

*[Signature]*  
 Executive Engineer  
 PMGSY Division  
 Doda

c/s  
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 District Forest Officer  
 National Forest Division  
 Doda

**LEGEND:-**

1	FOREST LAND	—
2	PROTECTED LAND	—
3	STATE LAND	—
4	DUMPING POINT	●
5	OTHER ROADS	—

**IMPLEMENTATION OF ENGINEERING MEASURES AT MUCK DUMPING SITES**

It has been observed that after disposal of muck, it creates problems as it is susceptible to scattering unless the muck disposal yards are supported with engineering measures such as protective walls/Gabbion walls. All the dumping sites need proper handling to avoid splitting 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 structures. 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.

**BUDGET FOR MUCK DISPOSAL PLAN**

An estimate has been framed for engineering measures of muck Disposal plan at Rs. 6.06 lacs. Proposed Gabion Drawing copy Enclosed

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**Model Plan related to Engineering Measures for Stabilization of Muck Dumping Sites in Forest Area for construction of Khellani Dranga Hud to Saras Package number:-JK04-114 Block Assar District Doda**

Typical Estimate for construction of crated wall to protect Dumping Sites of Surplus Muck/Excavated Material in forest area as per Engineering Measures

- 1) Earthwork in excavation for foundations of structures complete as per drawing & technical specifications in 70% Ordinary Soil, 20% Ordinary Rock & 10 % Hard Rock  
Length of crated wall = 50.00mtrs Number of dumping sites = 02

$$\begin{aligned} &= 02 * 50\text{mtr} * 1.4 \text{ mtr} * 0.60 \text{ mtr} \\ &= 84 \text{ cum. @ Rs. 363/cum} \\ &= \text{Rs. 30,492/-} \end{aligned}$$

- 2) For two layered crated wall,

$$\begin{aligned} \text{Quantity} &= 2*2*50\text{mtr} * 1.20\text{mtr} * 1.20 \text{ mtr} = 288 \text{ cum} \\ \text{Amount} &= 288 \text{ cum @ Rs. 2000/cum (incl. cost of crates)} \\ &= \text{Rs. 5,76,000/-} \end{aligned}$$

Total amount for 50.00 mtrs two layered crated wall = Rs.( 30,492/- + 5,76,000/-

=Rs. 6,06,492/-

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# ABSTRACT OF MUCK GENERATED AND ITS DISPOSAL ON ROAD KHELLANI DRANGA HUD

TO SARAS PACKAGE NO.:- JK04-114

Project Component	Quantity of Muck/Debris Generated (in cum)		Estimated Quantity of muck/debris proposed to be utilized (in cum)		Balance Quantity of Muck/Debris (cum)		Quantity of Muck due to swell factor (cum)		Name of Dumping Site	Area of the Dumping Site(Ha)	Capacity of the Dumping Site (cum)
	Rock	Soil	Rock	Soil	Rock	Soil	Rock (25%)	Soil (25%)			
Road	34425	22950	34425	0	0	22950	0	28687.5	Muck Dumping site D-1	0.1	14307.5
									Muck Dumping site D-2	0.1	14380
Total											28687.5

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**DETAILS OF MUCK DISPOSAL SITES ON ROAD KHELLANI DRANGA HUD TO SARAS  
PACKAGE NO.:- JK04-114**

S. No.	Name of Dumping Site	Location of Dumping Site	Area in Hectare	Capacity in cum	Volume of muck to be dumped in cum
1	Muck Disposal Site D1 (Forest Land)	Valley side of project road RD 4.475	0.1	14500	14307.5
2	Muck Disposal Site D2 (Forest Land)	Valley side of project road RD 6.025	0.1	14500	14380
Total					28687.5

Thus 28687.5 cubic metre quantity of muck will be dumped at the dumping sites shown in muck disposal plan for which an area of 0.20 Hectares has been proposed at different locations. Gabbion wall will be constructed at the dumping site so that it cannot spread in other areas.

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**STATEMENT SHOWING THE DETAIL OF MUCK DISPOSAL PLAN OF  
ROAD KHELLANI DRANGA HUD TO SARAS PACKAGE NO. JK04-114**

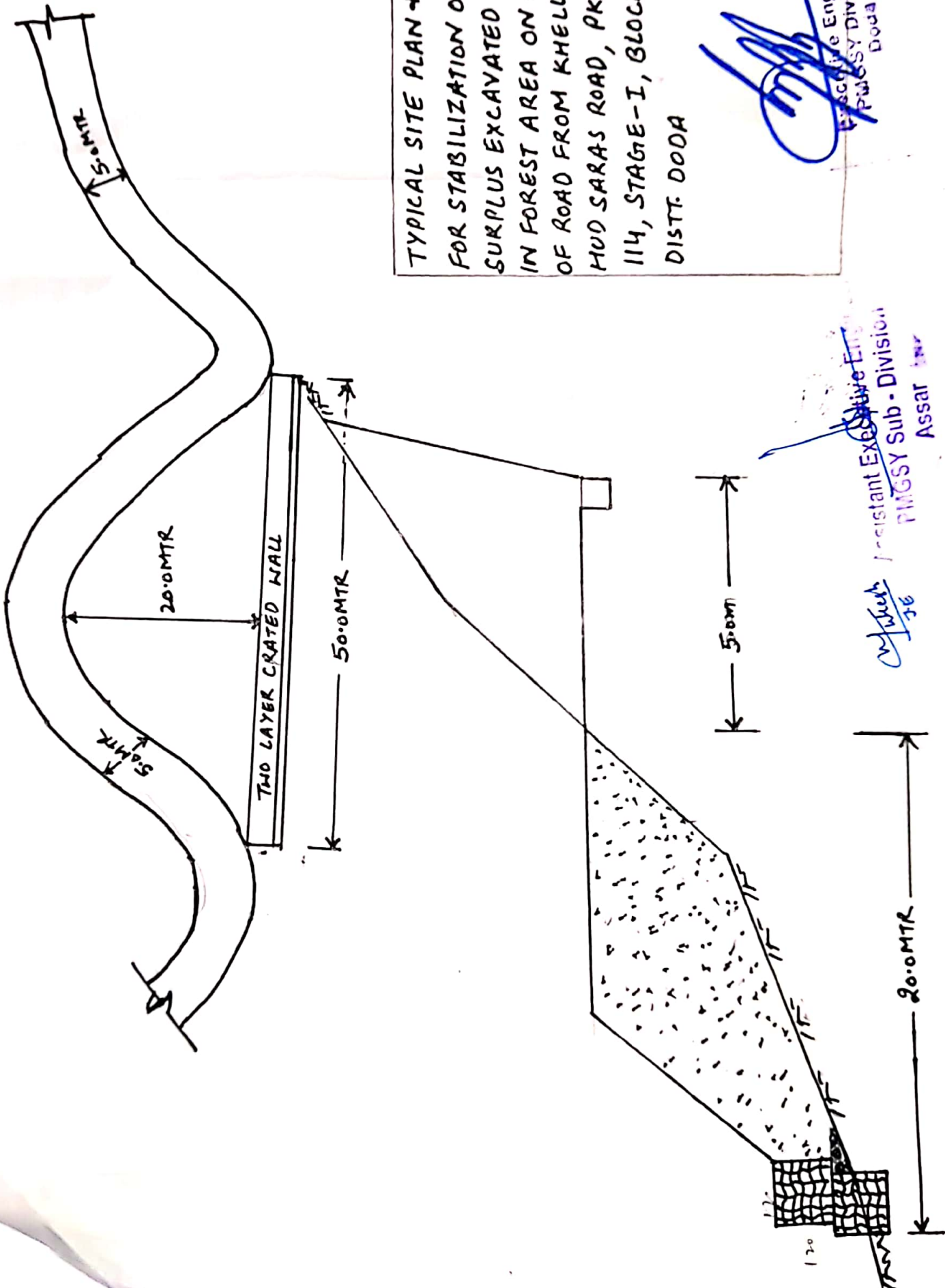
S NO.	RD	Length of road in Forest	Width of Road in Forest( in m)	Quantity of Muck Generated (in cum)	Quantity of muck to be used in Road construction ( in cum) 30% stone, 30% muck	Quantity of muck to be dumped	Remarks
1	0/450-1/300	850	5.00	0	0	0	Road already constructed
2	3/975-5/0	1025	5.00	15375	9225	6150	-
3	5/00-7/800	2800	5.00	42000	25200	16800	-
	Total	4675	5.00	57375	34425	22950	-

Thus 22950 cubic metre of muck will be used for filling behind the retaining walls & stones from cutting will be stacked & reused for protection works & construction of road surface, rest 22950 cubic metre will be dumped at the dumping site. Protection works will also be constructed at the dumping site so that it cannot spread in other areas.

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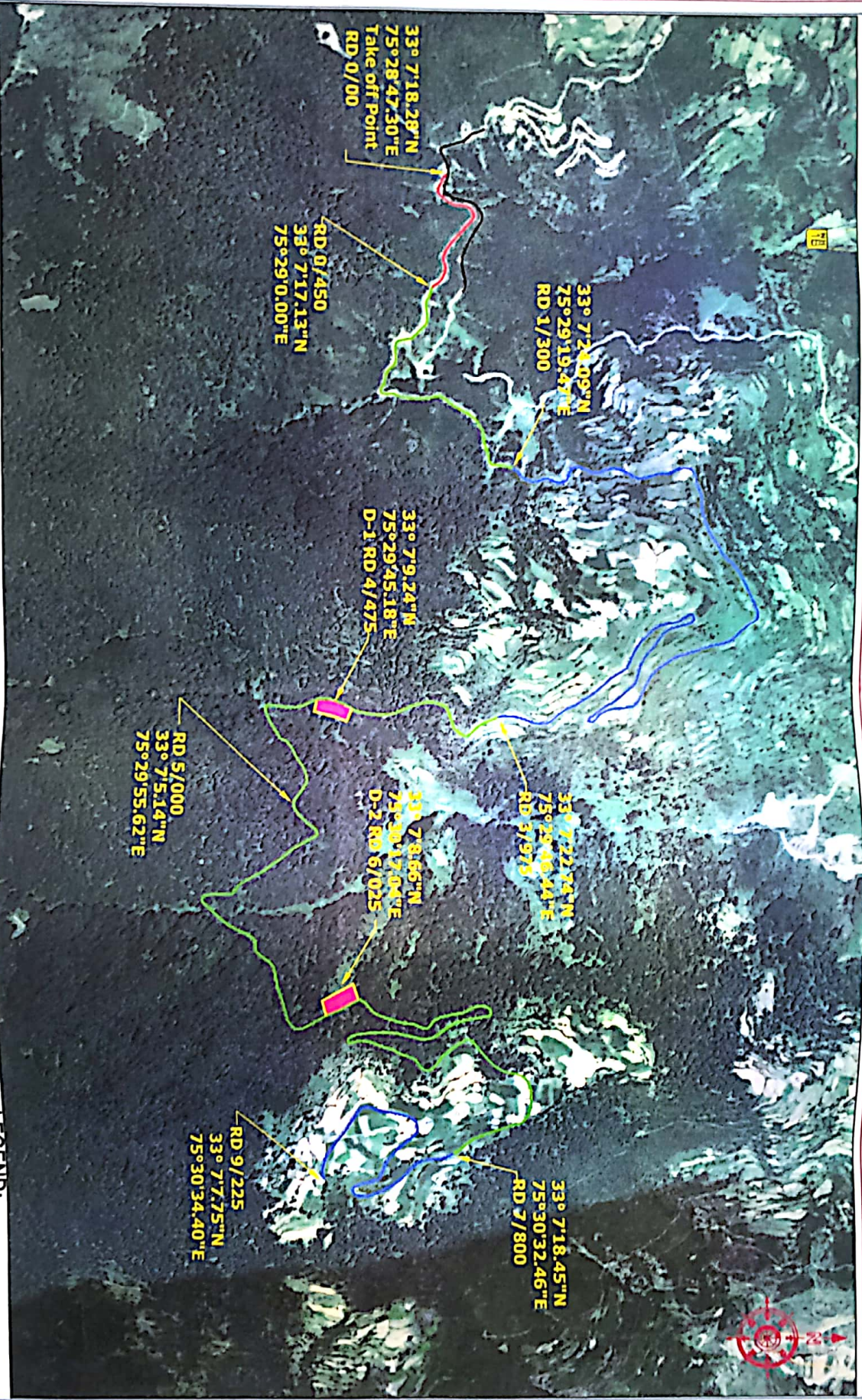
N.T.S

TYPICAL SITE PLAN + X-SECTION  
 FOR STABILIZATION OF MUCK/  
 SURPLUS EXCAVATED MATERIAL  
 IN FOREST AREA ON CONSTRUCTION  
 OF ROAD FROM KHELLANI DRANGA  
 HUD SARAS ROAD, PKG. NO JK04-  
 114, STAGE-I, BLOCK-ASSAR  
 DISTT. DODA

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GPS MAP FOR SHOWING ALIGNMENT FOR CONSTRUCTION OF ROAD FROM KHELLANI DRANGA HUD TO SARAS UNDER PACKAGE NO. JK04-114, PHASE-VII, STAGE-I, LENGTH=9.225KM PMGSY BLOCK ASSAR, DISTRICT DODA.



LEGEND:-

1.	FOREST LAND	
2.	PROPRIETY LAND	
3.	STATE LAND	
4.	DUMPING POINT	
5.	OTHER ROADS	

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