

CASE STUDY

HEATH FARM LANE, PARTINGTON



PILING

CLIENT

**Vistry Partnerships and
Trafford Housing Trust JV**

MAIN CONTRACTOR

Vistry Partnerships

SCOPE OF WORKS

**Driven Precast Piling
RBeam**

ACHIEVEMENTS

**Completed on time
Completed on budget**

Project Brief

RB were appointed to provide residential foundations on the £115m Partington housing scheme at Heath Farm Lane Partington, the Joint Venture, formed by Vistry Partnerships and Trafford Housing Trust, one of the largest regeneration schemes in the Greater Manchester area will deliver 600 new homes

RB were required to deliver a cost effective piled foundation solution in a safe and timely manner dealing with the issues associated with the regeneration of a brown field site and the associated variable ground conditions, access, and environment considerations. Following early consultation with Vistry an offsite solution for the piles and the ground beams - RBeams - was decided on as the best way forward. This high quality engineered foundation system is factory produced removing all quality and waste issues from site in line with Vistry's commitments to reduce waste and packaging, a it was agreed delivery would be phases to achieve best commercial results.



ROGER BULLIVANT LIMITED

T. 0845 838 1801 www.roger-bullivant.co.uk info@roger-bullivant.co.uk



PILING



Key Issues/Requirements

- Ground conditions varied across the site, with previous use ranging from rough grassed areas, old buildings hardstanding and even a former reservoir, some areas requiring foundations protecting against ground heave.
- The access between areas of the site included use of a public road.
- Ground water was present at a high level
- Relatively high drainage out fall to the site

Solution

- A total of 4400 metres of pre-cast concrete ground beams – Rbeams – support by over 1000 precast concrete piles over 4 phases provided the foundations for the 148 units.
- Majority of the variable ground had been dealt with by a strict remediation programme carried out by Vistry prior to RB's arrival on site resulting removal of most substructures and soft organic materials in preparation for services and roads. The use of precast piles not only provided with reduce waste benefits with its off site manufacture but allowed construction to continue with not additional curing times. Driven precast piles do not provide spoil arisings and there eliminate the risks associated with handling and disposing of any material that would result from a bored pile solution.
- We utilised our quiet piling hammers, installing segmented piles to depths of up to 10m. the rigs are designed and purposed built in-house to meet specific site requirements, in this case, reduced height and weight to suit the residential developments such as Heath Farm Lane.
- RBeams produced off site, having the same benefits as the precast piles, were protected in the areas of the site that had the potential for ground heave due to desiccation and the influence of trees, this protection include void formers being install below both precast caps and beams. Deliveries of both piles and beams could be scheduled to suit site requirements and monitored to accommodate the use of the public road through the site
- The high ground water levels presented meant the working platform had to be installed at a higher level than normal, this require a degree of ground management and following piling RB removed the surplus material and stockpiling and sealing at the rear of the plots for future use.

Vistry Partnerships' Managing Director of JVs for the North West, said:
“Not only is the Heath Farm Lane scheme an important project for Vistry Partnerships, but it will play a central role in transforming Trafford's housing supply so we are delighted to have Roger Bullivant on board to help turn our idea into a reality.”

