Union Territory of Jammu and Kashmir

OFFICE OF THE EXECUTIVE ENGINEER PWD (R&B) DIVISION BASOHLI

The Additional Chief Conservator of Forest,
Nodal Officer (FCA),
Van Bhawan, Jammu.

No. 1843-46 **Dated:-** 29-06-21

Subject: Muck Disposal Plan for construction of road Bani to Billawar via Dhaggar, Dhaman and Deri Gala under CRF (Phase-I).

Sir,

In reference to above cited subject the various measures to be adopted are as follows:

- **Diversion of forest land for Muck Disposal**
  - Road is being constructed to connect remote village namely Malad and the alignment passes through forest area.
  - As road alignment is passing through forest land, non forest land for disposal of muck is not available in the vicinity of project site.
  - As private land holdings are very small in size which are being used for subsistence farming, these small farmers are not ready to part with their land holdings for muck disposal.
- **Rehabilitation Measures**
- **Biological**
  - Forest Department shall be provided funds to undertake Biological measures to stabilize the muck dumpings at site @ Rs. _____ lacs per Hactor.
- **Engineering**
  - For stacking of dumped material Gabion Crated Walling has been proposed and details along with estimates is enclosed.

Yours faithfully,

Executive Engineer
PWD (R&B) Division
Basohli

Copy to the:

1. Chief Engineer, PW (R&B), Jammu for information please.
2. Superintending Engineer, PWD (R&B) Jammu-Kathua Circle Jammu for information please.
3. Divisional Forest Officer, Forest Division Billawar for information please.

MUCK DISPOSAL PLAN

NAME OF THE PROPOSAL : CONSTRUCTION OF ROAD FROM BANI TO BILLAWAR VIA DAGGAR, DHAMAN AND DERI GALA UNDER CRF (PHASE-I)

Proposal No:- FP/JK/ROAD/121506/2021

Date of Proposal:- 03-02-2021

DETAIL OF MUCK/DEBRIS TO BE PRODUCED

S No	Description of Item	Quantity (cum)
1	Total Quantity of muck to be produced from forest land during construction	20250
2	To be used for soling of road, wearing of road and filling behind retaining walls of road (30% soil)	6075
3	To be used locally for construction of road (30% stone)	6075
4	Total Quantity to be used (2+3)	12150
5	Net Quantity to be dumped (1-4)	8100
6	Swell Factor 20%	1620
7	Total Quantity to be dumped (5+6)	9720

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STATEMENT SHOWING DETAIL OF PLACES FOR DISPOSAL OF MUCK/DEBRIS DUE TO CONSTRUCTION OF ROAD FROM BANI TO BILLAWAR VIA DAGGAR, DHAMAN AND DERI GALA UNDER CRF (PHASE-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	4/225 -- 4/295	70 X 20 = 1400	4	4860
2	5/875 -- 5/945	70 X 20 = 1400	4	4860
Total				9720

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STATEMENT SHOWING COMPLETE DETAILS FOR THE CONSTRUCTION OF ROAD FROM BANI TO BILLAWAR VIA DAGGAR, DHAMAN AND DERI GALA UNDER CRF (PHASE-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 (sq m)	Non Forest Land (sq m)						
1	0.575	3.1400	267	0	267	9	2403	0	2.5453	Mahd	20250	12150	1.2	9720
2	3.750	6.7000	2250	0	2250	9	20250							
3	Dumping Site 1		70	0	70	20	1400	0						
4	Dumping Site 2		70	0	70	20	1400	0						
	Total						25453							

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STATEMENT SHOWING DUMPING QUANTITY OF MUCK/DEBRIS TO BE DUMPED WITH OTHER DETAIL FOR PROJECT CONSTRUCTION OF ROAD FROM BANI TO BILLAWAR VIA DAGGAR, DHAMAN AND DERI GALA UNDER CRF (PHASE-I)

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	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Formation cutting work of forest land	20250	12150	8100	1.20	9720	Dumping Site-1 TO 2	-	4/225-4/295 5/875-5/945	19	0.28 Ha.	0.28 Hc.	4 mtr Avg	

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Model Plan related to Engineering measures for Stabilization of Muck Dumping Sites in Forest Area

Typical Estimate for Construction of Crates Wall to protect Dumping sites of surplus Muck/Excavated material in Forest area as per Engineering Measures.

Taking Length of Crated Wal = 70.00 Mtrs

Trench Excavation in Dense Soil for Structures = 1 x 70 mtr x 1.4mtr x0.60 mtr

= 58.80 cum @ Rs 363/cum

= Rs. 21344.00

For Two Layered Crated Wall ,

Quantity =2 X 11X 6 X 1.20 mtr X 1.20 mtr = 190.08 cum

= 190.08 Cum @ Rs.2140/Cum(incuding cost of crates and Labour for handling of available stones)

= Rs. 406771/-

Total Amount For 70.00 Mtrs Two Layered Crated Wall = = Rs. 428115/-

Total amount for 2 dumping sites = 2 x 428115 = Rs. 856230/-

Assistant Executive Engineer
PWD Sub. Division
Billawar

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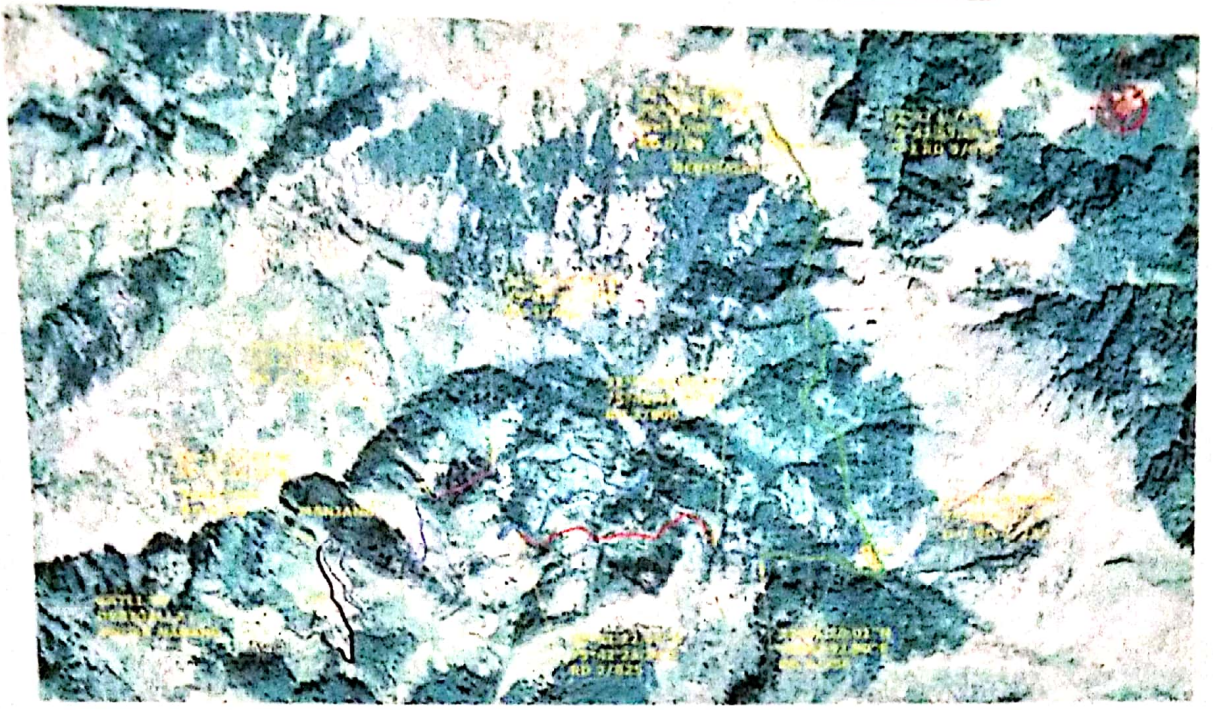
LAYOUT PLAN OF MUCK DUMPING SITES



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 masonary or by gabion structure. Gabbion 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 8.56 Lacs. Proposed Gabbion Drawing (copy enclosed)

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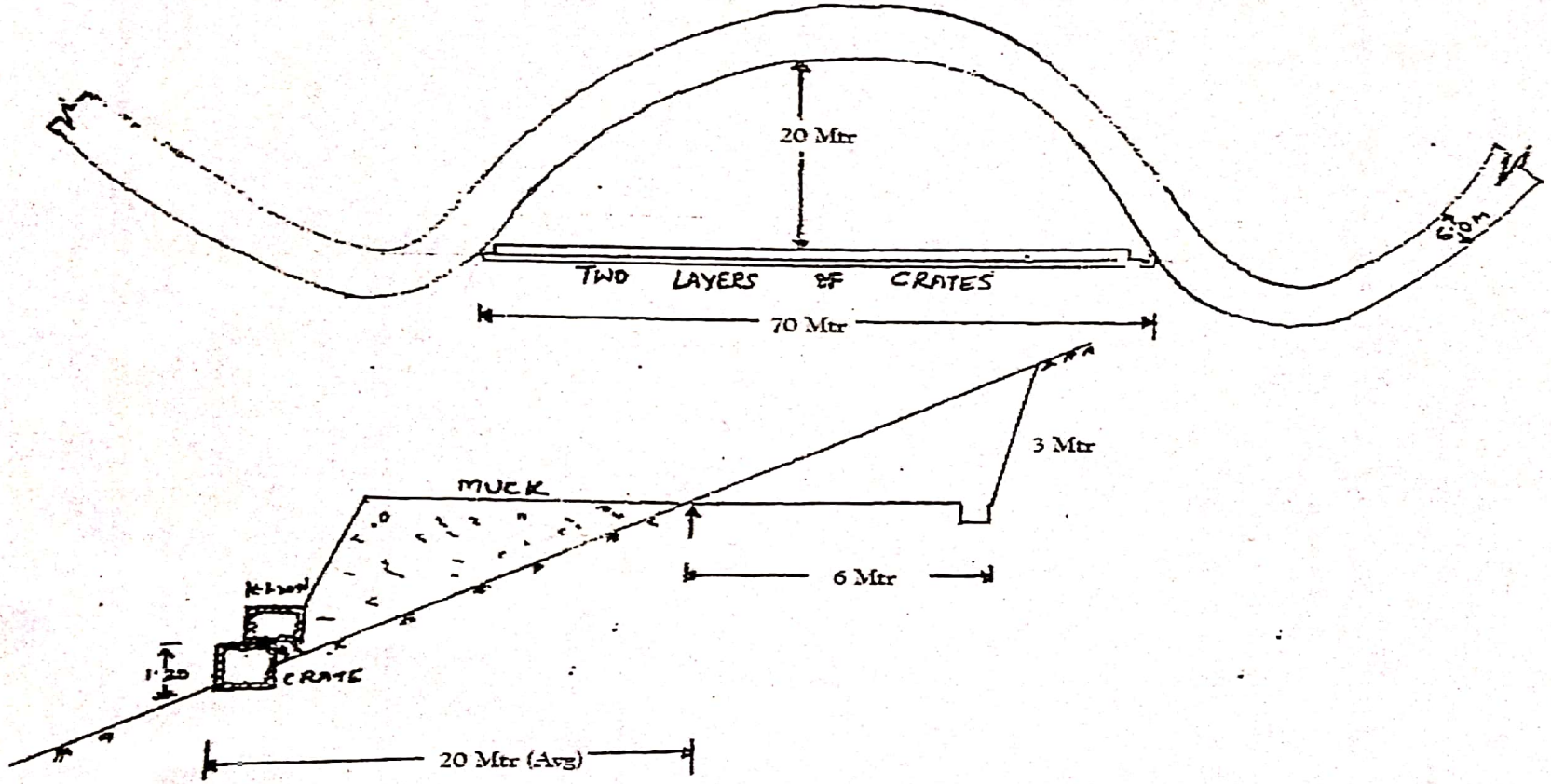
SITE PLAN AND X-SECTION FOR STABILAZATION OF MUCK/DEBRIS EXCAVATED IN FOREST AREA



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