

No. Ft. 48-5451/2021(FCA),
Forest Department, Himachal Pradesh

From: Pr. Chief Conservator of Forests (HoFF),
Himachal Pradesh Shimla-1.
To: The Regional Officer,
Integrated Regional Office GoI, MoEF&CC,
CGO Complex, Shivalik Khand, Longwood,
Shimla, Himachal Pradesh.

Dated Shimla-1, the **15 JUL 2022**.

Subject: Diversion of 50.091 ha. of forest land in favour of ITBP and applicant as Executive Engineer, ICBRPD-III, CPWD, Khasara No.781/547, Kalpa Road in front of HPPWD Rest House, Recong-Peo under (FCA-1980) for the construction of Dubling Rishi Dogri-Lamche-Dogri road within the jurisdiction of Kinnaur Forest Division, Distt. Kinnaur, Himachal Pradesh. (Online Proposal No. FP/HP/Road/145666/2021).

Sir,

Kindly refer to your office letter No.FC/HPC/06/54/2022/ dated 10.06.2022 on the subject cited above.

2. In this connection, the observations as raised vide letter under reference is submitted as under:-

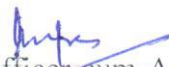
1. In this regard the user agency has submitted a copy of letter dated 9.6.2022 of DC concerned with regards to exemption to linear projects of strategic importance and the same has also been uploaded in online part-I.
2. DFO Kinnaur has intimated that the road is of strategic importance and proposed for connecting border out post of ITBP and Army. So this alignment is inescapable and also approved by Directorate General ITBP MHA Govt of India, copy of which is also enclosed herewith.
3. Muck management plan duly authenticated by DFO concerned has now been uploaded in online part-I.
4. All the components have now been marked in the KML file. Layout plan and Geo-referenced map duly authenticated by DFO concerned are enclosed herewith and the same have been uploaded online part-I.
5. Necessary corrections have now been made in online part-II as well in hard copy of part-II with regards to the legal status of the forest land proposed for diversion.
6. Administrative approval issued by competent authority is enclosed herewith.
7. DFO concerned has intimated that the user agency has submitted the Geological report attached at P.No.43A-C of the proposal folder of the area vetted by IIT Roorkee and mechanism for the construction to be followed for reducing soil erosion to the fullest and CPWD has ensured to construct ample number of protection structures, like gabion walls, retaining walls and breast walls to stop rolling down of soil/boulders, Undertaking given by the user agency to this effect is enclosed herewith.

PTO

8. In this regard DFO concerned has submitted that quantity of muck to be generated is very large which will require the large number of dumping sites. It has also been intimated by DFO concerned that no other suitable non forest land/private land for the purpose. Certificate of non availability of non forest land issued by DC Kinnaur has already been placed at P.No.77 of the proposal folder.
9. Necessary correction with regard to eco class has been made in online part-II and bill of NPV has also been revised accordingly.
10. DFO Kinnaur has submitted that the status of land proposed for CA is waste land(Unclassified Forest) as per record available in his office.
11. DFO Kinnaur has submitted that the area proposed for CA is suitable for plantation. A comprehensive CA scheme has been prepared to ensure survival of plantation in such high altitude conditions.
12. In this regard DFO Kinnaur has submitted that the possibility of reducing the number of trees was explored and after rationalizing it is submitted that 122 numbers of trees are coming in the proposed alignment and requires felling as per the approved alignment. An undertaking to ensure least number of trees will be felled during the execution of the project is enclosed herewith.
13. DFO Kinnaur has submitted that the project being linear in nature there is negligible impact on the species. However any impact on the species shall be mitigated through the Wildlife management plan. As per MoEF & CC letter vide file No.FC/11/43/2021-FC dated 7.6.2022 a lump sum quantum of 2% of the project cost shall be realized from the user agency towards the implementation of the plan.
14. DFO Kinnaur has submitted that the user agency in the general summary of the cost has made provision for protection works and to avoid erosion in the area. Additionally, details regarding the mitigation measures to be adopted to arrest the accelerated soil erosion/landslide during/after execution of the project shall be submitted alongwith the Soil & Moisture Conservation plan after realizing the lump sum quantum as mentioned in MoEF & CC letter No.FC/11/43/2021-FC dated 7.6.2022.
15. Necessary corrections have been made in district profile in online part-II by DFO concerned.
16. List of unique flora and Fauna species prevailing in the area has been updated after review against para 8(v) in part-II.

Yours faithfully,

Encls: As above.


Nodal Officer cum-APCCF (FCA)
O/o Pr. CCF (HoFF), H.P.

R-1

No. KNR-8(SK) FRA-Cor.(Voll-II)/2022- 935
Office of the Deputy Commissioner
Kinnaur at Reckong Peo.

To

The Executive Engineer,
Indo China Border Road Division-III
CPWD, Reckong Peo, Kinnaur.
Himachal Pradesh-172107

Date: - 172107 Reckong Peo

9th June, 2022.

Subject: - Issue of Forest Right Act clearances certificate for forest land reg.

Sir,

Kindly refer to the letter no.:F.No.11-9/98-FC9pt.) from the ministry of Environment and Forest (FC Division), Government of India dated:- 5th Febuary, 2013 wherein their stated that proposals seeking prior approval of Central Government under Forest (conservation) Act, 1980 for projects like construction of roads, canals, laying of pipe lines/optical fibers and transmission lines etc. where linear diversion of use of forest land in several villages are involved, unless recognised rights of PTG/PAC are being affected, are exempted from the requirement of obtaining consent of concerned Gram Sabha(s), as stipulated in clause(c) read with clause (b), (e) and (f) in second Para of this Ministry's said letter dated:- 3.8.2009. Further the Ministry has accorded general approval under section 2 (ii) of the Forest conservation act 1980 to the State Government vide letter No.F.No. 11-246/2014-FC dated 04.04.2014, 09.01.2015, 21.12.2017 & 19-04-2018 for creation of border security related infrastructure and roads to be implemented by border road organisation(BRO), Indo Tibetan Border Police Force (ITBP), Border security Force (BSF), Sashastar Seema Bal (SSB) and other road construction agencies vested with job by Ministry of defence and Home in their respective jurisdiction in area falling within 100 km of LAC, 15 km of Indo-Nepal border, 10km of Indo-Myanmar border and 5 km from all other international borders of India. However the proposal of diversion of forest land for the construction of Indo China Border roads Namgia-Dogri-Lukma via (MM ridge, Lukma-II), Dubling-RishiDogri-LamcheDogri, Dumti-Nithal Thach in which FRA certificate is sought for FCA clearance are discussed in District Level Forest Right Committee held on dated 26-05-2022 under the chairmanship of Deputy commissioner Kinnaur. All the members of DLC unanimously decided to comply with the above exemption to linear projects of strategic importance and recommended the same for further necessary action.

Therefore, accordingly for the below mentioned projects where you have sought the Forest Rights Act (FRA) Certificate, the Ministry's letter of exemption may kindly be referred:-

Sr.No.	Name of Road	Lenght (in km)	Area (In Hect.)
1	Namgia - Dogri - Lukma via (MM Ridge, Lukma-II), ITBP (Defence Road)	31.43	85-39-03
2	Dubling-RishiDogri-LamcheDogri road, ITBP (Defence road)	25	50-09-10
3	Dumti - Nithal Thach, ITBP (Defence Road)	8.24	14-44-20

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कार्यपालक अभियन्ता
भा.वी.सी.स.परि. मंडल-III, के.लो.नि.वि.
किनांग विओ, किन्नौर, हिमाचल प्रदेश-172107

Yours faithfully,

Abid Hussain Sadiq (IAS)
Deputy Commissioner-Cum-
Chairman DLC Kinnaur.

DIRECTORATE GENERAL, ITB POLICE
MHA, GOVT OF INDIA

Confidential

Sub : Regarding consultancy services for preparation of DPR and detailed design of roads and bridges etc for construction of High Altitude Hill roads to Indo- China Border under phase - II in the state of Himachal Pradesh using satellite imagery.

CPWD may kindly refer ITBP UO No VIII-11015/03/ Ph-II Roads/2017/Ops- 2417-18 dated - 01.05.2017 and their letter No W-12011/261/EE (III)/BFZ/2016-17/942-E dated 06.07.17, regarding on the subject cited above.

2. In this regard, it is intimated that alignment of 01 road i.e. Dubling - Rishi Dogri- Gangtam Balam had forwarded by CPWD in which CPWD has suggested change in location of start point of said road near Pooh (Army Camp) which is approx 6.30 km behind from Dubling on NH - 5 instead of Dubling.

3. ITBP is in agreement with the alignment suggested by CPWD, hence, the alignment of Dubling (near Army Camp, Pooh on NH-5) - Rishi Dogri - Gangtam Balam road, 86.20 Km in HP is approved and the copy of same is being forwarded to your office for further necessary action at your end please.

Encl : a.a. (04 pages)

(Ajay Pal Singh)
Dy Inspector General (Ops)

SE (P&A), CPWD, O/o CE, BFZ, East Block-1, Level-IV, R. K. Puram, New Delhi.

ITBP UO No.VIII-11015/03/ Ph-II Roads/2017 (Vol.II)/Ops - 4232-33 Date: 28/08/17

Copy to :

Sh Man Singh, Director (BM-IV), MHA, NDCC-II Building, New Delhi - For info please.

(Ajay Pal Singh)
Dy Inspector General (Ops)

CHECK LIST SERIAL NO. 6

Muck Disposal Plan for Dubling – Rishi Dogri – Lamche Dogri Road
(25.00 km)

Brief Summary of Project:

Recognizing the need for the development of border road connectivity in Northern Region of the country, Ministry of Home Affairs, Department of Border Management, Govt. of India has entrusted The Central Public Works Department (CPWD) for the construction of high altitude hill roads to Indo – China Border under phase – II in the states of Uttarakhand, Himachal Pradesh & Jammu & Kashmir (now UT of Ladakh). This work is of National importance having strategic in nature from Border Security aspect.

The Road Dubling – Rishi Dogri – Lamche Dogri is a vital link road which is being constructed for ITBP to reach and to protect Indian Territory up to Line of Actual Control. Hence, this will be a very important road to transport ammunitions and Military personals up to border of India. Therefore diversion of required forest land will be essential for constructing the road. In addition to above forest patrolling will also be easy on this road. The Road Dubling – Rishi Dogri – Lamche Dogri passed through hilly mountainous terrain area of the Kinnaur Forest Division in the State of Himachal Pradesh. This is cold desert type area the weather is cold and harsh. Oxygen level is low. The road passes between altitudes of 14000 – 19000 ft. from **Above Mean Sea Level (AMSL)**. The proposal for construction of Road Dubling – Rishi Dogri – Lamche Dogri from Km- 0+000 to Km- 25+000 has been prepared as per Forest Conservation Act, 1980 for obtaining forest clearance from Govt. of India.

Necessity of Project:

The road proposed along the approved alignment is required by ITBP in order to establish connectivity between its Border Outposts at Dubling – Rishi Dogri – Lamche Dogri. The military preparedness and security benefits are particularly critical in this region given the long – standing border and territorial issues with India's Eastern neighbor, China which makes road connectivity of paramount importance so as to ensure easy mobilization of troops, artillery etc. as and when required.

Muck Disposal Plan

Approximately 354674 cum of muck are to be disposed off. Out of this 19836 cum muck will be utilized for side filling and raising the level of the road in fill sections and Hard rock quantity (Rebate are consider in Estimation) is 205090 cum. Hence the quantity of unusable muck which is to be disposed off = 334838. For the disposal, 4.9715 Ha of land is being requisitioned in addition to the land required for construction of road. Locations of this muck disposal sites totaling for 49715 sqm is marked on Georeference Map and Toposheet.

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आदर्श कुमार मिश्रा
 कार्य
 प्र.जी.सी.व.परि.
 विभाग विद्ये, विन्या, विनयत प्रदर-112107

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Geo Reference of Muck Disposal Area with location

S.No	Area Sqm	Longitude (E)			Latitude (N)		
		Deg	Min	Sec	Deg	Min	Sec
1	2000	78	34	1.56	31	44	43.51
2	2000	78	34	14.01	31	44	31.72
3	2000	78	34	32.64	31	44	23.39
4	2000	78	34	9.40	31	44	29.33
5	2000	78	34	31.82	31	44	20.13
6	1715	78	34	53.71	31	43	52.74
7	2000	78	34	47.82	31	44	12.41
8	2000	78	34	43.75	31	44	32.33
9	2000	78	34	52.91	31	44	12.80
10	2000	78	35	1.58	31	43	52.62
11	2000	78	34	58.67	31	43	34.92
12	2000	78	34	56.77	31	44	6.51
13	2000	78	35	1.69	31	44	25.33
14	2000	78	35	2.18	31	44	7.21
15	2000	78	35	7.43	31	43	39.23
16	2000	78	35	20.89	31	43	12.63
17	2000	78	35	12.88	31	43	42.92
18	2000	78	35	11.50	31	44	10.85
19	2000	78	35	20.99	31	44	2.91
20	2000	78	35	20.05	31	43	32.47
21	2000	78	35	38.88	31	43	7.39
22	2000	78	35	47.36	31	42	39.88
23	2000	78	36	9.82	31	42	24.40
24	2000	78	35	48.21	31	42	49.06
25	2000	78	35	43.30	31	43	17.61

Date: - 05/08/2021

Place: - Reckong Peo

Date: - 01/12/2021

Place: - Reckong Peo

Adarsh Kumar Mishra

Executive Engineer

ICBRPD-III, Reckong Peo

आदर्श कुमार मिश्रा

कार्यपालक अभियन्ता

वा.पी.सी.स.परि.मंडल-झुंके.तो.नि.वि.
रिजॉंग विज़ो, किन्नोर, हिमाचल प्रदेश-172107

(Reginald Royston A) IFS

Counter Signed

Deputy Conservator of Forests,

Kinnaur Forest Division

Deputy Conservator of Forest
Kinnaur Forest Division
at Reckong Peo, H.P.

Full Title of Project: Construction of high link road between Dubling – Rishi dogri – Lamche dogri Road Indo-China Border roads under Phase 2 in the state of Himachal Pradesh.

RECLAMATION PLAN FOR MUCK DUMPING

Approximately 354674 cum of muck are to be disposed off. Out of this 19836 cum muck will be utilized for side filling and raising the level of the road in fill sections and Hard rock quantity (Rebate are consider in Estimation) is 205090 cum. Hence the quantity of unusable muck which is to be disposed off = 334838. For the disposal, 4.9715 Ha of land is being requisitioned in addition to the land required for construction of road. After leveling, dumping sites will be rehabilitated by planting OBL plants. The reclamation plan for the dumping sites is prepared as under.

Area	Area in Hect.	Rate/ Ha.	Total Amount
0th Year (Plantation + Fencing)	4.9715	60150.00	299036
1th Maint.	4.9715	6350.00	31569
2nd Maint	4.9715	4300.00	21377
3rd Maint.	4.9715	2250.00	11186
4th Maint.	4.9715	2250.00	11186
5th Maint.	4.9715	2250.00	11186
6th Maint.	4.9715	2250.00	11186
7th Maint.	4.9715	2250.00	11186
8th Maint.	4.9715	2250.00	11186
9th Maint.	4.9715	2250.00	11186
10th Maint.	4.9715	2250.00	11186
TOTAL C.A SCHEME			441470
DEPARTMENTAL CHARGES @17.5%			77257
CONTINGENCY CHARGES @ 5%			22073
GST FOR THE COST OF F/POST 13800@ 18%			79464
NSY COST FOR PLANTS 838@ 23/-			19274
GRAND TOTAL			639538

Muck Dumping Certificate:-

It is certified that there is no trees/ shrub growth on the proposed land for dumping site. It is also certified that the said area will be developed by user agency.

95

Deputy Conservator of Forests,
Kinnaur Forest Division
Office Seal
Deputy Conservator of Forests,
Kinnaur Forest Division at R/Peo HP.

(Adarsh Kumar Mishra)
Executive Engineer (CPWD)

21/10/21
आ.पी.सी.ए.परि. मंडल-III, के.लो.नि.वि.
किन्नौर विभाग, किन्नौर, हिमाचल प्रदेश-172107

NAME OF THE ROAD :- DUBLING-RISHI DOGRI-GANGTANG BRALAM (Length-25 Km)									
	Description	Unit	%	Qty.					
	Total Cutting in Road	Cum		559743					
	Reuse of material	Cum		205090					
	Reuse of stone (hard rock) material for making breast wall and retaining wall	Cum		75621.28					
	Total	Cum		279031.7					
	Add for Swelling factor 20 %	Cum		55806.34					
	Total Dumping material in Cum	Cum		334838.1					
				Say 3,34,838.00 cum					
	Muck Dumping Site = 25 nos.								
SR. NO.	DESCRIPTION	UNIT	No. of Structure	Length	Breadth	Height	QTY.	RATE (IN RS)	AMOUNT (in RS.)
1	Cost of Surveying and Investigation	Lump sum		1			1	25000	25000.00
2	Earthwork in excavation of foundation	Cum	25	100	2.60	0.5	3250	226	734500.00
3	Providing Stone Filled Gabion Wire Crates for protection works	Cum	25	100	Area =	9.33	23325	1955	45600375.00
3A	Plantation of Plants	per plant	25				5000	30	150000.00
4	Digging of pit for plantation	Nos	25				5000	40	200000.00
5	Cost of Barbed Wire Fencing for protection of Plants @Rs/ 25-per plant	Nos	25				5000	25	125000.00
6	Salary for Gardener for 5 years @ Rs. 3500 -per month	Months					60	3500	210000.00
7	Beldars for protection of Plantation for 2.5 years @ Rs.100/-per day	Year					2.5	36500	91250.00
8	Reclamation and Restoration	Lump sum					1	75000	75000.00
9	Landscaping and Beautification.	Lump sum					1	75000	75000.00
Total Amount									47286125.00

Note:-

- 1) Biological measures cost for stablization of muck dumping at site
2) Cost of engineering measures

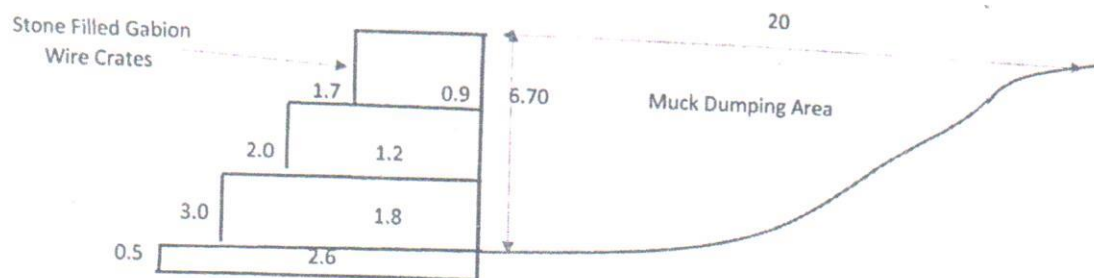
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कार्यपालक अभियन्ता
भा.पी.सी.स.परि.मंडल-III, के.तो.नि.वि.
सिवांग पिओ, किन्नौर, हिमाचल प्रदेश-172107

(Reginald Royston A) IFS
Deputy Conservator of Forests,
Kinnaur Forest Division at R/Peo HP.

Area of Muck disposal (Sketch not to Scale)

	Length	Width	Height
Meter	100	20	6.70



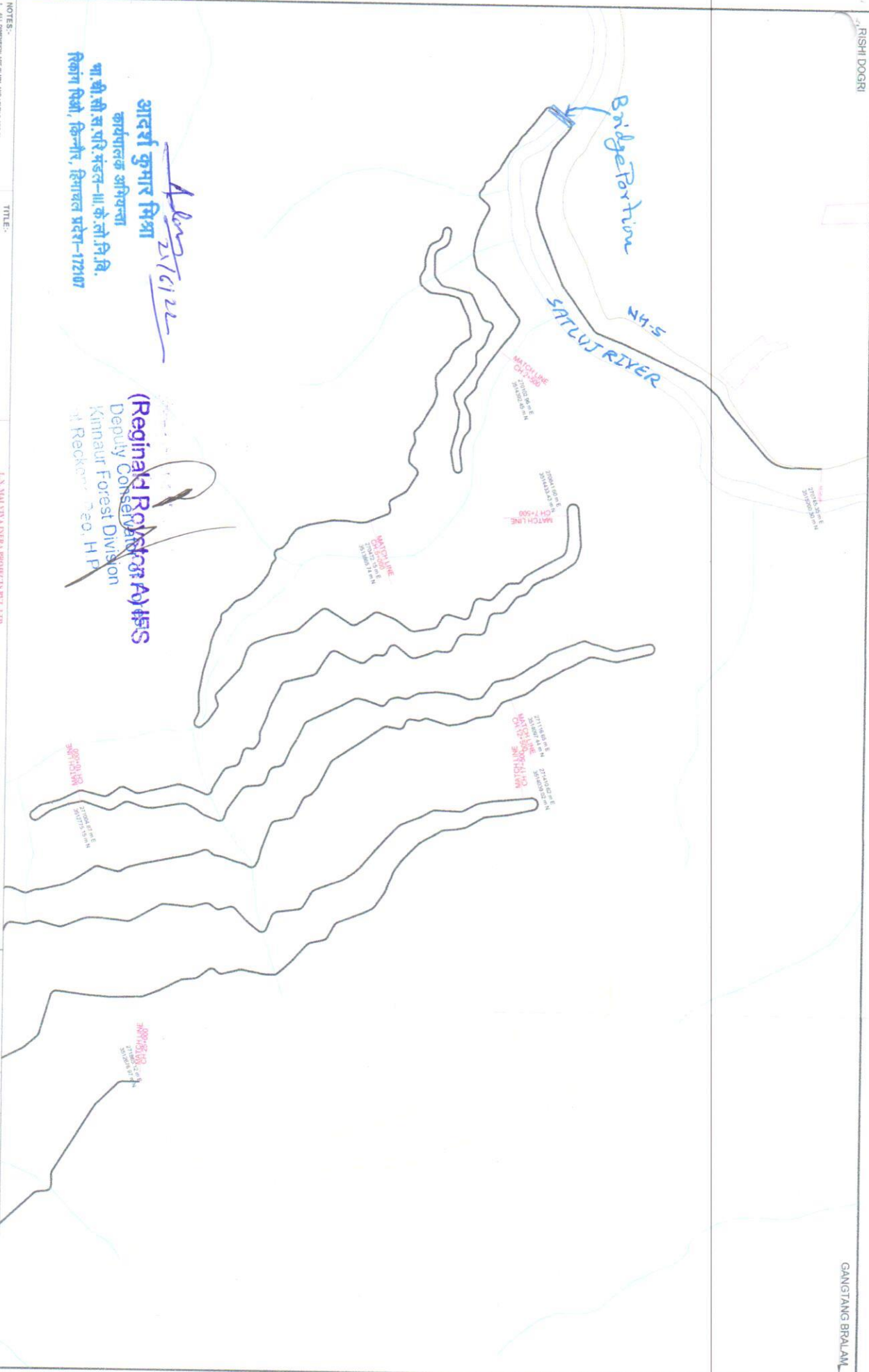
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आदर्श कुमार मिश्रा
कार्यपालक अभियन्ता
भा.बी.सी.स.परि.मंडल-III, के.लो.नि.वि.
रिकांग पिन्गो, किन्नौर, हिमाचल प्रदेश-172187

राजि रामकुमार
कार्यपालक अभियन्ता
भा.बी.सी.स.परि.मंडल-III, के.लो.नि.वि.
रिकांग पिन्गो, किन्नौर, हिमाचल प्रदेश-172187

(Reginald Royston A) IFS
Deputy Conservator of Forests,
Kinnaur Forest Division at R/Peo HP,

R-4



आदर्श कुमार मिश्रा
कार्यपालक अभियन्ता
भा.श्री.सी.स.पी.स.मंडल-III, के.तो.नि.वि.
खिखंग मिश्रो, किन्नीर, हिमाचल प्रदेश-172007

~~(Reginald Polston A) HES~~
Deputy Conservator
Kinnaird Forest Division
at Reckon, Geo. H.P.

NOTES:-

1. ALL DIMENSIONS ARE IN MM AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.

TITLE:

ALIGNMENT

Dubling Rishi Dogri - Lamche Dogri

Head Office - T-10 3rd Floor city center zone 1,

M P Nagar Bhopal 462011
 Ph. 0755 - 4236317
 Fax - 0755 - 4236147

PH. 0755 - 4236317
Fax - 0765 - 4736314

E-mail: irina.vysotskaya@rediffmail.com

Website: www.lninfra.com

Corporate Office :- Plot No 31, 2nd Floor, Behind HDFC Bank

Plot No 31, 2nd Flr
Dwarka Sector 12A
New Delhi-110078

E-mail: - delhilmi@gmail.com

NAME _____
WORK _____

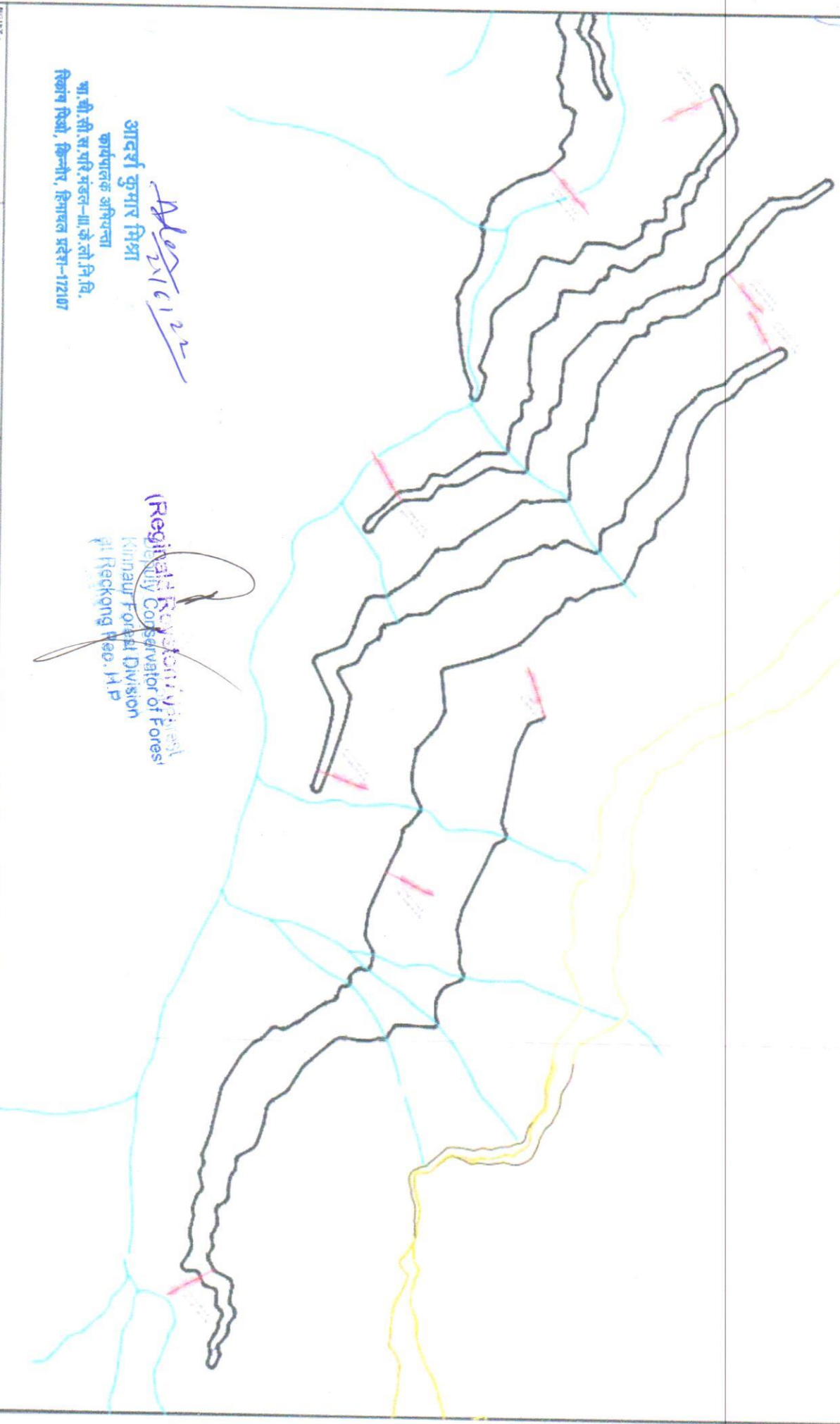
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CONSULTANCY SERVICES FOR PREPARATION FOR DESIGN AND DETAILED DESIGN OF ROADS AND BRIDGES ETC. FOR CONSTRUCTION OF HIGH ALTTITUDE HILL ROADS TO INDO-CHINA BORDER UNDER PHASE-II IN THE STATE OF HIMACHAL PRADESH USING SATELLITE IMAGERY

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Spec 17 no. 01



20/10/22
आदर्श कुमार मिश्रा
 कार्यपालक अभियन्ता
 श्री. सी. सी. मरि. मंडल-III, के. जे. नि. वि.
 विहार विद्या, किन्नी, हिमाचल प्रदेश-172107

(Reginald Conservation Forest)
 Regional Conservator of Forest
 Kinnaur Forest Division
 at Reckong Neo. H.P.

TITLE -		FILE -	
ALIGNMENT		Dudling Rishi Dogra - Lanchhe Dogra Road	
<p>Project No. 10/2019-2020 (P.O. No. 10/2019-2020)</p> <p>Project Name: Dudling Rishi Dogra - Lanchhe Dogra Road</p> <p>Project Location: Kinnaur Forest Division, Reckong Neo. H.P.</p> <p>Project Status: Approved</p> <p>Project Date: 10/2019-2020</p> <p>Project Officer: Mr. A. K. Singh</p> <p>Project Engineer: Mr. A. K. Singh</p> <p>Project Assistant: Mr. A. K. Singh</p> <p>Project Supervisor: Mr. A. K. Singh</p> <p>Project Inspector: Mr. A. K. Singh</p> <p>Project Clerk: Mr. A. K. Singh</p> <p>Project Driver: Mr. A. K. Singh</p> <p>Project Porter: Mr. A. K. Singh</p> <p>Project Cook: Mr. A. K. Singh</p> <p>Project Watchman: Mr. A. K. Singh</p> <p>Project Peon: Mr. A. K. Singh</p> <p>Project Sweeper: Mr. A. K. Singh</p> <p>Project Gardener: Mr. A. K. Singh</p> <p>Project Carpenter: Mr. A. K. Singh</p> <p>Project Blacksmith: Mr. A. K. Singh</p> <p>Project Cobbler: Mr. A. K. Singh</p> <p>Project Tailor: Mr. A. K. Singh</p> <p>Project Barber: Mr. A. K. Singh</p> <p>Project Doctor: Mr. A. K. Singh</p> <p>Project Teacher: Mr. A. K. Singh</p> <p>Project Student: Mr. A. K. Singh</p> <p>Project Staff: Mr. A. K. Singh</p> <p>Project Other: Mr. A. K. Singh</p>		<p>Project No. 10/2019-2020 (P.O. No. 10/2019-2020)</p> <p>Project Name: Dudling Rishi Dogra - Lanchhe Dogra Road</p> <p>Project Location: Kinnaur Forest Division, Reckong Neo. H.P.</p> <p>Project Status: Approved</p> <p>Project Date: 10/2019-2020</p> <p>Project Officer: Mr. A. K. Singh</p> <p>Project Engineer: Mr. A. K. Singh</p> <p>Project Assistant: Mr. A. K. Singh</p> <p>Project Supervisor: Mr. A. K. Singh</p> <p>Project Inspector: Mr. A. K. Singh</p> <p>Project Clerk: Mr. A. K. Singh</p> <p>Project Driver: Mr. A. K. Singh</p> <p>Project Porter: Mr. A. K. Singh</p> <p>Project Cook: Mr. A. K. Singh</p> <p>Project Watchman: Mr. A. K. Singh</p> <p>Project Peon: Mr. A. K. Singh</p> <p>Project Sweeper: Mr. A. K. Singh</p> <p>Project Gardener: Mr. A. K. Singh</p> <p>Project Carpenter: Mr. A. K. Singh</p> <p>Project Blacksmith: Mr. A. K. Singh</p> <p>Project Cobbler: Mr. A. K. Singh</p> <p>Project Tailor: Mr. A. K. Singh</p> <p>Project Barber: Mr. A. K. Singh</p> <p>Project Doctor: Mr. A. K. Singh</p> <p>Project Teacher: Mr. A. K. Singh</p> <p>Project Student: Mr. A. K. Singh</p> <p>Project Staff: Mr. A. K. Singh</p> <p>Project Other: Mr. A. K. Singh</p>	

N31°46'30"

Legend

 forest

forest

Proposed Bridge Portion

Image © 2022 CNES / Airbus

Imraye © 2022 Maxar Technologies

कार्यवाहक अभियन्ता

भा.वी.सी.स.परि.भंडल-III, के.वो.नि.वि.

रिकांग पिर्था, किन्नौर, हिमाचल प्रदेश-172107

Inaur Forest Division

Reckong Pao H.P



GOVERNMENT OF INDIA
DIRECTORATE GENERAL
C.P.W.D., 433-B, A-WING,
NIRMAN BHAWAN,
NEW DELHI
(BFR CELL)

No: ADG(B)/22/VIII/2020/66878

Dated: 21/12/2020

MEMORANDUM

S. No.	Reference	COST APPROVED BY CCS	AGENCY
16/32	No.: 17014/159/2009-BM-I dated 07.10.2020	Rs.455.03 Crore	CPWD

Subject: AA&ES for construction of 32 ICBR-II Roads assigned to BRO, CPWD, NHDCL and ITBP of operational significance along Indo-China Border Reg. -

Name of Road: Dubling - Rishi Dogri - Lamche Dogri

Length - 25.00 Kms.

Cost: Rs. 455.03 Crore

Probable Time of completion = 05 Years.

The Administrative Approval and Expenditure Sanction of the competent authority is hereby conveyed in respect of the above estimate amounting to **Rs. 455.03 Crore (Rupees Four Hundred Fifty Five Crore and Three Lakh only)** for the work to be executed as per the description above. The expenditure should not exceed the sanctioned amount. Following may also be kept in consideration for the execution of the work:

1. The project will be completed as per the timeline approved by the CCS as mentioned above. The expenditure for the respective years shall be limited to the budgetary allotment as finally made. The monthly physical and financial progress report shall be sent by the agency to the Ministry of Home Affairs.
2. The concern agency will take up the construction of roads in EPC mode as far as possible and award of construction contracts only after 90% land acquisition and other statutory clearances are in place.
3. The agency is advised to comply with provisions of GFR - 2017, CPWD Manual, MoF's orders, MHA's and CVC's guidelines.
4. Final cost of each ICBR-II Road inclusive of all the expenses like agency charges etc. may not exceed the cost ceiling approved by the CCS as mentioned above.
5. The flow of funds should be through PFMS and EAT modules.
6. The Expenditure would be charged to the Head of Accounts during the current financial year 2020-21 and subsequent years as mentioned below: -

Approved
कार्यपालक अभियन्ता
भा.सी.सी.स.परि. मंडल-III, के.लो.
रिकांग पिओ, किन्नोर, हिमाचल प्रदेश
4992107

Name of Work: Diversion of 50.091 ha. Of Forest land in favour of ITBP for the construction of Dubling -Rishi Dogri Road within the jurisdiction of Kinnaur Forest Division, Distt. Kinnaur, Himachal Pradesh. (Online Proposal No. FP/HP/ Road/145666/2021).

UNDERTAKING FOR MUCK MANAGEMENT

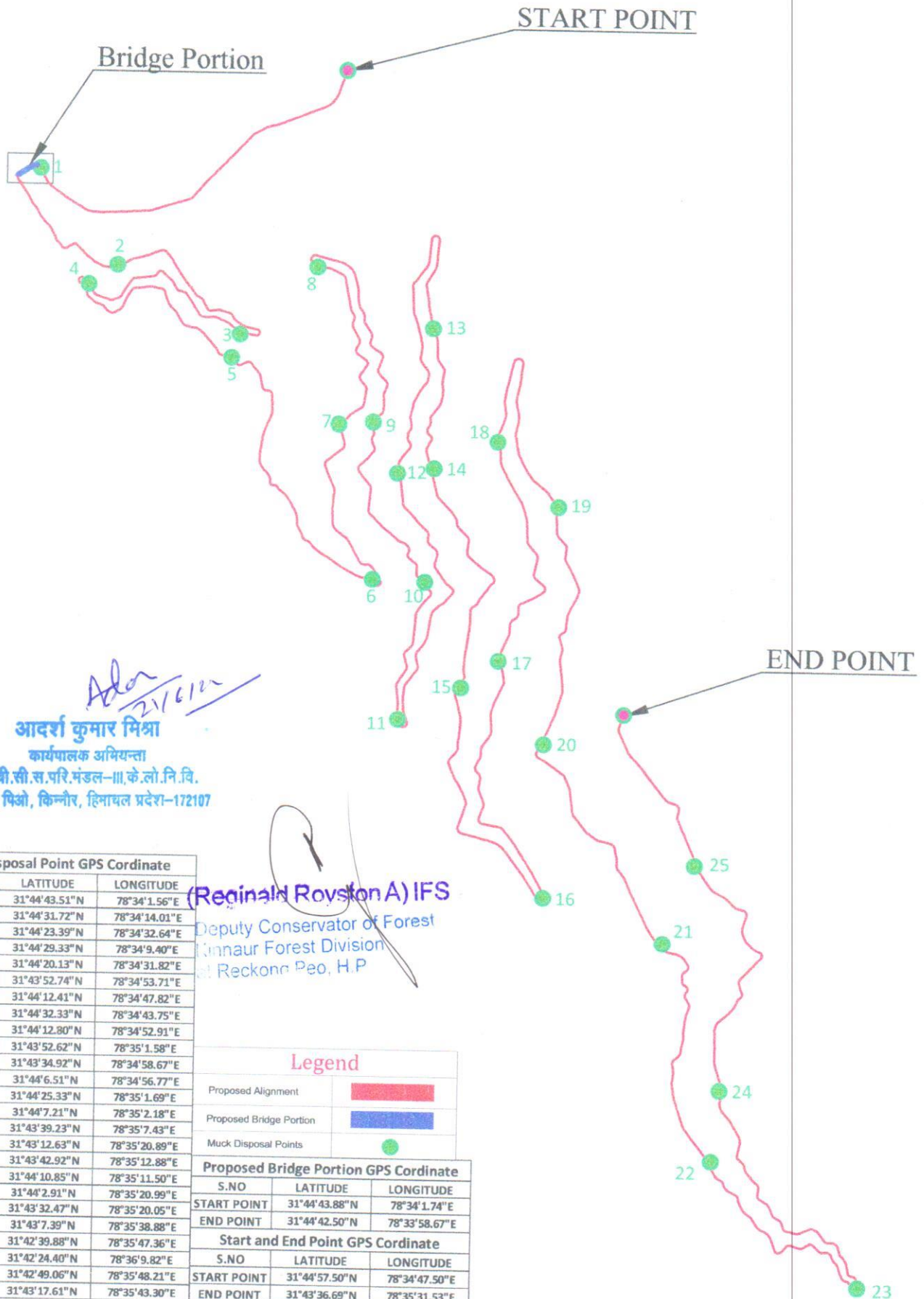
This is to certify that for muck management, retaining walls and other structures as per requirement of the site, will be constructed, to completely stop rolling down of the muck. It will also help to prevent soil erosion.

Adesh
22/6/22

(Executive Engineer)
ICBRPD-III, CPWD, Kinnaur,
Himachal Pradesh-
172107.


(Reginald Royston A) IFS
Deputy Conservator of Forests
Kinnaur Forest Division
Distt. Kinnaur H.P.

DUBLING-RISHI DOGRI-LAMCHE DOGRI GEO REFERENCE OF MUCK DISPOSAL POINT TOTAL :-25K.M. LENGTH



A REPORT ON GEOLOGY AND SLOPE STABILITY ALONG RISHI DOGRI TO DUBLING ROAD SECTION, HIMACHAL PRADESH

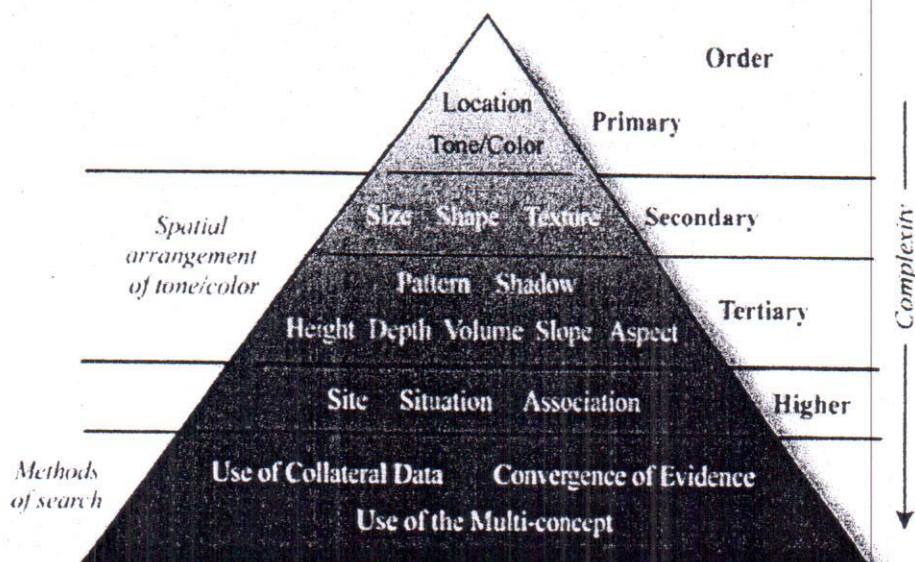
Dr. R. Anbalagan* & Dr. Ajanta Goswami**

INTRODUCTION

The present report deals in detail the methodology and the results of satellite image interpretation of the Rishi Dogri to Dubling Road Section road section and its adjoining areas in Himachal Pradesh.

OBJECTIVE: Study of Geology along the road side (approx. 500 m buffer) and slope stability of adjoining hills using high resolution satellite image

METHODOLOGY. In the proposed study, image interpretation of high resolution GeoEye image was carried out. Image interpretation involves extraction of qualitative and / or quantitative information from an image, which in the present context includes Geology and slope stability. The methodology involved is Deductive Approach which is based on Interpretation Elements (Image Elements & Terrain Elements) coupled with "Convergence of Evidences" criteria. The image elements considered are shape, size, tone, texture, pattern, shadow and association in addition to considering terrain elements such as landforms, drainage, vegetation, land use and soil. The ancillary data used in the study includes geological maps of the area published in refereed journals and GSI maps which are available at 1:50,000 scale. Since the spatial resolution of the ancillary data available is coarse, it was used as supportive information for deduction of Geology and slope stability.



The figure above shows the steps considered for image element interpretation.

* Emeritus Fellow Professor, Dept. of Earth Sciences, IIT Roorkee

** Assistant Professor, Dept. of Earth Sciences, IIT Roorkee

(Dr. R. ANBALAGAN)

डॉ. अजंता गोस्वामी / DR. AJANTA GOSWAMI
सहायक प्राध्यापक / ASSISTANT PROFESSOR
भू-विज्ञान विभाग / DEPARTMENT OF EARTH SCIENCES
भारतीय प्रौद्योगिकी संस्थान रुड़की
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
रुड़की / ROORKEE-247 667 (U.K.) INDIA

Slope stability study can be accomplished successfully using satellite images as shown by McKean et al. (1991), Westen (1993), Soeters and van Westen, (1996) and Westen (et al., 2008). With reference to the methodology demonstrated by the above mentioned researchers, active landslides in the study area are mapped which were seen with characteristic spectral response, mostly show up as bright pixels, typical oval/ elongated shape and association such as close to the river bank/ ridge or at the initiation point of 1st order stream. Many of the old slide zones were interpreted from their triangular/ crescent pattern, fresh vegetation growth and barrenness on the crest region indicating active mass wasting due to head ward erosion.

RISHI DOGRI TO DUBLING ROAD SECTION IN HIMACHAL PRADESH

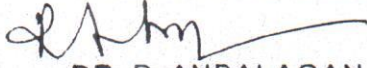
The Rishi Dogri to Dubling Road Section road section in Himachal Pradesh extends from Rishi Dogri with an aerial extent of 78°36'44"E 31°36'22"N and 78°48'51"E 31°43'8"N. This road has a design length of 52.85 kms (Fig 1).

The road offtakes from Rishi Dogri and runs in an upslope gradient towards north westerly direction initially. It traverses through the right bank of a south-easterly flowing stream course. In this stretch it has a zig-zag road alignment in the upper reaches of the valley where the gradients are very steep (more than 50°). From the top level of the valley, the road takes westerly turn with numerous zig-zag turns towards the ridge, where it intercepts thick glaciers. The further course of the road is mainly located on thick glaciers seen on the slopes. Though the overall alignment is westerly close to the top of the ridge and further down, later it takes turn towards NW and WNW through the valley glaciers. The road maintains a consistent WNW trend through the glaciers for sometimes and later it passes a hard rock, which is inclined roughly towards south. Though the road is nearly linear in the rocky terrain it has numbers of loops to accommodate the local gradients. From the glaciated terrain, the road follows a consistent down gradient. Towards the end reaches of the slope, the road is highly zig-zag with many hairpin bends before it reaches Dubling. The location Dubling is situated above a steeply inclined slope having higher landslide potential, however Dubling is safely located much above the landslide prone area.

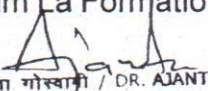
Denudational hills, seen on both the side of the valley shows coarse texture due to weathering and erosion. The thin strip of image covering road and buffer area is a challenge to interpret the geology and lithology of the area. Ancillary data used defines the confidence level of interpretation which again depends on the scale. The image provided is partially covered with snow making it difficult to interpret the Geology and slopes. However ancillary data (Geological map and DEM) of the study area could be studied for the deductive approach.

The break in lithology on either side of river valley could be well deciphered from break in slope, changes in resistance to erosion, changes in drainage pattern and tonal changes. Because of Weathering at places, it becomes soft and fragile locally.

The road starts at Rishi Dogri and passes through Lilang Formation. This Formation is of Triassic in age and mainly consists of carbonate rocks. Further WNW the road passes through Kuling Formation. The major rock types of this Formation are shales. These rocks are succeeded towards NW by Kunzum La Formation of Hemanta Group.


DR. R. ANBALAGAN
Professor (Rtd.)

Department of Earth Sciences
Indian Institute of Technology Roorkee
ROORKEE - 247 667, UTTARANCHAL


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सहायक प्राध्यापक / ASSISTANT PROFESSOR
भू-विज्ञान विभाग / DEPARTMENT OF EARTH SCIENCES
भारतीय प्रौद्योगिकी संस्थान रुड़की
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
रुड़की / ROORKEE-247 667 (U.K.) INDIA

It extends for a considerable distance of about 6 km towards NE. The rock types of this section dominantly include deltaic sedimentary rocks such as sandstone with subordinate shales and carbonate rocks. The road towards the end is located within Batal Formation of Hemanta Group for an aerial distance of nearly ~7 kms. This entire stretch consists of hard to medium hard rocks made up of medium to high grade metamorphic rocks including phyllites, slates and quartzites.

The rocks seem to be deformed and weathered at places along the road alignment. During road construction, suitable precaution may be adopted to minimize slope instability problems due to excavation. Over all the alignment seems to be stable.

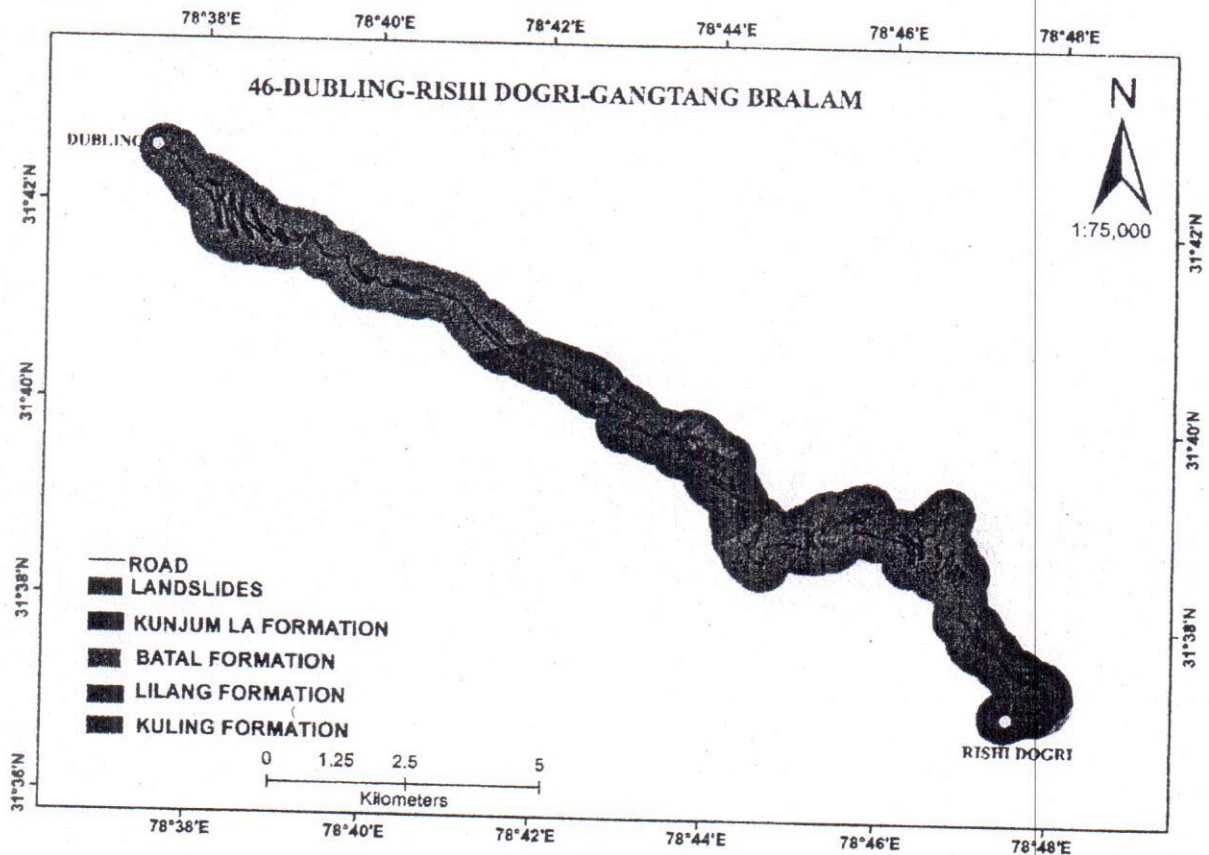


Figure 1: Location and geology along the road section

[Signature]
DR. R. ANBALAGAN
 Professor (Rtd.)
 Department of Earth Sciences
 Indian Institute of Technology Roorkee
 ROORKEE - 247 667, UTTARANCHAL

[Signature]
 डॉ. अजंता गोस्वामी / DR. AJANTA GOSWAMI
 सहायक प्राध्यापक / ASSISTANT PROFESSOR
 विज्ञान विभाग / DEPARTMENT OF EARTH SCIENCES
 भारतीय प्रौद्योगिकी संस्थान रुड़की
 INDIAN INSTITUTE OF TECHNOLOGY ROORKEE
 रुड़की / ROORKEE-247 667 (U.K.) INDIA

OFFICE OF THE COLLECTOR, KINNAUR DISTRICT AT
RECKONG PEO, H.P.

No. KNR-misc(DRA)/- 1079002.

Dated

NON-AVAILABILITY OF NON FOREST LAND CERTIFICATE

On the basis of Joint inspection report comprising of Forest & Revenue Department, it is certified that the land area measuring 50-09-10 hect. for construction of Dubling-Rishi Dogri-Lamcha Dogri road, land area measuring 85-42-21 hect. for construction of Namgia Dogri-lukma-I via(MM ridge & Lukma-2) roads of ICBR phase-II projects in sub-Division Pooch is to be proposed acquired by Executive Engineer, Indo China Border Road Project Division-III, Reckong Peo is a forest land. It is further certified that no non forest land is readily available for construction of above roads under phase-II District Kinnaur, H.P.

It is also certified that the diversion of above forest land for the construction of Dubling-Rishi Dogri-Lamcha Dogri & Namgia Dogri-lukma-I via(MM ridge & Lukma-2) roads under phase-II District Kinnaur is inescapable. The non availability of non forest land certificate is issued accordingly.

Place- Reckong Peo.

Dated 03/02/2021

COLLECTOR
KINNAUR DISTRICT
AT RECKONG PEO.
2

Subject: - Proposal for the Diversion of 50.091 ha. of Forest land in favour of ITBP Floor 03 Block 02, CGO Complex, Lodhi road New Delhi for the construction of Dubling Rishi Dogri-Lamche Dogri Road within the Jurisdiction of Kinnaur Forest Division. (Online proposal no FP/HP/ROAD/145666/2021)

वचनबद्धता

प्रयोक्ता अभिकरण यह वचनबद्धता प्रस्तुत करती है कि as the road is of strategic importance and proposed for connecting Border Out Post of ITBP and Army. So, this alignment is inescapable and also approved by Directorate General ITBP, MHA, Govt. of India. Approved alignment is also enclosed.

It is also certified that list of minimum trees were enumerated in the joint inspection with forest officials on dated 13/12/2021. (Copy enclosed)

It is also here by ensured that least possible no of trees will be felled down during actual execution of work.

(Reginald Royston A) IFS
Deputy Conservator of Forests
Kinnaur Forest Division
Distt. Kinnaur H.P.

Alan
27/12/22
Executive Engineer,
ICBRPD-III, CPWD,
Reckong Peo
Kinnaur.

Confidential

DIRECTORATE GENERAL, ITB POLICE
MHA, GOVT OF INDIA

Sub : Regarding consultancy services for preparation of DPR and detailed design of roads and bridges etc for construction of High Altitude Hill roads to Indo- China Border under phase - II in the state of Himachal Pradesh using satellite imagery.

CPWD may kindly refer ITBP UO No VIII-11015/03/ Ph-II Roads/2017/Ops- 2417-18 dated - 01.05.2017 and their letter No W-12011/261/EE (III)/BFZ/2016-17/942-E dated 06.07.17, regarding on the subject cited above.

2. In this regard, it is intimated that alignment of 01 road i.e. Dubling - Rishi Dogri- Gangtam Bralam had forwarded by CPWD in which CPWD has suggested change in location of start point of said road near Pooh (Army Camp) which is approx 6.30 km behind from Dubling on NH - 5 instead of Dubling.

3. ITBP is in agreement with the alignment suggested by CPWD, hence, the alignment of Dubling (near Army Camp, Pooh on NH-5) - Rishi Dogri - Gangtam Bralam road, 86.20 Km in HP is approved and the copy of same is being forwarded to your office for further necessary action at your end please.

Encl : a.a. (04 pages)

(Ajay Pal Singh)
Dy Inspector General (Ops)

SE (P&A), CPWD, O/o CE, BFZ, East Block-1, Level-IV, R. K. Puram, New Delhi.

ITBP UO No.VIII-11015/03/ Ph-II Roads/2017 (Vol.II)/Ops - 4232-33 Date: 28/08/17

Copy to :

Sh Man Singh, Director (BM-IV), MHA, NDCC-II Building, New Delhi - For info please.

(Ajay Pal Singh)
Dy Inspector General (Ops)

Enumeration List of Trees which are coming in the area

Bishling - Pishi Dogri - Lamcha Dogri Range from 0.00 to 25.00 Km in respect of Mooring Range as under

SNO	Species	Dis	Class	Remarks
1/021	Neoga	12-13	V	Green Standing
2/021	do -	15-16	V	do -
3/021	do -	17-18	V	do -
4/021	do -	17-18	V	do -
5/021	do -	18-19	V	do -
6/021	do -	22-23	IV	do -
7/021	do -	15-16	V	do -
8/021	do -	18-19	V	do -
9/021	do -	18-19	V	do -
10/021	do -	15-16	V	do -

ABSTRACT

Chilgoza	V	IV	VII	Volume	Total
	9	1	-	0.312 m ³	10 Trees

Deputy Conservator of Forests,
Kinnaur Forest Division at R/Poo HP.

Range Forest Officer
Mooring Range

Enumeration List of Trees which are coming in the alignment
 of "Dubling - Pishi Dogri - Lamche Dogri Road from 0.00 to
 25 Km in respect of Park Range as under:

SNO	Species	Dia	Class	Remarks
1/021	Chilgoza	17-18	V	Green standing
2/021	do -	37-38	III	do -
3/021	do -	17-18	V	do -
4/021	do -	27-28	IV	do -
5/021	do -	17-18	V	do -
6/021	do -	35-36	III	do -
7/021	do -	41-42	IIA	do -
8/021	do -	41-42	IIA	do -
9/021	do -	37-38	III	do -
10/021	do -	38-39	III	do -
11/021	do -	14-15	V	do -
12/021	do -	16-17	V	do -
13/021	do -	53-54	IIB	do -
14/021	do -	47-48	IIA	do -
15/021	do -	37-38	III	do -
16/021	do -	17-18	V	do -
17/021	do -	14-15	V	do -
18/021	do -	21-22	IV	do -
19/021	do -	32-33	III	do -
20/021	do -	16-17	V	do -
21/021	do -	47-48	IIA	do -
22/021	do -	32-33	III	do -
23/021	do -	34-35	III	do -
24/021	do -	13-14	V	do -
25/021	do -	52-53	IIB	do -
26/021	do -	16-17	V	do -
27/021	do -	16-17	V	do -
28/021	do -	32-33	III	do -
29/021	do -	17-18	V	do -
30/021	do -	21-22	IV	do -
31/021	do -	37-38	III	do -

SN	Sphs	Die	Class	Remarks
32/021	Chilgozs	37-38	III	Green standing
33/021	-do-	16-17	V	-do-
34/021	-do-	17-18	V	-do-
35/021	-do-	17-18	V	-do-
36/021	-do-	35-36	III	-do-
37/021	-do-	17-18	V	-do-
38/021	-do-	32-33	III	-do-
39/021	-do-	17-18	V	-do-
40/021	-do-	17-18	V	-do-
41/021	-do-	17-18	V	-do-
42/021	-do-	17-18	V	-do-
43/021	Needles	52-53	II B	-do-
44/021	-do-	37-38	III	-do-
45/021	-do-	17-18	V	-do-
46/021	-do-	35-35	III	-do-
47/021	-do-	17-18	V	-do-
48/021	-do-	25-26	IV	-do-
49/021	-do-	25-26	IV	-do-
50/021	Chilgozs	37-38	III	-do-
51/021	-do-	38-39	III	-do-
52/021	-do-	14-15	V	-do-
53/021	-do-	16-17	V	-do-
54/021	-do-	53-54	II B	-do-
55/021	-do-	47-48	II A	-do-
56/021	-do-	37-38	III	-do-
57/021	-do-	17-18	V	-do-
58/021	-do-	32-33	III	-do-
59/021	-do-	34-35	III	-do-
60/021	-do-	13-14	V	-do-
61/021	-do-	16-17	V	-do-
62/021	-do-	52-53	II B	-do-
63/021	-do-	16-17	V	-do-

Continued - p-3

SN	SPS	Dis	Class	Remarks
64/021	Chilgoza	16-17	V	Green Standing
65/021	-do-	16-17	V	-do-
66/021	-do-	32-33	III	-do-
67/021	-do-	17-18	V	-do-
68/021	-do-	21-22	IV	-do-
69/021	-do-	37-38	III	-do-
70/021	-do-	16-17	V	-do-
71/021	-do-	17-18	V	-do-
72/021	-do-	17-18	V	-do-
73/021	-do-	25-36	III	-do-
74/021	-do-	17-18	V	-do-
75/021	-do-	32-33	III	-do-
76/021	-do-	17-18	V	-do-
77/021	-do-	17-18	V	-do-
78/021	-do-	16-17	V	-do-
79/021	-do-	37-38	III	-do-
80/021	-do-	17-18	V	-do-
81/021	-do-	55-56	II B	-do-
82/021	-do-	47-48	II A	-do-
83/021	-do-	42-43	II A	-do-
84/021	-do-	47-48	II A	-do-
85/021	-do-	47-48	II A	-do-
86/021	-do-	35-36	III	-do-
87/021	-do-	37-38	III	-do-
88/021	-do-	47-48	II A	-do-
89/021	-do-	35-36	III	-do-
90/021	-do-	17-18	V	-do-
91/021	-do-	36-37	III	-do-
92/021	-do-	25-26	IV	-do-
93/021	-do-	19-20	V	-do-
94/021	-do-	16-17	V	-do-
95/021	-do-	16-17	V	-do-

S.No.	Spp	Dis	Class	Remarks
96/2021	Chilgoza	21-22	IV	Green standing
97/2021	do -	17-18	V	do -
98/2021	do -	32-33	III	do -
99/2021	do -	16-17	V	do -
100/2021	do -	16-17	V	do -
101/2021	do -	34-35	III	do -
102/2021	do -	32-33	III	do -
103/2021	do -	21-22	IV	do -
104/2021	do -	14-15	V	do -
105/2021	do -	17-18	V	do -
106/2021	do -	37-38	III	do -
107/2021	do -	47-48	IIA	do -
108/2021	do -	16-17	V	do -
109/2021	do -	14-15	V	do -
110/2021	do -	38-39	III	do -
111/2021	do -	37-38	III	do -
112/2021	do -	17-18	V	do -

ABSTRACT

S.No.	Spp	Class					Total
		V	IV	III	IIA	IIB	
1	Chilgoza	49	7	33	11	5	105 Nos
	Volume	0.882	1.05	13.86	9.57	6.25	31.61 m ³
2	Deodar	2	2	2	-	1	7
	Volume	0.06	0.46	1.42	-	2.55	4.49 m ³

13/12/2021
SANJEEV KUMAR RATHEE
 Assistant Engineer
 ICBRPD-III, CPWD,
 Reckong PEO
 Kinnaur, H.P.-172107

Deputy Commissioner

Total Trees 112 Nos

13/12/2021
 B. S. Pooch
 Dt 13/12/2021

CENTRAL PUBLIC WORKS DEPARTMENT

SUB: Estimate for construction of High Altitude Hill Roads to Indo - China Border under Phase II in the state of Himachal Pradesh

Name of Road:- Dubling-Rishi Dogri

Length = 25.00 km

GENERAL SUMMARY OF COST

Sr. No.	Description of Sub-Head	Amount of items based on Standard Data Book published by MoRT&H (Rs.)	Remarks
1	Earthworks	99,13,14,108	
2	Sub Base & Base Course	22,29,74,032	
3	Base and Surface Course (Bituminous)	11,16,22,423	
4	Road appurtenances	2,88,23,650	
5	Pipe culverts	60,87,232	
6	Foundation of structures	12,62,30,660	
7	Sub-structure	85,27,46,744	
8	Bridge Works	2,03,59,475	
9	Protection Works	20,13,02,111	
10	Rock fall Protection Works	57,42,224	
11	Tele-communication systems (wireless internet)	1,43,99,660	
12	Maintenance Infrastructure cost	3,80,16,767	
13	Amount of VAT & Excise Duty to be deducted from Prime Cost	(4,37,95,001)	
	Sub - Total (Construction Works) - A	2,57,58,24,085	A
	Civil Cost is Rs. 10.303 Crore Per km		
14	Time required for Construction (years) after receipt of statutory clearances and diversion of forest land		
15	Amount of escalation @ 6.5% per annum	83,71,42,827	
	Cost including escalation - B	3,41,29,66,912	B
16	Factor for managing cost elements, i.e. due to geological surprises, hostile and unpredictable weather condition, contingency plan for evacuation of labour, difficult terrain, snow clearance and land slide clearance (Expedients) etc @ 10% of (B) = C	34,12,96,691	C
17	Provision for Physical contingencies @ 3% of (B + C)	11,26,27,908	
	Grand Total	3,86,68,91,511	D
18	Goods and Service Tax on Infrastructure Contracts @ 12%	46,40,26,981	
	Total cost including GST	4,33,09,18,493	
	Construction Cost is Rs. 17.324 Crore Per km		
19	Cost of Land acquisition	15,01,480	
	Total cost including GST & Land cost	4,33,24,19,973	
	Construction Cost is Rs. 17.33 Crore Per km		
20	Cost of maintenance for 5 years after completion of construction activities and DLP	19,46,17,140	
21	Goods and Service Tax on Infrastructure Contracts @ 12% on maintenance works	2,33,54,058	
	Total cost of Maintenance	21,79,71,204	E
22	Total Maintenance Cost is Rs. _____ Per km / Year	17,43,770	

NOTE:

1. This project cost is based on prevailing reasonable rates of various inputs, viz. machineries, labour and materials etc. These may vary subsequently in accordance with market fluctuations / Gazette notifications of Government.