Dynamic sampling and dynamic probe testing

Dynamic sampling (or window sampling) is carried out by either track-mounted percussive samplers or hand-held equipment. Samples are retrieved in seamless plastic tubes for logging by a suitably qualified engineer. Window sampling is suited to restricted access sites, limited depth contamination investigations, and where disturbance must be kept to a minimum. The track-mounted equipment is also capable of carrying out dynamic probe testing, which is a continuous soil test procedure to enable correlation with relative density and shear strength of strata.

How can we help?

If you are planning any development involving construction, you are likely to require a site investigation. Structural Soils Limited (an RSK company) is always pleased to offer advice at an early stage and will provide information on geology, recommended investigation techniques and suggested scopes of work, usually without charge. In return we would expect to be invited to quote or provide a price for the investigation. Owing to our competitive pricing structure, we win approximately 40–50% of contracts priced. We then undertake the works using the most relevant equipment available. Common methods used on site include trial pitting, dynamic sampling, cable percussion drilling and rotary drilling, but we also have access to geophysical methods and static cone penetration testing.

Geotechnical laboratory testing is undertaken in our laboratories in Bristol, Castleford and Hemel Hempstead, and chemical testing is undertaken by an accredited laboratory with which we have strong and long-standing relations.

Factual and interpretive reports are prepared by our team of experienced engineers, geologists and environmental scientists, and provide advice on foundation solutions, contamination levels and remediation options.

Recent projects

Bridgwater, Somerset
An environmental investigation was required on a 27-ha closed cellophane factory. Although the work included cable percussion and rotary drilling, the environmental investigation was based mainly on the use of dynamic sampling. A total of 136 dynamic samples were sunk to depths of 5 m. The method used enabled access to be gained to all parts of the works. Samples recovered were tested via a UKAS-accredited laboratory and a factual report prepared for Scott Wilson (the engineer). The ultimate client was Innova Films.

Exeter
A ground investigation was undertaken to provide information for the refurbishment of the Royal Albert Memorial Museum in Exeter. The work included 24 hand-held and track-mounted window sample holes, largely to profile the defensive earthworks of a Norman castle. Exeter City Council was the client and the engineer was Building Design Partnership.