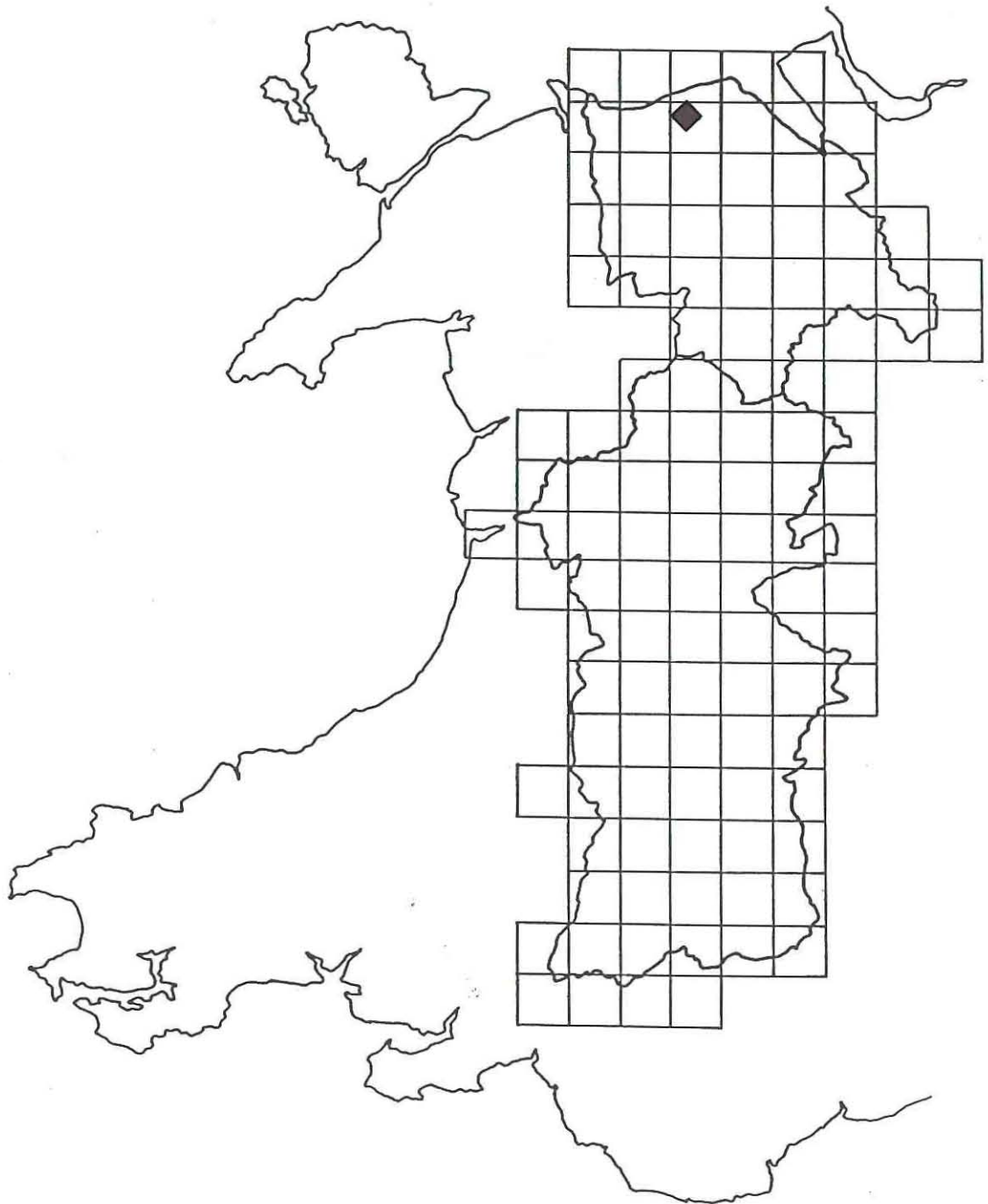


THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

Gwindy Street, Rhuddlan, Clwyd

ARCHAEOLOGICAL EVALUATION



CPAT Report No 77

Gwindy Street, Rhuddlan, Clwyd

ARCHAEOLOGICAL EVALUATION

by D Thomas
September 1993

Report prepared for D V Worthing Ltd

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1 INTRODUCTION

- 1.1 CPAT was commissioned in September 1993 by D.V. Worthing (Builders) Ltd to carry out a pre-determination archaeological evaluation of the site of a proposed housing development at Gwindy Street, Rhuddlan, Clwyd (Fig 1), the client having been advised by Rhuddlan Borough Council that archaeological evaluation would be necessary should any planning application be made.
- 1.2 A brief for the evaluation was prepared by Clwyd Archaeology Service (Clwyd County Council) on behalf of Rhuddlan Borough. The brief recognised the archaeological sensitivity of the site and specified a threefold approach to the evaluation — desk-top assessment, geophysical survey, and field evaluation. A written specification for the evaluation was prepared by CPAT after discussions with the Clwyd Archaeology Service, and was submitted to the client for approval (see copy in Appendix 3).
- 1.3 The specification and quotation for the evaluation were accepted by the client and work commenced on September 1993. The desk-top assessment and trial excavations were undertaken by CPAT. Geophysical survey was carried out by Stratascan on behalf of CPAT.
- 1.4 The site lies on the north-eastern side of Gwindy Street (SJ 0228 7822) and covers an area of approximately 3,600m² (Fig 1). The site is bordered by the Telephone Exchange to the north-west, playing fields to the north-east, and houses to the south-east. At the time of the evaluation the plot was occupied by the derelict British Legion building and gravelled car-park, and a wholesale fruit and vegetable merchant warehouse with a concrete forecourt.
- 1.5 The present ground surface is at c 9.15m OD on the Gwindy Street frontage on raised ground c 1.1m above the road surface. The rest of the site rises gradually to the south-east, with a more pronounced slope near the boundary with the playing field. The north-eastern corner of the site lies at c 12m OD.

2 DESK-TOP ASSESSMENT

- 2.1 The aim of the desk-top assessment was to study all the available sources of information relating to the archaeological context of the Gwindy Street site. In particular, consideration has been given to the sites topographical position, its relation to the known archaeology of the area from the Mesolithic to the late medieval periods and its appearance on early maps.

- 2.1.2 Much of the evidence upon which this assessment is based has not been fully published.

2.2 TOPOGRAPHY, GEOLOGY AND SOILS

- 2.2.1 Rhuddlan is situated on a bluff at c 15m OD, immediately to the east of the River Clwyd at the point of the lowest ford crossing of the river and at the highest point reached by tides. To the east and the north it overlooks the extensive alluvial coastal plain of Morfa Rhuddlan.
- 2.2.2 The geology at Rhuddlan is dominated by Boulder Clay which is overlain in the eastern and south-eastern parts of the town by glaciofluvial deposits of sand and gravel. These have been locally reworked and redeposited as windblown sands as late as the Romano-British period (Warren *et al*

1984).

- 2.2.3 Soils derived from the parent drift material are permeable but seasonally waterlogged clayey loams of the Salop series. Where overlying the freely draining-sands the soils are described as sandy loams of the Newport series (Ball 1960).

2.3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 2.3.1 The slightly elevated riverside position of Rhuddlan appears to have been of particular regional importance as an area of complex human activity since prehistoric times. Excavations carried out in a number of areas within the town since 1969 have revealed evidence of multi-period occupation extending over a period of more than 7000 years from the early Mesolithic period to the post-medieval period. The importance of the area as a place of early settlement during this period must be attributed partly to its favourable location on an estuary off the coastal plain which, in common with similar locations elsewhere, appears to have been among the most productive of primary ecological zones and one which could have supported a relatively high population (Jacobi 1973). Evidence of prehistoric activity has predominantly been found in areas of sandy soil, but a direct relationship in this respect may be more apparent than real (Manley and Healey 1982).

Mesolithic and Neolithic activity

- 2.3.2 Important evidence of both early and late Mesolithic lithic activity has been recovered from a significant proportion of the sites that have been investigated in Rhuddlan (Quinnell and Day forthcoming; Manley and Healey 1982), the evidence being notable for the range of artifacts represented and the range of contemporary structures identified including pits, postholes and gullies possibly representing the former presence of walls or windbreaks. All the sites excavated which have revealed features and *in situ* assemblages lie to the south-east of Gwindy Street, the closest of these being Princes Road (Site S), c 300m to the south-east. Excavations in 1971 to the rear of Gwindy Street (Site D), adjacent to the site under consideration (Fig 3), produced lithic material probably of Neolithic date which is thought to be residual rather than in primary contexts (Quinnell and Day forthcoming).

Bronze Age activity

- 2.3.3 Evidence for Bronze Age activity in the form of structures and scattered finds has been recovered from a number of sites in Rhuddlan (Quinnell and Day forthcoming). Excavations in 1971 to the rear of Gwindy Street (Site D), adjacent to the site under consideration (Fig 3), produced a single Bronze Age rim-sherd from a medieval context.

Iron Age activity

- 2.3.4 Evidence of Iron Age activity in the form of finds, structures and evidence of possible agricultural activity has been recovered from a number of sites in Rhuddlan (Quinnell and Day forthcoming). The nearest evidence to the present site comes from a number of sites near Ysgol-y-Castell, c 450m to the south-east of the present site.

Romano-British activity

- 2.3.5 A number of sites in the vicinity of Ysgol-y-Castell have also produced evidence in the form of finds and structures of Romano-British date from the late 1st - early 2nd century onwards (Quinnell and Day forthcoming). Excavations in 1971 to the rear of Gwindy Street (Site D), adjacent to the site under consideration (Fig 3), produced a single sherd of Roman samian pottery.

Early Medieval activity

- 2.3.6 The earliest documentary reference to Rhuddlan records *bellum rudglann* in 796 (*Annales Cambriae*), referring to the battle fought at Morfa Rhuddlan between the Welsh and the Mercians for the control of that part of North Wales known as *Tegeingl*.
- 2.3.7 The *Anglo Saxon Chronicle* records in AD 921 the foundation of the *burg* of Cledemutha which it has been suggested formed a defended area of c 30 ha to the south and east of Rhuddlan Castle (Fig 2; Manley 1987).
- 2.3.8 During the late 9th or early 10th century *Tegeingl* was regained by the Welsh, and at Rhuddlan Llywelyn ap Seisyllt established a stronghold probably at Twt Hill. Later Gruffydd ap Llywelyn established his *llys* at Rhuddlan, probably at Twt Hill (Soulsby 1983).

The Norman Borough

- 2.3.9 The *llys* was attacked and destroyed by Harold Godwin in 1063 (*Anglo-Saxon Chronicle*). Ten years later a motte and bailey was built at Twt Hill, and a Norman Borough was established with 18 burgesses, a mill, a church and a mint. Excavations carried out between 1969-1972 at the Abbey Nurseries and Ysgol-y-Castell sites established the line of the 11th century borough defences to the north and east of Twt Hill (Fig 2; Quinnell and Day forthcoming), an area of about 6 ha being suggested for the borough in the area between Rhuddlan Castle and Twt Hill.

The Edwardian Borough

- 2.3.10 A defended Edwardian Borough associated with Rhuddlan Castle was established by Edward 1 in 1278 (Soulsby 1983). This appears to have enclosed an area of some 8 ha to the north of the Castle, encompassing Castle Street, Parliament Street, High Street, Church Street and Gwindy Street (Fig 2). It has also been argued that the 30 ha enclosure defined by the 'Town Ditch' is also of this period (Quinnell and Day forthcoming). Gwindy Street (Fig 2) is located approximately 190m north-east of the River Clwyd and constitutes one of the original streets of the Edwardian Borough (Soulsby 1983). It has been suggested that this street was originally known as the 'Peperstrete' referred to in an extent of 1428 (Jones 1915; Miles forthcoming). In common with other streets of the Borough, burgage plots may have been established leading back from the street frontage.
- 2.3.11 Excavations beneath the base of the Edwardian defences immediately to the north of the site under consideration in 1971 (Fig 3, Trenches DR, DO, DP; Quinnell and Day forthcoming) revealed a buried soil consisting of brown sand with clay patches. Pre-bank features indicate a long period of use. The earliest and most definite features below the inner bank was a system of rectilinear plots probably associated with ploughmarks. A second pre-bank phase included shallow pits. These features are undated but possibly indicate a period of prehistoric or more probably early Medieval or Norman agriculture to the north of the pre-Edwardian boroughs at Rhuddlan.
- 2.3.12 Earthworks representing the defences of the Edwardian Borough survive to the north and north-west of site under consideration, representing the northern side of the Borough. Trenches were excavated across the defences of the northern corner in 1971 (Fig 3; Quinnell and Day forthcoming, Site D). These excavations showed that the ditch was 14m wide and 2.75m deep, with an outer bank up to c 12.20-13.70m wide and 1.25-0.6m high and an inner bank 18.00-13.4m wide and 1.0-0.5m high, the dimensions of the surviving banks evidently diminishing where the defences turned towards the south-east. The banks consisted of a spread of dark grey-brown soil

overlain by grey clayey soil and mixed dumps of red and yellow stiff clay. No trace of timber lacing or evidence of a palisade was found in either bank. Pottery recovered from the make-up of the banks is said to be consistent with an Edwardian date for these defences. Additional trenches (Fig 3, Trench DQ) immediately to the north-east of the present site located the edges of the ditch, the upper 1.5m of silting of which contained post-medieval material. No surviving bank material is recorded in this area.

- 2.3.13 The excavations in 1971 in the northernmost corner of the Edwardian Borough defences suggest that after a period of considerable activity soon after its construction the defences were became eroded or were possibly deliberately levelled within the medieval period. Activity in the post-medieval period included ploughing and boundary gulleys, suggesting that the area had reverted to agricultural use (Quinnell and Day forthcoming).
- 2.3.14 Trial excavations in 1989 immediately to the east of the site under consideration and on the assumed line of the Edwardian Borough defences (CPAT unpublished; not shown on plan) failed to locate any evidence of the defences, but further work would be needed in this area to confirm whether or not the defences were completed at this point.

Post-medieval activity

- 2.3.15 The earliest known map of Rhuddlan in 1756 (Fig 4; Clwyd Record Office Ref. No. NT/M/94 ii) indicates that a large portion of the north-eastern side of the site under consideration (parcel q) comprised possibly a field with a separate house and garden fronting onto Gwindy Street. The 18th century house appears to be sited where the modern semi-detached houses are built on the Gwindy Street frontage. Similar boundaries are shown on a map of 1810 (Fig 5, parcel 35; CRO Ref. No. NT/M/93) and the Tithe Apportionment Map of 1839 (CRO Ref. No. MT/M/54). The Tithe Map suggests that the south-west portion of the site under consideration formed the north-west ends of a number of parallel gardens or plots leading back from the High Street.

3 GEOPHYSICAL SURVEY

- 3.1 The full report on the geophysical survey carried out by Stratascan is included in Appendix 2. This section is intended as a summary of the results.
- 3.2 Both magnetometer and resistivity methods were used at the Gwindy Street site in an attempt to identify anomalies in the underlying soil strata which may relate to archaeological features or structures. Two areas, A and B, covering a total area of 1200m² were examined over the course of a single day. The gravelled surface of the site restricted the use of resistivity to the south of Area B.
- 3.3 The nature of the ground and background 'noise' on the site has meant that no significant anomalies were found in the resistivity survey, and that most magnetic anomalies were produced by modern services and debris. However, some magnetic anomalies in the north of Area B may represent buried metallic objects or hearths relating to archaeological features (Appendix 2, Fig 6).

4 FIELD EVALUATION

4.1 Introduction

- 4.1.1 The excavations consisted of four trenches of variable size, and seven 2x2m test pits (Fig 6). The distribution of the trial trenches was modified after on site discussions with the Development Control Officer of the Clwyd Archaeological Service — the position of the trenches being moved to ensure that where possible they aligned with the intended foundation trenches. The proposed 2x2m trench in the north-east corner of the site was abandoned due to difficulty of machine access, and the proposed 1.5x18m trench was extended to 1.5x27m.
- 4.1.2 The maximum depth of the trenches was limited to 1.2m to cover the disturbance caused by the proposed foundation trenches. Where features cut below this depth excavation was continued until information regarding their nature or date could be obtained. In areas unaffected by foundation trenches the depth was limited to 0.5m except where an assessment of the nature of the archaeology required deeper investigation.
- 4.1.3 Excavations were carried out over a period of 5 days between the 13-20th September 1993 with a workforce of 2-5 people. D.V. Worthing (Builders) Ltd provided a JCB for two days excavation and one day backfilling, and a labourer for the 5 days of excavation. All areas were stripped of modern build-up overburden by machine, and were then hand-excavated to assess the nature, preservation and date of surviving archaeological deposits.
- 4.1.4 Recording was undertaken using standard archaeological methods, as outlined in the specification. Numbers in brackets in the following descriptions refer to context numbers recorded on site.
- 4.1.5 The excavations were monitored by the Development Control Officer of the Clwyd Archaeology Service on September 16th 1993.

4.2 Area 1

- 4.2.1 Area 1 was a 10x2m trench excavated close to the Gwindy street frontage. The trench was excavated to a depth of 1.2m below the present ground surface, which lay at c 9.17m OD, and revealed modern ground build-up (01) to a depth of 1m. This build-up consisted of a stiff dark brown clay loam and contained brick, stone, and modern fragments of glass and pottery. Through this layer had been cut a modern rubbish pit (31, not shown on Fig 6) which contained large quantities of glass (not retained) and fragments of a post-medieval green-glazed storage jar.
- 4.2.2 A dark brown clay-loam plough soil (02) was present below the modern build-up which contained fragments of post-medieval pottery. This layer continued to the base of the trench at a depth of 1.2m from the present ground surface.
- 4.2.3 A small 2x1m box was excavated at the northern end of the trench to investigate the depth of undisturbed natural. This was identified at a depth of 1.4 m (7.71m OD) as a yellowish-grey clay (04), immediately below the post-medieval ploughsoil layer (02). Cut into this natural was the butt end of a ditch (16) which appeared to be running parallel to Gwindy Street, the fill of which (17) contained post-medieval pottery, coal and brick fragments. This is possibly a boundary ditch associated with the agricultural use of the area in the post-medieval period.

- 4.2.4 The finds recovered from the trench were exclusively of post-medieval or modern date.

4.3 Area 2

- 4.3.1 Area 2 was excavated behind the street frontage, in an area which it was anticipated may have contained medieval yard activity. The trench was excavated to a depth of 1.2m below the ground surface which lay at 9.31m OD and revealed 0.81m of modern build up (01) above 0.16m of post-medieval ploughsoil (02). Below this layer was c 0.23m of ploughsoil (05) of possible medieval date which contained no datable material except for two undiagnostic flint fragments. The top of natural yellowish-grey clay (04) was reached at a depth of 1.2m (8.15m OD). Bioturbation had caused some disturbance to the upper surface of the natural clay which contained small charcoal flecks. A narrow trench was excavated along the southern baulk to define the surface of clean undisturbed natural clay, which was encountered at a depth of 1.4m (7.95m OD).
- 4.3.2 No features were revealed cutting the natural subsoil, and the only pottery from the trench was post-medieval or modern in date.

4.4 Area 3

- 4.4.1 Area 3 was a 2x2m trench to the south of the British Legion building where the ground surface lay at 9.93m OD. It was excavated to a depth of 0.5m and revealed modern build-up (01) to the full depth. The trench contained ducting for electric cabling running to the British Legion building, and was immediately backfilled.

4.5 Area 4

- 4.5.1 Area 4 was a 2x2m trench excavated to the north-east of the British Legion building where the ground surface lay at 10.23m OD. It revealed a post-medieval ploughsoil (02) to a depth of 0.54m above yellowish-grey natural clay (04) at 9.69m OD. As in Area 2, this surface of the natural clay had been mixed by bioturbation, the surface of clean undisturbed natural clay being determined at 9.33m OD. No features were revealed in this trench, and the only finds were modern in date.

4.6 Area 5

- 4.6.1 Area 5 was the 2x27m trench excavated across the central part of the site. The modern ground surface lies at 11.06m OD at the north-eastern end of the trench and slopes toward the south-west. It had been considered that the more pronounced slope at the north-eastern end of the trench might represent part of the inner rampart of the Edwardian Borough defences. At the southern end of the trench the ground level lies at 10.68m OD.
- 4.6.2 Post-medieval ploughsoil (02) consisting of a dark brown clay loam was excavated by machine and revealed the natural subsoil (04), which varied in composition from a yellowish sandy clay at the north-east end of the trench where its surface was at 10.46m OD, to a fluvioglacial orange sand at the south-west which lay at 9.70m OD. Darker patches of natural existed in the subsoil, lying in irregular hollows, possibly representing ancient tree-fall holes. No trace of stratified rampart material was revealed above the subsoil in the northern end of the trench.

- 4.6.3 A number of features were revealed cutting into the natural subsoil. Two thin trenches (14; 25) running obliquely across the trench from east to west proved to be recent field-drains when excavated. A modern ceramic water pipe (15) also ran in the same direction at the western end of the trench.
- 4.6.4 Cutting through the subsoil at the north-east end of the trench was a circular feature (06) c 1.9m in diameter which had been partially cut through by one of the recent field drains (14). Part of the feature disappeared beneath the south-eastern baulk. The feature was half-sectioned and excavated to a depth of 0.8m to discover its nature and date. The sides of the feature were very steep and regular, and retained their circularity, but the bottom was not reached. The fill of the feature (07) was a very firm brown clay loam which contained occasional animal bone and pottery. The pottery was very small and fragmentary, but included a single green glazed sherd of probable 13-14th century date and three other sherds of probable medieval/late medieval date. The regular shape of the feature, and the relative lack of finds when compared to other features such as rubbish pits suggest that this feature might be a well, of possible medieval/late medieval date.
- 4.6.5 An apparently circular feature (13) was revealed at the south-western end of the trench with a diameter of 1.2m at its widest point in the trench, but more than half lay beneath the north-western baulk. The fill (11) was a brown sandy clay loam with charcoal flecks, and contained fragments of prehistoric pottery, three sherds of which were recovered for further study (see Appendix 1). The recovery of datable evidence from initial cleaning made it unnecessary to excavate the feature more fully, and its full depth was therefore not determined.

4.7 Area 6

- 4.7.1 Area 6 was a 2x2m test pit excavated to the east of the north-eastern part of Area 5. The ground surface lay at 11.24m OD, and excavation revealed 0.65m of post-medieval ploughsoil (02) above the pinky-grey natural clay (04), which lay at 10.59m OD. A recent land-drain (30) cut across the area from east to west which is probably the same drain as excavated in Area 5 (25). The only finds recovered were post-medieval or modern in date.

4.8 Area 7

- 4.8.1 Area 7 was a 2x2m test pit excavated to the west of Area 5 and to the south of Area 6. The ground surface lay at 11.16m OD, and excavation revealed 0.56m of post-medieval ploughsoil (02) above the yellowish-grey sandy clay natural (04) which lay at 10.60m OD. Cut into this natural was an irregular feature filled with a very clean material suggesting an ancient tree fall hole, and a modern service trench (23) which was not excavated. All the finds were post-medieval or modern in date.

4.9 Area 8

- 4.9.1 Area 8 was a 2x2m test pit excavated to the east of the southern part of Area 5. The ground surface lay at 10.92m OD, and excavation revealed 0.75m of post-medieval ploughsoil (02) above the orange sand natural subsoil (04) which lay at 10.17m OD. Cut into this subsoil were two small rectangular features which contained modern sheep burials (18;19, not shown on Fig 6; skeletal

material not retained). The only finds recovered from the trench were post-medieval or modern in date.

4.10 Area 9

- 4.10.1 Area 9 was a 2x5m trench excavated in the north-east corner of the development site on the projected line of the inner Edwardian rampart. The ground level in this area lay between 12.03m OD at the north-east end of the trench and at 11.87m OD at the south-west end.
- 4.10.2 Excavation of a very dark brown modern garden topsoil (08) to a depth of 0.55m revealed a stone layer (09) formed of stones of between 0.05-0.3m diameter, which covered the entire area. The layer was reasonably well consolidated, but its upper surface was irregular and appeared to have been disturbed by gardening activity. Excavation of the matrix of the layer produced six sherds of pottery of probable late medieval/post-medieval date. The lowest part of the layer was partly set into the underlying pink clay layer (04).
- 4.10.3 Removal of the stone layer revealed the pink clay natural subsoil (04). Cut into this layer were two linear features (22, 12) both running from east to west, which were sectioned to reveal their profile and recover datable material. No relationship between the features could be established. Feature 22 was a shallow gully c 0.1m deep with a brown clay loam fill (24) which contained fragments of mortar (not retained) and no other datable material was recovered from it. Feature 12 was a ditch 0.48m deep, with a recut (28) 0.33m deep to the south. The fills of the ditch and its recut (10;29) were both a very similar brown clay loam and could not be readily distinguished. The fills of the ditch and the recut contained fragments of animal bone, oyster shell, slag, sherds of pottery of probable 13th-14th century date and a fragment of roofing slate of post-medieval date. It is possible that the features represent a medieval ditch, recut in the post-medieval period, or alternatively that the ditch and recut are of post-medieval date and contain residual medieval pottery.

4.11 Area 10

- 4.11.1 Area 10 was a 2x2m box excavated close to the western corner of the wholesale fruit and vegetable retailer's building. The excavation revealed 0.5m of modern build up (01), and a service pipe. The trench was backfilled immediately.

5 CONCLUSIONS

- 5.1 Archaeological evaluation at the Gwindy Street site has demonstrated the existence of archaeology of varying dates across parts of the site.
- 5.2 Prehistoric activity is represented by two unstratified and undiagnostic flint fragments from Area 2 and by a pit (13) containing probably early Bronze Age pit in the south-west end of Area 5. No certain evidence of Mesolithic activity was identified. The evidence of Bronze Age activity appears to relate to other similar evidence recorded elsewhere within Rhuddlan (see 2.3.3) and elsewhere within the Vale of Clwyd (Brassil *et al* 1991, 81). Like most of the other evidence of prehistoric activity in Rhuddlan it may be significant that the pit was sited in an area of sandy subsoil (see

2.3.1), which had not been anticipated before excavation and which it has been suggested would have been more attractive to early settlement.

- 5.3 No evidence of medieval occupation on the street frontage was revealed in Area 1. However, only a limited area was excavated to a depth greater than 1.2m and it is possible that evidence may still survive at a greater depth.
- 5.4 Likewise, no evidence of medieval activity was identified in Area 2 behind the street frontage. The absence of medieval pottery in this area might indicate that the area was not occupied by buildings in the medieval period.
- 5.5 Probable evidence of medieval activity was identified towards the north-east of the site, represented by a probable well (06) at the north-east end of Area 5.
- 5.6 The stone surface and the underlying boundary ditches identified in Area 9 (12;28) are possibly of post-medieval date and may correspond to a continuation of the northern boundary of the parcel of land delimited on the maps of 1756 and 1810 (Figs 4-5) or to boundaries of properties fronting onto the High Street shown on the Tithe Apportionment Map of 1839. The boundaries here lie parallel to the anticipated rear of the line of the defences of the Edwardian Borough, however, and it is possible that one or more of the ditches identified in this area are of medieval date.
- 5.6 No evidence of the Edwardian rampart was identified in Areas 5 and 9, although the rise in ground along the boundary with the playing field to the north may be remnants of the rampart disturbed by post-medieval ploughing. Features relating to the rear of the defences of the Edwardian Borough might, however, be anticipated in the area towards the north-west boundary of the site.

6 ACKNOWLEDGEMENTS

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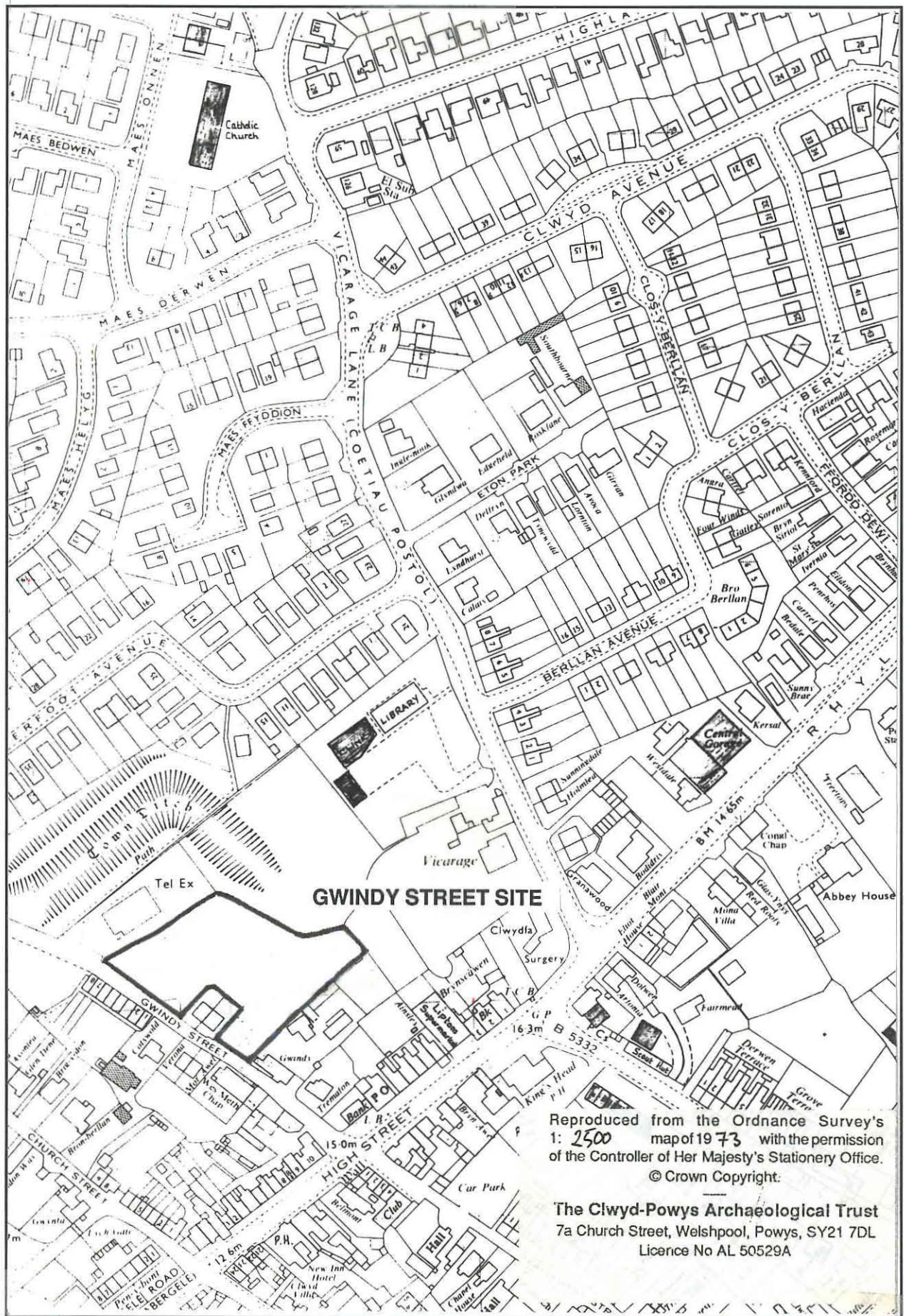


Fig 1. Gwindy Street, Rhuddlan. Site Location (Scale 1:2500)
Source: OS Sheet SJ 0278

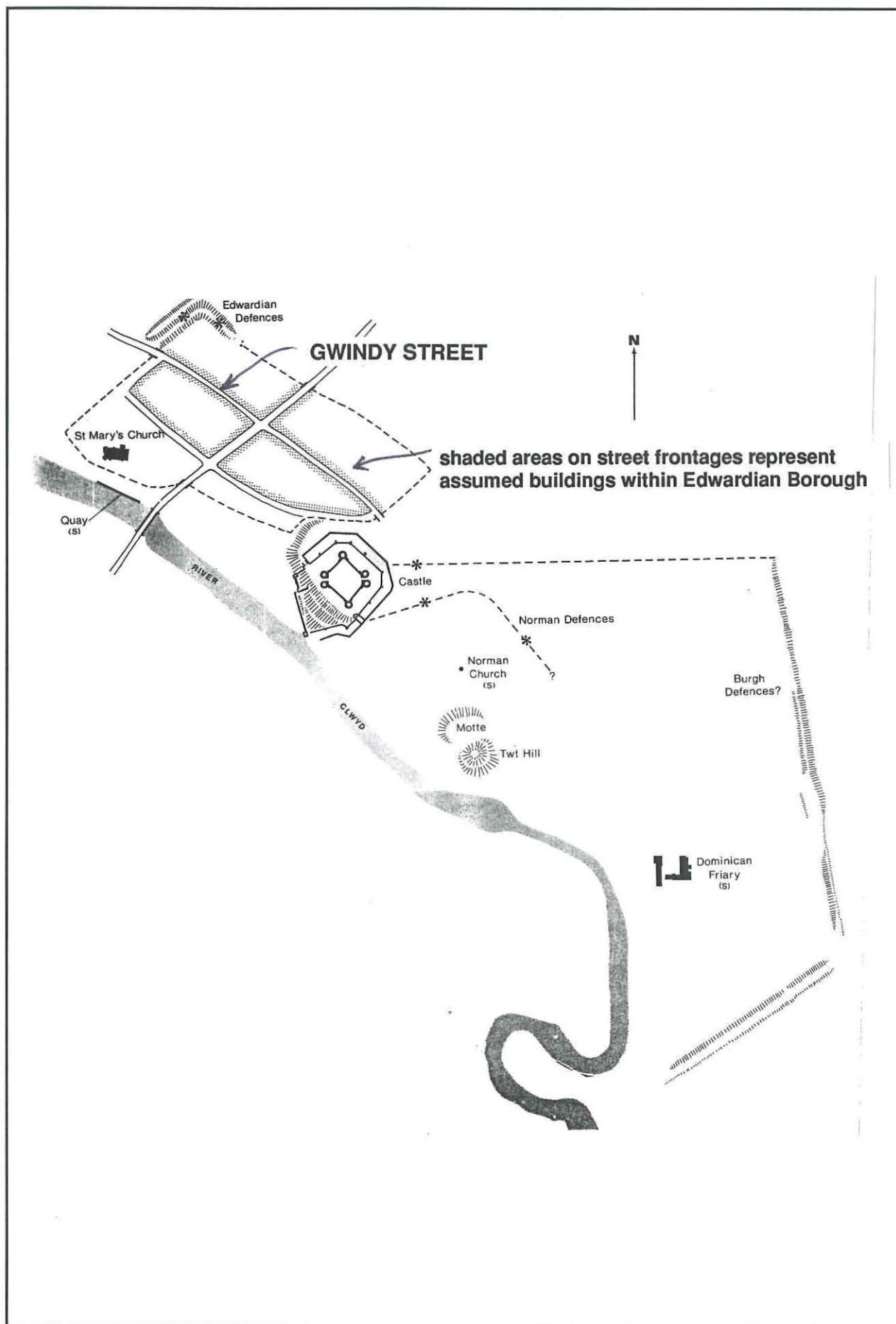


Fig 2. Rhuddlan Burgh and Borough
Source: Soulsby 1983, fig 88

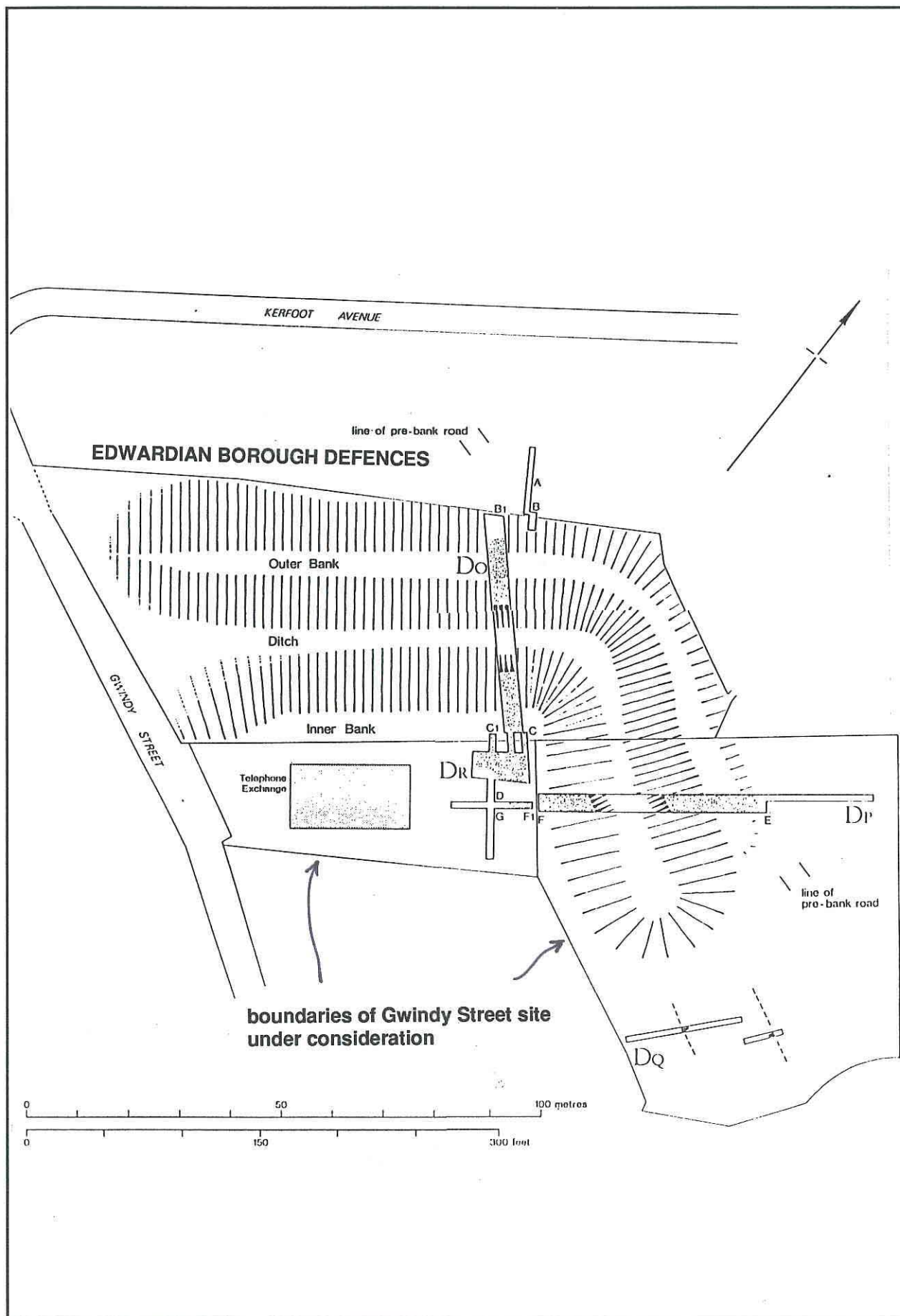


Fig 3. Plan of Site D, Gwindy Street, Rhuddlan, excavated in 1971
Source: Quinnell and Day forthcoming

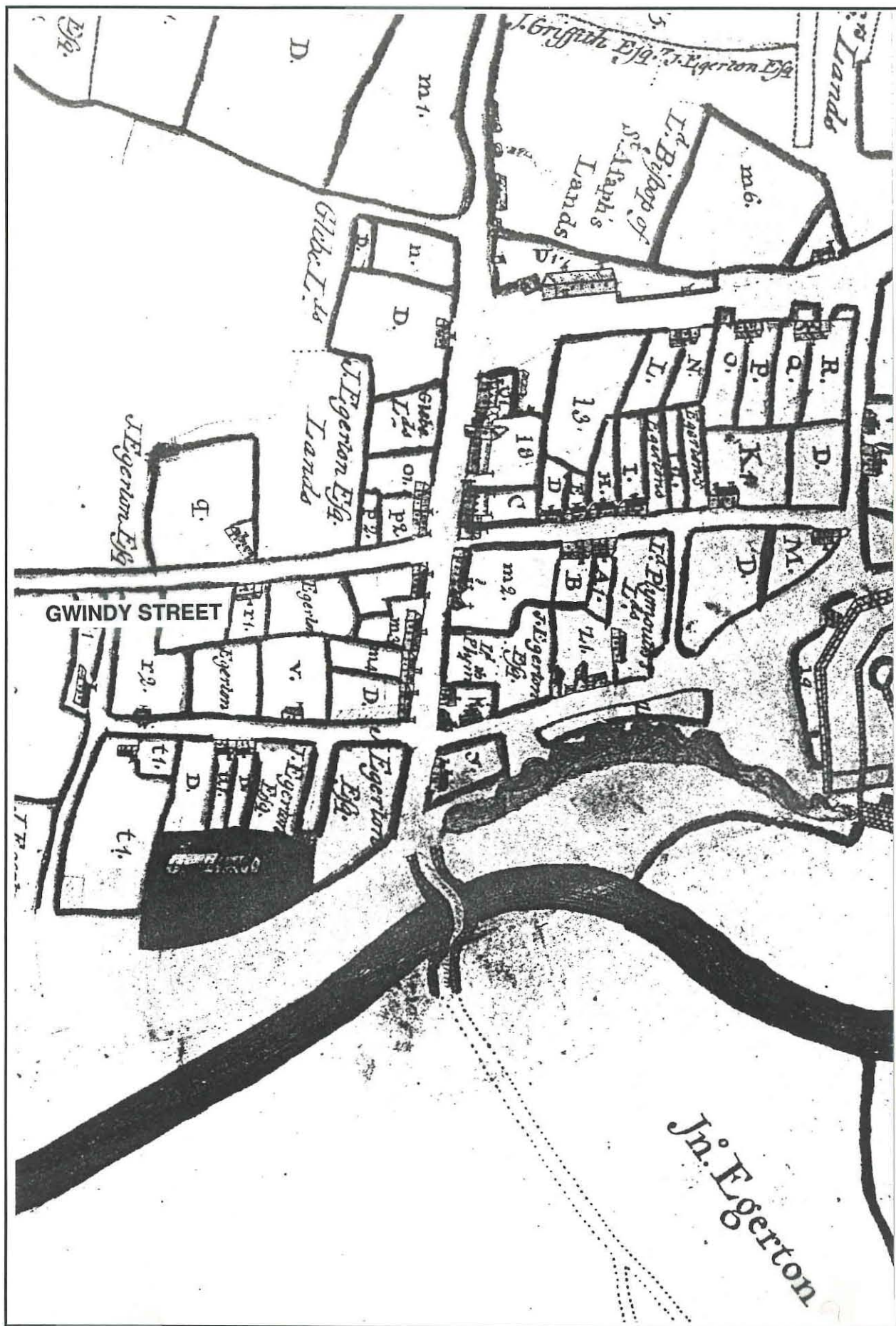


Fig 4. Rhuddlan: extract of map of 1756
Source: Clwyd Record Office Ref. No. NT/M/94(ii)

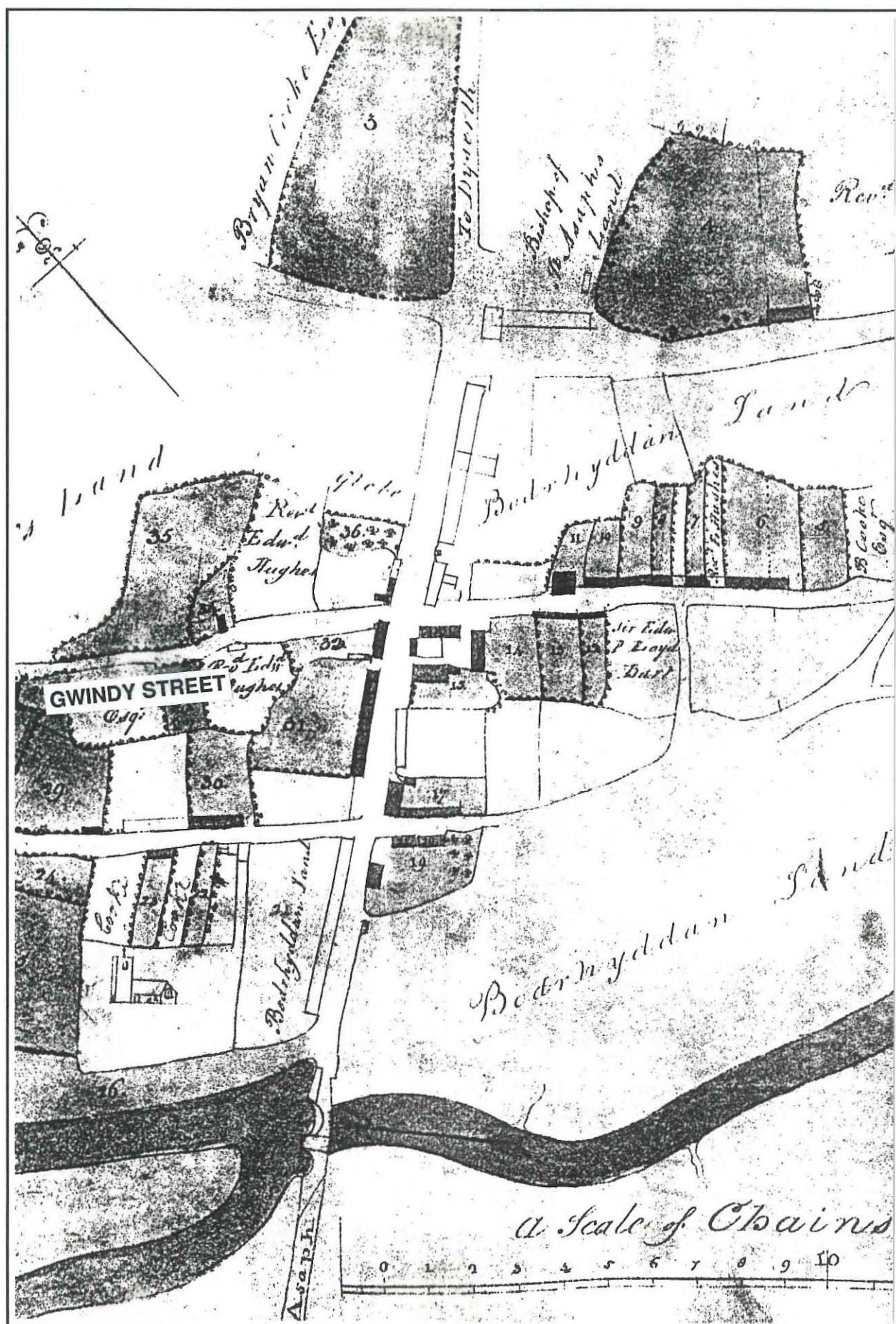


Fig 5. Rhuddlan: extract of map of 1810
Source: Clwyd Record Office Ref. No. NT/M/93

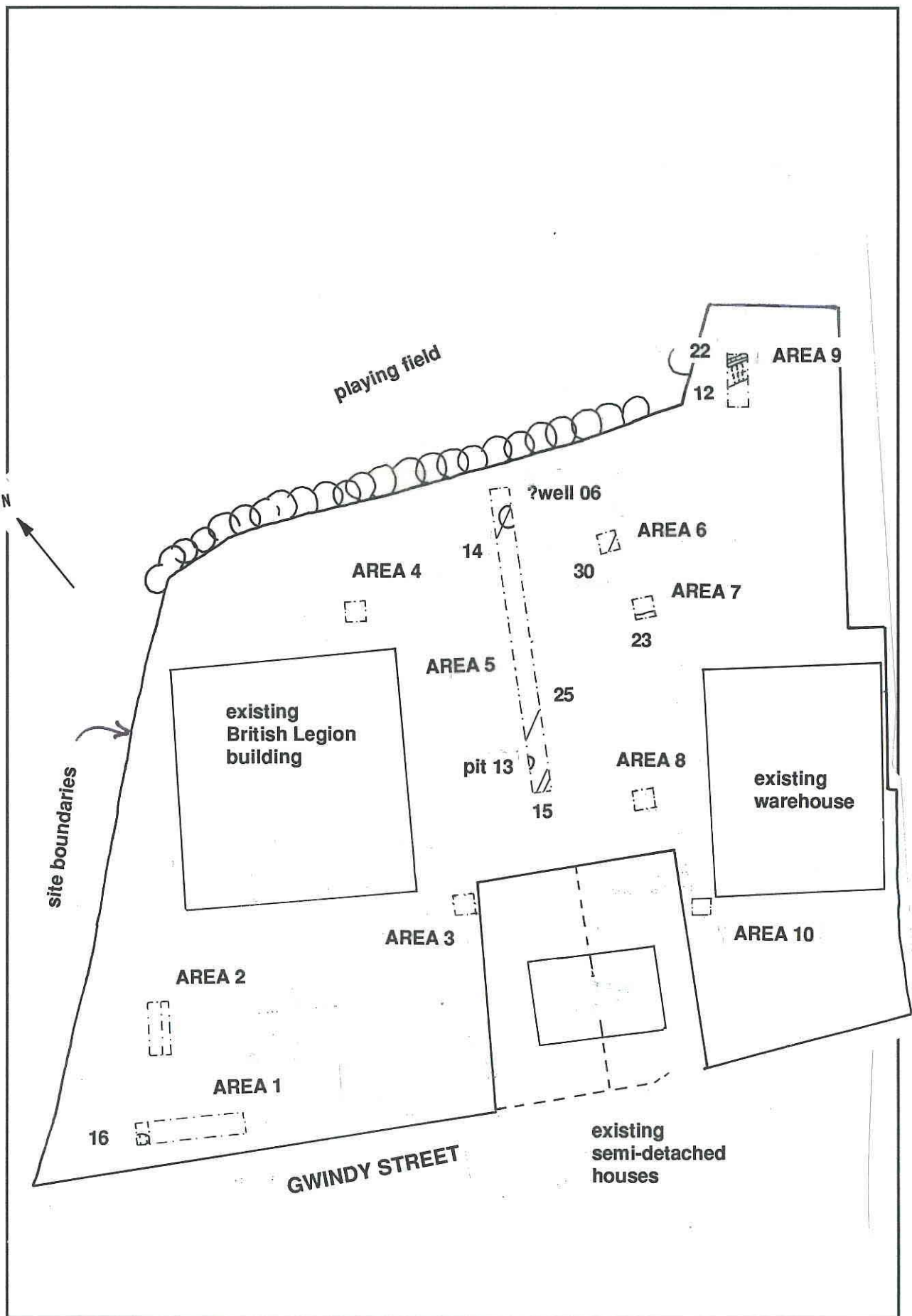


Fig 6. Gwindy Street, Rhuddlan. Location of evaluation trenches 1993 and summary plan of recorded features. (Scale 1:500)

APPENDIX 1

BRONZE AGE POTTERY FROM GWINDY STREET AREA 5, CONTEXT 11

(Dr A.M. Gibson)

Three sherds (plus smaller fragments) weighing a total of 76g. The fabric is hard, smooth and well-fired with reddish brown outer surface, black inner surface and core. The fabric has a slightly soapy texture, is up to 11mm thick and contains abundant grey igneous rock inclusions up to 6mm across. Some of these inclusions break the surfaces (particularly inner). The voided and laminated texture of the fabric indicates the former presence of some organic inclusions, possibly grass. Traces of coil or ring building can be noted in the fabric and the largest sherd has a slightly convex external profile.

The decoration, restricted to one sherd (Fig 1), comprises lines of twisted cord impressions. These appear to be arranged in opposed filled chevron motif though in the absence of apices makes this identification tenuous.

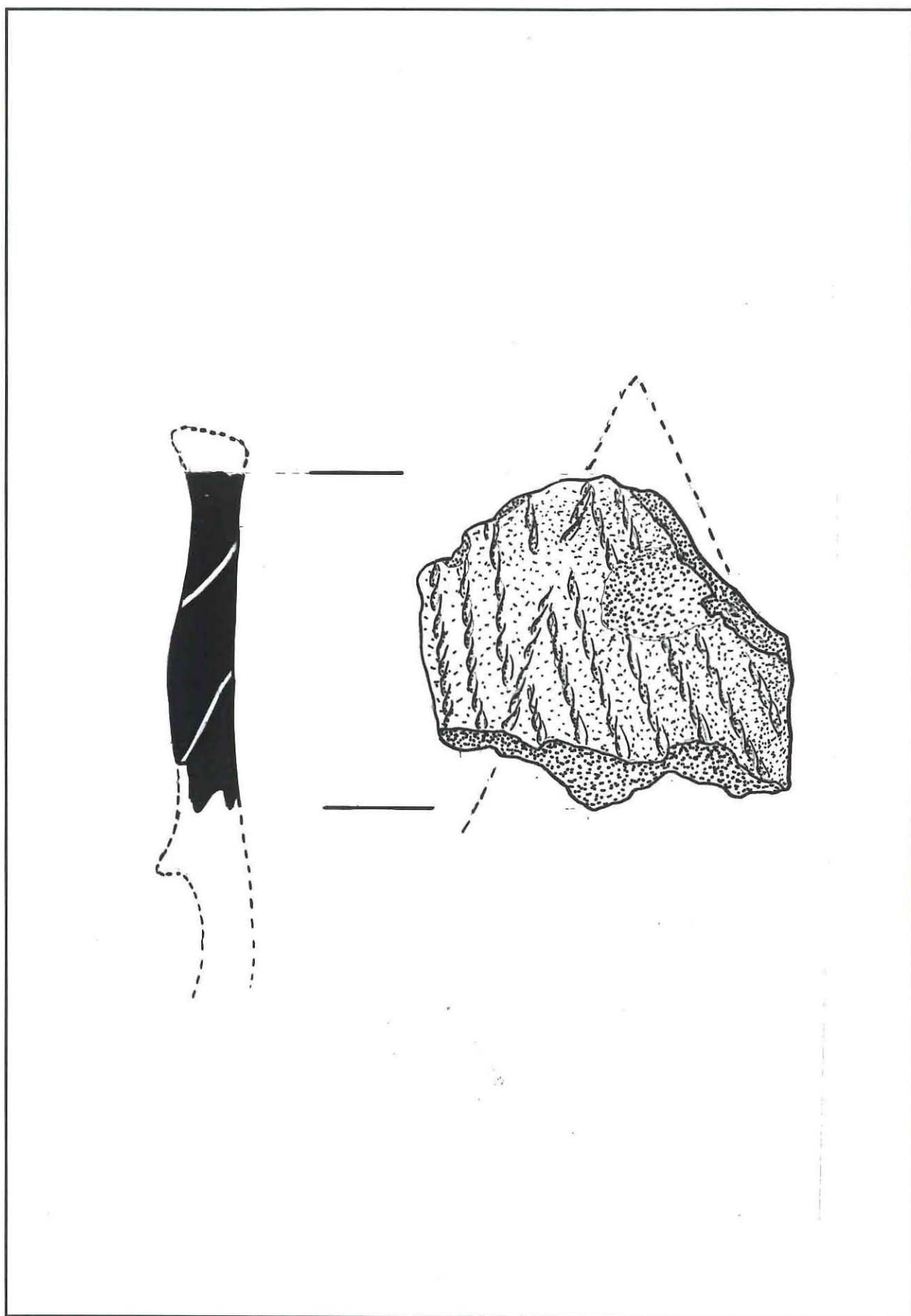
The external profile, decoration and thickness of the sherd suggests a large vessel of Collared Urn, Food Vessel Urn, Cordoned Urn or Biconical Urn affinity. Opposed filled chevrons are found on the collars of urns from *inter alia* Kilpaison, Pembroke (Savory 1980, 215, No. 419), Llanfihangel-y-Cruddyn, Cardigan (ibid, No. 427), Tredunnock, Monmouth (ibid No. 339) and Brenig 44, Denbighshire (Lynch 1993, 129). Parallels on Cordoned Urns may be found at Llanddyfnan, Anglesey (ibid, No.404). The motif appears on a Biconical Urn from Bromfield, Shropshire (Stanford 1982, fig. 16.39) though the technique is incision rather than cord.

The sherd also draws parallel with what appears to be a cord-decorated Food Vessel from Rhuddlan (Berridge forthcoming P19). This has twisted cord hurdle motif in the neck apparently giving to a slightly everted rim of a vase Food vessel.

On balance, it is likely that the present sherd represents a fragment of Collared Urn, possibly from the collar itself. Too little survives to be certain of this identification, however or to assign the vessel to a type or style. A date of c 1700-1500 BC may, however, be a safe estimate.

References

- Berridge, P. forthcoming. Between the Mesolithic and the Iron Age, with a study of Bronze Age Pottery group in Pit C46, in Quinnell and Day forthcoming.
- Lynch, F.M. 1993. *Excavations in the Brenig Valley. A Mesolithic and Bronze Age Landscape in North Wales*. Cambrian Archaeological Monographs No. 5, Cardiff: Cambrian Archaeological Association and Cadw:Welsh Historic Monuments.
- Savory, H.N. 1980. *Guide Catalogue of the Bronze Age Collections*. Cardiff: National Museum of Wales.
- Stanford, S.C. 1982. Bromfield, Shropshire - Neolithic, Beaker and Bronze Age sites, 1966-79. *Proceedings of the Prehistoric Society* 48, 279-320.
- Quinnell, H. and Day, M., forthcoming *Excavations at Rhuddlan, Clwyd: 1969-73: Mesolithic to Medieval*



Appendix 1 Fig 1. Bronze Age pottery from Gwindy Street Area 5, Context 11. The largest sherd of the group, showing twisted cord decoration. (Scale 1:1). Drawing by A.M. Gibson.

APPENDIX 2

A Report for
**CLWYD-POWYS
ARCHAEOLOGICAL TRUST**

on a

Geophysical Survey

carried out at

GWINDY STREET, RUDDLAN

August 1993

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Methodology

Discussion

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Figure 2 -	1:5000	Detailed Location Plan
Figure 3 -	1:500	Magnetometer Data
Figure 3A -	1:500	Magnetometer Data with wider plotting parameters
Figure 4 -	1:500	Raw Resistance Data
Figure 5 -	1:500	Processed Resistance Data
Figure 6 -	1:500	Abstraction of Features

INTRODUCTION

This geophysical survey was commissioned as part of an archaeological evaluation prior to the proposed development of the site.

DESCRIPTION OF THE SITE

The site is approximately 4000m² in area and lies on the north east side of Gwindy Street in the town of Rhuddlan (OS Ref SJ 0227 7824). There are two existing buildings on the site. The British Legion Clubhouse has a car park and the other, a warehouse, has a concrete forecourt. The site generally is rough with masonry heaps in various locations. The underlying geology is boulder clay but it is expected that the site would have urban accumulations of unknown depth. The site lies near the north eastern corner of the Edwardian borough's town defences.

METHODOLOGY

Two techniques were required in the brief, magnetometer and resistivity, both of which are described below.

Magnetometer

Although the changes in the magnetic field resulting from differing features in the soil are usually weak, changes as small as 0.2 nanoTesla (nT) in an overall field strength of 48,000nT, can be accurately detected using an appropriate instrument.

The mapping of the anomaly in a systematic manner will allow an estimate of the type of material present beneath the surface. Strong magnetic anomalies will be generated by buried iron-based objects or by kilns or hearths. More subtle anomalies such as pits and ditches can be seen if they contain more humic material which is normally rich in magnetic iron oxides when compared with the subsoil.

To illustrate this point, the cutting and subsequent silting or backfilling of a ditch may result in a larger volume of weakly magnetic material being accumulated in the trench compared to the undisturbed subsoil. A weak magnetic anomaly should therefore appear in plan along the line of the ditch.

The magnetic survey was carried out using an FM36 Fluxgate Gradiometer, manufactured by Geoscan Research. The instrument consists of two fluxgates mounted 0.5m vertically apart, and very accurately aligned to nullify the effects of the earth's magnetic field. Thus readings relate to the difference in localised magnetic anomalies compared with the general magnetic background. Readings are taken automatically with a sample trigger and held in an 'on board' data logger. The data is later downloaded into a computer for processing and presentation in the same way as the resistance meter.

Processing can emphasise various aspects contained within the data but which are often not easily seen in the raw data. Basic processing of the magnetic data involves 'flattening' the background levels with respect to adjacent traverses and adjacent grids. 'Despiking' is also performed to remove the anomalies resulting from small iron objects often found on agricultural land.

Once the basic processing has flattened the background it is then possible to carry out low pass filtering to reduce 'noise' in the data and hence emphasise the archaeological or man-made anomalies. The presentation of the data for the site involves a print-out of the 'despiked and filtered' data.

Magnetic features have been identified and plotted onto the 'Abstraction of Features' drawing for the site, numbered for ease of reference and prefixed with the letter 'M'.

Resistance Meter

This method relies on the relative inability of soils (and objects within the soil) to conduct an electrical current which is passed through them. As resistivity is linked to moisture content, and therefore porosity, hard dense features such as rock will give a relatively high resistivity response, while features such as a ditch which retains moisture give a relatively low response.

The resistance meter used was an RM15 manufactured by Geoscan Research incorporating a mobile Twin Probe Array. The Twin Probes are separated by 0.5m and the associated remote probes were positioned approximately 15m outside of the grid. This instrument uses an automatic data logger which permits the data to be recorded on site for later downloading to a computer for processing and presentation.

The processing typically involves the 'despiking' of high contact resistance readings and the passing of the data through a high pass filter. This has the effect of removing the larger variations in the data often associated with geological features. The net effect is to enhance the archaeological or man-made anomalies contained in the data. The presentation of the data for the site involves a print-out of the raw data as well as 'despiked and filtered' data.

Resistance features have been identified and plotted onto the 'Abstraction of Features' drawing for the site, numbered for ease of reference and prefixed with the letter 'R'.

Though the values being logged are actually resistances in ohms they are directly proportional to resistivity (ohm-metres) as the same probe configuration was used through-out.

The survey was carried out on Tuesday 31st August 1993 when the weather was fine. The survey areas were set out using a tape measure and optical square.

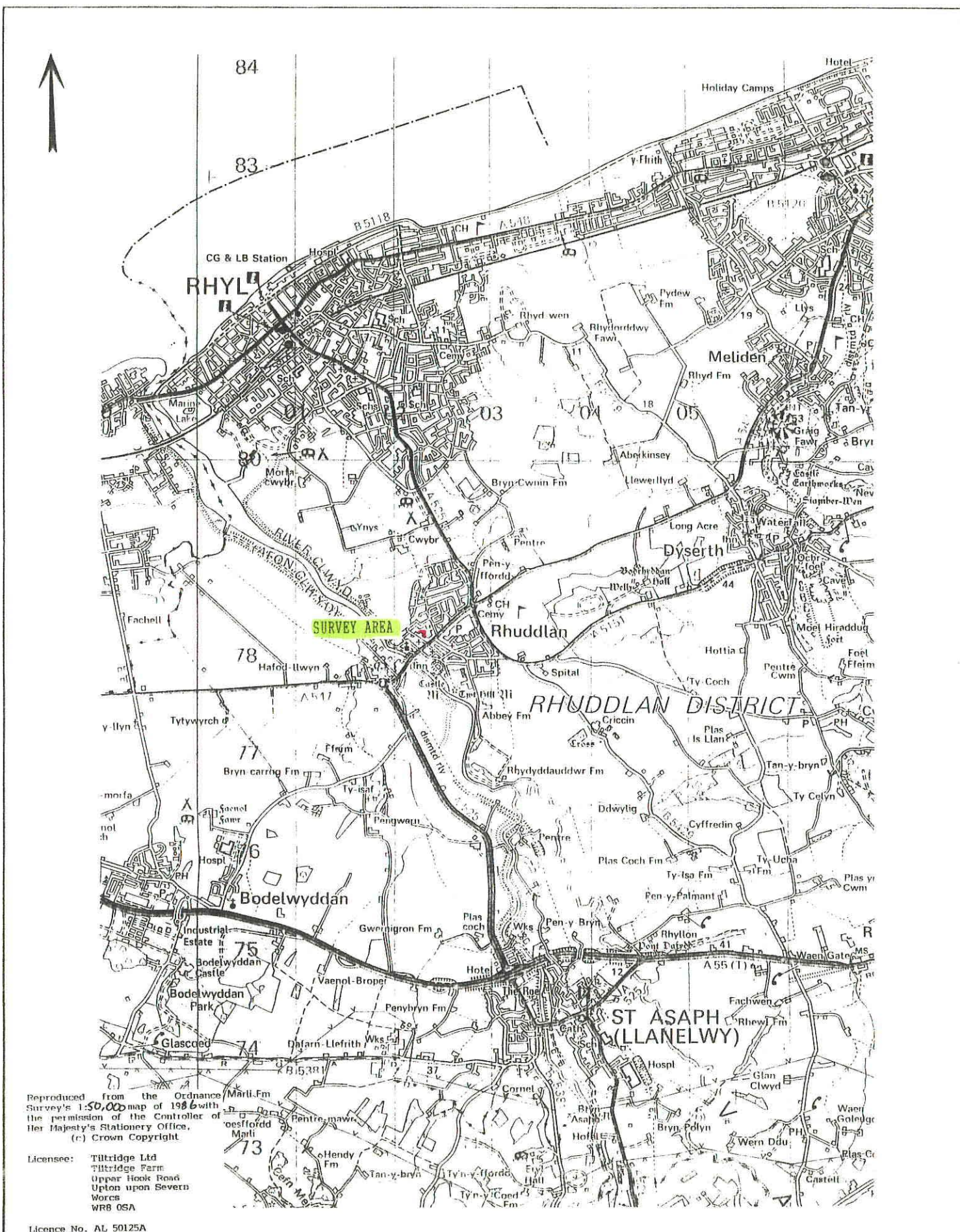
DISCUSSION

As the ground surface was mainly covered with gravel or hard standing the resistivity survey was restricted to a section on the eastern side of Area B. Nothing of significance is to be seen in the grey scale plots of the resistance survey (Figures 4 and 5).

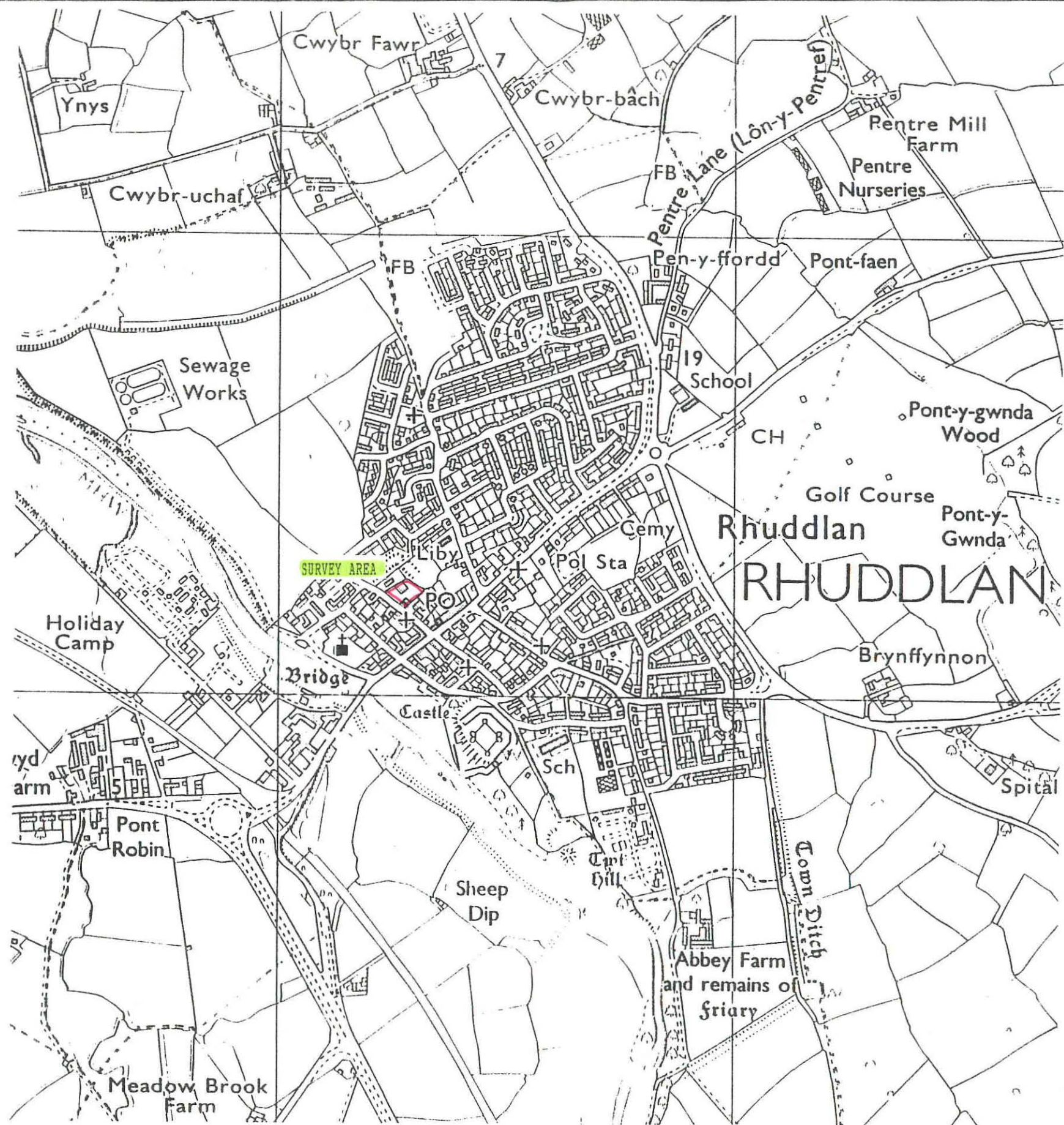
The magnetometer survey (Figures 3 and 3A) revealed strong magnetic anomalies within Area A. M1 is a car parked on the site beneath which is a manhole cover. M2 is another manhole cover which was lifted and revealed several drainage pipes as plotted onto Figure 7. The mixed area M3 is thought to be metal associated with the boundary of the site and other metallic debris.

The other larger area (Area B) also produced several anomalies. M4 are two small areas part unsurveyed due to undergrowth as well as an area of strong mixed levels which are likely to be from metal debris. The scatter of discrete magnetic anomalies across the northern part of this area are likely to be from buried metal objects, particularly M5 and M9. It should be noted, however, that M6, M7 and M8 have lower magnetic levels and are either as a result of deeper buried objects or from areas of burning.

Two weaker linear anomalies can be seen in M10 and M11 which may potentially be of interest but an interpretation as to what they may represent is difficult to make.



Date August 1993	Client CLWYD-POWYS ARCHAEOLOGICAL TRUST	STRATASCAN™ TILTRIDGE FARM UPPER HOOK ROAD UPTON UPON SEVERN WORCESTERSHIRE WR8 0SA UK TELEPHONE (0684) 592266
Scale 1:50 000	Subject Geophysical Survey Gwindy Street, Rhuddlan General Location Plan	
Figure 1		



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Upper Hook Road
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Worce
WR8 0SA

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Date August 1993

Client CLWYD-POWYS ARCHAEOLOGICAL TRUST

Figure 2

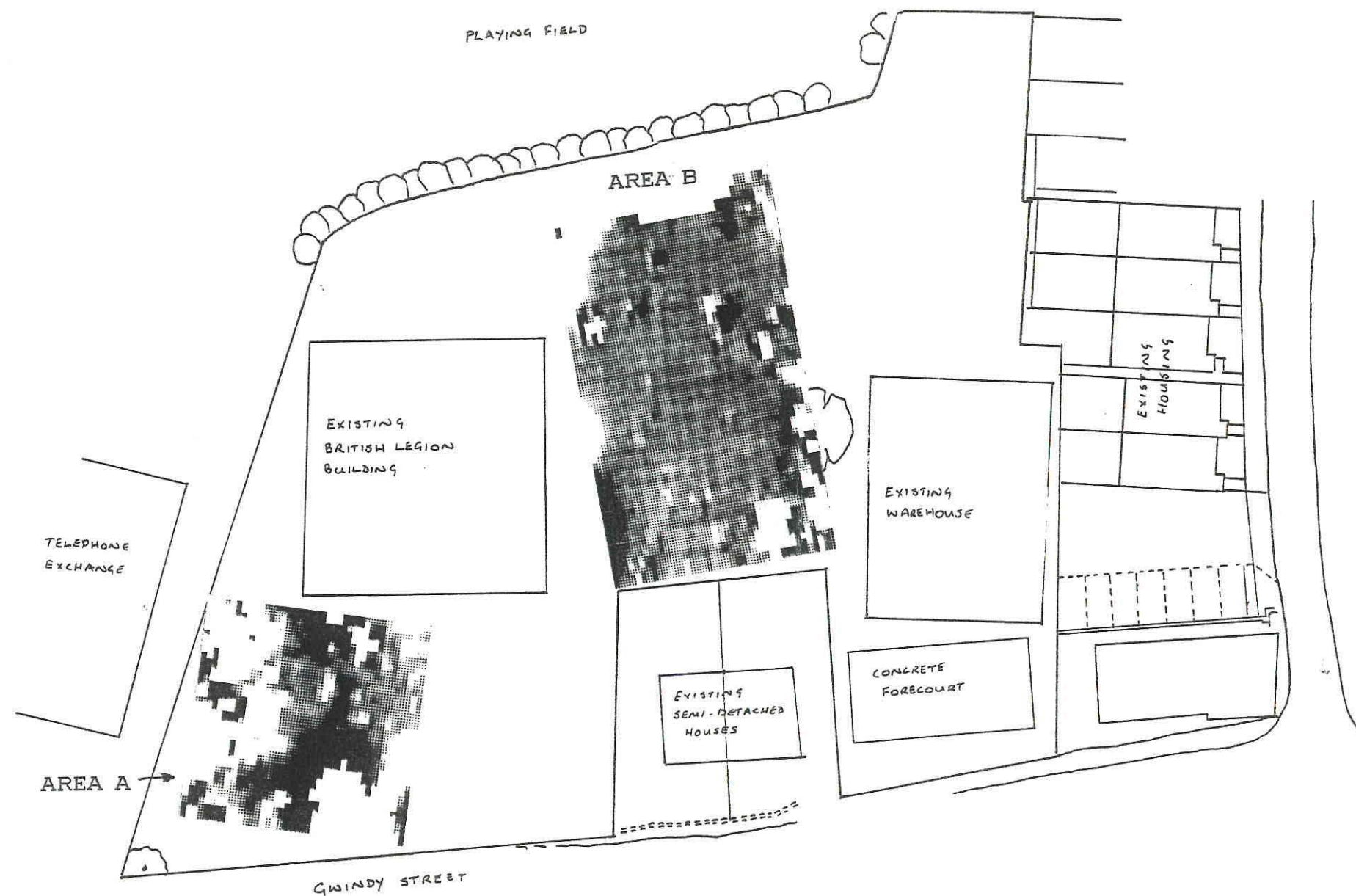
Scale 1:10 000

Subject Geophysical Survey
Gwindy Street, Rhuddlan
Detailed Location Plan

STRATASCAN™

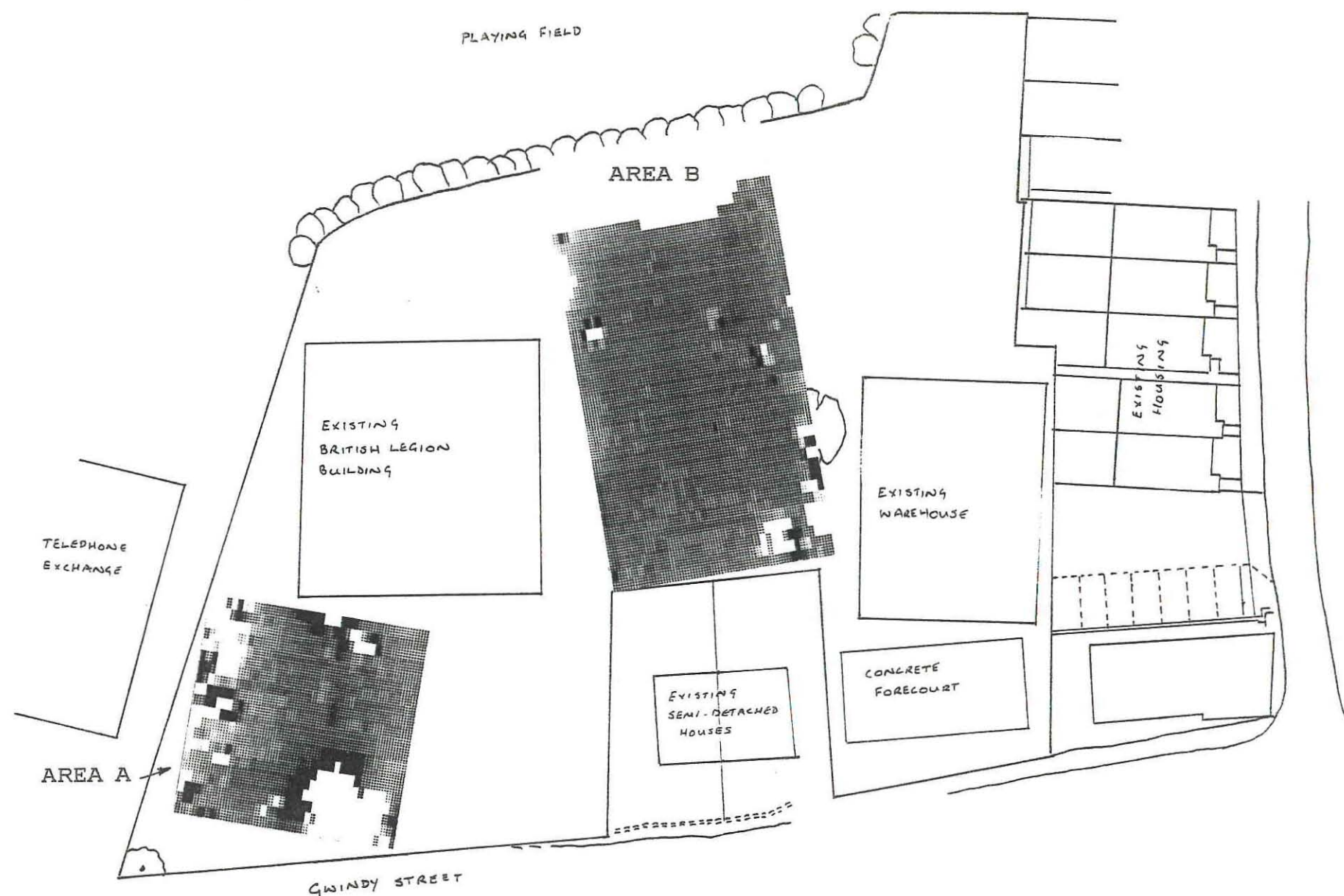
TELEPHONE (0684) 592266
FAX (0684) 594142

TILTRIDGE FARM
UPPER HOOK ROAD
UPTON UPON SEVERN
WORCESTERSHIRE WR8 0SA UK



Plotting parameters
 Minimum -8nT (white)
 Maximum +8nT (black)

Date August 1993	Client CLWYD-POWYS ARCHAEOLOGICAL TRUST	Figure 3	STRATASCAN™ TELERHONE (0684) 592266 FAX (0684) 594142 TILTRIDGE FARM UPPER HOOK ROAD UPTON UPON SEVERN WORCESTERSHIRE WR8 0SA UK
Scale 1:500	Subject Geophysical Survey Gwindy Street, Ruddlan Magnetometer Data		



Plotting parameters
Minimum -50nT (white)
Maximum +50nT (black)

Date August 1993

Client CLWYD-POWYS ARCHAEOLOGICAL TRUST

Figure 3A

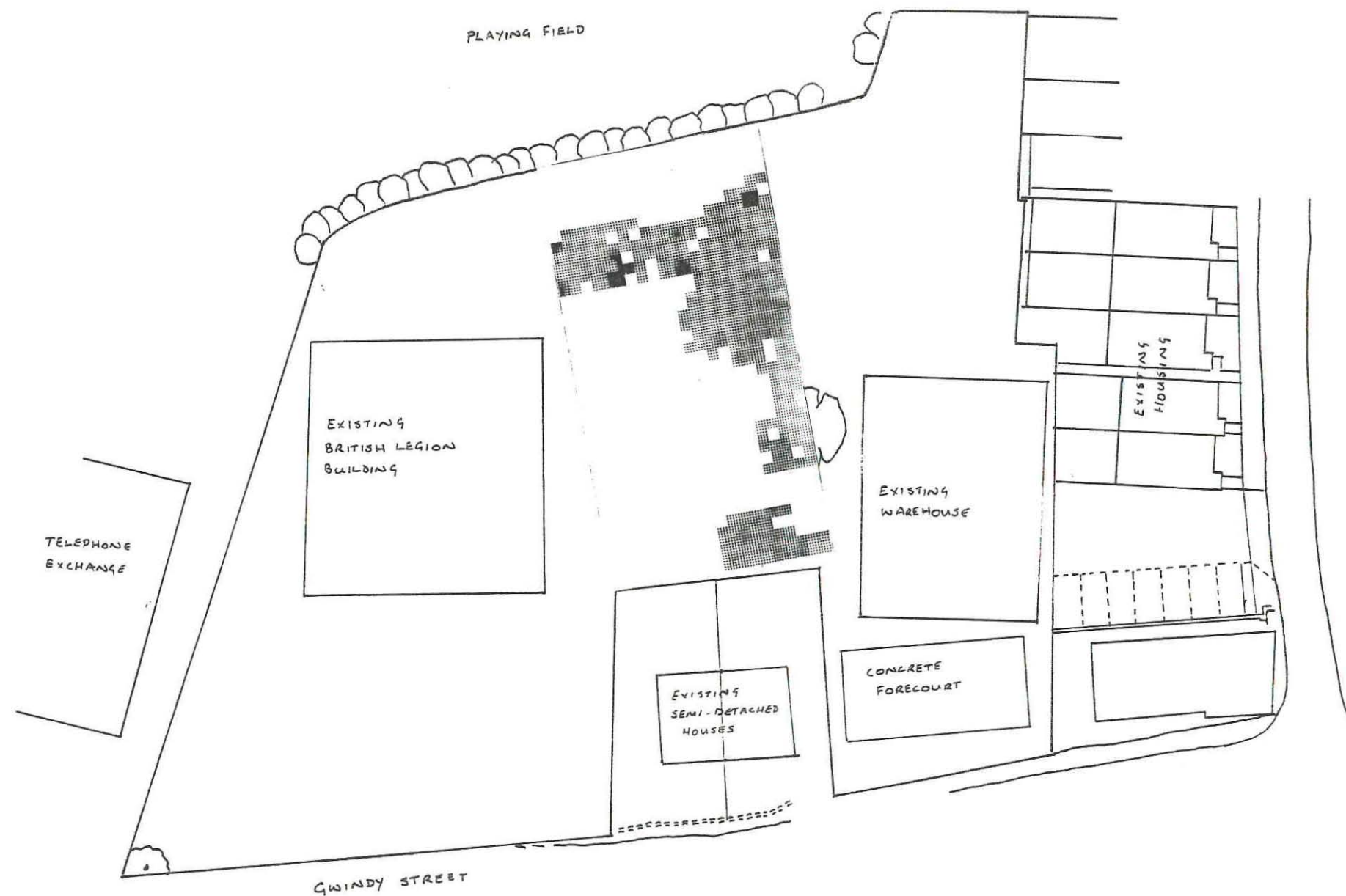
Scale 1:500

Subject Geophysical Survey
Gwindy Street, Rhuddlan
Magnetometer Data with wider plotting parameters

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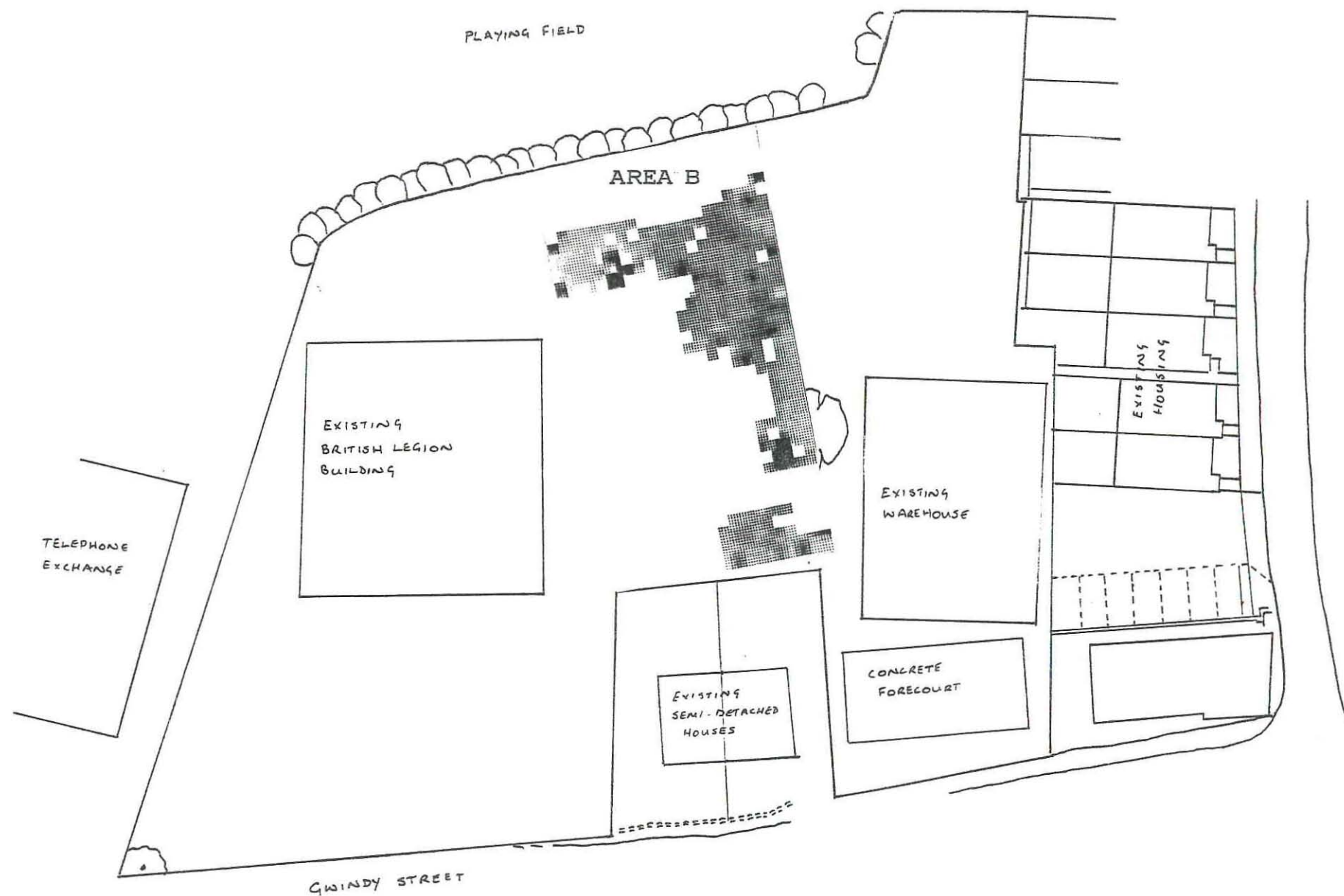
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FAX (0684) 594142

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UPPER HOOK ROAD
UPTON UPON SEVERN
WORCESTERSHIRE WR8 0SA UK



Plotting parameters
 Minimum 20 ohms (white)
 Maximum 107 ohms (black)

Date August 1993	Client CLWYD-POWYS ARCHAEOLOGICAL TRUST	Figure 4	STRATASCAN™ TELERHONE (0684) 592266 FAX (0684) 594142 TILTRIDGE FARM UPPER HOOK ROAD UPTON UPON SEVERN WORCESTERSHIRE WR8 0SA UK
Scale 1:500	Subject Geophysical Survey Gwindy Street, Rhuddlan Raw Resistance Data		



Plotting parameters
Minimum -18 ohms (white)
Maximum +17 ohms (black)

Date August 1993

Client CLWYD-POWYS ARCHAEOLOGICAL TRUST

Figure 5

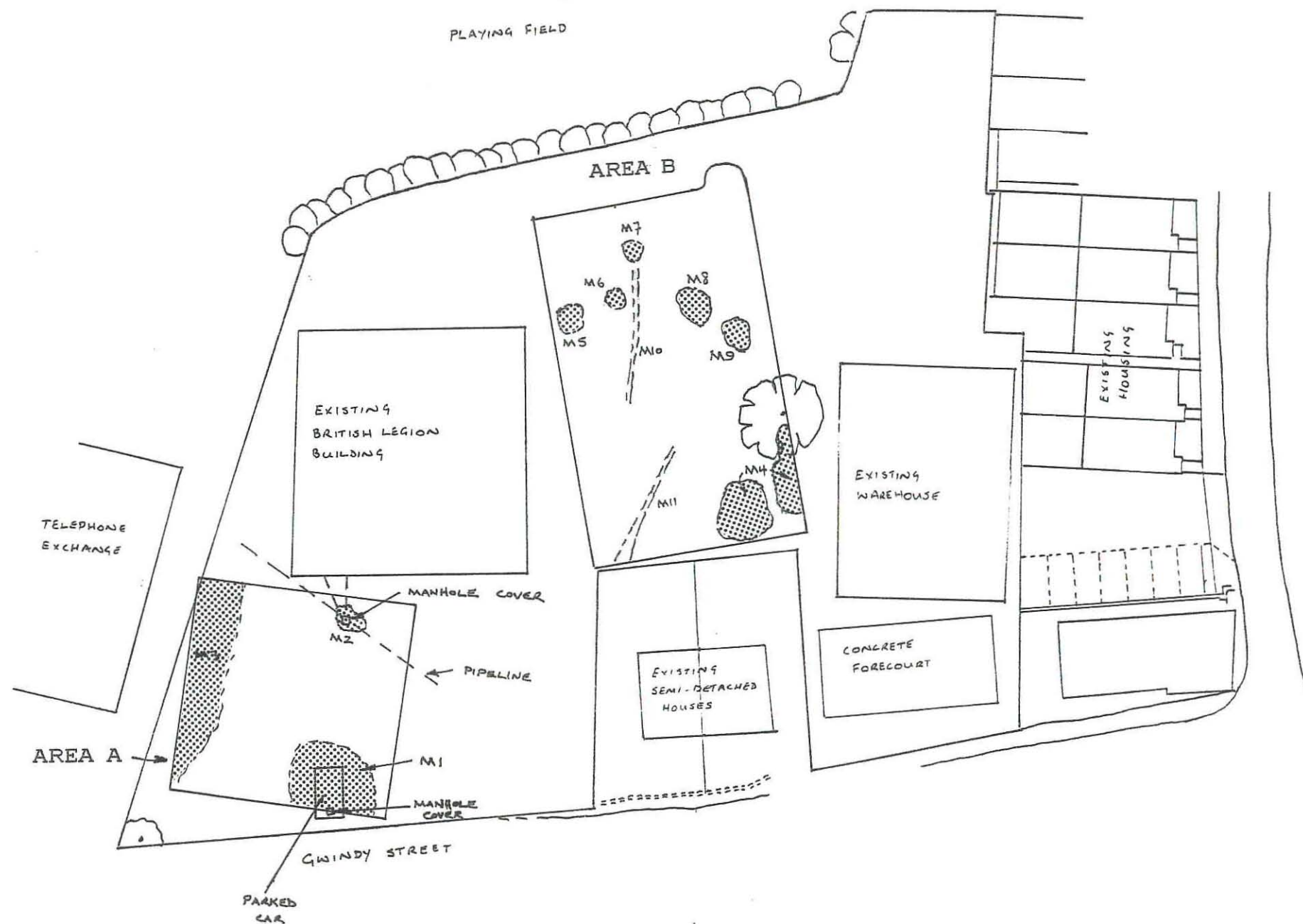
Scale 1:500

Subject Geophysical Survey
Gwindy Street, Rhuddlan
Processed Resistance Data

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Date August 1993

Client CLWYD-POWYS ARCHAEOLOGICAL TRUST

Figure 6

Scale 1:500

Subject Geophysical Survey
Gwindy Street, Rhuddlan
Abstraction of Features

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APPENDIX 3

LAND AT GWINDY STREET, RUDDLAN, CLWYD

SPECIFICATION FOR AN ARCHAEOLOGICAL FIELD EVALUATION

1 Introduction

1.1 The proposed residential development on land off Gwindy Street, Rhuddlan, lies within an area of high potential archaeological sensitivity. The north-eastern corner of the 13th-century town defences is adjacent and Gwindy Street is one of the original Edwardian streets. Mesolithic, Neolithic, Bronze Age and Roman artefacts have also been discovered in the locality.

1.2 Rhuddlan Borough Council have decided on the advice of the Clwyd Archaeology Service who are archaeological curators for the District that a field evaluation is necessary to assess the implications of the proposed development on the archaeological resource in order that these can be taken into account during the determination of the planning application. Accordingly a brief has been prepared by the Clwyd Archaeology Service which describes the scheme of archaeological works required.

2 Objectives

2.1 The objectives of the evaluation are:

2.1.1 to reveal by means of a combination of desk-based assessment, geophysical survey and evaluation trenches, the nature, 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 archaeology revealed in the evaluation trenches;

2.1.3 to prepare a report outlining the results of the field evaluation and incorporating sufficient information on the archaeological resource for the planning authority to assess the implications of the development.

3 Methods

3.1 The first stage of the evaluation will examine all the readily available primary and secondary records relating to the area, including previous excavation reports.

3.2 The second stage will be a geophysical survey of two areas, one 20m x 20m, the other 40m x 20m. The position of these areas and the geophysical methods to be used are outlined in the brief and will be adhered to during the work programme.

3.3 The third stage will take the form of three trenches of variable size, together with seven test pits, giving a total evaluation area of 94 square metres. The size of all of these is also specified in the brief and will be adhered to. The trenches will have the topsoil and any modern overburden removed mechanically, with this phase of the work being supervised closely by the archaeological team leader. This will be followed by manual excavation of all areas deemed to be of potential archaeological significance within the trench.

3.3 The excavation will be undertaken using standard evaluation procedures:

3.3.1 removal of modern overburden and sterile lower levels

3.3.2 evaluation of the archaeological deposits by hand trowelling to establish their importance and integrity, but avoiding any unnecessary disturbance of the deposits. All features encountered will be examined as fully as appropriate within the constraints imposed by time and safety considerations. Trenches will not be excavated by hand below a depth of 1.2m from the surface.

3.3.3 all archaeological contexts recorded using the standard numbered context system employed by CPAT. All significant contexts to be planned and/or drawn in section at appropriate scales (as defined in the Evaluation Brief), and photographed in monochrome and colour. All drawn records will be related to control points depicted on modern maps, and a general plan of the site showing the location of all the evaluation trenches will be prepared.

3.3.4 all archaeological artefacts and environmental samples recorded and processed in a manner appropriate to the material involved. Those requiring conservation or other specialist treatment will be stored in a stable environment until such times as they can be examined by a specialist. All finds, except those deemed to be Treasure Trove, are the property of the landowner. It is anticipated that they will be donated to an appropriate museum, subject to agreement being reached with the landowner and the museum curator.

3.4 Following the on-site work a report will be prepared according to the principles laid out in the Evaluation Brief.

3.5 The site archive will be prepared to specifications laid out in Appendix 3 in the Management of Archaeological Projects (English Heritage, 1991), and will be deposited in the Sites and Monuments Record for Clwyd maintained by the Clwyd-Powys Archaeological Trust.

4 Resources and Programming

4.1 The evaluation will be undertaken by a small team of skilled archaeologists under the direct supervision of an experienced field archaeologist, who will also be responsible for the desk-based assessment. Overall supervision will be by a senior member of CPAT's staff who will also be a member of the Institute of Field Archaeologists.

4.2 All report preparation will be completed by the same field archaeologist who conducted the evaluation.

4.3 It is anticipated that the assessment and evaluation will take up to three weeks in all and the subsequent report would be prepared 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.

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.

R. J. Silvester
16 August 1993

APPENDIX 4

ARCHIVE AND FINDS

SITE ARCHIVE

Plans and Sections

Location plan of trenches, including position of features and OD level values of trenches and various features.

Photographic Archive

35mm colour transparencies of excavated trenches and features.

35mm black and white negatives and contact prints of excavation trenches and features.

Context Records

Record forms describing all recorded contexts.

FINDS

Flintwork

2 undiagnostic and unstratified fragments from Area 2

Prehistoric Pottery

3 sherds and smaller fragments, Area 5 context 11

Medieval Pottery

4 sherds, medieval/late medieval, Area 5 context 7

3 sherds, Area 9 contexts 10/28

Post-medieval Pottery

6 sherds, Area 9 context 9

9 sherds, Area 1 context 31

Post-medieval pottery from recent build-up (1) and from post-medieval ploughsoil (2) was not retained.

Ironwork

1 heavily corroded ?nail, Area 5 context 7

1 heavily corroded ?nail, Area 9 context 9

Slag

1 fragment, Area 5 context 7

1 fragment, Area 9 context 9

1 fragment, Area 9 contexts 10/28

Shell

1 oyster shell, and 2 other shell fragments, Area 9 contexts 10/28

Animal bone

16 fragments (of which 1 calcined), Area 5 context 7

8 fragments, Area 9 context 9

12 fragments, Area 9 contexts 10/28

Charcoal

1 fragment, Area 5 context 11

Roofing slate

1 fragment, Area 9 contexts 10/28