

Geological report of Kunjethi to Byonkhi Motor Road

PMGSY Division Rudraprayag proposed 7.5 km **Kunjethi to Byonkhi Motor Road**. As requested by Er. R. C. Uniyal, Executive Engineer, PMGSY Division Rudraprayag, I carried out Geological investigations of the proposed road on 17 December 2017 in the presence of Ashish Pyasa, J. E.

General Geological Condition:

Geologically the investigated the area comes under Higher Himalayan terrain. The proposed alignment falls around 1400m to 1600a.m.s.l. The major ridge present in this area is roughly trending in NE-SW. At right angle to the main ridge, numerous secondary and tertiary spurs intersect the area showing highly dissected topography. The general slope is South facing.

Rock types:

Lithologically, the area is constituted by Slates, Schists and granitic gneisses. The highly fractured and shattered rocks are testimony of active tectonics in the region. Numerous local faults are also visible in the area. The steep slopes and rugged topography of the region indicate that the area is neotectonically active.



Slates are thinly bedded. Four sets of joints are prominent in the rocks. The trend of Schists at starting is 35° due SW.

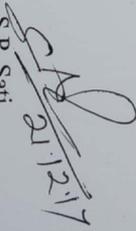
Detailed investigation of the alignment and suggested corrective measures are as:

The alignment will be bifurcated from Kalimath-Jaggi-Bagwan Road.

1. The alignment passes either through Gentler slopes. But the whole area is the zone of subsidence.
2. At the starting of the alignment the slope is gentle but the rocks are steeply dipping. It is hence recommended to take proper measures in order to avoid possible slope failure.
3. There are 2 HP bends proposed at the alignment.
4. The site of the HP bend is geologically safe as the slope is gentle and the rock trend favours the stability of the site.
5. The slope is gentle and hence favourable for road construction.
6. Most of the alignment will pass through gentle slope hence the alignment is geologically safe provided hill side road code of conduct during construction are followed.
7. Proper drains and parapet / scrubbers walls at appropriate locations be constructed as per norms of hill side road safety.



The proposed extension of the road may be geologically safe provided the construction agency (PMGSY Division) takes care of the above-mentioned corrective measures. Suggestions may be sought in future if problem arises at some point.


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