Archaeological evaluation at land off Cowbridge Road, St Athan, Vale of Glamorgan







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With contributions by Elizabeth Pearson and Rob Hedge

Illustrations by Carolyn Hunt and Laura Templeton

Summary

An archaeological evaluation was undertaken on land off Cowbridge Road, St Athan, in the Vale of Glamorgan (NGR ST 01219 69450). It was undertaken on behalf of The Environmental Dimension Partnership (EDP) on behalf of their client, Edenstone Homes Ltd, who intends residential development for which a planning application will be submitted.

Thirty trenches were excavated across the three fields which comprise the site, to investigate anomalies identified during geophysical survey, notably two circular features, along with those apparently otherwise blank areas. There was a good correlation between the geophysics and the trenching. The two circular features were determined to be ring ditches. The larger to the northwest was cut directly into the bedrock and contained no internal features. The smaller to the southeast was cut into the natural clay. The latter comprised two concentric ditches, with postholes along the inside edge of the outer ditch, thought to have formed a palisade, or more likely a revetment to contain a raise barrow mound. It contained internal pits and gullies, seven of which appeared to contain cremation deposits, one of which contained an apparent inverted urn. These features were recorded but left *in situ*.

A small number of undated gullies and a shallow ditch were also identified elsewhere across the site, some of which were sealed by colluvium, and an undated (although probably modern) area of quarrying along the road frontage.

The small assemblage of artefacts recovered and observed indicated several distinct phases of prehistoric activity on the site, with a small quantity of residual Mesolithic worked flint and an unexcavated ceramic funerary vessel of probable Bronze Age date. The ring ditches are considered to be of Neolithic to Bronze Age date, and are considered to be of regional significance, potentially relating to the wider prehistoric landscape which includes Neolithic features and Bronze Age funerary activity at St John's Well, 1.2km to the south, and the cropmark of a possible Early Neolithic causewayed enclosure, 1.4km to the north.

Report

1 Background

1.1 Reasons for the project

An archaeological evaluation was undertaken on land off Cowbridge road, St Athan, in the Vale of Glamorgan (NGR ST 01219 69450; Fig 1). It was commissioned by The Environmental Dimension Partnership (EDP) on behalf of their client, Edenstone Homes Ltd, who intends to submit a planning application for a residential development with associated infrastructure on the site.

The proposed development site is considered to include heritage assets and potential heritage assets, the significance of which may be affected by the application. These include cropmarks identified on aerial photographs as part of desk-based assessment (EDP 2016) of the site and clearly defined anomalies located during a recent geophysical survey, thought to represent ring ditches of prehistoric origin (Headland Archaeology 2016).

No brief was provided but a trench plan and outline scope of works for the project was formulated in consultation with EDP and the Archaeological Planning Officer at the Glamorgan Gwent Archaeological Trust (GGAT). As a result, a project proposal (including detailed specification) was produced by Worcestershire Archaeology (WA 2016). This conformed to the generality of briefs previously issued.

The project also conformed to the national standard and guidance document for archaeological field evaluation issued by the Chartered Institute for Archaeologists (CIfA 2014a).

The event reference for this project has not yet been provided by the Glamorgan Gwent Historic Environment Record (HER).

2 Aims

The aims of this evaluation were, in general, to:

- determine the presence or absence of archaeological deposits beyond reasonable doubt;
- identify the location, date, nature, importance and extent of any archaeological remains;
- assess their significance, and;
- assess the impact of the application on the archaeological site.

More specifically, the project aimed to define the date, nature and state of preservation of the probable ring ditches and other anomalies identified during the geophysical survey of the site area.

3 Methods

3.1 Personnel

The fieldwork was led by Richard Bradley (BA (hons.), MA; ACIfA), who joined Worcestershire Archaeology in 2009, assisted by Elspeth Iliff (BA (hons.); MSc) and Aidan Woodger (BA (hons.); MSc). Report preparation was led by Richard Bradley and Tom Vaughan (BA (hons.); MA; ACIfA), who was also the project manager responsible for the quality of the project. Elizabeth Pearson (MSc; ACIfA) contributed the environmental report, and Robert Hedge (MA Cantab) the finds report. Illustrations were prepared by Carolyn Hunt (BSc (hons.); PG Cert; MCIfA) and Laura Templeton (BA; PG Cert; MCIfA.

3.2 Documentary research

As mentioned above, a desk-based assessment report (DBA) was prepared by The Environmental Dimension Partnership Ltd (EDP) on behalf of Edenstone Homes (EDP 2016). This consulted readily available archaeological and historical information to determine the relevant historic

environment information for the site and the surrounding area (within a 500m radius). A site walkover survey was also undertaken.

The DBA provides the detailed background research information for the project and, therefore, the results of this are only briefly summarised below (Section 4.2).

3.3 Fieldwork strategy

A detailed specification was prepared by Worcestershire Archaeology (WA 2016). Fieldwork took place between the 12 and 22 September 2016. The Worcestershire Archaeology project number is P4926 (EDP reference 3504).

Thirty trenches of varying lengths were excavated on a rough grid array across over three fields which make up the total development site area of c 11ha. The location of the trenches is indicated in Figure 2. The trenches were mainly positioned so as to target geophysical anomalies (thought to represent archaeological features), but also areas considered to be devoid of archaeology outside these anomalies, within the constraints presented by underground services, a public footpath and the footprint of a former building.

The majority of trenches were excavated in their intended locations, although minimal alterations in orientation were necessary so as to avoid bisecting the public footpath directly (Trenches 16, 18 and 29) and to be clear of numerous trees (Trench 30). Trench 20 was also moved to the southeast to be further from the watercourse on this site of the field.

One trench (Trench 26) was expanded to further clarify and define archaeological features, as well as to ascertain a relationship in plan between features, following consultation with EDP and the Curator.

Deposits considered not to be significant were removed under constant archaeological supervision using a 360° tracked excavator, employing a toothless bucket. Subsequent excavation was undertaken by hand. Clean surfaces were inspected and selected deposits were excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. Deposits were recorded according to standard Worcestershire Archaeology practice (WA 2012) and trench and feature locations surveyed using a differential GPS with an accuracy limit set at <0.04m. On completion of excavation, trenches were reinstated by replacing the excavated material.

3.4 Structural analysis

All fieldwork records were checked and cross-referenced. Analysis was effected through a combination of structural, artefactual and ecofactual evidence, allied to the information derived from other sources.

3.5 Artefact methodology, by Rob Hedge

The finds work reported here conforms to the following guidance: for finds work by CIfA (2014b), for archive creation by AAF (2011) and for museum deposition by SMA (1993).

3.5.1 Recovery policy

The artefact recovery policy conformed to standard Worcestershire Archaeology practice (WA 2012; appendix 2).

3.5.2 Method of analysis

All hand-retrieved finds were examined. They were identified, quantified and dated to period. A *terminus post quem* date was produced for each stratified context. The date was used for determining the broad date of phases defined for the site. All information was recorded on *pro forma* sheets.

Artefacts from environmental samples were examined and are included in the quantification and assessment.

The pottery and ceramic building material was examined under x20 magnification and referenced as appropriate by fabric type and form according to the fabric reference series maintained by Worcestershire Archaeology (Hurst and Rees 1992 and www.worcestershireceramics.org).

3.5.3 Discard policy

The following categories/types of material will be discarded after a period of six months following the submission of this report, unless there is a specific request to retain them (and subject to the collection policy of the relevant depository):

- where unstratified
- post-medieval material in general, and;
- generally where material has been specifically assessed by an appropriate specialist as having no obvious grounds for retention.

See the environmental section for other discard where appropriate.

3.6 Environmental archaeology methodology, by Elizabeth Pearson

3.6.1 Project parameters

The environmental project conforms to relevant sections of the *Standard and guidance: Archaeological field evaluation* (CIfA 2014a), *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage 2011), and *Environmental archaeology and archaeological evaluations* (AEA 1995).

The aims of the project were to determine the state of preservation, type, and quantity of environmental remains recovered, from the samples and information provided. This information will be used to assess the importance of the environmental remains.

3.6.2 Sampling policy

Samples were taken according to standard Worcestershire Archaeology practice (WA 2012). A total of 5 samples (each of up to 20 litres) were taken from the site (Table 3). Samples were recovered from Ring Ditches 1 and 2, which are of Neolithic to Bronze Age date based on their association with each other and internal cremation deposits.

3.6.3 Processing and analysis

The samples were processed by flotation using a Siraf tank. The flots were collected on a 300mm sieve and the residue retained on a 1mm mesh. This allows for the recovery of items such as small animal bones, molluscs and seeds.

The residues were scanned by eye and the abundance of each category of environmental remains estimated. A magnet was also used to test for the presence of hammerscale. The flots were scanned using a low power MEIJI stereo light microscope and plant remains identified using modern reference collections maintained by Worcestershire Archaeology, and a seed identification manual (Cappers *et al* 2012). Nomenclature for the plant remains follows *New Flora of the British Isles* (Stace 2010).

3.6.4 Discard policy

Remaining sample material and scanned residues will be discarded after a period of six months following submission of this report unless there is a specific request to retain them.

3.7 Statement of confidence in the methods and results

The methods adopted allow a high degree of confidence that the aims of the project have been achieved.

4 The application site

4.1 Topography, geology and current land-use

The site comprises two fields within an irregular parcel of land (Fields 1 and 2), currently under pasture, and one separate area of grassed amenity space adjacent to a housing estate (Field 3), all around 1km to the north of St Athan village. The fields are bounded to the north-west by Nant y Stepsau, a tributary of the River Thaw, to the south-west by the St Athan/Cowbridge Road (to the south-west of which is MOD St Athan) and by farmland to the north. To the east, the small amenity area is open to the estate. Part of this space is occupied by a concrete road and car park, associated with a demolished military building.

The topography is undulating but, in general, slopes from east to west, with a plateau of land at around 49m AOD in the east, dropping down to 35m AOD in the north-west (Plate 1). This lower ground forms the south-eastern side of a low valley following the Nant y Stepsau watercourse.

The underlying bedrock geology consists of Porthkerry Member, interbedded limestone and mudstone. No superficial deposits are recorded (BGS 2016).

4.2 Archaeological context

As detailed in the desk-based assessment (EDP 2016), there are no previously recorded designated or undesignated heritage assets within the site and no part of the site is located within or adjacent to an historic landscape area. There are, however, numerous known heritage assets in the immediate surrounds.

These, in brief, include a cropmark that is thought to represent a possible Early Neolithic causewayed enclosure, around 1.4km to the north, a complex of multi-period features and settlement activity (Bronze Age to Roman) identified through fieldwork at MOD St Athan, 1km to the west (Cotswold Archaeology 2003; Wessex Archaeology 2010), and nationally significant Neolithic features and Bronze Age funerary remains subject to ongoing excavation at St John's Well, 1.2km to the south (GGAT and APAC Ltd pers comm; see also EDP 2016). In addition, the projected course of a Roman road running between West Aberthaw and Llansannol roughly follows the line of St Athan/Cowbridge Road that defines the south and west boundaries of the site.

Historic mapping suggests that the area was agricultural in use throughout the medieval and postmedieval periods, including some quarrying, but with little landscape alteration until the construction of MOD St Athan in the 1930's. This substantial RAF airfield largely defined the development of the locality and a number of defensive features related to the base are extant in close proximity. These include a pillbox and a barracks, as well as the large building and associated landscaping that previously occupied the eastern amenity space part of the site (Field 3). This building was demolished in the early 21st century.

Aerial photographs taken from the mid-20th century onwards show these military remains in the site area, and a number of cropmark anomalies thought to be of earlier date. Widely spaced, parallel linear marks are present across both pasture fields (and extend further north on the same alignment beyond the hedged boundaries of these fields) and were interpreted as either agricultural or geological in origin (EDP 2016). An oval cropmark approximately 35m in diameter was also noted in the western part of the site and another possible ring ditch in the field immediately to the north-west (EDP 2016, plan 7).

The large oval cropmark, perhaps a small enclosure or a ploughed-out barrow surviving as a ring ditch, was highlighted through the geophysical survey of the site undertaken in May 2016 (Headland Archaeology 2016, illustration 9, Ring Ditch 1). The survey also located an additional ring ditch (probably double-ditched), circular in plan and 16m in diameter (Ring Ditch 2), 70m to the east, as well as the previously identified parallel linear anomalies, and two clear areas of potential quarrying activity (Q1 and Q2).

5 Results

5.1 Structural analysis

The trenches and features recorded are shown in Figures 2–9. The results of the structural analysis are presented in Appendix 1.

5.1.1 Phase 1: Natural deposits

The natural substrate was encountered in all thirty of the trenches excavated. This was variable across the site but was broadly consistent with the British Geological Survey mapping information (BGS 2016) that shows an absence of superficial deposits above the bedrock in this area.

To the west, on the lower ground of Field 1, the natural horizon often comprised the solid bedrock geology of laminar limestone blocks in a series of stepped layers, although in a number of instances a heavily fractured version of the limestone within an orange-brown silty clay matrix was also encountered (always between 0.32-0.45m below the ground surface; Plate 3). This was thought to be the result of geological weathering in combination with historic and recent plough damage. In a group of trenches (Trenches 13, 14, 15, 16, 18, 21, 22, 28) towards the south-east and through the centre of Field 1, however, there was a noticeable absence of the solid limestone geology and the natural comprised brownish yellow/orange silty clay. This variation followed a shallow undulation in the landscape.

In Field 2, Trench 12 occupied the same depression within the rolling landscape and contained similar silty clay natural, as well as a series of colluvial deposits that undoubtedly reflect its location below noticeably higher ground in the rest of the field. The trenches on the higher ground to the north-east all exhibited the same combination of solid laminar limestone blocks and fractured limestone as in Field 1, around 0.20-0.40m below the surface.

Across both main fields (Fields 1 and 2) there were a number of north-east to south-west aligned linear features that formed clay bands though the solid limestone bedrock, correlating in many cases with those visible on aerial photographs and the geophysical survey (Plate 2). Where investigated with machine slots, these were found to be around 3-5m in width and 0.30-0.40m in depth and very sterile and homogenous. Although reminiscent of large plough furrows, based on a number of factors such as the spacing between, their known extents (they continue well beyond the site area to the north and north-east), and being clearly cut by archaeological features considered to be of prehistoric date (see below, Trench 26), these are thought to be geological rather than anthropogenic in origin.

In the easternmost part of the site, Trenches 29 and 30 within the grassed amenity space (Field 3) exhibited a deeper formation of subsoil and made ground above reddish-orange clay with limestone, the natural strata (encountered at 0.94m and 0.86m below the surface respectively).

5.1.2 Phase 2: Prehistoric deposits

Although there was very limited stratified artefactual evidence to provide conclusive evidence, a number of features identified across the trenches are considered to be of prehistoric date, mainly based on comparable morphology. These are described on a trench by trench basis in the following section, for ease of location.

Trenches 14 and 15 (Figs 2–3, and 6; Plates 5–8)

This 'T'-shaped trench arrangement in the eastern part of Field 1 was specifically located to target the geophysical anomaly thought to represent a circular ring ditch (RD2). This was identified as a double-ditched feature in almost the exact position within the trenches as highlighted by the geophysics and is considered to be the remains of a prehistoric barrow. Of particular note in this area was a much greater thickness of subsoil above the archaeological horizon (0.36-0.40m in depth compared to 0.08-0.30m elsewhere). Although no artefacts were recovered from the subsoil

in this trench, it contained more frequent charcoal than elsewhere and potentially represents ploughed out mound material dispersed across the vicinity.

These trenches contained significant and potentially complex archaeological deposits associated with a funerary monument. It was, therefore, determined that extensive intrusive excavation of features would be an inappropriate strategy at this stage of work. As a result, only limited intervention was undertaken and most features were simply cleaned and recorded in plan. For example, the two ditches forming the double ring ditch were observed in Trench 14 and twice in Trench 15, but investigated only at the northern end of Trench 15.

The outer ditch [1505] was 1.1m in width and 0.35m in depth (Plate 5), with two fills, the lowest of which appeared to be slumped deposit weathered from the inside edge (1504), similar to the clay natural. The ditch did not contain any dating evidence. On the inside (southern) edge was a cut for a circular posthole [1507], 0.46m in diameter, 0.23m in depth. A further possible posthole was recorded adjacent to this, also on the inner edge of the ditch, but not excavated. It is possible that these represent part of an enclosing palisade or perhaps a revetment for a bank between this ditch and the inner one. The presence of a bank was also suggested by a negative response band in this area on the geophysical survey (Headland Archaeology 2016, 3).

The inner ditch [1514] was wider and deeper (1.8m wide, 0.55m in depth), with a break of slope down into a small gully cut at the base [1516] (Plate 6). Slumped deposits were apparent down both sides of the ditch (1512 and 1513), perhaps weathered from banks on either side, with a main fill above that included a few fragments of heat-cracked stone. The edge of the ditch had truncated an earlier, possible gully feature [1509], which was very shallow (0.05m) and of uncertain function. This was filled with light brown silt, a deposit comparable to that seen in a number of other diffuse, but mostly unexcavated, features across the trenches that did not appear to be clearly associated with the layout of the ring ditch. One possible pit feature in Trench 15, located at the southern end of the trench between the inner and outer ditch, was explored [1548]. This was shallow and irregular and difficult to define. Another, in Trench 14, did not resolve into a clear cut feature when explored but was very shallow and dissipated in various directions within the natural. It remains possible that features such as these across both trenches are variations in the natural substrate or are related to rooting, potentially indicative of woodland in the area.

A cluster of internal features were, however, central to and clearly associated with the ditches. These provided the most obvious evidence of a prehistoric date for the monument, potentially Early Bronze Age, and included seven small pits associated with a sinuous and irregular small ditch or gully [1532]. None of these were excavated but it was apparent from surface observation that most contained mixed deposits of burnt bone and charcoal, likely to be cremation deposits of human bone and pyre material (Plate 7). In a few instances arranged or structured deposition was considered possible; for example, pits [1534] and [1530] were the same size and in close proximity, but one [1534] contained noticeably more burnt bone than charcoal, the other the opposite combination [1530]. It may be that this demonstrates a deliberate selection of material from the cremation pyre, whereby pyre material was separated out from the bone but still retained for burial.

One pit was of particular interest as it clearly contained an inverted urn [1536]. Only the base was visible. It was not excavated. The upper surface of the feature was cleaned and recorded but it was otherwise left *in situ*. There was little obvious damage (Plate 8). It is probable that the urn survives as its original size, potentially intact, with an extensive cremation deposit (or deposits) within.

Trenches 26 and 27 (Figs 2–3, and 8–9; Plates 9-11)

Trenches 26 and 27 were targeted on the large oval cropmark (RD1). This was identified as a welldefined rock-cut ditch in two places in Trench 27, as well as in Trench 26.

The feature was not excavated in Trench 26, only recorded in plan, where it was 1.54m in width and curving, correlating well with the shape of both the cropmark and geophysical anomaly [2605]. An extension to the trench showed that the ditch was cut through a large linear band of clay (2606)

within the limestone bedrock (also visible in this location on the geophysical survey; Plate 11), demonstrating the likely geological origin of similar such features across the site area.

The ditch was excavated in two places in Trench 27, both slots showing a slightly ragged but near vertical edge where plates of limestone bedrock had been broken away to create the shape of the feature. To the north-west, the ditch was 1.10m in width and 0.40m in depth [2705]. To the south-east it was a comparable, 0.92m in width and 0.36m in depth [2708]. The ditch had a flat base following a bed of limestone, with a patchy basal fill of blue-grey clay 0.04m-0.10m in depth filling small fissures in the rock, thought to be resultant from aquatic siltation. Above this was a sterile and homogenous silty clay fill (0.30-0.32m in depth), very similar to the subsoil and showing no indications of deliberate infilling (Plates 9 and 10). It was, however, noteworthy that a concentration of larger pieces of fractured bedrock was present in the middle of the main fill in both slots through the ditch (Plate 10). It is possible that plough damage had incorporated stone from the central area demarcated by the ditch.

There were no obvious internal or external features within Trenches 26 and 27 that could be associated with the ditch, and no dating evidence was retrieved, although a small chunk of chert was recovered from an environmental sample of the main fill. However, the size and shape of the overall ditch, plus the lack of occupation deposits and an absence of finds or associated occupation features, suggests that this is most likely to be a prehistoric ring ditch, reflecting a similar landscape use to that identified in Trench 14 and 15 but of varying form, possibly due to the differing natural geology.

Trench 18

Towards the north-east end of Trench 18 was a diffuse and shallow possible ditch feature [1803]. This was difficult to define in plan and appeared more as a hollow within the natural rather than an obviously cut feature. Two pieces of flint were recovered from the environmental sample, suggesting a prehistoric date.

Trench 21

Worked flint was recovered from the subsoil in Trench 21 (2101), which was typologically characteristic of a Mesolithic date.

5.1.3 Phase 3: Modern deposits

In all trenches, the humic and friable topsoil (0.08-0.22m in depth) sealed a thin subsoil deposit directly above either the natural substrate or the archaeological horizon, whichever was encountered first. Few modern finds were recovered and the topsoil was, in general, surprisingly devoid of artefacts.

Across the grassed amenity space (Field 3), where Trenches 29 and 30 were excavated, the geophysical survey had indicated a considerable spread of magnetic disturbance (Headland Archaeology 2016). This was evident as a deposit of made ground, 0.24-0.34m in depth, below the topsoil in both trenches (2901; 3001). Although the amount of modern material within this deposit was not extensive, brick, plastic, and metal was present (none retained) and is likely to have affected the geophysical response to some degree. Below the made ground was a thick subsoil deposit that appeared to be a disturbed/reworked natural, possibly reflecting landscaping works in this area associated with the former military building on this part of the site.

5.1.4 Undated deposits

As noted above, there was a distinct absence of artefacts across the site, with only a few features containing any cultural material. The majority were also isolated and lacking in stratigraphic relationships. Most, therefore, are not dated to a particular phase of activity on site, although it is possible that the undated deposits and features identified across the area could be broadly contemporary with the significant prehistoric archaeology identified in Trenches 14, 15, 26 and 27.

A small gully was located at the northern end of Trench 13 [1305]. This was diffuse, only 0.15m in depth and with a silty but sterile fill lacking in dating evidence, but appeared to have a slight curve and terminate within the trench extents (Plate 12). A similar undated feature was identified at the south-west end of Trench 18 [1810]; this was again very shallow, only 0.19m in depth.

In Trench 12, below deeper silty deposits of colluvium likely to have been washed down from the higher ground to the north and north-east, was a shallow linear ditch aligned broadly east-west [1207] (Plate 4). This was 1.70m in width and 0.30m in depth and did not appear to have been truncated due to the soil coverage above. It was not identified anywhere else in either field, such as in Trench 13 nearby, so the extent and purpose of this ditch is not clear. Towards the southern end of the trench was a small oval hollow, possibly a shallow pit, only 0.10m in depth [1205]. This lacked any cultural inclusions and had very diffuse edges.

Trench 17 was located across a series of irregular geophysical anomalies, thought to be related to stone extraction (Headland Archaeology 2016, 3). Two large areas of this probable quarrying were identified within the trench that correlated with these anomalies [1706 and 1709], both cut down through the bedrock for at least 1m (but not fully explored for safety reasons) and backfilled with broken limestone (Plate 13). This infill was unusual, in that little of the stone bedrock appeared to have been taken away, but this may be because it had been deemed unsuitable. No dating evidence was recovered, but the holes were so extensive as to suggest that machine excavation may have been the method originally used to create them.

5.2 Artefactual analysis, by Rob Hedge

The artefactual assemblage recovered is summarised in Tables 1 and 2.

The assemblage came from seven stratified contexts and could be dated from the Mesolithic period onwards (see Table 1). The limited nature of the assemblage can be attributed in part to the relative paucity of finds on prehistoric sites of this period in the region, and it part due to the decision to preserve some of the features identified *in situ* rather than excavate them.

period	material class	material subtype	object specific type	count	weight(g)
Mesolithic	stone	flint	bladelet fragment	1	0.33
Mesolithic	stone	flint	end-scraper	1	1.79
Bronze Age	ceramic		pot	1	N/A
prehistoric	stone	chert	chip	1	0.25
prehistoric	stone	flint	chip	2	0.19
post- medieval/modern	ceramic		pot	2	12
modern	glass		vessel	1	5
modern	metal		padlock	1	148
undated	slag		unident. slag	1	0.04
undated	stone	chert	shattered piece	1	0.54
			Totals	12	168 14

Table 1: Quantification of the assemblage

5.2.1 Summary artefactual evidence by period

For the finds from individual features, consult Table 2.

Phase 2: Prehistoric

Mesolithic

Two pieces of diagnostic worked flint were recovered from subsoil (2101) within trench 21:

- the distal portion of a small bladelet, 13mm x 8mm x 2.5mm, on fine, white-patinated flint, and
- a small end-scraper, 20mm x 16mm x 6mm, on a thick convex flake of mottled brown-grey flint with 75% dorsal cortex remaining and the butt modified to remove the proximal end.

Both are generally indicative of Mesolithic activity, although a later Neolithic/early Bronze Age date for the scraper is possible.

Bronze Age

A portion of what appeared to be an intact, inverted ceramic vessel was observed within deposit (1535). Although unexcavated, it is considered likely to be a cinerary urn containing cremation deposits. Without excavation, it was not possible to determine the fabric of the vessel. A precise date is therefore precluded, although it is highly likely to be Bronze Age in date.

Prehistoric

A small chip of worked chert from subsoil (2101) and two chips of worked flint recovered from an environmental sample from fill (1802) of ditch [1803], although not typologically diagnostic, are considered to derive from prehistoric flint-working. A prehistoric date for ditch [1803] is therefore suggested.

An environmental sample from upper fill (1503) of ditch [1505] yielded an extremely small (0.04g) fragment of metalworking waste which could not be readily identified to type. It indicates a *terminus post quem* date range beginning in the Bronze Age but could derive from any subsequent period. The presence of charcoal within the fill may be indicative of activity in the area but deliberate infill, leading to the incorporation of slag and charcoal from elsewhere, cannot be ruled out.

Phase 3: Modern

Topsoil deposits in Trenches 29 and 30 yielded a small quantity of later 19th and 20th century domestic material.

Undated

A single small chunk of chert was recovered from environmental sampling of upper fill (2706) of ditch [2708]; although it may represent a shattered piece of amorphous debitage from stone working, it is equally possible that it is of natural origin. A prehistoric date is therefore possible but cannot be confirmed without further evidence.

context	material class	material subtype	object specific type	count	weight(g)	start date	end date	TPQ date range
1503	slag		unident. slag	1	0.04	-2500	2000	2500 BC onwards
1535	ceramic		pot	1		-2500	-700	2500 BC - 700 BC
4000	stone	flint	chip	1	0.13	-10000	43	10000 BC -
1802	stone	flint	chip	1	0.06	-10000	43	43AD
	stone	flint	end- scraper	1	1.79	-10000	-4000	10000 50
2101	stone	flint	bladelet fragment	1	0.33	-10000	-4000	43AD
	stone	chert	chip	1	0.25	-10000	43	
2706	stone	chert	shattered piece	1	0.54			?prehistoric
2900	metal		padlock	1	148	1900	2000	1900 - 2000
2000	ceramic		pot	2	12	1850	2000	1900 -
3000	glass		vessel	1	5	1900	2000	2000

Table 2: Summary of context dating based on artefacts

5.2.2 Synthesis

Although the artefactual assemblage was limited in size, it is consistent with the interpretation of the cluster of features in Trenches 14, 15, 26 and 27 as a locus of prehistoric funerary activity, likely to be Neolithic or Bronze Age in date. There was no evidence to suggest domestic occupation.

Several pieces of Mesolithic flint attest to an earlier phase of activity within the landscape.

The absence of residual finds post-dating the prehistoric period (excepting the few modern artefacts) supports the conclusion that subsequent land use was not intensive.

5.3 Environmental analysis, by Elizabeth Pearson

The environmental evidence recovered is summarised in Tables 3–5.

Uncharred remains, consisting of mainly root fragments are assumed to be modern and intrusive as they are unlikely to have survived in the soils on site for long without charring or waterlogging.

Context	Sample	Feature type	Fill of	Position of fill	Period	Sample volume	Volume processed (L)	Residue assessed	Flot assessed
1503	1	Ditch	1505	Secondary	?EBA	20	10	Yes	Yes
1510	2	Ditch	1514	Secondary	?EBA	20	10	Yes	Yes
1802	5	Ditch	1803		?prehistoric	20	10	Yes	Yes
2703	3	Ditch	2705	Secondary	?prehistoric	20	10	Yes	Yes
2706	4	Ditch	2708	Secondary	?prehistoric	20	10	Yes	Yes

Table 3: List of bulk samples; ?EBA = ?Early Bronze Age

context	sample	charcoal	uncharred plant	artefacts	comments
1503	1	occ	0CC*	occ coal, clinker	
1510	2	occ	0CC*	occ coal	
1802	5	occ	0CC*	occ flint	flint flakes
2703	3	occ	abt*		
2706	4	000	mod*	occ chert	chert debris

Table 4: Summary of environmental remains from bulk samples; occ = occasional, mod = moderate, abt = abundant, * = probably intrusive

context	sample	preservation type	species detail	category remains	quantity/ diversity	comment
1503	1	?wa*	unidentified root fragments (herbaceous)		+/low	
1503	1	?wa*	<i>Betula pendula, Polygonum aviculare, Rumex</i> sp, unidentified fungal sclerotia	seed	+/low	
1510	2	?wa*	unidentified root fragments (herbaceous)	misc	+/low	
1510	2	ch	unidentified wood fragments	misc	+/low	single small fragment
1802	5	?wa*	Betula pendula	seed	+/low	

1802	5	?wa*	unidentified root fragments (herbaceous)	misc	+/low	
1802	5	ch	unidentified wood fragments	misc	+/low	small fragments
2703	3	ch	unidentified wood fragments	misc	+/low	small fragments
2703	3	?wa*	unidentified root fragments (herbaceous)	misc	+++/low	
2706	4	?wa*	unidentified root fragments (herbaceous)	misc	++/low	
2706	4	?wa*	Amaranthaceae sp indet	seed	+/low	
2706	4	?wa*	unidentified root fragments (herbaceous)	misc	++/low	
2706	4	ch	unidentified wood fragments	misc		small fragments

 Table 5: Plant remains from bulk samples

Key:

preservation	quantity
ch = charred	+ = 1 - 10
min = mineralised	++ = 11- 50
wa = waterlogged	+++ = 51 - 100
?wa = waterlogged or uncharred	++++ = 101+
	* = probably intrusive

5.3.1 Results

Phase 2: Prehistoric

Only small fragments of unidentifiable charcoal were recovered from contexts (1510) and (2703). Little interpretation could be made of the environmental remains. They show low potential for recovering environmental remains which would aid interpretation on the environment and activities on the site. However, bulk sampling may recover further micro-flint debris which would help to detect human activity on the site.

Ditch fill (1802) contained small fragments of flint waste, suggesting a prehistoric date. Only small unidentifiable charcoal fragments were identified.

Undated

Of note are the layers of colluvium sealing a pit/hollow [1205] and a ditch [1207], in Trench 12.

5.3.2 Significance

The environmental remains recovered were of low significance for interpreting the surrounding environment and human activity on the site. However, a thin layer of colluvium recorded in Trench 12 indicates the possibility that increased disturbance to nearby soils may have resulted from intensified settlement or agricultural activity post-dating the Neolithic to Bronze Age activity.

6 Overview and discussion

The evaluation has established that the site contains a number of archaeological features, quite broadly dispersed, but with intensive areas of activity in localised areas (e.g. Trenches 14, 15, 26 and 27). Limited intervention coupled with a lack of artefacts has led to most of these only being provisionally allocated to a site phase (prehistoric), mainly through comparison. This does, however, support the archaeological potential for the site as highlighted in the desk-based assessment (EDP 2016).

Most of the features had a good correlation with both cropmarks and the geophysical anomalies, particularly the ring ditches (RD1 and 2) and one area of quarrying (Q1; Trenches 14, 15, 17, 26, 27). Associated with these were a further range of significant buried remains such as cremation

deposits (Trench 15), as well as a few small pits and diffuse ditches/gullies elsewhere that demonstrate a further (albeit limited) archaeological component to the site beyond that identified in the geophysical survey (Trenches 12, 13, 18).

Given the largely accurate correlation of the geophysical anomalies with the presence of archaeology, the lack of either in parts of the site may indicate a real absence. It is possible, therefore, to suggest that large areas are devoid of significant archaeological remains, perhaps a reflection of the proximity of the bedrock to the surface making it less suitable for extensive occupation.

Prehistoric

The main archaeological activity appears to date to the prehistoric period, although, as noted above, the dating is not conclusive. Whilst Mesolithic flint was found in the subsoil of one trench, this was clearly focused on two ring ditches, probably the ploughed out remains of barrows characteristically late Neolithic and Bronze Age in date. One of these had associated internal discrete features, namely pits that included cremation deposits, charcoal, and at least one inverted pot, probably an urn. There was no clear indication of *in-situ* burning on the natural substrate around the charcoal-rich deposits, which suggests that the material was brought from pyres elsewhere in the surrounding area.

The preservation of the discrete features in the centre of this eastern ring ditch (RD2), despite evidence for ploughing damaging the natural substrate elsewhere, may have been facilitated by the presence of a barrow mound built-up over these deposits. This was also suggested by the thickness of subsoil in this area and, therefore, this barrow is more likely to have been a 'bell' or 'bowl' type, which had larger central accumulations of soil or turf stacks, potentially offering more protection. The postholes noted on the inner edge of the outer ditch may have been part of a structure used to retain this material.

The form of the western ring ditch (RD1) is less clear, mainly due to the lack of associated features or remains that could give an indication of its use. Construction within an area of solid bedrock geology in close proximity to the surface does, however, suggest that considerable effort was put into its formation and that this location was chosen deliberately for reasons beyond general practicality.

The geophysical survey indicated that the ditches were segmented, however this was not borne out in the trenching which was specifically located across these projected breaks or entrances. Variations in the natural appear to account for this, as in both features the ditches appeared to be continuous.

A grouping of ring ditches such as this in close proximity is suggestive of a ritual, funerary landscape of importance, one deemed suitable for the construction of a complex of monuments in the prehistoric period. Certainly the location conforms to an expected siting in relation to the surrounding landscape; the majority of barrows are found on lower valley slopes, normally on ground sloping to the south, west or north-west and in deliberate association with springs, streams or rivers (Woodward 2000, 73-4). The presence of water is likely to have been central to this landscape as a whole and it is interesting to note a similarity to the location of Neolithic features and Bronze Age funerary remains currently under excavation at St John's Well, 1.2km to the south (GGAT and APAC Ltd pers comm).

The paired location (*c* 80m apart) may also suggest the presence and visibility of both features in the landscape at the same time, although exactly how closely contemporary they were has not been determined. The distance between the monuments and the difference in form could also represent a widely clustered grouping created over a long period (see Woodward 2000, 73-99). This may also include the other possible ring ditch visible as a cropmark in the field immediately to the north-west of the site (EDP 2016, plan 7) and, alongside the known funerary monuments from the wider area, demonstrate that these features were just one small part of a wider and complex prehistoric ceremonial landscape.

Other activity

Based on the number of features located in the trenches, combined with the geophysical survey, it appears that outside of the probable prehistoric ring ditches, there was little intensive land use during any period. The undated small gullies and shallow ditch could relate to drainage, but the overall nature of other activity is difficult to determine, particularly given the paucity of artefacts and an absence of direct relationships or obvious arrangement of features. There was no suggestion that activity was related to settlement, although, if the undated features are considered to potentially be prehistoric in date, then they could represent a series of dispersed and ephemeral episodes of seasonal land use.

Aside from the stone quarrying (which was of uncertain date), there was no archaeological evidence to suggest that the fields had been used for anything other than agriculture following the prehistoric, prior to the modern period.

7 Significance

7.1 Nature of the archaeological interest in the site

The archaeological interest in the site lies in the presence of prehistoric remains: notably two ring ditches, with associated features, particularly cremation deposits, of Neolithic to Bronze Age date. The potential for survival of artefactual material, including funerary urns alongside associated monuments, is significant. Given the good correlation between the geophysical survey anomalies and the results of the trench evaluation, however, it is unlikely that further, as yet unidentified, substantial features are present within the site.

With largely sterile fills encountered during this phase of works, environmental sampling would be important in future phases of site investigation, for the recovery of artefactual material even if environmental remains per say are poor. The key focus of the site in artefactual terms is the potential for intact cinerary deposits such as the urn encountered in deposit (1535). Encountered at a depth of just over 0.5m, these are not considered vulnerable while the land is under pasture, but any change in land use or development should be carefully assessed.

There is the potential for further Mesolithic material to be contained within topsoil and subsoil deposits, which should be a consideration in advance of development proposals.

7.2 Relative importance of the archaeological interest in the site

The ring ditches and associated internal features are considered to be of regional significance, and may form part of a wider cohesive, contemporary and evolving prehistoric landscape with the Neolithic features and Bronze Age funerary activity at St John's Well, 1.2km to the south, and the cropmark of a possible Early Neolithic causewayed enclosure, 1.4km to the north.

The need for integration of understanding of later Neolithic and Bronze Age material culture research with monument studies is highlighted in the 2011 review of the Neolithic and Early Bronze Age section of *A Research Framework for the Archaeology of Wales*, which notes that 'material culture studies have been something of a poor relation in Wales' (ClfA Wales 2011, 6). Whilst valuable work has been undertaken on the prehistoric pottery of parts of Wales (e.g. Williams and Jenkins 2004), the potential of this site to offer a synthetic approach to understanding material culture and monumentality is significant.

As such they have the potential to feed into a number of the research themes identified in *A Research Framework for the Archaeology of Wales (Version 02): Neolithic and Earlier Bronze Age Wales* (ClfA Wales 2011, 7-8), notably:

1. Chronology of material culture and monument types

b. What is the date of the major monument and artefact types of Wales's Neolithic and Early Bronze Age?

And:

- 6. Ceremonial and funerary monuments
- a. What do monuments tell us about the nature of society?

b. What can their immediate environs tell us about the development, role and use of monuments?

7.3 Physical extent of the archaeological interest in the site

The two primary areas of archaeological interest on site appear to be quite localised, focussed around Trenches 14 and 15, and Trenches 26 and 27, where the ring ditches identified in the geophysical survey, were revealed at depths of approximately 0.35m (RD1) and 0.56m (RD2) below the present ground surface.

7.4 Discard and retention

Whilst the 19th and 20th century material is not considered worthy of retention, the prehistoric component of the assemblage should be retained, although the final decision rests with the receiving museum.

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Location of the site



Trench locations



Trench locations







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Trench 14 and 15





Trench 18

Figure 7

Plates

Plate 1: Field 1 with trenches open, facing west

Plate 2: Trench 6 showing bedrock geology, with linear anomaly, facing south-east

Plate 3: Trench 1 with fractured bedrock geology, facing south-east

Plate 4: Trench 12, ditch 1207 below possible colluvial deposits, facing south-east

Plate 5: Outer ditch 1505 of double ring ditch in Trench 15, facing north-east

Plate 6: Inner ditch 1514 of double ring ditch in Trench 15, facing north-east

Plate 7: Pit 1534 containing cremation deposit, Trench 15, facing north-east

Plate 8: Pit 1536 containing visible base of inverted urn, Trench 15, facing south-west

Plate 9: Rock-cut ditch 2705, Trench 27, facing south-west

Plate 10: Rock-cut ditch 2708 in plan, Trench 27, facing north-west

Plate 11: Ditch 2605, cutting bedrock and geological anomaly 2606, Trench 26, facing north

Plate 12: Small gully 1305, Trench 13, facing west

Plate 13: Quarrying activity in Trench 17, facing west

Appendix 1 Trench descriptions

Trench 1

Length: 20m

Width: 1.8m

Context	t summary:				
Context	Feature	Context	Description	Height/ depth	Interpretation
100	Topsoil	Layer	dark brownish grey clay silt	0.2m	
101	Subsoil	Layer	light brownish yellow silty	0.2m	
102	Natural	Layer	light yellow silty clay	0.2m	Cracked limestone blocks with silty clay matrix. Weathered bedrock
103	Natural	Layer			Limestone blocks covering almost all of trench. Sharp boundary with (102) and clear upper surface. Bedrock.

Trench 2

Length: 25m

5m Width: 1.8m

Context Context	summary: Feature	Context	Description	Height/ depth	Interpretation
200	Topsoil	Layer	dark brownish grey clay silt	0.2m	
201	Subsoil	Layer	light brownish yellow clay silt	0.2m	
202	Subsoil	Layer	light brownish yellow clay silt	0.4m	Superficial fill of natural linear depressions in bedrock
203	Natural	Layer			Fractured blocks of limestone up to 10cm by 10cm by 5cm. Weathered bedrock

Trench 3

Length: 30m Width: 1.8m

Context Context	summary: Feature	Context	Description	Height/ depth	Interpretation
300	Topsoil	Layer	moderately compact mid greyish brown silty clay	0.2m	
301	Natural	Layer	compact mid orangey brown silty clay	0.34m	Weathered bedrock with silty clay matrix
302	Natural	Layer			Banded limestone bedrock

Length:	23m	Width: 1.8m	Orientation:		
Contex Context	t summary: Feature	Context	Description	Height/ depth	Interpretation
400	Topsoil	Layer	dark brownish grey clay silt	0.2m	
401	Subsoil	Layer	light yellowish brown silty clay	0.2m	
402	Natural	Layer	yellowish brown clay silt		Fractured limestone blocks in a clay silt matrix - weathered bedrock

Trench 5 Length: 25m

Width: 1.8m

Width: 1.8m

Context	summary:				
Context	Feature	Context	Description	Height/ depth	Interpretation
500	Topsoil	Layer	dark greyish brown clay silt	0.2m	
501	Subsoil	Layer	mid brownish yellow clay	0.2m	
502	Natural	Layer			Weathered bedrock

Trench 6

Length: 30m

Context Context	t summary: Feature	Context	Description	Height/ depth	Interpretation
600	Topsoil	Layer	moderately compact mid greyish brown silty clay	0.2m	
601	Subsoil	Layer	compact mid orangey brown silty clay	0.22m	Only seen above (603)
602	Natural	Layer	compact mid brownish grey silty clay	0.3m	Weathered limestone bedrock in silty cay matrix
603	Natural	Layer	firm mid orangey brown silty clay		Change in natural, 3m wide band
604	Natural	Layer			Banded limestone bedrock

Length:	26m	Width: 1.9m			
Context Context	t summary: Feature	Context	Description	Height/ depth	Interpretation
700	Topsoil	Layer	Friable mid greyish brown silty clay	0.19m	
701	Subsoil	Layer	Firm mid yellowish brown clay	0.13m	Limestone bedrock frags
702	Natural	Layer	Firm mid yellowish brown clay		Containing fractured limestone blocks. Upper natural at SW end of trench. Natural formation of weathered/eroded rock
703	Natural	Layer			Solid geology. Strata of limestone bedrock. Only NE end. Jurassic seabed?

Trench 8

Length: 25m Width: 1.9m

Context	Context summary:							
Context	Feature	Context	Description	Height/ depth	Interpretation			
800	Topsoil	Layer	Friable mid greyish brown silty clay	0.19m				
801	Subsoil	Layer	Firm yellowish brown clay	0.14m				
802	Natural	Layer	Firm mid yellowish brown clay		Naturally weathered bedrock. Same as (702) - only at west and east end of trench with (803) in between			
803	Natural	Layer	Firm light reddish brown clay		Natural formation in gap of rock? Not cultural. In centre of trench			

Trench 9

Length: 25m Width: 1.8m

Context Context	t summary: Feature	Context	Description	Height/ depth	Interpretation
900	Topsoil	Layer	Friable mid greyish brown silty clay	0.2m	
901	Subsoil	Layer	Moderately compact mid orangey brown silty clay	0.2m	Only seen in eastern half of trench
902	Natural	Layer			Banded limestone bedrock. Mostly fragmentary but with solid bands
903	Natural	Layer	Compact light yellowish orange silty clay		Change in natural seen in a 1.3m wide band near the eastern end of the trench

Length:	25m	Width: 1.8m			
Context Context	summary: Feature	Context	Description	Height/ depth	Interpretation
1000	Topsoil	Layer	Friable mid greyish brown silty clay	0.2m	
1001	Subsoil	Layer	Moderately compact mid orangey Brown silty clay	0.1m	
1002	Natural	Layer			Banded limestone bedrock

Trench 11									
Length:	13m	Width: 1.8m							
Context	t summary:								
Context	Feature	Context	Description	Height/ depth	Interpretation				
1100	Topsoil	Layer	Moderately compact mid greyish brown silty clay	0.22m					
1101	Subsoil	Layer	Moderately compact mid orangey brown silty clay	0.38m	Weathered natural. Abundant large limestone frags				
1102	Natural	Layer			Banded limestone bedrock				
1103	Natural	Layer	Compact mid yellowish orange silty clay		Change in natural at western end				

Length: 25m Width: 1.8m

Context	summary:				
Context	Feature	Context	Description	Height/ depth	Interpretation
1200	Topsoil	Layer	dark brownish grey clay silt	0.08m	
1201	Subsoil	Layer	mid brownish grey clay silt	0.2m	
1202	Subsoil	Layer	light brown clay silt	0.15m	Colluvium/subsoil. Presumably continued accumulation of (1203) during period of working/weathering bedrock
1203	Subsoil	Layer	mid brown clay silt		Colluvium
1204	Natural	Fill	Compact mid yellowish black silty clay		Natural fill of hollow [1205]. No cultural material
1205	Natural	Cut		0.1m	Sub-circular cut of natural feature. Slightly diffuse edges, possible tree throw
1206	Ditch	Fill	Firm light brownish grey silty clay	0.3m	Absence of cultural material and homogeneity suggest slow deposition of silt in open ditch by natural deposition. No signs of water deposition. No sign of molluscs.
1207	Ditch	Cut		0.3m	Boundary or delineating feature. Does not appear to contain waterlogged material or have a drainage function (no primary silting at base).
1208	Natural	Layer	Compact mid yellowish brown silty clay		
1209	Natural	Layer			Weathered bedrock

Length:	50m	Width: 1.8m			
Context	t summary:				
Context	Feature	Context	Description	Height/ depth	Interpretation
1300	Topsoil	Layer	dark greyish brown silty	0.08m	
1301	Subsoil	Layer	mid brown silty clay	0.1m	
1302	Subsoil	Layer	mid greyish brown silty clay	0.1m	Subsoil with weathered natural
1303	Subsoil	Layer	mid greyish brown silty clay	0.32m	
1304	Gully	Fill	Compact mid greyish brown silty clay	0.15m	Silting of gully probably indicating gradual disuse. No cultural material
1305	Gully	Cut		0.15m	Possible drainage gully with butt end to east. Slight suggestion of curvature but not enough to be sure. Possible drainage feature for structure
1306	Natural	Layer	mid brownish orange silty clay		
1307	Natural	Layer			Weathered, fractured limestone bedrock

Length: 21m Width: 1.8m

Context	summary:				
Context	Feature	Context	Description	Height/ depth	Interpretation
1400	Topsoil	Layer	dark brownish grey clay silt	0.2m	
1401	Subsoil	Layer	mid brownish yellow silty clay	0.4m	
1402	Ditch	Fill	dark greyish brown clay silt		Upper fill of [1403] (unexcavated)
1403	Ditch	Cut			Curvilinear cut. Thought to be inner ditch of barrow. Noticeably wider - maybe more complex
1404	Curvilinear Cut	Fill	mid greyish brown clay silt		Fill of irregular curvilinear cut.
1405	Curvilinear Cut	Cut			Irregular curvilinear cut. Not excavated. Possibly ?segmented ditch
1406	Ditch	Fill	mid yellowish brown clay silt		Fill of curvilinear ditch
1407	Ditch	Cut			Cut of curvilinear ditch
1408	Natural	Layer	light brownish yellow silty clay		

Length:	40m \	Width: 1.8m			
Context Context	summary: Feature	Context	Description	Height/ depth	Interpretation
1500	Topsoil	Layer	Friable mid greyish brown clay silt	0.2m	
1501	Subsoil	Layer	Moderately compact light greyish brown silty clay	0.36m	
1502	Natural	Layer	Compact light orangey yellow silty clay		
1503	Ditch	Fill	Moderately compact mid orangey brown silty clay	0.2m	Upper fill of ditch [1505]. Moderate charcoal inclusions suggest activity in the area or possibly even dumping of material to fill ditch. Only seen on SW facing section.
1504	Ditch	Fill	Compact light brownish orange silty clay	0.19m	Lower fill of ditch [1505]. Seen in both sections. Quite similar to natural but with some charcoal. Most likely weathered natural formed throughout use of ditch. No finds.
1505	Ditch	Cut		0.35m	Cut of ditch containing two fills. Relatively shallow and slightly irregular base. Likely an external ditch of a mortuary structure. Situated near other ditches, gullies, pits and cremation deposits. Edge cut by posthole [1507] and possibly by another. No finds. Likely prehistoric.
1506	Posthole	Fill	Compact light brownish orange silty clay	0.23m	Fill of posthole [1507]. Quite similar to natural but with some charcoal. No post pipe. Most likely natural material weathered in after removal of post.
1507	Posthole	Cut		0.23m	Cut of posthole. Cuts edge of [1505] and next to another possible posthole. Maybe part of barrier/structure around mortuary barrow containing cremation deposits. No finds.
1508	Gully	Fill	Compact light reddish brown clay silt	0.05m	Silting/disuse of gully.
1509	Gully	Cut		0.05m	Curvilinear gully cut.

Cowbridge Road, St Athan, Vale of Glamorgan

1510	Ditch	Fill	Firm mid yellowish brown clay silt	0.35m	Upper fill marking disuse of ditch [1514]
1511	Ditch	Fill	Firm light greyish brown silty clay	0.1m	Probably weathering, possibly of (1512) and (1513) or a bank. Absence of cultural material suggests naturally deposited.
1512	Ditch	Fill	Firm light yellowish brown clay silt	0.2m	Weathering/erosion of sides of ditch, possible slumping. Could also be erosion of adjacent bank if there was one. Fill accumulated during use of [1514].
1513	Ditch	Fill	Firm mid brownish yellow	0.15m	Slumping/weathering of edges of [1514] or of associated but unseen bank.
1514	Ditch	Cut		0.55m	Inner ditch of possible barrow associated with Bronze Age cremation deposits. May be recut/new cut for ditch or may be that 1514/1516 are all one cut with this upper part being in use after [1516] became disused.
1515	Gully	Fill	Soft light brownish yellow clay silt	0.1m	Fill, disuse/silting up of [1516].
1516	Gully	Cut		0.15m	Either gully or ankle breaker (more likely) in base of [1514] or of an earlier ditch phase. [1514] and [1516] could be a single ditch or it could be more complicated; slightly difficult to say in small slot/evaluation. Part of inner ditch system of barrow.
1517	Pit	Fill	Moderately compact mid brownish orange silty clay		Fill of [1518]
1518	Pit	Cut			Pit in corner of trench
1519	Gully	Fill	Moderately compact mid brownish orange silty clay		Fill of [1520]
1520	Gully	Cut			
1521	Pit	Fill	Moderately compact mid brownish orange silty clay		Fill of [1522]
1522	Pit	Cut			
1523	Pit	Fill	Moderately compact mid brownish orange silty clay		Fill of [1524]
1524	Pit	Cut			

1525	Pit	Fill	Moderately compact mid brownish orange silty clay	Fill of [1526]
1526	Pit	Cut		
1527	Pit	Fill	Moderately compact mid brownish orange silty clay	Fill of [1528]
1528	Pit	Cut		
1529	Cremation	Fill		Cremation deposit in cut [1530]
1530	Cremation	Cut		
1531	Curvilinear	Fill	Moderately compact mid brownish orange silty clay	Fill of [1532]
1532	Curvilinear	Cut		
1533	Cremation	Fill		Cremation deposit in cut [1534]
1534	Cremation	Cut		
1535	Cremation	Fill		Cremation deposit (represented by inverted urn), in cut [1536]
1536	Cremation	Cut		
1537	Cremation	Fill		Cremation deposit in cut [1538]
1538	Cremation	Cut		
1539	Cremation	Fill		Cremation deposit in cut [1540]
1540	Cremation	Cut		
1541	Cremation	Fill		Cremation deposit in cut [1542]
1542	Cremation	Cut		
1543	Cremation	Fill	Compact light brownish yellow silty clay	Cremation deposit in cut [1544]
1544	Cremation	Cut		
1545	Ditch	Fill		Fill of [1546]
1546	Ditch	Cut		Inner ditch of possible barrow
1547	Pit	Fill	Moderately compact mid brownish orange silty clay	Fill of [1548]
1548	Pit	Cut		Amorphous natural
1549	Ditch	Fill	Moderately compact mid brownish orange silty clay	Fill of [1550]
1550	Ditch	Cut		External ditch of barrow

Length:	25m	Width: 1.9m			
Context Context	summary: Feature	Context	Description	Height/ depth	Interpretation
1600	Topsoil	Layer	Friable mid greyish brown clay silt	0.2m	
1601	Subsoil	Layer	Firm mid yellowish brown silty clay	0.25m	
1602	Natural	Layer	Firm mid reddish brown clay		Contains fractured limestone bedrock

Trench 17

Length: 50m Width: 1.9m

Context summary:

Context Feature Context Description

1700	Topsoil	Layer	Friable mid greyish brown clay silt	0.2m	
1701	Subsoil	Layer	Firm mid yellowish brown silty clay	0.12m	
1702	Natural	Layer	Firm mid reddish brown clay		Variation in natural - clay filling void in rock
1703	Natural	Layer			Solid geology - limestone bedrock as elsewhere
1704	Pit	Fill	Firm mid greyish brown silty clay	0.4m	Upper fill of [1706]
1705	Pit	Fill	silty clay	0.4m+	Mixed fill, not fully excavated. Quarried/broken limestone and silty clay infill
1706	Pit	Cut			Large cut. Possible machine hole/quarry
1707	Pit	Fill	mid greyish brown silty clay	0.4m	Upper fill of [1709], mid grey brown silty clay. Same as (1704)
1708	Pit	Fill			Broken limestone and clay mix. Lower fill of [1709].
1709	Pit	Cut			Large cut/quarry

Height/ Interpretation depth

Length:	35m	Width: 1.8m			
Context	t summary:				
Context	Feature	Context	Description	Height/ depth	Interpretation
1800	Topsoil	Layer	Compact dark brownish grey clay silt	0.2m	
1801	Subsoil	Layer	Compact mid yellowish Brown clay silt	0.2m	
1802	Ditch	Fill	Compact mid brownish clay silt		Fill of [1803]. Disuse
1803	Ditch	Cut			Curvilinear cut . Sharp break of slope to north, imperceptible break of slope to south. Rounded base
1804	Natural	Layer	Compact light brownish yellow silty sand		Natural superficial deposit
1805	Pit	Fill	mid brown clay silt	0.08m	Fill of [1806]
1806	Pit	Cut		0.08m	Small pit
1807	Pit	Fill	mid brown clay silt	0.08m	Fill of [1808]
1808	Pit	Cut		0.08m	Small pit
1809	Gully	Fill	mid reddish brown clay silt	0.18m	Fill of [1810]
1810	Gully	Cut		0.18m	Cut of curvilinear gully with butt end to south.
1811	Gully	Fill			Fill of [1812]
1812	Gully	Cut			Questionable gully
1813	Natural	Layer	Compact mid yellowish brown clay silt		Change in natural

Trench 19

Length:	26m	Width: 1.8m							
Context summary:									
Context	Feature	Context	Description	Height/ depth	Interpretation				
1900	Topsoil	Layer	Moderately compact mid greyish brown silty clay	0.2m					
1901	Subsoil	Layer	Moderately compact mid orangey brown silty clay	0.12m					
1902	Natural	Layer			Banded limestone bedrock in brown silty clay matrix				

Length:	43m	Nidth: 1.8m			
Context Context	summary: Feature	Context	Description	Height/ depth	Interpretation
2000	Topsoil	Layer	Friable mid greyish brown clay silt	0.2m	
2001	Subsoil	Layer	Friable mid orangey brown sandy clay	0.25m	
2002	Natural	Layer	Loose light whiteish brown clayey sand		Alluvial? Occasional limestone frags

Trench 21

Length: 30m Width: 1.8m

Context summary:							
Context	Feature	Context	Description	Height/ depth	Interpretation		
2100	Topsoil	Layer	Moderately compact mid greyish brown silty clay	0.2m			
2101	Subsoil	Layer	Moderately compact mid orangey brown silty clay	0.08m			
2102	Natural	Layer	Compact mid brownish orange silty clay				
2103	Natural	Layer			Change in natural. Fragmented, bande		

Fragmented, banded limestone bedrock

Trench 22

Length: 30m Width: 1.8m

Context Context	summary: Feature	Context	Description	Height/ depth	Interpretation
2200	Topsoil	Layer	Moderately compact mid greyish brown clay silt	0.22m	
2201	Subsoil	Layer	Moderately compact mid orangey brown silty clay	0.2m	
2202	Natural	Layer	Compact mid brownish orange silty clay		
2203	Natural	Layer			Change in natural. Weathered limestone bedrock in clay

Length:	24m \	Vidth: 1.9m							
Context	Context summary:								
Context	Feature	Context	Description	depth	Interpretation				
2300	Topsoil	Layer	Firm mid greyish brown silty clay	0.2m					
2301	Subsoil	Layer	Firm mid yellowish brown silty clay	0.15m					
2302	Natural	Layer	Yellowish brown silty clay		Fractured/weathered limestone bedrock in silty clay				
2303	Natural	Layer	Soft sandy clay		Alluvial? Close to brook/stream. Comes up onto (2302) at east end of trench				

Trench 24

Length: 19m Width: 1.9m

Context Context	: summary: Feature	Context	Description	Height/ depth	Interpretation
2400	Topsoil	Layer	Firm mid greyish brown silty clay	0.2m	
2401	Subsoil	Layer	Firm mid yellowish brown silty clay	0.12m	
2402	Natural	Layer	yellowish brown silty clay	0.17m	Fractured limestone blocks in a clay matrix. Damaged bedrock
2403	Natural	Layer			Solid geology. Laminated limestone bedrock. Jurassic seabed?

Trench 25

Length: 21m Width: 1.9m

Context summary:							
Context	Feature	Context	Description	Height/ depth	Interpretation		
2500	Topsoil	Layer	Firm mid greyish brown silty clay	0.25m			
2501	Subsoil	Layer	Firm mid yellowish brown silty clay	0.2m			
2502	Natural	Layer	yellowish brown silty clay		Weathered/fractured bedrock		
2503	Natural	Layer			Limestone bedrock		

Length: 20.50m Width: 1.8-10m (max)

Context summary:					
Context	Feature	Context	Description	Height/ depth	Interpretation
2600	Topsoil	Layer	Firm mid greyish brown silty clay	0.2m	
2601	Subsoil	Layer	Firm mid yellowish brown silty clay	0.19m	
2602	Natural	Layer	mid yellowish brown silty clay		Weathered natural
2603	Natural	Layer			Natural solid geology. Bedded limestone blocks
2604	Ditch	Fill	Friable mid yellowish brown silty clay		Fill of [2605].
2605	Ditch	Cut			Ditch cut. Curving - visible as oval feature on geophysics. Cuts solid bedrock. Probably prehistoric
2606	Natural	Layer			Clay band - glacial scar. Cut by ditch [2605]

Longth:	55m	\\/idth	1 9 m	
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Context	Context summary:					
Context	Feature	Context	Description	Height/ depth	Interpretation	
2700	Topsoil	Layer	dark greyish brown clay silt	0.2m		
2701	Subsoil	Layer	mid yellowish brown silty	0.15m		
2702	Natural	Layer			Laminar tabular limestone blocks in successive beds with an orange or grey silty clay matrix in fracture lines.	
2703	Ditch	Fill	Friable mid yellowish brown clay silt	0.3m	Upper fill relating to period of disuse of ditch [2705]. Very difficult to distinguish from subsoil (2701). Probably naturally deposited rather than backfilled by human agency.	
2704	Ditch	Fill	Friable light greyish brown clay silt	0.1m	Silting during last period at which ditch was open and maintained. Patchy in base of ditch filling uneven spaces in bedrock.	
2705	Ditch	Cut		0.4m	Rock cut ditch of oval monument. Seems to be cut through two layers of limestone blocks down onto a third.	
2706	Ditch	Fill	Moderately compact mid orangey brown silty clay	0.32m	Upper fill of rock cut ditch [2708]. Fairly sterile fill with only rare charcoal and quite similar to subsoil. Most likely weathered in over time.	
2707	Ditch	Fill	Compact mid blueish grey silty clay	0.04m	Basal fill of rock cut ditch [2708]. Bluey grey material probably gleying. No finds.	
2708	Ditch	Cut		0.36m	Cut of ditch into limestone bedrock, Bedrock has been cut along natural breaks, hence slightly uneven base. Likely same as [2705], another rock cut ditch to the west. Part of a large oval ring ditch.	
2709	Natural	Layer			Yellow clay band. Glacial scar through bedrock.	

Length:	32m	Width: 1.8m			
Context Context	summary: Feature	Context	Description	Height/ depth	Interpretation
2800	Topsoil	Layer	Moderately compact mid greyish brown silty clay	0.22m	
2801	Subsoil	Layer	Moderately compact mid orangey brown silty clay	0.23m	
2802	Natural	Layer	Compact mid brownish orange silty clay		Patches of limestone bedrock

Trench 29

Length: 12m Width: 1.8m

Context summary:					
Context	Feature	Context	Description	Height/ depth	Interpretation
2900	Topsoil	Layer	Friable mid greyish brown silty clay	0.20m	
2901	Made ground	Layer	Moderately compact mid greyish brown silty clay	0.24m	Includes modern waste and metal
2902	Subsoil	Layer	Compact light brownish orange silty clay	0.20m	Possibly redeposited/disturbed natural
2903	Subsoil	Layer	Firm mid brownish orange	0.30m	
2904	Natural	Layer	Compact mid reddish orange silty clay		Patches of limestone bedrock

Trench 30

Length: 10m Width: 1.8m

Context summary:					
Context	Feature	Context	Description	Height/ depth	Interpretation
3000	Topsoil	Layer	Friable mid greyish brown silty clay	0.20m	
3001	Made ground	Layer	Moderately compact mid greyish brown silty clay	0.34m	Occasional modern waste
3002	Subsoil	Layer	Compact mid brownish orange silty clay	0.32m	Possibly redeposited/disturbed natural
3003	Natural	Layer	Compact mid reddish orange silty clay		Patches of limestone bedrock

Appendix 2 Technical information The archive (WA project code P4926)

The archive consists of:

- 24 Context records AS1
- 5 Field progress reports AS2
- 3 Photographic records AS3
- 266 Digital photographs
- 1 Drawing number catalogues AS4
- 13 Scale drawings
- 1 Sample number catalogues AS18
- 30 Trench record sheets AS41
- 1 Bag of flots and sorted remains from residues
- 1 Bag of finds
- 1 CD-Rom/DVDs
- 1 Copy of this report (bound hard copy)

The project archive is intended to be placed at:

Amgueddfa Cymru – National Museum Wales National Museum Cardiff Cathays Park Cardiff, CF10 3NP

Tel: (029) 2039 7951 Fax: (029) 2057 3321

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