



Water Foot-Printing (Smart Meter)

1. Description and Overview

During Diaphragm Walling activities, the c405 initiative was to install smart meters at the bentonite plant. This was to review water consumption for this activity as currently it is unknown.

Water as a resource is becoming scarce as the population increases and global warming occurs.

The project was and still is looking to reduce water consumption inline with the corporate targets and CRL aspirations.

One of the major water consumption activities at C405 Paddington was the installation of 165 diaphragm wall panels which were on average of 3.35m in length by 1.2m wide by 40m depth.

We carried out water monitoring which showed that each panel used 72m3 of water. In total this was approximately 12000m3 from between May 2012 to February 2013.

Water champions were assigned to monitor daily usage of water. This information has since been shared across similar sites to keep the awareness live.

2. Benefits to the customer/project

- Understanding how much water is required per installed panel
- Highlights potential solutions for keeping water consumption low during specific activities
- Beneficial Information for Stakeholders and builds up the relationship due to informing them with specific details
- The water consumption that was recorded can be used as a benchmark for future works. This could help to drive down water consumption
 - Reduce impacts on the environment
 - Reduce costs

3. Recommendations for improvement

- Provide access to the data whilst on site during the operation (mobile technology)
- Availability for more information on site specific ground conditions

Title:	Environmental Manager CSJV
CSJV Contact:	Kenneth.hills@costain-skanska-jv.co.uk
Customer:	Crossrail
Project:	C405 – Paddington Station
Supplier (if applicable):	TBC