



Letter No...1837.../OMC/F&E/2018
01st February, 2018.

To

**The Divisional Forest Officer,
Bonai Forest Division**

Sub.: Diversion of 11.912 ha of forest land located within the surrendered ML area of Siligora ML for use of infrastructure (Labour hutment, Creche, Anganwadi, Staff quarters, Hospital, Guest House, School, Temple, Market Complex, Stores, Garage, Workshop, Club, Canteen and Generator House) developed by OMC Ltd. prior to 1980 for facilitating mining operation in Kurmitar and Rantha Iron Ore Mining Leases of OMC Ltd. in Sundargarh District.

Ref: (i) Letter no. 5-ORC322/2017-BHU dt. 08.08.2017 by ERO, Bhubaneswar.
(ii) Memo no. 17170/F&E dt.18.08.2017 by State Govt.
(ii) Memo no. 20094 dt.12.09.2017 by APCCF (N).

Sir

Conservator of Forests (Central), Eastern Regional Office, MoEF & CC, Bhubaneswar vide letter under reference (i) has sought clarification on certain points pertaining to diversion of 11.912 ha of forest land for use as infrastructure in support of mining at Kurmitar and Rantha Iron Ore Mining Leases. The point wise compliance to the clarification sought by ERO, Bhubaneswar is given as under:

Sl. No.	Points raised	Compliance
1	<p>The State Govt. has informed that the existing infrastructure was constructed prior to 1980 (developed within Siligora & Rajabasa Mining Lease) which was subsequently surrendered (Mining lease) by OMC. Now, the State Govt. has proposed that the existing infrastructure was to be used for both Kurmitar & Rantha mining lease.</p> <p>Hence, the State Govt. may clarify why the present infrastructure proposal could not be included in the part of either Kurmitar mining lease or Rantha mining lease. The present proposal should have been a part of the above mining lease and should be considered by MoEF & CC, New Delhi.</p>	<p>The current infrastructure proposal is not located adjacent to Kurmitar mining lease. Rantha and Kurmitar Mining leases are contiguous to each other.</p> <p>Initially, OMC submitted a proposal for diversion of 212.297 ha of forest land on dt 09.11.1995 pertaining to Kurmitar Iron and Manganese Ore Mines. Out of which MoEF, Govt. of India granted Stage-II forest clearance over 28.802 ha of broken up forest land only on dt. 26.12.2003. The validity of the approval was up to dt 28.04.2005.</p> <p>The proposal for diversion of 11.912 ha of forest land is not adjoining to Kurmitar ML. Hence, it was not included in the diversion proposal of 212.297 ha of forest land submitted on dt. 09.11.1995.</p> <p>While the proposal of 212.297 ha of forest land was under process, OMC submitted another proposal for diversion of 11.912 ha of forest</p>

The Odisha Mining Corporation Ltd.

(A Gold Category State PSU)

Registered Office : OMC House, Bhubaneswar-751001, India
Tel: 0674-2377400/2377401, Fax: 0674-2396889, 2391629, www.omcltd.in
CIN : U13100OR1956SGC000313

		<p>land separately on dt 23.07.1997 in order to support mining at Kurmitar, located at a distance of 3.0 km from Kurmitar ML. MoEF, Eastern Regional Office granted forest clearance on dt. 22.03.1999 to use 11.912 ha of forest land for a period of one year. The validity of the approval was up to dt 21.03.2000.</p> <p>When the proposal of 11.912 ha was under process of clearance, OMC submitted a proposal for diversion of part forest area pertaining to Rantha Iron Ore Mines on dt. 30.12.1997.</p> <p>The proposal for Rantha ML was required to be revised and resubmitted on dt. 14.09.2010 for diversion of total forest area included within Rantha ML. During such time the proposal for 11.912 ha of forest land used for mining infrastructures was also submitted along with Rantha ML proposal, being adjacent, as an integrated proposal.</p>
2	<p>The State Govt. has stated that one year approval was given by Ministry on 22.03.1999 for use of 11.912 ha of forest land till 21.03.2000. Since then it is being used by OMC Ltd. in violation of F.C. Act, 1980.</p> <p>The State Govt. may explain the reason for allowing the use of forest land since 21.03.2000 till the submission of the instant proposal. The name and designation of officials responsible for allowing/ not restraining use of forest land in violation of FC Act, 1980 may be furnished.</p>	<p>Present applied area of 11.912 ha was non-forest land as per the records available with the Revenue Department, over which mining lease was granted prior to notification of the area u/s 4 of Orissa Forest Act. All the infrastructures for which the diversion proposal is submitted now were constructed prior to enactment of Forest Conservation Act, 1980. Since the infrastructures include residential buildings, office, workshop etc required for Rantha and Kurmitar mines whose mining leases were still with OMC Ltd, the infrastructures were used even after surrender of Silgora and Rajabasa ML area. Although the area over 11.912 ha is under occupation of OMC even after the period permitted by MoEF expired on 21.3.2000, no breaking up of fresh area or new construction have been done after 25.10.1980. Only repair works of the existing infrastructures have been done.</p>
3	<p>As per Ministry decision 1000 plants per hectare over applied forest area is to be planted, accordingly, in this case 11912 trees should be planted. However, the State Govt. has proposed 200 plants per hectare. Hence, the revised C.A. Scheme with 1000 plans per hectare may be furnished. If it is not possible to</p>	<p>The CA scheme has been revised by DFO, Kalahandi (S) with 12800 plants over 11.912 ha. As the number of seedlings to be planted is more than 1000 per ha, no plantation in extra area of degraded forest land is necessary. Copy of the CA Scheme approved by APCCF (N) is enclosed herewith as Annexure-I.</p>

1370

	plant 1000 trees per hectare in the identified non-forest land, additional degraded forest land shall be identified elsewhere and the details along with GPS co-ordinates may be furnished.	
4	The original FRA certificate or attested by the issuing authority may be furnished.	The attested copy of the FRA certificate is enclosed herewith as Annexure-II .
5	The Shape file of the non-forest land identified for C.A. shall be furnished.	The shape file of the non-forest land identified in village Barkaudi under Thuamul Rampur Tahasil for CA is enclosed herewith as Annexure-III .

It is therefore requested to kindly recommend the compliance to the higher quarter for taking necessary action.

An early action is solicited.

Yours faithfully,

Encls. as above.


 Dy. General Manager (Geo) F&E

Memo No.....1828...../OMC/F&E/2018, dt. 01st February, 2018

Copy forwarded to the Regional Manager, Koirā, for information and necessary action.


 Dy. General Manager (Geo) F&E

**SCHEME FOR
SITE SPECIFIC COMPENSATORY
AFFORESTATION**

OVER

**11.912 HA OF NON-FOREST GOVT. LAND
IDENTIFIED IN VILLAGE BARKAUDI**

UNDER THUAMUL RAMPUR TAHASIL

IN

KALAHANDI DISTRICT

AGAINST

**INFRASTRUCTURE FOR MINING AT KURMITAR & RANTHA
IRON ORE MINES IN SUNDARGARH DISTRICT, ODISHA**

OF

M/s ODISHA MINING CORPORATION LTD.

OMC HOUSE, POST BOX-34, BHUBANESWAR-1

Detailed scheme for Compensatory Afforestation to be carried out in lieu of 11.912 hectares of forest area to be diverted for Infrastructure for mining at Kurmitar and Rantha Iron Ore Mines of Odisha Mining Corporation Ltd. in Sundargarh District.

Ministry of Environment and Forests, Eastern Regional Office, Bhubaneswar conveyed its approval vide letter No. 8-340/FCE/1157 Dt.22.3.1999 for use of 11.912 ha of forestland for township purpose only for a period of one year subject to three conditions:

- (1) 0.766 ha of forestland earmarked for magazine and road etc. shall be surrendered to the Forest Department
- (2) Submit new proposals, if so desired, for Rantha and Kurmitar mining leases and
- (3) No further permission can be granted for continuation of this Rantha township area in forestland unless forest areas of these two mining leases are cleared.

OMC, with the above background submitted a proposal for diversion of 11.912 ha of forestland under use for housing complex for the employees of Kurmitar Iron & Manganese ore mines. The area proposed for diversion gives accommodation to 150 nos of staff, 200 workers and 350 persons engaged in mining operation. During expansion phase it is proposed to accommodate additional 500 staff. The area is approachable by the only all weather road (Barsuan-Sareikala Road) for a distance of 13 km from Barsuan, the rail head on SE Railways. This road passes through the infrastructure project area and is the only haulage route for access and regress to Kurmitar and Rantha mines. The requirement of non-forest Govt. land for compensatory afforestation comes to 11.912 ha. In accordance with the provision of F.C Act 1980, compensatory afforestation scheme over 11.912 ha of non-forest land has to be covered to compensate the loss of forest against the forestland proposed to be utilized for non-forestry activity.

Compensatory Afforestation will be done over 11.912 ha. Collector, Kalahandi vide letter No. 1464 Dated 19.12.2014 (**Annexure-I**) has allotted the land for raising compensatory afforestation by the State Forest Department at project cost.

The site specific scheme was prepared and submitted by the DFO, Kalahandi South Division with provision of planting 300 seedlings per hectare. MoEF & CC Eastern Regional Office vide letter No.5-ORC322/2017-BHU Dt.8.8.2017 has intimated that 1000 plants per hectare should be planted. Before taking up plantation of shortfall seedlings in degraded forests outside the Compensatory Afforestation area, the site was again inspected thoroughly. It was noticed that Bald Hill plantation with 1600 plants per ha can be raised over 8 ha and ANR without gap plantation will be done over balance 3.912 ha Hence this revised scheme for Compensatory Afforestation is prepared:

1. Details of non-forest land:-

District: Kalahandi

Tahasil: Thuamul Rampur

Village	Khata No	Plot No	Total area of the plot (Acres)	Area considered (Acres)	Kissam
Barakaudi	115 (AAA)	712	34.43	29.44	Dangar

Total 29.44 Ac or 11.912 ha

The village maps showing the land details for the proposed compensatory afforestation is enclosed as Plate No.VI of the FDP.

The jointly verified non-forest land by Forest and Revenue authorities is enclosed as **Annexure-II**.

Key Plan of Compensatory Afforestation area shown on topo sheet is enclosed as **Annexure-III**.

G.P.S co-ordinates of survey stations of Compensatory Afforestation area are furnished as **Annexure-IV**.

2. Description of Area

- I. Whether the site selected for Compensatory Afforestation is a land bank or not:** This identified non-forest area is under the control of Revenue Department and classified as 'Dangar'. It is not a land bank.
- II. If the CA site is other than the land bank, reasons be given:** No land bank has been established yet for this purpose.
- III. In case of non forest area identified for CA, then what is the distance of CA site from the adjoining forest boundary:** 10 km from Indravati R.F.
- IV. Soil type:** Lateritic soil.
- V. Topography :**
 - a) Hilly/Undulating/Plain: The Compensatory Afforestation sites are hilly and undulating.
 - b) Slope: Steep/Medium/Gentle: The sites selected for Compensatory Afforestation have medium to gentle slope.
- VI. Whether the area is bearing any root stock of vegetation:** The sites selected for Compensatory Afforestation are either barren or with weed growth like *Lantana*, *Eupatorium*, *Woodfordia fruticosa*, *Combretum decandrum*. Root stock of any principal species like Sal is not available.

3. Plantation Model:-

Bald Hill plantation with 1600 plants per ha will be raised over 8 ha and ANR without gap plantation will be done over balance 3.912 ha Maintenance of plantation for 10 years is also required as per F.No. 11-168/2009-FC Date 14.2.2012 of MoEF. Considering these facts a site specific cost norm for the plantation is furnished as **Annexure-(V)**. Cost norm for ANR without gap plantation is enclosed as **Annexure-(VI)**.

4. Schedule of Plantation Programme:-

Detail of year wise break up of requirements of funds is as under:-

Year	Bald Hill plantation with 1600 plants/ ha			ANR without gap plantation		
	Area in ha	Rate/ ha.	Amount	Area in ha	Rate/ ha.	Amount
0th Year	8.0	65739	525912	3.912	1800	7042
1st Year		62533	500264		9100	35600
2nd Year		23296	186368		3500	13692
3rd Year		23000	184000		1900	7433
4th Year		10600	84800		700	2738
5th Year		10600	84800		700	2738
6 th Year		10600	84800		700	2738
7th Year		10600	84800		700	2738
8th Year		10600	84800		700	2738
9th Year		10600	84800		700	2738
10th Year		10600	84800		700	2738
Total		248768	1990144		21200	82933

5. Technical details:- Technical details of Compensatory Afforestation Scheme are as follows:

a) General Details :

Survey & Demarcation of boundary:

The identified area will be surveyed by DGPS and the area will be demarcated with RCC pillars of size 2.5 mtr x 30 cm x 30 cm. This work will be done by the User Agency at Project cost.

Fencing:

To protect the plantation from grazing and other biotic interference, it will be provided with 7 strand barbed wire fencing with RCC pillars, the cost for which will be paid by the User Agency. Since non-forest areas adjoining this site have also been taken for Compensatory Afforestation for other projects and barbed wire fencing will be done around the entire patch, the length of barbed wire fence needed in this project is furnished below.

Sl No	Village	Length of outer periphery of the site in mtr	Length of enclosures if required to be fenced	Length of common fence of adjoining project which need not be fenced	Total length of fence (3+4-5)
(1)	(2)	(3)	(4)	(5)	(6)
1	Barakaudi	1070.47	Nil	Nil	1070
Total					1070 mtr

Estimate for barbed wire fencing has been provided in **Annexure – (VII)**.

Planting and post-planting:

- b) Compensatory Afforestation areas of this project and its adjoining projects should be treated as a single plantation for proper management. Bald Hill plantation shall be taken up with 1600 plants per hectares at spacing of 2.5 m x 2.5 m. Alignment and pit marking should be done carefully in slopes so that the horizontal distance between plants in a row remains 2.5 mtrs and not the distance measured along the slope. All post planting measures like casualty replacement, soil working, manuring, fire protection etc. will be

undertaken. Regeneration cleaning, plantation, Soil Conservation Measures and all other works to be done as per time schedule given in the cost norm.

While taking up plantation, the following vital points shall be taken up for consideration: -

- Care to be taken to raise healthy plantable seedlings of minimum 60 cm height. 10% extra seedlings are to be raised for replacement of casualty.
- Pitting shall invariably be done during November-February i.e., before onset of monsoon. If possible the soil of upper portion and lower portion of pit should be placed separately in specific direction so that while planting the pits will be filled with top-soil first.
- Planting shall be done on the onset of monsoon to get full benefit of monsoon rain and planting should never be delayed.
- Basal dose of 50 grams of NPK and 5 grams of Chlorpyrifos dust per plant should be applied at the time of planting carefully by mixing with top-soil so that the roots of seedlings do not come in direct contact with fertilizer.
- In case of any mortality of planted seedlings, it should be replaced with good seedlings as soon as possible for better success rate.
- Complete weeding in proper time will be done. Strip weeding will not be permitted.
- Soil-working and application of 2nd dose fertilizer of 50 gms NPK per plant should be done in time.
- Since the area is provided with barbed wire fence, watch & ward will be easier and the watchers may be engaged in weeding in problematic areas alongwith watch & ward.

c) Species:

Although indigenous species are to be preferred in the plantation, considering adverse soil & moisture conditions we may go for hardy exotic species where required so that the plants are able to survive. For success of plantation in interior tribal areas, plantation of fruit and NTFP species plays a great role since economic species have a little value for local people. Considering the topography, soil and moisture availability of the plantation area, the following species will be planted

Sl No	Name of species	Common name	Remarks
1	<i>Azadirachta indica</i>	Neem	
2	<i>Derris indica</i>	Karanja	
3	<i>Emblica officinalis</i>	Amla	
4	<i>Terminalia chebula</i>	Harida	In lower areas with good soil depth
5	<i>Terminalia bellirica</i>	Bahada	In lower areas with good soil depth

6	<i>Dalbergia sissoo</i>	Sissoo	In lower areas with good soil depth
7	<i>Gmelina arborea</i>	Gambhari	In lower areas with good soil depth
8	<i>Dendrocalamus strictus</i>	Salia bamboo	In lower areas with good soil depth healthy seedlings from rhizomes may be planted
9	<i>Cassia siamea</i>	Chakunda	In lower areas with good soil depth
10	<i>Tamarindus indica</i>	Tentuli	In lower areas with good soil depth
11	<i>Madhuca indica</i>	Mahul	Only two years old seedlings may be planted
12	<i>Simaruba glauca</i>	Simaruba	In rocky areas with low soil depth
13	<i>Zizyphus mauritania</i>	Ber	In rocky areas with low soil depth
14	<i>Tectona grandis</i>	Teak	Potted seedlings from pre-sprouted healthy stumps will be planted
15	<i>Mangifera indica</i>	Mango	In situ plantation (direct placing of mango stone in planting site) during pre-monsoon may be adopted in few lower areas or where watering can be done during summer
16	<i>Caryota urens</i>	Salapa	
17	<i>Terminalia arjuna</i>	Arjuna	Planted only on nala bank or near water.
18	<i>Desmodium oojainensis</i>	Bandhan	
19	<i>Dillenia indica</i>	Ou	To be planted in area having good soil depth
20	<i>Feronia limonia</i>	Kaitha	
21	<i>Ficus benghalensis</i>	Bara	
22	<i>Ficus racemosa</i>	Dimiri, Dumer	
23	<i>Ficus religiosa</i>	Aswattha	
24	<i>Acacia auriculiformis</i>		
25	<i>Phoenix sylvestris</i>	Khajuri	
26	<i>Pithecolobium dulce</i>	Simakayan	
27	<i>Acacia catechu</i>	Khair	
28	<i>Acacia nilotica</i>	Babul	
29	<i>Artocarpus heterophyllus</i>	Jack fruit	
30	<i>Bauhinia variegata</i>	Kuler	
31	<i>Boswellia serrata</i>	Salai	
32	<i>Bridelia retusa</i>	Kasi	
33	<i>Buchanania lanzan</i>	Char	
34	<i>Calophyllum inophyllum</i>	Polanga	
35	<i>Cassia fistula</i>	Sunari	
36	<i>Ceiba pentandra</i>	White silk cotton	
37	<i>Chloroxylon swietiana</i>	Bheru	
38	<i>Cleistanthus collinus</i>	Karada	
39	<i>Albizia lebbek</i>	Siris	
40	<i>Albizia procera</i>	White Siris	

d) Soil and Moisture Conservation Works :-

Since most of the areas are hilly and undulating, half-moon trenches on down-hill side of plants should be constructed.

e) Protection of the plantation: - 7 strand Barbed wire fence with RCC pillars all along the periphery of the plantation will be provided. Few watchers will also be engaged for protection of the plantation.

6. **Proposed Monitoring Mechanism:** - The scheme shall be executed by the Divisional Forest Officer, Kalahandi South Division with his staff and all prescribed records are to be maintained. In addition to internal monitoring by Forest Officers of State Government, a Monitoring Committee under item no. 3.4(iii) of consolidated guidelines under F.C Act 1980 issued by MoEF, shall be established with a nominee of the Central Government to oversee that the stipulations, including those pertaining to Compensatory Afforestation are carried out.
7. **Total cost of the project:** The total cost of the project is Rs. 37, 44,300.00 (Rupees Thirty-seven lakh Fourty-four thousand Three hundred) only as detailed in **Annexure-VIII** which shall be payable by the user agency to the D.F.O, Kalahandi South Division.



Divisional Forests Officer
Kalahandi South Division
Kalahandi South Division

OFFICE OF THE COLLECTOR & DISTRICT MAGISTRATE: KALAHANDI

No. 1464 /Rev- Date: 19.12.2014

To,

Divisional Forest Officer (South)
Kalahandi, Bhawanipatna

Sub: Allotment of Govt. land for Compensatory Aforestation.

Ref: Your letter No.5081 dated 11.12.2014.

Sir,

I am to say that the enclosed schedule of non-forest Government land measuring Ac. 70.59, equivalent to 28.561 Ha under Th.Rampur Tahasil has been identified and allotted for raising compensatory aforestation in lieu of the forest land coming within the lease hold area of the granted mining leases of Daitari Iron Ore Mines and Infrastructure mining for Kurumtar and Rantha Mines in favour of O.M.C Ltd., Bhubaneswar.

You are requested to please file necessary requisition in Form No. 1 before the Tahasildar, Th.Rampur for processing alienation proposal for sanction of the land in favour of Forest Department immediately.

Enc: as above.

Yours faithfully,

[Signature]
19.12.14
Collector,
Kalahandi

Memo No. 1465 /Rev. Date: 19.12.2014

Copy alongwith copies of Joint verification report and sketch map forwarded to Tahasildar, Th.Rampur for information. He is requested to process the alienation proposal in favour of the Forest Department on obtaining the requisition from the Divisional Forest Officer (South), Kalahandi.

[Signature]
19.12.14
Collector,
Kalahandi

Memo No. 1466 /Rev. Date: 19.12.2014

Copy to Sub-Collector, Bhawanipatna for information and necessary action.

[Signature]
19.12.14
Collector,
Kalahandi

Memo No. 1467 /Rev. Date: 19.12.2014

Copy to Chairman-cum-Managing Director, Odisha Mining Corporation Ltd, Bhubaneswar with reference to his letter No. 15505/OMC dated 25.10.2014 for information and necessary action.

[Signature]
19.12.14
Collector,
Kalahandi

OFFICE OF THE DIVISIONAL FOREST OFFICER, KALAHANDI SOUTH DIVISION

Memo No. 5064 /BF Dt. 11-12-2014

To,

The Collector,
Kalahandi.

Sub:-

Submission of Joint verification report.

Ref:-

Letter No. 7826 Dt. 06.12.2014 of Tahasildar Th. Rampur.

Sir,

In inviting a kind reference to the above cited letters and captioned subject, I would like to inform you that, the joint verification report has been made both the Revenue and Forest Department in connection with allotment of non-forest Govt. land identified for Compensatory Afforestation against Daitari Iron Ore over an area of 16.649 Ha. and over an area of 11.912 Ha. against Infrastructure for mining at Rantha and Kurnitar mines of M/s OMC Ltd. located in the District of Keonjhar, Jajpur and Sundargarh under Th. Rampur Tahasil of Kalahandi District. The copy of joint verification report is enclosed herewith.

Therefore, I would request you to kindly allocate the non-forest Govt. land in favour of Forest Department for Compensatory Afforestation purpose as described above.

Encl:- 1. Joint Verification report
2. Maps

Yours Faithfully,

[Signature]
10/12/14
Divisional Forest Officer,
Kalahandi South Division

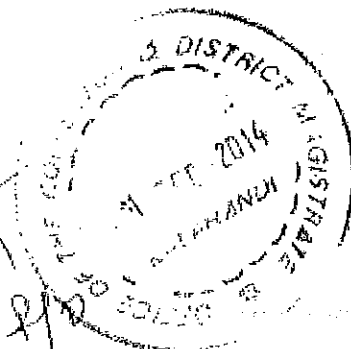
Memo No.

Dt.

Copy forwarded to Tahasildar, Th. Rampur for information with reference to his memo

No. 7826 Dt. 06.12.2014.

Divisional Forest Officer,
Kalahandi South Division



JOINT VERIFICATION REPORT OF NON - FOREST GOVT. LAND IN BARAKAUDI VILLAGE UNDER TH.RAMPUR TAHASIL OF KALAHANDI DISTRICT FOR RAISING COMPENSATORY AFFORESTATION AGAINST MINING PROJECTS OF M/S OMC LTD LOCATED IN THE DISTRICT OF KEONJHAR, JAIPUR AND SUNDARGARH DISTRICT OF ODISHA.

Certified that on joint verification of Non- Forest Govt. Land (KISSAM DANGAR) in Barakaudi village it is found that the scheduled wise land mentioned as given under is suitable for ANR and are free from encroachment and encumbrances.

Name of the Mine / Project	Name of the village	Khata No	Plot No	Total area of the plot in Acre.	Area recommended for CA	Kissam	Types of plantation in ha	
							Block 1600 nos of plants per ha	ANR 300 nos of plants/ per ha
Daitarl Iron Ore Mines	Barakaudi	115 Abada Ajogya Anabadi	687	49.03	41.15	Dangar	Nil	ANR
			Total	49.03	41.15 Acr or 16.649 ha	Dangar	Nil	ANR
Infrastructure mining for Kurumitar and Rantha mines	Barakaudi	115 Abada Ajogya Anabadi	712	34.43	29.44	Dangar	Nil	ANR
			Total	34.43	29.44 Acr or 11.912 ha	Dangar	Nil	ANR

Revenue Inspector
Badchhatrang

Forest Officer,
Th.Rampur

Forest Range Officer,
Th.Rampur.

Asst. Conservator of Forest
UC Th.Rampur (S) Range

TAHASILDAR
Th.Rampur

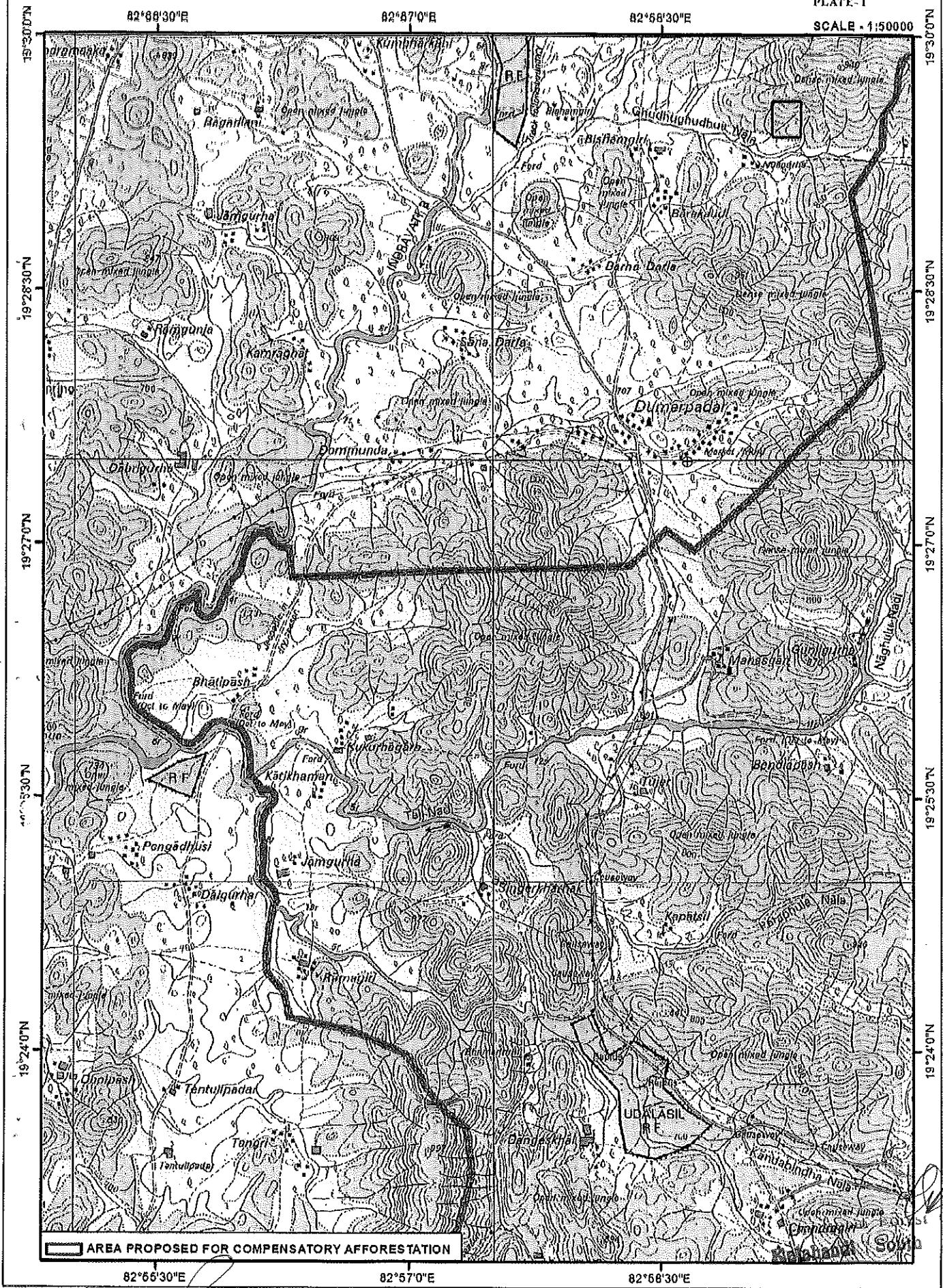
D.F.O, South,
Kalahandi.

REFERENCE TOPOSHEET NO. B44B15

KEY PLAN

PLATE - I

SCALE - 1:50000



AREA PROPOSED FOR COMPENSATORY AFFORESTATION

[Signature]
Revenue Supervisor
Thuamul Rampur Tehasil

280

[Signature]
30/11/17
Tehasil
Thu. Ramp.

[Signature]
Range Officer
Th. Rampur South Range

ANNEXURE-IV

GPS READING OF THE AREA PROPOSED FOR COMPENSATORY AFFORESTATION
(Village: Barkaudi)

Station		Distance in mtr	Forward Bearing	Backward Bearing	Co-ordinates	
From	To				Longitude	Latitude
1	2	300.672	91°30'46"	271°30'46"	19° 29' 37.354" N	82° 59' 9.318" E
2	3	399.707	181°44'42"	1°44'42"	19° 29' 37.324" N	82° 59' 19.610" E
3	4	274.863	272°19'02"	92°19'02"	19° 29' 24.349" N	82° 59' 19.514" E
4	5	30.532	295°40'36"	115°40'36"	19° 29' 24.501" N	82° 59' 10.106" E
5	6	52.63	15°09'15"	195°09'15"	19° 29' 24.909" N	82° 59' 9.154" E
6	7	12.067	285°15'18"	105°15'18"	19° 29' 26.569" N	82° 59' 9.584" E
7	1	329.348	2°01'33"	182°01'33"	19° 29' 26.663" N	82° 59' 9.183" E
Perimeter: 1399.82 mtr-329.35mtr=1070.47 mtr						

[Signature]
Revenue Supervisor
Thuamul Rampur Tahasil

[Signature]

[Signature]
30/8/17
Mahaziladar
Th. Rampur

[Signature]
Range Officer
Th. Rampur South Range

[Signature]
Divisional Forest Officer
Balebandi South Division

COST NORM FOR BALD HILL PLANTATION @ 1600 PLANTS PER HECTARE						
Labour cost @ Rs 213.50 per manday						
Sl No	Item of work	Preferable period of execution	Manday	Labour cost @ Rs 213.50 per day	Material cost per hectare in Rs	Total cost per hectare in Rs.
Preparatory operation (0th Year)						
1.	Survey and demarcation	June	2	427.00	0	427.00
2.	Pitting (1600 pits per ha.)- each pit 45cm ³	Nov-Dec	128	27328.00	0	27328.00
3.	Soil and water conservation measures					
	(a) Staggered trench along the contour @ 300 per ha (2.5mx0.5mx0.5m), digging of percolation pits @ 600 per ha in lieu of staggered trenches, gully plugging and Drainage line treatment, half-moon trench on the uphill side of each planting pit (100 MD for staggered trench/percolation pits and 30 MD for gully plugging, drainage line treatment and half-moon trench)	Sept-Nov	130	27755.00	0	27755.00
	(b) Green Fencing To be strengthened by planting of bamboo and other seedlings in two rows. Bamboo to be planted at 2 meters spacing in staggered manner on the two rows, and the rest of the species to be planted at ½ meter spacing along the two rows, the rows being 2m apart. Thus 500 plant (125 bamboo and 375 others) to be planted in two rows to cover 126 m of periphery / Ha. by the vegetative fence (Bamboo seedlings @ Rs. 9.45 per seedling x 125 = Rs. 1181.00 Agave seedling @ Rs. 3.50 per seedling x 375 + Rs. 1312.00)	June – Sept.	11	2348.50	2493.00	4841.50
	(c) Site clearance-8 MD. Alignment and staking of contour lines on ground, planting pits, contour trenches/ percolation pits and check dam sites etc.-2 MD	July-Aug	22	4697.00	0	4697.00
4	Raising of seedlings in poly bags (minimum 60 cm high) @ Rs 9.45 per seedling (Rs 6.67 in 0 th year) Part (1760 saplings to be raised for one hectare from January-March @ Rs 11739/-	October-March	44	9394.00	2939.00	12333.00
Total 0th year			337	71949.50	5432.00	77381.50
Planting Operation (1st Year)						
1	Cost of sapling (balance) from April-June/July @ Rs 2.78 per seedling for 1760 seedlings = Rs.4893/-	April-July	21.5	4590.25	593.00	5183.25
2	Freshening of pits-64 MD, filling with fertile soil and farm yard manure (FYM)-24 MD, application of insecticide and planting of 60 cm tall saplings including carriage of plants-21MD & transportation of seedlings by mechanical means.	June-July	109	23271.50	3520.00	26791.50
3	Cost of fertile soil 0.25 cft @ Rs 6 per cft/ FYM 0.25 cft @ Rs 15 per cft per pit		0	0	9200.00	9200.00
4	Sowing of seeds on dug out earth of trench	June	6	1281.00	200.00	1481.00
5	Carriage-6 MD. Planting including casualty replacement-6 MD, fertilizer application-5 MD, 1 st weeding-10 MD, 2 nd weeding-10 MD, soil working-10 MD.	July-August	47	10034.50		10034.50

6	Cost of fertilizer and insecticide (Granular insecticide @ 5gms/plant @Rs 80/- per kg = Rs 640.00, NPK 100 gms/plant in two doses @ Rs 24 per kg = Rs 3840.00		0	0	4480.00	4480.00
7	Maintenance of Soil and Moisture Conservation measures (20% of cost)	October-December	26	5551.00	0	5551.00
8	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	30	6405.00	0	6405.00
9	Fire tracing and control, display board construction, painting/writing, other miscellaneous cost	Jan-Feb	10	2135.00	360.00	2495.00
Total (1st year)			249.5	53268.25	18353.00	65752.75
Maintenance Operation (2nd Year)						
1	Casualty replacement-6 MD including seedling cost @ Rs 9.45 per seedling and its transportation of seedlings.	June-July	10	2135.00	1512.00 + 320.00	3967.00
2	Soil working-10 MD, 1 st weeding-10 MD, 2 nd weeding-10 MD and fertilizer application-5 MD	August-October	35	7472.50	0	7472.50
3	Cost of fertilizer @ 50 gms NPK per plant @ Rs 24/- per kg for 1600 plants = Rs 1920.00. Insecticide @ 5 gm per plant for 160 nos of plants @ Rs 80 per kg = Rs 64.00		0	0	1984.00	1984.00
4	Maintenance of Soil and Moisture Conservation measures (20% of cost)	August-October	26	5551.00	0	5551.00
5	Fire tracing and control, and other miscellaneous cost	Feb-March	10	2135.00	0	2135.00
6	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	30	6405.00	0	6405.00
Total 2nd Year			111	23698.50	3816.00	27514.50
Maintenance Operation (3rd Year)						
1.	S.M.C measures (Renovation)--	April-March	26	5551.00	0	5551.00
2	Repair of barbed wire fence	April-March	40	8540.00	1000.00	9540.00
2	Maintenance of plantation	Apr-Mar	14	2989.00	0	2989.00
3	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	30	6405.00	0	6405.00
Total 3rd Year			110	23485.00	1000.00	24485.00
Maintenance Operation (4th Year)						
1	S.M.C measures- 21MD, and maintenance of plantation – 14 MD	April-March	35	7472.50	0	7472.50
2	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	31	6618.50	500.00	7118.50
Total 4th Year			66	14091.00	500.00	14591.00
Maintenance Operation (5th Year)						
1	S.M.C measures- 21MD, and maintenance of plantation – 14 MD	April-March	35	7472.50	0	7472.50
2	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	31	6618.50	500.00	7118.50
Total 5th Year			66	14091.00	500.00	14591.00
Maintenance Operation (6th Year)						
1	S.M.C measures- 21MD, and maintenance of plantation – 14 MD	April-March	35	7472.50	0	7472.50
2	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	31	6618.50	500.00	7118.50
3	Repair of barbed wire fence		42.15	9000.00	0	9000.00
Total 6th Year			108.15	23091.00	500.00	23591.00

Maintenance Operation (7 th Year)						
1	S.M.C measures- 21MD, and maintenance of plantation – 14 MD	April-March	35	7472.50	0	7472.50
2	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	31	6618.50	500.00	7118.50
	Total 7th Year		66	14091.00	500.00	14591.00
Maintenance Operation (8 th Year)						
1	S.M.C measures- 21MD, and maintenance of plantation – 14 MD	April-March	35	7472.50	0	7472.50
2	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	31	6618.50	500.00	7118.50
	Total 8th Year		66	14091.00	500.00	14591.00
Maintenance Operation (9 th Year)						
1	S.M.C measures- 21MD, and maintenance of plantation – 14 MD	April-March	35	7472.50	0	7472.50
2	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	31	6618.50	500.00	7118.50
3	Repair of barbed wire fence		42.15	9000.00	0	9000.00
	Total 9th Year		108.15	23091.00	500.00	23591.00
Maintenance Operation (10 th Year)						
1	S.M.C measures- 21MD, and maintenance of plantation – 14 MD	April-March	35	7472.50	0	7472.50
2	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	31	6618.50	500.00	7118.50
	Total 10th Year		66	14091.00	500.00	14591.00

ABSTRACT

Sl	Year	Mandays	Labour cost (Rs.)	Material cost (Rs.)	Total (Rs.)
1	0 th year	337	71949.50	5432.00	77381.50
2	1 st year	249.5	53268.25	18353.00	65752.75
3	2 nd year	111	23698.50	3816.00	27514.50
4	3 rd year	110	23485.00	1000.00	24485.00
5	4 th year	66	14091.00	500.00	14591.00
6	5 th year	66	14091.00	500.00	14591.00
7	6 th year	108.15	23091.00	500.00	23591.00
8	7 th year	66	14091.00	500.00	14591.00
9	8 th year	66	14091.00	500.00	14591.00
10	9 th year	108.15	23091.00	500.00	23591.00
11	10 th year	66	14091.00	500.00	14591.00
	Total	1353.80	289038.25	32101.00	315270.75

Annexure-VI

COST NORM FOR AIDED NATURAL REGENERATION (ANR WITHOUT GAP) PER HECTARE						
Sl No.	Item of work	preferable period of execution	person days	Labour (Rs)	Material (Rs)	Total (Rs)
0th year						
1	Survey demarcation and pillar posting , GPS reading with mapping	Nov/Dec	2	427.00	0	427.00
2	Site Preparation	Nov/Dec	2	427.00	0	427.00
3	Cutting of high stump		5	1067.50	0	1067.50
	Sub Total		9	1921.50	0	1921.50
1st year						
1	Silvicultural operation involving clearance of weeds, cutting of climbers, singling of shoots etc.	Sep/Oct	15	3202.50	0	3202.50
2	Soil Conservation Measures (Staggered trenches of dimension 2 m x 0.5 m x 0.5 m@ 60 nos per ha) or its equivalent	Sep/Oct	20	4270.00	0	4270.00
3	Fire line Tracing and inspection path	Feb/Mar	3	640.50	0	640.50
4	Watch & ward	Aug-Mar	5	1067.50	0	1067.50
5	Contingency and unforeseen expenditure		0	0	500.00	500.00
	Sub Total		43	9180.50	500.00	9680.50
2nd year						
1	Soil conservation Measures (Renovation of staggered trenches etc.)	Sep/Oct	8	1708.00	0	1708.00
2	Fire line Tracing and inspection path	Feb/Mar	1	213.50	0	213.50
3	Watch & ward (whole year)	Apr-Mar	7	1494.50	0	1494.50
4	Contingency and unforeseen expenditures		0	0	300.00	300.00
	Sub Total		16	3416.00	300.00	3716.00
3rd Year						
1	Fire line Tracing and inspection path	Feb/Mar	1	213.50	0	213.50
2	Watch & ward (whole year)	Apr-Mar	7	1494.50	0	1494.50
3	Contingency and unforeseen expenditures		0		300.00	300.00
	Sub Total		8	1708.00	300.00	2008.00
4th year						
1	Fire line Tracing and inspection path	Feb/Mar	1	213.50	0	213.50
2	Watch & ward and cultural operation	Apr-Mar	2	427.00	0	427.00
3	Contingency and unforeseen Expenditures				100.00	100.00
	Sub-Total		3	640.50	100.00	740.50
5th year						
1	Fire line Tracing and inspection path	Feb/Mar	1	213.50	0	213.50
2	Watch & ward and cultural operation	Apr-Mar	2	427.00	0	427.00
3	Contingency and unforeseen Expenditures				100.00	100.00
	Sub-Total		3	640.50	100.00	740.50
6th year						
1	Fire line Tracing and inspection path	Feb/Mar	1	213.50	0	213.50
2	Watch & ward and cultural operation	Apr-Mar	2	427.00	0	427.00
3	Contingency and unforeseen Expenditures				100.00	100.00
	Sub-Total		3	640.50	100.00	740.50
7th year						
1	Fire line Tracing and inspection path	Feb/Mar	1	213.50	0	213.50

2	Watch & ward and cultural operation	Apr-Mar	2	427.00	0	427.00
3	Contingency and unforeseen Expenditures				100.00	100.00
	Sub-Total		3	640.50	100.00	740.50
8th year						
1	Fire line Tracing and inspection path	Feb/Mar	1	213.50	0	213.50
2	Watch & ward and cultural operation	Apr-Mar	2	427.00	0	427.00
3	Contingency and unforeseen Expenditures				100.00	100.00
	Sub-Total		3	640.50	100.00	740.50
9th year						
1	Fire line Tracing and inspection path	Feb/Mar	1	213.50	0	213.50
2	Watch & ward and cultural operation	Apr-Mar	2	427.00	0	427.00
3	Contingency and unforeseen Expenditures				100.00	100.00
	Sub-Total		3	640.50	100.00	740.50
10th year						
1	Fire line Tracing and inspection path	Feb/Mar	1	213.50	0	213.50
2	Watch & ward and cultural operation	Apr-Mar	2	427.00	0	427.00
3	Contingency and unforeseen Expenditures				100.00	100.00
	Sub-Total		3	640.50	100.00	740.50

ABSTRACT

Sl No.	Year	Mandays	Labour Cost (Rs.)	Material Cost (Rs.)	Total (Rs.)
1	0th Year	9	1921.50	0.00	1921.50
2	1st Year	43	9180.50	500.00	9680.50
3	2nd Year	16	3416.00	300.00	3716.00
4	3rd Year	8	1708.00	300.00	2008.00
5	4th Year	3	640.50	100.00	740.50
6	5th Year	3	640.50	100.00	740.50
7	6th Year	3	640.50	100.00	740.50
8	7th Year	3	640.50	100.00	740.50
9	8th Year	3	640.50	100.00	740.50
10	9th Year	3	640.50	100.00	740.50
11	10th Year	3	640.50	100.00	740.50
Total		97	20709.50	1800.00	22509.50

ESTIMATE FOR BARBED WIRE FENCE

7 strands (5 straight + 2 cross strands) of 2 ply barbed wire on RCC posts fixed at 2.5 mtr intervals.							
Two fencing posts extra, used as struts at each corner point							
Number of fence posts required per kilometer 500 nos.							
Fence post size 2 mtr long; 10cm x 10cm top; 15cm x 15cm bottom							
Minimum wage rate Rs. 200/- per day for unskilled labourer							
Lead Statement & cost of materials							
Sl. No	Item	Unit	Basic price	Lead in Km	Transport charge	Royalty	Total price
1	4cm hand broken granite metal	Cum	609.00	15	248.40	98.79	956.19
2	12mm H.G hand broken chips	Cum	934.00	15	248.40	98.79	1281.19
3	Screened & washed sand	Cum	59.00	25	340.40	27.44	426.84
4	M.S rod	Ant.	4000.00	90	76.80	0.00	4076.80
5	Cement	Qntl.	651.00	90	76.80	0.00	727.80
6	Barbed wire	Kg	66.00	90	0.76	0.00	66.76
Analysis of rate							
Sl. No.	Item	Qty.	Unit	Rate	Amount		
1	Cement concrete (1:4:8) with 4 cm HG metal						
a	Materials						
	Hand broken granite stone 4 cm size	0.96	Cum	956.19	917.94		
	Sand (Screened & washed)	0.48	Cum	426.84	204.88		
	Cement	1.72	Qntl.	727.80	1251.82		
					2374.64		
b	Labour						
	Mason second class	0.18	Each	253.50	45.63		
	Man mulia	1.80	Each	213.50	384.30		
	Women mulia	1.40	Each	213.50	298.90		
	Man mulia for mixing stone, sand and cement and granite water	0.70	Each	213.50	149.45		
					878.28		
c	Overhead charges 7.5% of (a+b)				243.97		
	Total cost per cum				3496.89		
2	C.C (1:2:4) in 12 mm hand broken H,G chips including hoisting and laying per cum.						
a	Materials						
	Hand broken granite stone 12 cm size	0.96	Cum	1281.19	1229.94		
	Sand (Screened & washed)	0.45	Cum	426.84	192.08		
	Cement	3.23	Qntl.	727.80	2350.79		
					3772.81		
b	Labour						
	Mason second class	0.68	Each	253.50	172.38		
	Man mulia	1.80	Each	213.50	384.30		
	Women mulia	1.40	Each	213.50	298.90		
	Man mulia for mixing stone, sand and cement and granite water	1.40	Each	213.50	298.90		
	Mason second class	0.50	Each	233.50	106.75		
					1261.23		
c	Overhead charges 7.5% of (a+b)				377.55		
	Total cost per cum				5411.59		
3	Labour for M.S reinforcement for R.C.C work including cutting, bending and tying the grills and placing in position, including cost of binding wire (per 1 Qntl.)						
	Blacksmith (Special)	1.00	Each	273.50	273.50		


	Total cost per cum				5411.59
3	Labour for M.S reinforcement for R.C.C work including cutting, bending and tying the grills and placing in position, including cost of binding wire (per 1 Qntl.)				
	Blacksmith (Special)	1.00	Each	273.50	273.50
	Semiskilled mulia	1.00	Each	233.50	233.50
	30% sundries, binding wires and T&P etc.				152.10
	Total charges per quintal				659.10
	Estimated cost per fence post of 2 mtr long, 15 cm x 15cm bottom and 10 cm x 10 cm top in RCC (1:2:4) with 12mm H.G chips				
	Cost for concrete 2.0 mtr x 0.01625 sq. mtr =	0.0325	Cum	5411.59	175.88
	Cost of 8 mm rod (4 x 2 mtr) + 6mm rod 0.6 mtr for rings =	3.25	Kg	40.77	132.50
	Labour for cutting, bending, binding & laying in position of rods including cost of binding wire	3.15	Kg	6.59	20.76
	Cost of staples for holding barbed wire				20.00
					349.14
	Estimated cost for fixing each fence post with C.C (1:4:8) cm metal				
1	Cost of concrete (45cm x 45 cm) + 45cm) - (15cm x 15cm x 15cm)	0.081	Cum	3496.89	283.25
	Estimated per Kilometre of Barbed wire Fencing				
Sl No	Work	Qty.	Unit	Rate	Amount
1	Cost of fence post RCC (1:2:4) with 12mm H.G chips 2 mtr long 15cm x 15cm bottom and 10cm x 10cm top	500.00	Each	349.14	174570.00
2	Digging of pits for fixing of fence posts	500.00	Each	20.00	10000.00
3	Fixing of fence post with C.C (1:4:8) with 4 cm H.G metal	500.00	Each	283.25	141625.00
4	Cost of 2 ply barbed wire 7 strands x 1000 mtr= 7000 mtr @ 8 mtr per kg	875.00	Kg	66.76	58415.00
5	Labour for fixing barbed wire fencing and post by means of staples and straining hooks	7000	Mtr	6.00	42000.00
6	Average expenditure needs for extra lead for transporting RCC fence posts in hill slopes manually 0.5 man-day per pillar	500.00	Each	100.00	50000.00
	Total expenditure for 1 km of barbed wire fence				476610.00

ANNEXURE-(VIII)

TOTAL COST OF THE COMPENSATORY AFFORESTATION SCHEME

Sl. No.	Item of Work	Total Estimated cost in Rs.
1	Barbed wire fence around plantation site Rs 476610/- X 1.07 km	509972.70
2	Bald Hill plantation over 8.0 ha. X Rs 315270.75	2522166.00
3	ANR without gap plantation over 3.912 ha. X Rs.22509.50	88057.16
	Total	3120195.86
	Cost of Escalation 20%	624039.17
	Total	3744235.04
		or say Rs.37,44,300.00

(Rupees Thirty-seven lakh Fourty-four thousand Three hundred only)


 Divisional Forest Officer,
 Kalahandi South Division.
 Kalahandi South Division

* Kuzumitae - 11.912 ha

Financial Outlay for revised Compensatory Afforestation Scheme over 11.912 ha of non-forest land identified in village Barakaudi under Thuamul-Rampur Tahsil of Kalahandi South Division against the infrastructure for mining at Kurmitar and Ranth Iron Ore Mines of M/s OMC Ltd.

(Wage Rate @ Rs.213.50 per MD)

Sl. No.	Description	Amount (Rs.)
1	Cost of Bald Hill Plantation over 8.0 ha. @ Rs.2,55,959/- per ha. excluding the cost of fencing with 10 years maintenance.	20,47,672.00
2	Cost of ANR without gap plantation over 3.912 ha. @ Rs.22,510/- per ha. with 10 years maintenance.	88,059.00
3	Cost of Barbed-wire fencing over 1.07 Kms. @ Rs.4,76,610/- per RKM.	5,09,973.00
	Total	26,45,704.00
4	Add Escalation Cost (20%)	5,29,141.00
	Grand Total	31,74,845.00
		Or rounded off to 31,74,900.00

(Rupees thirty-one lakhs seventy-four thousand nine hundred only)

Technically Approved

ahm
 Addl. Principal Chief Conservator of Forests
 Forest Division & Nodal Officer, FC Act
 (Forest Division & Nodal Officer F.C. Act)
 O/o. the P.C.C.F., Odisha, Bhubaneswar

REGARDING COMPLIANCE OF SCHEDULED TRIBES & OTHER TRADITIONAL FOREST DWELLERS (RECOGNITION OF FOREST RIGHT) ACT, 2006 IN RESPECT OF DIVERSION OF FOREST LAND MEASURING HA. 11.912 PERTAINING TO INFRASTRUCTURE PROJECT FOR MINING AT KURMITAR AND RANTHA MINING LEASE BY THE ODISHA MINING CORPORATION LTD. UNDER LAHUNIPARA TEHSIL IN SUNDARGARH DISTRICT.

1. It is certified that the complete process for identification and settlement of rights under the Scheduled Tribes & Other Traditional Forest Dwellers (Recognition of Forest Right) Act. 2006 has been carried out for the entire Forest area of 11.912 hectores proposed for diversion for non-forest used pertaining to infrastructure project for mining purpose of Kurmitar and Rantha Iron Ore mines of OMC Ltd. under Lahunipara Tehsil. The concerned record of all consultations and meetings held are annexed in shape of Palli Sabha Resolution dt.13.02.2015 of village Rantha and enquiry report of Tehsildar, Lahunipara.
2. It is certified that the proposals for such diversion has been placed before the Palli Sabha of forest dwellers under the Chairmanship of the Ward member of village Rantha of Bhutuda G.P and in presence of more than 50% of members of Palli Sabha and members of Village Forest Committee where the details of the projects and its implication have been explained to them in vernacular/ local language
3. It is certified that discussions and decisions on such proposals had taken place only when there was quorum of minimum 50% of the members of the Palli Sabha present.
4. It is certified on the basis of the verification report and Palli Sabha Resolution dt.13.02.2015 of village Rantha that no such primitive Tribal groups and pre-agricultural communities were in occupation of the forest land proposed for diversion and whose forest rights are required to be specifically safeguarded as per section 3(1)(e) of the Forest Rights Act, 2006.
5. It is certified on the basis of the verification report and Palli Sabha Resolution dt.13.02.2015 of village Rantha that no such facilities managed by Government requiring diversion of Forest land U/s 3(2) of the Forest Rights Act, 2006 exist over the forest land proposed for diversion.

Attested
m/x/17
Addl. Dist. Magistrate
Sundargarh

COLLECTOR, SUNDARGARH
CHAIRMAN, D.L.C