



basestone™

Case Study: Digital Redlining on Crossrail

Process: **Redlining**

Cost saving: **60%**

Costain Skanska Joint Venture (CSJV)
at Crossrail Paddington

The Problem

The Redline drawing review process used by Crossrail is heavily paper driven, time intensive, and easily leads to confusion - particularly when information is required to be accurately captured from the field and then used to create as-built redlines and reports. Engineers become frustrated at not having the right information to do their jobs. Simple tasks often take more time than necessary, delaying the whole project.

The Benefits

Using BaseStone, CSJV saw speed increases of 2.5x for redlining processes. This translates into cost savings of 60% compared to the traditional paper-based method. Cost savings are calculated based on time savings as well as reduced paper and printing costs.

Features

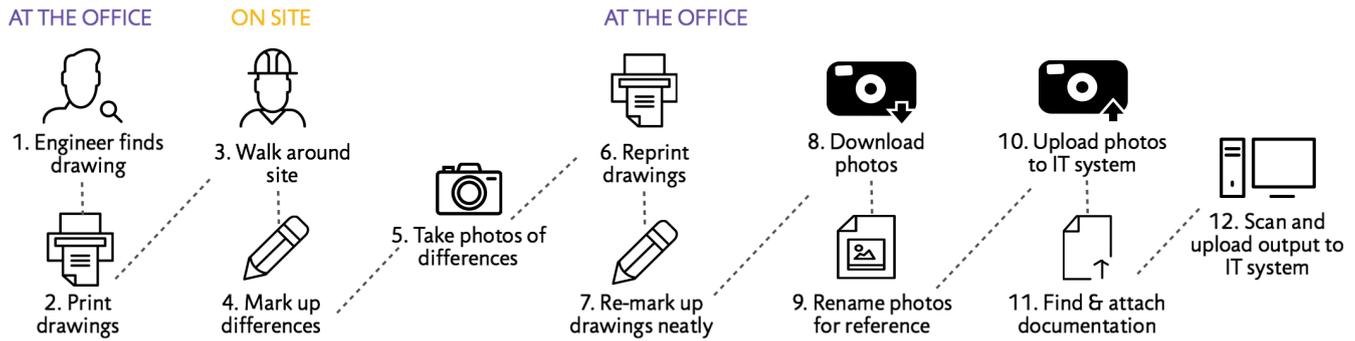
- **Digital redlining from the field** - engineers redlined drawings and added photos whilst on site. Replacing a process that was previously done using paper drawings and notepads, this greatly enhanced both the speed and accuracy of capturing data from the field.
- **Data synced to the cloud** - BaseStone automatically syncs data to the cloud - engineers accessed the information gathered and added more detail back at the office using the BaseStone web platform.
- **Report generation** - BaseStone generates as-built redlines, detailed reports and CSV reports including hyperlinks which replaced the need to create reports manually. As well as saving huge amounts of time, these outputs served as a digital record for CSJV and formed part of the handover package to Westminster Council.



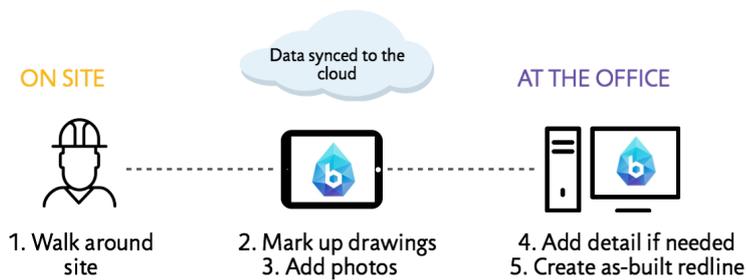
“The trial delivered a tangible 60% saving when using this technology in the field. The relationship has allowed a great deal of flexibility and this has helped us to drive digital capture of construction information, which we believe will drive a more efficient asset handover”

Ben Feltham, Head of BIM and Digital Engineering, Skanska UK

Before: Redlining Process



After: Redlining Process with BaseStone



	Traditional method	BaseStone method
Printing cost*	£65	£0
Time cost*	£2800	£1120
Total cost	£2865	£1120
Saving		£1745
% Saving		60.9%

The digital redline review process using BaseStone as an integrated system eliminated half of the steps compared to the traditional approach currently employed, achieving an average speed increase of 2.5x. The asset owner, Westminster Council, accepted the as-built redlines first time with the comment that they were of very high quality.

The Solution

BaseStone is a tablet and web-based collaboration tool designed for engineers in the construction industry. It allows users to digitally redline drawings directly from the field, syncs data to the cloud and generates outputs such as redlines and reports in one click. BaseStone digitised the redlining and process for the Costain Skanska Joint Venture (CSJV), demonstrating commercial benefits from both time and paper cost savings.

Find out more at www.basestone.io

*Printing costs were calculated based on printing A3 drawings in black and white. Time costs were calculated based on the average cost of an Engineer at £40 per hour.