

6/205
9/211

Abstract

Name of work: Raising Compensatory Afforestation plantation total 17.82 ha for Diversion of 17.82 ha of Protected Forest Land for widening of Existing Road Stretch from Khanvel Chowk to Dudhani Junction in the U.T. of Dadra and Nagar Haveli,

Survey No.

Village :

Area=17.82 Ha

Sr no	Particulars of Items	Amount
01	Nursery Cost	1197504/-
02	Formation Cost	1174480/-
03	Maintenance of plantation for 10 years & Chainlink Fencing work	11541817/-
04	Soil and Moisture conservation work	235400/-
05	Dressing of coppicing from ground level work	7144/-
	Total₹	14156345/-


RFO (NR)


Assistant Conservator of Forest (HQ)
Dadra & Nagar Haveli
Silvassa


Deputy Conservator of Forest (T)
Dadra & Nagar Haveli
Silvassa

NORMS FOR RAISING OF NURSERY

(In Terms of Mandays)

For 10,000 Seedlings

Size of Polythene Bags 20cm x 30 cm

for 1 year

4109
etrot
clerq

for 1 year						
Sr. No.	Particular	Quantity	Value in Rs.	M.D.	Rate per Mandays	Amount
1	Labor Charges for cleaning of the site and erection Chainlink fencing	Departmental Chainlink & Poles		30	340.2	10206.00
2	Collection of quality Earth	12.70 Cu. Mtr	2032.00	131.94	340.2	44885.99
3	Collection of Manure	12.70 Cu. Mtr	5080.00			
4	Collection of Sand	12.70 Cu. Mtr	5080.00			
5	Mixing of all above three ingredient after pulverizing			22	340.2	7484.40
6	Filling of the polythene bags			78	340.2	26535.60
7	Preparation of beds with wooden materials shifting and arrangement of polythene bags.			24	340.2	8164.80
8	Collection of seeds and sowing			6	340.2	2041.20
9	Watering for 150 days and weeding works. Feb-June			300	340.2	102060.00
10	Weeding and application of pesticide including rearranging as per requirment for 5 months July-Nov.			200	340.2	68040.00
11	Shifting of 10000 polythene bags and rearranging for 5 Months and transplanting June to Nov.			24	340.2	8164.80
12	Watering weeding and rearranging works from December - June next Season 7 months			400	340.2	136080.00
13	Polythene bag size 20x30 C.m/250 to 200 Guage (150 No/kg) 10.66 Kg for 1600 bags 130 per kg pb			8.3	340.2	2823.66
14	Cost of Fungicide and pesticides and other medicines	lump sum Rs. 500/-		5.41	340.2	1840.48
Total				1229.7		418326.93

10000 Seedlings :- 418326.93

1 Seedling :- 42.00

Cost per seedlings = 1600 X ₹:- 42 = 67200/- % 340.20

Cost per 17.82 Hect = 67200 X 17.82 = 11,97,504/-

RFO(NR)

ACF(HQ)

DCF(T)

CH-99
c/207

Formation Cost for Raising Plantation in 1 hect. for 1600 seedling per Hect.

Sr. No.	Particulars	Rate per Mandays	340.20
		1600 Seedling M.D.	Amount
1	Site Cleaning	16	5443.20
2	Alignment	3.52	1197.50
3	A) Pit Digging (45cm x 45cm x 45cm)	59.2	20139.84
4	Transportation plantation (12cm x 25cm x polythene bag)	27.2	9253.44
5	Weeding		
	A) 1st Weeding	20	6804.00
	B) 2nd Weeding	16.8	5715.36
	C) 3rd Weeding	16	5443.20
6	Application & Fertilizer	2.4	816.48
7	Watch & Ward	15	5103.00
Total		176.12	59916.02
8	Any other operation		
9	Misc. 10% Contigent of (Above all)	17.612	5991.60
Grand Total		193.732	65907.63

Formation Cost for 1 Hect Plantation = 65908/-

Formation Cost for 17.82 Hect = 65908 X 17.82 = 11,74,480/-

RFO (NR)

ACF(HQ)

DCF(T)

CHS
CHP
c/205

Abstract

Compensatory Afforestation plantation

A) Plantation

Sr No.	Particulars of work	Year of implementation	Plantation			Nursery			Total Amount	Remarks
			MD	Rate per Mandas Considering 10%	Amount	MD	Rate per Mandas Considering 10%	Amount		
1	I st year Maintenance	2020-21	178.42	340.20	60698	39.35	340.20	13387	74085	Mandays & Rupees decimal converted to round off
2	II nd year Maintenance	2021-22	95.35	374.22	35682	29.51	374.22	11043	46725	
3	III rd year Maintenance	2022-23	90.156	411.64	37112	19.68	411.64	8101	45213	
4	IV th year Maintenance	2023-24	84.964	452.8	38472	0		0	38472	
5	V th year Maintenance	2024-25	84.964	498.08	42319	0		0	42319	
6	VI th year Maintenance	2025-26	84.964	547.89	46551	0		0	46551	
7	VII th year Maintenance	2026-27	84.964	602.68	51206	0		0	51206	
8	VIII th year	2027-28	49.5	662.95	32816	0		0	32816	
9	IX th year Maintenance	2029-30	49.5	729.25	36098	0		0	36098	
10	X th year Maintenance	2031-32	49.5	802.18	39708	0		0	39708	
	Total Amount ...		852.3		420662	88.54		32531	453193	
B	Chainlink Fencing work Average per 1 Hect 400 Rmt					400		486.24	194496	Rate Analysis & Rates of S.O.R of taken from Estimate
						Grand Total			647689	

Maintenance Cost for 10 Year for 1 Hect Plantaion 647689

Maintenance Cost for 17.82 Year for 17.82 Hect Plantaion 647689 X 17.82 =

1,15,41,817/-


RFO(NR)


ACT(HQ)


DCF(T)

C-195
d/10/3

Rate Analysis

Sr No	Particulars	MD
01	Number of maximum trenches in 1 ha= 78	-
02	MD per trench is (₹ 143.64/₹ 307.90)	0.47
03	MD per 1 ha (78 x 0.47)	36.66
	Say .	37

Cost per 1 ha = 37 MD

Cost per 1 Hect = 37 x 0.852 = 31.52 MD


Range Forest Officer (NR)
Dadra & Nagar Haveli
Silvassa

CH-98
c/201

Estimate for Soil and moisture conservation Work

Sr No	MD per ha	Total area in ha	Total MD	Rate per MD	Amount
01	37	17.82	659	340.20	224191/-
5% Contingency					11209/-
Total Amount ₹....					235400/-


RFO (NR)


ACF (HQ)


DCF (T)

Estimate for Dressing of coppicing species from ground level work

Sr No	Particulars of work	MD	Rate per MD	Amount
01	Dressing of coppicing species from ground level	20	340.20	6804.00
	Contingency			340.00
	Total....			7144.00

RFO (NR)

ACF (HQ)

DCF (T)

ABSTRACT SHEET OF ESTIMATE

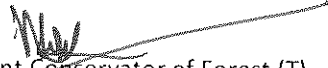
Name of work: Providing Chainlink Fencing (Cost for 1:00 Km/1000 Rmt) to P.F.Boundary

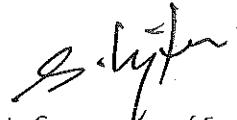
Sr No	Description of items	Qty	Unit	Rate	Rate with 1% Labour cess	Amount	GSR-2015-16 Valsad Reference
01	Providing <u>EARTHWORK IN EXCATION</u> by mechanical means (Hydraulic Excavator) Manual means over areas (Exceeding 30 cms in depth 1.5 meters in width as well as 10 sq mtr on plan including disposal of excavated earth lead up to 50 meters and lift up to 1.5 mtr disposed earth to be leveled and neatly dressed in All kinds of soil	50.00 Cu .m.	One Cubic Meter	122.00	123.22	6161.00	GSR Sr No 01 Code 04B001A
02	Providing and fixing G.I Chainlink fencing including material & labour with chainlink of size 150 mm x 150mm x 4mm (8G) wire & 1.50m wide with R.C.C. pole (10cm x 10cm) & 2.00m long/height provided at 2.50m CC distance including fixing of 'J' hooks (6 nos) in each pole complete) Excavation for pit & C.C to be paid scparately) 1x1000.00x1.50=1500.00 Sq.m	1500.00 Sq.m	One Sq m	301.60	304.616	456924.00	Rate Analysis
Certificate :- This is to certify that the rates adopted in the estimates are from GSR for the Year 2015-16 and rate analysis for consolidated items prepared based on the same GSR-2015-16 (Valsad)		Total ₹				463085.00	
		Add 5 % Contingencies ₹				23154.25	
		Total..... ₹				486239.25	
		Say..... ₹				486239.00	

(Cost for 1 Hect = Average 400 Rmt X 486.24 = 194496/-)


Junior Engineer (FD)


RFO (NR)


Assistant Conservator of Forest (T)
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Deputy Conservator of Forest (T)
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C/189
d/19/7

Species to be planted

Sr.no	Local Name	BotanicalName	Nos of Plants
1	Amla	<i>Emblica officinalis</i>	100
2	Aritha	<i>Sapindus emarginatus</i>	70
3	Beheda	<i>Terminalia bellerioa</i>	100
4	Dandosi	<i>Dalbergia lanceolaria</i>	50
5	Goradiyo	<i>Acacia senegal</i>	70
6	Jambu	<i>Syzygium cumini</i>	100
7	Karanj	<i>Pongamia pinnata</i>	50
8	Limada	<i>Azadirachta indica</i>	150
9	Kinai	<i>Albizzia procera</i>	100
10	Kanti	<i>Acacia ferruginea</i>	50
11	Mahudo	<i>Madhuca indica</i>	100
12	Papda	<i>Holoptelea integrifolia</i>	50
13	Siras	<i>Albizia odoratissima</i>	25
14	Shivan	<i>Gmelina arborea</i>	50
15	Shisham	<i>Dalbergia latifolia</i>	50
16	Sitafal	<i>Anona squamosa</i>	150
17	Umbro	<i>Ficus glomerata</i>	100
18	Vilayti amli	<i>Pithecellobium dulce</i>	235
			1600

RFO (NR)

RATE ANALYSIS

As Per GSR Valsad (2015-16)

NAME OF WORK:-

Item No. Providing material and labour for fixing G.I. chainlink fencing (Size:150mm x 150mm x 8 gauge 4mm) 2.00 Meter height with 2 line wire of 4mm dia (top & Bottom) with R.C.C. Poles (100mm x 100mm) & 2.50 Meter height with supporting poles where ever necessary as per side condition using P.C. Wire 3mm dia vertical bars 04 Nos. including making fixing holes of 1mm dia 6 Nos. and pole should be casted of C: C: M-20 mix, provided at 2.50 meter c/c distnsnce including fixing of G.I. 'J' hook hot drip (15cm/6"long) 6mm dia with nut and 02 Nos. of G.I. Washers with every "J" Hook. 6 Nos. in each pole etc. complete (Poles,chainlink, 'J' Hooks, G.I. Washers should be of good & approved quality) as directed.

Details of Cost :- For 30.00 x 2.00 = 60.00 Sq.m

Sr.No.	Item	Qty.	Rate	Unit	Amount
1	Supply of G.I. Chainlink (150mm x 150mm x 8 Gauge). 1 x 30.00 x 2.00 = 60.00 Sq.mt. (M. R.)	60.00	125.00	Sq.mt.	7500.00
2	Supply of R.C.C. Poles Having c/s 0.10 x 0.10m & 2.50Meter long of C.C. mix M-20 qty. = 13 x 2.50 x 0.10 x 0.10 = 0.325m (DSR Page No. 257, code No. 16.15.1)	0.325	20469.55	Cu.Mtr.	6652.60
3	Supply of 'J' Hook (6") with G.I. Washer 13 x 06.00 = 78.00 Nos (GSR Page No. 7, Sr.No.246, code No. M226)	78.000	8.80	Each	686.40
4	Carriage of Steel Chainlink (15km)	0.141	806.56	M.T.	113.72
	(a) Chainlink 1x45.00 x2.25kg/sq.m = 135.00 kg. (b) 'J' Hook = 06.00 kg. Total = 141.00 kg. i.e. 0.141 M.T. Consider lead = 100 km 1st 5.00 km = 220.41km Rem 90 km x 6.17 = 586.15 Total = 806.56 (GSR Pg.No.39, Sr. No.3.2.7)				
5	Carriage of R.C.C. Poles 13 Nos x 0.10 x 0.10 x 2.00 = 0.26 Cu.m. Weight of PCC = 24 KN/Cu.mt i. e. 2400 Kg./ Cu.mt 0.26 Cu.mt. x 2400Kg/Cu.mt = 624 kg i.e. 0.624 Mt Consider lead = 50 km 1st 5.00 km = 210.41km Rem. 40 km x 4.57 = 205.65 Total = 416.06 (DSR Pg.No.39, It. No.3.2.6)	0.624	416.06	M.T.	259.62
6	Labour charges for fixing of G.I. Chainlink with R.C.C. Pole including fixing of 'J' Hook etc. complete at site of work.				
	(i) Black smith 1 st class	02 Nos	303.00/No.		606.00
	(ii) Mistry (Welder)	02 Nos	294.40/No		588.80
	(iii) Fitter	01 Nos	294.40/No		249.40
	(iv) Hole driller	01 Nos	294.00/day		294.00
	(v) Labour	04 Nos	286.00/No		1144.00
	(GSR Pg. No. 32, it No. 3, 30 26, 40, 21)			Total	18094.54
	Cost for 1.00 sq.mt = Rs.18094.54/60.00 sq.mt.				301.57
			Say Total....Rs....		301.60/- Sq.mt.

RFO (MR)

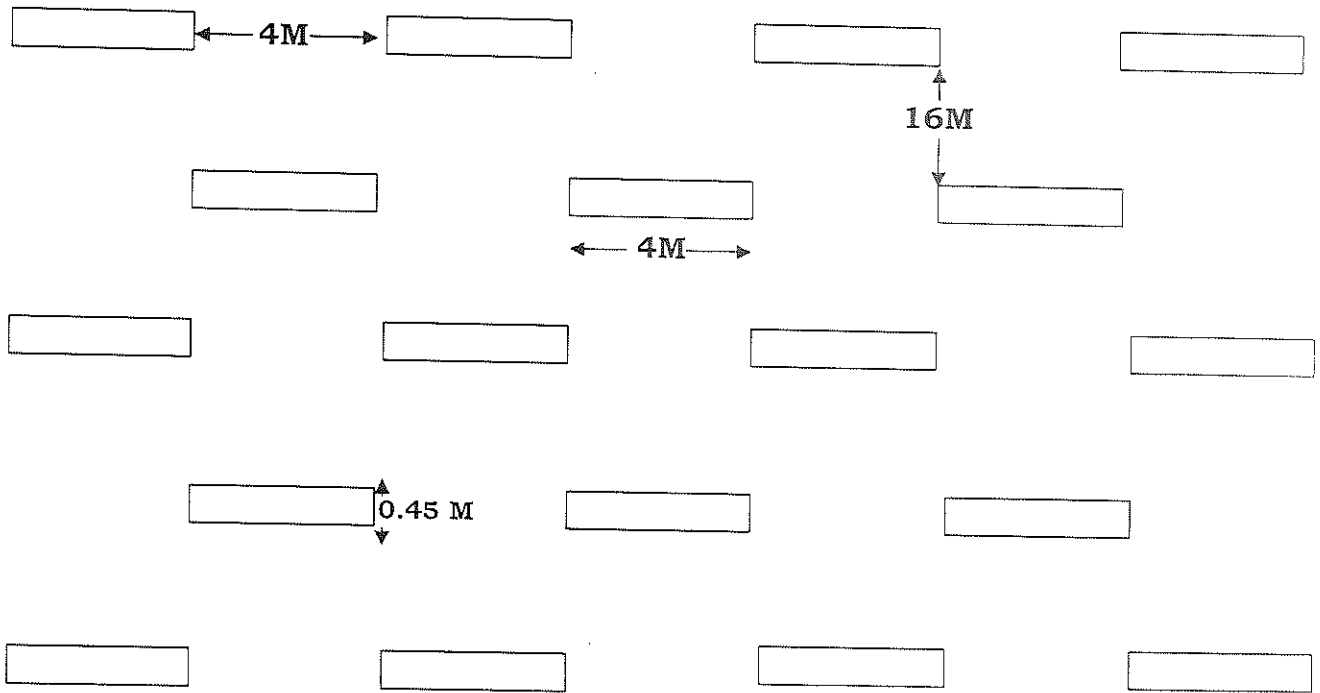
Junior-Engineer(FD)

Assistant Conservator of Forest(HQ)
Dadra & Nagar Haveli
Silvassa

Deputy Conservator of Forest(T)
Dadra & Nagar Haveli
Silvassa

STAGGERED CONTOUR TRENCHING

C/123
c/191



MEASUREMENT SHEET

- **Length of each trench:** 4 Meter.
- **Dimensions:** 4 Mt. x 0.45 Mt. x 0.30 Mt. (L x B x H)
- **Horizontal distance between two trenches:** 4 Meter.
- **Vertical distance between two rows:** 16 Meter.
- **Number of maximum trenches in one hectare:** 78.

➤ As per the G.S.O.R., Page no.: 5, item no.: 3, Code: 04 B001C.
Rate of earth work in hard murrum is Rs. 266.00 per cubic meter.
For preparation of trench of following specification
4M x 0.45M x 0.30M

$$\begin{aligned}\text{Volume} &= L \times B \times H \\ &= (4.0 \times 0.45 \times 0.30) \text{ M}^3 \\ &= 0.54 \text{ cubic meter.}\end{aligned}$$

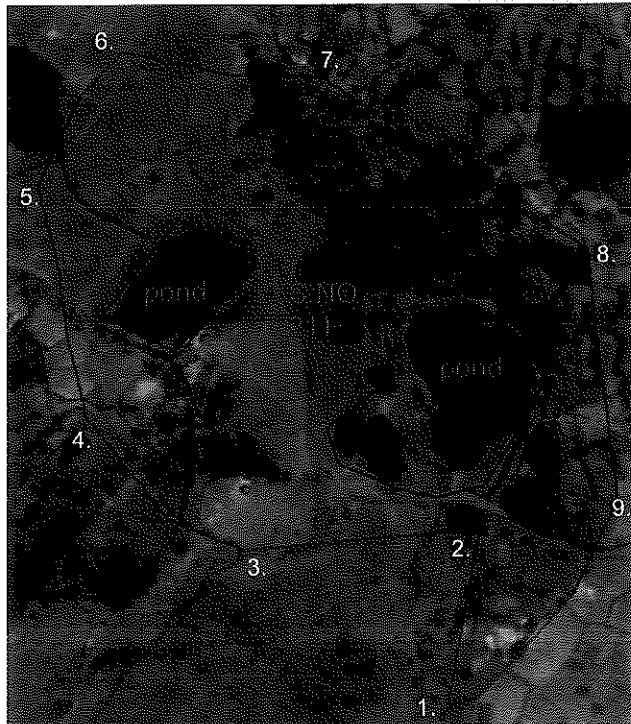
$$\begin{aligned}\text{Therefore, expenditure per trench} &= \text{Rs. } 266.00 \times 0.54 \\ &= \text{Rs. } 143.64\end{aligned}$$

The rate per MD is Rs. 307.90.

Therefore, MD per trench is Rs.143.64/Rs. 307.90 = 0.47 MD.


RFO (NR)

DGPS Map of Govt.Land Proposed for Compensatory Afforestation.



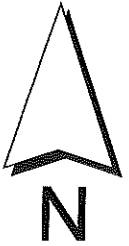
Location : Dadra Nagar Haveli

Village : Morkhal

Survey Numbar : 211 &171

Area : 18 H.A

GPS Reading :



1:8,000

	S.NO 211
1	20°18'50.20"N 73° 5'53.00"E
2	20°18'54.55"N 73° 5'53.81"E
3	20°18'54.03"N 73° 5'48.37"E
4	20°18'57.38"N 73° 5'44.31"E
5	20°19'3.96"N 73° 5'42.28"E
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	S.NO 171
1	20°19'59.33"N 73° 6'27.52"E
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12	20°20'2.09"N 73° 6'34.02"E
13	20°20'1.51"N 73° 6'33.49"E
14	20°20'1.26"N 73° 6'32.68"E
15	20°19'58.85"N 73° 6'31.55"E
16	20°19'57.33"N 73° 6'31.67"E

[Signature]
Range Forest Officer
Northern Range
Silvassa

[Signature]
**SURVEYOR
FOREST DEP.**

[Signature]
Assistant Conservator of Forests (HQ)
Dadra & Nagar Haveli
Silvassa

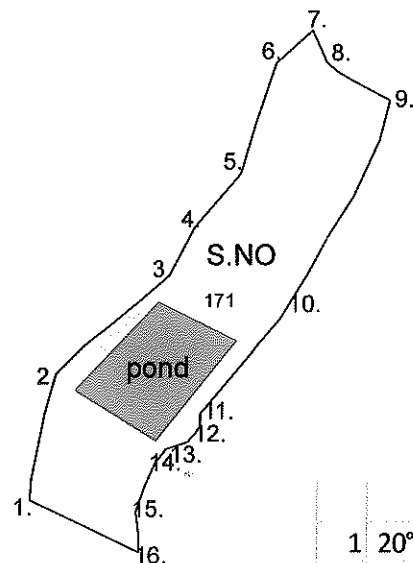
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21/09/2019



**SURVEYOR
FOREST DEP.**

Range Forest Officer
Northern Range
Silvassa

Geo-reference Map of Govt.Land Proposed for Compensatory Afforestation.



Location : Dadra Nagar Haveli

Village : Morkhal

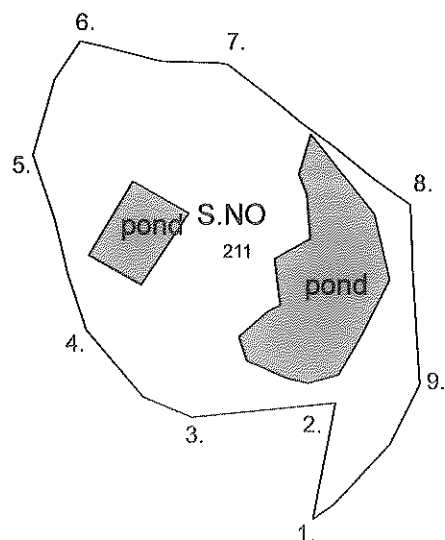
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[Signature]
Range Forest Officer
Northern Range
Silvassa

[Signature]
**SURVEYOR
FOREST DEP.**

[Signature]
officer