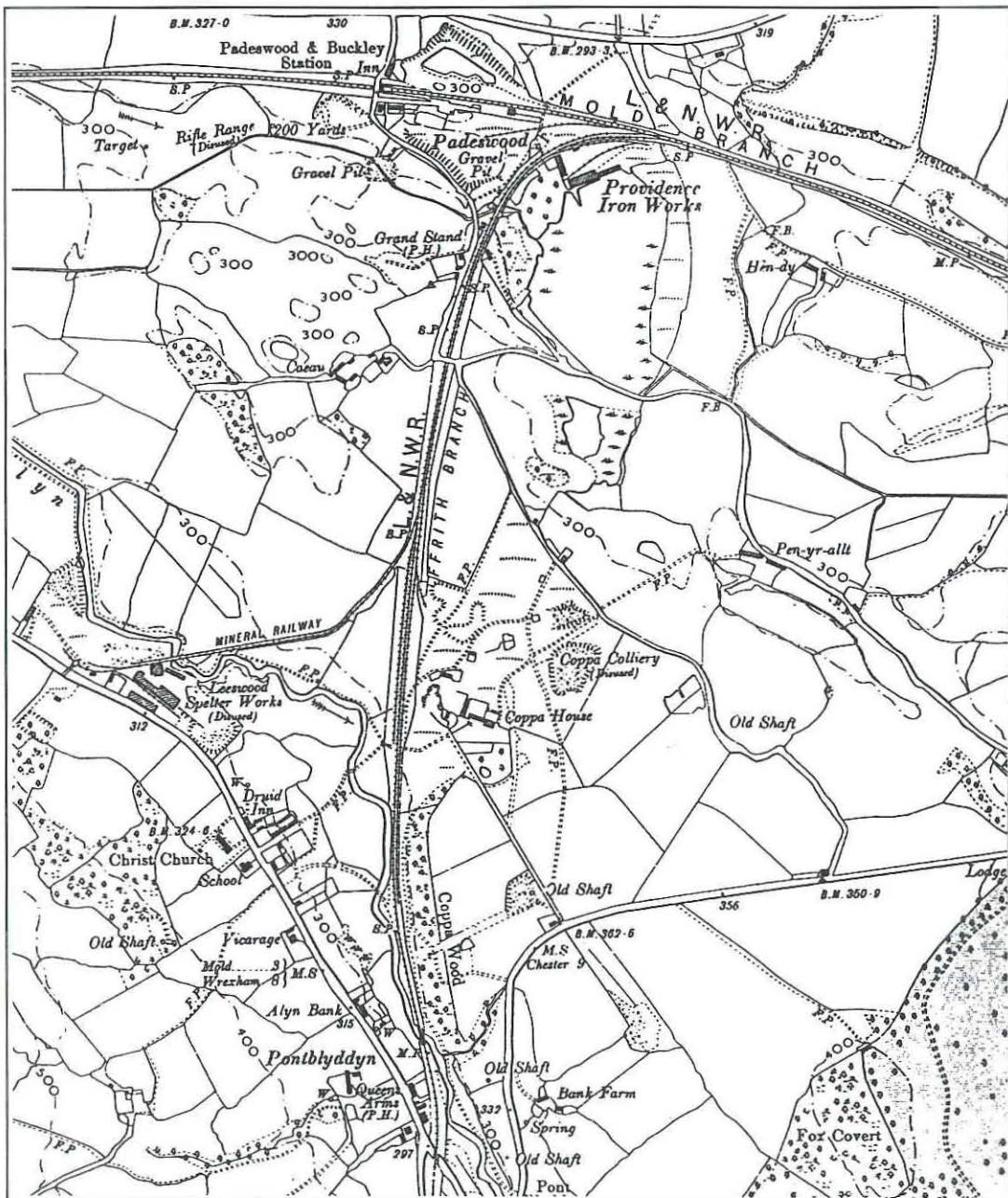


Leeswood to Buckley Wastewater Mains Transfer Scheme, Flintshire

ARCHAEOLOGICAL ASSESSMENT



CPAT Report No 431

**Leeswood to Buckley Wastewater Mains
Transfer Scheme, Flintshire**
ARCHAEOLOGICAL ASSESSMENT

NW Jones & R Hankinson
August 2001

Report for Galliford Northern

The Clwyd-Powys Archaeological Trust

7a Church Street, Welshpool, Powys, SY21 7DL
tel (01938) 553670, fax (01938) 552179



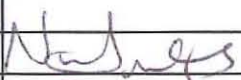

© CPAT

CPAT Report Record

Report and status

CPAT Report Title	Leeswood to Buckley Wastewater Mains Transfer Scheme, Flintshire: Archaeological Assessment		
CPAT Project Name	Leeswood Wastewater Main		
CPAT Project No	934	CPAT Report No	431
Confidential (yes/no)	No	draft/final	Final

Internal control

	name	signature	date
prepared by	R Hankinson		01/08/01
	N.W. Jones		01/08/01
checked by	N.W. Jones		01/08/01
approved by	R.J. Silvester		01/08/01

Revisions

no	date	made by	checked by	approved by

Internal memo

The Clwyd-Powys Archaeological Trust

7a Church Street Welshpool Powys SY21 7DL
tel (01938) 553670, fax 552179
© CPAT

CONTENTS

- 1 INTRODUCTION
- 2 LOCATION, TOPOGRAPHY AND GEOLOGY
- 3 HISTORICAL BACKGROUND
- 4 FIELD SURVEY
- 5 ARCHAEOLOGICAL SUMMARY
- 6 CONCLUSIONS
- 7 ACKNOWLEDGEMENTS
- 8 REFERENCES

APPENDIX 1: PROJECT ARCHIVE

APPENDIX 2: SPECIFICATION

APPENDIX 3: GAZETTEER OF SITES

ILLUSTRATIONS

1) Figures

2) Plates

1 INTRODUCTION

- 1.1 In February 2001 the Contracts Section of the Clwyd-Powys Archaeological Trust was invited by Bullen Consultants, acting as consultants to Galliford Northern and on behalf of Welsh Water, to prepare a specification and quotation for undertaking an archaeological assessment of the proposed route for a new waste water main between Leeswood and Buckley, Flintshire. The quotation was accepted in March 2001 and the evaluation undertaken in two stages between May and July 2001.
- 1.2 The Curatorial Section of the Clwyd-Powys Archaeological Trust, acting as archaeological advisors to the local authority, determined that an archaeological assessment should be undertaken to assess the potential impact of the proposals on the archaeological resource. Accordingly, a brief was prepared (ASB 413 dated 20/02/10) which detailed the works required.
- 1.3 Information held within the Regional Sites and Monuments Record indicated that there were two recorded archaeological sites within the area of the scheme: Wat's Dyke and Pontblyddyn Milestone (PRN 103357). In addition, the route would also cross former railway lines and their embankments.

2 LOCATION, TOPOGRAPHY AND GEOLOGY

- 2.1 The proposed pipeline (Fig. 1) runs for a total of 2.82km, commencing at the village of Leeswood (SJ 27236017), before descending into the valley of the Afon Alun at Pontblyddyn. After crossing the floor of the Alun valley, the line ascends in a northerly direction, reaching a dissected plateau which it then crosses in a north-north-eastern direction to its northern terminal at the Ty Gwyn Wastewater Treatment Works, Buckley (SJ 28326232).
- 2.2 Soils in the area generally consist of Cambrian stagnogleys of the Brickfield 3 Association (Rudeforth *et al.* 1984). The underlying geology of the area is contained within the Westphalian division of Upper Carboniferous rocks, commonly known as 'Coal Measures'.

3 HISTORICAL BACKGROUND

- 3.1 Stage One of the assessment involved the rapid consultation of all the readily available primary and secondary documentary, cartographic, pictorial, photographic and oral sources, and the extraction of information to assist in the preparation of the report that follows. Repositories consulted included the following: County SMR, CPAT, Welshpool; the National Monuments Record, RCAHMW, Aberystwyth; the National Library of Wales, Aberystwyth; Flintshire County Archives, Hawarden and records held by Welsh Water and their consultants, Bullen Consultants. Relevant Ordnance Survey maps have been reproduced as Figures 3-6; however, there were earlier map sources, most notably the Tithe maps, which were not sufficiently clear to be worth reproducing here. These sources are detailed in Section 8 and referred to in the Gazetteer of Sites (Appendix 3) where relevant.
- 3.2 The archaeological and historic background to the landscape of the pipeline corridor is summarised in chronological order, below. This section should not be viewed as a comprehensive study of the area through time, but rather as a guide to those activities and events that are known to have had an impact on the landscape.

Prehistoric

- 3.3 There are only two sites in the vicinity of the pipeline corridor which suggest prehistoric activity, and neither is completely certain. The cropmark linear ditch with appended D-shaped enclosure (PRN 7962), 150m to the north-west of its southern end, is considered to be Iron Age in date though this has not been proven. It has been suggested that the former mound (PRN 100091) at Padeswood might have had a Bronze Age burial mound or barrow on its crest, although other interpretations are possible (see Section 3.5, below). The site has subsequently been levelled and no trace now remains.

Early Medieval

- 3.4 The linear earthwork of Wat's Dyke (PRN 17774) is crossed by the pipeline corridor near its northern end. The site is considered to represent an early medieval boundary between England and Wales, and an extant section (PRN 106645) has been scheduled by Cadw: Welsh Historic Monuments as a monument of national importance (SAM F88).

Medieval

- 3.5 Evidence of medieval occupation in the vicinity of the pipeline corridor is relatively limited, with the only likely sites being two areas of ridge and furrow cultivation (PRNs 81538 & 81539), visible on 1947 RAF aerial photographs; neither of these sites is now extant. It has also been noted that the field containing the former mound (PRN 100091) was called Bryn-y-Castell; this could suggest that the mound represented a medieval motte.
- 3.6 Although there is no confirmed evidence of medieval settlement in the immediate vicinity of the pipeline corridor, houses such as Fferm (PRN 100114) demonstrate that the area was occupied in the early post-medieval period. It seems most likely that some of these dwellings will have had medieval precursors and supporting evidence comes from the names of Leeswood and Hartsheath townships in Mold parish, which were recorded during the Tithe survey. It is possible that these townships formed centres of medieval occupation.

Post-Medieval

- 3.7 It has been noted above (para 3.4.2) that dwellings of this period occur in the vicinity of the pipeline corridor; the main example is Fferm (PRN 100114) with its formal garden (PRN 22943), though the public house known as 'The Bridge Inn' (PRN 81541) at Pontblyddyn is depicted on an 18th-century map source. Settlements were served by a local road network, most of which survives, though a section of road (PRN 81542) heading south-west from Pontblyddyn bridge (PRN 100104) past the Bridge Inn and across the A541 has disappeared beneath later development.
- 3.8 Much of the evidence for post-medieval activity in the vicinity of the pipeline corridor relates to industrial activity. Extractive industry is largely represented by the coal mines (e.g. Coppa Coal mine - PRN 103346) which are widespread in the district, though iron workings (e.g. Leeswood Iron Mine - PRN 103359) are also present. Other, secondary, industrial activity is present in the area, most notably Pont Bleiddyn Mill (PRN 103356) and the Providence Iron Works (PRN 103224), though the latter is now destroyed. Poorly fired, waste brick fragments found at the Coppa clay pit (PRN 81530) could suggest that clay extracted from the pit was fired into bricks in its immediate vicinity.
- 3.9 Agricultural use of the area in the post-medieval period was widespread. Farms such as Pen-yr-Allt (PRN 31406) would have provided focii, with the surrounding areas which remained undeveloped by industry being mainly used for pasture.

19th & 20th Centuries

- 3.10 Settlement appears to have notably increased in the 19th century, with the rise in importance of the local mines and similar industry. Pontblyddyn, in particular, expanded from the two buildings shown on a map of 1766 to the dispersed roadside settlement depicted on the 1900 Ordnance Survey map.
- 3.11 Industry, largely based on coal mining, continued to form a major part of the local economy in this period. An interesting use for the cannel coal which is found in the district was found in the mid-19th century; this comprised the distillation of mineral oils from the coal using the method patented by James Young in 1850, and it would appear to have formed a major part of the local economy between the 1860's and 1880's, when crude oil began to be exploited (see Gregory, 1971-2). The Coppa Colliery and Oil Works (PRN 81540) was located in the vicinity of the central section of the pipeline corridor.
- 3.12 The increasing industrialisation of the area required improved transportation and the Mold Railway (PRN 81533), with a branch line to Ffrith via Pontblyddyn (PRN 81532), was opened in 1849, the main line running from Saltney Ferry to Mold, via Hope and Padeswood. Sidings were added to the branch line by 1865 to serve the Coppa Oil Company. The branch line operated until 1934 when it was eventually closed following the derailment of a freight train at Pontblyddyn, while the main line was closed to freight in 1956, with the passenger service closing in 1962 (Baughan 1991, 50-51; 62-3).

4 FIELD SURVEY (Fig. 2)

- 4.1 Stage Two of the assessment, the field survey, was carried out 12th July 2001 and consisted of the methodical fieldwalking of the proposed line of the pipe (including the contractors working width), as depicted on the landownership pipelaying notice plans (Drawing Nos 00G052: 021-035, dated 12th February 2001). The primary function of the survey was to visit the sites recorded by the initial phase of desk-top study in order that their condition and nature could be determined and recorded. In addition, the working width was prospected for new sites which had not been revealed by previous archaeological work; any sites encountered were measured, described, sketched and photographed, as appropriate.
- 4.2 The main land-use encountered by the survey was agricultural pasture, though at the southern end of the line the pasture fields had not been recently grazed and were carrying a hay crop. Two small areas of arable agriculture were crossed by the line, but crop growth was sufficiently well-advanced to preclude fieldwalking for potential find scatters. Significant sections of the line were also seen to cross or follow road alignments.

5 ARCHAEOLOGICAL SUMMARY

- 5.1 In the immediate vicinity of the proposed pipeline there are a total of 24 archaeological sites, of which 16 are still extant; detailed data relating to the individual sites are contained within the gazetteer (Appendix 1). Within this total the sites can be broken down as follows: 8 sites were already recorded by the SMR, of which 6 are still extant; 13 sites were revealed by the desk-top study, of which 7 are still extant; 3 previously unrecorded extant sites were identified during the field survey. On the accompanying map (Fig. 2) sites in the first category are denoted by red spots, while those in the latter two categories are denoted by green spots; linear sites and site areas are further defined on Fig. 2. Only those sites which remain extant are illustrated by photographs in this report.

- 5.2 Each site in the gazetteer has been classified according to its perceived significance. The categories are those given in the Cadw: Welsh Historic Monuments draft *Archaeology and the Trunk Road Programme in Wales: a Manual of Best Practice*.

Category A sites of National importance. It is presumed that sites in this category will be preserved and protected *in situ*.

Category B sites of regional or county importance which are of particular importance within the region. Preservation *in situ* is the preferred option for these sites, but if loss or damage is unavoidable, appropriate detailed recording should be undertaken.

Category C sites of district or local importance which are not of sufficient importance to justify preservation if threatened, but which merit adequate recording in advance of loss or damage.

Category D minor and damaged sites which do not merit inclusion in a higher category, and for which rapid recording should be sufficient.

Category E sites whose importance could not be fully determined as a result of the assessment and may warrant further evaluation.

- 5.3 Three sites in the vicinity of the pipeline corridor fall within Category A, having statutory designations. Two buildings at Pen-yr-Alft (PRNs 31406 and 31407) are listed, though the line runs approximately 100m to the west and neither will be affected. The remaining site is a section of Wat's Dyke (PRN 106645) which has been designated as a scheduled ancient monument of national importance; this linear earthwork will inevitably be crossed by the pipeline. The planned crossing of the dyke is located where an access road has already been cut through the bank, but it is likely that the accompanying ditch survives beneath the present ground surface, bank material having been dumped in it.
- 5.4 Comparison of the plan of the proposal with the recorded archaeology suggests that six extant sites without statutory designations may be disturbed by the installation of the pipeline. Three sites (PRNs 81531, 81532 & 81533) are abandoned 19th-century railway/tramway alignments which will inevitably

be crossed by the line, and are considered to be of Category C importance. Of the remaining three sites, one is a shaft mound (PRN 81537: Category C) associated with coal workings in the vicinity of Leeswood, a second is a potentially recent terrace (PRN 81543: Category C?) though of uncertain origin and function, while the third is a probable sand/gravel quarry (PRN 81544: Category D).

- 5.5 The eight sites which are no longer extant are largely either outside the immediate vicinity of the proposed pipeline corridor or have been completely removed. It is possible, however, that further information relating to extractive industry, in particular, may be revealed by site works.
- 5.6 The upper section of the Black Brook valley (see Plate 12) is crossed by the proposed line at SJ 28036178, where it appears to have been partially filled with alluvial material resulting in a relatively flat-bottomed valley with steep sides. Some surface drainage works have been carried out in this part of the valley suggesting that it was originally fairly wet and boggy. It is improbable that any environmental deposits of archaeological interest are present; the deposits which are present may be glacial in origin.

6 CONCLUSIONS

- 6.1 There are a total of twenty-four archaeological sites in the vicinity of the proposed pipeline; of these sites four fall within Category A, three within Category B, nine within Category C, and eight within Category D. No sites are considered to belong to Category E.
- 6.2 One site of major importance, Wat's Dyke, will inevitably be crossed by the pipeline if the proposal is implemented. However, the proposed line follows that of an access road which has already levelled a section of the bank forming part of the monument; the accompanying ditch is likely to have been filled with material from the bank and probably survives beneath the road surface. This site is a scheduled ancient monument and we are informed that the client has already submitted an application for Scheduled Monument Consent to Cadw: Welsh Historic Monuments in order to undertake excavations within the scheduled area, including provision for an appropriate programme of archaeological excavation and recording.
- 6.2 Three former railway/tramway alignments will also be crossed by the proposal. It seems likely that the trackbeds of these Category C sites will have survived in all cases, though no structural features (sleepers etc) can be seen. The excavation of the pipeline trench will expose sections through these linear features, but the features themselves should be relatively unaffected by the proposal.
- 6.3 Evidence relating to the coal industry of the area is widespread; one extant site (PRN 81537: Category C) which represents coal workings in the Leeswood area lies very near to the proposed line, but could be easily avoided. The remaining extant sites relating to this extractive industry should be unaffected by the proposal, though information on sites which are no longer extant could be revealed by excavations and topsoiling.
- 6.4 Clay and sand/gravel extraction are present in the vicinity of the proposal, but, with the exception of the small quarry (PRN 81544: Category D) which is directly on the line, these should remain relatively unaffected. It should be noted that there is a possibility that bricks were being manufactured in the vicinity of the Coppa clay pit (PRN 81530: Category C) and evidence of kilns could be present nearby.
- 6.5 Traces of the former road alignment (PRN 81542: Category C), which is associated with Pontblyddyn bridge but no longer apparently extant, may be revealed during the course of excavations in the vicinity of the junction between the A541 and A5104 at Pontblyddyn.
- 6.6 An anomalous terrace (PRN 81543: Category C?) of uncertain function lies below Bank Farm. It is possible that excavations and topsoiling in this area may reveal further information on its possible nature and dating, but it does not appear to be of sufficient interest to merit evaluation.
- 6.7 One area which may be of palaeo-environmental interest (Plate 12) will be traversed by the pipeline, but it is thought most probable that the deposits there are geological in nature.

7 ACKNOWLEDGEMENTS

- 7.1 The writer would like to thank Mr D. Barlow of Galliford Northern for facilitating access to the land along the proposed line and the owners for granting permission to carry out the survey.
- 7.2 The writer would also like to thank his colleagues at CPAT, Mr Nigel Jones and Mr Glyn Owen for their work on the desk-top study, and the staff of the following repositories for their help and assistance:
County SMR, CPAT, Welshpool;
National Monuments Record, RCAHMW, Aberystwyth;
National Library of Wales, Aberystwyth;
Flintshire County Archives, Hawarden;
Welsh Water and their consultants, Bullen Consultants.

8 REFERENCES

Published sources

Baughan, P E, 1991. *A Regional History of the Railways of Great Britain, Vol. 11: North and Mid Wales*, 2nd ed. Naim: David St John Thomas Publisher.

Davies, E, 1949. *The Prehistoric and Roman Remains of Flintshire*. Cardiff.

Gregory, H G, 1971, 'The Distillation of Oil from Cannel Coal and Shales', *Flintshire Historical Society Transactions*, 25, 166-169.

Rudeforth, C C, Hartnup, R, Lea, J W, Thompson, T R E, & Wright, P C, 1984. *Soils and their use in Wales*, Bulletin No. 11. Harpenden: Soil Association of England and Wales.

Cartographic sources

Ordnance Survey 25" 1st edition Flint. 14.13, surveyed 1870, published 1872
 Ordnance Survey 6" 2nd edition Flint. 14SW, surveyed 1869-70, revised 1898, published 1900
 Ordnance Survey 6" 3rd edition Flint. 14SW, revised 1909, published 1914
 Ordnance Survey 6" 3rd edition Flint. 17NW, revised 1909, published 1914
 Ordnance Survey 6" provisional edition Flint. 14SW, revised 1909 and 1938
 Ordnance Survey 6" provisional edition Denb. 17NW, revised 1909 and 1949, published 1954

Tithe Survey for Mold parish, Townships of Leeswood, Hartsheath and Bistre, 1847

Flintshire Record Office

1734 map of Leeswood demain in the parish of Mould. NT/M/144
 1766 A survey and plan of lands belonging to Philip Puleston esq. D/GW/660
 18th century Plan of the Farm estate. D/GW/678
 1811 Map of Leeswood township with its roads. D/LE/650
 1817 Cae du farm belonging to JW Eyton. D/GW/690
 c1852 Part II of altered tithe apportionment plan of Mold branch of Chester Holyhead Railway. D/GW/717
 c1860s Plan of Padeswood, Bistre. D/DM/102/1
 1862 draft plans of townships in the parish of Mold. D/DM/223/61-8
 1872 manuscript geological map. D/HM/352

Documentary sources

Flintshire Record Office

1856 lease of coal mines on the Hartsheath estate. D/BC/3319
 1860 lease of coal mines on the Hartsheath estate. D/BC/3321
 1864 lease of 6 acres forming part of Coppa Farm. D/BC/3323
 1874 lease of coal at Padeswood. D/HC/A/34

Aerial photographic sources

Oblique aerial photographs held by CPAT

87-10-0017
 87-10-0018
 87-10-0022

Vertical aerial photographs held by RCAHMW

RAF 540/488 3418, dated 11 May 1951
 RAF CPE/UK/1935/1240, 3240, 2240, dated 17 January 1947
 RAF 541/208/3112, 3143, 4143, 4151, dated 25 November 1948

APPENDIX 1
PROJECT ARCHIVE

Field survey

23 Site visit forms

Photographic archive

1 black and white negative films

1 colour print films

1 colour slide films

photographic catalogue

Digital archive

database of sites smr1.dbf

polygonal site data sitearea.tab

pipeline route bound.tab

OS data leeswood.tab

Paper archive

Curatorial Brief

Project Specification

Terms and Conditions

Quotation

miscellaneous correspondence

APPENDIX 2

SPECIFICATION

LEESWOOD TRANSFER SCHEME SPECIFICATION FOR AN ARCHAEOLOGICAL EVALUATION BY THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

1 Introduction

- 1.1 The proposed development involves the construction of a new wastewater main between Buckley and Leeswood, Flintshire. The Curatorial Section of the Clwyd-Powys Archaeological Trust, acting as archaeological advisors to the local authority, have determined that an archaeological assessment should be undertaken to assess the potential impact of the proposals on the archaeological resource. Accordingly, a Brief has been prepared (ASB 413 dated 20/02/10) which details the works required.
- 1.2 Information held within the Regional Sites and Monuments Record indicates that there are two recorded archaeological sites within the area of the scheme: Wat's Dyke and Pontblyddyn Milestone (PRN 103357). In addition, the route will also cross former railway lines and their embankments.
- 1.3 The following specification concerns only stages 1 and 2 of the Brief.

2 Objectives

- 2.1 The objectives of the assessment are:
 - 2.1.1 to reveal by means of a combination of desk based study and field survey, the nature, condition, significance and, where possible, the chronology of the archaeology within the area of the proposed development in so far as these aims are possible;
 - 2.1.2 to record any archaeological sites identified during the field evaluation;
 - 2.1.3 to prepare a report outlining the results of the assessment, incorporating sufficient information on the archaeological resource for a reasonable planning decision to be taken regarding the future management of the archaeology.

3 Methods

- 3.1 Stage one of the assessment will involve the examination of all the readily available primary and secondary documentary, cartographic, pictorial, photographic and oral sources. Repositories consulted will include the following: County SMR, CPAT, Welshpool; the National Monuments Record, RCAHMW, Aberystwyth; the National Library of Wales, Aberystwyth; Flintshire County Archives, Hawarden; records held by Welsh Water and their consultants, Bullen Consultants.
- 3.2 Stage two will take the form of a field survey of the whole of the proposed construction area. This will take the form of a single walked transect along the pipeline corridor. All archaeological sites will be recorded together with any potential environmental deposits. Each site will be recorded on standard CPAT site visit forms including: an accurate location using GPS; photography in 35mm format black and white and colour print and colour slide; sketch surveys as appropriate; written description of character, function; condition, vulnerability, dating etc.
- 3.3 Following the on-site work an illustrated and bound report will be prepared according to the principles laid out in the Curatorial Brief (section 7). This will be in A4 format and contain conventional sections on: Site location, Topography and Geology; Historic Background; Field Survey; Conclusions and Recommendations and References, together with appropriate appendices on archives and finds. A draft report will be forwarded to the curator and client prior to the production of the final report.
- 3.4 The site archive will be prepared to specifications laid out in Appendix 3 in the Management of Archaeological Projects (English Heritage, 1991).

4 Resources and Programming

- 4.1 The assessment will be undertaken by a small team of skilled archaeologists under the direct supervision of Mr RJ Silvester, a senior member of CPAT's staff who is also a member of the Institute of Field Archaeologists.
- 4.2 All report preparation will be completed by or with the assistance of the same field archaeologist who conducted the evaluation.
- 4.3 It is anticipated that stage one of the assessment will be completed within 4 days, the field survey will be completed in 2 days, and the report will be completed within 4 days. A copy of the report will be deposited with the Regional SMR. CPAT will not be in a position to undertake any part of the evaluation until April 2001. The curator will be informed of the timetable in order to arrange for monitoring if required.
- 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
27th February 2001

Appendix 3 Gazetteer of Archaeological Sites

PRN 31406 Type Farm	Name Pen-y-Allt Farm Period Post Medieval	Category A NGR SJ28056156
Description: Listed building		
PRN 31407 Type Barn	Name Pen-y-Allt Barn Period Post Medieval	Category A NGR SJ28056156
Description: Listed building		
PRN 81530 Type Clay pit	Name Coppa Clay Pit Period 19th Century ?	Category C NGR SJ2794761341
Description: Clay pit depicted on OS 1st ed 1872.		
Now flooded forming a pond. Many poorly fired brick fragments (wasters) on shore of pond to SW might suggest that the bricks were being fired nearby.		
PRN 81531 Type Tramway	Name Coppa Colliery Tramway Period 19th Century	Category C NGR SJ2775361013
Description: Tramway depicted on OS 1st ed 1872.		
Now used as a footpath on the N side of the A5104 road. Track bed visible, having the appearance of a disused lane, 3m wide, bordered by hedgerows.		
PRN 81532 Type Railway	Name Ffrith Branch Railway Period 19th Century	Category C NGR SJ27676032
Description: Railway depicted on OS 1st ed 1872.		
Where it is crossed by the proposed pipeline wayleave the track bed is terraced into a moderate E facing slope and runs approximately N/S. Track bed is 8m wide, cut in to a depth of 1m on the upslope side and built up to a height of 1m on the downslope side. There is a culvert immediately to the N of the crossing point which takes a small stream. Overgrown and disused.		
PRN 81533 Type Railway	Name Mold Branch Railway Period 19th Century	Category C NGR SJ28066214
Description: Railway depicted on OS 1st ed 1872.		
Where it is crossed by the proposed pipeline, the railway takes the form of a raised causeway c.10m wide x 1m high. Track bed relatively intact but no surviving railway features.		
PRN 81534 Type Shaft (coal)	Name Pontblyddyn Old Shaft I Period 19th Century	Category D NGR SJ2763860784
Description: Shaft depicted on OS 2nd ed. 1900.		
No trace of the shaft in this field, probably levelled.		

Appendix 3 Gazetteer of Archaeological Sites

PRN 81535	Name Pontblyddyn Old Shaft II	Category D
Type Shaft (coal)	Period 19th Century	NGR SJ2766160670

Description: Shaft depicted on OS 2nd ed. 1900.

No trace of the shaft in this field, probably levelled.

PRN 81536	Name Leeswood Shaft I	Category C
Type Shaft	Period 19th Century ?	NGR SJ2739560142

Description: Mound depicted on OS 1914 6" map.

Large shaft mound adjoining field boundary. Mostly spoil is on ENE side of boundary but some is also present on WSW. Hollow to ENE of boundary appears to define the position of the shaft. Slightly irregular in plan, but generally circular. Large ash tree growing on mound appears to have been partly buried by the spoil rather than growing on top of it.

PRN 81537	Name Leeswood Shaft II	Category C
Type Shaft	Period 19th Century ?	NGR SJ27326012

Description: Shaft mound visible on RAF vertical photo 1951.

Substantial oval shaft mound with central depression showing position of shaft. Fairly overgrown but some area of dark shale present showing it was for coal. Surrounding field improved but shaft mound relatively untouched.

PRN 81538	Name Coppa House Ridge and Furrow ?	Category D
Type Ridge and furrow	Period Medieval	NGR SJ27906150

Description: Possible ridge and furrow aligned NW-SE visible on RAF vertical AP 1947.

Field is now divided into two approximately equal sections, one part of which is arable. No surviving traces in either of the two sections.

PRN 81539	Name Dike Farm Ridge and Furrow	Category D
Type Ridge and furrow	Period Medieval	NGR SJ28206200

Description: Ridge and furrow aligned NNE-SSW visible on RAF vertical AP 1947.

No surviving trace present in this field.

PRN 81540	Name Coppa Colliery and Oil Works	Category B
Type Oil works	Period 19th Century	NGR SJ27706145

Description: Colliery and oil works shown on OS 1st ed.

PRN 81541	Name Bridge Inn, Pontblyddyn	Category B
Type Public house	Period Post medieval	NGR SJ27676050

Description: Bridge Inn, depicted on Hawarden RO maps D/LE/650 of 1811, D/GW/660 of 1766 and apparently on 1839 Mold (Leeswood t.) Tithe map. Intact, stone built range forms the main part of the public house. Other outbuildings in vicinity, though possibly not contemporary.

Appendix 3 Gazetteer of Archaeological Sites

PRN 81542	Name Pontblyddyn road	Category C
Type Road	Period Post Medieval	NGR SJ27666050

Description: Former road alignment running south-west from Pontblyddyn bridge (PRN 100104), as depicted on Hawarden RO map D/LE/650 of 1811. Also depicted on D/GW/660 of 1766 and 1839 Mold (Leeswood t.) Tithe map.

Not particularly evident on the ground, but its former line may be preserved beneath the existing road surface. The road (A541) appears to have been built up as the ground floor of the Bridge Inn is approximately 1m lower.

PRN 81543	Name Bank Farm terrace	Category C?
Type Terrace	Period Modern ?	NGR SJ27706070

Description: Levelled area adjacent to road on slope beneath Bank Farm. Appears to be relatively recent but lack of access from farm is curious. Possible embanked track runs SE along field boundary, which perhaps might suggest presence of coal workings. Field to S is very wet.

PRN 81544	Name Pen-yr-Allt quarry I	Category D
Type Quarry ?	Period Post Medieval	NGR SJ27966155

Description: Possible sand/gravel quarry consisting of linear trench cut into land on SW of dry gully. Open to NW, where there are also slight banks to NE and SW.

PRN 81545	Name Pen-yr-Allt quarry II	Category D
Type Quarry	Period Post Medieval	NGR SJ27996177

Description: Shallow sand/gravel quarry on end of ridge. Irregular but approximately sub-circular overall.

PRN 100091	Name Padeswood Pool Mound	Category D
Type Non antiquity	Period Unknown	NGR SJ27986195

Description: A NOW DESTROYED MOUND PREVIOUSLY OVAL WITH DIAM 65M SW-NE AND 50M NW-SE 3M HIGH IN FIELD BRYN-Y-CASTELL POSS A TUMULUS OR A NATURAL MOUND WITH A POSS BARROW ON TOP 7M DIAM 0.1M HIGH.;

Mound 220 paces in circumference and 8-10ft high, not perfectly round. Composed of gravel and pebbles with turf cover. Field called Bryn y Castell (E.Davies 1949, 247).

Mound 65m SW-NE x 50m NW-SE. Small mound 7m diam x 0.1m high on summit, possibly a barrow. Shape and size indicate a natural feature (OS 1959).

Mound completely levelled and no trace remains (OS, 1975).

Location of mound appears to be on a flat field east of a pond (now filled in). No trace of a mound - natural or otherwise- seen (CPAT site visit 14/02/00).

PRN 100104	Name Pontblyddyn Bridge	Category A
Type Bridge	Period Post Medieval	NGR SJ27726052

Description: STONE BUILT BRIDGE WITH A SINGLE SEGMENTAL ARCH.THE SPAN IS 9M LONG 3.2MWIDE THE APPROACHES TO THE BRIDGE ARE SPLAYED.PROB A PACKHORSE BRIDGE OF THE 17TH CENTURY.; (CAS 4/12/93)

Appendix 3 Gazetteer of Archaeological Sites

PRN 103346	Name Coppa Coal Mine	Category C
Type Mine (coal)	Period Post Medieval	NGR SJ27876090

Description: COAL MINE IS MARKED IN THIS AREA ON 1870 OS MAP. N0285;

PRN 103355	Name Ballantre Coal Mine	Category D
Type Mine (coal)	Period Post Medieval	NGR SJ27656150

Description: THERE IS NO VISIBLE EVIDENCE FOR A COAL MINE AT THE SITE MARKED ON 1964 OS MAP.PRESUMED DESTROYED. N0285;

PRN 103357	Name Pontblydden Milestone	Category B
Type Milestone	Period Post Medieval	NGR SJ27706095

Description: SANDSTONE MILESTONE MEASURES 0.35M HIGH 0.30M WIDE AND HAS A TRIANGULARSHAPE.IT IS INSCRIBEDCHESTER 9 MILES ON E SIDE ANDPONTPLYDDEN ON W SIDE. N0285;

PRN 106645	Name Wat's Dyke - Buckley F88	Category A
Type Linear earthwork	Period Dark Age	NGR SJ28466205

Description: WELL PRESERVED STRETCH WITH BANK UP TO 2.5M HIGH WITH DITCH UP TO 1.3M HIGH AND WITH A SHORT STRETCH OF COUNTERSCARP.

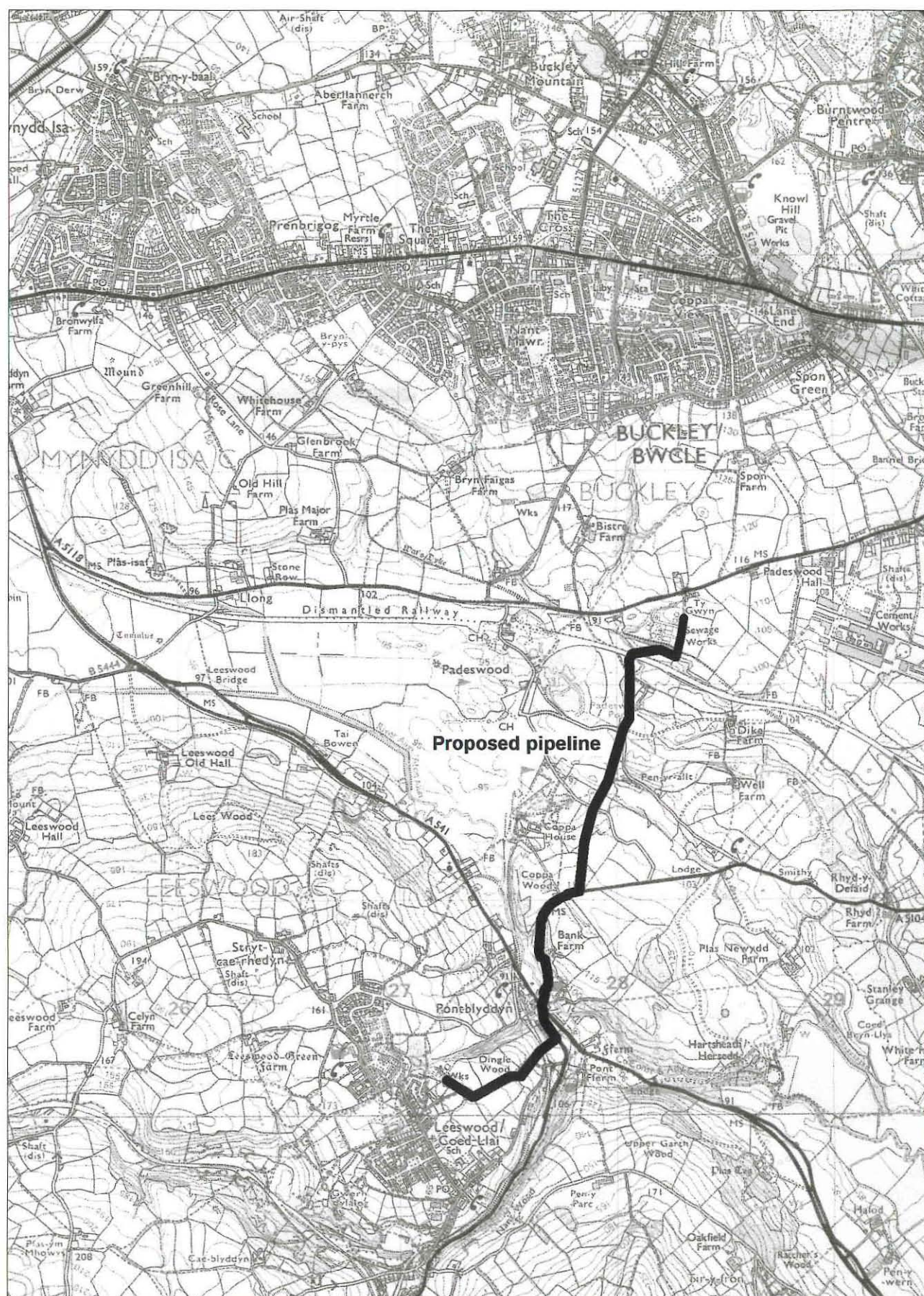


Fig 1 Location of proposed pipeline Scale 1:25,000

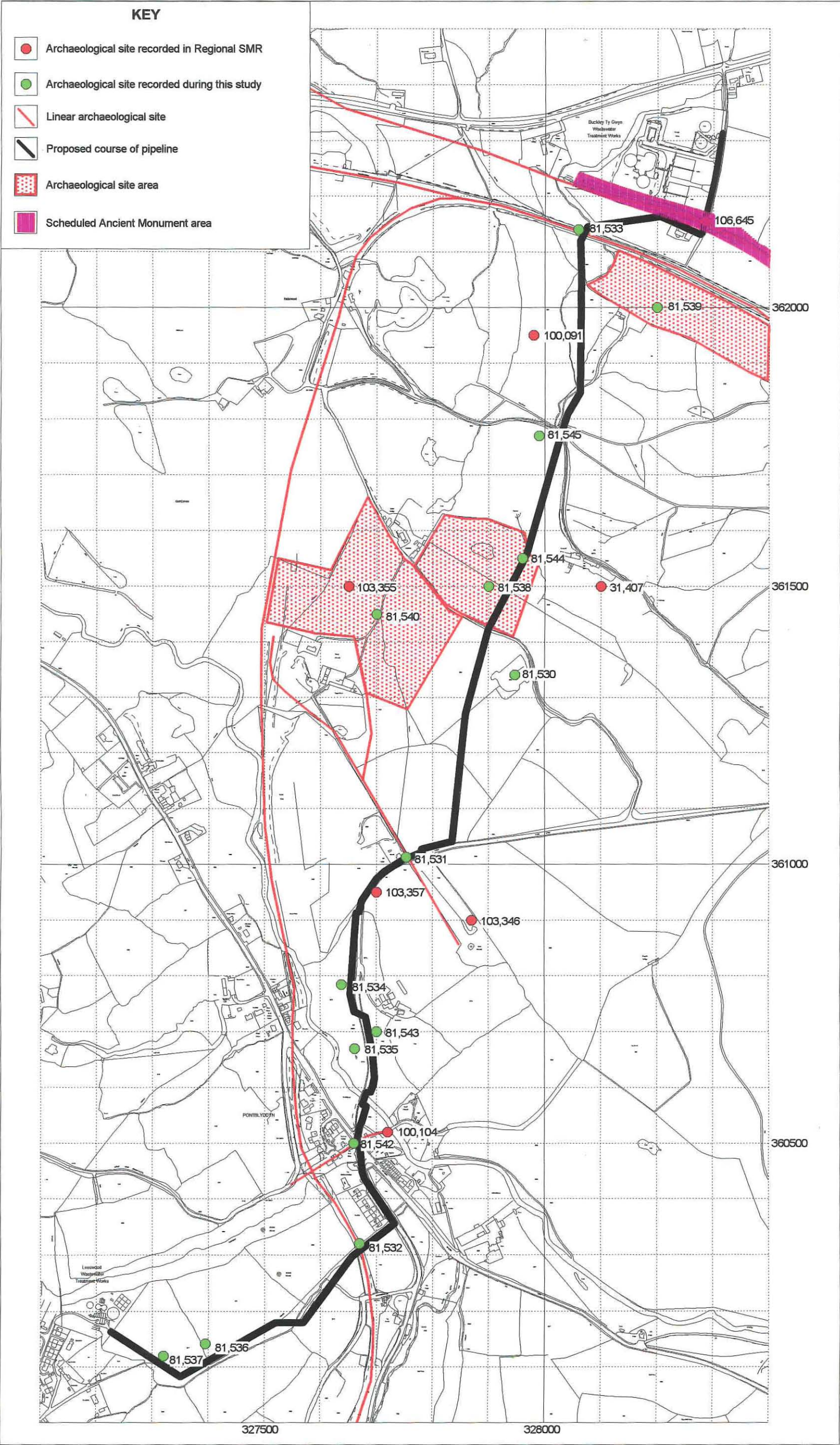


Fig 2 Pipeline in relation to archaeological sites and areas Scale 1:7,000

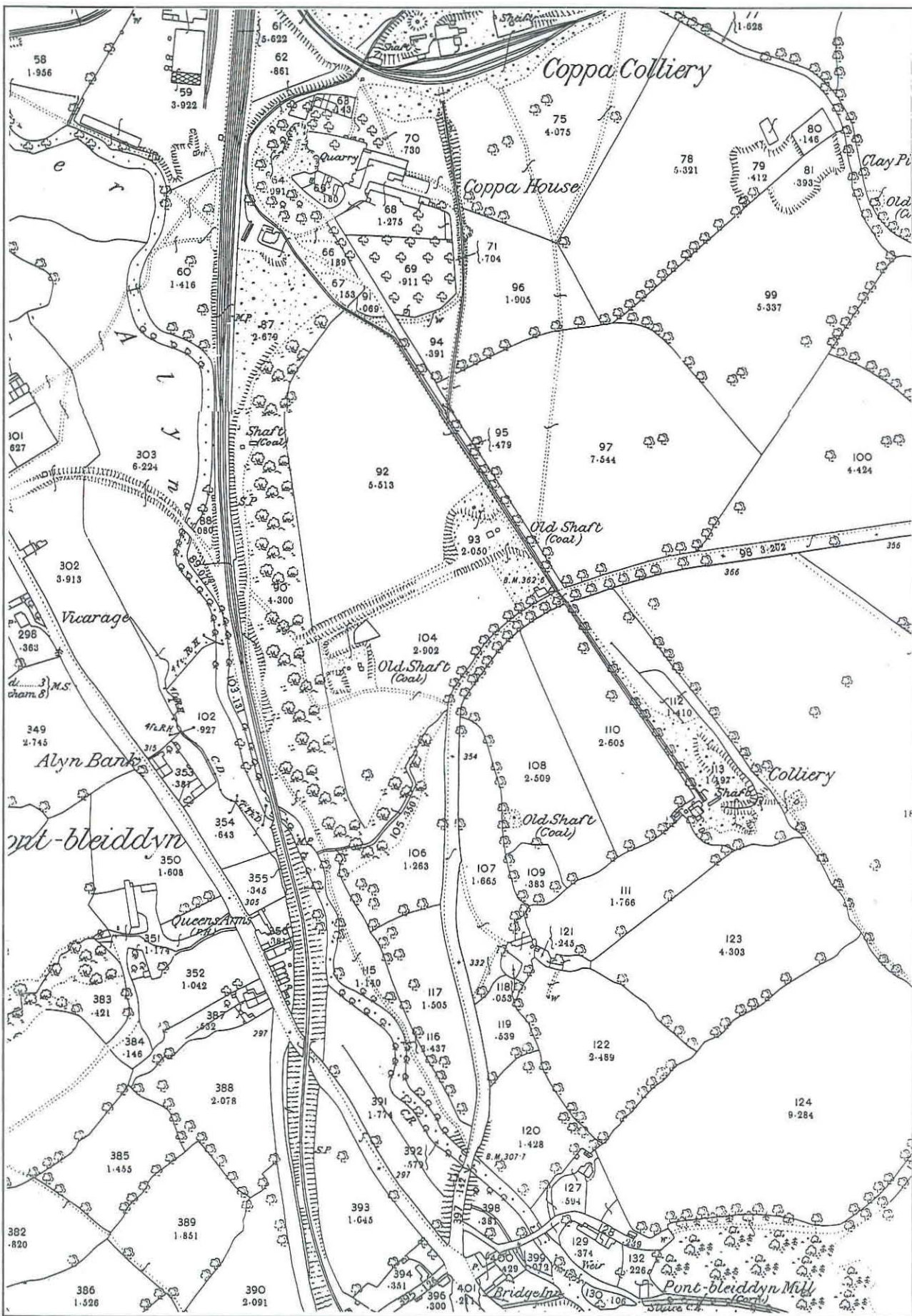


Fig 3 First edition 1:2500 map of Pontblyddyn area (Flintshire 14.13). 1872

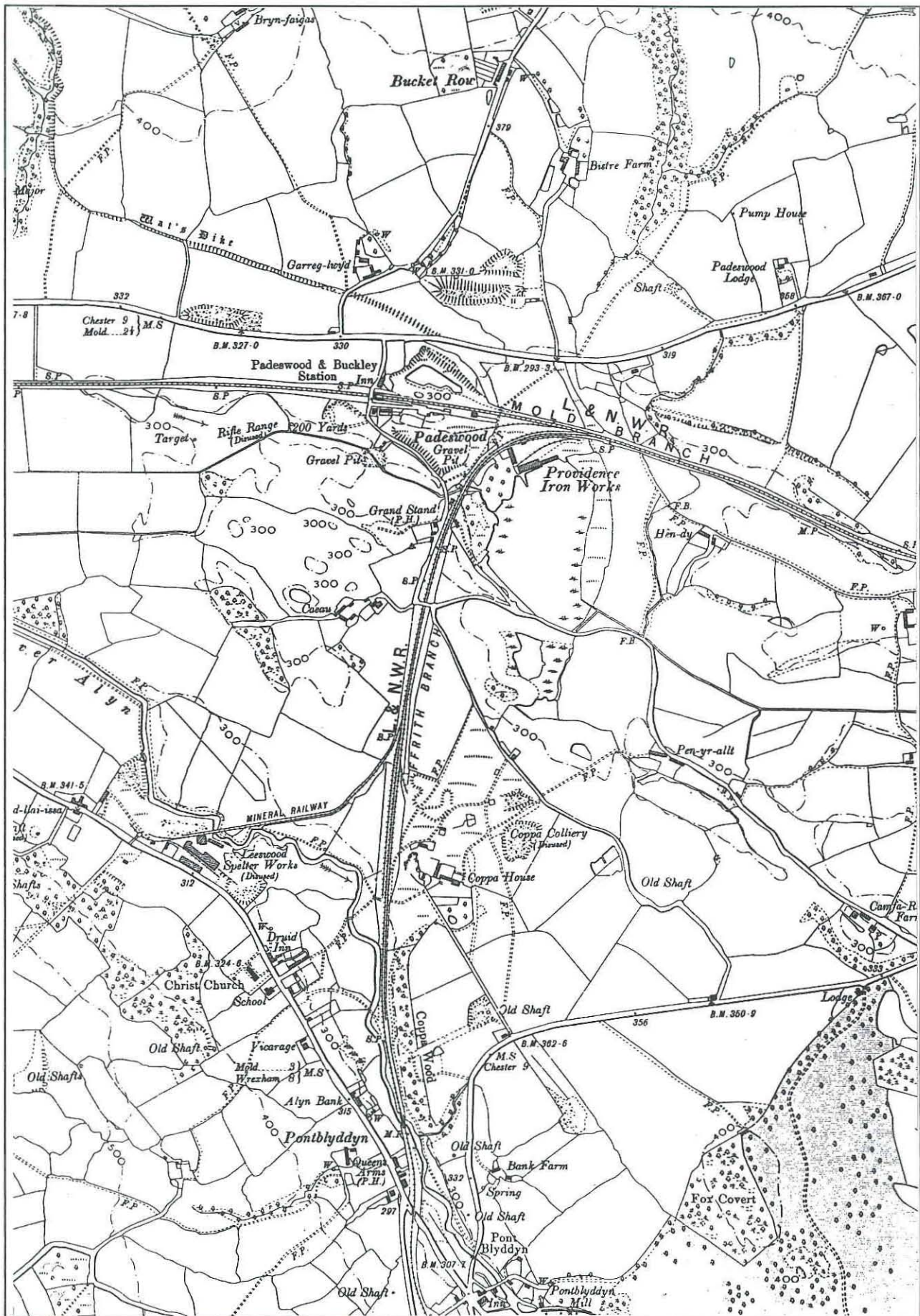


Fig 4 Second edition 1:10560 map of Pontblyddyn and Padeswood area (Flintshire 14SW). 1900



Fig 5 Third edition 1:10560 map of Pontblyddyn and Padeswood area (Flintshire 14SW/17NW). 1914

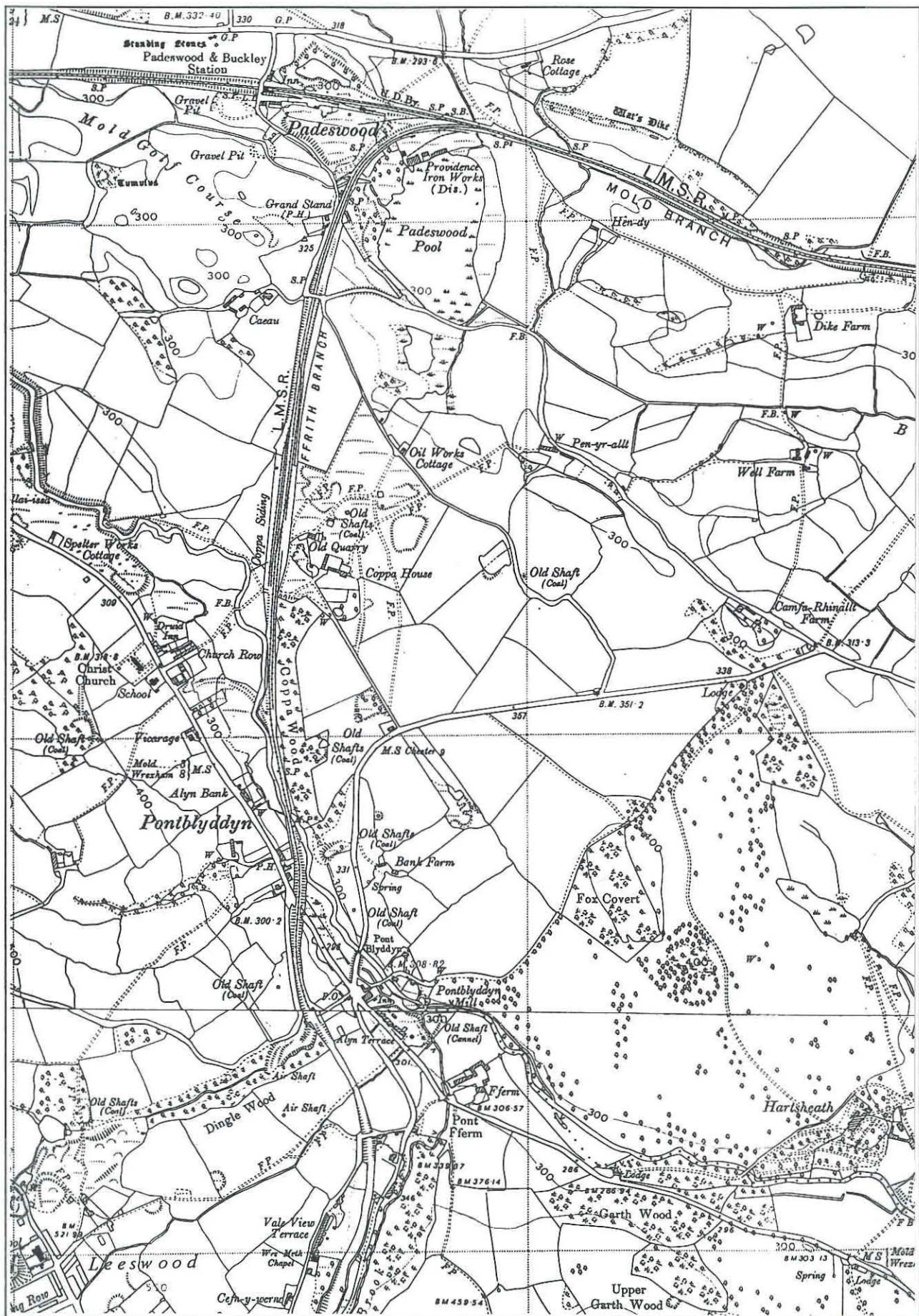


Fig 6 Provisional edition 1:10,560 map of Pontblyddyn and Padeswood (Flintshire 14SW/17NW). 1954



Plate 1 Coppa clay pit (PRN 81530) from SW. Photo CPAT 1080.06



Plate 2 Coppa Colliery tramway (PRN 81531), from NW. Photo CPAT 1080.12



Plate 3 Ffrith branch railway (PRN 81532), from SSE. Photo CPAT 1080.01



Plate 4 Mold branch railway (PRN 81533) from NE. Photo CPAT 1080.10



Plate 5 Leeswood shaft I (PRN 81536), from NNW. Photo CPAT 1080.03



Plate 6 Leeswood shaft II (PRN 81537) from SW. Photo CPAT 1080.02



Plate 7 Pontblyddyn; Bridge Inn (PRN 81541) and site of road (PRN 81542), from S. Photo CPAT 1080.04



Plate 8 Bank Farm terrace (PRN 81543) from SSW. Photo CPAT 1080.05



Plate 9 Pen-yr-Alit quarry I (PRN 81544), from NW. Photo CPAT 1080.07



Plate 10 Pen-yr-Alit quarry II (PRN 81545) from E. Photo CPAT 1080.08



Plate 11 Wat's Dyke (PRN 106645: SAM F88) road crossing, from SSW. Photo CPAT 1080.11



Plate 12 Upper Black Brook valley from NW. Photo CPAT 1080.09