SCHEME FOR COMPENSATORY AFFORESTATION OVER 42.608 HA OF NON-FOREST GOVT. LAND IDENTIFIED IN VILLAGE JALADIHI UNDER BANSAPAL TAHASIL OF B.J.P. RANGE OF KEONJHAR FOREST DIVISION AGAINST KALMANG WEST (NORTHERN PART) IRON ORE BLOCK IN KEONJHAR AND SURNDERGARH DISTRICT ALLOTTED TO M/S TATA STEEL BSL LIMITED (FORMERLY KNOWN AS M/S BHUSAN STEEL LTD)

ELEMENTS OF THE SCHEME FOR COMPENSATORY AFFORESTATION

CHAPTER-I

BRIEF NOTE ON THE PROPOSED FOREST DIVERSION PROPOSAL

As per information submitted by the project proponent, Govt. of Odisha, pursuant to the Mines and Minerals (Development & Regulation) Act, 1957 (the "Act") and the Mineral (Auction) Rules, 2015 (the "Rules"), issued the notice inviting tender dated 07.03.2017 to commence the auction process for grant of mining lease for Kalamang West (Northern Part) Iron Ore Block located in Sundargarh & Keonjhar District of Odisha. The e-auction process was conducted in accordance with the tender document for the said mineral block and Bhushan Steel Limited was declared as the "Preferred Bidder" under Rules 9(4)(b)(iii) of the Rules, vide Govt. of Odisha, Dept of Steel & Mines, Letter No. 4571/SM, dated 25th May 2017. Further, as required under Rule 10(1) of the Rules and the tender document for the said mineral block, the Company has made payment of the first instalment, being ten percent of the upfront payment of Rs. 4,46,69,460/- (Rupees four crore forty six lakhs sixty nine thousand four hundred and sixty) in shape of e-chalan through Treasury dated 01.06.2017.

Accordingly, on compliance of above, the Government of Odisha has issued Letter of Intent (LOI) vide Govt. Letter No. 5285/SM dated 24.06.2017 in favour of Bhushan Steel Ltd (now known as Tata Steel BSL Ltd) as per Rule 10(2) of the Rules for grant of Mining Lease for Kalamang West (Northern Part) Iron Ore Block in Village Kalamang, Ghodabudani of Sundargarh District and Village Gandalpada of Keonjhar District over an area of 92.00 Ha.

Before change of name from M/s Bhushan Steel Limited to Tata Steel BSL Limited, M/s Bhushan Steel Limited has submitted the Forest Diversion Proposal of above project vide Proposal No-FP/OR/MIN/27286/2017, and State Serial No-OR-031/2017, dated 27.07.2017. After taking over the Project by Tata Steel BSL Limited a fresh Forest Diversion Proposal has been submitted vide Proposal No-FP/OR/MIN/49169/2020 for getting Forest Clearance from MoEF & CC, Govt. of India. In the Letter of Intent (LOI) Govt. of Odisha has advised Bhushan Steel Limited (Now Tata Steel BSL Limited) to obtain all consents, approvals, permits, no-objections and the like as may be required under applicable laws for commencement of mining operation.

During verification of the land schedule allotted for the said mining lease area it was found that total area of 92.875 Ha consists of Revenue and DLC Forest land of 42.608 Ha (Keonjhar Forest Division 16.658 Ha + Bonai Forest Division 25.950 Ha (Revenue Forest Land 10.469 Ha + DLC Forest Land 15.481 Ha)) and 50.267 Ha of Non-forest land (Govt. non-forest land 30.096 Ha + Private non-forest land 20.171 Ha) in Bonai Forest Division, the land schedule of Kalamang West (Northern Part) Iron Ore Block over an area of 92.875 Ha has been authenticated by the Tahasildar Koira under Sundargarh District and Tahasildar Barbil under Keonjhar District.

Therefore, this proposal is being submitted for diversion of forest land of 42.608 Ha (Keonjhar Forest Division 16.658 Ha + Bonai Forest Division 25.950 Ha) under section 2(ii) of FC Act, 1980 including 2.382 Ha of forest land for Safety Zone along the lease boundary.

The present Compensatory Afforestation scheme is prepared at the prevailing wages @ Rs. 311.00 per man days over 42.608 ha Non-forest Govt. land identified in village Jaladihi under BJP Range of Banspal Tahasil allotted for the said purpose vide letter No. 1548/Rev dt. 23.09.2017 of Collector, Keonjhar, with maintenance period of 10 (ten) years.

CHAPTER- II

DETAILS OF LAND IDENTIFIED FOR COMPENSATORY AFFORESTATION

A. LAND IDENTIFICATION AND JOINT VERIFICATION OF THE IDENTIFIED SITE.

The site for Compensatory Afforestation has been identified in village Jaladihi under Bansapal Tahasil in B.J.P. Range of Keonjhar Forest Division over 42.608 ha and has been jointly verified by the Tahasildar, Bansapal, Revenue Inspector, Suakati, Range Officer, B.J.P. Range and Forest Section Officer, Suakati. The identified land has been allotted in favour of Kalmang West (Northern Part) Iron ore Block in Keonjhar and Sundergarh District allotted to M/s Tata Steel BSL Limited (formerly known as M/s Bhusan Steel Ltd) by the Collector, Keonjhar vide letter No 1548/Rev dt. 23.09.2017.

B. INFORMATION ON NON-ENCROACHMENT AND NON-ENCUMBRANCE.

The Tahasildar, Bansapal has given certificate of non-encroachment and non-encumbrance in respect of the non-forest Govt. land identified and allotted for Compensatory Afforestation over 42.608 ha in favour of Kalmang West (Northern Part) Iron ore Block in Keonjhar and Sundergarh District allotted to M/s Tata Steel BSL Limited (formerly known as M/s Bhusan Steel Ltd).

C. INFORMATION ON LAND STATUS.

The land scheduled and land status identified and allotted for Compensatory Afforestation is furnished hereunder:-

Tahasil	Village	Khata No.	Plot No.	Area(in ha)	Kissam.
Bansapal	Jaladihi	70	1	11.552	Parbat- I
			2	15.136	Parbat- I
			3	11.784	Parbat- II
			4(P)	4.136	Parbat- II
			Total	**42.608 ha**	

D. SUITABILITY OF IDENTIFIED SITE FOR COMPENSATORY AFFORESTATION.

The identified land is free from encroachment and encumbrance. This land is neither covered under Section-4 of Orissa Forest Act, 1972 nor included in DLC report.

The non-forest Govt. land identified in village Jaladihi is in one patch situated on upland with gentle slope and is suitable for Compensatory Afforestation in ANR plantation model @ 400 seedling per ha over 42.608 ha.

The topography of the area is mainly hilly situated on upland. The top soil is eroded due to "Podu cultivation" in the past. The soil is prone to erosion necessitating soil-moisture conservation measures. Available depth of lateritic-loam soil is conducive for plantation, but in most of the area there is a requirement of foreign soil for better growth of plantation coupled with suitable soil-moisture conservation measures. This necessitates the undersigned to adopt ANR Plantation norms approved by PCCF, Odisha. The norms provided in this project is proportionately reduced to accommodate 400 plants/ ha. The average temperature varies from 13.5° C minimum in December to 45° C maximum in May. The annual rainfall varies from 1200 mm to 1500 mm. The maximum rainfall is received during the rainy season from July to September. The identified land is considered for Compensatory Afforestation in ANR plantation over 42.608 ha. The CA scheme is envisaged to be executed with involvement of Jaladihi VSS.

CHAPTER-III

DELINEATION OF PROPOSED AREA ON SUITABLE MAP

III(1) GPS COORDINATES AND GPS MAP OF THE COMPENSATORY AFFORESTATION SITE

The area has been demarcated through GPS survey and 12 nos of 4' height RCC pillars have been posted around the identified area and the GPS survey data showing latitude & Longitude of each point and their chainage with bearing has been depicted in the village sheet map (Map Enclosed). A durable sign board has been erected at the identified site at a conspicuous location with name of the project, year of allotment, name of the scheme, details of plots etc. depicted there on.

CHAPTER- IV

AGENCY RESPONSIBLE FOR COMPENSATORY AFFORESTATION

IV(1) AGENCY RESPONSIBLE FOR PLACEMENT OF FUNDS

The user agency shall provide funds for raising Compensatory Afforestation as per the approved scheme.

IV(2) AGENCY RESPONSIBLE FOR EXECUTION OF COMPENSATORY AFFORESTATION

The Territorial Wing of the Forest Department i.e. Divisional Forest Officer, Keonjhar Division will be assigned with the task for execution of Compensatory Afforestation.

CHAPTER- V

DETAILS OF WORK SCHEDULE PROPOSED FOR COMPENSATORY AFFORESTATION

A. PLANTING PLAN

Planting Plan reflects the species specific treatment of the identified site. Choice of species is based on the geo-morphology of the site, soil-texture, structure, fertility and depth, proneness of the site to water logging etc. Specific treatment of the site in terms of soil and moisture conservation intervention will be depicted in the treatment map. A treatment map will invariably be prepared for Species to be planted and treatments to be applied to the different patches shown in the treatment map and planting plan. This plan will be followed when actual planting is carried out.

Species to be planted:-

1. *Sizyzium cumini*(Jamu)
2. *Adina cardifolia*(Kuruma)
3. *Accacia catechu* (Khair)
4. *Dalbergia sissoo*(Sissoo)
5. *Gmelinaarborea* (Gambar)
6. *Terminalia belerica*(Bahada)
7. *Terminalia chebula*(Harida)
8. *Pongamia pinnata* (Karanja)
9. *Emblica officinalis* (Amla)
10. *Shorea robusta*(Sal)

B.PRE-PLANTING OPERATION

B(I)-RAISING OF PLANTATION STOCK- NURSERY-

Nursery will be raised @440 seedlings per ha including seedlings for 10% casualty replacement for 42.608 ha.

B(II)-SURVEY, DEMARCATION & PILLAR POSTING, GPS READING WITH MAPPING-

The planting area has been surveyed and demarcated through GPS survey and 12 nos of 4' height RCC pillars have been posted at inter visible distance (as per the direction of forest Range Officer, BJP Range) with GPS co-ordinates, forward and backward bearing, pillar No. and distance between pillars inscribed in it. A GPS map in the scale of 1:4000 has been prepared along with GPS co-ordinates forward and backward bearing, pillar No. and distance between pillars reflected in the map. The survey and demarcation shall be carried out once again while implementing the scheme.

B(III)-SITE PREPARATION AND SILVICULTURAL OPERATION INCLUDING CLEARANCE OF WEED, CLIMBER CUTTING, HIGH STUMP CUTTING, SINGLING OF SHOOTS-

The clearing of the site involving removal of invasive weeds, bushes, climbers, high stumps and singling of shoots will be taken up preferably by the end of February and latest by the end of March. Pits of the dimension 30 x 30 x 30 cm. will be dug @400 per ha over 42.608 ha preferably 2 months before planting of seedlings.

C. PLANTING OPERATION

Planting of seedlings will be taken up in the month of July. The polythene covering of the balls of earth will be carefully removed before planting. Care will be taken to see that the ball of earth is not broken while doing so. The seedling with the ball of earth will then be placed firmly in the pit and buried at such a depth that the root collar is well below the surface of the soil. The soil around the plant will be well compacted with the heal as a final step so that there is a proper bond between the ball and the surrounding soil. The earth close to the collar will be slightly elevated so that rain water does not accumulate very close to the plant.

D. POST PLANTING OPERATION

D(1)-CASUALTY REPLACEMENT

The entire area will be gone over in the same order as plantation was carried out and casualties, if any, will be replaced as soon as the main plantation operation is over.

D(2)-WEEDING AND SOIL WORKING

Regular and efficient weeding will start immediately after sprouting of the stumps is complete or after the seedlings have started throwing up new buds.

D(3)-MANURING AND INSECTICIDE APPLICATION

On degraded sites urban compost or farmyard manure, wherever available, will be added to the soil while refilling the pits. As regards artificial fertilizers, N.P.K. and Urea will be applied in two split doses one in August and the other in September.

D(4)-SOIL MOISTURE CONSERVATION MEASURES

Special Soil Moisture Conservation Measures will be taken up through construction of wire mesh LBCD structures of dimension 10' x 10' x 5' to the tune of 43 nos. over the entire plantation site and Water Body- 1No.

D(5)-PROTECTION AGAINST FIRE AND BIOTIC INTERFERENCE

It is proposed to protect the CA plantation from grazing by domestic animals using G.I. Chain Link Mesh Fencing. The total length of such fencing for both the patches comes to 4.72 Km (4720 M). Fire line tracing will be ensured to protect the plantation from fire and watch & ward will be provided as per the approved norm for protecting the plantation from grazing with involvement of Jaladihi VSS.

CHAPTER- VI

Cost Norm for ANR Plantation @400 seedlings per ha (18 months old seedlings) @ 311.00/- Mandays as per revised wage rate by Labour Commissioner, Odisha, Bhubaneswar vide Notification No. 2816/LC dated 25.05.2021.

Sl.	Item of Works	Preferable Period of Execution	Labour in Mandays	Lobour Cost (₹)	Material Cost (₹)	Total Cost in (₹)
	PREVIOUS YEAR (ADVANCE WORK) NURSERY RAISING					
1	Nursery Cost (18 month Old Seedlings) @Rs.34.84/- part (Rs.8.68 to be released) for 440 seedlings (400+40) (Nov to March)	Nov-March	11.4	3545.4	627	4173
	TOTAL.		**11.4**	**3545.4**	**627.2**	**4172.6**
2	Monitoring & Supervision charge 5% of the total cost				0	209
	GRAND TOTAL		**11.4**	**3545.4**	**627.2**	**4381**
	0TH YEAR OPERATION					
1	Nursery Cost (1 yr 6 months old seedlings) part @ Rs.34.84 per seedling (Rs22.14 to be relesased) for 440 seedlings (400+40)	April - March	28.4	8832	1790	10622
	TOTAL.		**28.4**	**8832.4**	**1790**	**10622**
2	Monitoring & Supervision charge 5% of the total cost				0	531
	GRAND TOTAL		**28.4**	**8832.4**	**1790**	**11153**
	1ST YEAR OPERATION					
1	Nursery Cost (6 months old seedling) balance @ Rs.4.02 for 440 seedling	April-June	5.8	1804	145	1949
2	Alignment & stacking at 4M spacing including clearance sites in avenue & 2.5m x 2.5m in case of block plantation	April-May	6	1866	0	1866
3	Excavation of pits- 45cmx45cmx45cm in hard soil with vertical cut edges to make an uniform cube& heaping the excavated soil out side the pits.	May-June	20.8	6469	0	6469
4	Refilling of pits with excavated soil after breaking the clouds completely	June	3.2	995	0	995
5	Carriage and transport of saplings from Nursery site to plantation site over an average lead of 10kms @ Rs.6 per seedling for 440 seedlings	July	0	0	2640	2640
6(a)	Cost of Fym 0.25 CFT per plant @ Rs.15 per cft for 250 cft		0	0	1500	1500
6(b)	Cost of Vermicompost 250 gm per plant @ RFs.20 per kg for 250 kg		0	0	2000	2000
6(c)	Cost of NPK 50 gm per plant as basal dose @ Rs.24 per kg for 50 kg		0	0	480	480
6(d)	Cost of Granular Insecticide 10gm per plant @ Rs.80 per kg for 10 kg		0	0	320	320

7	Planting of sapling after carefully removing from sacks including mixing of Fym, Vermicompost,Granular Insecticide & Scooping the soil to required depth & pressing the soil around the plants.	July-Aug	10	3110	0	3110
8	Cost of chemical fertilizer (Urea/DAP/NPK etc.)		0	0	480	480
9	1st weeding around the plant to a radious of 45 cm,application of fertilizer	Augus t	10	3110	0	3110
10	2nd weeding around the plant to a radious of 50 cms	Septe mber	8	2488	0	2488
11	Soil working around 0.5 Mt radious of the plant & application of fertilizer, mulcuing with available materials	Sept-Oct	12.8	3981	0	3981
12	Watering for 5 months. 10 days per month-from Nov. to March,including cost of water,labour& Transportation through tractor/tanker @ Rs.84 per seedling for 1000 seedlings	Nove mber-March	0	0	33600	33600
13	Watch & ward for 9 months from July to March. 270 Days.	July-March	56	17416	0	17416
14	Contigency Expenditure		0	0	182	182
	TOTAL.		**132.6**	**41239**	**41347**	**82585**
15	Monitoring & Supervision charge 5% of the total cost				0.00	4129
	GRAND TOTAL		**132.6**	**41238.6**	**41346.8**	**86715**
	2ND YEAR OPERATION					
1	Cost of sapling - 1 yr & 6 months old for casualty replacement @ Rs.34.84 per seedling for 100 seedlings		0	0	1394	1394
2	Carriage and transport of saplings from Nursery site to plantation site over an average lead of 10kms @ Rs.6 per seedling for 100 seedlings	July	0	0	240	240
3	Replacement of casualty after reopening the pits & planting of sapling 100 nos. With application of FYM,Vermicompost and granular insecticides	July-Aug	1.6	497.6	0	498
4(a)	Cost of FYM 0.25 cft per plant @ Rs.15 per cft for 25 cft for100 plants		0	0	150	150
4(b)	Cost of Granular Insecticide 10gm per plant @ Rs.80 per kg for 1 kg		0	0	32	32
4(c)	Cost of NPK 50 gm per plant as basal dose @ Rs.24 per kg for 5 kg		0	0	48	48
4(d)	Cost of Vermicomost 250 gm per plant @ Rs.20 per kg for 25 kg		0	0	200	200
4(e)	Cost of chemical fertilizer (Urea/DAP/NPK etc.)		0	0	480	480
5	1st weeding around the plant to a radius of 30 cm & application of fertilizer	Augus t	8	2488	0	2488

6	Soil working around 0.5MT radius & application of fertilizer, Moisture conservation & mulching	August-Sept	9.6	2985.6	0	2986
7	2nd weeding around the plant to radius of 0.5 MT.	Oct-Nov	6.4	1990.4	0	1990
8	Watering for eight months 5 days per month including cost of water, labour & transportation through tractor/ tankers. (April to June & Nov. to March) @ Rs.67.20 per seedling for 400 seedlings	April-June Nov-March	0	0	26880	26880
9	Watch & ward for 12 months from April. to March (365 days)	April-Mar	74.4	23138.4	0	23138
10	Contingency Expenditure		0	0	552	552
	TOTAL.		**100**	**31100.00**	**29976**	**61076**
11	Monitoring & Supervision charge 5% of the total cost		0		0	3054
	Grand Total		**100**	**31100**	**29975.6**	**64129.38**
	3RD YEAR MAINTENANCE					
1	Weeding, Soil working & Manuring	Sept-Oct	8	2488	0	2488
2	Cost of chemical fertilizer (Urea/DAP/NPK etc.)		0	0	480	480
3	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	74.4	23138	0	23138
	TOTAL.		**82.4**	**25626**	**480**	**26106**
4	Monitoring & Supervision charge 5% of the total cost		0		0	1305
	GRAND TOTAL		**82.4**	**25626.4**	**480**	**27411.72**
	4TH YEAR MAINTENANCE					
1	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	74.4	23138	0	23138
	TOTAL.		**74.4**	**23138**	**0**	**23138**
2	Monitoring & Supervision charge 5% of the total cost					1157
	GRAND TOTAL		**74.4**	**23138**	**0**	**24295**
	5TH YEAR MAINTENANCE					
1	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	74.4	23138	0	23138
	TOTAL.		**74.4**	**23138**	**0**	**23138**
2	Monitoring & Supervision charge 5% of the total cost					1157
	GRAND TOTAL		**74.4**	**23138**	**0**	**24295**
	6TH YEAR MAINTENANCE					
1	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	74.4	23138	0	23138
	TOTAL.		**74.4**	**23138**	**0**	**23138**
2	Monitoring & Supervision charge 5% of the total cost					1157
	GRAND TOTAL		**74.4**	**23138**	**0**	**24295**
	7TH YEAR MAINTENANCE					

1	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	74.4	23138	0	23138
	TOTAL.		**74.4**	**23138**	**0**	**23138**
2	Monitoring & Supervision charge 5% of the total cost					1157
	GRAND TOTAL		**74.4**	**23138**	**0**	**24295**
	8TH YEAR MAINTENANCE					
1	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	74.4	23138	0	23138
	TOTAL.		**74.4**	**23138**	**0**	**23138**
2	Monitoring & Supervision charge 5% of the total cost					1157
	GRAND TOTAL		**74.4**	**23138**	**0**	**24295**
	9TH YEAR MAINTENANCE					
1	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	74.4	23138	0	23138
	TOTAL.		**74.4**	**23138**	**0**	**23138**
2	Monitoring & Supervision charge 5% of the total cost					1157
	GRAND TOTAL		**74.4**	**23138**	**0**	**24295**
	10TH YEAR MAINTENANCE					
1	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	74.4	23138	0	23138
	TOTAL.		**74.4**	**23138**	**0**	**23138**
2	Monitoring & Supervision charge 5% of the total cost					1157
	GRAND TOTAL		**74.4**	**23138**	**0**	**24295**

ABSTRACT

Sl. No.	Year of operation	No. Person Day	Labour cost @ Rs. 311/- per day	Material cost (Rs.)	Monitoring & Supervision charge	Total cost in (Rs.)
1	PREVIOUS YEAR	11.4	3545.4	627.2	208.6	4381.2
2	0th YEAR PLANTING	28.4	8832.4	1789.6	531.1	11153.1
3	1st YEAR PLANTING	132.6	41238.6	41346.8	4129.3	86714.7
4	2nd YEAR MAINTENANCE	100.0	31100.0	29975.6	3053.8	64129.4
5	3rd YEAR MAINTENANCE	82.4	25626.4	480.0	1305.3	27411.7
6	4th YEAR MAINTENANCE	74.4	23138.4	0.0	1156.9	24295.3
7	5th YEAR MAINTENANCE	74.4	23138.4	0.0	1156.9	24295.3
8	6th YEAR MAINTENANCE	74.4	23138.4	0.0	1156.9	24295.3
9	7th YEAR MAINTENANCE	74.4	23138.4	0.0	1156.9	24295.3
10	8th YEAR MAINTENANCE	74.4	23138.4	0.0	1156.9	24295.3
11	9th YEAR MAINTENANCE	74.4	23138.4	0.0	1156.9	24295.3
12	10th YEAR MAINTENANCE	74.4	23138.4	0.0	1156.9	24295.3
	Total	**876**	**272311.6**	**74219.2**	**17326.5**	**363857.3**
	Total Plantation Cost 42.608 ha X 363857.30					**15503231.83**

ADDITIONAL COST PROPOSED

1	Wire mesh LBCD of size 10' x 10' x 5' for 43 nos. @Rs 38,155/- per LBCD	38,155 x 43 nos	1640665.00
2	One water body of size 40mt x 30mt x 3mt in the plantation site	1 x 6,06,800	606800.00
3	Cost of G.I. Chain Link Mesh Fencing over 4.72 Km. with 3 years maintenance @2% of cost per RKM @Rs. 9,90,000/- per RKM	Rs. 9,90,000 x 4.72 Km	4672800.00
4	One Watcher shed @Rs 10 lakh	1 x 10,00,000	1000000.00
5	Compound wall (in RMT @Rs. 0.075 lakh x 100 mtr)		750000.00
	Sub-Total		**8670265.00**

*** The plantation will be maintained over a period of 10 years and is at a distant place from nearest habitation hence provision needs to be made a watcher shed for around the year for accommodation of labourers and watchers deployed in the plantation. Further the watcher shed would also be used as camp for fire squad members during the fire season.**

TOTAL COST OF PROJECT

1	Cost of ANR model @400 seedling over 42.608 ha @ Rs.363857.30	15503231.83
2	Additional Cost	8670265.00
	Sub Total	**24173496.83**
3	15% of the total plantation cost towards Entry Point Activity/ Incentive to VSS etc	3626024.52
	Total	**27799521.35**
4	Add 20% escalation	5559904.27
	Grand Total	**33359425.62** **Or say** **3,33,59,500.00**

(Rupees three crore thirty-three lakh fifty-nine thousand five hundred) only.

PROVISION OF FUNDS AND FUND UTILIZATION

Rs. 3,33,59,500/- (Rupees three crore thirty-three lakh fifty-nine thousand five hundred) only shall be deposited by the User Agency i.e. M/s Tata Steel BSL Limited (formerly known as M/s Bhushan Steel Ltd) on approval of the scheme in Ad-hoc CAMPA Account and the funds will be utilized for raising of Compensatory Afforestation by the Divisional Forest Officer, Keonjhar Division on allotment by the Principal Chief Conservator of Forests, Odisha, Bhubaneswar.

Divisional Forest Officer,
Keonjhar Division

CHAPTER- VII

DETAILS OF PROPOSED MONITORING MECHANISM

Compensatory Afforestation will be taken up in the identified site by the Range Officer, BJP Forest Range of Keonjhar Division. The Range Forest Officer, BJP Forest Range will undertake field checks of the works undertaken at the identified site and will be cross checked by the Asst. Conservator of Forests, (Affn.) and Divisional Forest Officer, Keonjhar Division. GPS co-ordinates along with other required informations of Compensatory Afforestation will be uploaded in the e-Greenwatch Portal of NIC, MoEF, Govt. of India for the purpose of online monitoring. Annual progress of plantation involving growth of planted seedlings, survival percentage etc. will be monitored and recorded in the plantation journal by the field staffs of BJP Forest Range and reported to the Divisional Forest Officer for necessary action. The same thing will be reported to the Regional Chief Conservator of Forests, Rourkela Circle and Chief Conservator of Forests (PP&A), O/o the Pr. Chief Conservator of Forests, Odisha, Bhubaneswar and necessary corrective measures will be followed if required so.

Divisional Forest Officer,
Keonjhar Division

SCHEME FOR COMPENSATORY AFFORESTATION OVER 44.002 HA OF DEGRADED FOREST LAND IDENTIFIED IN BALABHADRAPUR RF UNDER KONJHAR FOREST RANGE OF KEONJHAR FOREST DIVISION AGAINST KALMANG WEST (NORTHERN PART) IRON ORE BLOCK IN KEONJHAR AND SURNDERGARH DISTRICT ALLOTTED

TO

M/S TATA STEEL BSL LIMITED (FORMERLY KNOWN AS M/S BHUSHAN STEEL LTD)

ELEMENTS OF THE SCHEME FOR COMPENSATORY AFFORESTATION

CHAPTER- 1

BRIEF NOTE ON THE PROPOSED FOREST DIVERSION PROPOSAL

As per information submitted by the project proponent, Govt. of Odisha, pursuant to the Mines and Minerals (Development & Regulation) Act, 1957 (the "Act") and the Mineral (Auction) Rules, 2015 (the "Rules"), issued the notice inviting tender dated 07.03.2017 to commence the auction process for grant of mining lease for Kalamang West (Northern Part) Iron Ore Block located in Sundargarh & Keonjhar District of Odisha. The e-auction process was conducted in accordance with the tender document for the said mineral block and Bhushan Steel Limited was declared as the "Preferred Bidder" under Rules 9(4)(b)(iii) of the Rules, vide Govt. of Odisha, Dept of Steel & Mines, Letter No. 4571/SM, dated 25th May 2017. Further, as required under Rule 10(1) of the Rules and the tender document for the said mineral block, the Company has made payment of the first installment, being ten percent of the upfront payment of Rs. 4,46,69,460/- (Rupees four crore forty six lakhs sixty nine thousand four hundred and sixty) in shape of e-chalan through Treasury dated 01.06.2017.

Accordingly, on compliance of above, the Government of Odisha has issued Letter of Intent (LOI) vide Govt. Letter No. 5285/SM dated 24.06.2017 in favour of Bhushan Steel Ltd (now known as Tata Steel BSL Ltd) as per Rule 10(2) of the Rules for grant of Mining Lease for Kalamang West (Northern Part) Iron Ore Block in Village Kalamang, Ghodabudani of Sundargarh District and Village Gandalpada of Keonjhar District over an area of 92.00 Ha.

Before change of name from M/s Bhushan Steel Limited to Tata Steel BSL Limited, M/s Bhushan Steel Limited has submitted the Forest Diversion Proposal of above project vide Proposal No-FP/OR/MIN/27286/2017, and State Serial No-OR-031/2017, dated 27.07.2017. After taking over the Project by Tata Steel BSL Limited a fresh Forest Diversion Proposal has been submitted vide Proposal No-FP/OR/MIN/49169/2020 for getting Forest Clearance from MoEF & CC, Govt. of India. In the Letter of Intent (LOI) Govt. of Odisha has advised Bhushan Steel Limited (Now Tata Steel BSL Limited) to obtain all consents, approvals, permits, no-objections and the like as may be required under applicable laws for commencement of mining operation.

During verification of the land schedule allotted for the said mining lease area it was found that total area of 92.875 Ha consists of Revenue and DLC Forest land of 42.608 Ha (Keonjhar Forest Division 16.658 Ha + Bonai Forest Division 25.950 Ha (Revenue Forest Land 10.469 Ha + DLC Forest Land 15.481 Ha)) and 50.267 Ha of Non-forest land (Govt. non-forest land 30.096 Ha + Private non-forest land 20.171 Ha) in Bonai Forest Division, the land schedule of Kalamang West (Northern Part) Iron Ore Block over an area of 92.875 Ha has been authenticated by the Tahasildar Koira under Sundargarh District and Tahasildar Barbil under Keonjhar District.

Therefore, this proposal is being submitted for diversion of forest land of 42.608 Ha (Keonjhar Forest Division 16.658 Ha + Bonai Forest Division 25.950 Ha) under section 2(ii) of FC Act, 1980 including 2.382 Ha of forest land for Safety Zone along the lease boundary.

Non forest Govt. land over 42.608 ha has been identified and allotted in village Jaladihi under Bansapal Tahasil in B.J.P. Range of Keonjhar Forest Division, in favour of M/s Bhusan Steel Ltd. vide letter No. 1548 Rev dt. 23.09.2017of the Collector, Keonjhar for Compensatory Afforestation. The non-forest Govt. land over 42.608 ha has been considered for plantation under ANR model @400 seedlings / ha has been prepared to this effect.

The present scheme aims at preparation of a site-specific Compensatory Afforestation scheme over 44.002 ha of degraded forest land identified in Balabhadrapur RF under Keonjhar Forest Range of Keonjhar Division at the prevailing wage rate @ Rs. 311.00 per MD with a maintenance period of ten years to accommodate the balance seedlings under ANR with gap model @ 600 seedlings/ ha.

CHAPTER- II

DETAILS OF LAND IDENTIFIED FOR COMPENSATORY AFFORESTATION

IDENTIFICATION OF DEGRADED FOREST LAND

II(1)- Details of identified Forest land-

The identified Forest land for Compensatory Afforestation is situated in Balabhadrapur RF in Coupe- NLP-II under Nalapanga (NLP) Rehabilitation Series of Keonjhar Range in Keonjhar Forest Division. This Forest Block is allotted to Improvement Series of the present Working Plan.

II(2)- Character of existing vegetation of the identified site for Compensatory Afforestation-

The prevailing forest growth has been categorized under forest type- open jungle mainly sal in SoI Topo Sheet No. F45N11. The vegetation consists of Sal and its scattered associates like Jamu, Piasal, Asana, Sisoo, Kuruma, Karada, Dhaura, Khair, Sidha, Harida, Bahada and Ainla.

II(3)- Working Plan prescription for the identified site for Compensatory Afforestation-

The prescribed objectives of management for the identified forest block is depicted hereunder-

1. Regenerate of the degraded forest blocks including the areas once affected by shifting cultivation, by appropriate silvicultural inputs and protection measures with people's participation.
2. Improvement of the micro-climate and micro-edaphic conditions though soil and moisture conservation measures.
3. Encouragement of natural regeneration for increasing the biodiversity in forest crop.
4. Fulfillment of the bonafide needs of the local inhabitants for fuel wood, small timber, fodder and N.T.F.P. to the extent possible depending upon the productivity of the forests to ensure their participation.

II(4)- Suitability of the identified site for Compensatory Afforestation-

The identified site in Balabhadrapur RF is a degraded patch with existing vegetation of Sal and Sal associates. Gaps are sporadically spread over the forest block. The topography of the area is mainly undulating hilly having good depth of red boulder mixed soil conducive for plantation under ANR with Gap model @600 seedling per ha. The average maximum temperature is 40^0 to 45^0C and minimum 5^0 to 10^0 C and annual rainfall varies from 1100 mm to 1800 mm. The maximum rainfall is received during the rainy season from July to September. The site has been demarcated with 4 feet RCC pillars with erection of durable signboard depicting Scheme, Year, User Agency, Area etc. on it. Therefore, the CA scheme is envisaged to be executed with involvement of Baziapada VSS.

CHAPTER-III

DELINEATION OF PROPOSED AREA ON SUITABLE MAP

III(1)- GPS COORDINATES AND GPS MAP OF THE COMPENSATORY AFFORESTATION SITE

The area has been demarcated through GPS survey and GPS survey data showing latitude and longitude of each point and their chainage with bearing is also enclosed in the map prepared thereon (Maps enclosed).

III(2) DECISION SUPPORT SYSTEM- ANALYSIS OF FOREST COVER MAP

The map of the proposed CA land was processed using DSS for analysis of Forest cover over the area. The result obtained are depicted in the **Annexure- ____.**

Decision Support System of degraded forest land identified in Balabhadrapur RF under Konjhar Range

In Sq. Km.

Sl. No	Name of the site	Area identified for plantation (in ha)	Non-Forest	Open Forest
1	Balabhadrapur RF	44.002	0.22	0.22

CHAPTER- IV

AGENCY RESPONSIBLE FOR COMPENSATORY AFFORESTATION

IV(1)- AGENCY RESPONSIBLE FOR PLACEMENT OF FUNDS

The user agency shall provide funds for raising Compensatory Afforestation as per approved scheme.

IV(2)- AGENCY RESPONSIBLE FOR EXECUTION OF COMPENSATORY AFFORESTATION

The Territorial Wing of the Forest Department i.e. Divisional Forest Officer, Keonjhar Division will be assigned with the task for execution of the Compensatory Afforestation.

CHAPTER- V

DETAILS OF WORK SCHEDULE PROPOSED FOR COMPENSATORY AFFORESTATION

A. PLANTING PLAN

Planting Plan reflects the species specific treatment of the identified site. Choice of species is based on the geo-morphology of the site, soil-texture, structure, fertility and depth, proneness of the site to water logging etc. Specific treatment of the site in terms of soil and moisture conservation intervention will be depicted in the treatment map. A treatment map will invariably be prepared for Species to be planted and treatments to be applied to the different patches shown in the treatment map and planting plan. This plan will be followed when actual planting is carried out.

Species to be planted: -

1. *Shorea robusta* (Sal)
2. *Sizyzium cumini* (Jamu)
3. *Adina cardifolia* (Kuruma)
4. *Anogeissus latifolia* (Dhaura)
5. *Accacia catechu* (Khair)
6. *Dalbergia sissoo* (Sissoo)
7. *Azadirrachta indica* (Neem)
8. *Gmelina arborea* (Gambar)
9. *Terminalia belerica* (Bahada)
10. *Terminalia chebula* (Harida)
11. *Pongamia pinnata* (Karanja)
12. *Emblica officinalis* (Ainla)

B.PRE-PLANTING OPERATION

B(I)-RAISING OF PLANTATION STOCK- NURSERY-

Nursery will be raised @660 seedlings per ha including seedlings for 10% causality replacement.

B(II)- SURVEY, DEMARCATION & PILLAR POSTING, GPS READING WITH MAPPING-

The planting area has been surveyed and demarcated with four feet height RCC pillars at inter visible distance (as per the direction of the Forest Range Officer, Keonjhar Range) with GPS coordinates, forward and backward bearing, pillar No. and distance between pillars inscribed in it. A GPS map in the scale of 1:4000 has been prepared along with GPS co-ordinates, forward & backward bearing, pillar to pillar distance and pillar numbers reflected in the map. A sign board has been erected at a conspicuous location with name of the site, scheme, area etc. depicted on it.

B(III)- SITE PREPARATION AND SILVICULTURAL OPERATION INCLUDING CLEARANCE OF WEED, CLIMBER CUTTING, HIGH STUMP CUTTING, SINGLING OF SHOOTS-

The clearing of the site involving removal of invasive weeds, bushes, climbers, high stumps and singling of shoots will be taken up preferably by the end of February and latest by the end of March. Pits of the dimension 30 cm x 30 cm x 30 cm. will be dug @600 per ha. in the available gaps preferably 2 months before or at least a month before planting of seedlings.

C. PLANTING OPERATION

Planting of seedlings will be taken up in the month of July. The polythene covering of the balls of earth will be carefully removed before planting. Care will be taken to see that the ball of earth is not broken while doing so. The seedling with the ball of earth will then be placed firmly in the pit and buried at such a depth that the root collar is well below the surface of the soil. The soil around the plant will be well compacted with the heal as a final step so that there is a proper bond between the ball and the surrounding soil. The earth close to the collar will be slightly elevated so that rain water does not accumulate very close to the plant.

D. POST PLANTING OPERATION

D(1)-CASUALTY REPLACEMENT

The entire area will be gone over in the same order as plantation was carried out and casualties, if any, will be replaced as soon as the main plantation operation is over.

D(2)-WEEDING AND SOIL WORKING

Regular and efficient weeding will start immediately after sprouting of the stumps is complete or after the seedlings have started throwing up new buds.

D(3)-MANURING AND INSECTICIDE APPLICATION

On degraded sites urban compost or farmyard manure, wherever available, will be added to the soil while refilling the pits. As regards artificial fertilizers, N.P.K. and Urea will be applied in two split doses one in August and the other in September.

D(4)-SOIL MOISTURE CONSERVATION MEASURES

Special Soil Moisture Conservation Measures will be taken up through construction of wire mesh LBCD structures of dimension 10' x 10' x 5' to the tune of 43 nos. over the entire plantation site and Water Body- 1No.

D(5)-PROTECTION AGAINST FIRE AND BIOTIC INTERFERENCE

It is proposed to protect the CA plantation from grazing by domestic animals using G.I. Chain Link Mesh Fencing. The total length of such fencing comes to 2.92 Km (2920 M). Fire line tracing will be ensured to protect the plantation from fire and watch & ward will be provided as per the approved norm for protecting the plantation from grazing with involvement of Baziapada VSS.

CHAPTER- VI

Cost Norm for Plantation for 600 Saplings (18 months old seedlings) @ 311.00/- Mandays as per revised wage rate by Labour Commissioner, Odisha, Bhubaneswar vide Notification No. 2816/LC dated 25.05.2021.

Sl.	Item of Works	Preferable Period of Execution	Labour in Mandays	Lobour Cost (₹)	Material Cost (₹)	Total Cost in (₹)
	PREVIOUS YEAR (ADVANCE WORK) NURSERY RAISING					
1	Nursery Cost (18 month Old Seedlings) @Rs.34.84/- part (Rs.8.68 to be released) for 660 seedlings (600+60) (Nov to March)	Nov-March	17.1	5318.1	940.8	6259
	TOTAL.		**17.1**	**5318.1**	**940.8**	**6258.9**
2	Monitoring & Supervision charge 5% of the total cost		0		0	313
	GRAND TOTAL		**17.1**	**5318.1**	**940.8**	**6572**
	0TH YEAR OPERATION					
1	Nursery Cost (1 yr 6 months old seedlings) part @ Rs.34.84 per seedling (Rs22.14 to be relcsased) for 660 seedlings (600+60)	April - March	42.6	13249	2684	15933
	TOTAL.		**42.6**	**13248.6**	**2684**	**15933**
2	Monitoring & Supervision charge 5% of the total cost		0		0	797
	GRAND TOTAL		**42.6**	**13248.6**	**2684**	**16730**
	1ST YEAR OPERATION					
1	Nursery Cost (6 months old seedling) balance @ Rs.4.02 for 660 seedling	April-June	8.7	2706	217	2923
2	Alignment & stacking at 4M spacing including clearance sites in avenue & 2.5m x 2.5m in case of block plantation	April-May	9	2799	0	2799
3	Excavation of pits- 45cmx45cmx45cm in hard soil with vertical cut edges to make an uniform cube& heaping the excavated soil out side the pits.	May-June	31.2	9703	0	9703
4	Refilling of pits with excavated soil after breaking the clouds completely	June	4.8	1493	0	1493
5	Carriage and transport of saplings from Nursery site to plantation site over an average lead of 10kms @ Rs.6 per seedling for 660 seedlings	July	0	0	3960	3960
6(a)	Cost of Fym 0.25 CFT per plant @ Rs.15 per cft for 250 cft		0	0	2250	2250
6(b)	Cost of Vermicompost 250 gm per plant @ RFs.20 per kg for 250 kg		0	0	3000	3000
6(c)	Cost of NPK 50 gm per plant as basal dose @ Rs.24 per kg for 50 kg		0	0	720	720
6(d)	Cost of Granular Insecticide 10gm per plant @ Rs.80 per kg for 10 kg		0	0	480	480

7	Planting of sapling after carefully removing from sacks including mixing of Fym, Vermicompost,Granular Insecticide & Scooping the soil to required depth & pressing the soil around the plants.	July-Aug	15	4665	0	4665
8	Cost of chemical fertilizer (Urea/DAP/NPK etc.)		0	0	720	720
9	1st weeding around the plant to a radious of 45 cm,application of fertilizer	August	15	4665	0	4665
10	2nd weeding around the plant to a radious of 50 cms	September	12	3732	0	3732
11	Soil working around 0.5 Mt radious of the plant & application of fertilizer, mulcuing with available materials	Sept-Oct	19.2	5971	0	5971
12	Watering for 5 months. 10 days per month-from Nov. to March,including cost of water,labour& Transportation through tractor/tanker @ Rs.84 per seedling for 1000 seedlings	November-March	0	0	50400	50400
13	Watch & ward for 9 months from July to March. 270 Days.	July-March	84	26124	0	26124
14	Contigency Expenditure		0	0	273	273
	TOTAL.		**198.9**	**61858**	**62020**	**123878**
15	Monitoring & Supervision charge 5% of the total cost		0		0.00	6194
	GRAND TOTAL		**198.9**	**61857.9**	**62020**	**130072**
	2ND YEAR OPERATION					
1	Cost of sapling - 1 yr & 6 months old for casualty replacement @ Rs.34.84 per seedling for 100 seedlings		0	0	2090	2090
2	Carriage and transport of saplings from Nursery site to plantation site over an average lead of 10kms @ Rs.6 per seedling for 100 seedlings	July	0	0	360	360
3	Replacement of casualty after reopening the pits & planting of sapling 100 nos. With application of FYM,Vermicompost and granular insecticides	July-Aug	2.4	746.4	0	746
4(a)	Cost of FYM 0.25 cft per plant @ Rs.15 per cft for 25 cft for100 plants		0	0	225	225
4(b)	Cost of Granular Insecticide 10gm per plant @ Rs.80 per kg for 1 kg		0	0	48	48
4(c)	Cost of NPK 50 gm per plant as basal dose @ Rs.24 per kg for 5 kg		0	0	72	72
4(d)	Cost of Vermicomost 250 gm per plant @ Rs.20 per kg for 25 kg		0	0	300	300
4(e)	Cost of chemical fertilizer (Urea/DAP/NPK etc.)		0	0	720	720
5	1st weeding around the plant to a radius of 30 cm & application of fertilizer	August	12	3732	0	3732
6	Soil working around 0.5MT radius & application of fertilizer, Moisture	August-Sept	14.4	4478.4	0	4478

	conservation & mulching					
7	2nd weeding around the plant to radius of 0.5 MT.	Oct-Nov	9.6	2985.6	0	2986
8	Watering for eight months 5 days per month including cost of water, labour & transportation through tractor/ tankers. (April to June & Nov. to March) @ Rs.67.20 per seedling for 1000 seedlings	April-June Nov-March	0	0	40320	40320
9	Watch & ward for 12 months from April. to March (365 days)	April-Mar	111.6	34707.6	0	34708
10	Contingency Expenditure		0	0	828	828
	TOTAL.		**150**	**46650.00**	**44963**	**91613**
11	Monitoring & Supervision charge 5% of the total cost		0		0	4581
	Grand Total		**150**	**46650**	**44963**	**96194.07**
	3RD YEAR MAINTENANCE					
1	Weeding, Soil working & Manuring	Sept-Oct	12	3732	0	3732
2	Cost of chemical fertilizer (Urea/DAP/NPK etc.)		0	0	720	720
3	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	111.6	34708	0	34708
	TOTAL.		**123.6**	**38440**	**720**	**39160**
4	Monitoring & Supervision charge 5% of the total cost		0		0	1958
	GRAND TOTAL		**123.6**	**38439.6**	**720**	**41117.58**
	4TH YEAR MAINTENANCE					
1	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	112	34708		34708
	TOTAL.		**112**	**34708**	**0**	**34708**
2	Monitoring & Supervision charge 5% of the total cost		0			1735
	GRAND TOTAL		**112**	**34708**	**0**	**36443**
	5TH YEAR MAINTENANCE					
1	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	112	34708		34708
	TOTAL.		**112**	**34708**	**0**	**34708**
2	Monitoring & Supervision charge 5% of the total cost		0			1735
	GRAND TOTAL		**112**	**34708**	**0**	**36443**
	6TH YEAR MAINTENANCE					
1	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	112	34708		34708
	TOTAL.		**112**	**34708**	**0**	**34708**
2	Monitoring & Supervision charge 5% of the total cost		0			1735
	GRAND TOTAL		**112**	**34708**	**0**	**36443**
	7TH YEAR MAINTENANCE					
1	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	112	34708		34708
	TOTAL.		**112**	**34708**	**0**	**34708**

2	Monitoring & Supervision charge 5% of the total cost		0			1735
	GRAND TOTAL		**112**	**34708**	**0**	**36443**
	8TH YEAR MAINTENANCE					
1	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	112	34708		34708
	TOTAL.		**112**	**34708**	**0**	**34708**
2	Monitoring & Supervision charge 5% of the total cost		0			1735
	GRAND TOTAL		**112**	**34708**	**0**	**36443**
	9TH YEAR MAINTENANCE					
1	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	112	34708		34708
	TOTAL.		**112**	**34708**	**0**	**34708**
2	Monitoring & Supervision charge 5% of the total cost		0			1735
	GRAND TOTAL		**112**	**34708**	**0**	**36443**
	10TH YEAR MAINTENANCE					
1	Watch & ward for 12 months from April to March. 365 Days.	April-Mar	112	34708		34708
	TOTAL.		**112**	**34708**	**0**	**34708**
2	Monitoring & Supervision charge 5% of the total cost		0			1735
	GRAND TOTAL		**112**	**34708**	**0**	**36443**

ABSTRACT

Sl. No.	Year of operation	No. Person Day	Labour cost @ Rs. 311/- per day	Material cost (Rs.)	Monitoring & Supervision charge 5%	Total cost in (Rs.)
1	PREVIOUS YEAR	17.1	5318	941	313	6572
2	0th YEAR PLANTING	42.6	13249	2684	797	16730
3	1st YEAR PLANTING	198.9	61858	62020	6194	130072
4	2nd YEAR MAINTENANCE	150	46650	44963	4581	96194
5	3rd YEAR MAINTENANCE	124	38440	720	1958	41118
6	4th YEAR MAINTENANCE	112	34708	0	1735	36443
7	5th YEAR MAINTENANCE	112	34708	0	1735	36443
8	6th YEAR MAINTENANCE	112	34708	0	1735	36443
9	7th YEAR MAINTENANCE	112	34708	0	1735	36443
10	8th YEAR MAINTENANCE	112	34708	0	1735	36443
11	9th YEAR MAINTENANCE	112	34708	0	1735	36443
12	10th YEAR MAINTENANCE	112	34708	0	1735	36443
	Total	**1313**	**408467**	**111329**	**25990**	**545786**
	Total plantation cost 44.002 ha X 545786/-					**24015675.57**

ADDITIONAL COST PROPOSED

1	Wire mesh LBCD of size 10' x 10' x 5' for 43 nos. @Rs 38,155/- per LBCD	38,155 x 43 nos	1640665.00
2	One water body of size 40mt x 30mt x 3mt in the plantation site	1 x 6,06,800	606800.00
3	Cost of G.I. Chain Link Mesh Fencing over 2.92 Km. with 3 years maintenance @2% of cost per RKM @Rs. 9,90,000/- per RKM	Rs. 9,90,000 x 2.92 Km	2890800.00
4	One Watcher shed @Rs 10 lakh	1 x 10,00,000	1000000.00
5	Compound wall (in RMT @Rs. 0.075 lakh x 100 mtr)		750000.00
	Sub-Total		**6888265.00**

*** The plantation will be maintained over a period of 10 years and is at a distant place from nearest habitation hence provision needs to be made a watcher shed for around the year for accommodation of labourers and watchers deployed in the plantation. Further the watcher shed would also be used as camp for fire squad members during the fire season.**

TOTAL COST OF PROJECT

1	Plantation over 44.002 ha x Rs. 545786/- per ha.	24015675.57
2	Total additional cost	6888265.00
	Total	**30903940.57**
3	15% of the total plantation cost towards Entry Point Activity/ Incentive to VSS etc.	4635591.08
	Total	**35539531.65**
4	Add 20% escalation	7107906.33
	Grand Total	**42647437.98** **Or say** **4,26,47,500.00**

(Rupees four crore twenty-six lakh forty-seven thousand five hundred) Only

A. PROVISION OF FUNDS AND FUND UTILIZATION

Rs. 4,26,47,500/- (Rupees four crore twenty-six lakh forty-seven thousand five hundred) only shall be deposited by the User Agency M/s Tata Steel BSL Limited (formerly known as Bhushan Steel India Limited) on approval of the scheme to the Ad-hoc CAMPA Account and the funds will be utilized for raising of Compensatory Afforestation by the Divisional Forest Officer, Keonjhar Division on allotment by the Principal Chief Conservator of Forests, Odisha, Bhubaneswar.

Divisional Forest Officer,
Keonjhar Division

CHAPTER- VII

DETAILS OF PROPOSED MONITORING MECHANISM

Compensatory Afforestation will be taken up in the identified site by the Range Officer, Keonjhar Range of Keonjhar Division. The Range Forest Officer, Keonjhar Range will undertake field checks of the works undertaken at the identified site and will be cross checked by the Asst. Conservator of Forests, (Affn.) and Divisional Forest Officer, Keonjhar Division. GPS co-ordinates along with other required informations of Compensatory Afforestation will be uploaded in the e-Green watch Portal of NIC, MoEF, Govt. of India for the purpose of online monitoring. Annual progress of plantation involving growth of planted seedlings, survival percentage etc. will be monitored and recorded in the plantation journal by the field staffs of Keonjhar Range and reported to the Divisional Forest Officer for necessary action. The same thing will be reported to the Regional Chief Conservator of Forests, Rourkela Circle and Chief Conservator of Forests (PP&A), O/o the Pr. Chief Conservator of Forests, Odisha, Bhubaneswar and necessary corrective measures will be followed if required so.

Divisional Forest Officer,
Keonjhar Division