

# Ansty Aerospace Earthworks and Stabilisation



Client: **Rolls Royce**

Main Contractor: **Wates Construction**

Value: **£325k**

Location: **Ansty Coventry**

Duration: **8 Weeks**

Volume of Firmafil Stabilized Soil: **20,000m<sup>3</sup>**

Area of Firmabase Stabilized Soil: **7,000m<sup>2</sup>**

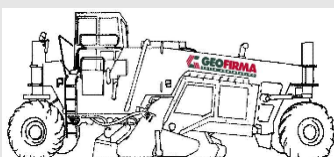


This was a subcontract for Wates Construction to undertake ground improvement works to a 3m depth below a proposed aerospace research facility. As well as ground improvement works below the building the surrounding hardstandings were also stabilised.

Due to the nature of the end use of the building the maximum total settlement over the design life was 15mm. The slab loading was to be 85Kn/m<sup>2</sup> over the whole slab. The solution adopted for this site was to treat the full depth of soft soils down to the competent granular materials. The soft soils were **Firmafil** treated to achieve a 15% CBR with the fill also being placed to >95% MDD and air voids averaging less than 5%. On top of the **Firmafil** a 300mm stabilised layer of **Firmabase** to 30% was placed with a 100mm crushed rock layer as surface protection.

The works were carried out over a 6 week period and once completed plate load tests were undertaken and the average settlement was less than 1mm under the design loading of 150Kn/m<sup>2</sup> for the tests. The predicted settlement within the stabilised material over time was less than 10mm.

The use of a **Firmafil** and **Firmabase** stabilised solution provided a technically robust solution to the potential settlement problems on the site.



www.geofirma.co.uk tel: 01787 224532  
email soils@geofirma.co.uk  
Coggeshall Road, Earls Colne, Essex, CO6 2JX