

**ESTIMATE FOR CARRYING OUT AVENUE PLANTATION ALONG NH-302 & NH 54
(A) FOR THE CONSTRUCTION OF 2 – LANING WITH HARD SHOULDER
CONFIGURATION OF NH 302 & NH 54 (A) FROM LUNGLEI - TLABUNG**

1. Project Name : Construction of 2 – laning with hard shoulder configuration of NH 302 & NH 54 (a) from Lunglei - Tlabung
2. Species proposed to be Planted :
Delonix regia
Messua ferrea
Artocarpus heterophyllus
Mangifera indica
Azadirachta indica
Ligustrum robustum
Bischofia javanica
Cassia javanica
3. Implementing Agency : Environment, Forests & Climate Change Department, Mizoram
4. Time scheduled : Advanced work ,creation of plantation and maintenance upto 6 years

(Rs. 380 /- per manday)
(Spacing 3X3 m)

(1000 plants per 3 km which is taken as 1 hectare)

Sl. No.	Item of works	Mandays required (in No.)	Labour component (in Rs.)	Material component (in Rs)	Total cost per Hectare (in Rs)
1	2	3	4	5	6
1.	Advance Works including Nursery.				
	(a) Survey and demarcation nursery site and planting site	12	4560	-	4560
	(b) Preparation of nursery bed, shed erection with netlon	20	7600	-	7600
	(c) Cost of seed	-	-	2700	2700
	(d) Cost of materials like poly bags, netlon and fertilizers etc	-	-	8100	8100
	(e) Pre-treatment of seeds including cost of fungicides, fumigants, soil sterilants, etc	17	6460	-	6460
	(f) Sowing of seeds and weeding, watering	16	6080	-	6080
	(g) Fire protection	5	1900	-	1900
	Sub-Total	70	26600	10800	37400
2.	Creation of plantation				
	(a) Alignment, preparation of stakes, digging of pits, preparation of planting materials, carriage to planting sites, planting/sowing, construction of camp sheds, inspection parts, signboards and other misc. works	40	15200	-	15200
	(b) Weeding 4 times including vacancy filling (30+20+20+20)	90	34200	-	34200
	(c) Fire protection measures and ward and watch(5+5)	10	3800	-	3800
	(d) Manuring & Watering	10	3800	-	3800
	(e) Cost of manures/fertilizers			5400	5400
	(f) Fencing /tree guard (Local materials) including subsequent maintenance.	-	-	37800	37800
	Sub-Total	150	57000	43200	100200
3	Maintenance of plantation				
	(I) Maintenance after one year				
	(a) Weeding 3 times including vacancy	70	26600		26600

	filling , manuring & watering (20+20+20+10)				
	(b) Fire protection measures & watch and ward(5+5)	10	3800		3800
	(c) Cost of manures/fertilizers			5400	5400
	(d) Signboard and labeling etc	-	-	5400	5400
	Sub-Total	80	30400	10800	41200
	(II) Maintenance after two years				
	(a) Weeding 3 times vacancy filling , manuring & Watering (15+15+10+10)	50	19000	-	19000
	(b) Fire protection measures & watch and ward(5+5)	10	3800	-	3800
	(c) Cost of fertilizers/manures			5400	5400
	Sub-Total	60	22800	5400	28200
	(III) Maintenance after three years				
	(a) Weeding 3 times vacancy filling , manuring & Watering (15+15+10+10)	50	19000	-	19000
	(b) Fire protection measures & watch and ward(5+5)	10	3800		3800
	(c) Cost of fertilizers/manures			5400	5400
	Sub-Total	60	22800	5400	28200
	(IV) Maintenance after four years				
	(a) Weeding 3 times vacancy filling , manuring & Watering (15+15+10+10)	50	19000	-	19000
	(b) Fire protection measures & watch and ward(5+5)	10	3800	-	3800
	(c) Cost of fertilizers/manures			5400	5400
	Sub-Total	60	22800	5400	28200
	(V) Maintenance after five years				
	(a) Weeding 3 times vacancy filling , manuring & Watering (15+15+10+10)	50	19000	-	19000
	(b) Fire protection measures & watch and ward(5+5)	10	3800		3800
	Sub-Total	60	22800		22800
	(VI) Maintenance after six years				
	(a) Weeding 3 times vacancy filling , manuring & Watering (15+15+10+10)	50	19000	-	19000
	(b) Fire protection measures & watch and ward(5+5)	10	3800		3800
	Sub-Total	60	22800		22800
	(VII) Maintenance after seven years				
	(a) Weeding 3 times vacancy filling & manuring & Watering (15+15+10)	40	15200	-	15200
	(b) Fire protection measures & watch and ward(5+5)	10	3800		3800
	Sub-Total	50	19000		19000
	(VIII) Maintenance after eight years				
	(a) Weeding 3 times (10+10+10)	30	11400	-	11400
	(b) Fire protection measures & watch and ward(5+5)	10	3800		3800
	Sub-Total	40	15200		15200
	(IX) Maintenance after nine years				
	(a) Weeding 3 times (10+10+10)	30	11400	-	11400
	(b) Fire protection measures & watch and ward(5+5)	10	3800		3800
	Sub-Total	40	15200		15200
	(X) Maintenance after ten years				
	(a) Weeding 3 times (10+10+10)	30	11400	-	11400
	(b) Fire protection measures & watch and ward(5+5)	10	3800		3800
	Sub-Total	40	15200		15200
	TOTAL OF PLANTATION COST	770	292600	81000	373600
4	Soil & Moisture Conservation measures including construction of check dams, gully plugging, contour trenching, water harvesting				56040

	structures etc. whatever necessary within the project area (15% of plantation cost)				
5	Fencing (5% of plantation cost)				18680
6	Monitoring & Evaluation (2% of plantation cost)				7472
7	Overheads (10% of plantation cost)				37360
Grand Total					493152

Length of the proposed road for diversion of forest land for Construction of 2 – laning with hard shoulder configuration of NH 302 & NH 54 (a) from Lunglei - Tlabung (For 3 x 3m spacing, 1000 plants could be planted on 3 kms) under Tlabung Forest Division is

COMPONENT BREAKUP		
1	Road Ch. Km 33.450 to km 38.400	4.950
2	Road Ch. Km 65.564 to km 68.600	3.036
3	Road Ch. Km 68.600 to km 73.180	4.580
4	Road Ch. Km 73.180 to km 76.250	3.070
5	Road Ch. Km 78.180 to km 79.560 (Eastern Side)	1.380
6	Road Ch. Km 78.180 to km 81.000 (Western Side)	2.820
7	Road Ch. Km 80.000 to km 81.000	1.000
8	Road Ch. Km 81.480 to km 81.624	0.144
9	Road Ch. Km 81.624 to km 83.180	1.556
10	Road Ch. Km 82.260 to km 82.580	0.320
11	Road Ch. Km 83.220 to km 83.740	0.520
12	Road Ch. Km 83.180 to km 90.200	7.020
13	Road Ch. Km 84.760 to km 84.780	0.020
14	Road Ch. Km 85.100 to km 85.180	0.080
TOTAL		30.496

Total length = 30.496 km
= 30496 m

Seedlings to be planted = $\frac{30496}{3}$
(3m x 3m spacing) = 10165.33 or say 10166

Area (1000 plants is taken as 1 ha) = $\frac{10166}{1000}$
= 10.166 or say 11

Total Cost of raising Avenue Plantation = 10.166 x 493152
= 50,13,383.232 Or Say Rs 50,13,383

(Rupees fifty lakh thirteen thousand three hundred and eighty three only)

Prepared by-

C/Signed
R.S. SINHA
APCCF & NO (FC)
20/6/22


(C. LALTHANKIMA)
Divisional Forest Officer
Tlabung Forest Division