

## Lyons Park

Coventry

As part of the regeneration of the former Jaguar car plant site in Coventry, a food manufacturing facility was built for a major UK logistics provider.



### The project

The construction of a 105,699 sq ft bespoke food manufacturing and distribution facility,

### The challenge

The new facility was constructed over a brownfield site with a highly variable thickness of reworked fill material, which contained pockets of buried topsoil. The main challenge was to provide a ground improvement solution which could accommodate high column and floor slab loadings of 4300kN and 55kN/m, while limiting total deflection to 25mm and differential settlement to 1:750.

## The solution

Rigid inclusions were selected as the most appropriate foundation solution to meet the required specification requirements while delivering a low vibration cast in-situ method of installation that would avoid the creation of pathways to the underlying Principal Aquifer of the Allesley Member. The RIs were designed for a bearing capacity of up to 200kN/m<sup>2</sup>, which enabled the structural engineers to reduce the size of the foundations. This has helped to deliver a sub-structure solution that offers significant overall carbon savings when compared with fully suspended alternatives. In less than seven weeks, 2000 columns were installed.

## Project facts

**Owner(s)**

Goodman UK

**Keller business unit(s)**

Keller UK

**Main contractor(s)**

Glencar Construction

**Solutions**

Bearing capacity / settlement control

**Markets**

Commercial

**Techniques**

Rigid inclusions

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