











PROJECT PROFILE

CREST ACADEMY



CREST ACADEMY

CREST ACADEMY



CREST ACADEMY NEASDEN, LONDON

Wates Construction was appointed as principal contractor by Brent Council in 2011 for a £40m project to rebuild Crest Boys' and Crest Girls' Academies in Neasden, Northwest London. Wates was supported by a design team from Capita Symonds. Four new buildings were proposed. These would include separate Girls' and Boys' Academies with a joint sixth form in two pavilion buildings, with the other two interconnecting, mutual-use buildings housing specialist subjects and sports, all within a park setting.

Toureen Group was appointed by Wates to carry out a four-phased project. The demolition of existing temporary structures and groundworks for the basement consisted of the demolition, bulk excavation and removal of 10,000m³



-1-

CREST ACADEMY CREST ACADEMY



PROJECT DURATION

DATE OF COMPLETION

65 WEEKS MAY 2013

CONTRACT VALUE

£11 MILLION

CLIENT

WATES

arisings. Rainwater harvesting tanks were installed, together with drainage, before the hard landscaping could begin for the rebuild of the two academies on the same site.

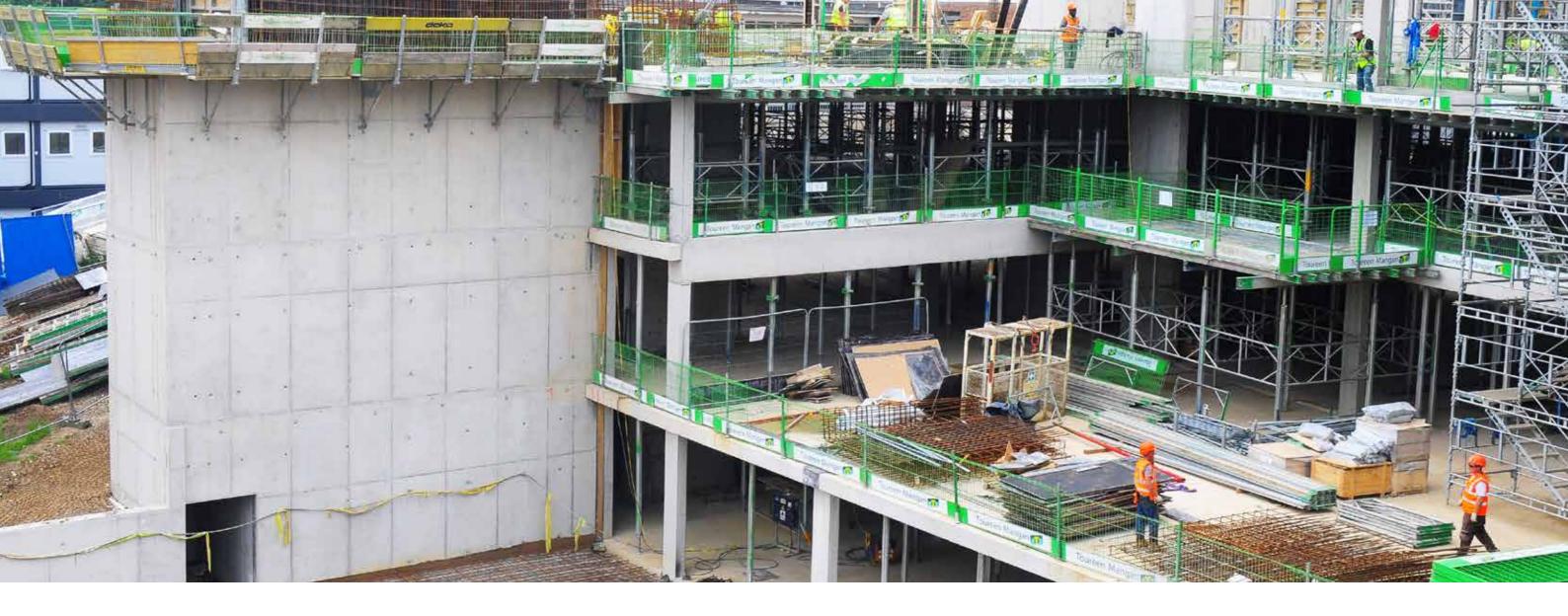
Enabling works included the formation of a new access road from Dollis Hill Lane and a car park, as well as the erection of temporary school accommodation.

Adding to the complexity of the scheme was the unusual position on the side of a hill, requiring a portion to be built into a slope. Restrictions on working hours and delivery times meant that materials and logistics planning were key to the smooth running and time efficiencies of the project. A detailed route in and out of the site for deliveries minimised the effect on residents and pupils, with no deliveries scheduled at either end of the working day. Issues of noise levels, school traffic and operating around exam periods were approached by phasing noisy site activities around the exam times; with construction traffic being managed around the arrival and departure of school children.

Construction of the 4-6 storey buildings, with connecting structures, commenced using both sheet piling and contiguous piled walls to secure the two large reinforced concrete basements forming part of the overall foundation solution. In all, some 360 piles were installed across the scheme, measuring between 600 and 800mm diameter and bored to depths of 8 to 32m.



-3-



Reinforced concrete walls, decking and columns were constructed, together with 7,000m² of post tensioned slabs. All concrete surface finishes met with specified Type B requirements.

Both steel and concrete frames were used in one of the mutual buildings due to its large spans. Despite both buildings being structurally independent, they butt against each other and, thanks to the differing frame heights, this meant that the concrete frame would actually cantilever over that of the steel; which made for some awkward detailing where the buildings met.

Across the rest of the school,

reinforced concrete, which is the ideal solution on sites like this, was used to provide the frame for the buildings. In places, these frames double up as retaining structures due to the huge 16m fall across the site.

Wates Construction Project Manager, Vince Whelan commented on the RC aspect of the job...

"We have used Toureen Group on many occasions for our RC frame works throughout the south east, all to great success."

They have been one of the best RC frames contactors that I have worked with for a long time."

Toureen Group delivered the project to Wates on time and on budget and received considerable praise from Wates for the high standards and attention to health and safety concerns throughout the whole Toureen team.

Wates Construction successfully handed over Crest Academy in September 2014, delivering a facility of which the school and wider community can be justifiably proud. Wates received a National Site Award in the Considerate Constructors Scheme for the project.



-5-



Toureen group Head Office 25 Cecil Road Harrow HA3 5QY

T: 020 8424 7999

E: info@toureengroup.co.uk

www.toureengroup.co.uk

