FULL TITLE OF PROJECT: Additional Forest land requirement of 11.7936 ks. for four laning of proposed Shimla Bypass from Kalthalighat to Shakral Section (Package-I) of NB-22 (Chainage from Km 128.835 ts Km.146.300) in already approved FCA case of the entire section from Kalthlighat to Dhalli, Online Proposal No. <u>FP/HP/ROAD/151117/2022</u>.

S.No.			If not Provided Why?	Page Number
1	Check-list of the project proposal	Yes	-	1-7
2	Demand letter of the project authority/ applicant, if submitted.	Yes	-	8-9
3	Main application form from Part-I to V as prescribed in the Rules under the FCA with all its columns duly filled up and signed by the competent authority with date, place and official seal. All the information in Part-I of Form-A including item-wise breakup of the forest area required, must be given in the form itself by expanding the columns			10-18
4	Detailed note on the project. It must include the information regarding the number of villages and number of persons to be benefited from the project including employment generation.			19-24
5	Map of the project site/forest area required clearly showing forest boundaries and adjoining areas with their land use in distinct colours in 1:50000 or any suitable scale on original Survey of India topo sheet. If the area is very small, in addition to above, an index map may be submitted showing forest boundaries and a location map on a larger scale with land use of the area required duly signed by DFO/CF concerned.			25-66
6	Layout plan of project site approved by competent authority. In case of linear diversion of forest land, linear map or a diagrammatic map of the project site should be enclosed.	Yes	-	67-95
7	Statement showing the details of forest area involved i.e. Survey No. /Coupe No. /Compartment No., etc., and item-wise breakup of the forest area proposed for diversion duly signed by DFO (in the prescribed format).	Yes	-	96-98
8	Statement showing the details of non-forest Yes area involved in the proposal (in the prescribed format).			99-106
9	Certificate from the Collector/Deputy Commissioner that no alternative suitable non-forest land is available for the project in question.	Yes	•	107-110
10	Justification for locating the project in forest area to be submitted by User Agency and countersigned by DFO.	Ýcs		111

J 1	Certificate for minimum use of forest land to be submitted by the User Agency, giving details of area and trees involved in the alternatives examined and reasons for their rejection duly countersigned by DFO (in the prescribed format).			112
12	Undertaking by the User Agency to bear the cost of compensatory afforestation duly counter signed by the DFO (in the prescribed format).			113
13	Undertaking by the User Agency to pay the Net Present Value (NPV) of the forest land involved duly countersigned by DFO (in the prescribed format).	Yes		114
	Undertaking by the User Agency to pay the Additional Net Present Value (NPV), if any, of the forest land involved duly countersigned by DFO (in the prescribed format) as decided at a later date as per the decision of the Supreme Court.			115
14	A certificate from the competent authority in the State in the prescribed (vide MoEP letter No. 11-9/98-FC (pt.) dated 5 th July 2013) format that all forest rights under the Forest Rights Act, 2006 have been settled in respect of the forest area proposed for diversion, wherever applicable.			116
	In case, the process for settlement of rights under FRA has not been initiated, grant of stage-I approval under the FCA to the proposal will be considered only if a certificate from the competent authority concerned, clearly stating that the process for settlement of rights under the FRA has not been initiated along with evidences			
	supporting that settlement of rights under the FRA will be initiated and completed before the final approval, is enclosed with the proposal (vide F. No. 11-179/2012-FC Dated: December 20, 2013).		1	•
15	Species-wise and girth class-wise enumeration list and abstract of trees (abstract to be given at the end of the list) standing on the forest area in question neatly typed or computerized and duly signed by DFO.	•	-	117-168
16	Site inspection report of the forest area involved in the project proposal by the DFO concerned or higher level forest officer in prescribed format (in the prescribed formal).	Yes	-	169

17	Details of non-forest land/degraded forest area identified for compensatory afforestation viz. Survey No./ Compartment No./Khasra No./Khatoni No., Village, Tehsil, District, etc., along with map in appropriate scale showing the boundaries of adjoining forest areas with their use in distinct colours (in the prescribed format).			170-175
18	Detailed scheme for compensatory afforestation on identified non-forest area/ degraded forest area, as the case may be, at prevalent wage rates duly signed by DFO and countersigned by the CF concerned. The CA scheme must include all the technical details, details of work schedule, total financial outlay and proposed monitoring mechanism (in the prescribed format).		•	176-180
19	Certificate from the DFO, that non-forest land selected for compensatory allorestation is in a compact block and contiguous to forest area or in close proximity of forest area and suitable from the management and protection point of view.	Yes	-	-
20	Suitability certificate from the Divisional Forest Officer that the land identified for compensatory afforestation is suitable for raising plantation (in the prescribed formal).			181-183
21	Certificate from the Chief Secretary regarding non-availability of non-forest land in the state for raising compensatory afforestation, wherever applicable. This certificate will be based on the certificate signed by the DFO and Deputy Commissioner/Collector of the district concerned about non-availability of such non-forest land.			•
22	In case of proposal which requires entry/exit through Protected Forest strips along	-	•	184
	 roads/railway lines/canals, the following information/documents must be given :- a) No Objection Certificate (NOC) of the land owning agency i.e. NHAI/PWD, Railways or Canal/ Irrigation Department b) Change of Land Use certificate from Town and Country Planning/ any other competent authority. 			
23	For the projects involving forest land for construction of buildings/right of way for buildings, the built-up area, details of DG sets to be installed, and raw materials to be used (in case of industries) should be clearly mentioned.	ŇĂ		-185
24	Status of clearance under Environment (Protection) Act, 1986, wherever required.	NA	•	-186-189

25	NOC of the State Pollution Control Board for establishment of the project, wherever required.	NA	L	190
26	Detailed scheme for rehabilitation of project affected persons, wherever required.	NA		-
27	Detailed Catchment Area Treatment Plan, wherever required. The CAT Plan should be prepared on the basis of actual survey of area and its classification in various categories requiring different engineering/ afforestation and other treatments in phased manner.	NA		*
28	Detailed Reclamation Plan, wherever required. It should be realistic exhaustive and complete in all respects along with relevant maps in distinct colours. It should also include the details of back fillings, afforestation and execution of such works, wherever required.	NA		-19]
29	Cost benefit analysis as per the guidelines issued under forest (Conservation) Act, 1980 in prescribed format, wherever required.	NΛ	-	-192
30	Any other information/documents necessary for giving clarifications on the project, may be specified and attached.	NA	-	-193-

11	Documents/Information Required for Proposals for Roads,
	Railway Lines, Canals and Transmission Lines
31	The following information/documents must NA 194-195 be given :- a) Length and width of Road/Railway 1 a) Length and width of Road/Railway 1 1 line/ Canal/ Transmission 1 1 passing through forest and non forest area, 1 1 1 1 b) In case of expansion of already 1 1 1 1 1
	 existing road/radiway line/canal, linear plan clearly showing in distinct colours the already existing road (from beginning to end), the width of the proposed road/railway line/canal to be expanded, and the remaining width of the Protect Forest strip, if any, which would be left after expansion. c) In case of transmission line, the following details may also be given :- i) Number of towers to be erected both in forest and non forest area. ii) Width of the right of way for transmission line.
ш	Documents/Information Required for Proposals for Hydro Electric Projects

•

	The following information/document must be given :-	NA	-	•		
	a) Component-wise total area requirement					
	b) Copy of Memorandum of Understanding					
	c) Copy of Techno-Economic Clearance					
	d) Copy of Implementation Agreement					
	e) NOC from Irrigation and Public Health Department					
	 NOC from Fisheries Department 					
	g) Authorization to the applicant by the Project Authority					
١V	Documents/Information Required for Proposal	s for Minin	g .			
33	The following information/documents must be given :-	NA	-	-		
	I New Proposale	:				
	a) Certificate from the competent					

mining lease shown in distinct	
colours on relevant maps	1 1
d) Proposed period of mining lease.	
e) Minimum distance of the proposed site	
from Wildlife Sanctuary and National	
Park.	ļ
f) A copy of the mining plan duly approved	
by IBM, Nagpur.	
g) Phased reclamation plan of the project	
area.	
h) Copy of lease deed/agreement entered	
into with the district authorities.	
i) The details of Safety Zone Area for the	
mining as per para 4.7 of the	
guidelines. The undertaking from the	
project authority to bear the cost of	
fencing of safety zone area and	
afforestation over one and half times of	
degraded forest area. The details of	
safety zone to be ascertained by the	
competent authority viz. Indian	
Bureau of Mines/ Deptt., of Geology	I
and Mining of the State Government.	
II) In case of renewal of Mining Lease	
al A brief grafile of the loopes (company)	
 A brief profile of the lessee/ company should be submitted giving details of 	
their existing mining leases in the	
State with their capacity of	
production, the present level of	
average annual production, location	
of these pits and the status of	
reclamation of forest land that are	
exhausted of minerals.	
b) Complete details of existing or	
proposed leases in that particular	
forest area with their present status should be indicated on the Survey of	
India Topo-sheet in appropriate scale	
www.rope succe in appropriate scare	
c) The State Government shall forward the	
complete proposal to the RO/MoEF at	
least six months prior to the expiry of the	I
existing lease. In case of any delay, a details report	
details report elaborating the causes of delay shall be	
forwarded along with the proposal.	
To the ded envirg with the proposal.	

d) A resolution of Gram Panchayat/ Local Body of the area endorsing the proposal that the project is in the		
interest of the people living in and around the proposed forest land.	-	

V	Documents/Information Required for Proposale	s for Retai	l Outlets of	an Oil
	Companies.	200 C 100 C		
34	 The following information/ documents must be given :- a) Copy of letter of intent issued by the oil Company. b) Site selection certificate as per Govt. of India guidelines. The DFO should certify the distance between two retail outlets on either side of the outlet in question. c) Layout plan showing dimensions of proposed approach road for entry and exit with clear area calculations. d) Map clearly indicating the directions of the road leading fromto e) The area calculations for the curves should invariably be given in the layout plan. f) NOC from NHAI/PWD/Urban or local body g) NOC from Town and Country Planning/ local body h) Certificate by User Agency to the effect that no High Tension line passing above the proposed site duly countersigned by DFO i) A Certificate by User Agency to the effect that no LP Gas godown is located near the proposed site duly countersigned by DFO. 	NA		
	Joint Inspection Report.			196
	NPV bill			197
	Dumping			198-211
	Revenue papers.			212- 314-
	Certifical seg. W.L.S.			315.

Dated:13.07.2022

Divisional Forest Officer, Shimla Forest Division, Dreki Not 01/77/2623472. Shimla Lorest Division SHIMLA Full Title of the proposal: - Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha, in the State of Himachal Pradesh.

File No.: FP/HP/ROAD/151117/2022

Date of Proposal: 13 January, 2022

CHECK-LIST SERIAL NO. - 02

DEMAND LETTER

The project road i.e. Shimla Bypass (Package I) is a section of NH-22, starting from Kaithlighat and ending at Shakral (Chainage from Km. 128.835 to Km. 146.300) located in Shimla district in the state of Himachal Pradesh. Stage II approval for forest diversion proposal of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) for 40.3 ha. was obtained by NHAI vide MOEF&CC, Dehradun letter dated 15.09.2017.

However, some additional forest land of approximate area 11.7936 hectares is required to be diverted for four laning of proposed section of Shimla Bypass for the following purposes:

i) Dumping sites for muck disposal

ii) Diversion of land over tunnels

iii) Four laning of structures against 2-lane in previous project

iv) Slope protection measures at fragile hill strata locations

v) Minor modifications in the alignment for improving geometry of the highway

As all the Government Waste land in this district are considered as forest land in view of the notification Ft.29-241/B/C/49 dated 25.02.1952 of Government of Himachal Pradesh according to which all Govt, waste land has been declared as protected forests, there is no availability of suitable non-forest land within district Shimla.

The proposed 4-lane road necessarily passes through forest land because there is no non forest land available as an alternative. These forest areas are located in scattered patches along the already approved alignment on either side of the road. Also, the project road is located in hilly areas and an alternative option to the road would not be viable. Hence, there is no escape from using the forest land. The four laning of Shimla Bypass will require minimum diversion of forest land.

Date : 19 - 09 - 202 2 Place : Shimla

Project Director National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

Countersigned -

Divisional Forest Officer Shimla Forest Division Shimla Forest Division SHIMLA

GM (T)-cum-Project Director NHAI, PIU-Shimla

FORM - "A"

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PART-1

la.	Project Details		-1/
	i) Short narrative of the proposal and project/scheme for which the forest land is required.	of Road Transport & Hi been entrusted with the NH-22 from Kaithlighat of Himachal Pradesh thr two packages. The proje starts from Kaithlighat at at km 146+300. The dei Km. The section of existing N through congested Shimil heavily built-up area and will involve large scal properties. Four laning o progress. Hence to main to provide a 4 lane bypas from Kaithlighat to Shak Dhalli section.	Authority of India (NHAI) under the Minist ighways (MoRT&H), Government of India h assignment of construction of four laaing to Dhalli Section (Shimla Bypass) in the Sta ough Hybrid Annuity mode and is divided in ect road of Shimla Bypass (NH-22) Package t km 128+835 and terminates at Shakral Villa sign length of proposed project road is 17.4 HI-22 between Kaithlighat and Dhalli is passi la town. This existing section is passing throug I it is not possible to widen it to four lanes as the acquisition of residential and commerce f NH-22 from Solan to Kaithlighat is already tain continuity of traffic capacity, it is require ss from Kaithlighat to Dhalli, and the Package ral Village is a part of this Kaithlighat to
			proposed project road are given below:
		Item	Improvement Proposal
		Design Length Major Bridge (4 lane)	17.465 Km 04 nos.
			and the second
		Viaduct (4 Iane)	16 no.s
		Vehicular Overpass (2 lane carriageway)	1 no.
	× .	Culverts	Box Culverts: 53 nos Pipe Culverts at the junction locations: 5 no.s
		Toll Plaza	One New Toll Plaza at Km. 131+290 at a staggered position as Left toll collection at Km. 131+155 and Right toll collection at Km 131+423.
		Passenger Wayside Amenities	1 no. at Km 142+985 (RHS)
		Tunnel	2 no.s New 2 lane Twin Tube Tunnels
		Truck Laybye	The truck lay bye are at Km. 139+795 (RHS) and Km. 140+025 (LHS).
		Bus Shelter	There is one bus shelter on either side proposed in the project. The bus

महाप्रबंधक (तकडीकी)≁GM(T) एवं परियोजना निवेशक ∕ & Project Director भाराताप्रा ∕ N.H.A.L प घटई - जिमना (ठिउप्र०)/PJU Samia (H.P.)

				helters are at K .m.139+685 (1	(m.139+685 (I LHS).	(HS) &
		Project road ler start and end of Start - 31° 15 End - 31° 4'	f the road fallin	g in Shimla F o 7° 6' 28 ,14"E (1	west Division a km 128+835)	ire:
	ii) Map Showing the required forest land, Boundary of the adjoining forest on a 1:50000 scale map.	The alignment enclosed as CI DGPS Maps a	hecklist SI. No	. 5.	21101220-023000	0,000 scale) i
	iii) Cost of the Project	The total proje	et cost is Rs. 1	721.52 Crores	i -	
	iv) Justification for locating Justification for locating project in forest area has been provid the project in forest area Checklist Sl. No 10 .			rovided in		
	v) Cost Benefit Analysis	The Cost Bene	fit Analysis is	enclosed as C	hecklist SI. N	o. 29.
	vi) Employment likely to be generated	The proposed to local people Permanent/Rey Temporary En persons emplo	during constru- gular Employm uployment (Nu	uction period o tent (Number mber of perso	of project. of persons): 30 n-days): 10950	, ,
2.	Purpose wise break up of Land to be diverted	The purpose wise break up of diversion of forest land in Shim Division is given below:				
		Division	Compone nt (Ha.)	Forest Area (Ha.)	Non- Forest Area (Ha.)	Total Area (Ha.)
			Road	3.2611	4.8949	8.1560
		Shimla	Muck Disposal Sites	4.3894	4.5902	8.9796
			Tunnels	4.1431	4.3239	8.4670
		1	Total	11,7936	13.809	25.6026
3.	Details of displacement of people due to the project if any? i. Number of families. ii. Number of Scheduled Castes/Scheduled Tribe families iii. Rehabilitation plan. (to be enclosed)	There will be r	io displacemer	it of people in	forest areas.	
4	Whether clearance under Environment (Protection) Act,	As per MoEFCC Notification no. S.O.2559 (E) dated 22 nd August, 201 (attached), the project does not require Environmental Clearance.				

गहाप्रवर्षक (ननामीकी)/GM(T.) एवं परियोजना निदेशक/& Project Director भारा.रा.प्रा./N.H.A.1 एका.ई. - शिमला (हि॰प्र॰)/PtJ-Shimla (H.P.)

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5.	Undertaking to bear the cost of raising and maintenance of compensatory afforestation and/or penal compensatory afforestation as well as cost for protection and regeneration of Safety Zone etc. as per the scheme prepared by the State Government (undertaking to be enclosed).	Undertaking for payment of compensatory afforestation cost is enclosed as Checklist SI. No.12.
6.	Details of Certificates/documents enclosed as required under the instructions.	Enclosed as per the Checklists provided.

महाप्रवैधक (तकनीकी) GM(ig)ature एवं परियोजना निवेशक Asra Khurat) Project Director भाराराप्रL/N.H.A.I. भारारा.प्रL/N.H.A.L PIU, Shimla प.का.ई. - जिमला (हि०प्र०)/PIU-Shimla (H.P.)

Date:- 12-08 Date:- Place:- Shimla

State serial No. of proposal______ (To be filled up by the Nodal Officer with date of receipt)

INSTRUCTIONS (for Part-I):-

1. The project authorities may annex a copy of the approved project/plan in addition to filling Col. 1 (i) e.g. IBM approved mining plan for major minerals/CMPDI plan with subsidence analysis reports, etc.

2. Map has to be in original duly authenticated jointly by project authorities and concerned DCF - Col. 1 (ii).

3. Complete details of alternative alignments examined especially in case of project like roads, transmission lines, railway lines, canals, etc. to be shown on map with details of area of forest land involved in each alternative to be given - Col. 1 (iii).

4. For proposals relating to mining, certificate from competent authority like District Mining Officer about nonavailability of the same mineral in surrounding/nearby non-forest areas.

5. In case the same company/individual has taken forest land for similar project in the State, a brief detail of all such approvals/leases be given as an enclosure along with current status of the projects.

6. The latest clarifications issued by the Ministry under Forest (Conservation) Act, 1980 may be kept in mind. In case such information do not fit in the given columns, the same shall be annexed separately.

GENERAL INSTRUCTIONS:-

1. On receipt of proposal, Nodal Officer shall issue a receipt to the user agency indicating therein the name of the proposal, user agency, area to bectare, serial number and date of receipt.

2. If the space provided above is not sufficient to specify any information, please attach separate details/documents.

3. While forwarding the proposal to the Central Government, complete details on all aspects of the case as per Form presented above read with the clarifications issued by the Ministry of Environment and Foresis, Government of India. New Delbi should be given. Incomplete or deficient proposals shall not be considered and shall be returned to the State Government in original.

4 The State Government shall submit the proposal to the Central Government within supulated time limits. In case of delay while forwarding, the reasons for the same to be given in the forwarding/covering letter.

Checklist Sl. No. 4

Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimia Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha. in the State of Himachal Pradesh.

File No. : FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK-LIST SERIAL NO. - 04

DETAILED NOTE ON PROJECT

1. INTRODUCTION

The National Highways Authority of India (NHAI) under the Ministry of Road Transport & Highways (MoRT&H), Government of India has been entrusted with the assignment of Construction of Four laning of NH-22 from Kaithlighat to Shakral Village (Shimla Bypass Package I from Km 128+835 to Km 146+300 for Design length – 17.465 Km) in the state of Himachal Pradesh on HAM. The location of Package I of Shimla Bypass is shown in the Index Map (Fig-1) below:

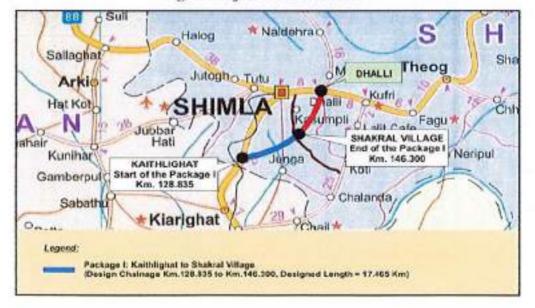


Fig. 1: Project Road Location

2. PROJECT DESCRIPTION

The project road i.e. Shimla Bypass (Package I) is a section of NH-22, starting from Kaithlighat and ending at Shakral (Chainage from Km. 128.835 to Km.

S.K. Sharma GM (T)-cum-Project Director NHAL PIU-Shimla

146.300) located in Shimla district in the state of Himachal Pradesh. Stage II approval for forest diversion proposal of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) for 40.3 ha, was obtained by NHAI vide MOEF&CC, Dehradun letter dated 15.09.2017.

However, some additional forest land of approximate area 11.7936 hectares is required to be diverted for four laning of proposed section of Shimla Bypass for the following purposes:

i) Dumping sites for muck disposal

ii) Diversion of land over tunnels

iii) Four laning of structures against 2-lane in previous project

iv) Slope protection measures at fragile hill strata locations

v) Minor modifications in the alignment for improving geometry of the highway

As all the Government Waste land in this district are considered as forest land in view of the notification Ft.29-241/B/C/49 dated 25.02.1952 of Government of Himachal Pradesh according to which all Govt, waste land has been declared as protected forests, there is no availability of suitable non-forest land within district Shimla.

The proposed 4-lane road necessarily passes through forest land because there is no non-forest land available as an alternative. These forest areas are located in scattered patches along the already approved alignment on either side of the road. Also, the project road is located in hilly areas and an alternative option to the road would not be viable. Hence, there is no escape from using the forest land. The four laning of Shimla Bypass will require minimum diversion of forest land.

A brief description of the project road w.r.t environmental aspects is given in Table below.

Total Length (km)	17.465 km
Project Districts	Shimla
Terrain	Hilly terrain
Protected Monument within 300 m of the Project Road	None
Name of the Protected Area within 10 km of Project Road (Buffer Zone)	Shimla Water Catchment Wildlife Sanctuary (is located at a minimum aerial distance of 3.69 km from the project site. However, no adverse impacts on wildlife are anticipated.

Table 1: Project description at glance

3. NEED OF THE BYPASS

The section of existing NH-22 between Kaithlighat and Dhalli is passing through congested Shimla town. This existing section is passing through heavily built-up area and it is not possible to widen it to four lanes as it will involve large scale acquisition of residential and commercial properties. Four laning of NH-22 from Solan to Kaithlighat is already in progress. Hence to maintain continuity of traffic capacity, it is required to provide a 4 lane bypass from Kaithlighat to Dhalli, and

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S.K. Sharma GM (T)-cum-Project Director NHA!, PIU-Shimla

the Package I from Kaithlighat to Shakral Village is a part of this Kaithlighat to Dhalli section.

4. TRAFFIC STUDY ON THE PROJECT ROAD

The projected Annual Average Daily Traffic in Package I (km 128+835 to km 139+400) is given as below:

SN	Description	Year	Tollable Traffic (PCUs)	Non Tollable Traffic (PCUs)
I Estimated Bypass Trai	Estimated Bypass Traffic	2020-2021	9845	10000
	Construction Year	2021-2022	10421	10585
a)		2022-2023	11030	11204
2		2023-2024	11675	11860
		2024-2025	12358	12555
3	Year of Opening	2025-2026	13156	13366

Table 2: Traffic on the Shimla Bypass Package I

The project road lies in the mountainous region of Himachal Pradesh and is expected to carry more than 10,000PCU/day i.e. more than the design service volume of 2 lane road in mountainous terrain. The proposed bypass road is, therefore, required to be developed as four lanes with paved shoulder from the expected year of opening for the entire length.

5. DETAILS OF STRUCTURES

Based on the Vertical Profile, Hydrological and Structural Analysis the following structures are proposed on the bypass:

A. Bridges & Other Structures

Number of 4 Lane major bridge	04 nos.
Number of 4 Lane Viaduct	16 nos.
Number of new Vehicular Overpass (2 lane carriageway)	01 no.
Total	21 nos.

B. Tunnels

Proposed Tunnels on the Project Road

S. No.	Location	Start Design Chainage (Ch.)	End Design Chainage (Ch.)	Length of Tunnel (m)	Carriageway width including Footpath & Walkway (m)	Remarks
1	Tunnel 1 (LHS &	L.H.S. Ch. Km	L.H.S. Ch. Km	680	10.50	The LHS tunnel of length 300m

S.K. Sharma GM (T)-cum-Project Director NHAI, PIU-Shimla

	RHS Tube)	129+940	130+620			is partially constructed
	-	R.H.S. Ch. Km 129+930	R.H.S. Ch. Km 130+620	690	11.95	-
2	Tunnel 2	L.H.S. Ch. Km 135+595	L.H.S. Ch. Km 136+800	1205	11.95	52
2	(LHS & RHS Tube)	R.H.S. Ch. Km 135+622	R.H.S. Ch. Km 136+800	1178	11.95	

C. Cross Drainage Structures (Culverts)

- Box Culverts 53 nos.
- Pipe Culverts at the Junction locations 05 nos.

D. Truck Laybyes

The truck lay bye are at Km. 139+795 (RHS) and Km. 140+025 (LHS).

E. Bus Shelters

There is one bus shelter on either side is proposed in the project. The Bus shelters are at Km.139+685 (RHS) & Km.139+685 (LHS).

F. Other Project Amenities

There are other Project Amenities in this Package which are enumerated below:

(a) Toll Plaza

There is one Toll Plaza at Km.131+290 at a staggered position as Left Toll collection at Km.131+155 and Right Toll collection at Km.131+423.

(b) Passenger Wayside Amenity

There is one Passenger Wayside Amenity at Km.1424985 (RHS).

G. Toll Plaza

There is one toll plaza in staggered manner i.e. Km 131+155 for left toll collection & Km 131+423 for right side toll collection.

6. CONSTRUCTION PACKAGES

The project involves construction of an extra-dosed bridge, five twin tube tunnels and number of viaducts in a very difficult terrain. It will need a contractor of good technical and financial standing to execute the project. Moreover the cost of

S.K. Sharma GM (T)-cum-Project Director NHAL PIU-Shimia

implementation is high and therefore Project is proposed to be implemented in two Packages.

This executive summary pertains to Package I of Shimla Bypass from Km.128+835 to Km.146+300.

7. ENVIRONMENTAL CONSIDERATIONS

Statutory Requirements

a) Environmental Clearance

The project does not require prior environmental clearance from the Ministry of Environment, Forest and Climate Change as per the EIA Notification Amendment dated 22nd August, 2013.

b) Forest Clearance

The project involves four laning of Shimla Bypass Package I (NH-22). Forest Clearance for diversion of required additional Forest land will be taken as per Forest Conservation Act 1980, and its amendments. As the proposed development is a linear project, the in-principle approval will be granted by the Integrated Regional Office (MoEFCC), Shimla for the proposed project.

c) Wildlife Clearance

The project corridor does not pass through any Wildlife Sanctuary/ National Park etc., hence Wildlife clearance as per Wildlife (Protection) Act, 1972 and Amendments is not required. Shimla Water Catchment Wildlife Sanctuary (WLS) is located in the study area (within 15km radius of the alignment) at a minimum aerial distance of 3.69 km from the nearest chainage at km. 146+300 of the proposed alignment. No significant impact has been envisaged on Wildlife Sanctuary due the proposed project.

Environmental Impacts & their Mitigation

The proposed project will have impacts on environment during the construction and operation phases. The negative impacts can be reduced or minimized only if proper safeguards are put in place during the design and construction stage itself. These can include reducing pollutant discharge from the harmful activities at source or protecting the sensitive receptor. Mitigation measures to the anticipated impacts have been worked out to minimise any adverse impacts on the various environmental and social components.

To mitigate the impact on forests, following measures have been proposed:

- Compensatory afforestation will be carried out as per Himachal Pradesh Forest Department norms and cost towards CA and NPV of diverted forest land will be paid by NHAI.
- There will be no tree felling in tunnel areas and hence the number of trees in these stretches will be saved.

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 Green belt development plan has been prepared for the project road in which avenue and median plantations have been proposed.

8. COST ESTIMATE OF THE PROJECT

The details of cost estimate are given in Table 10.

S. No.	Component of Costs	Cost (INR) in Crores
1.	Civil cost (In Crores)	1390.32
	Civil cost/ Km (In Crores)	79.61
2.	Total Project Cost (In Crores)	1721.52
	Total Project Cost /Km (In Crores)	98.57

Table 10: Total Civil and Project Cost

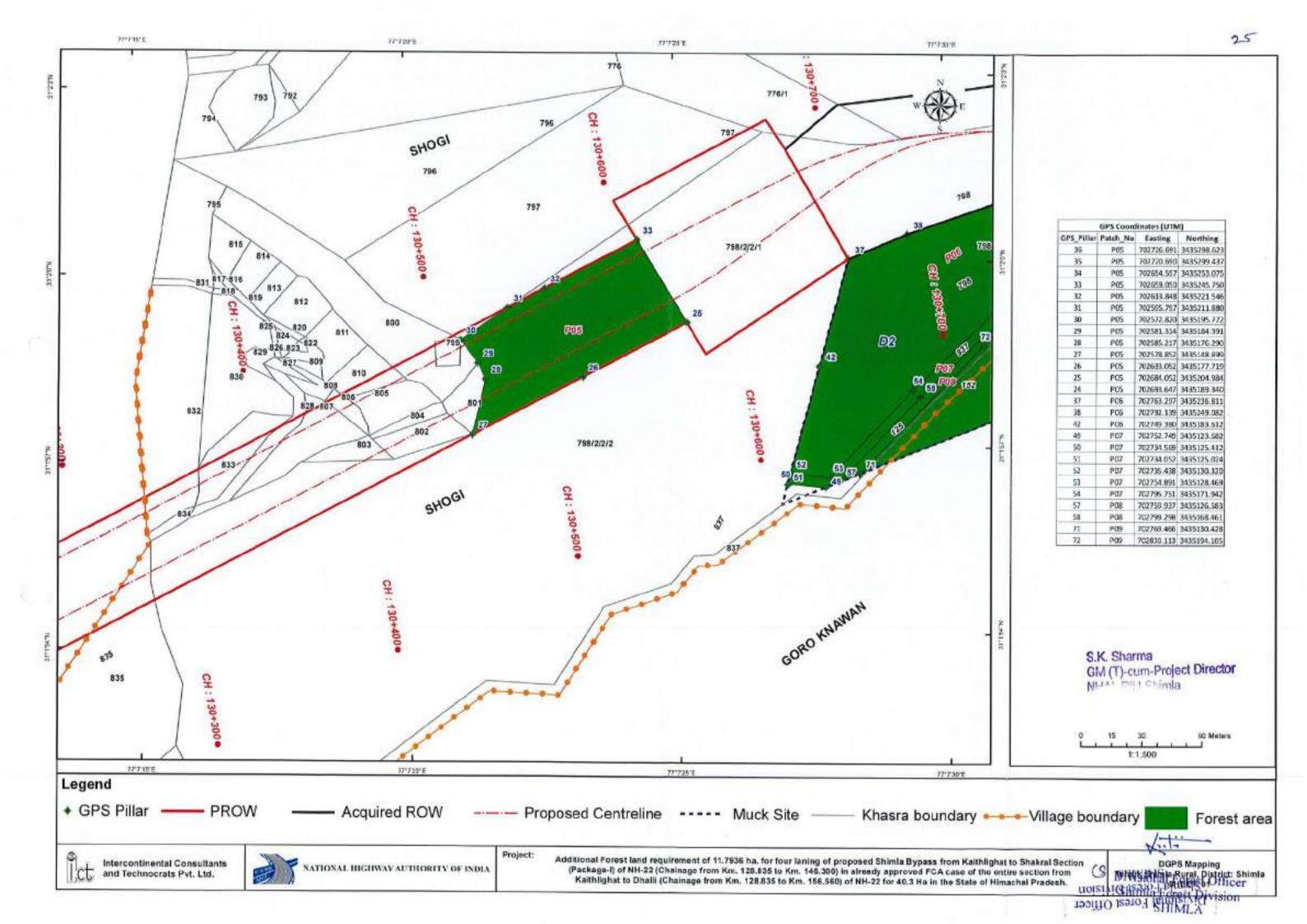
9. RECOMMENDATION

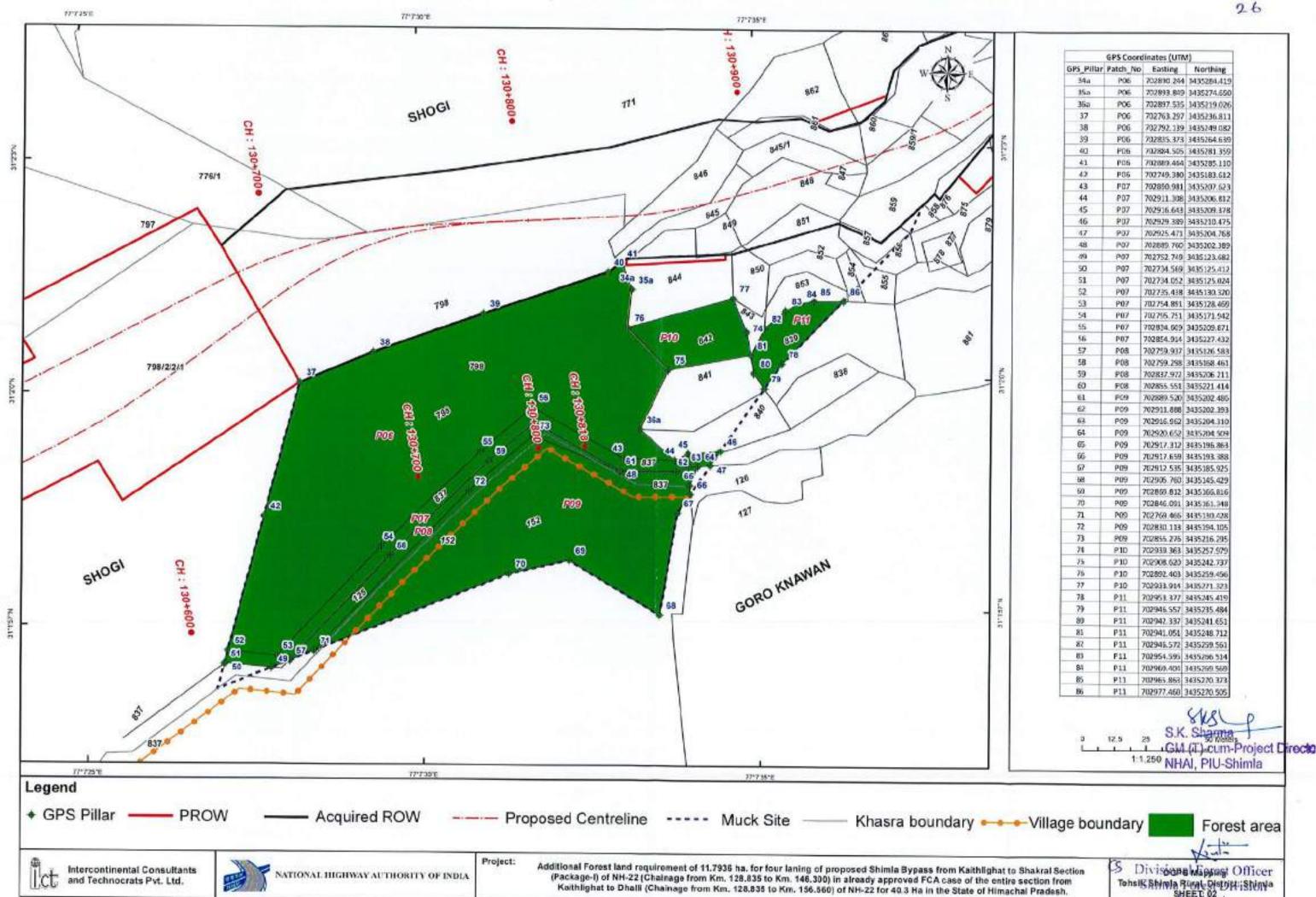
Based on the Detailed Project Study the following recommendations are made:

- The proposed bypass is likely to carry traffic of more than 10,000 PCUs/day which is more than the design service volume of 2 lane road in hilly terrain. Hence it is recommended to construct the Package I of the Shimla bypass to 4 lane configuration.
- Based on Life Cycle Analysis it is recommended to provide flexible pavement with cement treated base and sub-base. However for tunnel section and toll plaza rigid pavement will be provided.
- The project length is small and the project cost is high. The project will
 not be viable for implementation on BOT basis. Hence, it is recommended
 to implement the Package I on HAM.

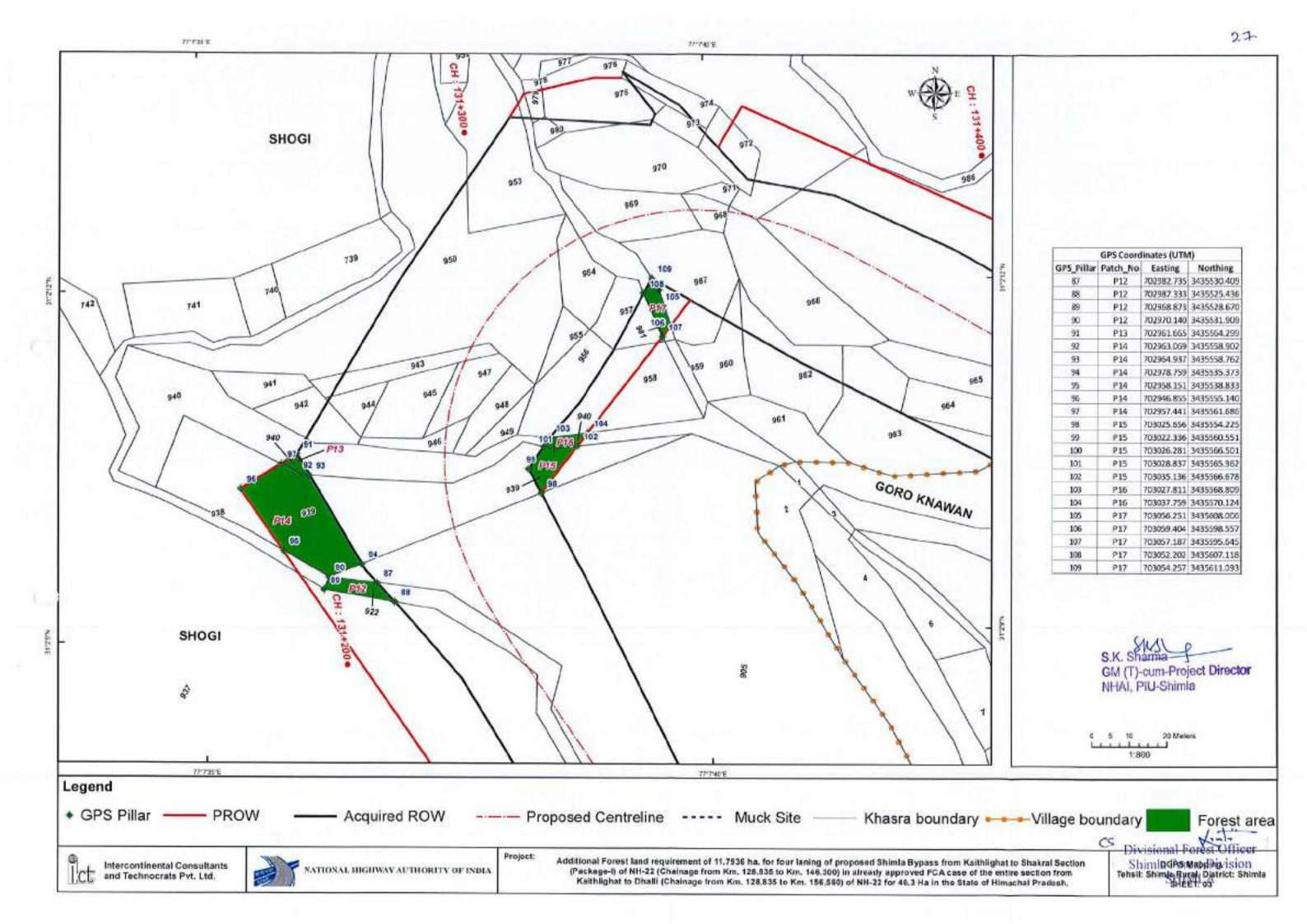
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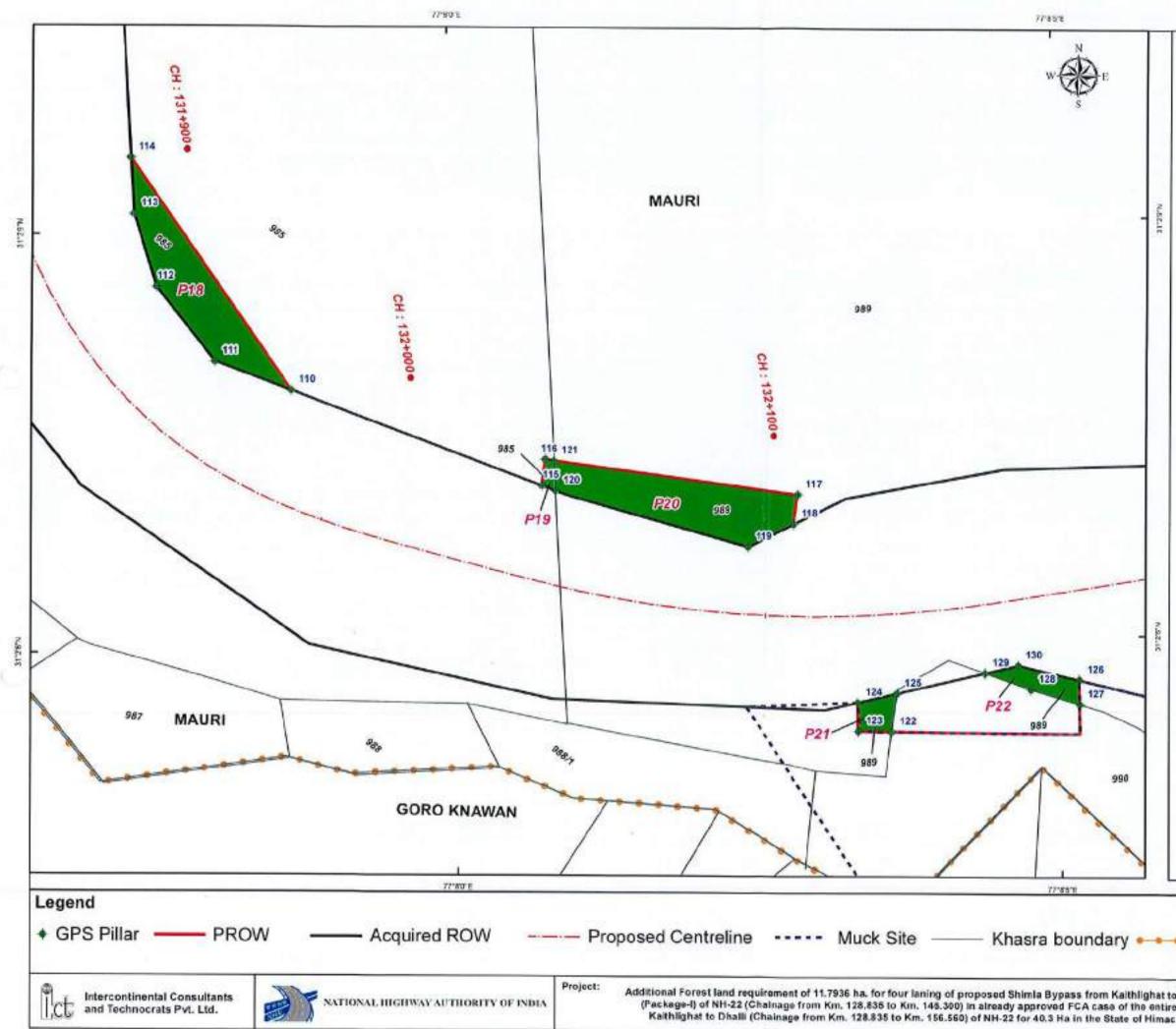
S.K. Sharma GM (T)-cum-Project Director



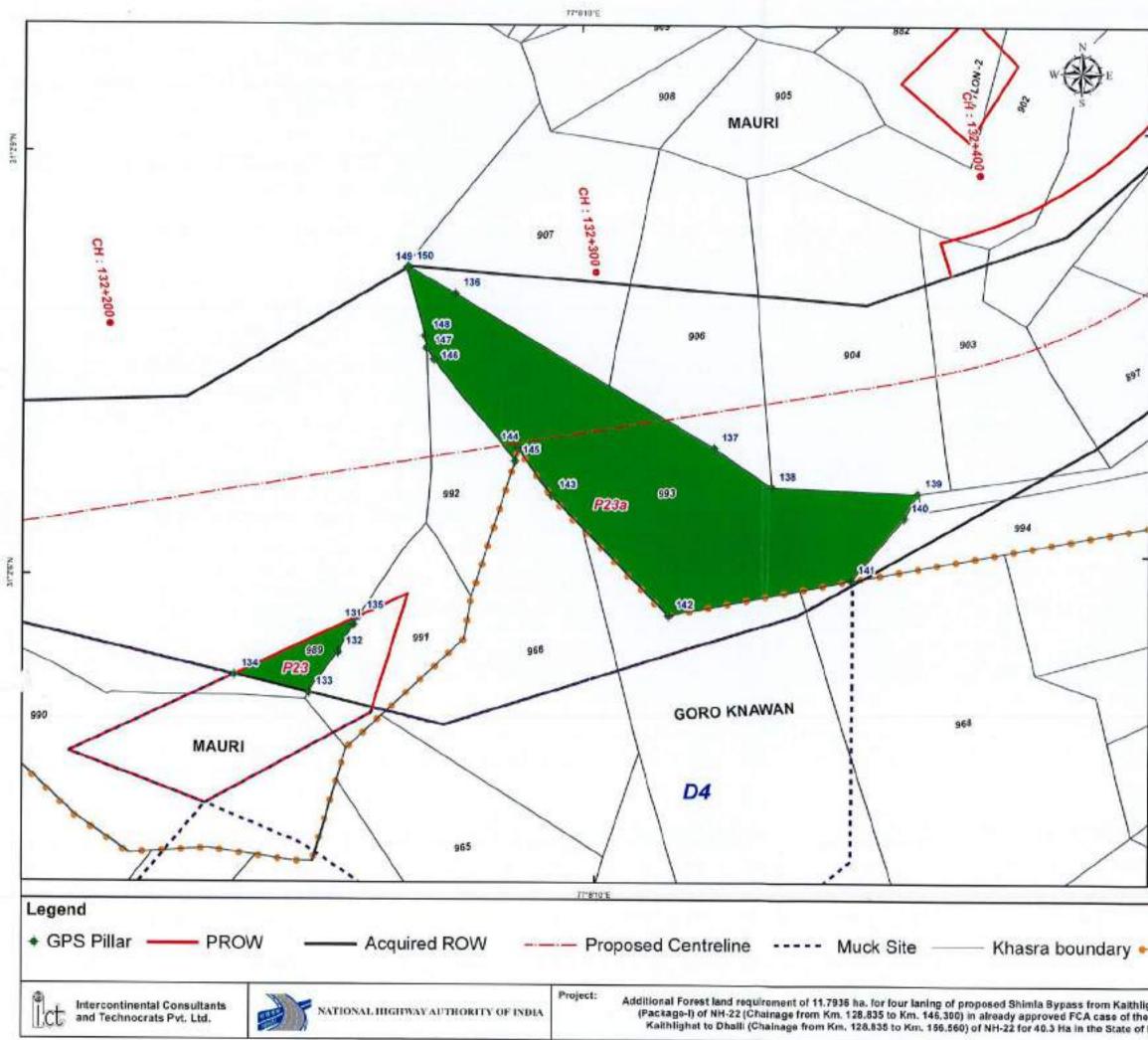


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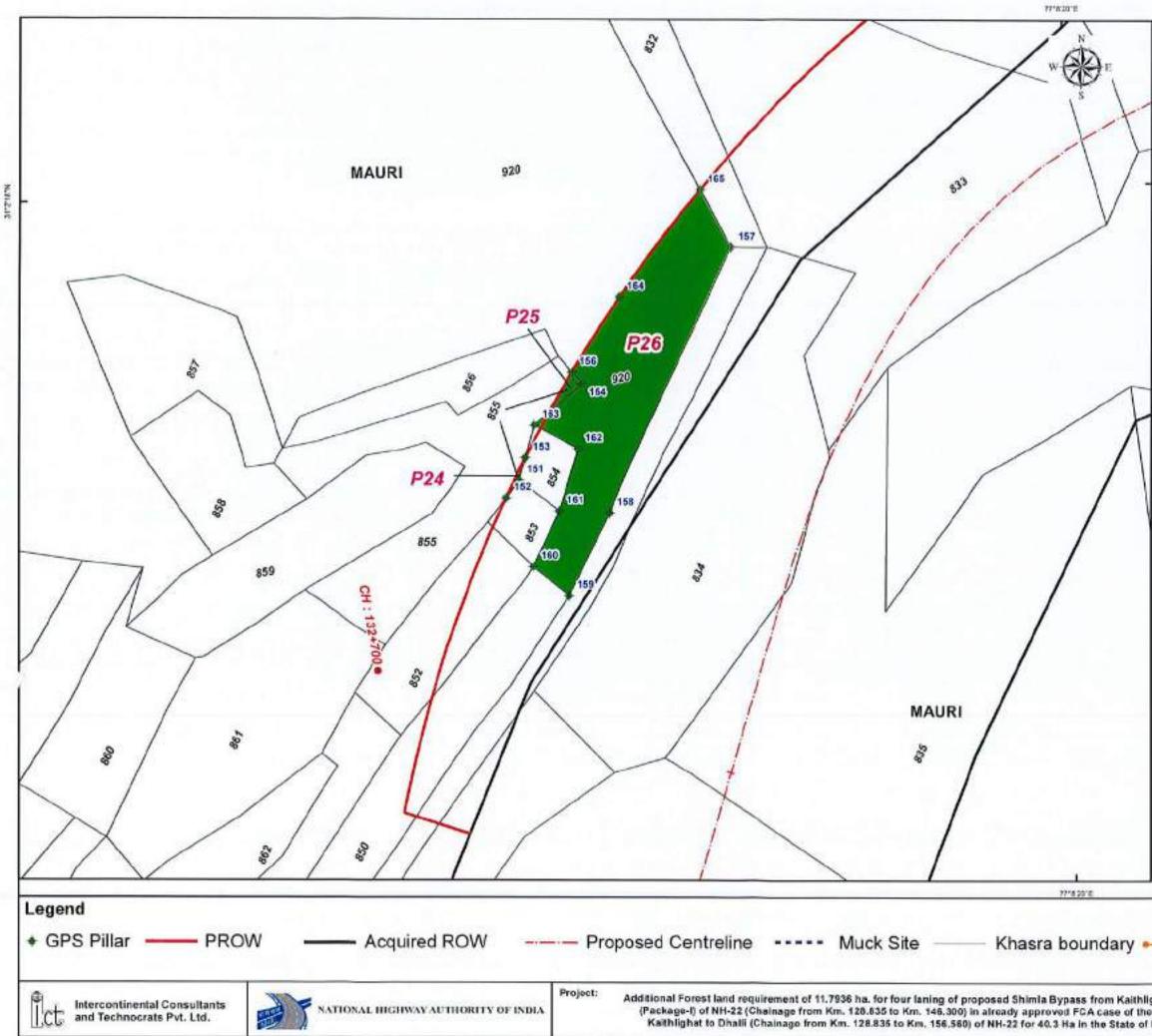




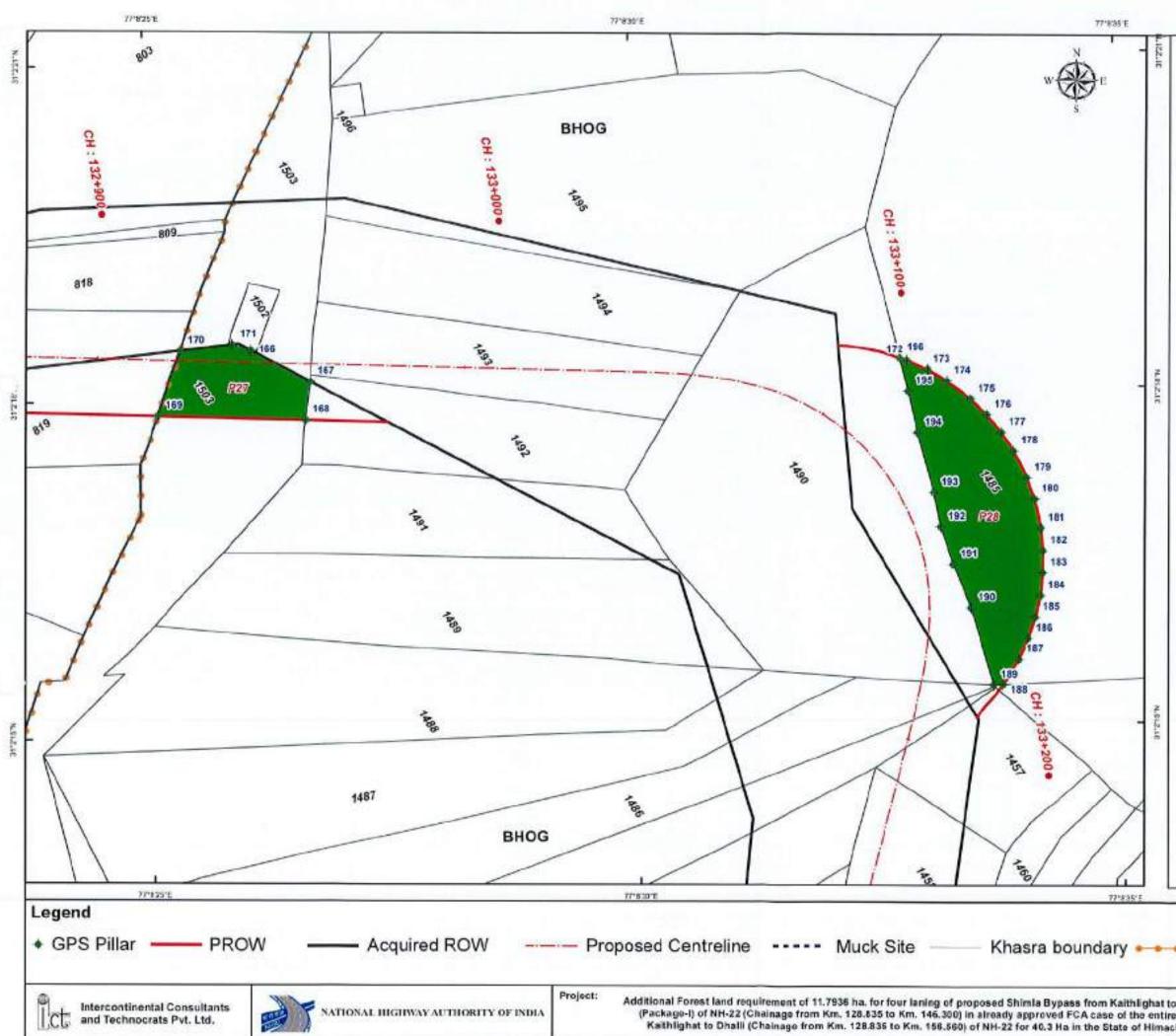
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	110	P18		3435491.865
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	112	P18		3435530.676
	113	P18		3435543.092
	114	P10	11.000	3435471.090
	115	P19 P19		3435476.825
	110	P19 P20		3435469.308
	118	P20		3435462.821
	119	P20	and the second se	3435457.722
	120	P20	Contraction of the second second	3435469.965
	120	P20	The State of State of State	3435476.577
	121	P20		3435417.158
	122	P21	and the second se	3435417.223
	123	P21	Contract of the Province of the Pro-	3435423.566
	125	P21		3435425.599
	125	P23		3435428.695
	123	P22	-1-7-CO. 3-7-CT. 2-1-	3435423.318
	128	P22	Contradict Contradiction of the	3435426.593
	129	P22	ALC: NOT THE OWNER WATER OF THE OWNER OWNE	3435430.171
	130	P22	and the second se	3435431.907
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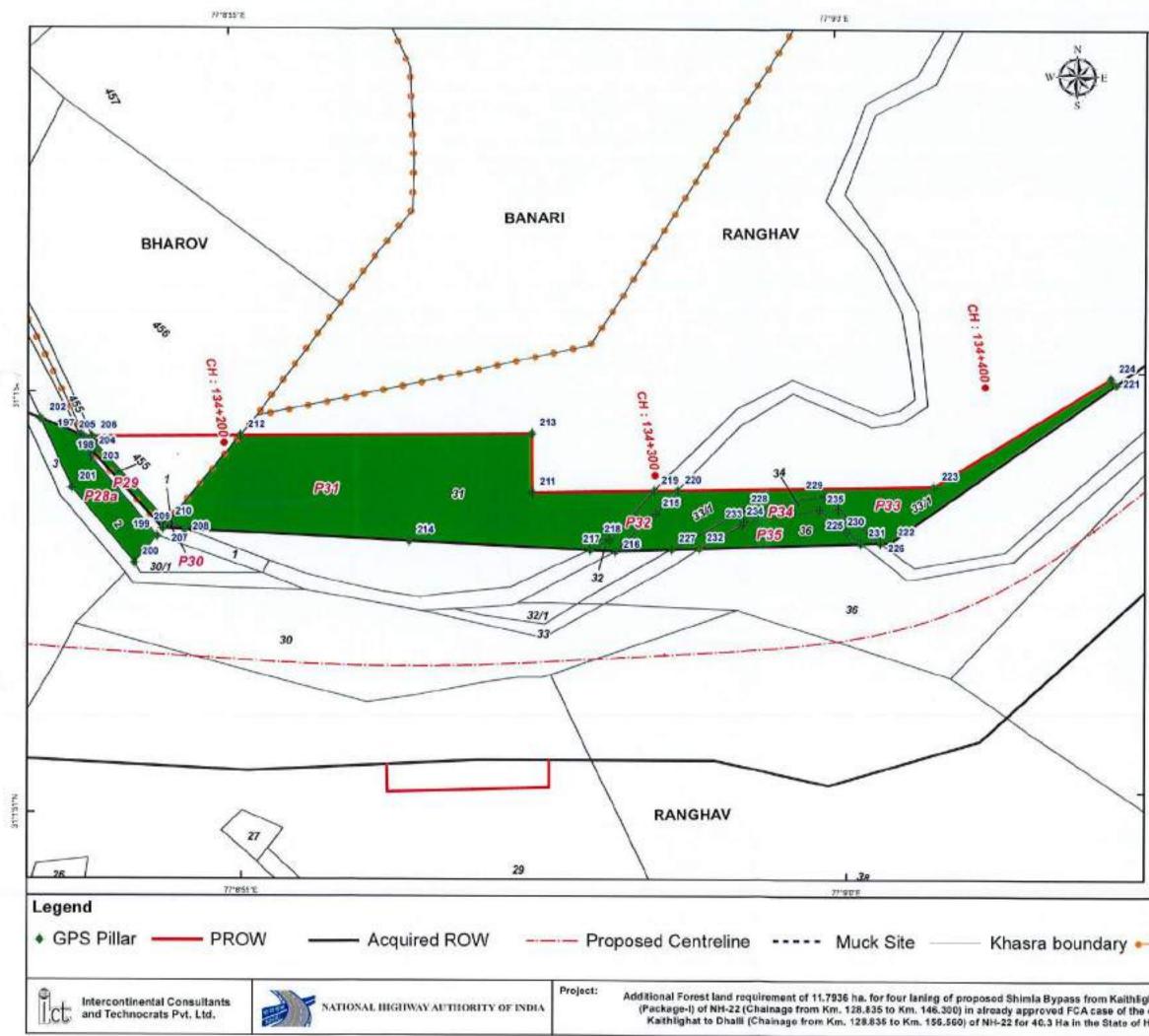
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	132	P23	Contraction of the local distance of the loc	3435421.508
	133	P23		3435412.684
1	134	P23	and the second	3435416.559
	135	P23	703817.573	3435429.332
	136	P23a	703838.173	3435499.817
	137	P23a	703894.425	3435466.250
	138	P23a	703907.054	3435457.755
	139	P23a	703938.755	3435456.594
	140	P23a	703935.897	3435451.138
	141	P23a	703924.391	3435437.522
	142	P23a		3435429,756
	143	P23a		3435455.796
	144	P23a	The second second second second second	3435466, 199
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	346	PZ3a	the state of the state of the state of the state of the	3435485.415
	147	P23a		3435487.927
	148	P23a	and the second second second	3435490.566
	149	P23a P23a	and the second sec	3435505.381 3435505.596
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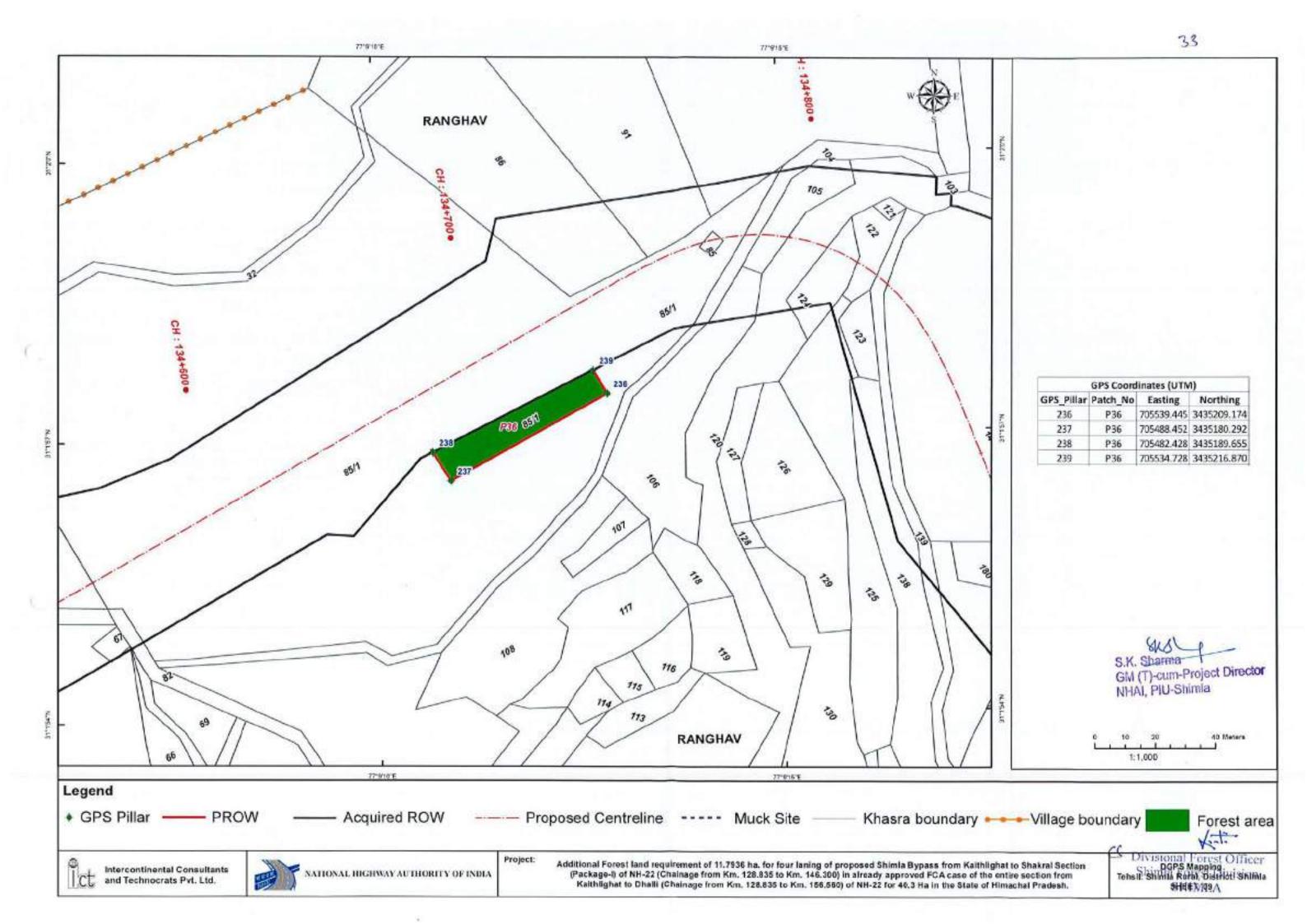
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	151	P24	the second s	3435782.992	
	152	P24	the second s	3435781.034	
	153	P24	College and an and the second s	3435785.406	
	154	P25	Contraction of the local distance of the loc	3435793.432	
	155	P25		3435790.367	
	156	P25		3435794.731	
	157	P26 P26	Contraction of the Contraction of the	3435808.394 3435779.432	
	159	P26		3435770.449	
	160	P26		3435773.584	
	161	P26	704071.178	3435779.608	
	162	P26	704073.161	3435786.369	
	163	P26	704068.476	3435788.989	
	164	P26	the second s	3435802.946	
	165	P26	704086,264	3435814.623	
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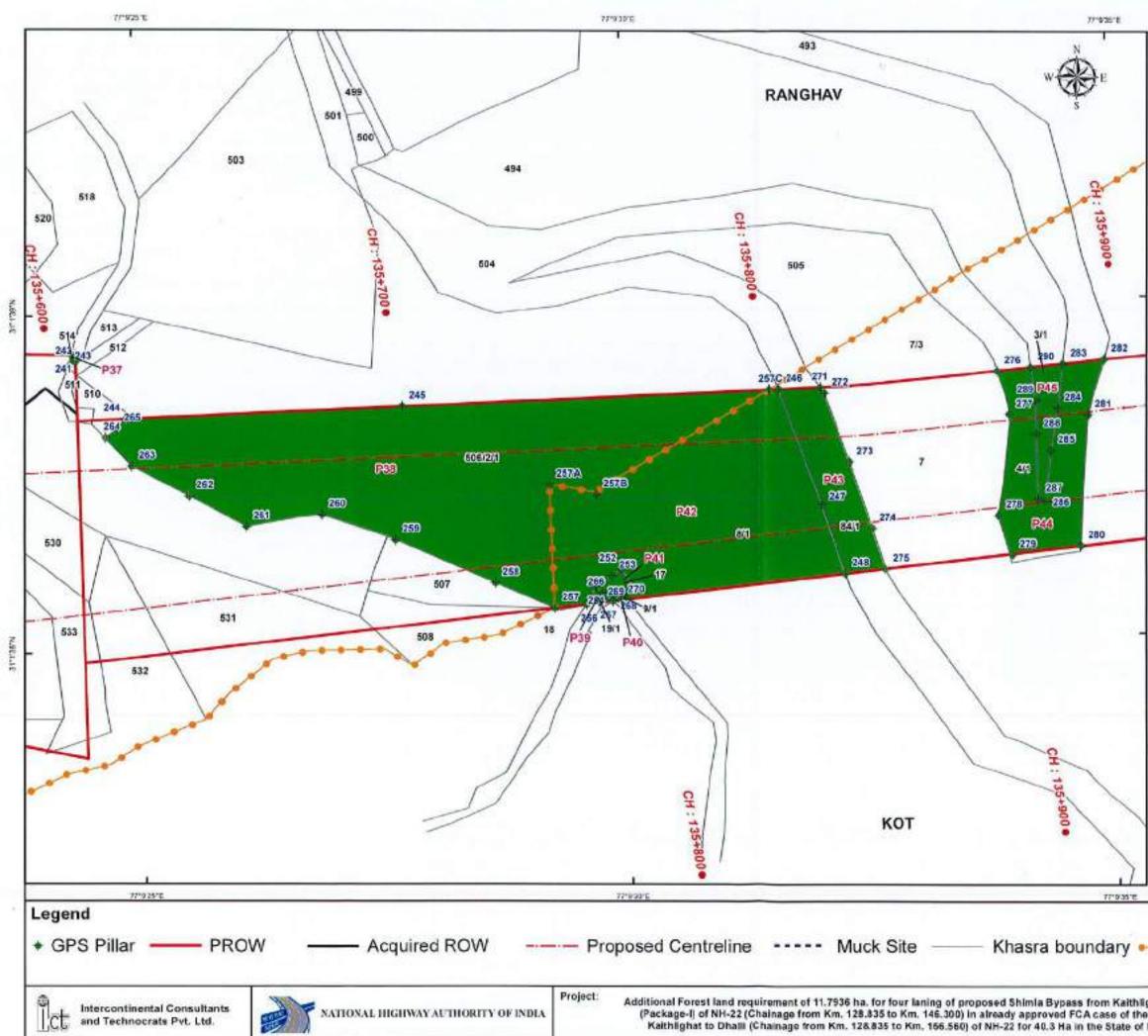


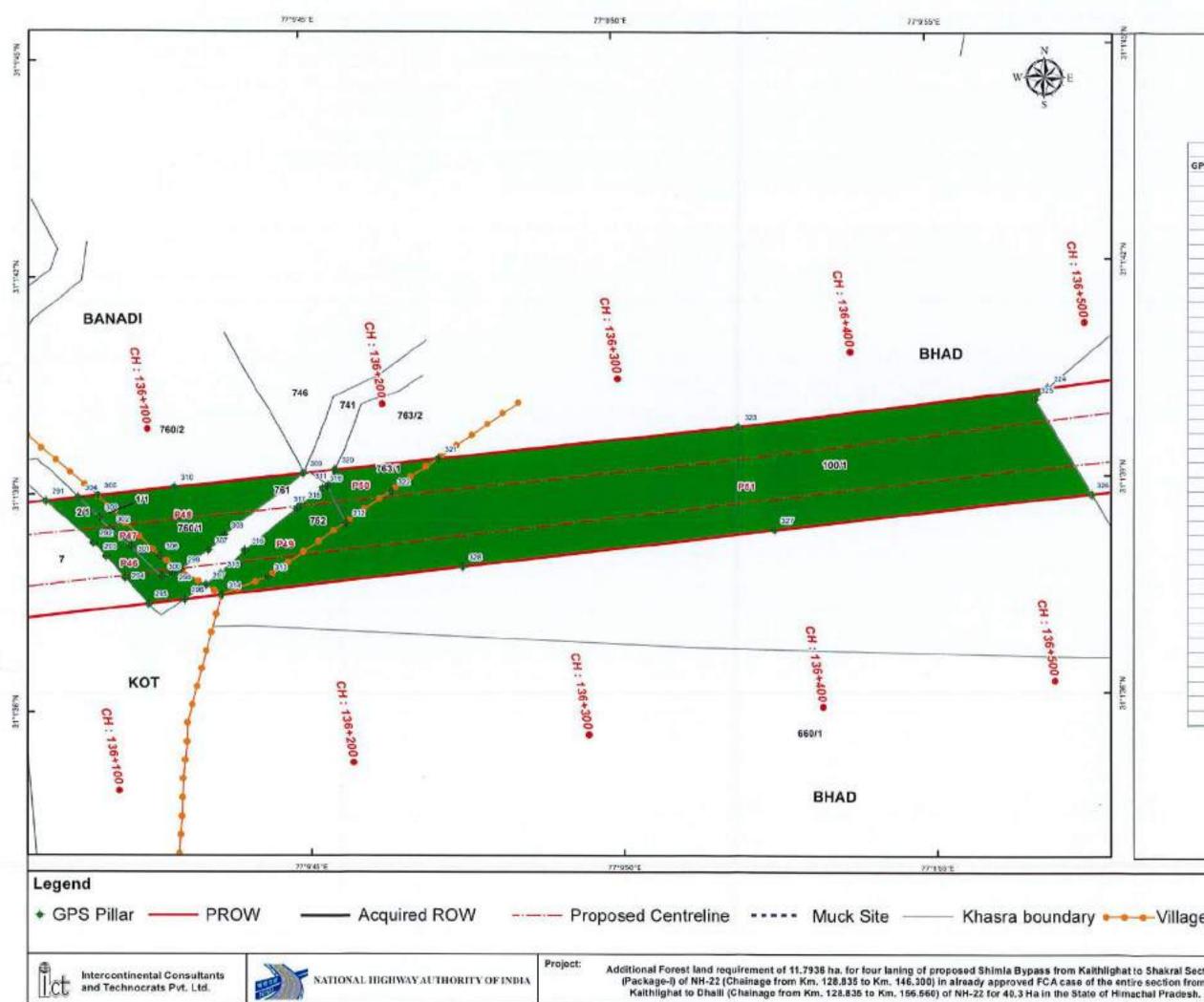
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		166	P27	704286.523	3435831.952
		167	P27	704302.721	3435823.483
		168	P27	704301.444	3435812.909
		169	P27	704261.211	3435813.778
	2	170	P27	704267.243	3435831.801
2	171	P27	704281.432	3435833.548	
	172	P28	704465.742	3435829.917	
	173	P28	704471.371	3435827.372	
	174	P28	704476.703	3435824.253	
	175	P28	704483.249	3435819.260	
	N. 152.10	176	P28	704487.667	3435814.943
	H.	177	P28	704491.610	3435810,188
		178	P28	704495.034	3435805.046
		179	P28	and the second se	3435797.688
		180	P28	704500.806	3435791.871
		181	P28	704502.610	3435783.838
		182	P28		3435777.690
		183	P28		3435771.513
		184	P28	and the second se	3435765.374
		185	P28		3435759.340
		186	P28		3435753.477
		187	P28	704496.682	3435747.850
		188	P28		3435740.819
		189	P28	704489.774	3435740.700
		190	P28		3435761,918
		191	P28		3435773.883
		192	P28	a subscription of the second se	3435784.171
		193	P28		3435793.538
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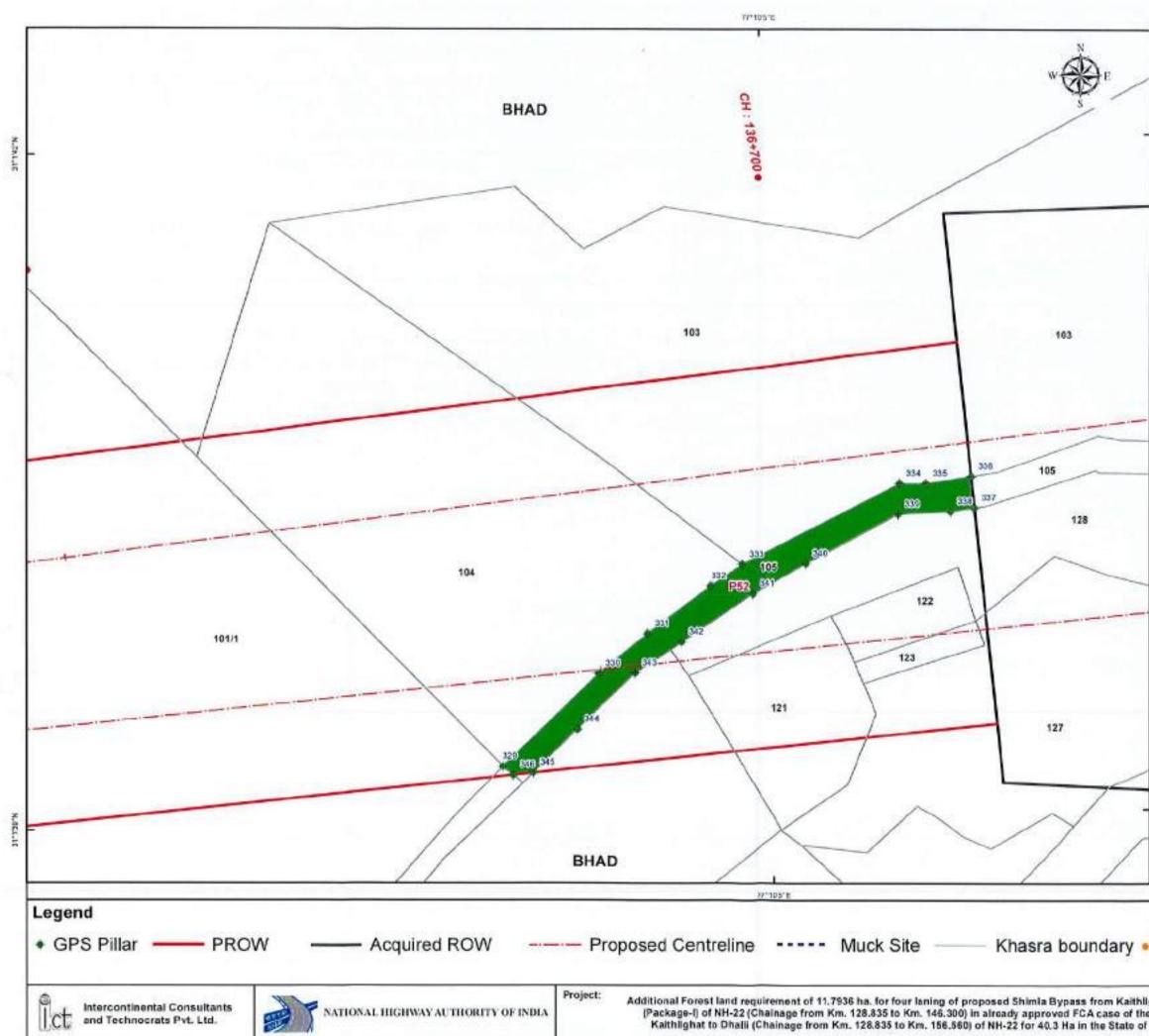
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197	P28a		3435083.765
198	P28a	Printer and a second	3435078.866
199	P28a	1.	3435061.584
200	P28a		3435055.617
201	P28a		3435072.083
202	P28a		3435087.215
203	P29		3435082.216
204	P29		3435080.380
205	P29		3435083.349
206	P29	U.S. Constants	3435083.367
207	P30		3435064.342
208	P30	and the second se	3435062.992
209	P30	Contraction of the second s	3435063.228
210	P30	Carlo Designation of the local data	3435054,522
211	P31	a start of the second se	3435071.251
212	P31		3435083.684
213	P31	and the second se	3435084.309
214	P31		3435060.610
215	P32		3435066.729
216	P32		3435058.425
217	P32		3435058.691
218	P32		3435060.947
219	P3Z	Construction of the second	3435071.727
220	P32		3435071.817
221	P33		3435095.476
222	P33	1	3435060.541
223	P33		3435072.819
224	P33	A 40 3 3 5 5 7 5 6	3435096.842
225	P34	and a second	3435067.724
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228	P34		3435067.787
229	P34		3435070.743
230	P35		3435062.755
231	P35		3435060.314
232	P35	the second s	3435059.069
233	P35		3435064.423
234	P35		3435065.019
235	P35	\$	3435067.764
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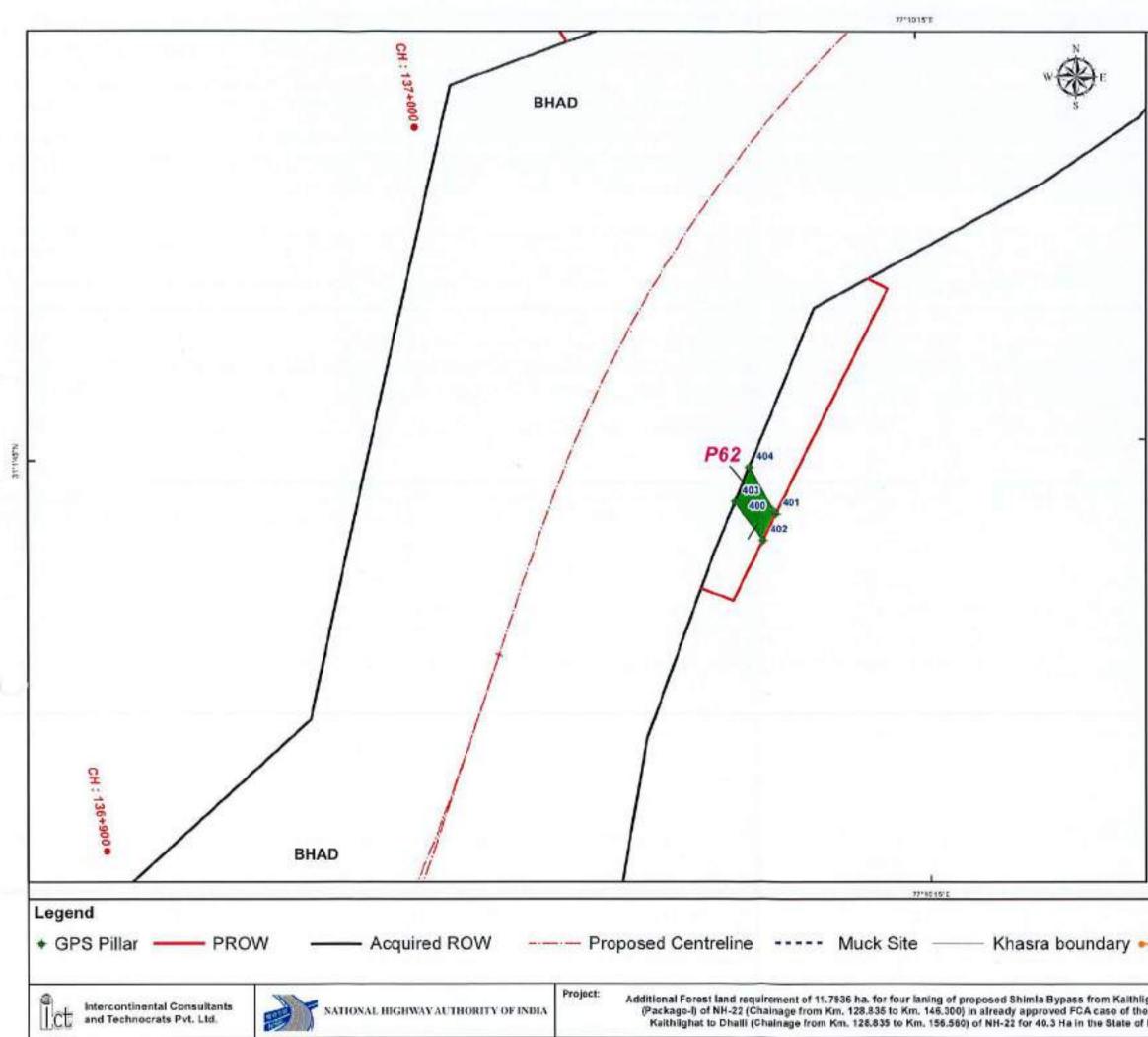




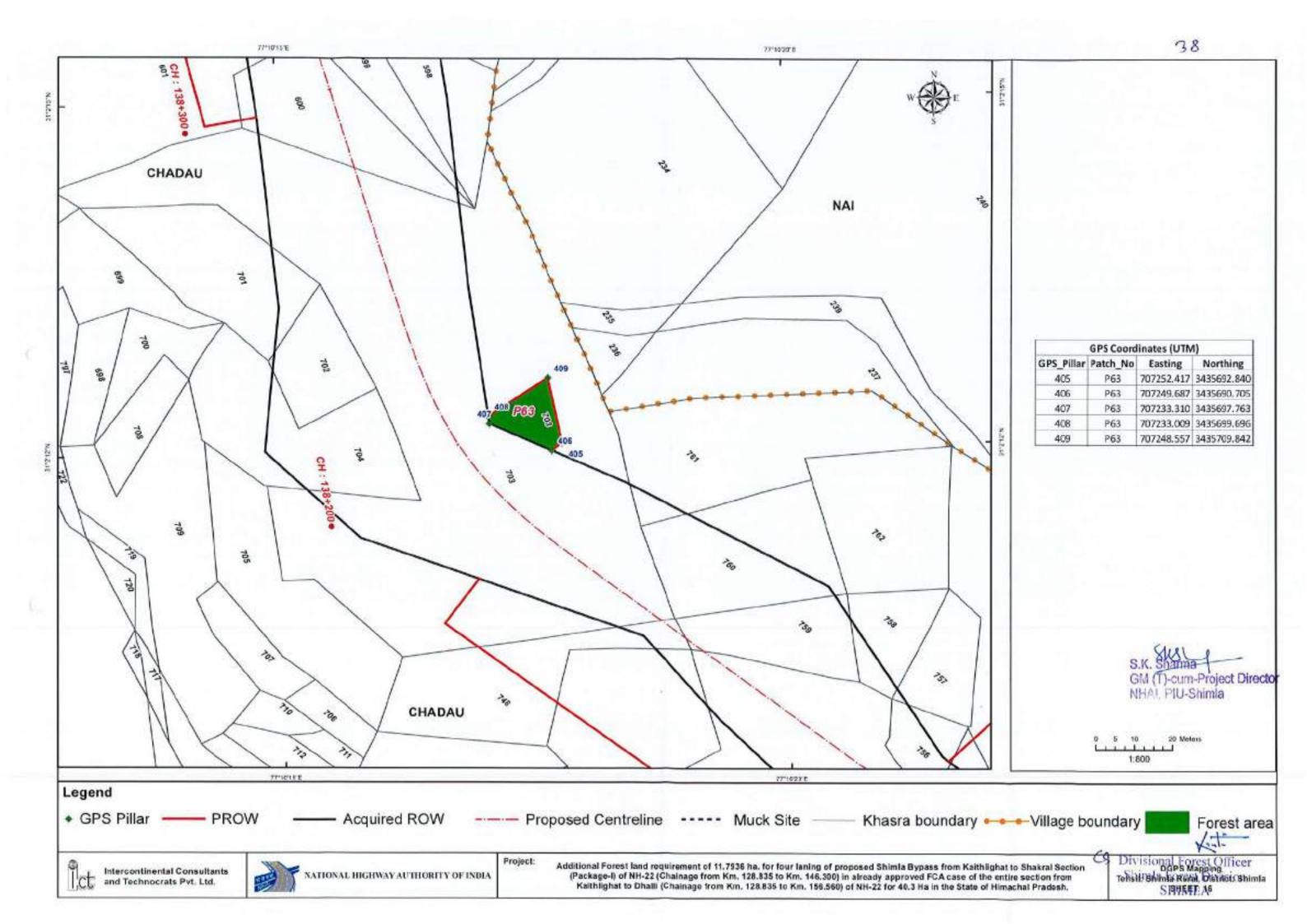
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328	P51	and the second	3434625.208
327	P51	706601.767	3434641.058
326	P51	706736.116	3434656.567
325	P51	706711.634	3434697.039
324	P51	706717.053	3434701.841
323	P51		3434685.108
322	P51	100000000000	3434657.354
321	P50		3434671.157
320	P50 P49		3434666.371 3434658.514
318	P49		3434651.558
317	P49		3434649.746
316	P49		3434631.831
315	P49		3434622.047
314	P49	706367.742	3434613.005
313	P51	705387 119	3434620.609
312	P50	706420 306	3434643.934
311	P50	705412.239	3434659.520
310	P48		3434658.904
309	P48		3434664.878
308	P48	The second se	3434638.507
307	P48 P47	0.00000000000	3434632.169 3434629.639
305	P47		3434655.350
304	P47		3434654.465
303	P47		3434646.019
302	P46		3434641.041
301	P47	706329.257	3434633.678
300	P46	705342.294	3434620.958
299	P47	705346 765	3434622.146
298	P48	706350 372	3434623.937
297	P46	1120000000000000	3434617.185
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295	P46	Contraction of the second s	3434609.292
294	P46	A. 11 20 10 10 10 10 10 10	3434620.296
293	P46 P46		3434629.540 3434635.084
292	P46 P46	Chevrolet and the second se	3434652.967
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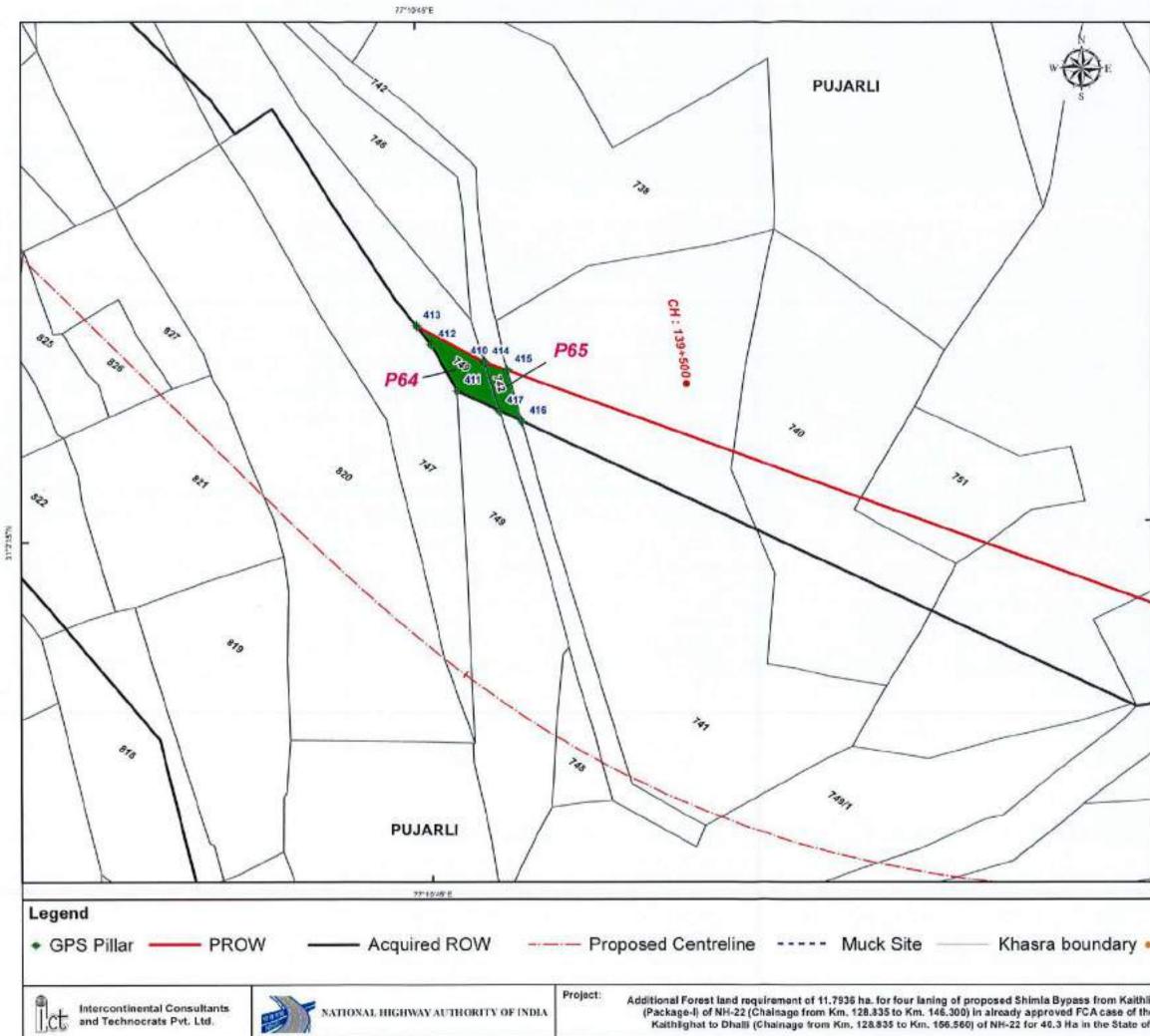


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	346	P52 P52	and the second se	3434673.862 3434674.158	
	345	P52 P52		3434680.119	
	344	P52		3434687.794	
	342	P52		3434692.015	
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	341	P52	and a set of the set of the set of the	3434702 770	
	339	P52		3434709.569	
	338	P52		3434709.936	
	337	P52	and any second second second second	3434710.425	
	336	P52		3434714.732	
	335	P52		3434713.747	
	334	P52	H1000000000000000000000000000000000000	3434713.750	
	333	P52	Contraction of the South of the	3434702.649	
	332	P52	COULD A REAL PROPERTY AND	3434699.714	
	331	P52	705916.075	3434693.194	
	330	P52	705909.404	3434687.726	
	329	P52	705896.443	3434674.976	
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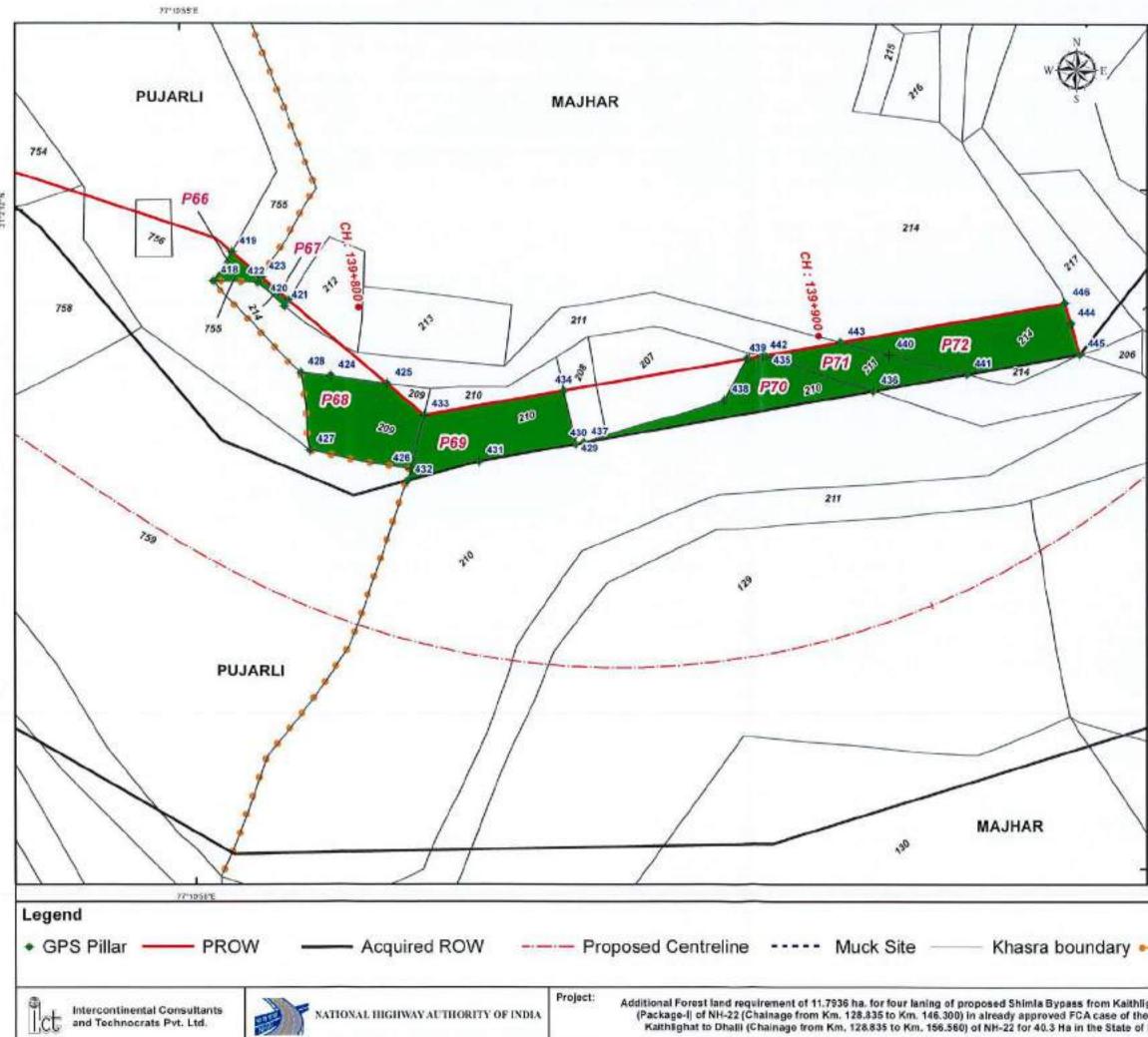


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		GPS Coord	inates (UTIV	1)
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2	400	P62		3434848.876
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7	402	P62	707172.948	3434844.899
	403	P62	charge from the local sectors and the sec	3434850.158
	404	P62	10/1/1.05/	3434854.937
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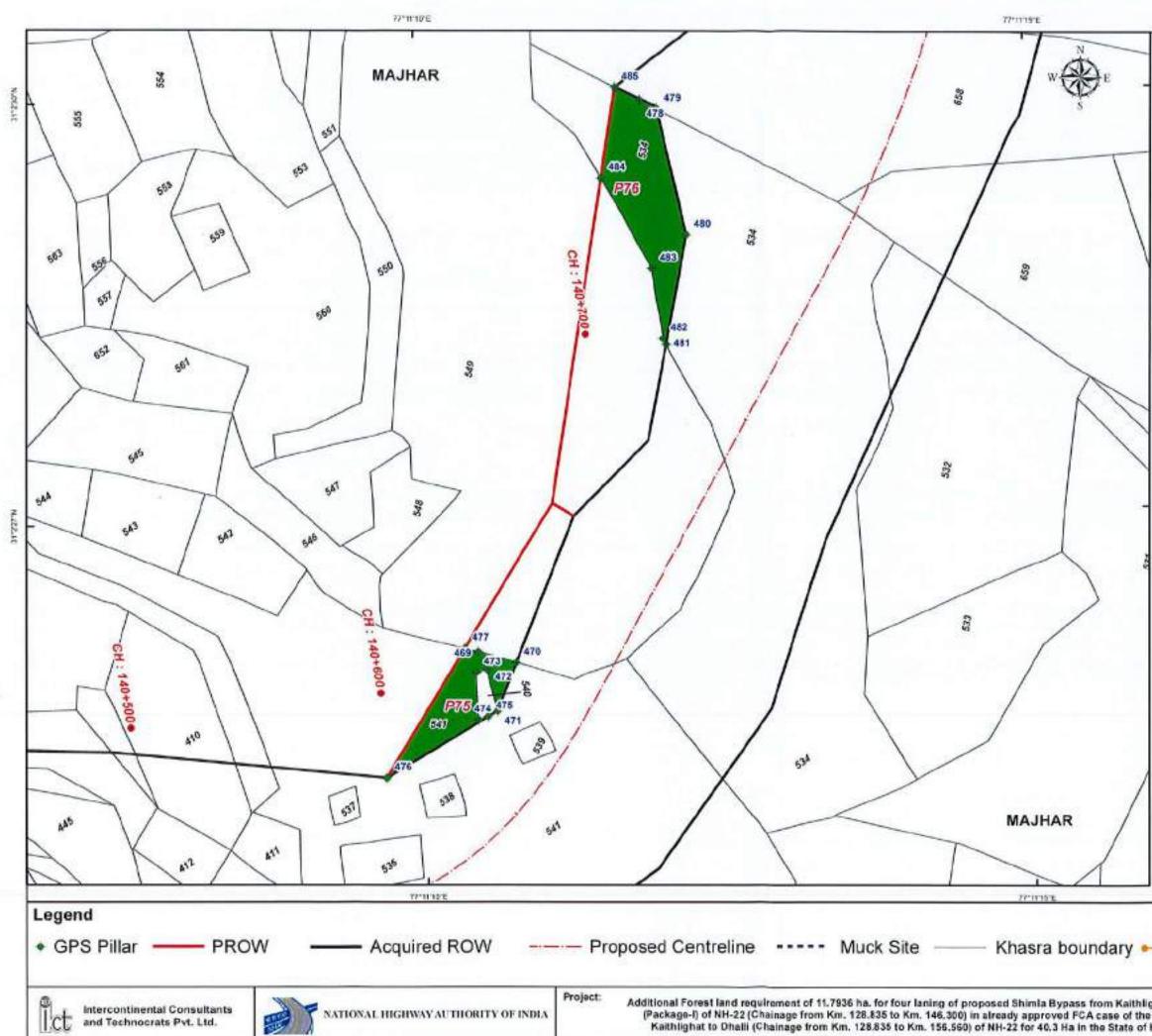




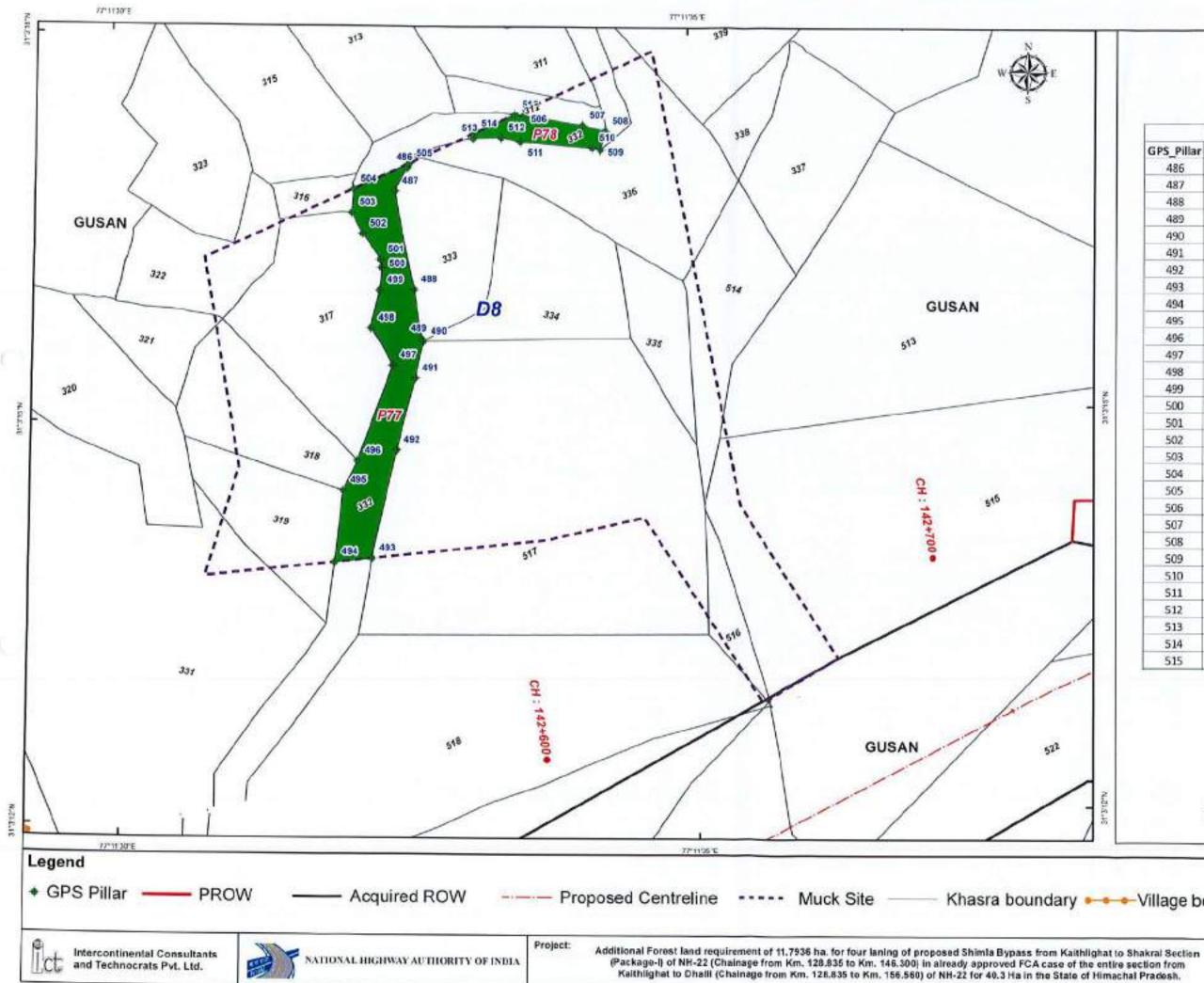
		GPS Coord	inates (UTN	1)
	GPS_Pillar	Patch No	Easting	Northing
	410	P64		3435816.463
	411	P64	707975.702	3435813.228
	412	P64	707972.918	3435818.253
	413	P64	707971.326	3435820.285
	414	P65	707978.708	3435816.416
	415	P65	707981.145	3435815.530
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10	417	P65	707980.311	3435811.078
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42			3435697.023
42	10 10 10 10	708249.374	
42		708249.831	and the second se
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43	101000		3435682.222
434			3435685.528
43		708318.012	3435690.170
430	1100 AD 11	708332.547	3435685.516
43		708293.392	3435678.455
43		708312.327	3435684.248
43	6. A 6. 6		3435689.878
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44			3435687,788
44	2 P71	708317.577	3435690.255
44	3 P71		3435692.095
44		708359.229	3435594.692
44	5 P72	708360.450	3435690.548
44	6 P72		3435697.503
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91.562.18				
		GPS Coord	linates (UTN	1)
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1	469	P75	708640.348	3436151.130
	470	P75		3436148.823
	471	P75	708644.432	3436138.177
	472	P75	708642.255	and a property of the second se
	473	P75	708639.842	and the second se
	474	P75		3436136.328
	475	P75	708642.451	The second second second second
	476	P75	708620.381	3436123.564 3436151.879
	477	P75 P76		3436151.879
	470	P76	708678.804	3436270.230
	475	P76	708685.441	3436242.628
	481	P76	708681.108	and and the second second second second
	482	P76	708680.426	and a second
	483	P76	708677.978	3436235.211
	484	P76	708666.723	and the second se
	485	P76	708669.623	3436274.986
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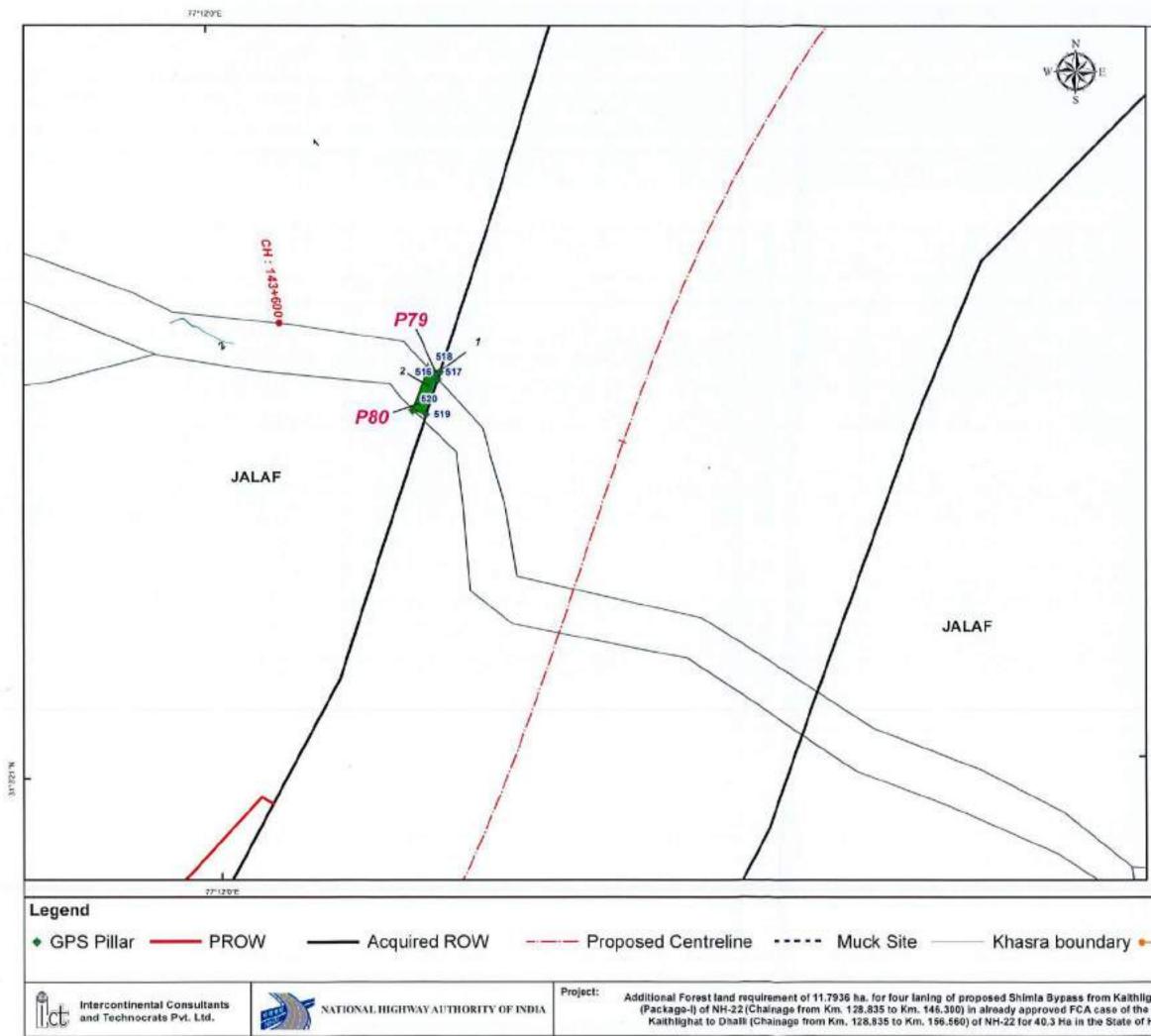


GPS Pillar	Patch No	Easting	Northing
486	P77		3437727.771
487	P77		3437722.316
488	P77		3437699.696
489	P77	0.00.000.0000	3437688.283
490	P77	5 00 05 00 00 00	3437687.715
491	P77	the state of the s	3437679.223
492	P77		3437662.570
493	P77		3437637.622
494	P77		3437636.675
495	P77		3437653.235
496	P77		3437660.031
497	P77		3437682.182
498	P77		3437690.678
499	P77		3437699.481
500	P77		3437704.677
500	P77		3437704.677
502	P77		3437712.480
503	P77		3437717.315
504	P77		3437722.758
505	P77	and the second	3437728.729
506	P78		3437739.884
507	P78	patrophycia a sin a sin	3437737.769
508	P78		3437736.406
509	P78		3437732.160
510	P78		3437732.616
511	P78	e verier son en internet an	3437733.865
512	P78		3437734.799
513	P78		3437734.588
514	P78		3437735.773
515	P78		3437740.142
515	1.70	103220.435	3457740.142
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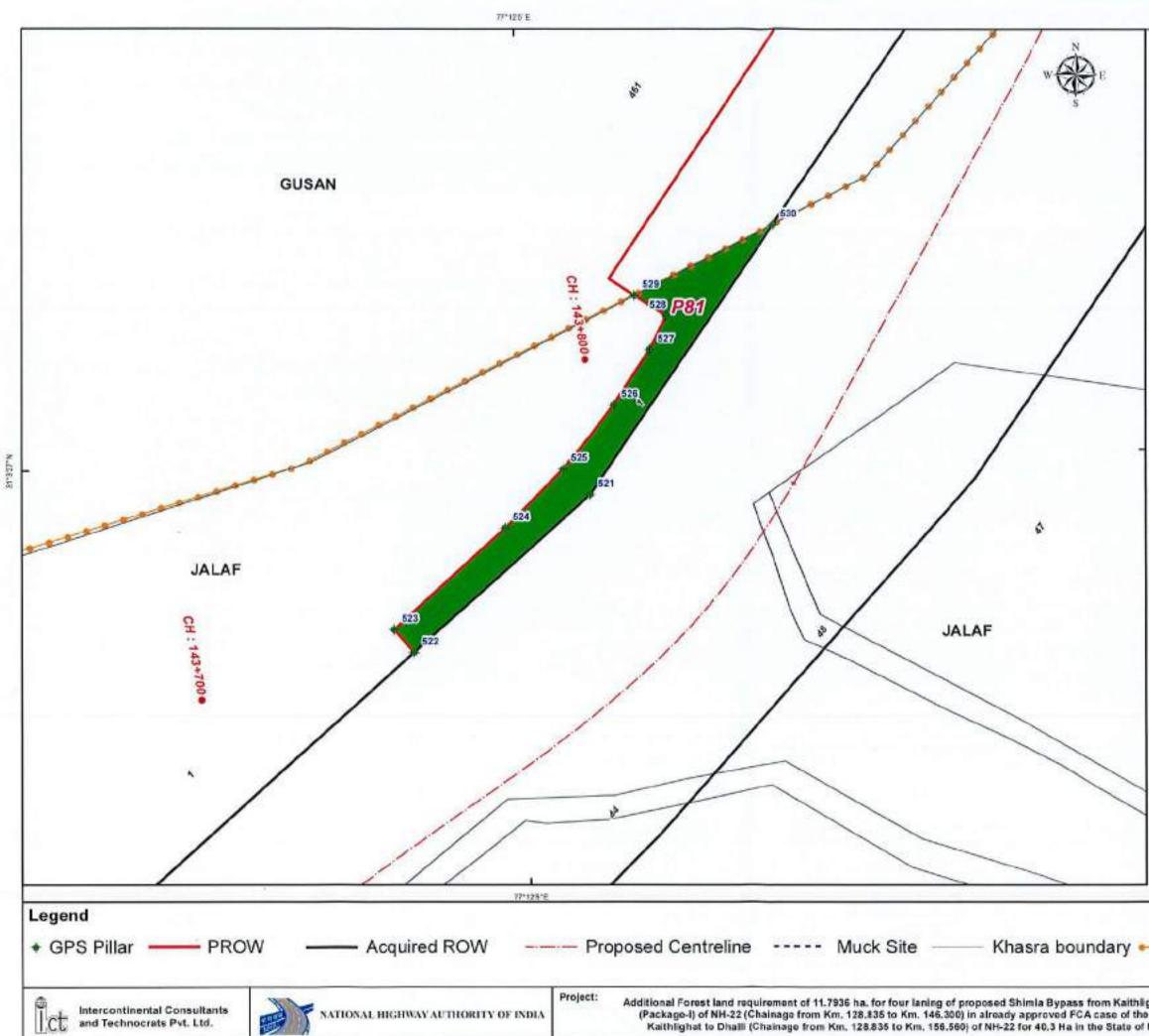
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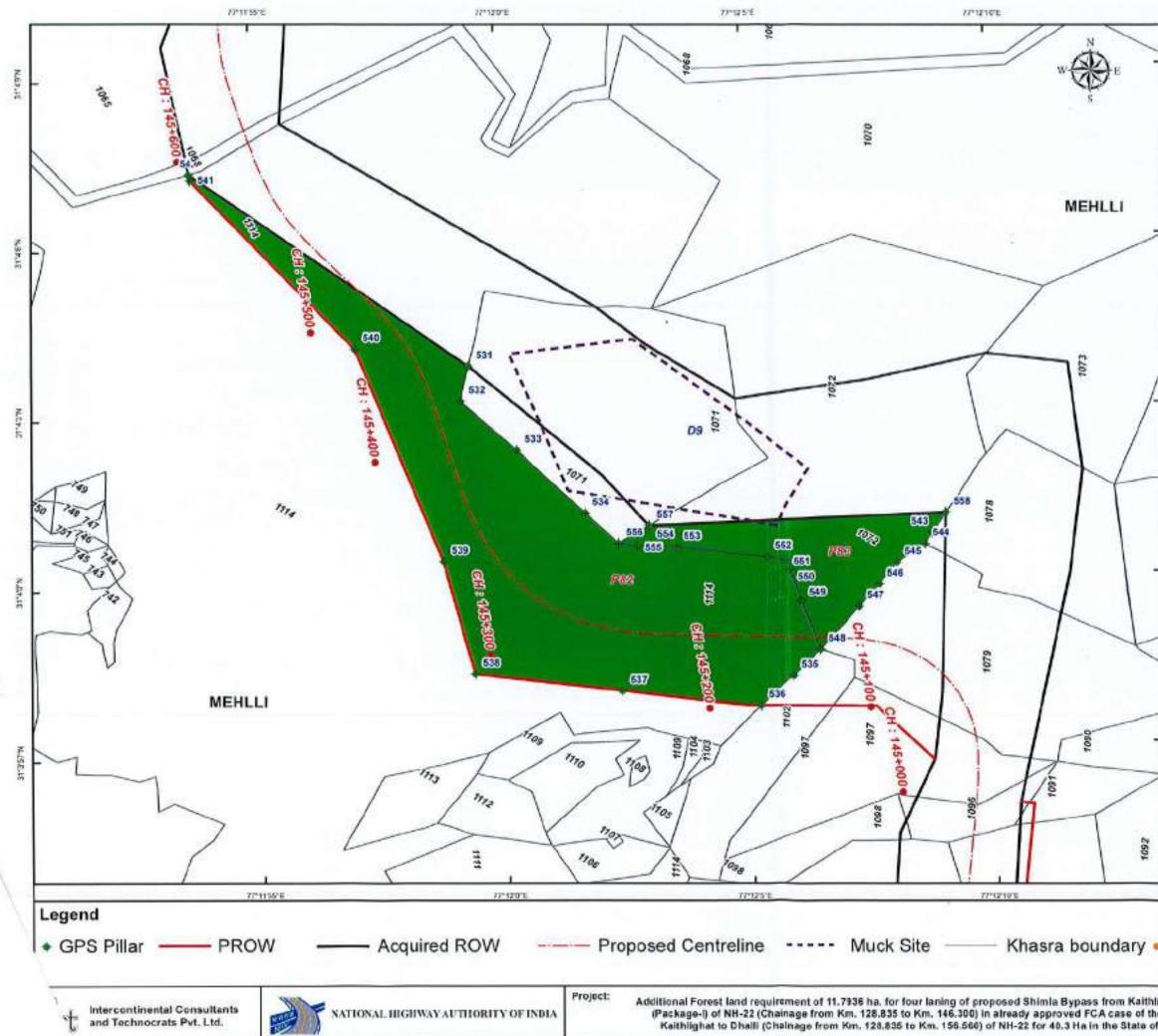
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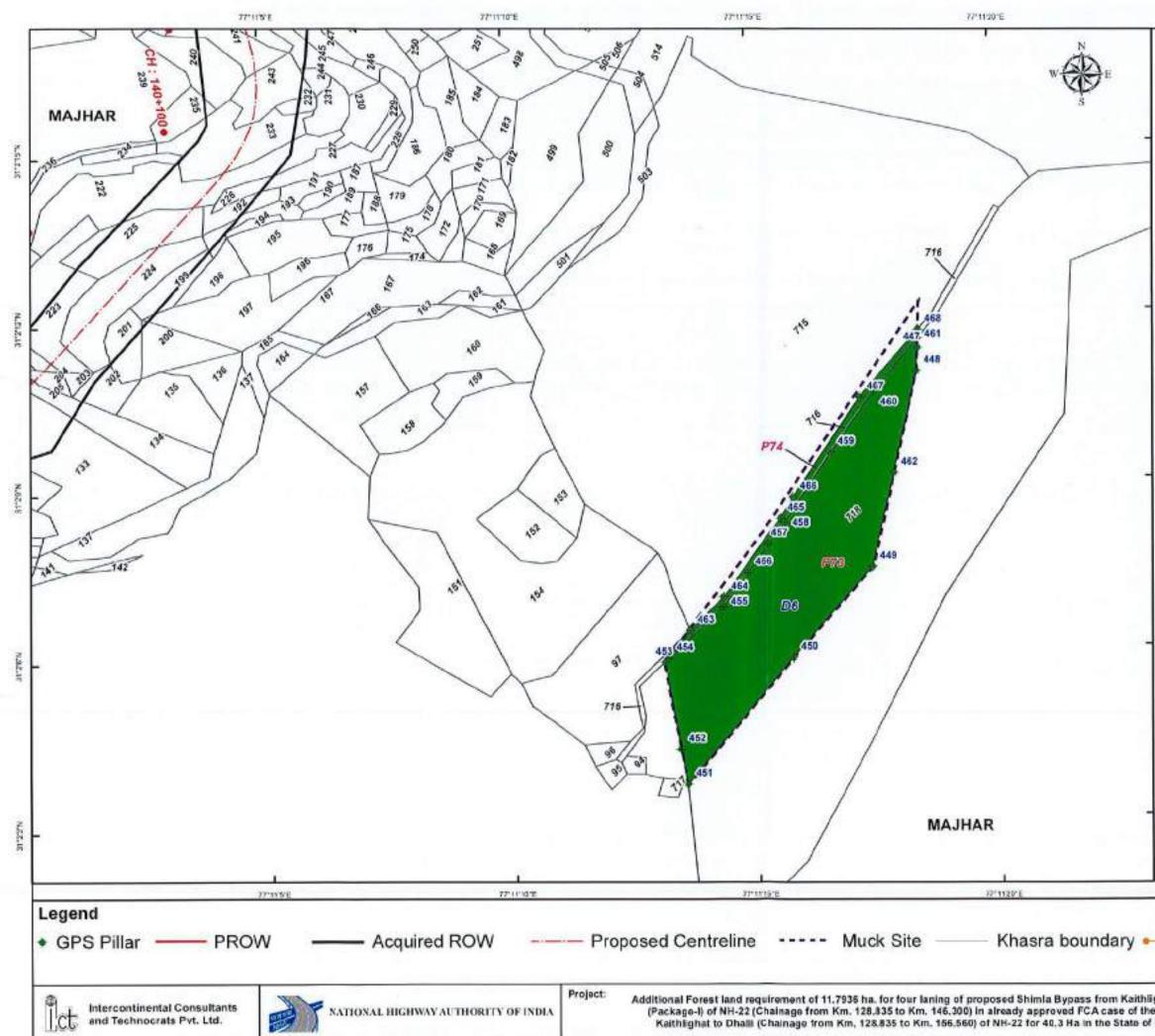
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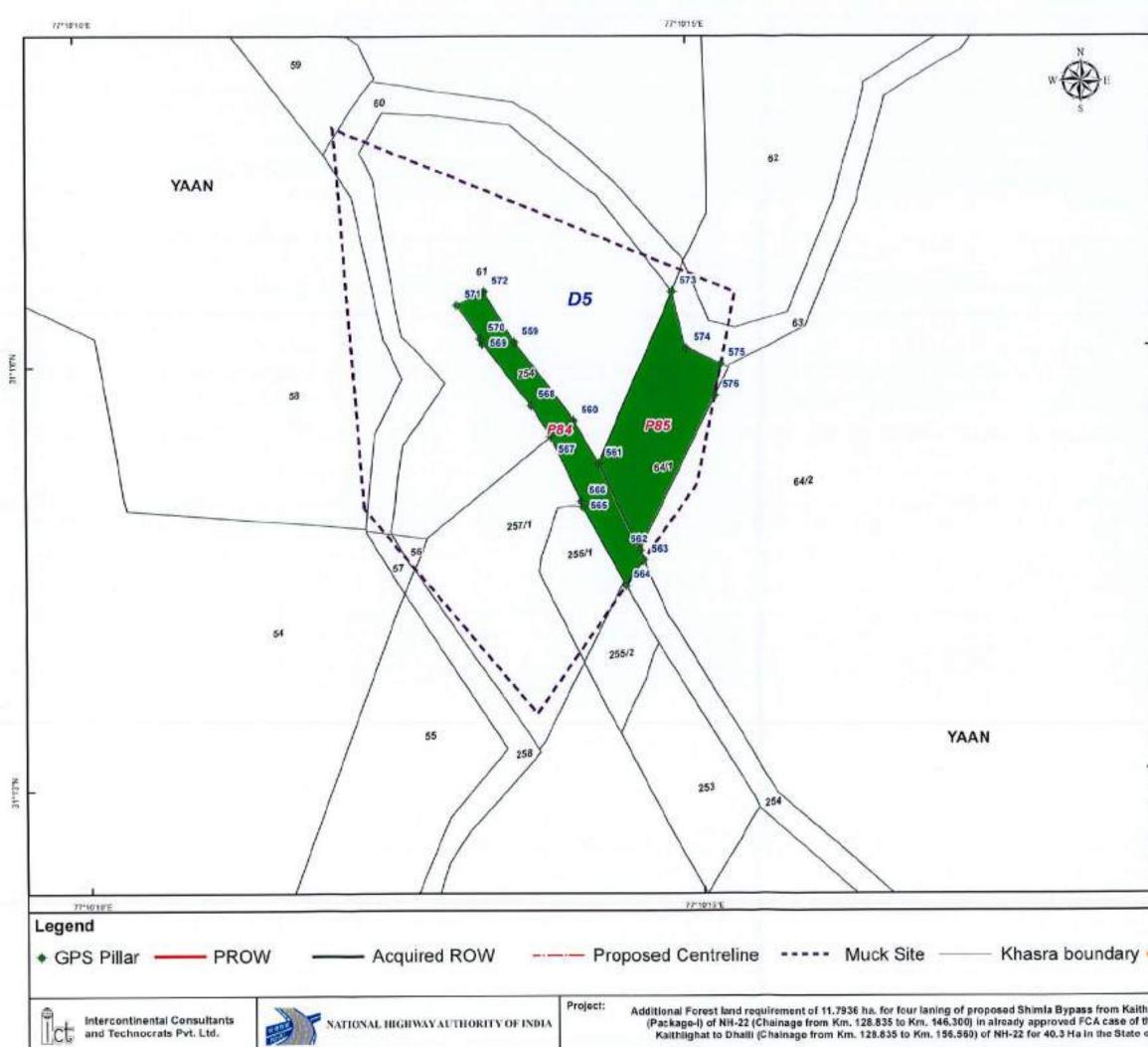
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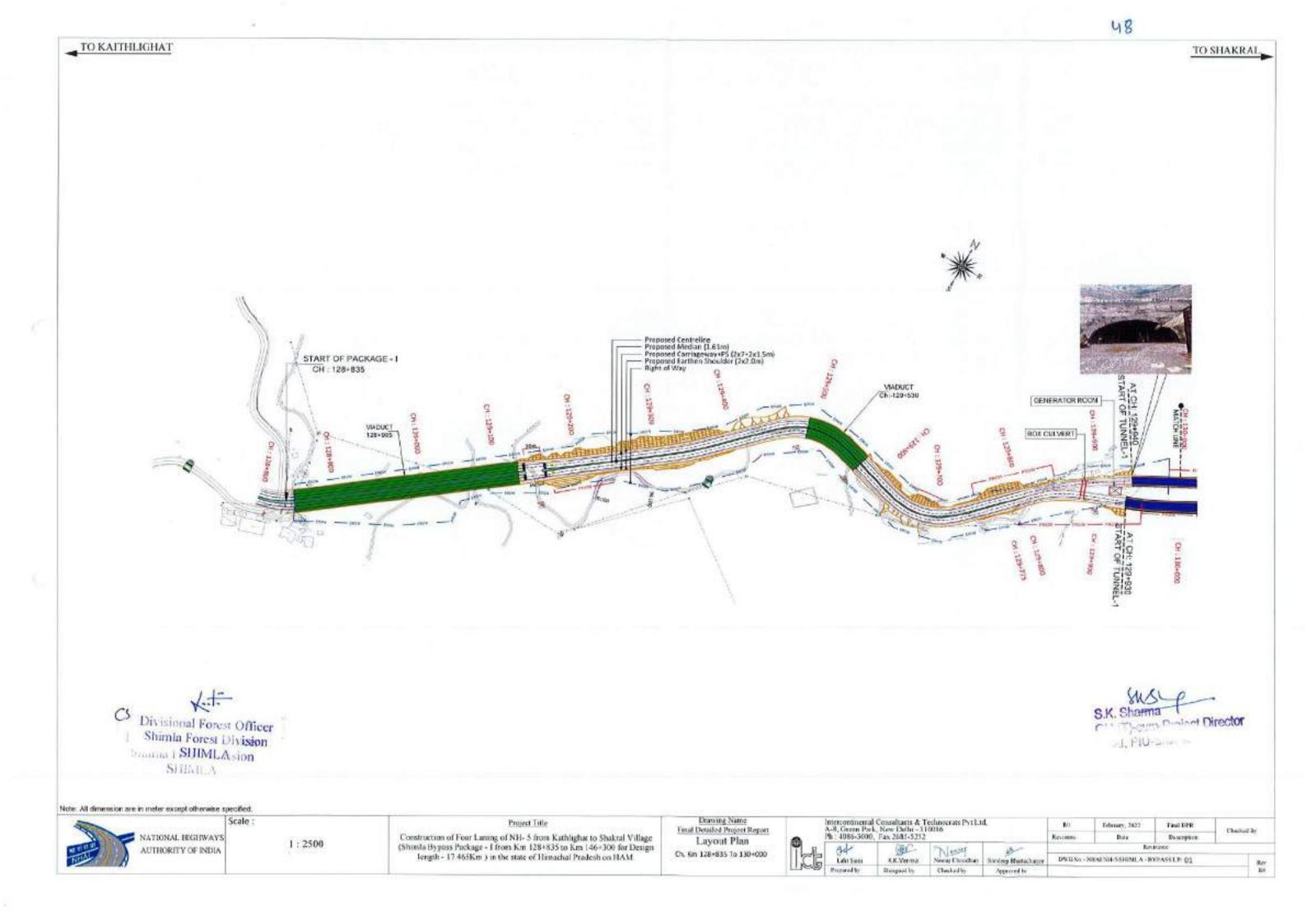
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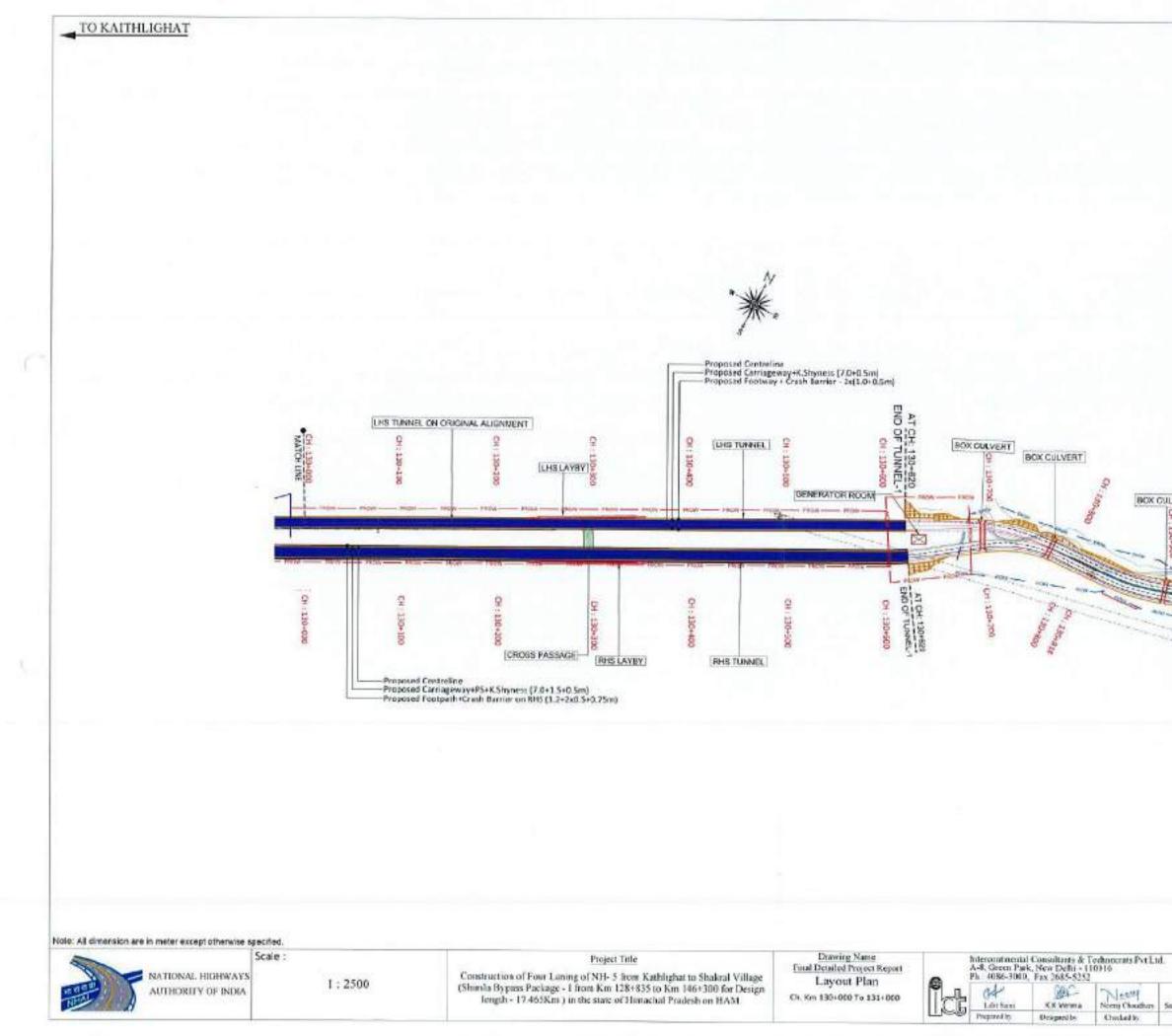


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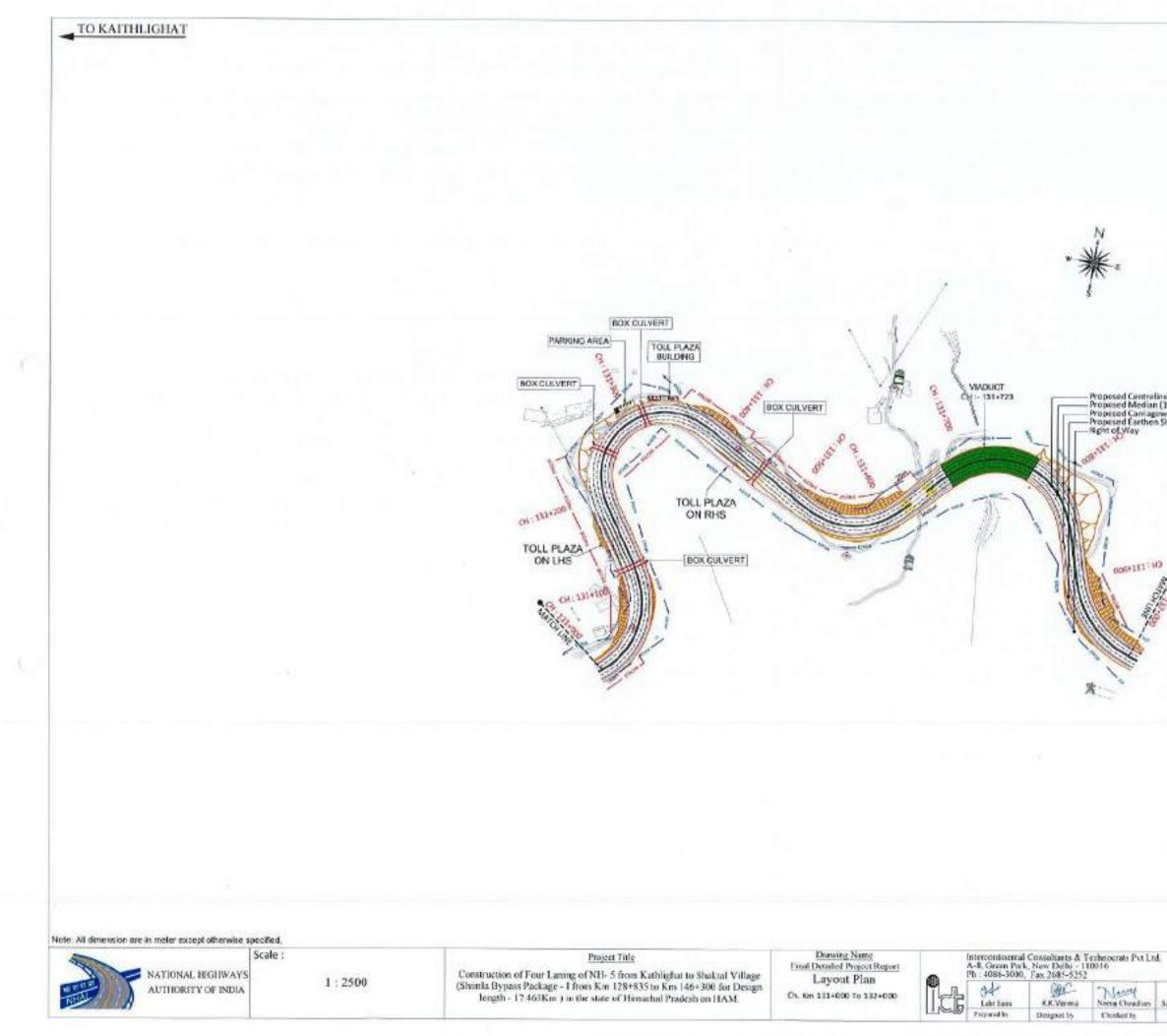


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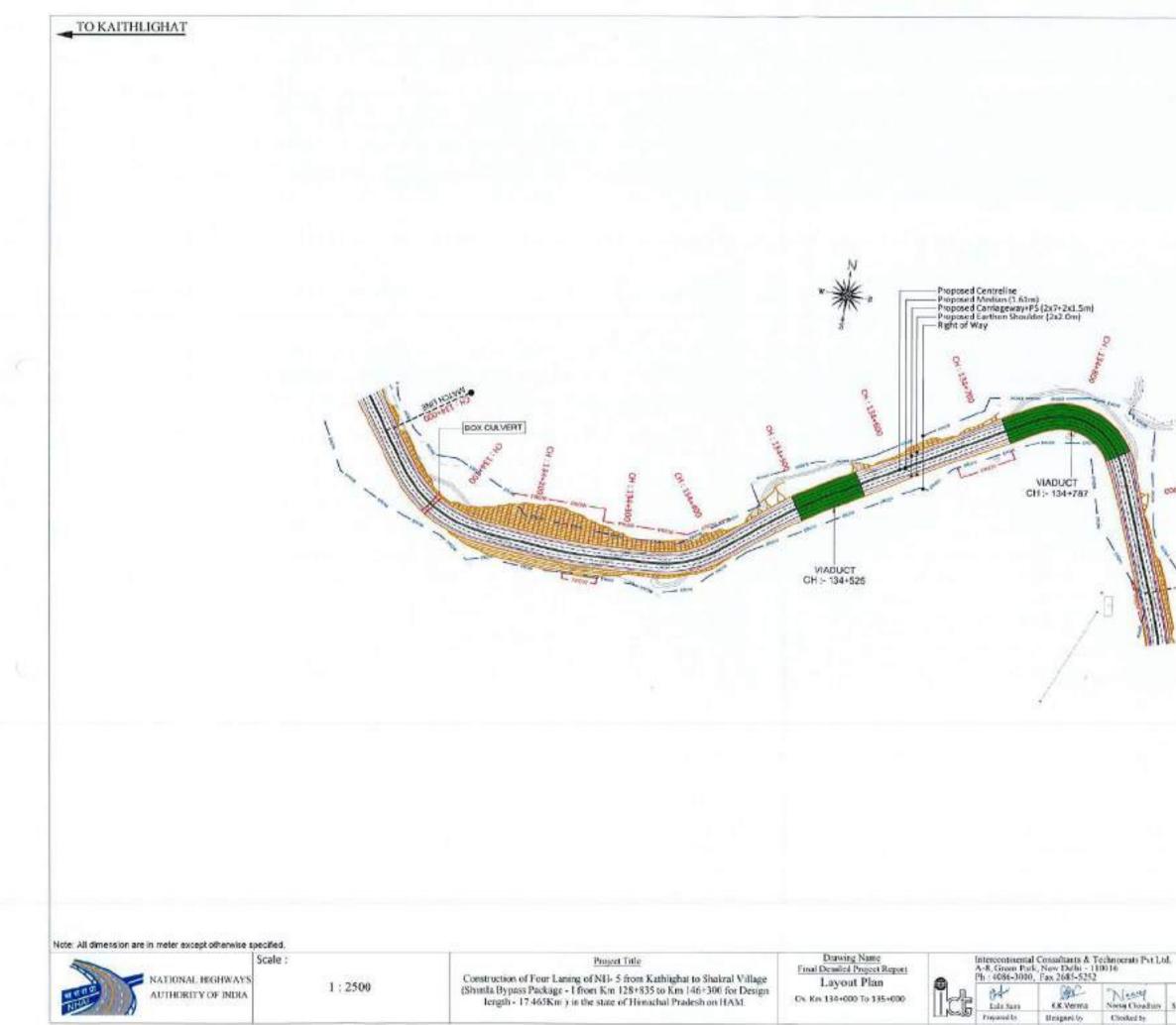


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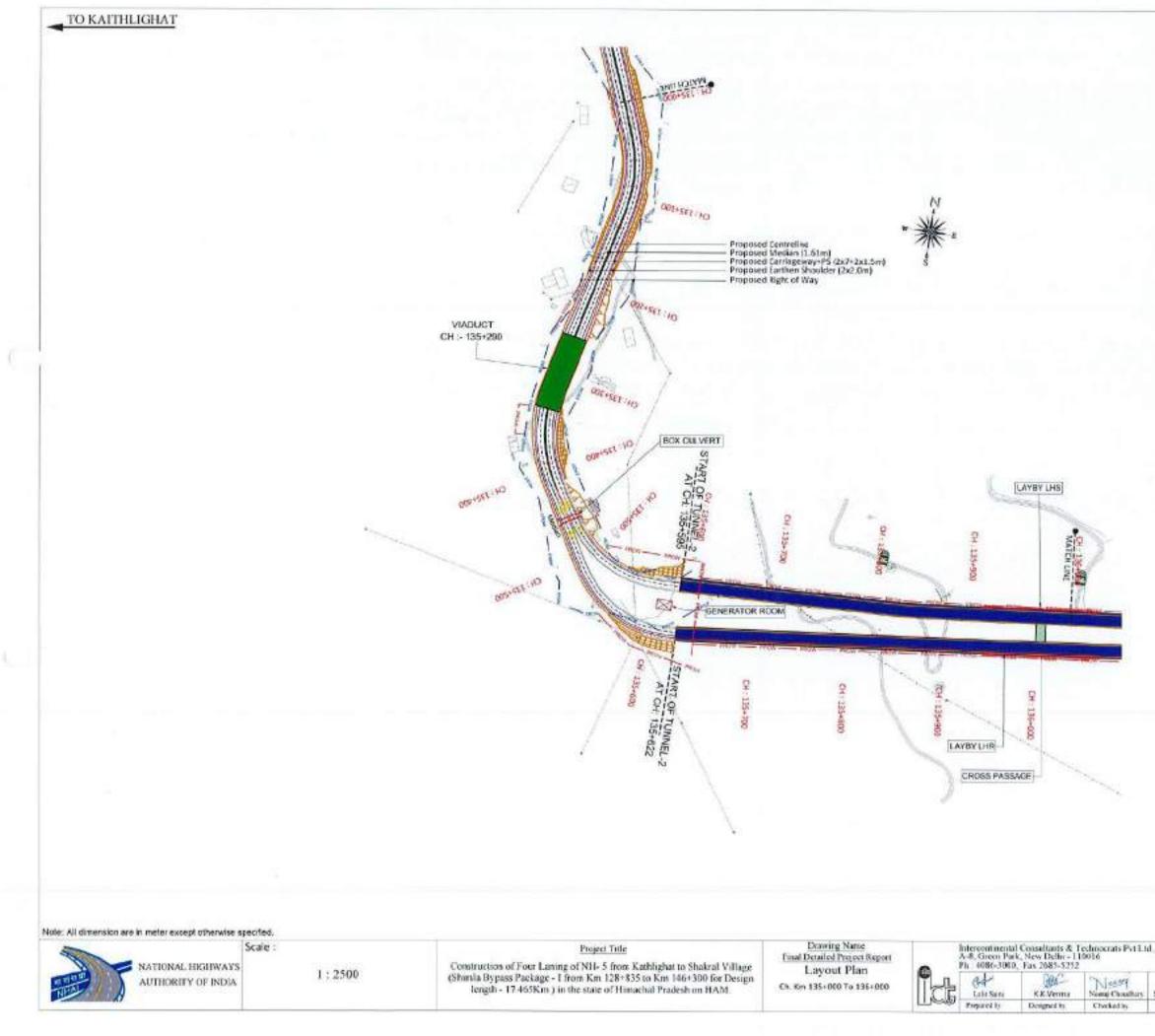
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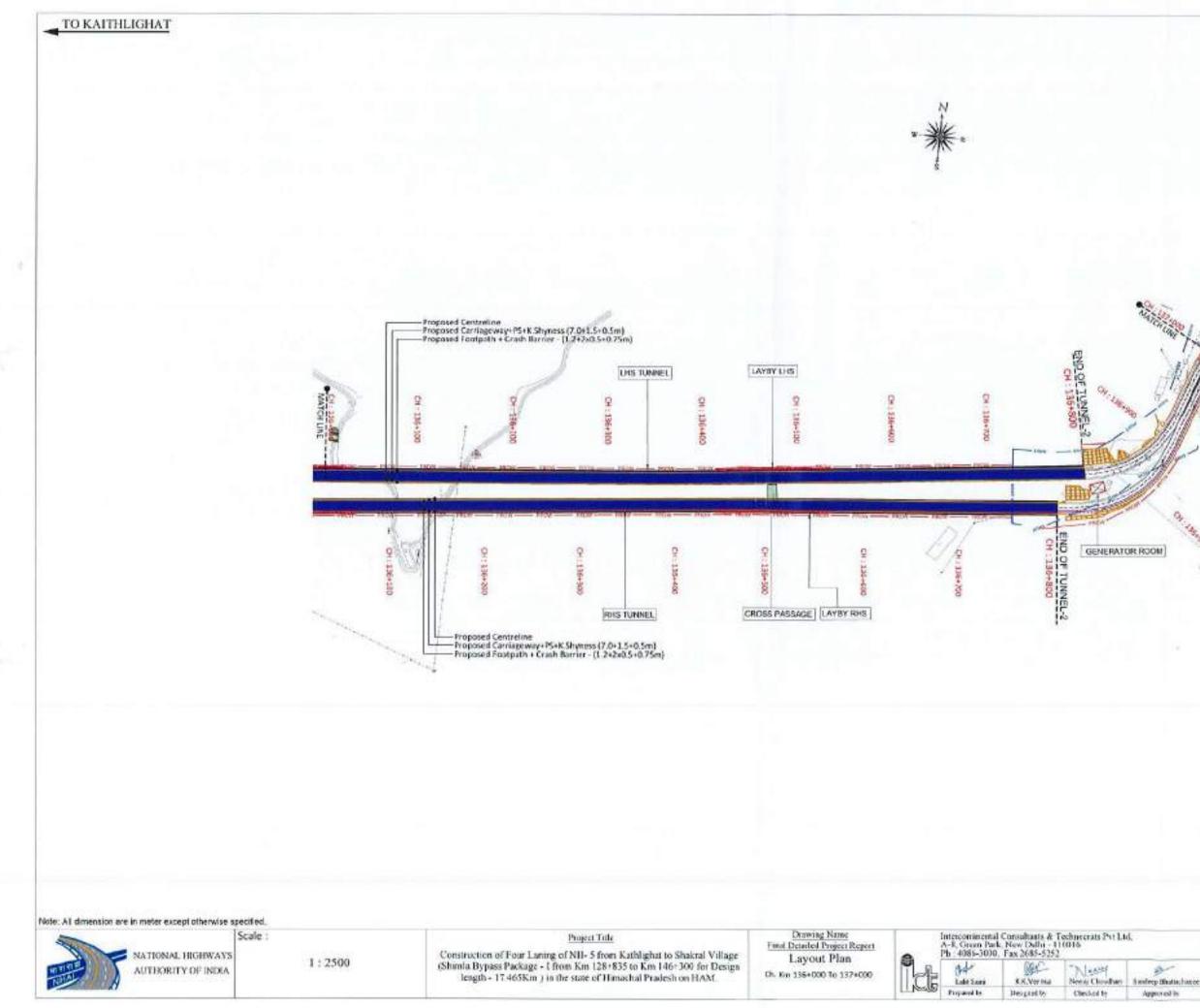
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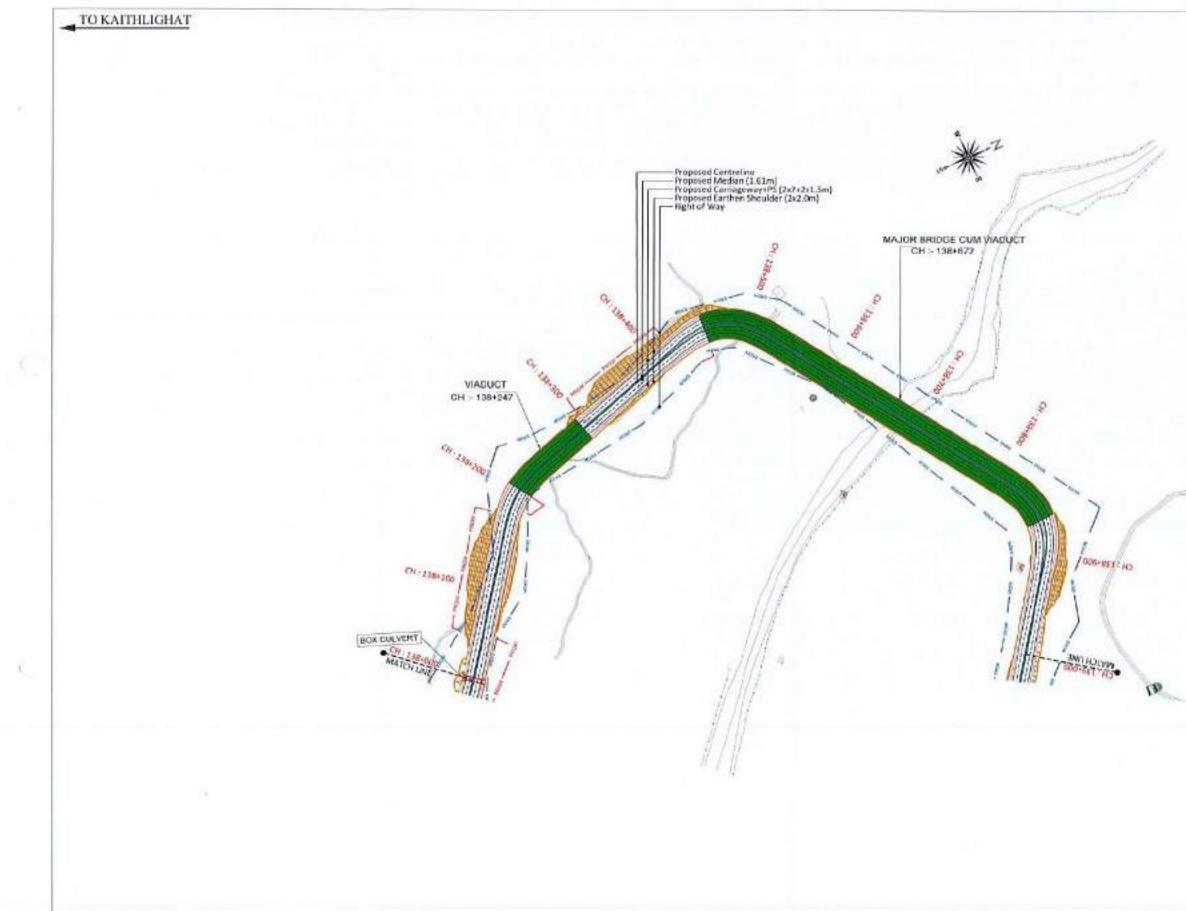
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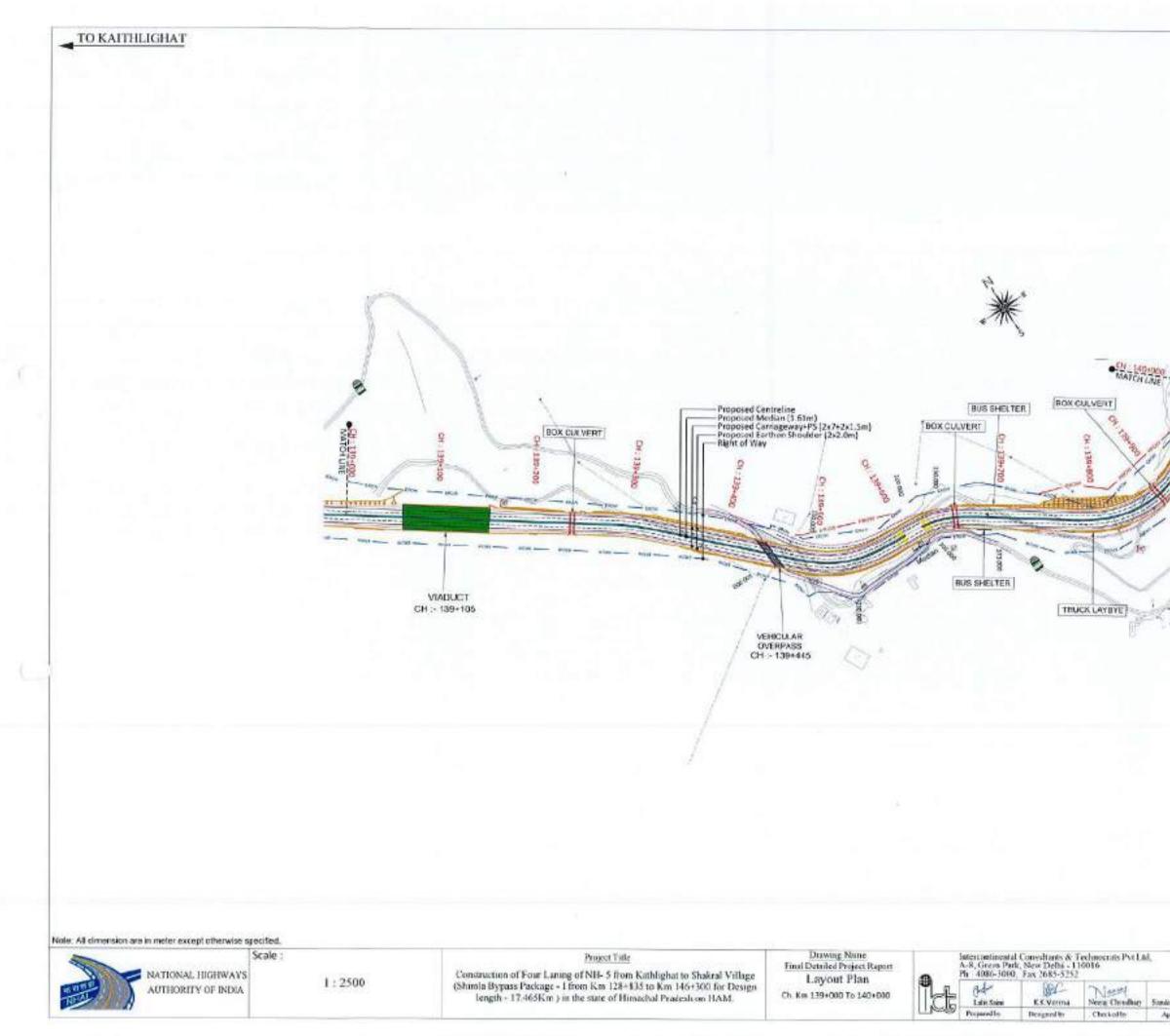


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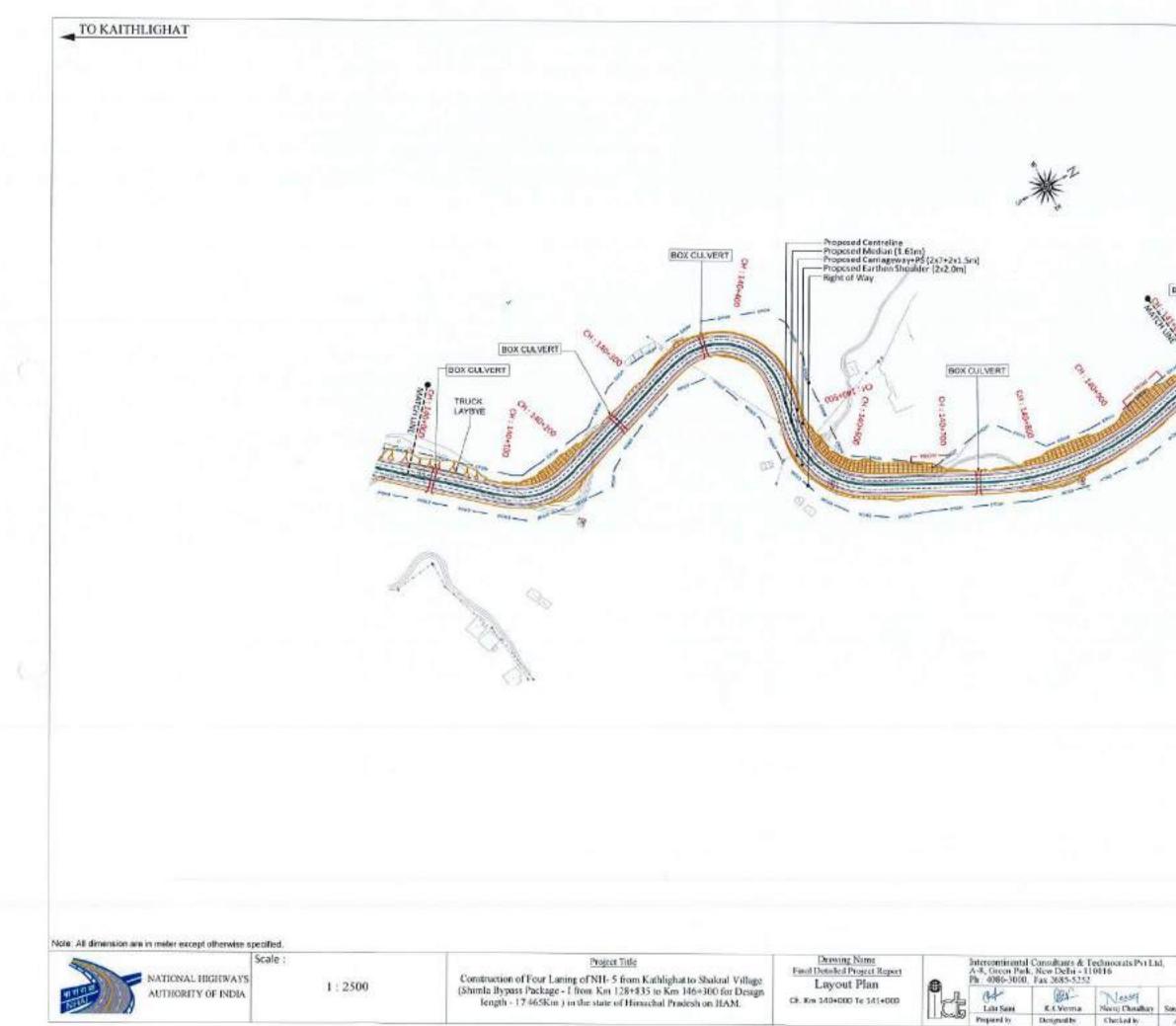
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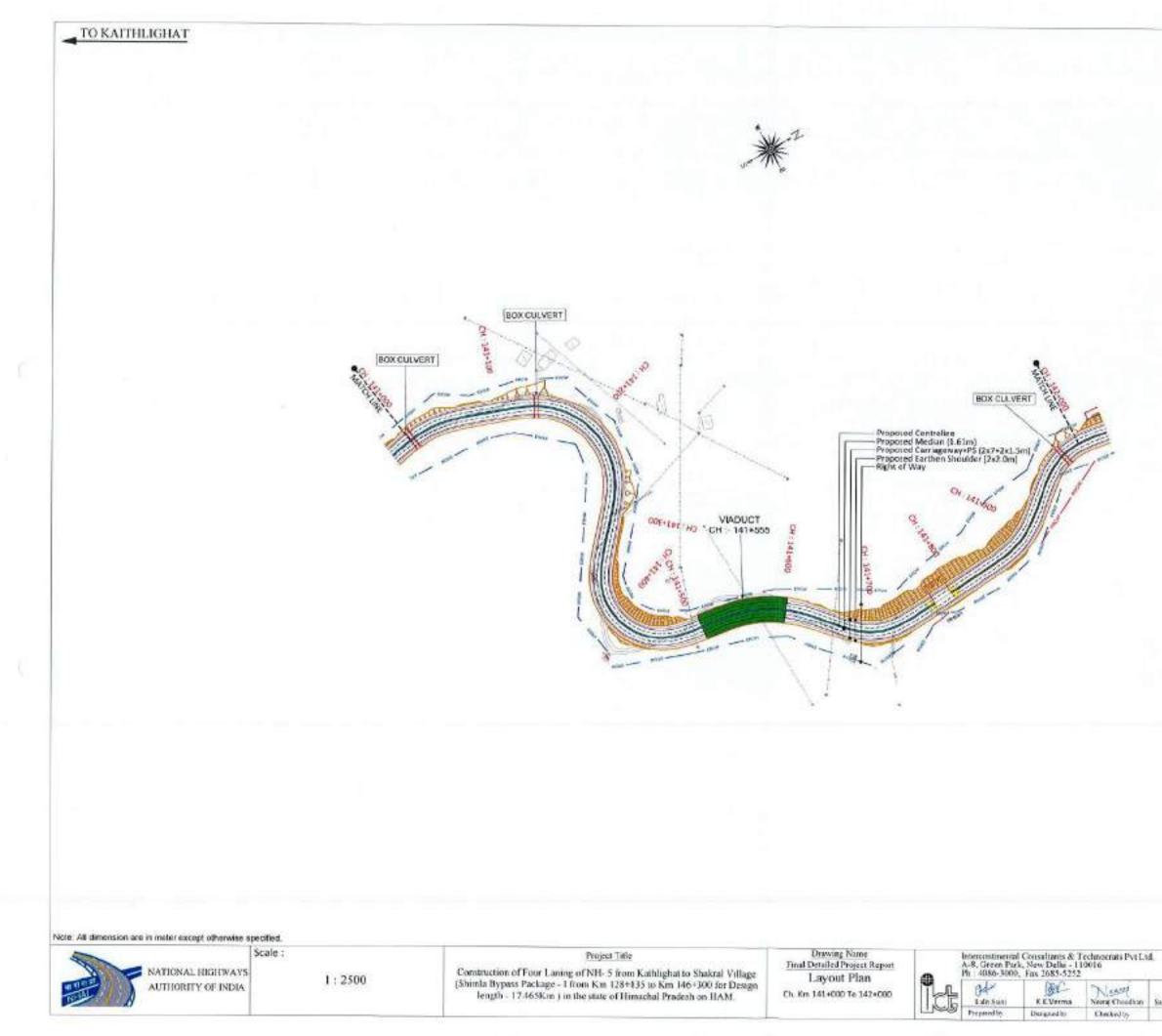
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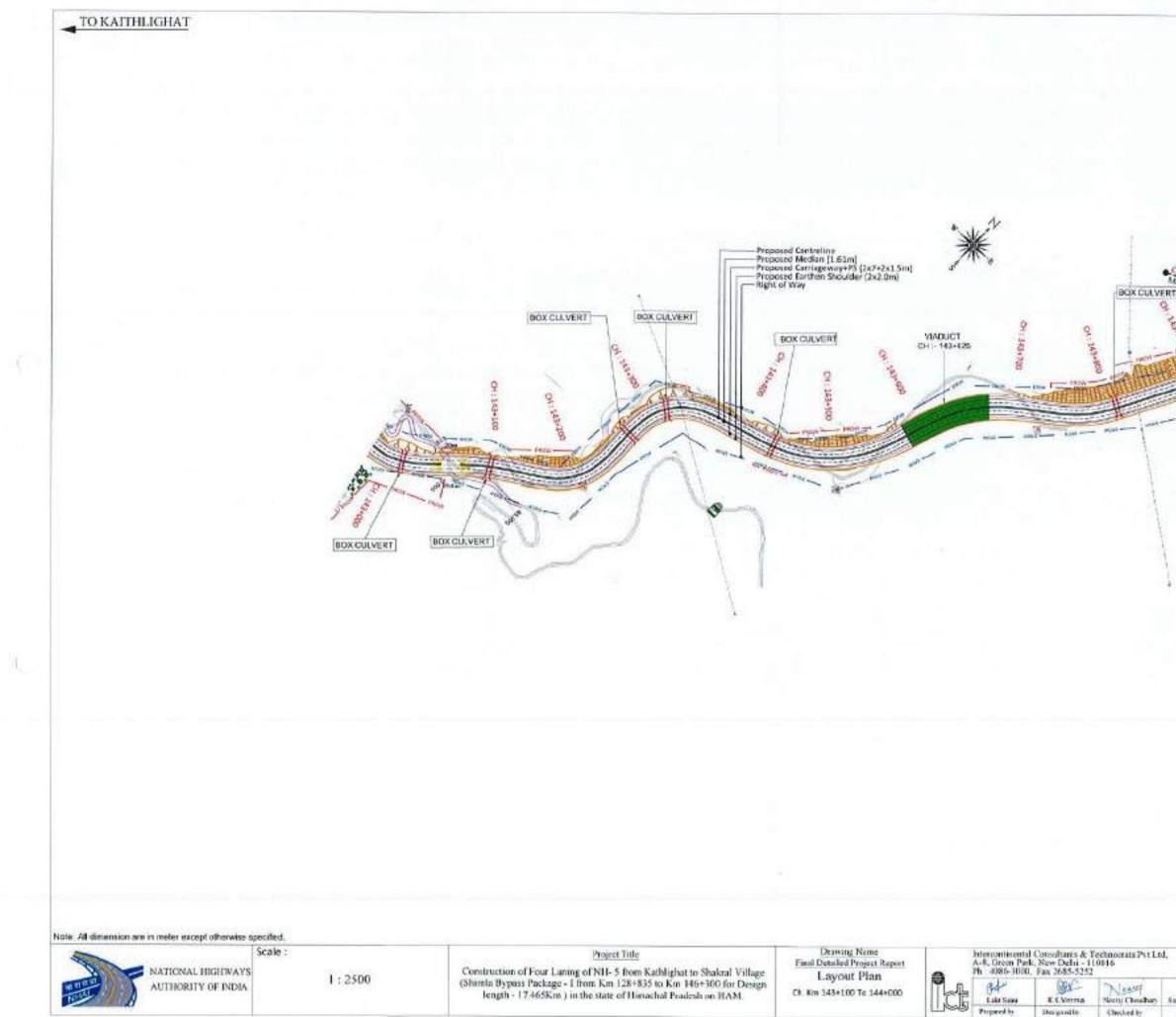
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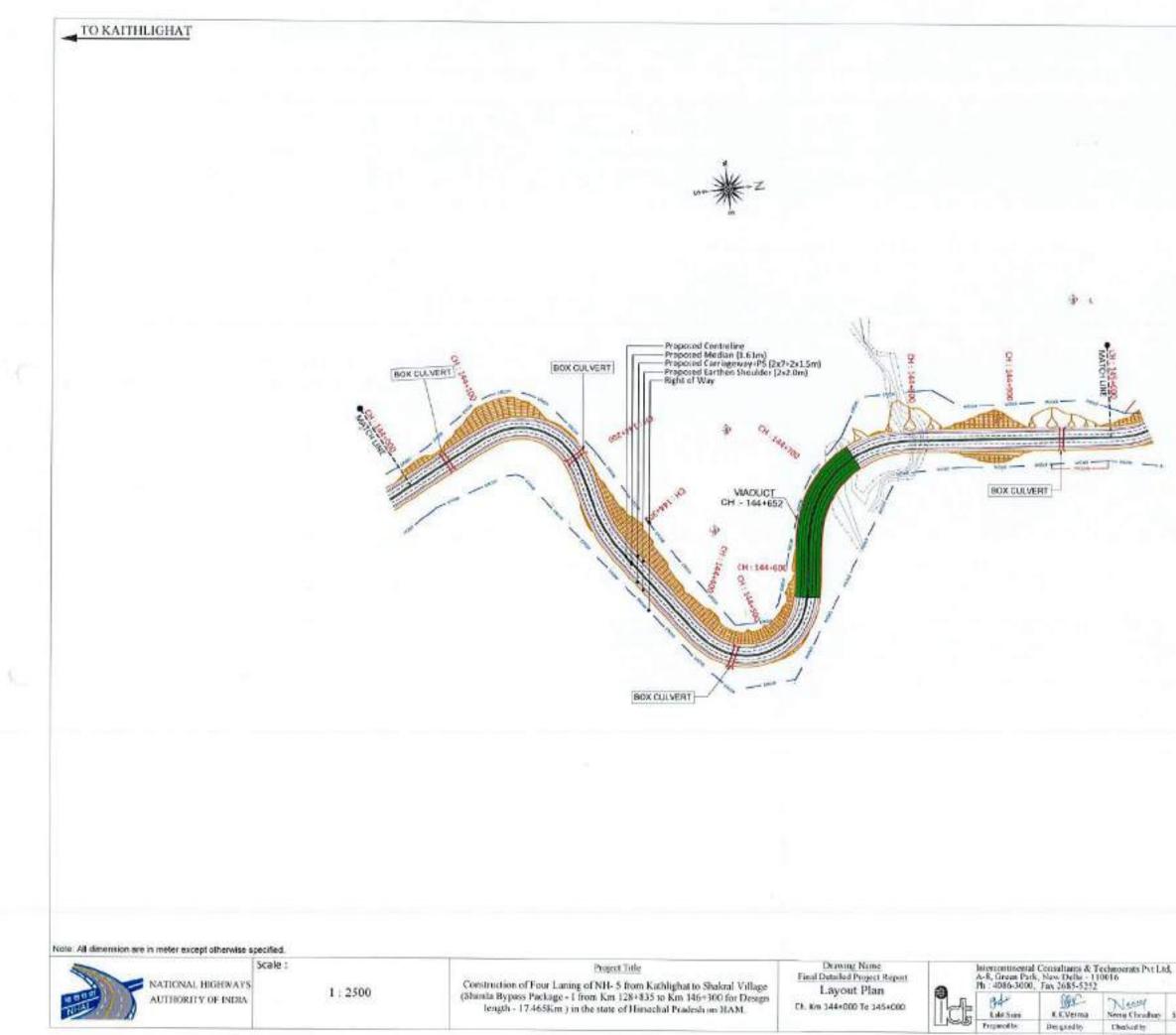
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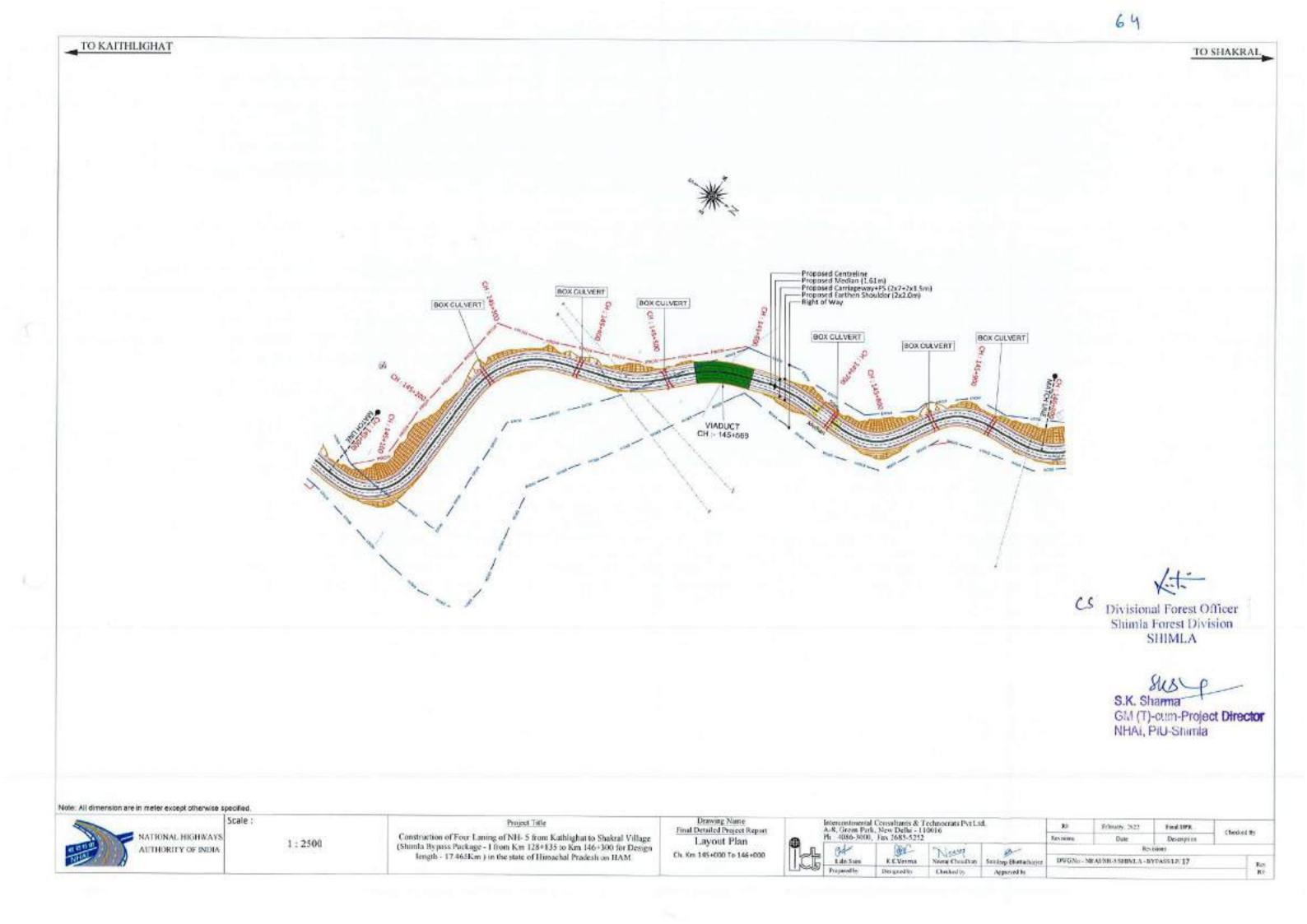
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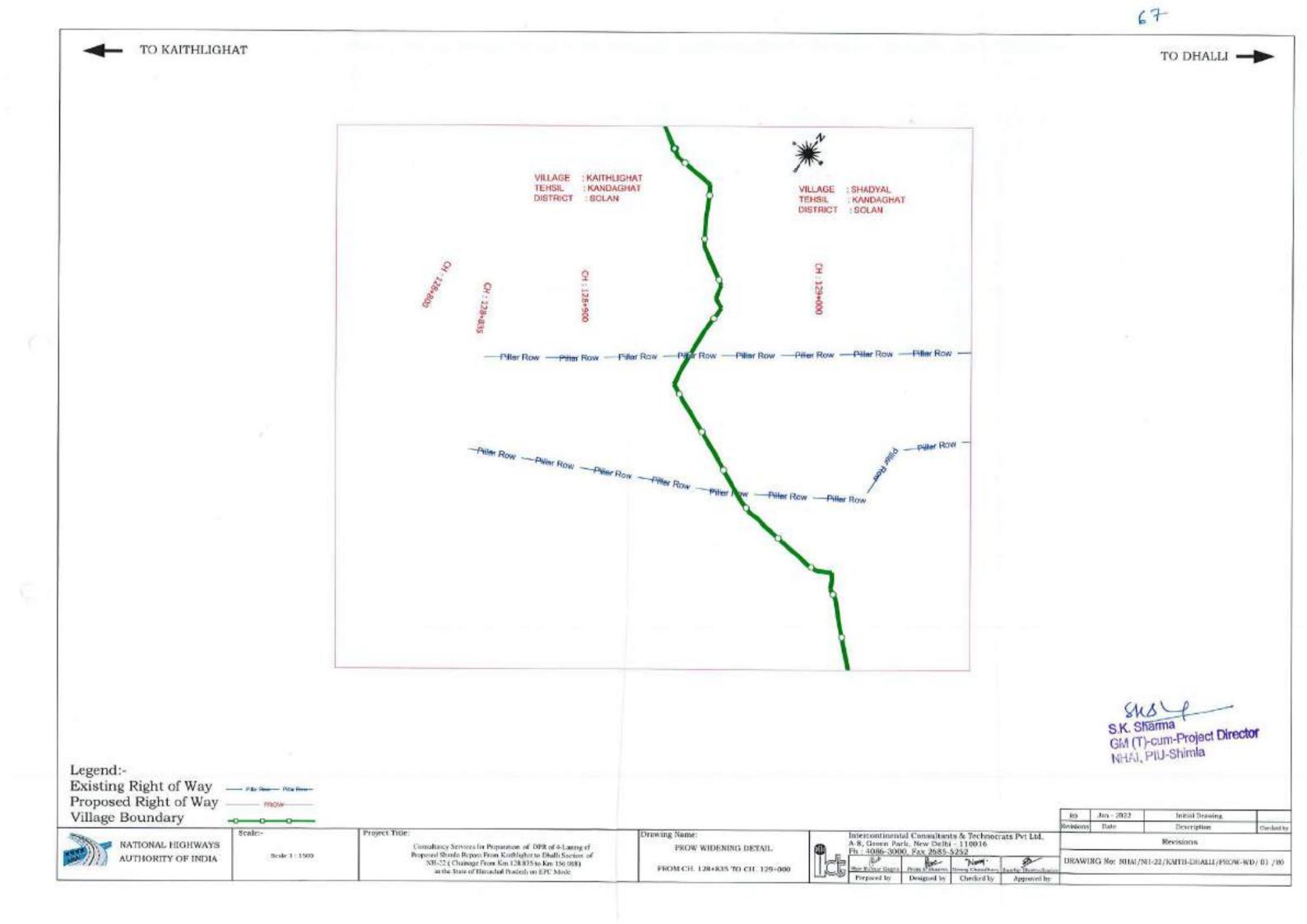
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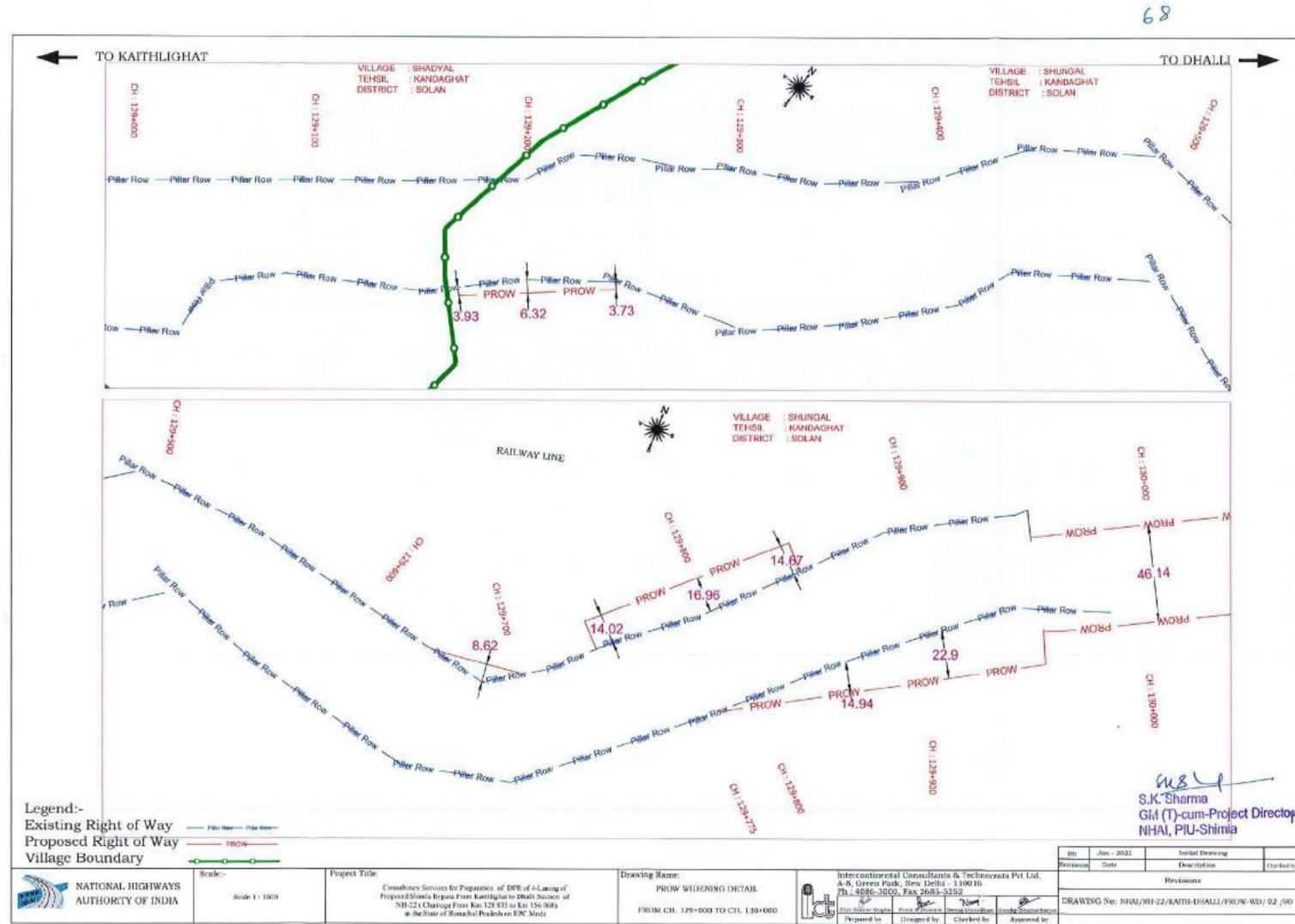




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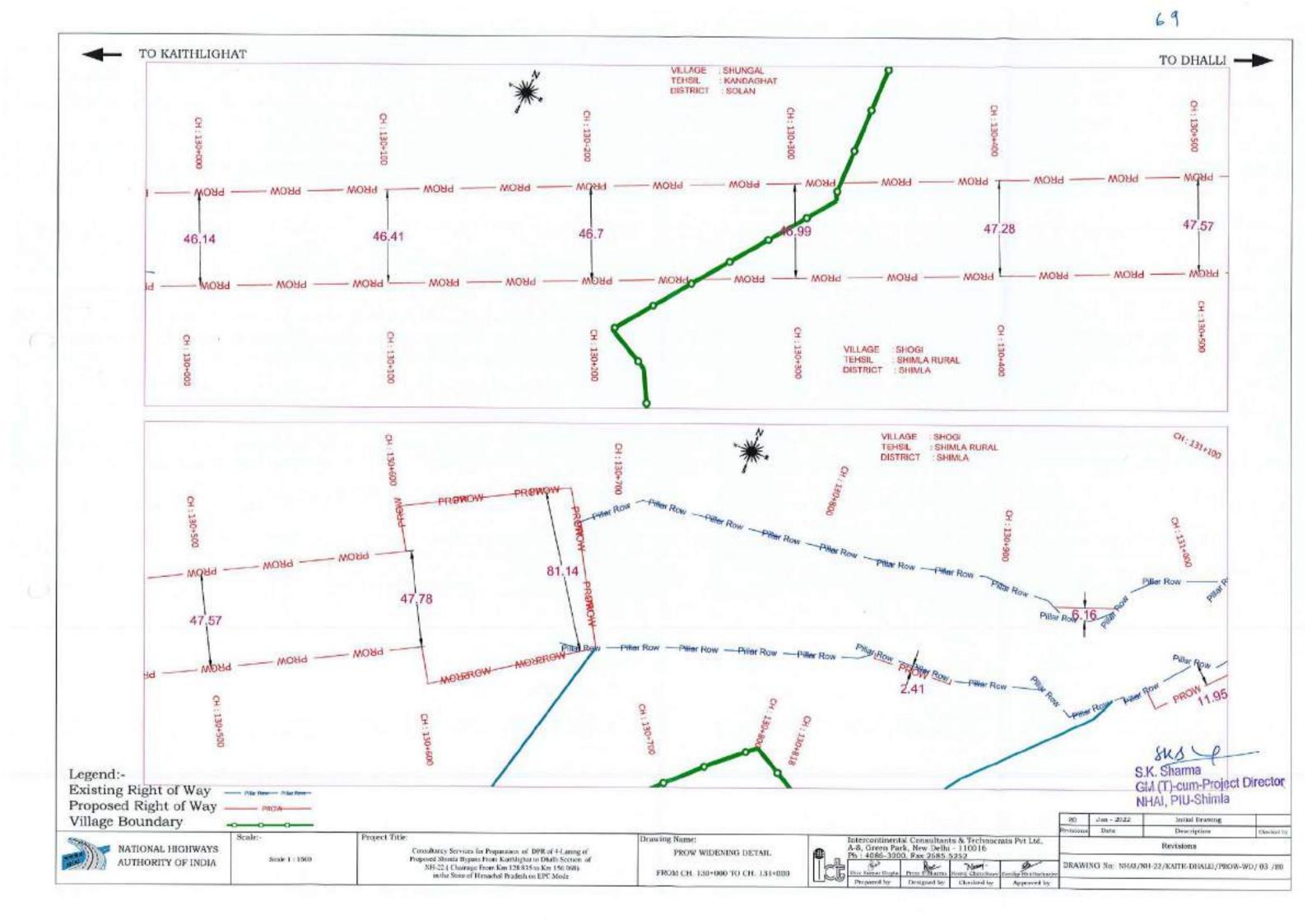


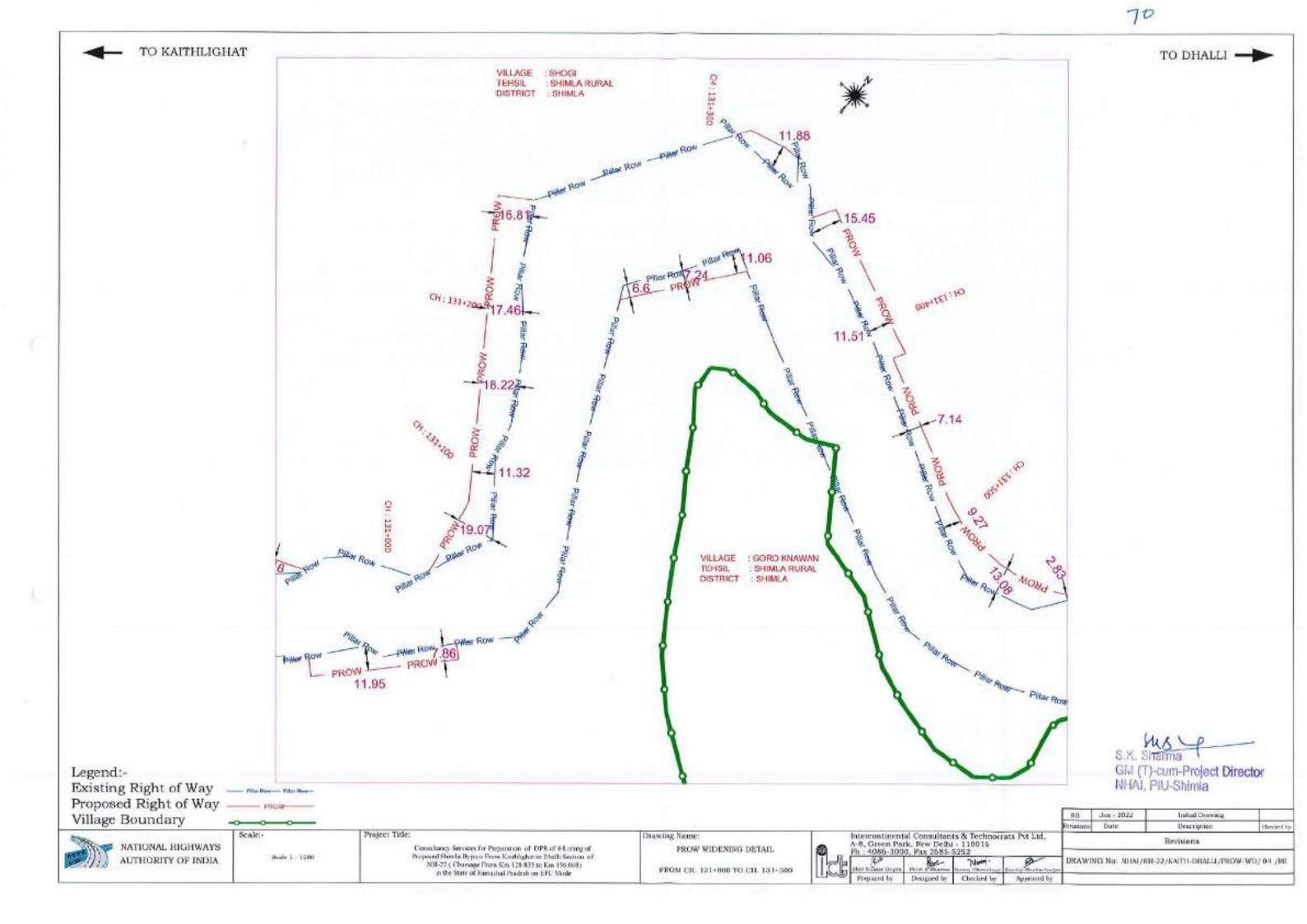


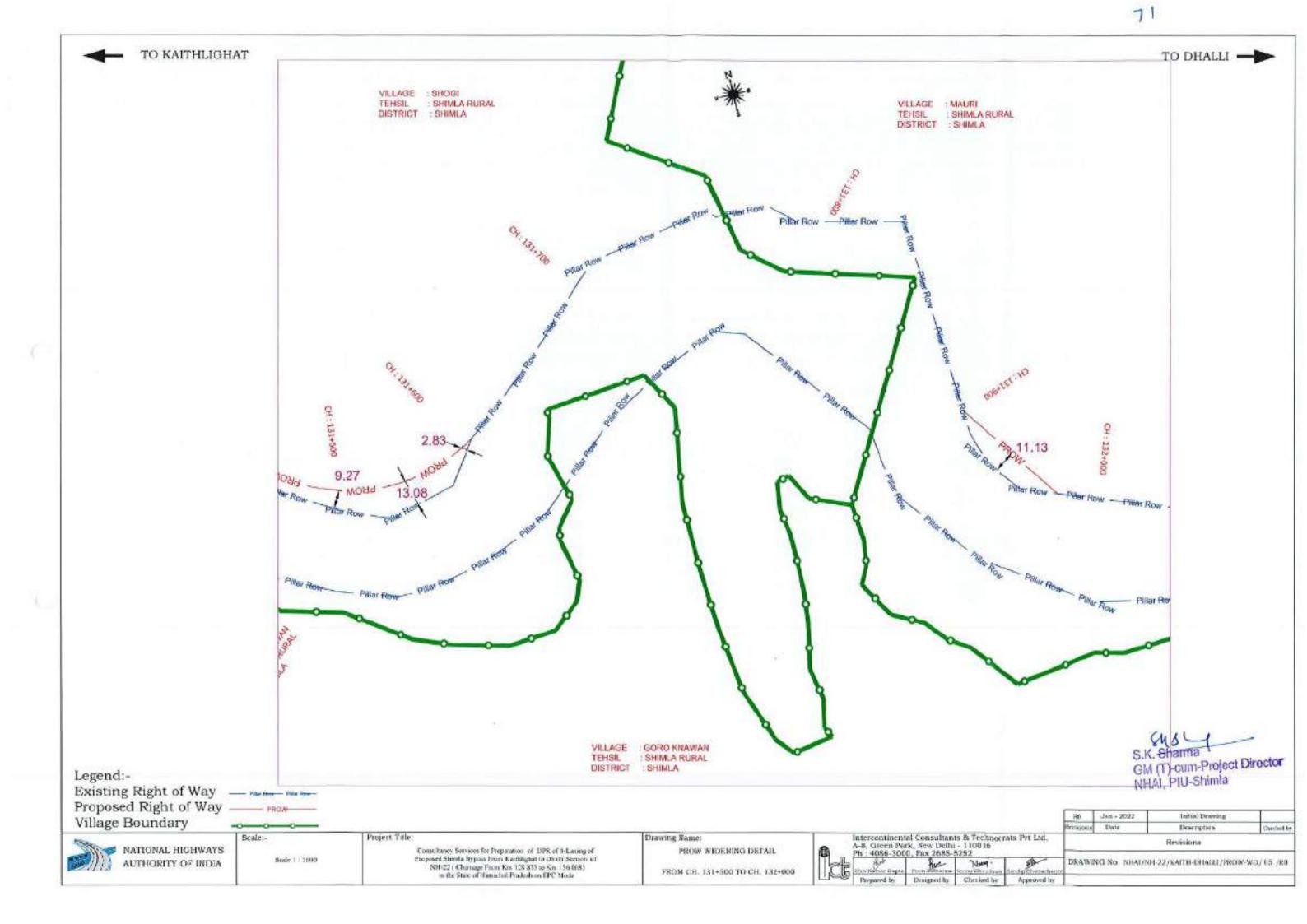


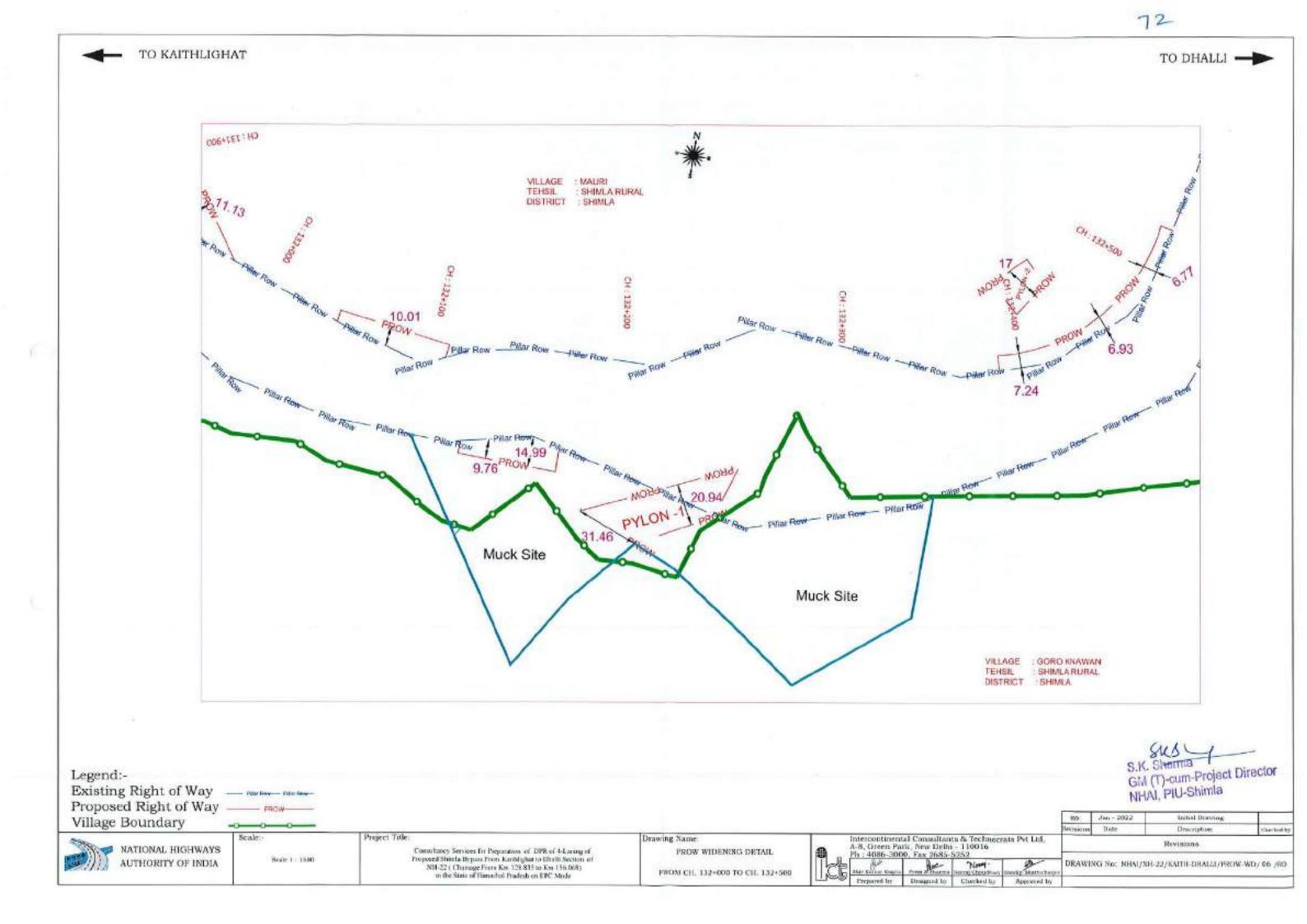
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		S.K. Sharma	1
		GM (T)-cum-	Project Director

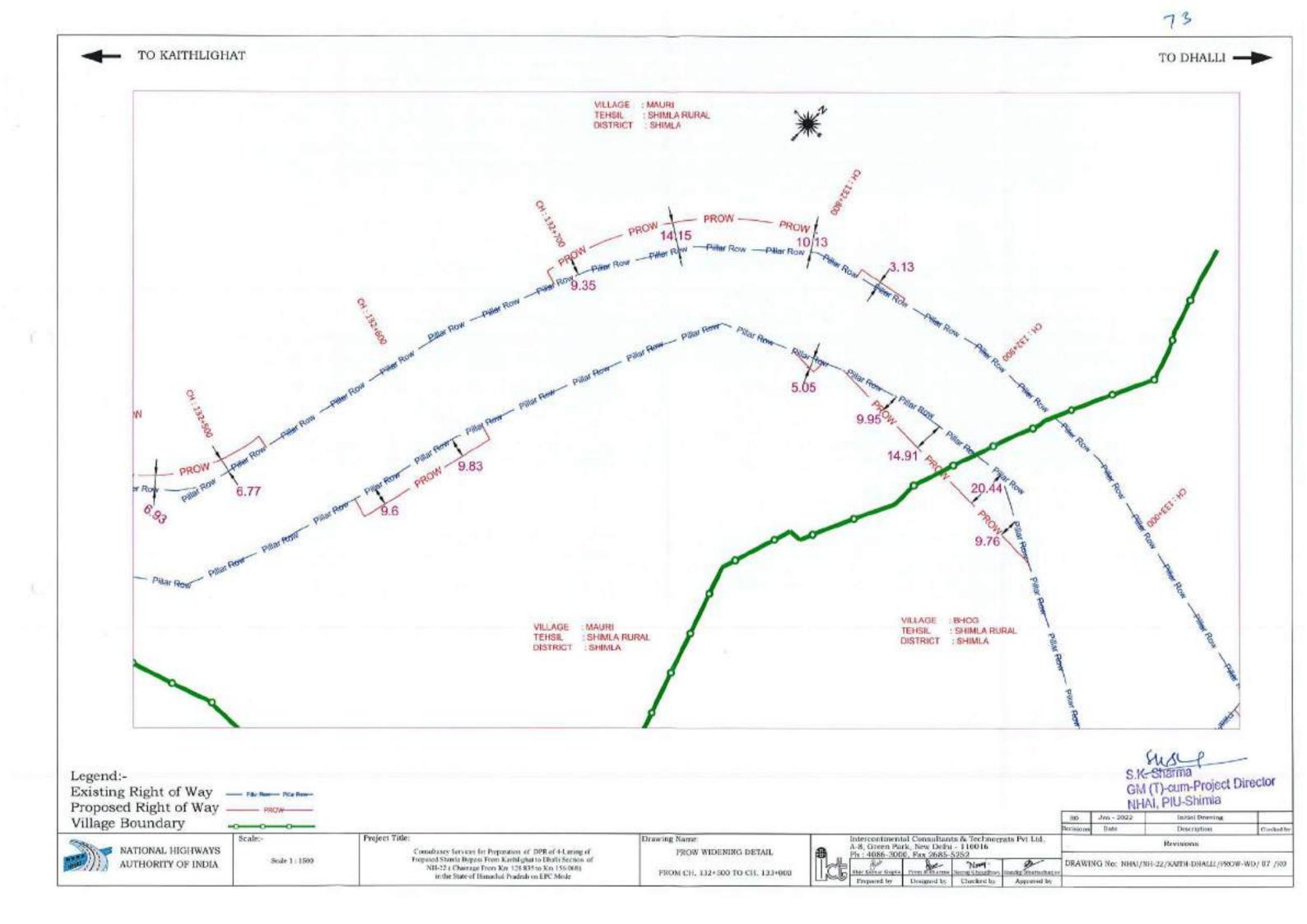
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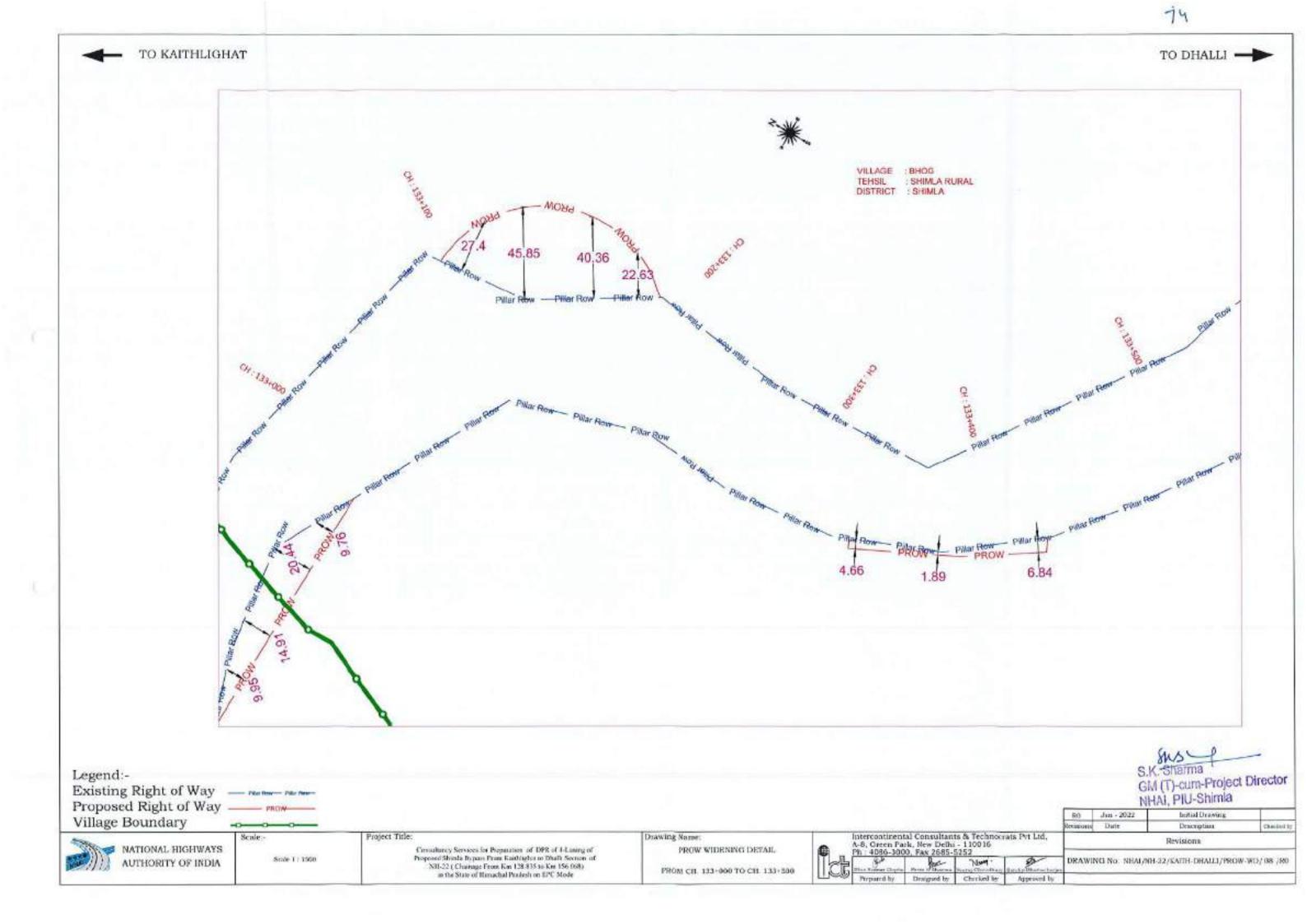


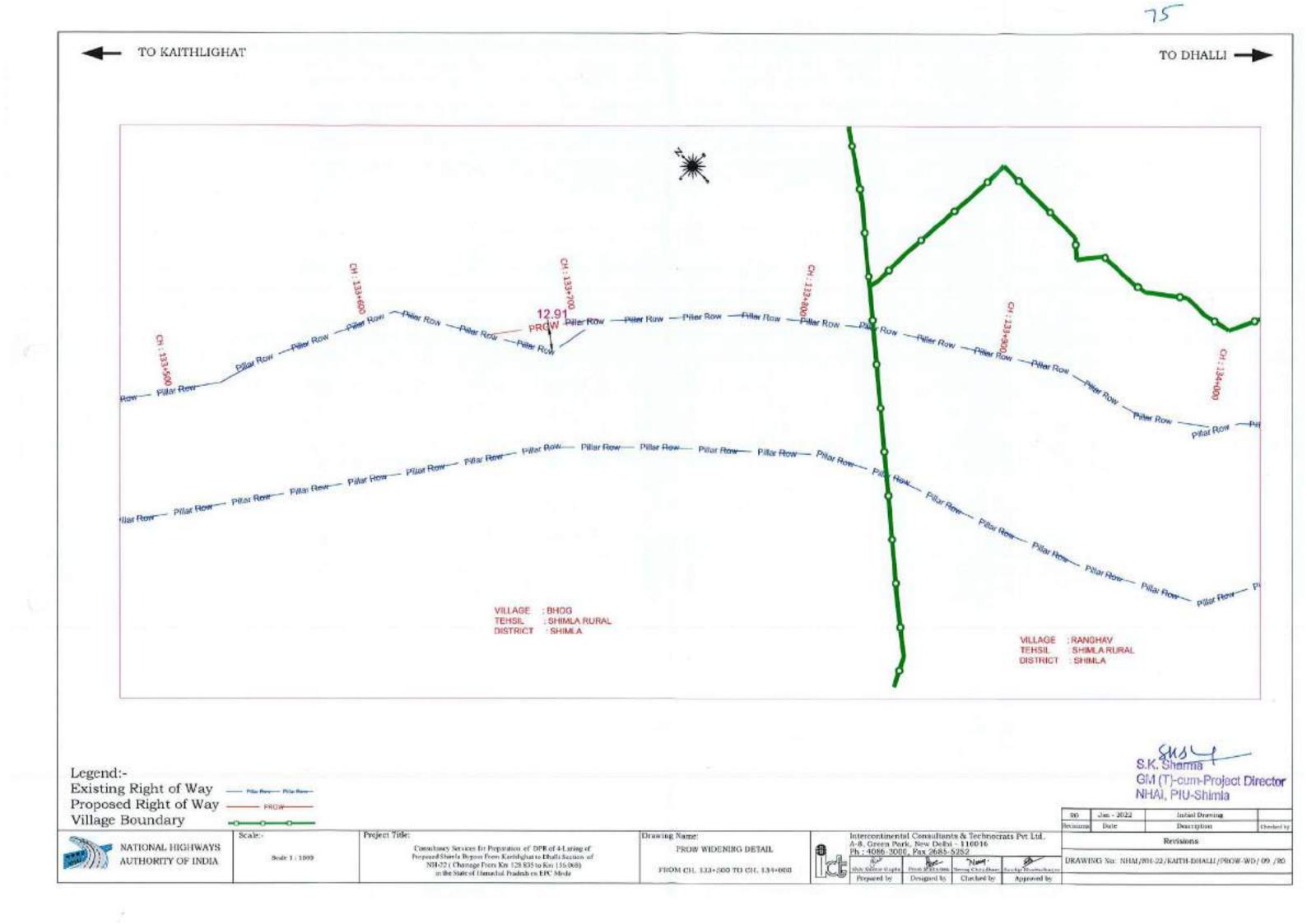


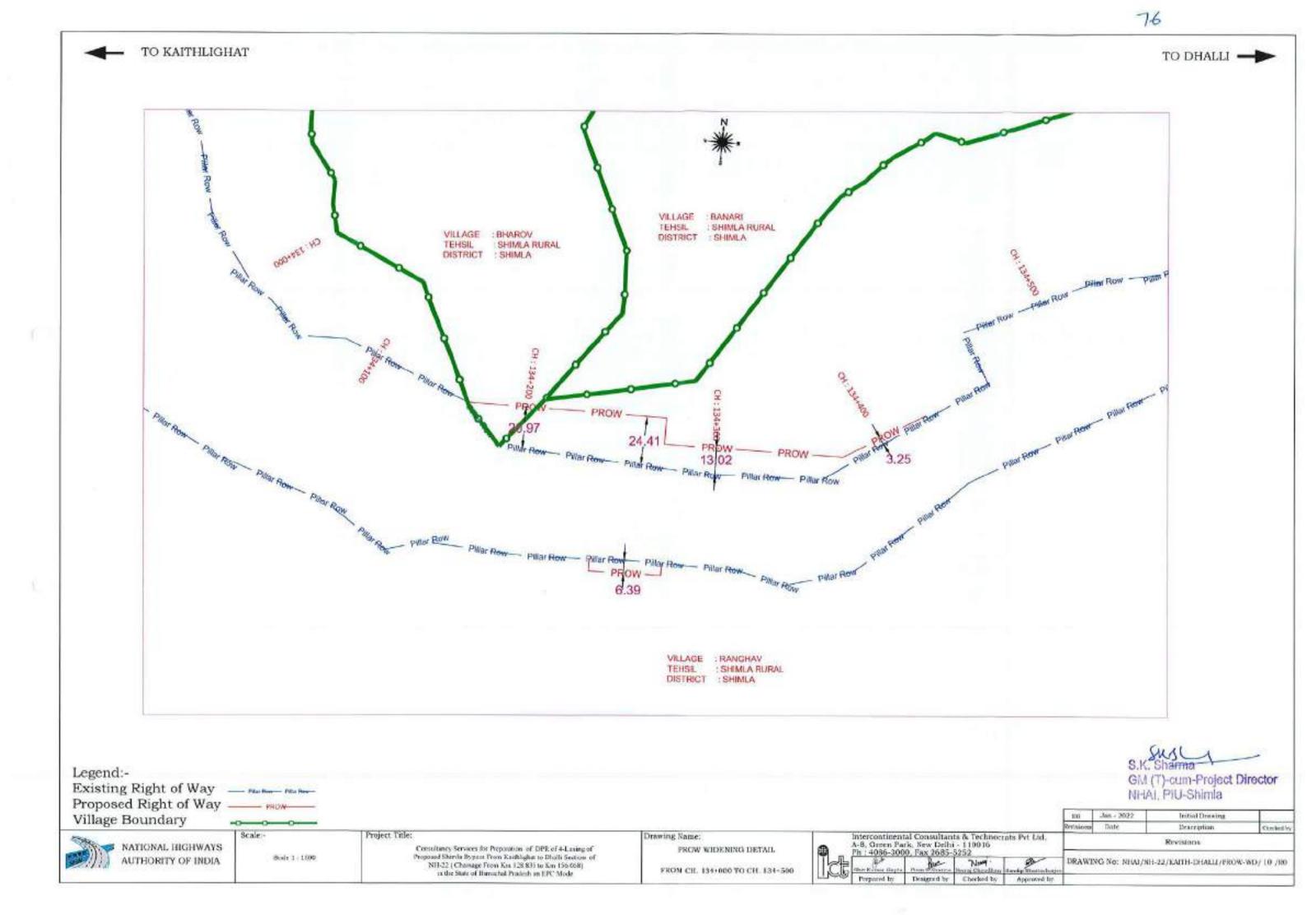


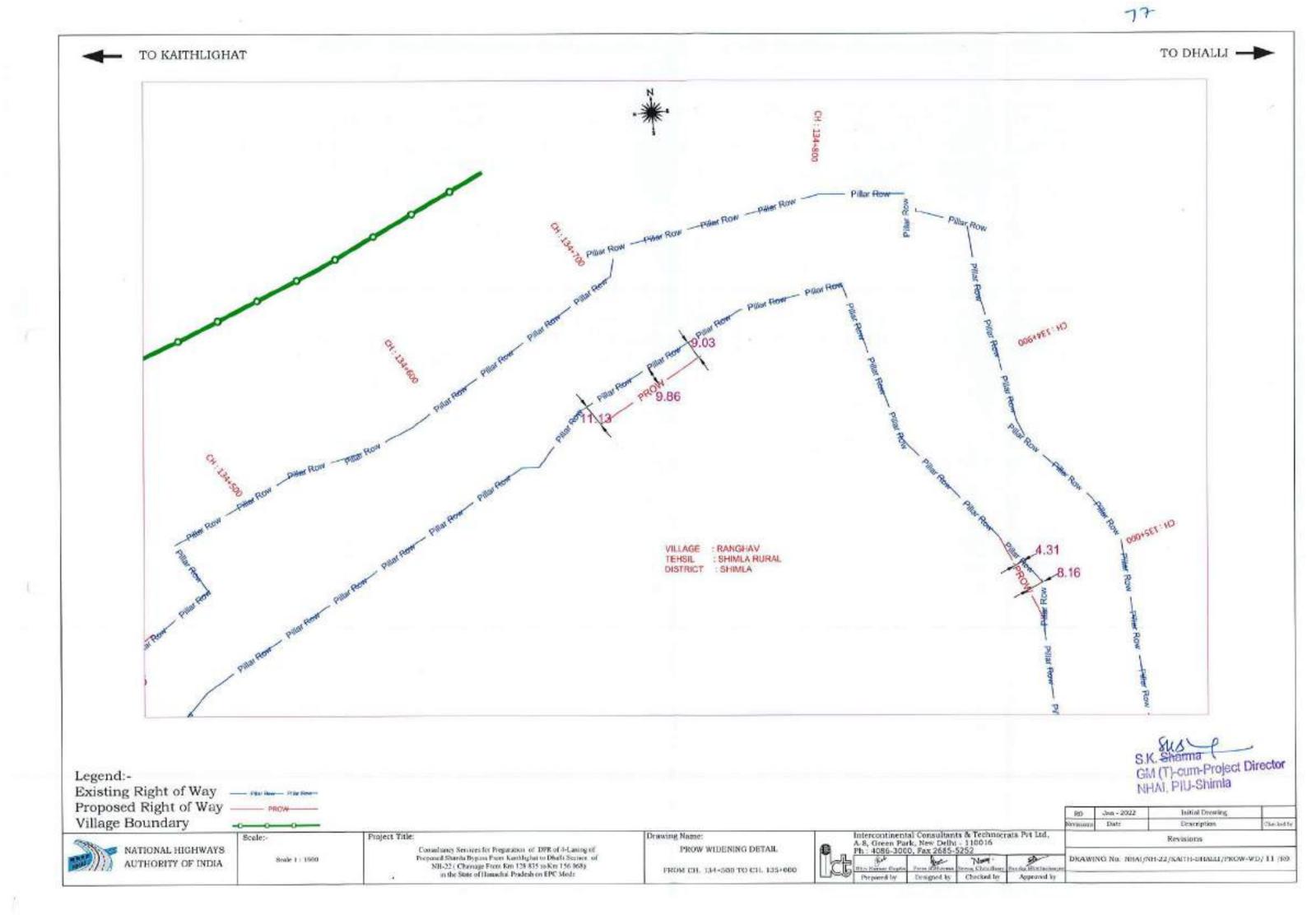


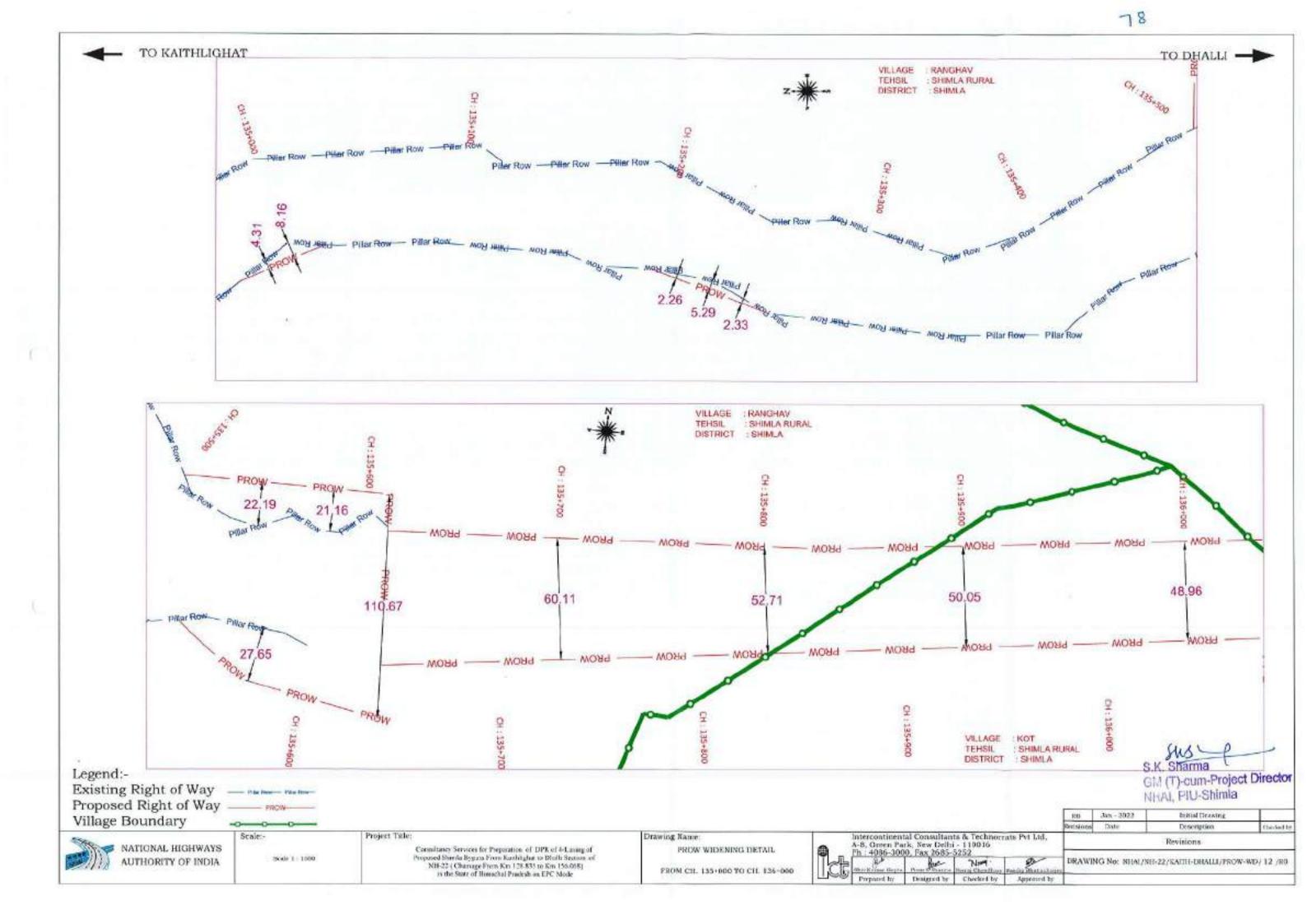


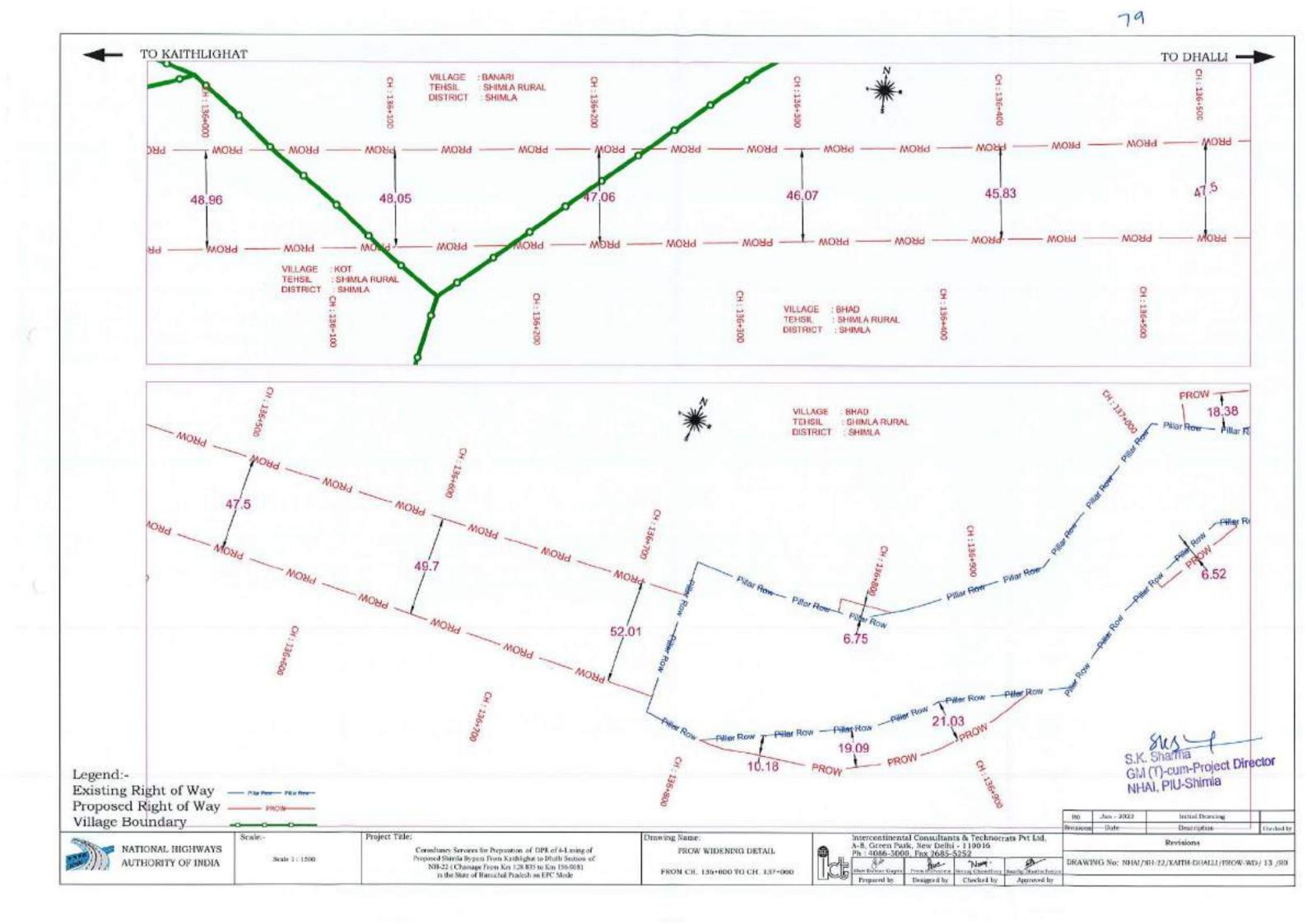


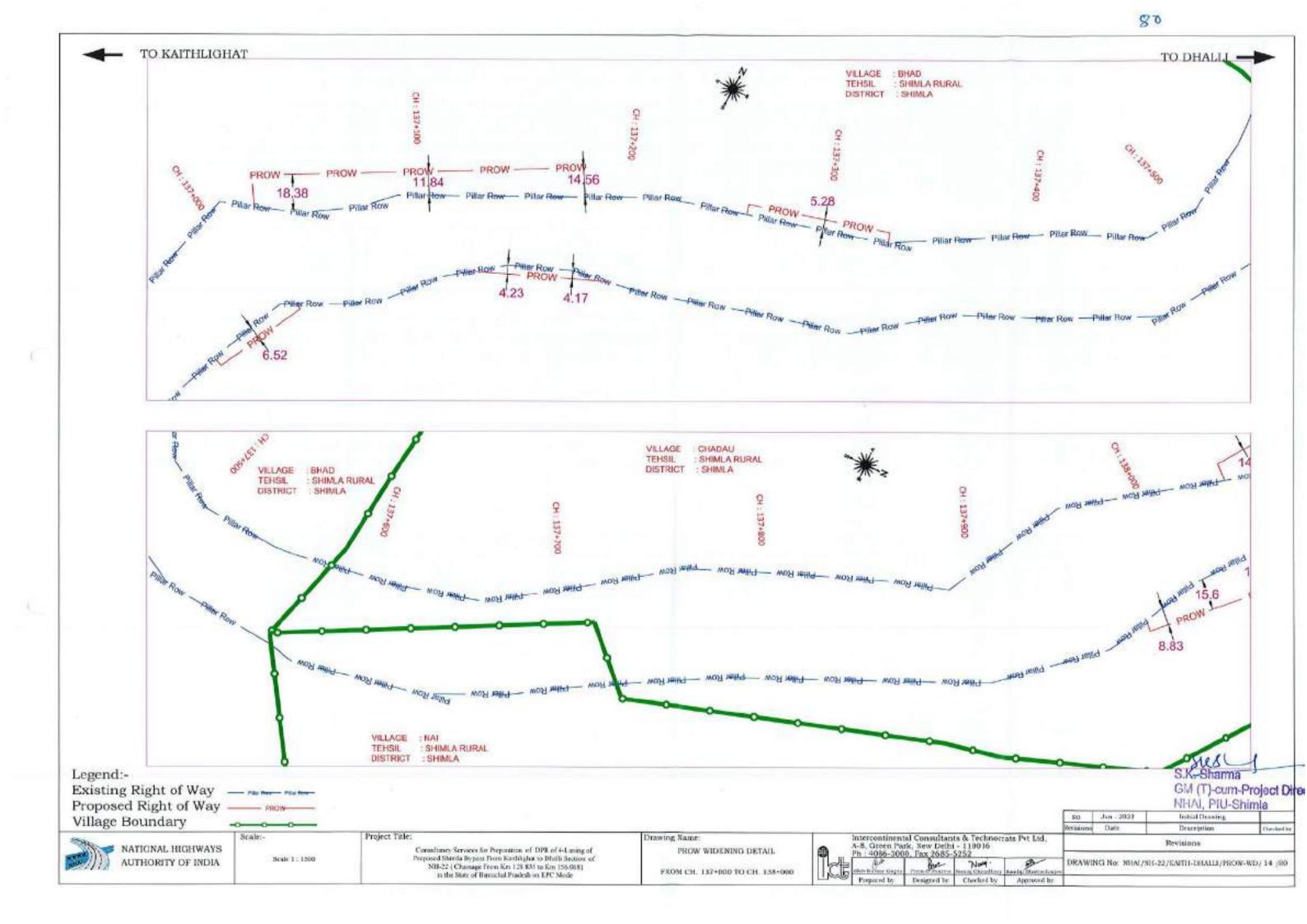


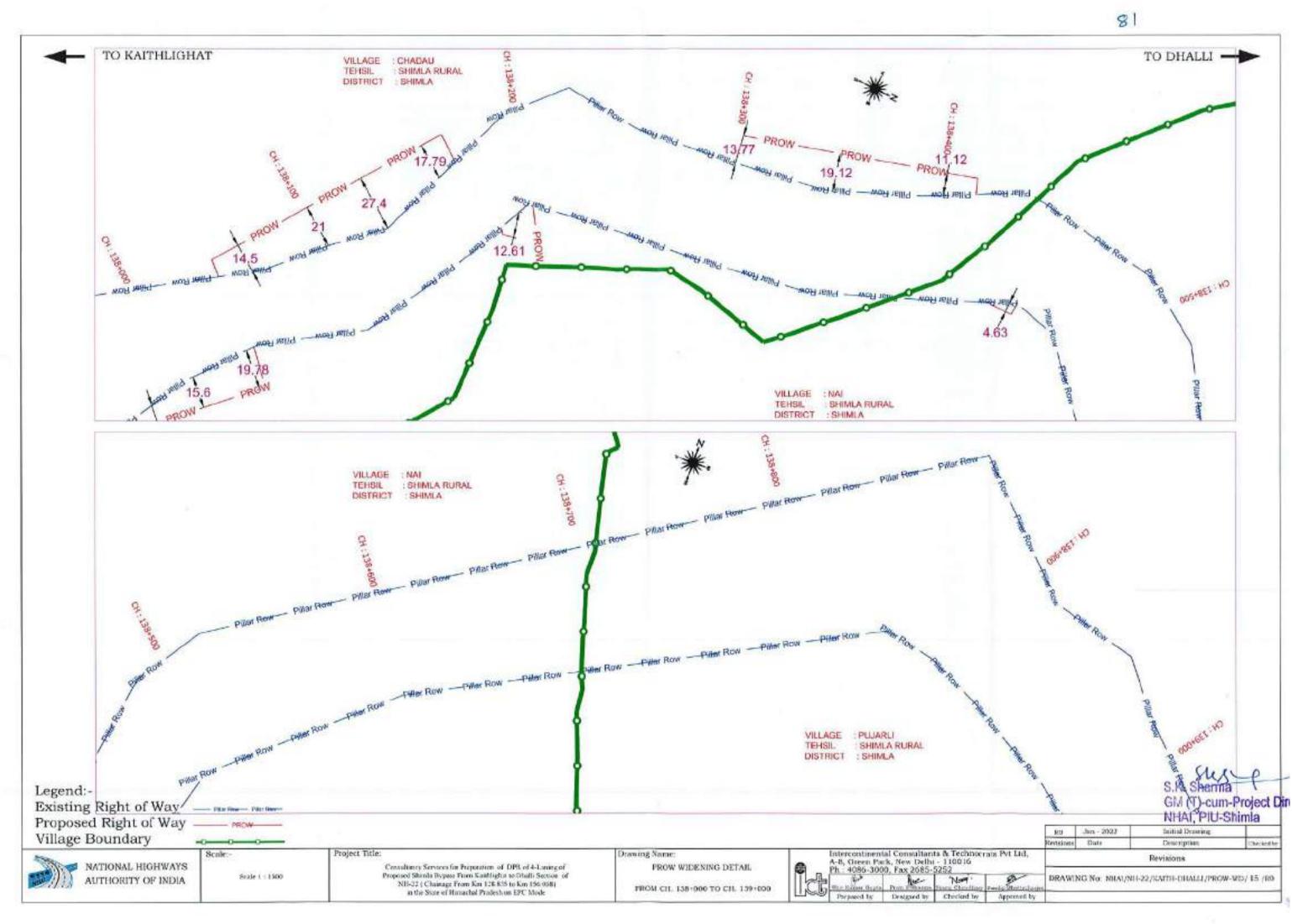


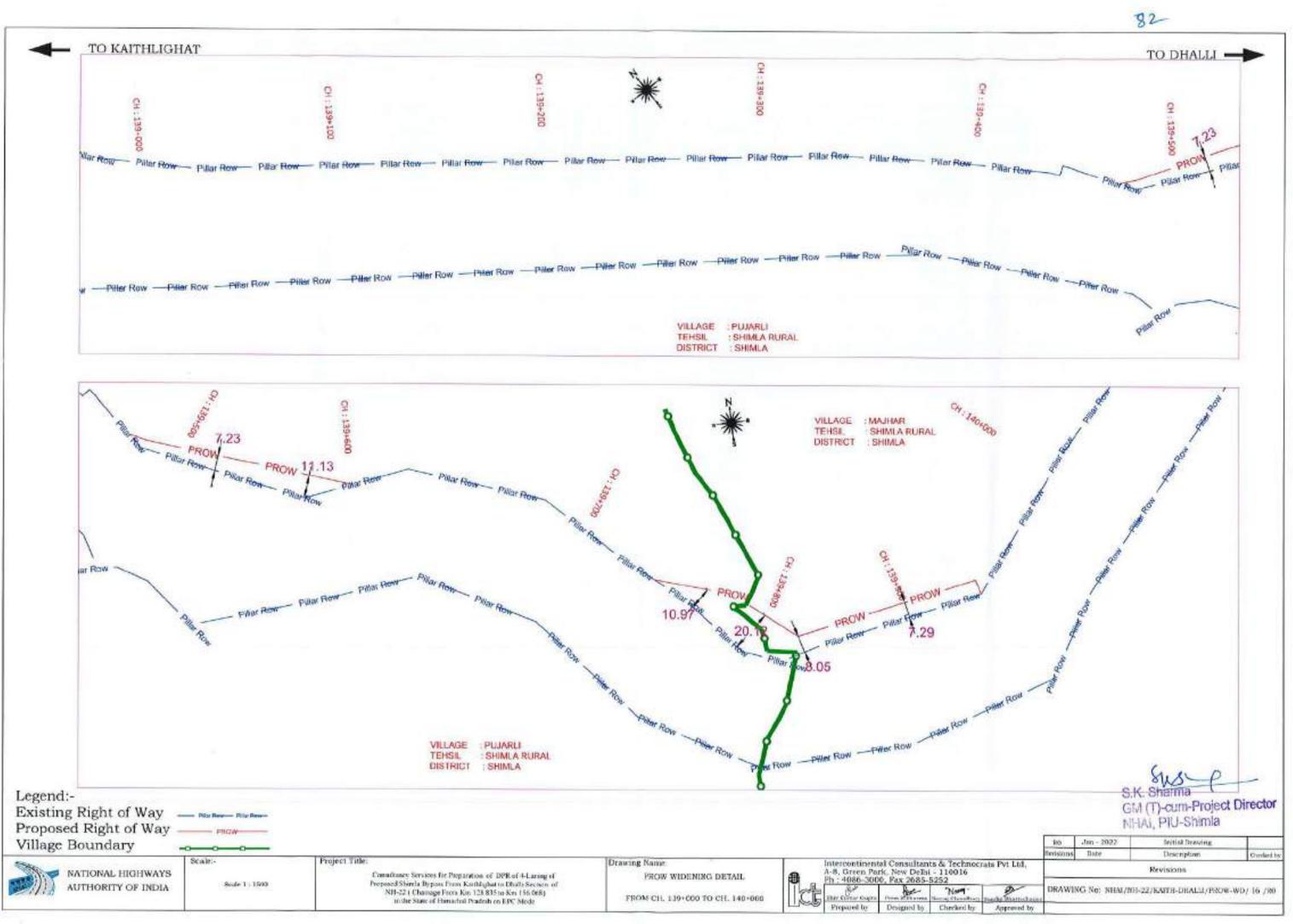


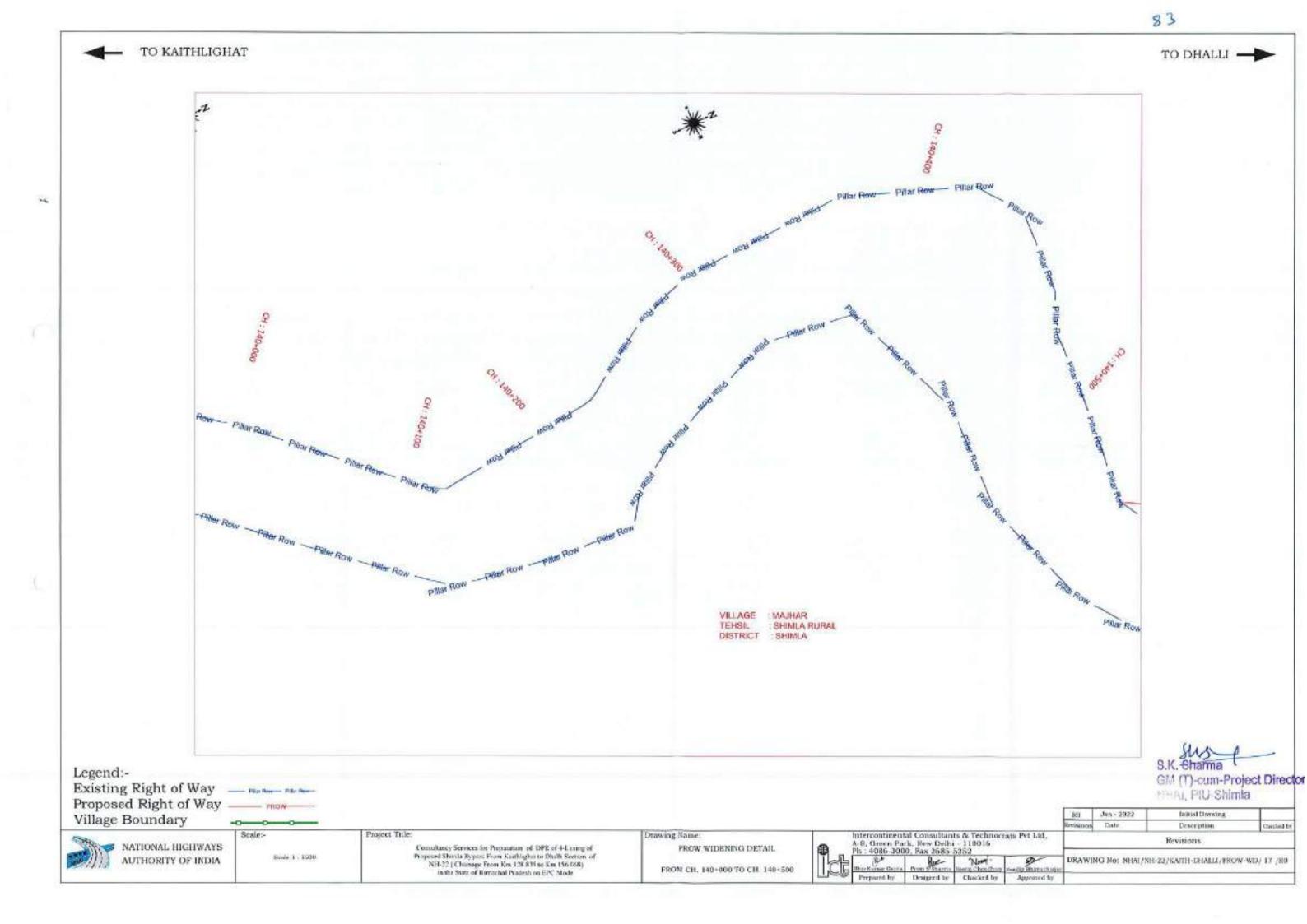


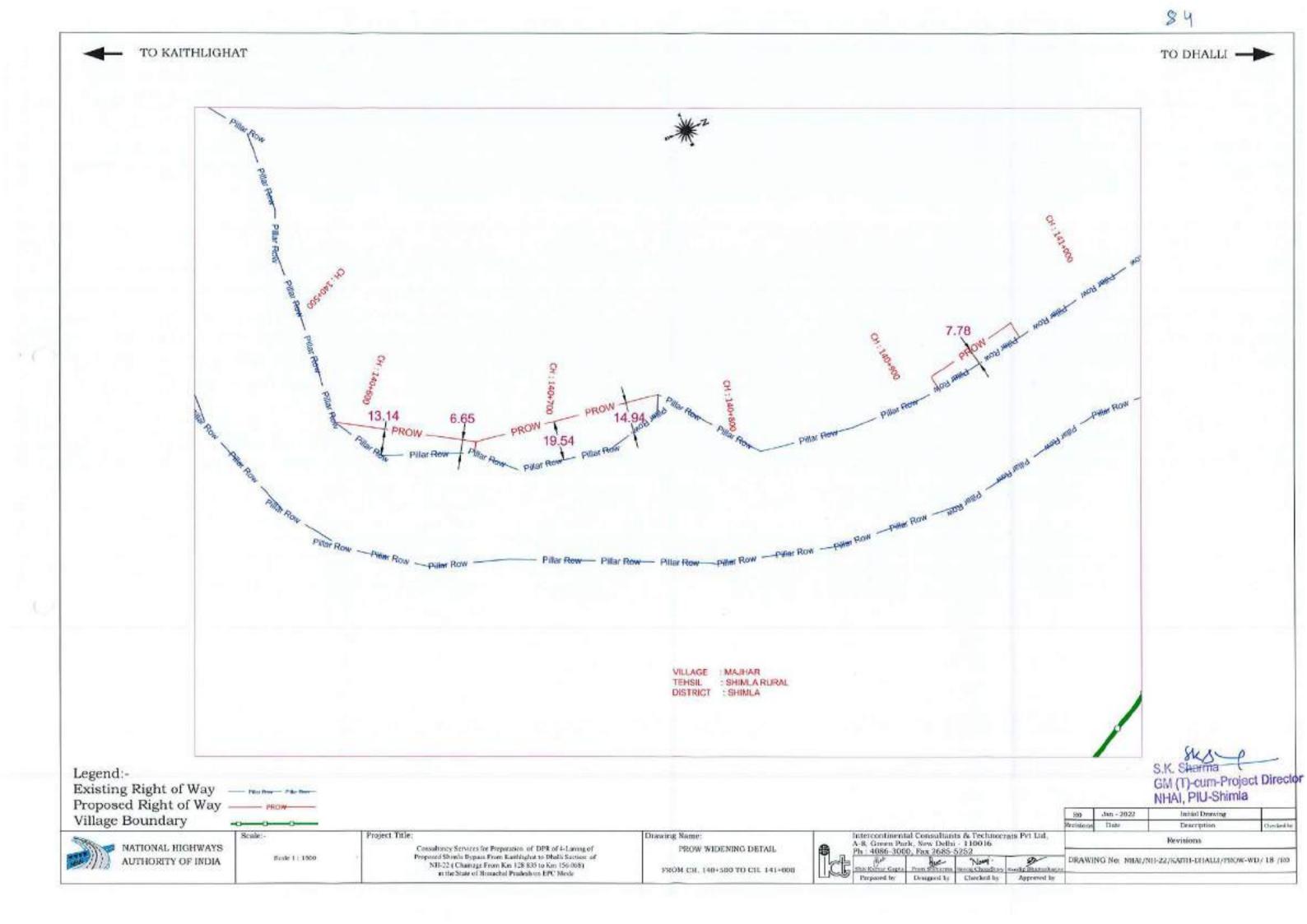


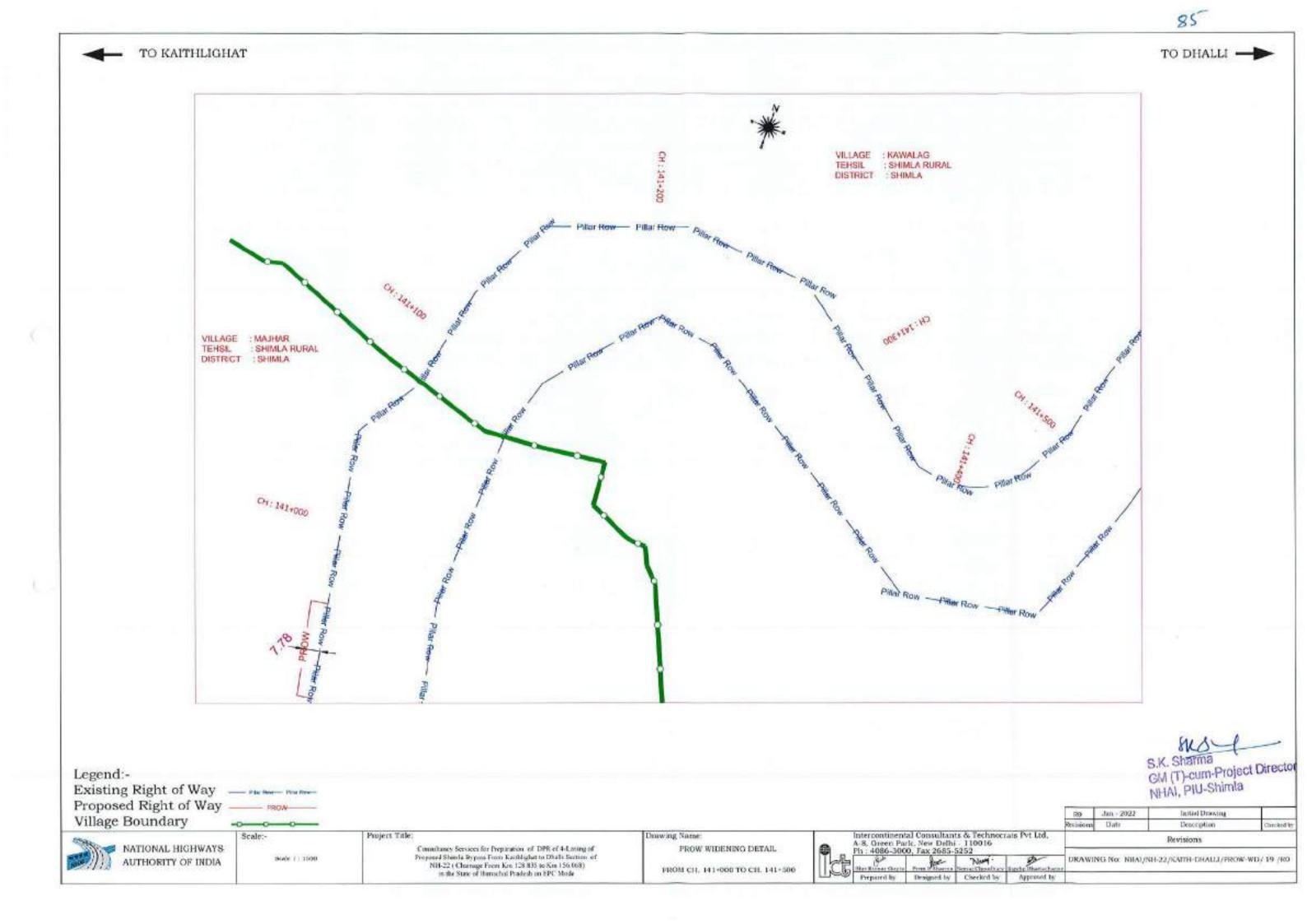


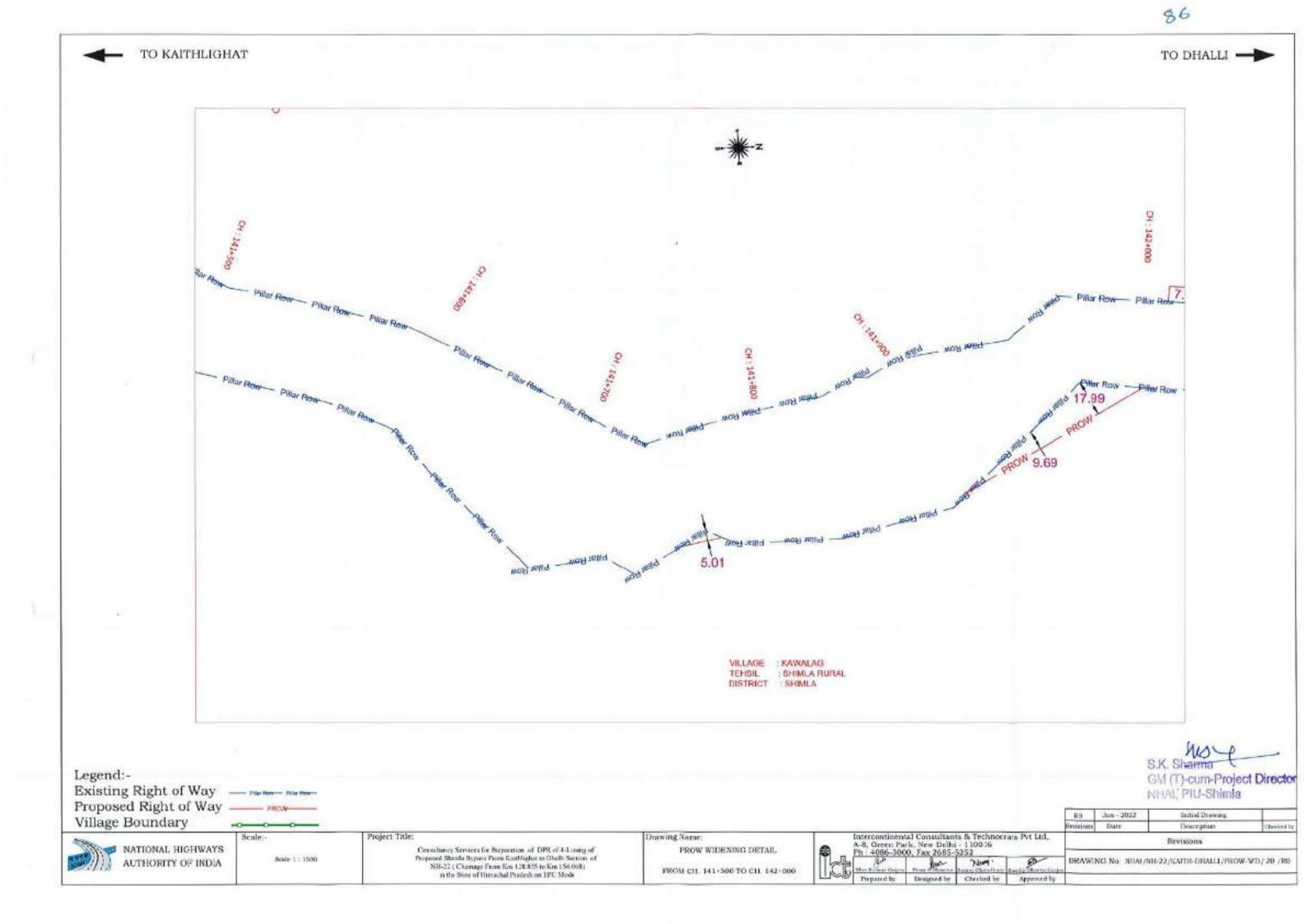


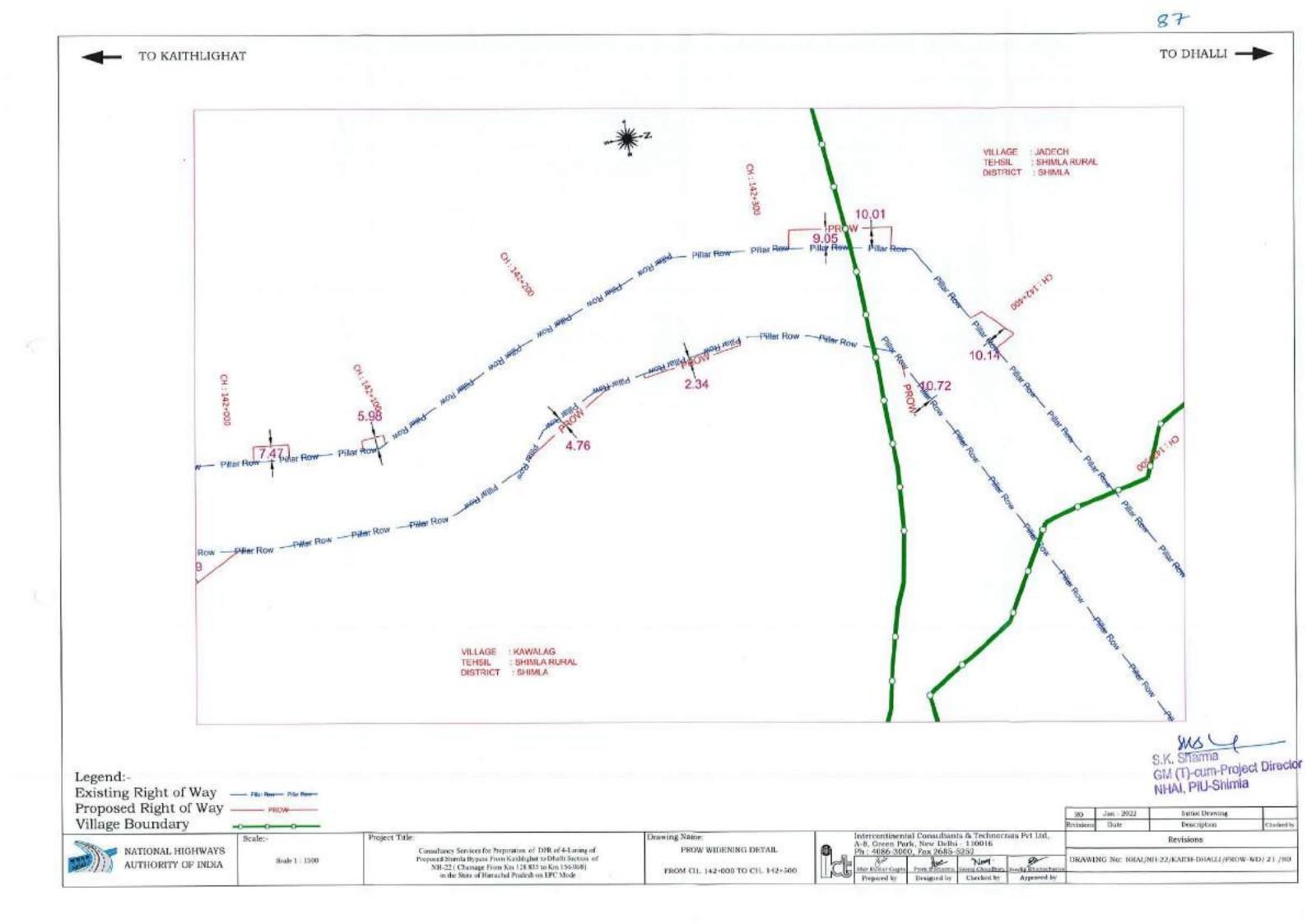


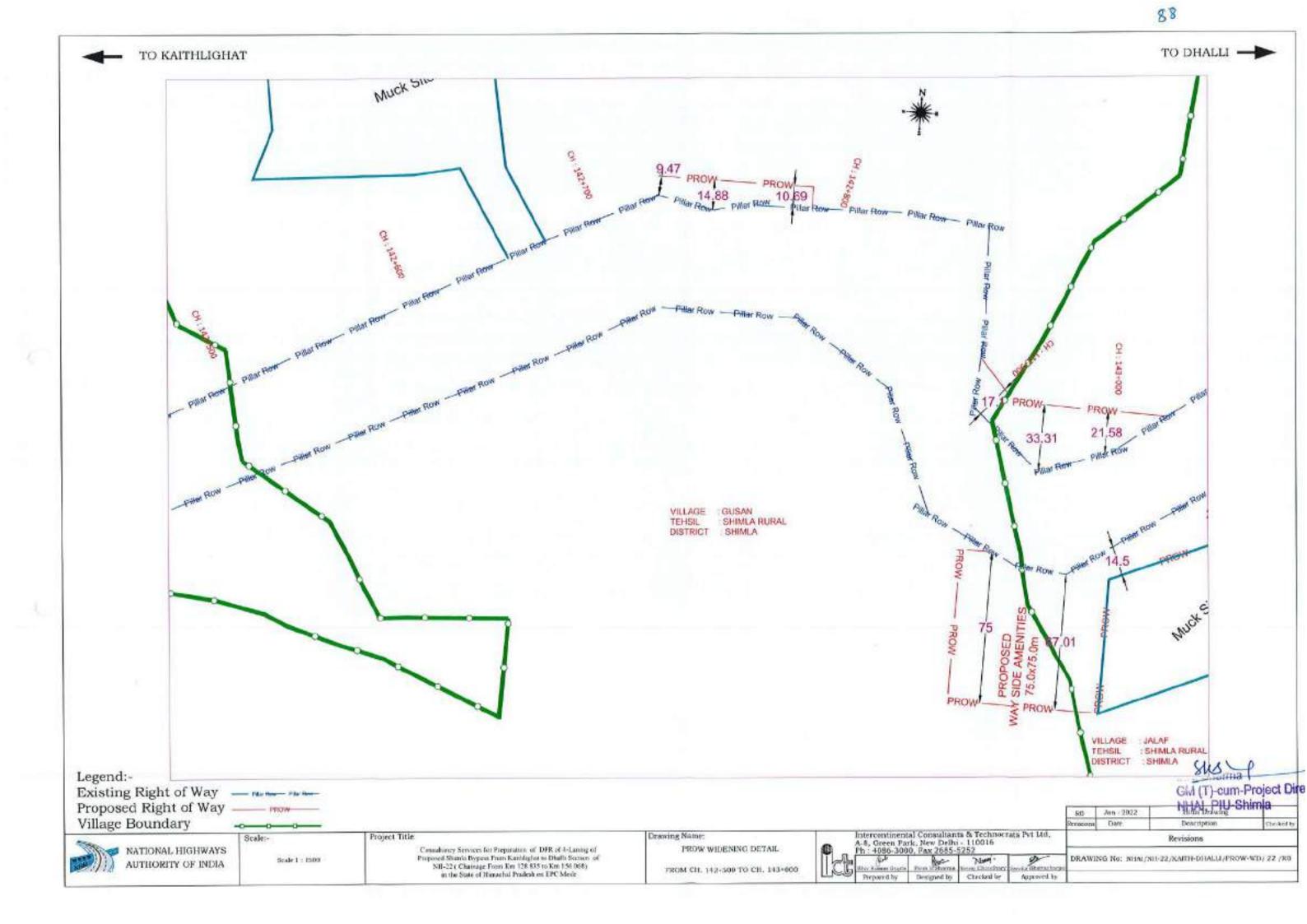




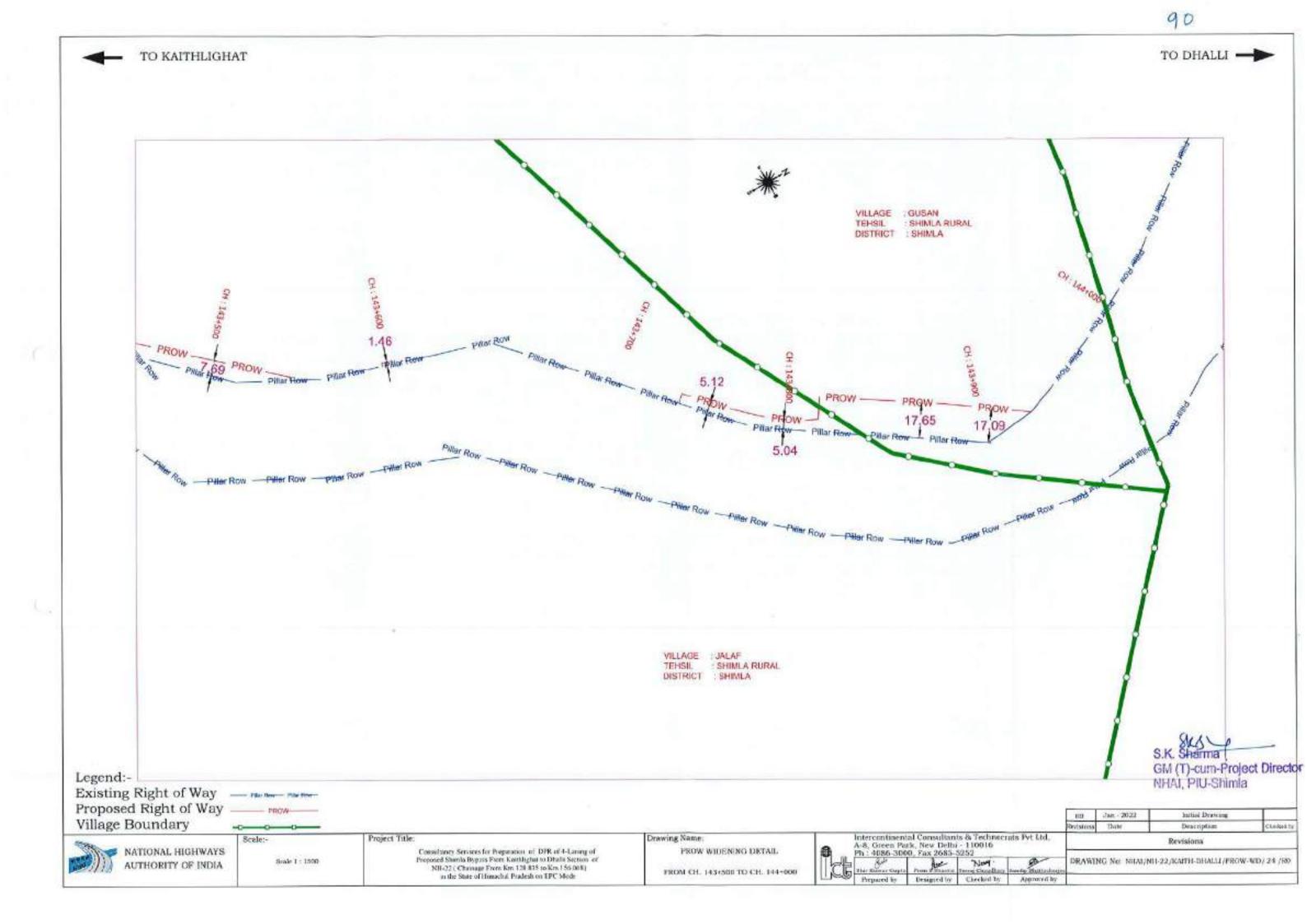


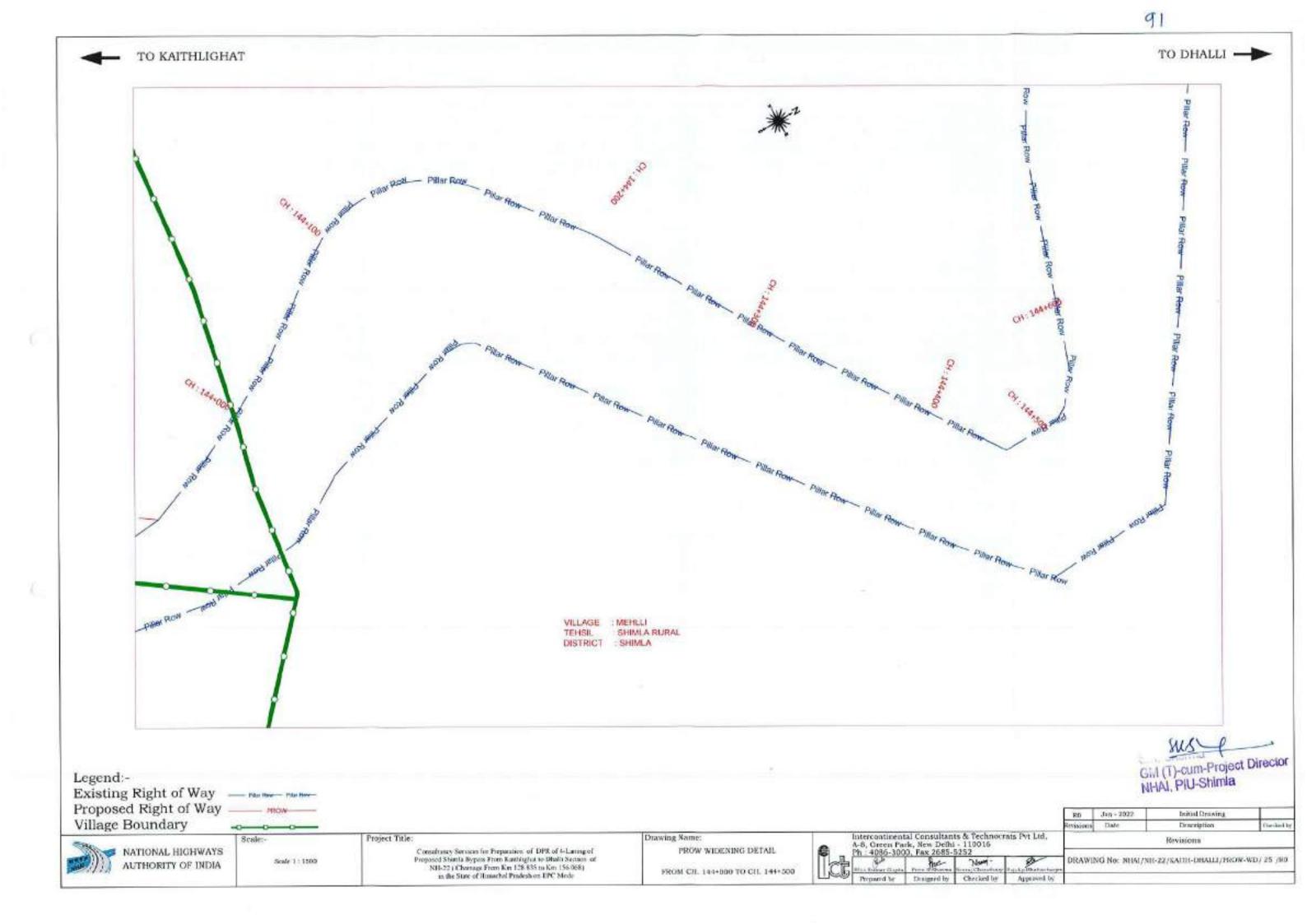


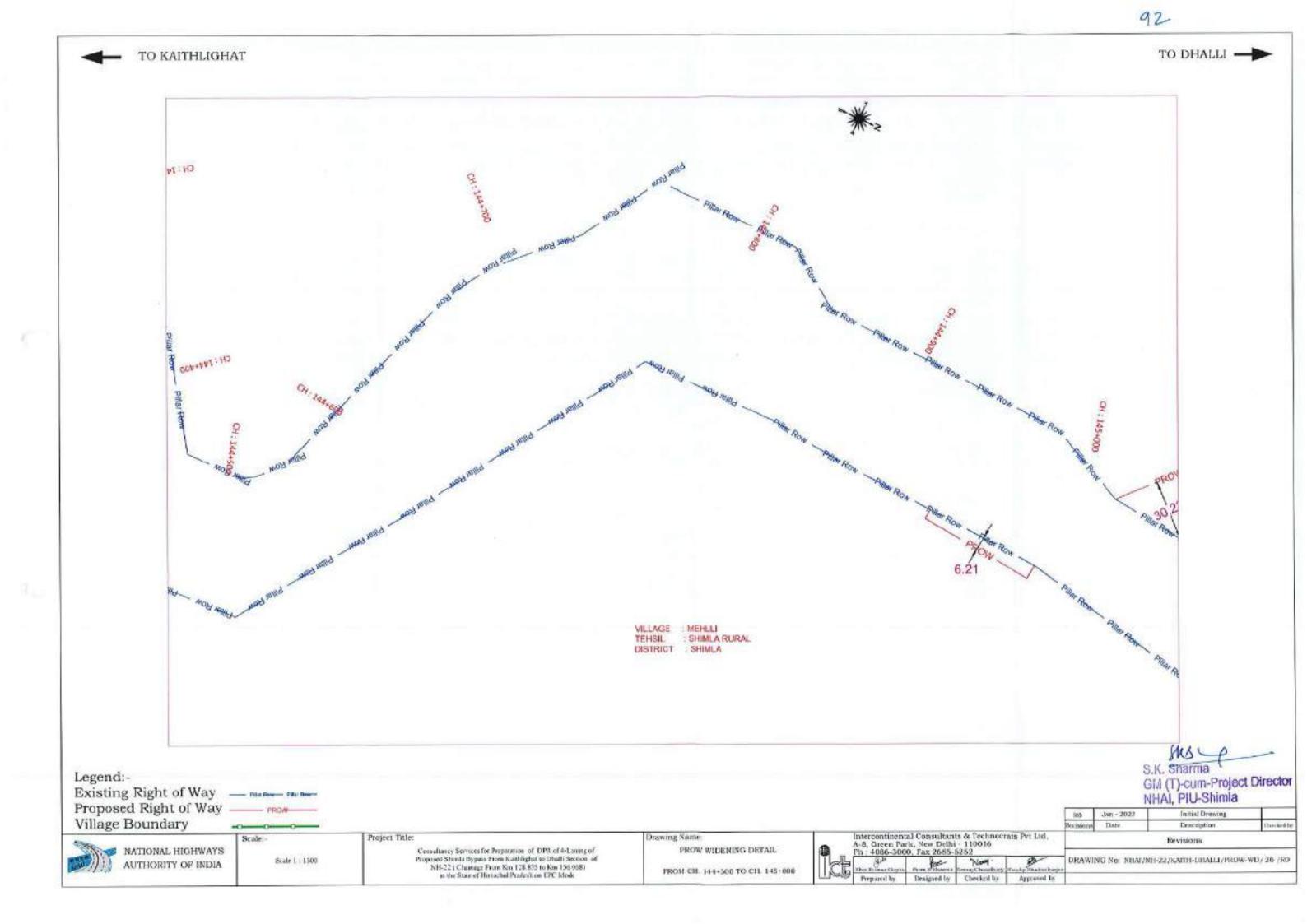


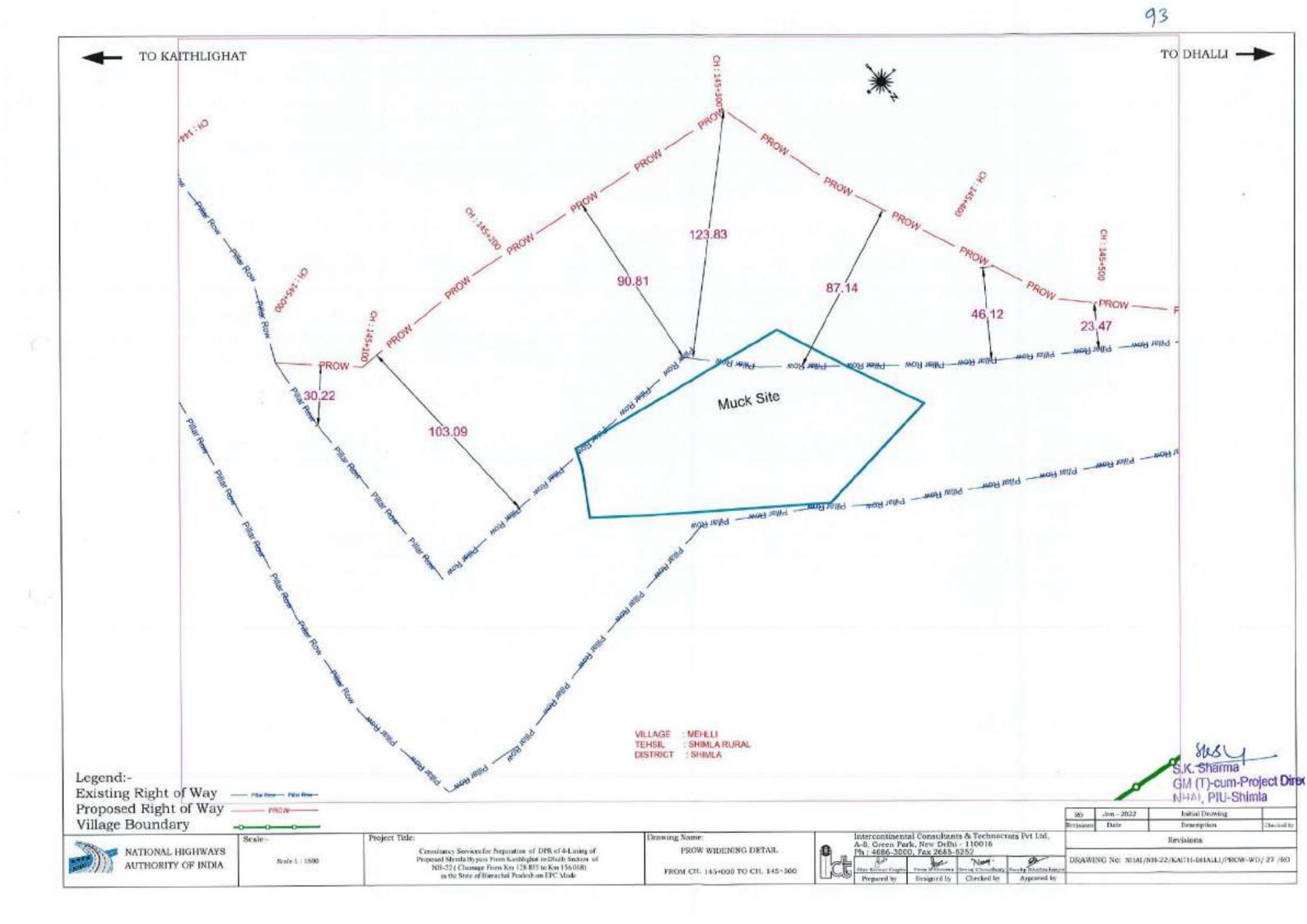


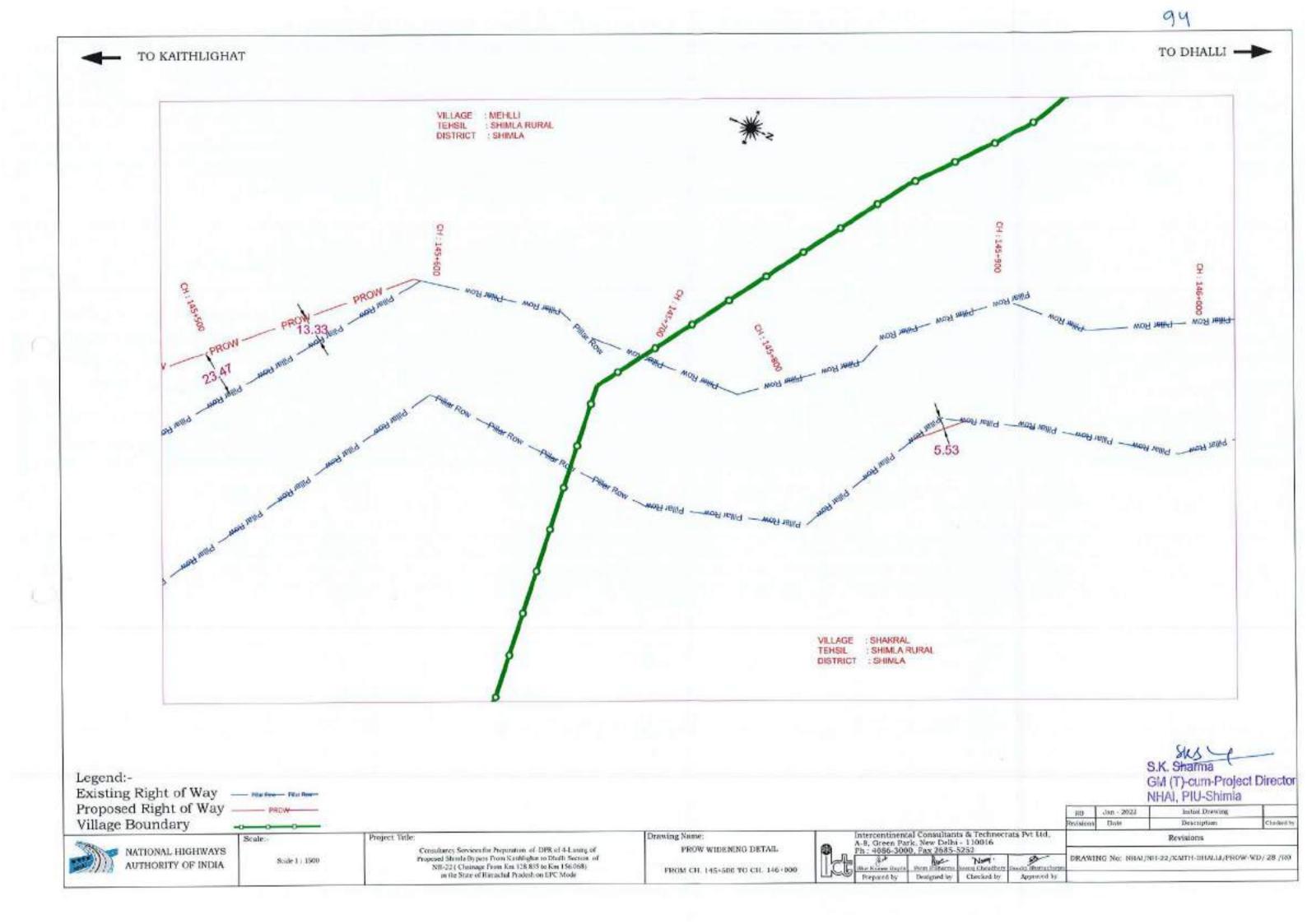


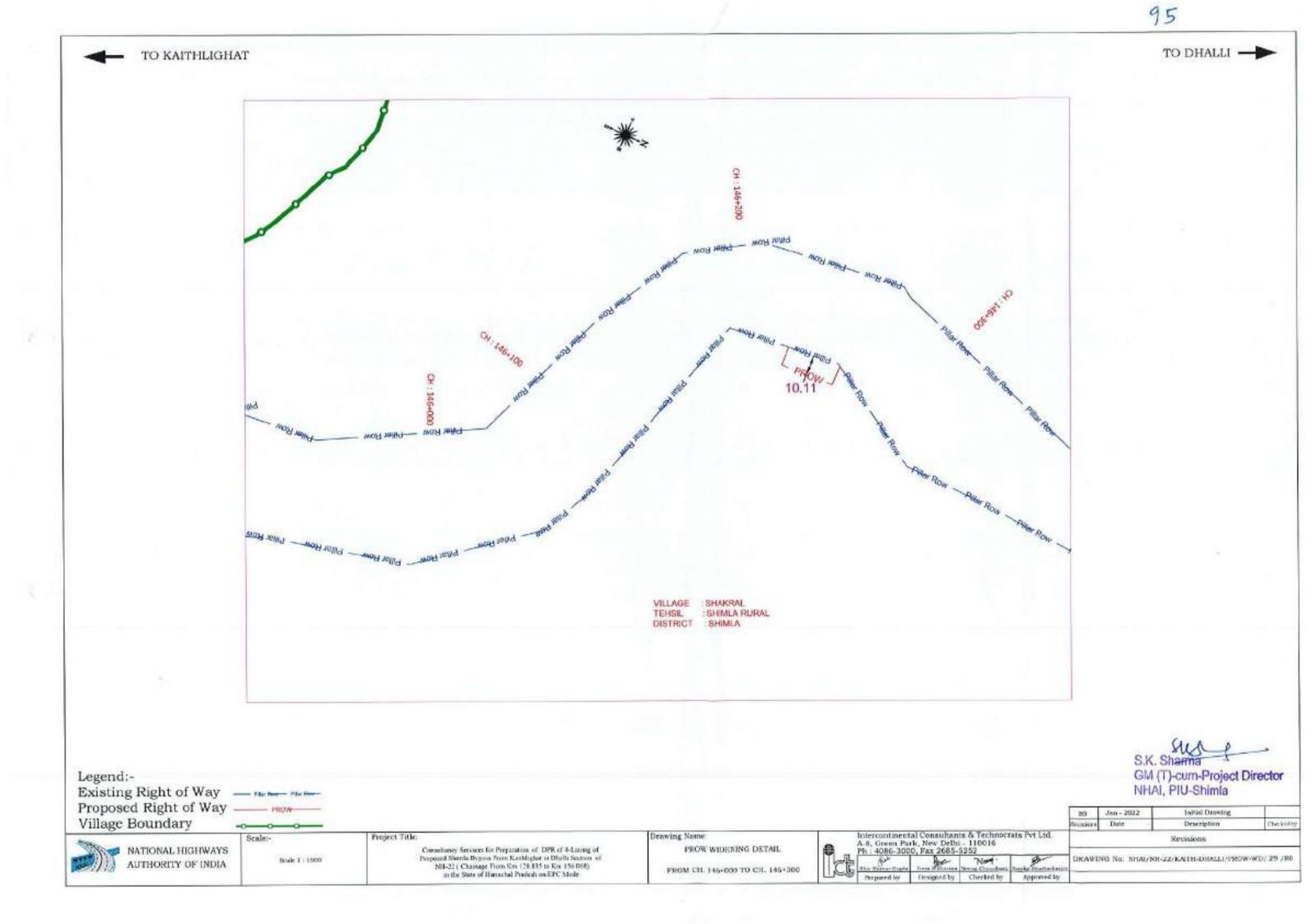












Checklist Sl. No. 07

Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha, for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha, in the State of Himachal Pradesh.

File No. : FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK-LIST SERIAL NO. - 07

STATEMENT SHOWING THE DETAILS OF THE FOREST AREA PROPOSED FOR DIVERSION

		For	st Area (Ha.) involved in of Shimla Bypa		ivision		
S. No.	District	Division	Range/Tehsil/Taluka/ Village	Khasra/ Survey or Compartment Number of Km. Stone	Forest Area proposed for Diversion (Ha.)	Legal status of Forest Area	Remarks
1.	/ Shimla	Shimla	Shimla Rural	Details Attached	11.7936	Details Attached	

Date: 12 08 2012

Place : Shimla

महात्रवादक (तकनीकी)/GM(T.) एवं परिक्षेतुत्तक्षतित सम्प्रक्षPAgeaByector भाराराप्रा./N.H.A.L. Office Seal पकाई - जिमला (दिप्रपुंडर) Director (H.P.) National Highways Authority of India Project Implementation Unit (PIU) Shimta, Himachal Pradesh

Countersigned -

Divisional Forest Officer Shimla Forest Division Office Seal FULL TITLE OF PROJECT: Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from Kalthalighat to Shakral Section (Package-I) of NH-22 (Chainage from Km 128.835 to Km.146.300) in already approved FCA case of the entire section from Kalthalighat to Dhall. Online Proposal No. <u>FP/HP/ROAD/151117/2022</u>.

5.No	District	Division	Range/Tehsil/ Village	Khasra/Survey or Compartment number of Km. Stone.	Forest Area Proposed for diversion (ha.).	Legal Status of Forest Area	Remarks
1	Shimla	Shimla	Mashobra /Shimla/ Shogi	837/1	0.0595	UPF	Road
2	Shimla	Shimla	Mashobra /Shimla/ Shogi	839/1	0.0578	UPF	Road
3	Shimla	Shimla	Mashobra /Shimla/ Shogi	922/2/1	0.0064	UPF	Road
4	Shimla	Shimla	Mashobra /Shimla/ Shogi	939/2/1	0.0340	UPF	Road
5	Shimla	Shimla	Mashobra /Shimla/ Shogi	981/2	0.0110	UPF	Road
6	Shimla	Shimla	Mashobra /Shimla/ Shogi	981/3/1	0.0010	UPF	Road
7	Shimla	Shimla	Mashobra /Shimla/ Mauri	985/3/1	0.0480	UPF	Road
8	Shimla	Shimla	Mashobra /Shimla/ Mauri	985/3/2	0.0012	UPF	Road
9	Shimla	Shimla	Mashobra /Shimla/ Mauri	855/2/1	0.0035	UPF	Road
10	Shimla	Shimla	Mashobra /Shimla/ Mauri	855/3	0.0090	UPF	Road
11	Shimla	Shimla	Mashobra /Shimla/ Mauri	856/2/1	0.0033	UPF	Road
12	Shimla	Shimla	Mashobra /Shimla/ Mauri	920/2/1	0.0189	UPF	Road
13	Shimla	Shimla	Mashobra /Shimla/ Bhog	1485/1/1	0.3174	UPF	Road
14	Shimla	Shimla	Mashobra /Shimla/ Bhog	1503/1/1	0.0410	UPF	Road
15	Shimla	Shimla	Mashobra /Shimia/ Bharob	455/1	0.0032	UPF	Road
16	Shimla	Shimla	Mashobra /Shimla/ Ranghav	517/1	0.0072	UPF	Road
17	Shimla	Shimla	Mashobra /Shimla/ Ranghay	527	0.0054	UPF	Road
18	Shimla	Shimla	Mashobra /Shimla/ Ranghav	528	0.0096	UPF	Road
19	Shimla	Shimla	Mashobra /Shimla/ Ranghav	85/1/3/1	0.0636	UPF	Road
20	Shimla	Shimla	Mashobra /Shimla/ Ranghav	85/1/2/1	0.0232	UPF	Road
21	Shimla	Shimla	Mashobra /Shimla/ Ranghav	33/1/3/1	0.0853	UPF	Road
22	Shimla	Shimia	Mashobra /Shimla/ Ranghav	34/4	0.0078	UPF	Road
23	Shimla	Shimla	Məshobra /Shimla/ Ranghav	36/3	0.0270	UPF	Road
24	Shimla	Shimla	Mashobra /Shimla/ Ranghav	32/2/1	0.0050	UPF	Road

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महाप्रबंधक (तकनीकी)/GM(T.) एवं परिवोजना निधानक/& Project Director WIRTSTON , NOT A 1 WHAT FROM (BRAND PARTIES HER)

25	Shimla	Shimla	Mashobra /Shimla/ Ranghav	31/2/1	0.1834	UPF	Road
26	Shimla	Shimla	Mashobra /Shimla/ Ranghav	.1/2/1	0.0032	UPF	Road
27	Shimla	Shimla	Mashobra /Shimla/ Ranghav	.2/2/1	0.0087	UPF	Road
28	Shimla	Shimla	Mashobra /Shimia/ Bhad	206/2	0.0042	UPF	Road
29	Shimla	Shimla	Mashobra /Shimla/ Bhad	221/2/1	0.0045	UPF	Road
30	Shimla	Shimla	Mashobra /Shimla/ Chadau	703/1/1	0.0318	UPF	Road
31	Shimla	Shimla	Mashobra /Shimla/ Pujarli	742/2/1	0.0016	UPF	Road
32	Shimla	Shimla	Mashobra /Shimla/ Pujarli	749/2/1	0.0028	UPF	Road
33	Shimla	Shimla	Mashobra /Shimla/ Pujarli	755/1	0.0010	UPF	Road
34	Shimla	Shimla	Mashobra /Shimla/ Up Mahal Majhar	209	0.0170	UPF	Road
35	Shimla	Shimla	Mashobra /Shimla/ Up Mahal Majhar	210/1/2	0.1303	UPF	Road
36	Shimla	Shimla	Mashobra /Shimla/ Up Mahal Majhar	211/1/1	0.0148	UPF	Road
37	Shimla	Shimla	Mashobra /Shimla/ Up Mahal Majhar	211/1/2	0.0119	UPF	Road
38	Shimla	Shimla	Mashobra /Shimla/ Up Mahal Majhar	214/1/1	0.0192	UPF	Road
39	Shimla	Shimla	Mashobra /Shimla/ Up Mahal Majhar	534/1/1	0.0348	UPF	Road
40	Shimla	Shimla	Mashobra /Shimla/ Up Mahal Majhar	541/1/1	0.0196	UPF	Road
41	Shimla	Shimla	Mashobra /Shimla/ Jalf	2/1/1	0.0060	UPF	Road
42	Shimla	Shimla	Mashobra /Shimla/ Jalf	1/1/1	0.0870	UPF	Road
43	Shimla	Shimla	Mashobra /Shimla/ Mehli	1114/1/1	1.0822	UPF	Road
44	Shimla	Shimia	Mashobra /Shimla/ Mehli	1072/3/1	0.7475	UPF	Road
45	Shimla	Shimla	Mashobra /Shimla/ Shogi	798/2/1	1.8127	UPF	Dumping
46	Shimla	Shimla	Mashobra /Shimla/ Shogi	939/3/1	0.0047	UPF	Dumping
47	Shimla	Shimla	Mashobra /Shimla/ Shogi	940/2/1	0.0038	UPF	Dumping
48	Shimla	Shimla	Mashobra /Shimla/ Shogi	940/3/1	0.0014	UPF	Dumping
49	Shimla	Shimla	Mashobra /Shimla/ Shogi	842	0.0856	UPF	Dumping
50	Shimla	Shimla	Mashobra /Shimla/ Goru Kanawan	152/1	0.6025	UPF	Dumping
51	Shimla	Shimla	Mashobra /Shimla/ Goru Kanawan	125/1	0.0595	UPF	Dumping
52	Shimla	Shimla	Mashobra /Shimla/ Mauri	989/2/1	0.0385	UPF	Dumping

C भाषाप्रबंधक (सकनीकी)/GM(T.) एवं परियोजना सित्रेशक /& Project Director भारात्रामा स्थल हो। WELS- WITH (Reas) WIL SHIMA (H.P.)

53	Shimla	Shimla	Mashobra /Shimla/ Mauri	989/3/1	0.3271	UPF	Dumping
54	Shimia	Shimla	Mashobra /Shimla/ Mauri	993/2/1	0.2129	UPF	Dumping
55	Shimla	Shimla	Mashobra /Shimla/ Yaan	64/1	0.0701	UPF	Dumping
56	Shimla	Shimla	Mashobra /Shimla/ Yaan	254/1	0.0360	UPF	Dumping
57	Shimla	Shimla	Mashobra /Shimla/ Up Mahal Majhar	718/1	1.0912	UPF	Dumping
58	Shimla	Shimla	Mashobra /Shimla/ Up Mahal Gusan	332/1	0.0434	UPF	Dumping
59	Shimla	Shimla	Mashobra /Shimia/ Shoghi	798/2/2/1	0.5845	UPF	Tunnel
60	Shimla	Shimla	Mashobra /Shimla/ Kot	1/1	0.0380	UPF	Tunnel
61	Shimla	Shimla	Mashobra /Shimla/ Kot	2/1	0.1504	UPF	Tunnel
62	Shimla	Shimla	Mashobra /Shimla/ Kot	3/1	0.0276	UPF	Tunnel
63	Shimla	Shimla	Mashobra /Shimla/ Kot	4/1	0.1256	UPF	Tunnel
64	Shimla	Shimla	Mashobra /Shimla/ Kot	8/1	0.3056	UPF	Tunnel
65	Shimla	Shimla	Mashobra /Shimla/ Kot	9/1	0.0018	UPF	Tunnel
66	Shimla	Shimla	Mashobra /Shimla/ Kot	17	0.0038	UPF	Tunnei
67	Shimla	Shimla	Mashobra /Shimla/ Kot	19/1	0.0061	UPF	Tunnel
68	Shimla	Shimla	Mashobra /Shimla/ Kot	84/1	0.0620	UPF	Tunnel
69	Shimla	Shimla	Mashobra /Shimla/ Ranghav	506/2/1	0.1957	UPF	Tunnel
70	Shimla	Shimla	Mashobra /Shimla/ Ranghav	514/2/1	0.0050	UPF	Tunnel
71	Shimla	Shimla	Mashobra /Shimla/ Banadi	760/1	0.2983	UPF	Tunnel
72	Shimla	Shimla	Mashobra /Shimla/ Banadi	762	0.0901	UPF	Tunnel
73	Shimla	Shimla	Mashobra /Shimla/ Banadi	763/1	0.2338	UPF	Tunnel
74	Shimla	Shimla	Mashobra /Shimla/ Bhad	100/1	1.9520	UPF	Tunnel
75	Shimla	Shimla	Mashobra /Shimla/ Bhad	105	0.0628	UPF	Tunnet
				Total	11.7936		

Divisional Forest Officer Shimtanolest Division Shimta Forest Division Shimta

महाप्रयंधका (महानीकी)/GM(T.) एवं परिपोकना (महेलक/8 Project Director भारतत्वा / states) भारतत्वा / states) म्यहर्ष - forent (fore ite)/PNJ-Shimba (H.P.)

Checklist No. 08

Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainoge from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha. in the State of Himachal Pradesh.

File No. : FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK-LIST SERIAL NO. - 08

STATEMENT SHOWING THE DETAILS OF THE NON-FOREST AREA PROPOSED FOR DIVERSION

		Non-Fe	orest Area (Ha.) involved of Shimla Bypa		Division		<i>a</i>
S. No.	District	Division	Range/Tehsil/Taluka/ Village	Khasra/ Survey or Compartment Number of Km. Stone	Non - Forest Area proposed for Diversion (Ha.)	Present Land use	Remarks
I.	Shimla	Shimla	Shimla Rural Taluka	Details Attached	13.8090	Details Attached	

Date : 19-04-2022 Place : Shimla

Sto Projet Director

National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

> S.K. Sharma GM (T)-cum-Project Director NHA), PIU-Shimla

Countersigned -

Kent

Divisional Forests Officer IShimla Rorest Division Shimla Forest Division SHIMLA Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalii (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 Ha in the State of Himachal Prodesh

File No. : FP/HP/ROAD/151117/2022

Date of Proposal: 13 Jan 2022

S.No.	District	Tehsil	Village	Forest Area (Ha.)	Total Non- Forest Area (Ha.)	Total Area (Ha.)
			Road	ALL DECK		
1	Shimla	Shimla Rurai	Shogi	0.1697	0.7585	0.9282
2	Shimla	Shimla Rural	Mauri	0.0839	0.5713	0.6552
3	Shimla	Shimla Rural	Bhog	0.3584	0.1378	0.4962
4	Shimla	Shimla Rural	Bharob	0.0032	0.0296	0.0328
5	Shimla	Shimla Rural	Ranghav	0.4294	0.5095	0.9389
6	Shimla	Shimla Rural	Bhad	0.0090	0.6122	0.6212
7	Shimla	Shimla Rural	Chadau	0.0318	0.9245	0.9563
8	Shimla	Shimla Rural	Pujarli	0.0054	0.1213	0.1267
9	Shimla	Shimla Rural	Up Mahal Majhar	0.2476	0.1624	0.4100
10	Shimla	Shimla Rural	Up Mahal Kawalag	0.0000	0.0465	0.0465
11	Shimla	Shimla Rural	Up Mahal Jarech	0.0000	0.1088	0.1088
12	Shimla	Shimla Rural	Up Mahal Gusan	0.0000	0.3931	0.3931
13	Shimla	Shimla Rural	Jaif	0.0930	0.2280	0.3210
14	Shimla Shimla Rural		Mehli	1.8297	0.1480	1.9777
15	Shimla	Shimla Rurai	Shakral	0.0000	0.1434	0.1434
			Total	3.2611	4.8949	8.1560
			Muck Disposal S	ites		
D2	Shimla	Shimla Rural	Shogi	1.9082	0.5473	2.4555
D2	Shimla	Shimla Rural	Goru Kanawan	0.6620	0.0000	0.6620
D3	Shimla	Shimla Rural	Goru Kanawan	0.0000	0.0241	0.0241
D3	Shimla	Shimla Rural	Mauri	0.5785	0.2412	0.8197
D4	Shimla	Shimla Rural	Goru Kanawan	0.0000	0.4840	0.4840
D5	Shimla	Shimla Rural	Yaan	0.1061	0.4978	0.6039
D6	Shimla	Shimla Rural	Up Mahal Majhar	1.0912	0.2777	1.3689
D7	Shimla	Shimla Rural	Jalf	0.0000	1.1126	1,1126
D8	Shimla	Shimla Rural	Up Mahal Gusan	0.0434	0.8101	0.8535
D9	Shimla	Shimla Rural	Mehli	0.0000	0.5954	0.5954
			Total	4.3894	4.5902	8.9796
			Tunnels			
T-1	Shimla	Shimla Rural	Sunghal	0	1.0077	1.0077
T-1	Shimla	Shimla Rural	Shogi	0.5845	0.5748	1.1593
T-2	Shimla	Shimla Rural	Ranghav	0.2007	0.3849	0.5856
T-2	Shimla	Shimla Rural	Kot	0.7209	1.1259	1.8468
T-2	Shimla	Shimla Rural	Banadi	0.6222	0.0679	0.6901
T-2	Shimla	Shimla Rural	Bhad	2.0148	1.1627	3.1775
			Total	4.1431	4.3239	8.4670
			Grand Total	11.7936	13.8090	25.6026

S.K. Sharma GM (T)-cum-Project Director NHAI, PIU-Shimla

Full Title of the Proposal: Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 Ha in the State of Himachal Pradesh

File No. : FP/HP/ROAD/151117/2022 Date of Proposal: 13 Jan 2022

Sr. No	Туре	District	Taluka	Village	Khasra No	Type of Land	Nature of Land	Area in Hect.
1	Road	Shimla	Shimia Rural	Shogi	862/1	Private	Banjar Kadeem	0.008
2	Road	Shimla	Shimla Rural	Shogi	863/1	Private	Banjar Kadeem	0.008
3	Road	Shimla	Shimia Rural	Shogi	840/1	Private	Banjar Kadeem	0.029
4	Road	Shimla	Shimla Rural	Shogi	855/1	Private	Banjar Kadeem	0.0065
5	Road	Shimla	Shimla Rural	Shogi	874/1	Private	Banjar Kadeem	0.0361
6	Road	Shimla	Shimla Rural	Shogi	865/2/1	Private	Banjar Kadeem	0.0056
7	Road	Shimla	Shimla Rural	Shogi	926/2/1	Private	Bakhal Awwal	0.0080
8	Road	Shimla	Shimla Rural	Shogi	927/2/1	Private	Banjar Kadeem	0.0029
9	Road	Shimla	Shimla Rural	Shogi	932/1	Private	G. M. Sehan	0.0039
10	Road	Shimla	Shimla Rural	Shogi	933/1	Private	G.M. Makan	0.0037
11	Road	Shimla	Shimla Rural	Shogi	934/1	Private	G. M. Sehan	0.0043
12	Road	Shimla	Shimla Rural	Shogi	905/2/1	Private	Ghasni	0.013
13	Road	Shimla	Shimla Rural	Shogi	958/1	Private	Bakhal Awwal	0.0283
14	Road	Shimla	Shimla Rural	Shogi	957/2	Private	Bakhal Awwal	0.0104
15	Road	Shimla	Shimla Rural	Shogi	979	Private	Banjar Kadeem	0.3137
16	Road	Shimla	Shimla Rural	Shogi	983/2/1	Private	Ghasni	0.0275
17	Road	Shimla	Shimla Rural	Shogi	984/2/2	Private	Ghasni	0.0541
18	Road	Shimla	Shimia Rurat	Shogi	985/2/1	Private	Ghasni	0.0758
19	Road	Shimla	Shimla Rural	Shogi	991/1	Private	Banjar Kadeem	0.0016
20	Road	Shimla	Shimla Rural	Shogi	995/2/1	Private	Ghasni	0.0116
21	Road	Shimla	Shimla Rural	Shogi	872	Private	Banjar Kadeem	0.0077
22	Road	Shimla	Shimla Rural	Shogi	931	Private	G.M. Makan	0.0148
23	Road	Shimla	Shimla Rural	Shogi	975	Private	Bakhal Awwal	0.0338
24	Road	Shimla	Shimla Rural	Shogi	992	Private	Banjar Kadeem	0.0438
25	Road	Shimla	Shimla Rural	Shogi	993	Private	Ghasni	0.0047
	1						Total	0.7585
27	Road	Shimla	Shimla Rural	Mauri	906/2	Private	Ghasni	0.0595
28	Road	Shimla	Shimla Rural	Mauri	860/1	Private	Ghasni	0.0230
29	Road	Shimla	Shimia Rural	Mauri	880/2	Private	Ghasni	0.0375
30	Road	Shimla	Shimla Rural	Mauri	880/3	Private	Ghasni	3800.0
31	Road	Shimla	Shimla Rural	Mauri	882/2/1	Private	Ghasni	0.1031
32	Road	Shimla	Shimla Rural	Mauri	983/1	Private	Banjar Kadeem	0.0140
33	Road	Shimla	Shimla Rural	Mauri	905/2	Private	Ghasni	0.0715
34	Road	Shimla	Shimla Rural	Mauri	902/3/1	Private	Banjar Kadeem	0.1130
35	Road	Shimla	Shimla Rural	Mauri	888/2/1	Private	Banjar Kadeem	0.0378
38	Road	Shimla	Shimla Rural	Mauri	999/1	Private	Ghasni	0.0190
37	Road	Shimla	Shimla Rural	Mauri	845/2/1	Private	Bakhal Doyam	0.0399
38	Road	Shimla	Shimla Rural	Mauri	842/2/1	Private	Ghasni	0.007
39	Road	Shimla	Shimla Rural	Mauri	844/2/1	Private	G.M Abadi	0.008
40	Road	Shimla	Shimla Rural	Mauri	861/2/1	Private	Banjar Kadeem	0.0178
41	Road	Shimla	Shimla Rural	Mauri	859/1	Private	Banjar Kadeam	0.0117
1001	- COLONE				00000		Total	0,571

Toal Non Forest Area - Shimla Forest Division

S.K. Sharma GM (T)-cum-Project Director No PIU-Shimla

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Sr. No	Туре	District	Taluka	Village	Khasra No	Type of Land	Nature of Land	Area in Hect.
43	Road	Shimla	Shimla Rural	Bhog	1490/1/2/1	Private	Ghasni	0.038
44	Road	Shimla	Shimla Rural	Bhog	1492/1	Private	Ghasni	0.099
							Total	0.137
46	Road	Shimla	Shimla Rural	Bharob	456/1	Private	Ghasni	0.029
						C1 - 004550 YES	Total	0.029
48	Road	Shimla	Shimla Rural	Ranghav	406/2/1	Private	Bakhal Awwal	0.053
49	Road	Shimla	Shimla Rural	Ranghav	52.1	Private	G.M. Tank	0.002
50	Road	Shimla	Shimla Rural	Ranghav	522/1	Private	Ghasni	0.012
51	Road	Shimla	Shimla Rural	Ranghav	523/1	Private	Bakhal Awwal	0.025
52	Road	Shimla	Shimla Rural	Ranghav	524/1	Private	Bakhal Awwal	0.048
53	Road	Shimla	Shimla Rural	Ranghav	629/1	Private	Ghasni	0.017
54	Road	Shimla	Shimla Rural	Ranghav	530/1	Private	Ghasni	0.021
55	Road	Shimla	Shimla Rural	Ranghav	509/2/1	Private	Ghasni	0.027
56	Road	Shimla	Shimla Rural	Ranghav	647/2/2/1	Private	Ghasni	0.096
57	Road	Shimla	Shimla Rural	Ranghav	29/2/1	Private	Ghasni	0.021
58	Road	Shimla	Shimla Rural	Ranghav	518/2	Private	Banjar Kadeem	0.040
59	Road	Shimla	Shimla Rural	Ranghav	520/2	Private	Bagicha Bakhal Doyam Faldar	0.016
60	Road	Shimla	Shimla Rural	Ranghav	525/2	Private	Bakhal Awwal	0.051
61	Road	Shimla	Shimla Rural	Ranghav	186/2	Private	Bakhal Awwal	0.075
			and the second		11.11.22		Total	0.509
63	Road	Shimla	Shimla Rural	Bhad	67/1	Private	Bakhal Awwal	0.013
64	Road	Shimla	Shimla Rural	Bhad	208/2/1	Private	Bakhal Awwal	0.022
65	Road	Shimla	Shimla Rural	Bhad	213/2/1	Private	Bakhal Awwal	0.012
66	Road	Shimla	Shimla Rural	Bhad	215/1/1	Private	G.M. Sadak	0.008
67	Road	Shimla	Shimla Rural	Bhad	70/1	Private	Bakhal Doyam	0.021
68	Road	Shimla	Shimla Rural	Bhad	71/2	Private	Bakhal Doyam	0.008
69	Road	Shimla	Shimla Rural	Bhad	265/2/1	Private	Ghasni	0.034
70	Road	Shimla	Shimla Rural	Bhad	264/1	Private	Ghasni	0.028
71	Road	Shimla	Shimla Rural	Bhad	263/2/1	Private	Ghasni	0.005
72	Road	Shimla	Shimla Rural	Bhad	180/2/1	Private	Banjar Kadeem	0.034
73	Road	Shimla	Shimla Rural	Bhad	216/2/1	Private	Bakhal Awwal	0.008
74	Road	Shimla	Shimla Rural	Bhad	222/1	Private	Banjar Kadeem	0.012
75	Road	Shimla	Shimla Rural	Bhad	76/2/1	Private	Bakhal Awwal	0.011
78	Road	Shimla	Shimla Rural	Bhad	63/2/1	Private	Bakhal Awwal	0.023
77	Road	Shimla	Shimla Rural	Bhad	68/1	Private	Bakhal Awwal	0.010
78	Road	Shimla	Shimla Rural	Bhad	127/4/1	Private	Banjar Kadeem	0.008
79	Road	Shimla	Shimle Rural	Bhad	138/3/1	Private	Banjar Kadeem	0.180
80	Road	Shimla	Shimla Rural	Bhad	176/1	Private	Banjar Kadeem	0.017
81	Road	Shimla	Shimla Rural	Bhad	179/3/1	Private	Ghasni	0.051
82	Road	Shimla	Shimla Rural	Bhad	181/2	Private	Banjar Kadeem	0.046
83	Road	Shimla	Shimta Rural	Bhad	240	Private	G.M. Rasta	0.000
84	Road	Shimla	Shimla Rural	Bhad	69	Private	Bakhal Awwal	0.052
							Total	0.612
86	Road	Shimla	Shimla Rural	Chadau	601/1/1	Private	Ghasni	0.065
87	Road	Shimla	Shimla Rural	Chadau	602/1	Private	Banjar Kadeem	0.010
88	Road	Shimla	Shimla Rural	Chadau	603/1	Private	Banjar Kadeem	0.036
89	Road	Shimla	Shimla Rural	Chadau	604/1/1	Private	Ghasni	0.025
90	Road	Shimla	Shimla Rural	Chadau	606/1	Private	Ghasni	0.027
91	Road	Shimla	Shimla Rural	Chadau	590/1/1	Private	Ghasni	0.001
92	Road	Shimla	Shimla Rural	Chadau	766/1	Private	Ghasni	0.064
93	Road	Shimla	Shimla Rural	Chadau	759/1	Private	Ghasni	0.030
94	Road	Shimia	Shimta Rural	Chadau	755	Private	Ghasni	0.063

S.K. Sharma GM (T)-cum-Project Director NHA), PIU-Shimla

Sr. No	Туре	District	Taluka	Village	Khasra No	Type of Land	Nature of Land	Area in Hect.
95	Road	Shimla	Shimla Rural	Chadau	766	Private	Ghasni	0.0249
96	Road	Shimla	Shimla Rural	Chadau	769/1	Private	Ghasni	0.055
97	Road	Shimla	Shimla Rural	Chadau	770/1	Private	Ghasni	0.017
98	Road	Shimla	Shimla Rural	Chadau	771/1	Private	Ghasni	0.0030
99	Road	Shimla	Shimla Rural	Chadau	772/1	Private	Ghasni	0.0628
100	Road	Shimla	Shimla Rural	Chadau	764/1	Private	Ghasni	0.005
101	Road	Shimla	Shimla Rural	Chadau	763/1	Private	Ghasni	0.0178
102	Road	Shimla	Shimla Rural	Chadau	752/1	Private	Ghasni	0.1593
103	Road	Shimla	Shimla Rural	Chadau	749/1	Private	Ghasni	0.050
104	Road	Shimla	Shimla Rural	Chadau	748/1	Private	Banjar Kadeem	0.024
105	Road	Shimla	Shimla Rural	Chadau	767	Private	Ghasni	0.089
106	Road	Shimla	Shimla Rural	Chadau	768	Private	Ghasni	0.089
108	Read	Shimla	Shimla Rural	Duladi	740/2/1	Private	Total Desire Kedeem	0.9245
109	Road Road	Shimla	Shimla Rural	Pujarli Pujarli	740/2/1	Private	Banjar Kadeem Ghasni	0.0212
110	Road	Shimla	Shimla Rural	Pujani	751/1	Private	G.M. Abadi	0.003
111	Road	Shimla	Shimla Rural	Pujani	752/2/1	Private	Ghasni	0.0198
112	Road	Shimla	Shimla Rural	Pujani	756	Private	G.M. Makan	0.0040
113	Road	Shimla	Shimla Rural	Pujarli	757/1	Private	Ghasni	0.0380
114	Road	Shimla	Shimla Rural	Pujarii	750/1	Private	Banjar Kadeem	0.0156
1.14	11000	Quinting.	- China - China	· open	1.000.1	1 110010	Total	0.1213
116	Road	Shimla	Shimla Rural	Up Mahal Majhar	207	Private	G.M Abadi	0.0192
117	Road	Shimla	Shimla Rural	Up Mahal Majhar	208	Private	Bakhal Awwal	0.0048
118	Road	Shimla	Shimla Rural	Up Mahal Majhar	549/1/1	Private	Banjar Kadeem	0.089-
119	Rosd	Shimla	Shimla Rural	Up Mahal Majhar	640/1/1	Private	Ghasni	0.0376
120	Road	Shimla	Shimla Rural	Up Mahal Majhar	650/3/1	Private	Ghasni	0.0114
				Up Mahal	and the second second		Total	0.162
122	Road	Shimla	Shimla Rural	Kawalag Up Mahal	169/1/1	Private	Ghasni	0.0180
123	Road	Shimla	Shimla Rural	Kawalag	170/1/1	Private	Ghasni	0.0060
124	Road	Shimla	Shimla Rural	Up Mahai Kawalag	178/1/1	Private	Ghasni	0.022
							Total	0.0465
126	Road	Shimla	Shimla Rural	Up Mahal Jarech	311/1/1	Private	Ghasni	0.0208
127	Road	Shimla	Shimla Rural	Up Mahal Jarech	311/3/1	Private	Ghasni	0.0195
128	Road	Shimla	Shimla Rural	Up Mahal Jarech	312/1/1	Private	Ghasni	0.0221
129	Road	Shimla	Shimla Rural	Up Mahal Jarech	312/3/1	Private	Ghasni	0.0208
130	Road	Shimla	Shimla Rural	Up Mahal Jarech	313/1/1	Private	Ghasni	0.0256
_	5						Total	0.1088
132	Road	Shimla	Shimla Rural	Up Mahai Gusan	511/1/1	Private	Ghasni	0.0868
133	Road	Shimla	Shimla Rural	Up Mahal Gusan	528/1/1	Private	Ghasni	0.0123
134	Road	Shimla	Shimla Rural	Up Mahal Gusan	547/1	Private	Ghasni	0.0897
135	Road	Shimla	Shimla Rural	Up Mahal Gusan	548/1	Private	Ghasni	0.0750

S.K. Sitama GM (T)-cum-Project Director NHAI, PIU-Shimla

Sr. No	Туре	District	Taluka	Village	Khasra No	Type of Land	Nature of Land	Area in Hect.
136	Road	Shimla	Shimla Rural	Up Mahal Gusan	560/1	Private	Ghasni	0.0178
137	Road	Shimla	Shimla Rural	Up Mahal Gusan	561/1	Private	Ghasni	0.0976
138	Road	Shimla	Shimla Rural	Up Mahal Gusan	527/3/1	Private	Ghasni	0.0076
139	Road	Shimla	Shimla Ruraf	Up Mahal Gusan	509/1/1	Private	Ghasni	0.0065
	1. J.						Total	0.3931
141	Road	Shimla	Shimla Rural	Jalf	17/1/1	Private	Ghasni	0.0812
142	Road	Shimla	Shimla Rural	Jalf	17/1/2	Private	Ghasni	0.0292
143	Road	Shimla	Shimla Rural	Jalf	13/1/1	Private	Ghasni	0.0064
144	Road	Shimla	Shimla Rural	Jalf	13/1/2	Private	Ghasni	0.0092
145	Road	Shimla	Shimla Rural	Jalf	93/18/1	Private	Ghasni	0.0960
146	Road	Shimla	Shimla Rural	Jaff	95/18/1	Private	Ghasni	0.0060
	1 /						Total	0.2280
148	Road	Shimla	Shimla Rural	Mehli	1078/3	Private	Ghasni	0.1072
149	Road	Shimla	Shimla Rural	Mehli	1079/1/2/1	Private	Ghasni	0.0408
_	1					<u>i</u>	Total	0.1480
151	Road	Shimla	Shimla Rural	Shakral	547/17/4/1	Private	Ghasni	0.0493
152	Road	Shimla	Shimla Rural	Shakral	22 /1/1	Private	Bakhal Awwal	0.0800
153	Road	Shimla	Shimla Rural	Shakral	16	Private	Ghasni	0.0065
154	Road	Shimla	Shimla Rural	Shakral	262	Private	Banjar Kadeem	0.0076
	1					2 <u></u>	Total	0.1434
156	D2	Shimla	Shimla Rural	Shogi	856/1	Private	Banjar Kadeem	0.0032
157	D2	Shimla	Shimla Rural	Shogi	937/3/1	Private	Ghasni	0.167
158	D2	Shimla	Shimla Rural	Shogi	841	Private	Banjar Kadeem	0.0929
159	D2	Shimla	Shimla Rural	Shogi	843	Private	Ghasni	0.0116
160	D2	Shimla	Shimla Rural	Shogi	844/2	Private	Ghasni	0.0847
161	D2	Shimla	Shimla Rural	Shogi	850	Private	Ghasni	0.0309
162	D2	Shimla	Shimla Rural	Shogi	851	Private	Ghasni	0.0575
163	D2	Shimla	Shimla Rural	Shogi	852	Private	Banjar Kadeem	0.0282
164	D2	Shimla	Shimla Rural	Shogi	853	Private	Banjar Kadeem	0.0322
165	D2	Shimla	Shimla Rural	Shogi	854	Private	Ghasni	0.0104
166	D2	Shimla	Shimla Rural	Shogi	857	Private	Banjar Kadeem	0.0203
167	D2	Shimla	Shimla Rural	Shogi	858	Private	Banjar Kadeem	0.0084
						1	Total	0.5473
169	D3	Shimla	Shimla Rural	Goru Kanawan	852/1	Private	Ghasni	0.0171
170	D3	Shimla	Shimla Rural	Goru Kanawan	962/1	Private	Ghasni	0.007
							Total	0.0241
172	D3	Shimla	Shimla Rural	Mauri	991	Private	Ghasni	0.1017
173	D3	Shimla	Shimla Rural	Mauri	992/2	Private	Ghasni	0.0385
174	D3	Shimla	Shimla Rural	Mauri	990/1	Private	Ghasni	0.101
							Total	0.2412
176	D4	Shimla	Shimla Rural	Goru Kanawan	965/1	Private	Ghasni	0.0971
177	D4	Shimla	Shimla Rural	Goru Kanawan	965	Private	Ghasni	0.1958
178	D4	Shimla	Shimla Rural	Goru Kanawan	967/1	Private	Ghasni	0.1843
179	D4	Shimla	Shimla Rural	Goru Kanawan	960/1	Privato	Ghasni	0.0068

S.K. Sherma GM (T)-cum-Project Director NHAI, PIU-Shimla

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Sr. No	Туре	District	Taluka	Village	Khasra No	Type of Land	Nature of Land	Area in Hect.
181	DS	Shimla	Shimla Rural	Yaan	257/1	Private	Ghasni	0.127
182	D5	Shimla	Shimla Rural	Yaan	255/1	Private	Ghasni	0.035
183	D5	Shimla	Shimla Rural	Yaan	56	Private	Ghasni	0.00
184	D5	Shimla	Shimla Rural	Yaan	61	Private	Ghasni	0.332
	2						Total	0.4978
186	D6	Shimla	Shimla Rural	Up Mahal Majhar	715/2	Private	Ghasni	0.1577
187	D6	Shimla	Shimla Rural	Up Mahal Majhar	502/1	Private	Ghasni	0.0096
188	D6	Shimla	Shimla Rural	Up Mahal Majhar	716/1	Private	Gairmumkin Kuhal	0.110
190	D7	Shimla	Shimla Rural	Jalf	94/18/1/1	Private	Total Ghashi	1.1082
191	D7	Shimla	Shimla Rural	Jaif	97/18/2/1	Private	Ghashi	0.0044
191	07	orninea	Simma Noral	(Jani)	317 (072/1	Filvalle	Total	1.1126
193	D8	Shimla	Shimla Rural	Up Mahal Gusan	513/1	Private	Ghashi	0.0056
194	D8	Shimla	Shimla Rural	Up Mahal Gusan	313	Private	Ghasni	0.0744
195	D8	Shimla	Shimla Rural	Up Mahal Gusan	315	Private	Banjar Kadeem	0.0748
196	D8	Shimla	Shimla Rural	Up Mahal Gusan	316	Private	Banjar Kadeem	0.010
197	D8	Shimla	Shimla Rural	Up Mahal Gusan	317	Private	Banjar Kadeem	0.067
198	D8	Shimla	Shimla Rural	Up Mahal Gusan	318	Private	Banjar Kadeem	0.038
199	BQ	Shimla	Shimla Rural	Up Mahal Gusan Up Mahal	321	Private	Banjar Kadeem	0.0224
200	D8	Shimla	Shimla Rural	Gusan Up Mahal	322	Private	Banjar Kadeem	0.0337
201	D8	Shimla	Shimla Rural	Gusan Up Mahal	323	Private	Banjar Kadeem	0.0528
202	BQ.	Shimla	Shimla Rural	Gusan Up Mahal	333	Private	Ghasni	0.045
203	D8	Shimla	Shimla Rural	Gusan Up Mahal	334	Private	Ghasni	0.0626
204 205	D8 D8	Shimla Shimla	Shimla Rural Shimla Rural	Gusan Up Mahal	335	Private Private	Ghasni Ghasni	0.026
205	D8	Shimla	Shimla Rural	Gusan Up Mahal	329/1	Private	Ghasni	0.0064
207	D8	Shimla	Shimla Rural	Gusan Up Mahal	320/1	Private	Banjar Kadeem	0.0459
208	D8	Shimla	Shimla Rural	Gusan Up Mahal Gusan	331/1	Private	Ghasni	0.008
209	80	Shimla	Shimla Rural	Gusan Up Mahal Gusan	331/2	Private	Ghasni	0.001
210	D8	Shimla	Shimla Rural	Up Mahal Gusan	319/1	Private	Ghasni	0.01
211	D8	Shimla	Shimla Rural	Up Mahal Gusan	517/1	Private	Ghasni	0.1234
212	D8	Shimla	Shimla Rural	Up Mahal Gusan	516/1	Private	Ghasni	0.0119
213	D8	Shimla	Shimla Rural	Up Mahal Gusan	515/1/1	Private	Ghasni	0.0507
214	D8	Shimla	Shimla Rural	Up Mahal Gusan	514/1	Private	Ghasni	0.0144

S.K. Sharma GM (T)-cum-Project Director NHAI, PIU-Shimla

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Sr. No	Туре	District	Taluka	Village	Khasra No	Type of Land	Nature of Land	Area in Hect.
215	D8	Shimla	Shimla Rural	Up Mahal Gusan	336/1	Private	Ghasni	0.004
							Total	0.810
217	D9	Shimla	Shimla Rural	Mehli	1071/1	Private	Ghasni	0.595
	1000						Total	0.595
219	T+1	Shimla	Shimla Rural	Sunghal	60	Private	Ghasni	0.463
220	T-1	Shimla	Shimla Rural	Sunghal	62	Private	Ghasni	0.543
							Total	1.007
222	T-1	Shimla	Shimla Rural	Shogi	797	Private	Ghasni	0.005
223	T-1	Shimla	Shimla Rural	Shogi	799	Government	G.M.Tower	0.013
224	T-1	Shimla	Shimla Rural	Shogi	800	Private	Ghasni	0.053
225	T-1	Shimla	Shimla Rural	Shogi	801	Private	Ghasni	0.035
226	T-1	Shimla	Shimla Rural	Shogi	802	Private	Ghasni	0.050
227	T-1	Shimla	Shimla Rural	Shogi	803	Private	Ghasni	0.029
228	T-1	Shimla	Shimla Rural	Shogi	804	Private	Ghasni	0.018
229	T-1	Shimla	Shimla Rural	Shogi	805	Private	Ghasni	0.082
230	T-1	Shimla	Shimla Rural	Shogi	806	Private	Ghasni	0.015
231	T-1	Shimla	Shimla Rural	Shogi	807	Private	Ghasni	0.093
232	T+1	Shimla	Shimla Rural	Shogi	810	Private	Ghasni	0.016
233	T-1	Shimla	Shimla Rural	Shogi	828	Private	Ghasni	0.037
234	T-1	Shimla	Shimla Rural	Shogi	832	Private	Ghasni	0.044
235	T-1	Shimla	Shimla Rural	Shogi	833	Private	Ghasni	0.045
236	T-1	Shimla	Shimla Rural	Shogi	834	Private	Ghasni	0.010
237	T-1	Shimla	Shimla Rural	Shogi	835	Private	Ghasni	0.045
LOT		oning	Onania rearai	0.00	000	Friedd	Total	0.574
239	T-2	Shimla	Shimla Rural	Ranghav	507	Private	Banjar Kadeem	0.034
240	T-2	Shimla	Shimla Rural	Ranghav	508	Private	Banjar Kadeem	0.034
241	T-2	Shimla	Shimla Rural	Ranghav	509	Private	Ghasni	0.167
242	T-2	Shimla	Shimla Rural	Ranghav	510	Private	Ghasni	0.002
243	T-2	Shimia	Shimla Rural	Ranghav	510	Private	G.M.Rasta	0.002
244	T-2	Shimia	Shimla Rurai	and the second se	512	Government	G.M.Kuhal	0.001
244	the second s	the state of the second se	and the second se	Ranghav	530	and the second	the second se	0.000
a loss to see to se	T-2	Shimla	Shimla Rural	Ranghav	the second se	Private	Ghasni Region Kodoom	to ministration
246	T-2	Shimia	Shimla Rural	Ranghav	531	Private	Banjar Kadeem	0.103
247	T-2	Shimla	Shimla Rural	Ranghav	532	Private	Banjar Kadeem	0.039
248	T-2	Shimla	Shimla Rural	Ranghav	533	Private	Bakhal Awwal	0.004
050	T 0	ALLAN	Chinese David	Barrell	~ ***		Total	0.384
250	T-2	Shimla	Shimla Rural	Banadi	741	Government	G.M.Sadak	0.064
251	T-2	Shimla	Shimla Rural	Banadi	761	Government	G.M.Sadak	0.003
	-					6	Total	0.067
253	T-2	Shimla	Shimla Rural	Kot	5	Private	Ghasni	0.336
254	T-2	Shimla	Shimla Rural	Kot	7	Private	Ghasni	0.789
							Total	1.125
256	T-2	Shimla	Shimla Rural	Bhad	101	Private	Ghasni	0.746
257	T-2	Shimla	Shimla Rural	Bhad	103	Private	Ghasni	0.105
258	T-2	Shimla	Shimla Rural	Bhad	104	Private	Ghashi	0.190
259	T-2	Shimla	Shimla Rural	Bhad	120	Private	Banjar Kadeem	0.021
260	T-2	Shimla	Shimla Rural	Bhad	121	Private	Banjar Kadeem	0.030
261	T-2	Shimla	Shimla Rural	Bhad	122	Private	G.M.Makan	0.012
262	T-2	Shimla	Shimla Rural	Bhad	123	Private	G.M.Makan	0.005
263	T-2	Shimla	Shimla Rural	Bhad	127	Private	Banjar Kadeem	0.016
264	T-2	Shimla	Shimla Rural	Bhad	128	Private	Bakhal Awwal	0.035
							Total	1.162
							Grand Total	13.809

S.K. Sharma GM (T)-cum-Project Director NHAI, PIU-Shimla No.SML-SR-57/2022 - 1023 Office of the Deputy Commissioner, Shimla, District Shimla, H.P. Dated, Shimla-1 the

NON AVAILABILITY OF NON FOREST LAND CERTIFICATE

Certified that no alternative suitable Non Forest land is available for construction of four laning of proposed Shimla Bypass form Kaithlighat to Shakral Section (Package-1) (Km 128.835 to Km 146.300). The diversion of forest land area measuring **11.7936 Hectares** situated in Mohal/Mauja Shogi, Mauri, Bhog, Bharob, Ranghav, Bhad, Chadau, Pujarli, Majhar, Jalf, Mehli, Goru Kanawan, Yaan, Gusan, Kot, Banadi, Tehsil Shimla (Rural), District Shimla, Himachal Pradesh is essential which cannot be avoided. The detail of forest land is as under:-

Sr. No.	Name of Tehsil/ Sub- Tehsil	Name of Mauja/ Up-Mohal	Khasra No.	Area in Hectares	classification of Land
			837/1	0.0595	G.M. Nalah
			839/1	0.0578	Charagh Billa Drakhtan
			922/2/1	0.0064	G.M Rasta
	Shimla		939/2/1	0.0340	Charagah Drakhtan
			981/2	0.0110	G.M. Nalah
1.	Rural		981/3/1	0.0010	G.M. Nalah
			985/3/1	0.0480	Charagah Drakhtan
			985/3/2	0.0012	Charagah Drakhtan
			855/2/1	0.0035	Charagh Billa Drakhtan
			855/3	0.0090	Charagh Billa Drakhtan

10+

	856/2/1	0.0033	Charagh Billa Drakhtan
	920/2/1	0.0189	Charagah Drakhtan
Bhog	1485/1/	0.3174	Charagah Drekhtan
	1503/1/	0.0410	G.M. Nolah
Bharob	455/1	0.0032	G.M. Rasta
	517/1	0.0072	Charagah Bilia Drakhtan
	527	0.0054	G.M Khabal
	528	0.0096	Charagah Billa Drakhtan
	85/1/3/	0.0636	Charagah Billa Drakhtan
	85/1/2/	0.0232	Charagah Billa Drakhtan
Ranghav	33/1/3/ 1	0.0853	Charagah Billa Drakhtan
	34/4	0.0078	G.M. Rasta
	36/3	0.0270	Charagah Billa Drakhtan
	32/2/1	0.0050	G.M. Kuhal
	31/2/1	0.1834	Charagah Billa Drakhtan
	.1/2/1	0.0032	G.M. Rasta
	.2/2/1	0.0087	Charageh Drakhtan
Bhad	206/2	0.0042	G.M. Rasta
	221/2/1	0.0048	G.M. Rasta
Chadau	703/1/1	0.0318	Charagah Drakhtan
	742/2/1	0.0016	G.M. Rasta
Pujarli	749/2/1	0.0028	G.M. Sedak
	755/1	0.0010	G.M. Rasta
Maihar	209	0.0170	Charagah
Majhar	210/1/2	0 1303	Charagah

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	211/1/1	0.0148	G.M Sadak
	211/1/2	0.0119	G.M Sadak
	214/1/1	0.0192	Charagah
	534/1/1	0.0348	Charagah
L	541/1/1	0.0196	Charagah
Jalf	2/1/1	0.0060	G.M Rasta
] 0a0,	1/1/1	0.0870	Charagah Bilta Drakhtan
 Mehli	1:14/1/ 1	1.0822	Charagah Drakhtan
	1072/3/	0,7475	Charagah Drakhtan
l	798/2/1	1.8127	Charagah Drakhtan
	939/3/1	0.0047	Charagah Drakhtan
Shogi	940/2/1	0.0038	G.M. Nalah
	940/3/1	0.0014	G.M. Nalah
	842	0.0856	Charagah Billa Drakhtan
Goru Kanawan	152/1	0.6025	Charagah Drakhtan
Kanawan	125/1	0.0595	G.M. Nalah
	989/2/1	0.0385	Charagah Drakhtan
Mauri	989/3/1	0.3271	Charagah Drakhtan
	993/2/1	0.2129	Charagh Billa Drakhtan
Yaan	64/1	0.0701	Charagah Drakhlan
taan	254/1	0.0360	G.M Nalah
Up Mahal Majhar	718/1	1.0912	Gair Mumkin Khad
Up Mahal Gusan	332/1	0.0434	G.M. Nalah
Shoghi	798/2/2	0.5845	Charagah Drakhtan
Kot	1/1	0.0380	Charagah Drakhtan

	Grand Total	11.7936 Hec.	
	Kita=75		
	105	0.0628	G.M Rasta
Bhad	100/1	1.9520	Charagah Billa Drakhtan
	763/1	0.2338	Charagah Billa Drakhtan
Banadi	762	0.0901	Charagah Billa Drakhtan
	760/1	0.2983	Charagah Billa Drakhtan
	514/2/1	0.0050	G.M Rasta
Ranghav	506/2/1	0.1957	Charagah Billa Drakhtan
	84/1	0.0620	Charagah Billa Drakhtan
	19/1	0.0061	G.M.Nalah
	17	0.0038	G.M.Chashma Pani
	9/1	0.0018	G.M.Kuhal
	8/1	0.3056	Charagah Drakhtan
	4/1	0.1256	Charagah Billa Drakhtan
	3/1	0.0276	Charagah Billa Drakhtan
	2/1	0.1504	Charagah Billa Drakhtan

Deputy Commissioner, Shimla (H.P.)-1750imla,H. Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha, for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha, in the State of Himachal Pradesh.

File No. : FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK-LIST SERIAL NO. - 10

JUSTIFICATION FOR LOCATING THE PROJECT IN FOREST AREA

Stage II approval of forest diversion proposal of the entire section from Kaithlighat to Dhalli (Chainage from Km, 128.835 to Km, 156.560) of NH-22 for 40.3 Ha, was obtained by NHAI vide MOEF&CC, Dehradun letter dated 15.09.2017.

However, some additional forest land of area 11.7936 Ha, is required to be diverted for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km.128.835 to Km.146.300) for the following purposes:

(i) Dumping sites for Muck Disposal

(ii) Diversion of land over tunnels

(iii) Four laning of structures against 2-lane in previous project

(iv) Slope protection measures at fragile hill strata locations

(v) Minor modification for improving geometry of highway

As all the Govt, waste land in Shimla is considered as forest land in view of the Notification Ft.29-241/B/C/49 dated 25:02:1952 of Govt, of Himachal Pradesh. Hence there is no availability of suitable non forest land within Shimla District.

The proposed 4-lane road necessarily passes through forest land because there is no nonforest land available. These forests are located along the already approved alignment in scattered patches on either side of the road. The four laning of Shimla Bypass will require bare minimum diversion of forest land. Also, the project road is located in hilly areas and an alternative option to the road will not be viable. Hence there is no escape from using the forest land.

Date : 19-04-2022 Place : Shimla

SWS Project Director

National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

Countersigned -

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Divisional Forests Officer Standard dress Division Shimla Forest Division SHIMLA S.K. Sharma GM (T)-cum-Project Director NHA), PIU-Shimla Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha. in the State of Himachal Pradesh.

File No.: FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK-LIST SERIAL NO. - 11

CERTIFICATE FOR MINIMUM USE OF FOREST LAND

This is to certify that the forest area involved in the proposal is unavoidable and barest minimum. **11.7936 ha** of forest area is proposed for diversion.

Date : 19 :09 : 202-2 Place : Shimla

SWS Project Director National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

S.K. Sharma GM (T)-cum-Project Director NHAI, PIU-Shimla

Countersigned -

Divisional Forests Officer Stunia Forest Division Stunia Forest Division Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha, in the State of Himachal Pradesh.

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File No. : FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK-LIST SERIAL NO. -12

UNDERTAKING FOR PAYMENT OF COST OF COMPENSATORY AFFORESTATION

I, the undersigned, on behalf of National Highways Authority of India, hereby undertake to pay the entire amount for compensatory afforestation in lieu of the forest area for four laning of Shimla Bypass (Package-I), as per prevailing rates at the time of undertaking the plantation activities.

Date : 19.04.2022 Place : Shimla

National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

> S.K. Sharma GM (T)-cum-Project Director NHAI, PIU-Shimla

Countersigned -

Divisional Forests Officer Shinita Porest Division Shinita Forest Division SHIMLA Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha, for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km, 128.835 to Km, 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km, 128.835 to Km, 156.560) of NH-22 for 40.3 ha, in the State of Himachal Pradesh.

File No. : FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK-LIST SERIAL NO. - 13

UNDERTAKING FOR PAYMENT OF NET PRESENT VALUE OF FOREST AREA

It is to certify that I, the undersigned, on behalf of National Highways Authority of India, have applied for diversion of **11.7936 ha.** of forest area for four laning of Shimla Bypass (Package-I) and hereby, undertake to pay the Net Present Value (NPV) of the above forest land.

Date : 19 - 0 4 - 2022-Place : Shimla

National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

> S.K. Sharma GM (T)-cum-Project Director NHAI, PIU-Shimla

Countersigned -Divisional Forests Officer Shimila Forest Division Shimila Forest Division SHIMLA Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha, for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km, 128.835 to Km, 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km, 128.835 to Km, 156.560) of NH-22 for 40.3 ha, in the State of Himachal Pradesh.

File No. : FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK-LIST SERIAL NO. - 13a

UNDERTAKING FOR PAYMENT OF ADDITIONAL NET PRESENT VALUE

I, the undersigned, on behalf of National Highways Authority of India, hereby undertake to pay the additional amount of NPV, if so determined as per the decision of the Hon'ble Supreme Court of India in respect of diversion of forest land required for four laning of Shimla Bypass Package I.

Date : 19-09-2022 Place : Shimla

National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

> S.K. Sharma GM (T)-cum-Project Director NHAI, PIU-Shimia

Countersigned -

Divisional Forests Officer Shimla Forest SHIMLA

Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha, in the State of Himachal Pradesh.

File No.: FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK-LIST SERIAL NO. - 14

UNDERTAKING FOR FRA CERTIFICATE

I, the undersigned, on behalf of National Highways Authority of India, undertake that the FRA Certificate for the project "Additional Forest land requirement of 11.7936 ha, for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha, in the State of Himachal Pradesh" will be obtained and submitted as per provisions of Recognitions of Forest Rights Act, 2006.

Date : 19 - 04 - 2023-Place : Shimla

National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

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Checklist SI, No. 22

Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha, in the State of Himachal Pradesh.

File No. : FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK LIST SERIAL NO. - 22

IN CASE OF PROPOSAL WHICH REQUIRES ENTRY/EXIT THROUGH PROTECTED FOREST STRIPS ALONG ROADS/RAILWAY LINES/CANALS

(Not Applicable)

Date : 19 · 04 · 2027 Place : Shimla

SU Project Director National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh



Checklist Sl. No. 23

Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha. in the State of Himachal Pradesh.

File No.: FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK LIST SERIAL NO. - 23

FOR THE PROJECTS INVOLVING FOREST LAND FOR CONSTRUCTION OF BUILDINGS/RIGHT OF WAY FOR BUILDINGS, THE BUILT-UP AREA - DETAILS OF DG SETS TO BE INSTALLED, AND RAW MATERIALS TO BE USED

(Not Applicable)

Date : 19 04-2022 Place : Shimla

SUS Project Director

National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha. in the State of Himachal Pradesh.

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File No. : FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK LIST SERIAL NO. - 24

STATUS OF ENVIRONMENTAL CLEARANCE

As per EIA Notification 2006 read with its subsequent amendment dated 22nd August, 2013 (copy enclosed), this project does not require Environmental Clearance.

Date : 19 - 09 - 2022 Place : Shimla

SKS! roject Director

National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh



पर्याटरण और सा संद्यमंच अपि कृषमा

नई दिस्मी, 22 अथस्त 2013

का.आ.2555(ज),-केल्ग्रीय सरकार के, आरत सरकार की पर्याधरण और का प्रेंत्राय्य में पर्यायरण (सेंराय्य) विधन, 1956 के जियम 5 के उपनीस्थत (3) के यह (4) के साथ पहिल - पर्यमारण (संरक्षण) अधिनियम, 1935 की प्रांग 3 की उपांतरा (2) के संह (5) और उप-धारा (1) के अधील जानी अधिवृष्टन संबना का.अ. 1533 (3) रुपील 14 सिर्हबर, 2006 ट्यार) विदेश दिया है कि इस अधिकुषभा के प्रकाशन की सारीय से ही नई परिजेजनाओं या उपस अधिशुरुत की अनुसुध में सुयोदा दिद्वमान परियोजनाओं रह कार्यकरामी के विकास या आधुनिवीयाल के लिय अपरिहार्य अन्यतन्त्रमध्य के लिए प्रतिष्ठ ये कंट्र्वानिकी में परिवर्तन और क उत्पाह निश्वन, मारत के विन्हें में माम में बचानियति केल्द्रीय संस्कृत दा उभस अपिनियम की बाग 5 की उप-धांत (5) के अबीन केल्द्रीय सरकार राजा। उन्हरू रुप से महिल शाम्य सरवेष प्रवायरण संग्रह क्रियोग प्रविकाण की उठने विनिर्द्रिण्ट प्रहेरक के अनुवारण में पूर्व पर्याहरू निकासी के परवात ही हाथ में सिख जाएगा;

और भारत सरकल के क्यांवरण और बन संकारन में राजनागे, जनवी और विश्वेष अधिक क्षेत्र परियोजनार्ज के प्रिय क्वांकरनीय जिलासी प्रदान करने हे संबंधित - मसंसरण संघात निर्वारण मण्डित्वकरा, 2006 के उपलेंधी का प्रतिहोगाल करते के किए सार्थाभय सापस ते. 21-270/2008-आईव.SI, तमीक्ष 11 दिसंगर, 2012 और पर्यावरण और बन मंग्रसव के तमनवूंदी अवने के बंबेप में कार्यक्रम जापन खरीब 7 करवरी, 2011 द्वारा संदरूप, (पर्ववरण और बल सका डिलाज और प्रोड्वेप्रिकी), बोजमा आयोग की अध्यक्षता में बच्च उच्य स्तरीय इमिलि का यहने विश्व था : (1)

3649 QU2013

और समिति के संदर्भ के निर्वणनों (टीशोआन) में एक प्रितंधन पर्वायरण संधान मिर्धराण अभिकृष्णन के अधीत 60 मौदर के अनस्थिकार और 209 किसंसरिटर जंबी राजमार्ग विरुत्पर परिवोधामाओं के लिए पर्वायरण सिफली की अध्यक्षती का पुत्रविंसोकन करने था :

और समिति में संवस्तय को अपनी दिगोर्ड प्रस्तुत कर दी है और इस दीओज़ार पर समिति ते राजमार्ग विस्ता परियोजनाओं को विस्तरण की अपनी और पर्यावरण संक्रम निर्णारण से तुद देने की सिफारिड की है या राजमार्ग किसकर परिवोजनाओं के लिए पर्वावरण करंपन परियोजना सावस दीओज़ार, सिर्व संवस्तय की बेवंसफट ५९ पोस्ट किन जायगर के अनुस्वर सेवार किया जा सकत है और पर्यावरण निकारी की अपना के संबेध में समिति ने सिफारिस कि जायगर के अनुस्वर सेवार किया जा सकत है और पर्यावरण निकारी की अपना के संबेध में समिति ने सिफारिस कि जायगर के अनुस्वर सेवार किया जा सकत है और पर्यावरण निकारी की अपना के संबेध में समिति ने सिफारिस कि जायगर के अनुस्वर सेवार किया जा सकत है और पर्यावरण निकारी की अपना के संबेध में समिति ने सिफारिस की है कि 100 जिस्सेसीटर तक उल्ट्रीय राजमाने परियोजनाओं का विस्तार जिसमें अधिरिक्त नामांधिकार जा विद्वस्वन संरक्षण पर 40 और तथ अर्जन और पुनःश्वित्वान वह 60 मॉडर या उप-सानों की अधिस्त्रय की बरिपि से सहर राजम ही सिफारिश की है ;

और समिति की विपोर्ट की प्रयोधरण और यन मेत्रासय में आँध की नई हैं । पहने ही अधिभूपना सं. जा. आ. 3067(अ) कारीका 1 दिसंबर, 2009 द्वापा सभी राज्य राजमाने विस्तार पनियोजमाओं को जिस्ता उन परियोजमाओं के ओ पहाड़ी क्षेत्रों (1000 मीटर एरनएसकन) और पारिसियमिकीय रूप से इविद्यंत्रणील क्षेत्रों में है, को पर्याजन संधाल निर्धारण अधिनुपना 2006 से कुट प्रदान कर ही नई है ।

और अल्प बालें के साथ पूर्वलस को ध्यान में रक्षते हुए प्रवांतरण और उस लंबासक से कार्यासय साएग हो. 21-270/2008-आईपश्रम, तमील 11 दिसंपर, 2012 ड्वामा गठित उच्च स्तरीय व्यक्ति की पूर्वावल मिफारियों को स्वीसार करने का विसित्साय किस है ;

अतः, जब, केनदीब सरकार. एर्यानरण (र्तरक्षण) विक्रंज, 1996 के जिन्म 6 के उपनिषम (4) के अल पठित प्रबोधरण (बरवण) अधिविषम, 1986 की धारा 3 की उपछारा (2) के बोट (5) और उपधारा (1) द्वारा प्रदारत शकित्वों का प्रबोध करते हुब, सारंत सरकार के पर्यावरण और बन मंत्रामय की अधिवृद्याय में. काआ, 1633(ज) तारीख 14 पितंगर, 2006 में उपल जिल्म 5 के उपलिषम (3) के बांड (क) के अधीन सूचवा की अधिवृत्य से आजिनुषित देने के बिए लिम्बमीविंत और संसंधन करती है, अर्थात् :-

2. उका अधिमुकन जें,-

J.

(क) येश 7 के उन्होंना () के सब ()) के स्थान पर जिल्लीवींकी मह रही जाएके, अधीत्ता-

(1) "विस्तालन" उठ प्रतिमा को लिदिपर करता है, जिनके तुबार पतर्ग का वरिकेलन विन्याकलायों के लागते में विशेषन आंकमन समिति और प्रथम 'ज 1' वरियोगकाओं वा कियाकलायों के मागते में, साव्य स्तर विवेषन अंतरतन समिति, जिसके अंतर्गत विद्युत्वान परिवोजनाओं या क्रियाकलायों के विस्तार या आधुविनीकरण या उत्पाद सिथन में परिवर्तन उच्च परिवोदना वा क्रियाकलाए, जिसके सिए पूर्व पर्वाकलीक जनवरित इंग्लित की नई है, के संबंध में पर्ववरण सवाधान विधारण विपर्व (ईआईन) तेवार करने के लिए सामे क्रुसंगढ पर्ववरणीव पिंसाओं को संबोधित करते हुए विस्तृत और संजय निर्देश के निर्वधर्भ का अवधारण और विवेषन आंकडन समिति या संबंधित प्रथम स्तर अंकलन समिति विद्वित जान्दन पर्व्य अंडरमांक में दी यह उज्यवसी के आधार पर विस्तन अंतर्गत आवेदक दुवारा प्रस्तवित किर्देश के निर्वधन है, किसी विशेषल आंवसन समिति का संवेधित राज्य स्तर अंकलन समिति विद्वित जान्दन पर्व्य अंडरमांक में दी यह उच्यवसी के आधार पर विस्तन अंतर्गत आवेदक दुवारा प्रस्तवित किर्देश के निर्वधन है, किसी विशेषल आंवसन समिति का संवेधित राज्य स्तर अंकलन समिति के किसी उप सम्हा द्वाय क्रमन कामण बदि संबंधित विशेषल आंवसन समिति का संवेधित राज्य स्तर विसेषल अंवसन समिति देवाय आवयत समझा आप, आवेदक द्वारा क्रमन अंतर्गत के निर्वधन, बद्दि करनार किर्माजन समिति है।

परंतु भिष्मतिसिंह को दिस्तारम की आजध्माता तहीं होती-

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 (1) अनुसूची के सद 8 में प्रवर्ग ख के रूप में स्वीबद्ध सही परियोजनाएं और कार्यकलाप (नगरों वा वाणिज्यिक परिसरों वा आवासन का संनिर्माण);

(ii) अनुसूची के भद 7 की उपमद (a) के अधीन रसंघ (3) और स्तंघ (4) की प्रविष्टि (ii) के अधीन आने वाली राजमार्ग विस्तार परियोजनाएं ;

परंत यह और कि -

अ. खंड (I) में लिदिष्ट परियोजनाएं और कार्यकडापों का अंकन प्ररूप 1 या प्ररूप 1क और अवधारणा गोजना के आधार पर किया जापना :

आ. खंड (8) में ज़िदिष्ट परियोजनाएं पर्यावरण और बन संग्रालय द्वारा विनिदिष्ट माडल टीओआर के आधार पर ईआईए और ईएलपी रिपोर्ट सैयार करोंगी ;

(छ) अनुसूची में मद 7 की उप मद (च) के सामने स्तंभ (3) में प्रविष्टि (0) के स्यान पर निम्नलिखित प्रविष्टि रखी जाणगी, अर्थात:-

"(II) राष्ट्रीय राजमानी का 100 किलोमीटर से अपिक विस्तार जिनमें अतिरिक्त 40 मीटर से अधिक विद्यमान संरेखर्णा पर और पुन: संरेखर्णों या उपमानों पर 60 मीटर क्षेत्राधिकार या भूमि अर्जन अंतवर्लित हे ।"

[फा.स.21-270/2008-आहेर.111]

अजय त्यामी, संयुक्त सचिव

हिष्मण : मूल नियम मारत के राजपत असाधारण, माग II, खंड 3, उपखंड (II) में अधिशूचना तं. का.आ. 1533(अ), तारीख 14 सितंबर, 2006 द्वारा प्रकाशित किए गए ये और तत्पश्थात् निम्नानुसार संशोधित किए गए :

1. का.आ. 1733(अ), तारीख 11 अक्तुबर, 2007;

का.आ. 3067(अ), तारीख 1 दिसंबर, 2009;

3. का.आ. 695(अ), तारीख 4 आप्रैल, 2011;

मत.आ. 2896 (अ), सारीख 13 दिसंबर, 2012; और

5. का.जा. 674(अ), तारीख 13 मार्च, 2013

MINISTRY OF ENVIRONMENT AND FORESTS NOTIFICATION

New Delhi, the 22nd August, 2013

S.O. 2559(E).- Whereas by notification of the Government of India in the Ministry of Environment and Ferests vide number S.O.1533(E), dated the 14th September, 2006 issued under sub-section (1) and clause (v) of sub-section (2) of section (3) of the Environment (Protection) Act, 1966 read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government directed that on and from the date of its publication, the required construction of new projects or activities or the expansion or modernization of existing projects or activities listed in the Schedule to the said notification entailing the capacity addition with change in process or technology and or product mix shall be undertaken in any part of India only after prior environmental clearance from the Central Government or as the case may be, by the State level Environment Impact Assessment Authority, duly constituted by the Central Government under sub-section (3) of section 3 of the said Act, in accordance with the procedure specified therein;

And whereas the Government of India in the Ministry of Environment and Forests had constituted a High Level Committee under the Chairmanship of Member (Environment and Forests and Science and Technology), Planning Commission, vide OM No.21-270/2008-LA.III dated the 11th December, 2012 to review the provisions of Environmental Impact Assessment Notification, 2006 relating to granting Environmental Charanees for Roads, Buildings and Special Economic Zone projects and provisions under the OM dated the 7th February, 2012 Issued by the Ministry of Environment and Forests regarding guidelines for High Rise Buildings:

And whereas one of the terms of reference (ToR) of the Committee was to review the requirement of Environmental Clearance for highway expansion projects up to the right of way of 60 meters and length of 200 kms under Environmental Impact Assessment notification;

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(i) अनुतूचो के सद 8 में प्रवर्ष के के रूप में सुचीक्ट इसी प्रदेशकाण और कार्यकराप (नगरी वा अधिनियक धीरवनों या आवश्वम का संग्रिमोण);

(8) अनुसूरी के मय 7 की उपमद (8) के अधीन सर्रम (3) और स्तम (4) की कडिपिट (8) के अधीन आजे बाती शतांमार्ग विस्तर परियोगकार्थ ;

गरंत 🗰 और 🖬 -

अ. स्रेड (!) में निर्दिष्ट परिष्ठेजनावं और सम्बंकतायों का प्रेंकन प्रक्ष्य 3 का प्रत्य 3क और जनवरणा कोजव्य के आधार पर किया अधिकां ;

आ. संह (8) में निदिष्ट परिपोलनामं प्रयोगाण और बन अंधालन क्यापा विनिधिष्ट मधल - दीओआर के आधार पर ईआईम और ईरलपी दिपोर्ट डेवार करेंगी :

(ब) अभूनूषी में मद 7 की उप मद (प) के सामने स्तंभ (5) में प्रसिष्ट (6) के स्वान पर जिन्धपितित प्रसिष्टि रबी भाषनी, अर्थतः-

(a) राष्ट्रीय राजमानों का 100 किजोसोटर के जमिक विस्तार जिनमें अतिरिक्त 49 जोटर के अधिक (a) राष्ट्रीय राजमानों का 100 किजोसोटर के जमिक विस्तार जिनमें अतिरिक्त 49 जोटर के अधिक (b) राष्ट्रीय राजमानों का 100 किजोसोटर के जमिक विस्तार जिनमें अतिरिक्त 49 जोटर के अधिक (b) राष्ट्रीय राजमानों का 100 किजोसोटर के जमिक विस्तार जिनमें अतिरिक्त 49 जोटर के अधिक (b) राष्ट्रीय राजमानों का 100 किजोसोटर के जमिक विस्तार जिनमें अतिरिक्त 49 जोटर के अधिक (b) राज्य के बाहर के जिनमें के 100 किजोसोटर के जमिक विस्तार जिनमें अतिरिक्त 49 जोटर के अधिक (b) राष्ट्रीय राजमानों का 100 किजोसोटर के जमिक विस्तार जिनमें अतिरिक्त के 100 किंक के 100 कि

क्षित्यसम्म संरक्षणां पर और धुनः संरक्षणां व इप्रमृत्री पर ६० मीटर क्षेत्रविकार या मूमि अर्जन जंतवर्णित हे ।"

(wr.w.21-270/2008-305w.151)

अंतरा त्याचे, संयुक्त संपित

टिप्पण ः सूत्र जिवस शारत के राजपत अखण्डल, साम ॥, संड ३, उपसंध (॥) में अधिसूचला . है. का.स. १९९३(ज), त्वरीक १४ हितंबर, 2006 द्वंडा प्रवाधित किए छए वे और अत्यरप्राद्य निम्मानुकर संसंधित किए कर :

- मा.स. 1733(अ), सरीव 11 अक्युबर, 2007;
- 2, MR.MR. 3067(M), ARIA & RAIM, 2020;
- का.स. 695(अ), स्वरीवा 4 अर्थन, 2011;
- 4. का.आ. 2006 (म), लागेव 13 दिसंबर, 2012; और
- 5. का.झ. 674(अ), सारीक 13 मार्च, 2013

MINISTRY OF ENVIRONMENT AND FORESTS NOTSFICATION

New Delid, the 23ed August, 2013

S.O. 2559(E).- Whereas by nonification of the Government of India in the Ministry of Environment and Forests vide number 3.O.1533(E), dated the 14th September, 2006 featured under sub-section (1) and classe (v) of sub-section (2) of realism (3) of the Environment (Protection) Act, 1965 read with classe (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government directed that on and from the date of its publication, the required construction of new projects or settivities or the expansion or modernization of existing projects or netivities listed in the Schudule to the said notification catalling the capacity addition with change in process or technology and or product mix shall be undertaken in any part of India only after prior environmental disension from the Central Government of as the case may be, by the State level Environment Import Assessment Asthority, duly constituted by the Central Government under sub-section (2) of section 3 of the said Act, in accordance with the procedure specified therein:

And whereas the Government of India in the Ministry of Environment and Poresta had constituted a High lock! Committee under the Chartmanship of Member (Environment and Poresta and Science and Technology), Planning Commission, vide OM No.21-270/2008-LA.III dated the 11th December. 2012 to review the providents of Environmental Impact Assessment Notification, 2006 relating to graving Environmental Clearances for Roads. Residings and Special Economic Zone projects and provisions under the OM dated the 7th February, 2012 issued by the Ministry of Economics and Forests respecting guidelines for High Rise Buildings:

And whereas one of the terms of reference (ToR) of the Committee was to review the requirement of Environmental Clearance for highway expansion projects up to the right of way of 60 meters and length of 200 kms under Environmental Impact Association, notification,

THE GAZETTE OF INDIA : EXTRAORDINARY

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And whereas the Committee has submitted its report to the Ministry and on this ToR, the Committee has tecommended exempting highway expansion projects from the requirement of scoping and that Environmental Impact Assessment or Environment Management. Plan for highway expansion projects may be prepared on the basis of medol ToRs to be posted on Ministry's metalike and in respect of requirement of environmental elearance, the Committee has recommanded that expansion of Network Highway projects up to 100 kms involving additional right of way or land acquisition up to 40 rate on existing alignments and 60 rate on re-alignments or by-process may be exempted from the proview of the actification;

And whereas the report of the Committee has been examined to the Ministry of Environment and Frances. Earlier, wide untilication 8-0, 3067(5), dated the 1st Determiner 2009 all State Righway expansion projects, except those in hilly tetrain (above 1000 m AMSL) and coologically sensitive areas, have already been exempted from the purview of the Eavirenneeus) impact Assessment neutrication, 2000.

And whereas, keeping inter-alla in view the foregoing, the Ministry of Environment and Percent has decided to accept the aforeasid recommunitations of the High Level Committee constituted vide OM No 21-270/2008-1A.11s, dated the 13th December 2012;

Now, therefore in exercise of the powers conferred by sub-station (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with sub-state (4) of rule (5) of the Environment (Protection) Act, 1986 (29 of 1986) read with sub-state (4) of rule (5) of the Environment (Protection) Act, 1986, the Central Covernment hereby makes the following further amondment to the notification of the Government of India, in the Ministry of Environment and Forests isomber S.O. 1003(E), dated the 14th September, 2006 after having dispersed with the requirement of notice under clause (a) of sub-role (3) of the said rule 5 in autility interest, namely: --

In the said polification, —

(s) in paragraph 7, in sub-paragraph II, for item (i), the following stem shall be substanted, sumely: -

"(i) "Scoping" refers to the process by which the Expert Appraisal Committee in the case of Category A "projects activities, and State level Expert Appraisal Committee in the case of Category 'Bi"projects or activities, inologing applications for expansion or moleculation or change in product mix of existing unjects or activities, determine denied and comprehensive Terms of Reference (TOR) addracing all relevant unvironmental concerns for the preparation of an Environment Impact Assessment (EIA) Report in respect of the project or activity for which price environmental clearance is sought and the Expert Appraisal Committee or State level Expert Appraisal Committee concerned shall determine the terms of reference on the basis of the information Sunsished in the prescribed application Form 1 or Fourie IA including terms of reference proposed by the applicant, a site visit by a sub-group of Expert Appraisal Committee or State level Expert Appraisal Committee concerned only if considered necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned only if considered necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, terms of Reference auguated by the application for the formation that may be available with the Expert Appraisal Commutee or State Level Expert Appraisal Commutee concerned;

Fromded that the following shall not require Scoping -

- all projects and activities listed as Calegory 'B' in item 5 of the Schedule (Construction or Township or Commercial Complexes or Rousing);
- (ii) all Highway apparation projects powered under entry (ii) of column (3) and column (4) under sub-item (f) of item 7 of the Schodale.

Provided further that

- the projects and activities referred to in placese (i) shall be apprised on the basis of Form 1 or from tA and the conceptual plan;
- B. The projects referred to in classe (h) shall prepare EIA and EMP report on the basis of model TOR specified by Ministry of Environment and Perese;

(b) in the Sobedule, against sub-item (f) of item ?, in column (3), for the entry (ii), the following entry shall be substituted, namely:--

"(ii) Expansion of National Highways greater than 100 km involveng additional right of way or land acquisition greater than 40m on existing alignments and 60m on re-alignments or by passer."

[F No. 21-270/2008-1A.(0)]

AJAY TYAGI, JI, Spey.

Note: The protected rules were published in the Gezetze of Ladia, Extraordinary, Part II, Section 3: Sub-section (in) vide actification number S.O. 1533(F), dated the 14th September, 2006 and subsequently succeeded as follows:----

L.S.O. 1737 (E), dated the 11th October, 2007;

2-S.O. 3067 (E), dated the 1st December, 2009;

3. S.O. 695 (E), dwed the 4th April, 2011;

4 S.O. 2895 (E), dated the 13th December, 2012; and

5 S.O.M74(E), dated the 13th March, 2010

- -

Printed by the Manualey, Government of India Press, Rive Road, Mayabirt, New Deskiel 10164 and in Administ by the Connoller of Publications, Dalkiel 10054 Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha, for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha, in the State of Himachal Pradesh.

File No.: FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK LIST SERIAL NO. - 25

NOC OF THE STATE POLLUTION CONTROL BOARD FOR ESTABLISHMENT OF THE PROJECT

(Not Applicable)

Date : 11-04-2022 Place : Shimla

MS Project Director

National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha, for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha, in the State of Himachal Pradesh.

File No.: FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK LIST SERIAL NO. - 27

DETAILED CATCHMENT AREA PLAN

(Not Applicable)

Date : 19 .04 . 2022 Place : Shimla

MS Project Director National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha, for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha, in the State of Himachal Pradesh.

File No. : FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK LIST SERIAL NO. - 28

DETAILED RECLAMATION PLAN

(Not Applicable)

Date : 19 09 2022 Place : Shimla

National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

Checklist SI, No. 29

Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shinda Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) is already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 136.560) of NH-22 for 40.3 Ha in the State of Himochal Prodesh

File No.: FP/HP/Road/151117/2022

Date of Proposal: 13 Jun, 2022

CHECK LIST SERIAL NO. - 29

COST BENEFIT ANALYSIS

(Attached)

Date : 12 08 2012

Place : Shimla

महापुर्वधक (तकनीकी)/GM(L) एवं परिप्रेल्ला निदेशक / A Project Director भाराराण,/N.H.A.L Office Scal पंकाई - विगला (किन्दुब्द्रीणिक्लिंगेक (H.P.) National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

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Checklist SL Nr. 29

COST BENEFIT ANALYSIS

Full Title of the proposals- Additional Forest land requirement of 11,7936 ha. for four laning of proposed Shimla Dypass from Kalthlighot to Shakead. Section (Package-D of NII-22 (Chaining: from Km. 128.835 to Km. 146.300) is already approved FCA case of the ratio section from Kalthlighot to Dhalli (Chaining: from Km. 128.835 to Km. 156.360) of KH-22 for 40.3 Ha to the State of Howerkad Pendech

File No.: FP/HP/ROAD/151117/2022

Date of Proposal: 13 Jan 2022

SHIMLA FOREST DIVISION

SLno	Nature of Proposal	Applicable / Not Applicable	Remarks	
1	All critegories of proposals involving forest land upto 20 hectares in plains and upto 5 hectares in hills	Not Applicable	These proposals may be considere ense basis and value judgement	d in a case to
2	Proposal for defence installation purposes and ail prospecting (prospecting only)	Not Applicable	In view of minimal priority accorded to the rottors, the proposals would be critically a to help ascertain that the utmost minimum land is diverted for non-forest use	
3	Habitation, establishment of industrial units, tourist lodges complex and other building construction	Not Applicable	These activities being detrineanal to protect and conservation of forest, as a matter of policy, proposals would be rarely extertained.	
4	All other proposals involving forest land more than 20 hectares in plains and more than 5 hectares in hills including roads, transmission lines, minor, medium and anajor irrigation projects, hydroprojects, mining activity, robway lines, location specific installations like microwave stations, auto repeater centres, TV inversete.	Applicable	These are cases where a cost - bes notessary to determine when diver land to non-forest use in the overal interest	ting the forest
Table	B: Estimation of Cest of Forest Diversion			
SLao	Parameters	Remarks	Description	Amount in lakh Rs
1	Ecosystem services lesses due to proposed forest diversion	Economic value of loss of ecosystem services due to diversion of forest shall be the net present value (NPV) of the forest land being diverted as presenbed by the Central Government (MulEE&CC) Note :In case of National Parks the NPV shall be ten (10) times the normal NPV and in case of Wildlife Satebasey the NPV shall be five (5) times the normal NPV or otherwise preteribed by the Ministry or any other competent authority.	11.7936 harof fores: land to be diverted. NPV Cost of the foress area (11.7936 X 10.69430) lakh haj for 50 years. NPV obtained form HP Forest Department website as per revised rates by MoEF&CC vide letter dated 6.01.2022 for Class VI open forest.	126-13
2	Loss of minut husbandry productivity, including loss of fudder	To be quantified and expressed in monetary terms or 10% of NPV applicable whichever is maximum	10% of NPV = 10% x 126,13 lakhs	12.61
3	Cost of human resettlement	To be quantified in monetary terms as per approved R&R plan	No Resettlement in the forest land proposed for diversion of the project	0.00
100	Loss of public facilities and administrative infrastructure (reach, building, schools, dispensary, electric lines, railways etc) on forest lard, which would require forest land if these facilities were diverted due to the project.	To be quantified and expressed in monetary tenns on actual cost busis at the time of diversion	Nil	0.00
5	Procession value of forest land diverted	30% of environmental costs (NPV) due to loss of finest or circle rate of adjoining area in the district should be added as a cost component as possession value of forest hard whichever is maximum.	30% of NPV – 30% x 295.11 Jakas	37.84
ñ	Cost of sufficing to oustees	The social cost of schabilitation of oustees (in addition to the cost likely to be incarned in providing residence, occupition and social services as per R&R plan) be worked out as 1.5 times of what oustees should have comed in two years had be not been shifted	Ni	0.60

सहाप्रबंध (तकनीकी)/GM(T.) एवं परियोजना निदेशक /& Project Director भाराराण्य /N.H.A.I. प्रशाई - जिनला (हि०प्र०)/PIU-Shimla (H.P.)



SLee	Parameters	Romarks	Description	Associat in Inkh Rs	
7	Habitat fragmentation cost	While the relationship between fragmentation and forest goods and services is complex, for the sake of simplicity the cost due to fragmentation has been pegged at 50% of NPV applicable as thants role.	50% of NPV = 50% x 126.13 b&bs	61.96	
8	Compensatory Afforestation and soil and moisture conservation cost	The actual cost of compensatory afforestation and sail and moisture conservation and its maintenance in fature at present discounted value	CA cost provided by the Forest Deportment as per CA Scheme	69.70328	
			Total Estimated Cost	309.35	
Table	C- Existing guidelines for estimating hearfits of f	nrest diversion in CBA			
Sl.no	Parameters	Remarks	Description		
1	Increase in productivity attributed to the specific project	To be quantified and expressed in monstary terms anniding double counting	Bonefits of the perjoet to the Econo- terus of increase in Economic Acti- the Project Area, increase in Per cu around the Project Influence Area,	ivity around pita income	
2	Denefits to economy due to the specific project	The incremental economic benefit in monetary terms due to the activities attributed to the specific project		5978.376	
3	No. of Population benefited due to the specific project	As per Detailed project report	Direct Betefits (Shimle District) Indirect Benefit (HP state)	8.14 Laklis 68.64 Lakle	
4	Economic benefits due to direct and indirect employment due to the project.	As per Detailed preject report	Around 100 persons will be employ construction period, which is 3 year		
3	Economic benefits due to the compensatory afferentiation	Benefits from such Compresentory Afforestation accruing over next 50 years momentised and discounted to the present value should be included to benefits of compressiony afforestation. "For benefits of CA the guideline of the Ministry for NPV estimation may be consulted			
			Total Estimated Benefits	5978,38	
			Ratio of Cost and Benefit	1:19.32	

As such after considering the above figures of Cost of the diversion of forest land and the benefits to the economy, the benefits are much more than the cost incurred which makes the Project viable

महाप्रबंधक (जरूनीकी)/GM(T.) एवं परियोजना निदेशक /& Project Director भाराराप्रा./N.H.A.I. प.का.ई. - शिमला (शिव्यव)/PIU-Shimla (H.P.)

Checklist Sl. No. 30

Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha, in the State of Himachal Pradesh.

File No. : FP/HP/ROAD/151117/2022

Date of Proposal: 13th January, 2022

CHECK LIST SERIAL NO. - 30

ANY OTHER INFORMATION

(Muck Management Plan)

Date : 19.09.2022 Place : Shimla

Project Director National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

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Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha. in the State of Himachal Pradesh.

File No. : FP/HP/ROAD/151117/2022

Date of Proposal: 13th January 2022

CHECK LIST SERIAL NO. - 31

DOCUMENTS / INFORMATION REQUIRED FOR PROPOSALS FOR ROADS, RAILWAY LINES, CANALS AND TRANSMISSION LINES

The following information/documents must be given:-

 a) Length and width of Road/Railway line/ Canal/ Transmission line passing through forest and non- forest area. 	Shimla Forest Division: Length and width of road passing through forest and non-forest area is annexed as 'Annexure to Checklist Sl. No. 31'.
b) In case of expansion of already existing road/ railway line/canal, linear plan clearly showing in distinct colours the already existing road (<i>from</i> <i>beginning to end</i>), the width of the proposed road/railway line/canal to be expanded, and the remaining width of the Protect Forest strip, if any, which would be left after expansion.	Not Applicable
 c) In case of transmission line, the following details may also be given :- i) Number of towers to be erected both in forest and non-forest area. ii) Width of the right of way for transmission line. 	Not Applicable

Date : 19-04-2022 Place : Shimla

Sus Project Director

National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

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Annexure to Checklist 31

Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha. in the State of Himachal Pradesh.

File No.: FP/HP/ROAD/151117/2022

Date of Proposal: 13 Jan 2022

INFORMATION IN RESPECT OF ITEM LENGTH & WIDTH

1.	Total length of road already acquired	-	17.465 km
2.	Total length of additional widening along the road	\sim	7.508 km
3.	Length of additional widening passing through forest	÷	3.049 km
4.	Length of additional widening passing through non forest	-	4.459 km
5.	Width of additional widening along the road		Varies from 1.89m to 45.85m
6.	Length of the road already existing/constructed out of the total length involved in the project	-	NIL

Date: 19.04.2022

Place: Shimla

National Highways Authority of India Project Implementation Unit (PIU) Shimla, Himachal Pradesh

Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha, for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 ha, in the State of Himachal Pradesh.

MUCK MANAGEMENT PLAN

1. INTRODUCTION

The project envisages four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-I) of NH-22 (Chainage from Km. 128.835 to Km. 146.300) including construction of two twin-tube tunnels of 1895 m. Large quantity of material would be excavated during construction. As the project road is located in a hilly terrain, the muck generated from the excavation is required to be disposed in a planned manner so that it takes least possible space and is not hazardous to the environment. It is of prime importance that these sites will have to be rehabilitated as soon as the disposal sites are full.

The muck generation, muck disposal sites, site selection criteria, stabilization measures and adequate disposal and management guidelines along with cost estimate for management of muck generated from the project have been discussed in the following sections.

2. MUCK GENERATION

In the proposed project, muck generation is expected to be generated as a result of tunneling operations and construction of road. The component wise muck generation from the project activity is given in Table-1.

generate	of Muck ed (Cum)	due to sw		Quantity Propos		1	quantity k (Cum)	be disposed (Cum) after rolling	of the Muck Disposal sites (Cum)
Rock (41%)	Soil (59%)	Rock (5%)	Soll (3%)	Rock (39%)	Sel 1(100%)	Rock (61%)	Soil (0%)		
946049	1361387	993351	1402229	385454	1402229	6/07897		516712	994740
Rock (4%)	Soff (96%)	Rock (5%)	Soil (3%)	Rock (0%)	Soil (69%)	Rock (100%)	Soil (31%)		
21650	519601	22732	535189	+	367565	22732	167624	161803	
967699	1880988	1016083	1937418	385454	1769794	630629	167624	678515	994740
	Rock (41%) 946049 Rock (4%) 21650	(41%) (59%) 946049 1361387 Rock Soff (4%) (96%) 21650 519601 967699 1880988	Rock (41%) Soil (59%) Rock (5%) 946049 1361387 993351 Rock (4%) Soil (96%) Rock (5%) 21650 519601 22732 967699 1880988 1016083	Rock (41%) Soil (59%) Rock (5%) Soil (3%) 946049 1361387 993351 1402229 Rock (4%) Soil (96%) Rock (5%) Soil (3%) 21650 519601 22732 535189 967699 1880988 1016083 1937418	Rock (41%) Soil (59%) Rock (5%) Soil (3%) Rock (39%) 946049 1361387 993351 1402229 385454 Rock (4%) Soil (96%) Rock (5%) Soil (3%) Rock (0%) 21650 519601 22732 535189 - 967699 1880988 1016083 1937418 385454	Rock (41%) Soil (59%) Rock (5%) Soil (3%) Rock (39%) Soil (100%) 946049 1361387 993351 1402229 385454 1402229 Rock (4%) Soil (96%) Rock (5%) Soil (3%) Rock (0%) Soil (69%) 21650 519601 22732 535189 - 367565 967699 1880988 1016083 1937418 385454 1769794	Rock (41%) Soil (59%) Rock (5%) Soil (3%) Rock (39%) Soil (100%) Rock (61%) 946049 1361387 993351 1402229 385454 1402229 607897 Rock (4%) Soil (96%) Rock (5%) Soil (3%) Rock (0%) Soil (69%) Rock (100%) 21650 519601 22732 535189 - 367565 22732 967699 1880988 1016083 1937418 385454 1769794 630629	Rock (41%) Soil (59%) Rock (5%) Soil (3%) Rock (39%) Soil (100%) Rock (61%) Soil (0%) 946049 1361387 993351 1402229 385454 1402229 607897 . Rock (4%) Soil (96%) Rock (5%) Soil (3%) Rock (0%) Soil (0%) Rock (0%) Soil (0%) Rock (100%) Soil (31%) 21650 519601 22732 535189 . 367565 22732 167624 967699 1880988 1016083 1937418 385454 1769794 630629 167624	Rock (41%) Soil (59%) Rock (5%) Soil (3%) Rock (3%) Rock (39%) Soil (100%) Rock (61%) Soil (0%) Rock (0%) Soil (0%) Rock (0%) Soil (0%) Rock (100%) Soil (100%) Rock (100%) Soil (0%) Rock (0%) Soil (100%) Rock (100%) Soil (31%) Image: Cump (0%) 946049 1361387 993351 1402229 385454 1402229 607897 - 516712 Rock (4%) Soil (96%) Rock (5%) Soil (3%) Rock (0%) Soil (69%) Rock (100%) Soil (31%) 21650 519601 22732 535189 - 367565 22732 167624 161803 967699 1880988 1016083 1937418 385454 1769794 630629 167624 678515

Table-1: Abstract of Muck ge	enerated and its disposal
------------------------------	---------------------------

Source-DPR Study

During construction of the various components of the project road, muck is generated both from soil and from rock excavation. Total quantity of muck / debris, generated from the project, shall be 28,48,687 cum which shall amount to 29,53,501 cum with swell factor. Out of the total muck

81150 S.K. Shama GM (T)-cum-Project Director NHAL PIU-Shimla

generated, 21,55,248 cum shall be utilized on project work leaving 6,78,515 cum of muck to be dumped after rolling at designated sites. The muck generated is proposed to be utilized in road activities such as earthwork embankment, subgrade, backfill and pavement layers depending on suitability of the material. The balance quantity of muck as shown in Table-1 shall have to be

3. MUCK DISPOSAL SITES

9 muck disposal sites of total area 10.7471 ha. have been designated for muck disposal from the proposed project. Out of the 9 sites, D-1 at Suroh and part of D-9 at Mehli is already acquired. 4.3894 Ha of the muck disposal sites to be acquired is forest area and 4.5902 Ha. is non-forest area. The details of muck disposal sites along with their capacity are given in **Table-2**.

disposed off in designated sites and the muck shall be properly roller. The muck disposal sites shall also be properly protected and stabilized with Gabions Walls of suitable designed sections.

			Almadar	To be A	equired	1	Conseller	Volume	
Muck Disposal Site No.		Chainage	Village	Already Acquired Area (Ha.)	Forest Area (Ha.)	Non- Forest Area (Ha.)	Total Area (Ha.)	Capacity of Muck Sites in Cum	of Muck to be disposed (in Cum)
D-1	128+835	Suroh	1.3970			1.3970	183228		
1010004	7.2216-52165	Shogi		1.9082	0.5473	2.4555			
D-2	130+800	-800 Goru Kanawan		0.6620	0.0000	0.6620	280552		
D-3	132+150	Goru Kanawan		0.0000	0.0241	0.0241	41261		
		Mauri		0.5785	0.2412	0.8197		678515	
D-4	132+280	Goru Kanawan		0.0000	0.4840	0,4840	45631		
D-5	136+700	Yaan		0.1061	0.4978	0.6039	77522		
D-6	140+100	Up Mahal Majhar		1.0912	0.2777	1.3689	101612		
D-7	142+950	Jalf		0.0000	1.1126	1.1126	39580		
D-8	142+600 Up Mahal Gusan		0.0434	0.8101	0.8535	149774			
D-9	145+300	Mehli	0.3705	0.0000	0.5954	0.9659	75579		
		Total	1.7675	4.3894	4.5902	10.7471	994740	678515	

Table-2: Details of Muck Disposal Sites

Land verified by CALA

It may be seen from the Table above that the capacity of the muck disposal sites is 9.94 lakh cum and the volume of muck to be disposed off after utilization is 6.79 lakh cum. This states that the capacity of the muck disposal sites exceeds 32% the generated muck volume. All the disposal locations shall be well supported by retaining structures and suitable slope protection measures. The location of the muck disposal sites marked on SOI Toposheet is enclosed as **Annexure I.**

Site selection Criteria

Based on the geological nature of the rocks and engineering properties of the soil, a part of the

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muck can be used as construction material. However, the balance requires being suitably disposed. The following points have been considered and followed as guidelines for finalization of the areas to be used as dumping sites:

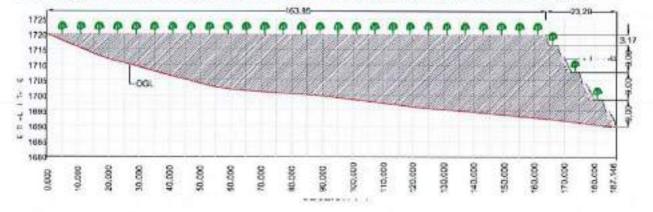
- The dumping sites shall be selected as close as possible to the project area to avoid long distance transport of muck.
- The sites shall be free from active landslides or creep and care has to be taken that the sites do not have a possibility of toe erosion and slope instability.
- 3. Existing slope of the site shall not be preferably more than 30°.
- The dumping sites shall be either at higher level than the flood level or shall be away from the river course so that the possibility of muck falling into the river is avoided.
- 5. There shall be no active channel or stream flowing through the dumping sites.
- Disposal areas shall be planned downwind of villages and townships in consultation with the forest department.
- Wind direction shall be taken into consideration so as to avoid the erosion i.e. on wind shadow region.
- 8. These sites shall not be pristine habitats containing endangered /threatened species.
- 9. Dumping site shall be located preferably 500 m from the river/stream/nullah
- 10. Dumping site shall not be located in Protected Areas.

Stabilization of Muck disposal site

The loosely held muck can lead to the rise in SPM levels and sedimentation load. Therefore, it requires stability with appropriate methods to avoid the subsequent ecological problems. The muck disposal involves both engineering and biological measures that depend on the ecoclimatic conditions.

I) Engineering Measures:

The muck shall be disposed off in the sites in terraces and the slopes shall be protected with multiple gabion walls of height 5m as per the elevation profile as given the figure below.



The Muck Disposal Plan of all the sites along with elevation profile and location of gabion walls is enclosed as Annexure II.

II)Biological Measures:

Vegetation cover plays a very important role in holding the dumped material over a period of time and controls the hydrological and mechanical effects on the soils and slopes. Special efforts will be required to raise vegetation cover of grasses, shrubs and trees. The local grass sodding

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should be done on the muck when grass seed will be germinating and the grass will add humus to the dumped material.

Soil conservation and quick growing species to be planted to stabilize the slope - Agave sislana, Berberis aristata, Bauhinia vahilii, Jasminum humile, Rubus ellipticus, Prinsepia utilis, Justicia Ipomea adhatoda. carnea. Hypericum oblongifolium, Mimosa himalayana, Salix denticulate. woodfordia fruticosa. Alnus nepalensis etc.



Slope Protection using Bio engineering techniques

Guidelines on Muck disposal Management

- The muck shall be dumped preferably in the form of terraces and slope of dumped muck shall not exceed 35° and preferably shall be kept under 30° or 1:2.
- 2. Fencing shall be done to prevent human / animal interference
- 3. Dumping shall not obstruct the natural drainage pattern
- Trees shall be retained along the contours wherever feasible so as not to disturb the natural slope.
- 5. Protection walls shall be constructed along the contours prior to dumping
- 6. Before dumping the muck chemical analysis shall be done to identify hazardous material if any. The same shall be managed as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. In case hazardous materials like radioactive elements, high arsenic or fluoride laden rocks are found they shall not be dumped into the dumping site and handled as per prescribed rules.
- Settling channels may be constructed, if required, along the protection walls that will be connected to a storage / filtration chamber
- Muck shall be carried in dumper trucks covered with heavy duty tarpaulin properly tied to the vehicles
- 9. Dumping may be avoided during the rainy season, to avoid slipping of muck while dumping
- Top soil shall be stripped wherever feasible to a specified depth of 150 mm and stored in stockpiles of height not exceeding 2 m in height and used for landscaping.
- All disposal sites shall be properly landscaped when the disposal gets completed so as to merge it in the natural surroundings.

4. RESTORATION PLAN

Once the dumpsites are filled, these sites shall be rehabilitated by covering it with fertile top soil and planting local species of trees and shrubs in consultation with the forest department so that the landscape is in harmony with the surrounding environment.

The afforestation with indigenous plant species of high ecological and economic value which can adapt to local habitat will be undertaken in consultation with the forest department depending upon the canopy cover required. Major tree and shrub species which would be planted are listed in table below.

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Botanical Name	Common Name	
Trees	0	
Populus ciliata	Poplar	
Pinus roxburghii	Chir	
Cedrus deodara	Deodar	
Salix acutifolia	Bhains	
Cassia fistula	Amaltas	
Pinus wallichiana	Kail, Blue pine	
Shrubs		
Artemisia nilgarica	Kunja	
Berberis aristata	Kingor	
Berberis lyceum	Kingor	
Tecoma stans	Tecoma	
Hibiscus rosa-sinensis	Gurhal	

5. BUDGET

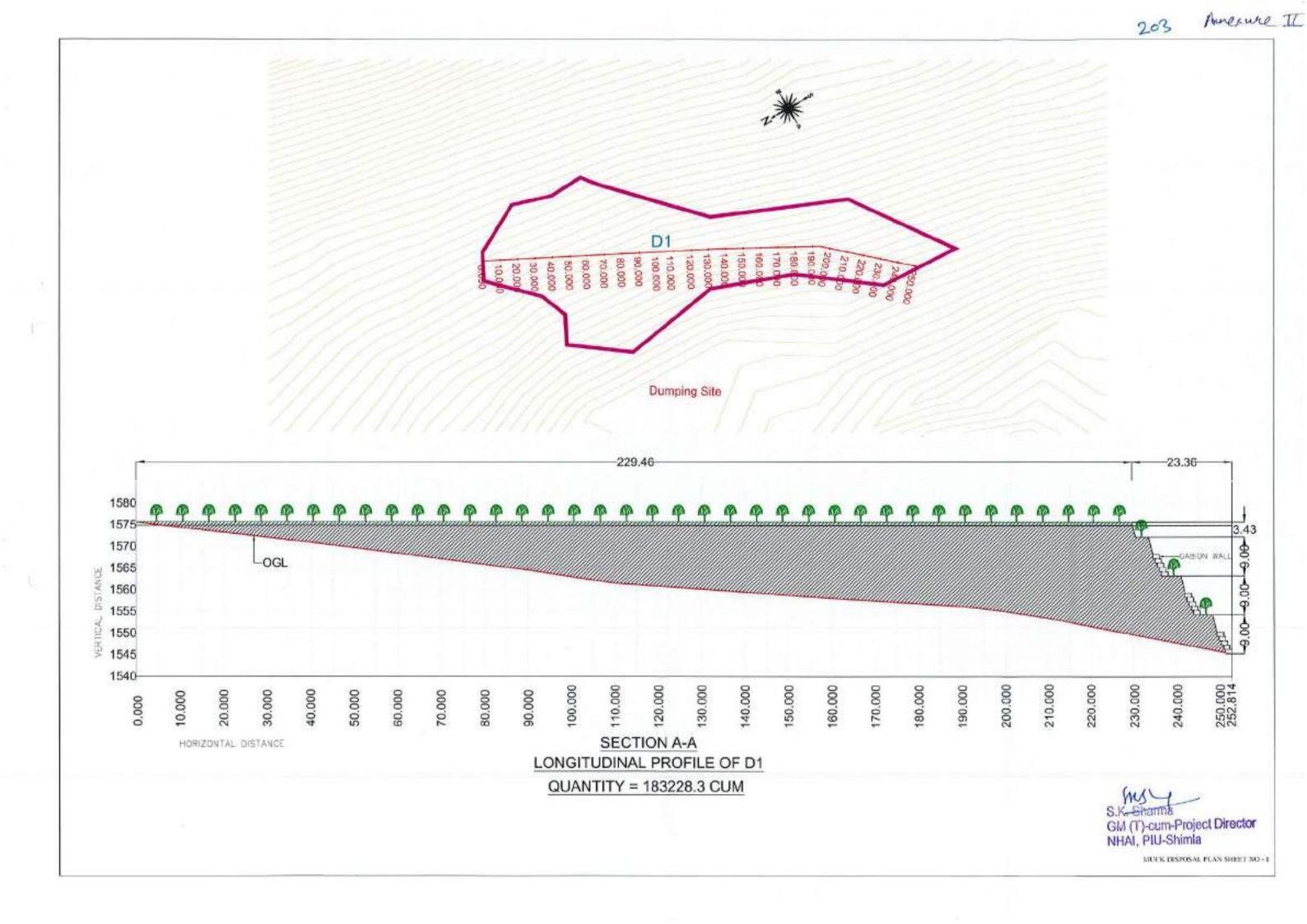
A budget of 9 crores has been earmarked towards management muck as per components listed below.

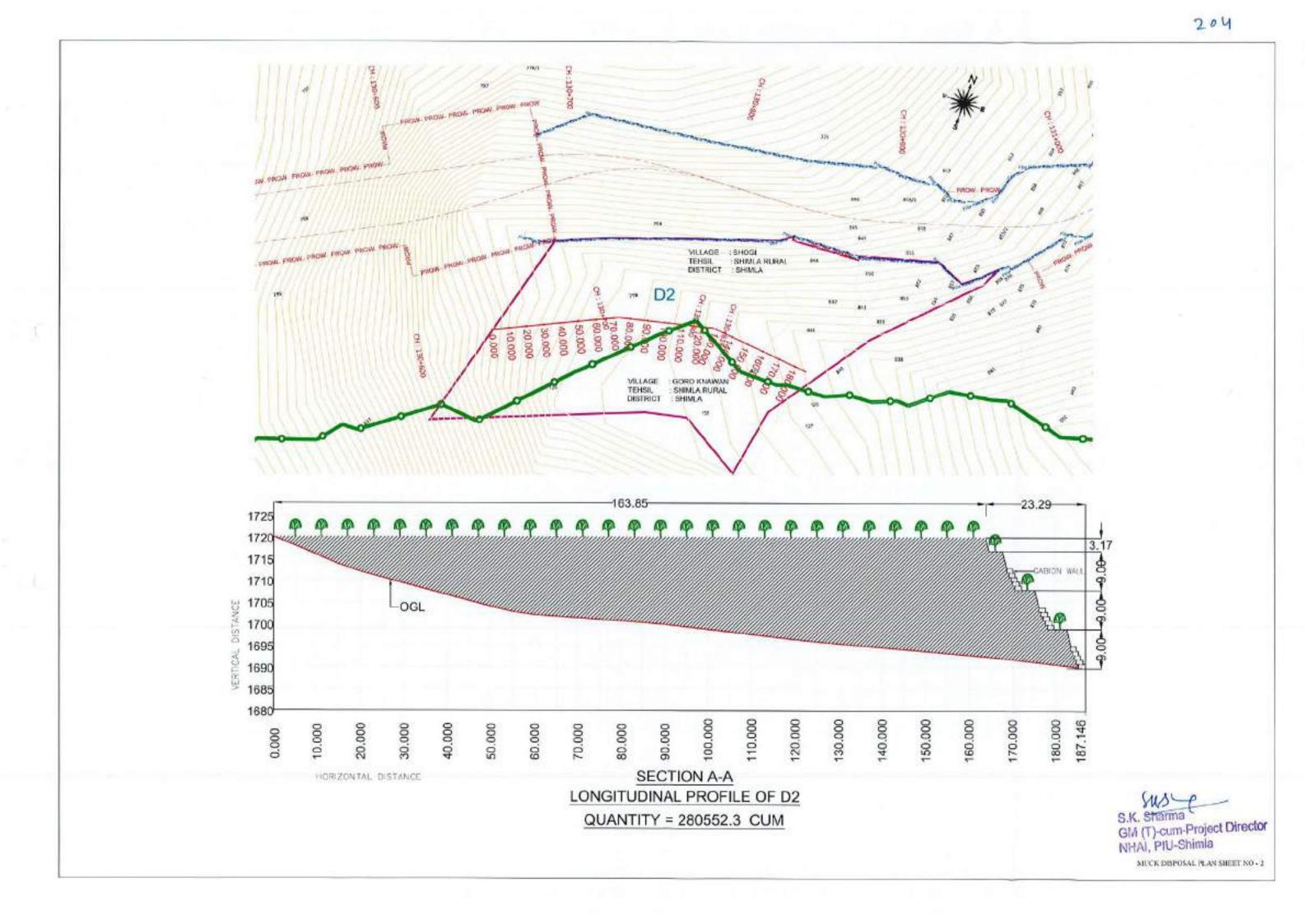
Item No.	Descriptions
A	Removal of muck from various locations including loading, unloading and disposal at site up to average lead of 10 km.
в	Gabion wall with terracing as applicable for protection.
	(i) Providing & making Gabion structure with Mechanically Woven Double Twisted Hexagonal Shaped Wire mesh Gabion Boxes as per IS 16014:2012,MORTH Clause 2500, of required size, Mesh Type 10x12 (D=100 mm with tolerance of ± 2%) Zinc coated, Mesh wire diameter 3.0 mm, mechanically edged/selvedged with partitions at every 1m interval and shall have minimum 10 numbers of openings per meter of mesh perpendicular to twist, tying with lacing wire of diameter 2.2mm, supplied @ 3% by weight of Gabion boxes, filled with boulders with least dimension of 200 mm, as per drawing, all complete as per direction of Engineer-in-charge.
	(ii) Terracing
С	Levelling, Rolling and Landscaping of top surface in slope as required of disposed soil at dumping site, all complete as per direction of Engineer.
D	Furnishing and laying of the live sods of perennial turf forming grass on embankment slope, verges or other locations shown on the drawing or as directed by the engineer including preparation of ground, fetching of sods and watering.
Е	Providing, laying and spreading of 15 cm top soil layer for vegetation.
F	Stabilization of slope and Eco-restoration of disposed muck with Bio-Engineering techniques for development of vegetation.

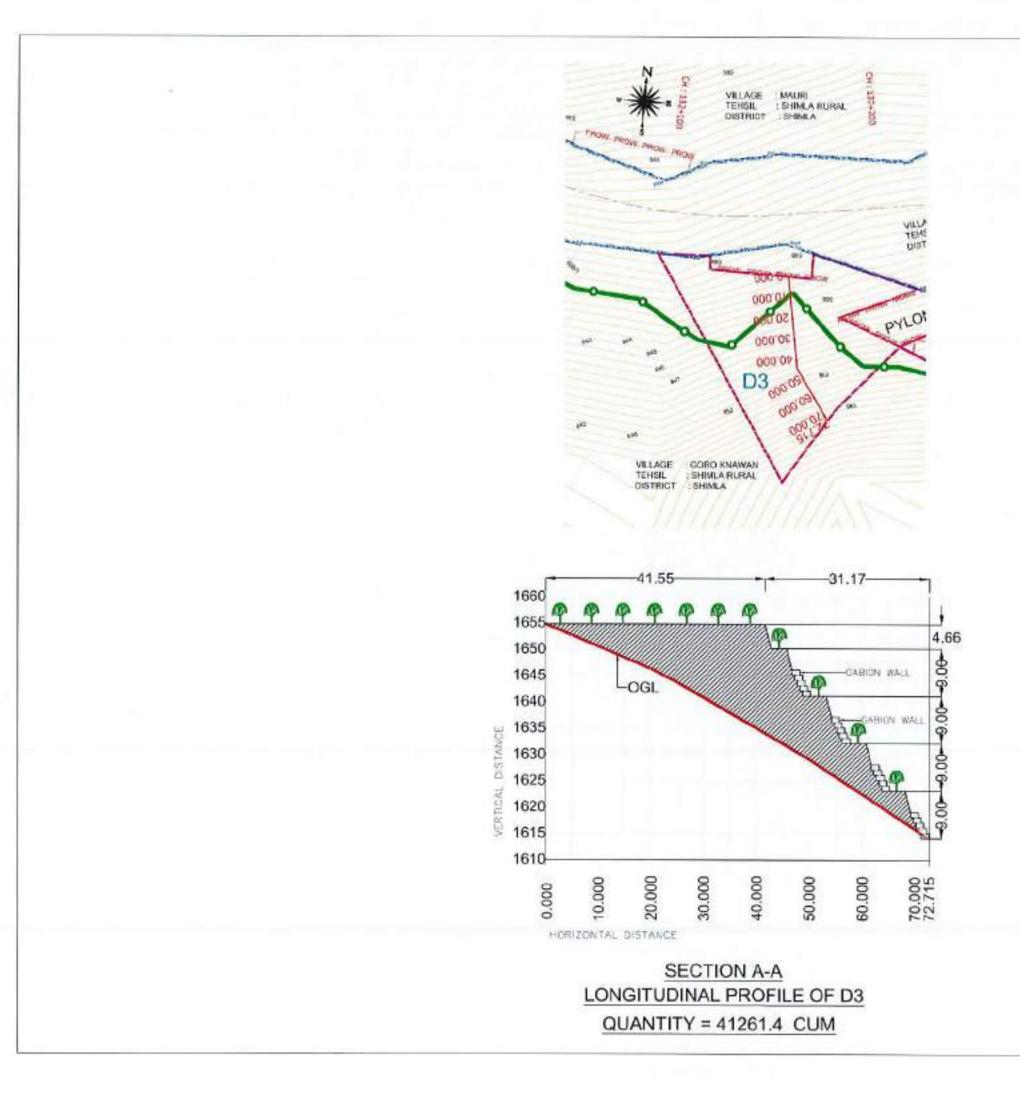
S.K. Sharma ₽ GM (T)-cum-Project Director NHAI, PIU-Shimla



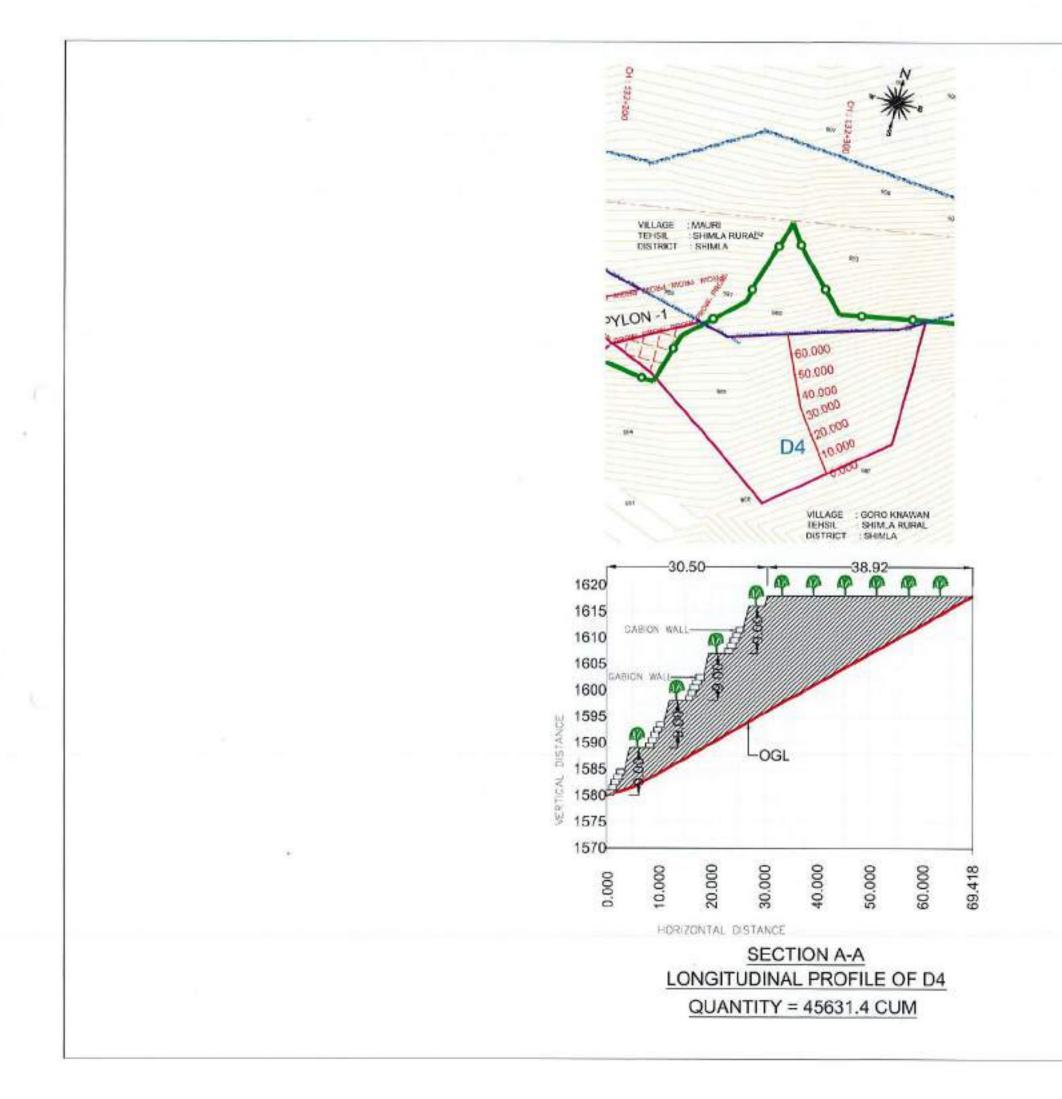
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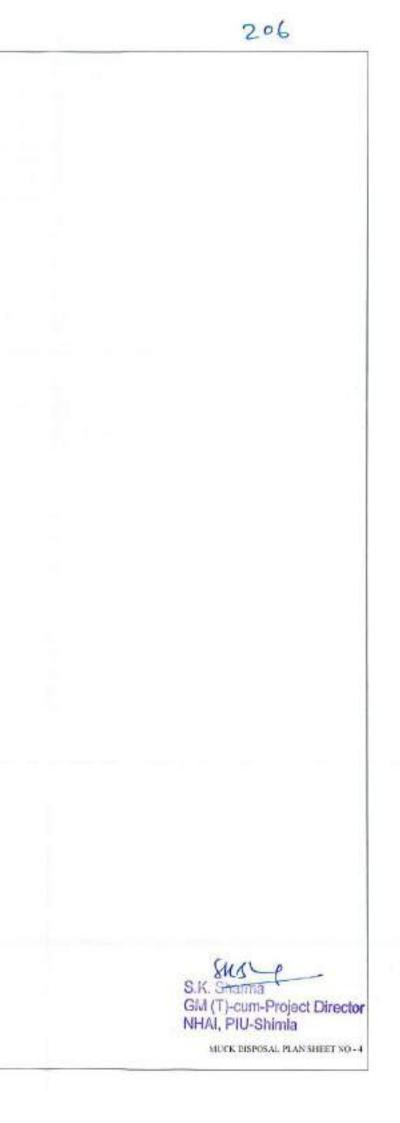


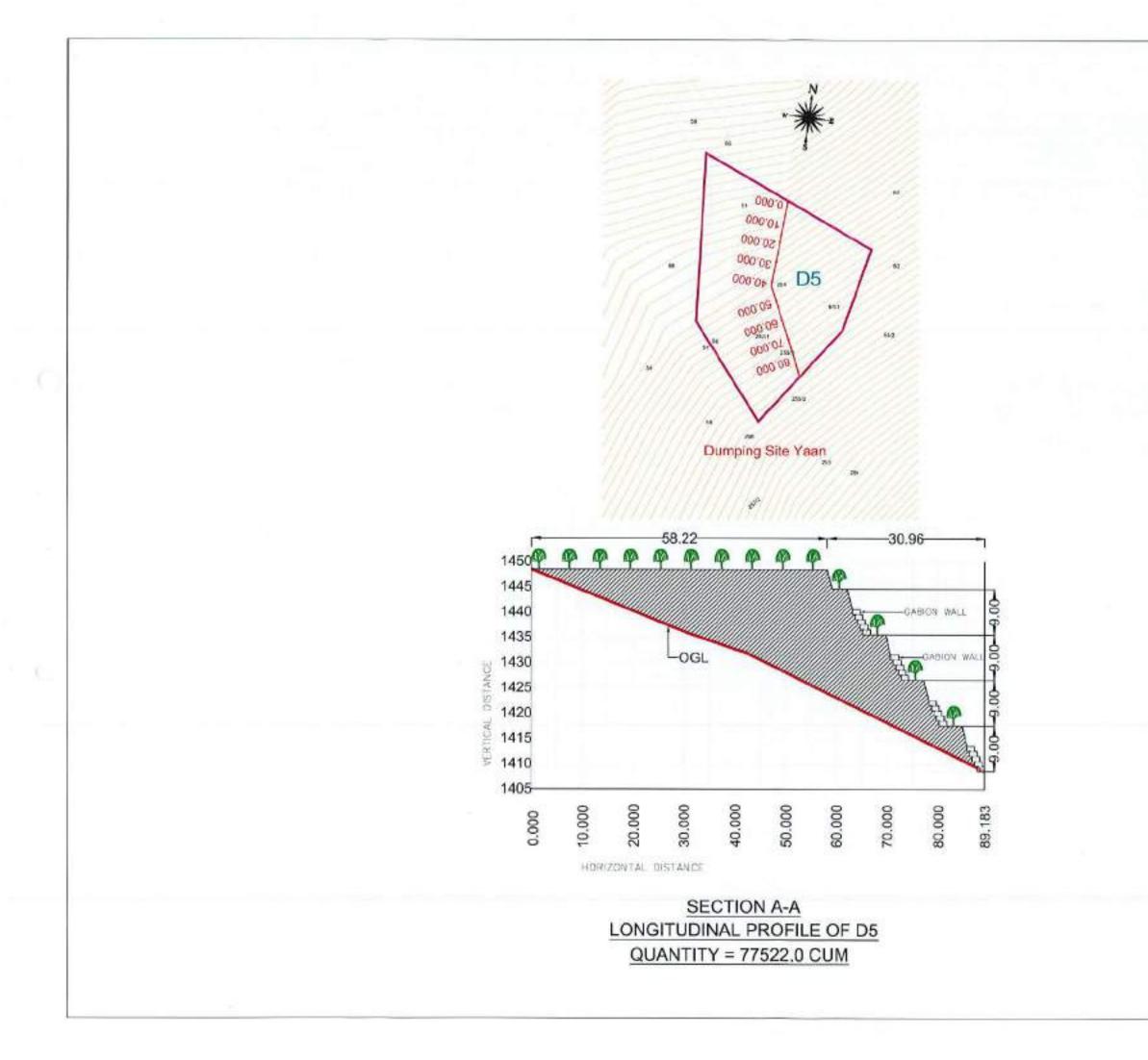




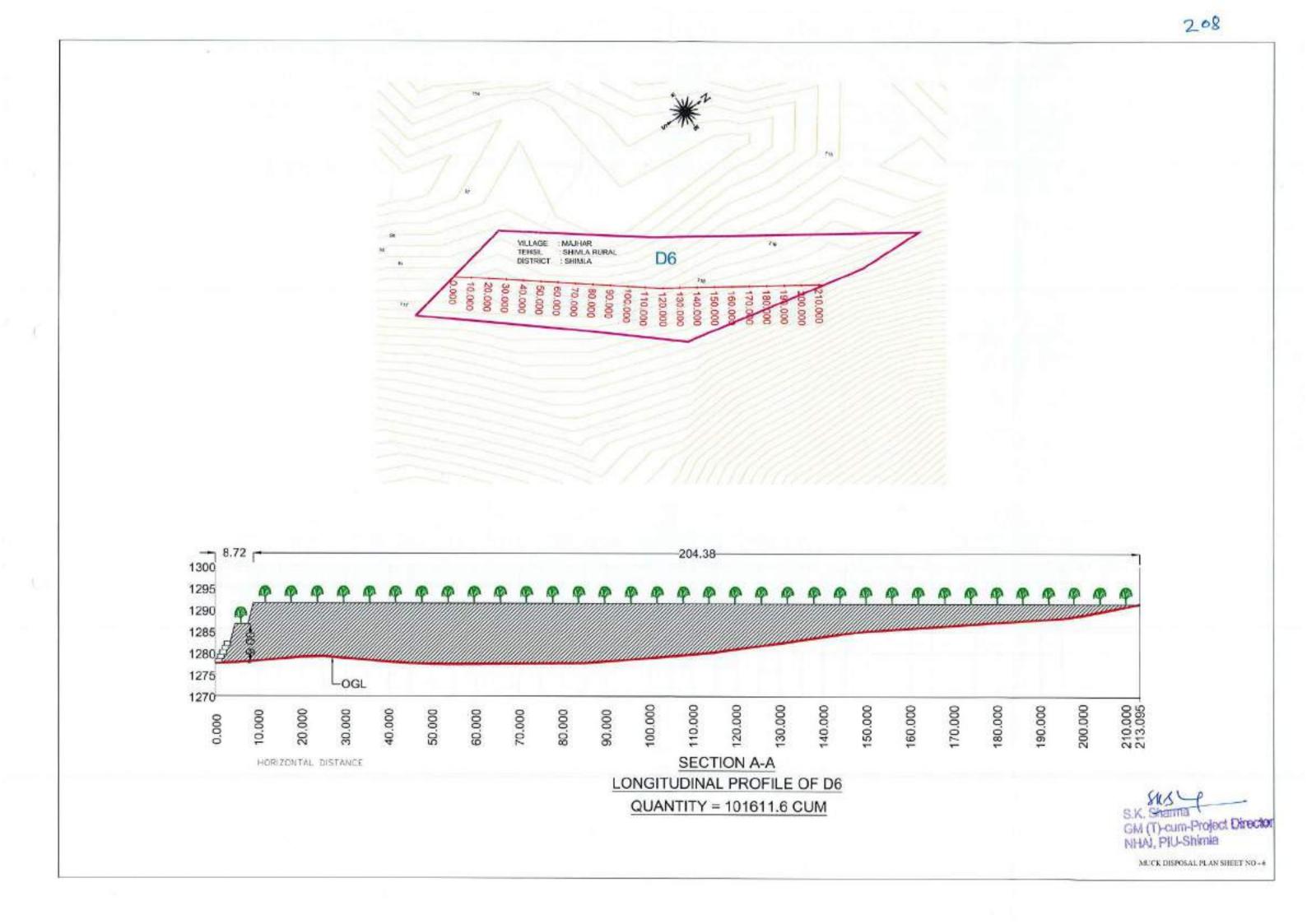


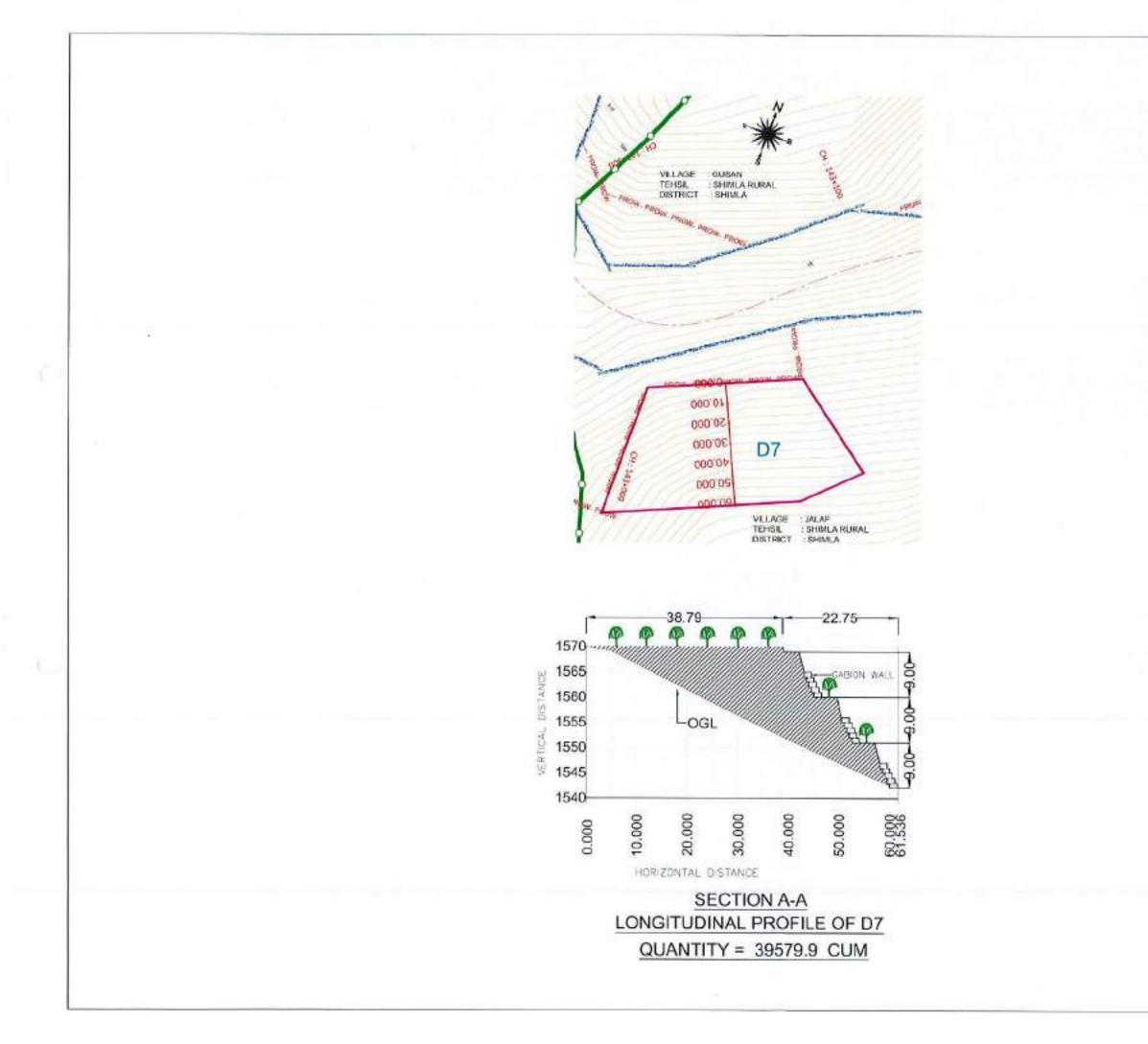


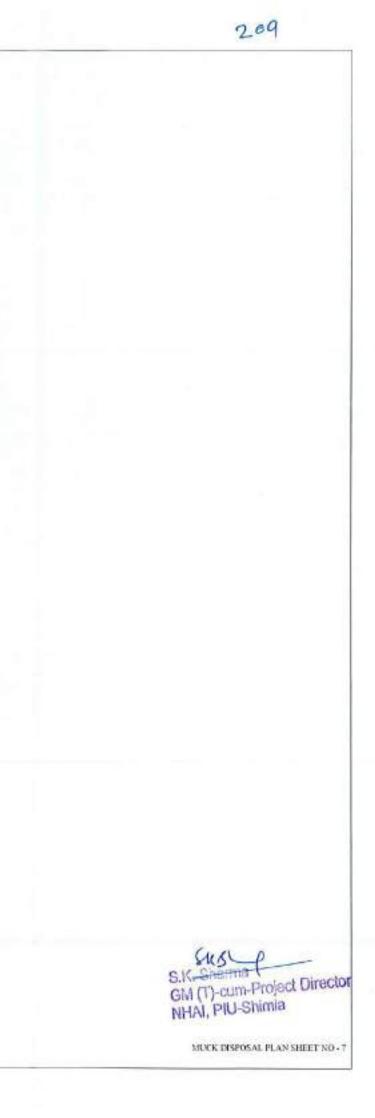


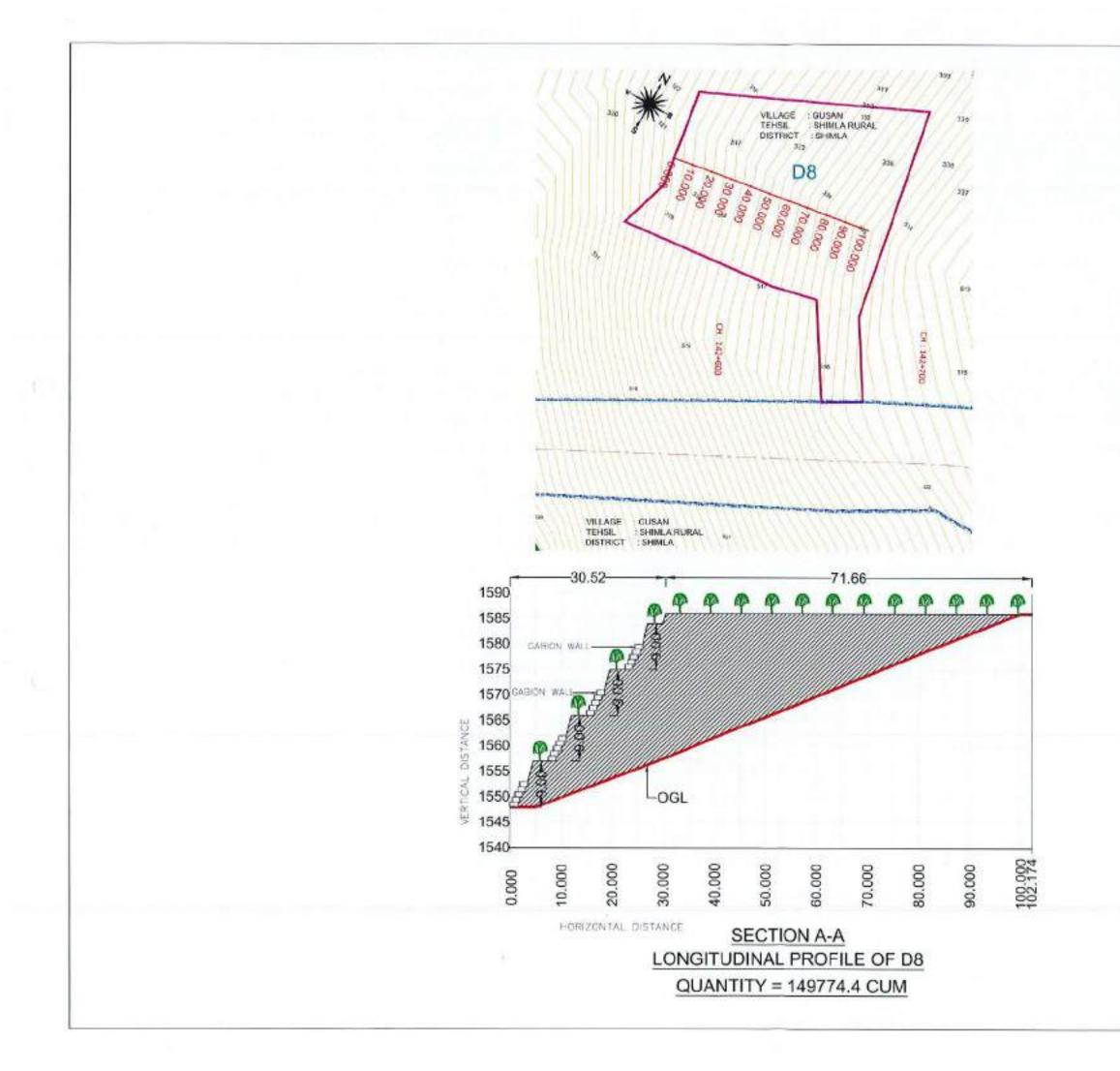




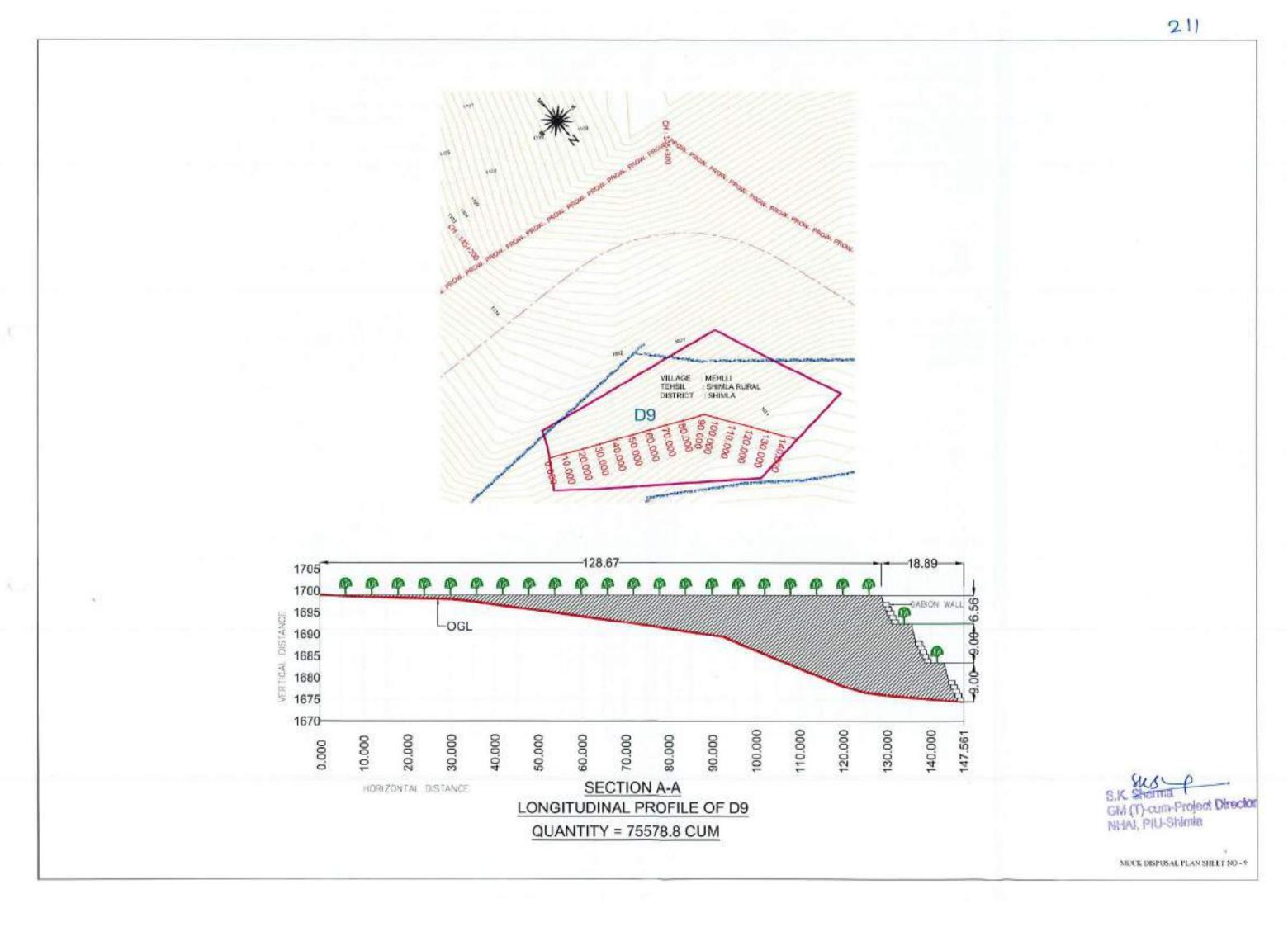












No. WLM-102/ 56 11
H.P. Forest Department,
Dated Shimla, the <u> </u>
Divisional Forest Officer,
Wildlife Division, Shimla.
GM (T) – cum- Project Director, NHAI PIU-Shimla.
Additional Forest Land requirement of 11.7943 hac for four laning of proposed Shimla Bypass from Kaithlighat to Shakral Section (Package-1) of NH-22 (Chainage from Km. 128.835 to km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km. 128.835 to Km. 156.560) of NH-22 for 40.3 hac hac in the State of Himachal Pradesh – Reg. compliance of

Sir,

From:

To:

Subject:

Kindly reference to your letter No. 11013/312012/K-D/Forest/PIU-SML/2661 dated 29-01-22 on the subject cited above.

the observations raised by Nodal Officer, Shimla.

2. As per report sent by Range Forest Officer, SWC, Dhalli the aerial distance of the proposed above site is approx. **3.69** *Km*. from Shimla Water Catchment Wildlife Sanctuary and the aerial distance from Eco Sensitive Zone Shimla Water Catchment is approx. **2.79** *Km*. and there is no adverse impact on Wildlife from this proposed site.

This is for favour of your kind information and further necessary

action please.

Note:

This is only distance certificate and cannot be treated as NOC.

Martin 52.2.22

Yours sincerely,

Divisional Forest Officer, Wildlife Division, Shimla.

Full Title of the proposal:- Additional Forest land requirement of 11.7936 ha. for four laning of proposed Shimla Bypass from kaithlighat to Shakral section (Package-I) of NH-22 (Chainage from Km.128.835 to Km. 146.300) in already approved FCA case of the entire section from Kaithlighat to Dhalli (Chainage from Km.128.835 to Km. 156.560) of NH-22 for 40.3 Ha in the State of Himachal Pradesh.

File No. : FP/HP/ROAD/151117/2022

Date of Proposal: 13 Jan 2022

Certificate of Population to be benefitted

Sr. No.	Name of village	Village Code	Population
5r. 10.	Shoghi	95	1256
2.	Goro- Kanwan	126	357
3.	Mauri	96	566
4.	Bhog	125	346
5.	Bharob	124	96
6.	Ranghav	132	126
7.	Bhad	122	243
8.	Chadau	121	111
o. 9.	Pujarli	116	380
10.	Up Mohal Majhar	118	144
11.	Up Mohal Kwalag	118	322
12.	Up Mohal Jadech	117	69
13.	Up Mohal Gusaan	117	165
14.	Jalaf	383	28
14.	Mehlli	113	1523
1.1	Shakral	381	742
16. 17.	Yaan	134	151
the second data water to be a second data and a second data	Kot	133	288
18. 19.	Banadi	123	132

List of Villages, Tehsil-Shimla (Rural), District-Shimla

Source: Directorate of Census Operations, Himachal Pradesh

Place: 8H MMA Date: 12 10 m

D.Digita6hi

Office Seal.....