

RECONNAISSANCE GEOLOGICAL REPORT OF SHRI TARA DUTT S/o
BAISAKHU RAM FOR THE PROPOSED CONSTRUCTION OF OWNER DRIVEN
CONSTRUCTION HOUSING (ODCH)
VILLAGE-GORSARA, TEHSIL- DUNDA, DIST.- UTTARKASHI
KHASRA No.533 & AREA-0.0019ha.

Date of Inspection: 23-12-2013

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 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. Pyar Singh Chauhan, Revenue Sub-Inspector, Dhauntri. The proposed construction site is located 65km away from district headquarter Uttarkashi, 100m hill side by foot away from Gorsada-Sirkalkhal motor road, and of falls on alluvial deposits. The proposed land is man-made cultivated land. At 700m horizontal distance in the south direction Jalkur gad is present, northward Tara Dutt house, eastward Basudev house; westward Shati/Chirdiya land is present. At 200m in east direction parental nala is present. The area is low populated and proposed site is low vegetated. That proposed site falls on the coordinates N 30°51'25.7" E 78°37' 4.2" and El. 1407m from msl.



Close view of the proposed site

The proposed site situated on the overburden which is manmade step cultivated flatland. At 700m horizontal distance in the south direction Jalkurgad present, about 0.5-1m thickness of overburden, in overburden fragments of quartzite and phyllite are varying 2-6cm in size with fine grained brownish clayey soil matrix. Bedrock has been found nearby the proposed site. The proposed site is cultivated and low vegetated. General slope of the proposed site is 20°-25°, hill side slope from proposed site trending 15°-20° northeast direction

and valley side slope is trending 35° - 40° moderate to steep in south west direction towards Jalkurgad. In this area boulders of quartzite are present having varying sizes of 1-2m.

The proposed site is situated on cultivated land, on the site tree and house is good condition or stable. Fresh, compact and hard in-situ of quartzite is found on proposed site. The rock is dipping 5° - 10° towards S 20° E, joint J1 is dipping 80° towards E and J2 48° towards S 60° W direction. No water seepage and weak zone in proposed site.

RECOMMENDATIONS:

Based on above surface geological observations, the proposed area seems geologically suitable for the proposed building construction. The following remedial measures are recommended for safety:

1. A inclined retaining wall at the uphill and downhill side; with provisions of weep holes and sufficient gap of about 0.5-1.0m in between the uphill side 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 from uphill side as well as waste water from the existing houses to be release safe place at down-hill along a channel.
3. The foundation depth of the houses must be as per the compactness of the overburden material in the proposed site.
4. The soak pits and toilet foundations must be quiet away from the house so that the foundations are not directly affected from subsidence due to excessive seepage.
5. Framed structure with 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.

CONCLUSION:

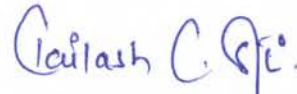
Prima-facie, presently, the proposed site of Shri.Tara Dutt S/o Shri.Baisakhu is geologically feasible for the proposed construction, only if, the above mentioned recommendations will be followed strictly, otherwise, in their contravention the geological suitability will be deemed canceled.



(Vivek Sahu)
Consultant Associate
Geologist

Date:

Place: Uttarkashi



(Kailash Chandra Sati)
Consultant Geologist



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

15 ਸੋਲਰ ਲਾਈਟ ਪੜ੍ਹੇ ਗਾਇਬ ਨਾ ਲੀਜ਼ ਫੁੱਲ ਜੀਅ ਤੋਲ ਕਰੋ

2

34

आरु जी ३ सा ५ यही गाजला पहलीन इक्य जिला

	२	३	५	५
५३३	००१९	८	वा २५ लला ५१० वेला १५ आरु जी ३ सा ५	५१ लला १५