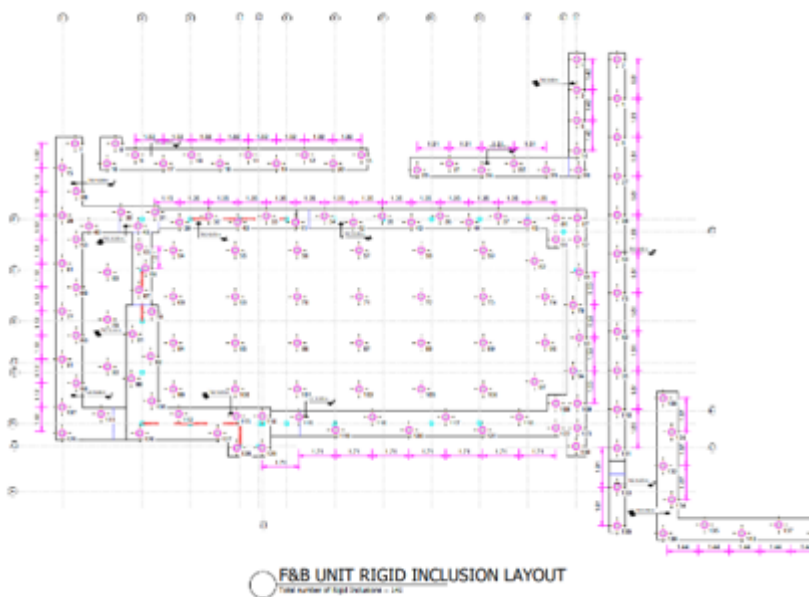


## Cambridge Retail Park

Cambridge, UK

Foundation solutions for a new retail park in Cambridge.

- Facilitated shallow simply reinforced spread footings & a ground bearing slab
- Provided a fully displacement solution through landfill
- Controlled differential settlement across the quarry high wall
- Offered a low vibration methodology for use close to live services



### The project

The construction of a food and beverage unit on the existing retail park.

### The challenge

The new building straddles a former landfill with a variable thickness of made ground of between 1.0m-8.0m, which in turn overlies the competent Gault Clay Formation. The unit was proposed within a live retail park environment with buried services close by. The proposed solution needed to avoid generating landfill arisings or high levels of vibration, whilst being suitable geotechnically given the risk of differential settlement across the high wall.

## The solution

A displacement RI ground improvement solution was adopted below the foundations and slab areas. Keller selected a 300mm diameter column to provide a bearing capacity of 100kN/m<sup>2</sup> for simply reinforced shallow foundations and 15kN/m<sup>2</sup> below the lightly loaded ground bearing slab. All of the columns were successfully installed in just a few days, allowing the Contractor to follow on quickly with the foundation installation works.

## Project facts

**Owner(s)**

Railpen Limited

**Keller business unit(s)**

Keller UK

**Main contractor(s)**

Prince Build Limited

**Solutions**

Piling

**Markets**

Commercial

**Techniques**

Rigid inclusions

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