

# Sustainability Highly Commended 2015

## 9 Cambridge Avenue

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The challenge was to disassemble an existing 10 year old, 3,290m<sup>2</sup> commercial building and re-erect it one mile away on the other side of a limited weight rail bridge. The project delivered a viable building with significantly less embodied carbon, constructed at lower cost than a new build, and which can be let at market rates.

The building originally at 816 Leigh Road had to be 'removed' to make way for a new road bridge over the new Crossrail tracks. The project team engaged early in the process, collaborating on every detail to establish the viability of moving the building; the planning of the project involved the whole team for 8 months.

A carbon footprint analysis elementally evaluated the building components to justify their environmental/functional inclusion and to scope the whole project. Benchmarking the project against a comparable new-build enabled the team to quantify clear and exact benefits including 56% lower embodied carbon, 25% cost savings and 6% lower whole life carbon footprint compared with a new-build.

The team elementally analysed the building components, assessing whether their re-use would add environmental value and be affordable. By understanding the building's potential end-use, the team established clear deliverables in terms of building performance so it would be attractive to the market.

SEGRO showed outstanding leadership and the project has delivered significant, measurable and surprising results. It is the first warehouse project in the UK where over 95% of the structure has been successfully re-used and it saved 850 T CO<sub>2</sub>.

The legacy of 9 Cambridge Avenue encourages the rest of the industry to explore a whole range of new opportunities and is used as a case study by Constructing Excellence, CIOB, RICS, RIBA, Ecobuild, University College London and Cambridge University School of Architecture.



### Judges comments

This project team demonstrated clear innovation in daring to think differently, with compelling evidence of cost and environmental benefits.

They negotiated with the council to allow derogation from Part L, as whole life carbon was lower for the re-use option, demonstrating the misconception that newbuild was better value for money – a clear lesson to the industry to look at the true carbon and cost for re-using buildings.