LEASE FOR LIMESTONE & ALLUVIAL CLAY
AREA UNDER MINING LEASE SHOWN IN RED LINE
AREA 103·00 ACRES
SCALE - 16" = 1 MILE
VILLAGE - KUNDBER No 585
VILLAGE - MUNDUEDEL No. 584
THANA KOLHAN
N
DRG No. CH/SQ/23/70
MUNDUEDEL
KUNDBERA
BLOCK
H
AREA 103·00 ACRES
Manager Mines
Rajanka Limestone Mine
ACC Limited, Chaibasa Cement Works
Director Plant
ACC Limited
Chaibasa Cement Works
Sheet Index
Manager Mining
Rajanka Limestone Mine
ACC Limited, Jhinkpani-833215
Singhbhum (W), Jharkhand
CERTIFIED THAT THE SECTIONS ARE CORRECT
PLATE II
CHAIBASA CEMENT WORKS
RAJANKA LIMESTONE MINES(MAIN LEASE)
PROJECT
MINING PLAN ALONGWITH PROGRESSIVE MINE CLOSURE PLAN FOR APPROVAL BY IBM SUBMITTED UNDER RULE 24(A) OF MCR 1960
DRAWING
LEASE PLAN (H BLOCK)
RMMP/G/JR-CHAB/4055
SCALE-1:3960
COMPETENT AUTHORITIES
SANDEEP KUMAR SINGH
(CHIEF MANAGER MINING)
REGISTRATION NUMBERS
RQP/BNG/183/2003/A
SURVEYOR
VINOD KUMAR
DRAUGHTSMAN
G.P. MAHADIK
ACC LIMITED
RAW MATERIAL & MINE PLANNING
MINING OFFICER OF SINGHBHUM
DEPUTY COMMISSIONER OF SINGHBHUM
CH/SQ - 23/70
जिला खनन पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा
Reduced map
23/09/17


Manager Mines
Rajanka Limestone Mine
ACC Limited, Chaibasa Cement Works
Director Plant
ACC Limited
Chaibasa Cement Works
Reduced map
ACC LIMITED


जिला खनन निबंधक का कार्यालय
पो. सिंहभूम, चाईबासा

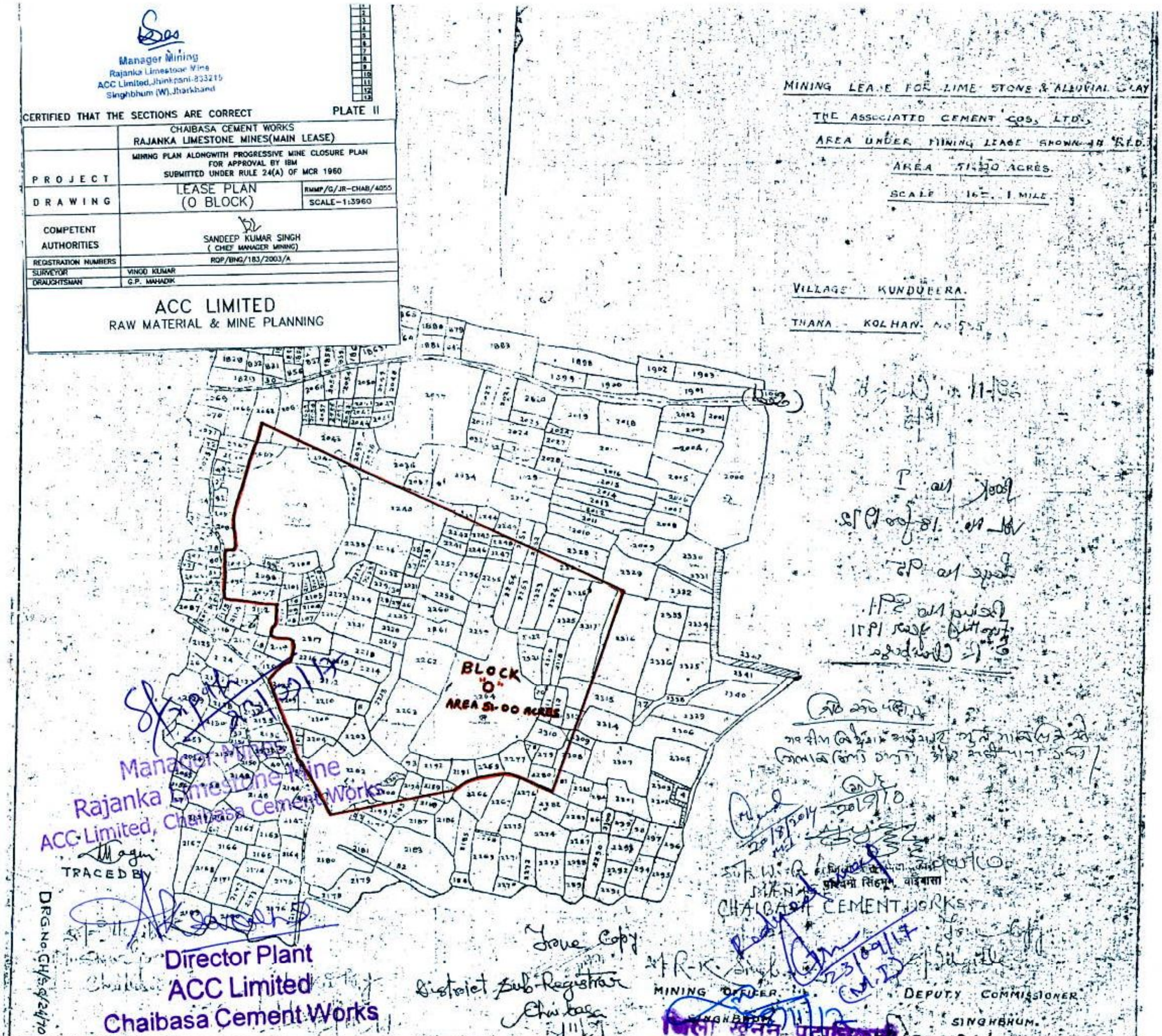
Manager Mining
Rajanka Limestone Mine
ACC Limited, Jhinkpani-833215
Singhbhum (W), Jharkhand

CERTIFIED THAT THE SECTIONS ARE CORRECT

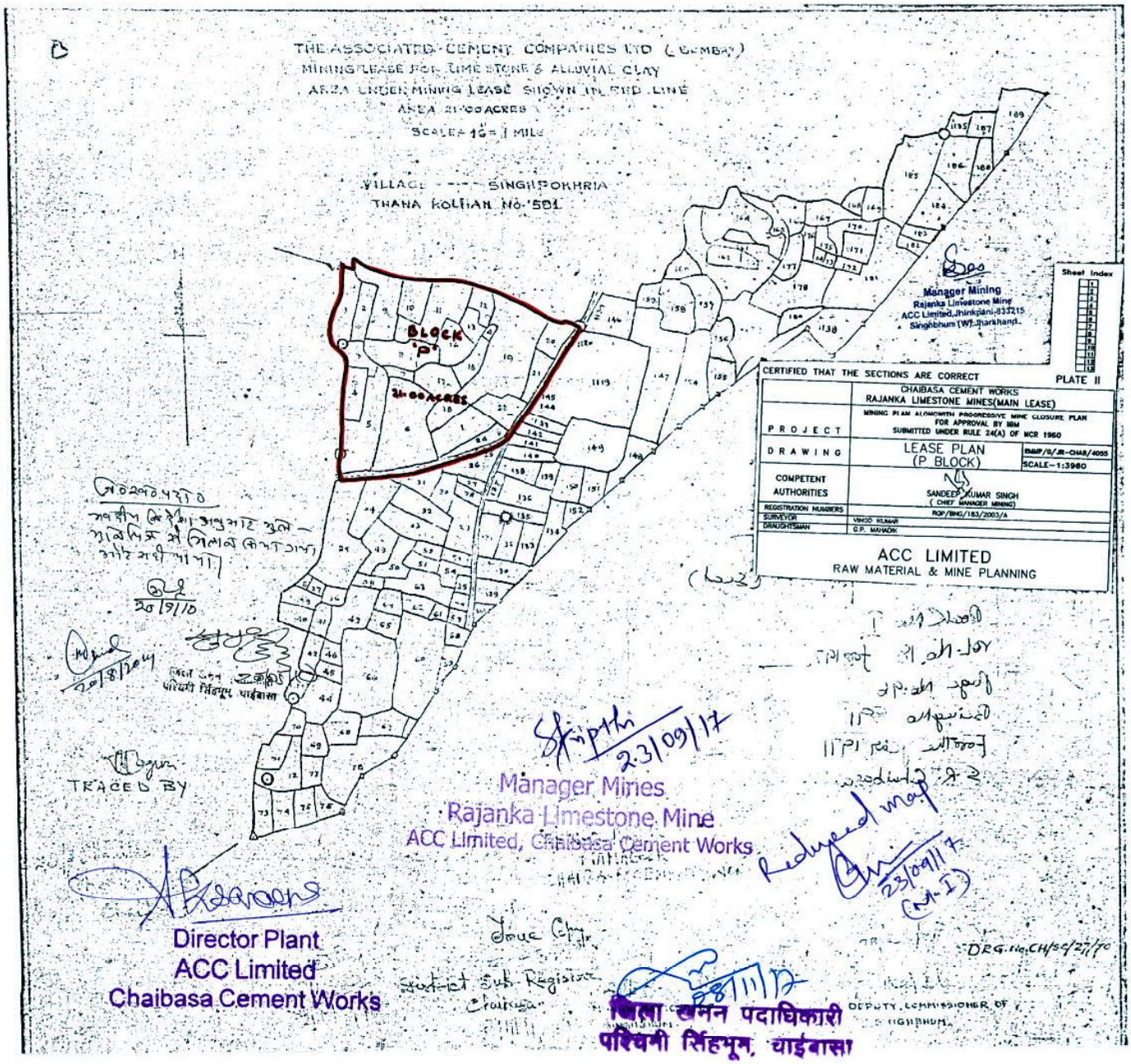
PLATE II

	CHAIBASA CEMENT WORKS RAJANKA LIMESTONE MINES(MAIN LEASE)
PROJECT	MINING PLAN ALONGWITH PROGRESSIVE MINE CLOSURE PLAN FOR APPROVAL BY IBM SUBMITTED UNDER RULE 24(A) OF MCR 1960
DRAWING	LEASE PLAN (O BLOCK) — RMMP/G/JR-CHAB/4055 — SCALE-1:3960
COMPETENT AUTHORITIES	SANDEEP KUMAR SINGH (CHIEF MANAGER MINING)
REGISTRATION NUMBERS	RQP/BNG/183/2003/A
SURVEYOR	VINOD KUMAR
DRAUGHTSMAN	G.P. MAHADIK

ACC LIMITED
RAW MATERIAL & MINE PLANNING



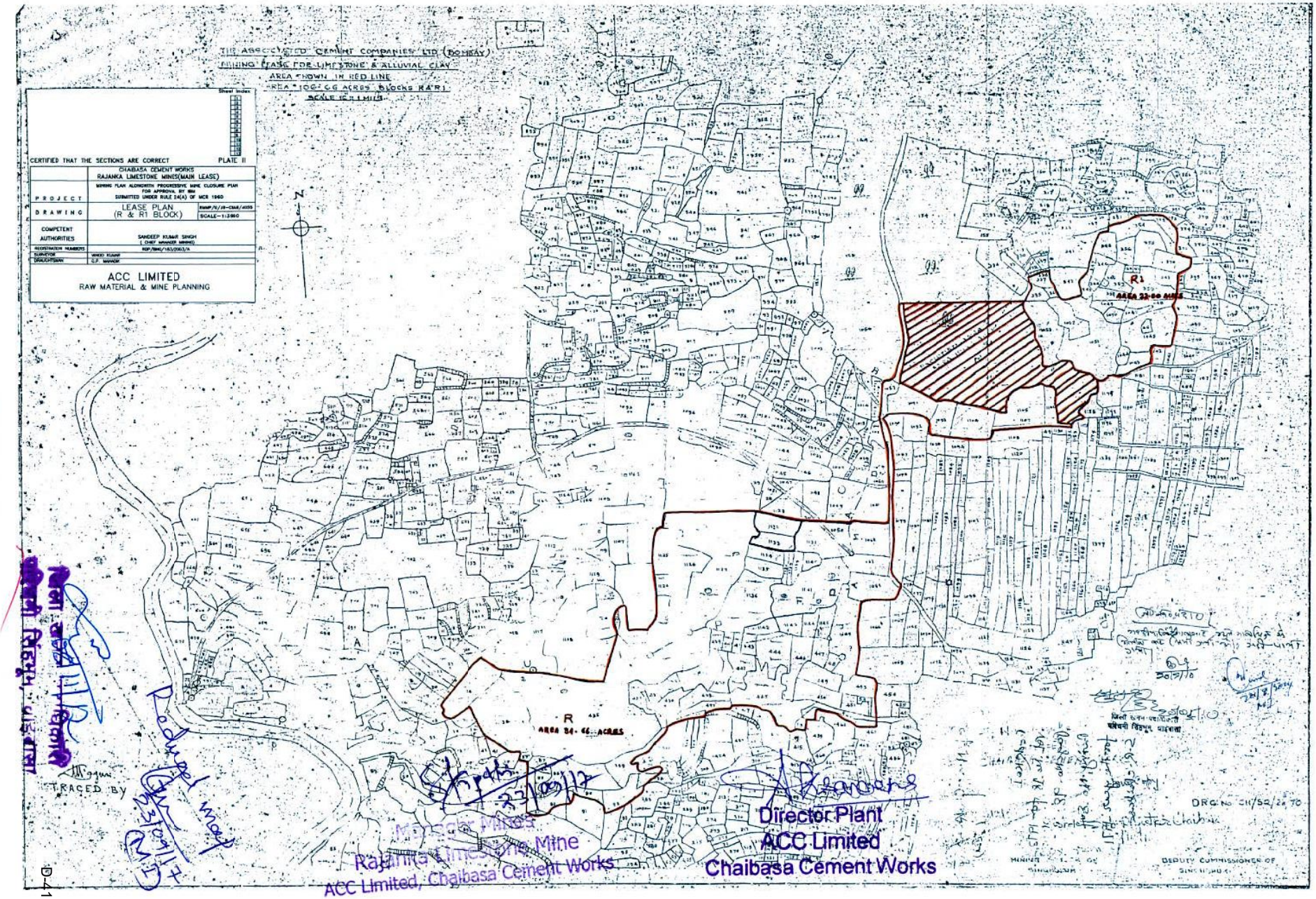

निबंधक का कार्यालय


THE ASSOCIATED CEMENT COMPANIES LTD (BOMBAY)
MINING LEASE FOR LIME STONE & ALLUVIAL CLAY
AREA UNDER MINING LEASE SHOWN IN RED LINE
AREA 21-00 ACRES
SCALE 16" = 1 MILE
VILLAGE SINGHPOKHRIA
THANA KOLHAN No. 501
BLOCK "P"
21.00 ACRES
Manager Mining
Rajanka Limestone Mine
ACC Limited, Jhinkpani-833215
Singhbhum (W), Jharkhand.
Sheet Index
CERTIFIED THAT THE SECTIONS ARE CORRECT
PLATE II
CHAIBASA CEMENT WORKS
RAJANKA LIMESTONE MINES(MAIN LEASE)
PROJECT
MINING PLAN ALONGWITH PROGRESSIVE MINE CLOSURE PLAN FOR APPROVAL BY IBM SUBMITTED UNDER RULE 24(A) OF MCR 1960
DRAWING
LEASE PLAN (P BLOCK)
RMP/G/JR-CHAB/4055
SCALE-1:3960
COMPETENT AUTHORITIES
SANDEEP KUMAR SINGH (CHIEF MANAGER MINING)
REGISTRATION NUMBERS
ROP/BNG/183/2003/A
SURVEYOR
VINOD KUMAR
DRAUGHTSMAN
O.P. MAHAOR
ACC LIMITED
RAW MATERIAL & MINE PLANNING
TRACED BY
Manager Mines
Rajanka Limestone Mine
ACC Limited, Chaibasa Cement Works
Reduced map
Director Plant
ACC Limited
Chaibasa Cement Works
DRG.No.CH/SC/21/10
DEPUTY COMMISSIONER OF SINGHBHUM
जिला खनन पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा


निबंधक का कार्यालय
रा० सिंहभूम, चाईबासा


THE ASSOCIATED CEMENT COMPANIES LTD (BOMBAY)
MINING LEASE FOR LIME STONE AND ALLUVIAL CLAY
AREA UNDER MINING LEASE IS SHOWN IN RED LINE
AREA 162.24 ACRES
SCALE 16" 1 MILE
VILLAGE - PURNA CHAIBASA
THANA KOLHAN NO 639
N
CERTIFIED THAT THE SECTIONS ARE CORRECT
PLATE II
CHAIBASA CEMENT WORKS
RAJANKA LIMESTONE MINES(MAIN LEASE)
MINING PLAN ALONGWITH PROGRESSIVE MINE CLOSURE PLAN FOR APPROVAL BY IBM SUBMITTED UNDER RULE 24(A) OF MCR 1960
PROJECT
DRAWING
LEASE PLAN (Q BLOCK)
SCALE-1:3960
COMPETENT AUTHORITIES
SANDEEP KUMAR SINGH (CHIEF MANAGER MINING)
REGISTRATION NUMBERS
ACC LIMITED
RAW MATERIAL & MINE PLANNING
BLOCK Q
Manager Mines
Rajanka Limestone Mine
ACC Limited, Chaibasa Cement Works
Director Plant
ACC Limited
Chaibasa Cement Works
TRACED BY
जिला खनन पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा


नियंत्रक का कार्यालय


THE ASSOCIATED CEMENT COMPANIES LTD (BOMBAY)
MINING LEASE FOR LIMESTONE & ALLUVIAL CLAY
AREA SHOWN IN RED LINE
AREA 106-66 ACRES BLOCKS R & R1
SCALE 16"=1 MILE
Sheet Index
CERTIFIED THAT THE SECTIONS ARE CORRECT
PLATE II
CHAIBASA CEMENT WORKS
RAJANKA LIMESTONE MINES(MAIN LEASE)
PROJECT
MINING PLAN ALONGWITH PROGRESSIVE MINE CLOSURE PLAN FOR APPROVAL BY IBM SUBMITTED UNDER RULE 24(A) OF MCR 1960
DRAWING
LEASE PLAN (R & R1 BLOCK)
SCALE-1:3960
COMPETENT AUTHORITIES
SANDEEP KUMAR SINGH
REGISTRATION NUMBERS
SURVEYOR
DRAUGHTSMAN
ACC LIMITED
RAW MATERIAL & MINE PLANNING
N
R1
AREA 32-00 ACRES
R
AREA 34-66 ACRES
TRACED BY
DRG NO CH/SC/26 70
DEPUTY COMMISSIONER OF
Director Plant
ACC Limited
Chaibasa Cement Works
Manager Mines
Rajanka Limestone Mine
ACC Limited, Chaibasa Cement Works

D-41

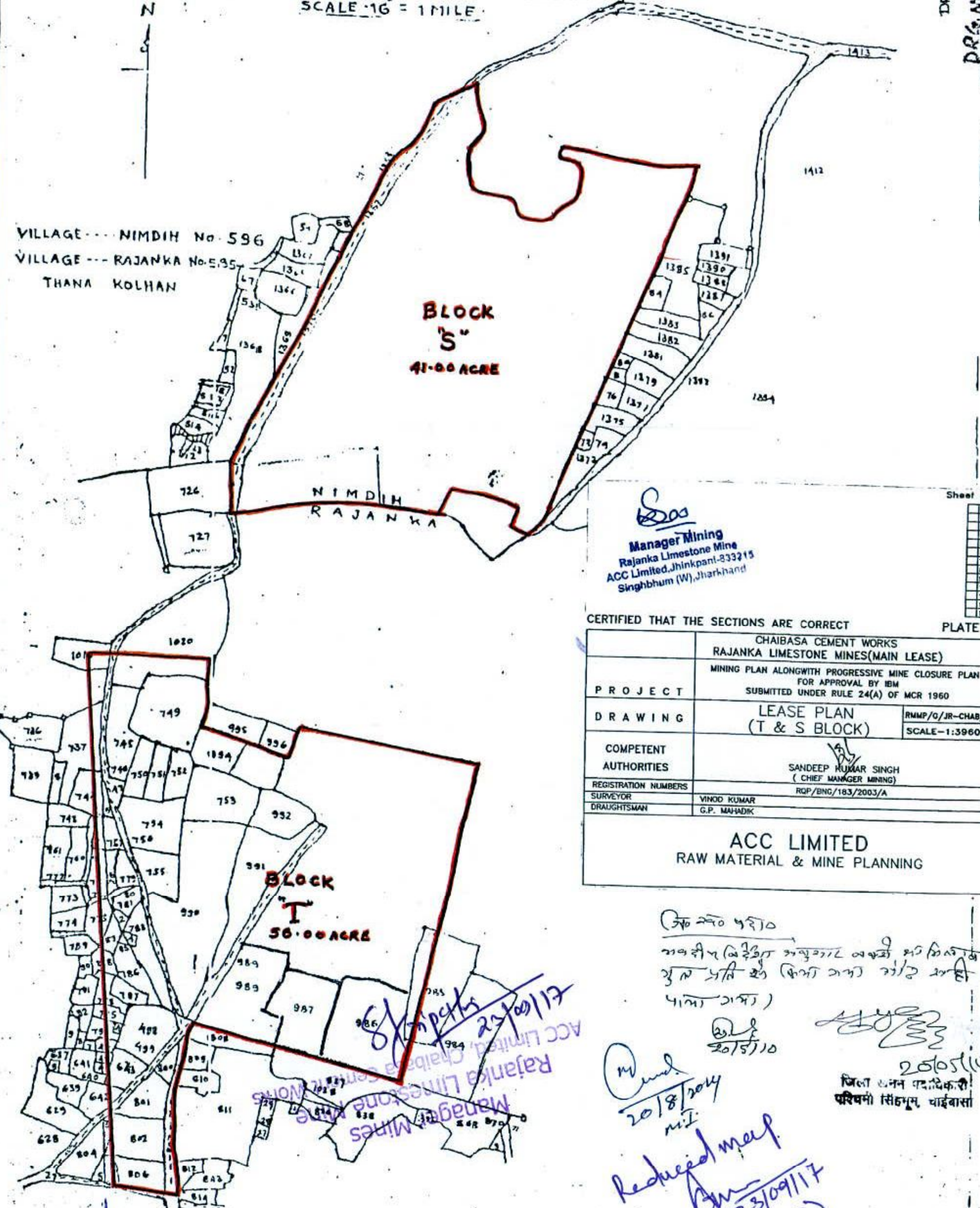

सेवधक का कार्यालय
पo सिंहभूम, चाईबासा

2b
A b

DRG No CH/SS/20/70

DRG No CH/5S-20/70

MINING LEASE FOR LIMESTONE & ALLUVIAL CLAY
THE ASSOCIATED CEMENT COS LTD
AREA SHOWN IN RED LINE
AREA 97·00 ACRES BLOCKS S & T
SCALE 16" = 1 MILE



Manager Mining
Rajanka Limestone Mine
ACC Limited, Jhinkpani-833215
Singhbhum (W), Jharkhand

Sheet Index: 1 2 3 4 5 6 7 8 9 10 11 12 13

CERTIFIED THAT THE SECTIONS ARE CORRECT

PLATE II

	CHAIBASA CEMENT WORKS RAJANKA LIMESTONE MINES(MAIN LEASE)	
PROJECT	MINING PLAN ALONGWITH PROGRESSIVE MINE CLOSURE PLAN FOR APPROVAL BY IBM SUBMITTED UNDER RULE 24(A) OF MCR 1960	
DRAWING	LEASE PLAN (T & S BLOCK)	RMMP/G/JR-CHAB/4055 SCALE-1:3960
COMPETENT AUTHORITIES	SANDEEP KUMAR SINGH (CHIEF MANAGER MINING)	
REGISTRATION NUMBERS	RQP/BNG/183/2003/A	
SURVEYOR	VINOD KUMAR	
DRAUGHTSMAN	G.P. MAHADIK	

ACC LIMITED
RAW MATERIAL & MINE PLANNING

20/5/10

20/05/10
जिला खनन पदाधिकारी
पश्चिमी सिंहभूम, चाईबासा

20/8/2014
M.I

23/09/17

ACC Limited, Chaibasa Cement Works
Rajanka Limestone Mine
Manager Mines

Reduced map
23/09/17
(M.I)

Director Plant
ACC Limited
Chaibasa Cement Works

28/11/17
खनन पदाधिकारी
MINING OFFICER
CHAIBASA
पश्चिमी सिंहभूम, चाईबासा

DEPUTY COMMISSIONER
OF SINGHBHUM

जिला अवर निबंधन कार्यालय प0 सिंहभूम, चाईबासा

पत्रांक 307 / चाईबासा, दिनांक 18/09/17

प्रेषक,

जिला अवर निबंधक
प0 सिंहभूम, चाईबासा।

सेवा में,

जिला खनन पदाधिकारी
चाईबासा।

विषय :– पश्चिमी सिंहभूम जिलान्तर्गत मेसर्स ए0 सी0 सी0 लिमिटेड द्वारा धारित चूना पत्थर खनन पट्टा मौजा कोन्दवा, राजंका एवं अन्य के रकवा 598.88 हे0 क्षेत्र के अनुपूरक पट्टा संविदा के निबंधन हेतु मुद्रांक एवं निबंधन शुल्क के गणना के संबंध में।

प्रसंग :– भवदीय के पत्रांक 1997 / एम0 दिनांक 14.09.2017।

महाशय,

उपर्युक्त प्रसांगिक विषय के संदर्भ में कहना है कि पश्चिमी सिंहभूम जिलान्तर्गत मेसर्स ए0सी0सी0 लिमिटेड द्वारा धारित चूना पत्थर खनन पट्टा मौजा – कोन्दवा, राजंका एवं अन्य के रकवा 598.88 क्षेत्र के अनुपूरक पट्टा संविद का निबंधन हेतु पत्र में अंकित आँकडो की गणनानुसार कुल 5970610.00 (उनसठ लाख सत्तर हजार छः सौ दस रूपैये) मांत्र की मुद्रांक शुल्क वसुलनीय होगी। चूँकि पत्र के साथ दस्तावेज की मूल प्रति संलग्न नहीं थी, जिस कारण से राशि में अन्तर हो सकता है।

अतः सूचनार्थ एवं आवश्यक कार्यार्थ प्रेषित।

अनु0 :– यथोक्त।

विश्वासभाजन

18/9/2017
जिला अवर निबंधक
प0 सिंहभूम, चाईबासा

ज्ञापांक 307 / चाईबासा दिनांक 18/09/17

प्रतिलिपि :– मेसर्स ए0सी0सी0 लिमिटेड, झींकपानी, चाईबासा को सूचनार्थ एवं आवश्यक कार्यवाही हेतु सुचनार्थ प्रेषित।

18/9/2017
जिला अवर निबंधक
प0 सिंहभूम, चाईबासा

जिला खनन् कार्यालय, चाईबासा, (प०) सिंहभूम।

पत्रांक 1997 / एम०
दिनांक 14/09/2017

प्रेषक,

जिला खनन् पदाधिकारी,
चाईबासा।

सेवा में,

जिला अवर निबंधक,
पश्चिमी सिंहभूम, चाईबासा।

विषयः– पश्चिमी सिंहभूम जिलान्तर्गत मेसर्स **ए०सी०सी० लिमिटेड** द्वारा धारित चूना–पत्थर खनन पट्टा मौजा कोन्दवा, राजंका एवं अन्य के रकबा 598.88 हे० क्षेत्र के अनुपूरक पट्टा संविद के निबंधन हेतु मुद्रांक एवं निबंधन शुल्क के गणना के संबंध में।

प्रसंग – कार्यालय ज्ञापांक 1263 / एम०, दिनांक 16.08.2017, 1302 / एम०, दिनांक– 29.08.2017 एवं ए० सी०सी० लि० का पत्र क्रमांक ACC/QRY/DMO-352/A, Date- 13-09-2017.

महाशय,

उपर्युक्त विषयक सूचित करना है कि पश्चिमी सिंहभूम जिलान्तर्गत मेसर्स ए०सी०सी० लिमिटेड द्वारा धारित चूना–पत्थर खनन पट्टा मौजा कोन्दवा, राजंका एवं अन्य के रकबा 598.88 हे० क्षेत्र के अनुपूरक पट्टा संविद का निबंधन किया जाना है। खनन पट्टा संविद के निष्पादन / निबंधन हेतु मुद्रांक एवं निबंधन शुल्क का निर्धारण करना है। विवरणी निम्न प्रकार हैः–

1.	मौजा	–	कोन्दवा, राजंका एवं अन्य
2.	रकबा	–	1479.90 एकड़ (598.88 हे०)
3.	खनिज	–	चूना–पत्थर
4.	अवधि	–	01.01.1991 से 31.03.2030
5.	प्रतिभूति राशि	–	10,000 / –रू०
6.	स्टाम्प ड्यूटी के लिए वार्षित प्रत्याशित स्वामिस्व की राशि	–	14,89,57,962 / –रू०
7.	वार्षिक भूतल लगान	–	36998 / –रू०, (598.88 हे० क्षेत्र के लिए)

अतः निबंधन हेतु मुद्रांक एंव निबंधन शुल्क का निर्धारण कर अधोहस्ताक्षरी को सूचित करने की कृपा की जाय।

सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।

विश्वासभाजन,

जिला खनन् पदाधिकारी,
प० सिंहभूम, चाईबासा।

आधार

भारत सरकार
Unique Identification Authority of India
Government of India

नामांकन क्रम / Enrollment No.: 1207/04314/02615

To
अरुण कुमार सक्सेना
Arun Kumar Saxena
S/O: Late Shyam Murari Saxena
Director Bungalow ACC Colony
ACC Colony Jhinkpani
Jhinkpani
Jhinkpani
Jhinkpani West Singhbhum
Jharkhand 833215
9771423600

23/04/2013

14091323

MN140913233FT

आपका आधार क्रमांक / Your Aadhaar No. :

9230 0188 1521

आधार - आम आदमी का अधिकार

भारत सरकार
Government of India

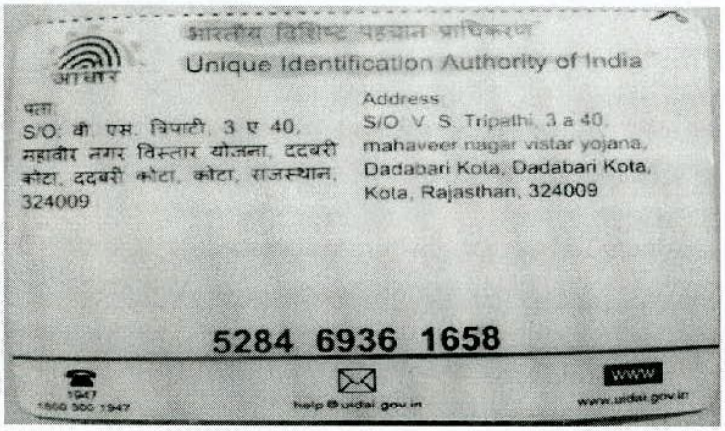
अरुण कुमार सक्सेना
Arun Kumar Saxena
जन्म वर्ष / Year of Birth : 1959
पुरुष / Male

9230 0188 1521

आधार - आम आदमी का अधिकार

Director Plant
ACC Limited
Chaibasa Cement Works

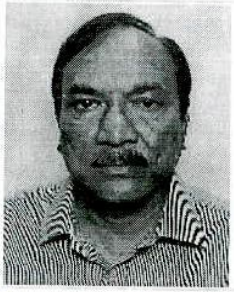

भारत सरकार
Government of India
संजीव त्रिपाठी
Sanjeev Tripathi
जन्म तिथि / DOB : 13/01/1980
पुरुष / Male
5284 6936 1658
आधार - आम आदमी का अधिकार


भारतीय विशिष्ट पहचान प्राधिकरण
Unique Identification Authority of India
पता:
S/O: वी. एस. त्रिपाठी, 3 ए 40,
महावीर नगर विस्तार योजना, ददबरी
कोटा, ददबरी कोटा, कोटा, राजस्थान,
324009
Address:
S/O: V. S. Tripathi, 3 a 40,
mahaveer nagar vistar yojana,
Dadabari Kota, Dadabari Kota,
Kota, Rajasthan, 324009
5284 6936 1658
1947
1800 300 1947
help@uidai.gov.in
www.uidai.gov.in

निबंधन विभाग, झारखंड
Chaibasa

Token No.2 Token Date: 2017-11-09
Party Name: Director Plant A.C.C Ltd. Rep. Dr. Arun Kumar Saxena
Father/Husband Name:Late Shyam Murari Saxena
(LESSEE)
At- Acc Colony Jhinkpani, Po - Jhinkpani, Dist - West Singhbhum

Deed Type: Lease Deed

Party Details	
Name :	Arun Kumar Saxena
Gender :	M
DOB :	15-04-1959
C/o :	S/O: Late Shyam Murari Saxena
District :	West Singhbhum
House/Building No. :	Director Bungalow
Locality :	ACC Colony Jhinkpani
Pincode :	833215
Post Office :	
State :	Jharkhand
Village/Town/City :	Jhinkpani
Aadhaar No :	xxxxxxxx1521
Photo :	

Registering Officer

Party Signature

Operator's Signature

निबंधन विभाग, झारखंड
Chaibasa

Token No.2 Token Date: 2017-11-09
Party Name: Sanjeev Tripathi
Father/Husband Name:V.S. Tripathi
(Identifier)
At - 3 A 40 Mahaveer Nagar Vistar Yojana Dadabari Kota Rajasthan 324009

Deed Type: Lease Deed

Party Details	
Name :	Sanjeev Tripathi
Gender :	M
DOB :	13-01-1980
C/o :	S/O: V. S. Tripathi
District :	Kota
House/Building No. :	3 a 40
Locality :	mahaveer nagar vistar yojana
Pincode :	324009
Post Office :	
State :	Rajasthan
Village/Town/City :	Dadabari Kota
Aadhaar No :	xxxxxxxx1658
Photo :	

Registering Officer

Party Signature

Operator's Signature


जिला अवर निबंधक का कार्यालय

Issue Token 11:53:48 AM

Presenter/Executant's Name	Director Plant Acc. Ltd. Rep. Dr. Ar
Token For	Registry
Payment Mode.	Online
Online Application ID (If Any)	93272 Verify On-line Payment Verify eGras Payment **View Deed**
e-Stamp Certificate No. (If Any)	Verify

Issue Token

Payment is done of Rs. 4481269.00 on 04/11/2017 with CIN - 10002162017110400860 & GRN No. - 1700436750 & Status - SUCCESS

Maximum Token Issue Time : 2 PM

Issue Token 11:54:37 AM

Presenter/Executant's Name	Director Plant Acc. Ltd. Rep. Dr. Ar
Token For	Registry
Payment Mode	Online
Online Application ID (If Any)	93272 Verify On-line Payment Verify eGras Payment **View Deed**
e-Stamp Certificate No. (If Any)	IN-JH07234872354860P Verify

Issue Token

IN-JH07234872354860P:

Stamp Details For Verification. Please click issue after verification

CertificateNo:	**IN-JH07234872354860P**
CertificateIssuedDate:	**23-Sep-2017 11:18 AM**
AccountReference:	**NONACC (FI)/ jhdopjc07/ CHAIBASA/ JH-WS**
UniqueDocReference:	**SUBIN-JHJHDOPJC0710377685993402P**
Purchasedby:	**ACC LIMITED**
DescriptionofDocument:	**Article 35 Lease**
PropertyDescription:	**EXECUTION AND REG OF SUPPLEMENTARY LEASE DEED FOR EXTENSION OF MINING LEASE (AREA 598.88 Ha)**
ConsiderationPriceRs:	**0**
FirstParty:	**GOVERNOR OF JHARKHAND**
SecondParty:	**ACC LIMITED**
StampDutyPaidBy:	**ACC LIMITED**
StampDutyAmountRs:	**59,70,610**

Maximum Token Issue Time : 2 PM


जिला अवर निबंधक का कार्यालय

निबंधन विभाग, झारखंड
Chaibasa
जांच पर्चा-सह घोषणा प्रपत्र (नियम 114)

Token No: **2** Token Date/Time: **09/11/2017 11:54:04.**

Document Type	**Lease Deed**	Presenter	**Director Plant Acc Ltd. Rep. Dr. Arun Kumar Saxena**		
Presenter' Name & Address				Date of Entry	**09/11/2017**
Stampable Doc. Value	0	DOE		Total Pages	**90**
Document/Transaction Value	**0**	Stamp Value	**5970610**	Book	**I**
Special Type		Serial /Deed No.	/	CNO/PNO	
Remarks / Other Details	**Anchal - Jhinkpani, Mouza - Dondwa, Rajanka Etc. Total Area - 598.88 Hectares.**	Old Serial No.	/		
Property Details:		App. ID	**93272**	e-Stamp Cert. No.	**IN-JH07234872354860P**

Anchal	Th.No.	Wrd/Hlk	Mauza	Kh. No.	Plot No	RegisterII Vol.No.	RegisterII Page No.	Plot Type	Boundary North	Boundary South	Boundary East	Boundary West	H No	ULB	Category	Area	Min. Value

Other Property Details:

Property Type	Th. No.	Wrd	Mauza	Location	Area	Rate	Amount

Party Details:

SN	P Type	Party Name	Father/Husband	Occup.	Relation	Caste	Gender	PAN/F 60	UID	Mobile	Pres. Address	Perm. Address
1	LESSOR	Deputy Commissioner West Singhbhum	Na							xxxxxxxx00	West Singhbhum Chaibasa	West Singhbhum Chaibasa
2	LESSEE	Director Plant A.C.C Ltd. Rep. Dr. Arun Kumar Saxena	Late Shyam Murari Saxena	Service			Male		xxxxxxxx1521	xxxxxxxx00	At- Acc Colony Jhinkpani, Po - Jhinkpani, Dist - West Singhbhum	At- Acc Colony Jhinkpani, Po - Jhinkpani, Dist - West Singhbhum
3	Identifier	Sanjeev Tripathi	V.S. Tripathi	Service			Male		xxxxxxxx1658	xxxxxxxx83	At - 3 A 40 Mahaveer Nagar Vistar Yojana Dadabari Kota Rajasthan 324009	At - 3 A 40 Mahaveer Nagar Vistar Yojana Dadabari Kota Rajasthan 324009

Fee Details:

SN	Description	Amount
1	SP	1,350.00
2	E	2,000.00
3	A1	4,477,919.00
Total		**4,481,269.00**

Holding Details provided by the user has been mutated in the name of -

Disclaimer : I hereby declare that all the contents of uploaded document and the original document are exactly same. And the information provided by me are true to itself.
The details of property's holding number has been verified by me at the time of entry through alert generated by the system. I am satisfied with the verification and hence proceeding further for registration after seeing the alert.

Signature's of Executant & Claimant

उपर्युक्त प्रविष्टिया दस्तावेज मे अंकित तथ्यों के अनुरुप है

9/11/2017

दस्तावेज लेखक का हस्ताक्षर प्रस्तुतकर्ता का हस्ताक्षर ऑप्रेटर का हस्ताक्षर

उपर्युक्त .....ने इस दस्तावेज के निष्पादन को मेरे समक्ष स्वीकार किया

जिसकी


जिला अवर निबंधक का कार्यालय

पहचान संजीव त्रिपाठी. पिता श्री एस० त्रिपाठी.

निवासी महावीर नगर, चाईबासा. पेशा नौकरी. ने की।

11/9/2017

निबंधन पदाधिकारी का हस्ताक्षर


जिला अवर निबंधक का

निबंधन विभाग, झारखंड
चाईबासा

Token No.2 Token Date: 2017-11-09
Serial/Deed No./Year :678/639/2017
Deed Type: Lease Deed

SN	Party Details	Photo	Thumb
1	**Deputy Commissioner West Singhbhum** Father/Husband Name:Na (LESSOR) West Singhbhum Chaibasa		
2	**Director Plant A.C.C Ltd. Rep. Dr. Arun Kumar Saxena** Father/Husband Name:Late Shyam Murari Saxena (LESSEE) At- Acc Colony Jhinkpani, Po - Jhinkpani, Dist - West Singhbhum		
3	**Sanjeev Tripathi** Father/Husband Name:V.S. Tripathi (Identifier) At - 3 A 40 Mahaveer Nagar Vistar Yojana Dadabari Kota Rajasthan 324009		

Book No. I
Volume 53
Page 521 To 610
Deed No 678/639
Year 2017
Date 2017-11-09

Registering Officer

Signature of Operator


जिला अवर निबंधक का कार्यालय
प० सिंहभूम

ANNEXURE-2
EARLIER EC LETTER

No.J.11015/129/2001-IA.II(M)
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan,
C.G.O.Complex, Lodi Road,
New Delhi-110003.

Dated: 18th January 2005

Shri A.Roy Chowdhary,
Vice-President,
Chaibasa Cement Works,
P.O.Jhinkpani- 833215,
Dist. West Singhbhum,
JHARKHAND.

CORRIGENDUM

Sub: Expansion Project of Rajanka Limestone Mine F and F2 Blocks (0.45 MTPA to 2.11 MTPA) located in village Kondwa, Tehsil Dokata, District Chaibasa, West Singbhum, Jharkand of M/s Associated Cement Co. Ltd. –reg

Sir,

With reference to this Ministry's earlier letter dated 28.12.2004 on the above subject, the following corrections may be noted:

(i) In the subject heading "Rajkanta" be read as "Rajanka".

(ii) In the preamble sentence "Mining will be confined to 65.20 ha" be replaced with "Of the total lease of 145.37 ha, area to be excavated is 65.20 ha, 0.50 ha is for topsoil storage, 10.45 ha is for OB dumps, 1.50 ha is for infrastructure, 3.30 ha is for roads, 0.50 ha is for railways, 27.20 ha is for greenbelt, and 36.72 ha is open area."

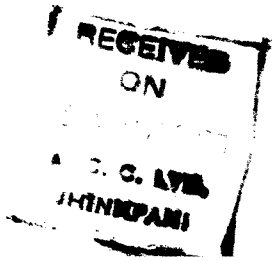
(iii) In Specific Condition A (ix), "A and D Blocks" be replaced with "A, G and S Blocks".

All other conditions remain the same.

(Dr.T.Chandini)
Additional Director

Copy to:

1. Secretary, Department of Environment & Forests, Government of Jharkand, Ranchi.
2. Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (Eastern Zone), Eastern Zonal office, A/3 Chandrashekarpur, Bhubaneshwar – 7510123.
3. Department of Mines & Geology, Government of Jharkand, Engineering Hostel, 2nd Floor, Gol Chakker, Dhurwa, Ranchi- 02.
4. Office of the Chief Wildlife Warden, Government of Jharkand, Ranchi.
5. Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi-110032.
6. Chairman, Jharkand State Pollution Control Board, T.A. Building, HEC Complex, P.O.Dhurwa,Ranchi.
7. Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
8. The Controller of Mines, Indian Bureau of Mines, 'Indira Bhawan', Civil Lines, NAGPUR-440 001.



9. District Collector, West Singbhum District, Government of Jharkand.
10. Chairman, Central Ground Water Authority, A-3 W3 Curzon Road Barracks, Kasturba Gandhi Marg, New Delhi.
11. Director, Project Elephant, Ministry of Environment and Forests, Paryavaran Bhawan, New Delhi.
12. E.I. Division, Ministry of Environment & Forests, New Delhi.
13. Guard File. 14. Monitoring File. 15. Record File.

No.J.11015/129/2001-IA.II(M)
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan,
C.G.O.Complex, Lodi Road,
New Delhi-110003.

Dated: 28th December 2004

To
Shri A.Roy Chowdhary,
Vice-President,
Chaibasa Cement Works,
P.O.Jhinkpani- 833215,
Dist. West Singhbhum,
JHARKHAND.

Sub: Expansion Project of Rajkanta Limestone Mine F and F2 Blocks (0.45 MTPA to 2.11 MTPA) located in village Kondwa, Tehsil Dokata, District Chaibasa, West Singbhum, Jharkand of M/s Associated Cement Co. Ltd. –reg

Sir,

This has reference to Department of Mines & Geology, Government of Jharkand's letter No.62/03-1030/M, Ranchi dated 30.07.2003, and your letters dated 29.08.2003, 06.10.2003, and 20.10.2003, in regard to the subject above. The Ministry of Environment and Forests has examined the application. It is noted that the proposal is for mining limestone in a total lease area of **145.37 ha** of which 40.35 ha area is agricultural land, 29.0 is Govt. wasteland and 76.02 ha is cultivable wasteland. There is no forestland involved. No ecologically sensitive area falls within 10 km radius of the mine site. No endangered fauna are found in and around mine site. The proposal is for expansion of total annual production capacity of limestone in F and F2 Blocks from **0.45 million tonnes per annum (MTPA) to 2.11 MTPA.** Mining will be confined to 65.20 ha only. An area of 34.37 ha is to be broken during the remaining life and an area of 63.92 ha will be left undisturbed. The project does not involve displacement of people. Mining is by opencast mechanised method involving blasting and drilling. Entire mineral transportation of 7045 TPD is by tube conveyors to the linked cement unit located at a distance of 2.5 km. The total water requirement is 195 m3/day of which 185 m3/d shall be recycled mine water (pit/sump) and 10m3/d for domestic consumption is to be met from groundwater. Ultimate working depth is 60 m below ground level (bgl). Average water table is 10-15m. Total waste generation over life of the mine is estimated to be about 23.584 million tonnes of which 11.915 MT will be generated during remaining period of mine life and concurrently backfilled. Approval of IBM has been obtained on 23.05.2003. Consent to Establish of the Jharkand State Pollution Control Board has been obtained on 11.01.2003. Public Hearing was held on 26.11.2002. Total life of the mine at the rated capacity is 9 years. Capital cost of the Project is **Rs. 1700 lakhs.**

The Ministry of Environment and Forests hereby accords environmental clearance for the proposed expansion of the above mentioned opencast limestone mine Project from 0.45 **MTPA to 2.11 MTPA** of limestone involving lease area of **145.37 ha** under the provisions of the Environment Impact Assessment Notification, 1994 as amended on 04.05.1997 and 10.04.1997 subject to terms and conditions mentioned below:

A. Specific Conditions

(i) Top soil should be stacked properly with proper slope at ear marked site(s) with adequate measures and should be used for greenbelt development.

(ii) No additional external dumps are proposed. Existing OB dumps of 10.95 ha shall be provided with garland all around the excavations to prevent storm water from catchment area to come in contact with freshly excavated areas. Toe drains will be provided all along the toe of the dump to arrest any soil erosion. The dumps shall be reclaimed by plantation and the loose material slopes shall be stabilised by making contour trenches at 2m intervals and plantation done to check soil erosion.

(iii) Check dams and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from the mining operations. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted and maintained.

Garland drain (size, gradient & length) and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material.

(iv) Drills should be wet operated with dust extractors and rock breaker shall be used to avoid secondary blasting.

(v) Crusher should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emissions from crushing operations, haulage roads, transfer points, etc.

(vi) Plantation shall be raised along the roads, dump sites etc. This includes a 30m wide green belt along the periphery of the ML area except the northern and western boundary covering a total area of 21.12 ha, 10.95 ha of OB dump and 3.61 ha area along roadside within the lease area. At least 2500 plant species/ha should be planted. Selection of native plant species shall be in consultation with local DFO/ Agriculture Department.

(vii) In addition, a total 54.65 ha of the mining area shall be reclaimed, which includes the remaining 44.70 ha to be backfilled by planting native plant species in consultation with local DFO/ Agriculture Department. At least 2500 plant species/ha should be planted. A void of 10.55 ha shall be left as a water reservoir. The higher benches of the void shall be terraced and plantation done to stabilise the slopes. Peripheral fencing shall be done along the excavated area around the void.

(viii) Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and/or construction of peizometers at suitable locations in project area. Frequency of monitoring on quantity should be done four times in a year - pre-monsoon (April/May), monsoon (August), post-monsoon (November), and winter (January) seasons and for quality in the month of May. Data thus generated should be submitted at regular intervals to MOEF and the CGWA.

(ix) The existing old worked out pits from the A and D Blocks shall be used as water harvesting structures.

(x) An ETP should be provided in the township for treatment of domestic wastes.

(xi) A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.

(xii) A Consent to Operate for the proposed expansion in production shall be obtained from the SPCB.

B. General Conditions

(i) No change in technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.

(ii) No change in the calendar plan including excavation, quantum of limestone, waste/OB dumps should be made.

(iii) Four ambient air quality monitoring stations should be established in the core zone as well as buffer zone for SPM, RPM, NO_X and SO_2. Location of the ambient air quality stations and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.

(iv) The data on environmental quality should be collected and analysed either through an in-house environmental laboratory established with adequate number and type of pollution monitoring and analysis equipment or got analysed through an approved laboratory under the Environment (Protection) Rules, 1986 in consultation with the State Pollution Control Board.

(v) Data on environmental quality should be regularly submitted to the Ministry including its Regional Office at Bhubaneshwar and the State Pollution Control Board/Central Pollution Control Board once in six months.

(vi) Adequate measures for control of fugitive emissions should be taken during drilling & blasting operations, loading and transportation of mineral, etc. Fugitive dust emissions should be regularly monitored and data recorded properly. Water spraying arrangements on haul roads, loading and unloading points, and transportation of minerals, etc. should be provided and properly maintained.

(vii) Adequate measures should be taken for control of noise levels below 85 dBA in the work environment.

(viii) Industrial wastewater should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time and reused.

(ix) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

Occupational health surveillance programme of the workers should be undertaken periodically and corrective measures taken, if required.

(x) The project authorities should inform to the Regional Office located at Bhubaneshwar regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.

(xi) The funds earmarked for environmental protection measures should be kept in separate account and not diverted for any other purpose. Year-wise expenditure should be reported to the Ministry of Environment & Forests.

(xii) The Regional Office of this Ministry located at Bhubaneshwar shall monitor compliance of the stipulated environmental conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.

(xiii) A copy of the clearance letter should be marked to concerned Panchayat/local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.

(xiv) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the collector's/Tehsildar's Office for 30 days.

(xv) The project authorities should advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within 7 days of issuance of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and may also be seen at web site of the Ministry of Environment and forests at **http://envfor.nic.in.**

3. The Ministry or any other competent authority may stipulate any further additional condition for environmental protection.

4. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance.

5. The above conditions will be enforce, inter-alia, under the provisions of Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control) of Pollution Act, 1981, Environment (Protection) Act, 1986 and Public Liability Insurance Act, 1991 alongwith their amendments and rules.

(Dr.T.Chandini)
Additional Director

Copy to:

1. Secretary, Department of Environment & Forests, Government of Jharkand, Ranchi.
2. Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (Eastern Zone), Eastern Zonal office, A/3 Chandrashekarpur, Bhubaneshwar –7510123.
3. Department of Mines & Geology, Government of Jharkand, Engineering Hostel, 2nd Floor, Gol Chakker, Dhurwa, Ranchi- 02.
4. Office of the Chief Wildlife Warden, Government of Jharkand, Ranchi.

ANNEXURE-3
PROPOSED TOR

Standard Terms of Reference (TOR) for Mining Project

1) The TOR will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon"ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors..

2) Department of Mining & Geology, State Government shall ensure that mining operation shall not commence till the entire compensation levied, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of judgment of Hon"ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.

3) Year-wise production details since 1993-94 should be given, clearly stating the highest production achieved in any one year prior to 1993-94. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to1994. The production details need to submit since inception of mine duly authenticated by Department of Mines & Geology, State Government.

4) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.

5) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.

6) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).

7) Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.

8) Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.

9) It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the proposed safeguard measures in each case should also be provided.

10) Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.

11) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.

12) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.

13) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.

14) A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.

15) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.

16) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.

17) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.

18) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.

19) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.

20) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared

in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.

21) Proximity to Areas declared as "Critically Polluted" or the Project areas likely to come under the "Aravali Range", (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.

22) Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL. HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).

23) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.

24) One season (non-monsoon) [i.e. March - May (Summer Season); October - December (post monsoon season); December - February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.

25) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.

26) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.

27) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

28) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.

29) Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.

30) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.

31) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be.

32) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.

33) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.

34) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

35) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.

36) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIAreport.

37) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.

38) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.

39) Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

40) Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.

41) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.

42) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

43) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

44) A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.

45) Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.

46) The activities and budget earmarked for Corporate Environmental Responsibility (CER) shall be as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 and the action plan on the activities proposed under CER shall be submitted at the time of appraisal of the project included in the EIA/EMP Report.

47) The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.

48) Compliance of the Ministry‟s Office Memorandum No. F: 3-50/2017-IA.III (Pt.), dated 30.05.2018 on the judgment of Hon‟ble Supreme Court, dated the 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India needs to be submitted and included in the EIA/EMP Report.

49) Besides the above, the below mentioned general points are also to be followed: -

a) All documents to be properly referenced with index and continuous page numbering.

b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.

c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.

d) Where the documents provided are in a language other than English, an English translation should be provided.

e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.

f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.

g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.

h) As per the circular no. J-11011/618/2010-IA. II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.

i) The EIA report should also include

(i) surface plan of the area indicating contours of main topographic features, drainage and mining area,

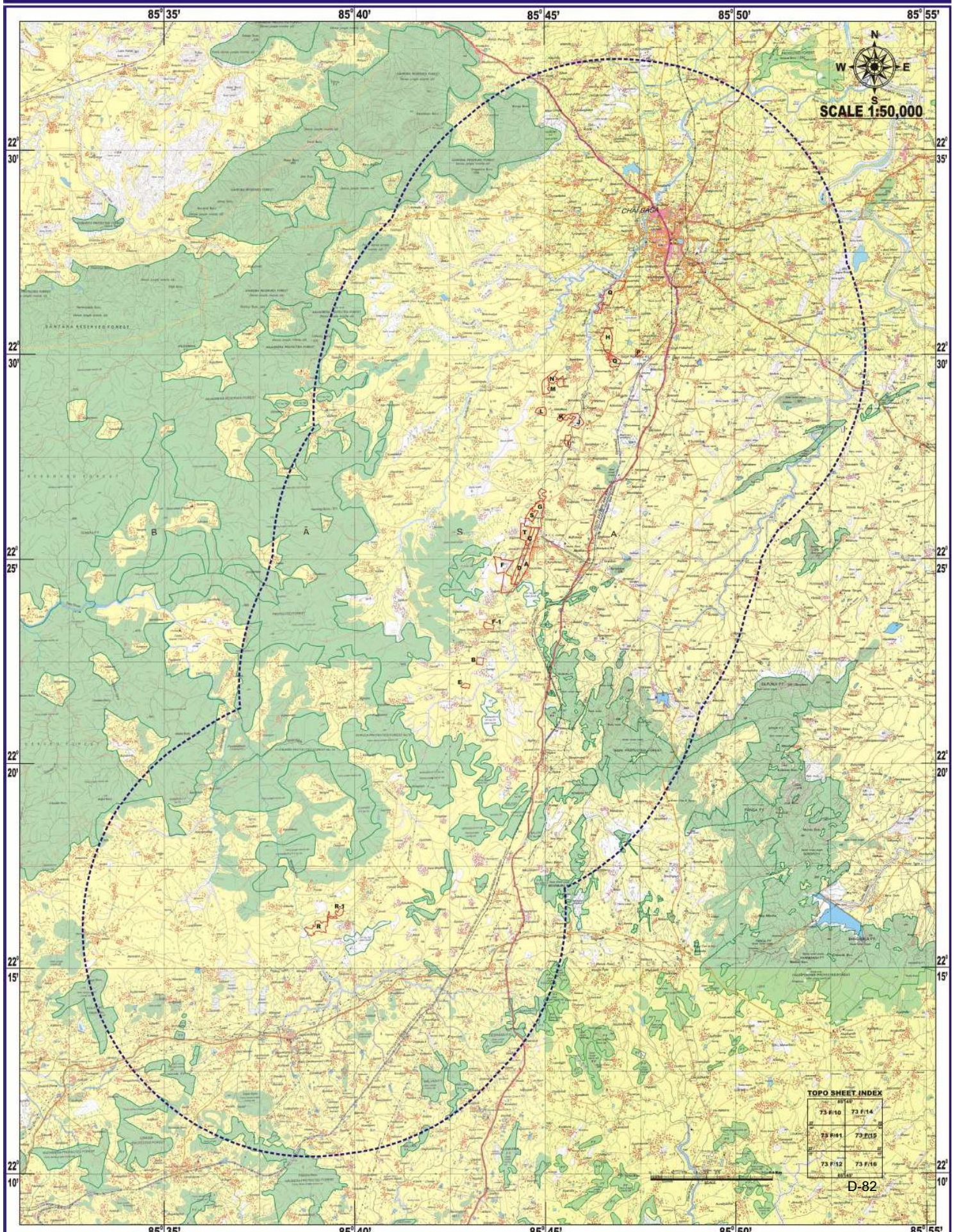
(ii) geological maps and sections and

(iii) Sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

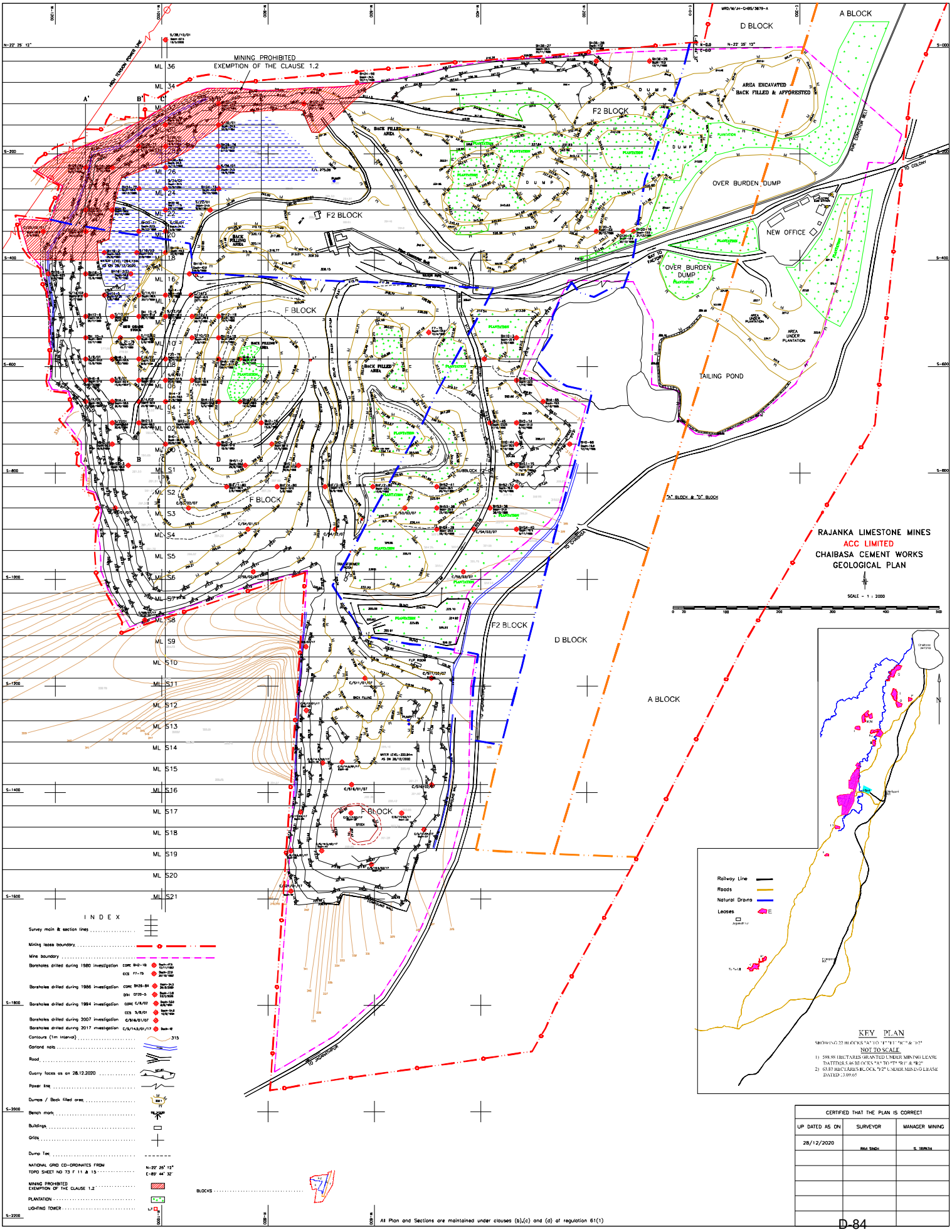
***

ANNEXURE-4
TOPOGRAPHICAL MAP

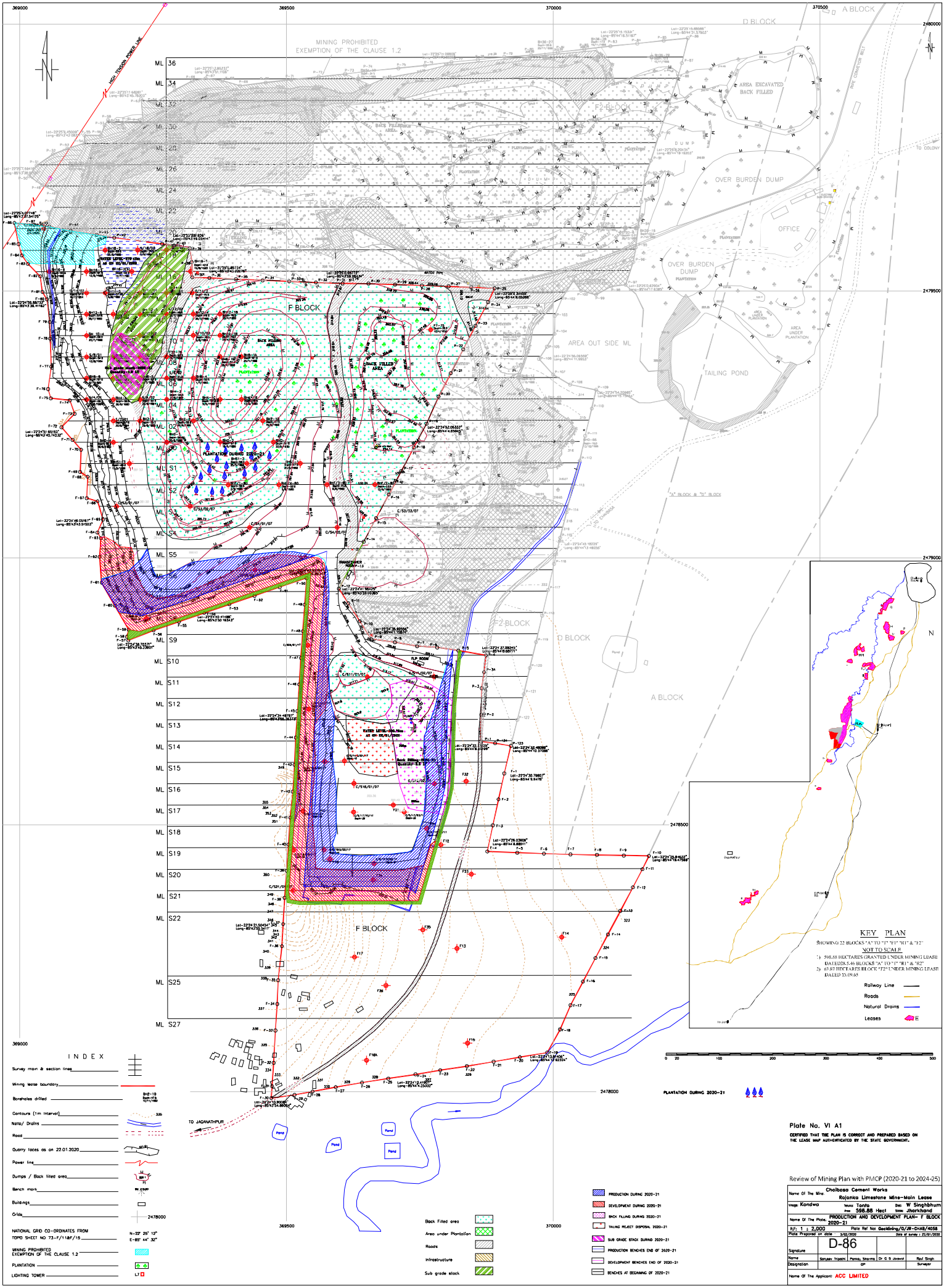
TOPOGRAPHICAL MAP- 10KM RADIUS, RAJANKA LIMESTONE MINE, 598.88 HA
M/S ACC LIMITED, CHAIBASA, WEST SHINGHBHUM, JHARKHAND

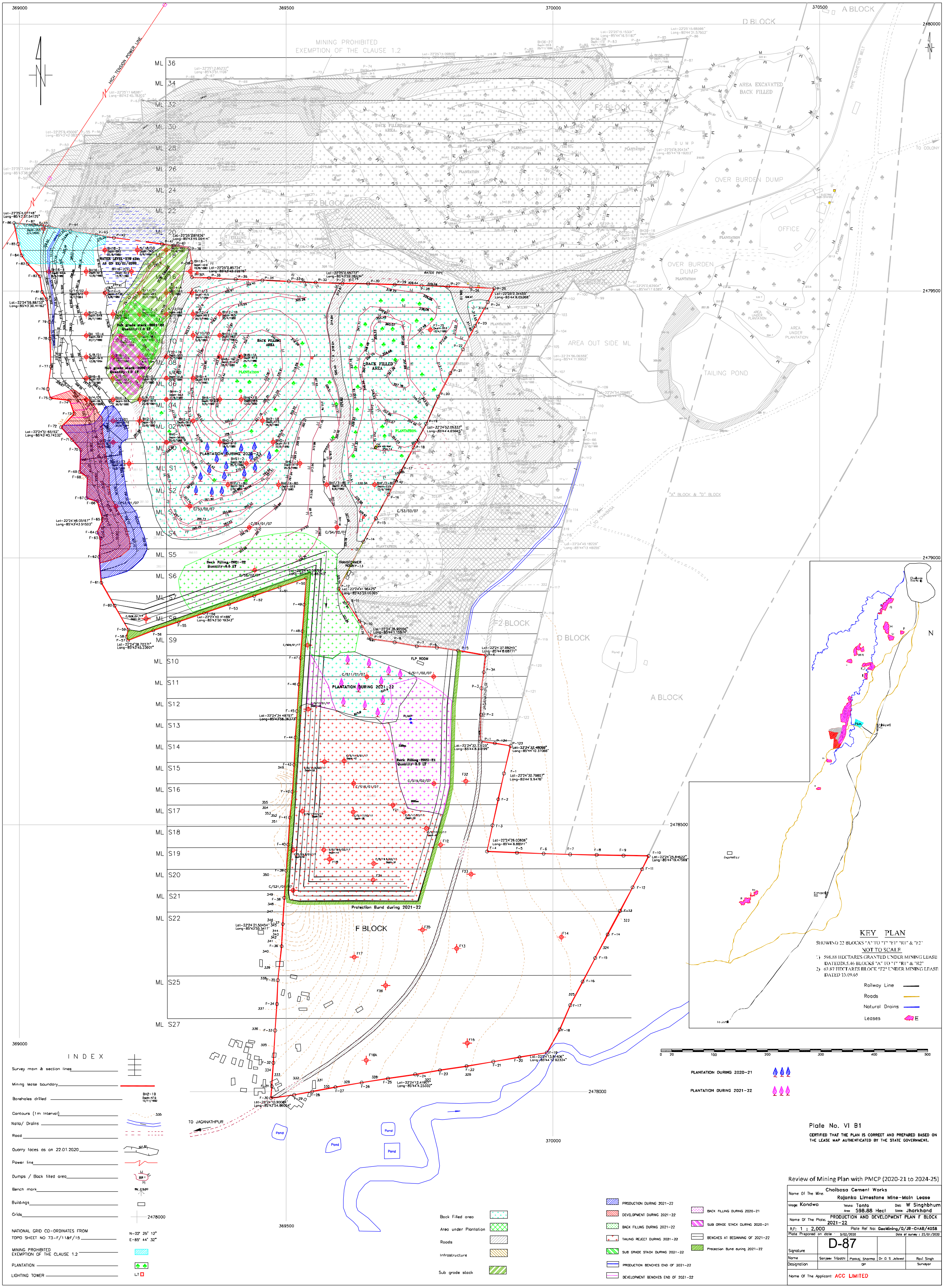


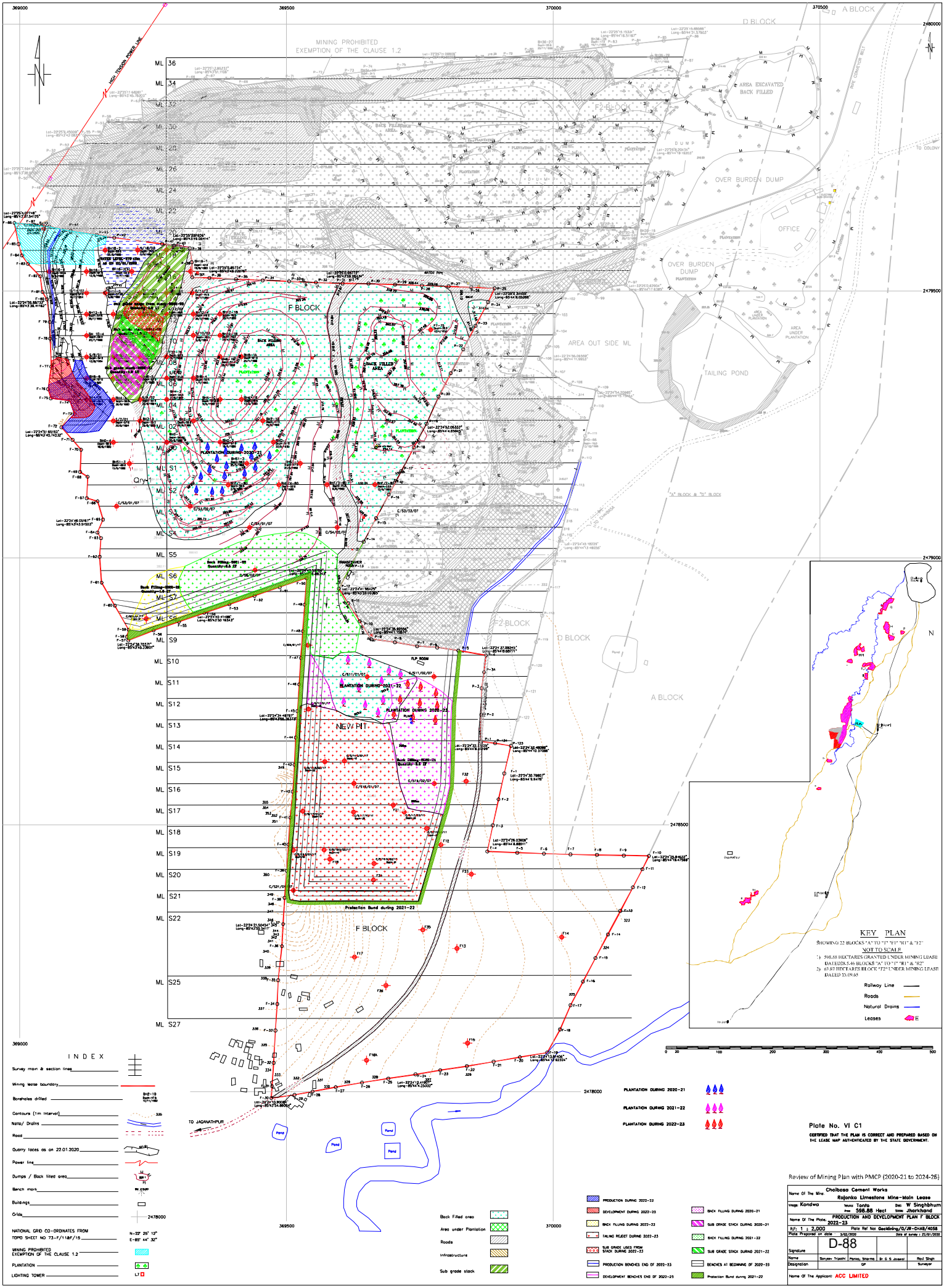
ANNEXURE-5
SURFACE PLAN

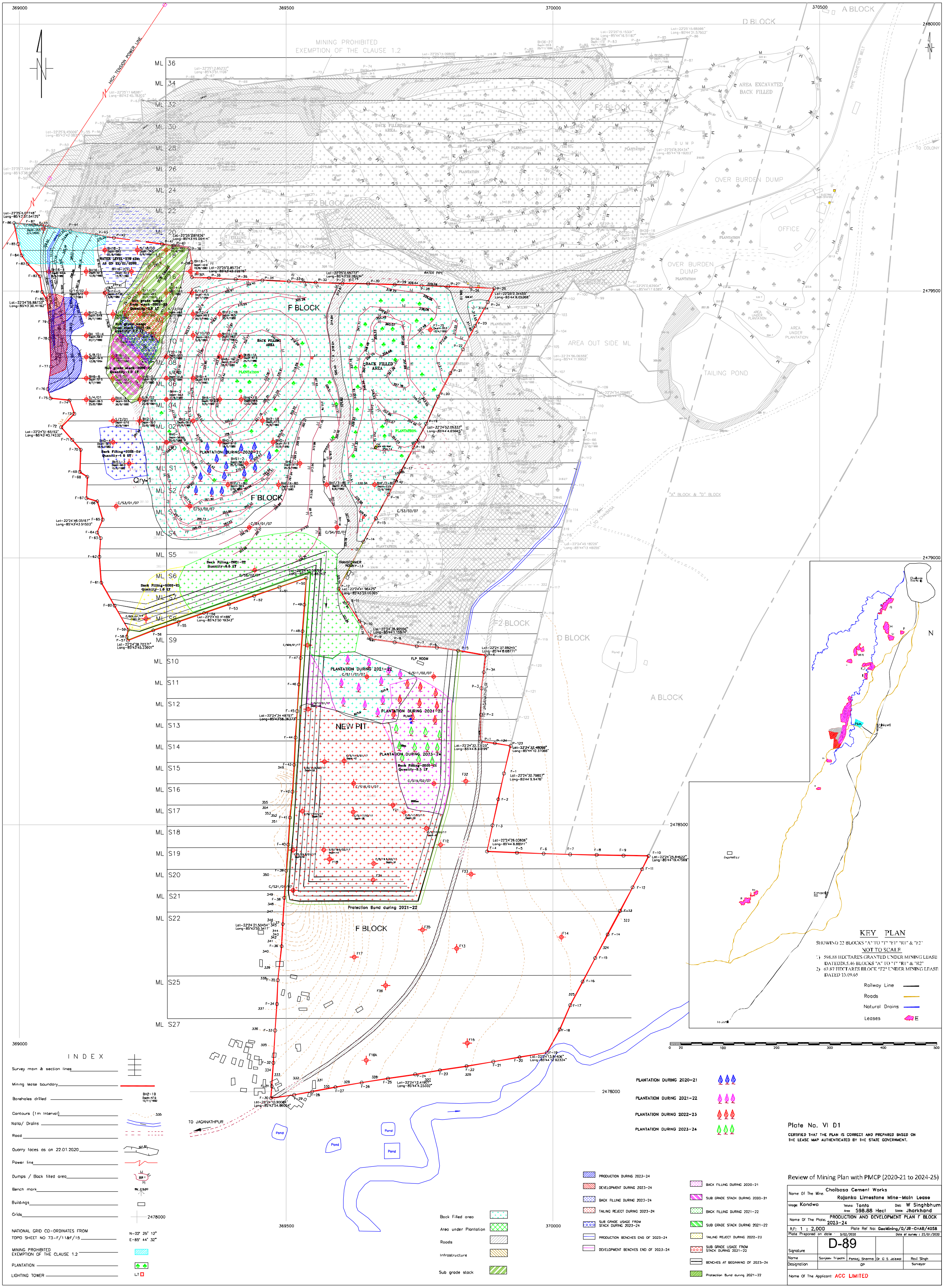

MINING PROHIBITED
EXEMPTION OF THE CLAUSE 1.2
D BLOCK
A BLOCK
F2 BLOCK
F BLOCK
OVER BURDEN DUMP
NEW OFFICE
TAILING POND
AREA EXCAVATED
BACK FILLED & AFFORESTED
RAJANKA LIMESTONE MINES
ACC LIMITED
CHAIBASA CEMENT WORKS
GEOLOGICAL PLAN
SCALE - 1 : 2000
INDEX
KEY PLAN
SHOWING 22 BLOCKS "A" TO "J" "L" "K" & "P2"
NOT TO SCALE
1) 598.88 HECTARES GRANTED UNDER MINING LEASE DATTED 5.46 BLOCKS "A" TO "F" "R1" & "R2"
2) 63.87 HECTARES BLOCK "P2" UNDER MINING LEASE DATED - 3.09.65
CERTIFIED THAT THE PLAN IS CORRECT
UP DATED AS ON
SURVEYOR
MANAGER MINING
28/12/2020
All Plan and Sections are maintained under clauses (b),(c) and (d) of regulation 61(1)

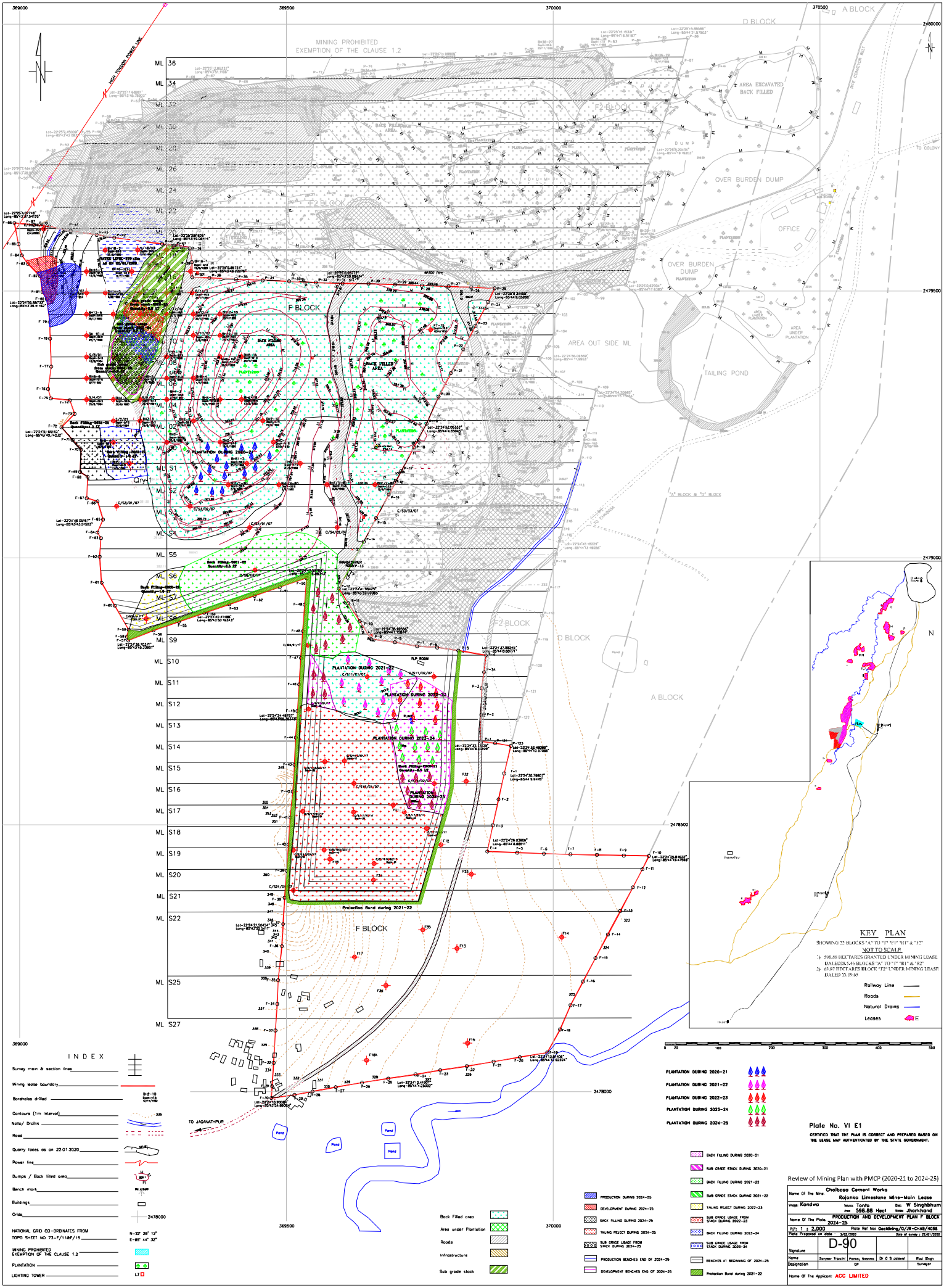
ANNEXURE-6
DEVELOPMENT PLAN


MINING PROHIBITED
EXEMPTION OF THE CLAUSE 1.2
HIGH TENSION POWER LINE
A BLOCK
D BLOCK
F2 BLOCK
F BLOCK
AREA EXCAVATED BACK FILLED
OVER BURDEN DUMP
OFFICE
TAILING POND
AREA OUT SIDE ML
TO COLONY
TO JAGANNATHPUR
ML 36
ML 34
ML 32
ML 30
ML 28
ML 26
ML 24
ML 22
ML 20
ML 18
ML 16
ML 14
ML 12
ML 10
ML 08
ML 06
ML 04
ML 02
ML S1
ML S2
ML S3
ML S4
ML S5
ML S6
ML S7
ML S8
ML S9
ML S10
ML S11
ML S12
ML S13
ML S14
ML S15
ML S16
ML S17
ML S18
ML S19
ML S20
ML S21
ML S22
ML S25
ML S27
369000
369500
370000
370500
2480000
2479500
2479000
2478500
2478000
INDEX
Survey mom & section lines
Mining lease boundary
Boreholes drilled
Contours (1m interval)
Nalla/ Drains
Road
Quarry faces as on 22.01.2020
Power line
Dumps / Back filled area
Bench mark
Buildings
Grids
NATIONAL GRID CO-ORDINATES FROM TOPO SHEET NO 73-F/11&F/15
N-22° 25' 12"
E-85° 44' 32"
MINING PROHIBITED EXEMPTION OF THE CLAUSE 1.2
PLANTATION
LIGHTING TOWER
Back Filled area
Area under Plantation
Roads
Infrastructure
Sub grade stock
PRODUCTION DURING 2020-21
DEVELOPMENT DURING 2020-21
BACK FILLING DURING 2020-21
TAILING REJECT DISPOSAL 2020-21
SUB GRADE STOCK DURING 2020-21
PRODUCTION BENCHES END OF 2020-21
DEVELOPMENT BENCHES END OF 2020-21
BENCHES AT BEGINNING OF 2020-21
PLANTATION DURING 2020-21
KEY PLAN
SHOWING 22 BLOCKS "A" TO "F" "R1" "R2" & "F2"
NOT TO SCALE
1) 598.88 HECTARES GRANTED UNDER MINING LEASE DATED28.5.46 BLOCKS "A" TO "F" "R1" & "R2"
2) 63.87 HECTARES BLOCK "F2" UNDER MINING LEASE DATED 25.09.65
Railway Line
Roads
Natural Drains
Leases
0 20 100 200 300 400 500
Plate No. VI A1
CERTIFIED THAT THE PLAN IS CORRECT AND PREPARED BASED ON THE LEASE MAP AUTHENTICATED BY THE STATE GOVERNMENT.
Review of Mining Plan with PMCP (2020-21 to 2024-25)
Name Of The Mine: Chaibasa Cement Works
Rajanka Limestone Mine-Main Lease
Village Kandwa
Tehsils Tonto
Area 598.88 Hect
Dist. W Singhbhum
State Jharkhand
Name Of The Plate: PRODUCTION AND DEVELOPMENT PLAN- F BLOCK 2020-21
R.F. 1 : 2,000
Plate Ref No: Geolmining/D/W-CHAIB/4058
Plate Prepared on date 3/02/2020
Date of survey : 21/01/2020
D-86
Signature
Name: Satyam Tripathi, Pankaj Sharma, Dr G S Jaiswal, Rajt Singh
Designation: GP, Surveyor
Name Of The Applicant: ACC LIMITED

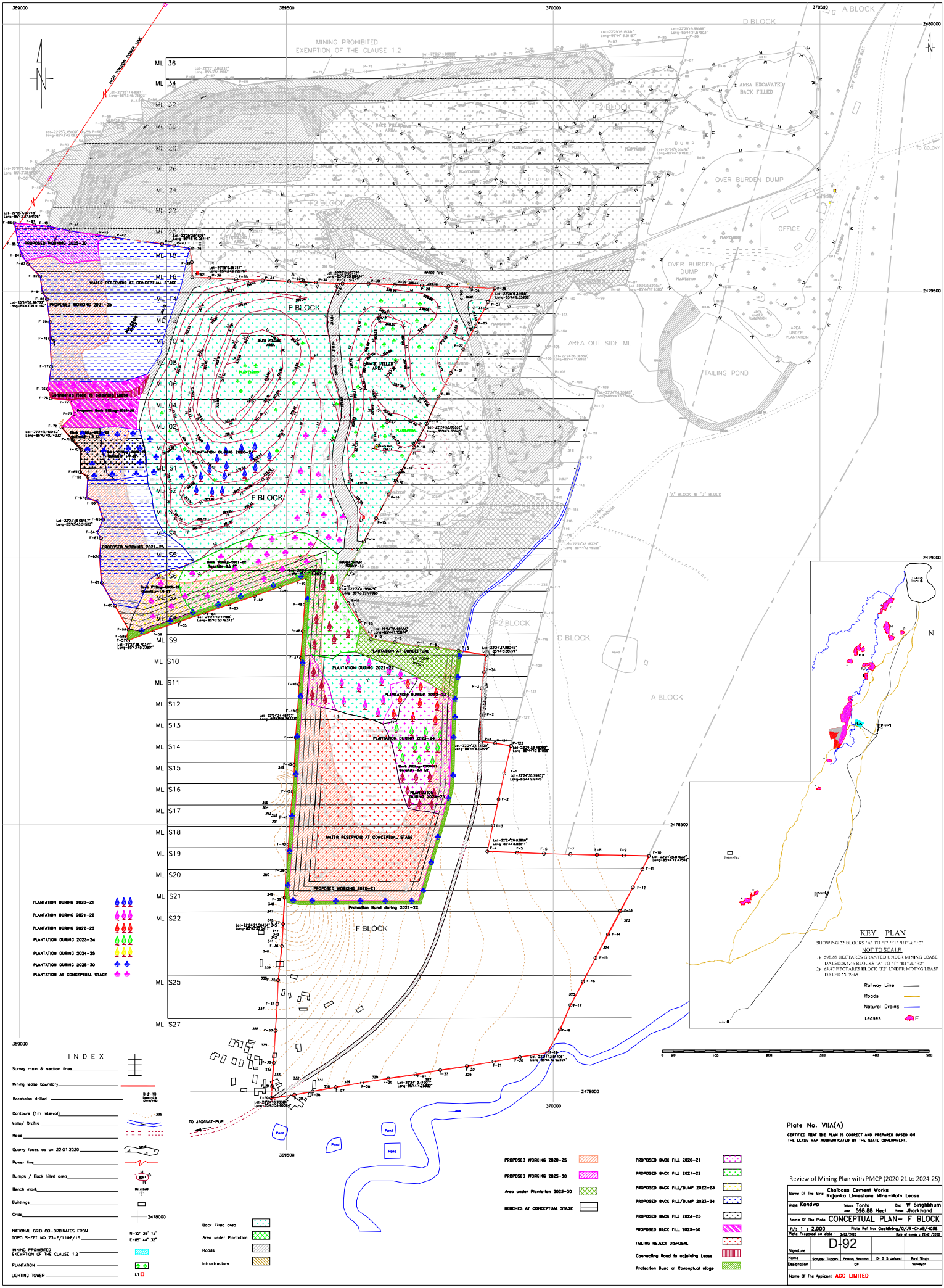

MINING PROHIBITED
EXEMPTION OF THE CLAUSE 1.2
HIGH TENSION POWER LINE
A BLOCK
D BLOCK
F2 BLOCK
F BLOCK
AREA EXCAVATED
BACK FILLED
OVER BURDEN DUMP
OFFICE
TAILING POND
AREA OUT SIDE ML
PLANTATION DURING 2020-21
PLANTATION DURING 2021-22
Protection Bund during 2021-22
TO JAGANATHPUR
TO COLONY
KEY PLAN
SHOWING 22 BLOCKS "A" TO "I" "F1" "R1" & "F2"
NOT TO SCALE
1) 598.88 HECTARES GRANTED UNDER MINING LEASE DATED28.5.46 BLOCKS "A" TO "I" "R1" & "R2"
2) 63.87 HECTARES BLOCK "F2" UNDER MINING LEASE DATED 13.09.65
Railway Line
Roads
Natural Drains
Leases
INDEX
Survey main & section lines
Mining lease boundary
Boreholes drilled
Contours (1m Interval)
Nalla/ Drains
Road
Quarry faces as on 22.01.2020
Power line
Dumps / Back filled area
Bench mark
Buildings
Grids
NATIONAL GRID CO-ORDINATES FROM TOPO SHEET NO 73-F/11&F/15
N-22° 25' 12"
E-85° 44' 32"
MINING PROHIBITED EXEMPTION OF THE CLAUSE 1.2
PLANTATION
LIGHTING TOWER
Back Filled area
Area under Plantation
Roads
Infrastructure
Sub grade stack
PRODUCTION DURING 2021-22
DEVELOPMENT DURING 2021-22
BACK FILLING DURING 2021-22
TAILING REJECT DURING 2021-22
SUB GRADE STACK DURING 2021-22
PRODUCTION BENCHES END OF 2021-22
DEVELOPMENT BENCHES END OF 2021-22
BACK FILLING DURING 2020-21
SUB GRADE STACK DURING 2020-21
BENCHES AT BEGINNING OF 2021-22
Protection Bund during 2021-22
Plate No. VI B1
CERTIFIED THAT THE PLAN IS CORRECT AND PREPARED BASED ON THE LEASE MAP AUTHENTICATED BY THE STATE GOVERNMENT.
Review of Mining Plan with PMCP (2020-21 to 2024-25)
Name Of The Mine: Chaibasa Cement Works Rajanka Limestone Mine-Main Lease
Village: Kondwa
Taluka: Tonto
Area 598.88 Hect
Dist: W Singhbhum
State: Jharkhand
Name Of The Plate: PRODUCTION AND DEVELOPMENT PLAN F BLOCK 2021-22
R.F: 1 : 2,000
Plate Ref No: GeoMining/G/JR-CHAB/4058
Plate Prepared on date : 3/02/2020
Date of survey : 22/01/2020
D-87
Signature
Name: Sanjeev Tripathi, Pankaj Sharma, Dr G S Jaiswal, Ravi Singh
Designation: QP, Surveyor
Name Of The Applicant: ACC LIMITED


MINING PROHIBITED
EXEMPTION OF THE CLAUSE 1.2
HIGH TENSION POWER LINE
A BLOCK
D BLOCK
F2 BLOCK
F BLOCK
AREA EXCAVATED BACK FILLED
OVER BURDEN DUMP
OFFICE
AREA OUT SIDE ML
TAILING POND
NEW PIT
PLANTATION DURING 2020-21
PLANTATION DURING 2021-22
PLANTATION DURING 2022-23
Protection Bund during 2021-22
TO JAGANNATHPUR
KEY PLAN
SHOWING 22 BLOCKS "A" TO "F" "F1" "F2" & "F2"
NOT TO SCALE
1) 598.88 HECTARES GRANTED UNDER MINING LEASE DATED28.5.46 BLOCKS "A" TO "F" "F1" & "F2"
2) 63.87 HECTARES BLOCK "F2" UNDER MINING LEASE DATED 25.09.65
Railway Line
Roads
Natural Drains
Leases
INDEX
Survey mark & section lines
Mining lease boundary
Boreholes drilled
Contours (1m interval)
Nalla/ Drains
Road
Quarry faces as on 22.01.2020
Power line
Dumps / Back filled area
Bench mark
Buildings
Grids
NATIONAL GRID CO-ORDINATES FROM TOPO SHEET NO 73-F/11&F/15
MINING PROHIBITED EXEMPTION OF THE CLAUSE 1.2
PLANTATION
LIGHTING TOWER
Back Filled area
Area under Plantation
Roads
Infrastructure
Sub grade stock
PRODUCTION DURING 2022-23
DEVELOPMENT DURING 2022-23
BACK FILLING DURING 2022-23
TAILING REJECT DURING 2022-23
SUB GRADE USED FROM STACK DURING 2022-23
PRODUCTION BENCHES END OF 2022-23
DEVELOPMENT BENCHES END OF 2022-23
BACK FILLING DURING 2020-21
SUB GRADE STACK DURING 2020-21
BACK FILLING DURING 2021-22
SUB GRADE STACK DURING 2021-22
BENCHES AT BEGINNING OF 2022-23
Protection Bund during 2021-22
Plate No. VI C1
CERTIFIED THAT THE PLAN IS CORRECT AND PREPARED BASED ON THE LEASE MAP AUTHENTICATED BY THE STATE GOVERNMENT.
Review of Mining Plan with PMCP (2020-21 to 2024-25)
Name Of The Mine: Chaibasa Cement Works
Rajanka Limestone Mine-Main Lease
Village: Kandwa
Tehsil: Tonto
Dist: W Singhbhum
Area: 598.88 Hect
State: Jharkhand
Name Of The Plate: PRODUCTION AND DEVELOPMENT PLAN F BLOCK
2022-23
R/F: 1 : 2,000
Plate Ref No: Geo/Mining/D/W-CHAB/4058
Plate Prepared on date: 3/02/2020
Date of survey : 21/01/2020
D-88
Signature
Name: Sanjeev Tripathi | Pankaj Sharma | Dr. C. S Jaiswal | Rajvi Singh
Designation: GM | Surveyor
Name Of The Applicant: ACC LIMITED


MINING PROHIBITED
EXEMPTION OF THE CLAUSE 1.2
HIGH TENSION POWER LINE
D BLOCK
A BLOCK
F2 BLOCK
F BLOCK
NEW PIT
AREA EXCAVATED
BACK FILLED
OVER BURDEN DUMP
OFFICE
AREA OUT SIDE ML
TAILING POND
WATER LEVEL-278 (231)
AS ON 22/01/2020
BACK FILLING AREA
PLANTATION
PLANTATION DURING 2020-21
PLANTATION DURING 2021-22
PLANTATION DURING 2023-24
Back Filling-2021-22
Back Filling-2022-23
Protection Bund during 2021-22
Qry-1
TO JAGANATHPUR
TO COLONY
ML 36
ML 34
ML 32
ML 30
ML 28
ML 26
ML 24
ML 22
ML 20
ML 02
ML 04
ML 06
ML 08
ML 10
ML 12
ML S1
ML S2
ML S4
ML S5
ML S6
ML S7
ML S8
ML S9
ML S10
ML S11
ML S12
ML S13
ML S14
ML S15
ML S16
ML S17
ML S18
ML S19
ML S20
ML S21
ML S22
ML S25
ML S27
369000
369500
370000
370500
2480000
2479500
2479000
2478500
2478000
INDEX
Survey main & section lines
Mining lease boundary
Boreholes drilled
BH2-18
Depth-47.5
12/11/1982
Contours (1m interval)
Nalla/ Drains
Road
Quarry faces as on 22.01.2020
Power line
Dumps / Back filled area
Bench mark
Buildings
Grids
NATIONAL GRID CO-ORDINATES FROM
TOPO SHEET NO 73-F/11&F/15
N-22° 25' 12"
E-85° 44' 32"
MINING PROHIBITED
EXEMPTION OF THE CLAUSE 1.2
PLANTATION
LIGHTING TOWER
Back Filled area
Area under Plantation
Roads
Infrastructure
Sub grade stack
PRODUCTION DURING 2023-24
DEVELOPMENT DURING 2023-24
BACK FILLING DURING 2023-24
TAILING REJECT DURING 2023-24
SUB GRADE USAGE FROM STACK DURING 2023-24
PRODUCTION BENCHES END OF 2023-24
DEVELOPMENT BENCHES END OF 2023-24
BACK FILLING DURING 2020-21
SUB GRADE STACK DURING 2020-21
BACK FILLING DURING 2021-22
SUB GRADE STACK DURING 2021-22
TAILING REJECT DURING 2022-23
SUB GRADE USAGE FROM STACK DURING 2021-22
BENCHES AT BEGINNING OF 2023-24
Protection Bund during 2021-22
PLANTATION DURING 2020-21
PLANTATION DURING 2021-22
PLANTATION DURING 2022-23
PLANTATION DURING 2023-24
KEY PLAN
SHOWING 22 BLOCKS "A" TO "I" "F1" "R1" & "F2"
NOT TO SCALE
1) 598.88 HECTARES GRANTED UNDER MINING LEASE DATED28.5.46 BLOCKS "A" TO "I" "R1" & "R2"
2) 63.87 HECTARES BLOCK "F2" UNDER MINING LEASE DATED 13.09.65
Railway Line
Roads
Natural Drains
Leases
0 20 100 200 300 400 500
Plate No. VI D1
CERTIFIED THAT THE PLAN IS CORRECT AND PREPARED BASED ON THE LEASE MAP AUTHENTICATED BY THE STATE GOVERNMENT.
Review of Mining Plan with PMCP (2020-21 to 2024-25)
Name Of The Mine. Chaibasa Cement Works
Rajanka Limestone Mine-Main Lease
Village: Kondwa
Taluka: Tonto
Area 598.88 Hect
Dist: W Singhbhum
State: Jharkhand
Name Of The Plate: PRODUCTION AND DEVELOPMENT PLAN F BLOCK 2023-24
R.F: 1 : 2,000
Plate Ref No: GeoMining/G/JR-CHAB/4058
Plate Prepared on date 3/02/2020
Date of survey : 22/01/2020
D-89
Signature
Name Sanjeev Tripathi Pankaj Sharma Dr G S Jaiswal Ravi Singh
Designation QP Surveyor
Name Of The Applicant ACC LIMITED


F BLOCK
F2 BLOCK
D BLOCK
A BLOCK
MINING PROHIBITED
EXEMPTION OF THE CLAUSE 1.2
HIGH TENSION POWER LINE
AREA EXCAVATED BACK FILLED
OVER BURDEN DUMP
OFFICE
TAILING POND
AREA OUT SIDE ML
TO COLONY
TO JAGANNATHPUR
ML 36
ML 34
ML 32
ML 30
ML 28
ML 26
ML 24
ML 22
ML 20
ML 18
ML 16
ML 14
ML 12
ML 10
ML 08
ML 06
ML 04
ML 02
ML S1
ML S2
ML S3
ML S4
ML S5
ML S6
ML S7
ML S8
ML S9
ML S10
ML S11
ML S12
ML S13
ML S14
ML S15
ML S16
ML S17
ML S18
ML S19
ML S20
ML S21
ML S22
ML S25
ML S27
PLANTATION DURING 2020-21
PLANTATION DURING 2021-22
PLANTATION DURING 2022-23
PLANTATION DURING 2023-24
PLANTATION DURING 2024-25
Protection Bund during 2021-22
FLP ROOM
KEY PLAN
SHOWING 22 BLOCKS "A" TO "F" "F1" "F2" & "F3"
NOT TO SCALE
1) 598.88 HECTARES GRANTED UNDER MINING LEASE DATED28.5.46 BLOCKS "A" TO "F" "F1" & "F2"
2) 63.87 HECTARES BLOCK "F2" UNDER MINING LEASE DATED 23.09.65
Railway Line
Roads
Natural Drains
Leases
INDEX
Survey mark & section lines
Mining lease boundary
Boreholes drilled
Contours (1m interval)
Nalla/ Drains
Road
Quarry faces as on 22.01.2020
Power line
Dumps / Back filled area
Bench mark
Buildings
Grids
NATIONAL GRID CO-ORDINATES FROM TOPO SHEET NO 73-F/11&F/15
N-22° 25' 12"
E-85° 44' 32"
MINING PROHIBITED EXEMPTION OF THE CLAUSE 1.2
PLANTATION
LIGHTING TOWER
Back Filled area
Area under Plantation
Roads
Infrastructure
Sub grade stock
PRODUCTION DURING 2024-25
DEVELOPMENT DURING 2024-25
BACK FILLING DURING 2024-25
TAILING REJECT DURING 2024-25
SUB GRADE USAGE FROM STACK DURING 2024-25
PRODUCTION BENCHES END OF 2024-25
DEVELOPMENT BENCHES END OF 2024-25
BACK FILLING DURING 2020-21
SUB GRADE STACK DURING 2020-21
BACK FILLING DURING 2021-22
SUB GRADE STACK DURING 2021-22
TAILING REJECT DURING 2022-23
SUB GRADE USAGE FROM STACK DURING 2022-23
BACK FILLING DURING 2023-24
SUB GRADE USAGE FROM STACK DURING 2023-24
BENCHES AT BEGINNING OF 2024-25
Protection Bund during 2021-22
Plate No. VI E1
CERTIFIED THAT THE PLAN IS CORRECT AND PREPARED BASED ON THE LEASE MAP AUTHENTICATED BY THE STATE GOVERNMENT.
Review of Mining Plan with PMCP (2020-21 to 2024-25)
Name Of The Mine: Chaibasa Cement Works
Rajanka Limestone Mine-Main Lease
Village: Kandwa
Tehsil: Tonto
Dist: W Singhbhum
Area: 598.88 Hect
State: Jharkhand
Name Of The Plate: PRODUCTION AND DEVELOPMENT PLAN F BLOCK 2024-25
R.F.: 1 : 2,000
Plate Ref No: Geo/mining/D/W-CHAIB/4058
Plate Prepared on date: 3/02/2020
Date of survey : 21/01/2020
D-90
Signature
Name: Surveyor: Tripathi, Pankaj, Sharma
Dr G S Jaiswal
Ravi Singh
Designation: GM
Surveyor
Name Of The Applicant: ACC LIMITED

ANNEXURE-7
CONCEPTUAL PLAN


369000
369500
370000
370500
2480000
2479000
2478500
2478000
A BLOCK
D BLOCK
F2 BLOCK
F BLOCK
MINING PROHIBITED
EXEMPTION OF THE CLAUSE 1.2
HIGH TENSION POWER LINE
AREA EXCAVATED/ BACK FILLED
OVER BURDEN DUMP
OFFICE
TO COLONY
AREA OUT SIDE ML
TAILING POND
"A" BLOCK & "D" BLOCK
TO JAGANNATHPUR
PROPOSED WORKING 2023-30
PROPOSED WORKING 2021-25
WATER RESERVOIR AT CONCEPTUAL STAGE
Connecting Road to adjoining Lease
Protection Bund during 2021-22
PROPOSED WORKING 2020-21
ML 36
ML 34
ML 32
ML 30
ML 28
ML 26
ML 24
ML 22
ML 20
ML 18
ML 16
ML 14
ML 12
ML 10
ML 08
ML 06
ML 04
ML 02
ML S1
ML S2
ML S3
ML S4
ML S5
ML S6
ML S7
ML S8
ML S9
ML S10
ML S11
ML S12
ML S13
ML S14
ML S15
ML S16
ML S17
ML S18
ML S19
ML S20
ML S21
ML S22
ML S25
ML S27
PLANTATION DURING 2020-21
PLANTATION DURING 2021-22
PLANTATION DURING 2022-23
PLANTATION DURING 2023-24
PLANTATION DURING 2024-25
PLANTATION DURING 2025-30
PLANTATION AT CONCEPTUAL STAGE
INDEX
Survey mark & section lines
Mining lease boundary
Boreholes drilled
Contours (1m interval)
Nalla/ Drains
Road
Quarry faces as on 22.01.2020
Power line
Dumps / Back filled area
Bench mark
Buildings
Grids
NATIONAL GRID CO-ORDINATES FROM TOPO SHEET NO 73-F/11&F/15
N-22° 25' 12"
E-85° 44' 32"
MINING PROHIBITED EXEMPTION OF THE CLAUSE 1.2
PLANTATION
LIGHTING TOWER
Back Filled area
Area under Plantation
Roads
Infrastructure
PROPOSED WORKING 2020-25
PROPOSED WORKING 2025-30
Area under Plantation 2025-30
BENCHES AT CONCEPTUAL STAGE
PROPOSED BACK FILL 2020-21
PROPOSED BACK FILL 2021-22
PROPOSED BACK FILL/DUMP 2022-23
PROPOSED BACK FILL/DUMP 2023-24
PROPOSED BACK FILL 2024-25
PROPOSED BACK FILL 2025-30
TAILING REJECT DISPOSAL
Connecting Road to adjoining Lease
Protection Bund at Conceptual stage
KEY PLAN
SHOWING 22 BLOCKS "A" TO "F" "F1" "F2" & "R2"
NOT TO SCALE
1) 598.88 HECTARES GRANTED UNDER MINING LEASE DATED28.5.46 BLOCKS "A" TO "F" "R1" & "R2"
2) 63.87 HECTARES BLOCK "F2" UNDER MINING LEASE DATED 23.09.65
Railway Line
Roads
Natural Drains
Leases
0 20 100 200 300 400 500
Plate No. VIIA(A)
CERTIFIED THAT THE PLAN IS CORRECT AND PREPARED BASED ON THE LEASE MAP AUTHENTICATED BY THE STATE GOVERNMENT.
Review of Mining Plan with PMCP (2020-21 to 2024-25)
Name Of The Mine: Chaibasa Cement Works Rajanka Limestone Mine-Main Lease
Village: Kandwa
Tehsil: Tonto
Area: 598.88 Hect
Dist: W Singhbhum
State: Jharkhand
Name Of The Plate: CONCEPTUAL PLAN– F BLOCK
R.F.: 1 : 2,000
Plate Ref No: Geo/mining/D/JR-CHAB/4058
Plate Prepared on date: 3/02/2020
Date of survey: 21/01/2020
D-92
Signature
Name: Sanjeev Tripathi | Pankaj Sharma | Dr. G S Jaiswal | Ravi Singh
Designation: GM | Surveyor
Name Of The Applicant: ACC LIMITED