LAND NORTH OF CROESGOCH, PEMBROKESHIRE: ARCHAEOLOGICAL EVALUATION 2016

(NGR SM82743043)





Prepared by DAT Archaeological Services For: Caskhen Ltd.





DYFED ARCHAEOLOGICAL TRUST

RHIF YR ADRODDIAD / REPORT NO. 2016/64 RHIF Y PROSIECT / PROJECT RECORD NO. 110310

> Rhagfyr 2016 December 2016



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Gan / By Fran Murphy

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LAND NORTH OF CROESGOCH, PEMBROKESHIRE: ARCHAEOLOGICAL EVALUATION 2016

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SUMMARY

DAT Archaeological Services were commissioned by Nicholas Hall Architectural Consultant on behalf of Caskhen Ltd, to provide a scheme of archaeological works in advance of the construction of 23 residential dwellings on land to the north of Croesgoch, Pembrokeshire (centred on NGR SM8274 3043).

This condition was placed following advice from the archaeological advisor to the planning authority, Dyfed Archaeological Trust - Development Management (DAT-DM), who was of the opinion that the proposed development had the potential to expose, damage or destroy archaeological remains associated with an early medieval cemetery (PRN 2836) identified to the southeast of the site, where an extended Christian long cist burial was dated to AD 370-600. There was also some potential for archaeological remains of other periods to be present.

The development area is situated on a gentle northwest facing slope and is approximately one half of an agricultural field that is presently under grass.

The evaluation was carried out over three days from 14th to 16th November 2016 in dry weather. Three 30 metre trenches and one 20 metre trench were machine excavated down to the natural subsoil under archaeological supervision. The majority of the trenches were then trowelled by hand to highlight any surviving archaeological features. This greatly assisted in the identification of a group of features; including at least three possible pits and three postholes. These features were cut into the natural subsoil and sealed by modern ploughsoil but were very difficult to recognise during machining.

The fills of two pits and two postholes contained sherds of pottery dated to the Neolithic/Early Bronze Age spanning a period 4000 to 3000 BC. Interpreting the nature of such activity is difficult within such a small excavated area but it is possible that they are 'ceremonial' pits that could commemorate the end of a period of occupancy. Mundane finds within these pits are often found placed on the bottom and sides of the feature; a characteristic recorded at Croesgoch.

Clusters or groups of pits of the fourth millennium BC have been rarely recorded in Pembrokeshire and this in itself makes these archaeological features of regional importance. They also have the potential to provide detailed information on the local environment and human practices at that time.

Ceremonial prehistoric pits located in the vicinity of the nearby Early Medieval Christian cemetery may demonstrate that Croesgoch has been a focus for ceremonial or religious activity for an extended time.

The proposed development would significantly impact, if not destroy, these regionally important archaeological remains. Therefore it is likely that further archaeological mitigation would be required prior to development. After having defined the extent of the area of surviving features within the development area; this is expected to include full excavation of all archaeological deposits and features that will be impacted upon.

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1. INTRODUCTION

1.1 Project Commission

- 1.1.1 DAT Archaeological Services (the contracting arm of Dyfed Archaeological Trust) were commissioned by Nicholas Hall Architectural Consultant on behalf of Caskhen Ltd, to provide a scheme of archaeological works in advance of the construction of 23 residential dwellings on land to the north of Croesgoch, Pembrokeshire (centred on NGR SM8274 3043, Figure 1). The archaeological works are required to satisfy a condition placed on planning permission for the development (Planning Application No. 15/0247/PA). This condition was placed following advice from the archaeological advisor to the planning authority, Dyfed Archaeological Trust Development Management (DAT-DM), who was of the opinion that the proposed development had the potential to expose, damage or destroy archaeological remains associated with an early medieval cemetery previously identified to the southeast of the site, or associated activity. There was also some potential for archaeological remains of other periods to be present.
- 1.1.2 The condition was in line with Section 23 of Welsh Office Circular 60/96 'Planning and the Historic Environment: Archaeology', and 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'.
- 1.1.3 Following discussions with the archaeological advisor to the planning authority (DAT-DM), it was established that an archaeological evaluation would be undertaken to characterise the nature and depth of any archaeological features or deposits that may be damaged or destroyed by the proposed works.
- 1.1.4 A written scheme of investigation defining the archaeological works was produced by DAT Archaeological Services and was approved by DAT-DM.
- 1.1.5 The aim of the evaluation was to provide information on the character and significance of any below ground archaeological remains within the area proposed for development. This information would inform any further mitigation that might be required.

1.2 Scope of the project

- 1.2.1 The aim of the project was:
 - to evaluate by trial trenching the survival of significant archaeological deposits or features within the area proposed for residential development on land north of Croesgoch, Pembrokeshire;
 - to establish the state of preservation, character, extent and date range for any identified archaeological deposits or features;
 - to use the information to design any required future mitigation at the site which will enable any identified archaeological remains to be appropriately investigated and recorded where they will be affected by the proposed development;
 - production of a report and an archive of results.

1.3 Report Outline

1.3.1 This report provides a summary and discussion of the archaeological evaluation and its results, and puts those results within their regional and national context.

1.4 Abbreviations

1.4.1 Sites recorded on the regional Historic Environment Record (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Sites recorded on the National Monument Record (NMR) held by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) are identified by their National Primary Record Number (NPRN). Scheduled Ancient Monument (SAM). Altitude is expressed to Ordnance Datum (OD). References to cartographic and documentary evidence and published sources will be given in brackets throughout the text, with full details listed in the sources section at the rear of the report.

1.5 Illustrations

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

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	
Mesolithic –	c. 10,000 – 4400 BC	Preh
Neolithic -	c.4400 - 2300 BC	hist
Bronze Age –	c.2300 - 700 BC	istoric
Iron Age –	c.700 BC - AD 43	n
Roman (Romano-British) Period –	AD 43 - c. AD 410	
Post-Roman / Early Medieval Period –	c. AD 410 – AD 1086	_
Medieval Period –	1086 - 1536	Hist
Post-Medieval Period ¹ –	1536 - 1750	storic
Industrial Period –	1750 - 1899	n
Modern –	20 th century onwards	

Table 1: Archaeological and Historical Timeline for Wales.

¹ 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

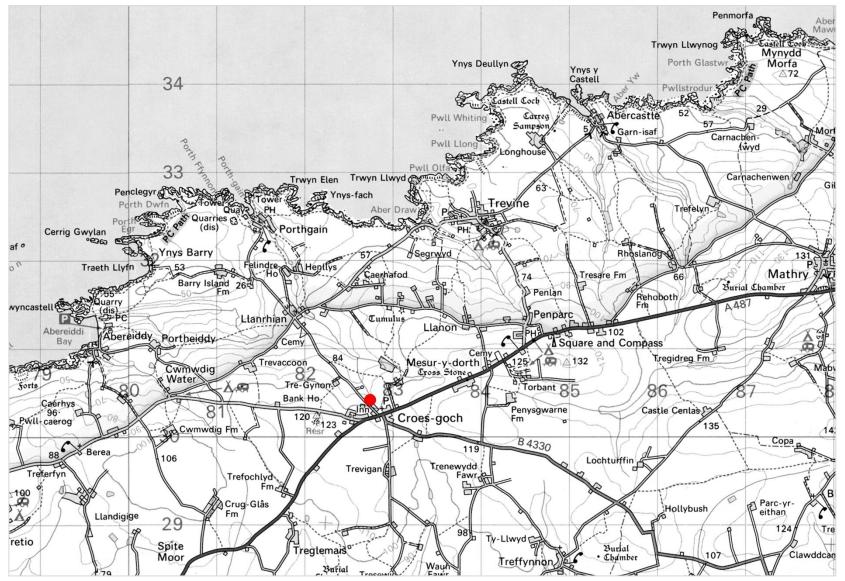


Figure 1: An extract of the 1:50000 Ordnance Survey map showing the location of the development area (red dot).

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Figure 2: Proposed development layout (plan taken from Pembrokeshire County Council planning website) with line of existing sewer shown in red and proposed realignment in blue.

2. THE SITE

2.1 Site Location and topography

- 2.1.1 The development site covers an area of c.0.83ha of land to the north of Croesgoch, Pembrokeshire (Figure 1 centred on SM8274 3043). Approximately one half of an agricultural field that is presently under grass forms the development area (Photo 1). The area is defined by the minor road between Croesgoch and Llanrhian to the west, a small stream course to the east and buildings to the south (including the site of a former forge). There is presently no physical boundary to the north. The proposed development comprises 23 residential dwellings (Figure 2).
- 2.1.2 The planning application was conditionally approved by the planning committee of Pembrokeshire County Council on 9th September 2016.
- 2.1.3 The development area is situated on a gentle northwest facing slope at about 100m OD. The underlying solid geology is comprised of the Penmaen Dewi Shale Formation Mudstone. This sedimentary bedrock formed approximately 467 to 479 million years ago in the Ordovician Period when the local environment was dominated by open seas. No superficial deposits are recorded Geological information has been obtained through the British Geological Survey mapping portal.

2.2 Historical Background and Archaeological Potential

- 2.2.1 The following information has been extracted from the Historic Environment Record (HER) held by Dyfed Archaeological Trust, the online National Monuments Record (NMR) held by the Royal Commission on the Ancient and Historic Monuments of Wales (RCAHMW) via the Coflein database, and Côf Cymru National Historic Assets of Wales, an online service developed by Welsh Government's Historic Environment Service (Cadw).
- 2.2.2 Figure 3 shows the location of the recorded archaeological and historical sites within the vicinity of the development area that are listed in Table 2.
- 2.2.3 A number of archaeological sites demonstrate human activity in the Croesgoch area as far back as the Bronze Age (PRN 13191). A possible Iron Age enclosure site (PRN 2839) has been tentatively identified from aerial photographs some 200m northwest of the proposed development.
- 2.2.4 Approximately 120m southwest of the development area within a field named 'Parc-y-fynwent' (ie. 'cemetery field') a number of long-cist burials (PRNs 2836 & 7568) have been recorded. The most recent discovery of a long-cist burial (PRN 46819) was in 2000 during groundworks for housing development from which radiocarbon dates of cal AD 370-600 were obtained (Ludlow 2003).
- 2.2.5 Ludlow (2003) summarised what is known about the cemetery:

The former presence of a medieval chapel (PRN 12840) and cemetery (PRNs 2836 & 7528) at Croesgoch has long been known. Medieval sources (summarized by Rees, 1932) indicate the presence of a chapel and later antiquarian sources (Fenton 1811, 36; Jones and Freeman 1886, 229) document the presence of burials on the site. The exact location of the chapel is not known.

Fenton's account describes the site as 'covered with graves marked out by stone coffins, formed of the coarse purple flags from the quarries in the neighboring cliffs'. One of the coffins contained an inhumation which was apparently accompanied by a 'sword' but Fenton (1811) does not mention

the material from which it was made. He states that the site was at Trevigan, 0.5km to the south, but all authorities agree that the Croesgoch site is meant

Antiquarian descriptions do not make it clear whether the cists were Christian burials, which are properly termed 'long-cists' to distinguish them from the smaller, stone-lined burials that occur in pre-Christian contexts, are orientated east-west and contain extended supine inhumations.

- 2.2.6 It is assumed that the burial with accompanying sword that Fenton refers to is the same as that recorded by the Ordnance Survey on the 1st edition 25" 1889 as 'Stone Coffin & Sword Found AD 1800' within the field labelled 'Parc y Fynwent' (Figure 5).
- 2.2.7 The full extent of the cemetery is not known, neither is it clear whether the cemetery was enclosed or unenclosed. No evidence of an enclosure has been identified from aerial photography and current field boundaries do not appear to reflect an enclosure surrounding the area of burials.
- 2.2.8 Rees (1932) marks Croesgoch as the site of a possible chapel, near the location of Parc-y-fynwent cist cemetery (PRNs 2836, 7568 & 46819). If the Rees map is correct, then the chapel may have been associated with the cist cemetery, or be a later addition to it and possibly illustrates the longevity of Croesgoch as a focus for religious activity.
- 2.2.9 Therefore there was considered to be the possibility that archaeological deposits or features related with the cemetery or associated religious activity could extend into the development area and be adversely affected by the proposed construction of residential housing.
- 2.2.10 Cartographic evidence provides little information on earlier uses or the history of the area within which the proposed development is located (Figures 4-6).

PRN	NPRN	Name	Туре	Description	Period	NGR
2836	308488	PARC-Y-FYNWENT; CROESGOCH	Cemetery	The location of 3 recorded long-cist burials, one of which has been dated to AD 370-600. Cemetery found at Trevigan according to Fenton, but at Croesgoch according to Laws + Owen who then show a tumulus symbol at Parc-y-fynwent.	Early medieval	SM826303
2839		TREGINNON	Defended enclosure	A possible Iron Age cropmark site.	Iron Age	SM82483052
7568		PARC Y FYNWENT	Inhumation	A burial that Fenton definitely associates with the probable early Medieval cemetery (PRN 2836). Lewis suggests that there may be confusion between two very different sites here and seems to imply that what Fenton calls a 'sword burial' is really a BA dagger burial.	Bronze Age? Early medieval?	SM826303
12480		PARC-Y-FYNWENT; CROESGOCH	Chapel	Site of former unrecorded, undated chapel? The Rees map (1932) marks Croesgoch as the site of a possible chapel, near the location of the undated Parc-y-fynwent cist cemetery (PRNs 2836, 7568 & 46819). If the Rees map is correct, then the chapel may have been associated with the cist cemetery, or be a later addition to it. Either way, there is no field evidence for the chapel, nor any current evidence for it being an early medieval site. NDL 2003	Early medieval	SM827302
13191		CROESGOCH	Standing stone	Possible standing stone or part of stone circle recorded in garden of John Knapp-Fisher's gallery at Croesgoch. RPS August 2001	Bronze Age	SM82873023
17909		CAPEL-Y- BEDYDDWYR	Chapel	1816 Croes goch 1868 Capel Y Bedyddwyr Overgrown graveyard.	Post medieval	SM82913033
17910		CROESGOCH	School	Former school marked on the 1 st edition OS 25" map	Post medieval	SM82943033
17911	30317	CROESGOCH	Lodge	Former lodge marked on the 1 st edition OS 25" map. A small lodge-cottage with boulder footings, rubble walls and slightly dressed quoins. Same as PRN 68668. Grade II Listed Building Ref No: 12415	Post medieval	SM83063034
23804		CROESGOCH	Blacksmiths Workshop		Post medieval	SM83063034
23805		CROESGOCH INN	Public house		Post medieval	SM82983032
46819		PARC-Y-	Inhumation	A cist disturbed by groundworks for a housing development in	Early	SM827303

		FYNWENT; CROESGOCH		200, contained an extended Christain inhumation that produced radiocarbon dates of cal AD 370-600. The cemetery may have been open and unenclosed, but may have associated with an unrecorded, undated (later?) chapel PRN 12480. NDL 2003	medieval	
58667	11086	CROESGOCH WELSH BAPTIST CHAPEL	Chapel	Croesgoch Baptist Chapel was built in 1816 and restored/redecorated in 1858. The present chapel, dated 1816, is built in the Simple Gothic style with a gable-entry plan and a large 40 pane window either side of the front door. Also known as Capel y Bedyddwyr.	Post medieval	SM82913031
				Grade II Listed Building Ref No: 12414		
58668	30317	CROESGOCH	Lodge	Former lodge marked on the 1 st edition OS 25" map. A small lodge-cottage with boulder footings, rubble walls and slightly dressed quoins. Same as PRN 17911.	Post medieval	SM83063034
58669		TREARCHED	Farmhouse	Grade II Listed Building Ref No: 12415 Mid to later C18, altered in C19. Farmhouse in painted roughcast rubble stone with raised cement dressings, grouted slate roof and stone end stacks. Long two-storey three-window front. Grade II Listed Building Ref No: 12416	Post medieval	SM83023906
	411561	CROESGOCH VILLAGE	Village	Archaeological sources suggest that Croesgoch is the site of cist burial features of the late/post Roman period. It is also known to have been an important focus for religious activities throughout the medieval period. The village has an early Welsh Baptist chapel formed in 1768.	Multiperiod	SM82883025

Table 2: Archaeological and historical sites recorded on the Dyfed HER that lie in the vicinity of the development area, shown in Figure 3.

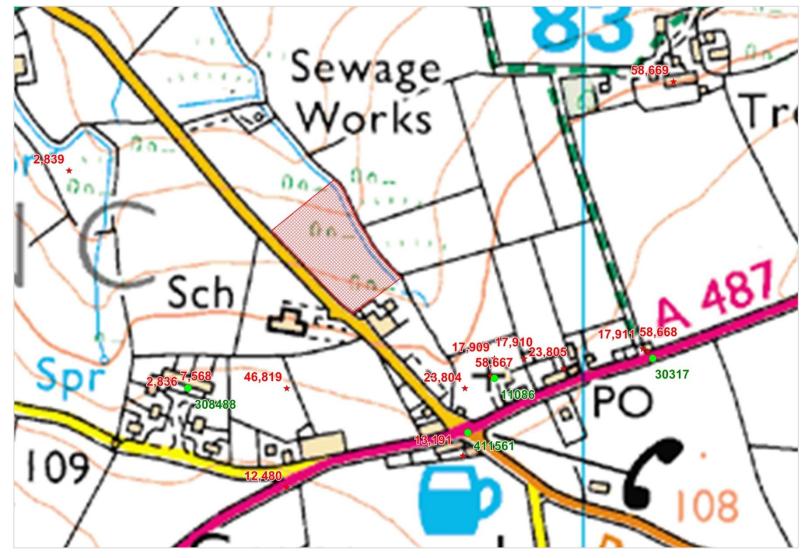


Figure 3: Map showing the location of archaeological and historical sites recorded on the Dyfed HER listed in Table 2.

PRNs are denoted by red stars and NPRNs by green dots. The development area is shaded red.

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2.3 Historic Mapping

Llanrhian Parish Tithe map of 1842

2.3.1 The Llanrhian parish tithe map (Figure 4) shows how little some of the field boundaries surrounding Croesgoch have changed over the intervening years. The development area lies within field '76' named as 'Parc rhos goch' (ie. red moor field) on the accompanying Apportionment. The state of cultivation is difficult to decipher but it may indicate that the field was used as both arable and pasture.

1st edition Ordnance Survey 1:25000 map of 1889

2.3.2 The 1:25000 1st edition Ordnance Survey map of 1889 shows little variation from the earlier tithe map (Figure 5). The map shows how the village of Croesgoch has grown with public houses, chapel, school and smithy. The field to southwest of the development area is labelled 'Parc y Fynwent' or 'Cemetery Field'. It is within this field that long-cist burials have been discovered and the map notates the field with 'Stone Coffin & Sword Found AD 1800'.

2nd edition Ordnance Survey 1:25000 map of 1907

2.3.3 The 1:25000 2nd edition Ordnance Survey map of 1907 shows little change from the 1st edition map (Figure 6).



Figure 4: An extract of the Llanrhian tithe map of 1842 with the approximate position of the development area outlined in red.

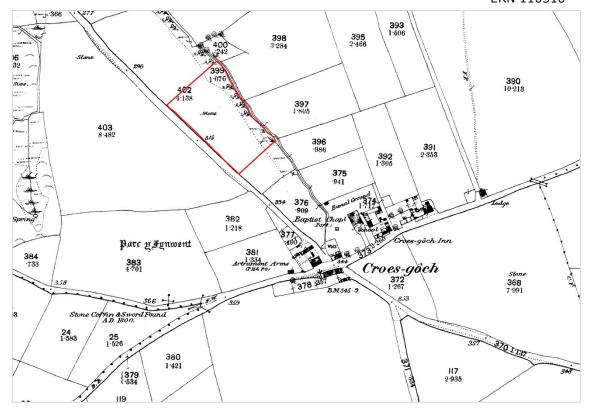


Figure 5: The first edition 1:25000 Ordnance Survey map of 1889 showing the development area outlined in red.

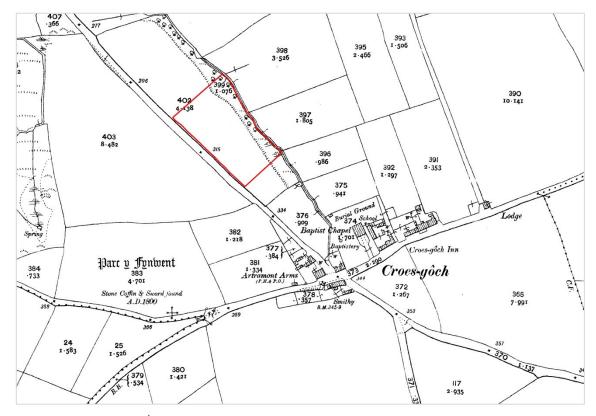


Figure 6: The 2nd edition 1:25000 Ordnance Survey map of 1907 showing the development area outlined in red.

2.4 Previous Archaeological Work (Figure 7)

- 2.4.1 The locations of the previous archaeological works described below within the Croesgoch area are shown in Figure 7.
- 2.4.2 A An archaeological watching brief (Williams 1995) was undertaken in 1995 during the construction of an access road, now called Crofty Close, for residential development (centred on NGR SM82763030), due to the vicinity of the development to the field named 'Parc y fynwent' (cemetery field). No archaeological features or deposits were observed during the watching brief.
- 2.4.3 **B** During 1996 an archaeological watching brief was undertaken during improvement works on the northern boundary of the garden of the house called Ty Pedwar Drws, due to the vicinity of a possible prehistoric standing stone (PRN 13191) within the garden. A 20m length of bank was machined back 3m to facilitate the widening of the A487 at this point. Although no archaeological features or deposits were recorded during the watching brief, two more boulders were discovered within the garden protruding through the turf that may be associated with the standing stone.
- 2.4.4 **C** In the early 1960s during the construction of a house, within the field 'Parc y fynwent', evidence of a long-cist burial was recorded within a foundation trench (Williams 1995).
- 2.4.5 **D** Two long-cist burials were discovered during the development of two houses in 2000 (Ludlow 2003). Both were orientated east-west and were identified during groundworks for a housing development when machining disturbed the stone lintel slabs of one grave (PRN 46819) and revealed the slabs of another 0.75m to the north. This latter grave was not excavated but left *in situ*. The disturbed grave (PRN 46819) contained an extended supine inhumation of a male, aged 50+ that produced radiocarbon dates of cal AD 370-600, at 2 sigma range. These dates lie within the late Roman and early post Roman period and are some of the earliest dates obtained from a west Wales long-cist burial.
- 2.4.6 **E** Following the discovery of the long-cist burials an archaeological watching brief was carried out in 2001 (note on file PRN 42955) on the remaining groundworks for the two houses but no further archaeological features were identified.
- 2.4.7 F An archaeological evaluation was carried out on the site of a planned extension to Croesgoch Primary School in 2009 (Pannett 2009) The only archaeological feature recorded within two machine excavated trenches was a stone-packed pit at the northern end of the southernmost trench. No finds were recovered from the pit and it is not dated. Given its proximity to the cemetery (PRNs 2836,7568 & 46819) it was thought possible that the pit formed part of an associated structure.
- 2.4.8 **G** Following the evaluation an archaeological watching brief (Pannett 2010) was undertaken during the topsoil strip and groundworks on the site of the extension to the school. No further archaeological features or deposits were recorded during the watching brief.
- 2.4.9 **H** A desk based assessment and geophysical survey of land north and adjacent to the Croesgoch Llanrhian road within which the current development area lies, was undertaken by Cambrian Archaeological Projects in 2009 (Smith 2009). The desk-based assessment section of the report appraised the documentary, photographic and cartographic evidence pertaining to the site and its immediate environs. The

geophysical survey of the assessment area was undertaken using a dual fluxgate gradiometer. The survey identified a number of possible archaeological features within the assessment area. The report recommended that further archaeological mitigation would be required if development progressed.

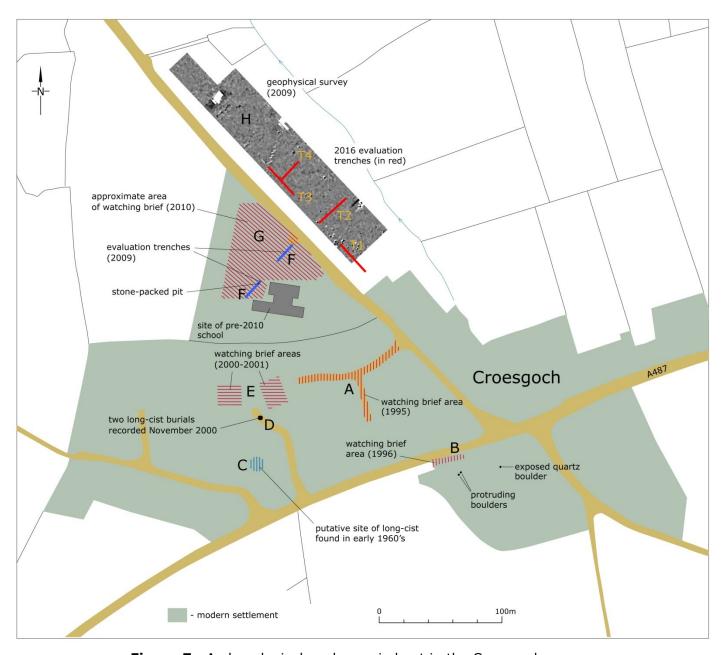


Figure 7: Archaeological works carried out in the Croesgoch area.

3. ARCHAEOLOGICAL EVALUATION METHODOLOGY

3.1 Fieldwork Methodology

- 3.1.1 This evaluation was undertaken in accordance with the Chartered Institute of Archaeologists' (CIfA) Standard and Guidance for an Archaeological Field Evaluation (2014). It followed the methodology laid out in the WSI (Appendix I).
- 3.1.2 After consulting the archaeological advisor to the planning authority, DAT-DM, it was established that an archaeological evaluation would be undertaken to characterise the nature and depth of any archaeological features or deposits that may be damaged or destroyed by the proposed works; features associated with an early medieval cemetery previously identified to the southeast of the site, or associated activity. There is some potential for archaeological remains of other periods to be present.
- 3.1.3 It was initially proposed that three trenches of c.1.6m width and 30m length were machine excavated within the development site; Trenches 1-3 shown in Figure 8. Trench 1 was located close to the western road front in the northern half of the development area, targeting the footprints of proposed dwellings; Trench 2 was located perpendicular to the existing road, along the line of the proposed entrance roadway into the development area and Trench 3 was located parallel with the road to the west within the southern half of the site area, again targeting proposed dwellings. On site it was decided to excavate another trench, Trench 4 of c. 20m in length at right angles to Trench 3 to target what were possible anomalies seen in the geophysical report (Smith 2009).
- 3.1.4 Trenches were excavated by a 360° machine excavator fitted with a toothless ditching bucket in level spits (Photos 1 & 2). Arisings were stored adjacent to the trench (at a safe distance). Trenches were excavated to remove all non-archaeologically significant overburden, down onto either archaeological levels or the underlying natural undisturbed ground surface.
- 3.1.5 Following machine excavation, the trenches were 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 was undertaken.
- 3.1.6 All deposits were recorded by archaeological context record sheet, scale drawing, photography and site notebooks. All individual deposits were numbered using the open-ended numbering system in accordance with DAT Archaeological Services' Recording Manual². Significant deposits were recorded by scale drawing (no less than 1:20); drawn plans were related to Ordnance Datum and, where possible, known boundaries. A photographic record was maintained using digital format.
- 3.1.7 All archaeologically significant artefacts, ecofacts and samples were retained and, where possible, related to the contexts from which they derived.

² DAT Archaeological Services use the Recording Manual developed by English Heritage Centre for Archaeology. A copy will be available for inspection if required.



Photo 1: Looking southeast across the proposed development area.



Photo 2: Machine excavation of Trench 1 looking north.

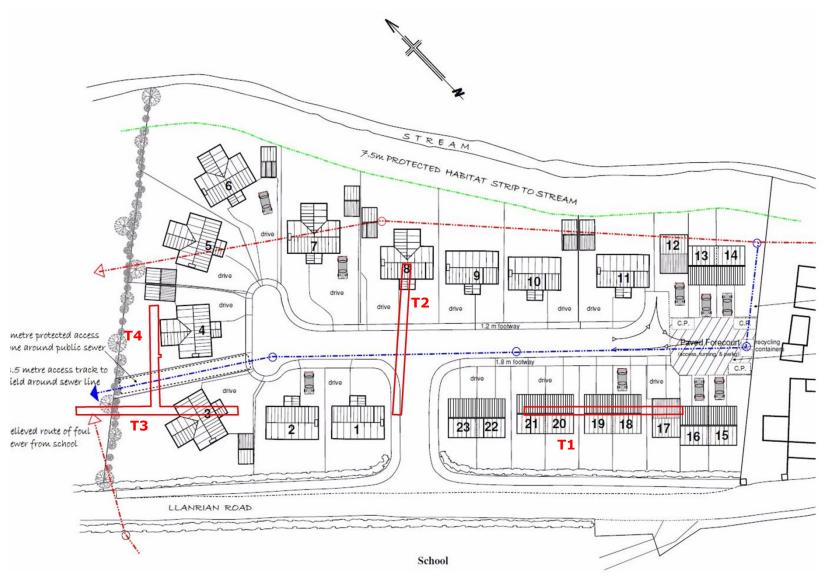


Figure 8: Proposed development layout (plan taken from Pembrokeshire County Council planning website) showing the position of the evaluation trenches excavated in 2016 (outlined in red).

4. EVALUATION RESULTS

4.1 The evaluation was carried out from 14th to 16th November 2016 inclusive in dry weather.

- 4.2 Trench 1 was located close to the western road front in the northern half of the development area, targeting the footprints of proposed dwellings (Figure 8).
- 4.3 The trench measured 30m in length and was approximately 1.6m wide with an average depth of 0.29m (Photo 3). The trench was excavated to the underlying natural undisturbed ground surface.



Photo 3: Looking southeast at Trench 1 after hand cleaning the trench. 2 x 1m scales

- 4.4 The dark brown loamy topsoil (113) was of a consistent depth of around 0.17m the whole length of the trench. Below this was a layer (114) of slightly lighter dark brown silty clay loam approximately 0.10-0.12m in depth that lay directly above the natural mudstone bedrock (115).
- 4.5 Within Trench 1 at least one archaeological feature was identified (Figure 9). Feature [109] was visible as a darker sub-circular area of silt within the natural bedrock (Photo 4); very similar to feature [107] in Trench 3 before it was excavated and found to be a circular posthole. Feature [109] was not excavated.

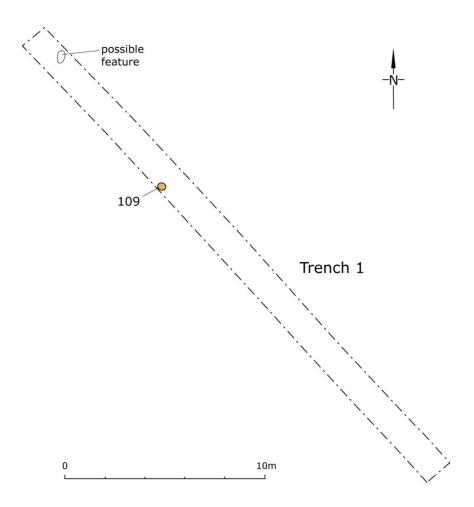


Figure 9: Plan of Trench 1.

- 4.6 Trench 2 (Photo 5) was located perpendicular to the existing road, along the line of the proposed entrance roadway into the development area (Figure 8).
- 4.7 The trench measured 30m in length and was approximately 1.6m wide with an average depth of 0.34m. The trench was excavated to the underlying natural undisturbed ground surface.
- 4.8 As seen in the previous trench the dark brown loamy topsoil (113) was of a consistent depth of around 0.20m the whole length of the trench. Below this was a layer (114) of slightly lighter dark brown silty clay loam approximately 0.14m in depth that lay directly above the natural mudstone bedrock (115).
- 4.9 No archaeologically significant features or deposits were recorded within Trench 2.



Photo 4: Feature [109] within Trench 1. 0.25m scale



Photo 5: Looking northeast along Trench 2 after machining. 2 x 1m scales.

- 4.10 Trench 3 was located parallel with the road to the west within the southern half of the site area targeting proposed dwellings (Figure 8). It was moved approximately 3m further to the northwest than planned to avoid the disturbance from a geotechnical test pit that had been recently backfilled.
- 4.11 The trench measured 30m in length and was approximately 1.6m wide with an average depth of 0.28m (Photo 6). The trench was excavated to the underlying natural undisturbed ground surface.
- 4.12 The dark brown loamy topsoil (113) was of a consistent depth of around 0.19m the whole length of the trench. Below this was a layer (114) of slightly lighter dark brown silty clay loam approximately 0.09m in depth that lay directly above the natural mudstone bedrock (115).
- 4.13 Within Trench 3 one archaeological feature [107] was identified at the northwestern end of the trench (Figure 10). This was first identified as a small area of darker silt within the lighter natural silt and mudstone subsoil (Photo 7).
- 4.14 Excavation of feature [107] revealed it to be a straight sided posthole c. 0.28m in diameter and 0.30m deep (Photo 8). The fill (108) was midbrown clayey silt containing infrequent small stones and some charcoal flecks. Within the top of the fill were a number of small pieces of quartz.



Photo 6: Looking northwest at Trench 3 after hand cleaning the trench. 2 x 1m scales.



Photo 7: Pre-excavation shot of feature [107]. 0.25m scale



Photo 8: Fully excavated posthole cut [107]. 0.5m & 0.25m scales

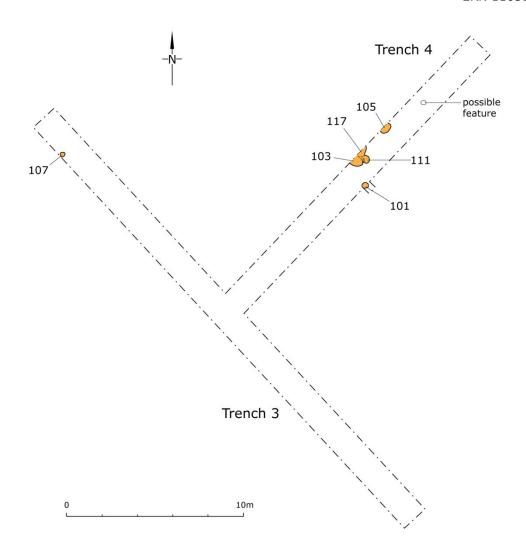


Figure 10: Plan of Trenches 3 and 4.

- 4.15 Trench 4 (Figure 10) of *c*. 20m in length was excavated at right angles to Trench 3 to target what were possible positive anomalies seen in the geophysical report (Smith 2009). Regions of anomalously positive relative magnetic field strength may be associated with high magnetic susceptibility soil-filled features such as pits and ditches.
- 4.16 The trench measured approximately 1.6m wide with an average depth of 0.40m (Photo 9). The trench was excavated to the underlying natural undisturbed ground surface.
- 4.17 As has been previously described the topsoil (113) was dark brown loam of a consistent depth of around 0.22m the whole length of the trench. Below this was a layer (114) of slightly lighter dark brown silty clay loam approximately 0.18m in depth that lay directly above the natural mudstone bedrock (115).



Photo 9: Trowelling Trench 4 – looking northeast.

4.18 Trowelling revealed discrete areas of darker silt towards the north-eastern end of Trench 4 including that shown in Photo 10. Excavation of this darker silt demonstrated that it indicated the presence of archaeological features including postholes and possible pits cut into the natural sub-soil and sealed by layer (114) (Photos 11 & 12).



Photo 10: Pre-excavation shot of what turned out to be 3 intercutting archaeological features [103, 111 & 117] in Trench 4; looking roughly north.

1.0m scale



Photo 11: Post-excavation shot of 3 intercutting archaeological features including 2 possible pits [103 & 117] and a posthole [111]; looking approximately north. 1.0m & 5.0m scales

- 4.19 The full extents of 2 possible intercutting pits [103 & 117] (Photos 11 & 12) were not visible in plan as they continued under the southeast facing section of Trench 4. Both cuts appeared to have quite steeply sloping sides that flattened out towards the base. It appeared that pit [117] cut [103] but their fills were very similar and hard to distinguish from one another. Both fills (combined under context 104) comprised a series of thin deposits of clayey silts containing varying amounts of small stones and charcoal. Within the pits two different types of pottery were recovered; towards the top of the fill of both pits sherds of a corky black fabric, very light in weight and in contrast to these, towards possibly the base of the pits, sherds of a much thicker, denser, harder fired pottery with clear quartz inclusions were discovered. The excavated portion of these two features measured 1.30m along the section and reached a depth of 0.30m.
- 4.20 Possible pit [103] just cut the edge of a posthole [111] measuring 0.42m diameter and 0.37m deep. The vertical sided posthole was filled with dark brown silt containing 1 large stone (stone packing) placed on its side within the cut, heat affected pieces of quartz stone, lumps of charcoal and 1 sherd of pottery recorded towards the bottom of the posthole.
- 4.21 To the south of posthole [111] another posthole [101] was recorded. A small section of the trench was cut back to reveal the full extent of the post hole (Photos 13 & 14). Posthole [101] measured 0.37m in diameter and was 0.27m deep with clear vertical sides. It had 2 fills; the primary fill (116) was orangey brown silt containing small stones, charcoal flecks, and 1 small pottery sherd of black corky fabric. It was much lighter in colour than the secondary fill (102)) an orange/brown silt containing small stones, obvious lumps of charcoal, 5 pottery sherds of similar fabric, 1 large angular stone (stone packing) laid flat at the bottom of the fill, and heat affected pieces of quartz stone. The primary fill (116) was very

difficult to see in plan as it was so similar to the surrounding natural subsoil.



Photo 12: Post-excavation shot of 2 possible pits [103 & 117] and 2 postholes [101 & 111] within Trench 4; looking southwest. 1.0m scale

- 4.22 The pottery from the pits [103 & 117] and the postholes [101 & 111] (Photos 16 & 17) have been provisionally dated, by comparison with examples from other excavated sites, to the Neolithic/Early Bronze Age periods; approximately 4000 to 3000 BC.
- 4.23 A further possible pit [105] was recorded to the northeast of the group of intercutting features (Figure 10). The full extent of this feature was not visible in plan as it continued under the southeast facing section of Trench 4 (Photo 15). The excavated portion measured 0.64m along the section, protruded 0.32m into the trench and reached a depth of 0.20 deep. It contained fill (106) of clayey silt containing some small stones and charcoal.
- 4.24 Within the side of the cut [105] there was a small circular depression, filled with (106) that could indicate the former position of a post or stake.
- 4.25 Towards the north-eastern end of Trench 4 another possible feature was identified. Although not excavated, it was circular in plan and at 0.32m in diameter; it was of comparable diameter to the other postholes recorded within the trench.



Photo 13: Pre-excavation shot of posthole [101] lying partially beneath the northwest facing section of Trench 4. O.25m scale



Photo 14: Post-excavation shot of posthole [101] within Trench 4; looking south. 0.5m scale



Photo 15: Post-excavation shot of possible pit [105] within Trench 4; looking southwest. 0.25m & 1.0m scales



Photo 16: The two different types of pottery sherds from fill (104) of pits [103] and [117] in Trench 4.



Photo 17: Pottery sherds from the fill (102) of posthole [101] in Trench 4.

4.26 The positioning of Trench 4 successfully targeted positive anomalies seen on the greyscale image of the 2009 geophysical survey (Smith 2009), which suggests that other positive anomalies (darker grey) seen on the greyscale image (Figure 11) close to the location of the pits excavated in Trench 4, could represent further clusters of pits.



Figure 11: The greyscale image of the geophysical survey undertaken in 2009 (Smith 2009) overlaid with the 2016 evaluation trenches (outlined in orange).

5. **CONCLUSIONS**

- 5.1 The dating evidence clearly suggests that the recorded features are a result of activity occurring in the Neolithic/Early Bronze Age prehistoric period. The discovery of groups of pits and post holes from this period is rare in Pembrokeshire.
- 5.2 Interpreting the nature of such activity is difficult within such a small sample area when few features have been fully excavated. The absence of cremated bone suggests they are not cremation pits. The presence of post holes could suggest some form of settlement activity.
- 5.3 The features were not all dug at the same time suggesting that prehistoric activity recurred at an interval. Therefore another possibility is that the pits are 'ceremonial' pits that could commemorate the end of a period of occupancy (Smythe 2012; Garrow 2012). It is possible that significant clusters of such pits dug over an extended period of time could be confused with occupation sites (Thomas 2012). They can be arranged in arcs, horseshoes or circles (Darvill et al, 2016). The arc of positive anomalies on the grayscale image of the geophysical survey (Smith 2009) (Figure 11) may well represent such a group of features.
- 5.4 Finds within these pits are often found placed on the bottom and sides of the feature and it is interesting to note that at Croesgoch sherds of the thicker pottery fabric were found at the bottom or side of features [103], [111] & [117], whereas the darker more corky fabric sherds were found at the top.
- 5.5 Clusters of pits of this date are often found in close vicinity to rock outcrops, springs or vistas across valleys or coast (Darvil et al, 2016). The pits recorded at Croesgoch lie close to a stream that lies just over 50m to the northeast, and from their location there are clear views northwest to the sea.
- 5.6 Environmental sampling of such features can be a great source of detailed information on the environment, as well as evidence of human practices at that time.
- 5.7 Prehistoric activity in this area raises the probability of finding burnt mounds adjacent to the nearby stream. These enigmatic mounds of burnt stone typically occur near water courses. Where excavated, burnt mounds have proven to be mostly Bronze Age in date (roughly 2300-850BC), although earlier and later examples are known.
- 5.8 The evaluation recorded at least one group of Neolithic/Early Bronze Age pits and postholes; visible as features cut into the natural subsoil at a shallow depth of between 0.28 to 0.40m below the current ground surface. These remains indicate that prehistoric activity, either settlement or ceremonial, survives within the development area. The rarity of such features in Pembrokeshire makes their discovery of regional importance and could indicate that Croesgoch has been a focus for ceremonial or religious activity for an extended time.
- 5.9 The full extent and distribution of this group of archaeological features are not known. The outlying posthole in Trench 3 indicates that prehistoric activity extends to the west. The lack of archaeological features in Trench 2 could define its south-eastern limit but only further investigation would identify its exact extent.
- 5.10 Due to the amorphous nature of the archaeological features when first revealed, they could easily have been missed if the trenches had not been cleaned by hand after machining and then investigated. This highlights the difficulty of being able to recognise such ephemeral features if time only allows for a brief inspection of the trench before it is backfilled.
- 5.11 The development plan includes the construction of at least 23 residential units, associated access roads and services. This type of development would

significantly impact, if not destroy, the type of surviving archaeological remains recorded during the evaluation.

6. RECOMMENDATIONS

- 6.1 If the surviving archaeological remains within the development area cannot be preserved *in situ* then it is likely that further archaeological mitigation would be required prior to development. After having defined the extent of the area of surviving features within the development area; this is expected to include full excavation of all archaeological deposits and features that will be impacted upon.
- 6.2 This could be undertaken through a strip, map and record exercise targeting the known area of features and the possible geophysical survey anomalies and extending to the southeast as far as the archaeology goes. From the results within Trench 2, the group of pits and postholes does not seem to extend that far, although feature [109] may well indicate other features scattered across the development area. It may be that following excavation and recording of the known features in the area to the northwest, that a watching brief may need to be maintained across the rest of the development site to ensure that any isolated features (such as that in Trench 3, Feature [109]) can be identified and recorded.

7. SOURCES

Publications

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

CIFA, 2014 Chartered Institute of Field Archaeologists Standards and Guidance for Archaeological Field Evaluation.

Darvil, T, James, H, Murphy, K, Wainwright, W & Walker, A, 2016. *Pembrokeshire Country History Volume I Prehistoric, Roman and Early Medieval Pembrokeshire*, Gomer Press.

Garrow, D, 2012. 'Concluding discussion: pits and perspective', in Anderson-Whymark, H.and Thomas, J. *Regional Perspectives on Neolithic Pit Deposition: Beyond the Mundane*, Neolithic Studies Group Seminar Papers 12, Oxford, Oxbow 216–225.

Ludlow, N, 2003. *A burial from the cist cemetery at Croesgoch, Pembrokeshire*, Cambria Archaeology unpublished report No 2003/56.

Rees, W, 1932. South Wales & Border in the 14th Century.

Pannett, A, 2009. Croes-goch County Primary School, Pembrokeshire, Cambrian Archaeological Projects, unpublished report No. 583.

Pannett, A, 2010. Croesgoch County Primary School, Pembrokeshire Archaeological Watching Brief, Cambrian Archaeological Projects, unpublished report No. 627.

Smith, C E, 2009. *Croesgoch Pembrokeshire, Desk Based Assessment and Geophysical Survey*, Cambrian Archaeological Projects unpublished report No. 588.

Smythe, J, 2012. 'Breaking Ground: an overview of pits and pit-digging in Neolithic Ireland', in Anderson-Whymark, H. and Thomas, J. *Regional Perspectives on Neolithic Pit Deposition: Beyond the Mundane*, Neolithic Studies Group Seminar Papers 12, Oxford, Oxbow, 13-29.

Williams, G, 1995. Croesgoch, *Pembrokeshire archaeological watching brief on access roads through OS 7729*, Dyfed Archaeological Trust unpublished report – Project Record No 30750.

Database

Dyfed Archaeological Trust Historic Environment Record

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

Cof Cymru - National Historic Assets of Wales http://cadw.gov.wales/historicenvironment/recordsv1/cof-cymru/?lang=en

Online resources

British Geological Survey: www.bgs.ac.uk

Map

Llanrhian Parish Tithe Map & Apportionment 1842

1st edition, Pembrokeshire, 1:25000" Ordnance Survey, 1889

2nd edition, Pembrokeshire, 1:25000" Ordnance Survey, 1907

8. PROJECT ARCHIVE

Project Number: FS16-048

Project Name: Croesgoch, Pembrokeshire, Archaeological Evaluation

Event Record Number: 110310 Digital Photographs: x 80 JPEGS

Digital Photographs Film Number: 110310

Digital Photographic catalogue x 1

Survey data: 1 GS5 files

Context	Trench	Description
101	4	Posthole cut – 0.35m diameter, 0.27m deep
102	4	Secondary fill of [101], orange/brown silt containing small stones, obvious lumps of charcoal visible on surface, 5 pieces of near black pottery, 1 large angular stone (stone packing), heat affected pieces of quartz – possible indicator of former position of post
103	4	Western-most of 2 intercutting features – full extent not known in plan as continues under section. Section not at right angles to feature. Possible pit? Initially in plan it very difficult to distinguish between the features; it was only when excavated that we could tell we had more than one feature. This cut probably just cuts posthole [111]
104	4	Fill of [103] & [117] – what appears in the section to be a series of thin fills tipping into pit – not excavated individually – all appear to be clayey silts containing varying amounts of small stones. 2 different types of pottery: towards top/middle dark pottery as found in [101] but at bottom was much denser harder fired pottery with clear quartz inclusions; one piece of which appears to have incised decoration.
105	4	Feature whose full extent is not known in plan as continues under section, don't know if section at right angles, excavated to a depth of 0.20m
106	4	Fill of [105] – clayey silt containing some small stones and charcoal
107	3	Posthole cut – 0.28m diameter, 0.30m deep
108	3	Fill of [107] – mid brown clayey silt containing charcoal flecks, some small stones & small fragments of quartz towards top
109	1	Cut of possible feature - unexcavated
110	1	Fill of [109]
111	4	Posthole cut – possibly just cut by [103] 0.40m diameter, 0.37m deep
112	4	Fill of [111] – dark brown silt containing 1 large stone (stone packing) placed on side within cut, quartz (heat affected), lumps of charcoal, pottery found towards bottom of cut
113	1-4	Topsoil/ploughsoil - dark brown loamy topsoil
114	1-4	Layer below topsoil - slightly lighter dark brown silty clay loam
115	1-4	Natural subsoil – mudstone & silts
116	4	Primary fill of [101] orangey brown silt containing small stones, charcoal flecks, 1 piece of pottery – much lighter that (102) and not easy to see in plan
117	4	Eastern-most cut of 2 intercutting pits – partially excavated – majority of pit not visible in trench, runs into section. I think this cut [103]. Filled by (104) as fills were not distinguished during excavation

APPENDIX 1

LAND NORTH OF 'THE FORGE', CROESGOCH, HAVERFORDWEST, PEMBROKESHIRE – RESIDENTIAL DEVELOPMENT FOR 23 DWELLINGS PLANNING APPLICATION REF. NO 15/0247/PA ARCHAEOLOGICAL TRIAL TRENCH EVALUATION

WRITTEN SCHEME OF INVESTIGATION - REVISED

1 INTRODUCTION

- 1.1 Planning application No. 15/0247/PA has been submitted to Pembrokeshire County Council for a residential development of 23 dwellings on land to the north of Croesgoch, Pembrokeshire (Figures 1, 2 & 3; centred on SM 8275 3044). This Written Scheme of Investigation (WSI or specification) has been prepared by DAT Archaeological Services (the contracting arm of Dyfed Archaeological Trust) in response to a request from Mr Nicholas Hall, architectural consultant for a scheme of archaeological works in advance of the proposed new residential development. The WSI proposes a methodology for archaeological trial trench evaluation within the proposed development area which measures c.0.8ha in size.
- 1.2 The development site has been previously used as agricultural land, and is presently under grass (Photos 1, 2 & 3). The site area is defined by the minor road between Croesgoch and Abereiddy to the west, a small stream course to the east and buildings to the south (including the site of the former forge). There is presently no physical boundary to the north.



Photo 1: View northwest from gated entrance at southern end of development area



Photo 2: Panoramic view from east to southeast from the northwestern corner of the proposed development area



Photo 3: Panoramic view from southwest to north from the southeastern corner of the proposed development area



Photo 4: View northeast from gated entrance at southern end of proposed development area showing the semi-circular area of differential vegetation in the area of possible contamination from the former forge



Photo 5: View southeast towards entrance gate into development area, showing access and presence of overhead cables across entranceway (at least 4m in height)

- 1.3 The archaeological advisor to the local planning authority (Mike Ings of the Development Management section of Dyfed Archaeological Trust) has requested that an evaluation is undertaken prior to the construction of the development as it has the potential to expose, damage or destroy archaeological remains associated with an early medieval cemetery previously identified to the southeast of the site, or associated activity. There is some potential for archaeological remains of other periods to be present.
- 1.4 It is proposed that three trenches of *c.*1.8m width and 30m length are opened up within the development site (Figure 3). One trench would be located close to the western road front in the northern half of the development area, targeting the footprints of proposed dwellings; a second trench would be located parallel with the road to the west within the southern half of the site area, again targeting proposed dwellings; and the third trench would be located perpendicular to the existing road, along the line of the proposed entrance roadway into the development area. Trenches would be excavated by machine fitted with a toothless ditching bucket in level spits down to the top of any surviving archaeological levels or the undisturbed natural substrata, whichever is reached first. Trenches would be cleaned and recorded and any identified features investigated to an appropriate level.
- 1.5 The locations of the trenches assume that there are no constraints, such as services, present. It is understood that there may be contamination issues associated with the site of the former forge which was present to the south of the development site. It was noted on the ground during a site visit on 07/10/16 that an area of differential vegetation growth had been present in a roughly semi-circular area directly north of the site of the old forge which could represent an area of contamination (Photo 4). Prior to the undertaking of any trial trenching within the site area, it will also be confirmed that there are no ecological issues with the locations of the proposed trenches.
- assessment and geophysical survey undertaken by Cambria Archaeological projects in 2009. The report stated that: 'The archaeological and historical background of Croesgoch shows several cist burial features of late/post Roman date in the area....Post-Roman/early medieval features are particularly rare in Wales with relatively little known of this period compared to others. The importance given to features of this date is down to their rarity.There is a reasonable likelihood, given what has been located elsewhere in Croesgoch, of such features existing within the assessment area.' The geophysical survey interpretation highlighted a single linear feature running northwest to southeast across the development area (Feature B), and earth mound (Feature C) and an area of disturbance corresponding with the gated entranceway into the site (Feature D). A second linear feature (Feature A) lay directly to the north of the development site, and was thought to either represent a service or a small ditch.
- 1.7 The following interpretations were laid out in the Cambrian Archaeological Projects report of 2009:

Feature A, being only slightly bi-polar in nature, may represent a non-metallic service such as alkathene. Alternatively it may represent a linear feature with traces of in situ burning

Feature B may represent a ditch. The feature is very faint and may also represent background 'noise' on the survey.

Feature C is likely to represent a modern disturbance as the survey was conducted over an extant mound. The mound may represent a backfilled geotechnical pit.

Feature D, the scattered small bi-polar responses, may represent light industrial activity associated with The Forge. Unfortunately, the scattered metallic readings serve to mask any features which may be underneath.

- The following information comes from the archaeological report 'A Burial from the Cist Cemetery at Croesgoch, Pembrokeshire' prepared by Neil Ludlow in 2003 on behalf of Cambria Archaeology (now DAT Archaeological Services). Previous archaeological work in Croesgoch to the southwest of the development site has revealed the presence of stone lined cist graves presumably of early medieval date. Fenton (1811) mentions the site of graves here, describing that the area was 'covered with graves marked out by stone coffins, formed of the coarse purple flags from the quarries in the neighbouring cliffs' and that one of the burials was accompanied by a 'sword'. A cist grave was recorded in the 1960s and two graves were observed during groundworks in 2000. The graves lie within a field formerly known as 'Parc-y-fynwent' or 'cemetery field'.
- 1.9 The full extent of the cemetery is not known, but from other works undertaken in the area in 1995 directly northeast of the burials and during development at the school site directly west of the development site, neither of which revealed burials, it is possible that the cemetery does not extend as far north as the present development site. At this time no church or settlement has been found associated with the burials, and there is thus a potential for such activity to lie within the development site. Such remains are likely to be represented by the earth-fast (below ground) remains of buildings, such as postholes or beam-slots or other activity such as waste disposal, such as waste pits.
- 1.10 Access to the development site is through a gated access in the southern boundary of the field, running through a yard adjacent to the property to the south. It was noted during the site visit that overhead cables are present running along the roadside (below which a machine would need to be driven to open the trenches Photo 5), but no visible indications of below ground services of pylons were visible within the development area. To the northeast of the site lies a Water Treatment Works, which is connected to the sewer main from the village which runs diagonally through the site area. This presently runs through the northeastern half of the site area and will be avoided by the proposed trenching. The line of the sewer will have caused disturbance to any underlying archaeological remains when it was laid. It is proposed that the sewer will be moved to follow the main road through the residential development.
- 1.11 This WSI details the methodology of the evaluation which will be undertaken and has been prepared in accordance with the *Standard and Guidance for Archaeological Field Evaluation* (CIfA³ 2014).
- 1.12 The Trust always operates to best professional practice. DAT Archaeological Services has its own Health and Safety Policy, and all works covered by appropriate Employer's Liability and Public Liability Insurances. Copies of all are available on request.
- 1.13 Dyfed Archaeological Trust is an Registered Organisation with the Chartered Institute for Archaeologists (CIfA).
- 1.14 All permanent staff members of DAT Archaeological Services are CSCS⁴ registered.

³ Chartered Institute for Archaeologists.

⁴ Construction Skills Certification Scheme (Health and Safety Tested)

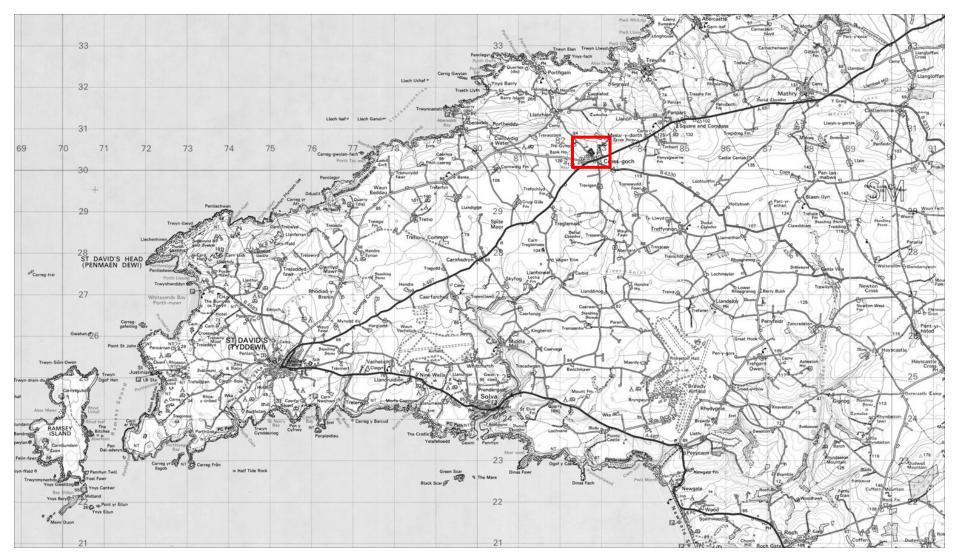


Figure 1: Site location plan showing location of Croesgoch

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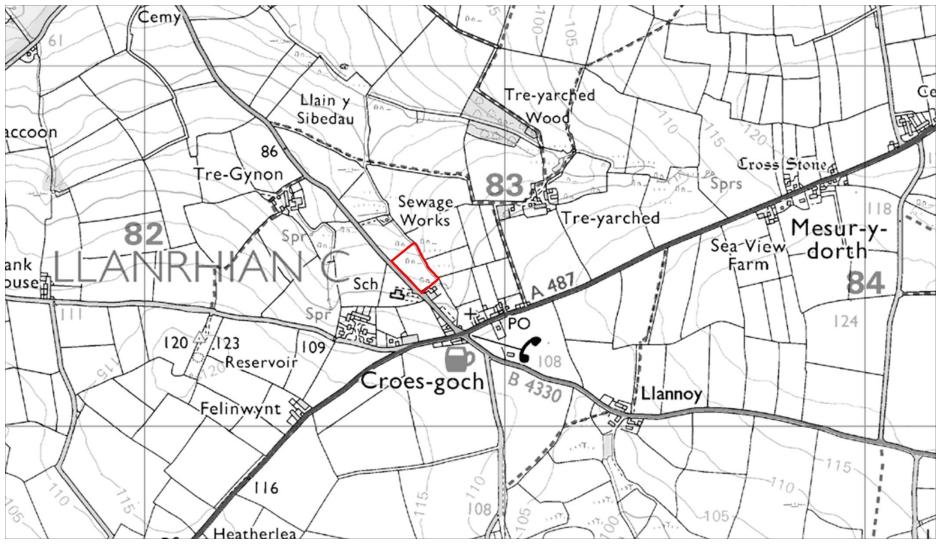


Figure 2: Detailed location plan of the Croesgoch development site

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Figure 3: Proposed development layout (plan taken from Pembrokeshire County Council planning website) with the three proposed trenches superimposed upon it – and line of existing sewer shown

2 AIM AND OBJECTIVES OF THE PROJECT

2.1 This document provides a scheme of works for:

The implementation of a scheme of archaeological evaluation using trial trenches within the area of the proposed residential development at Croesgoch, Pembrokeshire. A report shall be prepared on the results of the evaluation, 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.

- 2.2 The following tasks will be completed:
 - 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 a 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.

3 PROPOSED TRIAL TRENCH SCHEME

3.1 Introduction

- 3.1.1 To better ascertain the significance and state of preservation of the potential archaeology within the development site it proposed that a trial trench evaluation is implemented. This would involve the machine excavation of three trenches under archaeological supervision within the development area. The trenches would then be cleaned and the identified archaeology recorded and sample excavated. It is proposed that the trenches are each 30m in length and approximately 1.8m in width (the width of a standard ditching bucket).
- 3.1.2 The information from this scheme of works would identify the presence or absence of archaeology; determine the state of preservation of any identified remains, their date, significance and extent.
- 3.1.3 The provisional locations of the three trenches are shown on Figure 3, but the exact locations might change to avoid services or other constraints as yet unknown.
- 3.1.4 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.
- 3.1.5 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.
- 3.1.6 Features containing deposits of environmental significance will be sampled. The samples will be retained in stable conditions until analysis can be arranged.

- 3.1.7 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 Manual⁵. 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.
- 3.1.8 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 the DAT Archaeological Services in stable conditions. All finds, except those deemed to be Treasure⁶, 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).
- 3.1.9 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.
- 3.1.10 In the event of the discovery of human remains (including cist graves) they will, at this evaluation stage, be left *in situ*. 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).

4 POST-FIELDWORK REPORTING AND ARCHIVING

- 4.1 All data recovered during the evaluation 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.
- 4.2 The results of the fieldwork will be assessed in local, regional and wider contexts.
- 4.3 The results will be used to inform subsequent design considerations of the proposed development so that they will aim to avoid impacts upon any archaeological remains or that mitigation can be implemented before such remains are disturbed.

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

- 4.4 The report will include a desk-based assessment element to place the site into its wider context within the area and also more detail on and interpretation of the geophysical survey results.
- 4.5 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.
- 4.6 DAT Archaeological Services 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 the curator of the arrangement which has been made (it is anticipated that the archive will be deposited with Ceredigion Museum).
- 4.7 A summary of the project results, excluding any confidential information, may be prepared for wider dissemination (e.g. Archaeology in Wales and special interest and period-specific journals).
- 4.8 The report will be prepared to follow the *Standard and Guidance for Archaeological Field Evaluations* (CIfA 2014).
- 4.9 A digital copy and two bound copies of the reports will produced for the client. Bound copies of the reports will also be produced for Dyfed Archaeological Trust Heritage Management and the regional Historic Environment Record.

5 STAFF

- 5.1 The project will be managed by J Meek MIFA, Head of DAT Archaeological Services.
- 5.2 The on-site works will be undertaken by members of DAT Archaeological Services staff.

6 MONITORING

6.1 Following opening and recording of trenches, they will need to be monitored by the archaeological advisor to the planning authority. The Head of DAT Archaeological Services will also monitor the on-site works intermittently.

7 HEALTH AND SAFETY

- 7.1 All permanent members of DAT Archaeological Services staff are CSCS⁷ registered.
- 7.2 DAT Archaeological Services will carry out a health and safety risk assessment to ensure that all potential risks are minimised.
- 7.3 All relevant health and safety regulations must be followed.
- 7.4 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 DAT Archaeological Services staff at the start of the works.
- 7.5 All information relating to services or other constraints within the site area must be made known to DAT Archaeological Services prior to the start of the works.

 All relevant permissions from the landowner/s must also be given.
- 7.6 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 PPE⁸ that may be required.

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⁷ Construction Skills Certification Scheme (Health and Safety Tested)

- 7.7 DAT Archaeological Services 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.
- 7.8 The trenches will be left open for a number of days during the evaluation. Hazard tape or orange Netlon fencing can be erected around the trenches if needed. Deeper sections within the trenches will be surrounded with orange barrier fencing where deemed necessary. If more secure fencing is required (for example if livestock is present within the fields) it is presumed that this will either be provided by the client or additional sums will be made available to hire this in.

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⁸ Personal Protection Equipment

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RHIF YR ADRODDIAD / REPORT NO. 2016/64 RHIF Y PROSIECT / PROJECT RECORD NO. 110310

Rhagfyr 2016 December 2016

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

Fran Murphy

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

James Meek

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

Swydd / Position: Head of DAT Archaeological Services

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

