

UK Case Study – Blindwells Residential Development

This former open cast mine was backfilled without any engineering control.

The site is being developed as a Residential Estate with associated infrastructure including roads, schools, and community services infrastructure.

Landpac HEIC is being used for **In-situ Ground Improvement** prior to Fill works and **Compaction of Fill laid down in thick lifts** of around 800mm to 1.0m



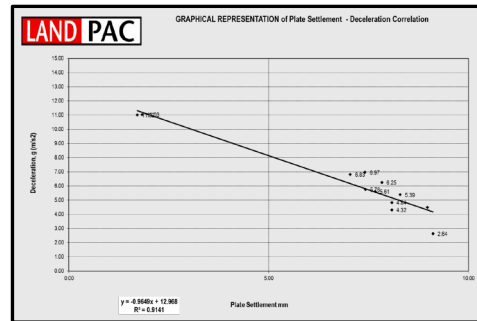
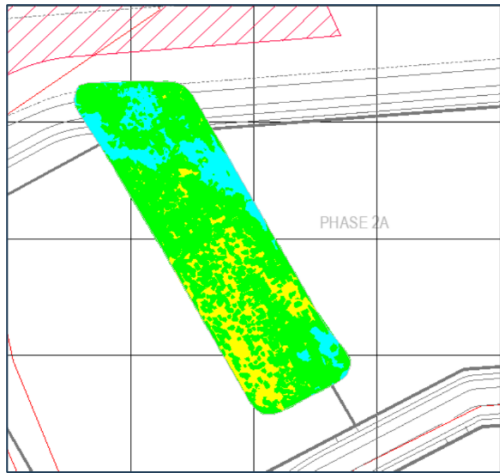
Materials Description

The site materials consisted predominantly of Made Ground comprising a variable mix of Sands and Clays with Gravels, Cobbles and Boulders of Coal, Mudstone and Sandstone.

Ground Improvement Requirements

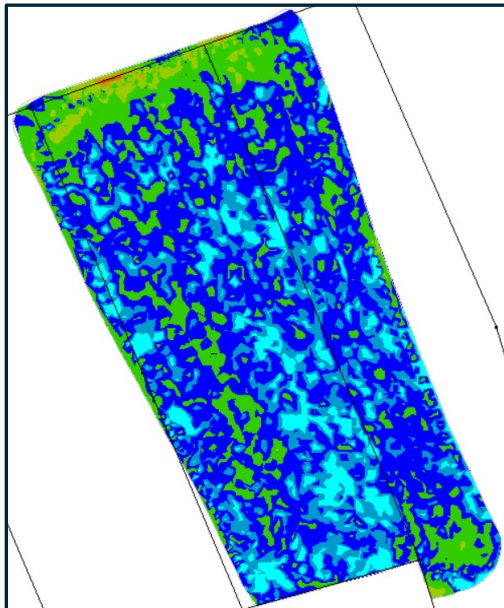
The ground bearing requirement for the Landpac HEIC ground improvement was defined by the engineers in terms of the extent of settlement measured using plate load testing. The Landpac CIR measurements are correlated to the onsite plate load testing results in order to produce colour coded maps indicating the bearing capacity over the areas treated with Landpac HEIC.

Typical Ground Bearing Capacity Map – CIR correlated to Plate Load Settlement



CIR MAP LEGEND	
Plate Settlement Ranges	CIR "g" Ranges
> 15mm	< 0
10mm - 15mm	0 - 3.31
5mm - 10mm	3.31 - 8.14
< 5mm	> 8.14

Typical HEIC Induced Settlement Map



LEGEND

Black	+350mm
Dark Brown	301-350mm
Brown	251-300mm
Light Brown	201-250mm
Olive Green	151-200mm
Green	101-150mm
Light Green	51-100mm
Blue	26-50mm
Teal	11-25mm
Cyan	0-10mm