

RECONNAISSANCE GEOLOGICAL REPORT OF PROPOSED SITE OF SHRI KARAMCHAND S/o SHRI DADTI FOR THE CONSTRUCTION OF OWNER DRIVEN CONSTRUCTION FOR HOUSING (ODCH) TOK TUNGLA, VILLAGE BARI, TEHSIL- MORI- DISTRICT UTTARKASHI, UTTARAKHAND
KHASARA No. – 583 & AREA – 0.020 ha.

Date of Inspection: 13/01/14

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, Homeguard. It is 27Km approx from Tehsil Headquarter Mori, Uttarkashi, Uttarakhand and the site is 5Km approx from Naitwad-Dhaura-Doni motarmarg through Dhaura-Bari village bridle path.. It falls on coordinate – N 31^o 09 39.4 E 78^o 05 34.2 El. 2049m. The site is in Tungla Tok of village Bari, which is moderately populated.

The proposed site is on mix colluvial overburden material varying in thickness range from 2-5m approx at places, man-made cultivated terraces are present. The uphill slope is 32^o-35^o upto 40-45m in uphill side then the slope gradient changes to 58^o-60^o and the downhill slope is 17^o-19^o sloping in NE direction. Around the proposed site location dense mix vegetation is present at about 60-65m approx in uphill side and around the site least vegetation is present.



Close view of the proposed site

In the uphill side in SW direction moderately weathered in-situ rock schistose gneiss with quartz veins are exposed. The orientation direction of the in-situ rock is as dip amount-

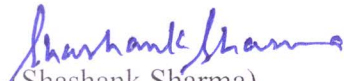
33°-35° dipping in NW direction. Also few boulders varying in size range from 0.5m to 4.5m approx are found embedded in the blackish brown silty clayey soil with gneiss and quartz fragments. The soil is consolidated; the rate of infiltration is medium making the soil water saturation medium. At the proposed site location the water seepage is low.


RECOMMENDATIONS:


1. Inclined retaining wall of 3m approx at the SW backside boundary and in the NE toe boundary of the site with depth of foundation of the backside retaining more than that of the foundation depth of the house, 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 east 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 north-eastern 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 Karamchand S/o Shri Dadi 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.

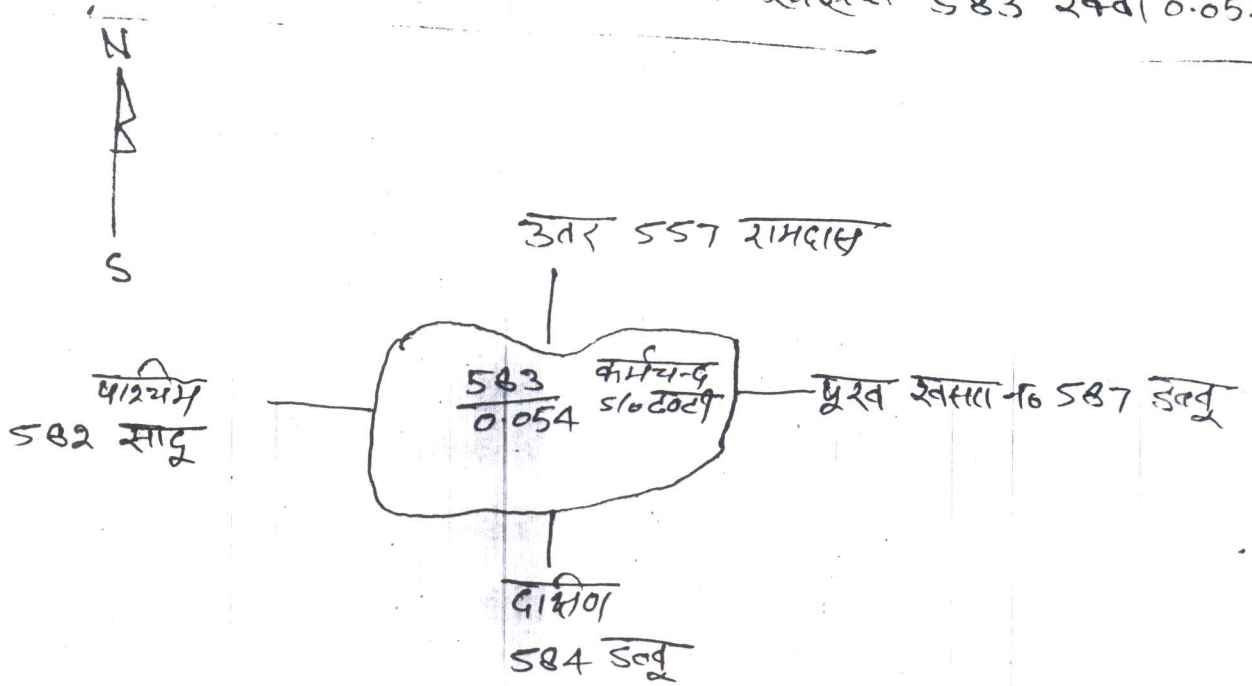

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कार्या पूर्ण

तद्वस्थित मीसी के ग्राम करी में है आपदा के कारण
 पूर्णरूप से क्षतिग्रस्त भवन के कारण पट्टा निम्नीभूमि
 पर बनाये जाने वाले प्रभावित व्यक्ति कर्मचन्द 516 टक्की
 के भवन का नजदी तमसा व खसरा 583 खसरा 0.054



खसरा नं० 583 की चौदही निम्नप्रकार है।

- ① पूरुब में खसरा नं० 587 डबू
- ② पश्चिम में खसरा नं० 582 सादू
- ③ उत्तर में खसरा नं० 557 रामदास
- ④ दक्षिण में खसरा नं० 584 डबू के नाप खेत है।

[Signature]
 R.S.I. दोग
 5/12/13

खसरा		
खसरा नं०	कुल खसरा	प्रस्तावित खसरा
583 म.	0.054	0.020 1/2