



PRIJEDLOZI HITNIH SANACIONIH MJERA ZA NOVOAKTIVIRANA KLIZIŠTA U GRADU GORAŽDU

Sažetak:

Tokom 2020/2021 u Gradu Goraždu su se pojavila određena klizišta koja su prijetila da unište privatnu imovinu i infrastrukturne objekte. Da bi se sto brže i efikasnije riješio novonastali problem bilo je potrebno da se izađe na teren i utvrdi činjenično stanje na lokaciji, te da se daju preporuke za intereventne sanacione mjere, odnosno aktivnosti koje bi trebalo izvesti kako bi se pokrenute kosine trajno vratile u stabilno stanje. U ovom radu bit će ukratko predstavljene tri lokacije sa aktiviranim klizištima, utvrđenom stanju i datim proprukama. Najteži problem je bio utvrditi uzroke nastanka klizišta, koji su nažalost uglavnom antropogenog karaktera, što zbog narušavanja stabilnosti, što zbog neblagovremene intervencije nakon izmjene naponskih stanja u kosini.

Prvo klizište nastalo je u naselju Obarak, na samom ulazu u grad Goražde, iznad objekta, kome prijeti da bude uništen. Isto je nastalo kao posljedice usjecanja tokom gradnje, bez bilo kakvog osiguranja kosine nakon usjecanja. Podzemne i površinske vode, koje su na ovom prostoru poznate od davnina, značajno utjecale na aktiviranje klizišta. Drugi slučaj je u mjestu Pijesak, gdje se nakon detaljnih istraživanja utvrdilo da rezervoar za vodu, koji se nalazi u vrhu kosine procjeđuje višak vode preko bazena i na taj način aktivira klizište. Treće klizište je u naselju Čitluk, gdje se iznad objekta nalazi jako veliki izvor vode sa preko 1 l/s. Voda je rezervoarima loše kaptirana i značajna količina vode teče nekontrolisano kroz kosinu, a koja natapa klizište koje se kreće ka objektu ispod izvora. Predložena rješenja i preporuke bit će detaljno opisana u radu.

Ključne riječi: klizišta, Goražde, hitne sanacione mjere.

ADVICE ON URGENT REMEDIATION MEASURES FOR NEWLY ACTIVATED LANDSLIDES IN GORAŽDE CITY

Summary:

During 2020 and 2021, some landslides that had been activated in Goražde city threatened to have an impact on private houses and infrastructure facilities. In order to solve this problem efficiently and as soon as possible, it was necessary to determine the factors on site and to provide advice for urgent remediation measures, i.e. the activities that should be undertaken in order to stabilize the slopes permanently. This paper will briefly present three activated slopes, their statuses and the advice for the activities on stabilisation. The most difficult task was to determine the trigger of the landslides occurrence, which was, unfortunately, mostly of an anthropogenic character, either due to the impact of structure to the stability or due to untimely stabilisation after the change of balance force in the slope.

The first landslide was activated in the Obarak settlement, at the very entrance to town Goražde, on a slope above private building. The landslide occurred during construction as a consequence of a slope cut performed without any subsequent securing. Groundwater and surface water, whose presence in the area has been known since before, have a significant impact on landslide's activation. The second case is in the Pijesak settlement. In detailed research, it has been determined that the trigger is water reservoir located at the top of the slope, behind the house. Unused, excess water seeped over the basin and slope and thus activated the landslide. The third landslide is in the Čitluk settlement, where a large water spring is located above the building with a flow over 1 l/s. The water is collected by the reservoirs poorly. A significant quantity of water flows down the slope uncontrollably. The water saturates the landslide, triggering its movement towards the building at the bottom of the slope. The proposed solutions and advice will be described in detail in the paper.

Key words: landslides, Goražde, urgent remediation measures.

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