

THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

# Pool Quay, Flood Defence

ARCHAEOLOGICAL WATCHING BRIEF



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## ARCHAEOLOGICAL WATCHING BRIEF

**D. E. Bull**  
August 2007

Report for Environment Agency

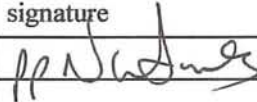
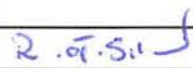
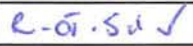
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## CPAT Report Record

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## 1 INTRODUCTION

- 1.1 In May 2007 the Field Services Section of the Clwyd-Powys Archaeological Trust (CPAT) was invited by Marianne Jones, Senior Environment Assessment Officer at the Environment Agency to prepare a specification and quotation for undertaking an archaeological watching brief on ground works associated with the construction of the flood defences at Pool Quay, Welshpool, Powys. The CPAT proposal was subsequently accepted and the watching brief commenced in early June 2007.
- 1.2 The works in question were designed to improve the flood defence system at Pool Quay and affected the existing Tirymynech Argae, which was originally constructed as part of a larger enclosure and land improvement scheme in the early 19<sup>th</sup> century. A section of the argae was to be removed and replaced with a larger argae on a new alignment some 50m to 100m to the west.
- 1.3 Pool Quay was associated with river traffic and industry from at least the 17<sup>th</sup> to the 19<sup>th</sup> centuries, and although the site of the main wharf and industrial development are located upstream from the new argae site it was thought possible that other remains could survive within the area of the new works.

## 2 LOCATION AND GEOLOGY

- 2.1 The construction site is located to the east of the village of Pool Quay, 4.5km north of Welshpool, Powys (see Fig. 1). The main site lies to the west of the river Severn between it and the disused railway embankment, and between the disused railway and the A483 at Pool Quay (SJ 2648811929).
- 2.2 The geology of the area mainly consists of undivided Ludlow and Wenlock Series siltstones and mudstones belonging to the Silurian period, though there is some local faulting which has exposed Caradoc Series siltstones and mudstones of the Ordovician period (1994 British Geological Survey map). The soils of the area generally consist of fine silty and loamy soils belonging to the Denbigh 1 Association (1983 Soil Survey of England and Wales map).

## 3 HISTORIC BACKGROUND

- 3.1 As the place-name suggests, the area around Pool Quay has a long association with river traffic. The earliest reference is to 'New Quay' in 1608 and later the 'quay of Welsh Poole' in 1774. Deriving its name from the nearby town of Welshpool, Pool Quay emerged as an important waterway settlement, probably in the 17<sup>th</sup> century, at the highest navigable point of the River Severn. In the mid-18<sup>th</sup> century lead ore extracted from the mines in the Tanat Valley some 15 miles to the north-west, was brought by mule to Pool Quay to be processed and subsequently transported down the River Severn. In addition, a considerable quantity and variety of goods had also to be imported into the Tanat Valley in support of the mining industry, including coal, gunpowder, candles, timber, iron and steel and lime again via Pool Quay. The production of lead ore from the Tanat Valley declined rapidly in the 1740s, the Pool Quay smelt house finally closing in 1762, although the wharfage continued in use until the construction of the Montgomeryshire canal at the end of the 18<sup>th</sup> century.
- 3.2 Also during the 18<sup>th</sup> century timber for naval ship-building was sent down the Severn from a wharf at Pool Quay in the 18<sup>th</sup> century, and prior to the construction of the Montgomeryshire Canal stripped tree trunks were floated down the river in the form of large rafts.
- 3.3 Pool Quay also had a water-powered corn mill, which was re-built about 1750 and later associated with a forge on the site of the former lead-smelting works. There was also a walkmill at the site which was rebuilt in 1802 to permit carding and spinning, and in 1835 this was made into a flannel

factory with a dye house that worked until 1858. Later still, there came a barytes-crushing mill, the 'Spar Mill', owned and operated by James Maginnis, which continued until the end of 1879. Finally, a saw mill was operated from the water supply, but now even this has disappeared and all that remains of this once busy industrial site are a few converted buildings, the leat and the mill pond.

#### **4 WATCHING BRIEF**

- 4.1 The watching brief was undertaken from 5 June 2007 during periods of topsoiling and groundworks associated with the flood defence scheme. A drawn, written and photographic record appropriate to the nature and scale of the on-site archaeology was maintained throughout.
- 4.2 The topsoiling was carried out along the length of the new argae in a strip roughly 25m to 30m wide by 1.2km, running parallel to and to the west of the existing argae, and over the areas of the borrow pits to the east of the existing argae, an area of approximately 4ha (see Fig. 2). Up to three machines were working at any one time with dumpers and bulldozers removing and stockpiling topsoil for reinstatement. Toothless scaling buckets were used initially, but these were later replaced with larger toothed buckets when the possibility of disturbing any archaeological features diminished.
- 4.3 The depth of the topsoil across the site varied between 0.3m and 0.4m as identified during stripping operations. A number of 0.5m by 0.5m by 1m deep test pits were hand excavated at appropriate intervals across the site in order to determine the nature and depth of the underlying stratigraphy. The test pits identified the continuation of a light grey-brown silty clay deposit characteristic of flood plain alluvium beneath the topsoil to a depth of at least 1m (see Plate: 1), well below the level of the topsoil strip.
- 4.4 The nature and depth of the alluvial material strongly suggested that the stripping operations were unlikely to disturb any archaeological levels.

#### **5 CONCLUSIONS**

- 5.1 The shallow depth of topsoil above the alluvium derived from past flooding events associated with the river Severn identified during the watching brief strongly suggests that any surviving buried archaeological remains were likely to be below the level of the topsoil groundworks.
- 5.2 No archaeological features, deposits, or indeed any stray finds were identified during the topsoiling operations.

#### **6 REFERENCES**

##### **Cartographic Sources**

1983 Soil Survey of England and Wales map (Sheet 2 - Wales) and Legend (1:250,000 scale).

1994 British Geological Survey map of Wales (Solid edition at 1:250,000 scale).

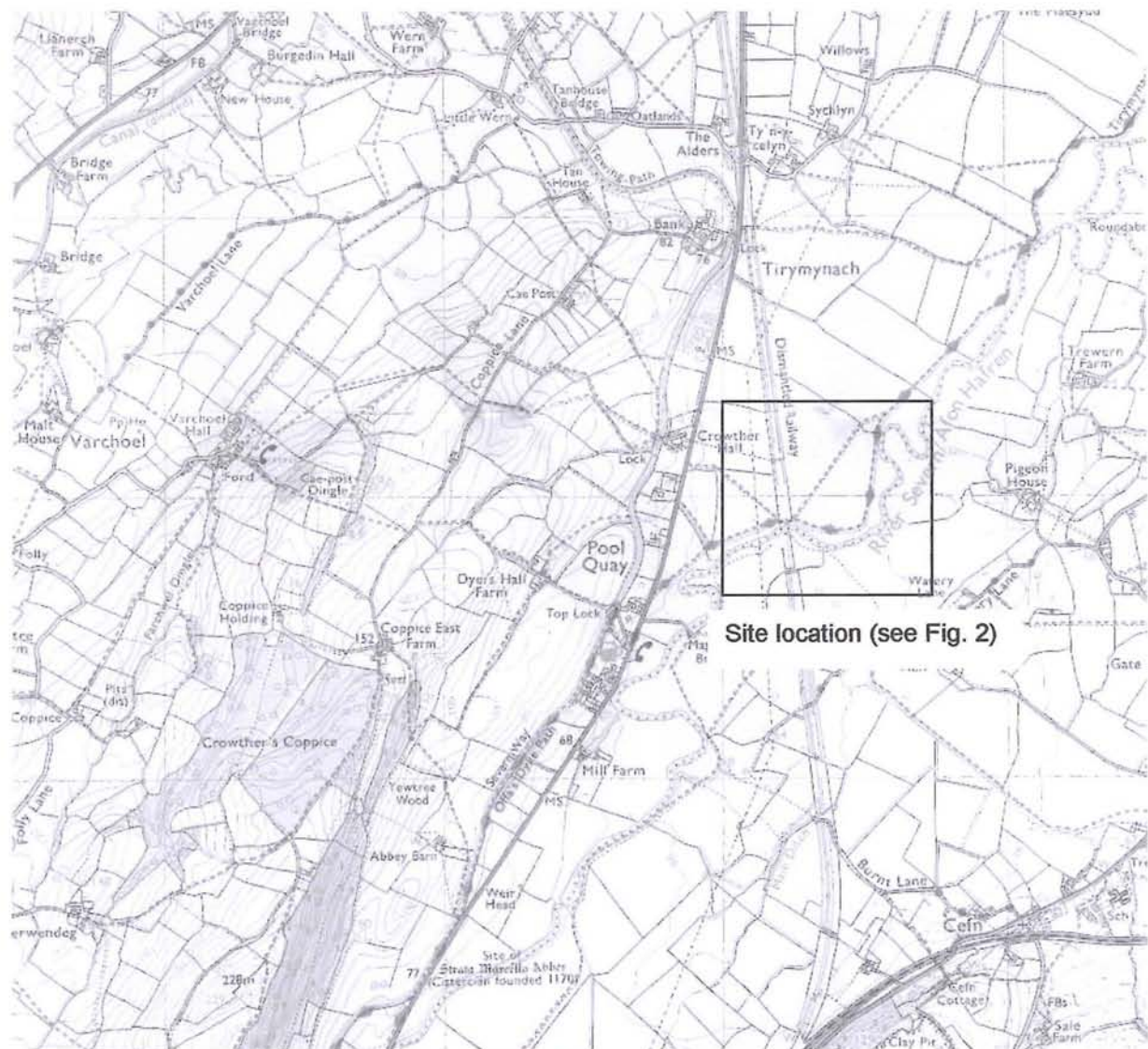




Plate 1: Topsoiling in preparation for the construction of the new argae.



Plate 2: Example of 0.5m by 0.5m by 1m test pit dug to test the depth of the alluvial deposits.



Reproduced from the Ordnance Survey's 1:25,000 map of 2000 with the permission of the Controller of Her Majesty's Stationery Office © Crown Copyright CPAT Licence No AL 50529A

**Fig. 1 Location of watching brief**



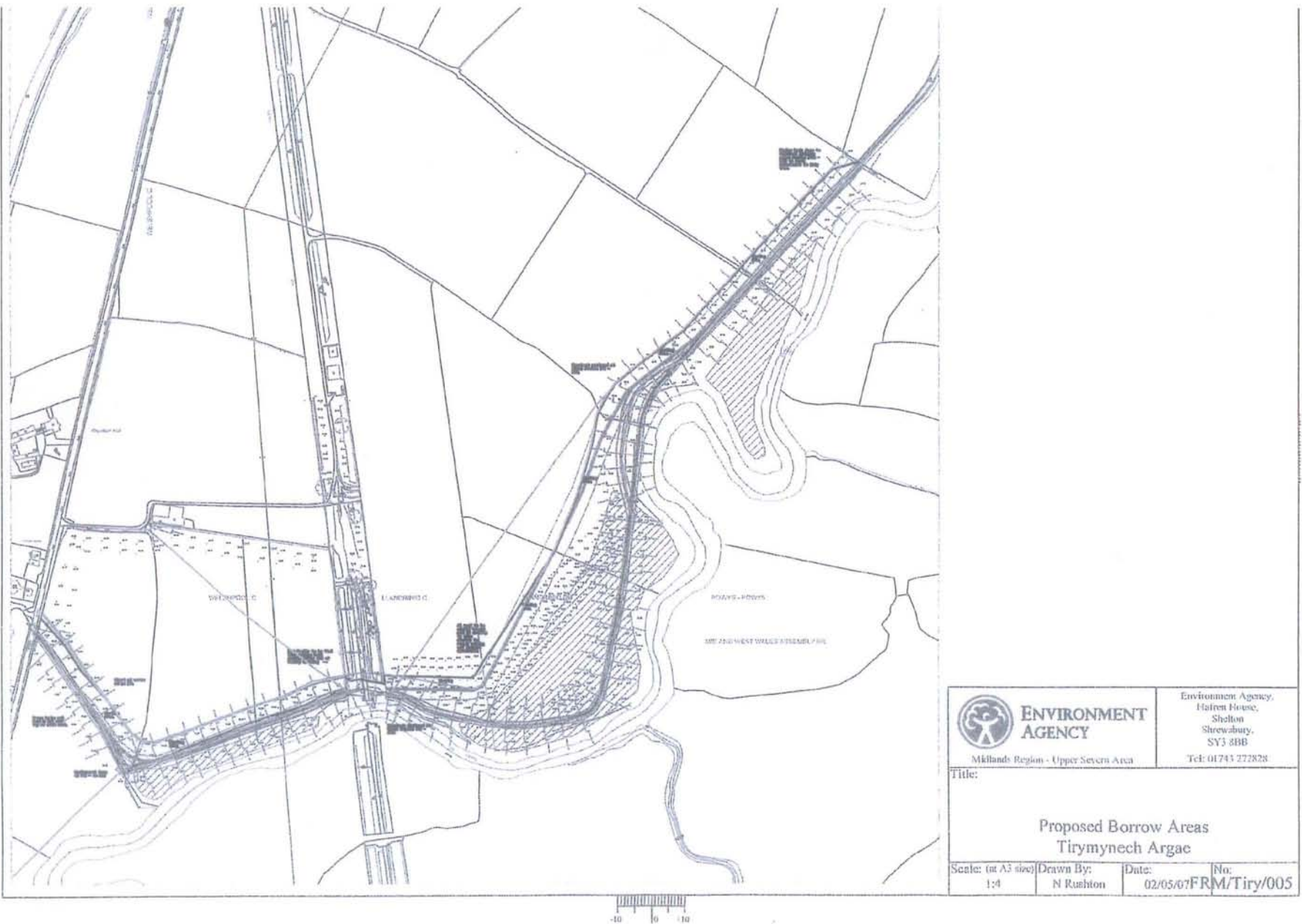


Fig 2. Map supplied by the Environment Agency showing the works at Pool Quay. Hatched areas indicate topsoiling.

## **APPENDIX 1**

### **PROJECT ARCHIVE**

26 digital photographs  
Photographic catalogue

## **APPENDIX 2**

### **SPECIFICATION**

#### **1 Introduction**

- 1.1 The Field Services Section of the Clwyd-Powys Archaeological Trust (CPAT) have been invited to tender for an archaeological watching brief on behalf of the Environment agency in connection with flood defence works at Pool Quay, Powys.
- 1.2 The watching brief has been recommended as it is thought that there is the potential for prehistoric and later archaeological deposits within the area.

#### **2 Objectives**

- 2.1 The objectives are:
  - 2.1.1 to record any archaeological features identified during the archaeological monitoring of groundworks to ensure their preservation by record;
  - 2.1.2 to prepare a report outlining the results of the watching brief.

#### **3 Methods**

- 3.1 Archaeological supervision of all relevant groundworks to include: the inspection of revealed surfaces for archaeological features; recording of archaeological features; limited excavation of features, where appropriate.
- 3.2 Monitoring of the groundworks will be undertaken by a qualified archaeologist positioned at a safe distance from the mechanical excavator. The archaeologist will wear appropriate clothing and equipment at all times, including a reflective jacket, hard hat and safety footwear. Depending on the nature of the works, and the presence of any archaeological deposits, it may be necessary for the archaeologist to inspect an area more closely, possibly including rapid cleaning and recording. Any significant deposits or features may need to be examined by limited excavation. Any archaeological works other than general monitoring will only be undertaken with the agreement and co-operation of the site contractors to ensure that the area concerned is a safe working environment. If necessary, an area will be temporarily fenced with orange barrier fencing to allow the archaeologist to work safely. No work of any nature will be undertaken in close proximity to any active machinery.
- 3.3 All archaeological deposits and/or features noted during the watching brief will be recorded and, where appropriate, excavated by hand and recorded by drawn section/plan and/or photography. All photography will be in digital format to a minimum resolution of 4 mega pixels. All features identified will be tied in locationally to points which are identifiable on modern Ordnance Survey mapping.
- 3.4 The on-site contractors are required to allow sufficient opportunity for appropriate archaeological excavation and recording to be undertaken. Every effort will be made to minimise any disruption to the overall scheme of works.
- 3.5 Following the on-site work an illustrated and bound report will be prepared. This will be in A4 format and contain, as necessary, conventional sections on: Site location, Topography and Geology; Historic Background; Watching Brief; Conclusions and References, together with any appropriate appendices on archives and finds.



- 3.6 The site archive will be prepared to specifications laid out in Appendix 3 in the Management of Archaeological Projects (English Heritage, 1991), to be deposited with the County Museums Service.

#### **4 Resources and Programming**

- 4.1 The watching brief will be undertaken by an experienced field archaeologist and overall supervision will be by Mr RJ Silvester, a senior member of CPAT's staff who is also a member of the Institute of Field Archaeologists (IFA). CPAT is an IFA Registered Organisation. The duration of the watching brief will be entirely determined by the contractor's programme of work.
- 4.2 All report preparation will be completed by or with the assistance of the same field archaeologist who conducted the fieldwork.
- 4.3 Copies of the report will be deposited with the client and regional Historic Environment Officer within one month of the completion of on-site works. If appropriate, a short report will be published in an appropriate regional or national journal.
- 4.4 Requirements relating to Health and Safety regulations will be adhered to by CPAT and its staff.
- 4.5 CPAT is covered by appropriate Public and Employer's Liability insurance.

N.W. Jones  
22 May 2007