

Wildlife Management Plan And Soil Moisture Conservation Plan

FOR

*Construction of Banjagarh-Ruisaan Motor Road
Under Badrinath Forest Division Gopeshwar*

Total area of the project –7.95hac

Total Project Cost- 290.56 lac.

Amount of the WLMP 2% - Rs. ^{5.811}~~5.81~~ lakh.

Amount of the SMC 0.50% - Rs. ^{1.453}~~1.45~~ lakh.



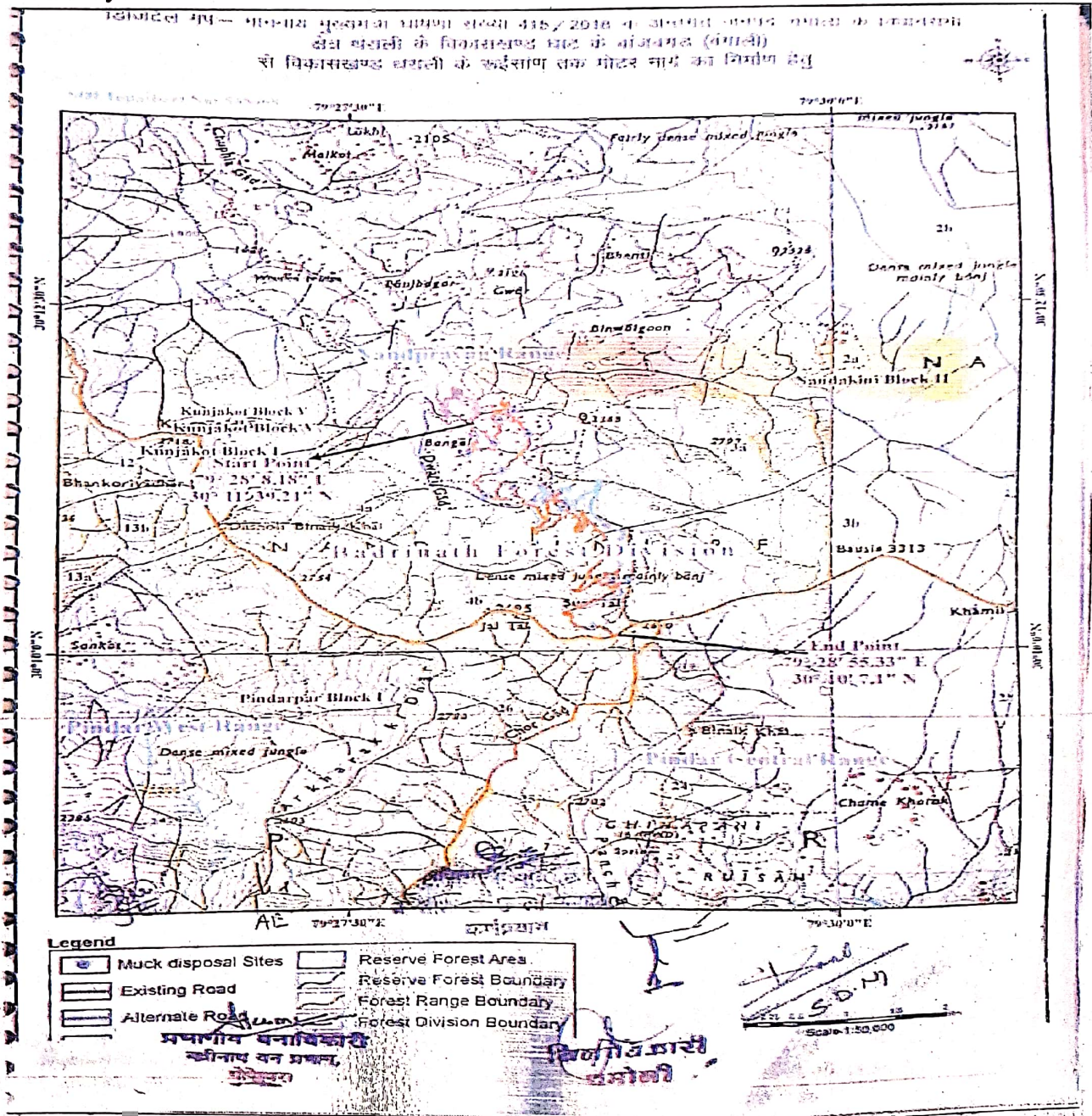
INDEX

S.No	Description of work	Page No
1	Wildlife Mitigation Plan for <i>Banbagarh-Ruisaan Motor Road</i>	
	1.0 Project Background	01
	1.1 Justification & benefit of the project	02
	1.2 Details of the proposed Motor Road	03
2	Proposed Wildlife Mitigation measures	
	2.1 Likely impact of project on Wildlife	04
3	WILDLIFE MITIGATION PLAN	
	3.1 Proposed Mitigation Measures & Soil and Water Conservation Plan	05
	3.2 Estimates	6- 8 17

SECTION -I: INTRODUCTION

1- PROJECT BACKGROUND :-

The proposed road is *Banjbagard-Ruisian Motor road* under Karanprayag Block of Chamoli District. The total distance of the road is length 11.625km. Administrative and financial approval of this project has been received vide Govt. letter no 5861/(1)/III (2)/18-05(MLA)/2017, dated 04-12-2018 amounting to Rs 290.56 lakh only.



1.2 – **JUSTIFICATION & BENEFIT OF THE PROJECT :-** The two block of district chamoli block Ghat and Block Tharali are adjucent. but the people have two walk about 65 km long distance through Karanparyag. All this is only due to non-existence of a direct linked road. The residents of Ghat and Tharali areas are directly connected to each other due to various reason, like kinship, trade, fair and other cultural activities. Due to the non-existent of any road connectivity the lives of the villagers are in constant danger as there are no medical services which could be provided to them even in cases of emergency such as maternity.

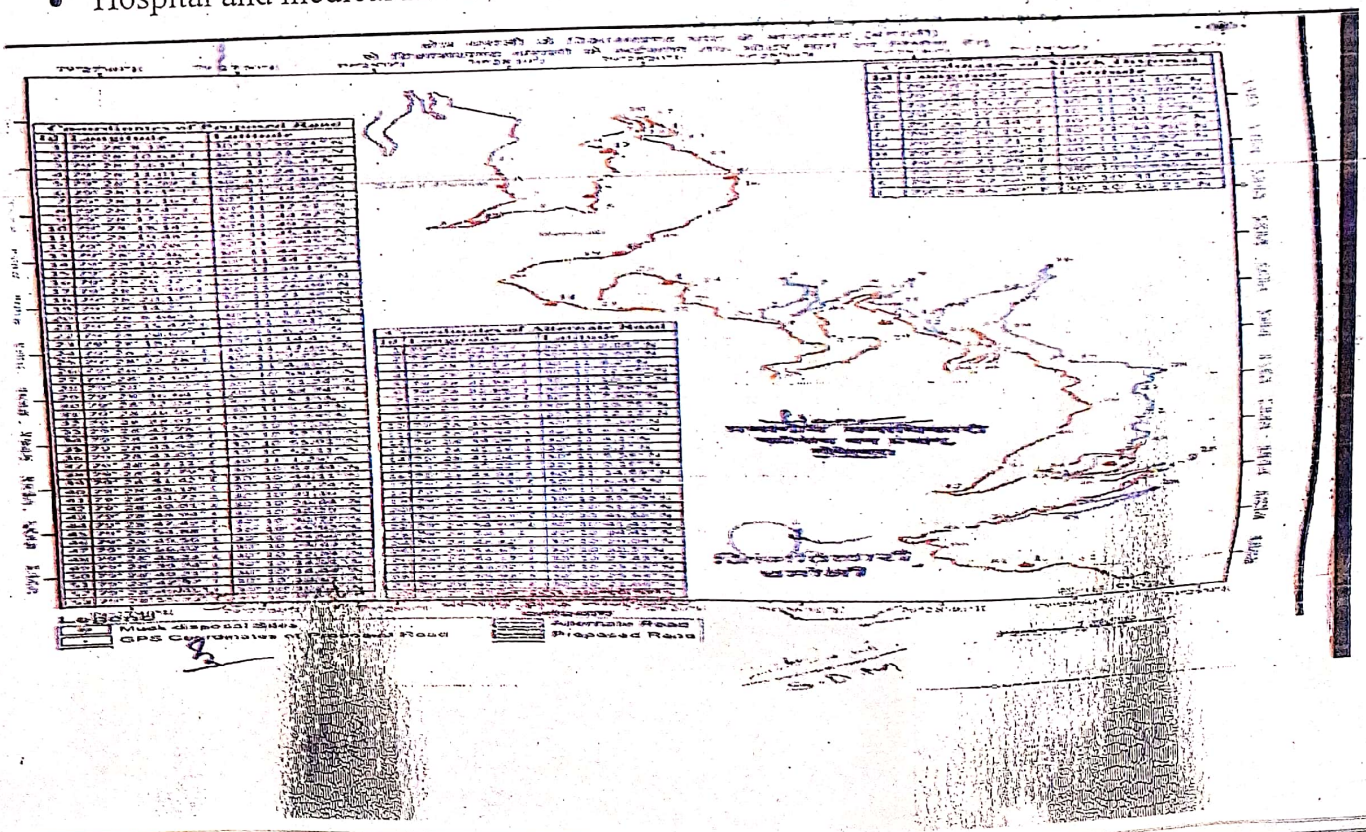
Further, due to non-existent of the road connectivity the area remains backward in all respects, the main occupation of the villagers residing in this village is animal husbandry and agriculture.

Benefit from the project: -

With the construction of this road the population of 1328 villagers of Kewar Tall and Kewar Mall village will get convenience in transportation.

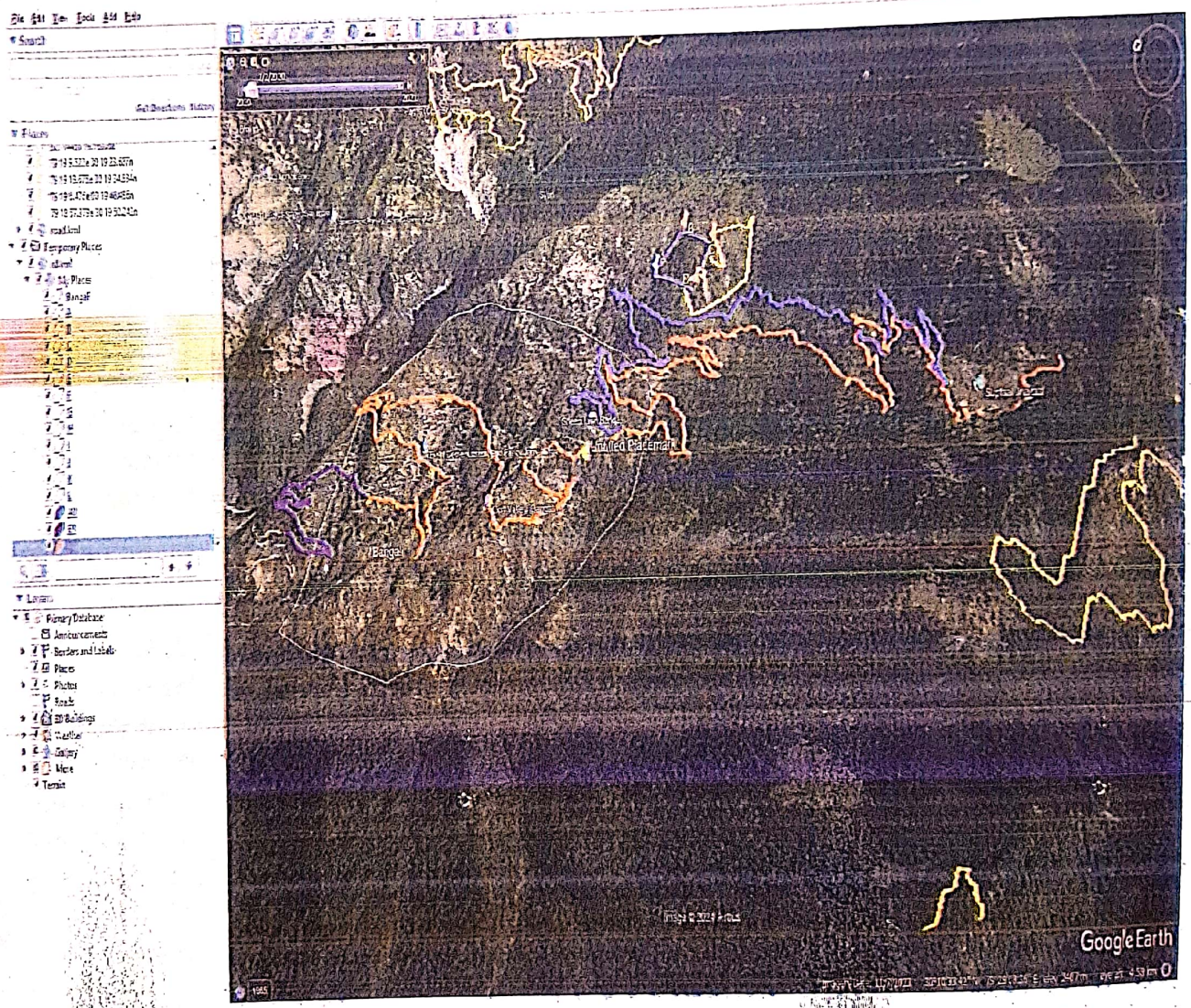
Due to the construction of road following benefits are provided to local people and Government too.

- Enhance the social and economical development of this area.
- Migration of pepole from the bvillage shall be minimized .
- Due to easily accessibility forest can be protected From fire during summer season to save vegetation plants and animals.
- The villages pepole will travel large distance for their Jobs.
- Local People will find jobs near their village.
- More women will get employment and will improve their economic situation.
- Educational development in this area.
- Hospital and medical facilities.



1.3:- DETAILS OF THE PROPOSED MOTOR ROAD :-

The Construction of a Motor Road Banjagarh(Bangali) in Block Ghat to Ruisaan in Block Tharali Motor Road in Tharali block total length of the motor road is 11.625 km in Reserve Forest land and Civil Land width of 7.00 and Nap land under width of motor road is 9.00 or total area of project is 7.95 hac for road construction in Reserve Forest land 4.8825ha, Civil Land 1.4175ha and 2.3625ha NaapLand. According to the UA apart from this land other alternative land is available but the project can be constructed only on the selected land. The total number of trees affected by this motor road is 357.



SECTION-II: Proposed Wildlife Mitigation Measures

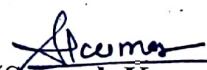
Likely Impact of the Project on Protected Area (PA)

As the proposed forest land for diversion is not situated in Protected Forest of Badrinath Forest Division and proposed land is Reserve forest land, Civil forest land and Naap Land of Bangali Village. Due to the areal distance of the above proposed motor road from Nanda Devi National Park aerial distance is 29.60 km. The overall impact of the Reserve Forest land and Civil forest land is assessed remarkable which can be addressed through proper mitigation measures as recommended below.

General Mitigation Measures for Protection of Wildlife

In addition to the aforementioned specific measures for animals and birds, the following mitigation measures shall be adopted by the User Agency during execution of the project for protection of forest and wildlife:

- Before start of work awareness campaign will be taken up by the User Agency in association with Forest Dept. To create maximum awareness among the construction workers regarding safeguard of forest and wildlife.
- User agency shall comply with all conditions stipulated in forest clearance under Forest (Conservation) Act 1980.
- Land shall not be used for any other purpose other than specified in the proposal.
- All Rules, Acts and regulation of the concerned department for establishing and running of the project shall be complied by user agency.
- The instruction/orders passed by the State Government/Central Government and the directions passed by Hon'ble Court/Supreme Court/ NGT and directions/ guidelines issued by the CWLW of Uttarakhand from time to time regarding such project shall be complied with.
- User agency will ensure that the project personal engaged in the project shall observe the provisions of the Indian Forest Act 1927, Wildlife (Protection) Act 1972 & Rules made thereafter.
- Tree felling will be minimized along the line corridor and only those trees which are unavoidable for road construction will be felled under the supervision of Forest Department.
- Construction waste materials will not be thrown inside the Forest Area.
- No labour camp shall be established in the forest area or other sensitive areas.
- Use of fuel wood for cooking purpose will not be allowed. The user agency will manage alternative energy for their labourers.
- There will be no permission to carry ammunition and explosive inside the forest area.


 (Sarvesh Kumar)
 Divisional Forest Officer
 Badrinath Forest Division.

Proposed Mitigation Measures:

As per the Guide line dated 16.01.2023, the user agency shall pay 2% of project cost for wildlife management and 0.50% of project cost for Soil and Water conservation works. As the project cost of this proposed project is only 290.56lakh, which 2% of project cost for wildlife management come only Rs. 5.811 lakh and 0.50% Soil Water Conservation works Rs. 1.453 lakh. Hence, following Specific and General Mitigation measures shall be adopted by User Agency during execution of the project for protection of forest and wildlife.

WILDLIFE MITIGATION PLAN

To mitigate the likely impact of project on wildlife, following Wildlife Mitigation Plan are proposed-

क्रम सं.	प्रस्तावित कार्य का विवरण	धनराशि (रुपये में)	अभ्युक्ति
1.	चारापत्ती/जंगली फलदार पौधरोपण योजना	417124.37	
1-	काटेदार एवं झाड़ीदार पौध रोपण योजना	0.00	-
2-	Bio Fencing	123050.44	Copy of estimate attached below.
3-	Strobe Light	18600.00	-
4-	Aniders	25000.00	
	Total	583774.81	
	Say in lacs	5.811	

Soil and Water Conservation Plan:-

क्रम सं.	प्रस्तावित कार्य का विवरण	धनराशि (रुपये में)	अभ्युक्ति
Soil Moisture Conservation Plan (SMC Work) 0.5%			
1	Construction of Chal Khal	44127.49	Copy of estimate attached below.
2-	Construction of Wire Crate	101416.74	
	Total	145544.23	
	Say in Lacs	1.453	

प्रमुख वन संरक्षक (वन्य जीव)
मुख्य वन्य जीव प्रतिपालक
उत्तराखण्ड

वन संरक्षक
गढ़वाल वृत्त उत्तराखण्ड पौड़ी

(Sarvesh Kumar)
Divisional Forest Officer,
Badrinath Forest Division, Gopeshwar

Summary Of Estimated Cost

S.No.	ITEM	AMOUNT (in lacs)
A	Wildlife Management Plan (2.00 %)	5.811 ✓
B	Soil Moisture Conservation Plan (SMC Work) (0.50 %)	1.453 ✓
	Total	7.264 ✓

Checked For Rs 7.264 Lacs
D/MAN
Forest

Sumo
प्रभागीय वनाधिकारी
बद्रीनाथ वन प्रभाग,
गोपेखरा

Summary Of Wildlife Management Plan

S.No.	ITEM	UNIT	SOR / DSR	QTY	RATE	AMOUNT
A	Wildlife Management Plan (2.00 %)					
1	चारापत्ती / जंगली फलदार पौधरोपण योजना	ha	Departmental	1.00	Annexure	417124.37
2	कांटेदार एवं झाडीदार पौधरोपण योजना	ha	Departmental	0.00	Annexure	0.00
3	Bio Fencing	km	Departmental	0.250	Annexure	123050.44
4	Strobe Light	no	MR	3.00	6200.00	18600.00
5	ANIDERS	no	MR	1.00	25000.00	25000.00
Total						583774.81
say in lacs						5.811

Checked For 5.811 Lacs
Ravi
Roxal

Sum
प्रभागीय वनाधिकारी
बद्रीनाथ वन प्रभाग,
गोपेश्वरा

चारापत्ती/जंगली फलदार पौधरोपण योजना

1- परियोजना का नाम - चारापत्ती/जंगली फलदार पौधरोपण कार्य।

2- वृक्षारोपण स्थल का नाम - रिक्त पड़े स्थानों पर।
जी०पी०एस० कोडिनेट-

3- परियोजना का क्षेत्रफल है० में 1.0000 ha

4- रोपित किये जाने वाले पौधों की कुल संख्या 1.0000 x 1100 1100 No.

5- रोपित की जाने वाली प्रजातियां - तिगला, दाडिम, कौफल, बेदू, आवला, मेहल आदि।

क्र.सं.	कार्य विवरण	मात्रा	इकाई	दर		घनराशि (रु० में)
				5	6	
1	2	3	4	5	6	7
प्रथम वर्ष (अग्रिम मृदा कार्य) :-						
1	साइट स्पेसिफिक प्लान (सर्वे डिमार्केशन, के०एम०एल० फाईल तैयार करना, रूट स्टॉक की गणना कार्य, मृदा परीक्षण कार्य)	1.0000	ha	1453.96	ha	1453.96
2	क्षेत्र की सफाई (साधारण झाड़ियाँ)	1.0000	ha	2481.43	ha	2481.43
3	दीवाल बन्दी कार्य/फेंसिंग (150 र०मी० प्रति है०) (1 x 0.45 x 1.20मी०)	1.0000	ha	78554.61	ha	78554.61
4	पौध की कीमत प्रथम वर्ष (20 प्रतिशत क्षतिपूरक सहित) 1320 पौध	1320	no	24.71	no	32617.20
5	गढ़ा खुदान कार्य (0.30 x 0.30 x 0.45)meter size	1100	no	16.23	no	17853.00
6	कन्दूर नाली का सीमांकन एवं खोदना व ड्रेसिंग (3.00x0.45 x 0.30)meter size 300 per ha.	1.0000	ha	40719.00	ha	40719.00
7	निरीक्षण बटिया	1.0000	ha	1043.39	ha	1043.39
उप योग						174722.59
प्रथम वर्ष का योग						3494.45
8	पौधालय विकास एवं अनुरक्षण कार्य-2 प्रतिशत					873.61
9	गुल्यांकन एवं अभिलेखीकरण-0.50 प्रतिशत					873.61
10	श्रम कल्याण कार्य-0.50 प्रतिशत					1747.23
11	वृक्षारोपण क्षेत्र की निगरानी एवं निरीक्षण हेतु वाहन किराया, रख-रखाव, ईंधन व अन्य पर व्यय-1 प्रतिशत					1747.23
12	कार्यालय व्यय स्टेशनरी, हार्डवेयर/सॉफ्टवेयर-1 प्रतिशत					1747.23
13	अन्य आकस्मिक व्यय- 1 प्रतिशत					10483.36
उप योग						185205.95
द्वितीय वर्ष (वृक्षारोपण कार्य) :-						
1	गड़डा भरान	1100	no	2.95	no	3245.00
2	कन्दूर नालियों में ह्यूमश, कीटनाशक डालना व बीज बोना	300.00	Rm	2.95	Rm	885.00
3	पौध की कीमत (20 प्रतिशत क्षति पूरक सहित) 1320 पौध	1320	no	6.54	no	8632.80
4	पौध ढुलान					0.00
	वाहन द्वारा 50 किमी० दूरी से लोडिंग व अनलोडिंग सहित	1100	no	11.92	no	13112.00
	सिरबोझ ढुलान 3 किमी०	1100	no	10.35	no	11385.00
5	पौध रोपण	1100	no	5.90	no	6490.00
6	निराई गुड़ाई प्रथम बार	1100	no	4.06	no	4466.00
7	निराई गुड़ाई द्वितीय बार	1100	no	3.54	no	3894.00
8	खाद/रसायन	1100	no	0.46	no	506.00
9	देख-रेख व रख-रखाव रोपण वर्ष में 8 माह	1.0000	ha	1285.50	ha/month	10284.00
10	सुरक्षा दीवाल/घेरबाड़ के बाहर 4 मी० पट्टी साफ करना	1.0000	ha	318.62	ha	318.62
उप योग						63218.42

4	श्रम कल्याण कार्य-0.50 प्रतिशत					78.72
	उप योग					236.17
	योग पंचम वर्ष -					15980.79
छठां वर्ष :-						
1	देख-रेख व रख-रखाव रोपण वर्ष में 12 माह	1.0000	ha	1285.50	ha/month	15426.00
2	सुरक्षा दीवाल/घेरबाड़ के बाहर 4 मी0 पट्टी साफ करना	1.0000	ha	318.62	ha	318.62
	उप योग					15744.62
3	गुल्यांकन एवं अभिलेखीकरण-1 प्रतिशत					157.45
4	श्रम कल्याण कार्य-0.50 प्रतिशत					78.72
	उप योग					236.17
	योग छठां वर्ष -					15980.79
सातवां वर्ष :-						
1	देख-रेख व रख-रखाव रोपण वर्ष में 12 माह	1.0000	ha	1285.50	ha/month	15426.00
2	सुरक्षा दीवाल/घेरबाड़ के बाहर 4 मी0 पट्टी साफ करना	1.0000	ha	318.62	ha	318.62
	उप योग					15744.62
3	गुल्यांकन एवं अभिलेखीकरण-1 प्रतिशत					157.45
4	श्रम कल्याण कार्य-0.50 प्रतिशत					78.72
	उप योग					236.17
	योग सातवां वर्ष -					15980.79
आठवां वर्ष :-						
1	देख-रेख व रख-रखाव रोपण वर्ष में 12 माह	1.0000	ha	1285.50	ha/month	15426.00
2	सुरक्षा दीवाल/घेरबाड़ के बाहर 4 मी0 पट्टी साफ करना	1.0000	ha	318.62	ha	318.62
	उप योग					15744.62
3	गुल्यांकन एवं अभिलेखीकरण-1 प्रतिशत					157.45
4	श्रम कल्याण कार्य-0.50 प्रतिशत					78.72
	उप योग					236.17
	योग आठवां वर्ष -					15980.79
नौवां वर्ष :-						
1	देख-रेख व रख-रखाव रोपण वर्ष में 12 माह	1.0000	ha	1285.50	ha/month	15426.00
2	सुरक्षा दीवाल/घेरबाड़ के बाहर 4 मी0 पट्टी साफ करना	1.0000	ha	318.62	ha	318.62
	उप योग					15744.62
3	गुल्यांकन एवं अभिलेखीकरण-1 प्रतिशत					157.45
4	श्रम कल्याण कार्य-0.50 प्रतिशत					78.72
	उप योग					236.17
	योग नवां वर्ष -					15980.79
दसवां वर्ष :-						
1	देख-रेख व रख-रखाव रोपण वर्ष में 12 माह	1.0000	ha	1285.50	ha/month	15426.00
2	सुरक्षा दीवाल/घेरबाड़ के बाहर 4 मी0 पट्टी साफ करना	1.0000	ha	318.62	ha	318.62
	उप योग					15744.62
3	गुल्यांकन एवं अभिलेखीकरण-0.50 प्रतिशत					78.72
4	श्रम कल्याण कार्य-0.50 प्रतिशत					78.72
	उप योग					157.44
	योग दसवां वर्ष -					15902.06

सारांश

क्रमांक	वर्ष	कुल व्यय (रुपये में)
1	प्रथम वर्ष	185205.95 ✓
2	द्वितीय वर्ष	67063.23 ✓
3	तृतीय वर्ष	38158.73 ✓
4	चतुर्थ वर्ष	30890.45 ✓
5	पंचम वर्ष	15980.79 ✓
6	छटा वर्ष	15980.79 ✓
7	सातवां वर्ष	15980.79 ✓
8	आठवां वर्ष	15980.79 ✓
9	नवां वर्ष	15980.79 ✓
10	दसवां वर्ष	15902.06 ✓
कुल योग		417124.37 ✓

Rate Checked & Corrected

D/Man
Forest

Sharma
प्रभागीय वनाधिकारी
बद्रीनाथ वन प्रभाग,
गोपेश्वरा

कार्य का नाम— मानव वन्य जीव संघर्ष रोकथम हेतु Bio Fencing (घेरबाड़) कार्य करना।						
क्र०सं०	कार्य का विवरण	मात्रा	इकाई	दर	इकाई	धनराशि (रु० में)
1	सर्वेक्षण एवं सीमांकन कार्य (1000 m x 10 = 10000 sqm or 1.00 ha)	1.00	ha	1453.96	ha	1453.96
2	लैन्टाना / गाजर घास झाड़ी कटान कार्य (1000m x 10 = 10000 sqm or 1.00 ha)	1.00	ha	8034.41	ha	8034.41
3	फैन्सिंग हेतु पौधों की आपूर्ति (रामबांस, टिगरु, हिंसालू, किलमोडा आदि) (2000 no x 3 row = 6000)	6000.00	no	39.83	no	238980.00
4	गड्डों का रेखांकन व खुदान कार्य	6000.00	no	16.23	no	97380.00
5	गड्डों में कीटनाशक एवं गोबर खाद डालना	6000.00	no	0.46	no	2760.00
6	गड्डा भरान कार्य	6000.00	no	295.06	per 100	17703.60
7	रोपण कार्य	6000.00	no	590.11	per 100	35406.60
8	पौध का दुलान कार्य	6000.00	no	1474.72	per 100	88483.20
9	साईन बोर्ड एवं अन्य कार्य			ls		2000.00
कुल योग						492201.77
कुल लम्बाई 0.250 किमी० में घेरबाड़ कार्य पर व्यय		0.250	km	@	492201.77	123050.44

Rate Checked & Corrected

[Signature]
D/Man
Forest

[Signature]
प्रभागीय वनाधिकारी
बद्रीनाथ वन प्रभाग,
गोपेश्वरा

चाल खाल निर्माण कार्य।

Name of work :-

Detail of Measurement

S. No.	Particulars of Item	Nos.			Length (m)	Width (m)	Height (m)	Quantity	Unit
1	Excavation for Structures Earthwork in excavation for structures as per drawing and technical specifications Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50 m, dressing of sides and bottom and backfilling in trenches with excavated suitable material. Ordinary soil Upto 3 m depth								
		3	x	1	5.50	4.00	1.00	66.00	cum
		0	x	1	8.00	6.00	1.00	0.00	cum
	Drain	3	x	2	8.00	0.30	0.30	4.32	cum
		0	x	2	9.50	0.30	0.30	0.00	cum
							Total	70.32	cum

Rate Checked & Corrected

D/Mah
Forest

Signature
प्रभागीय वनाधिकारी
बद्रीनाथ वन प्रभाग,
गोपेश्वरा

Bill of Qty.

Name of work :- चाल खाल निर्माण कार्य।

Year - 2024-25

ठसववा . बीज *वर्तमान* - *एनए*

S. No	ITEM	UNIT	SOR / DSR	QTY	RATE	AMOUNT
1	Excavation for Structures Earthwork in excavation for structures as per drawing and technical specifications Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50 m, dressing of sides and bottom and backfilling in trenches with excavated suitable material. . Ordinary soil Upto 3 m depth	Cum	11-1-1-1 MORD	70.32	531.80	37396.18
Total						37396.18
2	Add 18% GST					6731.31
Total						44127.49

Rate Checked & Corrected

[Signature]
D/Man
Forest

[Signature]
प्रभाग वनाधिकारी
बद्रीनाथ वन प्रभाग,
गोपेश्वरा

वायर क्रेट चैकडैम निर्माण निर्माण कार्य।

Name of work :-

Detail of Measurement

S. No.	Particulars of Item	Nos.			Length (m)	Width (m)	Height (m)	Quantity	Unit
1	Excavation for Structures Earthwork in excavation for structures as per drawing and technical specifications Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50 m, dressing of sides and bottom and backfilling in trenches with excavated suitable material. Ordinary soil Upto 3 m depth								
	foundation	3	x	1	3.50	1.50	0.50	7.88	cum
	foundation	0	x	1	3.00	1.50	0.50	0.00	cum
	Total							7.88	cum
2	Random Rubble Stone Masonry laid Dry, in breast walls, retaining walls, etc. including supply of all material, labour, T&P and royalties etc. complete as per drawing and technical specifications Clauses 702, 704, 1202 & 1203 of MORD Specification								
	foundation	3	x	1	3.50	1.50	0.50	7.88	cum
	foundation	0	x	1	3.00	1.50	0.50	0.00	cum
	aprin	3	x	1	3.50	1.00	0.30	3.15	cum
	aprin	0	x	1	3.00	1.00	0.30	0.00	cum
	Total							11.03	cum
3	Providing and laying of wire crates 3.00x1.50x1.50 in size with GI wire conforming to IS: 280 & IS:4826 in 150mm x 150mm mesh laid with stone boulders. as per direction of Engineer-in- charge. (As per PWD Uttarakhand specifications) GI wire 8 gauge BWG								
	superstructure	3	x	1	4.50	1.20	1.20	19.44	cum
	superstructure	0	x	1	4.00	1.20	1.20	0.00	cum
		3	x	2	1.20	1.20	0.50	4.32	cum
		0	x	2	1.00	1.20	0.50	0.00	cum
	Total							23.76	cum

Rate Checked & Corrected

B. Man
Forest

[Signature]
प्रभागीय वनाधिकारी
बद्रीनाथ वन प्रभाग,
गोपेश्वरा

Bill of Qty.

Name of work :- वायर क्रेट चैकडैम निर्माण निर्माण कार्य।

Year - 2024-25

उसवबा - जीज (अवधी) - धीक

S. No	ITEM	UNIT	SOR / DSR	QTY	RATE	AMOUNT
1	Excavation for Structures Earthwork in excavation for structures as per drawing and technical specifications Clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50 m, dressing of sides and bottom and backfilling in trenches with excavated suitable material. Ordinary soil Upto 3 m depth	Cum	11-1-1-1 mord	7.88	531.80	4190.58
2	Random Rubble Stone Masonry laid Dry, in breast walls, retaining walls, etc. including supply of all material, labour, T&P and royalties etc. complete as per drawing and technical specifications Clauses 702, 704, 1202 & 1203 of MORD Specification	Cum	1-3 misc	11.03	2476.60	27316.90
3	Providing and laying of wire crates 3.00x1.50x1.50 in size with GI wire conforming to IS: 280 & IS:4826 in 150mm x 150mm mesh laid with stone boulders. as per direction of Engineer-in- charge. (As per PWD Uttarakhand specifications) GI wire 8 gauge BWG	Cum	1-7-2 misc	23.76	2291.20	54438.91
				Total		85946.39
4	Add 18% GST					15470.35
				Total		101416.74

Rate Checked & Corrected

D/Man
Forest

Acuma
प्रभागीय वनाधिकारी
बद्रीनाथ वन प्रभाग,
गोपेश्वरा