

Estimate for Compensatory Aforestation in 3.78 HA Block against diversion proposal of 1.89 Ha Forest Land for ONGC Exploratory Drilling Location -KSAD

1	AREA (HA)	3.78	Dimensions of the Block in m		
2			162	202	144
3	PERIMETER	718	210		
4	SPACING	2 X 2	Name of Speceis to be planted:		
5	NUMBER OF SAPLINGS / HA	2500			
6	LENGTH OF FENCE (RM)	718	Holak, Holong, Mekai, Khokan, Morhal, Hingori, Titachopa, Panchopa, Gahorichopa, Shyamkothal, Bandardima, Nahar, Moz, Kadam, Hilikha.		
7	WAGE RATE FOR FIRST YEAR	240			
8	Increase in wage rate for subsequent year by a factor	1.1			
9	Appreciation of material cost by a factor	1.1			
10	Compartment Number	116			
11	Location of plantation : Upper Dehing Reserved Forest (WB)				
12	GPS: Co-ordinates: :				
	27° 25' 07.45" N ; 95° 30' 35.40" E				
	27° 25' 07.86" N ; 95° 30' 41.16" E				
	27° 25' 15.70" N ; 95° 30' 34.30" E				
	27° 25' 15.09" N ; 95° 30' 33.81" E				
13	Name of Range: Lakhpathar Range				

Sl. No.	Particulars of works`	Units	Qty/ ha	Total Qty.	Rate Rs	Amount Rs
A	ERECTION OF FENCING					
	(a) Cost of full Chain-linked Goat Proof fencing (4' ht. with 10 Gauge, 3" dia link) to be fitted on Pre-cost RCC pillars* at 1.8 mt. apart including transportation of fencing materials to site for 4330 RM @ Rs. 800 per RM as per estimate	RM		718	800	574400
	(b) Wages of DLS for carrying, fitting, fixing etc. of fencing materials @ 20 DLS/100 RM	DL		143.6	240	34464
	Sub-total					608864
B	INFRASTRUCTURE IN PLANTATION AREA					
	Construction of camp hut as per estimate.	Nos.		1	150000	150000
	Installation of ring/tube well	Nos.		1	50000	100000
	Irrigation facility with Diesel generation and hose pipes for watering the nursery and plantation (during dry spells)	Nos.		1	50000	50000
	Cost of tools & implements	Nos		1	10000	10000
	Cost of RCC signboard & Gate including fitting and fixing of the same	Nos		1	60000	60000
	Camp accessories @ Rs. 10,000/- per camp	Nos		1	10000	10000
	Construction of Inspection Path @ Rs. 50/- RM	RM		364	50	18200
	Construction of Staff quarters as per estimate.	No.		0	800000	0
	Provision of Solar energy for staff quarters including installation.	No.		1	70000	70000
	Sub-total					468200
C	ADVANCE WORK					
	Site selection, surveying, demarcation, jungle cutting, burning etc.20 DLS/ha	DLS	20	75.6	240	18144
	Preparation and acquisition of polypot sapling in the field nursery for planting 2500 Nos. Seedling/ha @ Rs. 6/- per polypot	No.	2500	9450	6	56700
	Preparation of polypot saplings in the field nursery for vacancy filling.					
	a)25% mortality expected during 1st year (to be planted in the field during the 2nd year),i.e., 625 Seedlings/ha @ Rs.6.5/- per polypot.	No.	625	2362.5	6.5	15356.25
	b)20% mortality expected during 2nd year (to be planted in the field during the 3rd year), i.e., 500 Seedlings/ha @ 7/- per polypot.	No.	500	1890	7	13230
	c) 15% mortality expected during 3rd year (to be planted in the field during the 4th year),i.e., 375 Seedlings/ha @ 7.5/- per polypot.	No.	375	1417.5	7.5	10631.25
	d) 10% mortality expected during 4th year (to be planted in the field during the 5th year),i.e., 250 Seedlings/ha @ 8/- per polypot.	No.	250	945	8	7560
	Cost of Bamboo, making of stacking & transportation etc.	No.	625	2362.5	1	2362.5
	Line alignment,carriage of stacking materials and fixing the satacking @ 5 DLS/ha	DLS	5	18.9	240	4536
	Supervision and Monitoring.	LS				10000
	Sub-total					138520

Sl. No.	Particulars of works`	Units	Qty/ ha	Total Qty.	Rate Rs	Amount Rs
D	CREATION & 1st YEAR MAINTENANCE	Wage Rate		240		
	Soil working, carriage of stumps, popypot seedlings and planting ar the plantation site including, dibbling of seeds wherever necessary to complete raising of plantation with all necessary operation @ 40 DLs/ha	DLS	40	151.2	240	36288
	5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLS	90	340.2	240	81648
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha.	DLS	5	18.9	240	4536
	Maintenance and protection of field nursery for 1 DLs for 365 days	DLs		365	240	87600
	Watch and ward for the plantation area for 365 days	DLs		0	152	0
	Maintenance of camp huts, implements, ring/tube-well, upkeepment of plantation, signboard, documentation, upkeepment of records and other mise. work.	LS				10000
	Awareness & Monitoring @ Rs.800/ha	DLs		3.78	800	3024
	Sub total					223096
E	2nd YEAR MAINTENANCE	Wage Rate		264		
	5 weedings, fire protection woks @15 DLs/ha weeding	DLs	75	283.5	264	74844
	25% Vacancy filling by 1 year old seedlings from nursery @ 10 DLs/ha	DLs	10	37.8	264	9979.2
	Upkeepment of plantation, and making of inspection path, repariring of fence etc on day to day basis @ 5 DLs/ha	DLs	5	18.9	264	4989.6
	Maintenance and protection of field nursery for 1 DLs for 365 days	DLs		365	264	96360
	Watch and ward for the plantation area for 365 days	DLS		0	264	0
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	LS				11000
	Supervision Cost	LS				3024
	Contingency L.S.	LS				2500
	Sub total					202697
F	3rd YEAR MAINTENANCE	Wage Rate		290		
	4 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	60	226.8	290	65772
	20% Vacancy filling by 2 year old seedlings from nursery @ 8DLs/ha	DLs	8	30.24	290	8769.6
	Protection work, cattle, watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	18.9	290	5481
	Maintenance and protection of field nursery for 1 DLs for 365 days	DLs		365	290	105850
	Watch and ward for the plantation area for 365 days	DLs		0	290	0
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records.	LS				12100
	Supervision Cost	LS				3024
	Contingency @ 15% over previous year	LS	0.15			2875
	Sub total					203872
G	4th YEAR MAINTENANCE	Wage Rate		319		
	4 weedings, fire protection woks @ 15 dls/ha/weeding	DLs	60	226.8	319	72349.2
	15% Vacancy filling by 2 year old seedlings from nursery @ 6DLs/ha	DLs	6	22.68	319	7234.92
	Upkeepment of plantation, and making of inspection path,repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	18.9	319	6029.1
	Maintenance and protection of field nursery for 1 DLs for 365 days	DLS		365	319	116435
	Watch and ward for the plantation area for 365 days	DLs		0	319	0
	Maintenance of camp hut, implements, ring/tube-well upkepmnt of plantation, signboard, documentation, upkeepment of records etc.	LS				13310
	Supervision Cost	LS				3024
	Contingency @ 15% over previous year.	LS	0.15			3306.25
	Sub total					221688

Sl. No.	Particulars of works`	Units	Qty/ ha	Total Qty.	Rate Rs	Amount Rs
H	5th YEAR MAINTENANCE	Wage Rate		351		
	Climber cutting, weeding & other silvicultural works and fire protection works @ 15DLs/ha	DLs	15	56.7	351	19901.7
	10% Vacancy filling by 2 year old seedlings from nursery @ 4 DLs/ha	DLs	4	15.12	351	5307.12
	Maintenance & fencing post replacement @ 3% initial cost of material.		0.03	574400		17232
	Upkeepment of plantation and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha.	DLs	4	15.12	351	5307.12
	Watch and ward for the plantation area for 365 days	DLs		0	351	0
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				14641
	Supervision Cost	LS				3024
	Contingency @ 15% over previous year.	LS	0.15			3802.1875
	Sub total					69215
I	6th YEAR MAINTENANCE	Wage Rate		386		
	Climber cutting, other silvicultural works and fire protection works @ 15DLs/ha	DLs	15	56.7	386	21886.2
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha.	DLs	4	15.12	386	5836.32
	Watch and ward for the plantation area for 365 days	DLs		0	386	0
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				16105.1
	Supervision Cost	LS				3024
	Contingency @ 15% over previous year.	LS	0.15			4372.515625
	Sub total					51224
J	7th YEAR MAINTENANCE	Wage Rate		425		
	Climber cutting, other silvicultural works and fire protection works @ 12DLs/ha.	DLs	12	45.36	425	19278
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha.	DLs	5	18.9	425	8032.5
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				17715.61
	Supervision Cost					3024
	Contingency @ 15% over previous year.	LS	0.15			5028.392969
	Sub total					53079
K	8th YEAR MAINTENANCE	Wage Rate		468		
	Climber cutting, other silvicultural works and fire protection works @ 8DLs/ha.	DLs	8	30.24	468	14152.32
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha.	DLs	5	18.9	468	8845.2
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				19487.171
	Supervision Cost	LS				3024
	Contingency @ 15% over previous year.	LS	0.15			5782.651914
	Sub total					51291
L	9th YEAR MAINTENANCE	Wage Rate		515		
	Climber cutting, other silvicultural works and fire protection works @ 7DLs/ha.	DLs	7	26.46	515	13626.9
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha.	DLs	5	18.9	515	9733.5
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				21435.8881
	Supervision Cost	LS				3024
	Contingency @ 15% over previous year.	LS	0.15			6650.049701
	Sub total					54470

Sl. No.	Particulars of works`	Units	Qty/ ha	Total Qty.	Rate Rs	Amount Rs
M	10th YEAR MAINTENANCE	Wage Rate		567		
	Climber cutting, other silvicultural works and fire protection works @ 6DLs/ha.	DLs	6	22.68	567	12859.56
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha.	DLs	4	15.12	567	8573.04
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				23579.47691
	Supervision Cost	LS				3024
	Contingency @ 15% over previous year.	LS	0.15			7647.557156
	Sub total					55684
	Total					2401900

Compensatory Afforestation Scheme for 10 Years in

3.78 Ha Block

Particulars of Works	Amount (Rs.)
Erection pf Fencing	608864
Infrastructure in Plantation Area	468200
Advance Work	138520
Creation & 1 st Year Maintenance	223096
2 nd Year Maintenance	202697
3 rd Year Maintenance	203872
4 th Year Maintenance	221688
5 th Year Maintenance	69215
6 th Year Maintenance	51224
7th Year Maintenance	53079
8th Year Maintenance	51291
9th Year Maintenance	54470
10th Year Maintenance	55684
Total	2401900
Overhead cost @ 50% on total cost	1200950
Grand Total	3602850
Rate Per Ha Plantation	953135

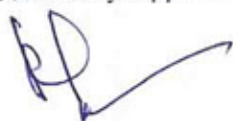
NOTE:

Cost escalation of 10% annually has been considered for wages

The norms should be revised annually based on wage rate & cost of materials

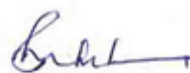
*Pre-cast RCC pillar with 5"x5" cross-section of ft height (1.5 ft below ground & 4.5 ft above ground) with

Technically Approved



Chief Conservator of Forests
Eastern Assam Circle, Jorhat

Submitted



Divisional Forest Officer
Digboi Forest Division