

Archaeological Assessment & Recording
of a
**WATERWHEEL PIT AT TRENANT VALE, TRENANT,
EGLOSHAYLE PARISH, NORTH CORNWALL.**
for
Environment Agency



Report No. 2185/2009



Bristol and Region Archaeological Services

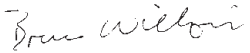

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**WATERWHEEL PIT AT TRENANT VALE, TRENANT,
EGLOSHAYLE PARISH, NORTH CORNWALL.**

Centred on
N.G.R. SW 99895 72580

Client: Environment Agency

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<i>Date Issued:</i>	11th November 2009 

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Abbreviations

AD	Anno Domini	m	Metre
aOD	Above Ordnance Datum	Km	Kilometre
BaRAS	Bristol & Region Archaeological Services	NGR	National Grid Reference
BC	Before Christ	NMR	National Monuments Record
c.	Circa	OS	Ordnance Survey

NOTE

Notwithstanding that Bristol and Region Archaeological Services have taken reasonable care to produce a comprehensive summary of the known and recorded archaeological evidence, no responsibility can be accepted for any omissions of fact or opinion, however caused.

November, 2009.

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1. INTRODUCTION

- 1.1 An archaeological assessment and archive standard photographic recording of a waterwheel pit and associated features at Trenant, Egloshayle was carried out prior to the undertaking of various flood prevention and Health and Safety works to the structure. The recording was undertaken by Reg Jackson of Bristol and Region Archaeological Services in early November 2009 on behalf of the Environment Agency.
- 1.2 As well as examination of the waterwheel pit, some historic maps and other documents were studied, including a copy of the Egloshayle tithe map and apportionment and large scale Ordnance Survey plans.
- 1.3 This report was written by Reg Jackson. A digital copy will be deposited with the National Monuments Record at Swindon at a later date. The archive will be deposited with Cornwall Record Office.

2. THE SITE

- 2.1 The waterwheel pit is located within Egloshayle parish and lies 700 metres to the north-west of the town and 500 metres south-west of the roundabout at the junction of the A39, A389 and B3314 roads, in the North Cornwall District (**Fig.1**; NGR SW99895 72580). It is north-east of an unclassified road known as Trenant Vale and is located to the rear of Trenant Cottages in an area of undergrowth, grass and trees (**Fig.2; cover plate**).
- 2.2 The waterwheel pit is located in the valley of an un-named stream which appears to rise 700 metres to the north-east and then flows south-west, issuing into the River Camel estuary 600 metres away. The stream enters a culverted section via the waterwheel pit which is oriented approximately north-east/south-west. The valley side rises quite sharply to the east of the waterwheel pit, while to the west are the gardens of no. 2 Trenant Cottages.
- 2.3 The waterwheel pit had been filled with debris and rubbish over a number of years, including an abandoned car, causing flooding of the surrounding area during high flows. Emergency works have been carried out to remove the debris and clear the access to the culvert. However, long term stabilisation works are now required to minimise the risk to the public and also to prevent a re-occurrence of the blockage. These works will comprise:
- Removal of the existing upstream inlet pipe into the waterwheel pit and the casting of a new open channel through the existing wall.
 - Installation of a gabion mattress into the upstream upper section of the waterwheel pit, including a half concrete pipe from the newly opened inlet to provide a low flow channel.
 - Installation of gabion baskets to create a drop weir between the upper level and the culvert entrance.
 - Installation of galvanised steel wall brackets and a mesh walkway over the top of the gabion weir.
 - Installation of a timber post and four rail fence, including an access gateway, around the waterwheel pit.
- 2.4 The waterwheel pit is not Listed, does not lie in a Conservation Area and is not a Scheduled Monument.
- 2.5 However, it is located on the boundary of two of the Cornwall and Isles of Scilly Historic Landscape Characterisation areas: 'Settlement: 20th century' and 'Farmland: Medieval' suggesting a high potential for archaeological survival.
- 2.6 Geologically, the site lies on Devonian slates, on the 25 metre contour. The ground rises to the north-east to around 70 metres at Ball and Middle Trevorder and slopes down to the River Camel to the south and south-west.

3. OBJECTIVES AND METHODOLOGY

- 3.1 This recording work is required to comply with the 'Brief for Archaeological Assessment and Recording' prepared by Cornwall Council's Historic Environment Service on 18 August 2009 (Appendix 2).
- 3.2 The objectives of the assessment work are to provide a desk-based assessment of the site including a map regression and a survey of the extant remains.
- 3.3 The objectives of the recording work are to provide an archive standard photographic record of the structure together with a brief report.
- 3.4 In addition to providing a history and record of the waterwheel pit, other objectives of the study are to inform whether archaeological recording of any extant remains is required; whether an archaeological evaluation or further archaeological recording of any potential buried remains is required; whether conservation of the structure is required; and whether palaeo-environmental sampling is required.
- 3.5 Photographs were taken in 35mm monochrome print and a digital medium. Cameras used were a 35mm Canon EOS 33 SLR with 28-300mm lens and 400asa film and an Olympus SP-510UZ 7.1 megapixel. A photographic scale was used in all photographs, unless circumstances prevented this. There was a record of each photograph taken, including location, direction of shot and size of scale used.
- 3.6 The work was carried out by a Member of the Institute for Archaeologists (MifA) in accordance with the Institute's Standard and Guidance for the archaeological investigation and recording of standing buildings or structures and for archaeological desk-based assessment.

4. HISTORICAL BACKGROUND

- 4.1 The waterwheel pit has not previously been recorded on the Cornwall and Scilly Historic Environment Record (HER) and there are no known archaeological investigations in the immediate vicinity that have produced evidence relating to this structure. The HER records two other features nearby: a malthouse located 28 metres to the north-east (PRN 26217) and a holy well 20 metres to the north-east (PRN 26227).
- 4.2 The Ordnance Survey Two-Inch (1:31,680) map, surveyed in 1809, does not seem to show a building on or adjacent to the site of the waterwheel pit.
- 4.3 The Egloshayle tithe map, surveyed in 1841, and its accompanying apportionment, dated 1840, provide the first detailed information about the location of the waterwheel pit (**Fig.3**; CRO TM/52 and TA/52). The plot of land in which the waterwheel pit is located, no. 438 on the tithe map, was owned and occupied by William Pollard and was called ‘Lindaby Field’. No buildings are shown in the field. Hard against the west bank of the stream and immediately to the west of the waterwheel pit is a building numbered 415 on the map, owned and occupied by John Davey and described as a malthouse and yard. (This is presumably the malthouse referred to in the HER records as PRN 26217). The fields and properties shown on the tithe map in the vicinity of the waterwheel pit are listed below:

Field No.	Owner	Occupier	Description
391	Richard Symons	Richard Symons	Garden at Trenant
404	Bishop of Exeter, Eleanor Chapman	John Davey	New Park
405	Bishop of Exeter, Eleanor Chapman	John Davey	New Park Moor
411	Bishop of Exeter, Fanny Bradford (Lessee)	John Davey	Garden
412	Bishop of Exeter, Fanny Bradford (Lessee)	John Davey	Dolly’s Orchard, Hedges
413	John Davey	John Davey	Orchard
414	John Davey	John Davey	Malthouse Orchard
415	John Davey	John Davey	Malthouse & Yard
416	John Davey	John Davey	Dry-house Meadow
417	John Davey	John Davey	Mowhay and Buildings
418	John Davey	John Davey	Linhay and Courtlage
419	John Davey	John Davey	Part of New Meadow
436	William Pollard	William Pollard	Lower Ching’s Park
438	William Pollard	William Pollard	Lindaby Field
508	Bishop of Exeter, William Pollard (Lessee)	William Pollard	Waste
509	Bishop of Exeter, William Pollard (Lessee)	William Pollard	Wiggon’s

- 4.4 The census return for 1841 records William Pollard, the owner of Lindaby Field, as a farmer living at Clapper in Egloshayle parish. The same return records John Davey, the owner of the malthouse, as a farmer living at Trenant. The next census return for 1851 notes John Davey as a maltster and farmer living with his nephew Andrew Davey, also a maltster, at Treslapat. Neither the 1841 nor the 1851 census return mentions a mill at Trenant although they do note the Lemail, Hingham and Kestle mills on the River Allen in the east of the parish.
- 4.5 The tithe map shows a small pond to the north-east of the location of the waterwheel pit, on the southern edge of field no. 416 ‘Dry-house meadow’. This appears to have been formed by building a dam across the valley floor at the west end of the pond. It is probable that this pond was associated with the malthouse rather than a mill, as malthouses required a supply of water in order that the barley grain could be ‘steeped’ in rectangular tanks or cisterns, with the water in the tanks requiring frequent changing. Steeping the grain for a day or more caused it to swell and increase in bulk. Steeping tanks were usually located below the malthouse, the

grain being fed to them through hoppers from the floor above. Changes in the brewing industry during the 19th century led to the disappearance of the small retail and wholesale brewers who had provided the market for the small maltings, such as that at Trenant, with the large town brewers, who built their own maltings, coming to dominate the industry (Palmer & Neaverson 1994, 35).

- 4.6 The 1861 census return mentions the Trenant Cottages, which later maps show as being to the north-west of the waterwheel pit. One was occupied by Thomas B. Menhenick, an agricultural labourer, and his family. The occupier of the other is not known as the folio recording that property has been damaged. Consequently any reference to an adjoining mill is also missing. As the Trenant Cottages occupied the same plot of land, and in the same position within that plot, as the malthouse it is possible that the cottages were converted out of the malthouse.
- 4.7 The 1871 census is more informative. It lists three families occupying the Trenant Cottages, the heads of the families being Thomas B. Menhenick, an agricultural labourer, Harriet Bullock, a 'domestic', and Elizabeth Tucker, a washerwoman. The next property to the Trenant Cottages recorded in the census is 'Olvers Mill' occupied by Henry Williams, aged 29, a miller, born in 'Kewry', Cornwall, his wife Susan and their two young children.
- 4.8 It seems possible that the malthouse owned by John Davey and shown on the 1841 tithe map had, like so many others in the 19th century, gone out of business by at least 1871 and that the southern part of it had been either replaced by, or converted to, the mill referred to as Olvers Mill. It is unfortunate that the critical part of the 1861 census return is damaged as, with the limited information available, it is not known if the mill was in operation from as early as 1852 or as late as 1870.
- 4.9 The Olver family were well known local mill owners. The will of William Olver, a miller, of Egloshayle, dated 1 April 1828 refers to his freehold premises called Lemail mill in Egloshayle parish and Port Isaac mill in Endellion parish (CRO SO/W830). These he left to his wife Mary and on her death to his son John. He was dead by 19 July 1828 and his wife had died by 27 June 1832 (CRO SO/W321). It is the son John Olver who may have been involved with Olvers mill at Trenant, with Henry Williams operating it as his tenant.
- 4.10 The 1881 and 1891 census returns again record the occupiers of Trenant Cottages but there is no further reference to Olvers Mill.
- 4.11 The first large-scale Ordnance Survey map, surveyed in 1880 and published in 1881 (**Fig.4**; scale 1:2500), shows Trenant Cottages, but does not show a building on or adjacent to the waterwheel pit. However, it does show a pond, apparently larger than that depicted on the 1841 tithe map, and presumably a mill-pond, on the course of the stream some 35 metres to the east of the site.
- 4.12 The Ordnance Survey Second Edition map, revised in 1906 and published in 1907 (**Fig.5**; scale 1:2500), again shows the probable mill-pond but the site of the waterwheel pit is devoid of buildings or structures. Similarly the map used for the Land Utilisation Survey of Britain dated 1946 (scale 1:63360) does not show a building in this location.
- 4.13 If Trenant Cottages are a modification of part of the malthouse then, externally at least, nothing of the historic structure can be seen due to a covering of cement render. A modern extension has been added to their southern end.
- 4.14 Somewhat confusingly, the modern Ordnance Survey map (Cornwall County Council Interactive Mapping) shows a building called 'Trenant Mill' about 100 metres to the north-west of the waterwheel pit. It is difficult to see how this could ever have operated as a mill, being on higher ground than the surviving mill-pond, and it is possible that its attribution as a mill is a modern invention.

5. THE WATERWHEEL PIT

- 5.1 The waterwheel pit is located in an area of undergrowth, rough grass and trees (**Cover & Plate 1**). To the east the side of the valley rises quite steeply away from the pit while to the west the ground rises immediately from the edge of the pit by about 1.7 metres (m) to the level of the adjoining garden. There are three trees, each with a trunk diameter of about 0.6m, growing hard against the structure – two to the east and one to the west. The backfill of modern rubbish has been removed from the southern end of the pit while a substantial amount of fill comprising car tyres, rubble and other rubbish remains at the northern end. The pit is protected by wire mesh Heras fencing panels.
- 5.2 At present the stream flows into the pit through a short length of concrete pipe over the top of the wall at its north-east end (**Plate 2**) (and also through gaps between the masonry in that wall) and exits the pit through a stone-built culvert at the base of its south-west wall. At the time of the survey, after a period of heavy rain and during heavy showers, there was a considerable flow of water through the structure. Consequently all recording had to be carried out from the top of the pit.
- 5.3 The structure is built of coursed slate (**Plate 3**) unless otherwise stated and this takes the form of a retaining wall or, in places, an offset wall, on its four sides, although the thickness of this retaining wall could not be determined. Where the modern fill has been removed from the pit it can be seen that at a depth of 1.7m on its west side the retaining wall has been built on top of the natural bedrock which is then exposed to the top of the silt at the base of the pit (**Plate 4**).
- 5.4 The structure is 1.85m wide at its south-west end and 6.8m long (**Fig.6**). Its east wall is straight over its entire length (**Plate 5**) while, at a distance of 4.2m from its south-west end, the west wall is set back by 0.8m, so that the north-east end of the structure is 2.65m wide. Along the length of its east side and at a depth of 0.8m from the present top of the structure, is an offset 0.5m wide at its south-west and north-east ends, widening to 0.7m for a length of 1.4m at the centre of the east side (**Plates 5 & 6**). Here part of the offset is finished with a squared block of fine-grained stone, probably sandstone, 0.9m long and about 0.25m thick. At the northern end of the west side of the pit, where it widens, there is a similar offset also 0.5m wide along the remainder of that side.
- 5.5 At the south-west end of the pit, and almost level with its top, is a projecting structure 1.23m wide built of five courses of brick 0.1m wide resting on three courses of squared stone (**Plates 3 & 7**). This structure projects 0.3m from the end of the pit and between it and the end of the pit is a gap 0.2m wide divided into three sections by further stones. This brick and stone structure only extends 0.9m down from the top of the pit and it is not clear how it is supported, but probably in a cantilever fashion by stones projecting from the end wall of the pit (**Plate 8**). The purpose of this structure is not known but it appears to form some sort of weir over which water could pass and be directed down the end wall of the pit. It may be a later addition.
- 5.6 At the south-west end of the west wall of the pit, and slightly overhanging it, is a large block of squared fine-grained stone, presumably sandstone, 1.10m long by 0.25m thick (**Plates 3 & 8**).
- 5.7 At its south-west end the pit is at least 3.4m deep (**Fig.7**). However, this measurement is to the top of what appears to be a deposit of silt rather than the actual base of the pit. Water flows out of the pit through a stone-built arch in its south-west end directly into a culvert – the tail race of the mill – which presumably emerges further down the valley, although this was not pursued (**Plate 9**).
- 5.8 There is no evidence for a bearing or other attachment for the axle of the waterwheel. However, the large squared block of stone on the offset halfway down the east side of the pit

may have been the support for such a bearing. Photographs in Benney (1972, e.g. 51, 58-60) show these bearings were often raised above the level of the top of the waterwheel pit.

- 5.9 The eastern boundary wall of the gardens of Trenant Cottages runs north-east from the north-east end of pit. Three relatively modern ceramic drains empty into the pit along its west side from the adjoining garden.
- 5.10 If this is a waterwheel pit, and at present the evidence suggests that it is, then the mill it served should have been very close to it, either to its east or west. Illustrations of other Cornish water-mills show that the end wall of the mill often rose straight from the side of the waterwheel pit (Benney 1972). Here there would not have been sufficient room for a mill to the east, between the side of the pit and the valley slope so it must have been to the west. The tithe map indicates that the whole width of the plot of land to the west and north-west of the pit (now occupied by Trenant Cottages and their gardens) was covered by the malthouse and it is possible that the southern end of the malthouse was converted to a mill after 1841. Certainly there is no evidence on the ground now of the malthouse/mill building and its demolished remains presumably lie below the raised garden of no. 2 Trenant Cottages.
- 5.11 Although not included in the Brief the opportunity was taken to photograph the remains of the iron sluice gate on the mill-pond (**Plate 10**) to the north-east of the waterwheel pit and the silted remains of the mill-pond itself (**Plate 11**). The waterwheel pit is sufficiently further, and lower, down the valley from the mill-pond that the water could have been fed to the mill via a raised wooden launder giving an overshot wheel arrangement as opposed to a breastshot wheel as would appear to be the case from the way the water currently enters the pit.

6. CONCLUSIONS

- 6.1 The structure recorded appears to be a waterwheel pit. There is no evidence for the mill building which must have adjoined it either on 19th- and 20th-century maps or in the other documents studied. However, there is a reference in the 1871 census return to 'Olvers Mill', occupied by the miller Henry Williams, in the immediate vicinity of Tenant Cottages. The Olver family were well known local mill owners.
- 6.2 Neither the mill nor a miller are mentioned in the 1851 census or in the 1881 census and the relevant part of the 1861 census is damaged. Therefore it is possible that the mill could have been operating from the early 1850s to the late 1870s. The mill is not recorded on the First Edition Ordnance Survey map, surveyed in 1880.
- 6.3 The 1841 tithe map shows a malthouse immediately to the west of the location of the waterwheel pit. It is possible that part of the malthouse was converted to a mill in the 19th century when the use of small local malthouses was no longer economic. It is not considered that the waterwheel pit is related to the use of the malthouse.
- 6.4 The waterwheel pit is quite well preserved, though partly filled with rubbish. Work is now required to make the pit safe and to prevent flooding.
- 6.5 This work will involve the casting of a new open channel through the pit's north-east wall which, as well as improving the flow of water, will prevent the wall from being further damaged by water flowing over and through it from around the existing concrete inlet pipe. The remaining flood prevention work will take place within the pit, leaving the structure of the pit intact. The pit is to be fenced but the writer has been informed that the fence posts will be placed well back from the structure to avoid damage.
- 6.6 The malthouse/mill building lies to the west of the waterwheel pit beneath what appears to be made ground below the adjoining garden. The proposed work should not affect the building.

7. SOURCES CONSULTED

Benney, D.E. 1972. *An introduction to Cornish water-mills*. Truro: D. Bradford Barton Ltd.

Palmer, M. & Neaverson, P. 1994. *Industry in the landscape: 1700-1900*. Routledge.

Cornish Studies Library

Ordnance Survey 1878, 1:2500 plan

Ordnance Survey 1907, 1:2500 plan

Cornwall Record Office

TM/52 Egloshayle tithe map, 1841

TA/52 Egloshayle tithe apportionment, 1840

SO/W/830 Will of William Olver of Egloshayle, miller, 1828

SO/W/831 Will of Mary Olver, Egloshayle, widow, 1832

X364/18 Copy of Land Tax Assessment, Egloshayle, 1801

X148/5 Plan of Trewarder and Kestle, Egloshayle, 1812

ARD/TER/186 Terrier, Egloshayle, 1816

On-line Sources

Vision of Britain – Ordnance Survey 1809, 1:31,680 plan

Vision of Britain – Land Utilisation Survey of Britain 1946, scale 1:63360 plan

Cornwall On-line Census Project

8. ACKNOWLEDGEMENTS

Access to the waterwheel pit was provided by Kevin Barnes of the Environment Agency. We would also like to thank Cornwall Record Office and the Cornish Studies Library staff for their assistance. Ann Linge prepared the plans and illustrations and produced the report.

APPENDIX 1: Policy Statement

This report is the result of work carried out in the light of national and local authority policies.

NATIONAL POLICIES

Statutory protection for archaeology is enshrined in the Ancient Monuments and Archaeological Areas Act (1979), amended by the National Heritage Act, 1983. Nationally important sites are listed in the Schedule of Ancient Monuments (SAM). Scheduled Monument consent is required for any work that would affect a SAM.

ODPM POLICY GUIDANCE

The Planning Policy Guidance of Archaeology and Planning (PPG 16) consolidates advice to planning authorities. The Guidance stresses the non-renewable nature of the archaeological resource, details the role of the County Sites and Monuments Record (SMR), encourages early consultation with county and district archaeological officers and sets out the requirement for developers to provide sufficient information on the archaeological impact of development to enable a reasonable planning decision to be made.

PPG 16 also indicates the circumstances where further work would be necessary and outlines the use of agreements and conditions to protect the archaeological resource.

PPG 15

PPG 15 Planning and Historic Environment (1994) provides for a full statement of Government policies for the identification and protection of historic buildings, Conservation Areas, and other elements of the historic environment. More specific issues are raised in PPG 16 Archaeology and Planning (1990), which also indicates the circumstances where further work would be necessary and outlines the use of agreements and conditions to protect the archaeological resource.

PPG 15 (para. 2.15) recognises that some buildings are scheduled ancient monuments, but many which are not scheduled are either of intrinsic archaeological interest or stand on ground which contains archaeological remains. It is important in such cases that there should be appropriate assessment of the archaeological implications of development proposals before applications are determined; and that, where permission is to be granted, authorities should consider whether adequate arrangements have been made for recording remains that would be lost in the course of works for which permission is being sought.

Paragraph 3.23 states that local planning authorities should consider whether it would be appropriate to make it a condition of consent that applicants arrange suitable programmes of recording features that would be destroyed in the course of the works for which consent is being sought.

LOCAL PLANNING POLICIES

In addition to national policies, the Cornwall Structure Plan (2004) and the North Cornwall District Council Local Plan (Adopted 1999) contain policies relating to the historic environment.

Policy 2 of the Cornwall Structure Plan states that: ‘The conservation and enhancement of sites, areas, or interests, of recognised international or national importance for their landscape, nature conservation, archaeological or heritage importance, including the proposed World Heritage Site, should be given priority in the consideration of development proposals’.

Policy ENV14 of the North Cornwall District Council Local Plan relates to ‘Archaeological and Historic Resources – Sites of Archaeological or Historic Interest’ and reiterates the provisions of Planning Policy Guidance Note 16 (sections 5.110 to 5.114). It also gives guidance for considering development proposals in Areas of Great Historic Value (sections 5.115 and 5.116), Historic Settlements (sections 5.117 to 5.120) and the Archaeological Landscape (Policy ENV15, sections 5.121 and 5.122).

APPENDIX 2: Brief for Archaeological Assessment and Recording

BRIEF FOR ARCHAEOLOGICAL ASSESSMENT & RECORDING

Date: 18 August 2009
Address: Trenant Vale stream to the rear of Trenant Cottages, Egloshayle, Wadebridge
Site: Waterwheel pit and associated features
Applicant: Environment Agency, NEAS, Olton Court, 10 Warwick Road, Olton, Solihull, B92 7HX
Agent: Ed Wilson, Senior Archaeologist, Environment Agency, NEAS, Olton Court, 10 Warwick Road, Olton, Solihull, B92 7HX

Historic Environment Planning Advice Officer: Phil Copleston, Cornwall Council, Historic Environment Service, Kennail Building, Old County Hall, Truro TR1 3AY. Tel. 01872 322058 E-mail. pcopleston@cornwall.gov.uk

This brief is only valid for six months. After this period the Historic Environment Planning Advice Officer (HEPAO) should be contacted. The contractor is strongly advised to visit the site as there may be implications for accurately costing the project.

Contractors Written Scheme of Investigation (WSI)

No ground works are to be undertaken until the HEPAO in liaison with the Senior Archaeologist of the Environment Agency has approved the archaeological contractor's WSI.

1 Introduction

This brief has been written by the HEPAO and sets out the minimum requirements for archaeological recording at Trenant Vale to the rear of Trenant Cottages, Egloshayle, Wadebridge.

2 Site Location and Description

The waterwheel pit and associated features are located to the rear of Trenant Cottages, on the line of a culvert with an orientation approximately NF-SW. The watercourse issues into the Camel Estuary 600m to the SW. The waterwheel pit is located at OS grid reference SX 99895 72580.

3 Archaeological Background

The waterwheel pit has not previously been recorded on the Cornwall and Scilly Historic Environment Record (HER), but several other features are recorded nearby; PRN 26217 MALTHOUSE and PRN 25227 HOLYWELL located 28m and 20m to the NE respectively. There are no known previous archaeological investigations in the immediate area that have produced evidence that may be related to this waterwheel, its watercourse or its former function. The waterwheel pit is not designated by Listing or Scheduling.

The Cornwall & Isles of Scilly Historic Landscape Characterisation (HLC) (CCC, 1994) indicated that the waterwheel pit is located on the boundary of two HLC areas, 'Settlement: 20th century' and 'Farmland: Medieval' with a consequent high potential for archaeological survival.

4 Requirement for Assessment Work

Ground works may disturb extant and buried archaeological or structural remains. In order to understand the site and its potential for recording archaeological or structural remains an assessment is required. This would involve a desk based assessment including a map regression plus a survey of the extant remains of the site. This would provide evidence for any recommendations for archaeological recording and appropriate conservation methodologies.

The site specific aims are to:

- Draw together the historical and archaeological information about the site.
- Inform whether archaeological recording of any extant remains is required.
- Inform whether an archaeological evaluation or further archaeological recording of any potential buried remains is required.
- Inform whether conservation of the structure is required and outline the appropriate methodologies for such work.
- Inform whether palaeo-environmental sampling would be required.

5 Requirement for Recording Work

The present proposals will culminate in the potential destruction of material remains of the waterwheel and associated features. It is therefore important that waterwheel and associated features is recorded to an appropriate level and that the results are made available to interested parties. In this particular instance an archive standard photographic record will be made together with a brief report. If existing structural drawings are available, these may be annotated to illustrate the report. This recording needs to be conducted by a building archaeologist or architectural historian that will be able to 'read' the structure and record the important details. The recorder needs to consider:

- Site layout and organisation
- Function
- Materials, method of construction
- Internal arrangements
- Original fixtures and fittings
- Subsequent fixtures and fittings
- Evidence of use and status
- Date/period of initial build and subsequent alterations

6 General Guidance

- 6.1 The archaeological contractor is expected to follow the code of the Institute for Archaeologists (IfA).
- 6.2 All of the latest Health and Safety guidelines shall be followed on site.
- 6.3 Terminology will be consistent with the English Heritage Thesaurus.

7 General Methodology

- 7.1 All stages of the investigation shall be supported by a written scheme of investigation (WSI).
- 7.2 The archaeological contractor is expected to follow the code of the Institute for Archaeologists (IfA).
- 7.3 Details including the name, qualifications and experience of the site director and all other personnel (including specialist staff) shall be included within the WSI.
- 7.4 All of the latest Health and Safety guidelines shall be followed on site.
- 7.5 The IfA's Standards and Guidance should be used for additional guidance in the production of the WSI, the content of the report and the general execution of the project.
- 7.6 Terminology will be consistent with the English Heritage Thesaurus.

8 Site Recording Methodology

- 8.1 Prior to the commencement of on site works the archaeological contractor should familiarise themselves with the site by examining the information held by the Cornwall and Scilly Historic Environment record (HER), the Cornwall Records Office at Truro and the Cornwall Centre at Redruth, where appropriate.
- 8.2 Details of how all structures are surveyed and recorded shall be provided. The site plan will be tied to the national grid.
- 8.3 The photographic record shall be a comprehensive record to archive standard of the existing structures, both externally and internally. The photographs will be taken with black and white 35mm or medium format film producing archive quality prints and negatives. Colour photography may be utilised for general shots and where it is appropriate for detail shots (negatives and where appropriate CD shall be included in the archive). For both general and specific photographs, a photographic scale shall be included. The photographic record shall be accompanied by a photographic register detailing as a minimum, feature number, location and direction of shot.

9 Results

- 9.1 The full report including all specialist assessments shall be submitted within a length of time (but not exceeding six months) to be agreed between the applicant and the archaeological contractor, Cornwall Council Historic Environment Service and the Cornwall Record Office or Royal Cornwall Museum. A further digital copy shall be supplied on CD-ROM preferably in 'Adobe Acrobat' PDF format.
- 9.2 The archaeological contractor will undertake the English Heritage/ads online access to the index of archaeological investigations (OASIS).
- 9.3 This report will be held by the Cornwall and Isles of Scilly Historic Environment Record (HER) and made available for public consultation.

9.4 The report must contain:

- A concise non-technical summary of the project results.
- The aims and methods adopted in the course of the investigation.
- A discussion of the archaeological findings in terms of both the site specific aims and the desk based research.
- A location map, a drawing showing those areas examined as part of the archaeological recording, and copies of any archaeological plans and sections. All plans shall be tied to the national grid.
- All specialist reports and assessments.
- A summary of the archive contents and date of deposition.
- A context register with brief descriptions shall be included as an appendix.
- A copy of the brief and the approved WSI will be included as an appendix.

10 Archive Deposition

- 10.1 An ordered and integrated site archive will be prepared in accordance with: *Management of Research Projects in the Historic Environment (MoRPHE) English Heritage 2006* upon completion of the project. The requirements for archive storage shall be agreed with the appropriate museum.
- 10.2 The archive including a copy of the written report shall be deposited with the Royal Cornwall Museum within two months of the completion of the full report and confirmed in writing with the HEPAO.
- 10.3 Where there is only a documentary archive this will be deposited with the Cornwall Record Office as well as the Courtenay Library of the Royal Institution of Cornwall.
- 10.4 A copy of the report will be supplied to the National Monuments Record (NMR) Swindon.
- 10.5 A summary of the contents of the archive shall be supplied to the HEPAO.
- 10.6 Only on completion of 10.1 to 10.5 (inclusive) will there be a recommendation for the discharge of any archaeological recording condition.

11 Monitoring

- 11.1 The HEPAO will monitor the work and should be kept regularly informed of progress.
- 11.2 Notification of the start of work shall be given preferably in writing to the HEPAO at least one week in advance of its commencement.
- 11.3 Any variations to the WSI shall be agreed with the HEPAO, preferably in writing, prior to them being carried out.

APPENDIX 3: WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL ASSESSMENT AND RECORDING of THE WATERWHEEL PIT AND ASSOCIATED FEATURES AT TRENANT VALE, EGLOSHAYLE, WADEBRIDGE, CORNWALL

1. INTRODUCTION

- 1.1 It is proposed to undertake some Health and Safety works to a recently uncovered waterwheel chamber at the rear of Trenant Cottages, Egloshayle, Wadebridge, Cornwall. The requirement of the Historic Environment Planning Advice Officer (HEPAO) is that a desk-based assessment and an archive standard photographic record are made together with a brief report.
- 1.2 This document represents a proposal for the desk-based assessment and archive standard photographic recording of the buildings involved together with the production of a brief report.
- 1.3 This Written Scheme of Investigation was compiled by John Bryant of Bristol and Region Archaeological Services (BaRAS) in October 2009.

2. SITE LOCATION

- 2.1 The waterwheel pit and associated features lie to the rear of Trenant Cottages, Egloshayle, on the line of a culvert that is aligned roughly north-east to south-west, at NGR SW 99891 72582. It is located about 10m south-west of No. 2 Trenant Cottages. The Trenant Vale watercourse continues to the south-west, meeting the River Camel after about 600m. The site lies between the 15m and 20m contours.
- 2.2 There are no Listed Buildings either on site nor in the immediate vicinity. The closest Scheduled Ancient Monuments are two wayside crosses in Egloshayle churchyard, approximately 600m to the south.

3. HISTORICAL BACKGROUND

- 3.1 Trenant Vale currently lies at the north-eastern edge of Wadebridge civil parish, but was formerly within the ancient parish of Egloshayle. Egloshayle was in the Hundred of Trigg.
- 3.2 It is not clear if the Ordnance Survey Two-Inch map, surveyed in 1805, shows the Cottages, but it does show the watercourse. At that time Trenant was a separate hamlet, with Wade Bridge shown as a small settlement at the north-eastern end of the bridge and Egloshayle village a short distance away to the south. The first large-scale OS plan, surveyed in c.1880, recorded the pair of cottages and also what are now known as Trenant Farm and Mill. There was a pond just east of the cottages. Between the watercourse and the lane leading south-west from Trenant were several small plots of ground.

4. OBJECTIVES

- 4.1 No previous archaeological work has been undertaken on this site. In order to understand the site and its potential, a desk-based assessment will be produced, to include a map regression and a survey of the site. An archive standard photographic survey will also be undertaken. A combined report will be produced. An archive will be prepared and deposited with the Cornwall Record Office.

5. METHODOLOGY

Desk-Based Assessment

- 5.1 A desk-based assessment will be undertaken. This will include research at the Cornwall Record Office, Cornwall Studies Centre at Redruth and any other appropriate sources. Documentary and cartographic resources will be examined. There will be a map regression. The report will include a basic survey of as much of the site as is reasonably accessible (given the nature of the location, there may be Health and Safety considerations).

Recording Method

- 5.2 The site recording will be carried out in accordance with this strategy document. There will be a comprehensive photographic record to archive standard, using a scale in each photograph. A report will be written, which will include a location plan.
- 5.3 Photographs will be taken in 35mm monochrome print and a digital medium. This will include coverage of interiors and exteriors as well as general views and photographs of details.
- 5.4 Where physically possible, a photographic scale will be used in each photograph. There will be a record of each photograph taken, to include identifier, location and direction of shot.
- 5.5 It is not anticipated that any archaeological artefacts will be retrieved.

6. MONITORING

- 6.1 The project will be monitored by the Historic Environment Planning Advice Officer, with whom any site visits are to be agreed.

7. REPORT PREPARATION

Archive

- 7.1 A project archive will be prepared containing all the site records. This material will be prepared, ordered and indexed in accordance with the various guidelines issued for the preparation of photographic archives for long-term storage.
- 7.2 A digital archive will be prepared using ADS guidelines. Text will be in MS Word and ASCII format and photographs as individual JPEG files, and the preferred format for other databases will be MS Access. A copy of all data will be supplied to the Cornwall and Scilly Historic Environment Record.
- 7.3 The archive will be deposited with the Cornwall Record Office within 6 months of completion of the fieldwork.

Report Preparation

- 7.4 Immediately following completion of the fieldwork, a report will be prepared for the client and HEPAO. The report will be fully representative of the information found. The report will be illustrated with plans and photographs. It will include:
- The aims of the work and a summary of the results
 - A history of the site and its features

- Plans and photographs to support the text

7.5 A digital copy of the report will be supplied to the HER in Word format with each photograph as a single JPEG file. A printed copy of the report will also be provided for the HER.

7.6 A digital copy of the report will be sent to the National Monuments Record at Swindon within 6 calendar months unless otherwise agreed.

8. PUBLICATION

8.1 The results of the building recording will, if required, be published in the most appropriate format, following refereeing.

8.2 A short summary of the work will be submitted to the relevant period and county journals for inclusion in the annual roundup of work.

9. RESOURCES and PROGRAMMING

9.1 The project will be undertaken by suitably qualified Bristol & Region Archaeological Services staff.

9.2 Staff

Project management: John Bryant, MifA

Project officer: Reg Jackson, MifA

Illustrator: Ann Linge

Programming

9.3 It is anticipated that the recording in the field will take one day, with the research and report writing taking a further week or so.

Insurance

9.4 Bristol & Region Archaeological Services holds Employers Liability Insurance through Zurich Municipal Insurance Co to a limit of £50m, Public Liability Insurance with the Zurich Municipal Insurance Co to a limit of £50m. Professional Indemnity Insurance is held through W. R. Berkley to a limit of £5m.



Fig.1 Map showing the location of Trenant (original scale 1:25000)

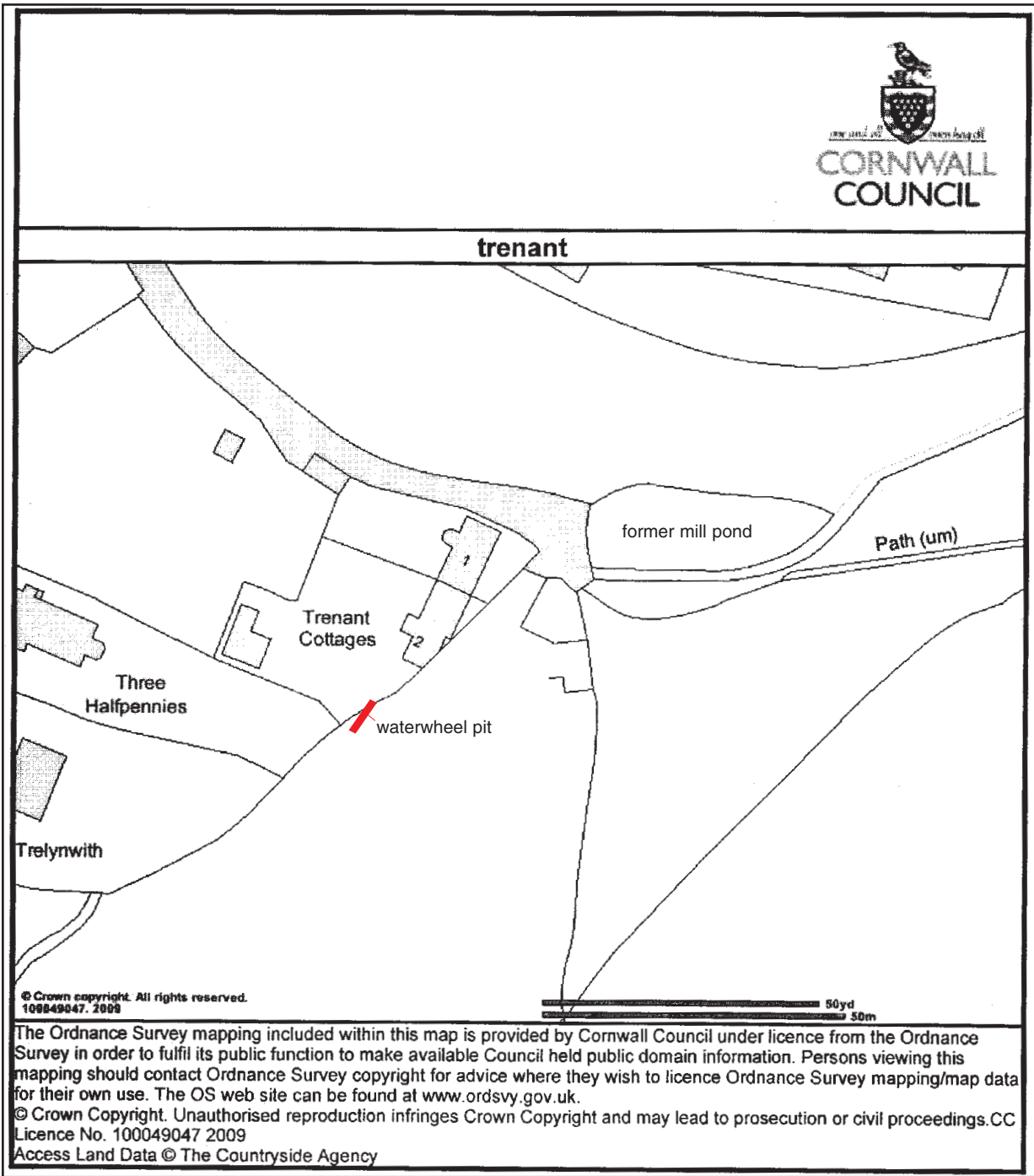


Fig.2 Map showing the location of the waterwheel pit (scale 1:500)



Fig.3 The Egloshayle tithe map, 1841

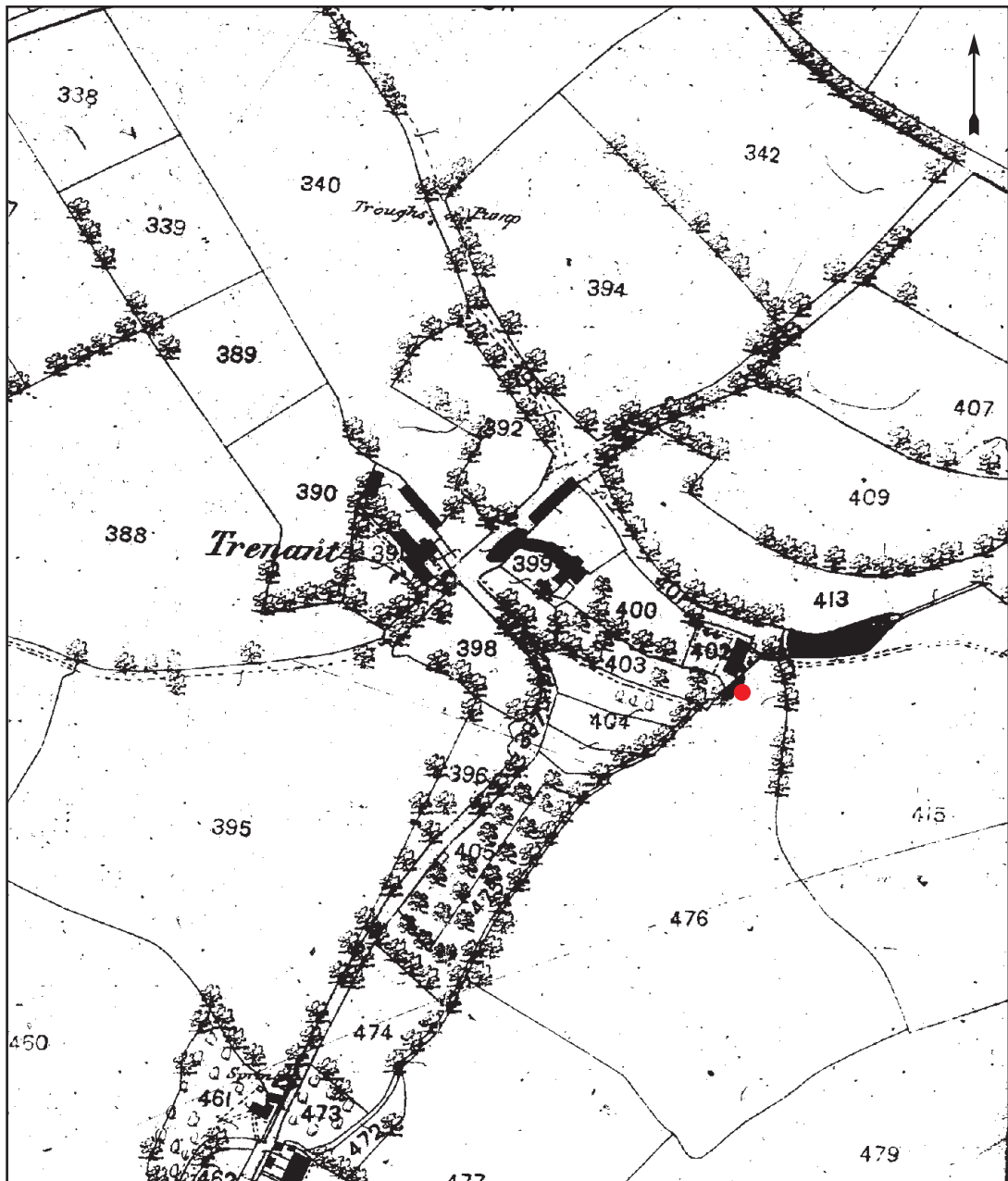


Fig.4 The First Edition Ordnance Survey map, 1881 (scale 1:2500)

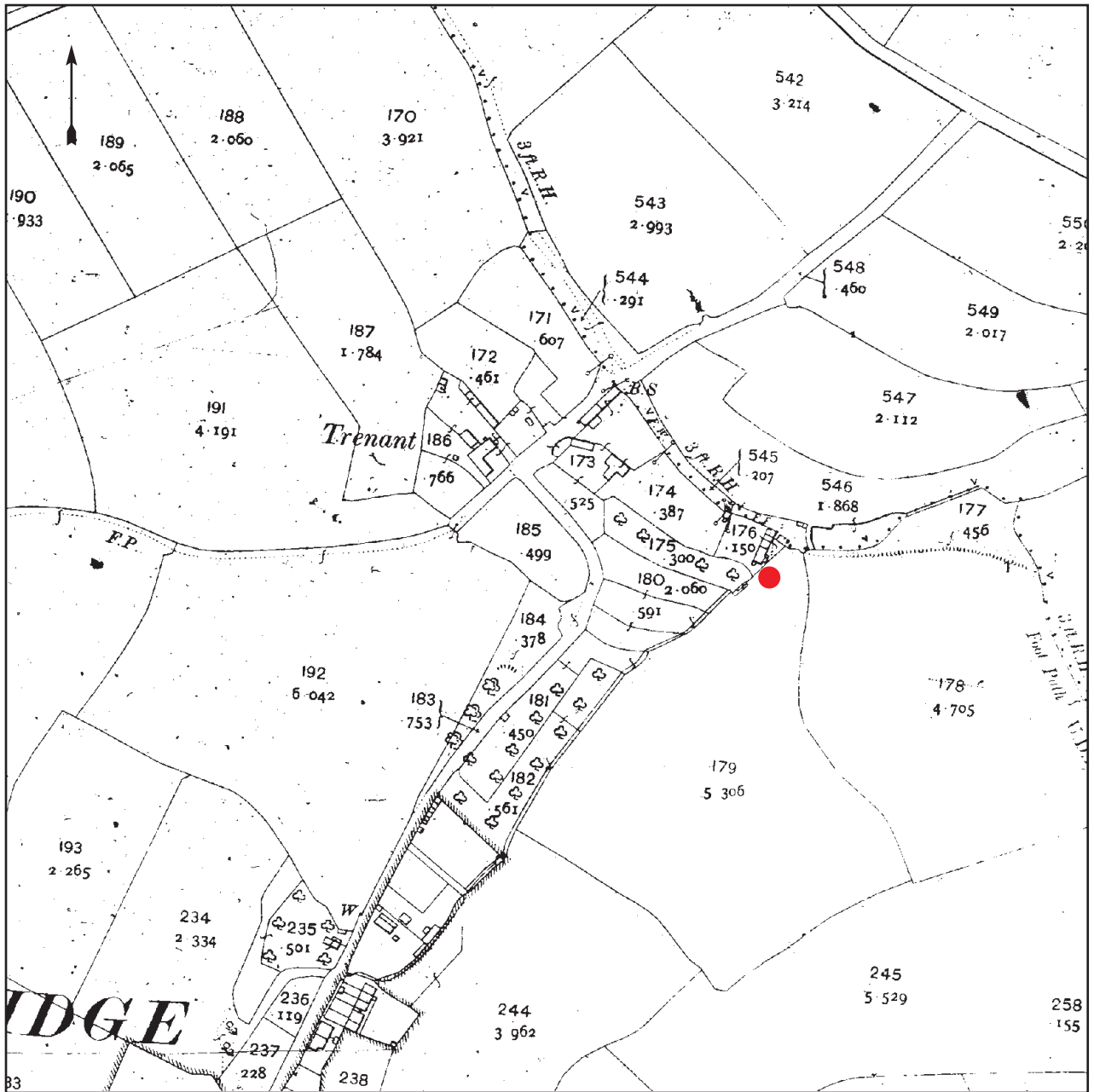


Fig.5 The Second Edition Ordnance Survey map, 1907 (scale 1:2500)

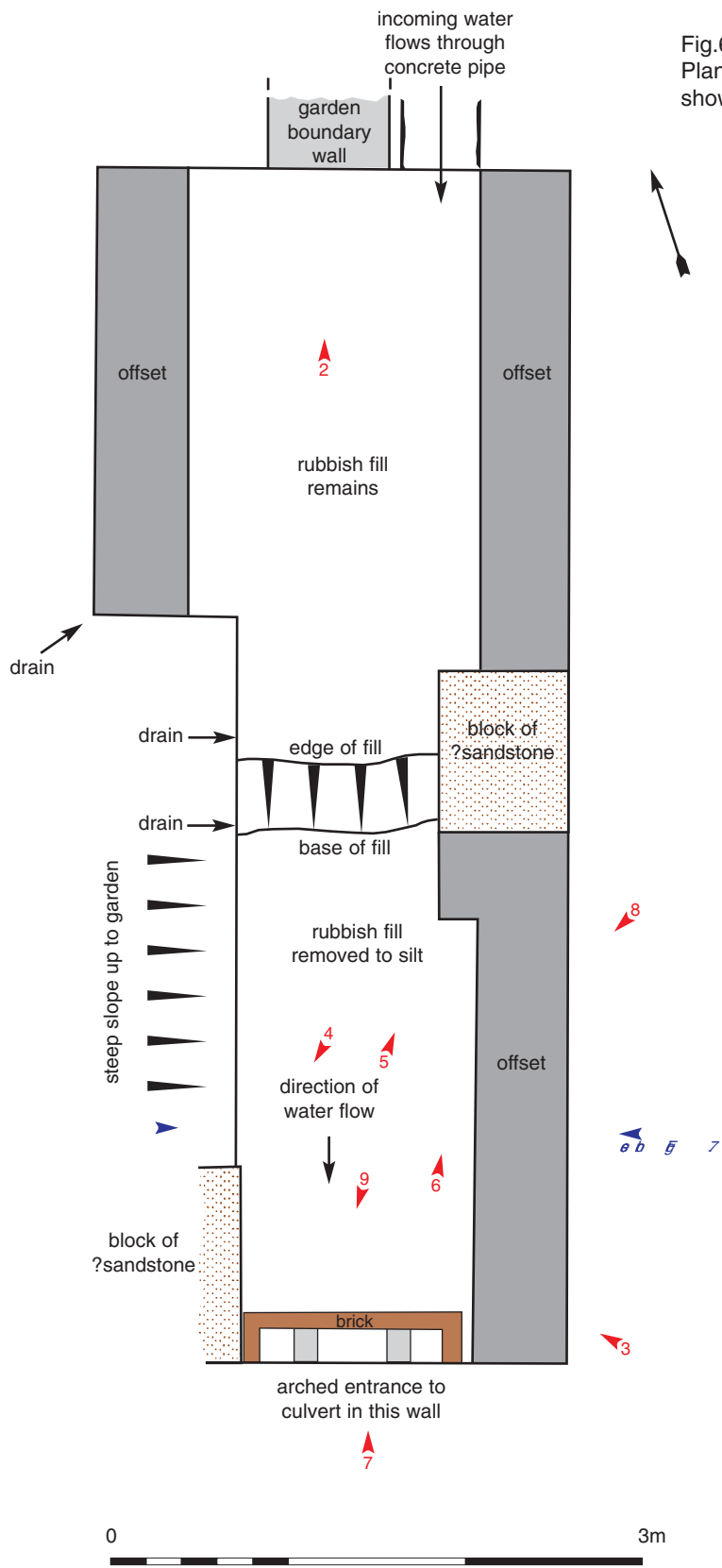


Fig.6
Plan of the waterwheel pit, scale 1:40,
showing the location and direction of Plates 2-9

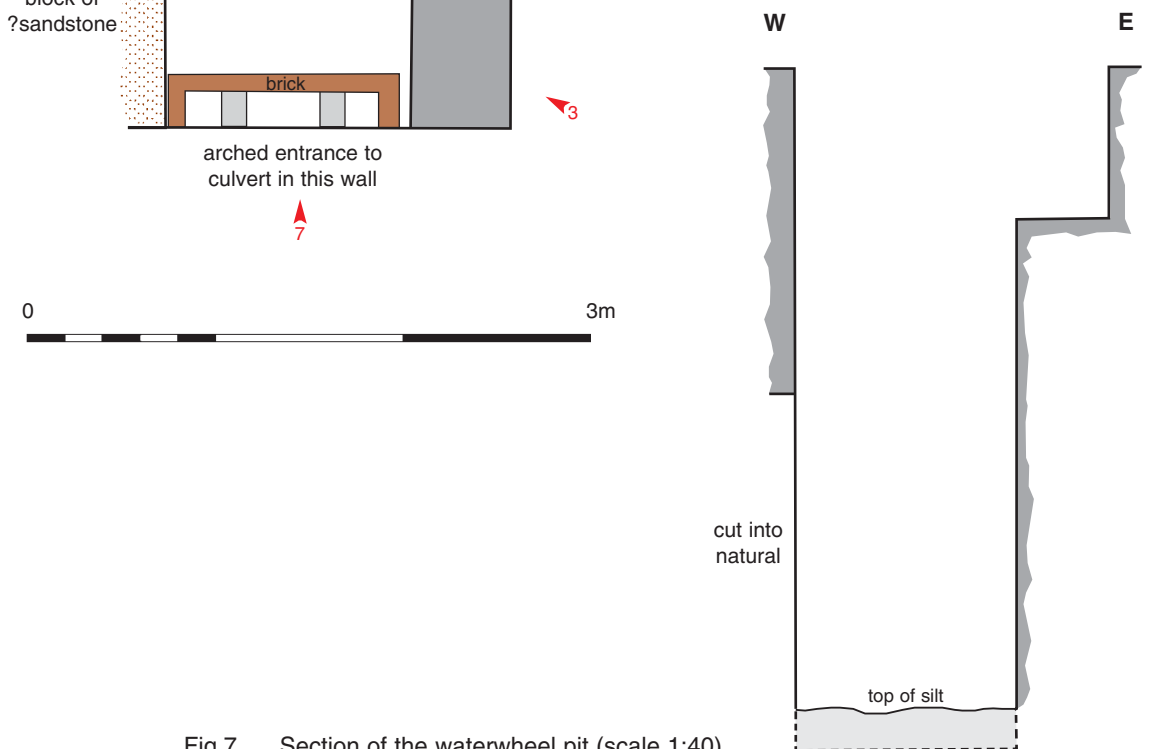


Fig.7 Section of the waterwheel pit (scale 1:40)



Plate 1 The waterwheel pit is behind the wire Heras fencing on the left, looking north-east

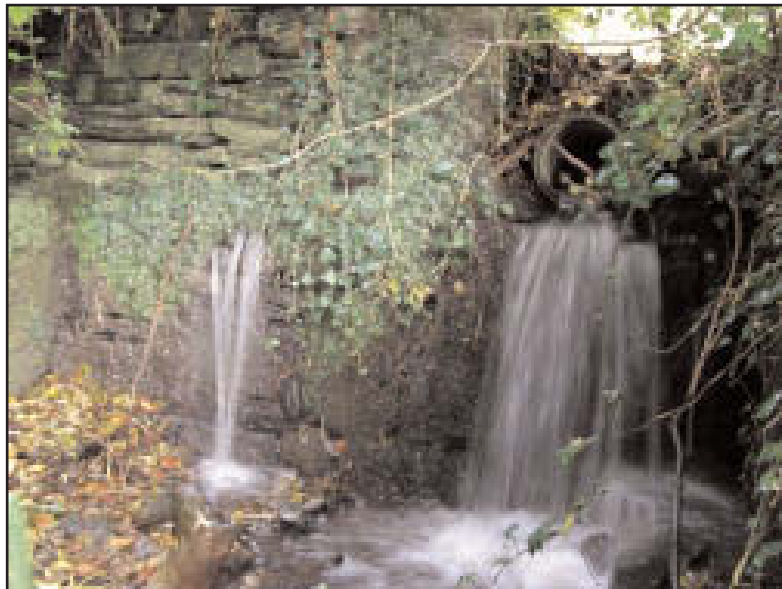


Plate 2 The north-east end of the waterwheel pit, showing water entering through a concrete pipe, top right, looking north-east



Plate 3 The south-west corner of the waterwheel pit showing coursed slate in the west wall, a squared sandstone block on the top of the wall and the brick and stone structure projecting from the end wall, looking west (scale 1m)



Plate 4 The south-west corner of the waterwheel pit showing the exposed natural bedrock forming the lower part of the west side of the pit, looking south-west



Plate 5 The east side of the waterwheel pit showing the east wall and offset, looking north-east (scale 2m)



Plate 6 A view along the length of the waterwheel pit showing the offset on the east side with the squared block of sandstone (in front of the base of the ranging pole) on top of the offset, looking north-east (scale 2m)



Plate 7 The brick and stone structure at the south-west end of the waterwheel pit, looking north-east (scale 1m)



Plate 8 The brick and stone structure, looking south-west (scales 2m and 1m).



Plate 9 The stone-arched entrance to the culvert in the south-west end wall of the waterwheel pit, looking south-west



Plate 10 The sluice gate on the west end of the millpond, looking north-east
(scale 1m)



Plate 11 The silted up remains of the millpond, looking east