

CASE STUDY 6

AS SEEN ON TV!

Piling solution appears on Channel 4

Croydon-based subsidence repair specialists - Withers - had the opportunity to put piling under the media spotlight recently they appeared on Channel 4's 'Room for Improvement' programme. They were filmed as part of an overview on the use of piling in foundation works.

Setting the scene



In May 2004, Withers was asked to provide an economical solution for a subsidence problem in a three-bedroom bungalow in Chessington, Surrey.

Capita Insurance Services (on behalf of their insurers) called in WCJ Engineers from Esher, Surrey, for analysis and report on a remedial cure. Withers produced a piled raft solution comprising 55 bored 250mm diameter piles and a 250mm thick RC raft to support the building.

The piles were installed internally with a TD 308 Piling rig – used by Withers as it can negotiate the width of an internal door frame and access the property without the need for any walls to be demolished. The rig is fitted with trip wires by way of a safety device so that any 'slip' across the working area of the augers automatically cause the rotation to stop

immediately. This can only be re-set externally when the safe working environment has been checked.



By Oct 2004, the client had moved out of the property and enabling works began with an anticipated contract duration of seven months. At just over £110k, the contract value is high for a domestic property and signifies the gravity of the problem. In a highly-plastic clay subsoil with trees surrounding the front of the property (on a slightly sloping site), 10m deep piles sleeved for heave in the top 3m was an economic solution compared with a traditional hand dig approach.

The health & safety implications of such a scheme would not be allowed under the CDM regulations – whereby the design team have a duty of care to prepare a design that can be safely executed.

Withers used their technology-based management system, withersnet, to fast track the project and allow the client, WCJ, access to the transparent job file via the internet for up to date information. This system ensures key dates are not missed by using a colour-coded traffic control system on the job file. White indicates everything is running on time, amber flags up a key date and red alerts contractors two days before a scheduled key date (giving system administrators a chance to address any potential issues).

With a client in alternative accommodation, which is usually bought in six month periods, a contract overrun could have significant impact on the insurance costs in general. However, this was not the case as works to the property are currently being finalised.

Withers had total responsibility for all the enabling, piling, raft and subsequent reinstatement, plus repair works (all managed across the withersnet system). This was a golden opportunity to show that with sound piling solutions and good project management, a subsidence issue can be tackled effectively.



In 'Room for Improvement', the couple showed how they used piling to their advantage by creating a modern extension to a Victorian property. The build included traditional and modern construction methods (such as the piling technique), but the overall result was a stunning extension with a great deal of fenestration.

Key players - Capita Insurance Services – Watford, WCJ Engineers – Esher and Withers Group – Croydon.

