

**RECONNAISSANCE GEOLOGICAL REPORT OF PROPOSED SITE OF
SHRI DIWAN SINGH S/o SHRI LAL SINGH FOR THE CONSTRUCTION OF
OWNER DRIVEN CONSTRUCTION FOR HOUSING (ODCH)
VILLAGE DAUNI, TEHSIL- MORI- DISTRICT UTTARKASHI, UTTARAKHAND
KHASARA No. – 52 & AREA – 0.165 ha.**

Date of Inspection: 11/01/2014

In a 'World Bank' funded programme, Government of Uttarakhand has provided teams of Consultant Geologists and Consultant Associate Geologists to Director, Geology and Mining Unit, Uttarakhand for geological studies in proposed sites for Owner Driven Construction For Housing (ODCH) in disaster affected districts of Uttarakhand.

Director, Geology and Mining Unit, Directorate of Industries, Uttarakhand has issued an Office Order No.1612 Aa. Pra./Bhu.Ni./Bhu.Khani.E./2013-14 dated 10thDecember 2013 regarding geological studies in disaster affected five districts of Uttarakhand, Uttarkashi is one of them. Thus, undersigned have taken geological observation during traverses and collected field geological data under the management of cosignatory departmental 'Assistant Geologist'.

In the above mentioned questioned area, the reconnaissance geological investigation was carried out in the presence and co-operation of Shri Prem Lal, Home guard- Mori, Uttarkashi. It is 32Km approx from Tehsil Headquarter Mori, Uttarkashi, Uttarakhand and the site is 50m approx on Netwar-Dauni motor marg through bridle path. It falls on coordinate – N 31° 08'53.3" E 78° 05'44.9" El. 1825m. The site is in above village Dauni, which is least populated.

The proposed site is on colluvial overburden material varying in thickness range from >3m approx at places, man-made cultivated terraces are present. The uphill slope is 20°-25° and the downhill slope is 15°-20° sloping in north-west direction. Around the proposed site location dense mix vegetation is present at about 150m-200m approx in uphill side. A perennial nala is passing from E side of land at about 100m approx flowing in N direction.



Close view of the proposed site

The proposed site is on colluvial overburden material thus no insitu rock is found but a few boulders varying in size range from 0.2m to 0.7m approx are found embedded in the brownish soil with fragments of quartz and gneiss of 2cm-3cm approx size. The soil is consolidated; the rate of infiltration is low making the soil water saturation low. At the

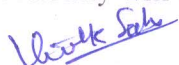
proposed site location above the road and the water seepage is low. The trees at the uphill slopes are standing straight.

RECOMMENDATIONS:

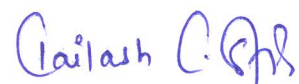
1. Inclined retaining wall of 2-3m approx height and 5m approx length at the SE backside boundary and also in the NW toe boundary of the site of 5-6m approx length, with provisions of weep holes and sufficient gap of about 2-3feet in between the backside retaining wall and the proposed construction should be constructed. And also, proper drainage system between the retaining wall and the wall of house should be developed.
2. The surface drainage should be properly planned through lined drain/pipe, so both rain water as well as waste water from the existing houses to be release safe place in W direction along a channel.
3. The foundation depth of the houses must be as per the compactness of the overburden material at the proposed site.
4. Framed structure with deep column and light roof must be constructed as the area falls in the earthquake zone IV, so it is essential that the house must be constructed with latest earthquake resistive techniques.
5. The soak pits and toilet foundations must be quiet away in NW side from the house so that the foundations are not directly affected from subsidence due to excessive seepage.
6. The premises of house must be made 'pukka' in order to avoid excessive seepage of the surface water.


CONCLUSION:

Prima-facie, presently, the proposed site of Shri Diwan Singh S/o Shri Lal Singh is geologically feasible for the proposed construction, only if, the above mentioned recommendations will be followed strictly, otherwise, in their contravention; geologically suitability will be deemed annulled.

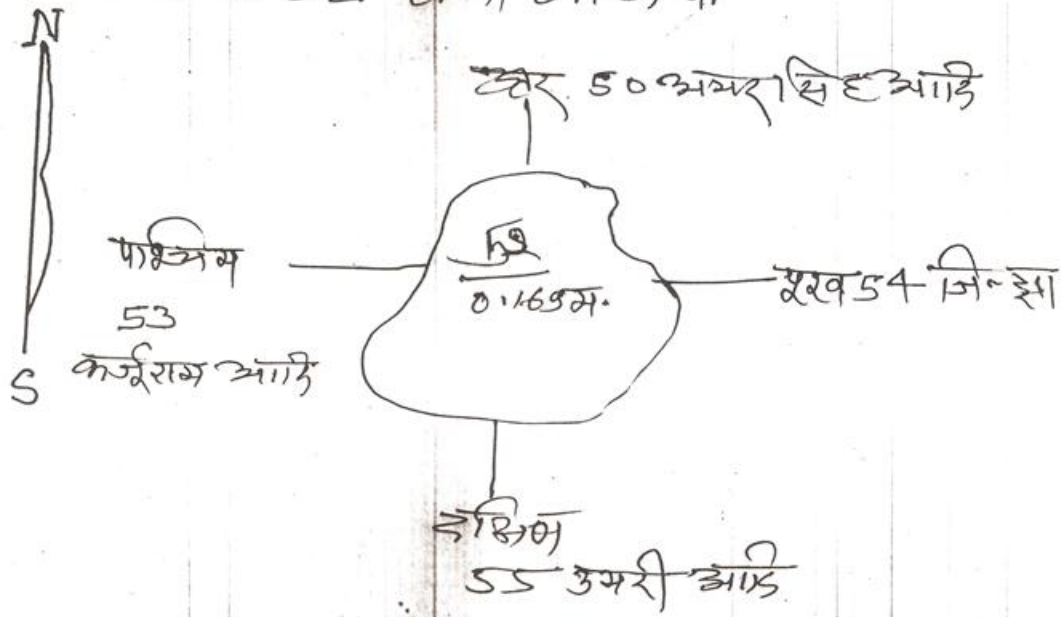


(Vivek Sahu)
Consultant Associate Geologist
Place: Camp Uttarkashi


(Kailash Chandra Sati)
Consultant Geologist


(Dipender Singh Chand)
Assistant Geologist
Mob: 8192802331
Email id: agddn-dgm-uk@nic.in

तहसील मोरी के ग्राम दोणी में दैवीय आपदा के कारण पूर्ण रूप से क्षतिग्रस्त भवन के कारण अपने निजी भूमि पर बनाये जाने वाले प्रभावित व्यापक के दिवान सिंह के भवन का नजरी नक्शा व खसरा 52 खसरा 0.169 अ.



खसरा नं० 52 की चौहदी निम्न प्रकार है -

- 1- पूरव में खसरा नं० 54 जिन्सा ,
- 2- पश्चिम में खसरा नं० 53 कर्ज राम झाडे ,
- 3- उत्तर में खसरा नं० 50 अमर सिंह झाडे ,
- 4- दक्षिण में खसरा नं० 55 उमरी झाडे के माप खटे हैं


R.S.I. 19/11

खसरा
52 अ. 0.169 अ. 0.020 अ.