CPAT Report No. 1801

Caersws Water Main Replacement, Powys

Archaeological Watching Brief





Client name:	Severn Trent Water
CPAT Project No:	2539
Project Name:	Caersws water main replacement
Grid Reference:	SO 0290 9214
County/LPA:	Powys
Planning Application:	N/A
CPAT Report No:	1801
HER Enquiry No:	N/A
Event PRN:	140370
Report status:	Final
Confidential until:	09/07/2022

Prepared by:	Checked by:	Approved by:
Rose	Je Malan	pMaloo
Richard Hankinson Senior Archaeologist	Tim Malim Principal Archaeologist	Tim Malim Principal Archaeologist
08/07/2021	09/07/2020	07/09/2020

Bibliographic reference: Hankinson, R., 2021. *Caersws Water Main Replacement, Powys,* Unpublished CPAT Report No 1801.



YMDDIRIEDOLAETH ARCHAEOLEGOL CLWYD-POWYS CLWYD-POWYS ARCHAEOLOGICAL TRUST

41 Broad Street, Welshpool, Powys, SY21 7RR, United Kingdom +44 (0) 1938 553 670

trust@cpat.org.uk www.cpat.org.uk

©CPAT 2021



The Clwyd-Powys Archaeological Trust is a Registered Organisation with the Chartered Institute for Archaeologists

CONTENTS

SUMM	1ARY	11
CRYNO	DDEB	11
1	INTRODUCTION	1
2	HISTORICAL BACKGROUND	2
3	WATCHING BRIEF	2
4	CONCLUSIONS	5
5	SOURCES	6
6	ARCHIVE DEPOSITION STATEMENT	6

Summary

An archaeological watching brief was undertaken between 1-4 June 2021 by the Clwyd-Powys Archaeological Trust during water main replacement works on the outskirts of Caersws in Powys, between NGRs SO 0285 9206 and SO 0290 9216. The watching brief was commissioned by Severn Trent Water (STW) as part of the grant of permission by Cadw to STW for work within the designated area of the scheduled monument known as the Caersws Roman site (MG001).

The watching brief was required to mitigate the impact of the replacement, which had become necessary after there had been a leak in the existing main in 2020, at which time the original pipe was found to be in poor condition. A series of five excavations were carried out to install the new pipe and within two of these a sub-surface deposit of Roman age was revealed, though no in-situ features or structures were recognised.

Crynodeb

Bu Ymddiriedolaeth Archaeolegol Clwyd-Powys yn cynnal briff gwylio archaeolegol rhwng 1 a 4 Mehefin 2021 yn ystod gwaith ailosod pibell ddŵr ar gyffiniau Caersws ym Mhowys, rhwng Cyfeirnodau Grid Cenedlaethol SO 0285 9206 ac SO 0290 9216. Comisiynwyd y briff gwylio gan gwmni dŵr Hafren Dyfrdwy fel rhan o ganiatâd Cadw i'r cwmni weithio o fewn ardal ddynodedig yr heneb gofrestredig o'r enw safle Rhufeinig Caersws (MG001).

Roedd gofyn cynnal briff gwylio i liniaru effaith yr ailosod, a oedd wedi dod yn angenrheidiol ar ôl cael twll yn y prif bibell a oedd yn bodoli yn 2020, a bryd hynny darganfuwyd bod y bibell wreiddiol mewn cyflwr gwael. Cloddiwyd cyfres o bum rhych ar gyfer gosod y bibell newydd ac, o fewn dwy o'r rhain, datgelwyd dyddodion o dan yr wyneb yn dyddio o oes y Rhufeiniaid, er na adnabuwyd unrhyw nodweddion neu strwythurau yn eu lle.

1 Introduction

- 1.1. The Clwyd-Powys Archaeological Trust (CPAT) was appointed by Severn Trent Water (STW) to carry out an archaeological watching brief during the replacement of a water main in fields centred at NGR SO 02900 92146, to the north-west of the village of Caersws in Powys (Fig. 1). There had been a leak in the main in 2020, the repair of which had necessitated a watching brief and demonstrated the poor condition of the existing pipe.
- 1.2. Archaeological input was required as the work entailed the excavation of a series of pits to provide access and allow for the insertion of a smaller pipe within the existing one. The main fell within the designated area of the Caersws Roman Site scheduled monument (MG001) and the need for a watching brief during ground disturbance associated with the work had been specified by Cadw in their grant of scheduled monument consent (SMC) for the works.
- 1.3. The watching brief was carried out at the beginning of June 2021. In line with Cadw's stipulations, the watching brief monitored all excavations and reinstatement work and provided an opportunity to record any archaeological features revealed.

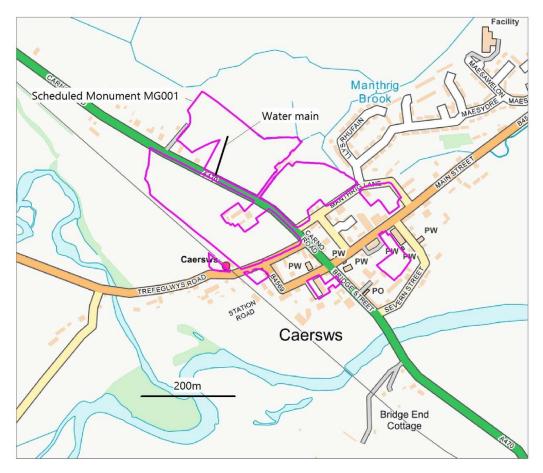


Fig. 1: Location of the water main (contains Ordnance Survey data © Crown copyright and database right 2018)

2 Historical Background

- 2.1. This section provides a brief summary of the relevant archaeology in the area affected, to allow the findings of the watching brief to be placed in a wider context.
- 2.2. The scheduled area of the Caersws Roman Site (MG001) covers the Caersws II Roman fort and its adjacent *vicus* or Roman civilian settlement; the earlier Caersws I fort lies about 1km to the east-north-east. Caersws II is believed to have been established in the mid-70s AD and then refurbished later in the 1st century. Further works were carried out on the fort during the early 2nd century, at which time the ramparts were fronted with stone and an annexe was added on its north-west side (Jones 1993, 15-96).
- 2.3. Excavations in the annexe have identified a tile kiln and geophysics has suggested that it may have been the site of timber structures. It was defended by a ditch, with a second that also divided it into north-east and south-west sides (Fig. 2). Additional ditches have been identified further to the north-west which may identify an extension in that direction.
- 2.4. As far as can be ascertained with current knowledge, the early 3rd century effectively marked the end of the military tenure of the site, though there is evidence of activity lasting into the 4th century (Burnham and Davies 2010, 226-9).

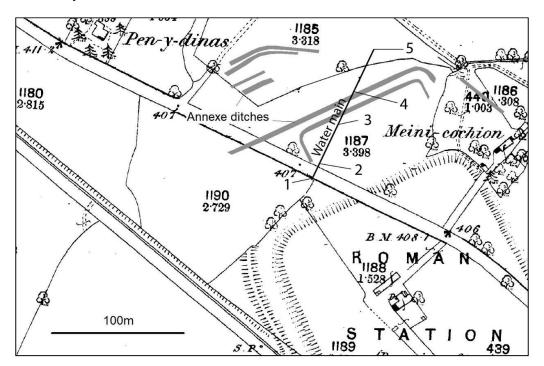


Fig. 2: Caersws II fort showing the line of the water main and the STW excavation locations (numbered) in relation to the annexe ditches. Extract from the 1885 Ordnance Survey map

3 Watching Brief

3.1. The watching brief was conducted from 1-4 June 2021, in accordance with the Chartered Institute for Archaeologists' (CIfA) (2020) *Standard and Guidance for an Archaeological Watching Brief.*

- 3.2. The water main runs from a larger main that follows the line of the main A470 Carno road and serves a water supply in each of the two fields on the north-east side of the main road. The replacement involved the insertion of a smaller flexible pipe within the old asbestos cement main and a total of five separate excavations were needed to provide access for this operation. The first of these was outside the scheduled area within the road corridor at SO 0285 9206 (Fig. 2, 1), with the remainder spaced out across the fields to the end of the main at SO 0290 9216 (Fig. 2, 5), a total length of approximately 110m.
- 3.3. Each excavation covered an area of about 2.0m by 1.0m, with Nos 2 and 5 having extensions to connect to the stock water supply in their respective field. Excavation locations were determined by passing a wire up the existing main and identifying its end by scanning; this minimised the amount of excavation required. A machine with a toothless bucket was then used to identify the trench in which the old pipe was laid and a narrow bucket was used to excavate down to the pipe itself. Once exposed, the pipe was broken into to allow the new pipe to be inserted in sections. The trench in which the original pipe had been laid averaged 0.8m deep.



Fig. 3: Excavation No 2 at SO 0286 9207, from the north-east. Photo CPAT 4927-0001

- 3.4. Excavation No 1 was within the road corridor and was entirely within ground already disturbed by the large water main and the construction of the main road; no in-situ archaeological deposits were revealed.
- 3.5. The first of the excavations within the fields (No 2; Fig. 3) was entirely within disturbed ground and again, no archaeological deposits were revealed.
- 3.6. Excavation No 3 fell within the main part of the annexe (see Fig. 2) and identified an archaeological layer comprising a mixture of yellowish clay and grey stony silt, from 0.25m to 0.3m in thickness (Fig. 4). The layer contained charcoal flecking and was covered by 0.3m of grey-brown silty topsoil; it overlay the natural subsoil, which was a grey manganese-panned gravel. The Roman ceramic material visible within the archaeological layer was left in-situ.



Fig. 4: Excavation No 3 at SO 0287 9210, showing the archaeological deposit below the topsoil, from the east-south-east. Photo CPAT 4927-0006

3.7. Although excavation No 4 lay just outside the ditches of the main part of the annexe, the layers identified were apparently identical to those in No 3. This indicated that the Roman activity extended beyond the main annexe ditches to the north, in an area where further ditches, presumed to relate to the annexe, have been identified from cropmark evidence.



Fig. 5: Excavation No 5, at the north end of the main, showing the connecting trench to the stock water supply, from the north. CPAT 4927-0008

- 3.8. The final excavation (No 5) at the northern end of the main was cut entirely through disturbed ground containing bricks and other modern material. No Roman finds or features were identified, though this might have resulted from works relating to the installation of the earlier pipe.
- 3.9. Once the various sections of the new main had been inserted into the old pipe and connected to the larger main the excavations were backfilled and the ground reinstated in accordance with Cadw's stipulations (see Fig. 6).



Fig. 6: The area of Excavation No 3 following its reinstatement, from the north. Photo CPAT 4927-0007

4 Conclusions

- 4.1. The methods used in the replacement of the water main were appropriate for working within the scheduled area as they ensured that there was only a minimal impact on sub-surface archaeological deposits.
- 4.2. The watching brief recorded a Roman deposit in excavations 3 and 4, which indicated that the activity on this side of the fort continued from within the main annexe to the north of the annexe ditches, away from the fort and into an area where cropmarks have been identified in the past. The evidence confirmed the results of the watching brief carried out on the repair of the leak in 2020 (Hankinson, 2020).
- 4.3. Once the new main had been installed, the excavations were carefully backfilled and reinstated. This successfully returned the area to its previous surface appearance.

5 Sources

Published sources

Burnham, B.C., and Davies, J.L. (Ed), 2010. *Roman Frontiers in Wales and the Marches,* Aberystwyth: RCAHMW.

Hankinson, R., 2020. Caersws Water Main Repair, Powys, Unpublished CPAT Report No 1753.

Jones, N.W., 1993. 'Caersws Roman Fort and Vicus, Montgomeryshire, Powys 1984-92', *Montgomeryshire Collections*, 81, 15-96.

Cartographic sources

1885 Ordnance Survey 1:2500 1st edition Montgomeryshire 35.15

6 Archive deposition Statement

6.1. The project archive has been prepared according to the CPAT Archive Policy and in line with the CIFA *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives guidance* (2020). The archive is entirely digital and will be deposited jointly with the Historic Environment Record, Clwyd-Powys Archaeological Trust and the National Monuments Record (RCAHMW). No artefacts were retained.

Archive summary

CPAT Event PRN: 140370

4 CPAT watching brief visit forms

14 digital photographs, CPAT film no 4927