

Award-winning paper in 2020

Papers published in *Municipal Engineer* 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 15 October 2021, ICE president Rachel Skinner presented awards to the following papers published in *Municipal Engineer* in 2020. The editorial panel nominated their best papers and an awards committee chaired by Tim Broyd allocated the awards.

James Hill Prize

The James Hill Prize, presented to the best paper published in *Municipal Engineer*, was awarded to Metje *et al.* (2020).

Abstract

Buried utilities (e.g. gas, water, electricity, drainage), many installed decades ago, are vital urban support systems. Their locations are often not well documented, yet accurate location greatly helps replacement, rehabilitation and maintenance of existing services and is crucial for installation of new utilities: it minimises utility strikes / third party damage and the huge associated costs of delayed / additional streetworks. Several international standards and specifications aim to provide guidance on utility surveys to increase client confidence in their accuracy and repeatability. The most recent specification is PAS (Publicly Available Specification) 128 in the UK for underground utility detection, verification and location. This paper investigates the impact of PAS128 by comparing trial site survey results from different utility survey specialists with each other and with the vertical and horizontal accuracies at trial excavations. While the overall detection level was very good for all companies, the research revealed that the definition of quality level QLB1 needs to be reconsidered as it was not achieved in many places with respect to the vertical accuracy. It is recommended that future revisions of PAS128 differentiate between accuracy and confidence since detection by multiple sensing technologies increases the confidence, but not the accuracy as suggested by PAS128.

REFERENCE

Metje N, Hojjati A, Beck A and Rogers CDF (2020) Improved underground utilities asset management – assessing



Professor Nicole Metje receiving the James Hill Prize with ICE President Rachel Skinner

the impact of the UK utility survey standard (PAS128). *Municipal Engineer*, **173(4)**: 218–236, <https://doi.org/10.1680/jmuen.18.00055>.