

1.3



79°33'40"E 79°33'45"E, 79°33'50"E  
उत्तरी गौला वन क्षेत्र नथुलाखान  
नैनीताल वन प्रभाग 1:6,000  
0 0.0275 0.055 0.11 0.165 0.22 km  
Prepared by: ETGC, PCCF Office, Dehradun

सहायक अभियन्ता  
निर्माण, स्वच्छता, निविदा विभाग  
मैसूर, का. २०००

जिला विकास  
समिति.



**DETAIL OF TOPOGRAPHY OF ALIGNMENT**

पर्य का नाम:- वित्तीय वर्ष 2016-17 में जनपद नैनीताल के विधान सभा क्षेत्र नैनीताल के विकास खण्ड रामगढ़ के तहत नथुवाखान-सुयालबाड़ मोटर मार्ग छिमी से मटेला होते हुए तोला भूमियों देव मन्दिर तक मोटर मार्ग का नव निर्माण का कार्य। (लम्बाई:-4.000किमी०)

Point of Topography of the Road	Proposed Alignment No-1	Proposed Alignment No-2
Main features and Description of Alignment	This alignment started from Km25.0 of Nathuwakhan-Suyalbadi motor Road And Curunt Name From Km.67.0 of SH-62 motor Road and connects Villages Matela	This alignment started from Km 25.0 of Nathuwakhan-Suyalbadi motor Road And Curunt Name From Km.67.0 of SH-62 motor Road and connects Villages Matela
Length of the alignment from starting to terminal point	4.00 km	4.50 Km.
Geometries:- (I) Gradient in different stretches (ii) Curves and hairpin bends etc.	1:20R, 1:22R, & 1:40R 06 No	1:18R/F, 1:30R, 8 No
Terrain soil conditions:- (i) Geology of area (ii) Road length passing through (a) Mountainous terrain (cross slop from 25% to 40 %) (b) Mountainous terrain (cross slop from 40% to 70%) (c) Rocky stretches with indicating of length in loose stretches (d) Snow bound area	Hill area 2.500 Km. 1.000Km. 0.500 Km. Nil	Hill area 1.00 Km. 2.50 Km. 1.50Km. Nil
Nature of soil :- (i) Length of reaches with earth & boulder (ii) length of reaches with medium rock/shale (iii) Length of reaches with hard rock/shale (iv) Length of reaches with homogeneous rock	2.500 Km. 1.000 Km. 0.500 Km. Nil	2.000 Km. 1.800 Km. 0.700 Km. Nil
Requirement of bridges: 1-Minor Bridges (a) Total No. (b) Span (c) Total water ways 2-Major Bridges (a) Total No. (b) Span (c) Total water ways	Nil Nil 2No. (2N0 Causeways incl.) Nil N.A. Nil	Nil Nil 4No. (4N0 Causeways incl.) Nil N.A. Nil
General elevation of the road (i) Indicating maximum and minimum height negotiated by main ascends and descends (ii) Total No. of ascends & descends (iii) Total No. of cliffs & gorges	1400-1550Mts. 01 & 01 Nil	1400-1550Mts. 01 & 01 Nil

Junior. Engineer

Assistant Engineer

Executive Engineer

निर्माण खण्ड, लो. विभाग नैनीताल. द्वारा प्रति प्रमाणित

सहायक अभियन्ता  
निर्माण खण्ड, लो. विभाग  
नैनीताल



S.N.	Point of Topography of the Road	Alignment	Alignment
1	(a) Right of way bringing out construction on account of built up area, mountains and other structure.	Total Mountain Area	Total Mountain Area
2	(b) Approximate area and value. (i) Cultivated land (ii) irrigated (iii) Unirrigated	3.000 Km. Nil 1.000 Km.	3.000 Km. Nil 1.500 Km.
3	(a) Existing means of inter communications, sub path, Geep, track etc. (b) Relation of proposed alignment with exiting, under construction road.	Bridle path, Mule track  This alignment connect to Km25.0 of Nathuwakhan-Suyalbadi motor Road And Curunt Name From Km.67.0 of SH-62 motor Road	Bridle path, Mule track  This alignment connect to Km25.0 of Nathuwakhan-Suyalbadi motor Road And Curunt Name From Km.67.0 of SH-62 motor Road
4	(a) Availability of road construction material. (b) Location of quarries (c) Average lead	Stone will be available from hill side cutting Betalghat (a)1.000Km(b)46.00Km.	Stone will be available from hill side cutting Betalghat (a)2.500Km(b)45.00Km.
5	(a) Facilities/resources (i) Landing ground (ii) Dropping zones (iii) Food stuffs (iv) Labour (locally available or need of import) (v) Construction material -timber bamboos, stone etc.	Nil Nil Local food grain available As per contract basis (Locals & Napalis) Stone & sand locally available, grit from Betalghat & Lalkuon quarry.	Nil Nil Local food grain available As per contract basis (Locals & Napalis) Stone & sand locally available, grit from Betalghat & Lalkuon quarry.
6	Access points: Indication possibilities of inductions of equipment	Betalghat Motor road.	Betalghat Motor road.
7	Climatic condition (a) Temperature Maximum and minimum (b) Rain fall dates wind direction velocity (c) Exposed of sun (d) Drainage characteristic of area, indicating susceptibility of drainage	Max.(30°), Min.(2°)  June - September 6 to 7 hour during clear weather North-West Minor damages may occur during the rainy season.	Max.(30°), Min.(2°)  June - September 6 to 7 hour during clear weather North-West Minor damages may occur during the rainy season.
8	Length of land slides	Nil	Nil
9	Length of unstable area	50 M	50 M
10	Length of heavy clearing	Nil	Nil
11	Length of marshy or flooded area	Nil	Nil

Junior. Engineer

Assistant Engineer

जुनियर इन्जिनियर  
निर्माण विभाग  
महानगरपालिका, काठमाडौं

कोठा प्रति प्रमाणित

महानगरपालिका  
निर्माण विभाग  
महानगरपालिका, काठमाडौं



Point of Topography of the Road	Alignment	Alignment
(a) Important villages, towns, market center and commercial center	Betalghat	Betalghat
(b) Length of portion with loose rocks villages following with		
(i) 1st Km. Of the alignment	50 Mtrs	50Mtrs.
(ii) 1st Km. to 5th Km. of alignment	Nil	Nil
Period required for construction	Two year	Two year
Vegetation	Grass and bushes, Chir wood trees.	Grass and bushes, Chir wood trees.
Political aspects	Nil	Nil
Strategic conditions	Crops, vegetable & Fruit etc	Crops, vegetable & Fruit etc
Economic and Industrial		
(I) Population secured by the alignment	App.200 Total Population	App.180 Total Population
Recreational potential and development of tourism	Yes	Yes
Scope of agriculture of horticulture Development	Road construction will encourage development of Tourism, horticulture & agriculture. Locally produced fruits & vegetables will reach to the market easily. Less Distance to Thesil & Distt Head quarter.	Road construction will encourage development of Tourism, horticulture & agriculture. Locally produced fruits & vegetables will reach to the market easily. Less Distance to Thesil & Distt Head quarter.
Exploitation of forest wealth	Nil	Nil
Aspects of development of minor and major hydroelectric projects	Nil	Nil
Approximate cost of construction	207.20 Lac.	233.10 Lac.
(a) Merits	1. Development of area, connects all nearby villages of above 250 population in total.	1. Development of area, connects all nearby villages of above 250 population in total.
(b) Demerits	2. Shortest route to Thesil & Distt Headquarter During construction damage some property, & vegetation.	2. Shortest route to Thesil & Distt Headquarter During construction damage some property, & vegetation.
As other useful information, other important project etc. being area required completion of the work	This M/R will be shortest route for these villages to connect Thesil & Distt head quarter,	This M/R will be shortest route for these villages to connect Thesil & Distt head quarter,
Recommendation of the Executive Engineer.	In consideration of all the above aspects of the work, <b>Alignment -1</b> shown in red color seems to be most suitable and is, therefore, <b>Recommended for approval.</b>	In consideration of all the above aspects of the work, <b>Alignment-2</b> shown in Blue color seems to be not suitable and is there fore alignment is not recommended for the favour for approval.
Order of Superintending Engineer		

Junior Engineer

Assistant Engineer

निदेशाधीन अधिकारी  
निदेशाधीन अधिकारी  
निदेशाधीन अधिकारी  
निदेशाधीन अधिकारी

कार्य प्रति प्रमाणित

निदेशाधीन अधिकारी  
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निदेशाधीन अधिकारी