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Geological Report of the proposed road for Suradi from 4th km of Rampur-Gawana Road

Road

PWD Construction Division, Srinagar proposed a 6.135 km road for Suradi from 4th km of Rampur-Gawana Road. As requested by Er. M. S. Rauthan, J. E., PWD Construction Division, Srinagar, I carried out Geological investigations of the proposed road on 28th February 2015 in the presence of Er. Rauthan.

General Geological Condition:

Geologically the investigated the area comes under the Lesser Himalayan terrain. The proposed alignment falls between 900 to 1600 meters a.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 North-East to South-East facing.

Rock types:

Lithologically, the area is constituted by phyllites and quartzites. 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. Phyllits are thinly bedded. Four sets of joints are prominent in the rocks. The trend of Quartzites at starting is 35° due SW.

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

- 01. The proposed alignment will be bifurcated from 4th km of Rampur-Gawana Road.
- 02. The proposed alignment will pass either through civil land or cultivable land.

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- 03. 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.
- 04. There are all 9 HP bends proposed on the alignment.
- 05. All the HP bends are proposed on the gentle slopes hence geologically safe provided proper breast wall and retaining walls are proposed.
- 06. The slope is gentle and hence favorable for road construction.
- 07. Most of the alignment will pass through either cultivable fields or gentle slope hence the alignment is geologically safe provided hill side road code of conduct during construction are followed.
- 08. The road alignment should be constructed with a minimum grade 1:18 or higher.
- 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 (PWD) take care of the above-mentioned corrective measures. Suggestions may be sought in future if problem arises at some point.

ाया प्रति प्रमाणित

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