

GLAMORGAN-GWENT ARCHAEOLOGICAL TRUST
CONTRACTS SECTION

ARCHAEOLOGICAL DESK-TOP STUDY
RHYD-Y-CAR LAND RECLAMATION SCHEME
MERTHYR TYDFIL, MID GLAMORGAN

APRIL 1993

PROJECT NO. A117
REPORT NO. 93/026

RHYD-Y-CAR LAND RECLAMATION SCHEME

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Summary

In fulfilment of the planning conditions on the proposed land reclamation scheme at Rhyd-y-car, Merthyr Tydfil, Ove Arup and Partners commissioned the Glamorgan-Gwent Archaeological Trust (Contracts Section) to carry out a desk-top assessment of the likely impact of the proposals on the archaeological resource.

The Merthyr Tydfil area has been exploited since the Mesolithic period, although much of the evidence of earlier occupation has been overlain and obscured by the industrial activities of the past two centuries. The reclamation area includes the site of Rhyd-y-car Pit, which provided ironstone to the nearby Ynys-fach ironworks; the engine house survives. In addition, part of the Glamorganshire Canal crosses the site. The early post-medieval farm at Old Rhyd-y-Car, and the site of a group of houses near the canal, also fall within the development area.

A series of measures, to mitigate the impact on the archaeological resource as identified, are presented.

Acknowledgements

This report was prepared by D J Maynard BSc, (Project Officer, Glamorgan-Gwent Archaeological Trust (Contracts Section)), with the assistance of M Locock BA AIFA, M Lawler BA, and other GGAT staff.

The author is grateful to staff at the Central Register of Air Photography for Wales, Cardiff, Mid Glamorgan County Record Office, Cardiff for their assistance in documentary research.

1. Introduction

1.1 Development proposal and commission

The Welsh Development Agency has submitted an application for planning permission to develop a site at Rhyd-y-Car, Merthyr Tydfil, Mid Glamorgan, for the construction of a hotel and for leisure uses (Application no. 52930056). In support of this application, the Welsh Development Agency commissioned Ove Arup & Partners to prepare an study of the environmental impact of the proposals. Ove Arup in turn commissioned Glamorgan-Gwent Archaeological Trust (Contracts Section) to carry out a study of the archaeological impact.

1.2 Specification for the report

The specification for the report is given in full in Appendix One

1.3 Layout of the report

The report describes the physical environment of the proposed development area (Section 2), gives a summary of the archaeological resource in the area (Section 3) and gives details of the likely impact of the development proposals on the archaeological resource (Section 4). Recommendations and suggestions for mitigatory measures to minimise damage to the archaeological resource are outlined in Section 5. Detailed data is presented in a series of appendices.

1.4 Abbreviations used in the report

Sites in the area previously recorded in the county Sites and Monuments Record are referred to by their Primary Record Number (PRN) and National Grid Reference. Sites, both previously-known and new, lying within the development area are referred to by numbers with the prefix RC: a list of these sites will be found in Appendix Two. References to documents and published works are given in brackets: the full titles will be found in the bibliography.

2. Physical environment

2.1 Topography

The present landscape is essentially artificial, the product of two centuries of industrial activity. The site lies on the west bank of the River Taff, 1km south of the town of Merthyr Tydfil. The east and south sides of the site are covered by old spoil tips: in the southeast, the farm of Old Rhyd-y-Car survives. The Nant Rhyd-y-Car runs west across the top of the site, feeding into the Glamorganshire Canal. The modern A470 runs up the west side of the site.

2.2 Surface geology

The reclamation area is located on deposits of the Lower Coal Measures which contain mainly grey, silty mudstones with a few sandstones. The Lower Coal Measures also contain many of the worked ironstone deposits, containing bands of ironstone nodules closely associated with coal seams (Blandford 1981, 54). Both the ironstone and coal seams were exploited at Rhyd-y-car.

3. Summary of archaeological resource

The Merthyr Tydfil region has been utilised by man since the Mesolithic period, but much of the evidence for occupation and use has been destroyed or obscured by industrial and mining activity in the past two and a half centuries. The reclamation area was the site of Rhyd-y-car Pit, sunk around 1800 to mine ironstone for the nearby Ynys-fach Ironworks.

3.1 Prehistoric

Despite the presence of prehistoric features in the area of Merthyr Tydfil and casual finds of prehistoric artefacts, no prehistoric features were identified in the reclamation area in the documentary search.

3.2 Roman

The Roman fort at Penydarren Park formed a link on the road from Cardiff to Brecon Gaer and was abandoned early in the 2nd century AD. The presence of further buildings outside the area of the fort might indicate continued Roman settlement beyond that date. No evidence of Roman activity in the reclamation area was found.

3.3 Early Medieval/Medieval

The town of Merthyr Tydfil would appear to have originated in the early medieval period. The location of the original settlement is not known, but probably lay somewhere within the present town. During the early medieval and medieval periods the reclamation area was probably used as pasture. No medieval features were identified in the reclamation area in the documentary search.

3.4 Post-Medieval/Modern

The mining of ironstone and coal, and the dumping of the spoil generated, has obscured much of the pre-industrial landscape. However, the farm at Old Rhyd-y-Car (RC 1: see Fig. 1) does survive largely intact. Industrial features of interest include the course of the Glamorganshire Canal (RC 2: see Fig. 1), with a surviving bridge at the north edge of the development area (RC 10), the site of a group of cottages, some of which are now at the Welsh Folk Museum (RC 4: see Fig. 1), a further group of canalside cottages (RC 9: see Fig. 1), the engine house of Rhyd-y-Car mine (RC 3: see Fig. 1). There are also the courses of two railway lines of some interest (RC 5, RC 6 and RC 7), but which have been extensively disturbed. The bridge which carried the Rhymney Railway over the Brecon and Merthyr and London and North Western Joint Railway still survives (RC 8).

4. Impact of development proposals on archaeological resource

4.1 Nature of development

The proposed development envisages a large-scale programme of landscaping and construction works. For the purpose of this study, it has been assumed that the entire ground surface would be affected, and therefore that any archaeological feature not excluded will be destroyed.

4.2 Sites affected by development

The following sites will be adversely affected by the development:

- RC 1 Old Rhyd-y-Car Farm
- RC 2 Glamorganshire Canal
- RC 3 Rhyd-y-Car engine house
- RC 8 Railway bridge
- RC 9 Row of houses
- RC 10 Bridge over canal

4.3 Sites unlikely to be affected

It is improbable that sensitive deposits of the following identified sites survive within the affected area:

- RC 4 Rhyd-y-Car houses
- RC 5 Railway
- RC 6 Railway
- RC 7 Railway

5. Recommendations

The impact of the development on the archaeological resource would be mitigated by the implementation of the following works.

RC 1 Old Rhyd-y-Car Farm

We recommend that the farm is retained in its present form. If this is not possible, then a survey of the standing buildings of the complex should be undertaken prior to demolition.

RC 2 Glamorganshire Canal

We recommend that this part of the canal course should be excluded from any groundworks. If this is not possible, then we recommend that a surface survey of the feature should be prepared in advance of any groundworks.

RC 3 Rhyd-y-Car engine house

We recommend that this building should be retained in situ. If this is not possible, then we recommend that the building interior should be cleared of rubble by archaeological excavation, with all architectural stone retained, and then that the building should be recorded in detail, dismantled stone-by-stone, stored elsewhere, and subsequently rebuilt at or near its original site. It is likely that structures relating to the function of the engine house will continue below the present ground surface: should the building be dismantled, it is recommended that it should be considered as an entity and rebuilt as such. It is probable that the below-ground structure will contain deposits of a nature necessitating archaeological excavation.

RC 8 Railway bridge

We recommend that this feature should be excluded from any proposals. In view of the possibility of subsequent deterioration, we recommend that the feature should be recorded in its present state.

RC 9 Row of houses

We recommend that these houses is retained in its present form. If this is not possible, then a survey of the standing buildings of the complex should be undertaken prior to demolition.

RC 10 Canal bridge

We recommend that this feature should be excluded from any proposals. In view of the possibility of subsequent deterioration, we recommend that the feature should be recorded in its present state.

This work should be undertaken by qualified archaeological personnel.

Appendix One: Specification

Definition of Study

The project will conform to the draft Standard in British Archaeology for Archaeology in Desk-based Studies, issued by the Institute of Field Archaeologists in September 1992, and will be carried out in accordance with the GGAT Contracts Guidelines for the Execution of Assessment Projects.

1. Objectives

- 1.1 Assessment of existing archaeological information to determine the extent, character and significance of archaeological interests, in local, regional, and wider contexts, and the likely effects of the proposed development on such interests, by means of documentary study and field visit.
- 1.2 Identification of areas or features requiring further assessment where present archaeological knowledge is insufficient for informed decisions to be made in the planning process.

2. Documentary Searches

- 2.1 Collation of information pertaining to sites recorded in the County Sites and Monuments Record (SMR).
- 2.2 Search of cartographic sources for additional archaeological information, and collation of information relating to archaeological interests.
- 2.3 Analysis of aerial photographic coverage held by the Central Register of Air Photography for Wales for additional archaeological information, and collation of information relating to archaeological interests.
- 2.4 Analysis of relevant primary historic documents and published sources for additional archaeological information, and collation of information relating to archaeological interests.
- 2.5 Analysis of borehole data, geotechnical studies, etc., for additional information, and collation of information relating to archaeological interests.

3. Fieldwork

- 3.1 Site visit to check the present condition of archaeological features identified by 2.1 - 2.5, and to

assess factors that may have influenced the condition or visibility of these features.

3.2 Identification of previously-unknown archaeological features.

3.3 Rapid recording of archaeological features (e.g. sketch plotting and photographs).

4. Assessment

4.1 Assessment of the information acquired from the execution of 2 and 3.

5. Reports

The results of the study will be reported in a series of reports

5.1 Client - A bound report comprising a synthesis of data gathered through the execution of 2-4, placing the archaeological resource within its wider context, with supporting evidence in appendices, and identification of features of archaeological interest onto scale drawings, or listing of such features by eight-figure National Grid References. The identification of legal constraints (e.g. scheduled ancient monuments, listed buildings) relating to archaeological interests. A copy of this report will be deposited with the County Sites and Monuments Record.

5.2 Academic - A digest report of significant archaeological information in an appropriate outlet (e.g. regional/national academic journal).

5.3 Other - Initial notification to Cadw of sites which may satisfy the Secretary of State's criteria for national importance, which are a prerequisite for statutory protection.

6. Archive

6.1 Preparation of an ordered archive of records made during the assessment in accordance with NMR cataloguing procedures.

6.2 Deposition of the assessment archive with an appropriate organisation (usually GGAT Contracts records).

6.3 Submission of a copy of the report for inclusion in the County SMR, within 6 months of the completion of the work.

7. Staff

7.1 The project will be managed by the Principal Archaeological Officer (Contracts), AG Marvell BA, MIFA, and Projects Manager (Assessments), M Locock BA AIFA, and carried out by one of the Trust's Project Officers, all of whom have wide experience of such work.

8. Insurance

8.1 GGAT Contracts holds insurance cover for all risks involved in this type of project, including substantial Professional Indemnity cover.

9. Scope of the work

9.1 The work outlined in this specification will be carried out to the highest professional standards, and the conclusions drawn will be based on a considered review of the evidence available. However, the archaeological resource is unpredictable, and the encountering of unexpected archaeological deposits on the site cannot be ruled out.

Appendix Two: Archaeological sites in the area

Sites listed on the county Sites and Monuments Record, held at GGAT, Swansea

- 1081 Cast iron overbridge, taking railway over Glamorganshire canal (100m southeast of development area) (Hague and Richards 1976, 53).
- C04 Glamorganshire Canal (see below, RC 2)
D29 Vale of Neath railway (see below, RC 5)

New sites identified by this study

- RC 1 Old Rhyd-y-car Farm - apparently extant in 1765 (Source: mining assessment report by Ove Arup, based on a lease in J Lloyd's History of Ironworking in Wales (1906)); still surviving.
- RC 2 Glamorganshire Canal (PRN C04) - opened 1794 to improve movement of iron from Merthyr. Attempts by the Crawshays (owners of Ynys-fach) to monopolise the canal stimulated interest in other forms of transport, e.g. railways, in the Merthyr area. Surviving as an earthwork for part of its length.
- RC 3 Rhyd-y-car Pit - opened around 1800, originally mined ironstone for Ynys-fach Ironworks immediately north of reclamation area, later coal. Closed down around 1880, mostly demolished, engine house still standing.
- RC 4 Rhyd-y-car houses (PRN 1081)- 29 houses built from 1800 to house miners working at Rhyd-y-car. Six earliest houses moved to Welsh Folk Museum and rebuilt, remainder demolished c.1980 (William 1984).
- RC 5 Vale of Neath Railway (PRN D29) - opened in 1853.
- RC 6 Brecon and Merthyr and London and North Western Joint Railway - originally opened in 1868, much of route now lies below the A470.
- RC 7 Rhymney Railway - opened 1886 (shown as Ynys-fach Railway on 1st edition OS map).
- RC 8 Railway bridge - carried RC 7 over RC 6. Still survives as a footbridge.
- RC 9 Group of houses - A row of two-storey houses, in varying states of repair. Probably built to serve the canal.
- RC 10 Footbridge over Glamorganshire Canal. Still survives.

Appendix Three: Cartographic and documentary evidence

Documentary and cartographic searches have shown the area around Merthyr Tydfil to have been utilised and settled since prehistory, with artefact evidence dating from the Mesolithic and occupation evidence from the Bronze Age. During the medieval period, Merthyr Tydfil was part of the Marcher lordship of Senghenydd, with most of the land utilised for farming. From the eighteenth century onward Merthyr was the centre of intense industrial activity, with large iron foundries and ironstone and coal mining.

Prehistoric

The earliest evidence of human activity is a scatter of flints of Mesolithic date found near Abercanaid (PRN 880). Another indicator of prehistoric utilisation of the area is a "thin-butted axe-head" of Neolithic date (PRN 478; GCH 1984, 438), found in a Merthyr street. Neither of these finds is necessarily an indicator of settlement, merely of a human presence in the area.

Settlement of the area in the Bronze Age is indicated by the presence of cairn-groups around Merthyr Tydfil; it is probable that they were formerly more numerous than they are now, hence suggesting that occupation of the area was extensive.

Roman

Approximately 1.5km northeast of the reclamation area is the site of the Roman fort at Penydarren (PRN 823, NGR SO 0503 0678). Established c.AD 75 it was probably abandoned in the reign of Hadrian (GCH 1984, 438; Jarrett 1969, 106; RCAHMMW 1976, 84-6). Excavation work in the area has uncovered further buildings outside the fort, with traces of a cemetery to the northwest. All known Roman occupation is confined to the east side of the River Taff.

Early medieval/Medieval

A sixth-century inscribed stone is preserved in St Tydfil's Church. The inscription reads in translation "(The stone) of Anniccus, son of Tecurus He lies here in this tomb" (PRN 454). Another memorial stone of eighth- or ninth-century date is preserved nearby (GCH 1984, 438; RCAHMMW 1976 40; PRN 455). The stone bears the inscription ARTBEU. The findspot of the first stone is to the north of Merthyr, that of the second is unknown; both indicate Early Medieval settlement of the Merthyr area.

Before the Norman conquest of Wales, Glamorgan was reputedly divided into seven cantrefs. Merthyr was in the commote of Uwch

Caeach, part of the cantref of Senghenydd. In the mid-twelfth century, Senghenydd was the dominion of Ifor ap Meurig, whose family retained lordship into the thirteenth century and remained prominent landowners into the late medieval period. Norman control of Senghenydd was not established until the last quarter of the thirteenth century; post-conquest Merthyr was part of the demesne lands of Gilbert de Clare, Earl of Gloucester and Lord of Glamorgan.

Post Medieval/Modern

The parish of Merthyr was still largely pastoral in the sixteenth century: in 1535, over half the tithe was derived from sheep and cattle, and less than a quarter from corn (GCH 1974, 3). Dairy farming was relatively important, with farmers possessing an average of 15 cattle each in the period 1688-1725 (GCH 1974, 323). The population of Merthyr in 1670 is estimated at 110, and in 1696 it is described as a village of about 40 houses. By the mid-eighteenth century there were 93 farms in the parish, perhaps including Old Rhyd-y-Car (RC 1).

The area owes its current appearance to the industrial activity of the last two centuries: the construction of the Glamorganshire Canal in 1794, to serve the iron industry of Merthyr, was followed by the opening of the Rhyd-y-Car pit to supply iron stone to Ynys-fach. Other parts of the industrial landscape were workers housing (RC 4, RC 9) and the complex railway systems of the late 19th century.

Appendix Four: Aerial photograph evidence

1. Features identified

Pre-Industrial

As the whole of the development area had been effectively landscaped some time before the end of the 19th century, there was no likelihood of pre-industrial earthworks surviving. The farmstead on the south side of the area (Old Rhyd-y-Car, RC 1) may pre-date the 19th century, but no further evidence can be extracted from the air photographs than is already available on the 25" OS sheets.

Industrial

In essence, the air photographs chronicle the various stages of post-war dereliction of the industrial landscape. No structural features were visible that are not shown on the first three OS 25" surveys.

2. Sorties examined

A rapid search was undertaken through each of the available sorties listed below. More detailed examination, however, was concentrated on five sorties.

CPE/UK/2326. Pt II 26 Sept 1947

This large scale (1:4800) series was probably the most useful of the post-war RAF sorties. The canal bed was dry by then, but very distinct, along with its bridges and the features along its banks. The slag tips lying to the east of the canal were then still unreclaimed; there is a very strong contrast between the fractured surface of these tips and the smooth terraced masses of the colliery tips above Rhyd-y-car.

F21 58/RAF/1715 14 Apr 1955: 0183 & 0184
F22 542/RAF/205 11 Jul 1955; 0045

By this stage the slag tips on the east side of the canal had been reclaimed

Meridian 71/67 23 July 1967; 116 & 117

This is another large-scale format sortie, of interest because substantial sections of the industrial landscape on the west side of the canal had survived largely undisturbed.

Welsh Office Sortie No 900424 24 April 1990; 8198 & 8199

This is probably the most recent large-scale air coverage of the development area and illustrates very effectively the transformation of the former industrial landscape since the 1960s. Parts of the canal and the colliery survive, as well as structures on the periphery of the development area. The increase of vegetation cover on the Rhyd-y-car tips is well marked.

<u>SORTIE</u>	<u>SCALE</u>	<u>DATE</u>	<u>LIBRARY NO</u>
<u>RAF Sorties</u>			
106G/UK 1120	1:10,000	14/1/46	163
CPE/UK 1997	1:9,800	13/4/47	589
CPE/UK 2326	1:4,800	26/9/47	741
58/RAF 1110	1:10,000	15/5/53	1452
58/RAF 1715	1:10,000	14/4/55	1646
542/205	1:10,000	11/7/55	1682
<u>Commercial</u>			
Meridian 71/67	1:5,000	23/7/67	
JA Storey	1:20,000	28/4/85	8501
<u>Welsh Office</u>			
WO/ 900424	1:2,500	24/4/1990	

Appendix Five: Site visit

A site visit was undertaken to check for the presence of further features, and to examine the state of preservation of features previously identified. A series of photographs of features of interest were taken to record their present appearance.

RC 1 Old Rhyd-y-Car

Surviving farm complex of various dates. It is possible that some elements are 18th-century.

RC 2 Glamorganshire Canal

RC 10 Footbridge across Glamorganshire Canal

Although no longer water-filled, the Glamorganshire Canal survives in the north half of the development area as a visible feature, with the two-path on its east side still in use as a track. The south part of the canal route lies under a modern track and has probably been obscured. The footbridge at the extreme north limit of the development area is part of the canal structure, and is of some interest.

RC 3 Rhyd-y-Car engine house

This survives as a shell-structure. No related structures could be identified.

RC 4 Rhyd-y-car houses

No structural evidence of these were visible. It is improbable that significant features survive.

RC 5, 6, 7 Railways

RC 10 Bridge

No structural features of interest were visible except the bridge RC 10, which has been altered but still survives.

RC 9 Houses

This row of four houses, previously unidentified, is of some interest. Although at present used as houses, the presence of full-size doors at first-storey level suggests that they may have originally been partly used for industrial storage. They are clearly closely linked to the canal, and should be considered to be one of the canal's associated structures.

Appendix Six: Catalogue of research archive

The research archive is held at GGAT, Swansea, and includes the following:

1. Copy of the report
2. Brief and specification for the report
3. Notes made during research, including transcripts of relevant documents and notes from secondary sources
4. Photocopies of OS maps at various scales, annotated by researcher
5. Correspondence and notes from meetings with specialists
6. Notes and photographs from site visit
7. Annotated drafts of the report

Appendix Seven: Sources consulted

The following sources were consulted:

Ove Arup Mining Survey
Ove Arup Mining Subsidence report

County Sites and Monuments Record, GGAT, Swansea (see Appendix Two)

Published sources (see Bibliography)

Central Register of Air Photography for Wales, Cardiff (see Appendix Four)

Documentary and cartographic sources, Mid Glamorgan Record Office OS maps, 1st edition 25" (see Appendix Three)

A site visit was also undertaken (see Appendix Five).

Sources not consulted

No further geotechnical reports were available.

No further air photograph coverage was examined, since the Welsh Office collection was sufficiently complete.

No further documentary or cartographic sources were examined.

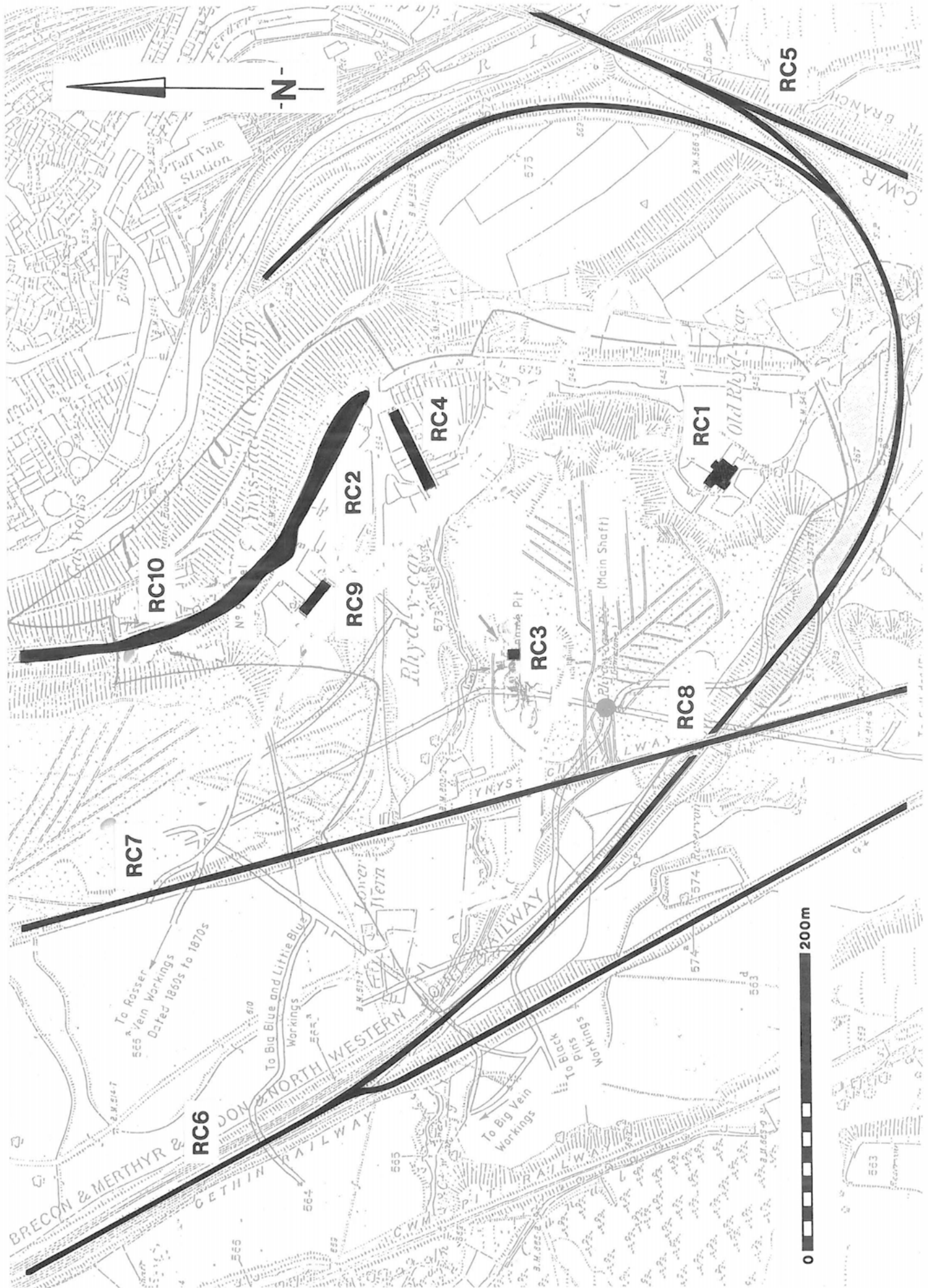


Figure One: Plan of development area, showing archaeological sites RC 1-10