

# Case Study

## SOUTHERN DATA CENTRE, WELWYN

**Client:** Digital Realty Trust

**Consultant:** Arup

**Main Contractor & Anchor Installer:** [Laing O'Rourke](#)/Expanded Structures Ltd



### PROJECT SPECIFICATION

The construction of a new data centre required a fast, cost effective method of supporting an excavation in sandy ground to allow the building of a subterranean water tank and associated control room. The proximity of the excavation to the floor slab meant it was imperative that no undermining of the foundations occurred.

### SOLUTION

A combination of bore hole logs and site testing revealed that the ground was extremely well suited to the use of Platipus® Anchors. An indemnified design, based on the requirements of HA68/94, was prepared which was checked by Laing O'Rourke's geotechnical team. The cut face was covered with a geocomposite from Tensar and secured using S08 anchors. On site instruction was provided to allow Expanded Structures to carry out installation themselves.

**Anchor System:** S08EC galvanised spheroidal graphite iron anchor c/w 4m of 12mm Ø galvanised steel wire tendon, 200mm x 200mm galvanised steel load plate & 12mm galvanised steel wedge grip.

**Quantity:** 85

**Anchor Design Life:** 5 yrs

**Soil Type:** Sand & gravel

