

c/177

### Abstract

Name of work: Raising Compensatory Afforestation plantation total 0.8196 ha for Diversion of 0.4098 ha of Protected Forest Land for Laying of 8" Natural Gas Pipeline along with optical Fiber Cable(OFC) from Existing GSPL pipeline to Bhilosa Industries, Kharadpada in the U.T. of Dadra and Nagar Haveli,  
Survey No. 8 Village : ~~NANA~~ ~~RANDHA~~ Area=0.8196 Ha

| Sr no | Particulars of Items                                            | Amount            |
|-------|-----------------------------------------------------------------|-------------------|
| 01    | Nursery Cost                                                    | 55,077/-          |
| 02    | Formation Cost                                                  | 54,018/-          |
| 03    | Maintenance of plantation for 10 years & Chainlink Fencing work | 5,30,845/-        |
| 04    | Soil and Moisture conservation work                             | 10,834/-          |
| 05    | Dressing of coppicing from ground level work                    | 7,144/-           |
|       | <b>Total ....₹</b>                                              | <b>6,57,918/-</b> |

RFO (NR)

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Silvassa

Deputy Conservator of Forest (T)  
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Silvassa

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**NORMS FOR RAISING OF NURSERY**  
(In Terms of Mandays)  
For 10,000 Seedlings  
Size of Polythene Bags 20cm x 30 cm  
for 1 year

| 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 0.8196 Hect = 67200 X 0.8196 = 55077/-

  
RFO(NR)

  
ACF(HQ)

  
DCF(T)

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

| Sr. No.            | Particulars                                             | Rate per Mandays      | 340.20          |
|--------------------|---------------------------------------------------------|-----------------------|-----------------|
|                    |                                                         | 1600 Seedling<br>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                  | <b>Weeding</b>                                          |                       |                 |
|                    | 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         |
| <b>Total</b>       |                                                         | <b>176.12</b>         | <b>59916.02</b> |
| 8                  | Any other operation                                     |                       |                 |
| 9                  | Misc. 10% Contigent of (Above all)                      | 17.612                | 5991.60         |
| <b>Grand Total</b> |                                                         | <b>193.732</b>        | <b>65907.63</b> |

**Formation Cost for 1 Hect Plantation = 65908/-**

**Formation Cost for 0.8196 Hect = 65908 X 0.8196 = 54018/-**

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ACF(HQ)

DCE(T)

14/11/20

### A) Plantation

|                                                            |                   |
|------------------------------------------------------------|-------------------|
| Maintenance Cost for 10 Year for 1 Hect Plantaion          | 647689            |
| Maintenance Cost for 0.8196 Year for 0.8196 Hect Plantaion | 647689 X 0.8196 = |
|                                                            | 5,30,845/-        |

$$DCF(t)$$

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**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 0.8196 Hect =  $37 \times 0.8196 = 30.33$  MD

  
Range Forest Officer (NR)  
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# Estimate for Soil and moisture conservation Work

| Sr No              | MD per<br>ha | Total area<br>in ha | Total MD | Rate per<br>MD | Amount  |
|--------------------|--------------|---------------------|----------|----------------|---------|
| 01                 | 37           | 0.8196              | 30.33    | 340.20         | 10318/- |
| 5% Contingency     |              |                     |          |                | 516/-   |
| Total Amount ₹.... |              |                     |          |                | 10834/- |

RFO (NR)

ACF (HQ)

DCF (T)

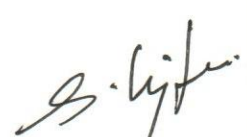
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**Estimate for Dressing of coppicing species from ground level work**

| 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 EXCAVATION</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<br>Cu .m.             | One<br>Cubic<br>Meter | 122.00 | 123.22                   | 6161.00   | GSR Sr No 01<br>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 separately) 1x1000.00x1.50=1500.00 Sq.m | 1500.00<br>Sq.m             | One Sq<br>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)

Dadra & Nagar Haveli

Silvassa

Deputy Conservator of Forest (T)

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2/1/23

**RATE ANALYSIS****As Per GSR Valsad (2015-16)**

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**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 distnce 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<br>qty. = 13 x 2.50 x 0.10 x 0.10 = 0.325m<br>(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 x 2.25kg/sq.m = 135.00 kg.<br>(b) 'J' Hook = 06.00 kg.<br>Total = 141.00 kg.<br>i.e. 0.141 M.T.<br>Consider lead = 100 km<br>1st 5.00 km = 220.41km<br>Rem 90 km x 6.17 = 586.15<br>Total = 806.56<br>(GSR Pg.No.39, Sr. No.3.2.7)                                                          |        |                            |              |                                  |
| 5      | Carriage of R.C.C. Poles<br>13 Nos x 0.10 x 0.10 x 2.00 = 0.26 Cu.m.<br>Weight of PCC = 24 KN/Cu.mt i. e. 2400 Kg./ Cu.mt<br>0.26 Cu.mt. x 2400Kg/Cu.mt = 624 kg i.e. 0.624 Mt<br>Consider lead = 50 km<br>1st 5.00 km = 210.41km<br>Rem. 40 km x 4.57 = 205.65<br>Total = 416.06<br>(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 <sup>st</sup> 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)                                                                                                                                                                                                                                                                         |        |                            | <b>Total</b> | <b>18094.54</b>                  |
|        | Cost for 1.00 sq.mt = Rs.18094.54/60.00 sq.mt.                                                                                                                                                                                                                                                                    |        |                            |              | 301.57                           |
|        |                                                                                                                                                                                                                                                                                                                   |        | <b>Say Total....Rs....</b> |              | <b>301.60/-</b><br><b>Sq.mt.</b> |

RFO (NR)

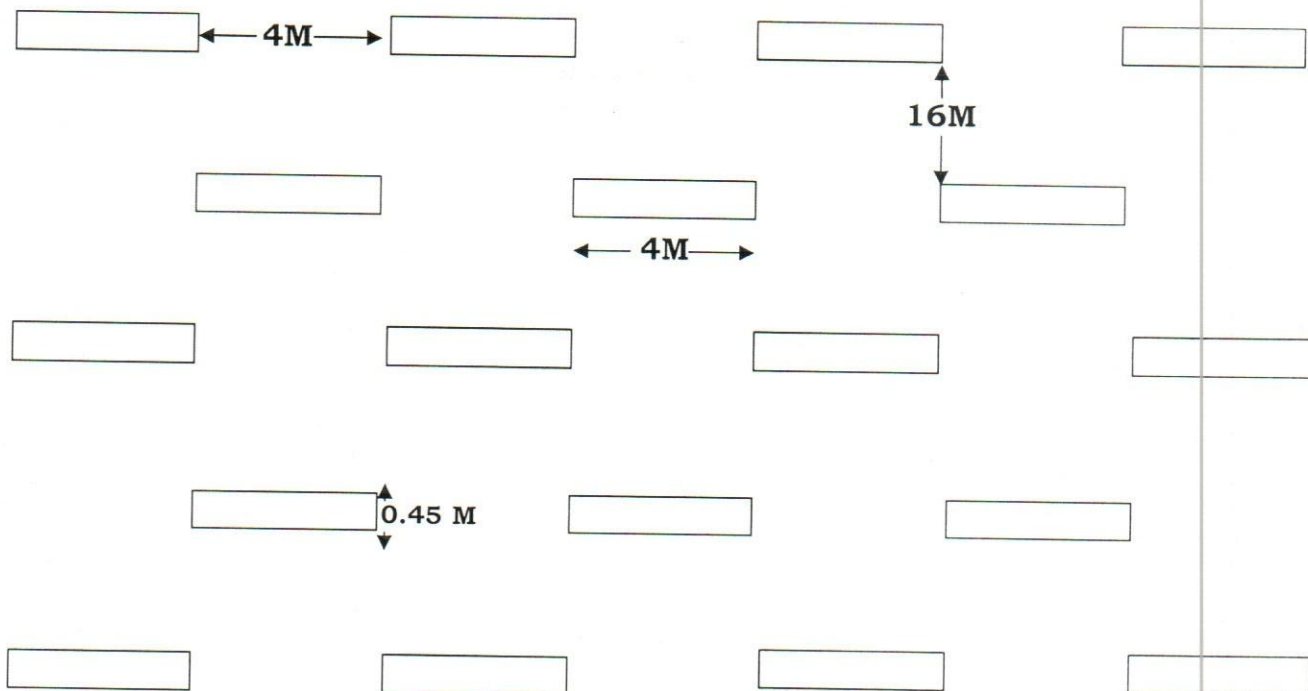
Junior Engineer(FD)

Assistant Conservator of Forest(HQ)  
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## STAGGERED CONTOUR TRENCHING

c/159



## 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  
**Volume** = L x B x H  
= (4.0 x 0.45 x 0.30) M<sup>3</sup>  
= 0.54 cubic meter.  
Therefore, expenditure per trench = Rs. 266.00 x 0.54  
= Rs. 143.64  
The rate per MD is Rs. 307.90.  
Therefore, MD per trench is Rs.143.64/Rs. 307.90 = 0.47 MD.

  
RFO (NR)

## 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 dulcses</i>  | 235           |
|       |              |                                | <b>1600</b>   |

RFO (WR)

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