2.22

(5)

1.3

कार्यालय प्रमुख अभियन्ता एवं विभागाध्यक्ष
उत्तराखण्ड लोक निर्माण विभाग,
देहरादून।

भू – गर्भीय निरीक्षण आख्या एस0जी0– 184 / सड़क / पुल समरेखण / कुमाऊं / 2014

Geological Assessment of the alignment corridor proposed for Veel-Kulwan-Jyona State motor road, Distt. Bageshwar.

04–अक्टूबर–2014

Geological Assessment of the alignment corridor proposed for Veel-Kulwan-Jyona State motor road, Distt. Bageshwar.

Vijay Dangwal
04-10-2014

1- Introduction:- In the fulfillment of the request made by Er. Mahendra Kumar, Executive Engineer, Provincial Division Public Works Department Bageshwar, I made a visit to the site proposed for the construction of 2.00 km long motor road namely Veel-Kulwar-Jyona State motor road loacated in Garud Block, Distt. Bageshwar. Er. Vinod Kumar, Astt. Engineer, Er. Sumit Kr. Saini, Junior Engineer and Shri. Kheem Singh, PWD Bageshwar was present during the site visit.

2- Location:- The alignment proposed for the above said road originates from km 5.00 of Srikot-Veel Kulwan-Jyona State motor road constructed under the PMGSY scheme.

3- Geological assessment:- The entire area containing the proposed alignment of Veel Kulwan-Jyona State motor road is geologically lies in the inner land of Kumaon Lesser Himalayan Belt comprising the rocks belonging to Almora Thrust Sheet which at the site are represented by granite-gneisses and schist. The rock are thinly foliated, highly jointed and partially weathered in nature. The cross slopes of the alignment are inclined at very low to low angle between 5^0 to 10^0 and these are oriented in N 050 to N 070 directions. At places thick bands of quartz chlorite schists are exposed along the alignement which contain clay minerals in abundance. The rock mass occupying this area is mostly overlained by a thin sheet of residual soils.

The slope forming rock masses are generally poor in physical competency and these are grouped under the class IV. The weathering of the rocks exposed along the alignment corridor has been assessed ranging between W_2 to W_3 grade.

The slope forming soils exhibits diversive character of cohesive and diversive nature. Largely these are susceptible to undergo plastic deformation

By and large the alignment slopes are stable and free from any landslide/ground subsidence.

The uphill slopes of the proposed alignments bear a low gradient and consists very low relief.

On the basis of the geological/geotechnical studies carried at the site and the facts mentioned above the following suggestions are being made for the construction of the proposed road failing to these this report will be automatically treated as cancelled.

4- Recommendations:-

1. Form the road by half cut-half fill technique. Dynamic compaction of the fill material is mandatory.
2. Construct suitably designed retaining/breast walls all along the proposed road.
3. The road must have adequate arrangements of long and cross drains and the drained water must be disposed on stable ground.
4. Seal the entire surface of the road bench to check the water infiltration.
5. All the construction activities should be carried out as per the norms and Standard laid by the MORTH/ BIS codes for the Construction similar Structures.

5- Conclusion:- On the basis of the geological/geotechnical studies carried at the site and with the above recommendations, the alignment was found geologically suitable for construction of 2.00 km long motor road namely Veel-Kulwar-Jyona State motor road loacated in Garud Block, Distt. Bageshwar

V. Dangwal
4/10/2014

(Vijay Dangwal)
Sr. Geologist
Office of the Engineer in Chief,
PWD Dehradun