

Diversion of 0.0205 Ha of Forest land for approach road to proposed Retail Outlet of IOCL at Village Kairon, on Patti-Tarn Taran Road, Tehsil Patti, District Tarn Taran.

Penal Net Present Value

Wage Rate: 328/-

Plants Per ha. 1000 No.

Plantation Model for Standard Plantation under Compensatory Afforestation

Advance Work and Plantation					
	Name of Work	Unit	Qty	Unit Cost (In Rs.)	Total Amt
	Nursery				
	Cost of raising plants	1.100	1100	20.00	22000.00
A	Soil Works				
1	Site /Jungle Clearance (50%)	Ha.	0.50	5367.22	2683.61
2	Alignment & Dagbailing	Ha.	1	984.00	984.00
3	Earth Work- (a) Digging of Pits 1000x 0.5m x0.5m x0.4m	1M ³	100	101.38	10138.00
4	Kana Stubbing 25%	Ha.	0.25	26836.00	6709.00
B	Plantation Work				
1	a) Refilling of Pits 1000 x 0.5m x0.5m x0.4m	100 cum	75	2747.00	2060.25
2	Loading & Unloading of Plants (1000+10% Wastage=1100)	100 No	1100	550.00	6050.00
3	Carriage of Plants (1000+10% Wastage=1100 avg. distance upto 10 km)	100 No	1100	196.80	2164.80
4	i) Carriage from site to site	100 No	1000	131.20	1312.00
	ii) Planting of Plants (1000 No Including 10% replacement)	100 No	1000	984.00	9840.00
5	Spot Irrigation (1000 Plants)	100 No	1000	205.00	2050.00
6	Application of Insecticide (2 times)	100 No	1000	41.00	410.00
7	Application of Fertilizers (2 times)	100 No	1000	41.00	410.00
8	Weeding & Hoeing 3 times	100 No	3000	357.52	10725.60
9	Hand Watering (12 Times)	100 No	12000	205.00	24600.00
10	Replanting of Plants 10%	100 No	100	579.11	579.11
11	Rejungle Clearance (2 times)	Per Ha.	1	2378.00	2378.00
12	Covering (25% plants) of plants	100 No	250	295.20	738.00
13	Uncovering of plants	100 No	250	32.80	82.00
14	Restubbing of Kana (1 time)		0.25	26836.30	6709.08
15	Laying out & fixing of Barbed Wire	L/s			7872.00
16	Watch & Ward for every 10 Ha. (7 months)	Man year	1Man 7 Month	8528.00	5969.60
17	Material				
	i) Insecticides/Fertilizers	L/s			5000.00
	ii) POL	L/s			5000.00
	iii) Barbed Wire& fencing	L/s			50000.00
			Sub Total		186465.05

Maintenance I Year					
1	Cost of raising plants for 30% replacement	1 No.	300	20.00	6000.00
2	Reopening of Pits 300 x 0.50 x 0.50 x 0.30	1 m3	21.60	59.63	1341.68
3	Refilling of pits with earth in other soils 300	1 m3	21.6	27.47	618.08
4	Loading & Unloading of Plants	1 No.	300	2.46	738.00
5	Carriage of Plants (300+10% Wastage=330 avg. distance upto 10 km.)	100 No	1	196.20	196.20
6	Spreading of plants pit to pit	100 No	165	131.20	216.48
7	Re-planting Tall Plants	100 No	165	329.08	542.98
8	Spot Irrigation	100 No.	165	205.00	338.25
9	Weeding & Hoeing (thrice)	100 No	3000	357.52	10725.60
10	App. Of Fertilizer (two times)	100 No	1000	41.00	410.00
11	App. Of Insecticide (two times)	100 No	1000	41.00	410.00
12	Hand watering (6 times)	100 No	6000	357.52	21451.20
13	Rejungle Clearance (2 times)	Per Ha.	1.00	2378.00	2378.00
14	Restubbing of Kana	Per Ha.	0.25	26836.00	6709.00
15	Watch & Ward for every 10 Ha. (10 months)	Man year	1/10 Man yr.	8528.00	5969.60
16	Repair of Barbed wire	L/s			5000.00
17	POL & Machinery	L/s			5000.00
18	Material and supply	L/s			5000.00
			Sub Total		73045.07
Maintenance II Year					
1	Cost of raising plants for 15% replacement	No.	150	20.00	3000.00
2	Reopening of Pits 250 x 0.60 x 0.60 x 0.40	1 m3	21.6	59.63	644.00
3	Refilling of pits with earth in other soils 250 x 0.60 x 0.60 x 0.40	1 m3	21.6	27.47	296.68
4	Loading & Unloading of Plants	1 No.	75	2.46	184.50
5	Carriage of Plants = 75 avg. distance upto 10 km.)	100 No	1	196.20	196.20
6	Spreading of plants pit to pit	100 No	75	131.20	98.40
7	Re-planting to tall plants	100 No	75	229.09	171.82
8	Spot Irrigation	100 No.	75	205.00	153.75
9	Weeding & Hoeing (twice)	100 No	2000	357.52	7150.40
10	Hand Watering 5 Times	100 No	500	205.00	10250.00
11	Rejungle Clearance (2 times)	Per Ha.	1.00	2378.00	2378.00
12	Pruning to plants	100 No.	100	387.61	387.61
14	Watch & Ward for every 10 Ha.	Man year	1/10 Man yr.	8528.00	5969.60
15	Repair of Barbed wire	L/s			5000.00
16	POL & Machinery	L/s			5000.00
17	Material and supply	L/s			5000.00
			Sub Total		45880.96
Maintenance III Year					
1	Cost of raising plants for 10% replacement	1 No.	100	20.00	2000.00

2	Reopening of Pits 200 x 0.50 x 0.50 x 0.40	1 m3	10	5963.00	429.34
3	Refilling of pits with earth in other soils 100 x 0.60 x 0.60 x 0.40	1 m3	7.5	27.47	197.78
4	Loading & Unloading of Plants	1 No.	100	2.46	246.00
5	Carriage of Plants 200 avg. distance upto 10 km.)	100 No	100	1.00	100.00
6	Spreading of plants pit to pit	100 No	100	131.20	131.20
7	Re-planting to plants	100 No	100	229.09	229.09
8	Spot Irrigation	100 No.	100	205.00	205.00
9	Weeding & Hoeing (Twice)	100 No	2000	357.52	7150.40
10	Hand Watering (5 times)	100 No	5000	205.00	10250.00
11	Pruning to plants 20%	100 No.	200	387.61	775.22
12	Watch & Ward for every 10 Ha.	Man year	1/10 Man yr.	8528.00	5969.60
13	Repair of Barbed wire	L/s			5000.00
14	POL & Machinery	L/s			5000.00
15	Material and supply	L/s			5000.00
			Sub Total		42683.63
Maintenance IV Year					
1	Cost of raising plants for 15% replacement	1 No.	50	20.00	1000.00
2	Reopening of Pits 50 x 0.50 x 0.50 x 0.40	1 m3	5	5963.00	429.34
3	Refilling of pits with earth in other soils 100 x 0.50 x 0.50 x 0.30	1 m3	3.75	27.47	197.78
4	Loading & Unloading of Plants	1 No.	50	2.46	123.00
5	Carriage of Plants = 150 avg. distance upto 10 km.)	100 No	50	1.00	50.00
6	Spreading of plants pit to pit	100 No	50	131.20	65.60
7	Re-planting to plants	100 No	50	229.09	114.55
8	Spot Irrigation	100 No.	50	205.00	102.50
9	Weeding & Hoeing (Twice)	100 No	2000	357.52	7150.40
10	Hand Watering (4 times)	100 No	4000	205.00	8200.00
11	Pruning to plants 30%	100 No.	300	387.61	1162.83
12	Watch & Ward for every 10 Ha.	Man year	1/10 Man yr.	8528.00	5969.60
13	Repair of Barbed wire	L/s			5000.00
14	POL & Machinery	L/s			5000.00
15	Material and supply	L/s			5000.00
			Sub Total		39565.60
Maintenance V Year					
1	Watch and Ward every 10 ha. (10 Months)	Man Year	1/10 Man yr.	8528.00	5969.60
			Sub Total		5969.60
Maintenance VI Year					
1	Watch and Ward every 10 ha. (10 Months)	Man Year	1/10 Man yr.	8528.00	5969.60
			Sub Total		5969.60
Maintenance VII Year					

1	Watch and Ward every 10 ha. (10 Months)	Man Year	1/10 Man yr.	8528.00	5969.60
			Sub Total		5969.60
Maintenance VIII Year					
1	Watch and Ward every 10 ha. (10 Months)	Man Year	1/10 Man yr.	8528.00	5969.60
			Sub Total		5969.60
Maintenance IX Year					
1	Watch and Ward every 10 ha. (10 Months)	Man Year	1/10 Man yr.	8528.00	5969.60
			Sub Total		5969.60
Maintenance X Year					
1	Watch and Ward every 10 ha. (10 Months)	Man Year	1/10 Man yr.	8528.00	5969.60
			Sub Total		5969.60
					423457.90
	Over Head expenses 5%				21172.89
	Wages Enhancement 10%				42345.79
			G.Total		486976.58
			Or Say		486977.00

Summary of Costs

- b) **Net present value** as fixed by Govt. for open area diverted @ Rs 8.87 lac per ha.

0.0205 Area *887000=18184

18184*1 (one time) =18184

12% interest =18184*12%=2182

Total=20366

G.TOTAL

20366

Surjit Singh Sahota
 Divisional Forest Officer,
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 Amritsar.