

PART- A


DETAIL OF FOREST LAND

**CALCULATION OF NET PRESENT VALUE (NPV) OF FOREST LAND INVOLVED FOR
CONSTRUCTION OF BARSHALLA TO BHALWANA ROAD BY PWD (R&B) SPL SUB
DIVISION DODA.**

1	Compartment No.	38b/Kuntwara
2	Forest Area Involved	3.13Hac
3	No. of Trees/Poles	206
4	Cost of land as per NPV ECO Class –V for 3.13 Ha @ Rs. 8,45,000/- per Ha	2644850
5	Felling and extraction charges of trees	644953
6	Compensatory afforestation (cost of plantation & cost of fencing)	1098853
7	Biological measures for stabilization of muck dumping site	183494
	G.Total	4572150/-

(IN WORDS: FORTY FIVE LAKH SEVENTY TWO THOUSAND ONE HUNDRED FIFTY ONLY)


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Full Title of the Project:- Construction of road from Barshalla to Bhalwana via Sisool

File No.:- FP/JK/ROAD/46055/2020.

Date of Proposal:- 22-06-2020.

Name of the Forest Division:- Doda Forest Division.

Forest area to be diverted:- 3.13Ha

Detail of land where Compensatory Afforestation to be carried out:

Degraded Forest land: Yes

Area: 6.26 Ha

Non-Forest land: No

Forest Division: Doda Forest Division

Range: Kuntwara

District: Doda

Tehsil: Mohalla

Compartment No. 38/Kt

C.A Site: Bhalwana Village

C.A Area: 6.26 Ha.

C.A Site Geo-Coordinates:

Starting point: Latitude: 33°10'37.833" N

Longitude: 75°46'2.652" E

Ending point: Latitude: 33°10'38.987" N

Longitude: 75°46'5.996" E

I. Description of C.A Site:

a. **Soil type:** Sandy Loom

b. **Topography:** Hilly

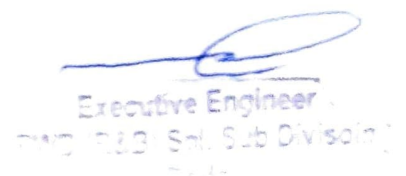
c. **Slope:** Medium.

d. **In case of degraded forest land-description of forest land and crown density:** Upper Himalayan Chir-Pine forests (9/C/1b) with crown density is 0 - 5%.

ii. **Plantation Model:** Compensatory Afforestation over an area of 6.26 Hac. of degraded forest land is proposed to be raised. The area selected for this purpose is in village Bhalwana, which is degraded forest. Whole of the plantation of 6.26 Hac. will be raised in a single compact block inside the degraded forest for such purpose. The area identified for plantation has also been shown on the attached map. Plants @ 700 plants per hectare will be planted. The species to be planted will be mainly conifer and other misc. species of broad leaved plants. The plantation will be raised in the following year after the approval of FCA proposal and further maintenance and beating up of failures will be done for the subsequent ten years. The scheme will be implemented by Forest Department through DFO, Doda. Total financial Outlay for compensatory plantation scheme is **1098853/-** Site is suitable for Compensatory Afforestation. The monitoring will be done as per existing monitoring mechanism in the forest department at present.


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Compensatory Afforestation for degraded forest area

S.No.	Description			Rate (in ₹)	Total amount (in ₹)
		Unit	No.		
A	1st year cost of Afforestation				
1	2nd year maintenance	No.	4382	40.03	175411.46
2	3rd year maintenance		1096	40.03	43872.88
3	4th year maintenance		438	40.03	17533.14
4	5th year maintenance		219	40.03	8766.57
5	6th year maintenance		219	40.03	8766.57
6	7th year maintenance		219	40.03	8766.57
7	8th year maintenance		219	40.03	8766.57
8	9th year maintenance		219	40.03	8766.57
9	10th year maintenance		219	40.03	8766.57
	Total		7449		298183.47
B	Other Afforestation Interventions (As per the requirement of the site condition)				
1	Patch Sowing	No. of patches	1878	6.99	13127.22
2	Planting of grass slips	No. of slips	1878	6.35	11925.3
	Total				25052.52
C.	Fencing:				
1	Square PCC Post Fencing (4 Strand)	Rft	3756	72.78	273361.68
2	Wooden fencing				
3	Chain link fencing				
4	Fencing repair		3756	16.74	62875.44
	Total				336237.12
D	Site Preparation: (Cutting, Grubbing and removal of lantana)	Ha	1.878	22904	43013.712
E	Pruning and Training of existing root stocks:	No.	1878	6.35	11925.3
	Total C.A Charges				714412.122
F	Soil and water conservation and protection measures like constructon of fire lines and inspection path.				313000
	Total (A+B+C+D+E+F)				1027412.122
G	Supervisory/Watch and ward/Overhead/Miscellaneous charges: (10% of the C.A Charges)				71441.2122
	Grand Total: (A+B+C+D+E+F+G)				1098853.334

III **Technical Details:** Technical detail of compensatory afforestation scheme are as follow:

- i **General detail**
- ii **Plantation method:** Poly bags
- iii **Spacing:** 2 x 2 m
- iv **Species proposed to be planted:** Deodar and Kail
- v **Silviculture Operations:** Nil
- vi **Soil and Moisture Conservation Works:**
- vii **Protection:** (Fencing, Watch and Ward, People's Participation etc): Yes
- viii **Proposed monitoring Mechanisim:** Regular patrolling of concerned beat guard
- ix **Any other information:** No


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Biological measures for stablization of muck dumping site for construction and Barshalla to Bhalwana via Sisool.

S.No.	Item of Work	Unit	Quantity	Rate	Amount
1	Fencing :- Using fence post conforming to product code PCFP-3 at spacing of 10' & 5 strands of Galvaized Barbed wire with 2 Criss cross conforming to the product code GA-BW all fence post be fixed in the cement cocree 1:3:6(1 cement:3 coarse sand:6 stone aggregate 40 mm nominal size) block of size 1'6"x1'x1'.	Rft	65	100	6500
2	Afforestation (1st year)				
i	Plantation:- Poly bagged plantng of fast-growing soil binding local species (Trees/Shrubs) in pits of size (45x45x45)cm in staggered fashion along the counter.	Nos.	75	29.34	2200.5
ii	Agave:- Agave bulbs planted between interspacesof plants, open spaces & along the fence line of size.	Nos.	200	15.45	3090
iii	Grass Slips:- (Soil bindin grasses viz: vetivers, Napier, Saccharum munja & Arundo donax)	Nos.	200	6.35	1270
iv	Cutting:- Ipomea/Vitex/Popular/Salix/Mulberry (area specific)	Nos.	50	6	300
v	Seed ball:- Broad casting/dibbling of the seed balls	Nos.	50	2.35	117.5
	Total				6978
3	Maintenance for 9 years : 2nd year @ 25% + 3rd year @ 10% +4th year to 10th year 7x@5%= 70% of afforestation	year			4884.6
4	Geo-Textile Mat	Sq.M	50	300	15000
	Total (1+2+3+4)				33362.6
5	Overhead 10% of total				3336.26
	Grand Total				36698.86
6	Total financial for five identical muck dumping sites				183494.3

* The location of five muck dmping sites is enclosed alongwith.


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Detail of muck dumping sites for construction Barshalla to Bhalwana via Sisool

S.No.	Muck dumping site	Proposed Length (in metre)	Proposed Width (in metre)	Area proposed to be diverted (in Ha)	Location
1	Dumping site I	25	20	0.05	RD (1/950 - 1/975)
2	Dumping site II	25	20	0.05	RD (3/400 - 3/425)
3	Dumping site III	25	20	0.05	RD (4/375 - 4/400)
4	Dumping site IV	25	20	0.05	RD (5/050 - 5/075)
5	Dumping site V	25	20	0.05	RD (5/700 - 5/725)
Total				0.25	


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**CALCULATION OF N.P.V. OF FOREST LAND INVOLVED IN
CONSTRUCION OF BARSHALLA TO BHALWANA ROAD**

1.	Total Forest land involved in Comptt. 38B/Kuntwara	3.13Hac
2	Rate per hac as per Hon'ble S.C of India's order dated. 28/03/2008 in I.A No. 826 in 566 and togther I.A regarding he rate of NPV of Forest land (Eco Class V Dense Forest)	8,45,000.0
3	NPV of Forest Land Involved	2644850.0
	Total	2644850.0

(In words :- Rupees twenty six lakh forty four thousand eight hundred fifty only)



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**DETAILED ESTIMATE FOR EXTRACTRION OF TREES COMING IN THE
PROPOSED ALIGNMENT OF CONSTRUCION OF BARSHALLA TO
BALWANA IN COMPTT. No. 38/Kt**

(A) Extraction charges of firewood

S.No	Item of Work	Qty	Rate (In rupees)	Amount(in rupees)	Remarks
1.	Enumeration of trees	63 Nos	5.40/- per Tree	340.02	
2.	Marking of Trees	63 Nos	9.75/- per tree	614.25	
3.	Felling of trees , hand sawing/ conversion and its splitting making fit for head load carriage/stocking upto loading point road side	48.8 Qtls	105.57/- per Qtls	5152.00	
4.	Weightage, Loading, unloading, Depot handling and other misc.	48.8 Qtls	21.48/- per Qtls	1064.00	
7	Extra carriage on account of firewood through head load	48.8 Qtls	50/- per Qtls	2440.00	
8.	Mechanical transportation of firewood for 50Km	48.8 Qtls	1.90/- per qtls/ per km	4636.00	
9.	Watch & ward for 01 labour for 3 months	3 months	6750/- per month	20250.00	
10	Over head expenses		L/S	15000.00	
	Total			49480.67	

(B) Extraction charges of timber.

S.No	Item of Work	Qty	Rate (In rupees)	Amount(in rupees)	Remarks
1.	Enumeration of trees	143 Nos	5.40/- per Tree	772.00	
2.	Marking of Trees	143 Nos	9.75/- per tree	1394.00	
3.	Felling of trees , hand sawing/ conversion, head load, MT, loading, unloading and its splitting making fit for head load carriage/stocking upto loading point road side	8736 cft	62.06/- per cft	542156.00	
5	Nikasi(PerQtls)	8736 cft	0.94/- per cft	8212.00	
6	Stacking (PerQtls)	8736 cft	0.88/- per cft	7688.00	
7	Watch & ward for 01 labour for 3 months	3 months	6750/- per month	20250.00	
9.	Over head expenses	0	L/S	15000.00	
	Total			595472.13	
	G. Total = A+B			644953/-	

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