

**NAME OF THE PROPOSAL : CONSTRUCTION OF ROAD FROM
RIAR TO BAGGAN (PART II)**

MUCK DISPOSAL PLAN

1. Muck Disposal Plan

Muck disposal plan is for the construction of road by which muck would be generated. The excavation shall result in large quantity of excavated material i.e. muck which have to be evacuated, disposed off and roller compacted or laid on mild slopes with the excavation work to such designated areas where the muck piles do not substantially interfere with either environment / ecology or the river flow regime and do not cause turbidity impairing the quality of water. The disposal of muck has to be scientifically planned keeping in view the economic aspects necessitating nearness to the muck generating component of work, which understandably reduce the travel time of dumpers, less interference to surface flow and ground water aquifer and disposition of habitation.

Based on the quantities of excavation a muck management plan, therefore, has been formulated to manage the disposal of muck and restore such areas from further degradation of the environment. During construction of the project, quantities of excavation will be carried out and shall be dumped in designated areas to provide stable slopes.

2. Quantity of Muck disposal and its reuse

During the construction of the project, muck will be generated. Total quantity of muck / debris, generated due to the project in the forest land, shall be 8325 cum. Out of the total muck generated, 4995 cum shall be utilized on project work leaving 3330 cum to be dumped. It is proposed to utilize about 60% of the excavated material for construction of various project components. The balance 40% shall have to be disposed off away from sites to make available the site clear. The muck shall be properly roller compacted and dumped on slopes and treated to mix and match with the surrounding environment with least change in landscape. Table-1 indicates for muck disposal quantity below:

Table - 1

STATEMENT SHOWING THE DETAIL OF MUCK DISPOSAL PLAN OF ROAD FROM RIAR TO BAGGAN
PART-II

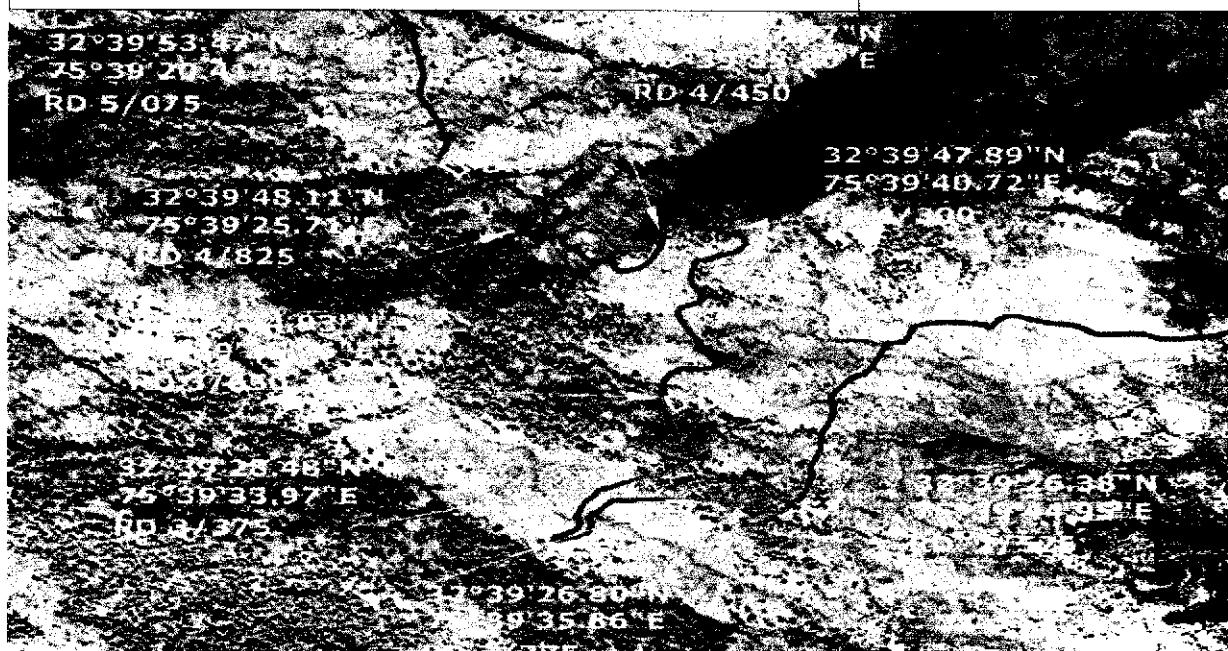
S.NO	RD	LENGTH OF ROAD IN FOREST (M)	WIDTH OF ROAD(M)	QUANTITY OF MUCK GENERATED (M3)	QUANTITY OF MUCK TO BE USED IN ROAD CONSTRUCTION(30% STONE +30% MUCK)(M3)	QUANTITY OF MUCK TO BE DUMPED (M3)	REMARKS
1	2/525- 2/775	250	6	2250	1350	900	
2	3/375- 3/650	275	6	2475	1485	990	
3	4/300- 4/450	150	6	1350	810	540	
4	4/825- 5/075	250	6	2250	1350	900	
				8325	4995	3330	

3. Selection of Muck Disposal Site

The selection of muck disposal sites was carried out considering the quantity of the muck, landscape, cost effectiveness, nearness to source of generation. All the dumping locations shall be well supported at base and at higher elevation by suitable retaining structures. Three (3) muck dumping sites have been identified on forest land. The details of dumping sites along with their total capacity and amount of muck to be disposed are enumerated in Table 2.

Table-2

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	2/775	40 X 25 = 1000	3	900
2	3/650	40 X 25 = 1000	3	990
3	5/000	40 X 25 = 1000	4	1440
Total				3330



Layout Plan of Muck Dumping Sites

4. Description on Muck Disposal Sites

Muck Disposal Site 1

The proposed muck dumping site-1 is located on the left hand side of the road on the forest land. The proposed chainage of the Muck Dumping Site-1 is 2/775 to 2/815. The plan area of Dumping Site-1 is 0.1 ha.

Muck Disposal Site 2

The proposed muck dumping site-2 is located on the right hand side of the road on the forest land. The proposed chainage of the Muck Dumping Site-2 is 3/650 to 3/690. The plan area of Dumping Site-2 is 0.1 ha.

Muck Disposal Site 3

The proposed muck dumping site-3 is located on the right hand side of the road on the forest land. The proposed chainage of the Muck Dumping Site-1 is 5/000 to 5/040. The plan area of Dumping Site-1 is 0.1 ha.

5. Implementation of Engineering Measures At Muck Disposal 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 Gabions with minimum of voids.

6. Budget for Muck Disposal Plan :

An estimation has been made for Engineering measures of Muck disposal Plan at Rs 7.96 Lacs. Proposed Gabbion 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 = $2 \times 7 \times 6 \times 1.2 \times 1.20 = 120.96 \text{ Cum}$

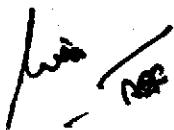
Amount = 120.96 Cum @Rs 2020.52/Cum (including cost of Crates and labour for handling of available stones)

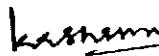
= Rs 2,44,402/-

Total Amount for 40 mts two layered crated wall = Rs 2,56,598/-

Total amount for 3 dumping sites = $3 \times 2,56,598/-$

= Rs. 7,69,794/-




Executive Engineer

PMGSY Division

Billawar

Full Title of the Project: RIAR TO BAGGAN (PART-II)

File No. FP/JK/ROAD/52199/2020

Date of Proposal:- 31-10-2020

**UNDERTAKING FOR PAYMENT OF ADDITIONAL NET PRESENT VALUE
OF FOREST AREA**

It is to certify that I Executive Engineer PMGSY Division, Billawar have applied for diversion of 0.855 ha of forest area for the purpose of Construction of road from Riar to Baggan (Part-II). I/We hereby undertake to pay the amount of additional Net Present Value (NPV) of the above forest land, if so determined as per the decision of the Hon'ble Supreme Court.

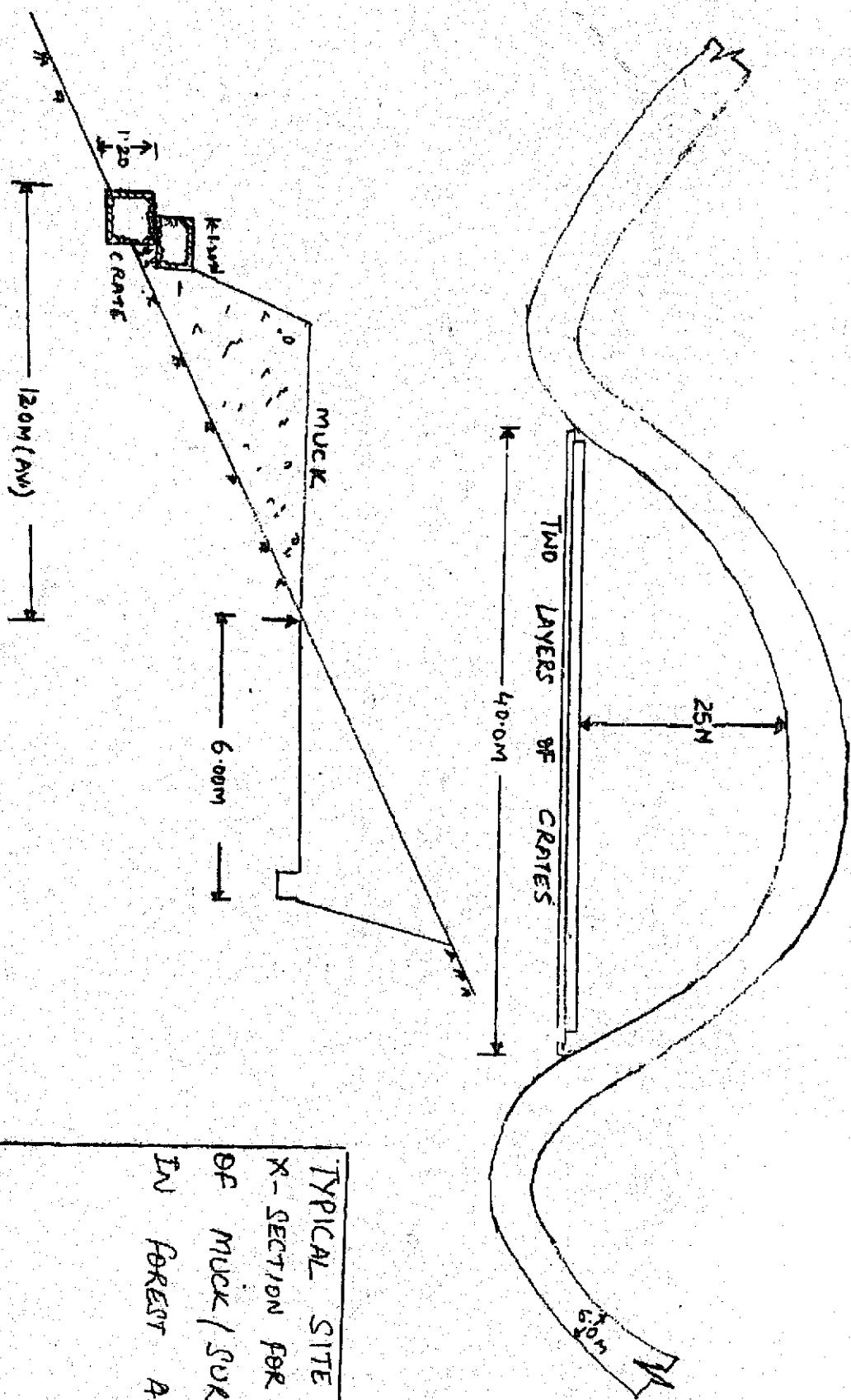
Place:

Date:

Karan Singh
Signature of the User Agency
Office Seal

Counter signed by

Divisional Forest Officer
Billawar Forest Division
Billawar



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