

## MUCK DISPOSAL PLAN

### NAME OF THE PROPOSAL : CONSTRUCTION OF ROAD FROM MALHAR TO MARHOON (PART-I)

Proposal No:- FP/JK/ROAD/47637/2020

Date of Proposal:- 30-07-2020

### DETAIL OF MUCK/DEBRIS TO BE PRODUCED

<b>S No</b>	<b>Description of Item</b>	<b>Quantity (cum)</b>
1	Total Quantity of muck to be produced from forest land during construction	87570
2	To be used for soling of road, wearing of road and filling behind retaining walls of road (30% soil)	26271
3	To be used locally for construction of road (30% stone)	26271
4	Total Quantity to be used (2+3)	52542
5	Net Quantity to be dumped (1-4)	35028
6	Swell Factor 20%	7006
7	Total Quantity to be dumped (5+6)	42034

**STATEMENT SHOWING DETAIL OF PLACES FOR DISPOSAL OF  
MUCK/DEBRIS DUE TO CONSTRUCTION OF ROAD FROM MALHAR  
TO MARHOON (PART-I)**

S No	Location of Dumping Place	Length, Width of Dumping Place (Area in sqm)	Height of Dump Expected (m)	Quantity of Muck that can be Disposed (cum)
(1)	(2)	(3)	(4)	(5) = (3) x (4)
1	0/775	40 X 25 = 1000	3	2314
2	1/235	40 X 25 = 1000	3	2568
3	1/945	40 X 25 = 1000	4	2400
4	4/100	40 X 25 = 1000	4	3000
5	4/700	40 X 25 = 1000	4	2940
6	6/585	40 X 25 = 1000	6	6156
7	7/935	40 X 25 = 1000	2	2640
8	8/875	40 X 25 = 1000	3	3000
9	9/650	40 X 25 = 1000	6	7344
10	10/500	40 X 25 = 1000	6	2760
11	12/450	40 X 25 = 1000	6	6912
<b>Total</b>				<b>42034</b>

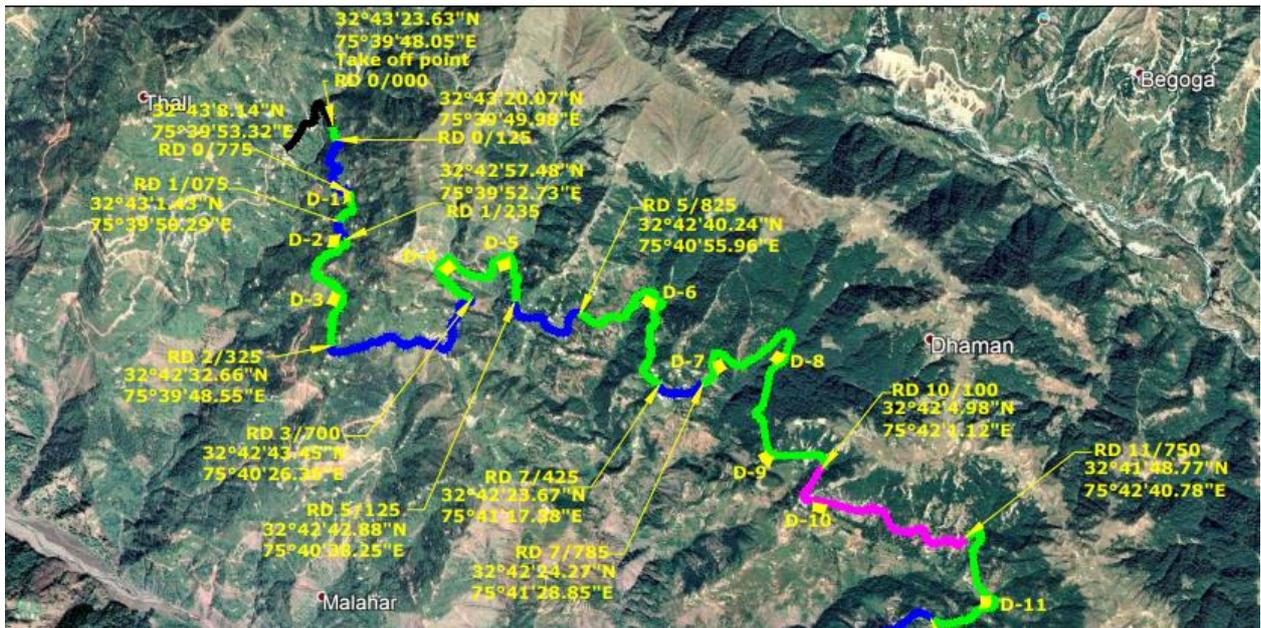
**STATEMENT SHOWING COMPLETE DETAILS FOR THE CONSTRUCTION OF ROAD FROM MALHAR TO MARHOON (PART-I)**

S No	RD		Distance in mtr			Width of Right of Way (m)	Area of Road		Total Area of Forest Land (Ha)	Name of Village	Qty of Muck to be produced	Qty of Muck to be utilized locally	Swelling Factor	Qty of Muck to be dumped in dumping places
	From	To	Forest Land (m)	Non Forest Land (m)	Total (m)		Forest Land (sqm)	Non Forest Land (sqm)						
1	0	125	125	0	125	6	750	0						
2	775	1075	300	0	300	6	1800	0						
3	1235	2325	1090	0	1090	6	6540	0						
4	3700	5125	1425	0	1425	6	8550	0						
5	5825	7425	1600	0	1600	6	9600	0						
6	7785	10100	2315	0	2315	6	13890	0						
7	10100	11750	1650	0	1650	6	9900	0						
8	11750	12975	1225	0	1225	6	7350	0						
9		Dumping Site 1	40	0	40	25	1000	0						
10		Dumping Site 2	40	0	40	25	1000	0	6.938	Malhar	87570	52542	1.2	42084
11		Dumping Site 3	40	0	40	25	1000	0						
12		Dumping Site 4	40	0	40	25	1000	0						
13		Dumping Site 5	40	0	40	25	1000	0						
14		Dumping Site 6	40	0	40	25	1000	0						
15		Dumping Site 7	40	0	40	25	1000	0						
16		Dumping Site 8	40	0	40	25	1000	0						
17		Dumping Site 9	40	0	40	25	1000	0						
18		Dumping Site 10	40	0	40	25	1000	0						
19		Dumping Site 11	40	0	40	25	1000	0						
		<b>Total</b>					<b>69380</b>	<b>0</b>						

**STATEMENT SHOWING DUMPING QUANTITY OF MUCK/DEBRIS TO  
BE DUMPED WITH OTHER DETAIL FOR PROJECT CONSTRUCTION OF  
ROAD FROM MALHAR TO MARHOON (PART-I)**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
S No	Name of Component from Muck / Debris is to be produced	Total Qty. of Muck/Debris to be produced (cum)	Qty. of Muck/Debris to be utilized locally (cum)	Qty. of Muck/ Debris to be dumped (cum)	Factor of increase in volume for dumping	Qty. of Muck/ Debris to be dumped on the basis of increase(cum)	Name of Dumping Places	Slope of Dumping Place	Location of Dumping Place	Distance of Dumping Place from River	Area of Dumping Place (Ha)	Area of forest land involved in Dumping Place	Height of Muck Dump Expected	Remarks
1	Formation cutting work of forest land	87570	52542	35028	1.20	42034	Dumping Site-1 TO 11	-	0/775 1/235 1/945 4/100 4/700 6/585 7/935 8/875 9/650 10/50 0 12/45 0	-	1.10	Nil	5 mtr Avg	

## LAYOUT PLAN OF MUCK DUMPING SITES



## IMPLEMENTATION OF ENGINEERING MEASURES AT MUCK

### DUMPING SITES:

It has been observed that after disposal of muck, it creates problem as it is susceptible to scattering unless the muck disposal yards are supported with engineering measures such as protective walls. All the dumping sites need proper handling to avoid spilling of muck while dumping and in the post dumping stages. All the muck disposal sites have to be developed from the ground level either by providing stone masonry or by gabion structure. Gabion Walls will be provided to support disposed muck. In all the muck dumping sites, the muck brought in by dumpers shall be dumped and manually spread and roller compacted in such a way that rock mass is properly stacked behind the Gabbions with minimum of voids.

### **Budget for Muck Disposal Plan :**

An estimation has been made for Engineering measures of Muck disposal Plan at Rs 29.81 Lacs. Proposed Gabion Drawing (copy enclosed)

**Model Plan related to Engineering Measures for Stabilization of Muck Disposal sites in Forest area.**

Typical estimate for Construction of Gabbion/Crated Wall to protect dumping sites of surplus Muck/Excavated Material in forest Area as per Engineering Measures.

Taking length of Crated wall = 40M.

Earthwork in excavation for structures =  $1 \times 40 \times 1.40 \times 0.6$   
= 33.60Cum @Rs 363/Cum  
= Rs. 12,196/-

For two layered crated wall,

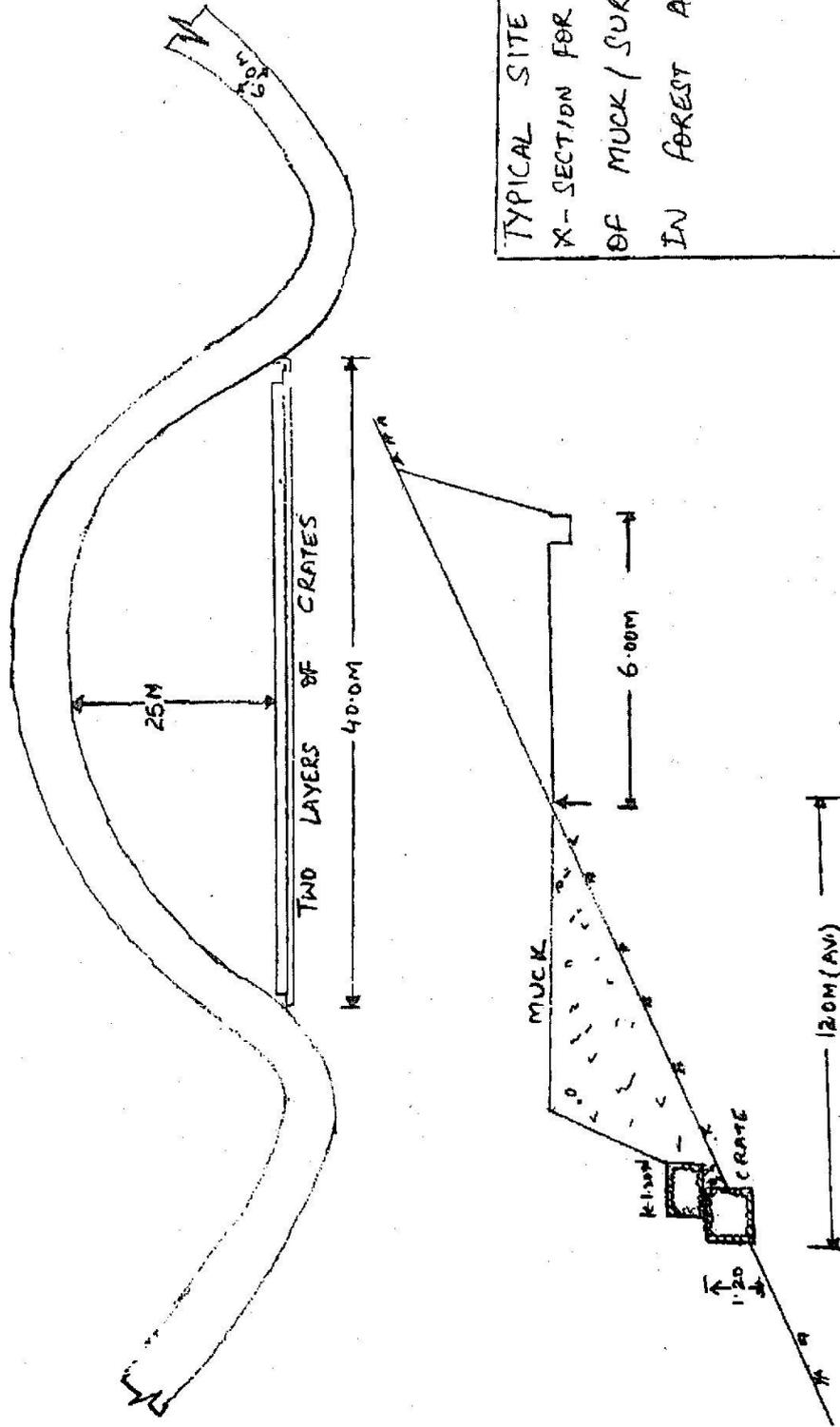
Quantity =  $2 \times 7 \times 6 \times 1.2 \times 1.20 = 120.96$  Cum  
Amount = 120.96 Cum @Rs 2140/Cum (including cost of  
Crates and labour for handling of available stones)  
= Rs 2,58,854/-

Total Amount for 40 mts two layered crated wall = Rs 2,71,050/-

Total amount for 3 dumping sites =  $11 \times 2,71,050$  /-  
= Rs. 29,81,550/-

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Executive Engineer  
PMGSY Division  
Billawar



TYPICAL SITE PLAN AND  
 X-SECTION FOR STABILIZATION  
 OF MUCK / SURPLUS EXCAVATED  
 IN FOREST AREA.

*Signature*  
 Director  
 Forest Dept.  
 Mysore

*Signature*  
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