

MHA+ Technology Awards Shortlisted : Best use in Construction

Executive Summary: John Sisk & Son Ltd

Arguably the greatest engineering challenges of our Framework projects on the A12 and A14 were rooted in matching the levels of the new tarmac surface with the old life expired concrete. The closer we were able to replicate these levels, the greater the efficiencies in delivery, program, carbon, local impact and cost.

Creating geospatial heat maps of as-built road elements to compare to the 3D parametric design surfaces meant we could validate the construction as it progressed with simple easy to understand visuals, and as such ensure precision install and a right first time approach leading to significant reductions is waste and facilitation material reuse on site.

We have created a legacy for the future of highway maintenance, which when fed into the overall E2ED strategy designed for National Highways by Sisk, offered tangible, measurable and scalable benefits applicable to the wider framework, the efficiencies of which will be far reaching and long lasting.