ESTIMATE FOR CARRYING OUT AVENUE PLANTATION ALONG NH-06 FOR REHABILITATION AND UPGRADATION TO 2 LANE WITH PAVED SHOULDERS OF SELING-DULTE SECTION NH-06

1.Project Name : Rehabilitaion and upgradation to 2 lane with paved shoulders of Seling - Dulte section, NH-06

2.Species proposed to be planted : *Delonix regia*
Messua ferrea
Artocarpus heterophyllus
Mangnifera indica
Lingustrum robustum
Bischofia javanica
Cassia javanica

3. Implementing Agency : Environment, Forest & Climate change Department, Mizoram

4. Time scheduled : Advanced work, creation of plantation and maintenance upto 10 years.

(Rs.380/- per manday) ***(1000 plants per 3 km which is taken as 1 hectare)***
(Spacing 3x3 m)

Sl. No	*Item of works*	*Mandays require (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 & Demarcation nursery site and planting site	12	4560	-	4,560.00
	b)Preparation of nursery bed, shed erection with netlon	20	7600	-	7,600.00
	c) Cost of seed	-	-	2700	2,700.00
	d) Cost of materials like poly bags, netlon and fertilizers etc.	-	-	8100	8,100.00
	(e) Pre treatment of seeds including cost of fungicides, fumigants, soil sterilants, etc.	**17**	**6460**	**-**	6,460.00
	(f)Sowing of seeds and weeding, watering	**16**	**6080**	**-**	6,080
	(g) Fire protection	**5**	**1900**	**-**	1,900.00
	Sub-total	**70**	**26600**	**10800**	37,400.00
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,inspectionparts, signboards and other misc.works	40	15200	-	15,200.00
	b) weeding 4 times including vacancy filling (30+20+20+20)	90	34200	-	34,200.00
	c) Fire protection measures and ward and match (5+5)	10	3800	-	3,800.00
	d)Manuring & watering	10	3800	-	3,800.00
	e)Cost of manures/fertilizers			5400	5,400.00
	f)Fencing/tree guard (Local mterials) including subsequent maintenance			37800	37,800.00
	Sub-Total	**150**	**57000**	**43200**	**1,00,200.00**

3	Maintenance of plantation				
	(I)Maintenance after one year				
	a) Weeding 3 times including vacancy filling, manuring & watering (20+20+20+10)	70	26600		26,600.00
	b) Fire protection measures & watch and ward (5+5)	10	3800		3,800.00
	c)Cost of manures/fertilizers			5400	5,400.00
	d)Signboard and labelling etc.			5400	5,400.00
	Sub Total	**80**	**30400**	**10800**	**41,200.00**
	(II)Maintenance after two years				
	a) Weeding 3 times vacancy filling, manuring & watering (15+15+10+10)	50	19000	-	19,000.00
	b) Fire protection measures & watch and ward (5+5)	10	3800	-	3,800.00
	c)Cost of fertilizers/manures			5400	5,400.00
	Sub Total	**60**	**22800**	**5400**	**28,200.00**
	(III)Maintenance after three years				
	a) Weeding 3 times vacancy filling, manuring & watering (15+15+10+10)	50	19000	-	19,000.00
	b) Fire protection measures & watch and ward (5+5)	10	3800		3,800.00
	c)Cost of fertilizers/manures			5400	5,400.00
	Sub Total	**60**	**22800**	**5400**	**28,200.00**
	(IV)Maintenance after four years				
	a) Weeding 3 times vacancy filling, manuring & watering (15+15+10+10)	50	19000	-	19,000.00
	b) Fire protection measures & watch and ward (5+5)	10	3800	-	3,800.00
	c)Cost of fertilizers/manures			5400	5,400.00
	Sub Total	**60**	**22800**	**5400**	**28,200.00**
	(V)Maintenance after five years				
	a) Weeding 3 times vacancy filling, manuring & watering (15+15+10+10)	50	19000		19,000.00
	b) Fire protection measures & watch and ward (5+5)	10	3800		3,800.00
	Sub Total	**60**	**22800**		**22,800.00**
	(VI)Maintenance after six years				
	a) Weeding 3 times vacancy filling, manuring & watering (15+15+10+10)	50	19000	-	19,000.00
	b) Fire protection measures & watch and ward (5+5)	10	3800		3,800.00
	Sub Total	**60**	**22800**		**22,800.00**
	(VII)Maintenance after seven years				
	a) Weeding 3 times vacancy filling, manuring & watering (15+15+10+10)	40	15200	-	15,200.00
	b) Fire protection measures & watch and ward (5+5)	10	3800		3,800.00
	Sub Total	**50**	**19000**		**19,000.00**
	(VIII)Maintenance after eight years				
	a) Weeding 3 times (10+10+10)	30	11400	-	11,400.00
	b) Fire protection measures & watch and ward (5+5)	10	3800		3,800.00
	Sub Total	**40**	**15200**		**15,200.00**
	(IX)Maintenance after nine years				
	a) Weeding 3 times (10+10+10)	30	11400	-	11,400.00
	b) Fire protection measures & watch and ward	10	3800		3,800.00
	Sub Total	**40**	**15200**		**15,200.00**

	(X)Maintenance after ten years				
	a) Weeding 3 times (10+10+10)	30	11400		11,400.00
	b) Fire protection measures & watch and ward (5+5)	10	3800		3,800.00
	Sub Total	**40**	**15200**		**15,200.00**
	TOTAL OF PLANTATION COST	**770**	**292600**	**81000**	**373600**
4	Soil & moisture conservation measures including construction of check dams, gully plugging,contour trenching,water harvesting structures etc.whatever necessary within the project area (15% of plantation cost)				56040
5	Fencing (5% of plantatin 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 rehabilitaion and upgradation to 2 lane with paved shoulders of Seling-Dulte section, NH-06 (*For 3x3m spacing, 1000 plants coul be planted on 3 kms*) under Aizawl Forest Division is

COMPONENT BREAKUP		
1	Design chainage km 9.520 to 12.400	2.88
2	Design chainage km 12.400 to 13.510	1.11
3	Design chainage km 13.510 to 14.510	1
4	Design chainage km 41.480 to 45.040	3.56
5	Design chainage km 45.040 to 49.132	4.09
	Total	**12.64**

Total length = 12.64 kms
= 12.64 X 1000
= 12640 m

Seedlings to be planted (3m x 3m spacing) = $\frac{12640}{3}$ = 4213.33 or Say 4213

Area (1000 plants is taken as 1 Ha) = $\frac{4213}{1000}$ = 4.213

Total Cost of raising Avenue Plantation = 4.213 x 493152
= 20,77,649.37
or Say Rs.20,77,649

(Rupees twenty lakh seventy seven thousand six hundred and forty nine only)

(LALTLANHLUA ZATHANG)
Divisional Forest Officer
Aizawl Forest Division

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Aizawl Forest Division
Aizawl : Mizoram