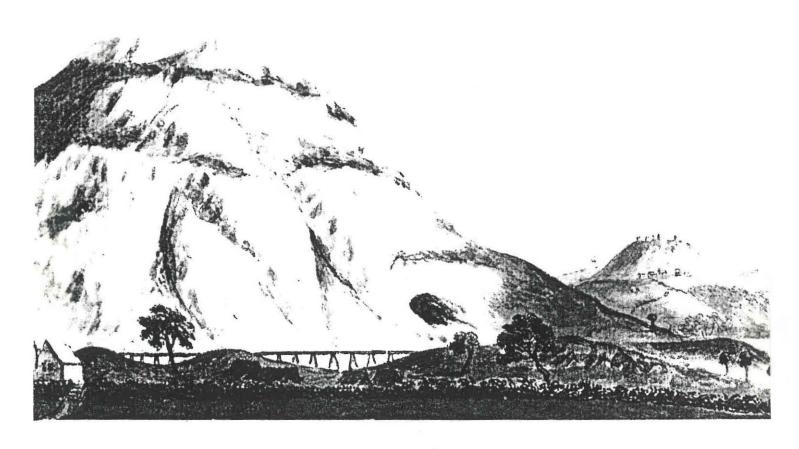
Ffordd Penrhwylfa Water Main, Prestatyn archaeological assessment



Ffordd Penrhwylfa Water Main, Prestatyn ARCHAEOLOGICAL ASSESSMENT

P.Frost September 1997

Report for Hyder Consulting Ltd.

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CPAT Report Record

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1 INTRODUCTION

- 1.1 The Contracting Section of the Clwyd-Powys Archaeological Trust (hereafter CPAT Contracts) was commissioned in August 1997 by Hyder Consulting Ltd., Warrington, to carry out an archaeological assessment of the proposed new water mains route from Meliden to Ffordd Penrhwylfa, Prestatyn.
- 1.2 The assessment had been requested by the Curatorial Section of the Clwyd-Powys Archaeological Trust acting in their role as advisers to Hyder Consulting Ltd., on behalf of Dwr Cymru/Welsh Water, and a Brief had been prepared detailing the works required (AAB 210, June 3rd 1997). The assessment was considered necessary since the Curatorial Section is of the opinion that the intended scheme may have a high impact on both recorded and potential unrecorded archaeological sites along the proposed route.
- 1.3 The Brief outlined a programme of work to assess the likely impact of the proposed scheme, consisting of a desk-top study of the most easily available primary and secondary sources, followed by a field-walked survey of the pipeline corridor. A report summarising the data resulting from the assessment would then be produced identifying areas of 'greater' and 'lesser' archaeological sensitivity within the corridor and making broad recommendations on the siting of the pipeline corridor route which would seek to avoid or minimise damage to archaeological features.
- 1.4 The report will be used by the Curator to decide the nature and extent of any further work.

2 LOCATION, TOPOGRAPHY AND LAND-USE

- 2.1 The proposed scheme affects a corridor c.3 km in length extending from land extending north-west from the A547 at Ffordd Talargoch, Meliden, at SJ05748053 to Ffordd Penrhwylfa, Prestatyn at SJ05598190 (Fig. 1).
- 2.2 The south end of the proposed corridor crosses enclosed and drained fields, west of the residential estates on the south-western fringe of Meliden, where the low lying ground does not exceed 40m OD. The corridor continues in a northerly direction to meet Ffordd Ffynnon on the southern boundary of the Caravan Site. The remainder of the route follows Ffordd Ffynnon in an easterly direction, before branching north along Ffordd Penrhwylfa.
- 2.3 The underlying solid geology in the southern sector of the corridor is of the Carboniferous period. The beds of black limestone on Graig Fawr, east of the Meliden-Dyserth Road and the disused Mineral Railway, dip north and north-west until they are cut by the Vale of Clwyd Fault, which follows a north-south trend, passing through Walker's Shaft working area (PRN 18203, SJ 0563 8049). The proposed corridor extends north from the gravels that bank up against Graig Fawr across shales and coal measures which are overlain by glacial deposits of boulder clay and sand and gravels. The fields of pasture comprise reddish-brown alluvial deposits.
- 2.4 The deposits have been examined at several locations in the Prestatyn area. Environmental sampling of peat and possible marine sediments, overlying the drift deposits at Nant Hall Road (SJ 070 832) in 1990 revealed evidence of Neolithic/Mesolithic date (Britnell 1991, 18) and further work was undertaken by CPAT (Thomas 1992, 70) at Melyd Avenue (SJ 062 817) in 1992 in closer proximity to the proposed corridor. The geological evidence examined, however, does not refer to peat deposits underlying the corridor route.
- 2.5 Mineralisation in the form of lead, silver and zinc occurs as veins in the Carboniferous Limestone to the south of the corridor, and the southern extent of the pipeline will cross the course of Panton's Vein, a deep vein covered in glacial drift, worked by the Talargoch Mine (Fig. 10).

3 METHODOLOGY

- 3.1 The assessment was undertaken according to the principles described in the brief, and consisted of a desk-top study of all readily available documentary, cartographic, pictorial and aerial photographic sources at the following repositories: County Sites and Monuments Record (SMR), Clwyd-Powys Archaeological Trust, Welshpool; National Library of Wales (NLW), Aberystwyth; National Monuments Record (NMR), Royal Commission of Ancient and Historical Monuments (RCAHMVV), Aberystwyth; County Records Office, Hawarden (CROH) and County Record Office, Ruthin (CROR). Documents relating to the Mostyn Estates, deposited at University College of North Wales, Bangor (UCNW), have been previously seen by the author. The desk-top was followed by a systematic field survey of the assessment corridor.
- 3.2 During the assessment, several new archaeological sites were discovered. The sites (1-15), which are located in the southern sector of the proposed pipeline route, have been given a site number and marked on Fig. 3. Sites not directly along the proposed route, but in close proximity to the route have also been included, as they may be affected by access to the works.
- 3.3 The sites which are already recorded on the SMR in close proximity to the corridor are given their primary record number (PRN), marked on Figs. 2 & 3 and included in the text.

4 HISTORICAL BACKGROUND

4.1 The earliest documentary references directly relating to the parcels of land covered by the corridor route are the deeds and leases deposited at the NLW, CROH, and UCNW relating to land owned by the Bishop of St. Asaph, the Earl of Plymouth (Dyserth Castle Estate) and members of the Mostyn family, who owned the Rhyd Estate (Figs 5 & 6).

4.2 Penrhwylfa/southern sector of proposed corridor route

- 4.2.1 A 1717 plan of some of the Earl of Plymouth's Land in the parishes of Dyserth and Meliden shows Plas Newydd at SJ 051 817 and arable fields to the north side of Ffridd Ffynnon. A 21 year lease dated 15/04/1795 was granted by Sir Edward Lloyd of Pengwern Place, in the County of Flint, to John Jones, farmer, of Llys in the parish of Meliden for the messuage (parcel of land) known as Llys Farm and lands and messuages called Pen'rhwfa in the northern sector of the proposed corridor route. Quillets (allocated strips of land within a field) to either side of Pen-r'lfa are shown on maps of part of Rhyd Estate (Mostyns) dating from 1766 (D/BD/149). There appears to have been little development in the northern sector of the proposed corridor until the end of the 19th century. The fields have remained as mainly as pastureland and the modern housing development on Ffordd Ffynnon and Ffordd Penrhwylfa are of post-war date.
- 4.2.2 The 1839 Tithe Map for Meliden Parish (Fig. 6) depicts Ffordd Ffynnon, which has quillets on the north side of the road on land occupied owned by William Williams of Plas Newydd, and to the south owned by Rt. Hon. Edward Mostyn Lloyd Mostyn of Rhyd.
- 4.2.3 The isolated houses at Penrhwylfa, as depicted on the Meliden Tithe Map are part of the Mostyn's Rhyd Estate. The pair of cottages N0. 404/5 may be the same cottages much improved, which are located on the west side of Ffordd Penrhwylfa, the only pre-20th century housing along this north sector of the corridor.
- 4.2.4 Sometime after the 1st edition Ordnance Survey (OS) Map of 1872 (Fig. 7) and prior to the 2nd edition OS map of 1900 (Fig. 8), Prestatyn Brickworks (PRN 103566) were established at SJ 0580 8180 on land formerly owned by the Mostyn family, to either side of Penrhwylfa cross-roads on the south side.

4.3 Mining Activity/southern sector of the pipeline

4.3.1 The reference to lands in the southern sector of the pipeline are closely related to mining activities. It is generally assumed that little mining activity occurred in north-east Wales following the Roman period until around the 13th century, when the Edwardian campaigns and castle building led to large demands for lead for roofing purposes. The first documentary reference to mining in the area dates to 1303, when four German miners were working in "copper mines at Disard" (Jones 1913, Appendix A).

- 4.3.2 Mining activity in the parishes of Dyserth and Meliden developed rapidly during the 17th century. The earliest lease located refers to William ap Robert leasing mineral rights on Carreg Faylon (now known as and hitherto referred to as Graig Fawr) to Sir John Conway. The hill of Graig Fawr seems to have been the main location for early mining activity. Disputes over the mineral rights spanned the mid-17th century. Claimants included the rich land owning families, the Grosvenors and the Mostyns, who both attested that Graig Fawr was common land; Thomas Mackworth claimed the hill was in the hundred of Prestatyn and he had been granted the right to all mines and quarries in the hundred in 1651. In 1660, the hill was declared the property of Ralph Hughes, whose family had claimed possession since 1573. This stability was followed by a flourish of mining activity in the two parishes (Thorburn 1986, 13).
- 4.3.3 Early mining deeds and leases referring to Dyserth and Meliden parishes dating from 1660 (Plymouth Mss. 210-41, Rhual Mss, 47-8) do not refer directly to the study area, but confirm that new veins were being explored on the lower ground, below Graig Fawr. It seems likely that considerable mining was taking place on the Bishop of St. Asaph's Talargoch lands in the 1660s (Plymouth Mss. 1325, 1329).
- 4.3.4 In May 1664, Derbyshire miners Ward, Eyre & Wooley leased the parcel of land known as Maesyrerwddu along the line of the Talargoch Vein (Plymouth Mss.1213). To work this vein, it was necessary to sink a drainage sough and the lease included a clause that Ebule Hughes (descendent of Ralph Hughes, Carreg Faylon) and the Derbyshire miners should at joint expense make "a sough and horse engine for drawing water from the works....the said sough beginning on a parcel of land known as Tir y Gwynt". (Fig. 3, Sites 2 & 6).
- 4.3.5 Problems of draining the workings continued and it is suggested that one of the first steam engines in Wales was erected on the Bishop of St. Asaph's land at Talargoch. The "Fire Engine House" c. 1716 and presumably of Newcomen type, is depicted on a 1736 map accompanying a 1736 lease (Plymouth Mss. 1586), along the Talargoch Vein on the south side of the Meliden/Dyserth Road on the "Bishop of St. Asaph's Liberty" (Fig. 5).
- 4.3.6 In 1753, Paul Panton and Rev. Thomas Ince leased land for 21 years on the Earl of Plymouth's Estate between Talargoch and Dyserth (Plymouth Mss. 1551), which included the right to provide an effective means of drainage and construct a watercourse to the works. Sometime in the mid-1750s, Panton constructed the leat (Fig. 3, Site3), which took water from the Afon Ffydion at SJ 057 793 above Dyserth waterfalls, following the natural contours below Graig Fawr to Talargoch, Maesyrerwddu site (PRN 18202, Fig. 3). The "diverted watercourse for the use of the lead miners" is depicted at Tir y Gwynt on an 1814 map of Dyserth Hall Estate, property of the Earl of Plymouth (Fig. 4) and the waterwheel is presumably Engine Issa (Fig. 3, Site 1). An 1840 map of the same estate (D/DM/540/6) similarly depicts the leat on Tir y Gwynt with apparently no further development on the land.
- 4.3.7 A water-colour illustration by Moses Griffith's in Pennant's "Tours in Wales, 1784" (cover illustration) shows Graig Fawr and Dyserth Castle in the background and Talargoch Mine in the foreground as viewed from Tir y Gwynt. The raised wooden launder for the leat (Site 3) contours the foot of Graig Fawr leading to the dressing floors at Maesyrerwddu. Although the view may be inaccurate, Tir y Gwynt appears to be a field of pasture in the foreground, connected to the mine site by a gate or stile in the hedged boundary north of the present road.
- 4.3.8 Panton and partners, who included John Mostyn, Thomas Slaughter and Ralph Richardson, began to acquire as many mining leases as possible in the area, resulting in the Talargoch Mine extending eastwards through Meliden. Considerable losses were incurred during the development of the mine due to exploration, drainage, maintenance and compensation paid to landowners through whose fields the leat ran. Lord Plymouth's agent expressed dissatisfaction on the payment for "water trespass" from 1880-1803, when the Plymouth lease was due for renewal (Esgair and Pantperthog Mss, 1078, 399). Part of the return course of the leat as it crosses Tir y Gwynt is shown on a map produced for a 19th century dispute and reproduced in Thorburn 1986 (25, pl. 5). A plan accompanying a 1799 lease (Mostyn Mss. 7048, reproduced in Thorburn (1986, Fig. 6) indicated three waterwheels worked by the 1750s leat. An 1802 description of the wheels gave dimensions of 24ft x 5ft 2ins for two of the wheels and 24ft by 4ft 8ins for the third. Engine Issa (Site 1) appears to be sited on the return course of the leat on Tir y Gwynt and the two other waterwheels, Engine Ucha and Canol were located north-east on higher ground. There is no evidence to suggest whether the Engine Issa waterwheel was used for pumping or for winding. Thorburn (1985, 35) also suggests

- that it is likely that 1770s reports referring to "Engine Shaft", "New Engine Shaft" or "Whimsey Shaft" (Site 2) apply to workings on Tir y Gwynt.
- 4.3.9 Following the death of Paul Panton in 1822, the mining interests passed to the Richardson, Williamson and Harisson families. In 1857, the Talargoch Mining Company was founded, the first of several limited companies who controlled all the mining interest. In developing the mine, Walker's Shaft (PRN 18203) was sunk on Tir y Gwynt in the 1870s, but the shaft was actually sunk just south of Panton's Vein and subsequently a cross-cut had to be driven from the Talargoch Vein to intersect Panton's (Fig. 10). The work on Panton's Vein were subsequently drained by the 80" pumping engine at Talargoch, but a pair of horizontal condensing engines and an 18" high pressure engine were at work at Walker's Shaft for raising ore from the 220 yard level and powering air compressors for the rock drills.
- 4.3.10 The 1839 Tithe Maps for Dyserth Parish (Fig. 5) depicts Tir y Gwynt as plot 86, owned by the Rt. Hon. Robert Clive of Dyserth Hall. The 1750s leat (Site 3) crosses the land and a small rectangular structure (Engine Issa) is illustrated on the east side of the leat near the old parish boundary. The adjacent field is plot Coitia y chain, also part of Dyserth Hall Estate and crossed by two public footpaths. The parish boundary remains unchanged today. The proposed corridor route passes through Tir y Gwynt and Coitia y chain, crosses the old boundary into Meliden Parish and crosses meadowlands owned by John Pears, north of the Bishop of St. Asaph's land, which is already in use by Talargoch Mines. The route continues north across meadowland in Dyserth Parish, before meeting Ffordd Ffynnon (Fig. 2 & 6).
- 4.3.11 The 1st edition 6" OS map of 1876 (Fig. 7), indicates a building at (SJ 0568 0859), which may be Engine Issa (Site 1), alongside the track Site 4) which connects mining operations at Tir y Gwynt with the site of Smedley's, No. 1 shaft and the mine office on the east side of the road (Fig. 10). The track curves west, passing east of the magazine (Fig. 3 & 9, Site 5, SJ 0560 8055) and two other possible buildings, before continuing south to Walker's Shaft site (Fig. 3 & 9).
- 4.3.12 Production, exploration, drainage problems and the high cost of royalties eventually led to the closure of the mine in 1883. The mine was auctioned as a single lot and purchased by Messrs Hughes and Lancaster of Acrefair, Nr. Wrexham. They failed to solve the problems of unwatering the workings and the Plant and Machinery were auctioned on June 5th 1884 (D/PW/14). At Walker's Shaft, the wooden pit headgear, a pair of horizontal condensing engines with 10ft diameter winding drum, an 18 inch horizontal steam engine with 6ft diameter drum and 12ft flywheel and two egg end boilers 40ft long were sold off.
- 4.3.13 Production continued and mining returns were made until 1905 (Burt 1992, 108) due to the reworking of old spoil tips, by several companies, who employed surface workers only. The 3rd edition OS map of 1912 (Fig. 9) depicts Walker's Shaft (Site 15), Engine House and Chimney (Site 12, pl. 3), a reservoir (Site 13) and a rectangular structure, which may be for storage (Site 14) and the double-walled magazine (Site 6, pl. 2). The shaft is surrounded by waste tips and the track runs north to the area of four trees and south to the larger spreads of waste (pls 1 & 2).
- 4.3.14 Most of the Talargoch shafts were filled in and the buildings demolished in the 1960s. The only structure standing to full height is the Engine House at Clive Shaft (Fig. 3, PRN 102605, SJ 0564 7999).

5 ARCHAEOLOGICAL BACKGROUND

- 5.1 The coastal plain north of Graig Fawr has been identified as an area of potential archaeological interest due to previous discoveries of Mesolithic and Prehistoric flint scatters. Small scale excavations and environmental sampling in 1991 by CPAT at Nant Hall Road, Prestatyn (PRN 17430, SJ 070 832) led to the recovery of four shell middens from peat deposits; charcoal samples from the deposits revealed radiocarbon dates of 4890 ±80 BP and 4700 ±70 BP associated with two cockleshell middens (Britnell 1991, 18).
- 5.2 Bronze Age finds have been recorded on Graig Fawr, south-east of the corridor route. These include a tanged bronze chisel located 0.08m below the surface by a metal detector at SJ 0595 8039 (PRN 103044) and a small bronze socketed knife (PRN 102189) found in 1946, lying on a rocky surface at SJ 0603 8028 (Fig. 2).

- 5.3 It is generally believed that lead has been mined in Flintshire since the Roman period and various finds in close proximity to early workings have attested to this. It seems more likely that the early miners would have been attracted by the exposed veins that ran down Graig Fawr, rather than the deeper veins later worked by the Talargoch Mine Company. Evidence of early mining at Talargoch has been masked by the more intense 18th and 19th-century workings.
- 5.4 Implied evidence of Roman workings is associated with a brass coin of Gordian III (AD 243-44), found c.1883 in a "long disused washing floor". The mine manager at the time, Mr A.Walker, described the location as under the ore-dressing floor of the mine, implying that the floor was in use. The coin was deposited at the Grosvenor Museum, Chester, and between 1887 and 1899, other coins were reportedly picked up on the surface of the mine (Webster 1952-3, 15-16).
- 5.5 Find scatters (PRN 102194) are recorded at SJ 0586 8049, which appear to link Talargoch's Walker's Shaft area with Roman mining. Finds include a bronze bracelet, a wedge, coins and tools of suggested Roman date, found at the mine site since 1704. Pennant (1784, 71) writes "I am in possession of a wedge, five inches and a quarter long, presented to me by Mr. Smedley of Bagillt Hall, discovered in working the deep fissures of Talargoch Rock". This suggests that the wedge was located at Graig Fawr. He adds that "This little instrument affords proof of its antiquity by being entirely encrusted with lead ore". NMR record No. 2226 (same as PRN 102194) adds the information that "in 1704, two bronze bracelets with snake heads were found in a lead work at Meliden".
- Roman occupation at Prestatyn during the 1st to 4th century AD is well attested. Major excavations at Melyd Avenue during 1984-5 (Blockley, 1989), on a site first discovered by local surveyor F. Gilbert Smith in 1934, included a civil settlement and a bath house. During the excavations, a number of sizeable lumps of galena (lead ore), where recovered from the site, which may suggest that the settlement was associated with nearby mineral deposits.
- 5.7 In the northern sector of the proposed corridor (Fig. 2), damaged masonry (PRN 102195) was revealed at a depth far below the surface land level, when a public sewer was being constructed along Ffordd Issa (SJ 0515 8164) in 1940. At the level of the stonework, numerous animal bones, similar in condition and character to those found at Melyd Avenue were noted by Mr. Gilbert Smith, who suggested a Roman date.
- 5.8 In 1938, six Roman coins (PRN 102186) were dug up by Mr. Robert Clarke, in his allotment at SJ 0573 8193, north-east of Penrhwylfa. The coins were so fragile that they broke when handled. One brass coin of Constantine was saved and retained by Gilbert Smith, who was apparently supervising the construction of a sewer trench across the allotment (Davies 1949, 321).
- 5.9 More recently, a bronze coin of 3rd century date (PRN 102668), minted in London, was found in 1982 on Ffordd Penrhwylfa by a house holder, presumably buried in a garden on the north side of the road. The find was reported to the Clwyd Archaeology Service and the coin remains in the possession of the finder.

5.10 Aerial Photographic Evidence

- 5.10.1 The oblique photographic archive at CPAT, dated 1986 and 1993, covered only the known site of Walker's Shaft (PRN 18203) and part of the fields to the north, and showed no new detail.
- 5.10.2 Vertical photographs from the RAF collection taken in 1957 were examined at the NMR and revealed Walker's Shaft with standing buildings, including a chimney stack. A track (Site 4) is visible connecting the shaft area to earthworks noted during the field survey (pls 1 & 2) and identified by the desk-top as the possible site of Engine Issa (Site 1). The track continues south to an area of waste. The remainder of Tir y Gwynt is pasture land.
- 5.10.3 An earlier aerial photograph from the NMR collection (CPE/UK/1996/1114) taken in 1947, before the housing estate was constructed at Ffordd Talargoch, shows a possible rectangular feature (same location as Site 1) as a crop mark at c. SJ 0568 0859. To the east of this a possible circular feature also shows as a cropmark (Site 2). The black and white photograph is in poor condition, unsuitable for any rectification and restricted copyright is enforced. The possible circular feature has the appearance of a horse whim circle and may be the construction referred to in connection with the drainage sough (see 4.3.4).

6 FIELD WALKED SURVEY

- 6.1 A systematic field walked survey was conducted during September 1997, covering the whole of the corridor.
- The parcel of land, known as Tir y Gwynt, property of Dyserth Hall estate, in the southernmost sector of the corridor adjoining the Dyserth to Meliden Road, contains several earthworks of potential archaeological interest (pls 1 & 2). The north-eastern corner of the field has a hedged boundary with the house and garden to the north (pl. 3) and a fairly recent limestone walled boundary to the road, which is raised above it. The depth of the field below the level of the road and a slight earthwork depression running south may suggest the line of the old drainage sough/level (Site 6) sunk by the Derbyshire miners in 1660s (see 4.3.4). The location is on the north side of the road from the dressing floors, at a position previously suggested by Thorburn (1985, Fig. 6), presumably prior to further land improvements.
- 6.3 Further north, an area of earthworks lies partly within the corridor route (Fig 3, pls 1 & 2). The earthworks, spread for a maximum of 42m in a north-westerly direction. At the north-western extent, the earthworks form a raised sub-circular mound of c. 10m diameter, at 2m above the ground level of the field on the north side. The earthworks include spreads of rubble and areas of nettles. The present spread of the earthworks and the location of the trees is not exactly as on the 3rd edition OS map (Fig. 9). The location corresponds to the site of Engine Issa (Site 1) on the Talargoch Mine map of 1799 (Mostyn Mss. 7048, reproduced in Thorburn 1985, 34, Fig. 6).
- The earthworks lie in a position where the return of the leat constructed c.1750s (Site 3) (see 4.3.6) may have crossed the former parish boundary, which follows an existing hedge line, and continued in a southerly direction across the field to meet the boundary with the Dyserth to Meliden road at SJ 0560 8020. The course of the leat may be indicated by the fall of c. 2m in the land, which may largely be natural. The course of the leat on the 1799 map (Figs 4 & 5, Mostyn Mss. 7048) and the existing break of slope follow a contour of c. 38m AOD. A 19th century mine track (Site 4) follows part of the line of the leat and may have utilised the direction of the earlier earthwork.
- 6.5 The site of Walker's Shaft Engine House and chimney at SJ 0566 8049 and subsidiary buildings are defined as grassed-over mounds in the parcel of land identified as Tir y Gwynt on the 1799 Map of the Mines (Mostyn MSS). The site lies outside the corridor route, but the large blocks of sandstone (pl. 3), some with fixing bolts for the engine, and visible foundations protruding from the mounds emphasise the large scale 19th-century workings on this parcel of land (Fig. 3 & 9).
- 6.6 On the lower ground north-west of Walker's Shaft, and also outside the corridor route, the foundations of a rectangular building constructed in local limestone measuring c. 4 x 3m, with walls 0.35m wide is presumably the 19th-century magazine (Fig. 3, Site 5, pl. 2).
- 6.7 The fields in the northern sector of the proposed route are of arable and pasture use. Beyond the open fields, the proposed route follow the road along Fford Fynnon and Ffordd Penyrhwylfa.

7 CONCLUSIONS AND RECOMMENDATIONS

- 7.1 The results of the desk-top and field walked assessment have shed further light on the nature and survival of the archaeological resource in the area.
- 7.2 The southern sector comprises an area of high archaeological sensitivity, marked on Fig 3. It is recommended that a watching brief be undertaken during any topsoil stripping and trenching work in that area.
- 7.3 The area includes low earthworks, identified during the field work, suggesting the direction of the sough/level (Site 6), and substantial earthworks attesting to the site of previous structures, possibly Engine Issa (Site 1), both lying within the proposed corridor route (pls 1 & 2). Removal of undergrowth during the construction of the pipeline on the roadside adjoining the north-east corner of Tir y Gwynt may uncover further evidence of the drainage sough, while evidence of the five shafts (Sites 7-11) may be recovered in trenching for the pipeline further north parallel the hedged boundary.

- 7.4 Aerial photographic evidence suggested an earlier feature (Site 2), which may be affected by the corridor route (see 5.10.3).
- 7.5 The corridor will cut across the entrance track to Walker's Shaft as depicted on the 1st edition OS map of 1876 (Fig. 7), which runs in a westerly direction from the boundary to east of the magazine and two other possible buildings.
- 7.6 It would appear that the northern sector of the proposed route has comprised of arable and pasture land for several hundreds of years, prior to the modern housing development. However, the location of finds of Roman origin (Fig. 2, PRNs 102186,102195, & 102668) and the close proximity to Melyd Avenue Roman site (PRN 102196) indicates a strong possibility of below-ground archaeology or evidence of early occupation, in the way of further artefacts, which may be revealed during the proposed works. Although the field walked survey revealed no evidence of archaeological features within the open fields, it does not preclude their existence.

ANCILLARY WORKS

- 7.7 The parcel of land known as Tir y Gwynt (Fig. 5) has been associated with mining from at least the 1660s (see 4.3.4). Consequently any work on that particular parcel of land may affect the archaeology.
- 7.8 The archaeology at Walker's Shaft area (PRN 18203) and the foundations of the magazine (Site 5), both lie outside the corridor route, but may be at risk as access is made to the proposed route. It is recommended that restrictions be made to ensure that these highly sensitive archaeological resources will remain intact during the proposed work, and not be affected by access to the works.

8 ACKNOWLEDGEMENTS

8.1 CPAT Contracts would like to thank the various landowners for allowing access for the field walked survey and the staff at the following for their assistance and co-operation: County Sites and Monuments Record, Clwyd-Powys Archaeological Trust, Welshpool; National Library of Wales, Aberystwyth; National Monuments Record, Royal Commission of Ancient and Historical Monuments, Aberystwyth; Flintshire County Records Office, Hawarden.

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APPENDIX 1

SITE GAZETTEER

PRN 18202	Talargoch Mine, Maesyrerwddu Site Located on the lower ground below Graig Fawr. Sit Shaft, Mine Office and dressing floors.	SJ 0575 8030 te of Smedleys, No. 1 and Engine			
PRN 18203	Talargoch, Walker's Shaft Site Site of shaft (Site 15) sunk on Panton's Vein. Area and Chimney (Site12), Reservoir (Site 13), and bu				
PRN 102186	Penrhwylfa Coins Six coins of Roman date recovered 1938.	SJ 0573 8193			
PRN 102188	Graig Fawr Flint Knife Found in 1925. Handed over to St. Asaph Cathedr	SJ 0617 8062 al Museum.			
PRN 102194	Talargoch Mine Roman Finds Bronze bracelet, wedge and coins found at Talargo	SJ 0586 8049 och Mine.			
PRN 102196	Area of prehistoric settlement, including Roman battlement Avenue, Prestatyn	athhouse. SJ 062 818			
PRN 102195	Ffordissa possible Roman remains Damaged masonry uncovered in 1940s, with anim seen at Melyd Avenue Roman site by Gilbert-Smit				
PRN 102605	Talargoch, Clive Shaft Workings around Clive Shaft sunk 1842-5. Site inc	SJ 0562 8000 cludes 100" Cornish Engine House.			
PRN 102668	Ffordd Penrhwylfa Roman Coin SJ 0585 8141 Bonze coin of 3rd century date found in garden on Ffordd Penrhwylfa.				
PRN 103044	Graig Fawr bronze chisel Bronze tanged chisel found with metal detector on	SJ 0595 8039 Graig Fawr in 1977.			
PRN 103566	Prestatyn Brickworks Built on land owned by the Mostyn Estate at the er covered by modern housing.	SJ 0580 8180 nd of the 19th century. Now part			
SITE 1	Engine Issa	SJ 0568 8059			
SITE 2	Possible horse whim site	SJ 0575 8956			
SITE 3	Talargoch, return course of Panton's 1750s leat	SJ 0571 8061 to SJ 0562 8021			
SITE 4	Walker's Shaft mine track	SJ 0566 8047 to SJ 0562 8030			
SITE 5	Walker's Shaft magazine	SJ 0560 8055			
SITE 6	Talargoch, 1660s Sough/Old Level	SJ 0578 8051 to SJ 0546 8079			
SITE 7	1660s Old Level shaft no.1	SJ 0546 8078			
SITE 8	1660s Old Level shaft no.2	SJ 0555 8075			
SITE 9	1660s Old Level shaft no.3	SJ 0560 8070			
SITE 10	1660s Old Level shaft no.4	SJ 0569 8062			
SITE 11	1660s Old Level shaft no.5	SJ 0574 8055			

SITE 12	Walker's Shaft Engine House and Chimney	SJ 0568 8050	
SITE 13	Walker's Shaft, site of reservoir	SJ 0571 8051	
SITE 14	Walker's Shaft buildings	SJ 0568 8051	

PAGE

SJ 0565 8050

12

CPAT Report No 237, 9/8/97

Walker's Shaft

SITE 15

APPENDIX 2 PROPOSED NEW WATER MAIN FROM MELIDEN TO FFORDD PENRHWYLFA, PRESTATYN.

SPECIFICATION FOR A STAGE 1 ARCHAEOLOGICAL ASSESSMENT BY CLWYD-POWYS ARCHAEOLOGICAL TRUST

1 Introduction

- 1.1 The proposed development involves the construction of a new 3km water mains on land between the A547 at Ffordd Talargoch, Meliden (SJO57488053) and Ffordd Penrhwylfa, Prestatyn (SJO5598190).
- 1.2 This area lies on low-lying ground given to residential housing estates and pasture fields. Archaeological sites dating to the Roman period have been located close to or within the pipeline corridor and the pipeline passes close to the C19th mine at Talargoch from where Roman finds have also been made. These finds are associated with the Roman civilian and possible military presence at Prestatyn.
- 1.3 The Curatorial Section of the Clwyd-Powys Archaeological Trust (hereafter CPAT Curatorial) in their capacity as archaeological curators for the county have determined that an Archaeological Assessment is necessary to assess the implications of the proposed development on the archaeological resource. Accordingly a brief has been prepared by CPAT Curatorial (No AAB 2 1 0 dated 3rd June 1996) which describes the scheme of archaeological works required.

2 Objectives

- 2.1 The objectives of the Assessment are
- 2.1.1 to reveal by desk-based assessment and field-walked 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 prepare a report outlining the results of the assessment, to identify areas where desk-top assessment alone cannot provide sufficient information and make recommendations for further work or mitigatory measures;
- 2.1.3 to incorporate sufficient information on the archaeological resource for a reasonable planning, decision to be taken regarding the archaeological provision for the area affected by the proposed development-,
- 2.1.4 to identify and make broad recommendations for the management of the archaeological resource, including any further provision for that resource where it is considered necessary.

3 Methods

The assessment will be carried out according to the guidelines in the *IFA Standard and Guidance for Archaeological Desk-Based Studies and* will involve the examination of all the readily available primary and secondary records relating to the area of the proposed development, including documentary and cartographic sources. Archives and repositories will include The County Sites & Monuments Record housed by CPAT Curatorial, the National Library of Wales, Aberystwyth, the NMR housed with the RCAHMW, Aberystwyth, the County Record Offices at Hawarden & Ruthin Borehole and test-pit data will be requested from the developers where appropriate.

- 3.2 The assessment will be carried out according to identified archaeology and the presence of other sites not identified from the documentary sources and to make a photographic record of the area.
- 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 (p 4). This will be in A4 format and contain conventional sections on: Site location, Topography and Geology; Historical Background; Catalogue of sites identified with

- notes on their condition and significance, Conclusions and Recommendations and References, together with appropriate appendices on archives and finds.
- 3.4 The site archive will be prepared to specifications laid out in Appendix 3 in the *Management of Archaeological Projects* (English Heritage, 199 1).

4 Resources and Programming

- 4.1 The assessment will be undertaken by a skilled and experienced archaeologist who will also be responsible for undertaking the desk-based assessment. Overall supervision will be by Dr A Gibson, 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 the same field archaeologist who conducted the assessment.
- 4.3 It is anticipated that the assessment and evaluation will take no more than six days in all and that the subsequent report would be prepared immediately thereafter, dependent on the client's instructions and the arrangement of a suitable timetable. The date of commencement, at the time of writing, has yet to be agreed with the client, and will be dependent on the state of the site and negotiated access. The archaeological curator will be informed of the detailed timetable and staffing levels when agreement has been reached with the client.
- 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.

A.M. Gibson Projects Manager

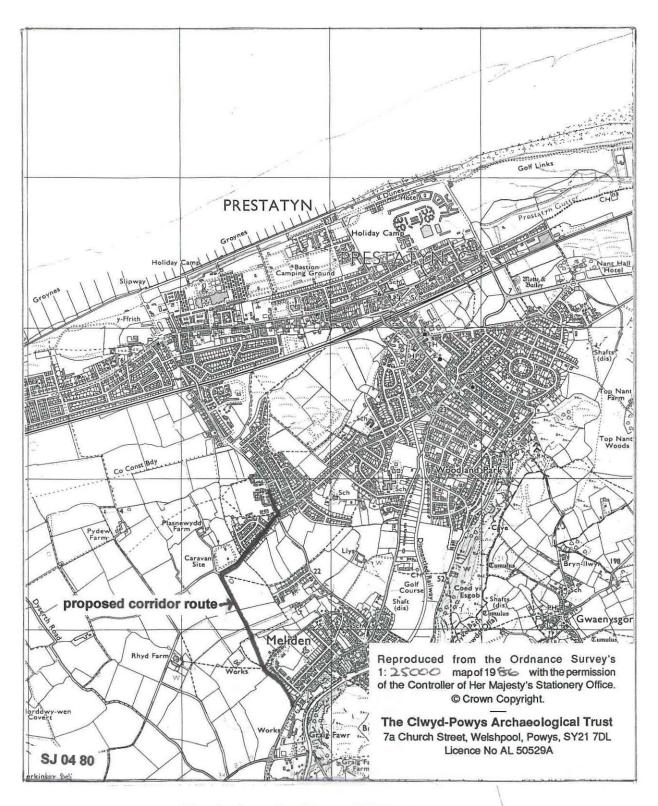


Fig. 1 Location Map. 1986 Ordnance

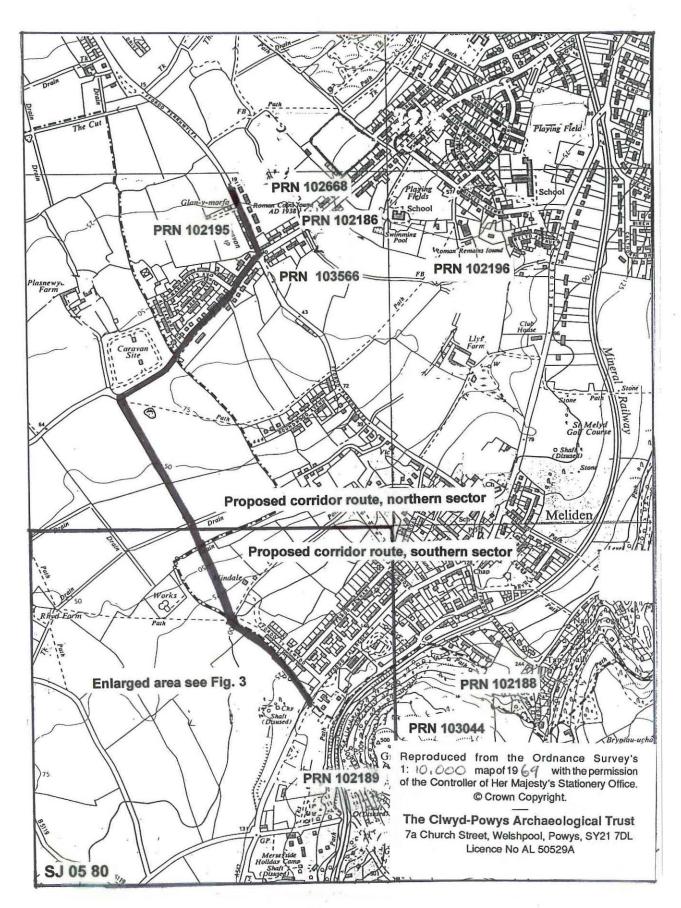


Fig. 2 Proposed pipeline corridor, location of new and known sites: 1969 Ordnance Survey 1:10,560. Flintshire Sheet SJ08 SE

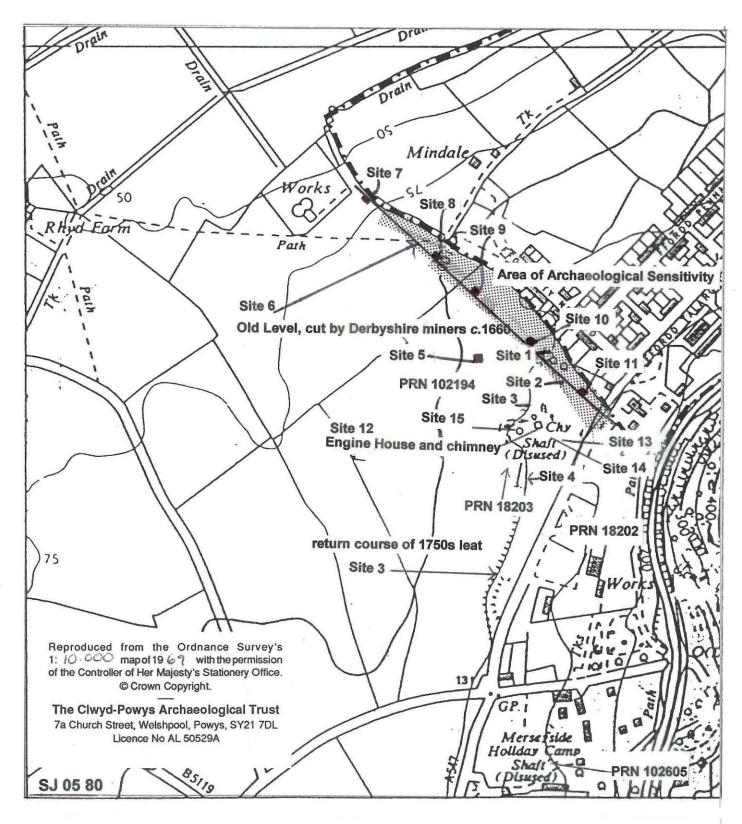


Fig. 3 Area of Archaeological sensitivity. Scale 1:5,000, enlarged from 1969 Ordnance Survey, Flintshire Sheet SJ08 SE 1:10560.



Fig. 4 1814 "Map of Dyserth Hall in the County of Flint, Estate of the Right Honourable Earl of Plymouth". Surveyor un-named. Scale 13.1":1 mile (CROH D/DM/540/5)

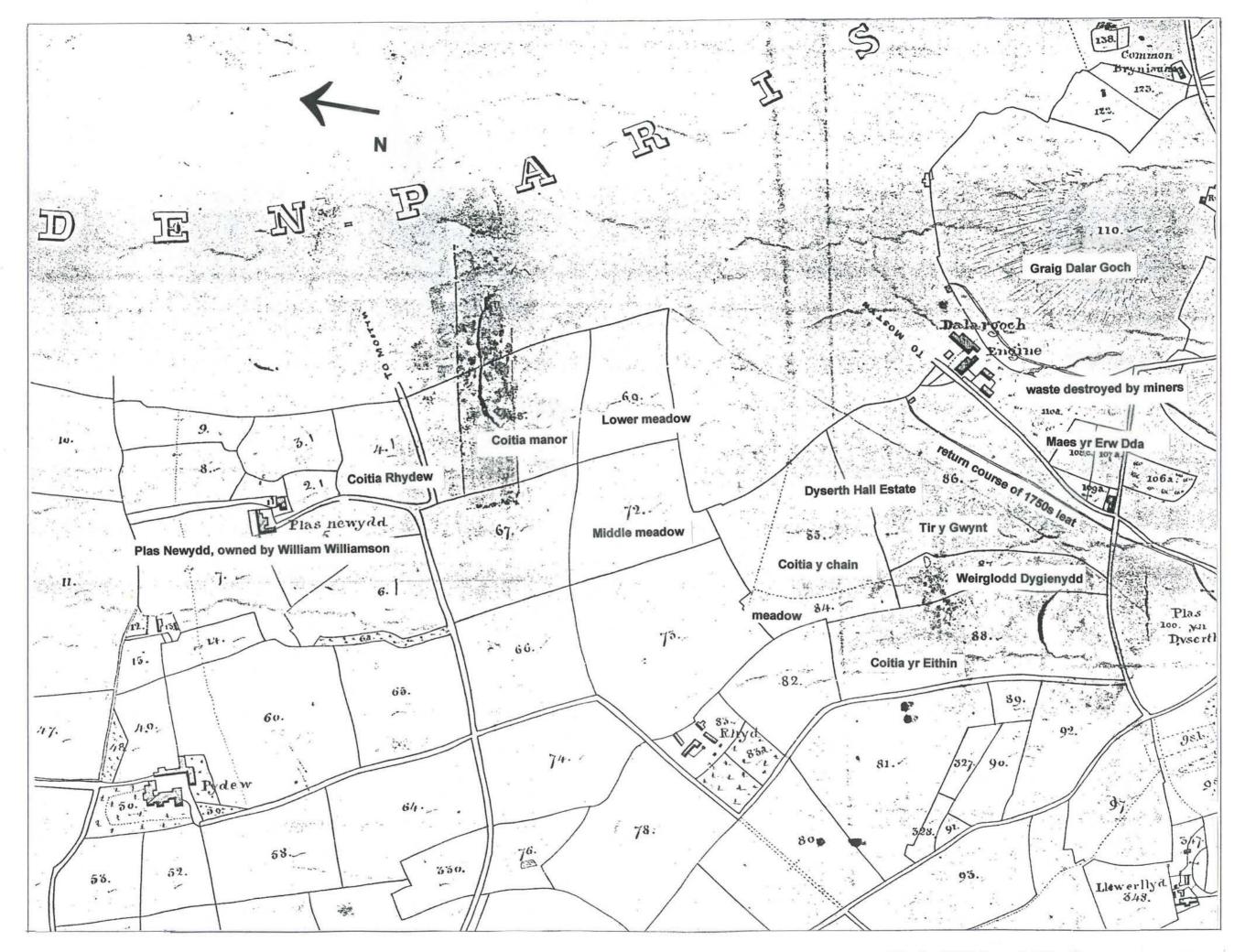


Fig. 5 1839 Dyserth Tithe Map (NLW.AC71/503)



Fig. 6 1839 Meliden Tithe Map (NLW.AC472/521)

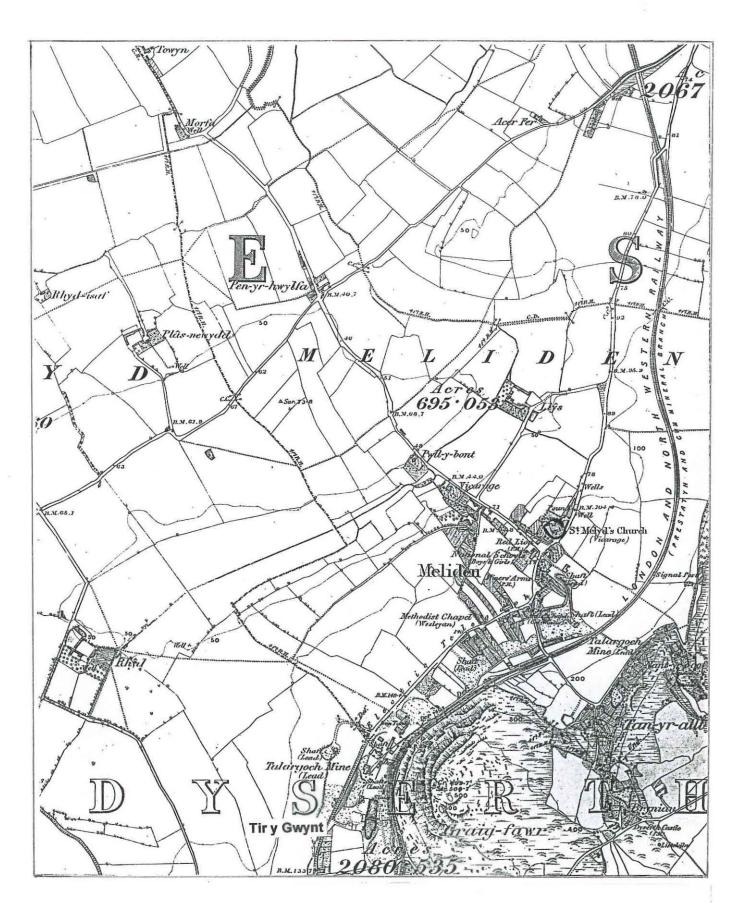


Fig. 7 1872 Ordnance Survey 1st edition 6" Flintshire Sheet 1. SE

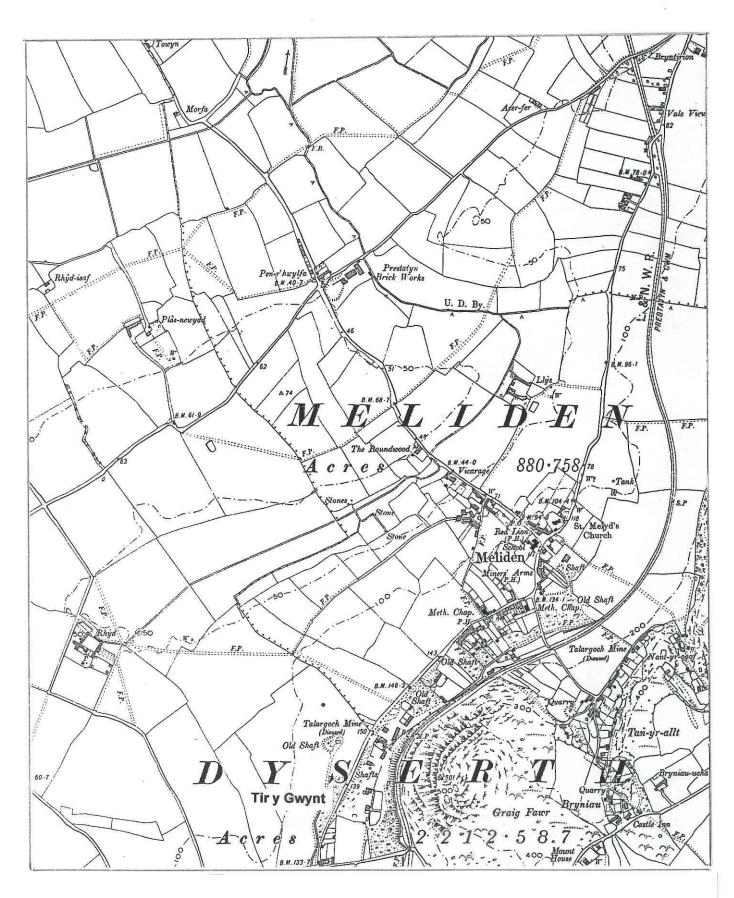


Fig. 8 1900 Ordnance Survey 2nd edition 6" Flintshire Sheet 1. SE

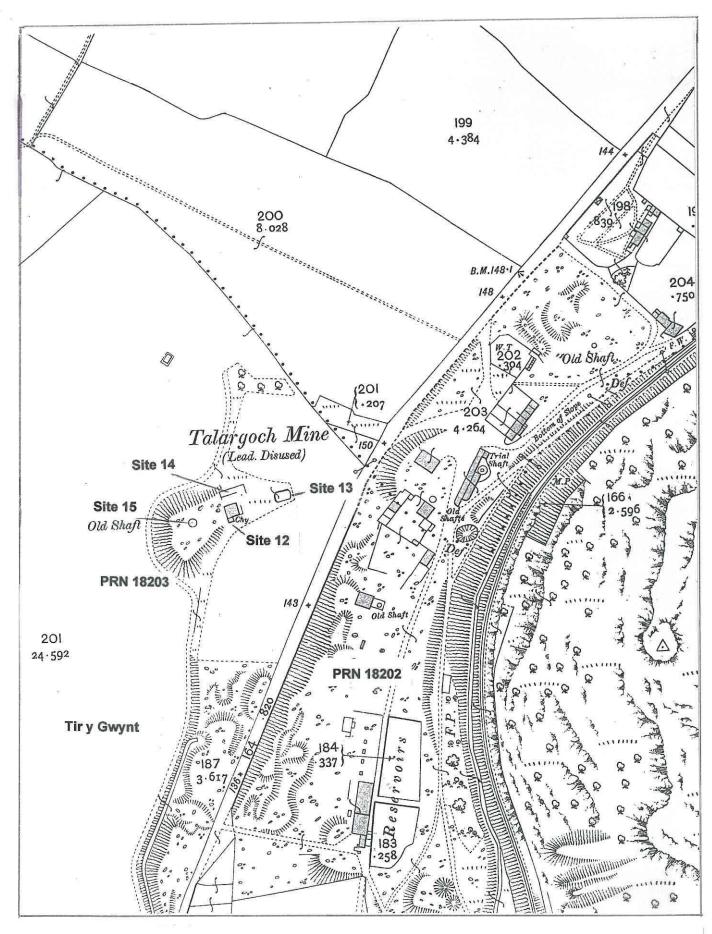


Fig. 9 1912 Ordnance Survey 3rd edition 1:2500 Flintshire Sheet F.1.12

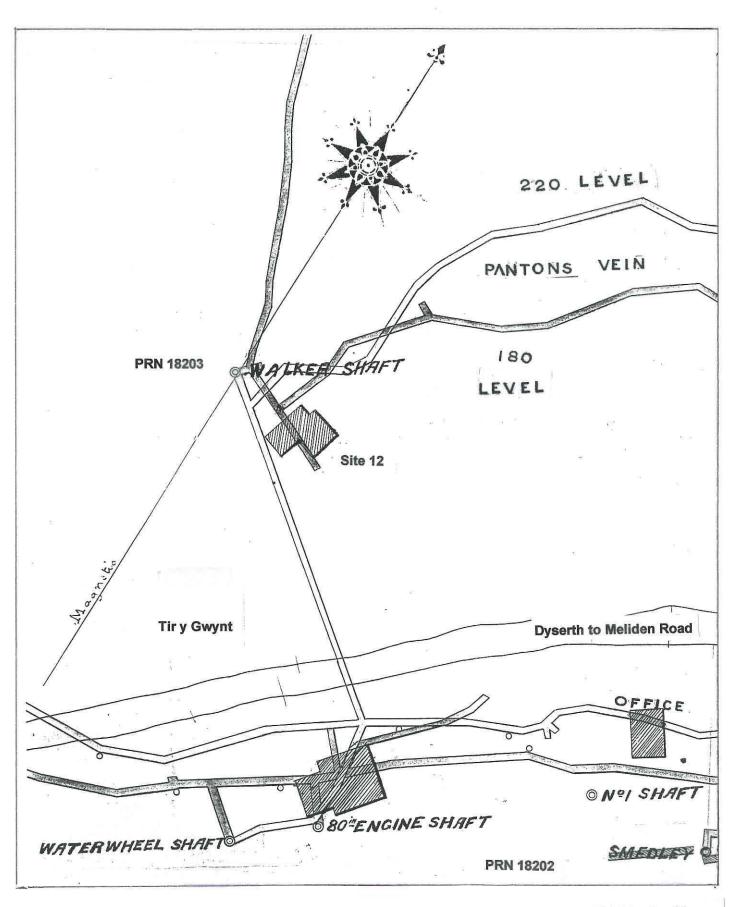


Fig. 10 Abandonment Plan of Talargoch Lead Mine, deposited 28. 1.1885 in the Home Office (CROH AB/126)



Plate 1 Area of archaeological sensitivity. View from east over Tir y Gwynt.

Grassed-over mound represents possible site of Engine Issa (Site 1). Course of 1750s (Site3) leat may have followed the lower ground to the left of the picture.



Plate 2 Area of archaeological sensitivity. View from west towards Graig Fawr.

Foundations of the 19th-century magazine (Site 5) in the foreground. Raised ground probably defines the course of the 1750s leat, later used as part of the mine track (Site 4).

Raised mound defines possible site of Engine Issa (Site 1).



Plate 3 Walker's Shaft area, PRN 18203. Large blocks of sandstone are the remains of the engine house (Site 12). View from south, over Tir y Gwynt, towards the corridor route. Hedgeline parallels the direction of the 1660s drainage sough/old level (Site 6) and the line of the five shafts sunk along it (Sites 7-11).