

Award-winning paper in 2016

Papers published in *Construction Materials* are eligible for awards from the Institution of Civil Engineers. Papers from any of the ICE journals can be nominated for several awards. In addition, each journal has awards dedicated to their specific subject area.

On Friday 6 October 2017, ICE president Tim Broyd presented an award to the following papers published in *Construction Materials* in 2016. The

editorial panel nominated their best papers and an awards committee chaired by Nigel Wright allocated the awards.

Howard Medal (best paper in the journal)

The best paper was awarded to Ellis *et al.* (2016).

Abstract

The Bermondsey Dive-Under (BDU) scheme is a fundamental part of UK's Thameslink Programme. The scheme involves extensive demolition of 900 m of masonry viaduct followed by the construction of 900 m of new structures, 200 m of reinforced earth structures and 200 m of embankment modifications. Crushed brick is typically not used as a structural fill material in the UK due to concerns over its friability and associated long-term performance. This paper describes a study undertaken in 2012 that examined the viability of recycling the demolished brickwork material into a crushed engineered fill material for use in the BDU permanent works. The overarching objective of the study was to seek to reduce the scheme's significant volumes of both imported fill and exported demolition material, with associated sustainability advantages in addition to the environmental and safety benefits resulting from the significantly reduced lorry movements from London's streets. The paper details the sampling and testing of brickwork that was undertaken and presents the findings from the study. The paper also discusses some of the issues associated with introducing innovation within major work programmes. The BDU scheme is currently under construction and is scheduled for completion in 2017.

REFERENCE

Ellis S, Goodwin A, Laycock E and Hurst C (2016) Use of crushed brick in reinforced-earth railway structures. *Proceedings of the Institution of Civil Engineers – Construction Materials* **169**(2): 93–105. <https://doi.org/10.1680/jcoma.15.00014>.



Howard Medal winners, Elizabeth Laycock, Simon Ellis, Andrew Goodwin and Chirs Hurst, with ICE President Tim Broyd