

**RECONNAISSANCE GEOLOGICAL REPORT OF PROPOSED SITE OF
SHRI GIRVIR CHAND S/O SHRI PREM CHAND FOR THE CONSTRUCTION OF
OWNER DRIVEN CONSTRUCTION FOR HOUSING (ODCH)
VILLAGE-MASON, TEHSIL- DUNDA, DIST.- UTTARKASHI
KHASARA NO – 1854, 1855 & AREA – 0.019ha, 0.008ha**

Date of Inspection: 29-12-2013

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 10th December 2013 regarding geological studies in disaster affected five districts of Uttarakhand. District Uttarkashi is one of them where the undersigned took traverses and collected field geological observations 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 Ram Singh Negi, Revenue Sub-Inspector. The site is 30km approximately from Tehsil Dunda, District Uttarkashi, Uttarakhand by NH-108 (National Dharasu-Gangotri Highway) via NH-94 (National Dharasu-Yamunotri Highway) and 2-3km on bridle path from Brahmkhal. It falls on coordinates – N 30°41'40.8" E 78°18'52.5" and elevation 1622m. The site is highly populated.

Proposed construction site



A far view from North direction of the proposed site.



A view from SW direction of the proposed site.

The proposed site is situated on a hill slope terrace in Village Mason. The overburden thickness in the proposed site is 8-10m approximately. There are fragments of phyllite and

quartzite in the overburden material of approximately 5-10cm in size. The soil is light brown color with silty material. The general slope of the area is 50° towards West direction. There is a perennial Nala about 30m from the site in NE direction. The site is less vegetated.

About 20-30m uphill in East direction from the site a proposed motor road is there.

RECOMMENDATIONS:

Based on above surface geological observations of the proposed area the following remedial measures for construction of a geologically suitable house are recommended:


1. An inclined retaining wall of 10m in two-steps of 5m each on East side and another 15m wall in three-steps of 5m each on West side of the proposed site must be constructed with proper weep holes at specific distance for enhanced stability of the plot.
2. The weep-holes passage should be clear to discharge subsurface water to maintain stability of foundation of the house.
3. The depth of foundation of the house should be as per the compactness of the overburden material.
4. The premises of the house must be made cemented to prevent subsurface seepage and a proper drainage system with lined pipes at the backside with discharge towards North direction needs to be developed.
5. As the area falls in Lesser Himalayan earthquake zone IV, light weight and slanting roof, framed structure, deep column and single storied house construction is preferable.


CONCLUSION:

Prima-facie, the proposed site of Shri Girvir Chand S/o Shri Prem Chand, is geologically feasible for the proposed construction, with the strict implementation of the above mentioned recommendations, otherwise, in their contravention; geological suitability will be deemed voided.


(Anupriya Shah)
Consultant Associate Geologist

Date: 5th Jan, 2014
Place: Camp Uttarkashi


(Deepak Singh)
Consultant Geologist


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

ग्राम- अशोक भण्डारा
जिल्हा- अकोला

३० काशी
प्रमाणित कर
अकोला जिल्हा
जिल्हा ए



संकेत

- ① लाय कोट
- ② - - - - -
- ③ प्रस्तावित इंधन मळाने



प्रस्तावित इंधन मळाने
निर्माण हेतु

O.P.E. 17

29/12/13
अ. अ. अ. अ. अ.

संख्या - २०५८ प्रथम प्रमाण दिनांक - ३०/०५/५५

जमीन पर लगे हुए मकानों की सूची

क्र.सं.	संख्या	प्रमाण	नाम मूकिया	व्यक्ति	संख्या	मिटर
1	2	3	4	5	6	7
1854	००१९	०५	मिर्जा (संख्या ८५)			५००
1855	०००८		मुम-च-९			५०
			मि. गणेश X			
			म. सोम			



1854