

मक डिस्पोजल प्लान

तांकुल 4X3 मेगावाट लघु जल विद्युत परियोजना से उत्सर्जित मलवा निस्तारण
हेतु प्रस्ताव (जिला पिथौरागढ़)

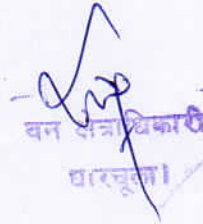
वित्त अधिकारी
धारवाड़ा

R Singh
अधिसूत्री अभियन्ता
यूजेवीएन लिमिटेड
मुनस्यारी (पिथौरागढ़)

Name of Project : Tankul (4x3 MW) Small Hydro Project, Dharchula, District - Pithoragarh

Quantity of material to be excavated

S.No.	Description of work	Quantity	Unit
1	Material excavated from road to weir site	12250	Cum
2	Material excavated from Diversion weir and intake structure	3193.9	Cum
3	Material excavated from Power duct & Vortex Tube	1186.71	Cum
4	Material excavated from Desilting tank & Sedimentation Chamber	30819.08	Cum
5	Material excavated from Power Channel and tunnel	44187.7	Cum
6	Material excavated from Surge Tank	1743.5	Cum
7	Material excavated from Penstock	6608.49	Cum
8	Material excavated from Switchyard, Power House and TRC	38820.25	Cum
9	Material excavated from Road to Power House	12250	Cum
	Total quantity of material to be excavated (A)	151059.63	


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मुनस्यारी (पिथौरागढ़)

Name of Project :- Tankul (4X3 MW) Small Hydro Project, Dharchula, District Pithoragarh

Disposal and use of excavated material

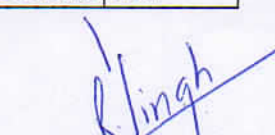
S.N.	Description of work	Quantity	Unit
1	Road Protection work of wier site (100% quantity of excavation will be used in walls & soling)	12250	cum
2	Road Protection work of wier and Intake structure		
i	H.P. stone filling	606.7	Cum
ii	C.C. M15 (80% Quantity will be used from excavated material)	435.46	Cum
iii	C.C. M-20 (80% Quantity will be used from excavated material)	48.26	Cum
iv	R.C.C. M-25 (80% Quantity will be used from excavated material)	1658.69	Cum
v	R.R. Stone massonary 1:6	315	Cum
vi	R.R. dry Stone massonary	168	Cum
vii	Boulders in wrie crates	256	Cum
viii	River Protection works	5000	Cum
3	Power Duct and Vortex tube chamber		
i	H.P. stone filling	55.13	Cum
ii	C.C. M15 (80% Quantity will be used from excavated material)	82.27	Cum
iii	C.C. M-20 (80% Quantity will be used from excavated material)	0.8	Cum
iv	R.C.C. M-25 (80% Quantity will be used from excavated material)	121.49	Cum
v	R.R. Stone massonary 1:6	114.98	Cum
vi	R.R. dry Stone massonary	92.93	Cum
vii	Boulders in wrie crates	30	Cum
4	Desiting tank & Sedimentation Chamber		
i	H.P. stone filling	552.3	Cum
ii	C.C. M15 (80% Quantity will be used from excavated material)	801.22	Cum
iii	R.C.C. M-25 (80% Quantity will be used from excavated material)	1906.18	Cum
iv	R.R. Stone massonary 1:5	554.4	Cum
v	R.R. dry Stone massonary	433.13	Cum
vi	Boulders in wrie crates	330	Cum
vii	River Protection works	15000	Cum
viii	Filling works	10000	Cum
5	Power Channel and tunnel		
i	C.C. M15 (80% Quantity will be used from excavated material)	973.04	Cum
ii	C.C. M-20 (80% Quantity will be used from excavated material)	8	Cum
iii	R.C.C. M-25 (80% Quantity will be used from excavated material)	1296.98	Cum
iv	R.R. Stone massonary 1:6	1047.38	Cum
v	R.R. dry Stone massonary	771.75	Cum
vi	Boulders in wrie crates	240	Cum
vii	River Protection works	20000	Cum
viii	filling works along Power channel	20000	Cum
6	Surge tank		
i	H.P. stone filling	90	Cum
ii	C.C. M15 (80% Quantity will be used from excavated material)	35.42	Cum
iii	C.C. M-20 (80% Quantity will be used from excavated material)	8	Cum
iv	R.C.C. M-25 (80% Quantity will be used from excavated material)	145.3	Cum
v	R.R. Stone massonary 1:6	146.48	Cum
vi	R.R. dry Stone massonary	113.4	Cum

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मनस्यारी (पिथौरागढ़)

vii	Boulders in wrie crates	48	Cum
viii	filling works & other Protection works	1000	Cum
7	Penstock		
i	H.P. stone filling	273.75	Cum
ii	C.C. M15 (80% Quantity will be used from excavated material)	436.09	Cum
iii	R.C.C. M-25 (80% Quantity will be used from excavated material)	1227.94	Cum
iv	R.R. Stone massonary 1:6	193.73	Cum
v	R.R. dry Stone massonary	144.11	Cum
vi	Boulders in wrie crates	150	Cum
vii	Misc. Protection works	4000	Cum
8	Power House, Switchyard and TRC		
i	H.P. stone filling	1950	Cum
ii	C.C. M15 (80% Quantity will be used from excavated material)	733.17	Cum
iii	C.C. M-20 (80% Quantity will be used from excavated material)	20	Cum
iv	R.C.C. M-25 (80% Quantity will be used from excavated material)	1771.27	Cum
v	R.C.C. M-30 (80% Quantity will be used from excavated material)	20	Cum
vi	R.R. Stone massonary 1:6	507.94	Cum
vii	R.R. dry Stone massonary	375.64	Cum
viii	R.C.R 1:4	75	Cum
ix	River Protection works	28000	Cum
9	Road Protection work of Power House site	12250	Cum
	Total (B)	148865.33	Cum
	Materail to be dumped = (A)-(B)	2194.3	Cum
	Swell factor 16%	351.088	Cum
	Total quantity of material to be dumped in dumping area	2545.388	Cum


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 अधीक्षक अभियन्ता
 यूजेवीएन लिमिटेड
 मुनस्यारी (पिथौरागढ़)

Name of Project: - Tankul (4x3 MW) Small Hydro Project, Dharchula, District-Pithoragarh

<u>Carrying Capacity of Muck Dumping Yard</u>							
Detail of Measurement							
S.No.	Items of work	No. of blocks	Length	Width	Height	Qty	Unit
1.	Muck disposal site near weir and D-tank area.	3	20	10	5.5	1100	m ³
2.	Muck disposal site at Power Channel area.	3	20	10	5.5	1100	m ³
3.	Muck disposal near Power House	3	20	20	5.5	2200	m ³
Total						4400	m³


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धरकुला


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मुनस्यारी (पिथौरागढ़)

Name of Project : Tankul (4x3 MW) Small Hydro Project, Dharchula, District - Pithoragarh

Detail of Measurement							
S.No.	Items of Work	No.	Length	Width	Height	Qty	Unit
1	Excavation in foundation for retaining walls in all types of soil and rocks including lead, lift and disposal of surplus material as per direction of Engineer in Charge. (As per PWD Uttarakhand Specifications).						
	i Muck disposal site near weir and D-tank area.	1	20	1.5	0.5	15	m ³
		2	10	1.5	0.5	15	m ³
	ii Muck disposal site at Power Channel area.	1	20	1.5	0.5	15	m ³
		2	10	1.5	0.5	15	m ³
	iii Muck disposal near Power House site.	1	20	1.5	0.5	15	m ³
		2	20	1.5	0.5	30	m ³
Total						105	m³
2	Providing and laying of wire crates 3.0 x 1.50 x 1.50 in size with a 10 guage BWG GI wire confirming to IS 280 in 150 mm x 150 mm mesh laid with stone boulders. As per directions of Engineer in Charge.						
	i Muck disposal site near weir and D-tank area.	1	20	1.5	6	180	m ³
		2	10	1.5	6	180	m ³
	ii Muck disposal site at Power Channel area.	1	20	1.5	6	180	m ³
		2	10	1.5	6	180	m ³
	iii Muck disposal near Power House site.	1	20	1.5	6	180	m ³
		2	20	1.5	6	360	m ³
Total						1260	m³


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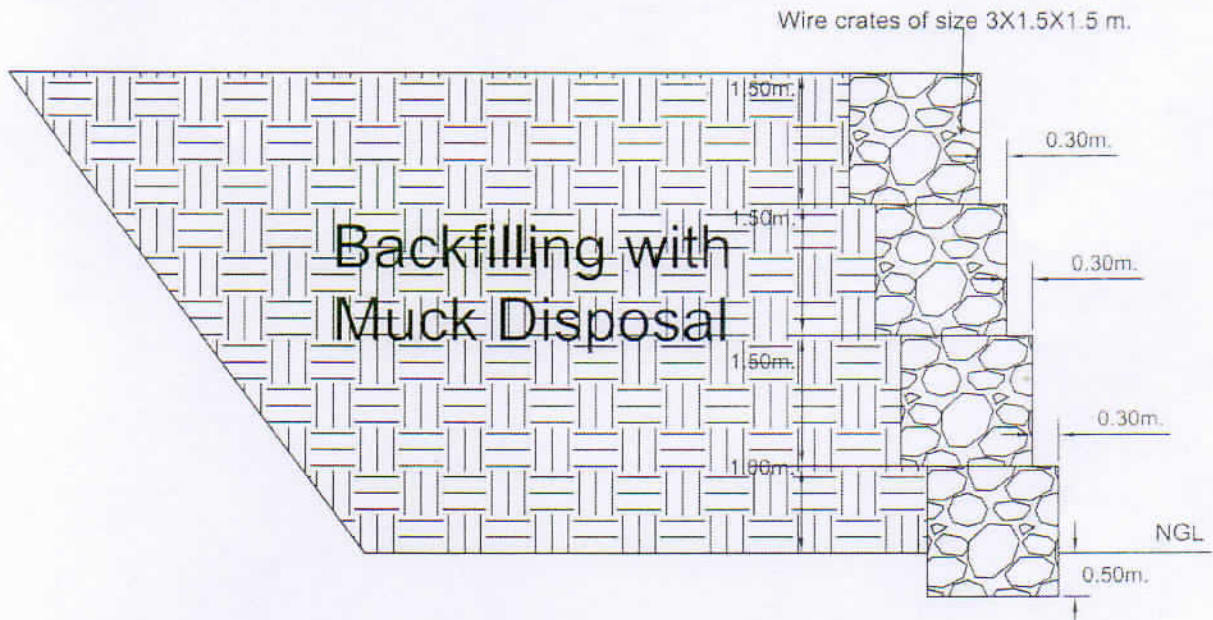

 अधिशासी अभियन्ता
 यूजेवीएन लिमिटेड
 मुनस्यारी (पिथौरागढ़)

Name of Project : Tankul (4x3 MW) Small Hydro Project, Dharchula, District - Pithoragarh

Bill of Quantity					
S.No.	Items of Work	Qty	Unit	Rate in Rs.	Amount in Rs.
1	Excavation in foundation for retaining walls in all types of soil and rocks including lead, lift and disposal of surplus material as per direction of Engineer in Charge. (As per PWD Uttarakhand Specifications).	105	m ³	308.4	32382
2	Providing and laying of wire crates 3.0 x 1.50 x 1.50 in size with a 10 guage BWG GI wire confirming to IS 280 in 150 mm x 150 mm mesh laid with stone boulders. As per directions of Engineer in Charge.	1260	m ³	1464.1	1844766
3	Plantation of grass	L.S.			300000
Sum					2177148
4	Add 2% Surcharge				43542.96
Total					2220691
(Rs. Twenty Two Lakh Twenty Thousand Six Hundred Ninety One Only)					

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मुनस्यारी (पिथौरागढ़)

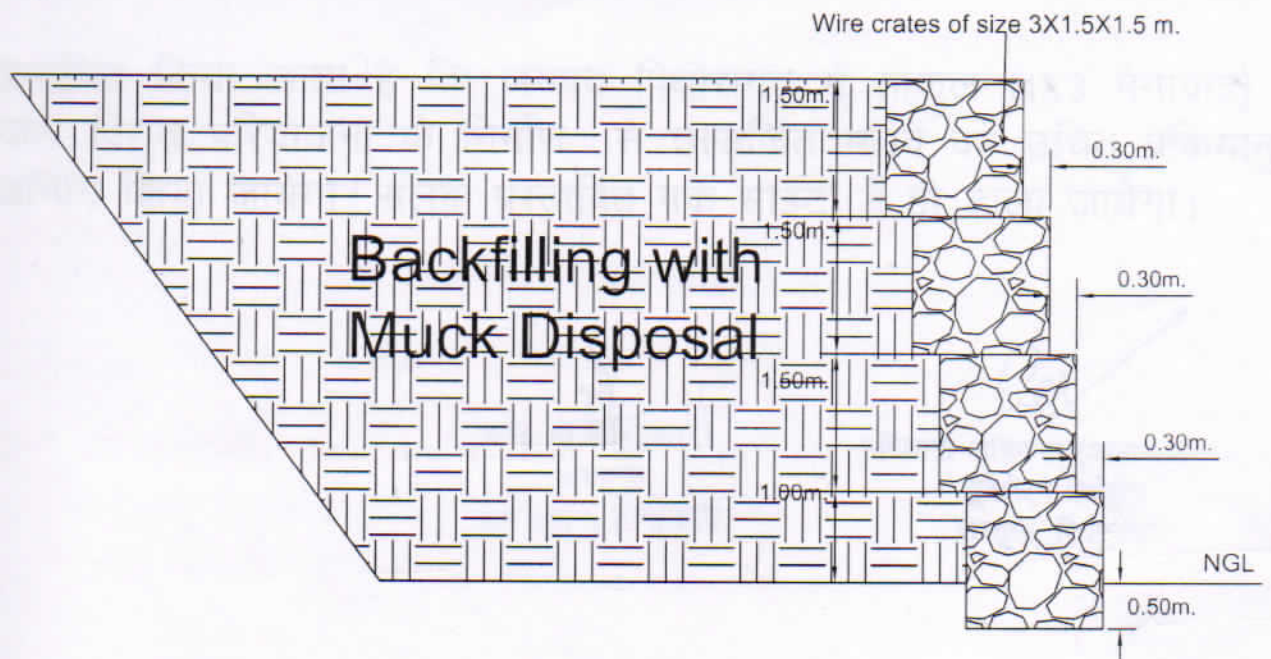


Detail of typical X-section of wire crate wall for
muck disposal site at Tankul SHP (4X3 MW)

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धारचूला
वन विभाग, विशौखनद

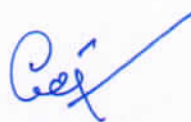
महाराष्ट्र वन विभाग
विशेषाधिकार वन प्रणाली

अधिकांश अभियन्ता (जा. अभियन्ता)
यूजेवीएन लिमिटेड
धारचूला, पिथौरागढ़



Detail of typical X-section of wire crate wall for muck disposal site at Tankul SHP (4X3 MW)


 वन क्षेत्राधिकारी
 धारचूला
 वन प्रभाग, पिथौरागढ़
 प्रजातीय वन क्षेत्राधिकारी
 पिथौरागढ़ वन प्रभाग


 अधिशासी अभियन्ता (जागतिक शांतिविप)
 यूजेवीएन लिमिटेड
 धारचूला, पिथौरागढ़

मक डम्पिंग प्रमाण-पत्र

प्रमाणित किया जाता है कि जनपद पिथौरागढ़ में तांकुल (4x3 मेगावाट) लघु जल विद्युत परियोजना के निर्माण से उत्सर्जित मलवे को उचित प्रक्रियानुसार डम्पिंग किया जायेगा। मलवा प्रस्तावित मक साइटों में ही डाला जायेगा।


वन क्षेत्राधिकारी
धारचूला
वन प्रभाग, पिथौरागढ़


अधिकासी अभियन्ता (जनपद-पिथौरागढ़)
यूजेवीएन लिमिटेड
धारचूला, पिथौरागढ़



परियोजना का नाम
विद्युत परियोजना

Assistant Engineer
Small Hydro Project
UJVNL Ltd.
Division- Dharchula
District- Pithoragarh

वन क्षेत्राधिकारी
धारचूला
वन प्रभाग, पिथौरागढ़

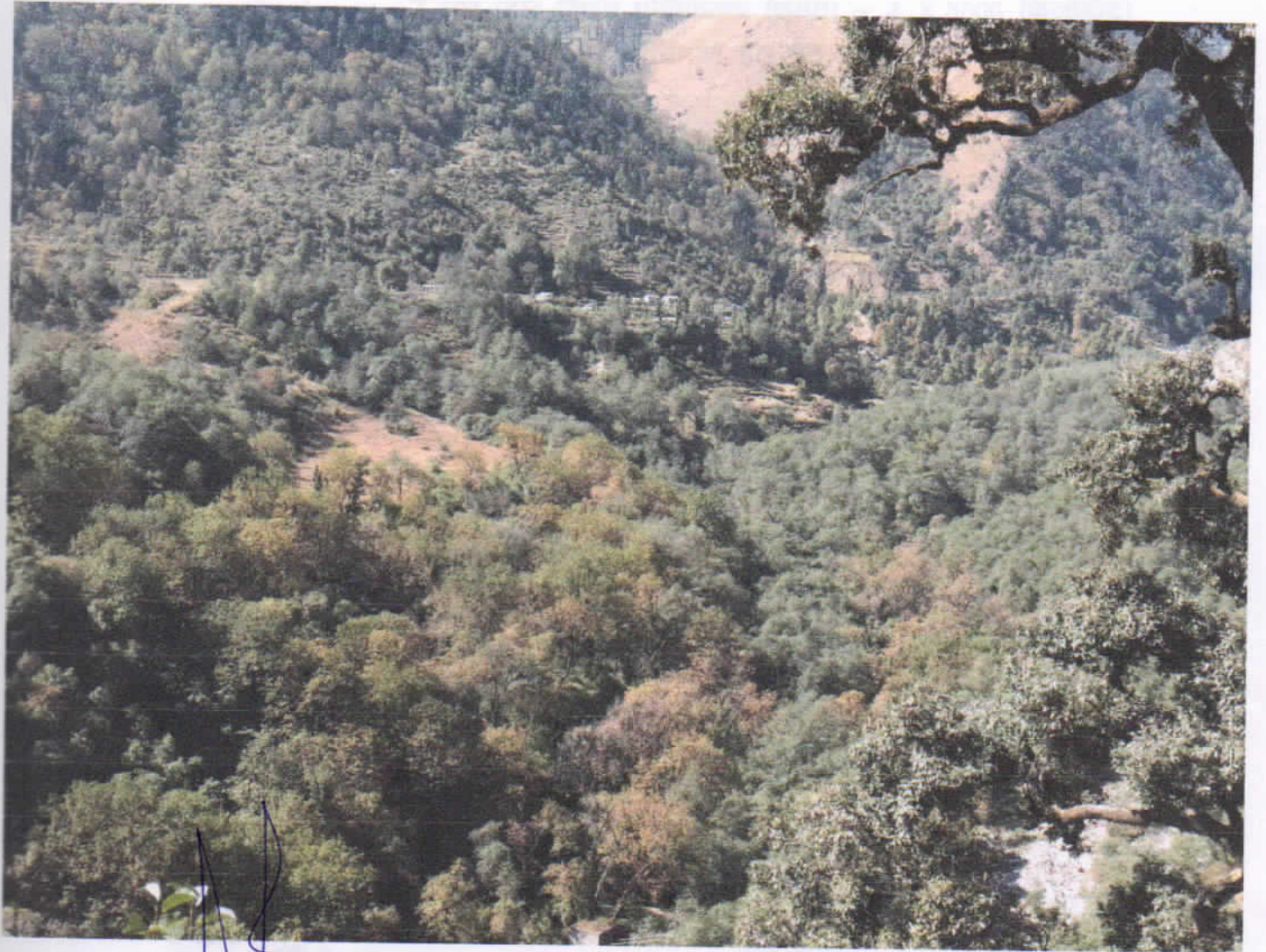


परियोजना का नाम
विद्युत परियोजना

वन क्षेत्राधिकारी
धारचूला
वन प्रभाग, पिथौरागढ़

परियोजना का नाम नद सील धारचूला अन्तर्गत जनपद पिथौरागढ़ में प्रस्तावित ताकुंदा
Small Hydro Project विद्युत परियोजना (4x3000 किलोवॉट)-10.236 है। भूमि प्रस्ताव
UJVNL Ltd.
Division- Dharchula
District- Pithoragarh
मलवा निस्तारण फोटोग्राफ

जनपद पिथौरागढ़ में तहसील धारचूला अन्तर्गत प्रस्तावित गुरुकुल लक्ष्म
जल विद्युत परियोजना (क्षमता - 4X3 000 किलोवाट) 10.236 हे० के नव
निर्माण हेतु वन भूमि हस्तान्तरण प्रस्ताव ।



राष्ट्रीय वन अधिकारी
पिथौरागढ़ वन प्रभाग

मलवा निस्तारण प्रस्ताव (जेरोडाफ)

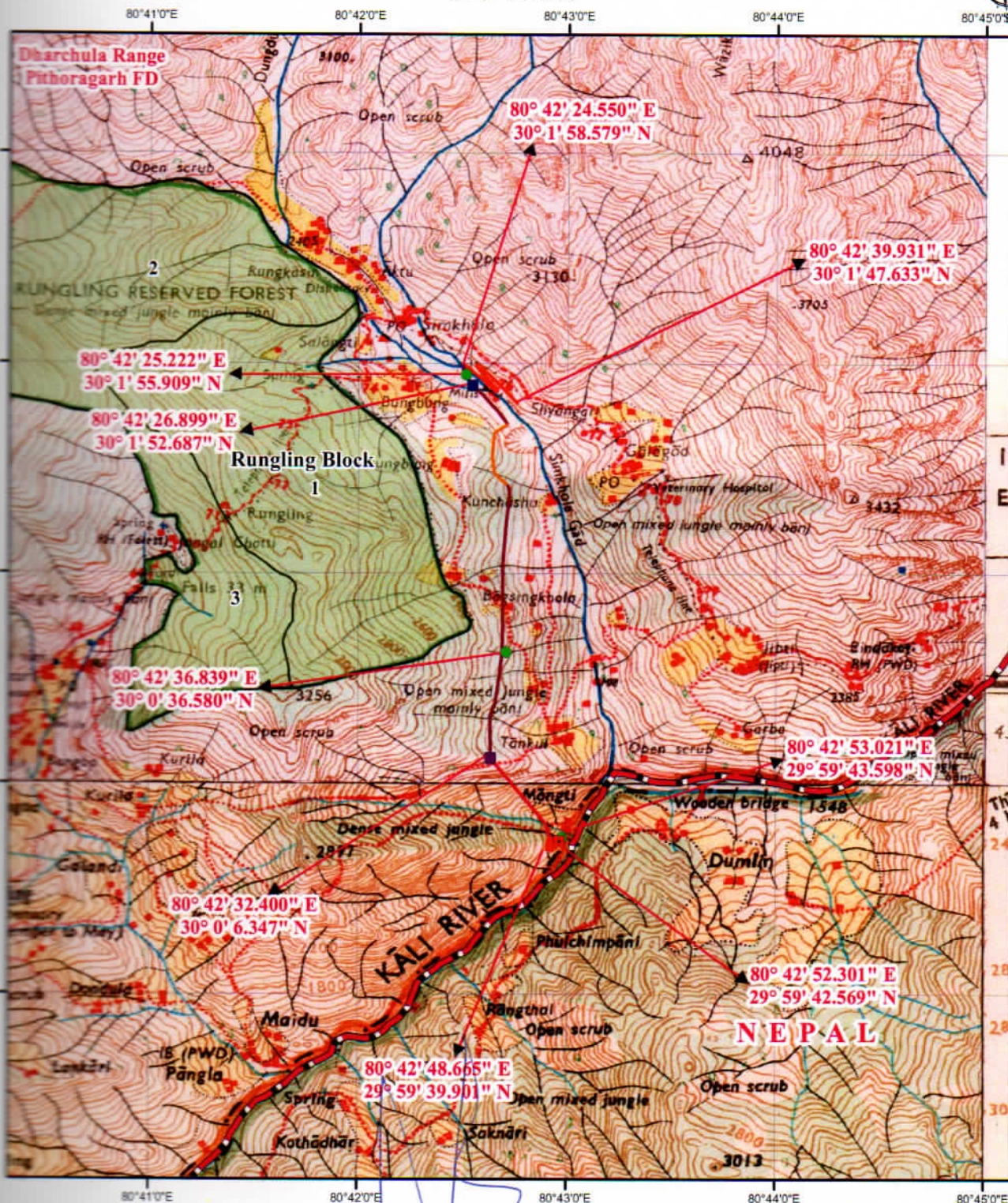
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धारचूला
वन प्रभाग, पिथौरागढ़

Sh. H. C.
Assistant Engineer
Small Hydro Project
UJVN Ltd.
Division- Dharchula
Distt - Pithoragarh

DIGITAL MAP OF 4x3000 K.W. TANKUL SMALL HYDRO POWER PROJECT DHARCHULA DISTRICT-PITHORAGARH

0 0.5 1 1.5 Km

Scale - 1:50,000



Legend

- Reserve Forest
- Reserve Forest Boundary
- Forest Division Boundary
- Forest Range Boundary

Legend

- D Tank
- Muck Disposal
- Power House
- Surge Shaft
- Penstock
- Power Channel
- Power Duct
- Road to P.H.
- Road to Weir
- Tunnel
- Weir

वन क्षेत्राधिकारी
धार्चुला
वन प्रभाग, पिथौरागढ़

उप प्रशासक वन विभाग
जिलाधिकारी
डोहाट
पिथौरागढ़

Asistant Engineer
Small Hydro Project
UJVNL Ltd.
Division- Dharchula
Distt - Pithoragarh

अभिषेक (जानक-राजदिया)
यूजेवीएन लिमिटेड
धार्चुला