CARDIGAN HEALTHCARE CENTRE, CEREDIGION:

ARCHAEOLOGICAL EVALUATION 2018

(NGR SN 1766 4673)

DAT Archaeological Services

Prepared by DAT Archaeological Services
For: Interserve Construction Limited

REGISTERED ORGANISATION CIfA

ymddiriedolaeth archaeolegol DYFED archaeological trust

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ARCHAEOLOGICAL EVALUATION 2018

Gan / By

Charles Enright

Ymddiriedolaeth Archaeolegol Dyfed Cyf
Corner House, 6 Stryd Caerfyrddin, Llandeilo, Sir Gaerfyrddin SA19 6AE
Ffon: Ymholiadau Cyffredinol 01558 823121
Adran Rheoli Treftadaeth 01558 823131
Ebost: info@dyfedarchaeology.org.uk
Gwefan: www.archaeolegdyfed.org.uk

Dyfed Archaeological Trust Limited
Corner House, 6 Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AE
Tel: General Enquiries 01558 823121
Heritage Management Section 01558 823131
Email: info@dyfedarchaeology.org.uk
*Website: www.*dyfedarchaeology*.org.uk*

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CARDIGAN HEALTHCARE CENTRE, CEREDIGION: ARCHAEOLOGICAL EVALUATION 2018

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SUMMARY

An archaeological evaluation was undertaken at the development site of Cardigan Healthcare Centre (NGR SN 1766 4673) in order to address an archaeological condition placed upon the planning decision for the development (Planning Application No. A150846).

The proposed development lies adjacent to Cardigan Town, which has seen intensive human activity at least as far back as the medieval period. Consequently there was considered to be a strong possibility that archaeological features or deposits could extend into the development area and therefore be adversely affected.

DAT Archaeological Services had previously conducted a geophysical survey across the entirety of the development area. The survey revealed four types of features: trackways, land drains, pits and large circular and sub circular features. The latter features were interpreted as potentially representing drip gullies of Iron Age roundhouses.

Based on the findings of the geophysical survey five evaluation trenches were machine excavated under archaeological supervision across the development site, targeting potential features of interest in order to provide information on the character, date and significance of any below ground archaeological remains. In addition to this a strip, map and record exercise within the areas of the site compound and access tracks was undertaken.

The archaeological works revealed the same soil profile across the whole of the development area that comprised c.0.30m depth of grey/brown silty loam topsoil lying above natural yellow silty clay subsoil. Attempts to improve the land were evidenced by the many 19th/20th century land drains recorded running across the development area cut into the natural clay subsoil. Evidence of past ploughing was clearly seen in the large number of plough scars crossing the site just cutting into the natural clay subsoil. Other recorded features included various linear gullies and ditches, a number of which contained fragments of pottery dating from the 19th/20th century.

It is likely that all the recorded features reflect post medieval or modern farming and land management activity and are of low or negligible archaeological significance. No circular features, as identified by the geophysical survey, were recorded during the archaeological investigations. The geophysical survey results and interpretation diagrams are not always a definitive model of what lies beneath the ground surface and in this case it would appear features identified during the geophysical survey are likely to have been caused by characteristics of the underlying geology.

The lack of any features or artefacts pre-dating the 19th and 20th century would suggest that the remainder of the area not subjected to archaeological evaluation has very limited archaeological potential. It is considered therefore that the proposed development will have no significant adverse impact upon the historic environment.

1. INTRODUCTION

1.1 Project Commission

1.1.1 DAT Archaeological Services were commissioned by Interserve Construction Limited to undertake an archaeological evaluation of the site of the proposed new Cardigan Healthcare Centre, Ceredigion (centred on NGR SN 1766 4673; Figure 1).

1.1.2 Planning permission (Planning Application No. A150846) for the development had been approved by Ceredigion County Council subject to conditions, which included a condition regarding archaeology, which stated: *No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the Local Planning Authority. Reason: To protect historic environment interests whilst enabling development.*

1.1.3 The proposed development lies adjacent to Cardigan Town, which has seen centuries of intensive human activity. Consequently there was considered likely that archaeological deposits or features could extend into the development area and be adversely affected by the proposed works. As archaeological advisors to Ceredigion County Council, the Development Management team at Dyfed Archaeological Trust recommended that phased archaeological works should be carried out to mitigate against the impact to buried archaeological remains. In the first instance, this comprised undertaking a geophysical survey across the entirety of the site area.

1.1.4 DAT Archaeological Services were commissioned by Interserve Construction Ltd to undertake the geophysical survey of the development area which was carried out in 2017 (Day 2017). The geophysical survey revealed four types of features: trackways, land drains, pits and large circular and sub-circular features. The many circular and sub circular features intercut each other, and varied in diameter from about 3m to 30m, with the majority being 5 – 10m across. These showed mainly as positive features which could be interpreted as possibly the drip gullies of roundhouses, which are typically Iron Age in date. Those of negative magnetism might indicate the remains of stone walls.

1.1.5 Based on these findings a further phase of archaeological works was implemented which comprised the excavation of five evaluation trenches across the main area of development and a strip, map and record exercise along the access route into the site area. The purpose of this intrusive phase of archaeological works was to provide information on the character, date and significance of any below ground archaeological remains that may be present within the development area. The results of these works would determine if any further stages of archaeological mitigation might be required (such as full excavation of identified archaeological remains or a watching brief during further groundworks).

1.2 Scope of Project

1.2.1 A Written Scheme of Investigation (WSI) for the archaeological evaluation was prepared by DAT Archaeological Services prior to the commencement of works. This was approved by the archaeological advisors to Ceredigion County Council, the Development Management team at Dyfed Archaeological Trust, prior to the start of the works. The WSI outlined the following tasks for the project:

- Provision of a written scheme of investigation to outline the methodology for the intrusive trial trench evaluation which DAT Archaeological Services will undertake (this document);
- To establish the state of preservation, character, extent and date range for any archaeological deposits identified;
- To use the information to design future mitigation at the site which will enable any identified remains to be appropriately investigated and recorded where they will be affected by the proposed development;
- Production of a report and an archive of the results.

1.2.2 The overall scheme of works was summarised as: *The implementation of a scheme of archaeological evaluation using trial trenches and a strip, map and record exercise within the area for the proposed new Cardigan Healthcare Centre. A report shall be prepared on the results of the archaeological works, and an archive created of all finds, records, photographs and plans created. Further mitigation may possibly need to be implemented where significant archaeological remains are identified, the scope of which will be determined following the results of the evaluation.*

1.3 Report Outline

1.3.1 This report provides a summary and discussion of the results of the archaeological evaluation and strip, map and record exercise carried out with in the area proposed for the new Cardigan Healthcare Centre and puts those results within their regional and national context.

1.4 Abbreviations

1.4.1 Sites recorded on the Regional Historic Environment Record[1] (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Dyfed Archaeological Trust – Development Management – DAT-DM; Scheduled Ancient Monument – SAM; Written Scheme of Investigation – WSI; RCAHMW – Royal Commission on the Ancient and Historical Monuments of Wales; aOD – above Ordnance Datum

1.5 Illustrations

1.5.1 Printed map extracts are not necessarily produced to their original scale.

[1] Held and managed by Dyfed Archaeological Trust, Corner House, Carmarthen Street, Llandeilo SA19 6AE.

1.6 Timeline

1.6.1 The following timeline (Table 1) is used within this report to give date ranges for the various archaeological periods that may be mentioned within the text.

Period	Approximate date	
Palaeolithic –	*c.*450,000 – 10,000 BC	Prehistoric
Mesolithic –	*c.* 10,000 – 4400 BC	
Neolithic –	*c.*4400 – 2300 BC	
Bronze Age –	*c.*2300 – 700 BC	
Iron Age –	*c.*700 BC – AD 43	
Roman (Romano-British) Period –	AD 43 – *c.* AD 410	Historic
Post-Roman / Early Medieval Period –	*c.* AD 410 – AD 1086	
Medieval Period –	1086 – 1536	
Post-Medieval Period[2] –	1536 – 1750	
Industrial Period –	1750 – 1899	
Modern –	20th century onwards	

Table 1: Archaeological and Historical Timeline for Wales.

[2] The post-medieval and industrial periods are combined as the post-medieval period on the Regional Historic Environment Record as held by Dyfed Archaeological Trust

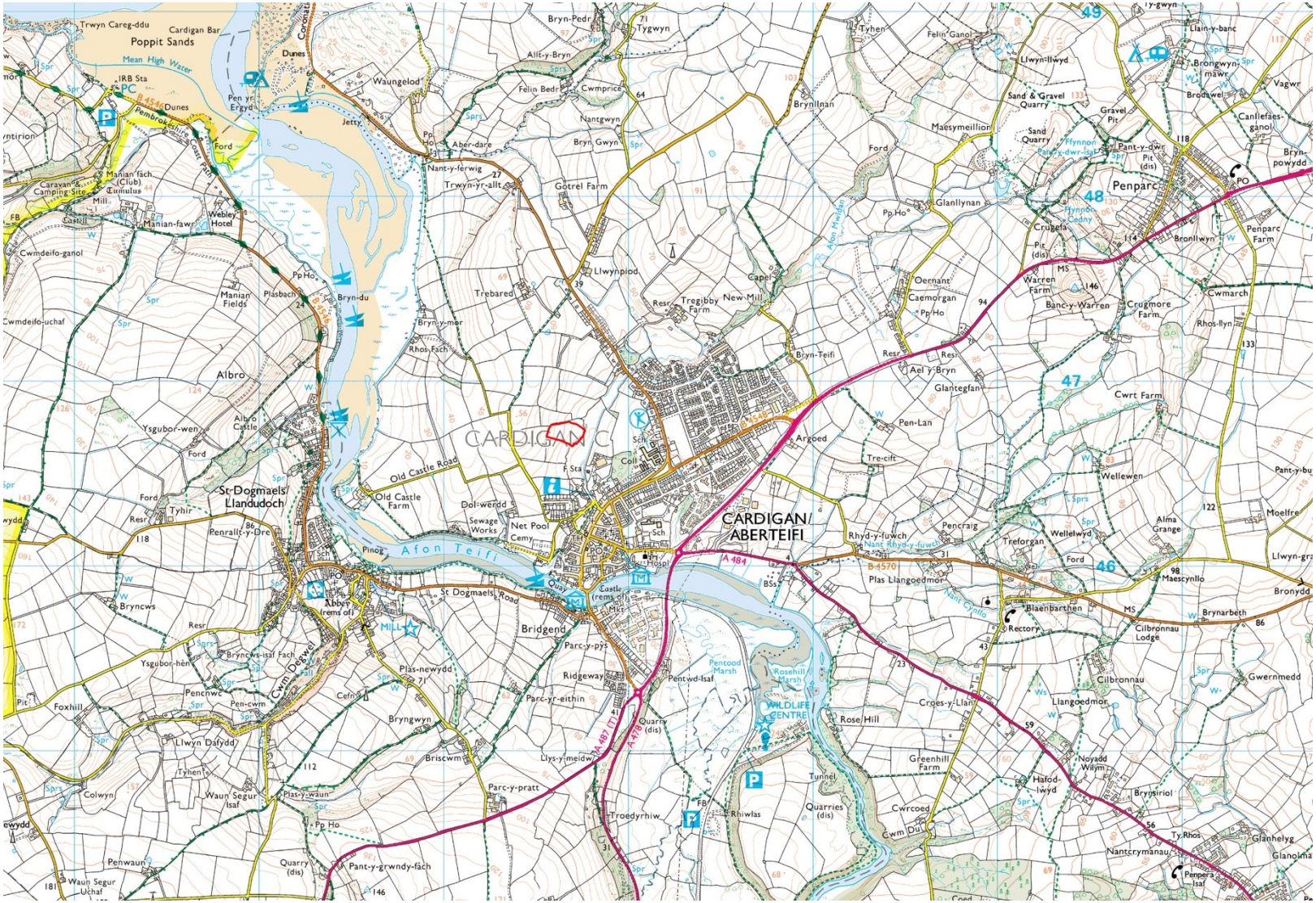
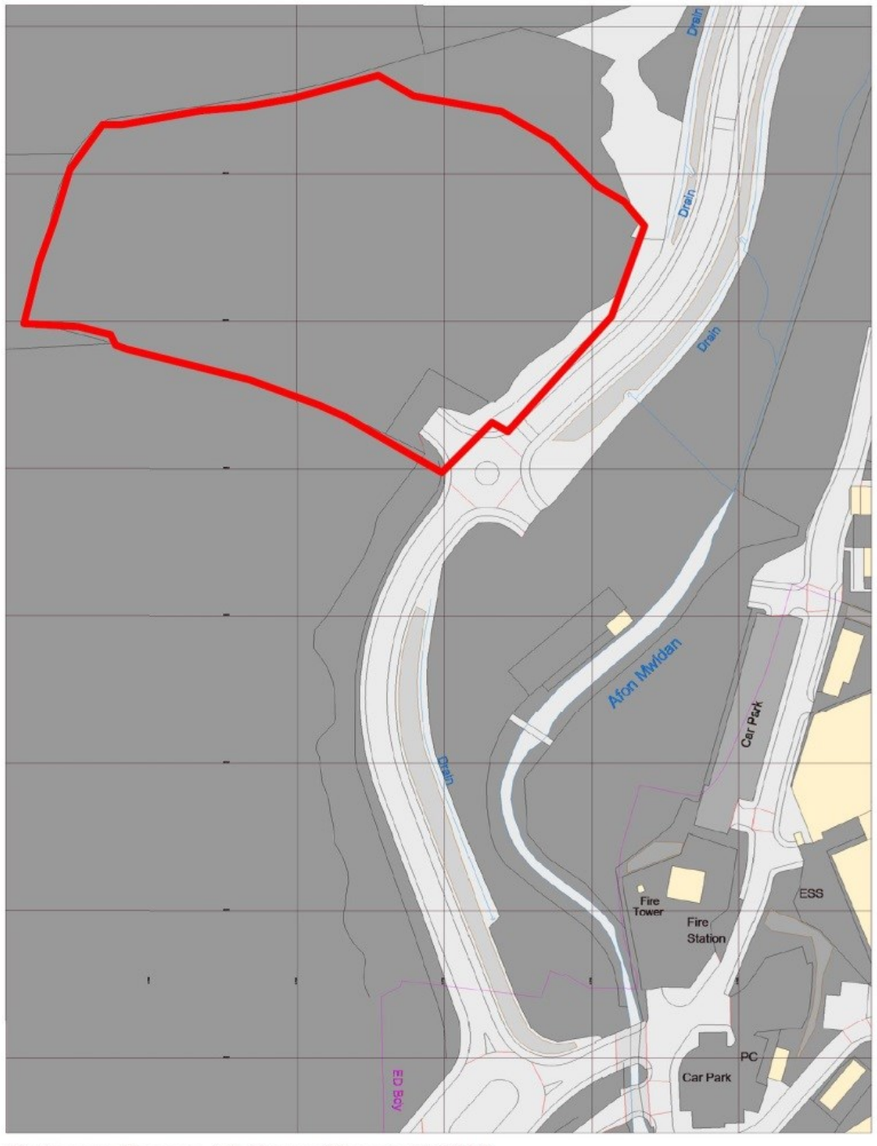


Figure 1: Location map, based on the Ordnance Survey. The development area is outlined in red.

DESIGNED FOR *Life* : BUILDING FOR *Wales* 3
CYNLLUN *Oes* : ADEILADU AR GYFER *Cymru* 3

Proposed Site Location Plan
Scale: 1 : 1250



Mark	Date	Details	By
1	22/10/2015	Issued for Planning	VS

REVISIONS

Trust:
GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Hywel Dda University Health Board

HYWEL DDA HEALTH BOARD
Bath House Road
Cardigan
Ceredigion
SA43 1JD

Supply Chain Partner:
Interserve

INTERSERVE CONSTRUCTION LIMITED
138 HEOL-Y-GORS
CWMBWRLA
SWANSEA
SA5 8LT

Project Title:
Cardigan Integrated Care Centre
Bath House Road
Cardigan
SA43 1JD

Scale: 1 : 1250 for the original size of A2

Drawn By: Author | Checked By: Checker | Passed By: Approver | Date: 10/21/15

Drawing Status:
ISSUED FOR PLANNING

Drawing Originator:
boyesrees architects

Boyes Rees Architects
4th Floor, Greyfriars House
Greyfriars Road, Cardiff CF10 3AL
Tel: 029 2055 8900 Fax: 029 2039 9592
www.boyesrees.co.uk
Registered office As above Reg No. 295 1683 (England & Wales)

Drawing Title:
Location Plan

Job No:	Drawing No: Project	Origin	Volume	Level	Type	Discip	Number	Revision:
5494	P001	BRA	XX	00	DR	A	900100	1

Refer to Architects for details of current building layouts

Figure 2: Detailed site location plan as supplied by client.

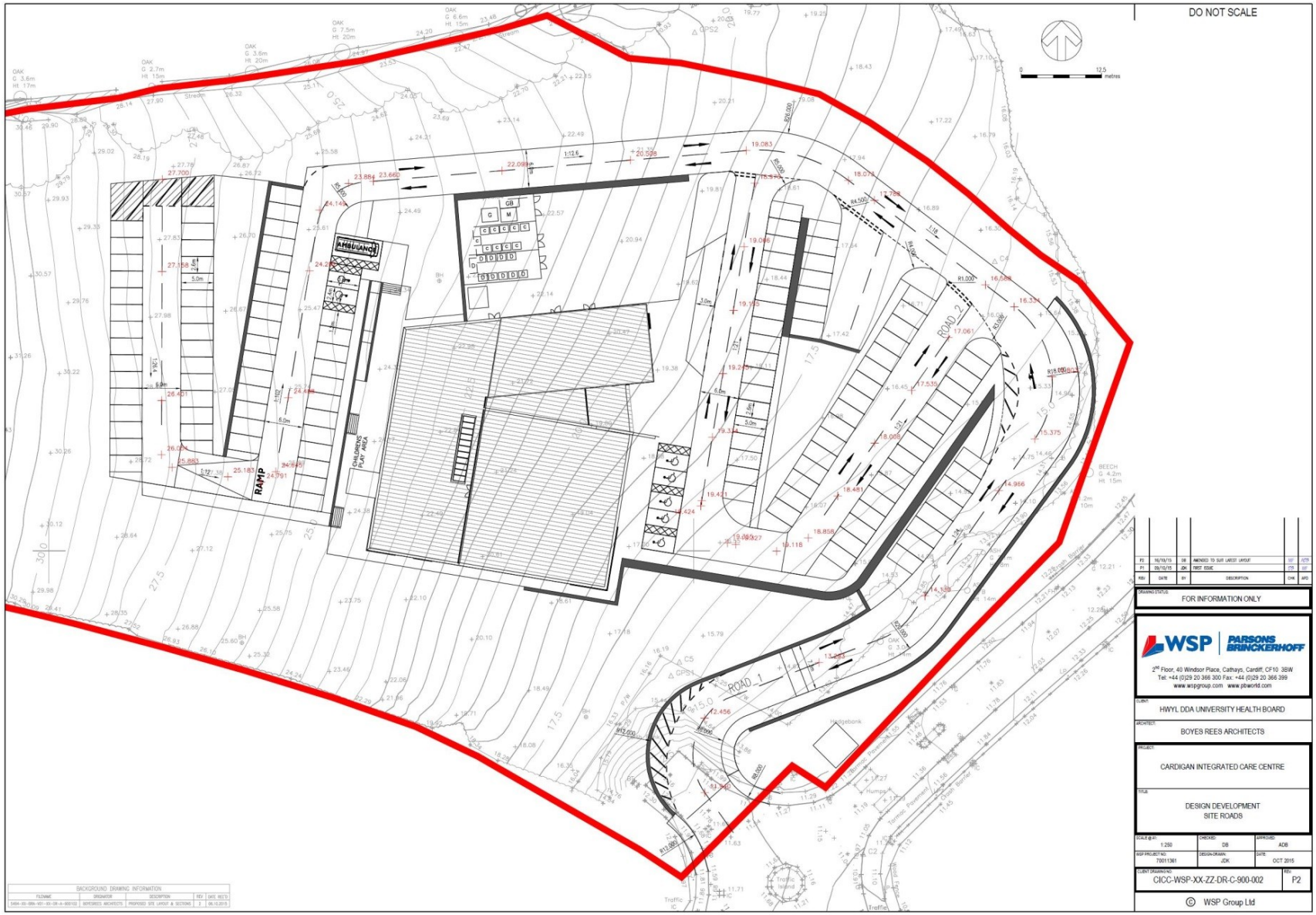


Figure 3: Proposed layout plan of Cardigan Healthcare Centre as supplied by client.

2. THE SITE

2.1 Location, Topography and Geology

2.1.1 The proposed site of the Cardigan Healthcare Centre is located on land to the east of the Afon Mwldan on a sloping parcel of land directly west of a new link road on the north side of Cardigan, Ceredigion (Figures 1 & 2). Figure 3 shows the proposed layout of the Healthcare Centre.

2.1.2 Access to the site is via a roundabout on Bath House Road in the bottom southeast corner. Bath House Road links Cardigan town centre with a residential area to the north of the site. The development site slopes steeply from northwest at 35.0m aOD to southeast at 15.0m aOD. Trees line the north, east and west sides of the site.

2.1.3 The bedrock in the vicinity of the site is sandstone and mudstone of the Dinas Island Formation of the Caradoc Series. A superficial glacial till deposit covers the bedrock over the whole site, comprising diamicton of the Devensian Stage.

2.2 Archaeological Potential

2.2.1 No archaeological sites are known to exist within the proposed development area. Apart from the geophysical survey undertaken in 2017 (Day 2017) no known archaeological work has previously taken place within the area or its immediate vicinity. Satellite imagery and LiDAR have been examined for traces of archaeological features but none were visible.

2.2.2 The prehistory and history of the area is described below, in order of archaeological period. This gives an idea of which different types of site, from which different periods, might be found within the development site. This information has largely been taken from a recent archaeological report on Cardigan Town (Meek 2015).

Prehistory

2.2.3 The *Cardiganshire County History* (Davies and Kirby 1994) highlights the relative dearth of evidence for the presence of man in the county before the Bronze Age; the monumental stone burial chambers that characterise the early farmers of the Neolithic period are almost completely absent. Some artefactual evidence has been found at chance findspots however, in the form of stone and antler implements. These date to both the Mesolithic and the Neolithic periods, some of which have been recovered from the Teifi estuary area. The older Palaeolithic period is unlikely to be represented in this area due to the removal of any archaeological layers by the movement of ice during our last glaciation.

2.2.4 Evidence for the Bronze Age in Ceredigion is far more apparent, mainly in the form of numerous burial monuments such as round barrows and cairns. There are also many standing stones and some stone circles. The majority of these lie on higher ground in the east of the county. Bronze Age artefacts have also been recovered from the Teifi estuary area, indicating some level of activity in the area during that period but as yet no evidence of sustained activity has come to light.

2.2.5 More permanent settlement is suggested during the Iron Age with the establishment of several defended enclosures and larger hillforts in prominent areas around the landscape. The promontory on which Cardigan was established lends itself to the possibility of settlement during this period but as yet there is no archaeological evidence to sustain this theory. The remains of many hillforts and other types of defended

enclosure from the Iron Age are found in abundance in the lower-lying western half of the county.

Roman

2.2.6 There is hardly any evidence for Roman activity in the area; forts and camps are so far only found in the eastern half of the county along a known Roman road. Roman coins have been said to have been found on the Gwbert side of the Teifi estuary although the provenance of these is uncertain. It is very likely that the Teifi estuary was used during the Roman period.

Early Medieval

2.2.7 The Kingdom of Ceredigion was one of several Welsh Kingdoms that emerged in the 5th century AD and persisted until the Norman Conquest in the 13th century. Its area corresponded roughly to that of the modern county of Ceredigion. Some of the exploits of the rulers of Ceredigion from this time are documented, for example in the *Chronicle of the Princes* (Jones 1955), which describes the various civil wars enacted by rulers such as Maredydd ao Owain, Llywelyn ap Iorweth and Maelgwn ap Rhys from the 10th century onwards. It was also written in the *Chronicle* and elsewhere that Danes and Northmen also caused trouble in these parts.

2.2.8 By the 5th century it is believed that St. Dogmael (or Dogfael) had established a monastic community in the area on the south side of the River Teifi – one suggested location is near the Iron Age hillfort of Caerau.

2.2.9 It would appear that by the time the Normans arrived in the area in the late 11th century a monastic community had already been established at the current St Dogmaels settlement, however other than the possibility of some form of defended site called Din Geraint on the north of the river there is no indication of more extensive settlement prior to the arrival of the Normans.

Medieval

2.2.10 Cardigan as an established settlement has its origins in the medieval period. The first Norman incursions into this area occurred in 1093 when Welsh chroniclers record the raid of Roger de Montgomery, Earl of Shrewsbury. To secure his position he built a timber and earth castle on the north banks of the Teifi, according to the *Chronicle* at a site called Din Geraint. This may have been the location of the current castle site but it is often equated with the defensive outworks visible at Old Castle Farm less than a mile further downstream. However, it appears the castle was short-lived: following Roger's death the following year the area soon fell back into the hands of the native Welsh.

2.2.11 In 1110 Gilbert fitz Richard de Clare was commissioned to retrieve Roger's possessions and following another successful invasion established another castle on the Teifi. This would appear to have been on the site of the current castle, as there is no indication it moved prior to the establishment of the town. Cardigan castle was to be Gilbert's centre of power in this area of Wales north of the river, and as was common with Norman invasions a settlement was to be established around the castle, both to provide an administrative and commercial foothold, but also to attract a local force of foreign settlers willing to fight for the new lord. The first reference to the settlement comes from reports of the battle of Crug Mawr in 1136. A pitched battle fought nearby between a large Welsh force of men from both Gwynedd and Deheubarth and a hastily assembled force of Normans from south of the Teifi. The victorious Welsh force went on to

plunder the town of Cardigan and break the town bridge but failed to take the castle. This indicates that not only was the castle a strong one, but in its shadow lay a small town complete with a church and a bridge across the river.

2.2.12 The castle and town eventually fell to Rhys ap Gruffydd in 1165 who, unusually for a native Welsh ruler of the time, rebuilt the castle in stone, retained the settlement and confirmed various existing rights. It is clear that between this period from *c*.1110 to 1165 the basis of a thriving community had been established at Cardigan.

2.2.13 The late 13th and early 14th century appears to have been the height of medieval urban activity at Cardigan. The subsequent history of medieval Cardigan was one of slow decline, in common with many towns throughout late 14th and 15th century Wales and England. Maritime trade appears to have been dwindling, contact with Bristol and Ireland lessening, accompanied by a general economic slump and disruptive military activity. A survey for the Black Prince in 1343 records the castle as the worst of all Royal castles and pleas sent to Richard II in the late 14th century show the town had lost many of its privileges, although a charter in 1395 restores their right to hold the courts at Cardigan, and the right to choose their own Bailiff and Mayor. Following the Owain Glyndwr rebellion in 1400 Cardigan was to return no revenue to the crown for 5 years, and the disruption meant no fairs were being held. By the 1530s Leland reports that Aberystwyth is now a 'better market then Cairdigan' and by 1540 the town is said to be a third the size of Carmarthen, and half that of Tenby.

Post-Medieval and modern

2.2.14 Cardigan's fortunes were recovering during the 17th century, due mainly to an increase in maritime activity. The 18th century was to be Cardigan's golden age of maritime activity as general maritime trade was increasing mainly in agricultural produce, limestone and general merchandise, but the expanding herring fishing industry also increased. The port had jurisdiction over Newport, Fishguard, Aberaeron, Aberporth and Newquay by the 18th century, with a combined fleet of nearly 300 vessels by 1833. The Mwldan was becoming the focus of industrial activity, with iron foundries, a tannery, warehouses, a mill and malthouses all recorded during the 18th and early 19th century.

2.2.15 Industry continued to flourish, the two main iron foundries at Mwldan and Bridgend successfully shifting focus from the fading maritime industry to agriculture, general ironwork and, more recently, engineering. A gas works was established at the southern end of the Mwldan in the 1860s to provide the expanding town with lighting and gas. At the north end of the town the Cardigan Brickworks were established in the 1850s, becoming a vital source of employment and building material to aid in the expanding town.

Historic Mapping

2.2.16 The first available map of the area, the 1847 St. Mary's Parish Tithe Map, shows that the shape of the field in which the development site lies has not changed from then until the present day (Figure 4). A stream is depicted running around the eastern edge of the field. The apportionment to the tithe map, also of 1847, describes the field as meadow land, named 'Miss Mead Fields' and along with several other surrounding fields belonged to a Reverend Morgan Davies and occupied by Thomas Morgan.

2.2.17 The Ordnance Survey 1st edition 1:2500 of 1888 shows the same field layout (Figure 5). By this time the new brickworks has been built to the

southeast of the proposed development site. In addition it can be seen that a stream north of the brickworks has been canalised and has a footpath running alongside it (compare with Figure 4). The stream adjacent to the proposed development site has been diverted into the canalised stream, and in subsequent maps from 1906 onwards it no longer flows past the site.

2.2.18 Later maps show no further changes within the development area.

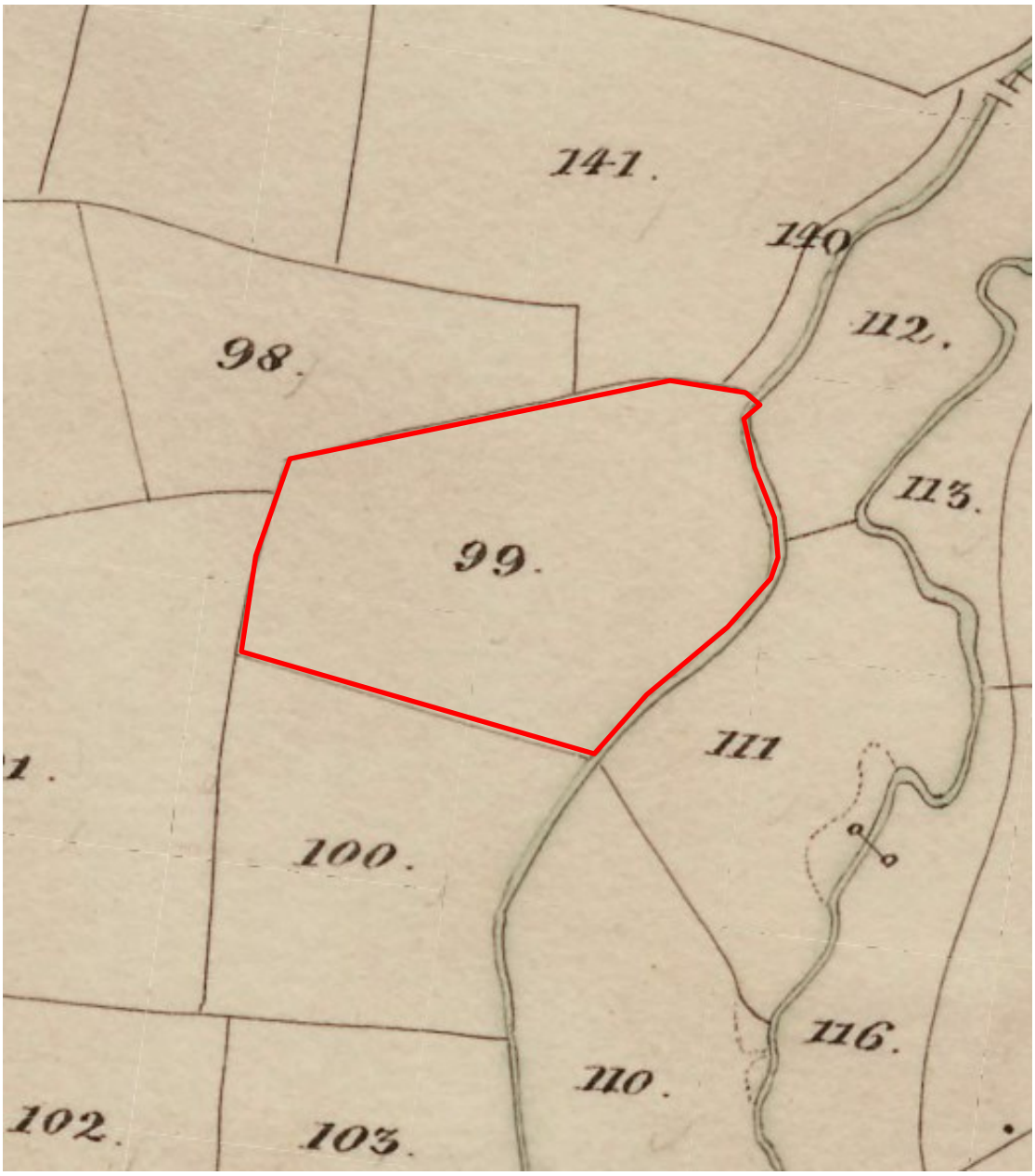


Figure 4: Extract from the 1847 St. Mary's Parish Tithe Map (the proposed development site is the field numbered 99)

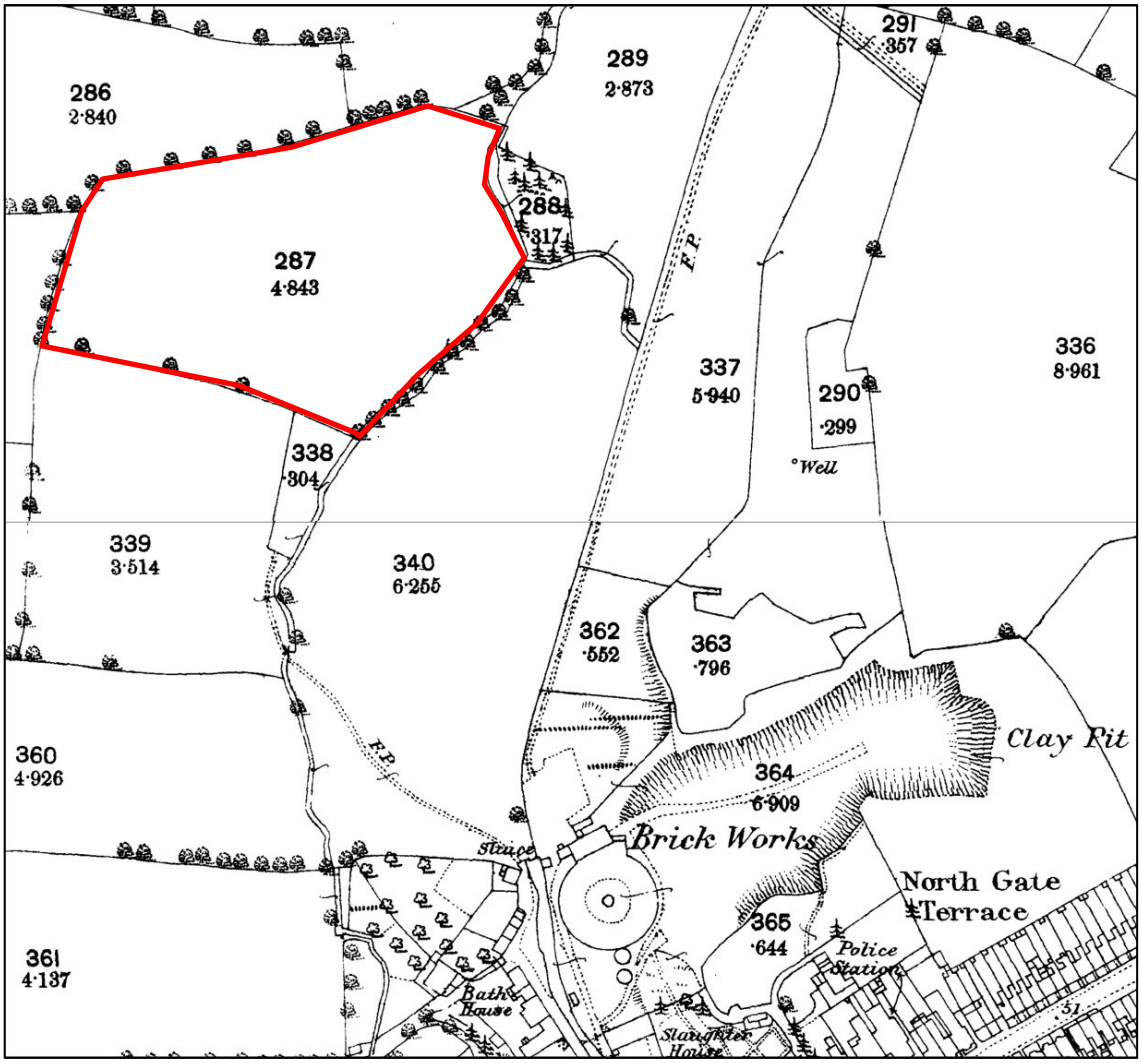


Figure 5: Ordnance Survey 1st edition 1888
(the proposed development is outlined in red)

3. ARCHAEOLOGICAL EVALUATION METHODOLOGY

3.1 Fieldwork Methodology

Archaeological Evaluation

3.1.1 To ascertain the significance and state of preservation of any archaeological features or deposits within the proposed development area, a phase of trial trench evaluation was implemented. Using a tracked 360° mechanical excavator fitted with a flat bladed bucket five trenches (Figure 6) were excavated. The trenches were positioned to target features identified during the 2017 geophysical survey. All non-archaeologically significant overburden was removed under archaeological supervision and the trenches were excavated down onto archaeological levels or natural subsoil (whichever was reached first).

3.1.2 The trench plan was originally proposed to target only the eastern side of the development area (see Appendix II proposed trench plan) due to the initially planned phased development programme based on awaiting remedial works to be completed on the adjacent site to the south. By the time of the development commencing, these works had been completed and the entire site area was then available for development. The trench plan was amended accordingly to firstly target the wider area available and also to avoid areas of the site unsuitable for trenching (waterlogged or churned up from agricultural or site investigation works). The revised trench plan and strip, map and record areas overlaid on the geophysical survey results are shown on Figure 10).

3.1.3 Following machine excavation, the trenches were hand cleaned using trowels to best determine the presence or absence of archaeological remains. Certain areas were re-trowelled a number of times to improve the definition of features. Sample excavation was undertaken of features identified during the evaluation.

3.1.4 All deposits were recorded by archaeological context recording sheet, scale drawing, photography and site note books. All individual deposits were numbered using the open-ended numbering system in accordance with DAT Archaeological Services Recording Manual[3]. Trench plans and sections were recorded by means of measured drawings and sketches. A photographic record was maintained using digital cameras.

3.1.5 The trenches were located in relation to surrounding features and buildings using a Differential Global Positioning System (DGPS).

3.1.6 The archaeological evaluation was undertaken between 20th and 23rd March 2018.

Strip, Map and Record

3.1.6 Following completion of the evaluation, a strip, map and record exercise was undertaken along the line of two access routes and the within the area proposed for the site compound (Figure 6). This was carried out between 26th and 30th March 2018.

3.1.7 This exercise involved the careful removal of topsoil and non-archaeologically significant subsoil, across these areas using a mechanical excavator fitted with a flat bladed bucket under permanent archaeological supervision.

[3] DAT Archaeological Services use the Recording Manual developed by English Heritage Centre for Archaeology. A copy will be available for inspection if required.

3.1.8 Any archaeological features identified within these areas were defined and surveyed using DGPS.

3.1.9 Where appropriate, areas containing possible archaeology were hand cleaned to further define the presence, or absence of archaeological features and to determine their significance. Where deemed necessary features were archaeologically excavated and recorded using the same methodology as noted above (sections 3.1.1 – 3.1.5).

3.2 Post-Fieldwork Reporting and Archiving

3.2.1 All data recovered during the fieldwork was collated into a site archive structured in accordance with specifications in *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (Brown 2011), and the procedures recommended by the National Monuments Record, Aberystwyth.

3.2.2 The results of the fieldwork have been assessed in local, regional and wider contexts. The report includes a desk-based research element to ensure that the site is placed within its wider archaeological context.

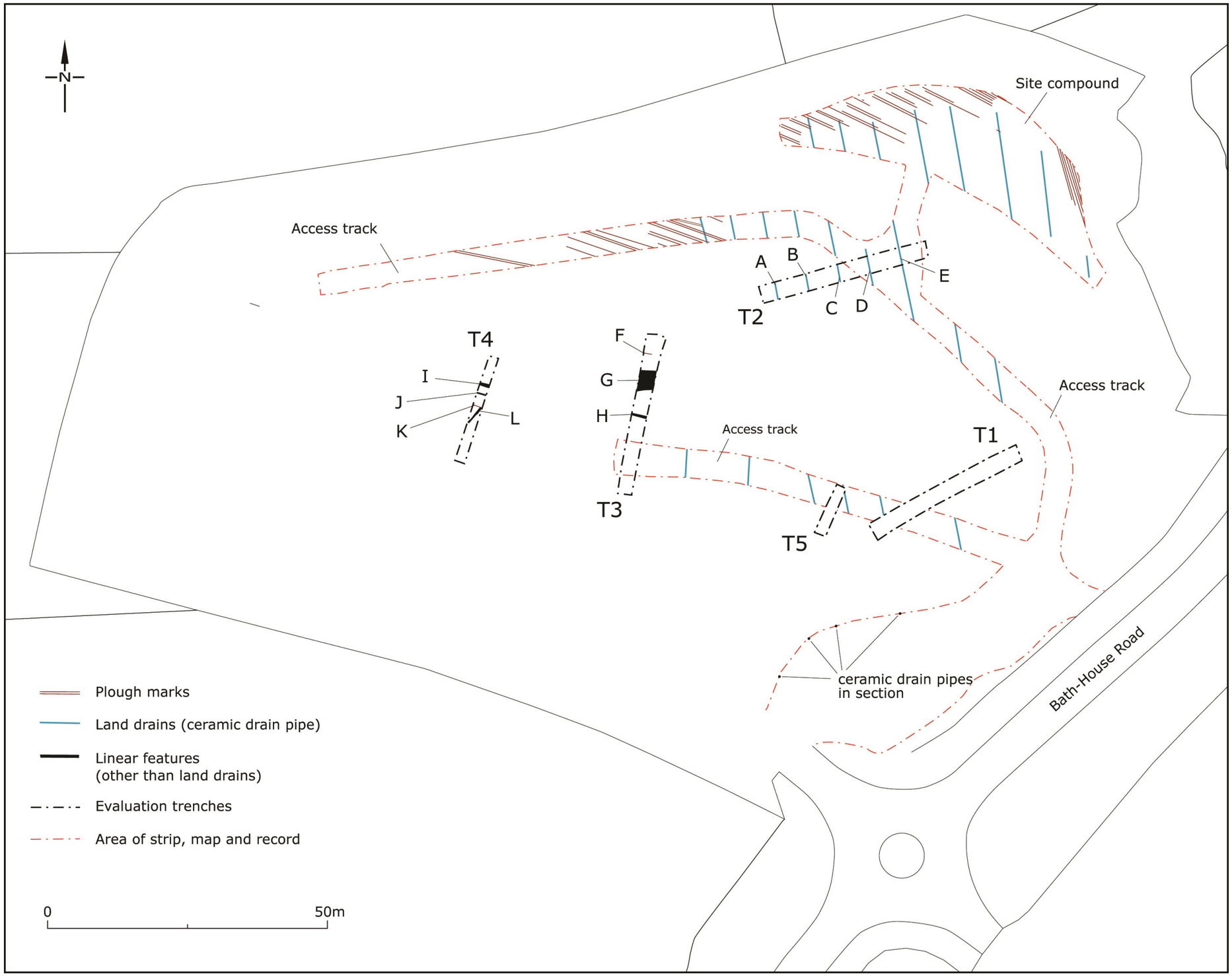


Figure 6: Plan showing the evaluation trenches and recorded archaeological features

4. RESULTS

4.1 Evaluation

4.1.1 Five trenches were machine excavated across the development area (Figure 6; Photo 1) targeting features identified during the 2017 geophysical survey. The trenches were recorded with plan and section drawings where appropriate (Figures 7 - 9). The trenches were machine excavated until natural subsoil was reached (Photo 2) and within all five trenches a similar soil profile was recorded, as shown in Photo 3. Typically this comprised *c.*0.30m depth of grey/brown silty loam topsoil lying above the natural yellow silty clay subsoil. Fragments of 19th and 20th century pottery were retrieved from the topsoil, but these were not retained (Photo 6).

4.1.2 The development site sloped quite steeply from northwest to southeast (Photo 1) and this was reflected in the trenches in which natural clay subsoil was recorded at 25.4mOD in Trench 4 to the northwest and at 16.57mOD in Trench 1 to the southeast.

4.1.3 No archaeological features or deposits were encountered in Trenches 1 and 5 and these trenches are not discussed further. Trenches 2, 3 and 4 contained archaeological features and are discussed below. A table of recorded contexts can be found in Appendix I.

Photo 1: Overview of the development area showing the machine excavation of Trench 5. View east

Trench 2 (Figure 7)

4.1.4 Within Trench 2 a series of five parallel, narrow linear features (A to E) were observed cutting the natural clay subsoil (Photo 2). They were orientated roughly north to south; a possible sixth linear was observed at the most eastern end of the trench but was difficult to discern. The linear features were 5.75m to 5.95m apart; four were partially excavated to reveal a red ceramic drain pipe *c.*0.10m in diameter (Photo 3) lying at the bottom of a narrow linear cut *c.*0.30m wide and 0.45 m deep. The depth

of the tops of the ceramic drain pipes ranged from 0.60m to 0.70m below the current ground surface. The cut of each drain was filled with similar compacted, mottled yellowish grey silty clay (redeposited material dug out and backfilled within the pipe trench).

Photo 2: Overview of Trench 2 showing the partially excavated parallel land drains that ran across the trench. View east. 2 x 1m scales

Photo 3: The ceramic drain pipe of land drain B observed in Trench 2. View south. 0.5m & 1m scales

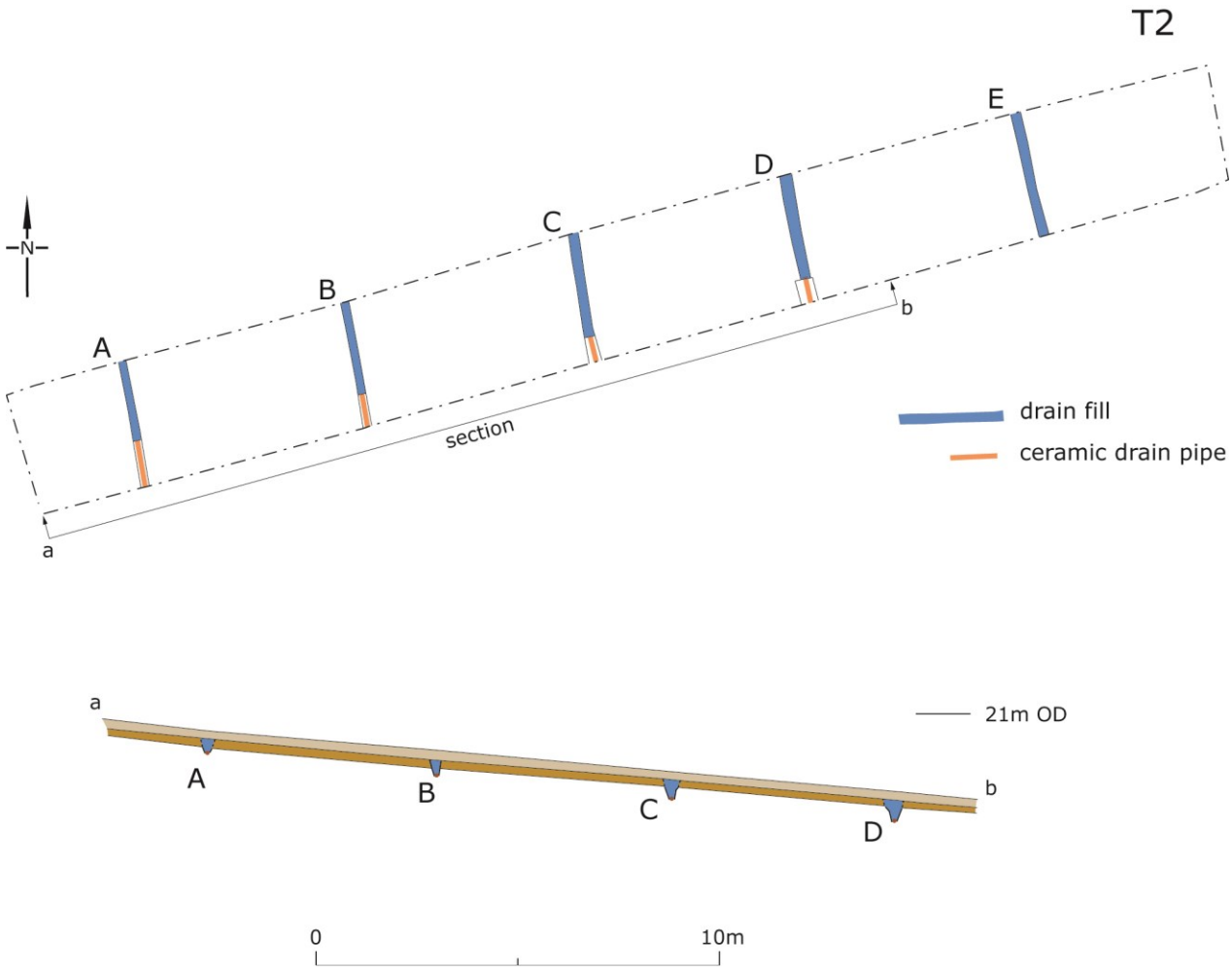


Figure 7: Plan and section drawings of Trench 2

Trench 3 (Figure 8)

4.1.5 Cutting into the natural clay subsoil within Trench 3 were a number of linear features. At the northern end of the trench, orientated roughly east to west, was a probable plough scar (F). This was represented by a narrow linear cut that just penetrated the clay subsoil, filled with yellowish brown silty clay.

4.1.6 A wide linear feature (G) also orientated east to west was recorded to the south of feature F. It measured *c.*3.54m and had a maximum depth of 0.30m. A section was excavated through this feature to reveal that its sides sloped gradually to a wide flat base (Photo 4). Despite having clear edges there was no further evidence of anthropogenic activity. This possible ditch was filled with compacted, mottled brown/grey clayey silt. No finds were recovered from the fill.

4.1.7 At approximately the middle of the trench a 0.39m wide gully-like feature (H) was observed. Again this was roughly orientated east to west across the extent of the trench. A section excavated through the feature revealed a 'U'- shaped gully up to 0.20m deep (Photo 5). The fill was compacted clayey silt similar to that previously seen in feature G. Fragments of 19th/20th century pottery were retrieved from the fill during excavation.

Photo 4: Feature G seen in the west facing section of Trench 3. View southeast. 0.5m & 2m scales

Photo 5: Feature H; a shallow U-shaped ditch seen in the west facing section of Trench 3. 0.5m scale

Photo 6: A sample of the 19th & 20th century pottery recovered from the topsoil.

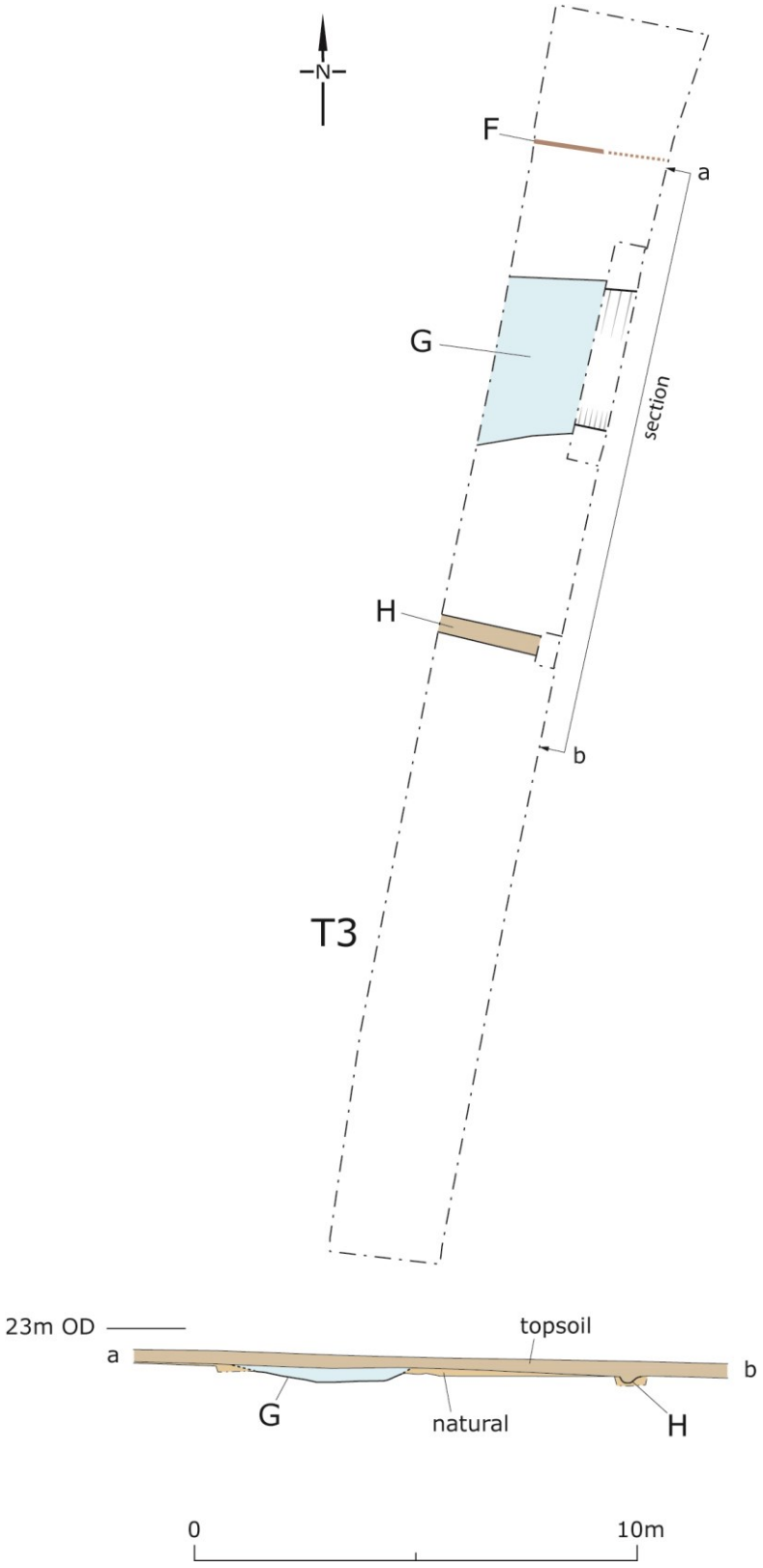


Figure 8: Plan and section drawings of Trench 3

Trench 4 (Figure 9)

4.1.8 At the northern end of Trench 4 a 0.73m wide linear feature (I) was seen extending east to west across the trench. A section was excavated through this feature to reveal a 0.58m deep ditch. The ditch had steep, almost vertical sides and a flat base. The ditch was filled with compacted yellowish/brown silty clay. A few pieces of 19th/20th century pottery were recovered from the fill. Loose stone had been placed in the base of the ditch to improve drainage (Photos 7 & 8).

4.1.9 A linear gully feature (J) was seen to the south of Feature I; also orientated east to west across the trench. The cut as observed within the trench measured 1.80m long, 0.19m wide and 0.10m deep and filled by compacted, mottled brown/grey clayey silt. No finds were recovered from the fill.

4.1.10 What was considered to be a plough scar (K) was observed in this trench, similar to that seen in Trench 3 (Photo 9). Beyond this to the south, at approximately the mid-section of the trench a shallow linear gully (L) was recorded. The gully was approximately 0.25m wide, 3.80m in length and as little as 0.03m deep. The fill was yellowish brown clayey silt containing no finds.

Photo 7: Feature I; showing the stone infill at the base of the ditch. View south. 0.5m scale

Photo 8: Feature I; showing the ditch after the removal of the stone infill at the base of the ditch. View east. 0.5m scale

Photo 9: Feature K; excavated plough scar. View east. 1m scale

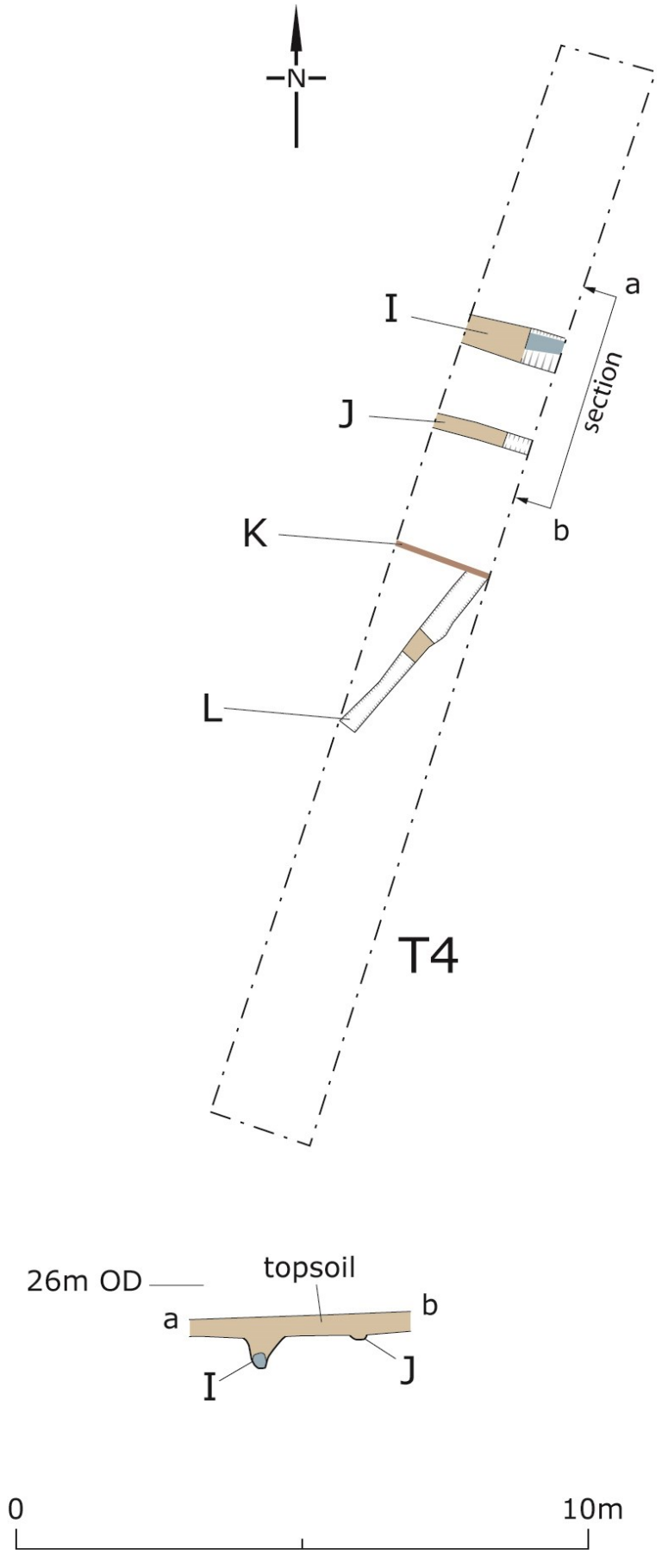


Figure 9: Plan and section drawings drawing of Trench 4

4.2 Strip, Map and Record (Figure 6)

4.2.1 The strip, map and record exercise was undertaken over five days after the evaluation had been completed. It was carried out across access track (Photo 10) and site compound areas (Photo 11) as shown in Figure 6. Archaeological features recorded during this exercise ar4e also shown on Figure 6. The topsoil was removed by machine under archaeological supervision; revealing the yellow silty clay natural subsoil similarly visible in the evaluation trenches.

4.2.2 All archaeological features revealed during the machine strip were defined and surveyed using DGPS, hand cleaned, and where necessary features were archaeologically excavated.

4.2.3 The machine stripping of topsoil revealed evidence of a large number of plough marks and land drains crossing the development area (Photos 12 & 13), similar in characteristics to those recorded during the evaluation.

Photo 10: General shot of southern access track area after machining. View roughly east. 1m scale

Photo 11: General shot of site compound area during machining.
View roughly north. 1m scale

Photo 12: General shot of site compound area after completion of machining showing the visible plough marks running across the area.
View roughly east. 1m scale

Photo 13: Ceramic drain pipe running across eastern end of southern access track. View approximately south**.** 1m scale

5. CONCLUSION

5.1 During the course of this evaluation an area of 2258sqm was archaeologically evaluated or observed, which included five evaluation trenches and the areas subject to a strip, map and record exercise.

5.2 The evaluation trenches targeted features identified in the 2017 geophysical survey. Trenches 1 and 5 contained no archaeology. The remaining trenches (Trenches 2, 3 and 4) contained evidence of post medieval and modern land improvement and farming practices in the form of land drains and plough scars. A number of ditches were also recorded, some of which contained a few pieces of 19th/20th century pottery. No obvious function was determined but it is most likely they represent further evidence of post medieval farming activities.

5.3 The recorded features all cut the natural horizon of yellow silty clay that was observed in every trench. Overlying this clay was *c.*0.30m of brown/grey silty loam topsoil.

5.4 The strip, map and record exercise across the access track and site compound areas revealed evidence of a large number of plough marks and land drains crossing the development area, similar in characteristics to those recorded during the evaluation.

5.5 The evaluation and strip, map and record did not record any circular features as identified by the results of the geophysical survey (Figure 10). Geophysical Survey results and interpretation diagrams cannot be regarded as a definitive model of what lies beneath the ground surface; not all buried features will provide a magnetic response that can be identified by the gradiometer. During the interpretation of the recorded features the shape was the principal diagnostic tool, along with comparison with known features from other surveys and professional judgement. This has proved to be extremely successful in previous projects in predicting what archaeological features might lie underground. However, in this case it appears that the underlying geology has obstructed the correct interpretation of the survey results and it is considered that the circular features were caused by variations in the geological substrata. The features did not represent the remains of Iron Age structures as was initially highlighted as a possibility.

5.6 This archaeological evaluation has addressed the aims of the investigation and has demonstrated that the development area contained no significant archaeological features or deposits. The archaeological features that were observed reflect post medieval to modern land management and farming activity and are of low or negligible archaeological significance.

5.7 Overall it is considered that the development of the Cardigan Healthcare Centre will have caused no impact to any significant archaeological remains. It has been confirmed with the Development Management team of Dyfed Archaeological Trust, in their capacity as archaeological advisors to the planning authority, that no further archaeological works will be required at the development site.

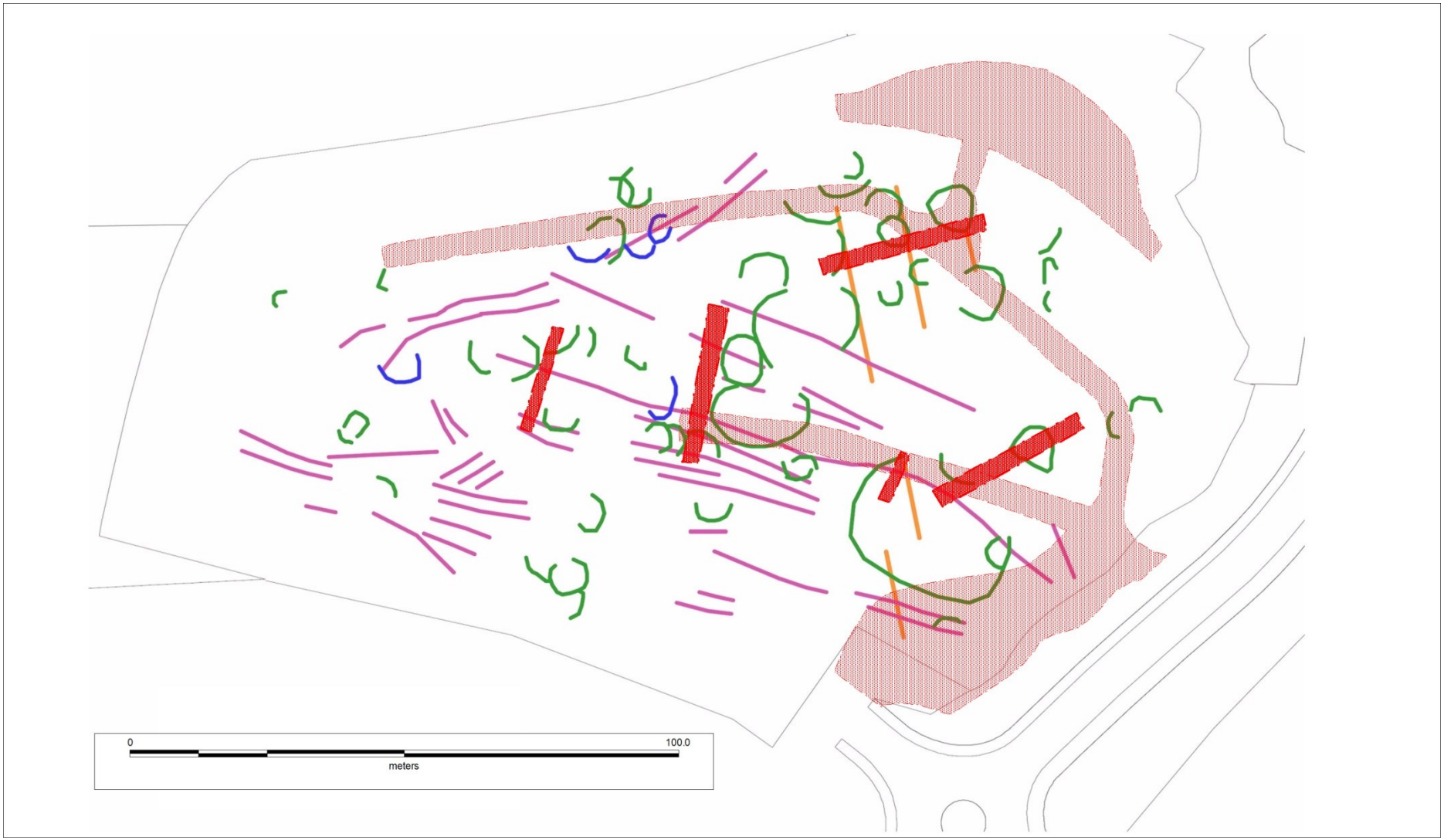


Figure 10: Trench locations and strip, map and record area overlaid on geophysical survey interpretation plot (trackways = purple; land drains = orange; positive circular features = green; negative circular features = blue).

6. SOURCES

Publications

Brown, D.H., 2011. *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation.* Chartered Institute for Archaeologists.

Day, A, 2017. *Cardigan Healthcare Centre, Ceredigion: Geophysical Survey.* DAT Unpublished Report 2017/34

Meek, J, 2015. Proposed Tidal Flood Alleviation Scheme, Cardigan, Ceredigion: Archaeological Desk-Based Assessment 2015. DAT Unpublished Report 2015/08

Database

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Dyfed Archaeological Trust Historic Environment Record.

RCAHMW Coflein Database http*://www.coflein.gov.uk/*

APPENDIX I: CONTEXT REGISTER

Context	Trench	Length	Width	Depth	Description/Interpretation
Topsoil	All trenches			0.30m	Grey/brown silty loam.
Natural subsoil	All trenches				Yellow silty clay.
A – E	Trench 2	3.0m	0.30m	0.45m	Set of parallel linear features spaced 5.75m to 5.95m apart orientated north to south. A similar fill of compacted yellowish/grey silty clay was recorded within each linear cut surrounding a red ceramic drain pipe lying at the bottom of the cut.
F	Trench 3	3.0m	0.10m	0.10m	Shallow linear cut interpreted as a plough scar, orientated roughly east to west. Filled with This possible ditch was filled with compacted, mottled brown/grey clayey silt. No finds
G	Trench 3	3.0m	3.54m	0.30m	A wide linear feature orientated east to west with broad gently sloping sides to a wide flat base. It was filled with compacted, mottled brown/grey clayey silt. No finds.
H	Trench 3	3.0m	0.39m	0.20m	A gully-like' feature orientated east to west with a 'U'-shaped profile. Filled with compacted, mottled brown/grey clayey silt. 19th/20th century pottery.
I	Trench 4	3.0m	0.73m	0.58m	Wide linear feature orientated east to west. The feature had steep almost vertical sides and a flat base. The ditch was filled with compacted yellowish/brown silty clay containing a few pieces of 19th/20th century pottery. At the very bottom of the ditch stone had been placed to improve drainage.
J	Trench 4	1.80m	0.19m	0.10m	Orientated east to west a linear gully-'like' feature. It was filled with compacted, mottled brown/grey clayey silt. No finds.
K	Trench 4	3.0m	0.10m	0.08m	Plough scar
L	Trench 4	3.80m	0.25m	0.03m	A gully-like' feature filled with yellowish brown clayey silt containing no finds.

APPENDIX II:

**CARDIGAN HEALTHCARE CENTRE:
PLANNING APPLICATION A150846
WRITTEN SCHEME OF INVESTIGATION
FOR ARCHAEOLOGICAL WORKS FOLLOWING GEOPHYSICAL SURVEY**

1 INTRODUCTION

1.1 This written scheme of investigation presents a methodology for further archaeological works following a geophysical survey undertaken across the site of the proposed new Cardigan Healthcare Centre on land to the east of the Afon Mwldan on a sloping parcel of land directly west of a new link road on the north side of Cardigan, Ceredigion (centred on NGR SN 1766 4673; Figure 1). This document has been prepared by James Meek MCIfA of DAT Archaeological Services.

1.2 The site covers an area of *c.*1.8ha on which the new healthcare centre and associated car parking etc will be constructed. The site has been granted planning permission (reference A150846) with conditions. Following consultation on the application, the archaeological advisors to the planning authority, Development management – Dyfed Archaeological Trust, recommended the following condition should be attached to the planning permission:

'No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the Local Planning Authority. Reason: To protect historic environment interests whilst enabling development.'

1.3 Following discussions with the archaeological advisors to the planning authority it was determined that the best way of determining the presence or absence of archaeological remains at the site would be through the implementation of phased archaeological works. A geophysical survey was undertaken of the development site in May 2017 and the report on the results completed in June.

1.4 The results of the geophysical survey can be summarised as follows. The geophysical survey revealed four types of archaeological feature across the survey area: Trackways, land drains, pits and large circular and sub-circular features. A number of the circular and sub-circular features intercut each other. They varied in diameter from *c.*3m to 30m, with the majority being about 5-10m across. These showed mainly as positive features. Numerous potential pit anomalies were also identified which were mainly located close to the circular features, sited on the gentle slope at the east end of the field rather than the steeper slopes to the west. One of the large positive circular features had significant positive magnetism over its whole area and was interpreted as a probable pit.

1.5 The interpretation of the identified features would suggest that the majority of the track anomalies were associated with previous vehicle movements across the development area associated with undertaking geotechnical investigations in recent years and are not of archaeological significance. A number of the circular and sub-circular anomalies may be former clay extraction pits associated with a nearby brickworks or the anomalies caused by former cattle feeders in the field (the movement around the feeders by the cattle wears the ground away, causing circular depressions to form in the ground). Alternatively some of these might be associated with former geotechnical test pits excavated by Earth Science Partnership in the last decade. It cannot be discounted that the circular anomalies actually relate to the drip gullies which were placed around the roofs of Iron Age roundhouses, and that an Iron Age settlement exists on the site.

1.6 Following the results of the survey it was anticipated by the archaeological advisors top the planning authority (Dyfed Archaeological Trust – Development Management) that the development area should be subject to a strip, map and record exercise to determine the origin of the features. It had been agreed that if the anomalies did transpire to be of modern origin following a sample area strip of the site, that strip, map and record of the remaining site area would not be needed.

1.7 Following a meeting with the client and other parties on 03/07/17 a new approach to the next stage of archaeological mitigation has been proposed. This new approach is partially to fit in better with the phasing of the development programme, but is more dictated by the existing clay ground conditions on the site. Undertaking a site strip of the area well in advance of development is not possible due to the clay subsoil and the issues that would be caused by significant water run-off into the surrounding land. Development is due to commence on the eastern side of the site, adjacent to the existing road, to create a permanent site access and internal road around the northern side of the site area. The area of car parking proposed on the eastern side of the site would be available for further archaeological investigation at this stage, but a complete topsoil strip would not be possible (Figure 4).

1.8 DAT Archaeological Services suggest that the best means of continuing the archaeological investigation of the site should involve a trial trench evaluation of the eastern side of the site area. Through discussions with the archaeological advisor to the planning authority, it has been agreed that the trenches should be of double width (around 3m) to expose as much of the geophysical survey anomalies as possible to determine their date, character, significance, extent etc. Should they be determined to be of modern date then further archaeological works may not be required. Should they be shown to be of archaeological significance then further stages of archaeological recording and excavation will be required (including across the remainder of the site area). A strip, map and record exercise would be possible along the line of the proposed roadway (shown as orange on Figure 4).

1.9 This written scheme of investigation (WSI) covers the next stage of trial trenching, followed by methodologies for further archaeological mitigation which may be required at the site.

1.10 Scattered across the field are a number of water monitoring/borehole sites. It is uncertain if these can be removed during the trial trench stage of works.

1.11 The site area is relatively easy to access with no overhead services visible. No indications of any underground services, such as man hole covers, were present.

1.12 This written scheme of investigation outlines the methodology through which DAT Archaeological Services will undertake the Archaeological works. This document has been prepared for the client and is specifically prepared for DAT Archaeological Services to undertake the required archaeological works. The WSI cannot be used by any third party.

1.13 The specification is in accordance with the relevant Institute for Archaeologists Standard and Guidance (Chartered Institute for Archaeologists (CIfA 2014).

1.14 The Trust always operates to best professional practice. DAT Archaeological Services has its own Health and Safety Policy, and all works are covered by appropriate Employer's Liability and Public Liability Insurances. Copies of all are available on request.

1.15 Dyfed Archaeological Trust is a CIfA Registered Organisation. All permanent staff members of DAT Archaeological Services are CSCS[4] registered.

Figure 1: Location map of the proposed new Cardigan Healthcare Centre (red boundary), based on the Ordnance Survey.

[4] Construction Skills Certification Scheme (Health and Safety Tested)

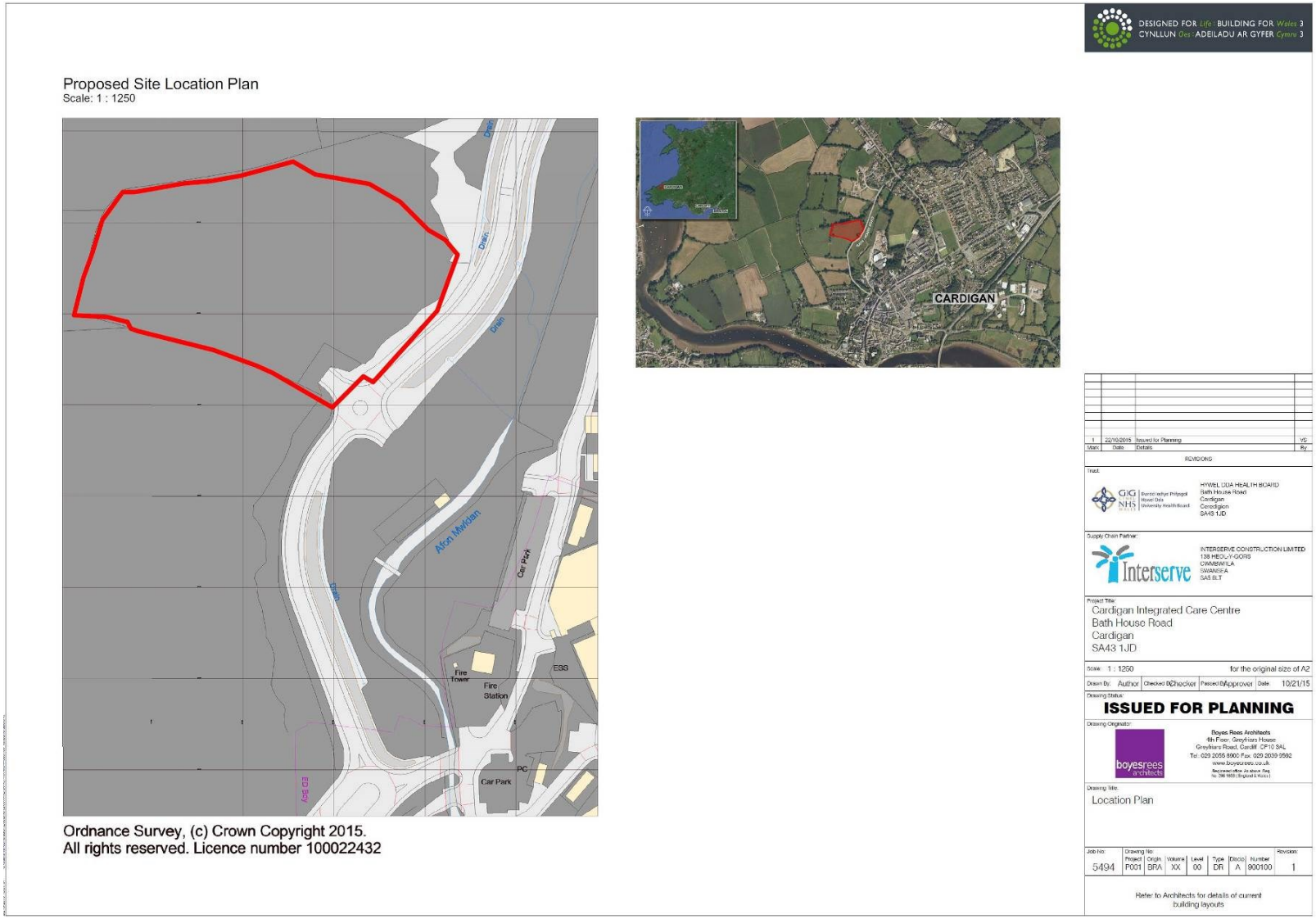

Figure 2: Detailed site location plan as supplied by client

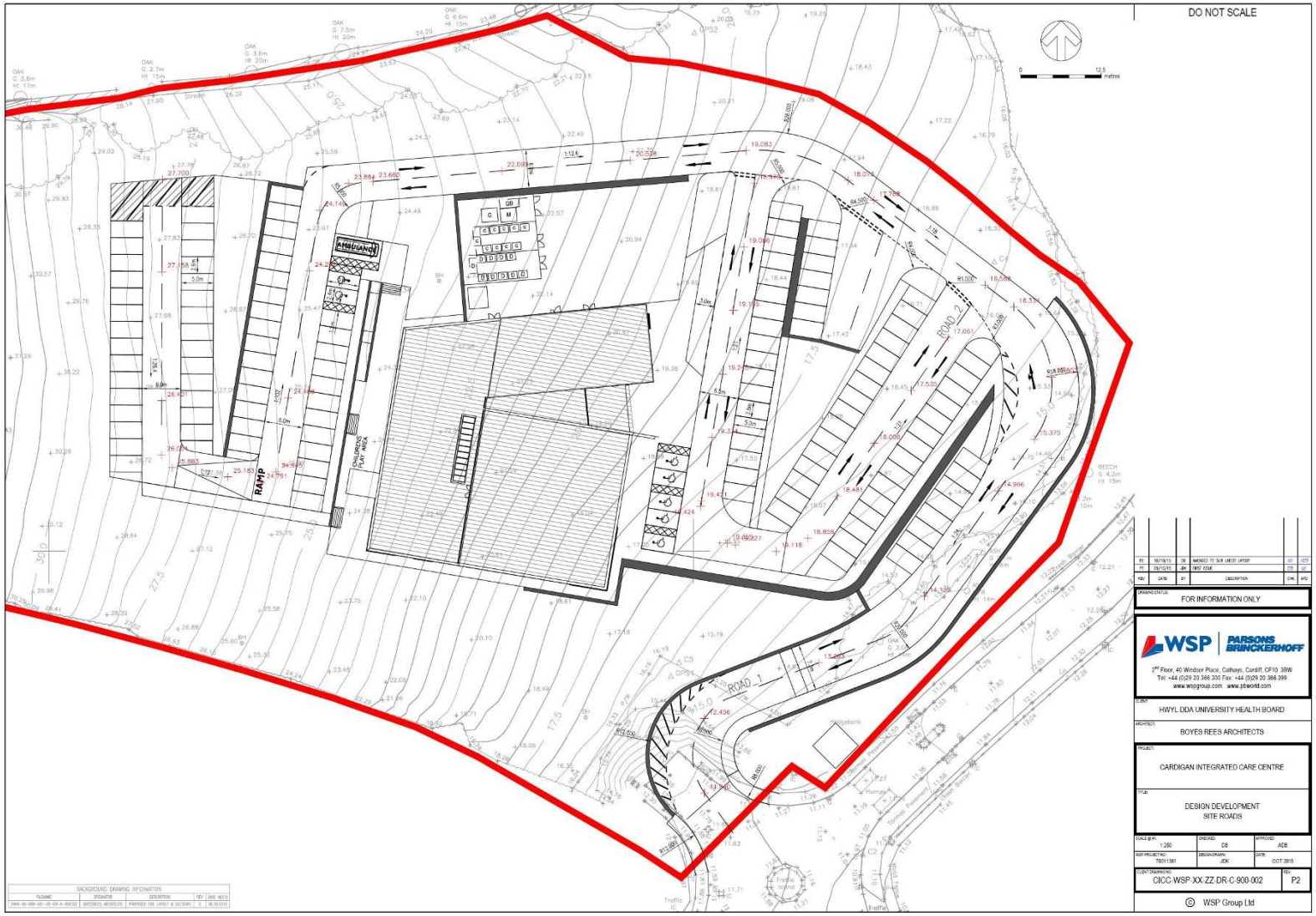

Figure 3: Proposed layout plan of Cardigan Healthcare Centre as supplied by client

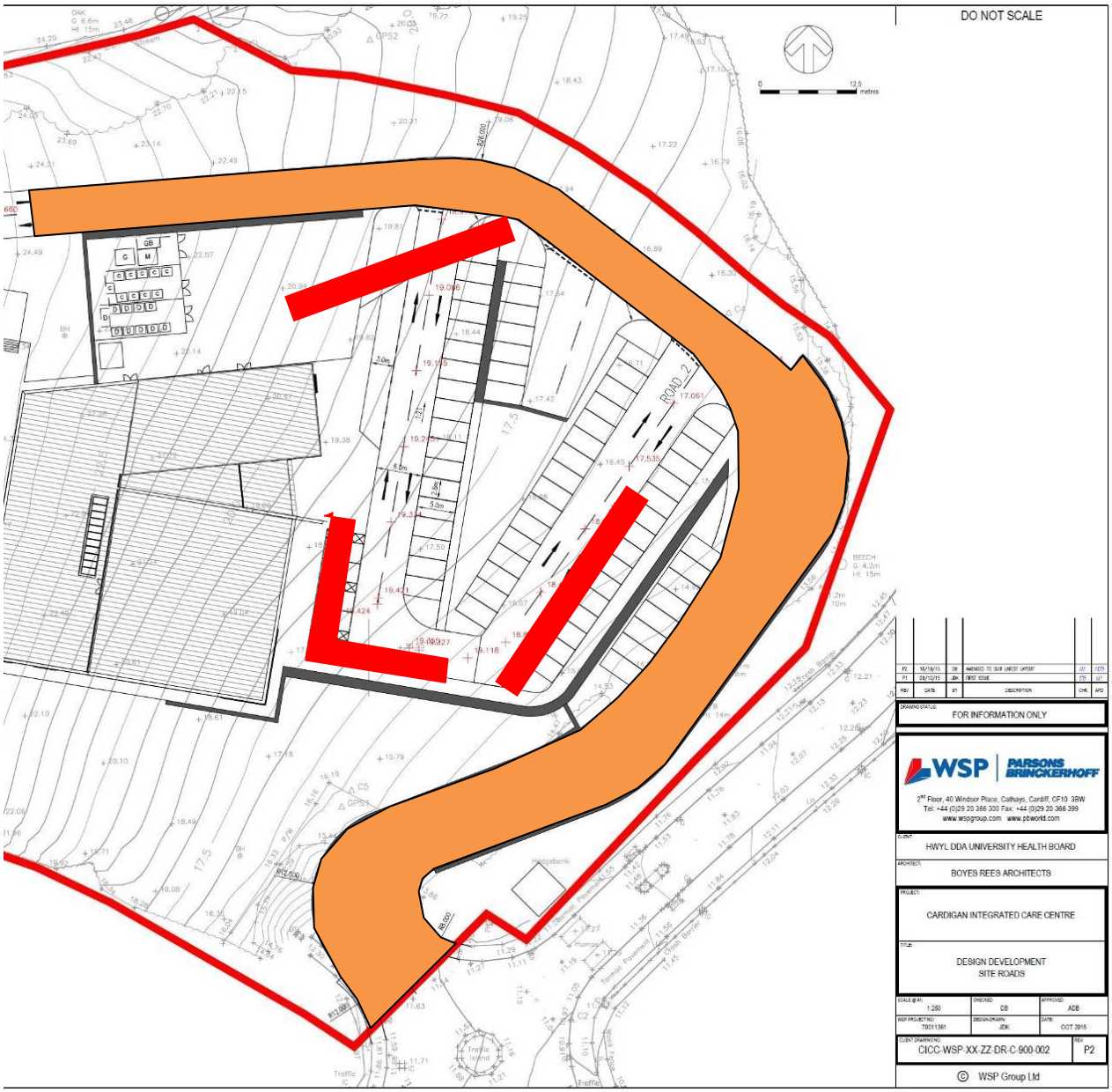

Figure 4: Proposed trench location overlaid on eastern side of Cardigan Healthcare Centre (stage 1 works) as supplied by client

Figure 5: Proposed trench location overlaid on geophysical survey results (approximate)

2. AIM AND OBJECTIVES OF THE PROJECT

2.1 This document provides a scheme of works for:

The implementation of a further programme of archaeological investigation, including trial trenching within the proposed development area of the Cardigan Healthcare Centre on land to the west of the Afon Mwldan to the north of Cardigan, Ceredigion. The results of all stages of archaeological works undertaken at the site, in advance of or during the proposed development will be included in a series of reports. An archive of the results of all stages of the archaeological works will be prepared.

2.2 The following tasks will be completed:

- Provision of a written scheme of investigation to outline the methodology for the geophysical survey and any subsequent stages of archaeological works which will be undertake at the site (this document);
- To establish the character, extent and date range (where possible) for any archaeological deposits identified within the site area on the geophysical survey that will be affected by the proposed works;
- To prepare a report and archive on the results of all stages of archaeological works.

3 TRIAL TRENCH EVALUATION

3.1 A scheme of archaeological trial trench evaluation is proposed within the development site. This will initially be undertaken within the eastern half of the development area associated with the first stage of development works proposed. The line of the proposed access road that leads from the existing roundabout around the northern side of the site area could be undertaken as a strip, map and record exercise.

3.2 The aim of the trenches would be to better ascertain the origin of the features identified on the geophysical survey, initially within the eastern half of the site area to determine their date, character, significance, extent and state of preservation. This would involve the machine excavation of trenches (using a toothless bucket) under archaeological supervision across the development site and specifically targeting features identified through the geophysical survey. The trenches would then be cleaned and the identified archaeology recorded and sample excavated.

3.3 A provisional trench plan is shown on Figure 4 for the area on the eastern side of the site area, which will target anomalies identified on the geophysical survey (Figure 5). Three trenches will be opened 3m in width and of approximately 30m length. One of these trenches will be L shaped to evaluate more of the interior of the possible larger oval enclosure in the southeastern part of the development area identified by geophysical survey.

3.4 The trenches will be excavated using a mechanical excavator (JCB 3CX or similar). The machine will be fitted with a flat bladed bucket. Arisings will be stored adjacent to the trench (at a safe distance). Trenches will be excavated to remove all non-archaeologically significant overburden, down onto either archaeological levels or the underlying natural undisturbed ground surface.

3.5 Following machine excavation, the trenches will be appropriately cleaned to prove the presence, or absence, of archaeological features and to determine their significance. The excavation of the minimum number of archaeological features needed to elucidate the character, distribution,

extent, date and importance of the archaeological remains will be undertaken.

3.6 Features containing deposits of environmental significance will be sampled. The samples will be retained in stable conditions until analysis can be arranged.

3.7 All deposits will be recorded by archaeological context record sheet, scale drawing, photography and site notebooks. All individual deposits will be numbered using the open-ended numbering system in accordance with the DAT Archaeological Services' Recording Manual[5]. Significant deposits will be recorded by scale drawing (no less than 1:20); drawn plans will be related to Ordnance Datum and, where possible, known boundaries. A digital photographic record will be maintained as a minimum.

3.8 All archaeologically significant artefacts, ecofacts and samples will be retained and, where possible, related to the contexts from which they derived. Sensitive materials will be stored in appropriately stable conditions. Finds will be temporarily stored by DAT Archaeological Services in stable conditions. All finds, except those deemed to be Treasure[6], will remain the property of the landowner, but it is assumed that permission will have been given by the landowner for these to be stored as part of the archive in a suitable repository (ownership will still be with the landowner).

3.9 Under the 1996 Treasure Act, "treasure" can be summarised as:

- Any object other than a coin containing at least 10% gold or silver and at least 300 years old;
- Any prehistoric assemblage of base metal;
- Coins found together which contain 10% gold or silver (but no single coins) and groups of at least 10 coins of other metals, provided they are at least 300 years old;
- Any object found associated with treasure except unworked natural objects; and
- Any object which would have been Treasure Trove before the 1996 Act but not covered above.

3.10 In the event of the discovery of human remains (including cremations or inhumations) they will, at the evaluation stage, be left *in situ*. The coroner should be informed. If removal is necessary it will only take place following the granting of all permissions in writing by the relevant authorities and at a later stage of any necessary archaeological works (a burial licence granted from the Ministry of Justice).

3.11 The results of the archaeological evaluation should be reported upon and an archive prepared of the results (see below).

4. STRIP, MAP AND RECORD EXERCISE

4.1 A Strip, Map and Record exercise could be undertaken along the line of the roadway proposed on the eastern side of the site area circuiting to the north (Figure 4).

4.2 The exercise would involve the careful removal of topsoil and any non-archaeologically significant subsoil, across these identified areas using a

[5] Dyfed Archaeological Trust Field Services use the Recording Manual developed by English Heritage Centre for Archaeology. A copy will be available for inspection if required.

[6] If any material deemed to be Treasure is found, the Coroner must be informed

mechanical excavator fitted with a flat bladed bucket under permanent archaeological supervision.

4.3 Any archaeological features identified within these areas would be defined and surveyed using either accurate GPS or Total Station.

4.4 Sample areas of the areas would be hand cleaned to further define the presence, or absence, of archaeological features and to determine their significance. A sample of these features will then be archaeologically excavated and recorded using the same methodology as noted above (sections 3.4 – 3.10). The sample size will be determined by the significance of the exposed archaeology and in consultation with Development Management – Dyfed Archaeological Trust.

4.5 The excavation of the minimum number of identified archaeological features needed to elucidate the character, distribution, extent, date and importance of the archaeological remains will be undertaken.

5. ARCHAEOLOGICAL EXCAVATION

5.1 In the event that the trial trench evaluation confirms the presence of significant archaeological remains, a scheme of full excavation may be required prior to the development commencing to preserve any such remains through record. This would assume that the development design cannot be altered or amended to preserve any such remains in situ.

5.2 The areas requiring excavation will be clearly defined. Construction works may be able to be commenced in areas around those marked for archaeological excavation.

5.3 The recording methodologies for excavation will be as follows:

5.4 All areas of excavation will be appropriately hand cleaned to prove the presence, or absence, of archaeological features and to determine their significance. It is not possible to adequately determine the presence or absence of archaeological remains without hand cleaning.

5.5 The excavation of the minimum number of identified archaeological features needed to elucidate the character, distribution, extent, date and importance of the archaeological remains will be undertaken. This will be agreed with Development Management – Dyfed Archaeological Trust.

5.6 Features containing deposits of environmental significance will be sampled, if present. The samples will be retained in stable conditions until analysis can be arranged.

5.7 All deposits will be recorded by archaeological context record sheet, scale drawing, photography and site notebooks, using the DAT Archaeological Services' Recording Manual. All deposits will be individually recorded and given context numbers. Significant deposits will be recorded by scale drawing (no less than 1:20); drawn plans will be related to Ordnance Datum and known boundaries.

5.8 A digital photographic record will be maintained as a minimum, using a high resolution camera, with photographic information recorded for all photographs taken.

5.9 All archaeologically significant artefacts, ecofacts and samples will be retained and, where possible, related to the contexts from which they derived. Sensitive materials will be stored in appropriately stable conditions. Finds will be temporarily stored by DAT Archaeological Services in stable conditions. All finds, except those deemed to be Treasure, will remain the property of the landowner, but it is assumed that permission has been given by the landowner for these to be stored as part

of the archive in a suitable repository (ownership will still be with the landowner).

5.10 Under the 1996 Treasure Act, "treasure" can be summarised as:

- Any object other than a coin containing at least 10% gold or silver and at least 300 years old;
- Any prehistoric assemblage of base metal;
- Coins found together which contain 10% gold or silver (but no single coins) and groups of at least 10 coins of other metals, provided they are at least 300 years old;
- Any object found associated with treasure except unworked natural objects; and
- Any object which would have been Treasure Trove before the 1996 Act but not covered above.

5.11 In the event of the discovery of archaeological human remains they will, have to be removed following the granting of a licence for the removal of human remains granted from the Ministry of Justice.

6. ARCHAEOLOGICAL WATCHING BRIEF

6.1 In the event that few archaeological remains are identified or where their significance is low, a watching brief during groundworks associated with the development may be appropriate. This would normally be done at the site strip phase, where archaeological remains could be exposed, damaged or destroyed by the works. The watching brief may only be needed in certain areas of the site, where the potential or presence of archaeology has been identified.

6.2 The archaeologist would monitor the groundworks and aim to identify any archaeological remains. They will have the authority to halt groundworks in areas where archaeological remains are identified until they have been further investigated and recorded. Areas of archaeological interest will be demarcated and made known to site contractors.

6.3 Adequate time must be made available to the visiting archaeologist to ensure that appropriate recording can be undertaken of any archaeological features or deposits exposed during ground works.

6.4 Recording of all archaeological features or deposits will conform to best current professional practice and be carried out in accordance with a recognised methodology. Archaeologically recording will use the same methodology as noted above (sections 5.7 – 5.11).

6.5 In the event that unforeseen archaeological discoveries are made during the development, or where unexpected archaeological remains of high significance are exposed, DAT Archaeological Services will have the power to halt any ground works and shall inform the client and Development management – Dyfed Archaeological Trust, and prepare a written statement with plan detailing the archaeological evidence. Following assessment of the archaeological remains by all parties, if required, a contingency scheme for salvage excavation of affected archaeological features may need to be implemented. This event may need to be covered by contingency financial arrangements within the project budgets.

7 POST-FIELDWORK REPORTING AND ARCHIVING

7.1 Individual reports will be required for the stages of archaeological works as laid out above. It is possible that these reports could be interim reports with enough information so as to enable a decision to be made on the

scope of the next stage of mitigation, if required. This would be confirmed with Development Management – Dyfed Archaeological Trust. This assumes the same archaeological contractor will be used for each stage of work.

7.2 Following completion of all stages of archaeological works a full report on the results should be prepared. This may start with an initial assessment of the results put together for discussion with the client and Development Management - Dyfed Archaeological Trust, to determine the appropriate way forward for full post-excavation analysis. This will include the level of detail required for specialist analysis of all artefacts or ecofacts recovered from the site. Radiocarbon dating may be required. The extent of conservation of any recovered artefacts will also be determined at this stage.

7.3 A grey literature report will be produced detailing the full results of the fieldwork which will be assessed in local, regional and wider contexts. This will include full specialist reports.

7.4 It is anticipated that a summary of, or short report on, the project results, excluding any confidential information, will be prepared for wider dissemination (e.g. Archaeology in Wales and special interest and period-specific journals). A more detailed publication report will also be required to be placed in an appropriate journal or publication.

7.5 The grey literature report and specialist reports will be prepared to follow the relevant Standard and Guidance of the Chartered Institute for Archaeologists (CIfA 2014).

7.6 Digital copies (and paper copies if required) of the grey literature report will be supplied to the regional Historic Environment Record and Development Management – Dyfed Archaeological Trust. Other copies of the report will need to be supplied to the client, the quantity and format to be determined at a later date.

8. ARCHIVING

8.1 All data recovered during the archaeological works will be collated into a site archive structured in accordance with the specifications in *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (Brown 2011), and the procedures recommended by the National Monuments Record, Aberystwyth. The *National Standards for Wales for Collecting and Depositing Archaeological Archives* produced by the Federation of Museums and Art Galleries of Wales will also be adhered to. Digital archives will be collated using the Royal Commission on the Ancient and Historical Monuments of Wales systems (2015) and deposited with the RCAHMW.

8.2 The project archive, including all significant artefacts and ecofacts (excepting those which may be deemed to be Treasure) will be deposited with an appropriate body following agreement with the landowner. The appointed archaeological contractor will arrange for the deposition of finds, and ascertain the costs of storage and deposition, with an approved body before the project commences and inform Development Management – Dyfed Archaeological Trust of the arrangement which has been made.

9 STAFF

9.1 The project will be managed by James Meek a Member of the Chartered Institute for Archaeologists.

9.2 The on-site works should be undertaken by experienced archaeologists from DAT Archaeological Services.

10 MONITORING

10.1 Following opening and recording of trenches or other elements, they will need to be monitored by the archaeological advisor to the planning authority, Development Management – Dyfed Archaeological Trust.

11 HEALTH AND SAFETY

11.1 Staff working on the project will be CSCS[7] registered.

11.2 A health and safety risk assessment will be prepared before each stage of archaeological mitigation to ensure that all potential risks are minimised.

11.3 All relevant health and safety regulations must be followed.

11.4 All site inductions, H&S procedures, H&S constraints and site rules of the client or any on-site contractor will be made known to the archaeological contractor at the start of the works.

11.5 All information relating to services or other constraints within the site area must be made known to the archaeological contractor prior to the start of the works. All relevant permissions from the landowner/s must also be given.

11.6 Safety helmets, high visibility vests and boots are to be used by all site personnel as necessary. The developer will make all site staff aware of any other PPE[8] that may be required.

11.7 The archaeological contractor's staff must ensure that their presence on site is communicated to all relevant site staff, especially the machine operator. The archaeologist observing the excavation of trenches by machine will establish a safe working procedure with the machine operator at the start of work.

[7] Construction Skills Certification Scheme (Health and Safety Tested)
[8] Personal Protection Equipment

CARDIGAN HEALTHCARE CENTRE: ARCHAEOLOGICAL EVALUATION 2018

RHIF YR ADRODDIAD / REPORT NUMBER: 2018/18

RHIF Y PROSIECT / EVENT RECORD NO. 112090

Ebrill 2018

April 2018

Paratowyd yr adroddiad hwn gan / This report has been prepared by

Charles Enright

Swydd / Position: Archaeologist DAT Archaeological Services

Llofnod / Signature ..... Dyddiad / Date 28/03/18

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith
This report has been checked and approved by

Fran Murphy

ar ran Ymddiriedolaeth Archaeolegol Dyfed Cyf.
on behalf of Dyfed Archaeological Trust Ltd.

Swydd / Position: Project Manager DAT Archaeological Services

Llofnod / Signature F.A. Murphy Dyddiad / Date 20/04/18

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any comments you may have on the content or presentation of this report

ymddiriedolaeth archaeolegol

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