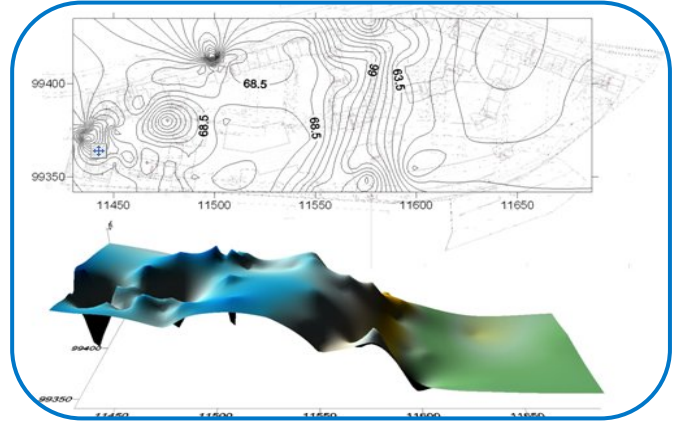


## Former Chemical Works, Watford

### Our Services

- Site Investigation (*CPT Gamma Cone and Trial Pitting*)
- Foundation Design



### Investigation of Chalk Solution Features

**CGL** provided Jubb Consulting Engineers with foundation design advice for a large Barratt Homes site (North London), the former Sun Chemicals works in Watford. The site will become a mixed commercial and residential development featuring terraced housing and apartments with both basement and semi-basement car parking.

The site is underlain by the Upper Chalk Formation, often affected by sizeable solution features in this area. Variable chalk depths noted in the large volume of previous environmental site investigations pointed towards possible solution features underlying the development.

A site investigation comprising gamma-cone CPT and trench excavation was conducted to provide accurate information on the depth of chalk and the nature of both the overlying strata and the solution infill material.

This information was combined with the existing investigation data to produce a three dimensional model of the chalk surface. These showed the presence of three solution features which would otherwise have remained hidden.

Combining the subsurface data with detailed drawings from the structural engineers, we were able to provide advice resulting in bespoke foundation designs for each individual structure.

A traditional piled solution was not possible on this site due to the contaminated nature of the near-surface soils and the presence of the underlying aquifer.

Client: Jubb Consulting Engineers  
(on behalf of Barratt Homes North London)