

RECONNAISSANCE GEOLOGICAL REPORT OF PROPOSED SITE OF SHRI RAMCHANDRA S/o SHRI RAM SINGH FOR THE CONSTRUCTION OF OWNER DRIVEN CONSTRUCTION FOR HOUSING (ODCH) VILLAGE PUJELI, TEHSIL- MORI- DISTRICT UTTARKASHI, UTTARAKHAND
KHASARA No. – 266 & AREA – 0.020 ha.

Date of Inspection: 16/01/14

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 Jaipal Singh, Homeguard. It is 27Km approx from Tehsil Headquarter Mori, Uttarkashi, Uttarakhand and the site is 100m approx from Naitwad-Bhitri motar marg through Pujeli village bridle path. It falls on coordinate – N 31° 06 19.4 E 78° 05 19.8 El. 1750m. The site is in village Pujeli, which is moderately populated. In north direction w.r.t. the site Dewani Khadd and water spring is present at about 200m and 20m approx distance respectively.

The proposed site is on colluvial overburden material varying in thickness range from 1-2m approx at places, man-made cultivated terraces are present, is old rock fall. The uphill slope is 40°-45° and the downhill slope is 30°-35° sloping in SW direction. Around the proposed site location least mix vegetation of Banjh, Chulu, etc., is present at about 40-45m approx in uphill side.



Close view of the proposed site

The proposed site is on colluvial overburden material thus no insitu rock is found but a few boulders of granite gneiss in NE backside varying in size range from 1m to 5m approx are found embedded in the blackish soil with fragments of quartz. The soil is consolidated;


the rate of infiltration is low making the soil water saturation low to medium. At the proposed site location the water seepage is low. The trees at the uphill slopes are standing straight and a new construction is already present.

RECOMMENDATIONS:

1. Inclined retaining wall of 2m approx height and 3m approx length at the NE backside boundary and also in the SW toe boundary of the site of 3m 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 south 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. If possible, the massive boulders which can be lifted manually should be removed from the back side of the proposed site.
6. Massive plantation of trees, bushes and grasses which can hold the soil mass and retain the debris with dense and long rooted, wide leafed flora must be done in the southern uphill side to protect the soil erosion and minimize the surface erosion of sub-surface rock.
7. The soak pits and toilet foundations must be quiet away in south side from the house so that the foundations are not directly affected from subsidence due to excessive seepage.
8. 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 Ramchandra S/o Shri Ram 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.


(Shashank Sharma)

Consultant Associate Geologist

Place: Camp Uttarkashi



(Vijai Kr. Sen)

Consultant Geologist



(Dipender Singh Chand)

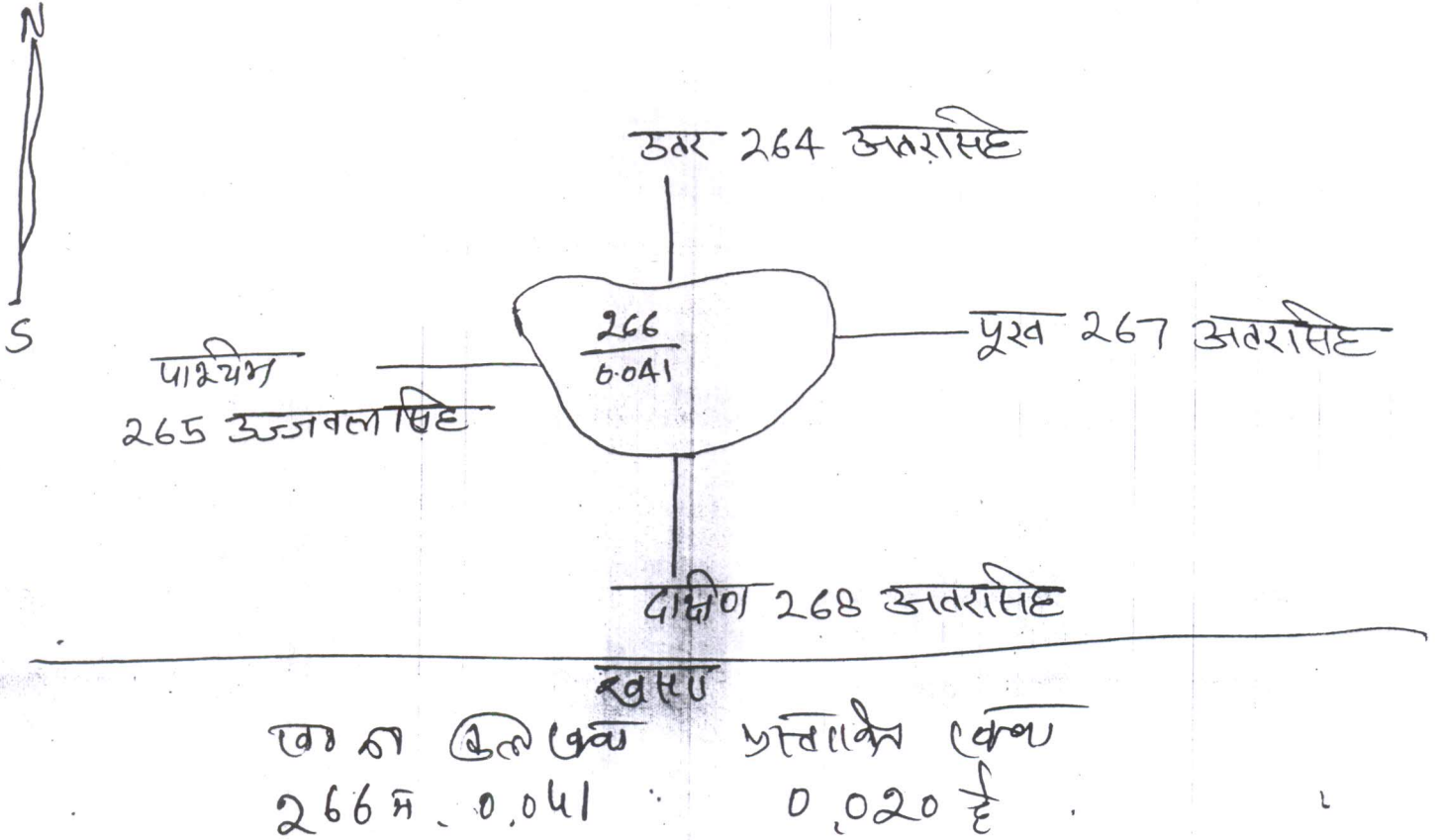
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करचा पूरा

हसील मोरी के ग्राम पुजेवी में देवी आपदा के कारण पूर्ण रूप से क्षतिग्रस्त भवन के कारण अपने निर्जी भूमि पर वना में जाने वाले अभक्ति व्यक्ति श्री रामचन्द्र के भवन का नगरी नम्बरा व खसरा 266 खवा 0.041 हे०



खसरा नं 266 की चौकड़ी निम्न प्रकार है

- ① पूरव में खसरा नं 267 अतरासिह
- ② पार्श्वीय में खसरा नं 265 अज्जबलासिह
- ③ उत्तर में खसरा नं 264 अतरासिह
- ④ दक्षिण में खसरा नं 268 अतरासिह

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R. E. M.