## Geological report of proposed Road Javari to Jaikandi(Ajaipur to Kakola) MR

PMGSY Division Rudraprayag, proposed **Javari to Jaikandi(Ajaipur to Kakola) MR**. As requested by Er. R. C. Uniyal, EE, I carried out Geological investigations of the proposed road on 15<sup>th</sup> July 2018 in the presence of Er. Jaspal Arya, J. E.

## General Geological Condition:

Geologically the investigated the area comes under the Higher Himalayan terrain. The proposed alignment falls around 1300m to 1500a.m.s.l. The major ridge present in this area is roughly trending in E-W. 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 and Schists-Gneisses-Amphibolites. 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 Gneissesat starting is 45° due SW.

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

- The alignment bifurcates from Javari to Jaikandi (Ajaipur to Kakola) Motor Road.
- 02. The proposed alignment will run through cultivable land, Civil Land and forest land.
- 03. Most of the part of alignment passes through gentle slopes but at some places it has smaller segments of steeper slopes. Hence utmost care should be ensured during road cutting especially at steeper segments.
- 04. At the starting of the alignment the slope is gentle but the rocks are highly fractured. It is hence recommended to take proper measures in order to avoid possible slope failure.
- 05. There is one anticipated sliding zone along the proposed alignment. Therefore proper engineering measures should be ensured to stabilize the slope.
- 06. There are all 5 HP bend proposed at the alignment.

07. All the HP bends are proposed at comparatively gentler slope sites hence may be geologically safe. Still proper engineering measures should be ensured for slope safety.

08. The alignment is geologically safe provided hill side road code of conduct during construction are followed.

09. Proper drains and parapet / scrubbers walls at appropriate locations be constructed as per norms of hill side road safety.

The proposed section 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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