

Technical assistance on sinkhole scheme

Fontmell Close sinkhole



Client: Hertfordshire County Council
Location: St Albans, United Kingdom
Completion Date: December 2016

A sinkhole 12m in diameter and 8m deep opened up in the public highway at Fontmell Close, a residential area of St Albans on October 1st 2015. Opus was immediately commissioned by Hertfordshire County Council Highways to provide technical advice and support.

Opus has vast experience working in the wake of emergencies resulting from our expertise in the UK, but mainly following major earthquakes in Christchurch, New Zealand. UK staff previously deployed to NZ also worked on this site, where we were one of the first on the scene, making it safe, starting the initial stabilisation and creating temporary access to get affected residents to their properties.

With residents at the centre of the project, we arranged and undertook a variety of desk based studies, geophysical surveys, drillholes, boreholes and probes, subsurface CCTV surveys and specialist geotechnical assessments. We used our local expertise, peer checked by our Global sector leaders.

Opus' calculated approach using highly qualified and experienced staff was critical, along with an ability to communicate effectively with stakeholders. The use of clear and consistent communication was essential. Our technical approach also recognised that the time factor

to restore the site was very important to the community.

Ground subsidence investigation directly beneath the sinkhole revealed the cause of the collapse to be a former 'bell' shaped chalk mine. We investigated the whole length of Fontmell Close and neighbouring Bridle Close to establish their long term risks. Opus confirmed that there were no further mined voids beneath the highway, as well as identifying the best approach to reinstate the carriageway.

Opus shared its learnings at a recent Geological Society technical conference focusing on ground instability. The reopening took place on December 2016 with Opus in attendance, demonstrating the connection the team built with the community.