

Hornchurch, Essex

Site Area: 3.2 Hectares
Former Use: Landfill
Client: Taylor Wimpey
Value: £3,500,000

Provectus were contracted by Taylor Wimpey to provide a fixed price, all risk D&B remediation and infrastructure solution at a former landfill located in Hornchurch, Essex for their 87 unit development.

The site was historically used as an airfield and was subsequently quarried for its sand and gravel deposits. It was then backfilled with up to 5m of refuse and waste and then capped. Investigations at the site had been carried out over many years and all this information was consolidated during a final intrusive investigation carried out by Provectus, which focussed on the proposed end use, layout and likely remedial solutions.

Gas control and protection of future residents were key factors in Provectus' design, which led to an approved remediation and infrastructure solution appropriate for residential development.

As part of their contract, and in order to provide a robust solution to the issues of concern, Provectus provided:

- Construction of a 6m deep perimeter gravel filled passive gas ventilation trench using a novel deep trenching technology from Holland;
- Provision of further gas mitigating measures across the site including granular vent blankets and a geocomposite vent network connecting to passive gas ventilation trenches;
- Placement of a validated cohesive cover barrier in gardens and public open spaces using site derived materials and imported materials;
- Enhanced gas protective measures including installation of gas membranes at base of oversite and beneath floor screed.

