

Estimate for Comapensatory Aforestation in 2.86 HA Block against diversion proposal of 1.43 Ha Forest Land for ONGC Exploratory Drilling Location -NRAA to GGS

for ONGC Exploratory Drilling Location -NRAA to GGS					
1	AREA (HA)	2.86	Dimensions of the Block in m		
2			207	150	230
3	PERIMETER	705	118		
4	SPACING	2 X 2	Name of Speceis to be planted:		
5	NUMBER OF SAPLINGS / HA	2500			
6	LENGTH OF FENCE (RM)	705			
7	WAGE RATE FOR FIRST YEAR	240			
8	Increase in wage rate for subsequent year by a factor	1.1	Holak, Holong, Mekai, Khokan, Morhal, Hingori, Titachopa, Panchopa, Gahorichopa, Shyamkothal, Bandardima, Nahar, Moz, Kadam, Hilikha.		
9	Appreciation of material cost by a factor	1.1			
10	Compartment Number	116			
11	Location of plantation : Upper Dehing Reserved Forest (EB)				
12	GPS: Co-ordinates: :				
	27° 26' 47.68" N ; 95° 44' 24.64" E				
	27° 26' 48.80" N ; 95° 44' 28.83" E				
	27° 26' 54.80" N ; 95° 44' 25.20" E				
	27° 26' 53.92" N ; 95° 44' 19.80" E				
13	Name of Range: Digboi 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		705	800	564000
	(b) Wages oF DLS for carrying, fitting, fixing etc. of fencing materials @ 20 DLs/100 RM	DL		141	240	33840
	Sub-total					597840
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 nurserv 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		357	50	17850
	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					467850
C	ADVANCE WORK					
	Site selection, surveying, demarcation, jungle cutting, burning etc.20 DLs/ha	DLS	20	57.2	240	13728
	Preparation and acquisition of polypot sapling in the field nursery for planting 2500 Nos. Seedling/ha @ Rs. 6/- per polypot	No.	2500	7150	6	42900
	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	1787.5	6.5	11618.75
	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	1430	7	10010
	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	1072.5	7.5	8043.75
	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	715	8	5720
	Cost of Bamboo, making of stacking & transportation etc.	No.	625	1787.5	1	1787.5
	Line alignment,carriage of stacking materials and fixing the satacking @ 5 DLs/ha	DLS	5	14.3	240	3432
	Supervision and Monitoring.	LS				10000
	Sub-total					107240

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	114.4	240	27456
	5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLS	90	257.4	240	61776
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha.	DLS	5	14.3	240	3432
	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		2.86	800	2288
	Sub total					192552
E	2nd YEAR MAINTENANCE	Wage Rate		264		
	5 weedings, fire protection woks @15 DLs/ha weeding	DLs	75	214.5	264	56628
	25% Vacancy filling by 1 year old seedlings from nursery @ 10 DLs/ha	DLs	10	28.6	264	7550.4
	Upkeepment of plantation, and making of inspection path, repariring of fence etc on day to day basis @ 5 DLs/ha	DLs	5	14.3	264	3775.2
	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				2288
	Contingency L.S.	LS				2500
	Sub total					180102
F	3rd YEAR MAINTENANCE	Wage Rate		290		
	4 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	60	171.6	290	49764
	20% Vacancy filling by 2 year old seedlings from nursery @ 8DLs/ha	DLs	8	22.88	290	6635.2
	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	14.3	290	4147
	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				2288
	Contingency @ 15% over previous year	LS	0.15			2875
	Sub total					183659
G	4th YEAR MAINTENANCE	Wage Rate		319		
	4 weedings, fire protection woks @ 15 dls/ha/weeding	DLs	60	171.6	319	54740.4
	15% Vacancy filling by 2 year old seedlings from nursery @ 6DLs/ha	DLs	6	17.16	319	5474.04
	Upkeepment of plantation, and making of inspection path,repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	14.3	319	4561.7
	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				2288
	Contingency @ 15% over previous year.	LS	0.15			3306.25
	Sub total					200115

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	42.9	351	15057.9
	10% Vacancy filling by 2 year old seedlings from nursery @ 4 DLs/ha	DLs	4	11.44	351	4015.44
	Maintenance & fencing post replacement @ 3% initial cost of material.		0.03	564000		16920
	Upkeepment of plantation and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha.	DLs	4	11.44	351	4015.44
	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				2288
	Contingency @ 15% over previous year.	LS	0.15			3802.188
	Sub total					60740
I	6th YEAR MAINTENANCE	Wage Rate		386		
	Climber cutting, other silvicultural works and fire protection works @ 15DLs/ha	DLs	15	42.9	386	16559.4
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha.	DLs	4	11.44	386	4415.84
	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				2288
	Contingency @ 15% over previous year.	LS	0.15			4372.516
	Sub total					43741
J	7th YEAR MAINTENANCE	Wage Rate		425		
	Climber cutting, other silvicultural works and fire protection works @ 12DLs/ha.	DLs	12	34.32	425	14586
	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	14.3	425	6077.5
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				17715.61
	Supervision Cost					2288
	Contingency @ 15% over previous year.	LS	0.15			5028.393
	Sub total					45696
K	8th YEAR MAINTENANCE	Wage Rate		468		
	Climber cutting, other silvicultural works and fire protection works @ 8DLs/ha.	DLs	8	22.88	468	10707.84
	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	14.3	468	6692.4
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				19487.17
	Supervision Cost	LS				2288
	Contingency @ 15% over previous year.	LS	0.15			5782.652
	Sub total					44958
L	9th YEAR MAINTENANCE	Wage Rate		515		
	Climber cutting, other silvicultural works and fire protection works @ 7DLs/ha.	DLs	7	20.02	515	10310.3
	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	14.3	515	7364.5
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				21435.89
	Supervision Cost	LS				2288
	Contingency @ 15% over previous year.	LS	0.15			6650.05
	Sub total					48049

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	17.16	567	9729.72
	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	11.44	567	6486.48
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				23579.48
	Supervision Cost	LS				2288
	Contingency @ 15% over previous year.	LS	0.15			7647.557
	Sub total					49731
	Total					2222273

Compensatory Afforestation Scheme for 10 Years in

2.86 Ha Block

Particulars of Works	Amount (Rs.)
Erection pf Fencing	597840
Infrastructure in Plantation Area	467850
Advance Work	107240
Creation & 1 st Year Maintenance	192552
2 nd Year Maintenance	180102
3 rd Year Maintenance	183659
4 th Year Maintenance	200115
5 th Year Maintenance	60740
6 th Year Maintenance	43741
7th Year Maintenance	45696
8th Year Maintenance	44958
9th Year Maintenance	48049
10th Year Maintenance	49731
Total	2222273
Overhead cost @ 50% on total cost	1111136.5
Grand Total	3333410
Rate Per Ha Plantation	1165528

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