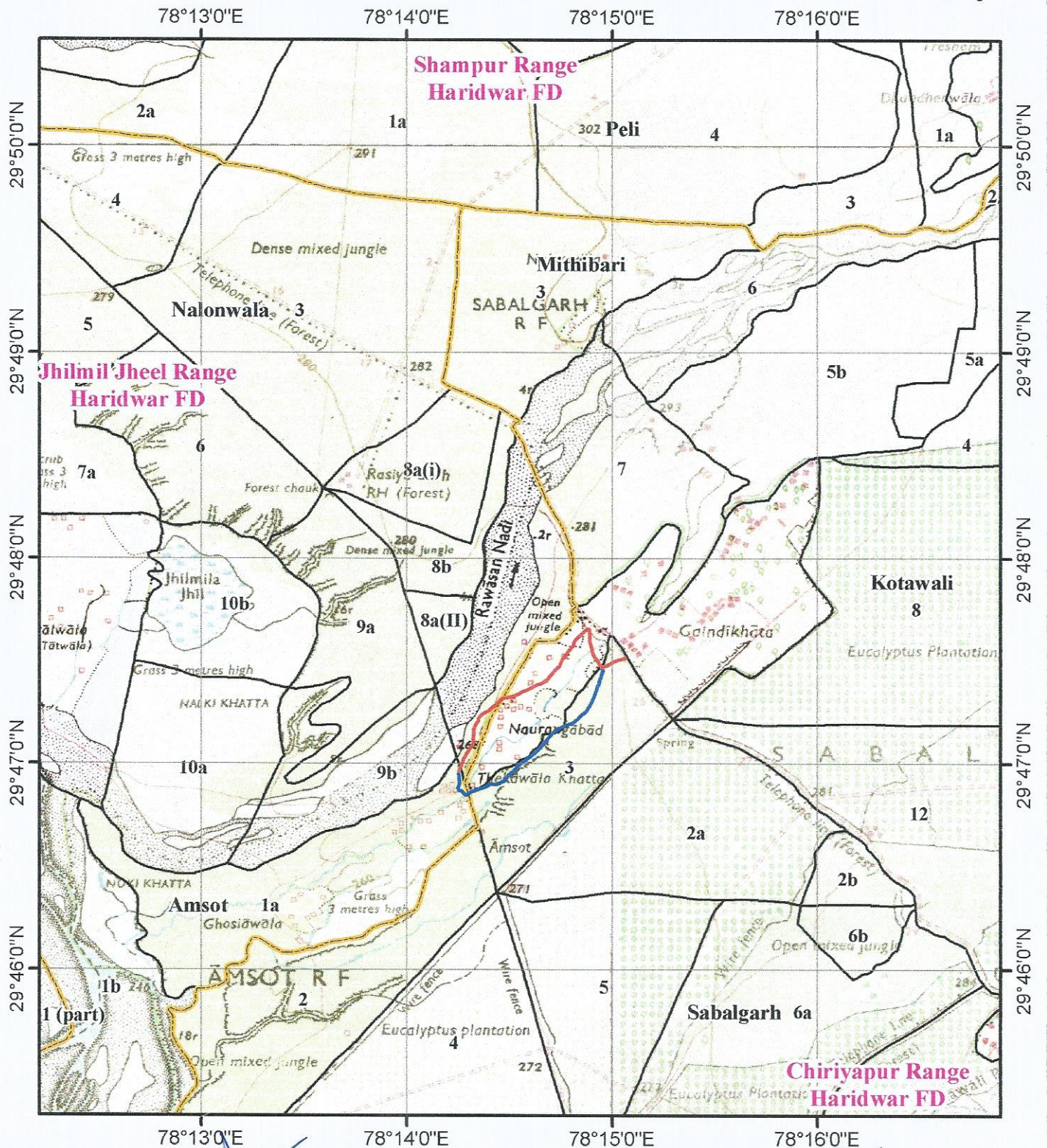
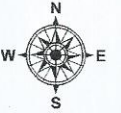


# डिजिटल मैप :- जनपद हरिद्वार के अन्तर्गत गैंडीखाता -नौरंगाबाद मोटर मार्ग का नवनिर्माण कार्य 2.320 कि०मी०

0 0.5 1 1.5 2 Km



## Legend

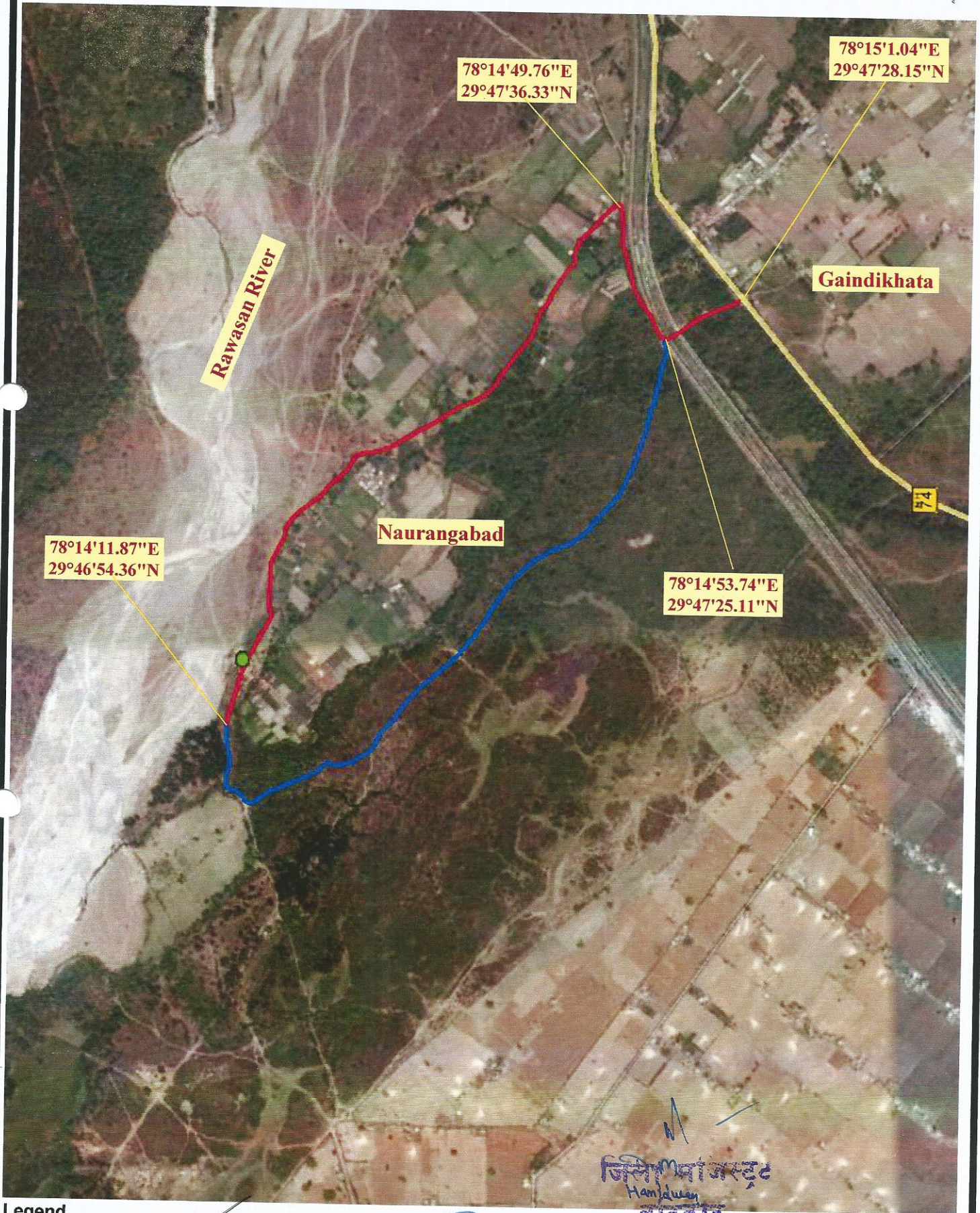
- Muck Diposal
- Proposed Road
- Alternate Road
- ▨ Reserve Forest
- ▭ Reserve Forest Boundary
- ▭ Forest Range Boundary

Assistant Engineer  
P.M.G.S.Y. Irrigation Div.  
Dehradun





डिजिटल मैप :- जनपद हरिद्वार के अन्तर्गत गैंडीखाता -नौरंगाबाद मोटर मार्ग का नवनिर्माण कार्य 2.320 कि०मी०



Legend

- Proposed Road
- Alternate Road

*[Signature]*  
Assistant Engineer  
P.M.G.S.Y. Irrigation Div.  
Dehradun



*[Signature]*  
(E.E.)  
Executive Engineer  
P.M.G.S.Y. I.D.  
6, Indira Nagar, Dehradun

हरिद्वार  
जनपद

प्रभागीय कार्यालय  
हरिद्वार वन प्रभाग



## COMPRATIVE STATEMENT OF VARIOUS ALIGNMENT

NAME OF WORK: Comparative statement of various alignment of motor road under  
PMGSY Irrigation Div. Dehradun, Distt. Dehradun From Gaindi Khata to Naurangabad  
motor road

Sr. No.	Item	Alignment	
		Alignment 1	Alignment 2
1	Details of route, vis -a-vis topography of the area Main features and description of the alignment	It starts from Gaindi Khata, Najibabad-Haridwar NH-74 and goes upto Naurangabad	It starts from Gaindi Khata, Najibabad-Haridwar NH-74 and goes upto Naurangabad ✓
2	Length of the alignment from starting point to terminal point.	2.32 Km ✓	2.29 Km ✓
3	<b>Geometric</b>		
	A. Avg. Gradient of the alignment.	As per enclosed L-Section	As per enclosed L-Section
	B. Curves and Hair pin bends	Nil	Nil
4	<b>Terrain and soil condition</b>		
	(a) Geology of the road.	Soil, E & B,	Soil, E & B,
	(b) Road length passing through cultivated land barren land & Forest Land	100%	100%
	1. Mountainous terrain cross slope from Less then 25°.	2.32 km	2.29 km
	2. Steep terrain cross slope greater than 60°	Nil	Nil
	3. Rocky stretches with indication in length in loose.	Nil	Nil
	4. Area subject to avalanches and snow drifts.	Nil	Nil
5	<b>Nature of soil</b>		
	A. Length of reaches with earth	100%	100%





	B. Length of reaches with Ordinary rock	Nil	Nil
	C. Length of reaches with Very Hard Rock.	Nil	Nil
6	A. Bridge Requirements Minor Bridge		
	(i) Bridge	Nil	Nil
	(ii) Total number Culvert	Nil	Nil
	(iii) Total water way.	Nil	Nil
	(iv) Scuppers	Approx. 10 pipe Scuppers	Approx. 12 pipe Scuppers
7	Right of way bringing out construction Approximate area and value		
	(i) Nap Land	1085 Mtr	210 Mtr
	(ii) Gram Panchayat Land	Nil	Nil
	(iii) Forest Land	1200 Mtr	1765 mtr
8	General Elevation of Road		
	(i) Indicating maximum and minimum heights.	Minimum EL 252.86 Mtr. ✓ Maximum 270.15 Mtr. ✓	Minimum EL 256.90 Mtr. ✓ Maximum 270.15 Mtr. ✓
9	A. Existing means of inter communication (Mule path, jeep etc)	Mule path and foot track	Mule path and foot track
	B. Relation of proposed alignment with existing and under construction roads.	Existing road Najibabad-Haridwar NH-74 and goes upto Naurangabad ✓	Existing road Najibabad-Haridwar NH-74 and goes upto Naurangabad ✓
10	A. Availability of road construction materials	Locally available	Locally available
	B. Location of quarries	Expected on the alignment	Expected on the alignment
	C. Average leads	Nil	Nil
11	Facilities / Resources		
	A. Landing ground	Nil	Nil
	B. Dropping zone	Nil	Nil
	C. Food stuffs	Wheat, Paddy (Rice) and Local Fruits.	Wheat, Paddy (Rice) and Local Fruits.
	D. Labour locally available or need of import.	50% Labors Available locally and rest from Nepal	50% Labors Available locally and rest from Nepal
	E. Construction materials	Stone Mostly	Stone Mostly
	F. Timber, Bamboo, Sand, Stone, Shingle, Grit etc. extent of their availability & lead involved	Jawalapur Haridwar	Jawalapur Haridwar





12	Access point indicating possibility of equipment.	Haridwar / Najibabad	Haridwar / Najibabad
	<b>CLIMATE CONDITIONS</b>		
13	A. Temperature maximum & minimum.	Max 45° C, Min 5° C	Max 45° C, Min 5° C
	B. Rainfall data average annual peak intensities.	Not available	Not available
	C. Length of road covered by snow average and period.	Nil	Nil
	D. Wind direction and velocities.	From North and South with moderate velocity	From North and South with moderate velocity
	E. Fog conditions	Negligible	Negligible
	F. Exposure to Sun.	Well exposed to sun	Well exposed to sun
14	Drainage characteristics of the area indicating susceptibility to damage.	Good natural drainage, hence susceptibility to damage in minimum,	Good natural drainage, hence susceptibility to damage in minimum,
15	Length of landslides.	Nil	Nil
16	Length of unstable areas.	Nil	Nil
17	Length of heavy snow covering	Nil	Nil
18	Length of marshy and flooded areas.	Nil	Nil
19	Length of position with loose rocks.	Nil	Nil
20	Period required for construction	12 month (working season)	12 month (working season)
21	Vegetation extent / type	Ordinary bushes / Forest tree.	Ordinary bushes / Forest tree.
22	Political Aspect	The area will be connected with Block H.Q.	The area will be connected with Block H.Q.
23	Village following on or within.		
	i. with in 6 Km of the alignment	Naurangabad	Naurangabad
	ii. With in 10 K.mtr of the alignment.	Nil	Nil
24	Important villages, town / marketing center connected.	Haridwar / Najibabad	Haridwar / Najibabad
25	Economic & industrial consideration	Normal	Normal
	i. Population served by alignment	Approximate 352 People	Approximate 352 People
	ii. Agriculture potential for development of forest.	Good	Good
	iii. Recreational potential	Will Increase	Will Increase





26	Strategic conditions.	Better Communication	Better Communication
27	Scope of agriculture and Horticulture development.	Good	Good
28	Extent of forest wealth.	Normal	Normal
29	Prospect of development of minor or any other major development project being taken up in the O.S. Hydro Electric Project.	Not Know	Not Know.
30	Merits & Demerits		
	A. Merits	1. Alignment accepted by villagers & Elected Public representatives of area. 2. Alignment is passing through existing car track. 3. Better Road Transpiration.	1. Alignment are not accepted by villagers. 2. Alignment is passing through maximum Forest area.
	B. Demerits	Viewing the served population from the alignment no demerits are there.	1. All villagers are not agreed to this alignment. 2. Forest area to be affected.
31	Relation of proposed alignment with existing Motor Road	As a branch road.	As a branch road.
32	Any other useful information (Viz other important project being undertaken in the area required for the completion of work.)	The farmer will deliver their CASH crops/Local Fruits to Market	The farmer will deliver their CASH crops/Local Fruits to Market
33	Recommendation of Executive Engineer	Alignment No. 1 is recommended for sanction	
34	Order of the Superintending Engineer with reasons		

J.E.



A.E.

Alignment No. ( T ) is APPROVED, which is shown with Red Colour on Contour Map, as per Recommendation of Executive Engineer

अधीक्षण अभियन्ता  
पी० एम० जी० एस० वाई० वरुण  
से० नि० नि०, २४/१२/२०१३