Alignment
Name of work-Alignment of Naini Kwearali Motor Road. In Distt. Almora

Sanctioned	Length=4.00) KM.
 	 	

	D u	nchoned Length-4.00 Km.	
Sl. No	Particular	Alignment No-1	Alignment No-2
1	Topography	Start from Artola Jageshwar Naini Motor road in Km 20 Hec 8-10	Start from Artola Jageshwar Naini Motor road in Km 20 Hec 8-10
2	Length of Road	1.825 Km.	3.00 Km.
3	Bridging requirement No. and Length	Nil	Nil
4	Geometric	Nap Land , Reserve Forest Land	Nap Land , Reserve Forest Land
	(a) Gradients	1:22R,1:20R, 1:40R & Level	1:22R,1:24F, 1:22F, 1:40R & Level
 	(b) Curves, H.P. Bends	2No. H.P. Bends	2No. H.P. Bends
5	Existing means of communication, mule path, jeep, Tracks etc.	villages are connected by foot track.	villages are connected by foot track.
6	Right of way, bringing out. Construction on account of built up areas, monuments and other structures	No such construction involved	Same as alignment no.1
7	 (a) Terrain & soil condition (i) Nature of soil (ii) Geology of the area (b) Road length passing through (i) Mountainous terrain (ii) Steep terrain 	E.&B., H.S., V.H.S., cultivated and Hill area Approx.80% Approx.20%	E.&B., H.S., V.H.S. , cultivated and Hill area Approx.80% Approx.20%
	iii) Rocky stretches with indication of length in loose rocky stretches(iv) Area subject to avlanches and snow drift(v) Slip Zone Area	Approx 0.500 km. rocky portion & 1.325 km. ordinary rocks. Nil Nil	Approx 0.500 km.rocky portion & 2.5 km. ordinary rocks. Nil Nil
	(vii) Cliffs and gorges (vii) Drainage characteristics of the area including supceptibility to flooding (viii) General elevation of the road indicating maximum and minimum height negotiated by main ascends and discends (ix) Variations extants and types	Nil Area has good drainages - maximum hight 1696 m minimum height 1620 m Nil	Nil Area has not good drainages maximum hight 1670 m minimum height 1590 m Nil

			(ID)
8	Climate condition: (a) Temperature monthly max.& min. reading.	Approx.32 ⁰ C to 1 ⁰ C	Approx.32 ^o C to 1 ^o C
	(b) Rainfall data average annual peak intensities monthly	Not available	Not available
7 7 7 7 1 1 1	distribution(to the extent available) (c) Snowfall data average annual peak intensities monthly	Mostly winter season Record not available	Record not available
1	distribution(to the extent available) (d) Wind direction and velocities (e) Fog condition	Not available	Not available
1	(f) Exposure to sun	Often in rainy season	Often in rainy season
	(g) Unusual weather conditions like cloud brust etc.	Almost in all the year	Almost in all the year
		Nil	Nil
9	Facilities resources (a) Landing ground (b) Dropping Zone (c) Food stuffs	Not available Not available	Not available Not available Crops, vegetables,
	(d) Labour local availability and need for import (e) Construction material (Timber, Bamboo, Sand, stone, shingle etc.	Crops, vegetables, fruits, Milk production area Local & Nepali labour also available Stone locally available & other material	fruits, Milk production area Local & Nepali labour also available
	extent of their availability and lead involved	available App. 175 km away at Haldwani.	Same as alignment no.1
10	Value of land, agricultural land, Irrigated land, built up land, forest land etc.	As per current Government rate	As per current Government rate
11	Approximate Const. Cost	Total cost Rs 94.55 lacs	Total cost Rs 155.4 lacs
12	Access point indicating possibility of induction of equipment	At present access not available	Same as alignment No.1
- 13	Period required for construction	2 years after land transfer	Same as alignment No.1
14	Strategic Consideration	To provide better communication	Same as alignment No.1
15	Important villages, towns and markets centers to be connected	Villages – Kwearali willl be connected by m/r and also Tahsil block & district headquater.	Same as alignment No.1
16	Recreational potential	Good	Same as alignment No.1





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17	Economic Factors: (a) Population served by the alignment	Appx.250	Appx.250
	(b) Agricultures and economic potential of the area	Population of above village will be benefited good.	Same as alignment No.1
18	Other major development projects being taken up electric projects etc.	Nil	Nil
19	(i) Misc. such as camping sites(ii) Law and other problem(iii) Royailty(iv) Availability of contractors for collection and carriage of construction material	Nil Nil Nil Local contractor are available for the work.	Nil Nil Nil Local contractor are available for the work.
	(v) Working period available for construction of work	Approximately 9 months a year working period available	Same as alignment No.1
20	Merits	1-Easy grades involved. 2-Min. Forest Land, affected from this alignment. 3- 2 No. H.P. band 4-Villages people approved this alignement.	Nil
21	Demerits	Nil	1-More cost involved in this alignment. 2-Max. Nap, Forest land affected from this alignment. 3- 2 No. H.P. band 4-Villages people not approved this
			alignement.

RECOMMENDATIONS:

Alignment no.(1) recommended for approval being more economical, useful & technically feasible.

Junior. Engineer C.D., P.W.D. Almora

Assistant Engineer C.D., P.W.D.,

Álmora

Executive Engineer C.D., P.W.D.,

Almora