

A320 Hoe Stream Bridge

Client: R&W civil engineering at commencement, superseded by Thorne group.

Value: £237,000

Duration: 4 weekends

Project Detail

The Hoe Stream bridge had previously been stabilised by a gabion basket retaining wall situated at each corner of the bridge. Over time the gabion baskets have suffered excessive movement and failed in the north-east corner. As a more long-term solution, Suttle Projects were instructed to install a sheet pile retaining wall to replace the gabion baskets in each corner.

There were a number of challenges for our team to overcome whilst carrying out these works:

- Making sure that we have the reach to install the piles, which were in a difficult to access location.
- There was a medium pressure gas main running underneath the verge near where we were tracking.
- Preventing damage to the road whilst using heavy plant.
- Minimising the disruption to the public whilst carrying out the works.

Using our simplified approach, we overcame each challenge efficiently and effectively. We selected our Komatsu PC490 with Movax attachments SG75v and DH25, the Komatsu has a great reach of 9-10m which easily achieved the reach required for the piling location. To ensure the gas pipe was uninterrupted we completed a platform design to ensure the ground loadings from our Komatsu PC490 would not impact the gas pipe in any way.

In order to get the works completed on schedule and with minimal disruption we had teams working over four weekends whilst road closures were in place. Although there was a road closure in place the footpath was enabled to be left open for pedestrians. Our operatives and banksmen kept a close eye on the public activity on the footpath and stopped works when a member of the public approached, resuming only when it was safe to do so. The program of works was completed on schedule.

Photographs:



Figure 1: Back driving piles using DH25 attachment



Figure 2: Bog mats laid out to avoid damage to the road



Figure 3: Installing sheet piles using SG75v attachment



Figure 4: Installed sheet piles