



M/S RAMCHANDRA MEHTA CAPTIAN ANAND APARNA DEVI

Ref No.

Date

Date – 10.01.2018

To
Divisional Forest Officer
Hazaribag West Forest Division
Department of Forest Environment & Climate Change
Govt. of Jharkhand
Dist: - Hazaribag
Jharkhand State

Sub: - Forest Proposal seeking Diversion of Forest Land in respect of Karma Stone Mine over an area of 14.17 Ha in Village Karma of Hazaribag District of Jharkhand State of M/s Ram Chandra Mehta Captain Anand Aparna Devi.

Ref – 1. Your Letter No – 122 dated 09.01.2018
2. PCCF(Nodal) letter no – 1218 dated 28.12.2017

Sir,
Please refer above said references related to subject cited above. In this regard please find enclosed herewith the item wise compliances as follows.

Query :-

- वन विभागीय पत्रांक-3105 दिनांक-27.07.2017 द्वारा पृच्छित 3 विन्दु संख्या "ख" को स्पष्ट किया जाय कि प्रस्तावित वन भूमि में Safty Zone की water body के आस-पास तथा अन्य स्थानों पर कुल चौड़ाई वास्तव में कितनी है।

Compliance:-

Width of Safety zone near water body has kept 15 meter and rest on other places along the Mining lease boundary has kept 7.5 meter. Copy of Safety Zone Plan showing the Width of Safety Zone is enclosed herewith as Annexure I.

Query:-

- Mining Plan के पेज 34 पर Excavated Area मात्र 330 मीटर दिया गया है, जबकि मूल प्रस्ताव के कंडिका-02 में Mining (Ultimate pit) 12.14 ha. बताया गया है। इस विरोधाभास को स्पष्ट किया जाय।

Compliance:-

Refer to Page No 34 of approved Mining Plan in Para Reclamation at Conceptual Stage (Copy enclosed as Annexure II), it states that, the Surface Level of the

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RAM CHANDRA MEHTA CAPTIAN ANAND APARNA DEVI

Ramchandra Mehta

Authorised Signatory



M/S RAMCHANDRA MEHTA CAPTIAN ANAND APARNA DEVI

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Excavated area would be 330 meter after end of life of mine. This means that, Depth of the Quarry Floor level after 10th year of Mining would be 330 meter in terms of Reduce Level with reference to Mean Sea Level and size of quarry area (Ultimate Pit) would be 12.14 ha.

Query:-

- यदि यह मान भी लिया जाय की सम्पूर्ण 12.14 हे० में खनन कार्या किया जाएगा तो जिस प्रकार 2017-18 से 2027-28 (10 वर्षों) में 6.25 मिलियन क्युबिक मीटर स्टोन के उत्पादन का Schedule दिया गया है। उससे लगभग 50 मीटर गहरा Vertical गढ़ा पूरे क्षेत्र में बन जाएगा। इतने गहरे गढ़े को Reclaime किया जाना किस प्रकार संभव हो पाएगा, ताकि Top soil के साथ वृक्षारोपण हो सके, इसकी विवरणी दी जाय।

Compliance:-

Mining to excavate the 6.25 million of Cu Mt of stone from the proposed Karma Stone Mine will be done by open cast mining method followed by formation of Benches of 3 meter width & 3 meter height at an ultimate Pit Slope of 45°. Hence, Vertical Mine Pit will never be formed.

So far the Reclamation over the excavated area followed by spreading of top soil and Afforestation is concern; Reclamation & Afforestation will be commenced on 2028-29 and continued till to 2031-32 for the period of 4 years after fully exhausts of mineral from the said mine. Method of reclamation & afforestation and its financial outlay over the excavated area is given in the enclosed Reclamation & Afforestation Scheme with its plan as **Annexure III** which is self explanatory for the manner of reclamation.

Moreover, it is to inform you that, as per rule 23 C Mineral Conservation & Development Rules 1988 (**Copy enclosed as Annexure IV**), a final Mine Clouser Plan has to be approved from Govt of Jharkhand prior to one year of the clouser of the mine which is only for Reclamation & Afforestation.

Therefore, Rehabilitation of excavated quarry area after end of life of mine shall be done by us.

Query:-

- प्रयोक्ता अभिकरण ने एक जगह उल्लेख किया है कि Top soil का प्रयोग Road Maintainance हेतु किया जाएगा जबकि दूसरे जगह उल्लेख किया की Top soil को वृक्षारोपण के लिए गढ़ा भरा जायगा। कृपया इसे स्पष्ट किया जाय।

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Ramchandra Mehta

Authorised Signatory



M/S RAMCHANDRA MEHTA CAPTIAN ANAND APARNA DEVI

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Compliance:-

Applied area of Karma Stone Mine is virgin and exists on fully exposure of stone where generation of top soil during mining would be very negligible quantity. When Mining operation over the said area will start, the excavated top soil shall be spread over road. During reclamation of excavated quarry, top soil shall be procured from nearby area in order to spread over the filled area and sapling shall be planted.

Query:-

5. माईनिंग प्लान के पेज 54 टेबुल-31 में खनन की औसत गहराई 60 मी० दी गयी है जबकि पेज 42 पर भू-जल स्तर (Water table) अधिकतम 60 मी० दी गयी है। इस स्थिति में इतनी गहराई तक कहाँ तक उचित होगा। इसे स्पष्ट किया जाय।

Compliance:-

Ground water table of the proposed Karma Stone mine is 65 meter depth from the existing surface. Refer to Conceptual Plan & Section of approved Mining Plan (**Copy enclosed as Annexure V**), the floor level of quarry shall be 330 meter depth at the end of life of mine which is 5 meter up from Ground Water table. Since the Mining Shall be done by Benching system of Box Cut method, so the depth of quarry floor level shall never be proceed beyond 330 meter of depth. Mining shall be done by deploying Heavy Earth Moving Equipment, therefore, 60 meter average depth has been considered.

Query:-

6. प्रस्तावित स्थान के आस-पास अवैध माईनिंग प्रतिवेदित है। इस हेतु वन प्रमण्डल पदाधिकारी द्वारा क्या कार्रवाई की जाती रही है।

Compliance:-

This reply is related to Divisional Forest Office, Hazaribag West Forest Division

Therefore, it is herewith requested to kindly recommend the proposal for obtaining Forest Clearance at the earliest.

Thanking You

Yours Faithfully

For M/s Ram Chandra Mehta Captain Ananad Aparna Devi

RAM CHANDRA MEHTA CAPTAIN ANAND APARNA DEVI

Ramchandra Mehta

R C Mehta

Authorised Signatory

Authorized Signatory

Encl - As above

Office : Vill.- Bigha, P.O.- Phulwariya, P.S.- Nawalsahi, Dist.- Koderma (Jharkhand) - 825418

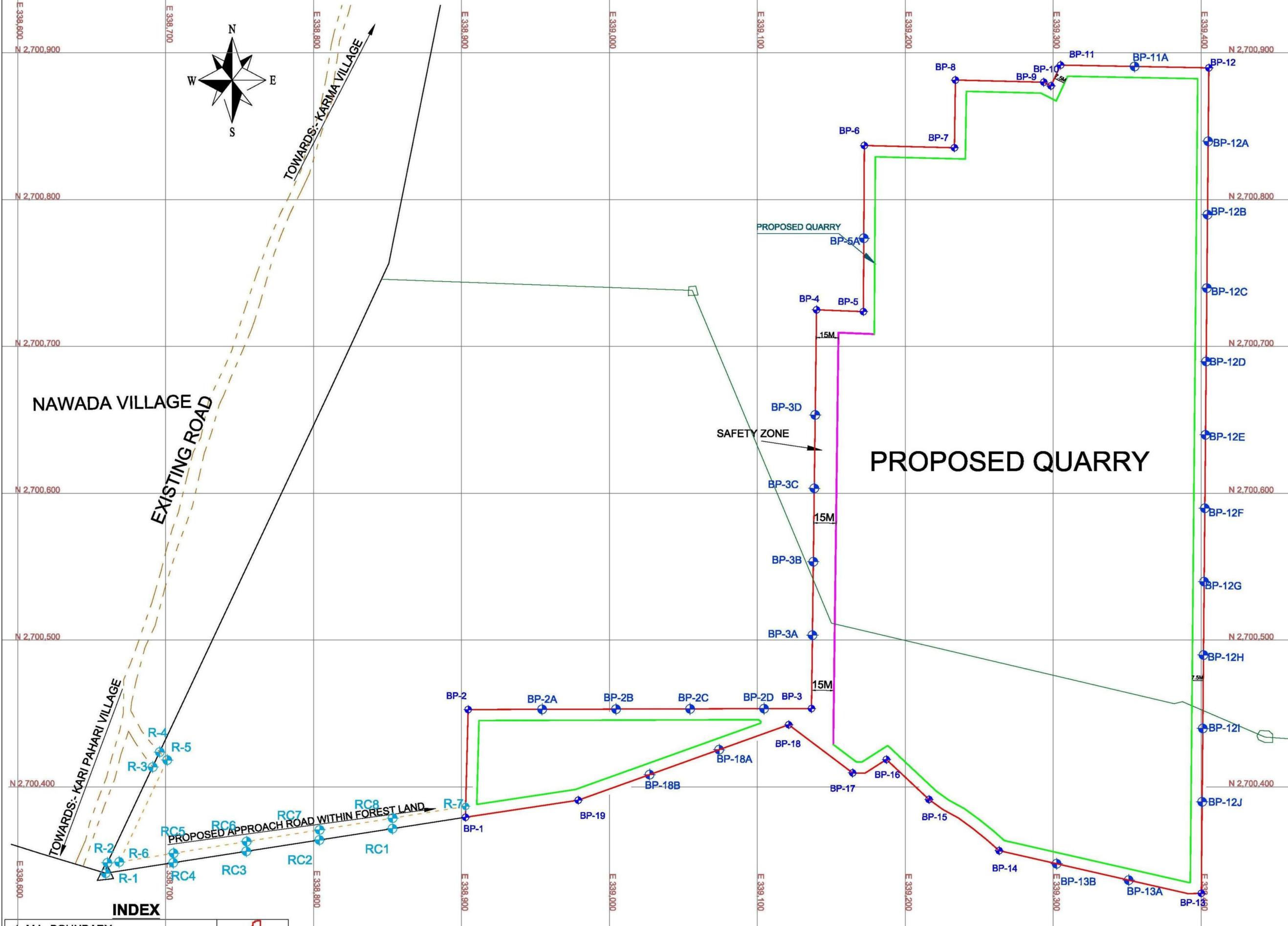
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RAM CHANDRA MEHTA CAPTAIN ANAND APARNA DEVI

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Ramchandra Mehta

Authorised Signatory



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SAFETY ZONE INDEX

SAFETY ZONE OF 15 M		SAFETY ZONE OF 7.5 M	
SAFETY ZONE WIDTH NEAR WATER BODY SHOWN IN THE MAGENTA COLOUR	15 M	SAFETY ZONE WIDTH ALONG OTHER PLACE OF MINING LEASE BOUNDARY IS SHOWN IN THE GREEN COLOUR	7.5 M
AREA BETWEEN MINING LEASE BOUNDARY AND SAFETY ZONE		4.45Acres/1.80Ha.	

PLATE-VI

PLAN SHOWING SAFETY ZONE OF THE APPLIED MINING LEASE OF THE KARMA STONE MINE OVER AN AREA OF **13.94 Ha/34.44 Ac.±**
 PROPOSED APPROACH ROAD OVER AN AREA OF 0.23 Ha./0.56 Ac.=TOTAL AREA **14.17 Ha/ 35.00 Ac.** IN VILLAGE KARMA, THANA-CHOUPARAN, DIST.-HAZARIBAGH OF JHARKHAND STATE FOR FOREST CLEARANCE UNDER FC ACT 1980

SCALE- 1 : 2000

Ramchandra Mehta

SIGNATURE OF APPLICANT

MINING PLAN OF KARMA STONE MINE OVER AN AREA OF 14.17 Ha/35.00 ACRE OF
M/s RAM CHANDRA MEHTA CAPTAIN ANAND APARNA DEVI

Reclamation at the end of plan period:

There is no proposal of reclamation of quarry during this plan period due to the area is not fully exhausted.

Reclamation at conceptual stage:

As stated earlier the generation of waste is very less and it will be utilized for the maintenance and making of mine road and surroundings etc. The Mining lease area is exists on the ground surface and surface level of the excavated area would be 330 meter after end of life of mine. The excavated area shall be reclaimed by waste from nearby area. Top soil would be spread over the reclaimed area. Spring planation shall be done and the said land shall handed over to Forest Department

vi) Afforestation:

Afforestation for the ensuing plan period would be carried out over the safety zone as given below:

DETAILS OF AFFORESTATION SCHEME FOR FIVE YEAR PLAN PERIOD

Table - 18

Sr. No.	Year	Over the green belt in Ha/Acre	Over the excavated quarry area Ha/Acre	Number of Plants
1	2017 - 18	0.36/0.89		576
2	2018 - 19	0.36/0.89		576
3	2019 - 20	0.36/0.89		576
4	2020 - 21	0.36/0.89		576
5	2021 - 22	0.36/0.89		576
	Total	1.80/4.45		2880
6	2022 - 23 to 2027 - 28 (Life of Mine)		12.14/29.99	19424
		1.80/4.45	12.14/29.99	
Grand Total		13.94/34.44		22304

APPROVED

अनुमोदित

RAM CHANDRA MEHTA CAPTAIN ANAND APARNA DEVI
Ramchandra Mehta
Authorised Signatory

B. B. Jai

Key Person,

Gems Projects Pvt. Ltd., RQP/RNC/166/2014/B

VIJAY KUMAR GUHA
Deputy Director, Geology

**PHASED RECLAMATION AND AFFORESTATION SCHEME OF
KARMA STONE MINE OF
M/S RAM CHANDER MEHTA CAPTAIN ANAND APARNA DEVI,
KODERMA, JHARKHAND**

1. INTRODUCTION

M/s Ram Chandra Mehta Captain Anand Aparna Devi has applied fresh Mining Lease for Stone over an area of 35.00 Acres (14.17Ha) in Village-Karma, PO & P.S. – Chouparan, Dist. – Hazaribag, Jharkhand State which includes approach road in forest land over an area 0.23 ha/0.56 ac.

The status of land is as follows:

Existing Land use Pattern

Sl no	Name of Village	Plot No	Type of Land	Applied Area (Hectares)
1	Karma	771(P)	Forest	2.18
		772(P)	Forest	11.99
Total				14.17

2. FUTURE LAND USE PATTERN

The total applied Mining Lease area is 14.17 ha which lies in forest land. Diversion for entire forest land of 14.17 ha shall be required for non forest use. The proposed land use at the end of life of mine is as follows:-

Proposed Land Use Pattern

Sl. No.	Pattern of Utilisation	Total area	Forest
1)	Mining area		
	a) Mining	12.14	12.14
	d) Proposed approach Road (outside the lease)	0.23	0.23
	Sub-Total :		12.37
2)	Safety zone & Barrier	1.80	1.80
	Grand Total		14.17

3. PROPOSED RECLAMATION & AFFORESTATION PLAN:

The applied stone mining lease area is fresh & virgin. The Mining Plan has been approved vide letter no 147 dated 01.09.2017. The total land requirement for the development of the Mine is 13.94ha/34.44 ac and approach road is 0.23 ha/0.56 ac. (outside the mine) of totaling 14.17 ha/ 35 acres which included 1.80Ha of safety zone. 14.17 ha / 35 acres of Forest Land which to be diverted for development of the mine block.

The mineable reserve of the stone is 6.2 million cum with a maximum production capacity of 0.6051 million cum for annum. The life of the mine will be 10.3 years at this stage.

EXCAVATION SCHEDULE AS PER APPROVED MINING PLAN

Plan Period	Production of Stone in cum
2017-18	593110
2018-19	583875
2019-20	601290
2020-21	605160
2021-22	604800
Total	2988235
2022-23 to 2027-28 (Conceptual Period)	3221318
Grand Total	6253778

As per approved mining plan, the generation of waste is very less and it will be utilized for the maintenance and making of mine road and surroundings road etc. The Mining lease area is exists on the surface level having RL of 390 meter & surface level of the excavated area would be 330 meter after end of life of mine. So the depth of excavated quarry will be 60 meter. The excavated area shall be reclaimed by waste from nearby area.

Top soil would spread over the quarry floor to make the land suitable for growth of plant for re-generation of forest growth over all the excavated area and handed over to Forest Department.

SCHEDULE OF PHASED RECLAMATION

As per approved Mining Plan, there is no proposal of reclamation of quarry during this plan period (First Five Year) due to the area is not fully exhausted. The excavated area shall be reclaimed at the end of life of mine after 10 years and rehabilitated by spreading top soil with sapling plantation. The total excavated area as per proposed land use pattern will be 12.14 Ha. The total waste material of 5003022 cu mt would be required keeping 80% as swelling factor for fully reclamation of the excavated area. The Schedule of Phased Reclamation is as follows:-

SI No	Year	Proposed Area for Phased Reclamation in Ha	Quantity of Waste in Cu Mt	Budget in INR
1	2028-29	3.035	1250755.5	4100000.00
2	2029-30	3.035	1250755.5	4100000.00
2	2030-31	3.035	1250755.5	4100000.00
4	2031-32	3.035	1250755.5	4100000.00
Grand Total		12.14	5003022	16400000.00

PHASE AFFORESTATION PROGRAMME

As per approved Mining Plan, Afforestation for the ensuing plan period (First Five Year) would be carried out over the safety zone and excavated quarry area would be planted at the end of life of mine after 10 years. The Schedule of Phased Afforestation is as follows:-

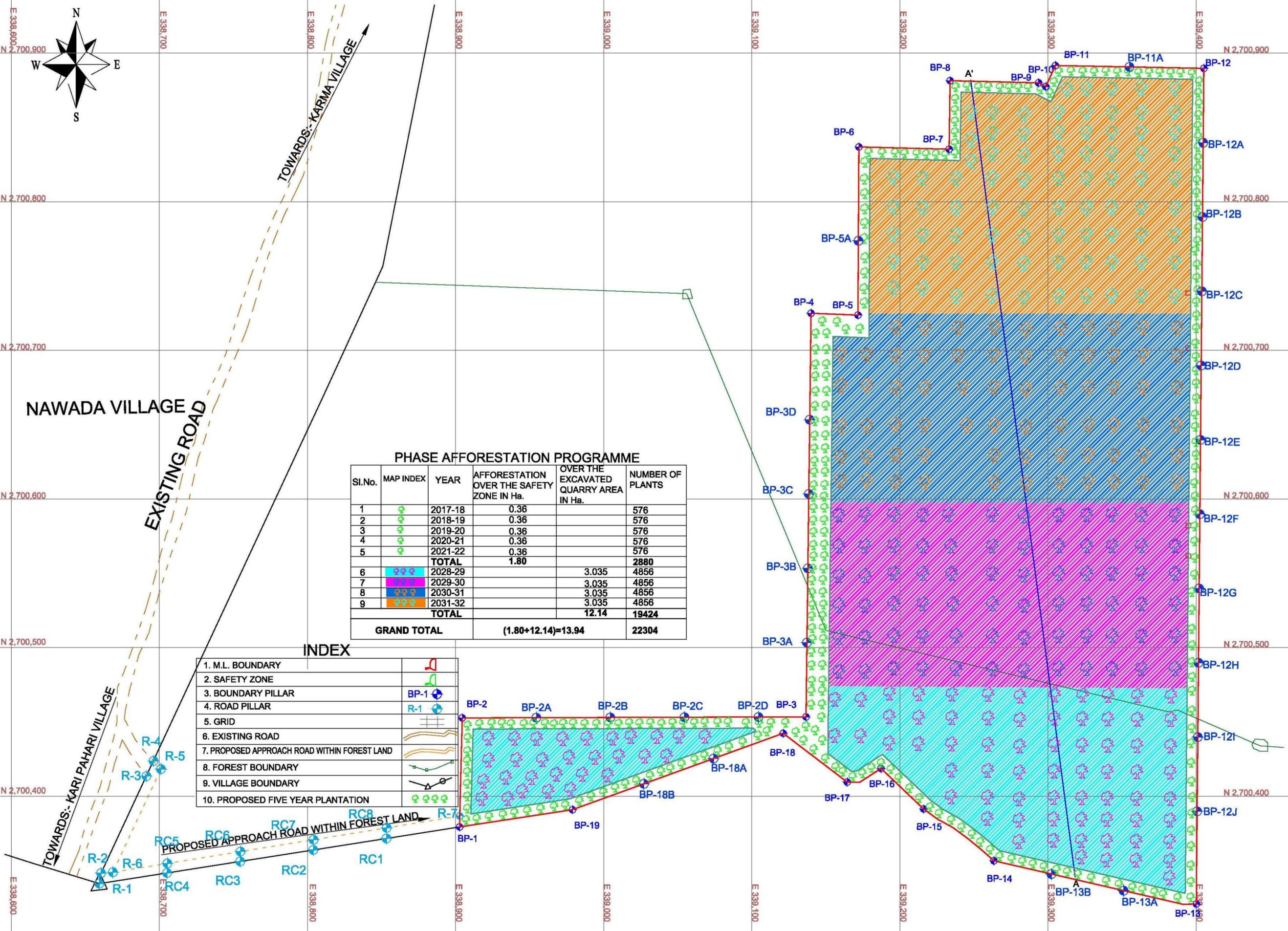
Sr. No.	Year	Afforestation Over the safety zone in Ha	Over the excavated quarry area Ha	Number of Plants
1	2017-18	0.36/0.89	---	576
2	2018-19	0.36/0.89	---	576
3	2019-20	0.36/0.89	---	576
4	2020-21	0.36/0.89	---	576
5	2021-22	0.36/0.89	---	576
	Total	1.80/4.45	---	2880
6	2028-29		3.035	4856
7	2029-30		3.035	4856
8	2030-31		3.035	4856
9	2031-32		3.035	4856
	Total		12.14	22304
	Grand Total		(1.80 + 12.14) = 13.94	22304

4. METHODS OF PLANTATION:

The procedures for plantation has been outlined as follows:

- Reclamation of the mined out quarries where the resources have been depleted. Such quarries will be filled up using waste such as laterite, shale and soil etc.

- ii) Leveling of the ground and spreading of the top (sweet) soil.
- iii) Selection of site and demarcation of the area for plantation.
- iv) Digging of the pits (30 x 30 x 30 cm³) with 2m x 2m interval before monsoon.
- v) Mixing of the sweet soil, cow dung and sand in 3:1:1 portion and pit filling.
- vi) Application of insecticide and pesticide in the pits.
- vii) Using neem cake powder, to protect plants from white ants and as manure.
- viii) Planting of seedling will be done in the month of July. In the sloping terrain, trenches shall be dug a 3m interval along the contours with stacking of the excavated earth on the edge of the trench on the lower slope side to arrest waste water flow, thereby allowing the planted saplings to get water nutrients.
- ix) Application of chemical fertilizer
- x) Weeding and hoeing
- xi) Watering of plants
- xii) Fencing
- xiii) Pruning
- xiv) Replacement of casualty.



PHASE AFFORESTATION PROGRAMME

Sl.No.	MAP INDEX	YEAR	AFFORESTATION OVER THE SAFETY ZONE IN Ha.	OVER THE EXCAVATED QUARRY AREA IN Ha.	NUMBER OF PLANTS
1		2017-18	0.36		576
2		2018-19	0.36		576
3		2019-20	0.36		576
4		2020-21	0.36		576
5		2021-22	0.36		576
		TOTAL	1.80		2880
6		2028-29		3.035	4856
7		2029-30		3.035	4856
8		2030-31		3.035	4856
9		2031-32		3.035	4856
		TOTAL		12.14	19424
GRAND TOTAL			(1.80+12.14)=13.94		22304

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10. PROPOSED FIVE YEAR PLANTATION	



PLATE-VII

PLAN SHOWING PHASED RECLAMATION & AFFORESTATION OF THE APPLIED MINING LEASE OF THE KARMA STONE MINE OVER AN AREA OF 13.94 Ha./34.44 Ac.+ PROPOSED APPROACH ROAD OVER AN AREA OF 0.23 Ha./0.56 Ac.=TOTAL AREA 14.17 Ha/ 35.00 Ac. IN VILLAGE KARMA, THANA- CHOUPARAN, DIST.-HAZARIBAGH OF JHARKHAND STATE FOR FOREST CLEARANCE UNDER FC ACT 1980

SCALE- 1 : 2000

Ramchandra Mehta
SIGNATURE OF APPLICANT

¹[23A. **Mine Closure Plan.**- Every mine shall have Mine Closure Plan, which shall be of two types:-

- (i) a progressive mine closure plan; and
- (ii) a final mine closure plan.

23B. Submission of Progressive Mine Closure Plan.- (1) The owner, agent, manager or mining engineer shall, in case of fresh grant or renewal of mining lease, submit a progressive mine closure plan as a component of mining plan to the Regional Controller of Mines or officer authorized by the State Government in this behalf as the case may be.

(2) The owner, agent, manager or mining engineer shall, in case of existing mining lease submit a progressive mine closure plan to the Regional Controller of Mines or the officer authorized by the State Government in this behalf, as the case may be, for approval ²[on or before the 31st December, 2004].

(3) The owner, agent, manager or mining engineer shall review the progressive mine closure plan every five years from the date of its approval in case of existing mine or from the date of opening of the mine in case of fresh grant or from the date of renewal of mining lease, as the case may be, and shall submit to the Regional Controller of Mines or officer authorised by the State Government in this behalf, as the case may be, for its approval.

(4) The Regional Controller of Mines or the officer authorised by the State Government in this behalf, as the case may be, shall convey his approval or refusal of the progressive mine closure plan within ninety days of the date of its receipt.

(5) If approval or refusal of the progressive mine closure plan is not conveyed to the owner, agent, manager or mining engineer of the mining lease within the period as specified in sub-rule (4), the progressive mine closure plan shall be deemed to have been provisionally approved, and such approval shall be subject to final decision whenever communicated.

23C. Submission of final mine closure plan.- (1) The owner, agent, manager or mining engineer shall submit a final mine closure plan to Regional Controller of Mines or the officer authorised by the State Government in this behalf, as the case may be, for approval one year prior to the proposed closure of the mine.

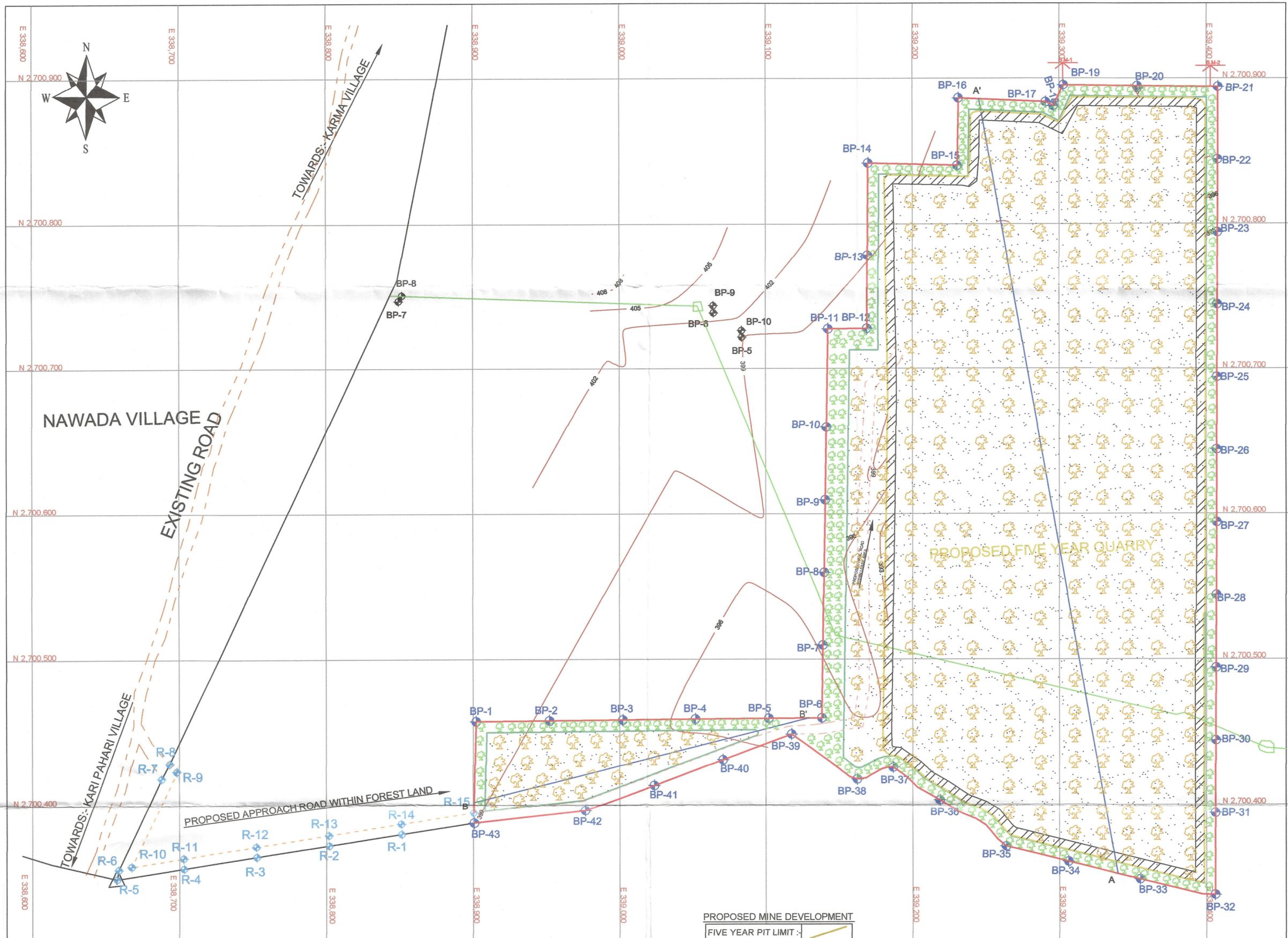
(2) The Regional Controller of Mines or the officer authorised by the State Government in this behalf, as the case may be, shall convey his approval or refusal of the final mine closure plan within ninety days of the date of its receipt to the owner, agent, manager or mining engineer.

(3) If approval or refusal of the final mine closure plan is not conveyed to the owner, agent, manager or mining engineer of the mining lease within the period as specified in sub rule (2), the final mine closure plan shall be deemed to have been provisionally approved, and such approval shall be subject to final decision whenever communicated.

¹ Inserted by G.S.R. 330 (E), dated 10.4.2003.

². Substituted by G.S.R. (E), dated 23-12-2003.

RAM CHANDRA MEHTA CAPTAIN ANAND APARNA DEVI
Ramchandra Mehta
 Authorised Signatory



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CONCEPTUAL LAND USE PATTERN FOR LIFE OF MINE

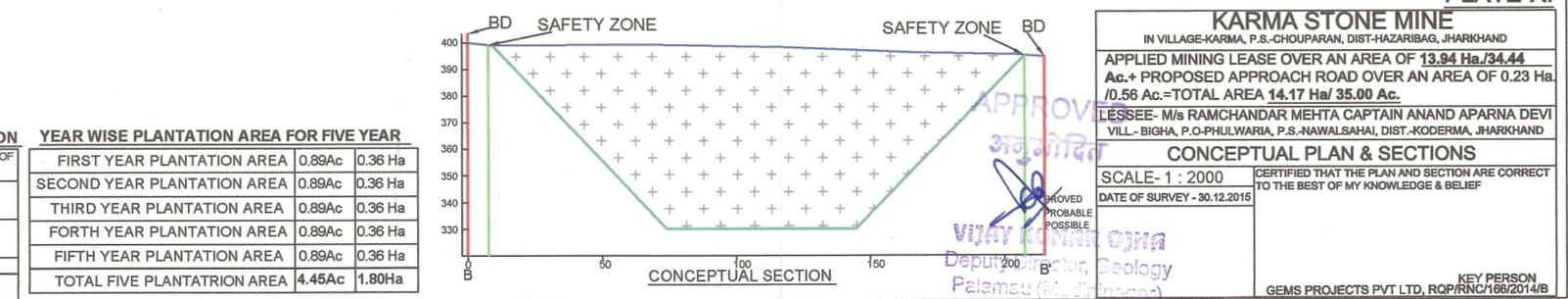
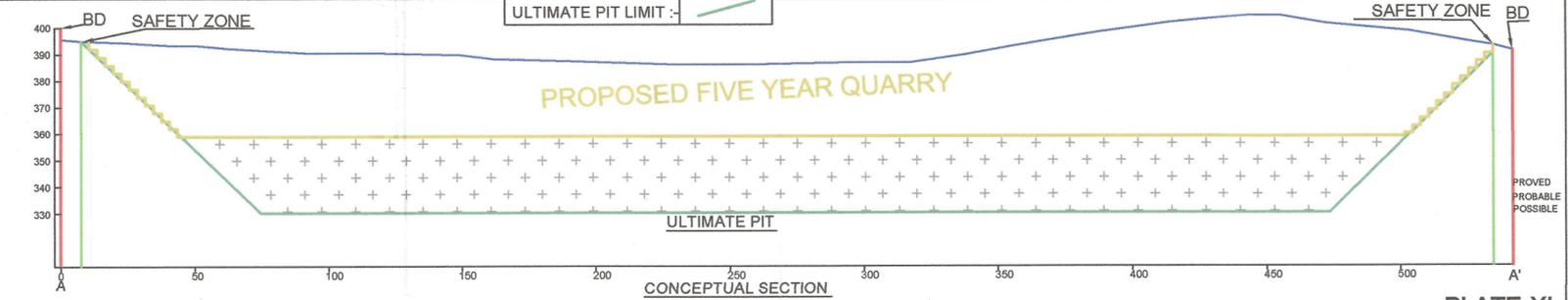
PATTERN OF LAND USE	AREA IN Ac.	AREA IN Ha.
1. PROPOSED QUARRY	29.99	12.14
2. PROHIBITED & PROTECTED SAFETY ZONE AREA EARMARKED FOR MINING OPERATION	4.45	1.80
3. PROPOSED APPROACH ROAD WITHIN FOREST LAND	0.56	0.23
TOTAL	35.00	14.17

PROPOSED LAND USE FOR FIVE YEAR

DESCRIPTION	AREA IN Ac.	AREA IN Ha.
1. PROPOSED QUARRY	25.81	10.45
2. PROPOSED APPROACH ROAD INSIDE THE LEASE AREA	0.43	0.17
3. PROPOSED APPROACH ROAD WITHIN FOREST LAND	0.56	0.23
4. PROPOSED PLANTATION	4.45	1.80
5. AREA UNUTILISED	3.75	1.52
TOTAL	35.00	14.17

PROPOSED FIVE YEAR & LIFE OF MINE PLANTATION

S.No.	YEAR	OVER THE GREEN BELT IN		OVER THE EXCAVATED QUARRY AREA		NUMBER OF PLANTS
		ACRE	Ha	ACRE	Ha	
1.	2017-18 TO 2021-22	4.45	1.80			2880
2.	2022-23 TO LIFE OF MINE			29.99	12.14	19424
3.	TOTAL	4.45	1.80	29.99	12.14	22304
GRAND TOTAL		34.44.00 ACRE/13.94 Ha.				22304



YEAR WISE PLANTATION AREA FOR FIVE YEAR

FIRST YEAR PLANTATION AREA	0.89Ac	0.36 Ha
SECOND YEAR PLANTATION AREA	0.89Ac	0.36 Ha
THIRD YEAR PLANTATION AREA	0.89Ac	0.36 Ha
FORTH YEAR PLANTATION AREA	0.89Ac	0.36 Ha
FIFTH YEAR PLANTATION AREA	0.89Ac	0.36 Ha
TOTAL FIVE PLANTATION AREA	4.45Ac	1.80Ha

KARMA STONE MINE

IN VILLAGE-KARMA, P.S.-CHOUPARAN, DIST-HAZARIBAG, JHARKHAND

APPLIED MINING LEASE OVER AN AREA OF **13.94 Ha/34.44 Ac.** PROPOSED APPROACH ROAD OVER AN AREA OF **0.23 Ha/0.56 Ac.** TOTAL AREA **14.17 Ha/ 35.00 Ac.**

LESSEE- M/s RAMCHANDAR MEHTA CAPTAIN ANAND APARNA DEVI
VILL.- BIGHA, P.O-PHULWARIA, P.S.-NAWALSAHAI, DIST.-KODERMA, JHARKHAND

CONCEPTUAL PLAN & SECTIONS

SCALE- 1 : 2000
DATE OF SURVEY - 30.12.2015

CERTIFIED THAT THE PLAN AND SECTION ARE CORRECT TO THE BEST OF MY KNOWLEDGE & BELIEF

APPROVED
अनुमोदित
PROVED PROBABLE POSSIBLE
Vijay Kumar Singh
Deputy Director, Geology
Palamu (Jharkhand)

KEY PERSON
GEMS PROJECTS PVT LTD, RQP/RNC/166/2014/B