

## M4 widening scheme - South Wales

Since the beginning of April 2007 Archaeological Investigations Ltd. has been working as the archaeological contractor for Carillion Plc (formerly Alfred McAlpine) and Jacobs UK Ltd. on the M4 widening scheme between junctions 29 and 32 in South Wales. Areas of potential archaeology were identified in an Environmental Statement published in 2006 and our aim was to investigate these areas and to monitor the removal of topsoil. A field evaluation was undertaken in advance of ground-works on four sites adjacent to the motorway. A total of 20 trenches were excavated but no archaeological finds or features were revealed. Since undertaking the evaluation we have maintained a watching brief on the site during ground-works on areas identified as having archaeological potential. During the removal of topsoil on the north side of the motorway between junctions 29 and 30 a small complex of three features cut into the subsoil were revealed.

The fills of the features contained material synonymous with metal working. Large amounts of slag, hammerscale, furnace lining and coal suggested that industrial activity had been taking place on the site. Although fragments of furnace lining were discovered within the larger of the two features, there was no discolouration or textural change in the surrounding subsoil to suggest that the features were subjected to high enough temperature to be the remains of a furnace. The features were likely to have been associated with a nearby furnace which was not revealed during the soil strip. The features excavated were possibly a smithing hearth and quenching pit associated with the metal working process. The third, smaller feature may have been a stake hole related to a structure or awning covering the complex. Unfortunately, without the presence of datable artefacts or material suitable for carbon dating, the period when this activity was taking place is unknown to us.

Metalworking techniques such as these changed little between the beginning of the Iron Age (c.800BC) and the Industrial Revolution (c.AD1780). The lack of cultural material associated with the features however, may suggest an Early Medieval date (Wales was largely aceramic during this period). A metal working complex excavated by us in Pembrokeshire during March 2007 was similar in form and (like the M4 site) occupied a position towards the top of a north facing slope. This feature was dated to the 7th century AD. In June 2008, monitoring of the ground-works on the south side of the motorway between junctions 30 and 32 revealed a flint blade. Made from a flint type fairly common to the Welsh border area, it is believed to date from the Neolithic/Early Bronze Age period (4500BC - c.1500BC). Although not associated with any features or further artefacts, the good level of preservation would suggest that it was found very close to its original site of loss.

Work on the widening scheme is ongoing and Archaeological Investigations will be returning to carry out further monitoring in the near future.