

CRITICAL PROBLEMS AND THEIR SOLUTION FOR HILLY ROAD PAVEMENT WITH PARTICULAR REFERENCE TO NH-52(A) – A NEW AVENUE

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ABSTRACT

Construction of road pavement by cutting or filling in hilly terrains generates instability to the naturally standing hillock system for some sections of any hilly road. For withstanding under prevailing local atmospheric condition such pavements need engineering cares. In consistence to such aspects, particularly a hilly road abundantly built in Himalayan subsoil encounters numerous engineering problems. Out of those engineering problems, geotechnical problems are the highest in tune, which demand unique care besides the conventional on going practices of engineering cares. Present study conducted to emphasis such problems that encounter in a national highway NH-52(A) within hilly terrains of Himalayan subsoil origin since its inception. Efforts have been made to emphasis the problems through detail geotechnical studies carriedout on the road all along its alignment. Study proclaims recommendations regarding absolute solution against those prevailing problems. Such recommendations are made based on the out comes of a new innovative R&D activity carried out recently, which generates a system comprising road foundation concept. Such type of solution prepared for hilly roads of Arunachal Himalaya which is also suitable for the whole zone of South East Asian hilly roads may deem fit to bring full success for achieving everlasting pavement section against their prevailing critical problem generating section of any hill road.

KEYWORDS: Hill, Pavement, Himalayan Subsoil, Problem, Road Foundation, Engineering Cares, Solution