

ABSTRACT OF PROPOSED COMPENSATORY AFFORESTATION

Proposal No.: FP/WB/OFC/146241/2021

Area (ha.): 0.0348 ha (From KHARIARBANDAR FOREST COMPARTMENT ALONG NH-31(R o W) AND VILLAGE ROAD UNDER JALPAIGURI FOREST DIVISION)

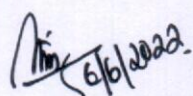
Location Range: Diana, Beat: Khairkata, Block: South Diana Area: 0.0696 ha

Diversion of 0.0348 ha Forest Land (in Jalpaiguri Division 0.0348 ha) in favour of Reliance Jio Infocomm Ltd.

Creation of Plantation(0.0696 ha) and Solar power fencing

Sl.No	Particulars of work	Area (Ha.)	Amount (Rs.)
1	Estimate for Creation of Misc. Plantation NB	0.0696	₹ 96,395.00
2	Total Cost of maintenance for Plantation (1st Yr. to 10th Yr.)	0.0696	₹ 1,91,270.00
3	Supply of base unit Material for construction of solar power fencing	150 mt	₹ 1,02,044.00
4	Supply of Labour, Material Transportation and Installing Power Fencing with Maintenance	150 mt	₹ 1,02,044.00
Total			₹ 4,91,753.00
5	Add: Contingency @ 3% on Total	₹ 4,91,753.00	₹ 14,752.59
Grand Total = (Rupees Five Lakh Six Thousand Five Hundred Six only)			₹ 5,06,506.00

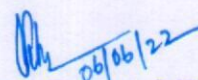
Countersigned by



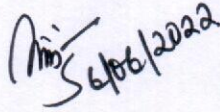
S.K. Mohan (IFS)

Chief Conservator of Forests, Northern Circle

Submitted by

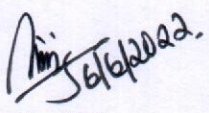
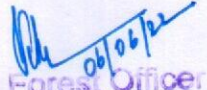
Divisional Forest Officer
Jalpaiguri DivisionVikas V (IFS)
DFO, Jalpaiguri Division

Proposal No.: FP/WB/OFC/146241/2021					
Forest Range: Diana Range			Beat: Khairkata		
Spacing : 2m X 2m			Species : Misc.		
No. Of seedling/ ha : 2500 Nos.					
Total area to be Planted : 0.0696 ha					
Size of the pit : Miscellaneous (NB)- (60 X 45 X 45cm)					
Wage of Labour : Rs. 300/- per DL					
Species to be Planted: Misc. Plantation NB					
(i) CA Area Under Jalpaiguri Division : 0.0696 Hectare					
1	Cost of seedlings (2500 nos + 15% insurance) = 2875 nos @ Rs. 20/- seedlings	Dec to June	LS	LS	₹ 57,500.00
2	Survey and demarcation of the plantation including preparation of Regeneration Map and GPS Survey map	1 ha	₹ 600.00	1 ha	₹ 600.00
3	Initial cleaning of Preplanting plantation area by cutting jungles & undergrowth bushes as where necessary	1 ha	₹ 7,800.00	1 ha	₹ 7,800.00
4	Stacking and alignment of plantation site, collection of stacks, pitching etc.	1 ha	₹ 1,800.00	1 ha	₹ 1,800.00
5	Pit cutting Miscellaneous (NB)- (60 X 45 X 45cm)	1 ha	₹ 12,600.00	1 ha	₹ 12,600.00
6	Soil Moisture Conservation - Digging of box trench over a length of 500mt of size 5m X 0.45m X 0.45m	1 ha	₹ 11,100.00	0.5 ha	₹ 4,980.00
7	Creation of Instection Path by removing weeds, scarping and by providing proper drain along the diagonal of the plantation site of 3mt wide	100mtr	₹ 1,800.00	50 mtr	₹ 900.00
8	Pit filling and application of Farm yard Manure : i)Miscellaneous (NB)	1 ha	₹ 5,400.00	1 ha	₹ 5,400.00
9	Transplanting of Hycopots seedling into pits including man carriage from the unloading point : Miscellaneous (NB)	1000 nos	₹ 4,200.00	2500 nos	₹ 10,500.00
10	Application of insecticides and other chemicals whenever necessary	1000 nos	₹ 900.00	2500 nos	₹ 2,250.00
11	Vacancy infilling of pits with new seedling wherever there mortality due abiotic and biotic factors	100 nos	₹ 600.00	250 nos	₹ 1,500.00
12	1st Cleaning	1 ha	₹ 6,000.00	1 ha	₹ 6,000.00
13	1st Mulching	1000 nos	₹ 4,500.00	2500 nos	₹ 11,250.00
14	2nd Cleaning	1 ha	₹ 4,500.00	1 ha	₹ 4,500.00
15	3rd Cleaning	1 ha	₹ 3,900.00	1 ha	₹ 3,900.00
16	4th Cleaning	1000 nos	₹ 3,900.00	1 ha	₹ 3,900.00
17	5th Cleaning	1000 nos	₹ 3,900.00	1 ha	₹ 3,900.00
18	Creation of fireline to protect plantation from fire, by making 3mt fireline inside plantation and boundary by removing weeds and vegetation and scrapping, cutting of asll existing wwed growth to a width of 3m Heaping, burning abd re-burning in younger plantation.	100 mtr	₹ 1,500.00	150 mtr	₹ 2,250.00

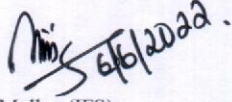
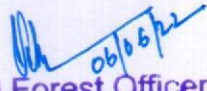
19	Providing watch and ward in the form of man days to observe the plantation and protect the plantation from damages arising out of biotic factors for the entire year	1 ha	₹ 4,200.00	1 ha	₹ 4,200.00
20	Organic manure (50gms/plants)	1 Mt	₹ 30,000.00	0.125 mt	₹ 3,750.00
21	Transplanting of Hycopots seedling from nursery to plantation site including loading & unloading : lead distance >20km & upto 30km: 300 CC Hycopots.	1000 nos	₹ 1,500.00	2500 nos	₹ 3,750.00
22	Collection of Hycopots after plantation & transporting back to central nursery after careful packing etc. lead distance >20km & upto 30km: 300 CC Hycopots.	1000 nos	₹ 600.00	2500 nos	₹ 1,500.00
23	Fencing : Vegetation fencing using bamboo post at least of 6ft high with 1ft embedded underground and not more than 5ft apart with splitted bamboo of atleast 5 rows and using ipomea/brushwood/thron as locally available as filler.	10 mtr	₹ 1,500.00	100 mtr	₹ 15,000.00
24	Signage: Instatation of sign board with Forest directorate colour code and emblem of size 3' x 4ft made out of brick work and plastered and well finished and painted with good quality paint				₹ 700.00
Estimate for Creation of Misc. Plantation NB (per ha)					₹ 1,70,430.00
(A) Total area to be Planted in Ha : (0.0696) 50% of Estimate for Creation of Misc. Plantation NB (per ha)				0.0696	₹ 85,215.00
(B) Add: GST @ 12%					₹ 10,225.80
Total (A+B)					₹ 95,441.00
(C) Add: Labour Cess @ 1%					₹ 954.41
Grand Total : { Total(A+B) + C }					₹ 96,395.00
Countersigned by		Submitted by			
 S.K.Mollay (IFS) Chief Conservator of Forests, Northern Circle		 Divisional Forest Officer Jalpaiguri Division Vikas.V (IFS) DFO, Jalpaiguri Division			

(ii) Maintenance of Plantation					
1st Year Maintenance of Plantation		Period	Rate (Rs.)	MD/ Nos	Amount(Rs.)
1	Infilling with 2yrs old tall seedlings including transporation cost	Apr to May	₹ 310.00	20	₹ 6,200.00
2	1st time weeding cleaning,earthing & mulching with application of fertilizer & vacancy filling.....	May to June	₹ 310.00	24	₹ 7,440.00
3	Sparying of pesticides and nutrients on the plants	May to June	₹ 310.00	5	₹ 1,550.00
4	2 nd time weeding cleaning,earthing & mulching with application of fertilizer & vacancy filling.....	Jul to Aug	₹ 310.00	15	₹ 4,650.00
5	3 rd time weeding cleaning & mulching without application of fertilizer.....	Sept to Oct	₹ 310.00	10	₹ 3,100.00
6	4 th time weeding cleaning & mulching without application of fertilizer.....	Dec to Jan	₹ 310.00	10	₹ 3,100.00
7	Cost of watch & ward for fire and grazing control from September to March over 02 no.s watcher on contract....	Apr to Mar	₹ 310.00	30	₹ 9,300.00
8	Making fire lines 1.50 mt wide all along the periphery and 1.20 mt with inside plantation.....	Dec to Jan	₹ 310.00	6	₹ 1,860.00
Cost of maintenance for 1 Ha. Plantation					₹ 37,200.00
2nd Year Maintenance of Plantation		Period	Rate (Rs.)	MD/ Nos	Amount (Rs.)
1	Infilling with 2yrs old tall seedlings including transporation cost	Apr to May	₹ 320.00	16	₹ 5,120.00
2	1st time cleaning with soil mulching/earthing up	May to June	₹ 320.00	22	₹ 7,040.00
3	Sparying of pesticides and nutrients on the plants	Jul to Aug	₹ 320.00	3	₹ 960.00
4	2 nd time time cleaning with soil mulching/earthing up	Sept to Oct	₹ 320.00	14	₹ 4,480.00
5	3 rd time cleaning with soil mulching/earthing up...	Dec to Jan	₹ 320.00	10	₹ 3,200.00
6	Cost of watch & ward for fire and grazing control from September to March over 02 no.s watcher on contract....	Apr to Mar	₹ 320.00	24	₹ 7,680.00
7	Making fire lines 1.50 mt wide all along the periphery and 1.20 mt with inside plantation.....	Dec to Jan	₹ 320.00	4	₹ 1,280.00
Cost of maintenance for 1 Ha. Plantation					₹ 29,760.00
3rd Year Maintenance of Plantation		Period	Rate (Rs.)	MD/ Nos	Amount (Rs.)
1	Infilling with 2yrs old tall seedlings including transporation cost	Apr to May	₹ 330.00	5	₹ 1,650.00
2	1st time cleaning with soil mulching/earthing up	May to June	₹ 330.00	15	₹ 4,950.00
3	Sparying of pesticides and nutrients on the plants	Jul to Aug	₹ 330.00	4	₹ 1,320.00
4	2 nd time time cleaning with soil mulching/earthing up	Dec to Jan	₹ 330.00	15	₹ 4,950.00

5	Cost of watch & ward for fire and grazing control from September to March over 02 no.s watcher on contract....	Apr to Mar	₹ 330.00	18	₹ 5,940.00
6	Making fire lines 1.50 mt wide all along the periphery and 1.20 mt with inside plantation.....	Dec to Jan	₹ 330.00	4	₹ 1,320.00
Cost of maintenance for 1 Ha. Plantation					₹ 20,130.00
4th Year Maintenance of Plantation		Period	Rate (Rs.)	MD/ Nos	Amount (Rs.)
1	Infilling with 2yrs old tall seedlings including transporation cost	Apr to May	₹ 340.00	5	₹ 1,700.00
2	1st time cleaning with soil mulching/earthing up	May to June	₹ 340.00	15	₹ 5,100.00
3	Sparying of pesticides and nutrients on the plants	Jul to Aug	₹ 340.00	3	₹ 1,020.00
4	2 nd time time cleaning with soil mulching/earthing up	Dec to Jan	₹ 340.00	15	₹ 5,100.00
5	Cost of watch & ward for fire and grazing control from September to March over 02 no.s watcher on contract....	Apr to Mar	₹ 340.00	12	₹ 4,080.00
6	Making fire lines 1.50 mt wide all along the periphery and 1.20 mt with inside plantation.....	Dec to Jan	₹ 340.00	4	₹ 1,360.00
Cost of maintenance for 1 Ha. Plantation					₹ 18,360.00
5th Year Maintenance of Plantation		Period	Rate (Rs.)	MD/ Nos	Amount (Rs.)
1	Infilling with 2yrs old tall seedlings including transporation cost	Apr to May	₹ 350.00	5	₹ 1,750.00
2	1st time cleaning with soil mulching/earthing up	May to June	₹ 350.00	15	₹ 5,250.00
3	Sparying of pesticides and nutrients on the plants	Jul to Aug	₹ 350.00	2	₹ 700.00
4	2 nd time time cleaning with soil mulching/earthing up	Dec to Jan	₹ 350.00	15	₹ 5,250.00
5	Cost of watch & ward for fire and grazing control from September to March over 02 no.s watcher on contract....	Apr to Mar	₹ 350.00	12	₹ 4,200.00
6	Making fire lines 1.50 mt wide all along the periphery and 1.20 mt with inside plantation.....	Dec to Jan	₹ 350.00	4	₹ 1,400.00
Cost of maintenance for 1 Ha. Plantation					₹ 18,550.00
6th Year Maintenance of Plantation		Period	Rate (Rs.)	MD/ Nos	Amount (Rs.)
1	Fire Protection (Fire Watcher)	Jan to Mar	₹ 360.00	30	₹ 10,800.00
2	Mulching	Dec to May	₹ 360.00	5	₹ 1,800.00
Cost of maintenance for 1 Ha. Plantation					₹ 12,600.00
7th Year Maintenance of Plantation		Period	Rate (Rs.)	MD/ Nos	Amount (Rs.)
1	Fire Protection (Fire Watcher)	Jan to Mar	₹ 370.00	30	₹ 11,100.00
2	Mulching	Dec to May	₹ 370.00	5	₹ 1,850.00
Cost of maintenance for 1 Ha. Plantation					₹ 12,950.00

8th Year Maintenance of Plantation		Period	Rate (Rs.)	MD/ Nos	Amount (Rs.)
1	Fire Protection (Fire Watcher)	Jan to Mar	₹ 380.00	30	₹ 11,400.00
2	Mulching	Dec to May	₹ 380.00	5	₹ 1,900.00
Cost of maintenance for 1 Ha. Plantation					₹ 13,300.00
9th Year Maintenance of Plantation		Period	Rate (Rs.)	MD/ Nos	Amount (Rs.)
1	Fire Protection (Fire Watcher)	Jan to Mar	₹ 400.00	30	₹ 12,000.00
2	Mulching	Dec to May	₹ 400.00	5	₹ 2,000.00
Cost of maintenance for 1 Ha. Plantation					₹ 14,000.00
10th Year Maintenance of Plantation		Period	Rate (Rs.)	MD/ Nos	Amount (Rs.)
1	Fire Protection (Fire Watcher)	Jan to Mar	₹ 412.00	30	₹ 12,360.00
2	Mulching	Dec to May	₹ 412.00	5	₹ 2,060.00
Cost of maintenance for 1 Ha. Plantation					₹ 14,420.00
Total Cost of maintenance for 1 Ha. Plantation					₹ 1,91,270.00
Countersigned by			Submitted by		
 S.K.Mollay (IFS) Chief Conservator of Forests, Northern Circle			 Divisional Forest Officer Jalpaiguri Division Vikas.V (IFS) DFO, Jalpaiguri Division		

Proposal No.: FP/WB/OFC/146241/2021						
Forest Range: Diana Range			Beat: Khairkata			
NATURE OF WORK			Solar Power Fencing			
Area to be protected Hectare				0.0696 ha		
Fence Length (Perimeter) Meter				150		
Fence Height above ground level Meter				2.14	(7 ft)	
Number of wire rows / strands Number				7		
Specing between wire rows Meter				0.3	(1 ft)	
Pole to Pole distance Meter				5		
Total Pole Height (Above+Below Meter				2.74	(8.5 ft)	
Ground level (1.5 ft))						
Technical Specifications for above Model and its cost						
Sl.N o.	Name of items	Specification	Quantity	Rate (Rs.)	Amount (Rs.)	Remarks
A. The Electrical Unit						
1	Energizer	Input Voltage: 12V DC, Input Current: 500MA, Output Voltage: 6.0 KV - 10.0 KV, Pulse Interval: 1.2 Second, Pulse Duration: 0.3 Milli Second, Output energy: 2.5 Joules	1	25000	₹ 25,000.00	
2	Fence Voltage Alarm		1	1000	₹ 1,000.00	
3	Solar PV Module	72 Wp	1	5500	₹ 5,500.00	
4	Battery	100 Ah	1	20000	₹ 20,000.00	
5	Hooter	320 DB	1	500	₹ 500.00	
6	Lightening Diverter	Copper	2	2500	₹ 5,000.00	
7	Mounting box	Mild Steel with Powder coating	1	3000	₹ 3,000.00	
8	Module Mounting Structure with Pole	Mild Steel with Powder coating	1	1500	₹ 1,500.00	
9	Cables and Hardware	2-Core copper flexible cable (Mtrs)	5	30	₹ 150.00	
B Fence					₹ -	
1	H.T. Wire	ACSR Conductor wire, 2.59 mm (12 guage), TATA make or equivalent	2200	5.5	₹ 12,100.00	Total perimeter for protection X no. of wire rows + 100 m extra
2	Corner / End Posts	MS with Galvanised, 40x 40 Sq.mm Pipe, 8.5 Feet with PP Insulator revetting	8	640	₹ 5,120.00	2 at gates + one per 50 meter at corners/end
3	Support Posts	MS with Galvanised, 25x 25 Sq.mm Pipe, 8.5 Feet with PP Insulator revetting	22	390	₹ 8,580.00	2 each at corner/end post + 2 at each post at 10 m
4	Intermediate Posts	MS with Galvanised, 25x 25 Sq.mm Pipe, 8.5 Feet with PP Insulator revetting	60	390	₹ 23,400.00	As per spacing
5	Support Poles Bolts	Mild Steel	22	25	₹ 550.00	One for each support post
6	Corner Poles/End Insulators	Poly Propylene	56	7	₹ 392.00	No. of Corner post and end post X number of wire rows
7	Intermediate Poles Insulators	Poly Propylene	420	7	₹ 2,940.00	No. of intermediate posts X number of wire rows
8	Corner Pole Hooks	SS	56	7	₹ 392.00	No. of Corner post and end post X number of wire rows
9	Wire Tightners	MS	21	25	₹ 525.00	One each at 100 m fence length
10	Joint Clamps	GI	21	7	₹ 147.00	One each at 100 m fence length
11	Double Insulated Cable Single Core	ACSR wire, 2.0mm Dia	50	25	₹ 1,250.00	LS
12	Earth Kits (Galvanizing)	Copper	6	700	₹ 4,200.00	one at each 50 m fence length
13	Warning Sign Boards	PVC	30	75	₹ 2,250.00	One each at 10 m fence length
C Gates					₹ -	
1	4 ft wide gate 1 leaf		1	32350	₹ 32,350.00	LS
D Instruments / tools						
1	Digital Multi meter	Range Upto -20000 KV	1	7500	₹ 7,500.00	
2	Xenon Flash Tube		1	3000	₹ 3,000.00	
3	Neon Tester		1	2500	₹ 2,500.00	
4	Tool kit (wire tightener handle twistin tool, pliers, double ended spanner for		1	1000	₹ 1,000.00	
Total Fencing work					₹ 1,69,846.00	
II Civil Work						
1	Excavation for Poles :- 0.45mx0.60mx0.60m (CuM)	0.162	14.58	150	₹ 2,187.00	CuM x number of corner/end, intermediate and support posts

2	Providing and laying cement concrete for Post (Cum)		14.58	800	₹	11,664.00	
Total Civil Work					₹	13,851.00	
Grand Total (I+II)					₹	1,83,697.00	
(III) Installation					₹	9,184.85	5% of above
Add: Total					₹	1,92,881.85	
Add: GST @12%					₹	23,145.82	
Total					₹	2,02,066.70	
Add: Labour Cess @ 1%					₹	2,020.67	
Total					₹	2,04,087.37	
Total estimate of 150 metre					₹	1,02,044.00	
Operation & Maintenance Cost							
Sl. No.	Particulars	Yr-1	Yr-2	Yr-3	Yr-4	Yr-5	
A	Expenditure						
i	Fixed Cost of Fencing	₹ 1,02,044.00					
ii	Operation & Maintenance Cost (25% of fixed cost)		₹ 25,511.00	₹ 25,511.00	₹ 25,511.00	₹ 25,511.00	
Sub-Total Cost (Yr-2 to Yr-5)		₹ 1,02,044.00	₹ 25,511.00	₹ 25,511.00	₹ 25,511.00	₹ 25,511.00	
Countersigned by			Submitted by				
 S.K. Mollay (IFS) Chief Conservator of Forests Northern Circle			 Divisional Forest Officer Jalpaiguri Division Vikas.V (IFS) DFO Jalpaiguri				