

**RECONNAISSANCE GEOLOGICAL REPORT OF PROPOSED SITE OF
SHRI SHANTI S/O SHRI TULA FOR THE CONSTRUCTION OF
OWNER DRIVEN CONSTRUCTION FOR HOUSING (ODCH)
VILLAGE-DHUINK, TEHSIL- BARKOT, DIST.- UTTARKASHI
KHASARA NO – 3381 & AREA – 0.010 ha**

Date of Inspection: 24-12-2013

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 Upendra Singh Rana, Revenue Sub-Inspector. The site is 58km approximately from Tehsil Barkot, District Uttarkashi, Uttarakhand by NH-123 (Delhi-Yamunotri National Highway) via Damta-Kandari Motor Marg and 20-30m downhill on bridle path from road. It falls on coordinates – N 30°38.387' E 78°02.811' and elevation 1609m. The site is highly populated.

Proposed site for construction



A far view from North direction of the proposed site.



A side view from NE direction of the proposed site.

The proposed site is situated on left bank of River Yamuna and on a flat cultivated terrace in Village Dhuink. The overburden thickness in the proposed site is about 15-20m approximately and is colluvial in nature. There are fragments of siltstone in the overburden

material of approximately 5-10cm in size. The site is almost flat 4°-5° for 50m in NW direction from the site and then the downhill slope is 65°-70° in NW direction. The road is 20m uphill south of the proposed site with the uphill slope of approximately 40°-50° towards NW direction. The proposed site is less vegetated. There are some houses in East direction of the site. The soil is brown color with silty clay material and siltstone fragments.

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. The depth of foundation of the house should be as per the compactness of the overburden material.
2. An inclined retaining wall of 1m on ESE side of the proposed site must be constructed with proper weep holes at specific distance for enhanced stability of the plot.
3. The weep-holes passage should be clear to discharge subsurface water to maintain stability of foundation of the house.
4. There must be a minimum gap of 2-3ft between the uphill retaining and the backside wall of the house to avoid seepage into the house.
5. The back, sides and premises of the houses must be made cemented to prevent subsurface seepage and a proper drainage system with drain discharge towards NW direction needs to be developed.
6. As the area falls in Lesser Himalayan earthquake zone IV, light weight and slanting roof, framed structure, deep column and single or double storied house construction is preferable.

CONCLUSION:

Prima-facie, the proposed site of Shri Shanti S/o Shri Tula, 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

(Anupriya Shah)
Consultant Associate Geologist

Date: 5th Jan, 2014
Place: Camp Uttarkashi

Deepak

(Deepak Singh)
Consultant Geologist

d/w

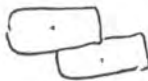

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नकशा योजना कंडीफ मध्ये श्री शान्ति फु तुला वि० ग्राम दुर्ग के लिए प्री फेक्टोरेड
 भवन निर्माण हेतु शसि प्रस्तावित
 रा० उ० वि० क्षेत्र - डामटा तहसील - बडकोट जिला - उत्तराखण्ड
 पैमाना 64" = 1 मील



चौहद्दी

- ① पूर्व दिशा में - वेनासिट का खेत
- ② पश्चिम दिशा में - मिजानसिट धोपरसाहि का खेत
- ③ उत्तर दिशा में - मिमानसिट रथ्य मेहरसिंह का खेत
- ④ दक्षिण दिशा में - गवरासिट धोवामसिंह का खेत

संकेत

 माप खेत

 प्रस्तावित शसि

समाप्त
 राजस्व निरीक्षक
 वनीगाड

समाप्त
 08/07/13
 रा० उ० वि०
 डामटा

ड्रेस किया
 08/07/13
 रा० उ० वि० - डामटा

राज्या दुईक राजस्व उपनिरीक्षक क्षेत्र-डामटा तहसील-बडकोट जिला-उत्तराखण्ड
 श्री शान्ति कुमारी तुला ग्राम दुईक के देवी भाषा से अविग्रह होने पर प्रमाणित करने के लिए प्रमाणित

क्र.सं.	खण्ड नं.	खाना नं.	खतियार का नाम पति का नाम एवं निवासी	विवरण
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3381	0010	64	शान्ति कुमारी तुला महेश १० उमर	महोदय प्रस्तावित श्री शान्ति कुमारी तुला के धर्म बंधन हैं।

सत्यापित
 राजस्व उपनिरीक्षक
 बडकोट

सत्यापित
 @ By
 25/11/13
 R.S.I Damsda

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 2/12/13
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