



# भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

## National Highways Authority of India

(Ministry of Road Transport and Highways, Govt. of India)

परियोजना कार्यान्वयन इकाई पालमपुर

Project Implementation Unit – Palampur



NHAI/PIU-PALM/11016/12/Forest-VA/23-24/

Aug, 2023

To,

**The Deputy Conservator of Forest,  
Forest Division Mandi,  
Distt. Mandi H.P.**

**Sub:** Diversion of 19.5896 ha Forest land for Rehabilitation and Up-Graddation to Two Lane with Paved shoulder configuration & Strengthening of Padhar to Bijni (Package-VA) from 180.00 to Km 202.815 (Design Length. 19.050 Km), of NH-20(New NH-154) of Pathankot- Mandi Section in the State of Himachal Pradesh under the jurisdiction of Mandi Forest Division Distt. Mandi, Himachal Pradesh (Online proposal no- FP/HP/Road/154466/2022)-**Re-submission of case after attending the observations raised by Project Screening Committee held on 17/04/2023 thereof.**

**Ref:** -Office Letter No.I/47162/202 dated: 23-06-2023.

Sir,

Please refer to the letter No.I/47162/202 dated: 23-06-2023 received from O/o Integrated Regional Office ,Ministry of Environment, Forest and Climate Change ,CGO Complex, ShivalikKhand, Longwood Shimla, Himachal Pradesh – 171001 ,under reference on the subject cited matter. In this regard, it is submitted that the observations pertaining to this office are being attended as under: -

Sr. No	Observation Raised	Reply of User Agency
1	State Govt. may upload the Project Screening Committee minutes on the designated column of the PARIVESH portal	This Observation pertains to Higher Authorities.
2	<p>i. It has been observed from KML file that the dumping site is in very steep slope from where debris can be easily rolled down into river/household and agriculture land downhill side. Therefore, the State Govt. may submit mitigation measures to be adopted, so that debris could not be rolled down into the river/household/agriculture land downhill side.</p> <p>ii. The Muck dumping site is proposed in forest land. The suitable non-forest land/private land may be explored for</p>	<p>i. Since the Proposed alignment traverses through Mountainous &amp; Steep Terrain. Thus, steep slope of hills exists at most of the sections. Therefore, no other sites are available for muck disposal. Further, these sites have been duly checked and verified on ground by concerned Ranger &amp; DFO during Joint site inspection on dated 16.12.2022.(Letter of Joint Site Inspection enclosed for ready reference). However,</p>



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disposal of muck. Also, a separate list of trees standing in muck dumping site may be provided/uploaded if muck dumping is proposed in forest land.

iii. In revised muck disposal plan, total area of muck dumping sites (Forest and Non-forest) is mentioned as 6.0750 ha, however in total calculation of the both dumping sites it is mentioned as 6.0180 ha. Also, it is submitted that "Out of the total 6.0180 ha, 4.2002 ha Forest land has already been diverted in 2021 through Proposal No-FP/HP/Road/154466/2022 dated 05.07.2022", however proposal mentioned(FP/HP/Road/154466/2022) is submitted for FCA, 1980 approval. Therefore, State Govt. may review the muck management plan and clarify the contradictory statement mentioned in MMP.

Environmental safeguard mitigation measures have been considered to prevent the debris from rolling down to river/household/agricultural land in downhill side.

These mitigation measures are proposed of gabion walls at different elevation levels to retain the muck as well as proposal of bio engineering techniques i.e. after completion of dumping, stone pitching and turfing with geo mats(Coir Textiles) etc will be done to stabilize the muck disposal site. The detailed explanation has already been given in Muck Disposal Plan and same have been uploaded with the forest proposal. Kindly refer.

ii. As explained above, there are no other suitable sites available for muck disposal. Accordingly, these sites have been identified & selected for muck disposal and further duly checked and verified on ground by concerned Ranger & DFO during Joint site inspection on dated 16.12.2022.

Moreover, the list of trees standing in muck dumping sites are enclosed as **Annexure-I**.

iii. The actual area is 6.0180 ha only and no forest land has been diverted through the mentioned proposal no FP/HP/Road/154466/2022 dated 05.07.2022. Due to clerical mistake it was written as "Out of the total 6.0180 ha, 4.2002 ha Forest land has already been diverted in 2021

*Vijay Singh*

1<sup>st</sup> & 2<sup>nd</sup> Floor, Dayal Ji Niwas, Opp. Govt. Primary School, Chimbhalhaar, Palampur (HP) 176061,

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		through Proposal No-FP/HP/Road/154466/2022 dated 05.07.2022", Same have been corrected in the Muck Disposal Plan and Re-Revised Muck Disposal Plan is enclosed as <b>Annexure-II</b> . Further, it is stated that Out of 6.0180 ha, <b>4.2002 ha</b> . Area is Forest land identified in muck disposal sites which has been proposed for diversion through Proposal No FP/HP/ROAD/154466/2022 dated 05/07/2022 for muck disposal.
3	State Govt. may provide the Geo-referenced map of the Diversion area in legible format. Same may uploaded on the desired column of the PARIVSH portal.	Revised Geo-referenced map of the Diversion area in legible format has been uploaded on the desired column now.
4	The detail of chainage-wise dimensions (Length and Width) and purpose wise breakup of proposed area showing Khasra no. wise details of forest area may be uploaded on the PARIVESH portal duly authenticated by DFO concerned.	The detail of chainage-wise dimensions (Length and Width) and purpose wise breakup of proposed area showing Khasra no. wise details of forest area has been uploaded on the PARIVESH portal duly authenticated by DFO concerned now.
5	State Govt may provide the Jamabandi of the proposed DA area duly authenticated by competent authority.	Jamabandi of the proposed DA area duly authenticated by competent authority is being uploaded now.
6	State Govt may submit the plantation model mentioning the site specific plant species, plant species which have capacity of the absorptions of CO2 and other pollutants to be planted along the PRow as per guidelines of MoEF& CC vide letter no.FC-11/39/2020-FC dated 08.09.2021.	In this Regard It is Submitted that the component of plantation model has not been taken in the phase -I of the project. The same will be taken into account in the Phase - II of the project. An undertaking regarding "plantation of site specific plant species, plant species which have capacity of the absorptions of CO2 and other pollutants to be planted along the PRow as per guidelines of MoEF& CC vide letter no.FC-11/39/2020-FC dated 08.09.2021" is being submitted.
7-	Since the proposal is rehabilitation and up	It is submitted that portion of ERow



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	gradation to two lane, therefore it may be clarified that whether ERoW has been included in the calculation of total diversion in the present proposal. Also, it may be clarified whether approval under FCA has been obtained for the ERoW? If yes, details of the same may be provided.	has not been included in the calculation of total diversion in the present proposal. The construction of the ERoW has been done in late 60's and at that time there was no such act. It was only in 1980 that act came into existence. The land of the ERoW has already been transferred to NHAI, detail of the revenue record of ERoW is being submitted.
8	Large numbers of trees and sapling (Total 2302) including ecologically and economically important species of (Quercus leucotrichophora, Cedrus deodara, etc.) are proposed for felling. Therefore, possibility of reducing the numbers of trees to be affected may be explored or rationalisation to be done in the layout of the proposal to reduce green felling especially of Ban, Deodar and Shisham. Further, separate list of trees which are required to be felled and retained (not to be felled) may be provided.	The proposed site has been finalized after proper site investigation and all the mitigation measures were taken care of. These sites have been duly checked and verified on ground by concerned Ranger & DFO during Joint site inspection on dated 16.12.2022. The proposed site is best in all respect and the trees falling in to the alignment are unavoidable. Hence it is not possible to shift the alignment. It is submitted that all the possibilities were explored and the present alignment is unavoidable. Hence there is no possibility of reducing the numbers of trees.
9	Enumeration list of trees with khasra number details, which is duly authenticated by the concerned DFO, needs to be provided/uploaded on the PARIVESH portal Part-II.	This observation pertains to your good office.
10	In part-II, para -4(ii) scientific name of some species is mentioned as "others". State Govt may review and rectify the same with proper scientific name.	This observation pertains to your good office.
11	In the Site Inspection Report (SIR) of the DFO, it is reported that the extant proposal "involves complete disruption of the present nursery in Drang Range. Therefore, to establish the entire infrastructure of Nursery an amount of RS. 21,73,126/- as calculated by RFO Drang is	The undertaking to this respect is being submitted.

*Vijay Singh*





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	compensated by Project Authority". Therefore, State Govt may submit an undertaking to the effect that User Agency shall establish the entire infrastructure of Nursery of the amount RS. 21,73,126/-.	
12	State Govt may provide the Joint inspection report of the extant proposal. Same may be uploaded on the PARIVESH portal.	The joint inspection report has been uploaded and the same is being submitted.
13	State Govt may provide the reclamation plan duly authenticated by DFO concerned.	The reclamation plan duly authenticated by DFO concerned is being submitted.
14	As the alignment is passing through the local/PwD Roads. Therefore, State Govt may provide the NoC from concerned department.	It is submitted that any PWD land which falls in the alignment of the road is upgraded and not acquired , there is no change in the title of the land .Hence NoC from PwD departments not obtained.
15	Following clarification/justification for CA area may be provided :- i. In part-II, para-13-(i), S. No-3, name of PF/RF is mentioned as "Sinhnala", however in the CA scheme and in location Map the name of RF/PF is mentioned as "Sihnal". Therefore, State Govt. may review and rectify the same. ii. As per DSS analysis, in the proposed CA Patch-6, 02 ha of area is under Moderately dense Forest (MDF) category. Therefore, state Govt may review and verify the same.	This observation pertains to your good office.
16	The status of proposed Compensatory Afforestation (CA) along with the documentary proof may be provided, whether it is Govt. waste land declared as PF under HP Govt. notification, 1952 or it is notified as UPF/DPF under IFA, 1927 and the under the ownership/control of HP Forest department or not.	This observation pertains to your good office.

*Vijai Singhwalan*

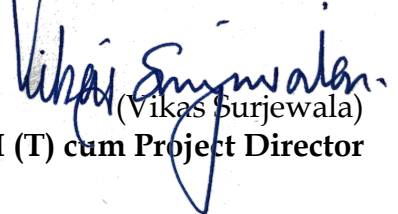


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17	The State Govt. may rectify and fill the district profile in Part-II, Para-14.	This observation pertains to your good office.
18	As the DA area passes through the hilly/undulating areas, there must be natural streams/Nallah/springs/waterfall on which local peoples depend for day-to-day life sustenance. Therefore, concerned Conservator of Forest may comment or provide the mitigation measures on the impact of such water resources due to the extant proposal.	It is submitted that all mitigation measures on the impact of such water resources due to the extant proposal has been taken into account. Proper construction of Bridges, culverts, has been proposed .Therefore no loss or damage due to the construction of the said road will be done.

With Regards,

  
(Vikas Surjewala)  
GM (T) cum Project Director

## MUCK DISPOSAL PLAN

## 1. Generated Muck Volume

Since proposed road completely traverses through Mountainous & Steep Terrain in Open Country due to which roadside cutting involves which requires removal of excavation of material i.e. soil, boulders etc.

The estimated volumes of muck to be generated from the road side cutting are given in table 1 below.

About 100% of the generated muck is to be reused in road construction for filling, construction of retaining/RS walls and in approaches of VUP as necessary. The total quantity of generated muck, reusable quantity, and quantity to be disposed are provided in Table 2 below.

Table: 1 Volume of Muck to be generated

S.No.	Description	Quantity	Unit
1	Material received from hill side cutting	654337.277	Cum
2	Total (1)	654337.277	Cum
3	Disposal and use of cutting material in road work		
1	Embankment filling from roadway cutting (80%)	131129.442	Cum
4	Total	131129.442	Cum
5	Material required to be disposed by cartage (2-4)	523207.835	Cum
6	Swell Factor 40%	209283.134	Cum
7	Total Material Required to be Disposed (5+6)	732490.969	Cum

Table 2 Summary of debris disposal

S.No.	Reused material for road construction	Total debris including 40% swell factor	Total disposal in dumping zone
1	131129.442	732490.969	732490.969

*Note: - Muck disposal 732490.969 cum. shall be catered to muck dumping location (I) km 175+500 to km 175+950 Nearby village Matha Neval having Capacity 425250 cum. and muck dumping location (II) km 177+975 to km 178+580 having Capacity 1197900 Cum. Nearby village Bijni Total Capacity 1623150 Cum. section for NH-154.*

## 2. Proposed Muck Disposal Sites

Two (02) muck disposal sites measuring a total area of 6.0180 ha have been selected as designated site for muck disposal as detailed in **Table 3** below.

**Table 3: Muck Disposal Sites-Present Status**

Village	Dumping Sides	Survey No	Existing Land		To be acquired Land		Total Land (Ha.)	
			Forest Land (Ha.)	Non Forest Land (Ha.)	Forest Land (Ha.)	Non Forest Land (Ha.)		
Matha Niyul	MDS1	230/1			0.0765		0.0765	
		514/225/1			1.0790		1.0790	
		514/225/2			0.2515		0.2515	
		204/2			0.0016		0.0016	
		204/3			0.0032		0.0032	
		208			0.0103		0.0103	
		206/1			0.0340		0.0340	
		485/225/1				0.0101	0.0101	
		215/1				0.0123	0.0123	
		216				0.0625	0.0625	
		217				0.0111	0.0111	
		218/1				0.0377	0.0377	
		205/1				0.0559	0.0559	
		207				0.0086	0.0086	
		209/2				0.0017	0.0017	
		Tandu	212/1			0.0765		0.0765
			214/1			0.0012		0.0012
222/1				0.0067		0.0067		
452/360/1				0.0079		0.0079		
213					0.0275	0.0275		
216/1					0.1371	0.1371		
216/2					0.0283	0.0283		



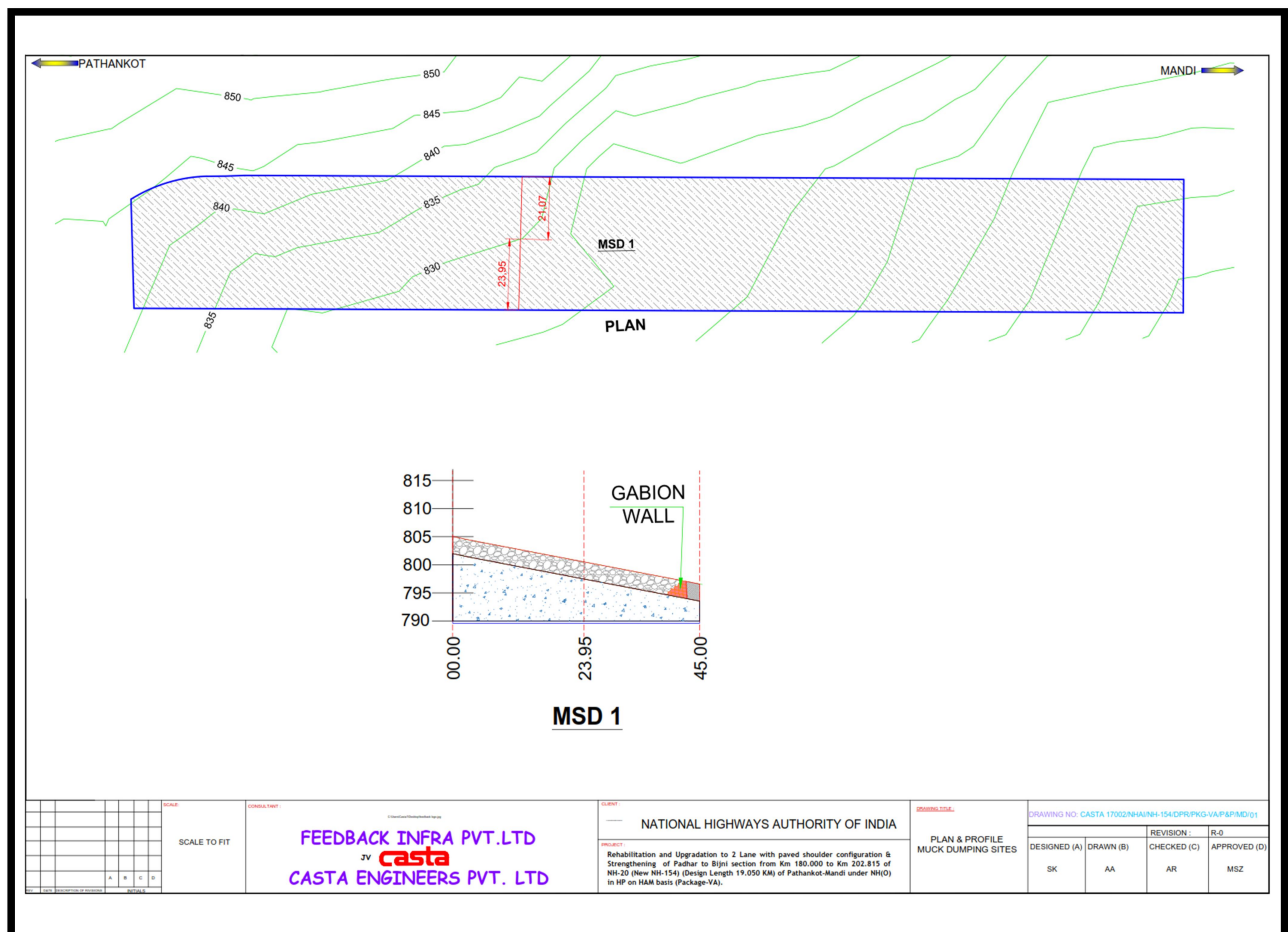
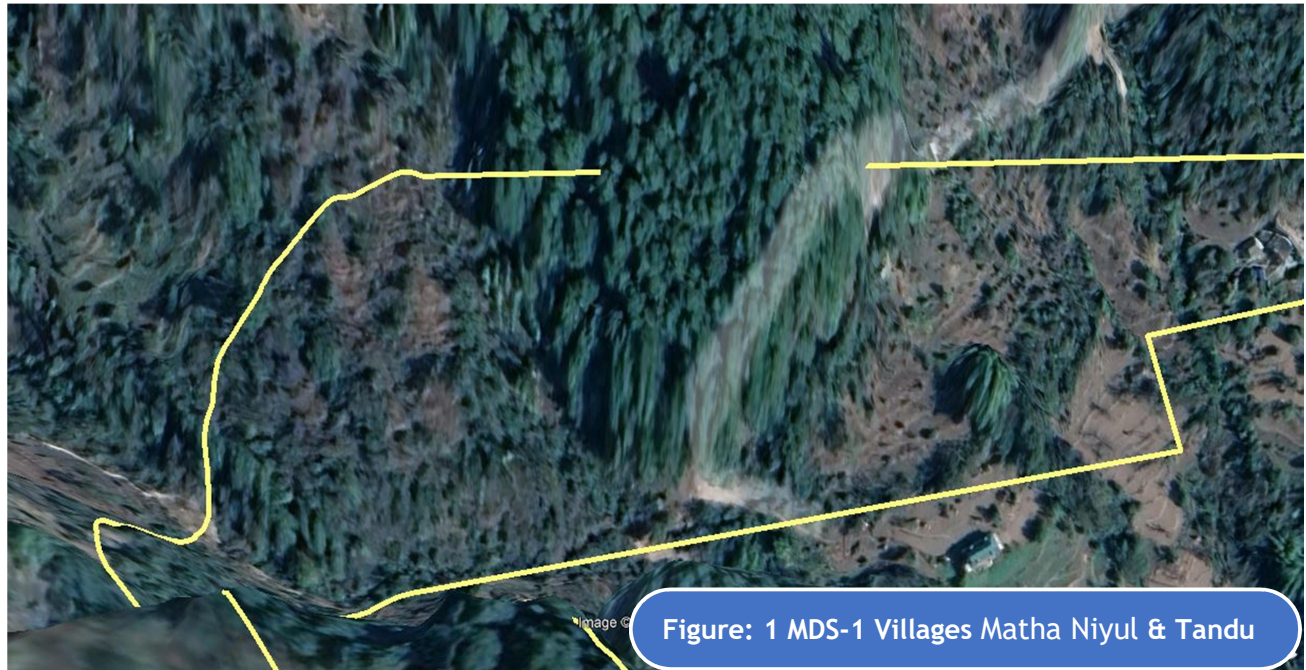
Village	Dumping Sides	Survey No	Existing Land		To be acquired Land		Total Land (Ha.)
			Forest Land (Ha.)	Non Forest Land (Ha.)	Forest Land (Ha.)	Non Forest Land (Ha.)	
		217				0.0206	0.0206
		218				0.0016	0.0016
		219/1				0.0213	0.0213
		220/1				0.004	0.0040
		224/1				0.02429	0.0243
		224/1/1				0.0121	0.0121
		Total				1.5484	0.4767
Bijan	MDSII	1091/8/1			2.6518		2.6518
		9				1.0611	1.0611
		10				0.0101	0.0101
		24				0.0041	0.0041
		1456/1163/60				0.1815	0.1815
		1161/60				0.0434	0.0434
		1162/60				0.0410	0.0410
Total				2.6518	1.3412	3.9930	
Grand Total				4.2002	1.8179	6.0181	

The muck disposal lands proposed are generally in non-forest area but due to under-capacity some forest land has also been acquired within the PROW to fulfil the muck dumping as no other alternative non-forest land is available along the project area. Out of the total 6.0180 ha, 4.2002 ha. Area is Forest land which will be diverted through Proposal No FP/HP/ROAD/154466/2022 dated 05/07/2022 for muck disposal.

Digital elevation models, as presented in **Figure 1&2 below** of the Two (02) selected muck disposal sites, were prepared for all muck dumping sites to ascertain the topography and determining the location and length of the gabion wall for slope protection so as to prevent the muck from reaching into natural streams.

*Vijay Singhwal*

Muck Dumping Site-I



Vijay Singhwalan

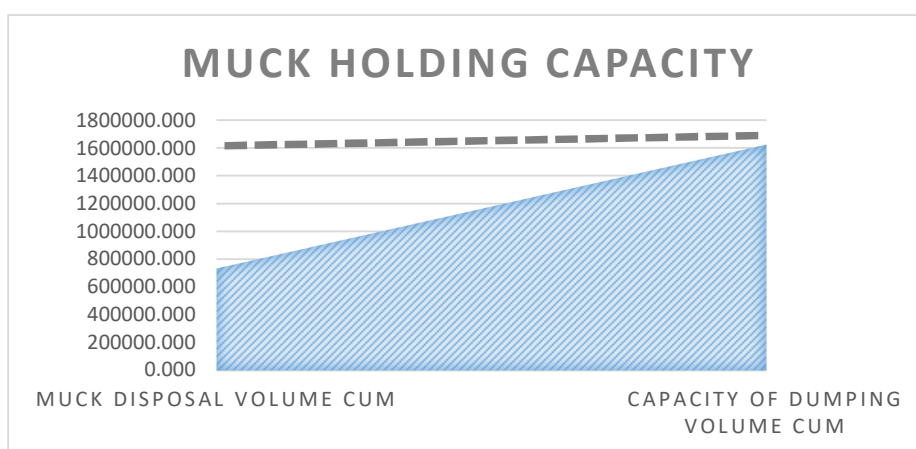


Figure: 1 MDS-2 Village Bijni

The muck holding capacity of the all muck disposal sites (including the already diverted/acquired plot) are detailed in **Table 4 below** and comparison of muck volume to be generated vis-à-vis capacity of the disposal sites are presented in info graphics in **Figure 3 below**.

**Table: 4 Muck Holding Capacity of Disposal sites**

S.No	Villages	Design Chainage (km)		Length	Width	Height	Area (Sqm)	Volume (Cu.m)
		From	To					
1	Matha Niyul & Tandu	175.500	175.950	450	45	21	20250	425250
2	Bijan	177.975	178.580	605	66	30	39930	1197900
Total							60180	1623150



**Figure: 3 Generate Muck Volume Vis -a-Vis's capacity of Disposal sites**

It can be inferred from the Figure 3 above that capacity of the disposal sites fulfils the requirement of generated muck volume. Therefore, the proposed muck disposal sites with the suggested gabion wall height will suffice the requirement of dumping of excavated muck.

### 3. Environmental Impacts of Improper Muck disposal

The dumping of rock spoil can potentially be a cause for environmental problems and land degradation. It may cause landslides if not disposed properly and be an aesthetical damage to the natural landscape. Improper muck dumping without slope protection measures results in wash away into the channels/Khad/Streams causing siltation and blockage of natural channels. The trees and undergrowth vegetation of the dumping sites are also affected due to change in land use. Further, when stacked without adequate stabilisation measures, muck moves along with runoff and creates landslides.

*Vijay Singhwal*



#### 4. Environmental Safeguard Measures for Muck Disposal Sites

- Multiple gabion walls at different elevation levels are proposed to retain muck within the boundary of muck disposal sites. Gabion wall of height of 5 m including 0.75 m of buffer along with standard wire gauge galvanised wire (SWG GI) having 10 cm x 10 cm mesh and dimension 1.15 m x 1.15 m in multi tiers with 0.5 m wide offset to be laid concurrently with the dumping of muck for side protection. Muck dumping plan of all two (02) proposed disposal sites along with elevation profile and desired Placement of gabion wall is provided in drawings at the end of this report.



**Use of Geo- mats for Slope Stabilization**

- After preparing the gabion wall at muck disposal site, the muck brought in dumpers shall be dumped and manually spread behind the wall in such a manner that rock mass is properly stacked behind the wall with minimum of voids.



**Rehabilitation of slopes using bio-engineering techniques**

- Regular inspection by environmental expert of concessionaire and Independent engineer (IE) shall be made to ensure complete avoidance of spilling of muck outside the boundary, especially into channels/Khad/Streams.

*Vikas Singhwala*

- Bioengineering is the technique of utilizing vegetation in addressing geotechnical problems. Slope of muck disposal sites after completion of dumping to a particular site should be stabilized by stone pitching and turfing with geo mats (Cair Geotextile) & indigenous species of soil stabilizing legumes like Vetiver grasses. Natural geotextiles degrade quicker than man-made counterpart, but facilitate growth of vegetation quicker and better due to this inherent characteristics. Hydro-seeder sprays are to be used for restoring soil fertility of the slope walls for quicker result, as necessary.

Vijay Singhwal

No.CALA-NH-20(Revenue)/2023- 245

From

Competent Authority  
Land Acquisition-cum- SDM  
Sadar NH-20, Mandi H.P.

To

The Project Director, NHAI, PIU, Palampur  
1st & 2<sup>nd</sup> Floor, Dayal Ji Niwas  
Opposite Govt. Primary School,  
Chimbalhar, Palampur-176061.

Dated Mandi, the 21<sup>st</sup> August, 2023.

Subject:

Diversion of forest land for the diversion of 19.5896 Ha. Forest land for Rehabilitation and upgradation to Two Lane with paved shoulder configuration And strengthening of Padhar to Bijani (package-VA) from Km. 180.000 to KM. 202.815 (Design Length 19.050 KM) of NH-20 (Ne 154) of Pathankot-Mandi in The state of H.P. Supply of detail/area of Forest land falling under EROW-Reg.

Sir,

Reference your office letter No.NHAI/PIU/PALM/HP/11016/12/Forest-VA/2023-24/3330 dated 08-08-2023 on the subject cited above.

2. The requisite information in respect of Sadar Sub-Division-Mandi (Bhatog to Bijan) is sent herewith for further necessary action at your end please.

Encl. 1

Yours faithfully,

Competent Authority,  
Land Acquisition-cum- SDO(C)  
Sadar NH-20, Mandi H.P.

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LIST /AREA OF KHASRA NOS IN RESPECT OF EXISTING ROW (PATHANKOT-MANDI) PACKAGE-VA (BHATOG TO BIJAN) KM.190.000 TO 202.815 SUB-DIVISION SADAR MANDI.					
Sr. No.	Name of Muhal	Khasra No.	Area in Hect.	Classification of land	Ownership /possession
1.	Bhatog	340	0.1736	Gair Mumkin Sadak	Central Govt./MOR TH
2.	-do-	315/1	0.0999	-do-	-do-
3.	-do-	125/1	0.1827	-do-	-do-
4.	-do-	125/2	0.2478	-do-	-do-
5.	-do-	125/3	0.1570	-do-	-do-
6.	-do-	34	0.0718	-do-	-do-
	<b>Total</b>	<b>Kita-6</b>	<b>0.9328</b>		
1.	Dwardu	256	0.0686	-do-	-do-
2.	-do-	254	0.1297	-do-	-do-
3.	-do-	222/1	0.6923	-do-	-do-
4.	-do-	222/2	0.0364	-do-	-do-
5.	-do-	222/3	0.1521	-do-	-do-
6.	-do-	215/1	0.3118	-do-	-do-
	<b>Total-</b>	<b>Kita-6</b>	<b>1.3909</b>		
1.	Dhakalwahan	211/1	0.0639	-do-	-do-
2.	-do-	219/1	0.0265	-do-	-do-
3.	-do-	219/2	0.0129	-do-	-do-
4.	-do-	223/1	0.0714	-do-	-do-
5.	-do-	223/2	0.1113	-do-	-do-
6.	-do-	223/3	0.2891	-do-	-do-
7.	-do-	223/4	0.0425	-do-	-do-
8.	-do-	205	0.1477	-do-	-do-
	<b>Total</b>	<b>Kita-8</b>	<b>0.7653</b>		
1.	Mehad	248/1	0.0235	-do-	-do-
2.	-do-	242/1	0.0225	-do-	-do-
3.	-do-	242/2	0.1034	-do-	-do-
4.	-do-	325/1	0.1465	-do-	-do-
	<b>Total</b>	<b>Kita-4</b>	<b>0.2959</b>		
				-do-	-do-
1.	Magal	273/1	0.1289	-do-	-do-
2.	-do-	681/1	0.0212	-do-	-do-
	<b>Total</b>	<b>Kita-2</b>	<b>0.1501</b>		
1.	Bijan	547/1	0.0334	-do-	-do-
2.	-do-	89/1	0.0710	-do-	-do-
3.	-do-	89/2	0.0445	-do-	-do-
	<b>Total</b>	<b>Kita-3</b>	<b>0.1489</b>		
	<b>Grand Total</b>	<b>Kita-29</b>	<b>3.6839</b>		

*Bhawan*

*Authority Land*



**Full Title of Project :- Diversion of 19.5896 Ha. Forest land for Rehabilitation and Upgradation to Two lane with paved shoulder configuration & Strengthening of Padhar to Bijni (Package-VA) from Km 180.00 to Km 202.815 (Design Length 19.050 km) of NH-20 (New NH-154) of Pathankot-Mandi Section in the state of Himachal Pradesh.**

**CHECK LIST NO.31**

**COMPONENT WISE BREAKUP OF THE FOREST LAND AND NON FOREST LAND**

S.No.	Village/Khasra No.	Length & Width of Road	Forest land	Non-Forest land
1	Saned 607/1, 671/539, 674/548/1, 591, 589/1, 587/1, 585/1, 584/1, 631/1	140.8 x 30 = 4224 Sqm = 0.4224 Hect. 301.53 x 30 = 9046 Sqm = 0.9046 Hect.	<b>0.4224</b>	<b>0.9046</b>
2	Narla 636/2/1, 646/608/204/1, 205/1, 634/591/511/1, 634/591/511/2, 634/591/511/2, 634/591/511/3, 1/1, 573/6/1, 610/204/1, 610/204/2, 619/219/1, 13/1, 203/1, 555/202/1, 221/1, 696/227/1, 696/227/2, 438/1, 675/632/449/1, 675/632/449/2, 675/632/449/3, 540/1, 541/1	513.6 x 30 = 15408 Sqm = 1.5408 Hect. 879.43 x 30 = 26383 Sqm = 2.6383 Hect.	<b>1.5408</b>	<b>2.6383</b>
3	Singh 605/42/1, 137/1, 149/1, 161/1, 170/1, 205/1, 217/1306/1, 27/1, 143/1,	76.43 x 30 = 2293 Sqm = 0.2293 Hect. 882.06 x 30 = 26462 Sqm = 2.6462 Hect.	<b>0.2293</b>	<b>2.6462</b>
4	Kunnu 449/163/1, 451/179/1, 180/1, 314/1, 323/1, 255/1, 296/1, 332/1, 169/1, 169/2	87.86 x 30 = 2636 Sqm = 0.2636 Hect. 416.33 x 30 = 12490 Sqm = 1.2490 Hect.	<b>0.2636</b>	<b>1.2490</b>
5	Sahal 14/1, 27/1, 71/1, 127/1, 133/1, 228/1, 228/1, 245/1, 439/1, 525/1, 114/1	39.73 x 30 = 1192 Sqm = 0.1192 Hect. 785.86 x 30 = 23576 Sqm = 2.3576 Hect.	<b>0.1192</b>	<b>2.3576</b>
6	Pipali	142.46 x 30 = 4274 Sqm = 0.4274 Hect.	<b>0.4274</b>	

*Vijay Singhwalan*

	1/, 144/1, 746/242/1, 243/1, 247/1, 189/1, 238/1, 240, 444/1, 447/1, 311/1, 440/1, 441/1, 442/1, 582/1, 583/1, 682/1, 690/1	1089.13 x 30 = 32674 Sqm =	3.2674	Hect.		<b>3.2674</b>
7	Pali 1/1, 27/1, 677/597/28/1, 34/1, 46/1, 389/1, 401/1, 395/1, 381/1, 619/603/494/1	47.36 x 30 = 1421 Sqm = 674.06 x 30 = 20222 Sqm =	0.1421 2.0222	Hect. Hect.	<b>0.1421</b>	<b>2.0222</b>
8	Malog 11/1, 111/1, 114/1, 218/1, 220/1, 228, 368/254/1, 368/254/2, 67/1,	194.8 x 30 = 5844 Sqm = 249 x 30 = 7470 Sqm =	0.5844 0.7470	Hect. Hect.	<b>0.5844</b>	<b>0.7470</b>
9	Maseran 551/1, 781/1, 743/1, 541/1, 917/541/1/1, 917/541/1/2, 822/549/1, 822/549/2, 552/1, 795/1, 766/1, 769/1, 771/1, 773/2, 892/734/1, 755/1, 844/722/1, 744/1, 724/1,	346.96 x 30 = 10409 Sqm = 756.1 x 30 = 22683 Sqm =	1.0409 2.2683	Hect. Hect.	<b>1.0409</b>	<b>2.2683</b>
10	Bhatog 342/1, 355/1, 498/339/1, 338/1, 327/1, 328, 480/473/1, 319/1, 100/1, 1/1, 199/1, 55/1, 54/1, 329/1	180.36 x 30 = 5411 Sqm = 553.8 x 30 = 16614 Sqm =	0.5411 1.6614	Hect. Hect.	<b>0.5411</b>	<b>1.6614</b>
11	Dwardu 329/1, 330/1, 32/1, 323/1, 241/1, 243/1, 227/1, 230/1, 346, 382/216/1, 382/216/2, 382/216/3, 207/1, 369/201, 371/88/1, 366/86, 367/86,	127.6 x 30 = 3828 Sqm = 365.8 x 30 = 10974 Sqm =	0.3828 1.0974	Hect. Hect.	<b>0.3828</b>	<b>1.0974</b>
12	Pakhri 283/135/1, 281/135/1, 282/135/1, 285/202/1, 232/1	156.5 x 30 = 4695 Sqm = 209.9 x 30 = 6297 Sqm =	0.4695 0.6297	Hect. Hect.	<b>0.4695</b>	<b>0.6297</b>
13	Dhaklwan 208/1, 222/1, 328/97/2, 38/97/2, 329/97/1, 329/97/2	136.66 x 30 = 4100 Sqm = 278.96 x 30 = 8369 Sqm =	0.4100 0.8369	Hect. Hect.	<b>0.4100</b>	<b>0.8369</b>
14	Mehad	223.4 x 30 = 6702 Sqm =	0.6702	Hect.	<b>0.6702</b>	

*Vikash Singhwalan*

	1/1, 4/1, 4/2, 4/3, 710/249/1, 710/249/2, 255, 256/1, 287/1, 301195, 193/1, 154/1, 337/1, 438/1, 442/1, 454/1, 708/477/1, 653/480/1, 561/1,	2006.9 x 30 = 60207 Sqm = 6.0207 Hect.		6.0207	
15	Tandu 402/110/1, 448/111/1, 448/111/2, 425/280/1, 321/1, 450/357/1, 343/1, 343/2, 344, 410/356/1, 214, 222 ,212, 452/360/1, 208/1, 228/1, 234/1, 102/2	631.53 x 30 = 18946 Sqm = 1.8946 Hect. 958.95 x 45 = 43153 Sqm = 4.3153 Hect.	1.8946  4.3153	4.3153	
16	Matha Neul 230/1,514/225/1, 214/1, 206/1, 208, 204/1, 204/2, 204/3, 196/1, 248/1, 260/1, 191/1, 544/258/1	247.1305 x 30.015 = 7418 Sqm = 0.7418 Hect. 456.35 x 45 = 20536 Sqm = 2.0536 Hect.	0.7418  2.0536	2.0536	
17	Maigal 830/253/1, 895/292/1, 303/1, 892/836/1, 324/1, 847/331/1, 844/822/1, 846/331/1, 332/1, 860/333/1, 861/333/1, 682/1296/1	529.64 x 31.5 = 16684 Sqm = 1.6684 Hect. 647.55 x 45 = 29140 Sqm = 2.9140 Hect.	1.6684  2.9140	2.9140	
18	Bijan 1, 7, 1091/8/1, 1091/8/2, 1091/8/3, 273, 1071/550, 1095/501, 1114/498, 78	327.33 x 45 = 14730 Sqm = 1.4730 Hect. 1922.622 x 45 = 86518 Sqm = 8.6518 Hect.	1.4730  8.6518	8.6518	
		Total : 59.3029 Hect.	13.0214	46.2814	
	village	Area for Dumping Site	Area	Forest	Non Forest
1	Matha Neul	211.03 x 69 = 14561 Sqm =	1.4561 Hect.	1.4561	
		28.97 x 69 = 1999 Sqm =	0.1999 Hect.		0.1999
	Tandu	13.37 x 69 = 923 Sqm =	0.0923 Hect.	0.0923	
		40.1145 x 69 = 2768 Sqm =	0.2768 Hect.		0.2768
2	Bijni	541.183 x 49 = 26518 Sqm =	2.6518 Hect.	2.6518	
		273.71 x 49 = 13412 Sqm =	1.3412 Hect.		1.3412
		Total : 6.018 Hect.	4.2002	1.8177	

*Vijay Singhwal*

	village	Way Side Ameneties	Area		Forest	Non Forest
1	Dwardu	200 x 150 = 30000 Sqm	3.0000	Hect.	0.00	3.00
		<b>Total :</b>	<b>3.0000</b>	<b>Hect.</b>		<b>3.00</b>
	<b>At R/D</b>	<b>Minor/ Major Bridges(Forest Area</b>	<b>Area</b>			
1	163/117	80 x 16 = 1280 Sqm =	0.1280	Hect.		
2	164/149	62 x 16 = 992 Sqm =	0.0992	Hect.		
3	16/861	90 x 16 = 1440 Sqm =	0.1440	Hect.		
4	169/100	90 x 16 = 1440 Sqm =	0.1440	Hect.		
5	176/325	150 x 16 = 2400 Sqm =	0.2400	Hect.		
6	160/350	50 x 16 = 800 Sqm =	0.0800	Hect.		
7	160/425	25 x 16 = 400 Sqm =	0.0400	Hect.		
8	161/037	36 x 16 = 576 Sqm =	0.0576	Hect.		
9	161/325	25 x 16 = 400 Sqm =	0.0400	Hect.		
10	161/816	25 x 16 = 400 Sqm =	0.0400	Hect.		
11	162/795	25 x 16 = 400 Sqm =	0.0400	Hect.		
12	165/345	42 x 16 = 672 Sqm =	0.0672	Hect.		
13	165/621	25 x 16 = 400 Sqm =	0.0400	Hect.		
14	167/290	36 x 16 = 576 Sqm =	0.0576	Hect.		
15	168/263	10 x 16 = 160 Sqm =	0.0160	Hect.		
16	168/761	36 x 16 = 576 Sqm =	0.0576	Hect.		
17	168/875	30 x 16 = 480 Sqm =	0.0480	Hect.		
18	170/265	25 x 16 = 400 Sqm =	0.0400	Hect.		
19	174/600	36 x 16 = 576 Sqm =	0.0576	Hect.		
20	175/975	25 x 16 = 400 Sqm =	0.0400	Hect.		
21	177/175	30 x 16 = 480 Sqm =	0.0480	Hect.		
22	177/550	15 x 16 = 240 Sqm =	0.0240	Hect.		
23	178/350	36 x 16 = 576 Sqm =	0.0576	Hect.		
24	179/00	20 x 25 = 500 Sqm =	0.0500	Hect.		
		<b>Total :</b>	<b>1.6564</b>	<b>Hect.</b>		
		<b>Reconstruction/Construction of Existing and Additional Culverts(Forest Land)</b>				
1		593 x 12 = 7116 Sqm =	0.7116	Hect.		
		<b>Total :</b>	<b>0.7116</b>	<b>Hect.</b>		
		<b>Grand Total(Non Forest Area)</b>	<b>51.1207</b>			
		<b>Grand Total( Forest Area)</b>	<b>19.5896</b>			
		<b>G-Total ( Forest + Non-Forest Land):</b>	<b>70.7103</b>	<b>Hect.</b>		

The sections of project highway passing through Existing Road( Area not included in Area of Diversion)

S.No	Existing Chainage (KM)		LENGTH (M)	VILLAGE
	FROM	TO		

*Vijay Singhwalan*



1	180+100	180+300	200	NARLA
2	183+250	183+650	400	KUNNU
3	184+375	184+900	525	SAHAL
4	187+350	188+390	1040	PALI
5	189+550	189+910	360	DRANG
6	193+050	193+450	450	PAKHRI
7	194+250	194+900	650	MEHAR
	<b>TOTAL LENGTH (M)</b>		3625	

Vijay Singhwalan

OFFICE OF THE CALA-CUM-SUB-DIVISIONAL MAGISTRATE PADHAR  
DISTRICT MANDI, H.P.

NO.SDO(C)/PDR/NHAI/2021/- 1062

DATED:-21.08.2023

To

The Project Director (NHAI),  
PIU office 1<sup>st</sup> and 2<sup>nd</sup> floor, Diyalji Niwas,  
Opposite Govt. Primary School,  
Chimbalhar Teh. Palampur,  
Distt.Kangra (H.P) 176061.

Sub.:-

Two lanning of NH-154 from Km 180.00 to 190.00 section Pathankot to Mandi  
Package V-A regarding submission of *list of land acquired from*  
*existing NH-154 for the construction of two lane NH 154.*

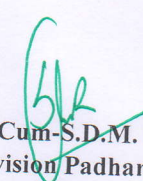
R/Sir,

Kindly find enclosed herewith the above mentioned list of land acquired from  
existing NH-154 from Muhal Saned to Maseran under this Sub-Division for the  
construction/upgradation of NH-154 after incorporating all the Khasra No. and area of land  
which are present in the two lanning alignment of NH-154.

This is submitted for your information and further necessary action please.

With Regards.

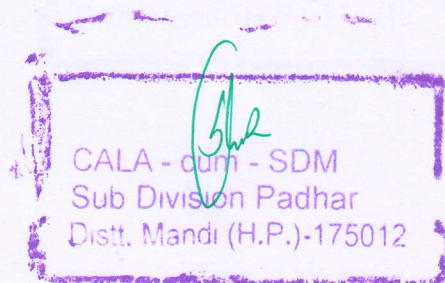
Encl:-10 No.

  
CALA-Cum-S.D.M. (NHAI),  
Sub-Division Padhar,  
Distt. Mandi H.P.



## ABSTRACT

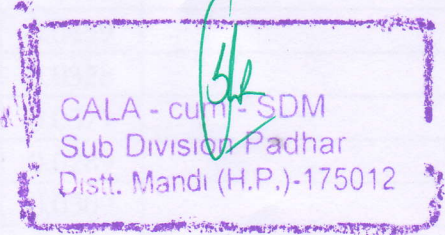
Sr.No.	Name of Muhal	Total Khasra Number	Acquired Land Area		Remarks
			In Bighas	In Hec.	
1.	Saned/533	2	3-04-14	0.2618	
2.	Narla/584	11	8-08-12	0.6822	
3.	Singh/583	7	8-02-15	0.6585	
4.	Kunnu/582	4	4-03-00	0.3357	
5.	Sahal/588	5	8-15-04	0.7088	
6.	Pipali/590	9	7-11-05	0.6119	
7.	Pali/591	6	9-09-09	0.7666	
8.	Malog/601	6	5-06-00	0.4288	
9.	Maseran/602	10	11-05-05	0.9114	
	Total	60	66-06-04	5.3657	





List of Land of Existing Road NH-154 Acquired in connection with Two Lane/Up gradation for NH-154 From Muhal Saned to Maseran under this Sub-Division.

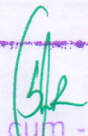
Sr.No.	Name of Muhal	Khasra Number	Acquired Land Area		Remarks
			In Bighas	In Hec.	
	Saned/533				
1.		502/2	1-01-06	0.0862	
2.		538/2	2-03-08	0.1756	
	Total		3-4-14	0.2618	





**List of Land of Existing Road NH-154 Acquired in connection with Two Lane/Up gradation for NH-154 From Muhal Saned to Maseran under this Sub-Division.**

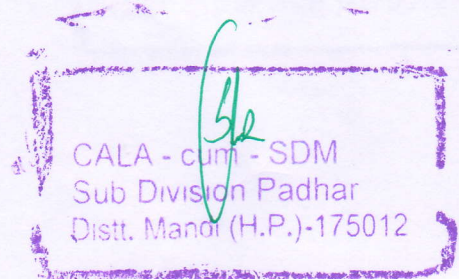
Sr.No.	Name of Muhal	Khasra Number	Acquired Land Area		Remarks
			In Bighas	In Hec.	
	<i>Narla/584</i>				
1.		5/2	0-10-12	0.0429	
2.		5/3	2-3-15	0.1770	
3.		220/2	0-15-4	0.0615	
4.		220/3	0-9-3	0.0370	
5.		455/1	1-11-5	0.1265	
6.		455/4	0-11-7	0.0459	
7.		455/6	0-8-2	0.0328	
8.		455/8	0-14-2	0.0571	
9.		455/10	0-7-3	0.0289	
10.		455/12	0-7-13	0.0309	
11.		455/14	0-10-6	0.0417	
	<i>Total</i>		8-8-12	0.6822	

  
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 Sub Division Padhar  
 Distt. Mandi (H.P.)-175012



List of Land of Existing Road NH-154 Acquired in connection with Two Lane/Up gradation for NH-154 From Muhal Saned to Maseran under this Sub-Division.

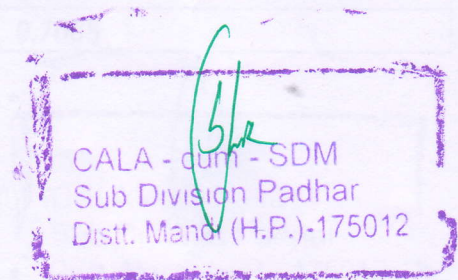
Sr.No.	Name of Muhal	Khasra Number	Acquired Land Area		Remarks
	<i>Singh/583</i>		In Bighas	In Hec.	
1.		20/2	0-12-07	0.0500	
2		20/4	0-11-06	0.0457	
3		207/2	1-09-02	0.1177	
4		207/4	1-08-08	0.1149	
5		207/6	3-04-06	0.2602	
6		305/2	0-10-10	0.0425	
7		313/2	0-06-16	0.0275	
	<i>Total</i>		<i>8-02-15</i>	<i>0.6585</i>	





List of Land of Existing Road NH-154 Acquired in connection with Two Lane/Up gradation for NH-154 From Muhal Saned to Maseran under this Sub-Division.

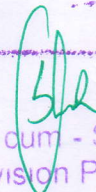
Sr.No.	Name of Muhal	Khasra Number	Acquired Land Area		Remarks
			In Bighas	In Hec.	
	Kunnu/582				
1.		171/1	0-07-10	0.0303	
2.		297/1	0-11-12	0.0469	
3.		297/3	2-01-11	0.1681	
4.		297/5	1-02-07	0.0904	
			4-03-00	0.3357	





List of Land of Existing Road NH-154 Acquired in connection with Two Lane/Up gradation for NH-154 From Muhal Saned to Maseran under this Sub-Division.

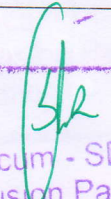
Sr.No.	Name of Muhal	Khasra Number	Acquired Land Area		Remarks
			In Bighas	In Hec.	
	<i>Sahal/588</i>				
1.		113/1	5-14-06	0.4625	
2.		234/1	0-4-13	0.0188	
3.		417/1	1-4-11	0.0993	
4.		409/1	0-0-10	0.0020	
5.		378/1	1-11-04	0.1262	
	<i>Total</i>		<i>8-15-4</i>	<i>0.7088</i>	

  
 CALA - cum - SDM  
 Sub Division Padhar  
 Distt. Mandi (H.P.)-175012



List of Land of Existing Road NH-154 Acquired in connection with Two Lane/Up gradation for NH-154 From Muhal Saned to Maseran under this Sub-Division.

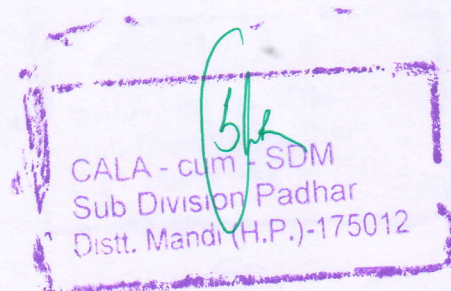
Sr.No.	Name of Muhal	Khasra Number	Acquired Land Area		Remarks
			In Bighas	In Hec.	
	<i>Pipali/590</i>				
1.		37/2	2-5-19	0.1859	
2.		241/2	0.11-0	0.0445	
3.		241/3	0-3-18	0.0157	
4.		443/1	0-15-10	0.0627	
5.		572/2	0-17-5	0.0698	
6.		572/4	0-7-17	0.0318	
7.		572/6	0-13-10	0.546	
8.		678/2	1-3-10	0.0951	
9.		679	0-12-16	0.0518	
	<i>Total</i>		<i>7-11-5</i>	<i>0.6119</i>	

  
 CALA - cum - SDM  
 Sub Division Padhar  
 Distt. Mandi (H.P.)-175012



List of Land of Existing Road NH-154 Acquired in connection with Two Lane/Up gradation for NH-154 From Muhal Saned to Maseran under this Sub-Division.

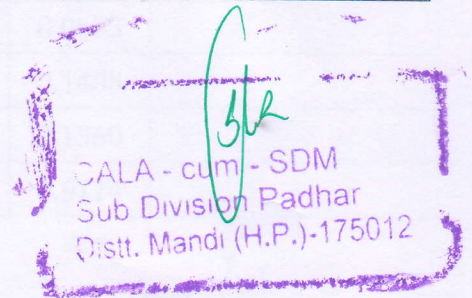
Sr.No.	Name of Muhal	Khasra Number	Acquired Land Area		Remarks
			In Bighas	In Hec.	
	<i>Pali/591</i>				
1.		108/2	0-9-17	0.0399	
2.		107/3	5-8-09	0.4388	
3.		237/1	0-6-13	0.0269	
4.		396/3	2-0-08	0.1635	
5.		483/1	0-0-03	0.0006	
6.		483/3	1-3-19	0.0969	
	<i>Total</i>		<i>9-9-9</i>	<i>0.7666</i>	





**List of Land of Existing Road NH-154 Acquired in connection with Two Lane/Up gradation for NH-154 From Muhal Saned to Maseran under this Sub-Division.**

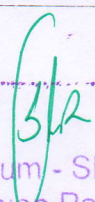
Sr.No.	Name of Muhal	Khasra Number	Acquired Land Area		Remarks
			In Bighas	In Hec.	
	<i>Malog/601</i>				
1.		68/1	0-01-00	0.0040	
2.		68/3	0-15-00	0.0607	
3.		70/1	0-01-00	0.0040	
4.		254/1/2	0-06-11	0.0265	
5.		254/1/4	0-07-06	0.0295	
6.		254/1/6	3-15-03	0.3041	
	<i>Total</i>		<b>5-06-00</b>	<b>0.4288</b>	





**List of Land of Existing Road NH-154 Acquired in connection with Two Lane/Up gradation for NH-154 From Muhal Saned to Maseran under this Sub-Division.**

Sr.No.	Name of Muhal	Khasra Number	Acquired Land Area		Remarks
			In Bighas	In Hec.	
	Maseran/602				
1.		550/2	0-09-12	0.0388	
2.		550/4	0-10-17	0.0439	
3.		550/6	01-04-02	0.0975	
4.		550/8	2-17-06	0.2319	
5.		782/1	0-07-16	0.0315	
6.		782/3	0-14-00	0.0567	
7.		774/2	0-17-01	0.0690	
8.		735/2	0-16-03	0.0653	
9.		735/4	1-14-16	0.1408	
10.		735/6	1-13-12	0.1360	
	<b>Total</b>		<b>11-5-5</b>	<b>0.9114</b>	

  
 CALA - cum - SDM  
 Sub Division Padhar  
 Distt. Mandi (H.P.)-175012



**DIVERSION OF 19.5896 HA. FOREST LAND FOR REHABILITATION AND UPGRADATION TO TWO LANE WITH PAVED SHOULDER CONFIGURATION & STRENGTHENING OF PADHAR TO BIJNI (PACKAGE-VA) FROM KM 180.00 TO KM 202.815 (DESIGN LENGTH 19.050 KM) OF NH-20 (NEW NH-154) OF PATHANKOT(NEW NH-154) OF PATHANKOT-MANDI SECTION IN THE STATE OF HIMACHAL PRADESH.**

**RECLAMATION PLAN FOR MUCK DUMPING**

**Name Of Work:- DIVERSION OF 19.5896 HA. FOREST LAND FOR REHABILITATION AND UPGRADATION TO TWO LANE WITH PAVED SHOULDER CONFIGURATION & STRENGTHENING**

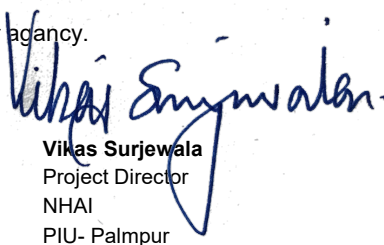
After leveling, dumping site will be rehabilitated by planting OBL plants. The reclamation plan for the dumping sites is

prepared as under :-

Year	Area in Hect.		Rate/ Hect.	Total Amount
0th year (Plantation Fencing)	4.2002	Hect.	60150.00	252642.00
1st year Maint.	4.2002	Hect.	6350.00	26671.00
2nd year Maint.	4.2002	Hect.	4300.00	18061.00
3rd year Maint.	4.2002	Hect.	2250.00	9450.00
4th year Maint.	4.2002	Hect.	2250.00	9450.00
5th year Maint.	4.2002	Hect.	2250.00	9450.00
6th year Maint.	4.2002	Hect.	2250.00	9450.00
7th year Maint.	4.2002	Hect.	2250.00	9450.00
8th year Maint.	4.2002	Hect.	2250.00	9450.00
9th year Maint.	4.2002	Hect.	2250.00	9450.00
10th year Maint.	4.2002	Hect.	2250.00	9450.00
	<b>Total C.A. Scheme</b>			<b>372974.00</b>
	Departmental charges @17.5%			65270.00
	Contingency Charges @5%			18649.00
	<b>Total</b>			<b>456893.00</b>
	GST for the cost of F/Post 1491 @18%			13609.00
	NSY cost for plants 91 @23/-			106260.00
	<b>Grand Total :-</b>			<b>576762.00</b>

**Muck Dumping Certificate :-**

It is also certified that the said area will be developed by user agency.

  
**Vikas Surjewala**  
Project Director  
NHAI  
PIU- Palampur