

No. D-V-519/G/ 4435  
H.P. Forest Department

Dated Chamba, the 07/09/2022

From:- Chief Conservator of Forests  
Chamba Forest Circle, Chamba

To:- Nodal Officer-cum-APCCF (FCA)  
O/o Pr. CCF, HP, Shimla

**Subject:- Diversion of 8.0678 hectare of forest land for construction of Siul-IV 4MW SHEP at Siul Nallah near Village Digodi, Tehsil Salooni, District Chamba- within the jurisdiction of Churah Forest Division.**

Memo.

Kindly refer to GoI, MoEF &CC, Integrated Regional Office Shimla letter No. 8B/HP/01/147/2019/FC/101 dated 07.06.2022 on the subject cited above.

2. In this connection, it is submitted that the observation raised by the GoI, MoEF have been attended by the User Agency as well as DFO Churah, the point wise reply to the observations is furnished as under:-
  1. Pertains to be attended at the level of higher ups.
  2. It has been submitted that, the smallest unit to measure the land as per revenue system in District Chamba is Karma, and 1 Karma is equal to 1.42 meter, further, it is also clarified that revenue unit Karma is the smallest unit and further it cannot be divided into any smallest form without settlement. Process of land settlement is very long and time consuming which is not yet initiated. In this regard, User Agency has submitted an undertaking that the forest land diverted shall be taken over for 15 meter width of ROW and rest of land shall not be occupied / used by the user agency, and can be considered as forest land without any right of User Agency. However, the User Agency has already submitted an undertaking to pay the full amount of CA levies and NPV for proposed forest land i.e. 8.0678 hectare.
  3. User Agency with the confirmation of Sai Kothi, Devi Kothi and Hail HEPs authority has submitted that the study carried out for these projects has been submitted to GoI, MoEF. All these projects are in-principal approved and are in processing for Stage-II approval. Still no any construction activities are initiated.
  4. User Agency has submitted that the non-forest area proposed in the proposal has also been shown in the KML file uploaded on the portal. So, cause the area of KML is becoming 9.329 hectare. Revised KML file has also been uploaded on the portal.
  5. A land scape Map showing the entire proposal approved/existing/proposed in the river basin has been shown in the Map. The KML file of the same is being sent in a DVD please.

6. User Agency has submitted that the matter regarding the comments of NBWL has been initiated with NBWL for necessary comments, and the same will be incorporated in the office of Nodal Officer (FCA) HP, Shimla.
  7. Reply is same as point No. 6.
  8. The certificate clarifying this point issued by DFO Churah is enclosed herewith.
  9. It is submitted that in view of guidelines Para 9.2 of the FCA Handbook, this project does not attract the provisions of CAT Plan please. Further, it is also submitted as yet no any fund received and utilized as implementation of Comprehensive CAT Plan for Ravi River Basin.
  10. NPV Bill as per the GoI, MoEF guidelines dated 06.01.2022 has been prepared and is enclosed herewith. The copy of same has also been uploaded on the portal. Also, the Revised Cost Benefit Analysis accordingly is enclosed herewith.
  11. As per the report of UA and DFO, it is submitted that no any area proposed for diversion is coming under any water body. The necessary documents like SoI Toposheet, Geo Reference Land use map and KML file of area proposed for diversion has already been provided. This might be due to shifting of KML while visualizing in the Google earth.
- Further, the GoI, MoEF, guidelines dated 28.06.2022 has also been complied and undertaking furnished by User Agency to pay the cost of implementation of Wildlife Management Plan as well as Implementation of Soil Conservation Plan is enclosed herewith.

This is for favour of information and further necessary action under FCA-1980 please.

**Encl. As above**

**Chief Conservator of Forests, (T)**  
**Chamba Forest Circle, Chamba.**

Endst: No.D-V-519/G/ 4436 dated. 07/09/2022

Copy is forwarded to DFO Churah with reference to his office memo No. 2606 dated 18.08.2022 and 2860 dated 31.08.2022 for information please.

**Chief Conservator of Forests, (T)**  
**Chamba Forest Circle, Chamba**



## UNDERTAKING

I / We M/S FRIENDS HIM ENERGIES have applied for diversion of 8.0678 hectares forest land for the construction of Siul-IV 4MW SHEP at Village Digodi, Tehsil Salooni District Chamba H.P. I Mr. Nitin Ramshan Project Manager of Siul-IV SHEP (4MW) hereby, undertake in respect of MOEF observation letter No. 8B/HP/01/2019/FC Dated, 07/06/2022 point No.2 that at the time of acquisition of land we shall take only 15meters width of transmission and rest of the part will not be acquired by the project authority and could be considered as surrendered to the concerned forest department. This is also pertinent to mention here that project authority is also agreed to deposit all compensatory levies for the area being asked for diversion i.e. 8.0678 hectare.

Place: Salooni

Dated: 28/07/2022

  
Project Manager  
User Agency  
M/s Friends Him Energies



# SOI TOPOSHEET PROJECT PROPOSAL ON SIUL RIVER OF RAVI BASIN DISTTRIC CHAMBA (H.P.)

- |                              |   |
|------------------------------|---|
| 1. Siul-Rathirani HEP-3.10mw | 7. SIUL-CHAKOLI HEP-13.00MW               |
| 2. SIUL-LANGERA HEP-5.0MW    | 8. SIUL-BAROTI -I SHEP-5.00MW             |
| 3. BHENT-SANGANI SHP-1.50MW  | 9. SIUL-BAROTI -II SHEP-5.00MW            |
| 4. SIUL-IV HEP 04.00MW       | 10. SIUL-BAROTI -III SHEP-5.00MW          |
| 5. SIUL-I HEP 05.00MW        | 11. EXISTING TRENCH WEIR SITE NHPC 200 MW |
| 6. SIUL-II HEP 05.00MW       |   |



No. I43V13

Scale 1:50,000

I43P12 (143P12)	I43P16 (143P16) Kuttanur JAMMU & KASHMIR	I43Q4 (143Q4)
I43V9 (143V9)	<b>I43V13 (143V13)</b> Kuttanur JAMMU & KASHMIR	I43W1 (143W1) Chenar HIMACHAL PRADESH
I43V10 (143V10)	I43V14 (143V14)	I43W2 (143W2)

भारतीय सर्वेक्षण विभाग SURVEY OF INDIA

### CONVENTIONAL SYMBOLS

<p>             1. <b>Business</b>              2. <b>Finance</b>              3. <b>Marketing</b>              4. <b>Operations</b>              5. <b>Human Resources</b>              6. <b>Information Systems</b>              7. <b>Legal</b>              8. <b>Public Relations</b>              9. <b>Environmental</b>              10. <b>Health, Safety, and Environment</b>              11. <b>Quality Management</b>              12. <b>Project Management</b>              13. <b>Supply Chain Management</b>              14. <b>Business Development</b>              15. <b>Customer Service</b>              16. <b>Product Development</b>              17. <b>Research and Development</b>              18. <b>Manufacturing</b>              19. <b>Logistics</b>              20. <b>Accounting</b>              21. <b>Tax</b>              22. <b>Insurance</b>              23. <b>Compliance</b>              24. <b>Investment</b>              25. <b>Banking</b>              26. <b>Real Estate</b>              27. <b>Construction</b>              28. <b>Energy</b>              29. <b>Transportation</b>              30. <b>Telecommunications</b>              31. <b>Media</b>              32. <b>Education</b>              33. <b>Healthcare</b>              34. <b>Food and Beverage</b>              35. <b>Retail</b>              36. <b>Automotive</b>              37. <b>Aerospace</b>              38. <b>Defense</b>              39. <b>Government</b>              40. <b>Non-Profit</b>              41. <b>Academia</b>              42. <b>Research Institute</b>              43. <b>Consulting</b>              44. <b>Engineering</b>              45. <b>Architecture</b>              46. <b>Design</b>              47. <b>Art</b>              48. <b>Music</b>              49. <b>Entertainment</b>              50. <b>Sports</b>              51. <b>Media</b>              52. <b>Technology</b>              53. <b>Software Development</b>              54. <b>Hardware Development</b>              55. <b>Mobile Development</b>              56. <b>Web Development</b>              57. <b>Cloud Computing</b>              58. <b>Artificial Intelligence</b>              59. <b>Machine Learning</b>              60. <b>Big Data</b>              61. <b>Blockchain</b>              62. <b>Cybersecurity</b>              63. <b>Internet of Things</b>              64. <b>Augmented Reality</b>              65. <b>Virtual Reality</b>              66. <b>Robotics</b>              67. <b>Autonomous Vehicles</b>              68. <b>Space Exploration</b>              69. <b>Biotechnology</b>              70. <b>Genetics</b>              71. <b>Medicine</b>              72. <b>Pharmaceuticals</b>              73. <b>Healthcare</b>              74. <b>Biotechnology</b>              75. <b>Genetics</b>              76. <b>Medicine</b>              77. <b>Pharmaceuticals</b>              78. <b>Healthcare</b>              79. <b>Biotechnology</b>              80. <b>Genetics</b>              81. <b>Medicine</b>              82. <b>Pharmaceuticals</b>              83. <b>Healthcare</b>              84. <b>Biotechnology</b>              85. <b>Genetics</b>              86. <b>Medicine</b>              87. <b>Pharmaceuticals</b>              88. <b>Healthcare</b>              89. <b>Biotechnology</b>              90. <b>Genetics</b>              91. <b>Medicine</b>              92. <b>Pharmaceuticals</b>              93. <b>Healthcare</b>              94. <b>Biotechnology</b>              95. <b>Genetics</b>              96. <b>Medicine</b>              97. <b>Pharmaceuticals</b>              98. <b>Healthcare</b>              99. <b>Biotechnology</b>              100. <b>Genetics</b> </p>	<p>             1. <b>Business</b>              2. <b>Finance</b>              3. <b>Marketing</b>              4. <b>Operations</b>              5. <b>Human Resources</b>              6. <b>Information Systems</b>              7. <b>Legal</b>              8. <b>Public Relations</b>              9. <b>Environmental</b>              10. <b>Health, Safety, and Environment</b>              11. <b>Quality Management</b>              12. <b>Project Management</b>              13. <b>Supply Chain Management</b>              14. <b>Business Development</b>              15. <b>Customer Service</b>              16. <b>Product Development</b>              17. <b>Research and Development</b>              18. <b>Manufacturing</b>              19. <b>Logistics</b>              20. <b>Accounting</b>              21. <b>Tax</b>              22. <b>Insurance</b>              23. <b>Compliance</b>              24. <b>Investment</b>              25. <b>Banking</b>              26. <b>Real Estate</b>              27. <b>Construction</b>              28. <b>Energy</b>              29. <b>Transportation</b>              30. <b>Telecommunications</b>              31. <b>Media</b>              32. <b>Education</b>              33. <b>Healthcare</b>              34. <b>Food and Beverage</b>              35. <b>Retail</b>              36. <b>Automotive</b>              37. <b>Aerospace</b>              38. <b>Defense</b>              39. <b>Government</b>              40. <b>Non-Profit</b>              41. <b>Academia</b>              42. <b>Research Institute</b>              43. <b>Consulting</b>              44. <b>Engineering</b>              45. <b>Architecture</b>              46. <b>Design</b>              47. <b>Art</b>              48. <b>Music</b>              49. <b>Entertainment</b>              50. <b>Sports</b>              51. <b>Media</b>              52. <b>Technology</b>              53. <b>Software Development</b>              54. <b>Hardware Development</b>              55. <b>Mobile Development</b>              56. <b>Web Development</b>              57. <b>Cloud Computing</b>              58. <b>Artificial Intelligence</b>              59. <b>Machine Learning</b>              60. <b>Big Data</b>              61. <b>Blockchain</b>              62. <b>Cybersecurity</b>              63. <b>Internet of Things</b>              64. <b>Augmented Reality</b>              65. <b>Virtual Reality</b>              66. <b>Robotics</b>              67. <b>Autonomous Vehicles</b>              68. <b>Space Exploration</b>              69. <b>Biotechnology</b>              70. <b>Genetics</b>              71. <b>Medicine</b>              72. <b>Pharmaceuticals</b>              73. <b>Healthcare</b>              74. <b>Biotechnology</b>              75. <b>Genetics</b>              76. <b>Medicine</b>              77. <b>Pharmaceuticals</b>              78. <b>Healthcare</b>              79. <b>Biotechnology</b>              80. <b>Genetics</b>              81. <b>Medicine</b>              82. <b>Pharmaceuticals</b>              83. <b>Healthcare</b>              84. <b>Biotechnology</b>              85. <b>Genetics</b>              86. <b>Medicine</b>              87. <b>Pharmaceuticals</b>              88. <b>Healthcare</b>              89. 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NOTES :-

Forest areas in Jammu & Kashmir are Government Reserves. The common forest boundaries have been fixed by the state of Jammu & Kashmir.

Forest land-use in the Western Pothohar belt shows where cultivated but have not been the forest activities.

The state boundary between Himachal Pradesh and Jammu & Kashmir States has been surveyed by the local officials on the ground but has not been verified by the Jammu & Kashmir Government. This survey is in progress and will be completed by May or October.

This sheet has been compiled from 1:25,000 survey.

COMPILATION INDEX

**A** Surveyed during 1972. Updated for identifications from a mapping of 2005.

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Projection – UTM Datum – WGS 84  
Magnetic Variation from True North about  $1\frac{1}{2}^{\circ}$  East in 2013.  
(Decreasing by about 2' annually)

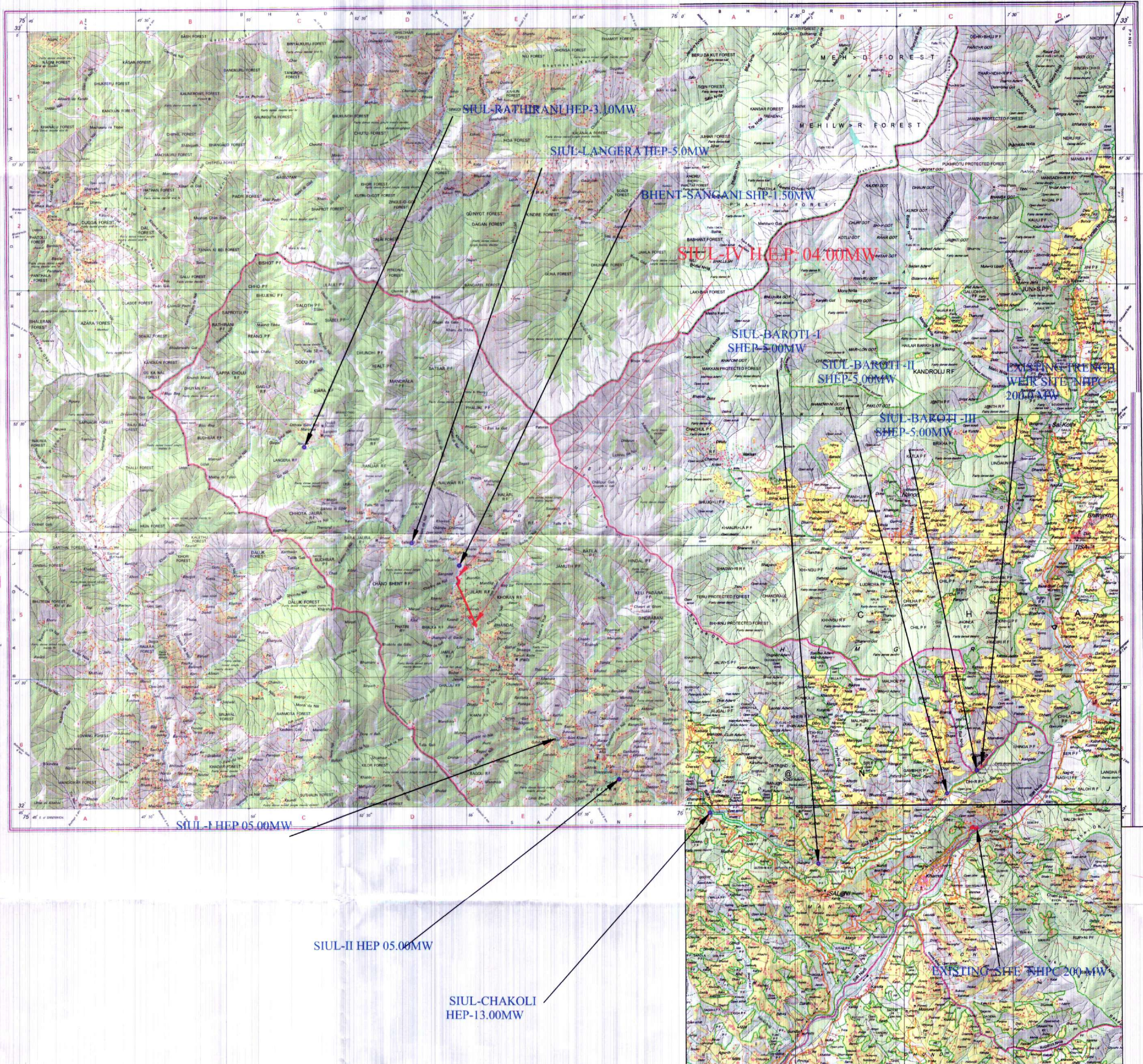
Scale bar showing distances in miles (0 to 2) and kilometers (0 to 2). The scale is 1:50,000.

for further details about this mass release control

J. & K. Geo-Spatial Data Centre  
Survey of India, 65 Chand Highway  
New Techno Park, Bangalore, India. 560018

Мені Зорянко Степану, Якову. 190015.

WEBSITE – [www.surveyofindia.gov.in](http://www.surveyofindia.gov.in)



SIUL-II HEP 05.00MW

SIUL-CHAKOLI  
HEP-13.00MW

EXISTING SITE 200 MW

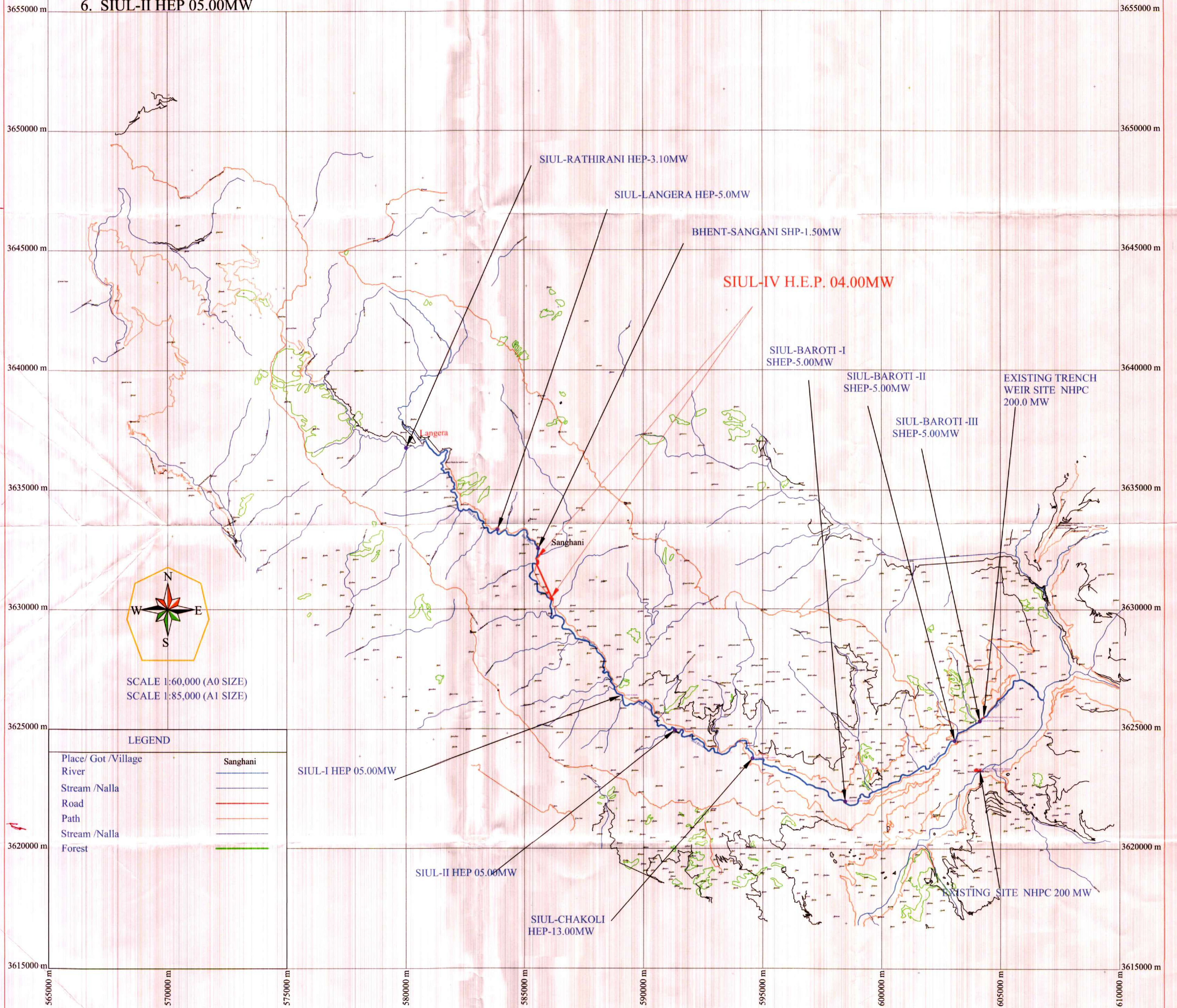
Project manager  
Ms. Friends HIM Energies

  
Divisional Forest Officer  
Gaurah Forest Division  
SALOOM



# SOI TOPOSHEET PROJECT PROPOSAL ON SIUL RIVER OF RAVI BASIN DISTRICT CHAMBA (H.P.)

1. Siul-Rathirani HEP-3.10mw
2. SIUL-LANGERA HEP-5.0MW
3. BHENT-SANGANI SHP-1.50MW
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9. SIUL-BAROTI -II SHEP-5.00MW
10. SIUL-BAROTI -III SHEP-5.00MW
11. EXISTING TRENCH WEIR SITE NHPC 200 MW



Project Engineer  
M/s. Friends HIM Energies

Divisional Forest Officer  
Chamba Forest Division  
SALDOON



## :CERTIFICATE:

It is certified that 17 hectare of waste land under the provision of guideline handbook Para 2.4(iii) in Churah Forest Division, the waste land which comes under the category of protected forest but have neither been demarcated on the ground nor transferred and mutated in the name of forest department is proposed for raising compensatory afforestation against diversion of 8.0678ha. of forest land in favour of M/S FRIENDS HIM ENERGIES, Near Happy Sen. Sec. School, jail Road, Gurdaspur (Panjab) for construction of Siul-IV SHEP, within the jurisdiction of Churah Forest Division, District Chamba Himachal Pradesh vide online proposal No. FP/HP/HYD/3545-78/2018. The site has been inspected on dated 07-08-2022 and it is observed that the density of the area is less than 0.4. The site is infested with the shrubs and few broad leave trees.

The possibility of planting as per norm of per hectare can be taken up in the above mentioned area. Therefore, the proposed area be treated as suitable for raising compensatory afforestation.

  
Divisional Forest Officer,  
Churah Forest Division, Salooni  
Churah Forest Division  
Salooni

## ANNEXURE-A

## BILL FOR NET PRESENT VALUE

CALCULATION OF NET PRESENT VALUE OF FOREST LAND TO BE DIVERSION OF 8.0678 HA OF FOREST LAND IN FAVOUR OF M/S HIM ENERGIES, C/O NEAR HAPPY SR. SEC. SCHOOL, JAIL ROAD, GUARDASPUR-143521 FOR THE CONSTRUCTION OF SUIL-IV-SHEP, WITHIN THE JURISDICTION OF CHURAH FOREST DIVISION, DISTRICT CHAMBA (H.P.).(ONLINE PROPOSAL NO. FP/HP/HYD/354378/2018)

Classification of land being diverted into various Eco Classes as per Hon'ble Supreme Court directions.

Name of Forest	Area being diverted			Classification as per champion and				ECO value class				
DPF Jaladi, Shadolu, Bhajetra, Bhdhwad, thamru, Kanthali & Bhasua DPF	8.07			Group: 9 : Sub Tropical pine Forests				VI				
Area of diverted land falling in Eco Zone V	V	IV	III	IIA	IIB	IA	IB	IC	ID	IE	TOTAL	Area being diverted.
Trees coming in the area	0	51	33	12	10	2	4	1	0	5	118	8.0678
Total tree upto Class-III												51
Total tree of -III and above class												67
Total Mature trees (nationally) after conversion of 2 trees of below III class in to one mature class.												92.5
Per Hectare No of tree												11
Percentage Density												
Density Class												Open Forest

## Calculation of NPV

Name of Forest	Area to be diverted	ECO class	Density class	NPV rate applicable	Amount (Rs.)
DPF Jaladi, Shadolu, Bhajetra, Bhdhwad, thamru, Kanthali &	8.0678	VI	Open Forest	1069470	8628270

Date:- 04.08.2022

Place:- Churah

  
 Divisional Forest Officer,  
 Churah Forest Division, Salooni  
**SALOONI**



**FULL TITLE OF PROJECT :- DIVERSION OF 8.0678Ha. OF FOREST LAND FOR CONSTRUCTION OF SIUL-IV SHEP 4MW TEHSIL SALOONI DISTT. CHAMBA HP.**

**CHECK LIST SERIAL NUMBER- 29**

**COST BENEFIT ANALYSIS**

**SIUL-IV SHEP (4MW)**

**TableA: Cases under which a cost –benefit analysis for forest diversion are required**

S.No.	Nature of Proposal	Applicable/ Not Applicable	Remarks
1.	All categories of proposals involving forest land upto 20 ha in plains and up to 5 ha in hills.	Not applicable	---
2.	Proposal for defense installation purposed and Soil prospecting	Not applicable	---
3.	Habitation, establishment of industrial units, tourist lodges complex and other building construction	Not Applicable	---
4.	All other proposals involving forest land more than 20 ha in plains and more than 5 ha in including hills transmission lines minor medium and major irrigation projects, hydel projects, mining activity, railway lines, location specific installations like micro-wave stations, auto repeater centers, TV towers etc.	Applicable	It is the 4MW SHEP being constructed in the hilly area of District Chamba (H. P.) for which barest minimum <b>8.0678ha</b> forest land for various components of the project has been taken. Meticulous exercise has been carried out for the minimum use of the forest land and tree to be cut which has been accepted after the site inspection by the forest officers on dated 25/07/2017 of the area and keeping the public interest intact.

**Table B -: Estimation of cost of forest diversion**

S.No.	Parameter	Remarks
1.	Ecosystem services losses due to proposed forest diversion	As per MoEF Guidelines Economic value of loss of eco-system services due to diversion of forests shall be the Net Present value (NPV) of the forest land being diverted. Also as per Gol new Guidelines No. F.No.11-438/15-FC (Pt) dated 17 <sup>th</sup> April, 2018, 50% of the normal NPV. Total Forest land Proposed for diversion is 8.0678ha. NPV Rates to open forest of class-VI @ Rs. 1069470/- ha. i.e. $8.0678 \times 1069470.00 = \text{Rs. } 8628270-00$ as per New Guidelines No. F.No.11-438/15-FC (Pt) dated 17 <sup>th</sup> April, 2018, 50% of the normal NPV. $= 8628270-00 \times 50\%$ <b>Total NPV cost is Rs. 4314135-00</b>
2	Loss of annual husbandry productivity including loss of fodder.	As per MoEF Guidelines- To be quantified and expressed in monetary terms or 10% of NPV applicable whoever is maximum. <b>The 10% of the Total NPV cost i.e. Rs. 862827/-</b>
3	Cost of human re-settlement	MoEF Guidelines States- To be quantified and expressed in monetary terms as per approved R&R Plan. There is no displacement involved due to the construction of the proposed project. Hence <b>no cost of re-settlement involved.</b>
4	Loss of public facilities and administrative infrastructure (Roads, building, schools, dispensaries, electric lines railway etc) on forest land or which would require forest land if these facilities were diverted due to the project.	As per MoEF Guidelines- To be quantified and expressed in monetary terms on actual cost basic at the time of diversion. These are cases where a cost-benefit analysis is necessary to determine when diverting the forest use in the overall public interest. The development of the project will not hamper any public facilities and administrative infrastructure. Infrastructure (Roads,



7

		building, schools, dispensaries, electric lines railwayetc) Therefore no such losses will occur.
5.	Possession value of forest land diverted.	MoEF Guidelines-30% of environmental costs (NPV) due to loss of forests or circle rate of adjoining area in the district should be added as a cost component as possession values of forest land whichever is maximum. Total Forest land Proposed for diversion is 8.0678ha. i).NPV Rates to open forest of class-VI @ Rs. 1069470/- ha. i.e. $8.0678 \times 1069470 = 8628270/-$ ii).Circle Rates to open forest of class-VI @ Rs. 6,76,000/- ha. i.e. $8.0678 \times 5,20,000 = 41,95,256/-$ As per GoI Guidelines NPV rates is higher than the circle rates of the area .Therefore - <b><u>30% of Total NPV Cost =Rs.2588481</u></b>
6.	Cost of suffering to oustees	There is no resettlement and rehabilitation is taking place due to the construction of proposed Project. <b><u>There is no displacement of peoples.</u></b>
7.	Habitat Fragmentation cost.	MoEF Guidelines- 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 a thumb rule. Total Forest land Proposed for diversion is 8.0678ha. NPV Rates to open forest of class-VI @ Rs. 1069470/- ha. i.e. $8.0678 \times 6,99,000 = \text{Rs. } 8628270-00$ As per GoI new Guidelines No. F.No.11-438/15-FC (Pt) dated 17 <sup>th</sup> April, 2018, 50% of the normal NPV. $= 8628270-00 \times 50\% = \text{Rs. } 4314135.00$ <b><u>50% of Total NPV Cost = Rs.2157067.00</u></b>
8.	Compensatory afforestation and soil & moisture conservation cost.	<b><u>Cost of Compensatory afforestation is Rs. 5608375/-</u></b>

**Table -C -: Existing guidelines for estimating benefits of forest diversion in CBA**

S. No.	Parameters	Remarks
1	Increase in productivity attributable to the specific Project	Applicable as in case of Hydel projects irrigation not an intended benefit hence the State Govt get free power in shape of Royalty. i.e. Qty of benefit -: Av. Cost of saleable net design energy @ Rs. 4.62 per unit (Note- The saleable design energy rate has been taken as per HPREC latest guide line of Himachal Pradesh Govt .)  1. Free power to state Govt for 1 <sup>st</sup> 12 years@ 6%( 0.29MU for 12 years = 13.39Lakh per annum 2. Free power to state Govt rest of 28 years @ 12% ( 0.57 MU for rest of 28 years =26.33lakh per annum Total = <b>898</b> lakh for 40 years
2	Benefit to economy due to the specific project	MoEF Guidelines- the incremental economic benefit in monetary terms due to the activities attributed to the specific project. Revenue from the sale of power i.e. 1.The annual energy benefits from the project have been estimated at about 0.03 MU for 12 years to panchayat as per state Govt guide lines i.e. 1.38lakh per annum And rest of 28 years 2.31lakh per annum Total = <b>81</b> lakh in 40years



		<p>2. Development works to be done through LADA @ 1% of project cost =<b>43Lakh.</b></p> <p>3. Adding more employment opportunity and giving boost to economic growth.</p> <p>Thus the state of H.P as well as local panchayat shall get free power as royalty in 40 years from this project.</p>												
3	No. of Population benefit due to Specific Project.	<p>During Construction: Project Engineer-1 , Civil/Electrical=3 Mechanical Engineers-2 , Trained Supervisors=5 , Other Allied staff=14</p> <p>Skilled/Unskilled Total=25 person are permanent employment in the project for 40 years and as per state Govt guide line 70% employment must be employed from local peoples.</p>												
4.	Economic benefits due to of direct and indirect employment due to the Project.	<p>MoEF Guidelines- <b>as per the Detailed Project Report.</b></p> <p>Direct Employment for a period of 2 years during construction period</p> <p>50 persons for 2 years at minimum wages @ 6,Lakh =<b>12Lakh</b></p> <p>Direct employment for a period of 40 years (post construction phase ) 12 persons 30Lakh per annum =<b>Rs. 120lakh.</b></p>												
5.	Economic benefits due to compensatory afforestation	<p>Cost to be incurred on compensatory afforestation= 3362894/-</p> <p>Benefits to be accrued during next 50 years from CA.</p> <p>No. of plant to be planted 1100 X 17 ha. = 18700 Nos.</p> <p>Expected survival% = (60%)..... = 11220 Nos.</p> <p>Cost monetized during next 50 years</p> <table><tr><th>Name of species</th><th>Survival of plants as 50%</th><th>Market high rate applied as approved by forest department</th><th>Total Cost</th></tr><tr><td>Conifer</td><td>5610</td><td>72044</td><td>404166840</td></tr><tr><td colspan="3">Total =</td><td>404166840.00</td></tr></table> <p>Benefits to derived during next 50 years = 404166840-5608375 = <b>398558465.00</b></p> <p><i>The above calculation is based on the current market rates as approved for the year 2018-19.</i></p> <p><i>Besides above benefit, intangible benefits will also be derived from above plantations.</i></p>	Name of species	Survival of plants as 50%	Market high rate applied as approved by forest department	Total Cost	Conifer	5610	72044	404166840	Total =			404166840.00
Name of species	Survival of plants as 50%	Market high rate applied as approved by forest department	Total Cost											
Conifer	5610	72044	404166840											
Total =			404166840.00											
	Total Cost benefit ratio	Total value of Table –C / Total value of Table B i.e. <b>33.807</b>												

Dated.30-08-2022

Place. Salooni

9/5

  
**D.F.O. Churah**  
**Salooni, Chamba (H.P)**

**M/s. Friends HIM Energies**

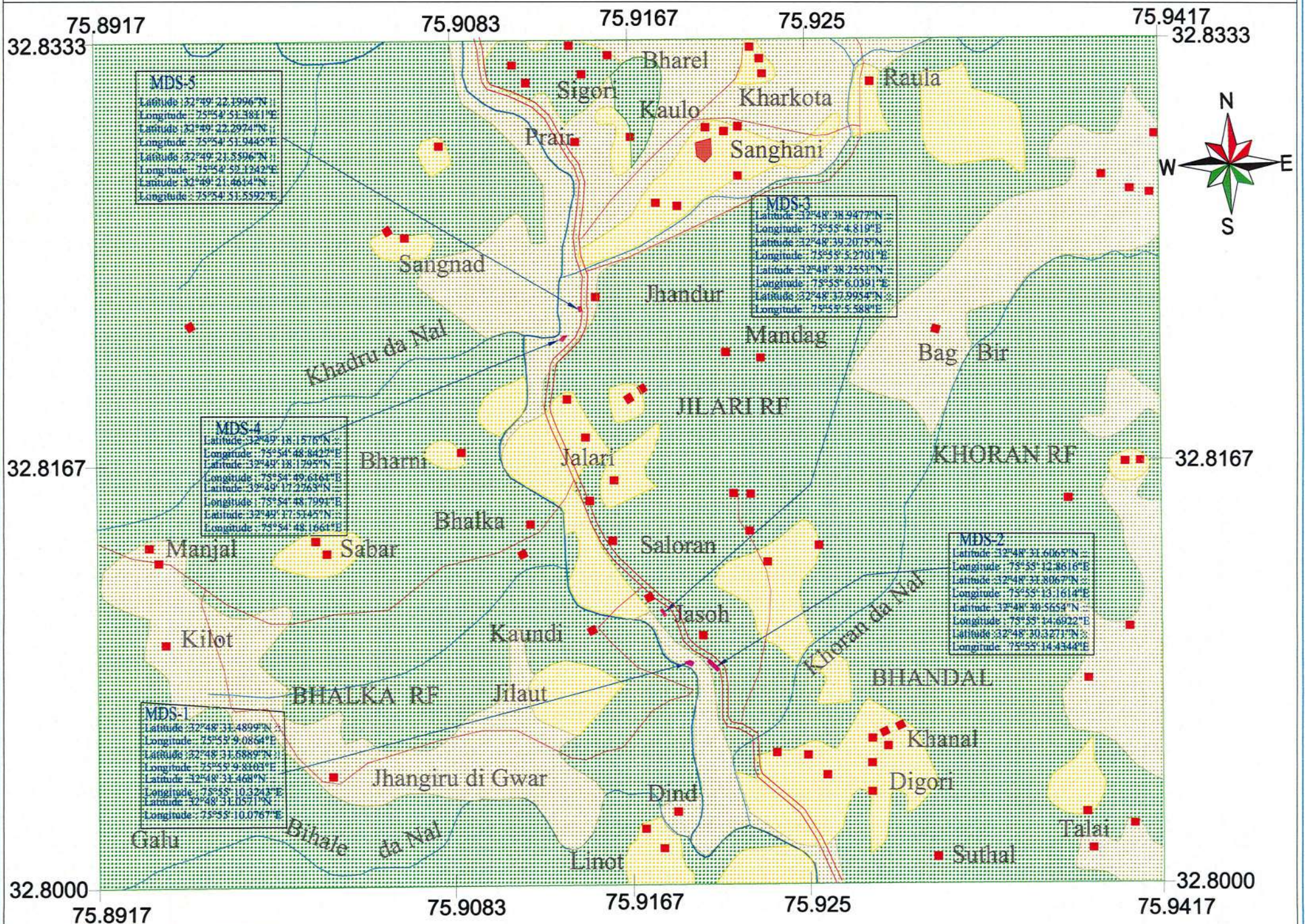
  
**Auth. Signature**



# LAND USE MAP OF MUCK DUMPING SITES SIUL-IV SMALL HYDRO ELECTRIC PROJECT (4.00 MW).

TEH.SALOONI, DISTT. CHAMBA (H.P.)

M/s Friends Him Energies



SR. NO.	Component	Index of Colour Sign
1	MUCK DUMPING SITE -1	
2	MUCK DUMPING SITE -2	
3	MUCK DUMPING SITE -3	
4	MUCK DUMPING SITE -4	
5	MUCK DUMPING SITE -5	

	Forest Land
	Grass, Scrub
	Waste Land
	Private Land
	Siul Nallah
	Road
	Footpath

2cm to 1km  
  
 SOI Toposheet Scale 1:50000  
 Sheet No.43 P/13 (I43V13)

Project Manager  
 M/s. Friends HIM Energies

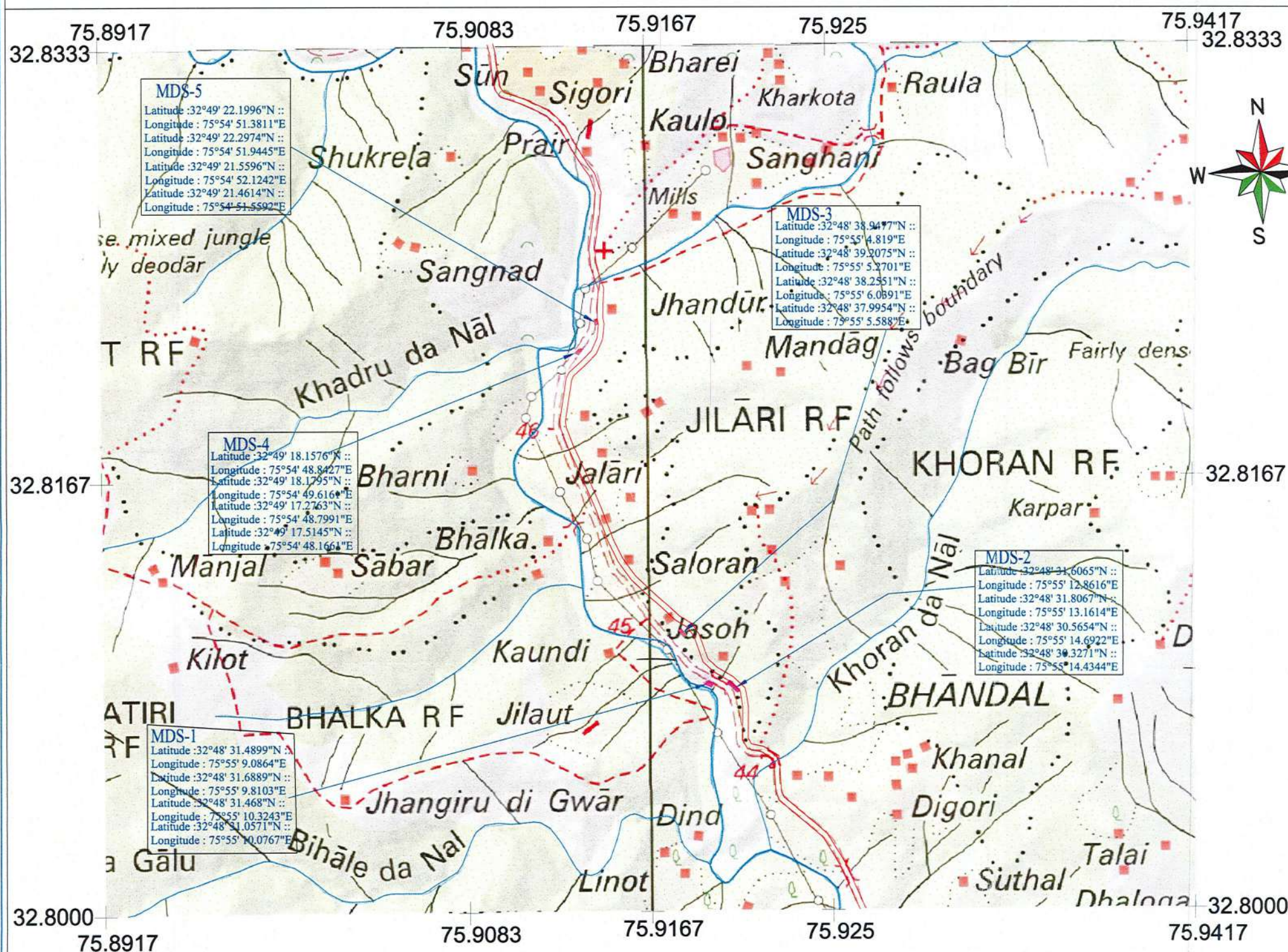
Divisional Forest Officer  
 Churah Forest Division  
 SALOONI



# DIGITAL MAP OF MUCK DUMPING SITES SIUL-IV SMALL HYDRO ELECTRIC PROJECT (4.00 MW).

TEH.SALOONI, DISTT. CHAMBA (H.P.)

M/s Friends Him Energies




SR. NO.	Component	Index of Colour Sign
1	MUCK DUMPING SITE -1	
2	MUCK DUMPING SITE -2	
3	MUCK DUMPING SITE -3	
4	MUCK DUMPING SITE -4	
5	MUCK DUMPING SITE -5	

2cm to 1km



SOI Toposheet Scale 1:50000  
Sheet No.43 P/13 (I43V13)

  
Project Manager  
M/s. Friends HIM Energies

  
District Forest Officer  
Chamba Forest Division  
SALOONI