

Bluewater Shopping Centre Extension

Current Use: Shopping Centre
Client: Blueco Limited
Value: £undisclosed
Location: Bluewater, Kent
Size: Set in 240 acres

Provectus were required by the appointed structural engineers to carry out a site investigation within the service yard of one of the largest prestigious Shopping and Leisure Complexes in the UK. Opened in 1999, Bluewater has continued to evolve and develop itself adapting to the changes in the retail and leisure markets.

The yard was in operation during the works and therefore had to be carefully cordoned off to avoid deliveries and staff in the yard coming into contact with the drilling operations.

The purpose of this investigation was to determine ground conditions for a two storey extension and provide an assessment on a foundation solution.

Programming constraints were that only a 6 week window was provided for the works to be carried out. The lead time up to this was short from the awarding of the contract to having to be on site to start the works, although full health and safety approval still had to be gained. Quick mobilisation was key.

Built on a former chalk quarry, the ground comprised engineered Thanet Sand to a depth of 13 metres, overlying deposits from the Upper Chalk. The yard also contained a significant amount of subsurface services requiring each area to be cleared and land excavated service pits



undertaken.

The site works comprised six cable percussive boreholes to confirm the deeper conditions and twelve hand excavated trial pits adjacent to the existing building to confirm pile cap locations.

Provectus were able to confirm the recommendations for the foundations, enabling the extension.

Bluewater continues to evolve with a further proposed extension of the West Village, continuing its contribution to economic growth in the region.