



Walthamstow Blockade.



Office extension.



Medway River Bridge.

# Walthamstow Blockade

*The British Ready-Mixed Concrete Association Award for Excellence in Customer Service recognises ready-mixed concrete companies who provide a high-quality, efficient and professional service. Ten nominations were received in 2016 and the winners were presented at The Concrete Society Awards Dinner.*

The 2016 winner is Hanson for the Walthamstow Blockade project. Track Partnership, a strategic alliance between London Underground and Balfour Beatty Rail, accepted the challenge to deliver the renewal of the Walthamstow Crossover in 2014. The scheme was the first time a low-vibration trackform (LVT) had been installed in the underground system. To facilitate this upgrade, a concrete slab of approximately 275m<sup>3</sup> was placed 500m from the point of discharge. This had to be laid to falls, requiring minimal compaction and flow easily around rebates designed to incorporate the new LVT track.

A bespoke material was developed in conjunction with the client, main contractor, concrete pump supplier and the concrete producer – Hanson UK. Laboratory trials were carried out for flexural strengths based on four concretes specifically designed for the project. A trial was also performed at Acton prior to supply; the area was large enough for Camfaud, the pump supplier, to run a 300m pipeline to see how the designed concretes would perform.

The pour continued for 36 hours due to the need to bubble-wrap all of the track's points to protect them, as well as the time needed to move the pump and equipment into the restricted place and check there were no leaks.

Hanson was able to adapt quickly to the issues faced on-site by opening another plant and bringing in drivers and plant staff on-site at very short notice on a Saturday. Hanson also supplied technical cover and a fitter on-site for the duration of the pour. The team was supported from across the supply chain, including Hanson Cement, Hanson Aggregates and Sika for admixtures.

"Hanson Concrete provided expertise during the trial, approval and testing of the concrete and management of wagons during the main pour," says Paul Fahey, senior delivery engineer at Track Partnership. "The team worked hard to deliver a sustainable concrete solution, which involved full-scale plant, site and pumping trials, with reviews after each development stage."

Atul Jewitt, project manager for TfL and a member of Track Partnership, adds, "The concrete pour was always going to be a challenge, working in a constrained site to tight timescale. The concrete pour was crucial to the successful completion of the Walthamstow Blockade and my thanks go to everyone for working so well together."

## Highly Commended

### Office extension for Dancourt Construction

Tarmac Readymix Concrete was Highly Commended for an office extension for

Dancourt Construction. The idea was to maintain the character of the existing building but expand outwards with a completely modern twist using coloured paints, external glass cladding, along with a large amount of product that Dancourt has a wealth of knowledge and experience in placing – reinforced concrete.

It was clear to Tarmac that Dancourt wanted to push the boundaries of ready-mixed concrete with this project. It required a reinforced concrete with very high consistence to place in congested locations and for long runs and high sections of formwork incorporating window frame openings to give an unblemished, highly defined finish.

### Medway River Bridge

Developing the right concrete was key to the success of this project and Hanson's technical team ensured that adjustments were made to the three high-strength concretes specified so that they arrived in perfect condition for use without drying out during transportation. To ensure quality and consistency throughout the complex construction, both plants converted their primary aggregate to 20mm limestone. In addition, the maintenance programme and production planning regime were stepped up at both plants during the build to keep deliveries on track. ■