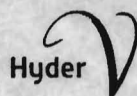


New Water Main
at
Ffordd Penrhwydfa, Prestatyn,
Denbighshire.

An
Archaeological Evaluation

*Prepared
for:*



Consulting

The Genesis Centre
Science Park South
Birchwood
WARRINGTON
WA3 7BH

*Agents
to:*

Dwr Cymru : Welsh Water

by

*L J Dodd, D J Garner
&
W S Walker*



Earthworks
Archaeological Services
(Project No. E261)

June 1998

New Water Main
at
Ffordd Penrhwyflfa, Prestatyn,
Denbighshire
(NGR SJ 0559 8190)

An
Archaeological Evaluation

Report Commissioned
by

Hyder Consulting Ltd
The Genesis Centre
Science Park South
Birchwood
WARRINGTON
WA3 7BH

*Agents
to:*

Dwr Cymru : Welsh Water

Earthworks
Archaeological Team
(Project No. E261)

L J Dodd
(excavation & recording; finds analysis)
D J Garner
(excavation & recording)
W S Walker
(excavation, report, report production)

SUMMARY

A desk-top study undertaken by the Contracts Section of the Clwyd-Powys Archaeological Trust identified an area of high archaeological sensitivity within the first 500m of a proposed new water pipeline route at Meliden, Denbighshire.

Prior to pipeline construction four linear trial trenches were excavated along the line of the pipeline construction trench within the area of archaeological sensitivity. The desk-top study clearly identified the potential of the general area, but the results from the trial evaluation identified no archaeological features or deposits earlier than the nineteenth century. It has been concluded that the pipeline route through the area of sensitivity will not impact upon any archaeological remains of merit.

New Water Main
at
Ffordd Penrhwylfa, Prestatyn,
Denbighshire

An
Archaeological Evaluation

CONTENTS

	<u>Page</u>
Summary.....	i
List of Figures.....	ii
List of Plates.....	ii
Acknowledgements.....	iii
Abbreviations.....	iii
Key to Plans.....	iii
1 Introduction.....	1
2 Summary Background.....	1
3 Fieldwork Methodology.....	3
4 Results.....	5
4.1 Trench 1.....	5
4.1.5 Deposits Close To Engine Issa.....	6
4.2 Trench 2.....	9
4.3 Trench 3.....	9
4.4 Trench 4.....	11
5 Conclusions.....	11
6 References & Selected Further Reading.....	12

APPENDICES

7 Brief for Archaeological Evaluation.....	13
8 A Copy of the Project Design.....	18

List of Figures

<i>Figure 1</i> Location of evaluation site. Scale 1:25000.....	1
<i>Figure 2</i> Location of evaluation trenches and section drawings <i>Figs 9a-g</i> . Scale 1: 1250.....	2
<i>Figure 3</i> Location of late features and area of more detailed recording in trench 1, Scale 1: 500.....	4
<i>Figure 4</i> Profile of context (1). Scale 1: 10.....	6
<i>Figure 5</i> Profile of context (3). Scale 1: 10.....	6
<i>Figure 6</i> Trench 1, plan view of features close to Engine Issa. Scale 1: 40.....	7
<i>Figure 7</i> Trench 1, section A-B on <i>Fig. 6</i> . Scale 1: 20.....	7
<i>Figure 8</i> Trench 1, section C-D on <i>Fig. 6</i> . Scale 1: 20.....	10
<i>Figures 9a-g</i> Representative soil profiles in trenches 1 to 4. Scale 1: 10.....	10

List of Plates

<i>Plate 1</i> Trench 1, south end.....	3
<i>Plate 2</i> General view of area of evaluation, looking north.....	5
<i>Plate 3</i> Detailed investigation of context (3).....	5
<i>Plate 4</i> General view of trench 1 in the area of Engine Issa.....	8
<i>Plate 5</i> Detail of context (33), trench 1.....	8
<i>Plate 6</i> Part of section through bank/trackway deposits, trench 1.....	9
<i>Plate 7</i> Looking south-east from trench 4 towards Graig Fawr towards.....	9



ACKNOWLEDGEMENTS

Earthworks Archaeology would like to express their gratitude to the following people for their valuable help during this project: Messrs. I McGregor, M Devenish and J Mawdsley , **Hyder Consulting Ltd**; Mr M Walters, Curatorial Section of **CPAT**; and Messrs. C and K Groves, **KM Construction**, St. Asaph.

ABBREVIATIONS

AOD	Above Ordnance Datum
c.	<i>circa</i>
CPAT	The Clwyd-Powys Archaeological Trust
NGR	National Grid Reference
OD	Ordnance Datum
OS	Ordnance Survey
pers. comm.	personal communication
PRN	Primary Record Number
TBM	Temporary Bench Mark

KEY TO PLANS

②	Context no
----	Limit of excavation
—▲—▲—	Vertical edge
- - - - -	Indistinct/merging horizon/break of slope (with hachures)
— —	Location of stringline
S	Sandstone
St	Stone
Sl	Slate
T	Tile
B	Brick
C	Cobble
	Undisturbed Clay Subsoil
	Mortar

1 INTRODUCTION

1.1 There are proposals by Hyder Consulting Ltd, acting as agents to Dwr Cymru : Welsh Water (Northern Division), to construct a new water pipeline from Meliden (NGR SJ 0574 8053) to Ffordd Penrhwyfla (NGR SJ 0559 8190). In September 1997 an archaeological assessment - comprising a desk-based study and systematic field survey - of the pipeline construction corridor (Frost, 1997) was undertaken by the *Contracts Section* of the Clwyd-Powys Archaeological Trust. This study indicated that the first 500m of the route (see *Fig. 1*), the southern sector at Meliden, formed an area of high archaeological sensitivity which contains a range of buried and surface features associated with mining activities dating from the Roman period to the nineteenth century.

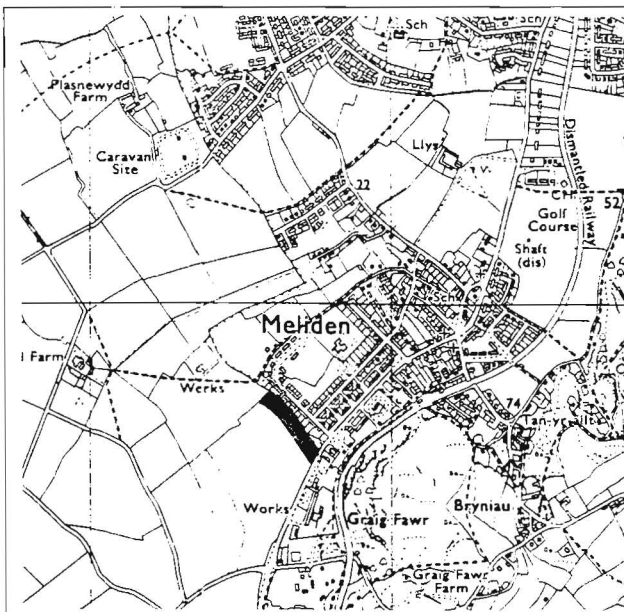


Figure 1: Location of evaluation site. Scale 1: 25000.

1.2 The identification of this area of archaeological sensitivity resulted in the drawing up of a Brief by the *Curatorial Section* of CPAT (ref: MJW/EVB/245 and dated 6 October 1997) for a controlled programme of archaeological evaluation prior to the commencement of pipeline construction.

1.3 Earthworks Archaeology was commissioned to undertake the evaluation and negotiations, prior to the commencement of the project, were conducted through Mr M Devenish, of Hyder Consulting Ltd, Warrington. The sitework took place between 19 and 22 June 1998 and is reported on here.

2 SUMMARY BACKGROUND

2.1 The Roman finds recovered from areas close to early mine working in this location have, quite reasonably, led to the belief that lead was mined at this time; the exposed veins in Graig Fawr would have been particularly accessible and attractive during the Roman period. Following the Romans' departure there is a general assumption that mining activity declined drastically only to be revived by the demand for lead that accompanied the castle building programme associated with the Edwardian campaigns in Wales during the thirteenth century. During the seventeenth century mining activity developed markedly in the vicinity of the study area and the documentary and cartographic evidence (see Frost, 1997, 4-5) records flourishing activity from the mid-seventeenth through to the early twentieth century.

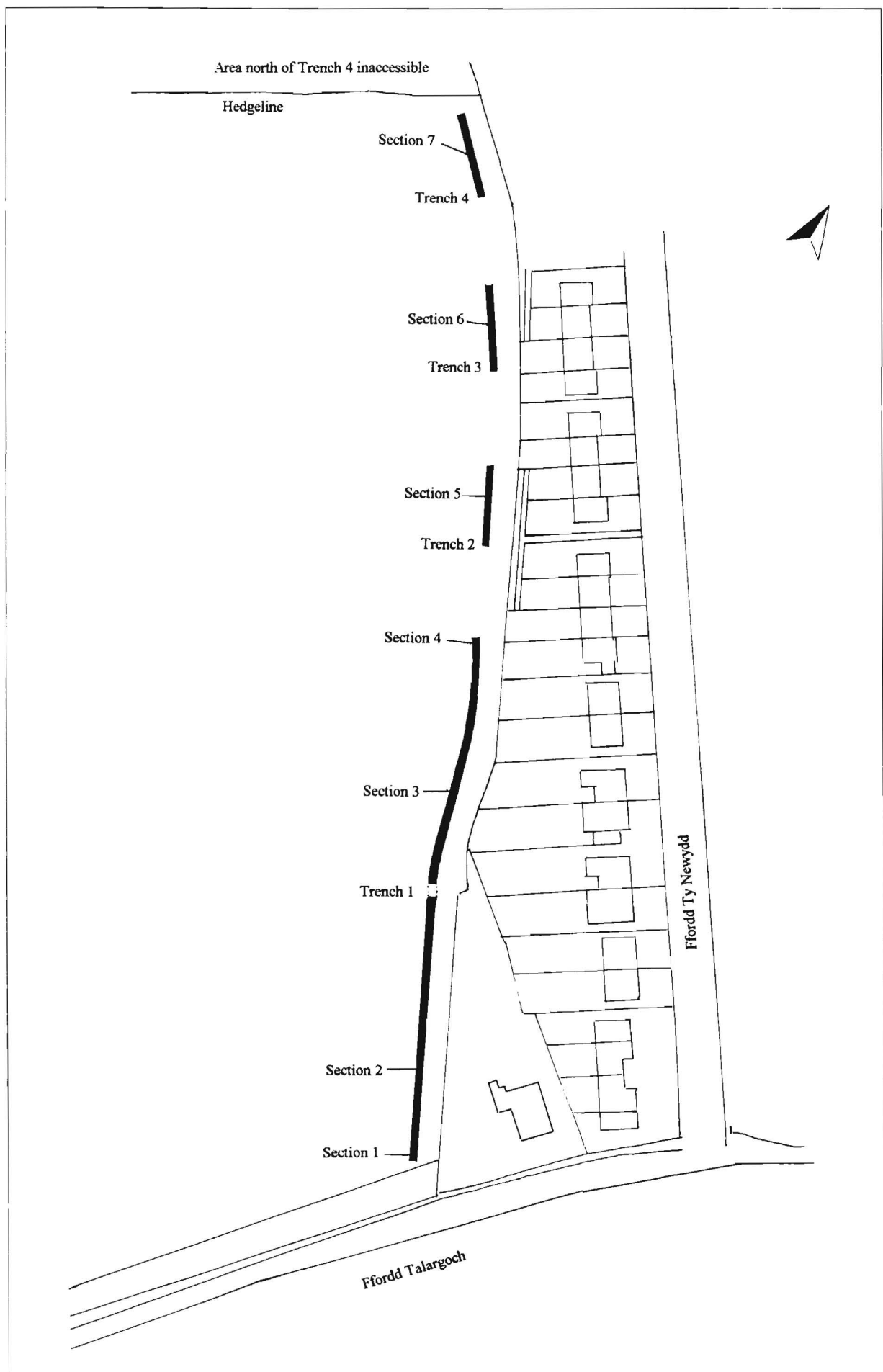


Figure 2: Location of evaluation trenches, showing also the location of section drawings Figs. 7, 8 & 9a to g. Scale 1: 1250.

2.2 The sites identified as being particularly vulnerable to ground disturbance during pipeline construction have been plotted as part of the desk-top study (see Frost, 1997, *Fig. 3*) and include:

- **PRN 102194:** Talargoch Mine Roman Finds, located below nineteenth century dressing floor
- **PRN 18203:** Talargoch Mine. Site of Walker's Engine Shaft inc. engine house, shaft and dressing floor
- **Site 1:** Engine Issa: site of former engine house
- **Site 2:** Possible Horse Whim site
- **Site 6:** Talargoch 1660's Sough/Old Level
- **Site 7:** 1660's Old Level shaft 1
- **Site 8:** 1660's Old Level shaft 2
- **Site 9:** 1660's Old Level shaft 3
- **Site 10:** 1660's Old Level shaft 4
- **Site 11:** 1660's Old Level shaft 1

3 FIELDWORK METHODOLOGY

3.1 Prior to the commencement of the project the centre line of the pipe trench, within the area of archaeological sensitivity, was marked out by **KM Construction**. The fieldwork comprised a programme of trial trenching (see *Figure 2*) along the centre line of the pipe trench. All trenches were c. 1.60m in width and were opened up along the line of the pipe trench to a maximum depth of c. 1.20m. Immediately west of Ffordd Talargoch, trench 1 was continuous (except for a 2m baulk to avoid disturbance to a marker peg) and 120m in length; thereafter trenches 2 to 4 were 20m in length and regularly spaced at intervals of 20m, as far as the hedgeline marked on *Figure 2*. The area north of the hedgerow was unavailable for evaluation due to problems of access.

3.2 The trenches were opened up by JCB machine, fitted with a wide toothless blade, down to the level of the first archaeological horizon; all machine work was closely monitored by an experienced archaeologist. Following machining the trenches were cleaned manually, where appropriate, and areas of particular archaeological potential were further investigated.

3.3 During the trial excavation deposits and features were recorded using context sheets; the trenches and features were planned and sections were drawn; due to the length of the trenches some site drawings have been reduced to aid intelligibility and for inclusion within this report. No archaeological features or deposits were observed in trenches 2 to 4 and thus recording took the form of a drawn representative soil profile from each trench. A levelling survey and a full photographic record (35mm colour prints



Plate 1: South end of trench 1 at the commencement of machining. Context (1), the rectangular 'stain', is visible; this was initially thought, together with other similar features, to be a possible grave; further investigation showed clearly that it is a relatively modern feature.

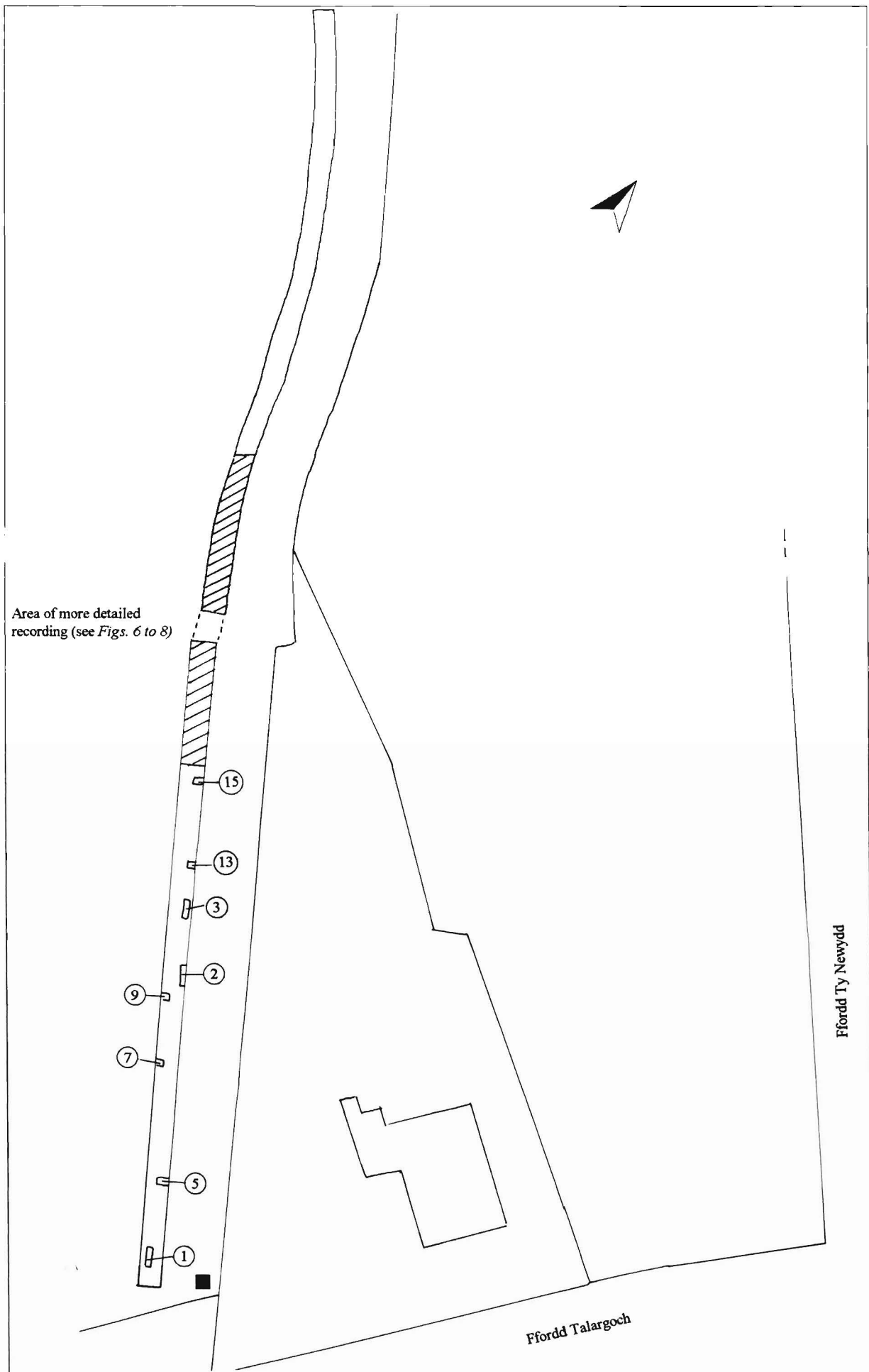


Figure 3: Trench 1, showing location of site TBM ■ (arbitrary value of 50m) and 'grave-like' cuts (see particularly Plates 1 & 3) which after investigation were shown to be late post-mediaeval features of uncertain function. Scale 1: 500.

and slides) of the project were taken. All level readings are relative to the site datum survey point - located in the south-east angle of the field (see *Fig. 3*) and with an arbitrary value of 50.00m.

3.4 A few very modern potsherds (discarded) were noted during the removal of topsoil deposits. Very few finds (all relatively modern) were recovered during more detailed investigation of the areas of potential. The finds recovered were cursorily examined by D J Garner & L J Dodd for dating purposes and subsequently discarded.



Plate 2: General view of area of evaluation, looking north from Ffordd Talargoch.

3.5 Upon completion of the sitework, and following consultation with KM Construction, the trenches were left open in preparation for pipe construction.. The small site archive will be lodged at the offices of CPAT, Welshpool.

4 RESULTS

4.1 Trench 1

4.1.1 This trench, measuring c.120m x 1.60m, was aligned north-west to south-east and ran essentially parallel to Ffordd Ty Newydd and approximately 5m from the boundary at the rear of the properties.



Plate 3: Detailed investigation by Leigh Dodd of context (3), a sub-rectangular cut similar to context (1). Part of a clay tobacco pipe stem recovered from its fill indicated a nineteenth century date for the feature. 1m scale.

4.1.2 At the north end of trench 1 the natural, undisturbed firm mid-brown clay subsoil (see below) lay at a depth of only c.80mm beneath the humic grey topsoil context (37). Confined within the first 50m length of trench 1, up to eight linear cuts were exposed, either fully or partially (contexts 1, 2, 3, 5, 7, 9, 13 & 15; see *Fig. 3*), each measuring c.1.80m (max.) x 400mm/500mm. Context (1) is clearly visible in *Plate 1*.

4.1.3 Although grave-like in character (see particularly *Plate 3*), partial excavation of contexts (4) and (11), the clay and clay loam fills of respective cuts (1) and (3), yielded a fragment of brick and part of a clay tobacco pipe stem datable to the nineteenth century. The depths of the features appeared to vary; *Figures 4 & 5* contrast contexts (1) and (3).

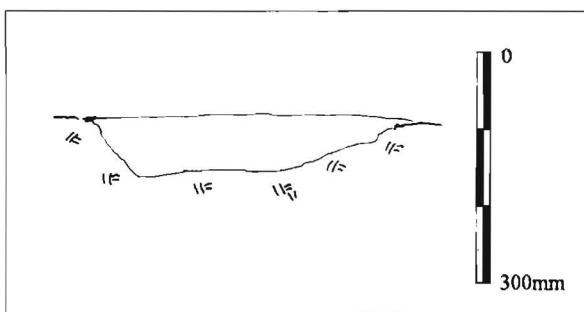


Figure 4: Profile of Context 1. Scale 1: 10.

4.1.4 Sections 1 to 4 (see *Figs. 9a to d*) show representative soil profiles at the points marked along trench 1 on *Fig. 2*. The stratigraphy at each section location consisted of:

- **Section 1** (*Fig. 9a*)
Context (37): soft, grey brown loam topsoil (80mm thick) immediately overlay firm mid-brown clay subsoil (38).
- **Section 2** (*Fig. 9b*)
Context (37): soft, grey brown loam topsoil (90mm thick) immediately overlay firm, friable sandy clay loam (39) containing modern brick fragments and potsherds, a trace of charcoal (>1%), and small angular and sub-rounded stones (5-10%) up to 200mm in size. Natural clay subsoil lay at a depth of 300mm.
- **Section 3** (*Fig. 9c*)
Context (37): soft, grey brown loam topsoil (140mm thick) immediately overlay firm, light to mid grey brown clay loam (40) containing small angular and sub-rounded stones (50%) up to 150mm in size. Natural clay subsoil lay at a depth of 280mm.
- **Section 4** (*Fig. 9d*)
Context (37): soft, grey brown loam topsoil (50mm thick) immediately overlay firm, friable brownish grey loam (41) containing small pebbles (1-2%). Natural clay subsoil lay at a depth of 280mm.

4.1.5 Deposits Close to Engine Issa (see *Figs. 3, 6, 7 & 8*)

4.1.5.1 This c.30m long stretch of trench 1 lay in the immediate vicinity of Engine Issa (Frost, 1997, Site 1). At this point along its length (see *Fig. 3* for location of area of more detailed recording) the proposed pipeline construction trench will cut obliquely through a wide bank which leads eastwards from the area of the Engine site (see *Plate 4*). This bank forms the remains of the track visible on the

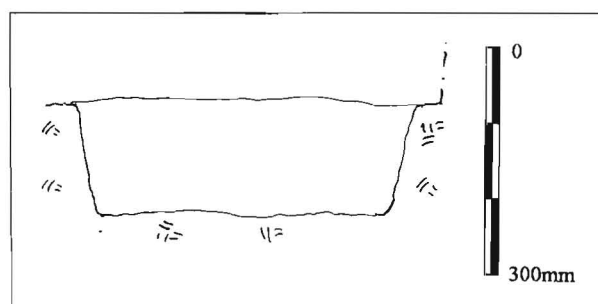


Figure 5: Profile of Context 3. Scale 1: 10.

1st edition 6" OS map 1872 (see Frost, 1997, 5 & *Fig 7*).

4.1.5.2 Below the dark yellowish brown loam topsoil (17), up to 200mm thick, lay a compact mid-yellow brown sandy clay, contexts (18) & (24), with inclusions of rounded pebbles (c.10%), up to 50mm in size, and small angular

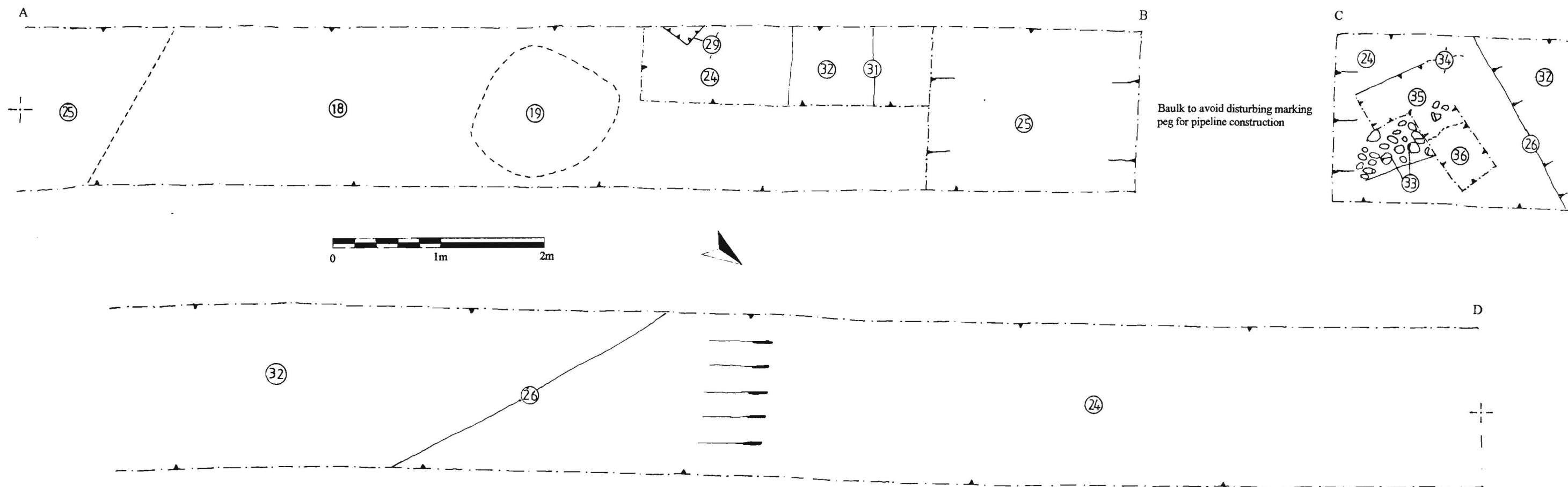


Figure 6: Plan view of features close to Engine Issa (Frost, 1997, Site 1). Scale 1: 40. This plan (for location see Fig. 3) is in the area of that part of trench 1 which cuts obliquely across the bank leading eastwards from the site of the engine (again see Frost, 1997, particularly Plate 1 & Figs. 3, 7 & 9). The bank is visible on Plate 4.

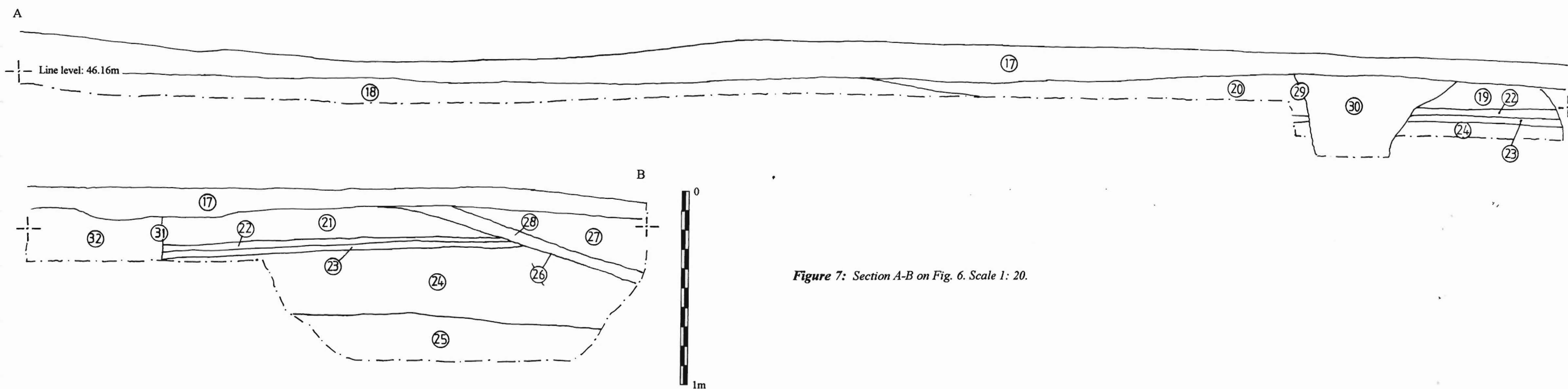


Figure 7: Section A-B on Fig. 6. Scale 1: 20.

limestone fragments; together with contexts (20), (35) & (36), mixed reddish brown sandy clays, these contexts were stratigraphically the earliest deposits encountered, and collectively they formed the material for the linear bank/track extending eastwards from the vicinity of the Engine Issa. No firmly datable finds were recovered from the contexts comprising the bank, but a large fragment of brick retrieved from deep within context (24) accords with the cartographic evidence (see Frost, 1997, *Figs. 7 & 9*)

which indicates a general late nineteenth century date for this feature.



Plate 4: Investigating the area of trench 1 close to Engine Issa (see Frost, 1997, *Figs. 3 & 9*). The trench cuts obliquely through a wide bank, clearly visible, leading from the former engine, in the area of the trees.

4.1.5.3 A small slot was excavated up against the west section (see *Figs. 6 & 7*). The possible remains of surface metalling on the bank consisted of a thin (10mm-20mm thick) layer of light yellow sandy gravel (23) (see *Fig. 7* and *Plate 6*) and a spread of limestone fragments (19), although the latter may have been the result of more modern deposition. A thin layer (c.15mm) of trampled material,



Plate 5: Detail of context (33), a small surviving patch of cobbling seemingly aligned parallel to the bank, but its full extent could not be determined within the confines of the trench. Although no finds were directly associated with the feature, its stratigraphic position indicates a probable nineteenth century date. 1m scale.

comprising dark grey silty clay (22), lay immediately above context (23). Context (22) in turn was sealed below the vestigial remains of a grey sandy gravel (19), up to 120mm thick, and a mixed deposit of firm reddish brown sandy clay (21) containing small sub-rounded and sub-angular stones (5%) and occasional brick fragments; a fragment of nineteenth century clay pipe was recovered from context (22). On the north side of the baulk - undisturbed to avoid removal of a marking peg (see *Fig. 6*) - part of a shallow linear cut (34), over 600mm in length and no more than 400mm wide, was filled with tightly packed cobbling (33) (see *Plate 5*) resembling surface metalling. Although no finds were recovered from this feature it was stratigraphically later than the original deposition of the bank material. Its general east-west alignment was consistent with that of the bank but its full extent and function was not ascertained within the confines of the trench.

4.1.5.4 Several features were cut into, and therefore post-date, the original construction of the bank and its associated surface(s). Up against the west section a ?square post-hole (29), at least 200mm wide, was partially exposed. Context (29) was filled by (30), a mixed red brown clay with inclusions of small sub-rounded stone (5%); context (30) was excavated to a depth of 400mm but not 'bottomed'. In this location the north side of the bank had been severely damaged by the cutting, presumably by machine, of a



Plate 6: Part of section through bank (see also Fig. 7); the undisturbed clay subsoil starts at a depth of c.600mm below turf level. 1m scale.

large, modern sub-circular rubbish pit (26) up to 8m wide, containing all manner of refuse: crisp packets, cans, asbestos, barbed wire, glass etc. The extent of this modern pit is visible as an area of parched ground on Plate 4, between the trees and the farthest archaeologist.

4.2 Trench 2 (Figure 9e)

4.2.1 This trench, measuring c.20m x 1.60m, was aligned north-west to south-east and located 20m north of trench 1.



Plate 7: Looking south-east from trench 4 towards Graig Fawr.

4.2.2 Beneath the grey loam topsoil (37), c.120mm thick, lay a brownish grey sandy loam (41) between 100mm and 150mm thick and containing small pebbles and angular stone 1-2% (up to 20mm). The undisturbed sandy clay subsoil lay at a depth of c.270mm. No archaeological features or deposits were observed.

4.3 Trench 3 (Figure 9f)

4.3.1 This trench, measuring c.20m x 1.60m, was aligned north-west to south-east and located 20m north of trench 2.

4.3.2 Beneath the grey loam topsoil (37), c.90mm thick, lay a light to mid-brown clay loam (42) 200mm thick and containing small angular stone 1-5% (up to 15mm) and traces of brick fragments. The undisturbed firm red brown

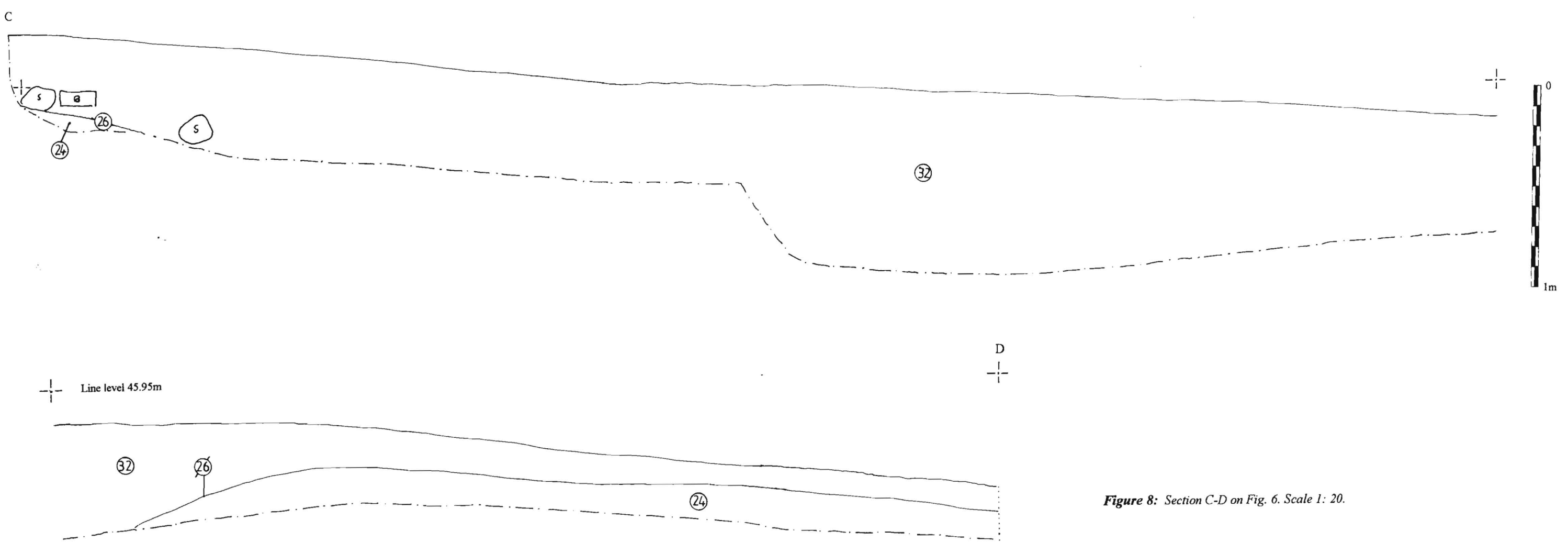
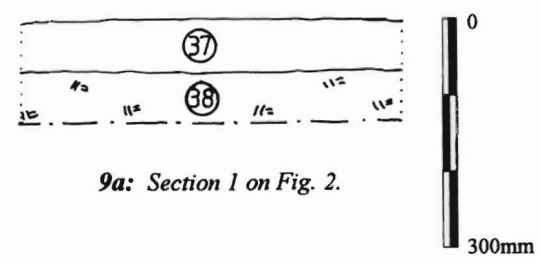
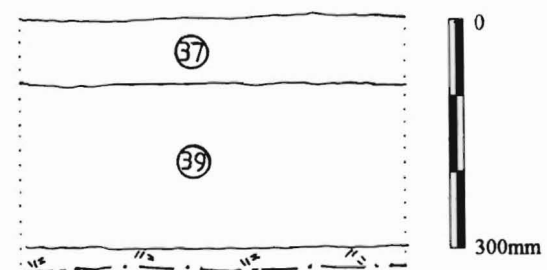


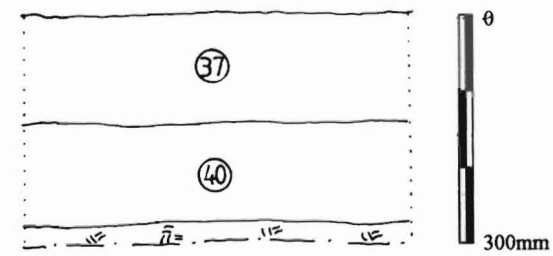
Figure 8: Section C-D on Fig. 6. Scale 1: 20.



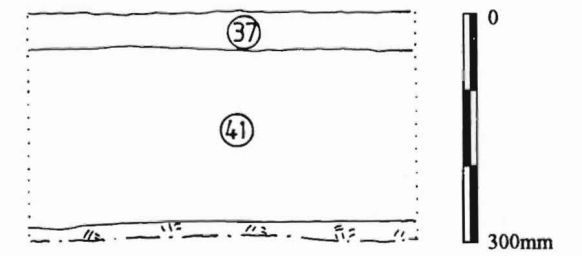
9a: Section 1 on Fig. 2.



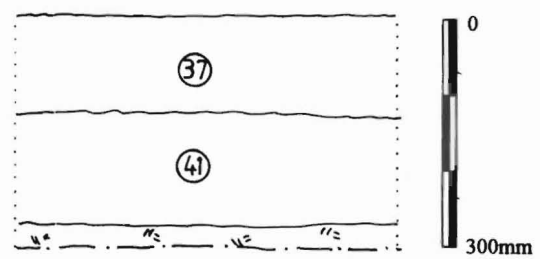
9b: Section 2 on Fig. 2.



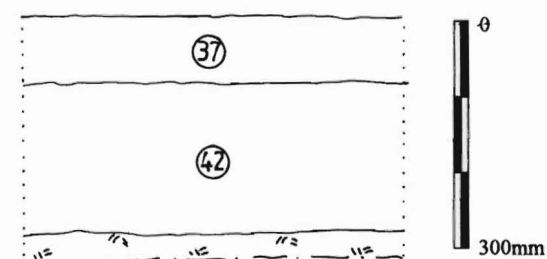
9c: Section 3 on Fig. 2.



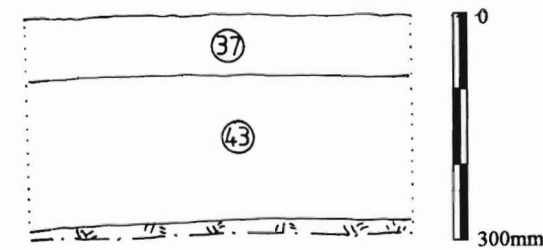
9d: Section 4 on Fig. 2.



9e: Section 5 on Fig. 2.



9f: Section 6 on Fig. 2.



9g: Section 7 on Fig. 2.

Figure 9: Representative soil profiles (9a-g) in trenches 1 to 4 (sections 1 to 7 on Fig. 2). All at scale 1: 10.

clay subsoil, with angular limestone fragments and pebbles, lay at a depth of c.270mm. No archaeological features or deposits were observed.

4.4 Trench 4 (Figure 9g)

4.4.1 This trench, measuring c.20m x 1.60m, was aligned north-west to south-east and located 20m north of trench 3.

4.4.2 Beneath the grey loam topsoil (37), c.80mm thick, lay a loose brown sandy loam (43) 200mm thick and containing rounded stone 1-2% (up to 60mm) and traces of red/orange brick fragments. The undisturbed sandy clay subsoil, with small angular limestone fragments, lay at a depth of c.280mm. No archaeological features or deposits were observed.

5 CONCLUSIONS

5.1 The results from the evaluation in archaeological terms are disappointing. Clearly, no features or deposits of Roman origin lie within the area of the evaluation trenches and the total absence of residual material of Roman date, considering the finds scatters noted previously (see Frost, 1997, 6), is surprising.

5.2 In trench 1, the narrow linear features, contexts (1) (2) (3) (5) etc., are perhaps associated with former organised flower/shrub beds of nineteenth century date, although there is no evidence for this on the OS maps.

5.3 The finds recovered from the area of the Engine Issa in trench 1, together with the cartographic evidence, have demonstrated that the deposits that form the linear bank/track feature date to the nineteenth century. There are several phases of activity within the archaeological record here, but all date to the nineteenth and twentieth centuries and are considered to be of limited archaeological merit.

6 REFERENCES & SELECTED FURTHER READING

- | | | |
|------------|--------|--|
| Blockley K | 1989 | Prestatyn 1984-5. <i>An Iron Age Farmstead and Romano-British Industrial Settlement in North Wales</i> . British Archaeological Report 210 |
| Davies E | 1949 | <i>Prehistoric and Roman Remains of Flintshire</i> |
| Lewis W J | 1967 | <i>Lead Mining in Wales</i> |
| Morris K L | 1990 | <i>Talargoch Lead Mine & Meliden Community</i> |
| Newstead R | 1936 | Excavations at the Roman Site at Prestatyn in <i>Proceedings of Dyserth & District Field Club</i> , 1937, 74-6. |
| Thomas D | 1992 | Melyd Avenue, Prestatyn in <i>Archaeology in Wales</i> 32, 70. |
| Webster G | 1952-3 | The Lead Mining Industry in North Wales in Roman Times in <i>Journal of the Flintshire Historical Society</i> , 13, 5-34. |

PROPOSED NEW WATER MAIN MELIDEN TO Ffordd PENRHWYLFA, PRESTATYN

Prepared for Hyder Consulting Ltd
(on behalf of Welsh Water Northern Division)

DESIGN BRIEF FOR ARCHAEOLOGICAL EVALUATION (CPAT EVB 245)**1. Summary**

1.1 It has been proposed by Hyder Consulting Ltd (The Genesis Centre, Science Park South, Birchwood, Warrington, WA3 7BH) acting on behalf of Welsh Water (Northern Division, Maes Y Ffynnon, Penrhosgarnedd, Bangor) that a new mains pipeline will be constructed on land between Meliden (SJ05748053) and Ffordd Penrhwyfya (SJ05598190), Prestatyn, Denbighshire.

1.2 This document is the design brief for archaeological evaluation work to be undertaken prior to construction work commencing in November 1997. The brief sets out the requirement for strategic trial trenching to be carried out within a previously identified 300m long archaeologically sensitive area (See: Pat Frost, CPAT Report 237, August 1997, 'Archaeological Assessment of Ffordd Penrhwyfya Water Main, Prestatyn). Such a scheme should seek to identify and promote the preservation in situ of any archaeological deposits recorded, whether in the form of sub-surface deposits or standing structures.

1.3 This brief should be used by archaeological contractors as the basis for the preparation of a detailed archaeological project specification. In response to this brief contractors will be expected to provide details of the proposed scheme of work, to include the anticipated working methods, timescales and staffing levels.

1.4 The detailed specification should be submitted to the client above. Specifications will be approved by the Curatorial Section of the Clwyd-Powys Archaeological Trust and the client will be free to choose between those specifications which adequately satisfy this brief.

2. Site Location and Description (see enclosed plan)

2.1 The proposed evaluation area lies immediately west of the Ffordd Ty Newydd housing estate off Ffordd Talargoch which is the main A547 from Rhuddlan to Prestatyn.

2.2 The area of archaeological sensitivity extends over 300m along the hedge line running parallel to the rear garden plots west of the Ffordd Ty Newydd Street frontage.

2.3 The maximum way leave width will be 15 metres which may be top-soiled at the commencement of the scheme. Within this width the pipe laying trench will measure 1.20m wide (max) and 1.20m deep (max).

3. Planning Background

3.1 Not Applicable

4. Archaeological Background

4.1 Prior archaeological assessment by CPAT Contracts Section (see ref. in 1.2 above) indicated that the first 500 metres of the mains route at Meliden, from Ffordd Talargoch to the works site east of Rhyd Farm, is of high archaeological sensitivity.

Brief EVB 245 / Prepared by M J Walters / 06 October 1997 / page 1

PROPOSED NEW WATER MAIN MELIDEN TO Ffordd Penrhwyf, Prestatyn

**Prepared for Hyder Consulting Ltd
(on behalf of Welsh Water Northern Division)**

DESIGN BRIEF FOR ARCHAEOLOGICAL EVALUATION (CPAT EVB 245)

4.2 A range of buried and surface features, related to mining archaeological remains dating from the Roman period to 19th century, survive in this area. The following sites were identified as being particularly vulnerable to disturbance:

PRN 102194 - Talargoch Mine Roman Finds. Located below former 19th c. dressing floors.

PRN 18203 - Talargoch Mine. Walker's Engine Shaft site including engine house, shaft, and dressing floor.

Site 1 Engine Issa - Site of former Engine House

Site 2 Possible Horse Whim Site

Site 6 Talargoch 1660's Sough/Old Level

Site 7 1660's Old Level shaft 1

Site 8 1660's Old Level shaft 2

Site 9 1660's Old Level shaft 3

Site 10 1660's Old Level shaft 4

Site 11 1660's Old Level shaft 5

4.3 Stripping of top soil in the way leave and cutting of the trench for pipe insertion may disturb intact archaeological deposits related to all of the sites listed above.

5. Objectives

5.1 The primary objectives will be to locate, by means of strategic trial trenching, and describe all archaeological features which may be present within the evaluation area. Preservation in situ will be advocated where at all possible but where engineering or other factors result in loss of archaeological deposits preservation by record will be recommended.

6. Evaluation

6.1 The evaluation is seen as an essentially non destructive process designed to promote the appropriate management of the archaeological resource within the framework of the present Welsh water scheme. However it must recover enough information to enable the developer and the curator to properly assess the implications of the development as well as providing an assessment of the sites archaeological worth.

Brief EVB 245 / Prepared by M J Walters / 06 October 1997 / page 2

PROPOSED NEW WATER MAIN MELIDEN TO Ffordd PENRHWYLFA, PRESTATYN

Prepared for Hyder Consulting Ltd
(on behalf of Welsh Water Northern Division)

DESIGN BRIEF FOR ARCHAEOLOGICAL EVALUATION (CPAT EVB 245)

6.2 It is therefore recommended that the following elements should form part of this evaluation:

Strategic Trial Trenching

NOTE: The centre line of the pipe trench should be agreed and marked by a representative of Welsh Water/Hyder Consulting in advance of the archaeological evaluation commencing for the whole of the 300m length of the archaeologically sensitive area. Archaeological contractors must ensure that this has been completed.

The initial 120 metre long x 1.50m wide x 1.20m deep (max) length of the pipeline immediately west of Ffordd Talargoch will be opened as a single continuous trench. Thereafter a 20m long x 1.50m wide x 1.20m deep (max) trench will be excavated at a spacing of every 20 metres as far as the proposed location of archaeological site 8, adjacent to the western corner of the housing estate.

Trenches will be initially excavated with the aid of a machine excavator utilising a wide toothless ditching blade. All modern overburden will be removed by machine down to the level of the first recognisable archaeological horizon. Thereafter all excavation will be completed using manual techniques unless otherwise agreed with the curator in advance. All archaeological contexts located must be adequately sampled in order to define their function, date, and relationship to adjacent features. The level of natural soils below the archaeology should be tested for in at least one location within every trench excavated.

6.3 Current health and safety procedures must be strictly adhered to at all times during excavation. All trenches left open must be securely fenced and their presence clearly marked to prevent access and injury to grazing stock and the public.

6.4 Archaeological contractors should agree in advance whether Welsh Water/Hyder Consulting require the trenches to be backfilled or left open for pipe insertion.

7. Reporting

7.1 A draft report must be forwarded to the client and curator, and approved by the curator, prior to the submission of the final version. A full report of the findings of the evaluation should then be completed and forwarded to the client within one month of the completion of the fieldwork element of the evaluation unless otherwise agreed.

7.2 This report should include a detailed report of the methodology, site history, recorded features, finds, a discussion, illustrations, conclusions, detailed site archive list, bibliography, appendices.

7.3 Colour laser copies of site photographs must be included in the text of each trench excavated and any significant features or finds from each trench.

7.4 Broad statements regarding the significance of the archaeology on a local, regional, and national scale should be included in the conclusions but the contractor is not expected to make specific recommendations as part of a mitigation proposal.

Brief EVB 245 / Prepared by M J Waiters / 06 October 1997 / page 3

PROPOSED NEW WATER MAIN MELIDEN TO Ffordd Penrhwylfa, Prestatyn

**Prepared for Hyder Consulting Ltd
(on behalf of Welsh Water Northern Division)**

DESIGN BRIEF FOR ARCHAEOLOGICAL EVALUATION (CPAT EVB 245)

7.5 A full report of the archaeology recorded should be completed and ready for publication within an appropriate academic publication within 12 months of the completion of the evaluation fieldwork. For the purposes of minor pieces of work such as watching briefs and small evaluation schemes the clients report may be accepted as the final report after agreement with the curator.

7.6 A note on the evaluation findings should be submitted to the editor of CBA Wales for inclusion in the annual CBA regional publication.

8. Monitoring Arrangements

8.1 Curatorial responsibility for this project lies with the Curatorial Section of the Clwyd-Powys Archaeological Trust. The curators should be given at least one weeks notice, in writing, of the proposed date of commencement of the site work.

8.2 Information provided in this brief cannot fully anticipate the conditions that will be encountered as work progresses. If requirements of the brief cannot be fully met they should only be excluded or altered after attainment of the written approval of the Curatorial Section of the Clwyd-Powys Archaeological Trust.

8.3 There will be a monitoring charge of £50 per pre-arranged monitoring visit. A programme of site visits will be agreed with the contractor in advance.

9. Archive Deposition

9.1 For the purposes of this project the full site archive will be deposited within one month of the completion of the final report for publication. The archive will be deposited with the Regional Sites and Monuments Record maintained by the Clwyd-Powys Archaeological Trust, from where the archive will be placed in the public domain.

9.2 Under certain circumstances the archive may be placed within other agreed and suitable deposition locations, but only after the agreement of the archaeological curator has been sought and confirmed in writing.

Brief EVB 245 / Prepared by M J Walters / 06 October 1997 / page 4

1. Introduction

- 1.1 There is a proposal to construct a new mains water pipeline from Meliden to Ffordd Penrhwylyfa, Prestatyn. A preliminary desk-top assessment and field walkover of the route was undertaken in August 1997 by the Contracting Section of the Clwyd-Powys Archaeological Trust (Frost, 1997). This study indicated that the southern sector of the pipeline forms an area of high archaeological sensitivity and, accordingly, a further programme of archaeological evaluation has been deemed necessary by the Curatorial Section of the Clwyd Powys Archaeological Trust. The following suggested framework for the evaluation has been prepared in accordance with a Brief (ref. EVB 245 and dated 6 October 1997) drawn up by M J Walters, and the general guidelines laid down in Appendix 2 of *Management of Archaeological Projects* (English Heritage, 2nd edition, 1991).

2. Primary Aims & Objectives

- 2.1 The primary objective of the project will be the retrieval of sufficient archaeological data to enable an informed decision to be made regarding the future management of any potential archaeological remains identified.
- 2.2 To compile a full and illustrated report setting out the results of the assessment, in full accordance with the Brief.
- 2.3 The final response to the results of the assessment will be determined by the Clwyd Powys Archaeological Trust.

3. Method

3.1 Field Investigation

- 3.1.1 The tender will include a figure for a programme of strategic trial trenching along the proposed line of the new water main. This will include the excavation of a continuous linear trench, measuring 120m x 1.50m x 1.20m deep (maximum), along the line of the pipeline immediately west of Ffordd Talargoch. Thereafter, the fieldwork will consist of the excavation of a linear trench measuring 20m x 1.50m x 1.20m deep (maximum) at a spacing of every 20m as far as the location of archaeological site no. 8, close to the west corner of the housing estate (Frost, 1997, 11 & Fig. 3).

3.1.2 Fieldwork Methodology

- prior to the commencement of the trial excavation the centre line of the pipe trench, for the whole of the 300m length of the archaeologically sensitive area, will be marked out by a representative of Hyder Consulting/Welsh Water
- all trenches will be opened up by JCB machine using a wide toothless blade. Only demonstrably modern deposits will be removed by machine in thin spits and under constant scrutiny by an experienced archaeologist. Machine excavation will stop at the first archaeological horizon and thereafter all excavation will be carried out by hand using only experienced archaeologists. Machine spoil will be stored neatly on site and used to backfill trenches, if necessary, upon completion of the fieldwork
- after machining, the hand excavation of any archaeological features/deposits will be undertaken. The archaeology will be recorded according to the normal principles of stratigraphic excavation, using context sheets, scale plans and sections; plans at scale 1: 20, sections at 1: 10. A location plan at a suitable scale will show the site and trench locations in relation to published boundaries
- all small finds and closely datable potsherds will be recorded three-dimensionally
- a full photographic record of all site activities (colour prints, and colour slides at 35mm format) will be taken, and a levelling survey carried out
- all artefacts recovered during the evaluation will be processed, analysed and catalogued, and will (with the permission of the landowner) form part the project archive. A catalogue and discussion of the finds will form an appendix to the final report
- all trial trenches will be securely fenced off with 'netlon' fencing and stakes.

3.2 Analysis and Report

- 3.2.1 Upon completion of the desk-top assessment and field inspection a draft copy of the report will be submitted to the Client and CPAT for comment. The exact reporting requirements, prior to the completion of the sitework, are - as identified in the Brief (*General Requirements for Archaeological Projects* paras. 22 to 29) - difficult to

predict. However, the tender will include, upon completion of the fieldwork, provision for the production of a full and illustrated report setting out the results of the project within 7 days of the completion of the works; any further reporting requirements will be the subject of discussion between the Client, Curator and Contractor. The report will include:

- a non-technical summary of the results
- summary site history
- methodology
- results and discussion as necessary
- description of archaeological features and deposits identified during trial trenching
- plans & sections as necessary; a plan of the study area with locations of trial trenches
- conclusions
- catalogue of artefacts recovered with discussion and illustrations as appropriate
- representative colour plates of trial trenching results
- references
- index to the project archive
- appended copies of the Design Brief and Project Design

3.3 **Archive Production**

- 3.3.1 The site/research archive will be completed, as necessary, in accordance with the guidelines given in the *Management of Archaeological Projects 2*, English Heritage, 1991. It will include a copy of the final report, specialist reports and all site records and finds (subject to the consent of the landowner) related to the project.

3.4 **Health and Safety**

- 3.4.1 All appropriate Health and Safety legislation will be complied with. On site Earthworks operates within the recommendations detailed in *The Health and Safety Manual of the Standing Conference of Archaeology Unit Managers* (SCAUM 1991) and in accordance with the Earthworks Archaeology *General Safety Policy Statement* (see Appendix) which identifies the more hazardous aspects of sitework.
- 3.4.2 Earthworks Archaeology is covered by appropriate Public and Employer's Liability insurance

3.5 **Standards**

- 3.5.1 Earthworks Archaeology operates within the *Code of Conduct* of the Institute of Field Archaeologists, and in accordance with CPAT's *General Requirements for Archaeological Projects* 1997.

3.6 **Project Monitoring**

- 3.6.1 The project will be monitored by Mark Walters, Curatorial Officer with CPAT, who will be kept fully informed of progress and timetables. A preliminary meeting at the start of the project will be arranged with progress meetings as necessary during sitework.
- 3.6.2 During fieldwork important archaeological features/deposits will be brought to the attention of the Curatorial Section of CPAT as soon as possible.

4 **Resources & Programming**

4.1 **Staffing**

- | | |
|--|---|
| <ul style="list-style-type: none"> • W S Walker BA; MIFA • L J Dodd • D J Garner BA | <p><i>Project management: excavation; report preparation and production; archive production</i></p> <p><i>excavation & recording; assistance with finds analysis</i></p> <p><i>excavation & recording; finds analysis</i></p> |
|--|---|

4.2 **Timetable**

- | | |
|---|-------------------------------|
| <ul style="list-style-type: none"> • Fieldwork • Production of report | <p>5-7 days</p> <p>7 days</p> |
|---|-------------------------------|

5. **References**

Frost P 1997 *Ffordd Penrhwyfya Water Main, Prestatyn: Archaeological Assessment*, CPAT Report No. 237



Earthworks
Archaeological Services

13 Denson Drive
Carlines Park
Ewloe
DEESIDE
Flintshire
CH5 3RG

Tel: (01244) 534958; Mobile: 0585 221896;
Fax: (01352) 754604; Email: Post@eworks.force9.co.uk