Archaeoleg Brython Archaeology

Post-Excavation Assessment of Potential
Wylfa Head

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Wylfa Newydd Development, Wylfa Head

Post-Excavation Assessment of Potential

Prepared for Wardell Armstrong LLP.

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Contents

Crynodeb

Comisiynwyd Archaeoleg Brython gan Horizon Nuclear Power Ltd. (HNP) i gyflawni rhaglen o waith cloddio archaeolegol rhwng 2017 a 2019 yn ystod gwaith clirio cynnar cyn cyflwyno cais Orchymyn Cydsyniad Datblygu (OCD/DCO) ar gyfer Orsaf Bŵer Wylfa Newydd ar Ynys Môn, Gogledd Cymru.

Wedi cwblhau'r cloddio commisynwyd Wardell Armstrong LLP. ac Archaeoleg Brython gan HNP i ddarparu crynodeb o ganlyniadau'r gwaith ac i gyflawni rhaglen o waith ôl-gloddio rhwng Medi 2019 a Mawrth 2020 i asesu arwyddocâd a photensial yr archif a'r darganfyddiadau.

Adroddiad Asesiad o Botensial yw'r ddogfen hon ar gyfer archif a chasgliad arteffactau safle Pen y Wylfa (Wylfa Head) a gloddiwyd fel rhan o'r gwaith clirio cynnar.

Roedd cloddfa Pen y Wylfa (NGR SH35769384; EVENT PRN 46035) yn mesur 4,585m² ac wedi ei leoli i asesu potensial y safle yn dilyn arolwg geoffisegol ac arolwg ffosi gan Headland Archaeology. Yn ystod y gwaith gwerthuso darganfyddwyd fynwent o faint sylweddol. Yn ystod y gwaith cloddio darganfyddwyd anheddiad Rufeinig-Frythonig a 315 bedd, y mwyafrif yn cynnwys cist o gerrig, yn dyddio i'r canoloesoedd cynnar. Darganfyddwyd weddillion dynol yng nghant a naw o'r beddi. Mae'n debyg i'r anheddiad ddatblygu dros sawl cyfnod, efallai yn cychwyn yn yr Oes Haearn fel anheddiad agored cyn cael ei amgylchu gan wal sylweddol yn y cyfnod Rufeinig-Frythonig. Mae dyddiadau radiocarbon o ddeunudd organic a gasglwyd yn ystod y cloddio yn awgrymu gweithgaredd ar y safle yn ystod y cyfnodau Neolithig, Oes Haearn Hwyr, Rhufeinig a chanoloesoedd cynnar. Mae dyddio radiocarbon o weddillion sgerbydol yn cadarnhau bod y fynwent yn dyddio i'r canoloesoedd cynnar. Mae'r arteffactau a ddarganfyddwyd yn ystod y cloddio yn cynnwys arfau cerrig Mesolithig a Neolithig, crochenwaith Cynhanesyddol a Rhufeinig, leinin ffwrnes, gwrthrychau metal, ceiniogau Rhufeinig, gweddillion anifeiliaid a gwrthrychau ôl-ganoloesol.

Mae'r asesiad yn nodi presenoldeb sylweddol ar y safle yn ystod y cyfnod Rhufeinig-Frythonig gan gynnwys gweithgareddau diwydiannol, cynhyrchu tecstilau a phrosesu grawn. Mae'r gweddillion anifeiliaid, sy'n cynnwys defaid/geifr a gwartheg, yn awgrymu gwastraff o brosesu cig. Mae'r gweddillion dynol a'r fynwent ganoloesol gynnar yn elfennau allweddol i ddeall poblogaeth ganoloesol gynnar Cymru.

Summary

Brython Archaeology, commissioned by Horizon Nuclear Power Ltd. (HNP), undertook a phased programme of excavation in 2017-2019 in advance of the submission of a Development Consent Order (DCO) application for the construction of the proposed Wylfa Newydd Power Station on the Isle of Anglesey, North Wales.

Wardell Armstrong LLP. (WA) and Brython Archaeology was subsequently commissioned by HNP to provide a summary of the results of the archaeological excavation and to undertake a programme of post-excavation during September 2019 to March 2020 to assess the significance and potential of the site archive and finds.

This is an Assessment of Potential Report of the archive and finds assemblage of Wylfa Head, which was excavated during early clearance works.

The excavation area of 4585m^2 at Wylfa Head (NGR SH35769384; EVENT PRN 46035) was defined following a geophysical survey and archaeological trial trench evaluation by Headland Archaeology to address the archaeological potential of the site. During the evaluation a large cemetery was identified. A Romano-British settlement and 315 early medieval graves, most of which were stone lined and capped long-cist types were identified during the excavation. One hundred and nine graves contained human remains. The settlement appeared to have evolved through a series of phases, possibly starting as an open settlement during the Iron Age and becoming enclosed by substantial walls during the Romano-British period. Radiocarbon dates from organic material recovered from soil samples suggest activity on the site dated to the Neolithic, Late Iron Age, Roman and early medieval periods. Radiocarbon dating of skeletal remains confirm an early medieval date for the cemetery. Artefacts recovered during the excavation include Mesolithic/Neolithic lithics, Prehistoric and Roman pottery, furnace lining, metal objects, coins, animal remains and post-medieval finds.

The assessment identified a significant presence at the site during the Romano-British period including industrial activity, textile production and grain processing. The animal remains recovered are suggestive of domestic food waste with most of the specimens identified to sheep/goat and cattle. The human remains and early medieval cemetery represent a key element in understanding early medieval population in Wales.

1 Introduction

During August 2017 to January 2019, Archaeoleg Brython Archaeology CYF. (ABA), commissioned by HNP, conducted a phased programme of excavation of a large early medieval cemetery and enclosed Romano-British settlement at Wylfa Head, Anglesey (NGR SH35769384) in advance of the submission of a Development Consent Order (DCO) application (PINS reference number EN010007) for the construction of the proposed Wylfa Newydd Power Station. The excavations at the Wylfa Newydd development site involved 30 open area excavations, with some undertaken as set piece excavations and others as strip map and sample excavations. In total 32 strip, map and sample areas, described as 'Hotspots' were identified, and organized into four zones referred to as 1a, 1b, 2 and 3 within the Written Scheme of Investigation (WSI; Horizon Nuclear Power, 2016; 2017). Fourteen of these areas were excavated by ABA totalling an area of approximately 25,578m^2 (*Figure 1 and Appendix II*):

- Wylfa Head (EVENT PRN 46035)
- Area 7 (EVENT PRN 46036)
- Area 8 (EVENT PRN 46037)
- Hotspot 5 (EVENT PRN 46038)
- Hotspot 6 (EVENT PRN 46039)
- Hotspot 7-9 (EVENT PRN 4640)
- Hotspot 8 (EVENT PRN 46041)
- Hotspots 10 (EVENT PRN 46042)
- Hotspot 11-13 (EVENT PRN 46043)
- Hotspot 12 (EVENT PRN 46044)
- Hotspot 14 (EVENT PRN 46045)
- Hotspot 15 (EVENT PRN 46046)
- Hotspot 16 (EVENT PRN 46047)
- Hotspot 17 (EVENT PRN 46048)

Two supplementary excavation areas, Hotspot 8B and Hotspot 15 West, were opened to investigate the interaction between the archaeology in Hotspot 8 and Hotspot 15. This phase of fieldwork was concluded in January 2019. In February 2019 it was announced that the Wylfa Newydd project was being put into a suspended state. As a result, all further works on the site have been suspended.

Prior to the excavation of the Wylfa Head site, it had been subject to an archaeological Desk Based Assessment (DBA) (Cooke *et al*., 2012), magnetometer geophysical survey (Hopewell, 2011a; b; Hopewell 2012) and a programme of evaluation trenching by Headland Archaeology (2017). A licence for the excavation of human remains was issued by the Ministry of Justice (*Appendix III*). The original excavation area of 4585m^2 was selected for excavation based on the results of the evaluation trenching during which early medieval cist graves were identified. The original excavation area was later extended to a total area of 5525m^2 due to the identification of a Romano-British settlement during the excavation of the cemetery. The cemetery consisted of 315 graves. The settlement evolved through a series of phases, possibly starting as an open settlement during the Iron Age and becoming enclosed by substantial walls during the Romano-British period.

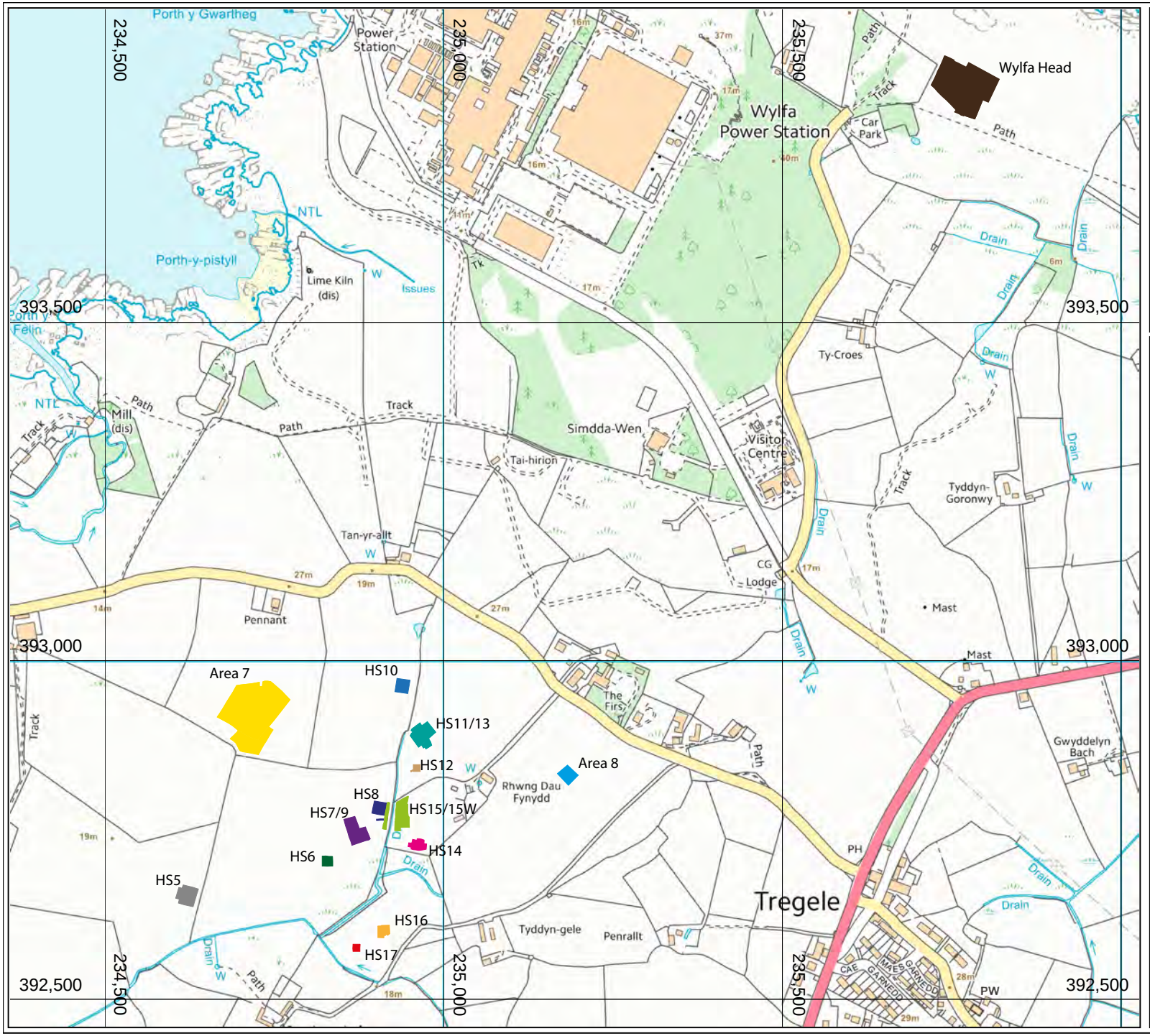
All archaeological works were undertaken in accordance with the Written Scheme of Investigation (WSI [Horizon Nuclear Power, 2016; 2017]), and in line with paragraph 5.8.21 of the overarching National Policy Statement for Energy (EN-1 [Department of Energy and Climate Change, 2011]), and in accordance and in accordance with the British Association of Biological Anthropology and Osteoarchaeology (BABAO) code of practice. The work was monitored by Gwynedd Archaeological Planning Services (GAPS), cultural heritage advisors to the Local Authority. WA have been employed by HNP as cultural heritage consultants for the project and within this capacity have provided guidance and advice during the works. The key historic environment stakeholders are:

- Cadw – The principal Welsh government body responsible for the historic environment of Wales; and

- GAPS - The curators responsible for monitoring archaeological investigations undertaken as part of development in the region.

During the fieldwork and post-excavation work an archaeological record and archive of the site, AB1703 Wylfa Head, was created. WA was appointed by HNP to undertake a programme of assessment of the archaeological potential of the evidence accumulated during the excavations and ABA was selected to undertake a portion of this work under a sub-contract agreement with WA. The excavated finds and environmental samples were handed over to WA in April 2019. ABA was further contracted to assess the archaeological potential of the human remains, and to stabilise the archive for future assessment. The human remains were sent to Cardiff University BioArchaeology (CUBA) for analysis.

The purpose of this document is to report on the post-excavation assessment of the Wylfa Head archive and finds assemblage and to create an ordered archive for deposition. This report is written and structured to conform to MoRPHE guidelines, the Charted Institute for Archaeologist' standards required of post excavation assessment works (CIfA 2014a; 2014b), and in line with the recommendations as stated in the ABA site summary report (ABA, 2018). Digital copies of this report are to be submitted to HNP and relevant stakeholders. The archive and finds assemblage were stored in accordance to CIfA's standards and guidance (CIfA, 2014a: 2014b) while under the curatorship of ABA. The paper archive and digital data, including photographs will be lodged with the Royal Commission on Ancient and Historical Monuments of Wales (RCAHMW) in Aberystwyth on completion of the project. ABA will hold a digital version of the archive indefinitely.



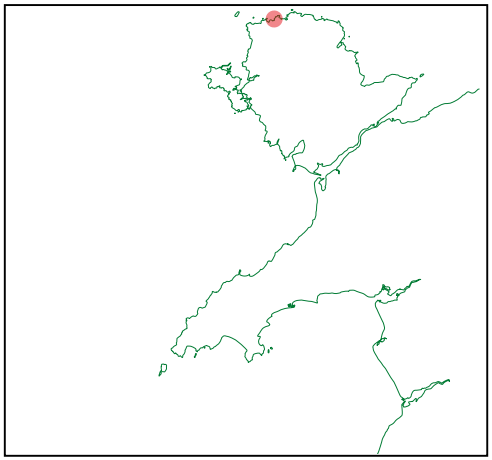


Figure 1
Location plan showing the areas excavated by ABA in the Wylfa Newydd Devleopment Area

Key

- Wylfa Head
- Area 8
- Area 7
- Hotspot 5
- Hotspot 6
- Hotspot 7/9
- Hotspot 8
- Hotspot 10
- Hotspot 11/13
- Hotspot 12
- Hotspot 14
- Hotspot 15
- Hotspot 16
- Hotspot 17

Project No.
AB1703

Drawn By: IGP

Date: 09/06/2021

Location:
SH35439322

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2 Project Background

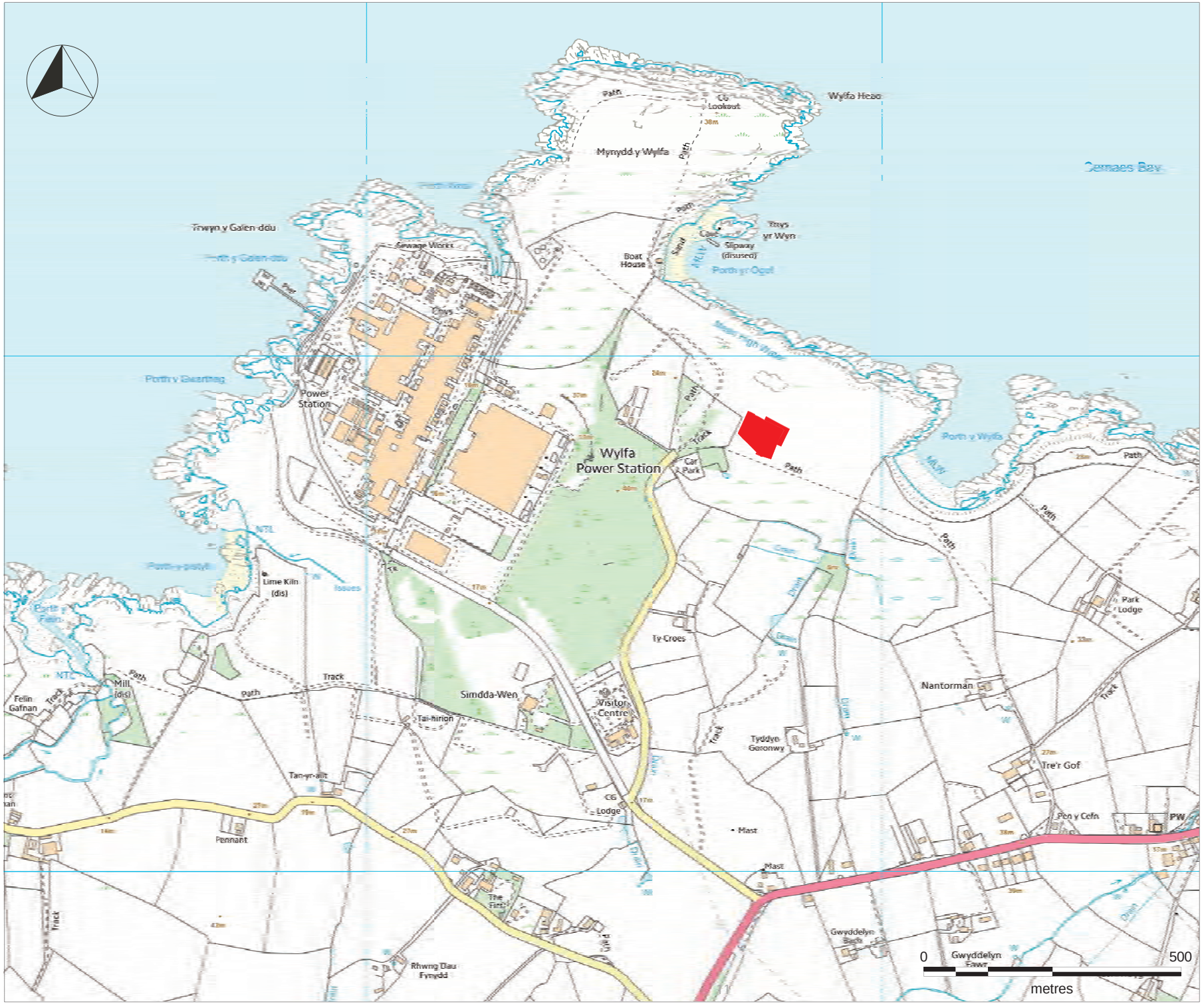
2.1 Site Location

The Wylfa Head site was located near the Wylfa Head Area of Anglesey in Zone L, in a Field designated 'L1' during the archaeological trail trench evaluation works (Headland Archaeology, 2017). The investigation site was located approximately 550m to the east of the existing decommissioned Magnox power station, approximately 140m south of the nearest coastal point, and 1.4km west-northwest of the centre of the modern village of Cemaes. The initial excavation area measured 4585m^2 in size and was centred on NGR SH35769384 at a height of approximately 9m above sea level. The excavation area consisted of a hill, the crest of which was on the western edge, sloping to the north, south and east to a small, flat plateau (*Figure 2*). The original excavation area was later extended to a total area of 5525m^2 due to the identification of a Romano-British settlement.

2.2 Geology and Topography

Superficial deposits in the area consist of Till, Devensian – Diamicton. These are sedimentary deposits which formed between 11.6 and 11.8 thousand years ago during the Quaternary period, indicating a landscape dominated by Ice Age conditions. The underlying bedrock geology consist of schist of the Gwna Group. This is a metamorphic bedrock which formed approximately 508 to 635 million years ago during the Cambrian and Ediacaran periods. These were originally sedimentary rocks formed in deep seas by chaotic deposition from underwater gravity slide, later altered by low-grade metamorphism (BGS, 2019).

In relation to Field L1 specifically, BGS mapping indicates that the overlying soil is freely draining slightly acidic loam, with a superficial geology of Devensian till and underlying bedrock of schist. Archaeological investigations undertaken in September 2016 indicated that the overburden consisted of a thin, silt topsoil, overlying a friable grey-green sand silt subsoil. The underlying drift geology was described as red-orange sand gravel with local outcrops of schist, with the archaeological horizon typically located at 0.60 to 0.80m below ground level (Craddock-Bennett *et al*., 2016).



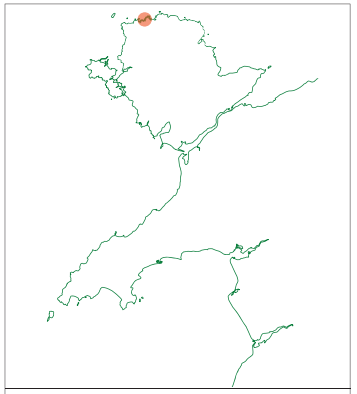


Figure 2
Location plan of Wylfa Head Excavation Area.

Key

Excavation Area

Drawn By:	IGP
Date:	18/10/18
Location:	SH35769384
Project:	AB1703 Wylfa Head

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2.3 Archaeological and Historical Background Data

Anglesey is rich in archaeological sites and artefacts dating from the Mesolithic to medieval period. The information below is summarised from reports and archaeological baseline assessments (Cooke *et al*., 2012; Parry *et al*., 2012; Jacobs, 2015; Wessex Archaeology, 2016; ABA, 2017; Headland Archaeology, 2018) which should be consulted for detailed information.

Mesolithic finds in the area generally consist of flint scatters and tools located at a number of locations across Anglesey, generally close to water sources and often at coastal locations. The nearest possible Mesolithic activity recorded is at Cemlyn Bay, located approximately 2km to the west of the existing decommissioned Wylfa power station, in the form of flint scatters (HER PRN GAT 31584). Another three blade-like flint flakes (HER PRN GAT 7046) is recorded approximately 8km to the south near Llyn Alaw. As discussed in this report, two possible Mesolithic lithic scatters (HER PRN GAT 91809/ HER PRN GAT 91811) were identified during the early clearance works at the Wylfa Head excavation area, approximately 350m east of the existing decommissioned power station.

Evidence for Neolithic activity in the area is abundant, mostly represented by megalithic funerary monuments, including chambered and passage tombs. These tombs would have been held the remains, both skeletal and cremated, of numerous individuals of the early farming communities which constructed them. Such monuments were often in use for long periods of time spanning both the Neolithic and Early Bronze Age periods, some examples show evidence of rearrangement and alteration to accommodate changing funerary practices. A ruined chambered tomb (HER PRN GAT 3046) is located approximately 1.8km to the south-east at Llanfechell. A limited number of domestic sites have been recorded on Anglesey, with the closest being the Early Neolithic settlement at Llanfaethlu, located approximately 8km south-west of the existing decommissioned Wylfa power station. The settlement of at least three Early Neolithic houses is the first of its kind identified in Wales and one of the first in the UK (Rees and Jones, 2015). Evidence of Neolithic activity was identified during the early clearance works at the Wylfa Head excavation area where a group of stone axes and polishing tools were identified in a pit (HER PRN GAT 91812).

Few Bronze Age settlements have been identified on Anglesey but evidence of activity during this period, such as barrow and cairn construction and erection of standing stones, remains visible in the landscape. During the Bronze Age, settlements became apparent on high, defendable ground suggesting the establishment of centres of power, likely organised into tribes and clans. During early clearance works and undefended Bronze Age roundhouse (HER PRN GAT 91868) was identified at Hotspot 14. The nearest Scheduled Monument dating to the Bronze Age is Meini Hirion (AN 30), a group of three standing stones, which may form part of a Prehistoric complex along with the previously mentioned ruined chambered tomb (HER PRN GAT 3046), located approximately 2km south-east of the existing decommissioned Wylfa power station. Prehistoric burials in the later part of the period appear to have moved away from the communal tradition with the appearance of individual urned cremations and crouched cist inhumations. Arguably the most common feature type associated with the Bronze Age is burnt mounds. Evidence of these features are plentiful in the region and as many as twenty burnt mound deposits were identified within the footprint of the Wylfa Newydd development area. The closest recorded burnt mound (HER PRN GAT 61102/91837) is located east of Rhwng Dau Fynydd, approximately 1km south of the existing decommissioned Wylfa power station and was excavated in Area 8. Further burnt mounds were excavated in Hotspot 5 (HER PRN GAT 91839) and Hotspot 7-9 (HER PRN GAT 91846) during the early clearance works.

Prior to the commencement of the archaeological evaluation and early clearance works no Iron Age activity had been recorded at the site. The closest recorded Iron Age enclosure (HER PRN GAT 61454) is found north of Penymorwydd, located approximately 4km south-east of the existing

decommissioned power station at Wylfa. A number of undated large enclosures and ring-gullies were identified in the development area during the evaluation phase, excavation during early clearance indicates that some of these date to the Iron Age. A partially enclosed hilltop settlement with a single roundhouse and possible granary (HER PRN GAT 91829) which was dated to the Iron Age was identified in Area 7. Unenclosed and low-lying Iron Age settlements were also identified at Hotspot 15 (HER PRN GAT 91875) and Area O5 South, occupation of these settlements is likely to have spanned from the Iron Age through to the Romano British period.

The closest evidence of Roman activity to the Wylfa Newydd development site previously identified was a probable fortlet (HER PRN GAT 37976) near Cemlyn Bay, near the western extent of the development area, and a Roman coins (HER PRN GAT 998) and brooch (HER PRN GAT 999) found at Cemaes Fawr Farm, located approximately 2km east. During evaluation and early clearance Roman and Romano British archaeology was identified at a number of locations. At Area 4, approximately 500m south of the existing power station, a possible Roman invasion camp (HER PRN GAT 92053) was identified. As discussed in this report, Iron Age/Romano British settlements were identified at Wylfa Head (HER PRN GAT 91817), and Area O5 South, and Hotspot 15 (HER PRN GAT 91875).

Prior to the evaluation and early clearance works evidence of early medieval archaeology within the development area was scant. Few sites of this period have been identified on Anglesey, the majority of known sites are ecclesiastical, including a 9th century cross slab (HER PRN GAT 3059) from Llanbadrig which pre-dates the 12th century church (HER PRN GAT 3052). Ad discussed in this report, during evaluation an early medieval cist cemetery (HER PRN GAT 91824) was identified at Wylfa Head, and fully excavated during the early clearance works. A second cemetery (HER PRN GAT 91830), which included four square funerary enclosures (HER PRN GAT 91831, 91832, 91833, 91834) was identified at Area 7, and a third possible group of family graves was identified at Hotspot 11-13 (HER PRN GAT 91862). Examples of cemeteries with square funerary enclosures have also been found further afield on Anglesey and in Gwynedd including at Capel Eithin, Gaerwen (HER PRN GAT 2730, An120); Llandygai, Bangor (HER PRN GAT 62195); and Ysgol y Hendre, Caernarfon (HER PRN GAT 34043). It is debated as to whether the square enclosures represent at least two different monument types, square barrows with open ditches and interior mounds, and timber structures which may have been roofed (Longley & Richards 2000). The graves within these features are considered to be 'special' graves, often becoming focal points for subsequent burials.

Documentary and physical evidence suggests that the area was extensively habited and utilised by the 12th century. The area would have been within the Kingdom of Gwynedd which was sub-divided into a number of regional commotes (Cwmwd) which would have had a royal manorial centre (Mardref) to act as a focus for administration and taxation (Cooke *et al*., 2012). The proposed development area was within the commote of Tanybolion, the Mardref was located approximately 1km east at Cemaes. No medieval settlements have been recorded in the area and the existence of settlements is largely known from documentary sources. Two place names that are however spatially closely associated with the site are:

- Tre'r Gof (township of the smith) – documented from the 12th century and is thought to have been a medieval township or hamlet with the commote of Talybolion.
- Wylfa (lookout point) – documented from the later medieval period as a farm that was part of the township of Caerdegog.
- Although no physical evidence of the hamlets have been identified it is possible that buried archaeology remains below later farms.

Evidence of early post-medieval field systems across the site was identified through desk-based assessments, geophysical survey and confirmed during evaluation and early clearance works. Many of these are likely to date to the 16th and 17th centuries and are likely to have been removed in the 19th century during episodes of land improvement and creation of larger fields for new farming techniques. It is likely that much of the land improvement during the 19th century was driven by the estates which held the land, these include Carreglwyd, Plas Coch, Cefn Coch and Bodorgan (Cooke *et al*., 2012).

Although no large estate houses were ever located within the proposed development area large houses with associated ancillary buildings, landscaped grounds and gardens were constructed at several former farms including Wylfa, Simdde Wen and Cestyll (Cooke *et al*., 2012). Historic Ordnance Survey Mapping showed buildings associated with Wylfa House (HER PRN GAT 36583/36584) - a post medieval manor house at the western edge of the excavation area during the mid-20th century, which is known to have included a kitchen garden located in the vicinity of the excavation area.

During WWII a Chain Home radar station (HER PRN GAT 36597/3658) was established at Wylfa Head to identify enemy aircraft and to manage the shipping routes for Liverpool.

The current landscape is dominated by the now decommissioned Wylfa power station which was constructed in the 1960s and was operational until 2015. As well as the present building much of the surrounding area was impacted by the construction of the plant but recent work shows that buried archaeology survives in close proximity to impacted areas.

2.4 Original Geophysical Survey Results

Geophysical surveys were carried out during the assessment of the site (WYAS, 2015; Hopewell 2011a: 2011b; Hopewell, 2012). These pieces of work did not demonstrate the presence of significant archaeological remains within the excavation area. Both suggested the presence of 'background' agricultural type remains such as field boundaries and drainage ditches.

2.5 Original Evaluation Results

The trial trenching undertaken in 2015-2016 within Field L1 indicated a significant prehistoric presence to the south and south-east of Field L1, with findings including burnt mounds, hilltop ring ditches and prehistoric pottery (Wessex Archaeology, 2016). The evaluation trenching undertaken in September 2016 (Craddock-Bennett *et al*., 2016) however, revealed the remains of what appeared to be a substantial human cemetery with approximately 49 burials identified across five trenches:

- Trench 2155 – five small cist burial 'chambers' lined and capped with slabs of locally derived stone;
- Trench 2156 – five burials consisting of a mix of graves and cists, one human humerus and femur fragment was recovered from grave 2156-004 in this trench;
- Trench 2157 – four burials consisting of a mix of graves and cists;
- Trench 2164 - 20 burials consisting of three graves and 27 cists; and
- Trench 2165 - 15 burials consisting of two graves and 13 cists, one human femur fragment was recovered from grave 2165-005 in this trench.

Bordering the trenches, a gully or ditch type feature (trench 2156) was noted, which may have indicated the boundary of the cemetery. A number of moderate to large pits, many with fills

containing significant quantities of burnt material were also identified in trenches 2154, 2158 and 2160. The density of the burials suggested that up to 150 burials may be present.

Radiocarbon dating of bone samples recovered from cist 2156-004 returned a date of 1249 cal BP, placing the remains at *c*. 700 AD (8th century). Dating of charcoal and cereals form graves 2157-004, 2157-006, 2156-004 and 2156-011 returned dates of between 1836 cal BP (*c*. 114AD) and 1392 cal BP (558AD). However, it is thought likely that these represent intrusive elements into the graves, rather than being truly representative of such an early date for the cemetery (Horizon Nuclear Power, 2017).

2.6 Original Aims and Objectives

According to the WSI (Horizon Nuclear Power, 2016: 2017), the general aim of the excavations at the Wylfa Newydd development site was to gather additional information of the extent, condition, depth, character, quality, stratigraphic sequence and date of the archaeological remains within the excavation areas and to preserve the revealed remains, in record, in anticipation that their physical remains may be destroyed by future development works. The results of the investigations are to be disseminated through the deposition of an ordered archive at suitable repositories for both physical and digital material, the deposition of a detailed report at the Historic Environment Record and the production of a publication article, at a level of detail appropriate to the significance of the results.

2.6.1 Site Specific Aims

1. Establish the true nature of funerary practices within the cemetery. Open graves and cist burials were identified during the trial trench evaluation, but it is unclear if these represent the whole picture, for example is there any evidence for the use of coffins? Were cremated remains placed at the site also? Is there any evidence for grave goods being placed with the deceased?
2. Establish the date of the use life of the cemetery via the recovery of datable artefacts or material (such as bone and charcoal) which is suitable to be subjected to scientific dating techniques. This should include Bayesian Analysis of the data recovered from scientific dating of the samples as well as pair series correlation. This latter is best applied to multiple samples recovered from the same context, and where that context can be identified as stratigraphically sound (i.e. unlikely to contain intrusive material) and short lived.
3. Establish the stratigraphic sequence of the burials within the cemetery area, and of those remains around and/or associated with the cemetery, to allow contemporary relationships with the wider site to be established.
4. Gain information of the demographic make-up of the cemetery (age, gender *etc*.) so far as is possible given that the highly acidic soils found on Anglesey mean that the preservation of bone is generally poor.
5. Gain information on such things as disease and diet via recovery and examination of HSR (study of the bone pathology) and the recovery of material that may represent the gut content of the buried individuals (via targeted bulk sampling of the grave fill material).
6. Determine the spatial lay out of the burials, and in particular if there are any distinct nodes of clustering to the burials, which may be indicative of separate distinct and/or intense periods of use or kinship.
7. Determine the presence, nature, character and date of any features associated with the burials, but which are not themselves burials, including (but not limited to) structural remains (such as

post holes) and boundary features (such as ditches). In addition to determining the spatial and stratigraphic relationships of these features between themselves and the burials.
8. Gain information on the past environment of the cemetery site via the recovery, and study, of micro and macro fossils from the burial fills.
9. Determine what, if any, link existed between the cemetery site and other known archaeological sites in the region, with particular emphasis on those other archaeological sites identified in fields L1, F1 and L20 by the trial trench evaluation.

2.6.2 Research Objectives

The relevant archaeological framework documents identified in the WSI (Horizon Nuclear Power, 2016: 2017) were:

- A Research Framework for the Archaeology of Wales: North West Wales - Early Medieval c. AD 400-1070 (Edwards *et al*., 2016).
- A Research Framework for the Archaeology of Wales: North West Wales – Medieval c. AD 1100 – 1539 (Longley, 2010).

From these documents the following, relevant, research objectives (RO) can be identified:

1. Confirmation of the date, nature, character and extent of potential medieval sites in order that the site can be placed into the wider context of medieval Anglesey.
2. To undertake detailed analysis of (early) medieval artefacts and their contexts in order to understand the chronological and typographic development, and use, of the artefacts.
3. The analysis of human remains for information on date, origins, demography, health, nutrition and transfer of pathogens.
4. The setting of the information gained from archaeological investigation into a broader regional and national (including Britain and Ireland) context.
5. Gaining of insights into the chronology and process of Christian conversion, the evolution and changing functions of religious sites and the broader impact of these on the landscape and (early) medieval society in Wales.
6. Identifying, in so far as is possible, the settlement and ecclesiastical sites associated with cemetery sites in order to understand the interrelationships between settlement sites, parish catchment areas and cemetery catchment areas.
7. Identifying, so far as is possible, the status of the individuals placed within the cemetery and understanding how this relates to the status of the settlement from which they came.
8. Gaining insights into the local farming economy and the wider exploitation of the natural environment – with particular reference to the exploitation of lakes and fens/bogs (such as the adjacent Tre'r Gof SSSI site) and the sea.
9. Gaining insights into long distance trade (via the analysis of recovered artefacts) especially in such products as pottery, glass and metalwork.
10. Establishing the extent of continuity or discontinuity between the late Roman and early medieval periods via analysis of environmental evidence (RO8), the agricultural economy (RO8), artefacts recovered (RO2) and changes in settlement patterns (RO6), trade (RO9) and burial and/or funeral practices (RO5).
11. Understanding how the transition between the Late Roman and early medieval period on Anglesey (RO10) compares with the same period elsewhere in Wales and Britain.
12. Understanding what, if any, impact Irish and Scandinavian populations had on (early) medieval Wales (artefacts, agricultural economy, funerary practices *etc*.).

As the excavations revealed archaeology from the Mesolithic, Neolithic, Romano-British, and possibly Iron Age periods the following archaeological research questions identified in the WSI for Strip, Map and Sample areas (Horizon Nuclear Power, 2017) are also relevant:

Prehistoric;

Q.1. Are the possible structural features associated with isolated structures or part of a larger settlement?

Q.4. What relationships or patterns, if any, can been seen between these prehistoric features and their wider landscape setting?

Q.5. What evidence do the ditch features provide for prehistoric landscape organisation and enclosure?

Q.6. What is the relationship between the ditches and other prehistoric features such as settlement features and burnt mounds and/or spreads?

Q.7. What relationships or patterns, if any, can been seen between these potential prehistoric features and their wider landscape setting?

Romano-British;

Q.14. How did the culture on the island change, and in what ways, between the Roman and early medieval periods?

Q.15. What types of Roman Sites are present with the Wylfa Newydd Development Area, and how do they relate to their surrounding landscape both in terms of location and utilisation of the landscape?

2.7 Field Methodology

The investigations were undertaken in accordance with the scope and methodology outlined in the WSI (Horizon Nuclear Power, 2016: 2017), and as described in the Site Summary Report (ABA, 2018). All works complied to CIfA's best practice guidance, regulations and standards (CIfA, 2014b: 2014c). With the possibility of human remains being present, the excavations of graves and/or burials were undertaken in accordance with the best practice guidelines set out in the *Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England* (Historic England, 2005 and 2017).

2.7.1 Surveying and Setting Out

The original excavation area was set out by Jones Brothers Balfour Beatty Joint Venture (JBBBJV). The excavation area and all archaeological features were subsequently surveyed by ABA using a Leica Viva GPS system, all surveys were tied into the Ordnance Survey National Grid.

2.7.2 Excavation and Sampling

2.7.2.1 Mechanical Excavation

All mechanical excavation and stripping were directed by Brython Archaeology. Topsoil and other deposits of overburden were removed using a tracked 360˚ excavator fitted with a toothless ditching bucket. All mechanical excavation was undertaken under direct archaeological supervision. Mechanical excavation proceeded to a depth sufficient to address the objectives of the excavation. Mechanical excavation ceased when the first archaeologically significant horizon was encountered or when the absence of any archaeological 'horizon' was adequately demonstrated. Spoil from the stripping operations were stockpiled in bunds outside of the archaeological excavation area. After the completion of mechanical excavation, both the spoil heaps and the stripped surface were scanned with a metal detector. Any artefacts of potential archaeological interest identified were recovered and their location accurately recorded (Horizon Nuclear Power, 2016; ABA, 2018).

2.7.2.2 Hand Excavation

After the removal of deposits overlying the archaeological horizon, the area was manually cleaned, and all features investigated and recorded. Pre-excavation plans of all visible features were prepared by GPS survey, printed out and brought to site to be checked and enhanced by hand planning. Unstratified artefacts or small finds exposed during the cleaning were collected. All hand cleaned surfaces, features and archaeological layers were scanned for metal object signals using a metal detector. Excavation priorities were assessed by taking these signals into account.

2.7.2.3 Funerary Remains

All funerary type archaeological remains identified were excavated in accordance with the following strategy:

- 100% of all graves and cists were excavated;
- Prior to excavation detailed photography and photogrammetry was undertaken and a pre-excavation plan of all such features produced, at a scale of 1:20. These show the details of any burial cuts and visible artefacts such as capping and/or side stones or Human Skeletal Remains (HSR). The pre-excavation plan of the burial features was recorded in 3D by a GPS system tied into the OS NGR system, with an accuracy of ± 5mm;
- All capping stones were carefully removed, weighed and retained on site, 10% of the total number of cist stones were retained for further specialist analysis off site;
- Hand excavation was undertaken in order to reveal any HSR *in situ*;
- All excavated fills were retained as bulk sample material;
- Prior to removal all in situ HSR were subject to detailed photography and georeferenced photogrammetry, 3D located using a GPS system tied into the OS NGR system, accurate to ± 5mm;
- Once recorded all HSR were carefully removed and retained;
- Remaining burial fill was excavated and retained as bulk sample material – burial fill from the skeletal head, mid-section and feet area was taken as separate samples for further analysis off site;
- Detailed post excavation photographs, photogrammetry, plans and sections (at a maximum scale of 1:20) of the emptied cists were undertaken to illustrate the arrangement and detail of the remaining lining slabs of the cist;

- Post excavation sections of graves cuts, at a maximum scale of 1:20, were produced - along with a detailed photographic record of the post excavation appearance of the features;
- All lining (side and where present base) stone slabs of the cists, were removed, weighed and retained on site, approximately 10% of the stones were retained for further specialist analysis off site;
- During the works care was taken to establish stratigraphic relationships with any other intercutting features;
- The post-excavation plan of the burial features was recorded in 3D by GPS system tied into the OS NGR system, with an accuracy of ± 5mm; and
- The location of all section and plan drawings was recorded in 3D by GPS system tied into the OS NGR system, with an accuracy of ± 5mm.

2.7.2.4 Non-Funerary Remains

All non-funerary type archaeological remains were excavated in accordance with the following strategy:

- Positive features likely to obscure earlier archaeological features – 100%;
- Discrete negative features of less than 1m in diameter - at least 50% by area in addition to all stratigraphic relationships;
- Discrete negative features of more than 1m in diameter - at least 50% by area in addition to all stratigraphic relationships;
- Discrete negative features containing good artefact assemblages - 100%;
- Non-structural linear negative features - at least 10% by area in addition to all stratigraphic relationships and termini;
- Structural negative features - 100% unless otherwise agreed with the Consultant;
- Hearths, pyre remains or other features with evidence of deliberate in situ heating - 100%;
- All intersections between features, all terminals of linear features, and all other features - 25% unless otherwise agreed with the Consultant; and
- The location of all small finds, except for those discovered within discrete features, were recorded in 3D by a GPS system tied into the OS NGR system, with an accuracy of ± 5mm.

2.7.2.5 Recording

All excavated contexts were fully recorded in line with the standards set out in the WSI (Horizon Nuclear Power, 2016) using appropriate ABA pro-forma recording sheets:

- A complete drawn record of archaeological features and deposits was compiled - this includes both plans and sections, drawn to appropriate scales (1:20 for plans, 1:10 for sections). The Ordnance Datum (OD) height of all principal features and levels were calculated and plans/sections have been annotated with OD heights;
- All photogrammetry and drawing control points were located in 3D by a GPS system tied into the OS NGR system, with an accuracy of ± 5mm; and
- The photographic record was compiled using digital cameras equipped with an image sensor of not less than 10 megapixels, these were taken as high-quality JPEG and RAW images, TIFF images will be created from RAW files for final archiving. Digital images were subject to managed quality control, curation processes which will embed appropriate metadata within the image and ensure long term accessibility of the image.

2.7.2.6 Palaeoenvironmental Sampling

General environmental sampling was undertaken in accordance with Historic England's (2011) environmental archaeology guide in sampling methods for post-excavation analysis:

- 100% of all grave fills was collected as bulk soil samples - the fill was collected from four specific areas (head, torso, feet and a smaller sample from the pelvic area) and given a separate sample number to aid identification; and
- Bulk environmental soil samples for plant macro fossils, small animal bones and other small artefacts were taken from appropriate well sealed and dated/datable archaeological contexts.

2.7.2.7 Archiving

The creation, compilation, transfer and deposition of the archaeological archive followed in line with the regulations of the Chartered Institute for Archaeologists Standards and Guidance (CIfA, 2014a; 2014b). At the time of writing the finds assemblage was under the curatorship of WA and the paper archive and human remains was under the curatorship of ABA. Upon completion of the project the paper archive and all digital data including photographs will be lodged with the Royal Commission on Ancient and Historical Monuments of Wales (RCAHMW) in Aberystwyth. Digital copies of the report will be submitted to Horizon who will then distribute to stakeholders. Printed versions will only be produced if specifically requested. ABA will hold a digital version of the archive indefinitely.

3 Excavation Results

As well as the targeted early medieval cemetery, several prehistoric features and a significant Romano-British enclosed settlement were identified within the excavation area (*Figure 3*). The results were first described in the ABA 2018 site summary report.

3.1 Quantification of Excavation Data

Data Category	Number
Context	2918 (70 voided)
Small finds	1932 (34 voided) - 147669.7g / 147.6697kg
Environmental samples	1792 (28 voided) – 61022 litres / 6122 buckets
Graves	411 (96 voided)
Human remains (skeletons)	110 (22979.3g /22.9793kg)
Digital photographs	3526 (JPEG) / 3526 (NEF)
Rectified photographs	515 GB (Areas) / 239 GB (Features) / 1.20 TB (Graves)
GPS surveyed digital data	43.6 MG
Hand drawn plans	897
Hand drawn sections	975

Allocated PRNs

PRN	Feature
HER PRN GAT 91809	Lithic Scatter
HER PRN GAT 91810	Pit
HER PRN GAT 91811	Lithic Scatter
HER PRN GAT 91812	Pit
HER PRN GAT 91813	Postholes
HER PRN GAT 91814	Roundhouse
HER PRN GAT 91815	Ditch
HER PRN GAT 91816	9 Post Structure
HER PRN GAT 91817	Enclosed Settlement
HER PRN GAT 91818	Roundhouse
HER PRN GAT 91819	Settlement Features
HER PRN GAT 91820	Platforms
HER PRN GAT 91821	Industrial Activity
HER PRN GAT 91822	Ditch
HER PRN GAT 91823	Stone Lined Pit
HER PRN GAT 91824	Cemetery
HER PRN GAT 91825	Ditch
HER PRN GAT 91826	Shaft
HER PRN GAT 91827	Pits and Postholes

3.2 Phasing/Stratigraphic Sequence

Post-excavation work involved checking and collating the site records, grouping contexts and phasing the stratigraphic data. A stratigraphic Harris Matrix was constructed from this data and is included as Appendix XIII. A total of 2918 contexts (Appendix IV) were identified during the Wylfa Head excavation. Upon investigation 70 contexts were found to not be of archaeological interest. The physical relationship between features excavated at the site suggested several potential phases and/or groups of activity within the limits of the Wylfa Head excavation:

1. Period 2 - Early Neolithic activity evidenced by the discovery of stone axes and flint scatters;
2. Period 3 and 4 - Iron Age and Romano-British structures, potentially divided into a pre-stone wall and stone wall phase;
3. Period 5 - Early medieval cemetery with an earlier focus of activity around Feature 296;
4. Period 7 and 8 - Post-medieval to modern activity; and
5. Features of undetermined date.

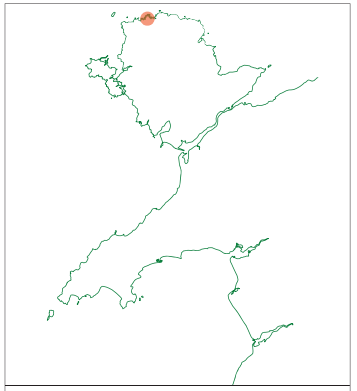


Figure 3
Plan of all features in the Wylfa Head excavation area.

Key

- Limit Of Excavation
- Evaluation Trenches
- Neolithic Features
- Late Iron Age
- Early Roman 43-100
- Early Medieval 410-1100
- Modern Features
- Undated Features
- Vertical stones/wall elements
- Horizontal stones/surface elements
- Extenet of bedrock outcrop

Drawn By: KM

Date: 14/10/21

Location: SH35769384

Project: AB1703 Wylfa Head

Archaeoleg Brython Archaeology

3.2.1 Period 2 (Early Neolithic)

The earliest evidence of activity at the site was in the form of flint scatters and a few discrete pits which showed evidence of burning (*Figure 4*). These were found below a deposit of colluvium on the northern edge of the site, which had initially been misinterpreted as natural glacial subsoil, below the level reached by the evaluation trenches in this area.

The first flint scatter (HER PRN GAT 91809) was identified on the surface of (10.1954), a moderately stony layer of friable, light grey, silt rich sand. Part of the layer had been heat affected, evident in reddening of the soil, and a significant number of flint tools and debitage were recovered from it.

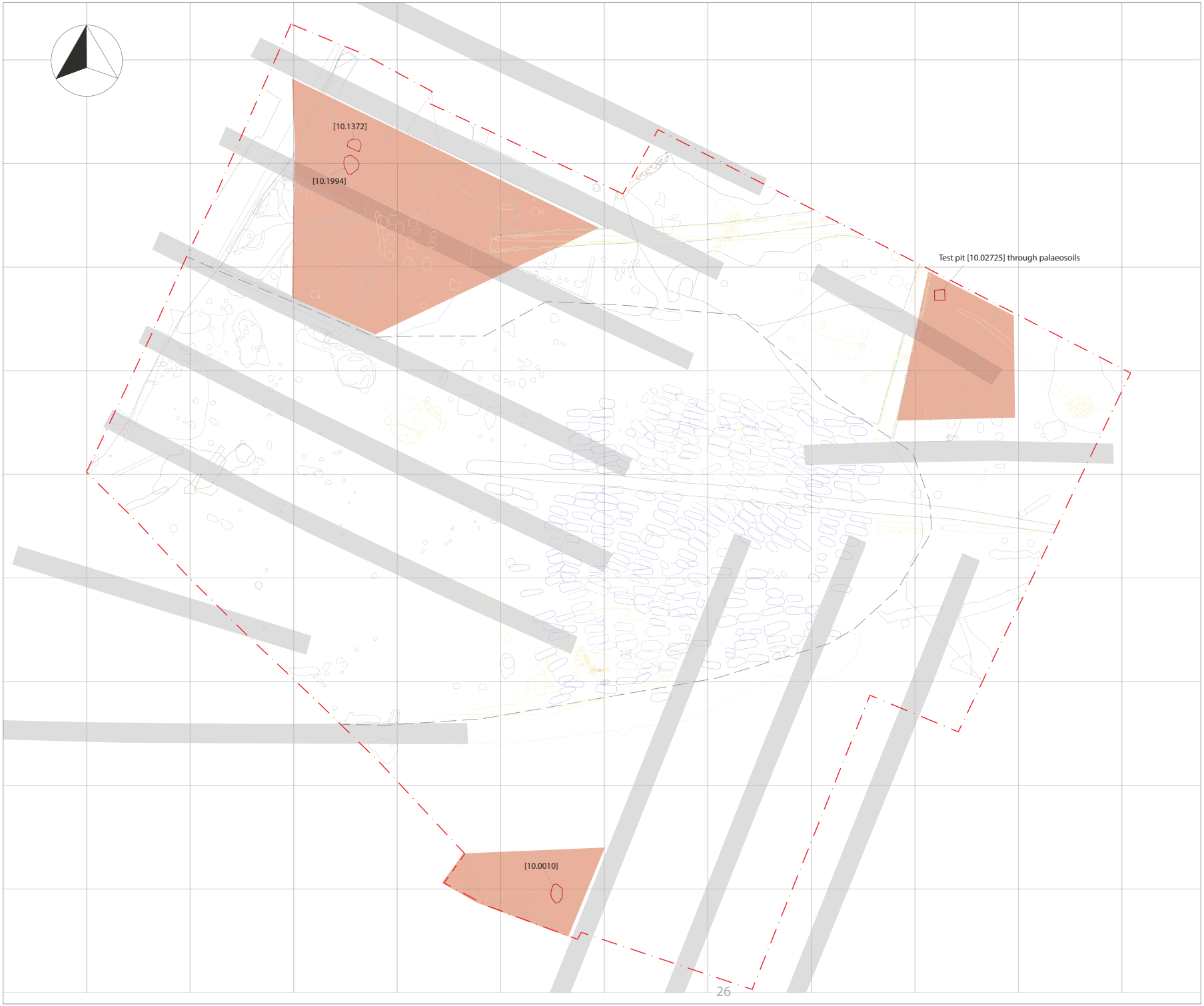
Two large pits (HER PRN GAT 91810) [10.1372] and [10.1994], 5m west of the layer, could potentially be contemporary although no direct relationship could be confirmed. Pit [10.1372] was partially truncated by a hand-excavated slot but appeared to be roughly sub-circular in plan, measuring approximately 1.3m in diameter and 0.3m deep. It was filled by a fairly homogenous grey-brown silt-sand with frequent small angular stone inclusions and occasional charcoal flecks. The homogenous nature of the fill may suggest intentional backfilling. Pit [10.1994] was subcircular in plan and measured approximately 1.7m in diameter and was 0.4m deep. It had three fills comprising a primary fill of firm grey-brown gravel silt with occasional charcoal flecks (10.1996), a secondary (main) fill of friable very dark brown to black silt-sand and charcoal with frequent fire-cracked stone (10.1964), and a final deposit of firm light grey silt clay (10.1995). Although no evidence of scorching of the natural was recorded it is likely that the pit functioned to contain a fire, (10.1996) being the remains of the burning episode, and (10.1995) being the result of silting following abandonment or intentional backfilling after use.

A second potential lithic scatter (HER PRN GAT 91811) was identified in a test pit [10.2725] (*Figure 5*) excavated in arbitrary spits through two palaeosols, (10.2621) and (10.2790). Preliminary assessment of the recovered lithics identified the assemblage as being indicative of Mesolithic activity and included classic microlithic forms and bladelets. However, radiocarbon dating of charred materials, identified as hazel and recovered from spit (10.2730), which contained both the lower contexts, (10.2790) and (10.2621), in the test pit, returned a Late Neolithic date of *c*. 2817 - 2666 BC indicating that either the lithics were residual or the charred material intrusive.

At the southern limit of the site, immediately north of the Tre'r Gof SSSI, a large pit (HER PRN GAT 91812) [10.0008/10.0010] (*Figures 6 and 7*), which had been dug into natural gravels was identified. Although unclear during excavation, due to no distinguishable difference in fills, it is possible that the feature comprised two or three intercutting pits. The feature was initially excavated as two intercutting pits, [10.0010] being the earliest and truncated by [10.0008], but was later interpreted as being a single cut. Upon excavation this pit was found to contain three Neolithic axes (*Plate 1 and 2*), possible whetstones (SF1035 to SF1037) and a cache of small polishing stones in a friable grey mottled and yellow black silt sand (10.0011). Two of the axes are made of Graig Lwyd stone from Penmaenmawr although they appear to have been partially discoloured by heating. One of the axes is a fine roughout (SF1210), shaped and ready to polish but showing no evidence that polishing had been started. The second has been partially polished (SF1211). The third axe (SF1212) is made of a blue-green stone, possibly rhyolite, which may have originated in the Lake District. Unlike the two other axes it has been made by pecking the rock rather than by knapping or flaking. The style of the axe may suggest that it could have had a function between that of an axe and a hammer and bears some similarities to the stone axe-hammers which were common during the Early Bronze Age. Radiocarbon dating of charred materials, identified as willow/poplar and recovered from the fill (10.0009) revealed an Early Neolithic date of *c*. 3639 – 3515 BC.

Plate 1. Stone axes *in situ*, SF1210 (left), SF1212 (right). View from the North-East, 0.5m scale.

Plate 2. Stone axe (SF1211) *in situ*. View from the North-East, 0.5m scale



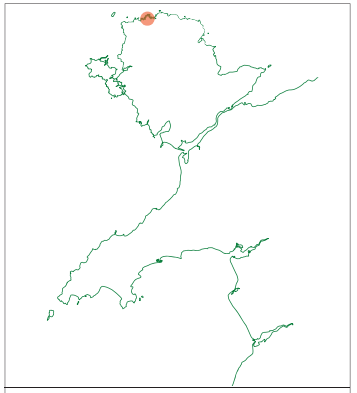


Figure 4
Wylfa Head excavation area.
Neolithic activity.

Key

- Limit Of Excavation
- Evaluation Trenches
- Neolithic Features
- Area of Neolithic activity
- Extent of bedrock outcrop
- Label lines

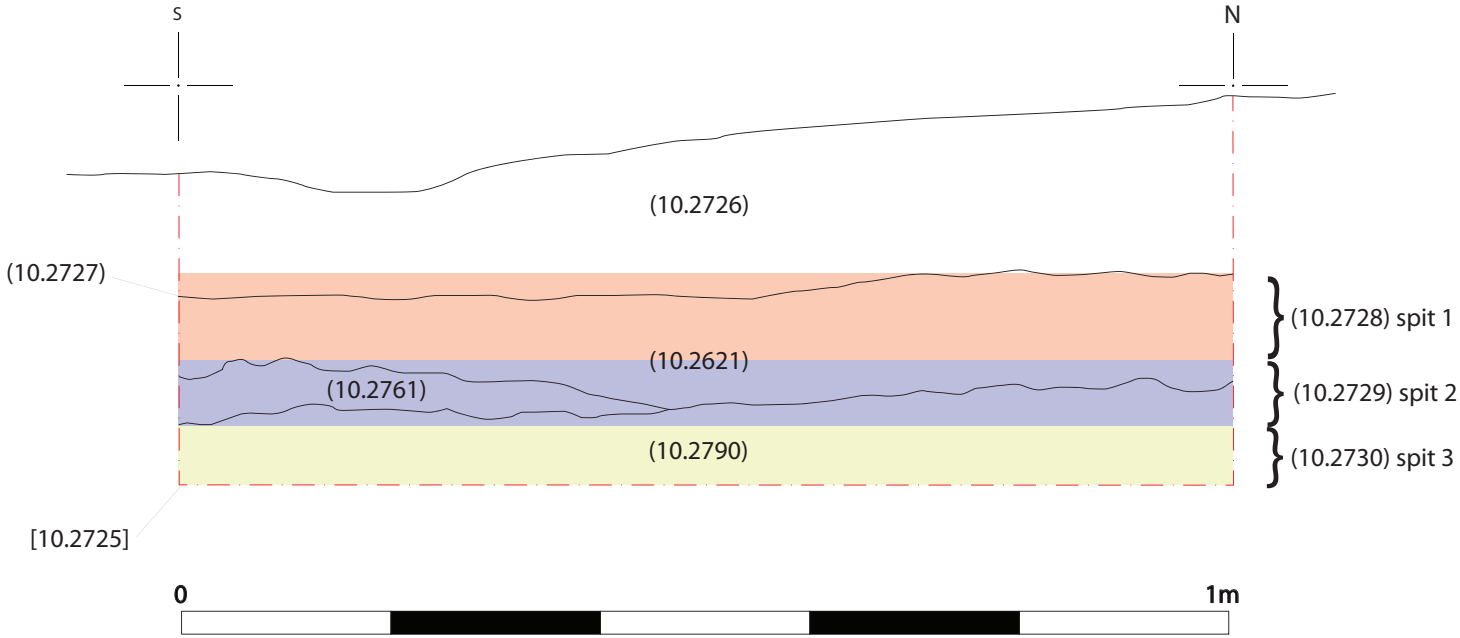
Drawn By: KM

Date: 06/04/20 (last edits 14/10/21)

Location: SH35769384

Project: AB1703 Wylfa Head

Archaeoleg Brython Archaeology



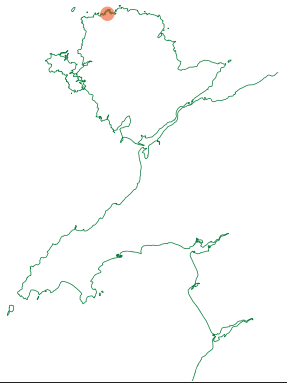


Figure 5
Section drawing of test pit [10.2725] showing all numbers assigned to contexts and spits.

Key

- Limit Of Excavation
- Extent of spit 1
- Extent of spit 2
- Extent of spit 3

Drawn By:	KM
Date:	14/10/21
Location:	SH35769384
Project:	AB1703 Wylfa Head

Archaeoleg Brython Archaeology

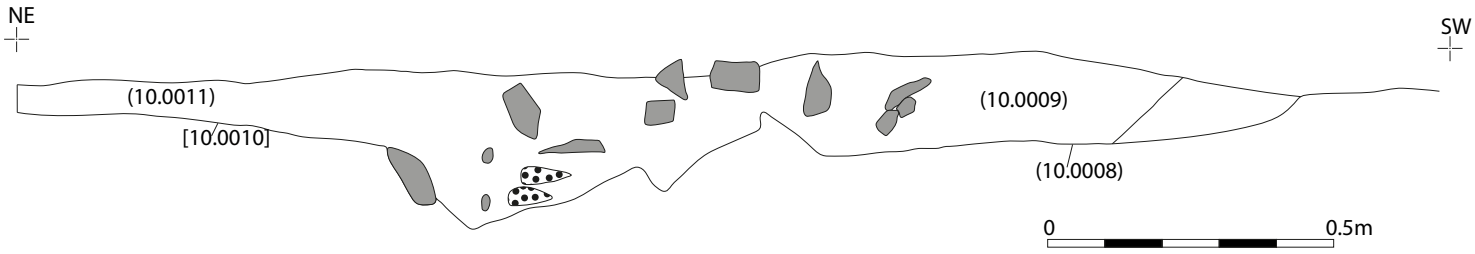


Figure 6. Section of pits [10.0008] and [10.0010] with two stone axes visible

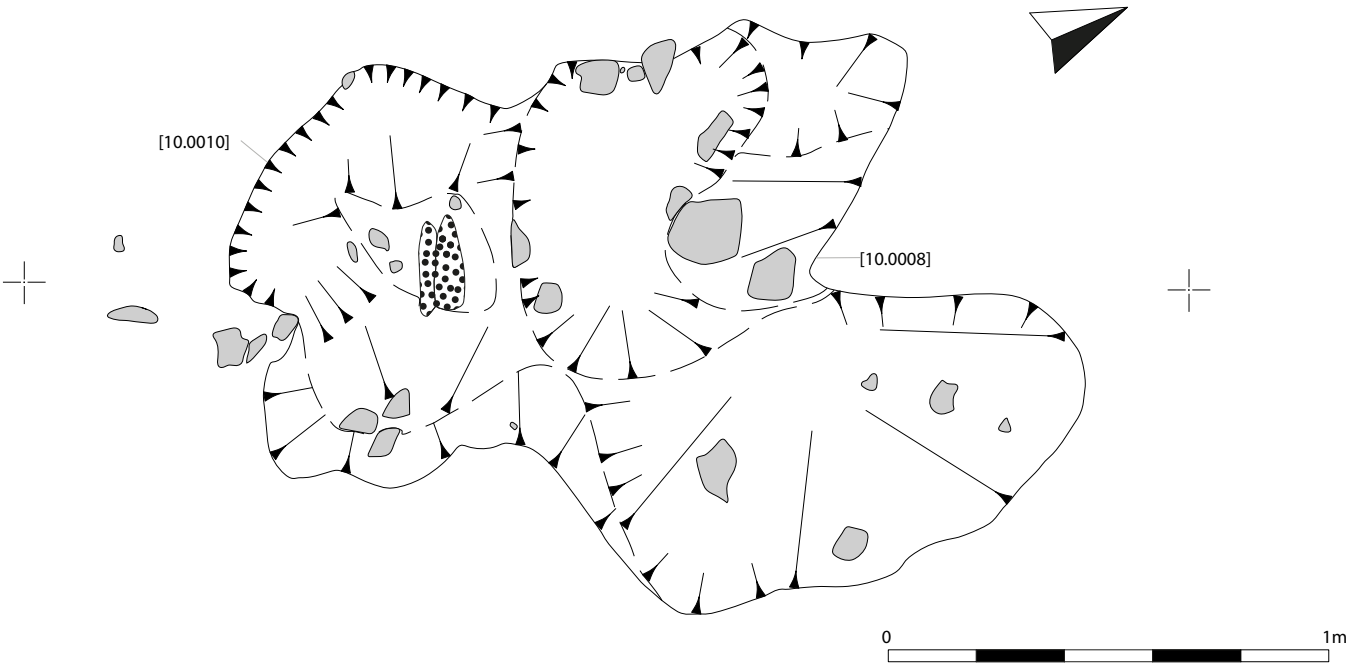


Figure 7. Plan of pits [10.0008] and [10.0010] with two stone axes visible

Figures 6 & 7
Pits [10.0008] & [10.0010].

Project No.
AB1703

Drawn By:
KM/IGP

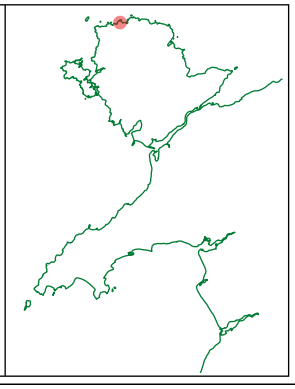
Date:
14/10/2021

Location:
SH35769381

Key

Stone

Stone Axe



Archaeoleg Brython Archaeology

3.2.2 Period 3 (Iron Age) and Period 4 (Romano-British)

3.2.2.1 Phase 1; early settlement pre stone wall (late Iron Age/Early Romano-British)

The features excavated represent multi-phase activity from the Late Iron Age to Early Romano-British period and is reported stratigraphically. Domestic and industrial activity was mostly concentrated at the northern half of the excavation area, although several associated features identified on the southern slope of the hill may also date from this period (*Figures 8 and 9*), and these represent the earliest evidence of settlement at the site. The earliest features within the settlement were identified in the north-west of the site as a collection of pits, postholes and a large patch of burnt daub.

Three posthole groups (HER GAT PRN 91813), each consisting of three postholes, formed a rough L shape with group [10.2902] forming the corner, and located east of group [10.2706] and north of group [10.2910].

- Posthole group [10.2706] consisted of postholes [10.2706], [10.2708] and [10.2710]. Posthole [10.2706] was the most northerly of the group. It was circular, measuring 0.37m in diameter and 0.10m deep with moderately sloping sides leading gradually to a concave base and was filled by (10.2705), a friable dark brown silt with frequent charcoal inclusions. Posthole [10.2708] was the most easterly of the group. It was circular, measuring 0.26m in diameter and 0.11m deep with steeply sloping sides leading imperceptibly to a concave base and was filled by (10.2707), a friable dark brown silt with frequent charcoal inclusions. Radiocarbon dating of organic material, identified as barley, recovered from fill (10.02707) returned a Late Roman date of *c*. 313 – 406 AD, which is later than suggested by the stratigraphy raising the possibility of intrusion. Posthole [10.2710] was the most south-westerly of the group. It was circular, measuring 0.31m in diameter and 0.18m deep with steeply sloping sides leading sharply to a pointed base and was filled by (10.2709), a friable dark brown silt with frequent inclusions of charcoal.
- Posthole group [10.2902] consisted of postholes [10.2902] [10.2896] and [10.2903]. Posthole [10.2902] was the most westerly of the group. It was circular, measuring 0.23m in diameter and 0.23m deep with steeply sloping sides leading imperceptibly to a concave base and was filled by (10.2870), a loose mid grey brown sand silt occasional charcoal inclusions. Posthole [10.2903] was the most southerly of the group. It was circular, measuring 0.20m in diameter and 0.12m deep with steeply sloping sides leading gradually to a concave base which was also filled by (10. 2870). Posthole [10.2896] was the most easterly of the group. It was circular, measuring 0.30m in diameter and 0.26m deep with steeply sloping sides leading imperceptibly to a concave base and was filled by (10.2897), a loose mid grey brown sand silt.
- Posthole group [10.2910] consisted of postholes [10.2910], [10.2912] and [10.2908]). Posthole [10.2910] was the most westerly of the group. It was circular, measuring 0.18m in diameter and 0.20m deep with steeply sloping sides leading sharply to a flat base and was filled by (10.2911), a compact mid grey silt with occasional charcoal inclusions. Posthole [10.2912] was the most northerly of the group. It was circular, measuring 0.18m in diameter and 0.20m deep with steeply sloping sides leading sharply to a concave base and was filled by (10.2911), a compact mid grey silt with occasional charcoal inclusions. Posthole [10.2908] was the most south-easterly of the group. It was circular, measuring 0.30m in diameter and 0.22m deep with steeply sloping sides leading sharply to a flat base.

Whilst their form or function was not obvious it was noted that the two northern most groups, i.e. [10.2706] and [10.2902], were along the southern edge of burnt daub patch (10.2614). It is possible that the burnt daub and the nearby postholes [10.2862], [10.2835], [10.2793], [10.2784], [10.2817]

and [10.2745], were the remains of the earliest roundhouse (HER GAT PRN 91814) on site which had been heavily truncated by later activity.

- Posthole [10.2862] was square, measuring 0.46m long, 0.38m wide and 0.24m deep with rounded corners and vertical sides leading gradually to a concave base and filled by (10.2865), a friable mid grey silt clay with occasional charcoal flecks.
- Posthole [10.2835] was square measuring 0.46m long, 0.44m wide and 0.18m deep with rounded corners and vertical sides leading gradually to a concave base and was filled by (10.2843), a compact light orange yellow clay with occasional charcoal flecks.
- Pit or posthole [10.2793] was sub-circular and orientated north to south measuring 0.83m long, 0.76m wide and 0.29m deep with convex sides leading sharply to a concave base lined with angular platy cobbles (10.2802). Overlying this stone lining was (10.2792), a loose mid brown clay silt with frequent inclusions of sub-angular schist medium pebbles and occasional charcoal and daub.
- Posthole [10.2784] was circular, measuring 0.40m in diameter and 0.16m deep with steeply sloping concave sides leading gradually to a concave base and was filled by (10.20783), a friable mid brown grey sand silt with occasional charcoal flecks.
- Posthole [10.2817] was circular, measuring 0.38m in diameter and 0.05m deep with steeply sloping sides leading sharply to a flat base and was filled by (10.2818), a friable dark red grey sand silt with frequent charcoal flecks.
- Posthole [10.2745] was an oval posthole measuring 0.73m long, 0.18m wide and 0.12m deep with gradually sloping sides leading sharply to a flat base and was filled by (10.2746), a compact dark brown black clay with frequent charcoal inclusions.

Overlying the northern edge of this burnt daub roundhouse was a curved drain with capstones (10.2077), which may have been associated with the structure described above, or part of a later phase of activity. The northern edge of this drain extended into evaluation trench 2162. Several other pits [10.2916] and [10.2734], and postholes [10.2808], [10.2841], [10.2819], [10.2891], [10.2892], [10.2580], [10.2800] and [10.2780]), were excavated in the area and belonged to the same stratigraphic phase as the features described above. Radiocarbon dating of organic material, identified as oak, recovered from fill (10.2842) of posthole [10.2841], located to the south of this group of features returned a Late Iron Age to early Roman date of *c*. 49 BC – 72 AD.

An east to west aligned ditch [10.1728] was also observed to the south of these features. It had steep sides and a flat base, and was filled by (10.1727), a loose dark brown silt with frequent inclusions of fine to medium pebbles and small cobbles, and occasional charcoal flecks. On the south side of this ditch at the western terminus was a row of six, closely spaced postholes of unknown function; [10.2407], [10.2418], [10.2424], [10.2427], [10.2435] and [10.1425]. It is possible that the postholes represents some form of early boundary or fence.

- The most westerly posthole [10.2407] was sub-oval in plan, measuring 0.60m long, 0.40m wide and 0.14m deep with steeply sloping concave sides leading gradually to a concave base and was filled by (10.2406), a loose dark grey brown sand silt with frequent inclusions of fine to medium pebbles.
- Immediately east of [10.4207] was posthole [10.2418], a sub-circular posthole measuring 0.30m long, 0.20m wide and 0.10m deep with steeply sloping concave sides leading sharply to a concave base which was filled by (10.2417), a loose mid grey brown silt with frequent inclusions of fine to coarse pebbles.
- Immediately east of [10.4207] was posthole [10.2424], which was circular, measuring 0.30m in diameter and 0.08m deep with steeply sloping concave sides leading gradually to a concave base and was filled by (10.2423), a loose mid grey brown silt with frequent inclusions of fine to coarse pebbles.

- Immediately east of [10.2424] was posthole [10.2427], which was circular, measuring 0.40m in diameter and 0.18m deep with steeply sloping concave sides leading gradually to a concave base and was filled by (10.2426), a loose mid brown silt with frequent inclusions of fine to coarse pebbles.
- Immediately east of [10.2427] was posthole [10.2435], which was circular, measuring 0.25m in diameter and 0.09m deep with steeply sloping concave sides leading gradually to a concave base which was filled by (10.2434), a loose mid brown silt with frequent inclusions of fine to coarse pebbles.
- Posthole [10.1425] was the most easterly posthole. It was circular, measuring 0.40m in diameter and 0.13m deep with steeply sloping sides leading gradually to a concave base and was filled by (10.1424), a loose light orange brown medium pebble deposit in a matrix of silt with occasional flecks of charcoal. Radiocarbon dating of organic material identified as hazel and recovered from fill (10.1424) of posthole [10.1425] returned a Late Iron Age to early Roman date of *c*. 4 - 130 AD.

A long, narrow ditch (HER GAT PRN 91815) [10.2517] running east to west was found below the northernmost later stone walls (*Plate 3*), and may represent an early boundary which had subsequently survived into the later phases of the settlement. Ditch [10.2517] had steeply sloping convex sides leading sharply to a flat base filled by three fills. Primary fill (10.2610) was a loose mid brown grey sand silt with moderate medium to coarse pebbles inclusions and charcoal flecks. Overlying this was secondary fill (10.2609), a loose light to mid brown grey sand silt with moderate medium to coarse pebble inclusions and charcoal flecks. Overlying this was tertiary fill (10.2608), a loose dark brown grey sand silt with frequent inclusions of sub-angular to sub-rounded medium to coarse pebbles and occasional charcoal flecks. Several slots were excavated through this ditch with the contexts in each slot given separate context numbers. All slots returned much the same results, as such the lowest context number assigned is used to denote the contexts. Radiocarbon dating of organic material identified as elm and recovered from primary fill (10.2610) returned a mid to late Roman date of *c*. 124 – 258 AD.

Plate 3. Pre-excavation of ditch [10.2517] (also numbered [10.2823]). View from the West (erroneous north arrow on the photo board), 2m scale.

A possible multi post structure (HER GAT PRN 91816) thought to represent a granary was located in the north-west corner of the site. This lay below the level of later stone structures in this area. The feature consisted of three rows of three posts arranged equally and broadly aligned east-west. Two postholes, [10.0183] and [10.0187], in the most southerly row heavily truncated two earlier postholes [10.0214] and [10.0203], and the most easterly posthole [10.0276] of the centre row, and heavily truncated an earlier posthole [10.0270].

- Posthole [10.0135] was the most westerly posthole in the most northerly row. It was sub-circular, measuring 0.90m long, 0.86m wide and 0.40m deep with steeply sloping concave sides leading gradually to an uneven base and was filled by (10.0134), a soft mid grey brown clay sand with frequent inclusions of daub and charcoal flecks. Radiocarbon dating of material identified as charred wheat from this fill returned an early to middle Roman date of *c*. 66 – 222 AD.
- Posthole [10.0356] was the central posthole in the most northerly row. It was circular, measuring 0.94m in diameter and 0.76m deep with steeply sloping concave sides leading

gradually to a flat base and was filled by (10.0357), a friable mid grey brown sand silt with frequent inclusions of large platy schist cobbles.

- Posthole [10.0233] was the most easterly posthole in the most northerly row. It was oval, measuring 0.81m long, 0.60m wide and 0.22m deep with moderately sloping concave sides leading gradually to a concave base and was filled by (1.0234), a friable mid brown black sand silt with frequent inclusions of large platy, angular schist cobbles and occasional charcoal flecks. Radiocarbon dating of organic material identified as wheat from this fill returned an early medieval date of *c*. 663 – 778 AD. Based on stratigraphy and similar features from other dated sites it is likely that the later early medieval date is due to dating intrusive elements.
- Posthole [10.0317] was the most westerly posthole in the central row. It was oval, measuring 0.88m long, 0.62m wide and 0.39m deep with moderately to steeply sloping sides leading gradually to a concave base and was filled by (10.0318), a friable dark brown black silt sand with frequent angular medium to large cobbles.
- Posthole [10.0231] was the central posthole of the central row. It was sub-circular, measuring 1.20m long, 0.70m wide and 0.35m deep with moderately sloping sides leading sharply to a concave base, filled by primary fill (10.0238), a firm mid brown silt clay with frequent inclusions of medium to large cobbles. Over this lay secondary fill (10.0232) a compact dark brown silt clay with frequent inclusions of medium to coarse pebbles, charcoal and burnt clay.
- Posthole [10.0270] was located beneath the most easterly posthole in the central row. It was heavily truncated by [10.0276] but appeared to be sub-circular with its visible portion measuring 0.70m long, 0.40m wide and 0.20m deep with moderately sloping sides leading gradually to an irregular base and was filled by (10.0271), a friable dark brown silt with frequent medium pebble inclusions.
- Truncating posthole [10.0270] was posthole [10.0276], this was the most easterly posthole in the central row. It was sub-oval, measuring 0.40m long 0.30m wide and 0.18m deep with moderately to steeply sloping sides leading gradually to a concave base and was filled by (10.0277), a friable dark brown silt with frequent medium pebble inclusions and occasional flecks of charcoal and burnt daub.
- Posthole [10.0296] was the most westerly of the most southerly row of postholes. It was sub-oval, measuring 1.80m long, 0.95m wide and 0.47m deep with moderately sloping sides leading gradually to a concave base and was filled by primary fill (10.0305), a compact mid brown grey silt clay with occasional small to medium pebble and charcoal inclusions. Overlying this was secondary fill (10.0297), a compact dark brown silt clay with frequent charcoal and burnt daub.
- Posthole [10.0214] was located beneath the central posthole in the most southerly row. It was heavily truncated by [10.0183] but appeared to be a sub-oval posthole with its visible portion measuring 0.844m long, 0.42m wide and 0.40m deep with near vertical sides leading sharply to an irregular base and was filled by (10.0215), a friable light grey brown sand clay with occasional inclusions of medium cobbles.
- Truncating posthole [10.0214] was posthole [10.0183], this was the central posthole in the most southerly row. It was sub-oval, measuring 0.72m long, 0.50m wide and 0.33m deep with moderately sloping sides which became steeper towards the base before leading imperceptibly to a concave base. It was filled by (10.0184), a friable dark grey brown silt sand.
- Posthole [10.0203] was located beneath the most easterly posthole in the most southerly row. It was heavily truncated by [10.0187] but appeared to be sub-circular with its visible portion measuring 0.80m long, 0.65m wide and 0.31m deep with moderately sloping sides leading gradually to a concave base and was filled by (10.0204), a soft mid red brown silt clay with occasional charcoal flecks.
- Truncating posthole [10.0203] was posthole [10.0187], this was the most easterly posthole in the most southerly row. It was sub-circular, measuring 0.37m long, 0.32m wide and 0.43m

deep with moderately to steeply sloping sides leading sharply to a concave base and was filled by primary fill (10.0191), a soft light grey silt with occasional inclusions of medium pebbles. Overlying this was secondary fill (10.0195), a soft light brown grey silt. Overlying this was tertiary fill (10.0188), a soft dark grey silt clay with moderate charcoal flecks.

A row of four postholes, [10.0235], [10.0189], [10.0274] and [10.0303], lay between the most northerly row and the middle row.

- Posthole [10.0235] was the most westerly of the row of four postholes. It was oval, measuring 1.20m long, 0.90m wide and 0.25m deep with gently sloping sides leading gradually to an uneven base. This feature was previously excavated in trial trench 2154 but was not given a context number.
- To the east of [10.0235] was posthole [10.0189], an oval posthole measuring 1.06m long, 0.64m wide and 0.45m deep with steeply sloping sides leading gradually to a concave base. This feature was previously excavated in trial trench 2154 as [2154-019].
- To the east of [10.0189] was posthole [10.0274], an oval posthole measuring 0.72m long, 0.52m wide and 0.34m deep with near vertical concave sides leading sharply to a flat base filled by (10.0275), a friable mid grey brown silt sand with occasional inclusions of medium cobbles interpreted as packing stones. This feature was previously identified in trial trench 2154 as [2154-01] but was not excavated during evaluation.
- Posthole [10.0303] was the most easterly of the row of four postholes. It was oval, measuring 0.68m long, 0.48m wide and 0.26m deep with moderately to steeply sloping sides leading gradually to an uneven base. This feature was previously excavated in trial trench 2154 as intercutting postholes [2154-012] and [2154-016].

Running north to south along the western edge of the group of postholes was possible drip gully [10.0206]. It measured 2.90m long, 0.45m wide and 0.30m deep with moderately sloping sides leading gradually to a flat base and was filled by (10.0205), a soft brown grey silt clay with frequent inclusions of angular coarse pebbles and charcoal flecks. This gully was truncated by posthole [10.0235].

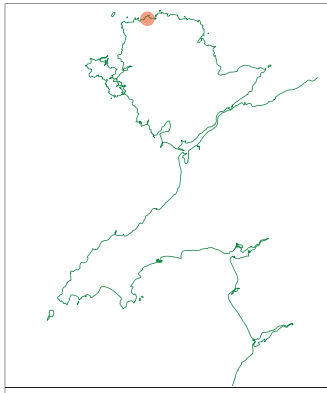


Figure 8
Wylfa Head excavation area. Late Iron Age and Early Roman activity.

Key

- Limit Of Excavation
- Evaluation Trenches
- Late Iron age and Early Romano British Features
- Late Iron Age and Early Romano British activity
- Well defined Romano British roundhouse
- Extent of bedrock outcrop

Drawn By:	KM
Date:	06/04/20 (last edits 14/10/21)
Location:	SH35769384
Project:	AB1703 Wylfa Head

Archaeoleg Brython Archaeology

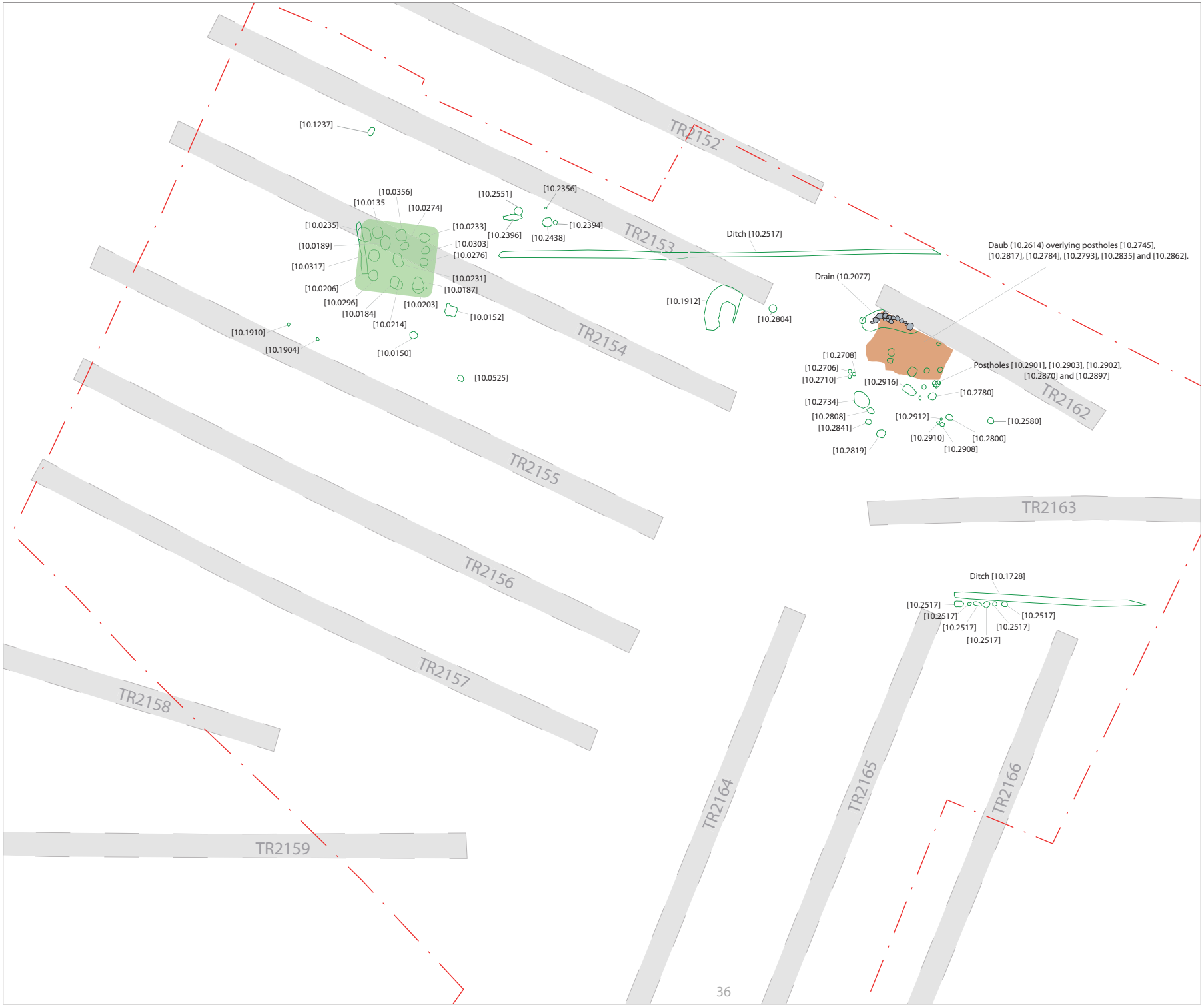


Figure 9
Phase 1 Settlement.

Key

- Label lines
- Limit Of Excavation
- Evaluation Trench
- Early Settlement Features
- Horizontal Stones
- Area of Burnt Daub
- Well defined Features

Drawn By: KM

Date: 25/08/20 (last edits 14/10/21)

Location: SH35769384

Project: AB1703 Wylfa Head

Archaeoleg Brython Archaeology

3.2.2.2 Phase 2; later settlement stone wall (mid-late Romano-British)

The most intensive area of domestic and industrial activity within the excavation area appears to be associated with the later enclosed phase of the settlement (HER GAT PRN 91817) (*Figure 10*). The enclosure walls were substantial structures, over 1m wide, and consisted of an inner and outer face of substantial orthostats with a rubble core. Although no walls could be confirmed to fully enclose the eastern and western sides of the settlement, it is likely that the stone deposit (10.2013) and ditch [10.2012] at the south of the site represented the remains of a southern boundary possibly consisting of a stone wall and ditch or construction cut.

Hints of a heavily truncated rectangular structure were identified to the west of the north-south boundary wall, just south of the earlier patch of burnt daub (10.2614). It was similar in construction to the enclosure walls in that it consisted of inner and outer faces with a rubble core. This was represented by a shallow foundation cut [10.2830] which was filled with loose stones (10.2831) and two sections of north-south wall - comprised of wall faces (10.2089) and (10.2091) and wall core (10.2090) to the south, and wall faces (10.2092) and (10.2093) and wall core (10.2094) to the north. This wall was truncated in the centre by the foundation cut [10.2068] for curved wall (10.2070). A threshold of two large schist stones laid on edge (10.2742) was excavated immediately to the east of the northern most end of wall (10.2091), and likely represents the entrance to this building (*Plate 4*).

Plate 4. Pre-excavation of sub-rectangular structure (10.2782) with fill (10.2773) of pit [10.2775] visible as the dark deposit below the stones to the right of the image and the entrance to the left. The eastern boundary wall (10.2089) running north to south is visible behind the far wall of the sub-rectangular structure. View from the West, 1m scale.

Immediately to the west of the north-south boundary wall was a building delineated by very large orthostats of grey schist (10.2782), forming a sub-rectangular room with rounded corners which had a corridor (10.2781) leading to the north. Within this structure, at its southern end, was a very large oval pit [10.2775] (HER GAT PRN 91823) (*Plate 5 and Figures 11 to 13*) measuring 3.70m long, 2.20m wide and 1.20m deep with steep sides leading gradually to a flat base. This pit contained a rectangular lining of large schist orthostats in the base of the cut, with the western edge left open for access via a stepped slope. Above these orthostats were randomly coursed roughly hewn schist stones (10.2774), these acted as a revetment or support for the sides of the large pit, which was cut into loose, degraded bedrock and colluvium. These courses were tied into the inner face of the walls of the building towards the top of the pit. The pit was filled by (10.2773), a soft black clay silt with frequent charcoal flecks and angular medium pebble inclusions. Robber trench [10.2778] near the entrance indicated that the main chamber of the building was originally narrower, but that some stones had been removed, possibly during a phase of remodelling of the building whereby the main chamber was enlarged. Very few finds were recovered from within this structure to denote use or date. One Roman Greyware pottery sherd (SF1851) was recovered from context (10.2813) between the stone lining (10.2774) and this was likely used for cooking and serving food, though it is thought that the pit represents some sort of industrial activity rather than that of domestic food preparation due to its size. Radiocarbon dating of organic material identified as barley recovered from fill (10.2773) returned an early medieval date of *c*. 765 - 895 AD. This date contradicts the stratigraphical and small finds evidence, which suggests that the feature was earlier, as such this Radiocarbon date may be inaccurate.

Plate 5. Mid-excavation of (10.2872) of pit [10.2775]. View from the North-West. Scales: 2 x 1m, 1 x 0.5m.

Contemporary with the sub-rectangular structure (10.2782) described above, was a structure consisting of a curved wall. This wall was similar in construction to the boundary walls with two faces (10.2069) and (10.2071) and a central rubble core (10.2070) sitting in a construction cut [10.2068]. This overlay the earlier rectangular structure in cut [10.2830]. This structure appeared to

reuse the northern end of the wall, (10.2091), (10.2092) and (10.2093), as its inner face and may have re-used the same threshold (10.2742) as an entrance. Immediately to the west of the threshold (10.2742) was a roughly coursed schist wall running south-west to north-east, this was smaller than the curved wall and formed the northern side of the structure with the outer face of the sub-rectangular building forming its eastern side. In the centre of this structure was a series of intercutting oval pits, with pit [10.2875] being the earliest (*Figure 14*).

- Pit [10.2875] was sub-oval and measured 1.50m long, 0.66m wide and 0.12m deep with steeply sloping sides leading gradually to a concave base and was filled by (10.2883), a firm grey black silt clay with charcoal flecks to its south, and (10.2890), a firm light grey silt with frequent sub-angular to sub-rounded medium pebbles to its north. It was truncated in the centre by recuts [10.2884] and [10.2887].
- Pit recut [10.2884] was sub-oval and measured 1.30m long and 0.40m deep, a width measurement could not be taken due to being heavily truncated by pit recut [10.2887]. It had steeply sloping sides leading gradually to a concave base and was filled by primary fill (10.2885), a firm red silt clay lining. Overlying this was secondary fill (10.2886), a firm dark gey silt clay with occasional charcoal flecks. This was heavily truncated by recut [10.2887].
- Pit recut [10.2887] was sub-oval measuring 1.41m long and 0.30m deep, a width measurement could not be taken due to being heavily truncated by pits [10.2814] and [10.2635]. It had near vertical sides leading sharply to a flat base and was filled by primary fill (10.2888), a firm yellow silt clay lining. Overlying this was secondary fill (10.2889), a firm dark red orange clay silt with occasional charcoal flecks. This recut was truncated to the north by pit [10.2814] and to the west by pit [10.2635]. Radiocarbon dating of organic material, identified as oak, recovered from fill (10.2888) of pit [10.2887] returned a late Roman to early medieval date of *c*. 321 - 422 AD.
- Pit [10.2814] was sub-oval, measuring 1.65m long, 0.97m wide and 0.11m deep with moderately sloping sides leading imperceptibly to an irregular base and was filled by (10.2815), a firm dark brown black sand silt with occasional charcoal inclusions.
- Pit [10.2635] was sub-oval measuring 1.20m long, 0.60m wide and 0.30m deep with vertical sides leading gradually to a flat base. It was filled by a stone lining (10.2634) of three slabs of schist laid on edge to line the north-west, south-west and north-east sides of the cut and flat schist cobbles stacked up and roughly coursed on the south-east edge. Overlying this was secondary fill (10.2697), a sand clay. Overlying this was tertiary fill (10.2633), a firm dark black brown silt clay.

Each of the earlier uses of the pit involved clay linings which had been heated, re-cut and then re-lined, though none of them showed any signs of a stone lining.

Around stone lined pit [10.2635], and built up against the walls, (10.2071), (10.02073) and (10.2075), was an occupational layer of charcoal rich silt (10.2630). The majority of finds from this structure were Romano-British in date and of a domestic nature, including Samian ware (SF1448, SF1537, SF1539 and SF1660), Amphora (SF1251 and SF1840), Back burnished ware (SF1447), a Roman coin (SF1540; *see Plate 31*)) and a possible Prehistoric or Romano-British stone gaming counter or disc (SF1541).

To the north-west of these structures, and south of the east-west boundary wall, overlying the earlier drain (10.2077), was a possible Iron Age or Romano-British roundhouse F602, which had been cut slightly into the bedrock on its south western side. Many of the features within this structure contained small finds usually associated with industrial activity and metal working such as slag and furnace lining, in addition to a Roman blue glass bead SF1689.

A large horizontal stone to the south formed a threshold (10.2066) into the structure with stones to its west forming part of a surface. A gully [10.2131] ran in an arc around the south western edge

intermittently for a length of 5.50m with another section of gully [10.2681] running around the south-west side of the structure for a length of 1.14m. There was a centrally located stone built feature, possibly a tank, within pit [10.2801]. This pit cut was sub-rectangular, measuring 0.90m long, 0.60m wide and 0.15m deep with rounded corners and moderately sloping sides leading gradually to an irregular base. This pit was lined by medium to large cobbles of schist (10.2811) laid on edge. Overlying this was a secondary fill (10.2810), a loose dark grey brown silt with occasional charcoal inclusions. A red and orange baked clay base (10.2656) to the west of the threshold may have been the remains of an oven or small kiln. It was a semi-circular deposit measuring 1.10m long, 1.00m wide and 0.08m thick. The structure was covered by layer (10.2063), a soft dark black brown silt with frequent charcoal inclusions and occasional medium to large pebble inclusions. This likely represents the occupation layer of this structure. Radiocarbon dating of organic material, identified as hazel, recovered from occupation deposit (10.2063) within the industrial feature returned an early medieval date of *c*. 556 – 654 AD. However, radiocarbon dating of organic material, identified as oak, recovered from fill (10.2599) of pit [10.2598], which cuts deposit (10.2063), returned a mid to late Roman date of *c*. 206 – 345 AD. More dating evidence is required from these features to better determine their chronological relationships.

A ring of 18 postholes with a small number of central postholes were located on the top of the plateau occupied by the later cemetery and are likely to be the remains of a roundhouse dating to this early settlement phase (HER GAT PRN 91818), though this structure was heavily truncated by later medieval burials. Two of the later graves, G232 and G233 (dated to an early medieval date of *c*. 426 – 579 and 551-643 AD) were backfilled with a burnt clay material. The position and nature of this material suggests the graves may have been dug through an off-centre hearth associated with the roundhouse. This burnt clay contained large fragments of charcoal, slag, metal and some burnt bone fragments, all likely to be redeposited material representing the domestic activity occurring within the roundhouse during this phase of settlement rather than relating to activity occurring at the time of the early medieval burials themselves. Radiocarbon dating of organic material recovered from two fills from these post holes indicates that this structure dates to the middle or late Roman period; with fill (10.1165; 'indeterminate species') of posthole [10.1167] returning a late Romano date of *c*. 313 – 406 AD, and fill (10.2008; 'barley') of posthole [10.2007] returning a mid to late Roman date of *c*. 124 – 258 AD.

- Posthole [10.1235] was sub-circular measuring 0.54m long, 0.50m wide and 0.28m deep with steeply sloping sides leading gradually to a concave base and was filled by (10.1239), a firm orange brown sand silt with frequent sub-angular fine pebble inclusions.
- Posthole [10.1734] was oval measuring 0.57m long, 0.44m wide and 0.18m deep with near vertical sides leading gradually to a flat base with packing stones (10.1746) on the north and north-west sides. Overlying this was secondary fill (10.1733), a soft dark brown silt sand with frequent medium pebbles and occasional charcoal inclusions.
- Posthole [10.2230] was sub-circular measuring 0.37m long, 0.32m wide and 0.08m deep with moderately sloping sides leading gradually to a concave base and was filled by (10.2229), a soft dark brown silt sand with moderate angular to sub-angular medium pebbles and occasional charcoal inclusions.
- Posthole [10.2224] was oval measuring 0.75m long, 0.66m wide an0d 0.37m deep with near vertical sides leading gradually to a rounded point. It was filled by packing stones (10.2231). overlying these was secondary fill (10.2223), a soft dark brown silt sand with frequent angular to sub-angular medium pebbles and occasional charcoal inclusions.

- Posthole [10.2007] was sub-oval measuring 0.60m long, 0.36m wide and 0.15m deep with steeply sloping sides leading imperceptibly to a concave base and was filled by (10.2008), a friable mid grey brown silt with occasional sub-angular medium pebbles and occasional charcoal.
- Posthole [10.2010 was oval measuring 0.62m long, 0.20m wide and 0.10m deep with steeply sloping sides leading gradually to a flat base and was filled by (10.201), a friable mid grey brown silt with occasional sub-angular medium pebbles.
- Posthole [10.2181] was oval measuring 0.34m long, 0.22m wide and 0.08m deep with moderately sloping sides leading imperceptibly to a concave base and was filled by (10.2180), a loose mid brown sand silt with frequent inclusions of angular to sub-angular fine pebbles.
- Posthole [10.1714] was circular measuring 0.50m in diameter and 0.05m deep with moderately sloping sides leading gradually to a flat base and was filled by (10.1713), a soft brown silt sand with frequent sub-angular to sub-rounded medium pebbles.
- Posthole [10.1525] was oval measuring 0.38m long, 0.29m wide and 0.10m deep with moderately sloping sides leading imperceptibly to a flat base and was filled by (10.1524), a soft yellow brown silt sand with occasional sub-angular to sub-rounded medium pebbles.
- Posthole [10.1687] was circular measuring 0.36m in diameter and 0.07m deep with steeply sloping sides leading gradually to a flat base and was filled by (10.1686), a soft yellow brown silt sand with frequent sub-angular to sub-rounded medium pebbles.
- Posthole [10.1494] was oval measuring 0.41m long, 0.35m wide and 0.16m deep with steeply sloping sides leading gradually to a concave base and was filled by packing stones (10.1499) on the north-east side. Overlying this was secondary fill (10.1493), a soft dark brown sand silt with occasional sub-angular to sub-rounded medium pebbles and occasional charcoal inclusions.
- Posthole [10.1469] was oval measuring 0.45m long, 0.38m wide and 0.16m deep with steeply sloping sides leading gradually to a concave base and was filled by packing stones (10.1479) on the south side. Overlying this was secondary fill (10.1468), a soft dark brown sand silt with occasional medium pebbles and charcoal inclusions.
- Posthole [10.1429] was circular measuring 0.44m in diameter and 0.21m deep with vertical sides leading gradually to a concave base and was filled by four packing stones (10.1430) lining the sides to form a square. Overlying this was secondary fill (10.1431), a friable mid grey brown silt with frequent angular to sub-angular fine pebbles and occasional charcoal flecks.
- Posthole [10.1147] was sub-circular measuring 0.66m long, 0.54m wide and 0.42m deep with vertical sides leading sharply to a flat base and was filled by (10.1146), a friable dark orange brown clay silt with frequent sub-angular fine pebbles.
- Posthole [10.1014] was circular measuring 0.25m in diameter and 0.38m deep with near vertical sides leading sharply to a flat base and was filled by (10.1015), a friable dark grey brown clay silt with frequent sub-angular medium pebbles and occasional sub-rounded to rounded white quartz medium pebbles.
- Posthole [10.0365] was oval measuring 0.40m long, 0.35m wide and 0.34m deep with near vertical sides leading gradually to a concave base and was filled by packing stones (10.0368). Overlying this was (10.0364), a soft dark brown sand silt with frequent sub-angular to sub-rounded medium pebbles.
- Posthole [10.0363] was oval measuring 0.36m long, 0.22m wide and 0.10m deep with near vertical sides leading gradually to a flat base and was filled by (10.0362), a soft dark brown sand silt with occasional sub-angular to sub-rounded medium to coarse pebbles.
- Posthole [10.1167] was circular measuring 0.28m in diameter and 0.37m deep with vertical sides leading gradually to a concave base. Packing stones (10.1166) lining the sides to form a square. Overlying this was (10.1165), a firm dark grey brown sand silt with frequent sub-angular fine to coarse pebble inclusions.

Further settlement features (HER GAT PRN 91819) were identified in the north-west of the excavation area. Though no evidence of the enclosure wall was identified in this area, these features are likely contemporary with the later enclosed phase of the settlement due to the large amount of stone rubble overlying the area and fragmentary stone structures present in the form of surfaces and drains some of which overlay the earlier possible nine post structure. Features in this area included a stone lined drain [10.0845], post-holes and gullies. Radiocarbon dating of organic material identified as barley and recovered from fill (10.0797) of posthole [10.0798] in this area, returned an early medieval date of *c*. 416 – 556 AD.

On the northern side of the hill, three rock-cut platforms (HER GAT PRN 91820) with patches of heat discoloured bedrock were identified. These appear to have been processing or industrial working areas. Radiocarbon dating of organic material identified as wheat and recovered from silty deposit (10.0439) returned an early to middle Roman date of *c*. 66 – 222 AD.

Overlying two of these areas was colluvial layer (10.0283), a loose dark grey brown fine silt with frequent inclusions of angular to sub-angular fine to medium pebbles.

Industrial Structure 1 lay beneath colluvial layer (10.0283) and consisted of a circular platform [10.0316] cut into the north-east side of the bedrock hillside. It measured 4.00m in diameter and up to 0.50m deep with steep, irregular sides leading sharply to a flat base. Within this cut was deposit (10.0315), a 0.15m thick spread of loose dark black brown silt with frequent charcoal inclusions and occasional angular to sub-rounded medium pebbles. Towards the north-east edge of the cut [10.0316] was cut [10.0324]. It was sub-oval measuring 0.80m long, 0.60m wide and 0.10m deep with moderately sloping sides leading gradually to an undulating base. It was cut into the bedrock which showed signs of discolouration due to having been heated. It was filled by primary fill (10.0329), a 0.03m thick friable dark brown sand silt with frequent angular medium pebbles and occasional charcoal flecks. Overlying this was secondary fill (10.0328), a 0.02m thick loose dark brown sand silt with frequent sub-angular medium pebbles and occasional charcoal flecks. Overlying this was first tertiary fill (10.0327), a 0.03m compact light grey sand and fine pebble deposit. Overlying this was second tertiary fill (10.0320), a 0.03m thick loose dark brown black silt with frequent charcoal and ash inclusions. Overlying this was third tertiary fill (10.0321), a 0.04m thick firm light orange grey clay with occasional inclusions of fine to medium pebbles. Towards the north edge of the cut [10.0316] was a small clay deposit (10.0331) on top of a silt deposit (10.0332). Deposit (10.0332) measured 1.00m long, 0.30m wide and 0.03m thick, it was a loose dark brown silt with frequent inclusions of angular medium pebbles and charcoal flecks. Overlying this was deposit (10.0331) measuring 1.00m long, 0.30m wide and 0.02m thick, it was a firm light grey orange clay with occasional inclusions of sub-angular to sub-rounded medium pebbles and occasional charcoal flecks.

Industrial Structure 2 was immediately to the north-west of Industrial Structure 1. A large portion of it have been removed during the excavation of evaluation trench 2155. What remained consisted of a fine pebble surface and five postholes. Surface (10.0397) was semi-circular, (with a significant portion having been removed during the excavation of evaluation trench 2155) measuring 1.80m long, 0.70m wide and 0.06m thick. It consisted of closely packed sub-angular to sub-rounded fine pebbles in a dark brown silt matrix.

- To the north of surface (10.0397) posthole [10.0751] was observed in the base of evaluation trench 2155. It was sub-circular measuring 0.80m long 0.70m wide and 0.30m deep with irregular sides and base due to being roughly hewn into the bedrock. It was filled by the backfill of the evaluation trench.
- Immediately to the west was posthole [10.0752], it was sub-oval measuring 0.80m long, 0.40m wide and 0.20m deep with irregular sides and base due to being roughly hewn into the bedrock. It was filled by the backfill of the evaluation trench. The relationship between these

postholes and the surface (10.0397) could not be observe due to the truncation of the surface by the evaluation trench.

- Posthole [10.0366] was sub-oval measuring 0.90m long, 0.50m wide and 0.25m deep with steep irregular sides leading gradually to a concave base and was filled by (10.0367), a firm dark black brown silt with occasional sub-angular fine to medium pebbles and occasional charcoal inclusions.
- Posthole [10.0379] was sub-circular measuring 0.40m long, 0.32m wide and 0.35m deep with near vertical sides leading gradually tot a concave base and was filled by (10.0380), a firm dark black brown silt with frequent sub-angular fine to medium pebbles and occasional charcoal inclusions.
- Posthole [10.0384] was circular measuring 0.48m in diameter and 0.25m deep with near vertical sides leading sharply to a concave base and was filled by (10.0385), a loose dark brown silt with frequent sub-angular to sub-rounded medium to coarse pebbles and occasional charcoal flecks.

Industrial Structure 3 was located to the south-east of the other two structures. It consisted of several deposits and possible surfaces overlying cut features in a natural hollow in the bedrock.

- Posthole [10.0396] was sub-circular measuring 0.40m long, 0.30m wide and 0.09m deep with moderately sloping sides leading sharply to a flat base and was filled by (10.0395), a soft mid grey brown clay silt with moderate sub-angular small to medium pebbles and occasional hard dark blue grey clay inclusions.
- Posthole or pit [10.0441] was oval measuring 1.58m long, 0.60m wide and 0.32m deep with steeply sloping sides leading sharply to a flat base and was filled by primary fill (10.0440), a soft mid brown grey sand silt with moderate charcoal flecks and occasional inclusions of daub and burnt clay. Overlying this was (10.0439), a soft mid brown grey sand silt with moderate charcoal and occasional burnt clay inclusions.
- Pit [10.0383] was sub-rectangular with rounded corners measuring 1.10m long, 0.40m wide and 0.16m deep with moderately sloping sides leading gradually to a concave base and was filled by (10.0382), a loose mid grey brown dan silt with occasional charcoal flecks.

Overlying all of these features was deposit (10.0265), a firm dark blue grey silt clay with occasional charcoal flecks measuring 3.20m long, 2.80m wide and 0.20m thick that may have formed a surface. Overlying this was (10.0269), a firm dark brown red deposit of heated silt clay measuring 0.92m long, 0.56m wide and 0.05m thick.

Also overlying deposit (10.0265) were deposits (10.0439) and (10.330), which likely represent the same deposit, both are recorded as a soft dark brown grey clay silt with frequent inclusions of burnt clay and charcoal and together measured 2.70m long, 1.50m wide and 0.12m thick. Overlying this deposit was (10.0319) a firm mid brown yellow silt clay with occasional flecks of charcoal and burnt daub. It measured 2.80m long, 1.60m wide and 0.50m thick. Cut through (10.0319) was posthole [10.0323]. it was oval measuring 0.92m long, 0.50m wide and 0.12m deep with moderately sloping sides leading gradually to a concave base and was filled by (10.0322), a soft mid grey brown sand silt with occasional charcoal flecks. Cut through the north-east edge of deposit (10.0439) was 'L' shaped linear cut [10.0418]. It measured 2.00m long, 1.22m wide and 0.09m deep with moderately sloping sides leading gradually to a flat base and was filled by (10.0417), a soft dark grey brown sand silt with occasional charcoal flecks.

Posthole [10.0399] was discrete and had no stratigraphic relationship with any other features. It was oval measuring 0.78m long, 0.60m wide and 0.024m deep with steeply sloping sides leading gradually to a concave base and was filled by (10.0398), a loose mid red brown sand silt with frequent sub-angular fine to medium pebbles and occasional patches of clay.

Posthole [10.0443] was discrete and had no stratigraphic relationships with any other features. It was oval measuring 0.56m long, 0.38m wide and 0.12m deep with steeply sloping sides leading gradually to a concave base and was filled by (10.0442), a soft mid brown grey sand silt with occasional angular fine to medium pebbles, charcoal flecks and burnt clay inclusions.

An area of industrial activity (HER GAT PRN 91821) on the interior edge (north side) of the southern revetment is likely to have been a building, or possibly covered working area. The remains of a small east-west running wall (10.1998), measuring 5.50m long, 1.10m wide and 0.44m high, in construction cut [10.1997] (*Figure 15 and 16*) defined the northern extent of this activity with its collapse and associated rubble (10.1473) extending down the slope to the south. Hearth [10.2295] had a possible flue [10.2138] associated with it but the relationship was truncated by a later grave (G398) which is likely to be early medieval in date. Radiocarbon dating of charred materials identified as oak recovered from the fill of [10.2295] provided an early medieval date of *c*. 528-623 AD, though this date is likely from intrusive material from grave G398. A pit [10.2431] containing a large amount of slag (SF1415, SF1424, SF1425, SF1432 and SF1433) was excavated to the west of this feature. It was sub-oval measuring 0.80m long, 0.46m wide and 0.24m deep with irregular sides leading gradually to a concave base and was filled by (10.2432), a loose black red silt sand with frequent charcoal inclusions and occasional sub-angular small to medium cobbles that had been heated. Between these two features was a possible trough aligned north-south, originally thought to be a grave [10.1859]. measuring 1.46m long, 0.76m wide and 0.36m deep with irregular sides leading gradually to an irregular flat base. The sides were lined with ten packing stones (10.1861), of which two were flat schist slabs set on edge and the rest being coarse sub-angular large cobbles set at varying depths into the irregular cut to create a roughly rectangular space in the centre. Between and behind these stones was (10.1882), a friable dark black brown silt with frequent charcoal inclusions. Filling the centre of the feature was (10.1860), a friable dark black brown silt with frequent medium pebbles to small cobbles and occasional charcoal inclusions. Associated with these features to the south was an irregular spread of large flat schists slabs with fired clay (10.1892) possibly representing a surface, the feature was linear running east-west measuring 1.84m long, 0.53m wide and 0.05m thick.

To the east of hearth [10.2295] was surface (10.1962). It was sub-rectangular in shape, measured 2.00m long and 1.50m wide and was constructed of a single layer of large schist slabs. To the east of this surface was another possible furnace or bloomery [10.2003] with a possible flue [10.2004] to the south. The main chamber [10.2003] was sub-circular measuring 1.20m long, 1.10m wide and 0.10m deep with gently sloping sides leading imperceptibly to a flat base which sloped down to the south. It was filled by (10.2002), a firm brown black charcoal silt with frequent lenses of orange fine sand, grey silt and charcoal. The flue [10.2004] measured 1.20m long, 0.70m wide and 0.05m deep with gently sloping sides leading imperceptibly to a flat base sloping down to the south. It was filled by (10.2005), a firm dark grey sand silt with frequent angular medium to coarse pebbles. Across the centre of this feature was an east-west wall (10.1989), though it is not clear if this is a later feature or part of the industrial feature itself. It measured 2.00m long, 0.60m wide and 0.35m tall and consisted of a single course of schist blocks up to 0.60m in length. Abutting this to the south was (10.1990), measuring 2.20m long, 0.60m wide and 0.25m tall and consisting of small to large cobbles in a dark black grey sand silt matrix. Below the possible wall around the point where the chamber meets the flue were nine postholes, six on the west of the flue, [10.2156], [10.2149], [10.2152], [10.2191], [10.2192] and [10.9193], and three to the east, [10.2154], [10.2194] and [10.2195].

Two additional hearths/areas of burning were found to the east, pit [10.2443] and hearth [10.2362]. Pit [10.2443] was circular, measuring 1.00m in diameter and 0.08m deep with steeply sloping sides leading gradually to a flat base. It was filled by primary fill (10.2454), a loose black and orange red burnt sand with frequent charcoal inclusions. Overlying this was secondary fill (10.2453), a loose dark brown sand silt with frequent charcoal inclusions. Overlying this was tertiary fill (10.2452), a

stiff light brown orange sand silt with frequent charcoal inclusions. Hearth (10.2362) was a sub-circular patch of burnt, friable mid brown yellow silt clay with occasional charcoal inclusions. A layer of friable dark brown grey sand silt colluvium containing frequent charcoal inclusions (10.2343), measuring 10.8m x 3m, covered the area surrounding pit [10.2431], hearth [10.2295] and flue [10.2004] extending down the hill to the rubble southern boundary wall (10.1998). It contained finds of slag (SF1336, SF1376, SF1398, SF1404, SF1405, SF1406, SF1407 and SF1410), furnace lining (SF1399, SF1400, SF1401, SF1402) and burned clay (SF1403). Regrettably, much of the evidence for any structure had been heavily truncated by the early medieval cemetery. As there were no direct relationships between this area and the structures to the north, other than stating that it relates to the enclosed phase of the settlement, it cannot be firmly associated with any of the other structures.

At the western edge of the site, ditch [10.1022] (HER GAT PRN 1822), along with ditch [10.1176] may have formed two sides of a sub square enclosure, with the possible junction of the two ditches being truncated away by modern disturbance. These features were below later stone structural remains. Ditch [10.1022] ran south-west to north-east, it was straight with a rounded terminus. It was 2.02m long, 0.78m wide and 0.24m deep with steeply sloping sides leading gradually to a concave base filled by (10.1021), a friable mid brown grey sand silt with frequent small to medium cobble inclusions. Radiocarbon dating of organic material identified as wheat recovered from fill (10.1021) returned a Roman date of *c*. 86 – 242 AD. Ditch [10.1176] ran south-east to north-west, it was straight with a rounded terminus. It was 2.80m long, 0.70m wide and 0.15m deep with steeply sloping sides leading gradually to a concave base and was filled by (10.1175), a firm dark brown grey silt with frequent sub-angular to sub-rounded small to medium cobble inclusions.

On the exterior (east side) of the north-south enclosure wall several features which were likely contemporary with the settlement were identified. These included pits and drainage gullies as well as a small oven or kiln (10.2376) (plate 6). The oven/kiln sat in cut [10.2380], a sub-rectangular cut measuring 1.15m long, 0.80m wide and 0.31m deep with steeply sloping sides leading gradually to a concave base. Overlying this was the stone structure of the oven/kiln (10.2376), the south and east portion of which had been previously removed during the excavation of trial trench 2163. Within this stone structure was (10.2428), a compact mid grey brown silt sand with inclusions of moderate amounts of sub-angular medium to coarse pebbles which had been exposed to heat and occasional orange clay and charcoal flecks. Overlying this was (10.2379), a compact light grey brown silt sand with inclusions of moderate sub-angular medium to coarse pebbles.

At the north-western corner of the excavation area a shallow stone lined pit [10.2563] was excavated. The function of the pit cannot be confidently suggested but given its low-lying position in a wet part of the site it is likely that it would have held water. The pit was sub-circular measuring 2.60m long, 2.40m wide and 0.40m deep with near vertical sides leading sharply to a flat base. It was filled by primary fill (10.2623), a 0.05m deep layer of loose light grey silt with occasional patches of iron panning. This may represent trample from the initial digging of the pit. Overlying this was secondary fil (10.2622), a 0.15m deep layer of loose dark brown sand silt with occasional charcoal flecks used as a levelling layer. Overlying this was (10.2604), a stone surface of large slightly overlapping schist slabs lining the base of the pit. Overlying this surface was (10.2603), a lining of stone orthostats laid on edge to line the sides of the pit creating a vertical sided chamber in the centre of the pit (*Plate 7*). Overlying this was (10.2586) a 0.15m deep layer of firm light brown grey sand silt with frequent inclusions of sub-angular medium to coarse pebbles.

Plate 6. Mid-excavation of small oven/kiln [10.2376]. View from the East, 1m scale.

Plate 7. Mid excavation of stone orthostats (10.2603) lining the sides and stone slabs (10.26204) covering the base of pit [10.2563]. View from the North, 1m scale.

Contemporary with pit [10.2563] were ditches [10.2520] to the west and [10.2588] to the east. Ditch [10.2520] ran down the hill from north-west to south-east into pit [10.2563]. It was approximately 20m long, 0.50m to 0.60m wide and 0.0.8m to 0.25m deep with moderately sloping sides leading gradually to a concave base and was filled by (10.2583), a firm dark brown clay silt with frequent medium pebble inclusions and occasional charcoal flecks. Ditch [10.2588] ran from the eastern edge of pit [10.2563] to the east. It was visible for 1.50m before continuing under the LOE. It was 0.50m wide and 0.14m deep with moderately sloping sides leading imperceptibly to a concave base and was filled by (10.2587), a loose dark grey sand silt with occasional sub-angular to sub-rounded medium pebbles.

Linear feature [10.2388] lay halfway between the north-south boundary wall (10.2089) and stone lined pit [10.2563]. It ran north-south measuring approximately 3m long, 0.90m wide and 0.40m deep with moderately sloping sides leading imperceptibly to a flat base and was filled by (10.2889), a compact dark brown sand silt with frequent small to medium pebble inclusions and occasional patches of iron pan. It produced two pieces of pottery, a sherd of black burnished ware SF1434 and a fragment of mortarium SF1436.

Pit [10.2695], lay to the east of north-south boundary wall (10.2089). It was oval measuring 1.32m long, 0.75m wide and 0.30m deep with moderately sloping sides leading gradually to a concave base and was filled by (10.2969), a friable mid grey brown silt with frequent medium pebble to small cobble inclusions. Small finds found within this fill include a small copper alloy finger ring (SF1704) and a flint blade (SF1720). Radiocarbon dating of organic material identified as barley recovered from fill (10.2696) returned an early medieval date of *c*. 684 – 778 AD. However, this pit was sealed by rubble (10.2349), which represents rubble from the collapse of the north-south boundary wall. More accurate sequencing of these features is difficult with the information currently available. Rubble (10.2349), sealing many of the features closest to the north-south wall,

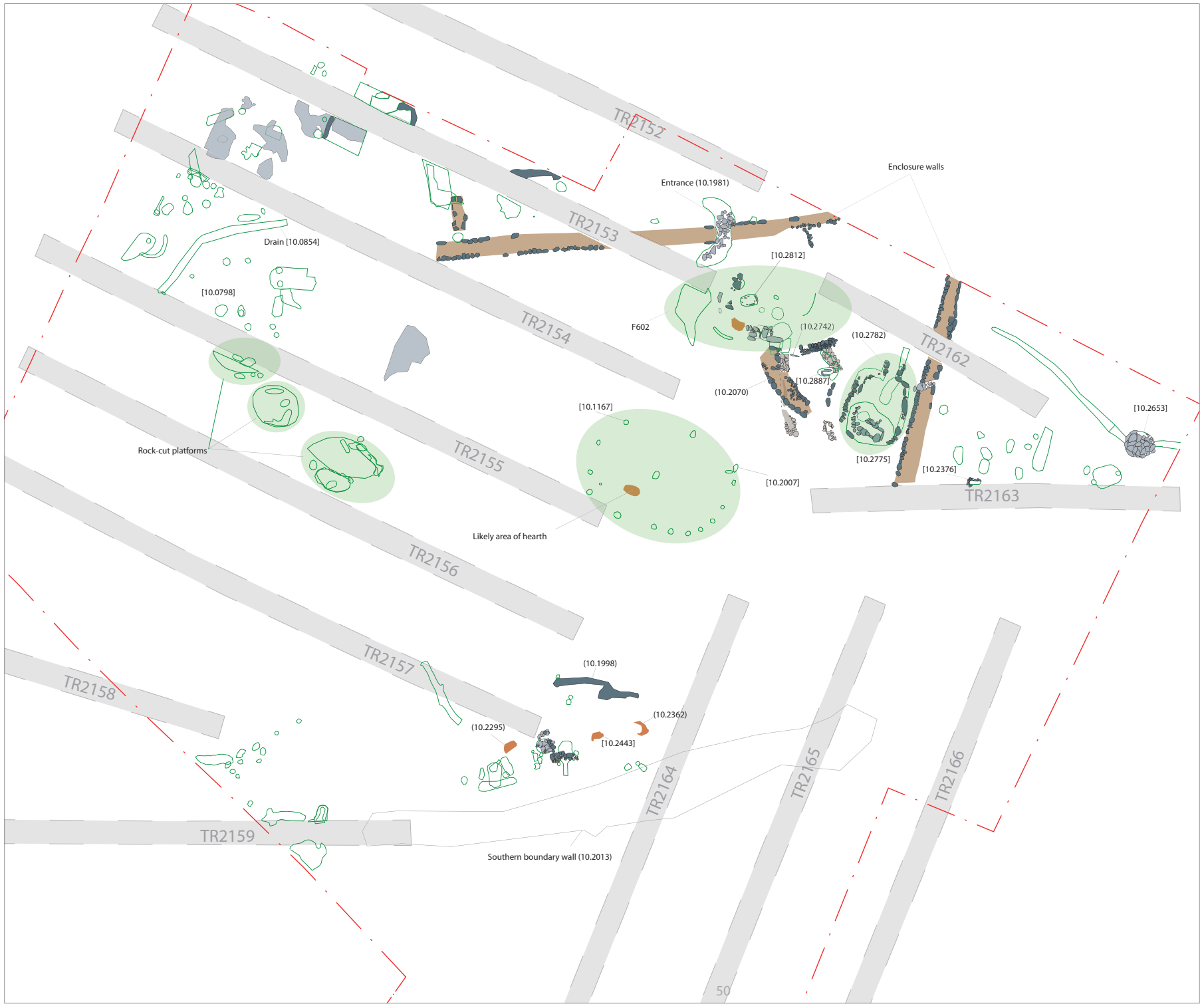
contained a number of finds including a fragment of mortarium (SF1925), half a glass bead (SF1561) and a piece of black burnished ware (SF1532) with evidence of repair in the form of an iron rivet still present.

Several features were also located on the exterior (to the north) of the east-west enclosure wall along the north edge of the excavation area, including postholes and stone structural elements of unknown function, many of which were only partially visible with some extending beyond the LOE. The east-west wall itself had an entrance way just north of roundhouse F602. This was in the form of a gap approximately 1.5m wide with both ends of the wall to either side being faced with orthostats with rough coursing above much in the same way as the rest of the wall's construction. A surface of flat schist slabs (10.1981) was laid through this gap in the wall and extended approximately 0.80m past the outer face of the wall to the north in a northerly direction, and approximately 1.2m past the inner face of the wall to the south with this portion continuing in a south-westerly direction. Below this stone surface was (10.2741), a 5.60m long, 2.20m wide and 0.15m deep layer of firm dark grey brown silt sand with sub-angular cobble inclusions. This may represent a foundation or earlier form of the trackway through the wall. This deposit extended approximately 2m north of the wall in a north-westerly direction and approximately 2m to the south of the wall on a south-westerly direction.

The only notable feature in the north-south boundary wall was drain [10.2088] which cut through the wall core (10.2087). The drain measured 0.59m wide and 0.52m deep extending obliquely from one side of the wall to the other on a south-west to north-east alignment. It was lined with side and cap stones (10.2771). Overlying these sides stones was (10.2770), a firm dark grey sand silt with moderate charcoal inclusions. Overlying this was (10.2769), a friable dark orange brown sand silt with occasional charcoal flecks. Overlying this was (10.2768), a friable black grey sand silt with occasional charcoal flecks. It was noted that a number of the orthostats facing the boundary walls (both the east-west and north-south walls) were missing, resulting in gaps and sockets along the face of the wall where orthostats had been removed but the wall core remained in place. It is possible that these orthostats may have been visible above ground and used as a source of stone for the later cist cemetery, this notion is further supported by two of the capstones from G398 (*Plate 8*) showing evidence of having been split on site from a single larger stone similar to those found in the outer faces of the boundary walls.

Plate 8. Two capstones from G398 which fit back together showing they were originally part of a larger stone possibly sourced from the earlier structures present nearby. Scale 0.5m.

Numerous quern fragments, both saddle and rotary, were discovered across the site, and a number of stone spindle whorls were recovered from domestic deposits. Faunal remains were also identified in the domestic deposits, however, due to the soil conditions the majority of these were generally fragmentary teeth. Glass beads, both complete and fragmentary, were recovered from the site, including shards of glass in association with domestic features. A relative wealth of Romano-British ceramics, metalwork and coins were discovered within the areas of domestic and industrial activity and include sherds of Samian ware, mortaria, black burnished ware and amphora. Several copper alloy beads, brooches, bracelets and unidentifiable fragments were recovered, in addition to the two coins, one of which appears to be 4th century in date. Numerous lead fragments recovered may also hint at some of the industrial processes undertaken at the site (*Appendix V to X*) .



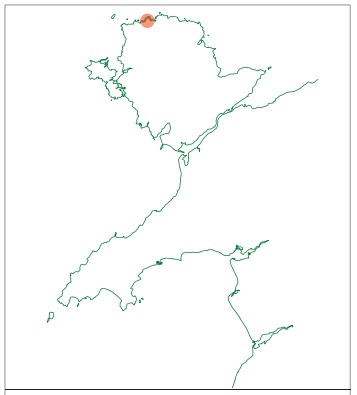


Figure 10
Phase 2 Settlement.

Key

- Label lines
- Limit Of Excavation
- Break of slope
- Late settlement features
- Horizontal stones (Hi res.)
- Stone surfaces (Low res.)
- Vertical stones (Hi res.)
- Stone walls (Low res.)
- Stone wall with core
- Elements of rectangular structure
- Areas of Burnt Daub
- Well defined structures

Drawn By: KM

Date: 14/10/21

Location: SH35769384

Project: AB1703 Wylfa Head

Archaeoleg Brython Archaeology

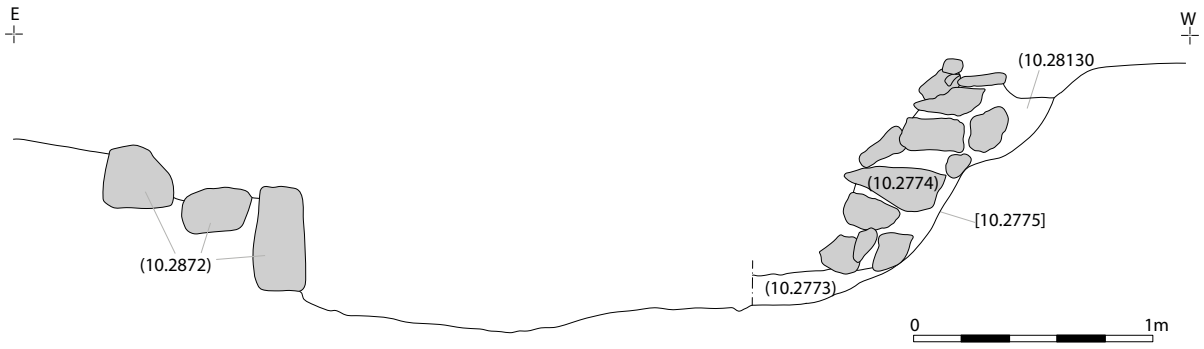


Figure 11. North facing Section of pit [10.2775] showing retaining walls once the rubble fills had been removed

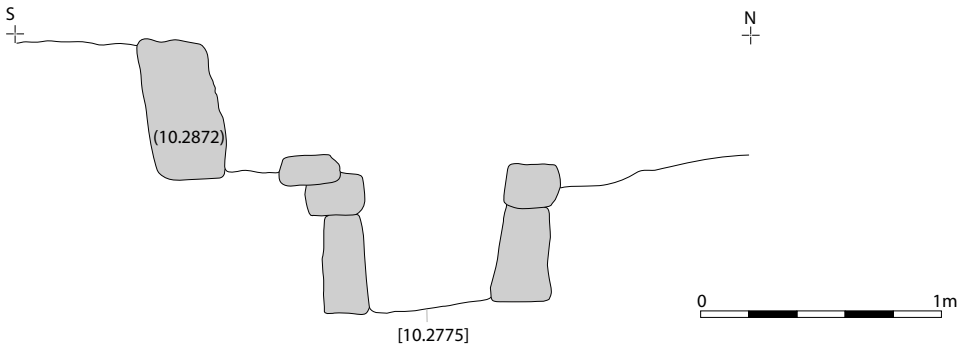


Figure 12. East facing Section of pit [10.2775] showing retaining walls once the rubble fills had been removed

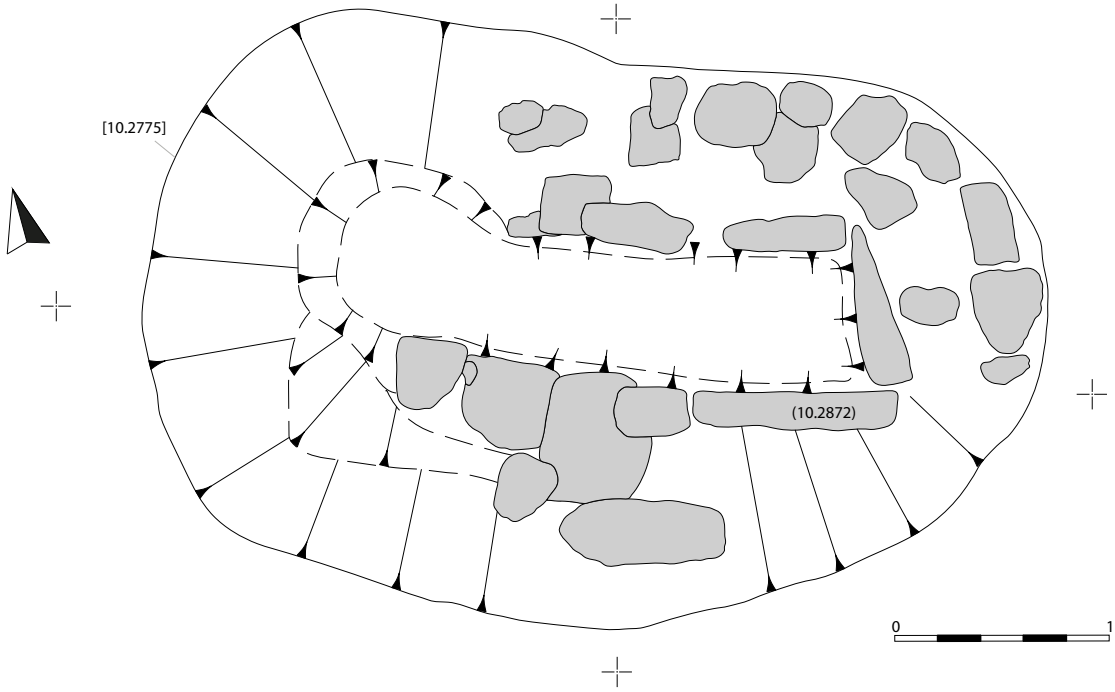


Figure 13. Plan of pit [10.2775] showing positions of stone lining elements (10.2872)

Figures 11-13
Pit [10.2775].

Project No.
AB1703

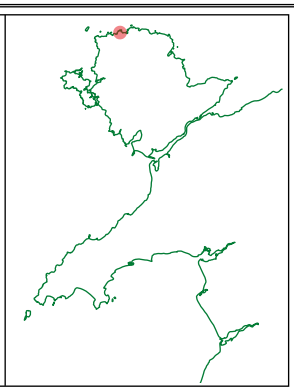
Drawn By:
KM/IGP

Date:
14/10/2021

Location:
SH35799385

Key

Stone



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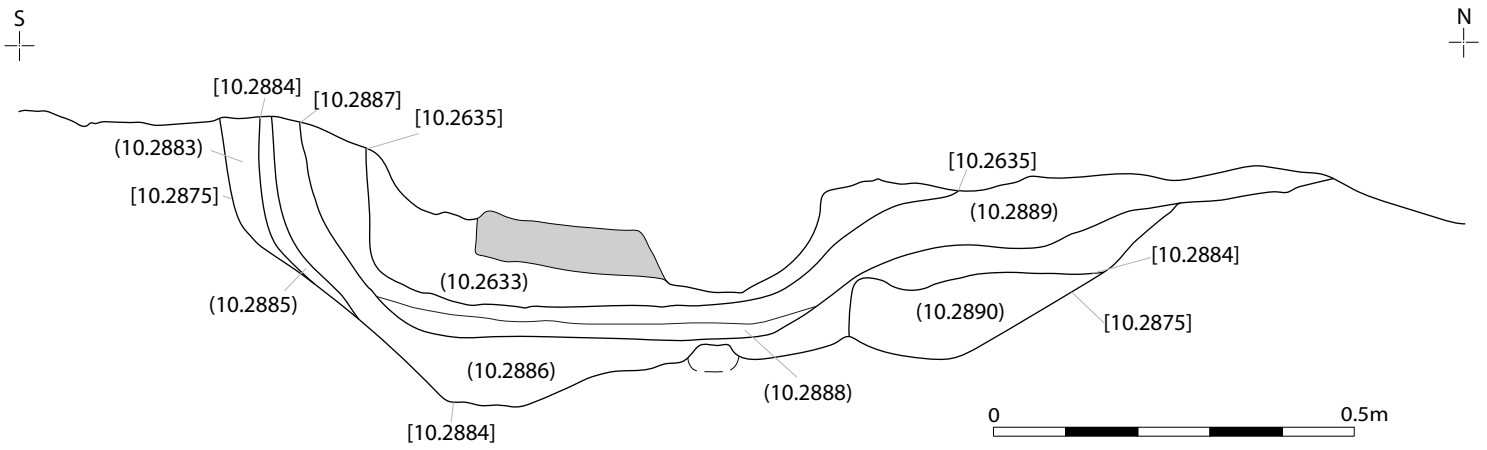


Figure 14. East Facing Section of pit [10.2875]

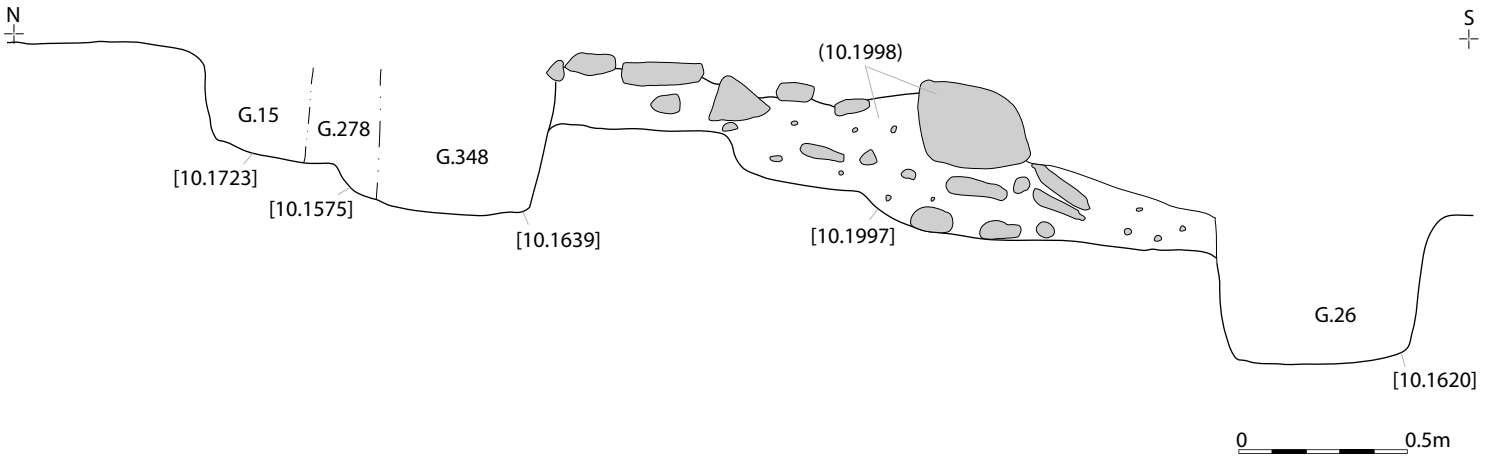


Figure 15. West Facing Section through wall [10.1997]

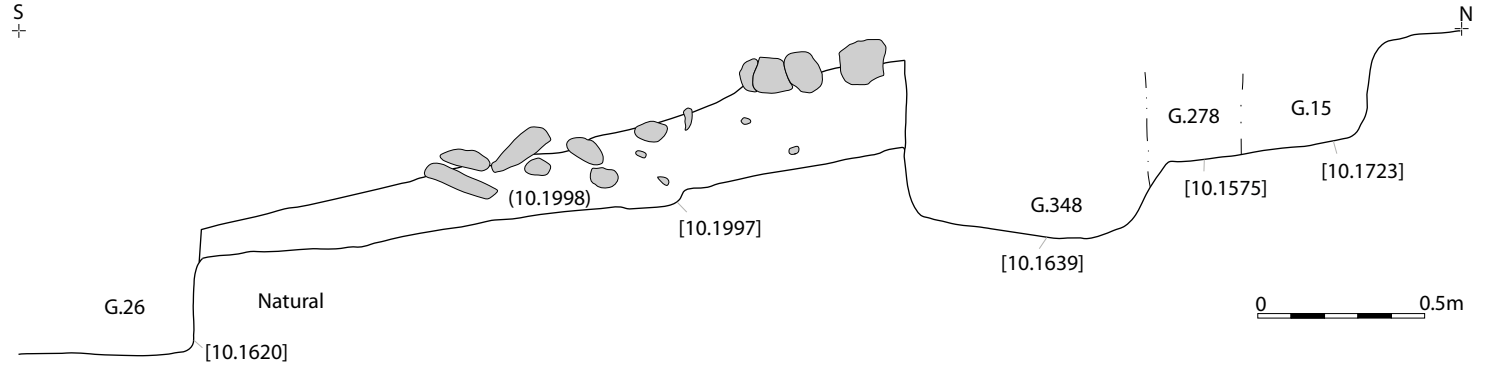


Figure 16. East Facing Section though wall [10.1997]

Figures 14-16
Pit [10.2875] & Wall [10.1997].

Project No.
AB1703

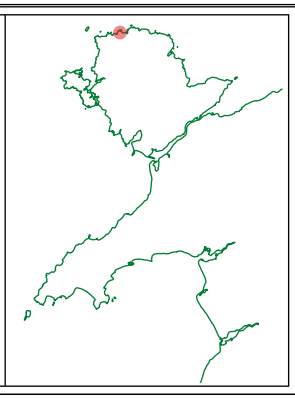
Drawn By:
KM/IGP

Date:
14/10/2021

Location:
SH35769384

Key

Stone



Archaeoleg Brython Archaeology

3.2.3 Period 5 (Early Medieval Cemetery)

The early medieval cist cemetery (HER GAT PRN 91824) excavated by ABA was mostly concentrated on the plateau and its southern slope, to the east of the highest part of the site (*Figure 17*). A total of 411 potential graves were identified. Upon investigation, 96 of these were determined not to be graves and were either voided without further excavation or excavated as non-funerary features giving a final total of 315 graves.

Grave Number	Context Number	Skeleton Number
001	10.0519	
002	number void	
003	10.1411	
004	10.1405	
005	10.1194	
006	10.1247	
007	10.1383	
008	10.1578	
009	number void	
010	number void	
011	number void	
012	10.1689	
013	10.1654	
014	10.1599	
015	10.1723	10.1760
016	10.1768	10.1770
017	number void	
018	10.1649	
019	10.1777	
020	10.1243	
021	10.1387	
022	number void	
023	number void	
024	10.1843	
025	10.1333	
026	10.1620	10.1801
027	number void	
028	10.1848	10.1885
029	10.2095	
030	number void	
031	number void	
032	number void	
033	10.1718	10.1772
034	number void	
035	10.1929	10.1941

Grave Number	Context Number	Skeleton Number
036	10.2107	
037	number void	
038	number void	
039	10.2142	
040	10.1462	10.1536
041	10.1488	10.1496
042	number void	
043	10.1441	
044	10.2163	
045	number void	
046	number void	
047	number void	
048	10.1640	10.1717
049	10.2267	
050	number void	
051	10.2276	
052	10.2236	
053	10.2208	
054	10.1540	
055	10.1056	
056	10.0933	10.0931
057	number void	
058	10.2120	
059	10.1256	
060	10.2046	
061	10.1461	
062	10.1133	10.1109
063	10.2115	
064	10.2111	
065	number void	
066	10.1182	
067	number void	
068	number void	
069	number void	
070	number void	

Grave Number	Context Number	Skeleton Number
071	10.1225	
072	10.1350	
073	number void	
074	10.1561	
075	number void	
076	number void	
077	number void	
078	number void	
079	number void	
080	10.0829	10.0746, 10.0740
081	number void	
082	number void	
083	10.0898	
084	10.0515	
085	10.0599	
086	10.0834	10.0876
087	10.0642	10.0732
088	10.0381	
089	10.0646	10.0793
090	10.0990	
091	number void	
092	number void	
093	10.0289	10.0294
094	number void	
095	10.1366	
096	number void	
097	number void	
098	10.0518	10.0316
099	10.0865	10.0842, 10.0856
100	10.0691	10.0745
101	10.0120	10.0118
102	10.0987	
103	10.0903	
104	10.0822	
105	10.0984	
106	10.0947	
107	number void	
108	10.0740	
109	10.0738	
110	10.1705	10.1704
111	10.0654	10.0715
112	10.0309	

Grave Number	Context Number	Skeleton Number
113	10.0432	10.0430, 10.0445
114	10.0438	10.0436
115	10.0594	10.0620
116	10.0472	10.0471
117	number void	
118	10.0504	10.0502
119	10.0757	10.0875
120	10.0547	10.0551
121	10.1072	10.1103
122	10.1272	
123	10.1484	10.1715
124	10.0705	
125	10.1711	10.1709
126	number void	
127	10.1328	
128	number void	
129	10.0713	
130	10.0030	
131	10.0769	
132	number void	
133	number void	
134	number void	
135	10.1625	
136	10.1834	
137	10.0015	10.0016
138	number void	
139	10.2040	10.2129
140	10.0344	10.0342
141	10.0686	10.0697
142	10.1357	10.1355
143	10.0695	10.0720
144	10.0113	10.0111
145	10.0532	
146	10.0586	10.0612
147	10.0141	10.0149
148	10.0172	10.0211
149	10.0478	
150	10.0659	
151	number void	
152	10.0513	
153	10.0857	10.8590
154	10.0775	10.0776
155	number void	

Grave Number	Context Number	Skeleton Number
156	10.1207	10.1211
157	number void	
158	10.1682	
159	10.0122	
160	10.0161	
161	10.0041	
162	10.0837	
163	10.0158	10.0179
164	10.0164	
165	10.0763	
166	10.0127	
167	number void	
168	10.1750	
169	number void	
170	10.0706	
171	10.0498	
172	number void	
173	10.1961	
174	10.1984	10.1993
175	10.1971	
176	number void	
177	10.1883	
178	10.1826	
179	10.1744	
180	10.0038	10.0050
181	number void	
182	number void	
183	10.0035	
184	10.0541	10.0542
185	number void	
186	number void	
187	10.0616	10.0611
188	10.0167	
189	10.1143	
190	10.0736	
191	10.0485	
192	10.0312	
193	10.0679	
194	10.0792	
195	10.0538	10.0595
196	number void	
197	10.0290	
198	10.0261	

Grave Number	Context Number	Skeleton Number
199	10.1675	
200	number void	
201	number void	
202	number void	
203	number void	
204	number void	
205	10.0241	
206	10.0245	
207	10.0252	
208	10.0255	
209	10.0257	
210	10.1330	
211	10.0260	
212	10.0448	10.0457
213	10.0414	
214	number void	
215	number void	
216	10.1751	
217	10.0350	10.0348
218	10.0450	
219	number void	
220	number void	
221	number void	
222	number void	
223	number void	
224	number void	
225	10.0904	
226	10.0724	
227	10.1378	
228	10.1004	10.1002
229	10.1282	
230	10.1181	10.1236
231	10.1382	
232	10.1560	
233	10.1604	10.1607
234	10.1763	
235	number void	
236	10.1007	10.1353
237	10.0648	
238	10.0966	
239	10.0482	
240	10.0585	10.0584
241	10.1131	

Grave Number	Context Number	Skeleton Number
242	10.0567	
243	10.0828	10.0784
244	10.0956	
245	10.0658	
246	10.0610	
247	10.1039	
248	10.1399	
249	number void	
250	10.1539	
251	10.0729	10.0727
252	10.1571	
253	10.0925	10.0971
254	10.1083	
255	10.0787	
256	10.0721	10.0762
257	10.0693	10.0807
258	10.1206	10.1059
259	10.0734	
260	10.1487	
261	number void	
262	10.1854	10.1869
263	10.1564	10.1565
264	10.1337	10.1342
265	10.1041	10.1042
266	10.1027	10.1028
267	10.1047	10.1048
268	10.0847	10.0851
269	10.1157	10.1140
270	10.0869	
271	10.0938	
272	10.0942	
273	10.1426	10.1480
274	10.1087	10.1221
275	10.1063	10.1061
276	10.1168	10.1169
277	10.1518	10.1596
278	10.1575	10.1624
279	10.1534	
280	10.1408	
281	10.0794	10.0785
282	10.0827	
283	10.0911	
284	10.0873	10.0871

Grave Number	Context Number	Skeleton Number
285	10.1763	10.1787
286	10.0977	10.0979
287	10.0948	10.0949
288	10.0937	
289	10.0957	10.0997
290	number void	
291	10.1205	
292	10.1161	
293	10.1026	
294	10.0546	10.0544, 10.0579
295	10.1080	10.1078
296	10.1190	10.1188
297	10.1117	10.1115
298	10.1334	10.1344
299	10.1776	10.1774
300	10.1521	
301	10.1125	10.1214
302	number void	
303	10.1619	10.1658
304	10.1285	
305	10.1319	10.1317
306	10.1264	
307	10.1268	
308	10.1394	10.1397
309	10.1831	10.1901
310	number void	
311	10.1922	10.1932
312	10.1820	10.1900
313	number void	
314	10.1894	
315	10.1991	
316	number void	
317	10.2053	
318	number void	
319	10.1767	
320	10.1853	
321	10.1627	
322	10.1825	
323	10.1134	
324	10.1295	
325	10.1324	
326	10.1215	
327	10.1216	

Grave Number	Context Number	Skeleton Number
328	10.1217	
329	10.1218	
330	10.1219	
331	10.1220	
332	10.1224	
333	10.1299	
334	10.1231	
335	number void	
336	10.1361	
337	number void	
338	10.1590	
339	10.1288	
340	number void	
341	10.1313	10.1343
342	10.1474	
343	10.1634	10.1632
344	10.1500	
345	10.1551	
346	10.1591	
347	10.1677	10.1741
348	10.1639	10.1659
349	10.1691	
350	10.1699	
351	10.1685	
352	number void	
353	number void	
354	number void	
355	10.1797	
356	10.1810	
357	10.1816	
358	10.1842	
359	10.1866	
360	10.1870	
361	number void	
362	10.2043	
363	10.1873	
364	number void	
365	number void	
366	10.1940	10.1955
367	10.1934	
368	10.1976	10.2182
369	10.2018	

Grave Number	Context Number	Skeleton Number
370	10.1804	
371	10.2049	
372	number void	
373	10.2061	
374	number void	
375	10.2280	
376	10.2167	
377	10.2226	
378	10.2117	
379	10.2028	
380	10.2031	
381	number void	
382	10.2212	
383	10.2203	
384	10.2021	
385	10.2103	
386	number void	
387	10.2102	10.2100
388	10.2055	
389	10.2058	
390	10.2135	
391	10.2211	
392	10.2169	
393	10.2254	
394	number void	
395	10.2222	
396	10.2257	
397	10.2237	
398	10.2249	
399	10.2240	
400	number void	
401	10.2258	
402	10.2262	
403	10.2291	10.2289
404	10.2283	
405	number void	
406	10.2299	
407	10.2309	
408	10.2391	
409	10.2421	
410	10.2429	10.2442
411	10.2449	

Most of the graves were cut into the natural bedrock. Based on dimensions, 28 graves were of a size which would have accommodated neonates or infants, 37 potentially accommodated juveniles and 216 could accommodate adults. Thirty-four graves were of unknown size due to truncation, two of which were double graves. Of the 315 graves, 48 were earth cut, seven had capstones only, 72 had side stones, 175 had cap and side stones, nine had side, cap and base stones, two had base stones only, one had base and side stones and one had capstones and two layers of side stones. All cist stones were assessed for markings on site and weighed to quantify the amount of raw material quarried over the lifetime of the cemetery. Approximately 10% of the cist stones were retained for specialist analysis. Whilst some graves were heavily truncated all graves had at least a portion of their full length intact providing data on which to base the descriptions.

Human remains, in varying degrees of preservation, were recovered from 109 graves which represented a minimum number of 119 individuals. The remains were assessed and analysed as part of a Brython Archaeology funded PhD at Cardiff University (*Appendix X*).

At the Wylfa Head cemetery there appears to have been an initial focal point, identified as a dense concentration of graves which seemed to have some structural elements built on top of them and were bounded by a ring of postholes. This area was designated Feature 296 (F296). Feature 296 was located at the highest point on the plateau and measured 7.5m by 7.0m. It contained 50 graves, of which 27 were adult sized graves (measuring more than 1.70m long), 17 juvenile graves (measuring 1-1.70m long) and six neonatal or infant sized graves (measuring less than 1m long). Marking the edge of F296 was a ring of 18 post holes, identified as an earlier roundhouse as discussed in paragraph 3.2.2.1. Sixteen of the postholes were located below the subsoil and above geology, with no stratigraphic relationship to any other features. One of the outer postholes [10.1147], and a central posthole [10.1440] were located below the graves. At certain points graves had been angled to fit within this circular structure, most notably grave G312 and grave G199, indicating that an earlier structure may have been used as a boundary for the graves in this area. This suggests that being within this area was potentially more important than the orientation of the grave. It is possible that the ruins of the roundhouse may have formed a circular mound which could have been mistaken for a Bronze Age barrow, and may explain why this part of the cemetery was seen as having significance. The reuse of earlier monuments is a well-documented aspect of early medieval burial in Britain (Bradley and Williams, 1998), and the presence of an initial focal point which may have held some significance has been noted in other cemeteries of this period in Wales (White and Smith, 1999). As previously mentioned, radiocarbon dating of organic material, identified as barley recovered from fill (10.2008) of posthole [10.2007] returned a Roman date of *c*. 124 – 258 AD, and dating of organic material of 'indeterminate species' recovered from fill (10.1165) of posthole [10.1167] returned a late Roman date of *c*. 313 – 406 AD. These dates support the notion that the circle of postholes predates the burials in this area and may have acted as a focus for the later cemetery.

Based on stratigraphic relationships there were four identifiable phases of burials within area F296. With the first phase of burials being graves G238, G260, G283 and G229, all cut into the bedrock. The second phase consisted of graves truncating these earlier ones, and included graves G259, G243 and G227. Grave G259 truncated both G238 and G260. Grave G243 truncated G283, and grave G227 truncated G229. The third phase consisted of graves G124, G244 and G231. Grave G124 truncated G259, grave G244 truncated G243, and grave G231 truncated grave G227. The fourth and final identifiable phase consisted of graves G246, G228 and G230. Grave G246 truncated grave G245, grave G228 truncated grave G244, and grave G230 truncated G231.

- First phase burial G238 was located in the northern part of F296. It was an adult size capped cist grave orientated east to west. The cut [10.0966] was rectangular with rounded corners measuring 2.14m long, 0.60m wide and 0.39m deep with vertical sides leading sharply to an irregular, broadly flat base. Lining this cut was a single cist side stone (10.0965) set on edge

against the south edge of the cut measuring 0.22m long, 0.13m wide and 0.03m thick. In the base of the cut was primary fill (10.1006), a deposit of fine pebbles in a firm brown orange silt matrix. Overlying this was the remains of wooden lining (10.0982), surviving as a friable powdery dark red brown decomposed wooden lining (*Plate 9)*. Overlying this was main grave fill (10.0964), a firm orange brown sand silt with frequent fine to coarse pebble inclusions. Overlying this were four schist capstones (10.0963) on the north side of the grave partially covering both this grave and grave G259. Above the capstones was upper grave fill (10.0962), consisting of fine to coarse sub-angular to sub-rounded pebbles in a firm brown orange silt sand matrix. This grave was truncated by grave G259.

- First phase burial G260 was located in the northern part of F296. It was heavily truncated by G245 with only the base stones and base of the cut remaining (*Plate 10*). It measured 0.80m long, 0.56m wide and 0.05m deep, the original size of this grave is unknown. The cut had rounded corners at the west end and sharp corners at the east, the sides were completely truncated away leaving an irregular base. Overlying this were schist base stones (10.1485) set on edge, which had been heavily truncated by grave G124 and G245. Lying between and over these stones was (10.1486), a loose dark grey sand silt.
- First phase burial G283 was located off centre to the north of F296. It was heavily truncated to the west by grave G243. It was sub-rectangular with rounded corners, measuring 0.31m long, 0.38m wide and 0.26m deep with vertical sides leading gradually to a flat base. It was filled by a single base stone (10.0910) (*Plate 11*). Overlying this was fill (10.0846), a loose dark brown silt sand with frequent medium pebbles to small cobbles and occasional charcoal inclusions.
- First phase burial G229 was located off centre to the west of F296. It was an adult size capped cist grave orientated north-west to south-east. The cut [10.1282] was rectangular with rounded corners. It measured 1.96m long, 0.62m wide and 0.32m deep with vertical sides leading gradually to a flat base. Lining the cut were six large flat platy schist side stones (10.1281) set on edge along all but its eastern side (*Plate 12*) where they had been removed by grave G228 and G230. Overlying this was main fill (10.1280), a soft yellow brown silt sand with occasional daub and charcoal inclusions. Overlying this and sitting on the edges of the vertical side stones (10.1281) were capstone (10.1279), these covered the east and west ends of the grave but were absent over the centre of the grave, at the west end there were two layers of capstones. Overlying the capstones was upper grave fill (10.1284), a soft yellow brown silt sand with frequent daub and occasional charcoal inclusions. It was truncated by grave G277 and posthole cut [10.1306].

Plate 9. Mid-excavation of wooden lining (10.0982) within grave G238. View from the South, 1m and 0.5m scale.

Plate 10. Pre-excavation of grave G260 with base stones within cut. View from the South -West, 0.2m scale.

Plate 11. Mid-excavation of grave G283 with base stone (10.0910). View from the South, 1m scale.

Plate 12. Mid-excavation of grave G229 with schist side stones (10.1281). View from the South, 1m scale.

- Second phase burial G259 was located in the northern part of F296. It was an adult size stone lined grave orientated north-west to south-east (*Plate 13*). The cut [10.0734] was rectangular with rounded corners measuring 1.95m long, 0.55, wide and 0.25m deep with vertical sides leading gradually to a flat base. Lining its north edge were three large platy schist side stones (10.0954) set on edge. Overlying this was (10.0733), a firm dark orange brown sand silt. It was truncated by grave G124 and G245.
- Second phase burial G243 was located off centre in the north-west of F296. It was an adult size grave orientated east to west. The cut [10.0828] was rectangular with rounded corners measuring 2.10m long, 0.70m wide and 0.25m deep with vertical sides leading gradually to a flat base. Lining the cut on the south, east and west sides were large platy schist side stones (10.0803), no stones were present lining the north side of the grave. The grave contained the fragmentary remains of two skeletons (SK10.0784 [*Plate 14*] and SK10.2922) with at least one adult being present (based on dental attrition) and one individual aged 14+ (based on a left tibia fragment) (*Appendix X*). Overlying this was grave fill (10.0666), a loose dark brown silt sand with frequent medium pebbles and occasional charcoal and daub inclusions. Overlying this were capstones (10.0664) consisting of four large roughly hewn and squared off platy schists stones with some smaller stones. It was truncated by grave G244.
- Second phase burial G227 was located on the western edge of F296. It was an adult size capped cist grave with base stones orientated north-west to south-east. The cut [10.1378] was rectangular with rounded corners measuring 2.16m long, 0.88m wide and 0.43m deep with vertical sides leading gradually to a flat base which sloped down to the east slightly. Overlying this were base stones (10.1434) most of them were located at the west end of the grave with the base stones to the east having been removed by grave G231. Lining the cut and overlying these base stones were eight large platy flat schist side stones (10.1377) set on edge lining the north, west and south sides of the grave (*Plate 15*). Overlying these was fill (10.1376), a soft dark brown silt sand with occasional charcoal inclusions. Overlying this were fragmentary capstones (10.1375). The east end of the grave was truncated by grave G231.

Plate 13. Pre-excavation of grave G259. View from the South-West, 1m scale.

Plate 14. Mid-excavation of grave G243 with skeleton (10.0784). View from the North, 1m scale.

Plate 15. Mid-excavation of grave G227 with schist side stones (10.1377). Grave G231 located to the south-west of grave G227. View from the North-East, 1m scale.

- Third phase burial G124 was located on the northern edge of F296. It was an adult size capped cist grave orientated north-west to south-east. The cut [10.0705] was rectangular with rounded corners measuring 1.76m long, 0.70m wide and 0.26m deep with vertical sides leading gradually to an irregular base (*Plate 16*). Partially lining the cut on the north and south sides were platy flat schist side stones (10.0704) set on edge. Overlying these was fill (10.0703), a firm orange brown sand silt with occasional fine to medium pebbles and charcoal inclusions. Overlying this were two capstones (10.0810) over the centre of the grave. Overlying these was upper grave fill (10.0809), a firm mid orange brown sand silt with frequent sub-angular medium pebble inclusions.
- Third phase burial G244 was located off centre to the north of F296. It was an adult size capped cists grave orientated north-west to south-east. The cut [10.0956] was rectangular with rounded corners measuring 2.04m long, 0.74m wide and 0.33m deep with vertical sides leading gradually to a flat base. Fully lining the cut were 13 large flat platy schists side stones (10.0955) set on edge, which appeared to have been laid in an anti-clockwise direction due to the overlapping of stones present on the north and south sides (*Plate 17*). Overlying these was fill (10.0923), a soft dark brown silt sand with frequent medium to coarse pebbles and occasional charcoal inclusions. Overlying this were four large capstones (10.0922) which sat on top of the side stones. Overlying this was upper grave fill (10.0921), a soft dark brown silt with occasional medium to coarse pebbles and charcoal inclusions. The cut was truncated by grave G228 to the south but this had not disturbed any cist stones.
- Third phase burial G231 was located off centre to the west of F296. It was a neonate/infant size grave orientated north-west to south-east (*see Plate 15*). The cut [10.1382] was rectangular with rounded corners measuring 1.13m long, 0.72m wide and 0.18m deep with vertical sides leading gradually to a flat base. Lining the cut on its north-east and south-west sides and its south-east end were five large flat platy schist side stones (10.1381) set on edge. These stones

lined up with the sides stone of grave G227 which grave G231 truncated. No stone was observed on the north-west end of the grave. Overlying these was fill (10.1380), a soft dark brown silt sand with occasional charcoal inclusions. Overlying this were seven capstones (10.1379), laid in two layers overlapping the sides stones.

Plate 16. Post-excavation of grave G124. View from the South, 1m scale. .

Plate 17. Mid-excavation of grave G244 with schist side stones (10.0955). Grave 228 is located to the south of grave G244. View from the South, 1m scale.

- Fourth phase burial G246 was located on the northern edge of F296. It was an adult size capped cist grave orientated east to west (*Plate 18*). The cut [10.0610] was rectangular with rounded corners measuring 1.70m long, 0.76m wide and 0.39m deep with vertical sides leading sharply to an irregular base. Lining the cut were nine large flat platy schist side stones (10.0608). Between the cut and the side stones was packing fill (10.0609), a firm mid orange brown sand silt with frequent fine to coarse pebble inclusions. Overlying the sides stones was fill (10.0606), a loose orange brown sand silt with occasional charcoal, burnt bone and daub inclusions. Overlying this were five large flat platy schists capstones (10.0605) with a sixth capstone lying outside of the cut to the west. These capstones had been laid from the east to the west as evidenced by the overlapping of stones.
- Fourth phase burial G228 was located in the centre of F296. It was an adult size capped cist grave orientated north-west to south-east. The cut [10.1004] was sub-rectangular with rounded ends measuring 1.96m long, 0.60m wide and 0.28m deep with vertical sides leading gradually to a convex base. Lining the north and south sides of the cut were seven large flat platy schist side stones (10.1003) set on edge, which tapered to be closer together at the east end. Within the cist lining were the fragmentary remains of what may have been (based on location within the grave) a humerus (SK10.1002), no age or sex determination could be made due to the limited nature of the remains (*Plate 19*). Overlying this was fill (10.0976), a soft dark brown silt sand with occasional charcoal. Overlying this were 10 large flat platy schist capstones (10.0975). Overlying these was upper grave fill (10.0974), a soft dark brown silt sand.
- Fourth phase burial G230 was located in the centre of F296. It was an adult size capped cist grave orientated north-west to south-east. The cut [10.1181] was rectangular with rounded corners measuring 2.00m long, 0.63m wide and 0.49m deep with vertical sides leading sharply

to a flat base. Fully lining the cut were nine large flat platy schist side stones (10.1180) set on edge. Within the cist were the fragmentary remains of (SK10.1236) consisting mostly of heavily eroded teeth and indeterminate fragments of bone (*Plate 20*). Based on dental attrition this individual had an estimated age range of 12-25 years (*Appendix X*). Overlying this was fill (10.1179), a loose yellow brown silt sand with frequent medium to coarse pebbles and occasional charcoal inclusions.

Plate 18. Pre-excavation of G246 with capstone. View from the North-East, 1m scale.

Plate 19. Mid-excavation of grave G228 with schist side stones (10.1003) and human remains (skeleton SK10.1002). View from the North, 1m scale.

Plate 20. Pre-excavation photo of roughly coursed wall (10.0373). View from the east (error on photo board), 2m scales.

Plate 21. Pre-excavation of grave G230 showing the absence of a central capstone where posthole [10.1199] had been dug through. View from the north, 1m scale.

Plate 22. Mid-excavation of grave G230 showing posthole [10.1199] cutting through the main grave fill. View from the North, 0.20m scale.

Due to the lack of stratigraphic interaction between the group of intercutting graves containing four phases and other burial groups within the boundary of F296, not all the graves within F296 could be accurately correlated with these burial phases.

One of these burial groups lay stratigraphically below rubble deposit (10.0376), that was similar to the main fill (10.0371), with some of the graves lying below the wall (10.0373). Deposit (10.0376) either represents a collapse or spreading of the structure over time or a deliberate dumping of material on the outside of the structure to increase its size. As the deposit sat in direct contact with the upper fills or capstones of several graves the later seems more likely. This grave group consisted of graves G149, G170, G171, G193, G194, G213, G216, G226, G236, G237, G333 and G355. The earliest grave in this group was G216 which belonged either to the first or second phase of burials described above. Grave 216 was truncated by graves G149, G171, G213 and G237, placing them in a later phase than grave G216. Grave G237 was truncated by G170 which belonged to either the third of fourth phase of activity placing G237 within the second or third phase.

A second group of burials consisted of graves primarily located under wall (10.0737) or its internal fill (10.0371). They consisted of first phase burial G229, second phase burial G227, third phase burial G231 and fourth phase burial G230, with graves G232 to G234, G250 and G351 potentially belonging to any one of the four phases.

A linear group of four graves, G112 to G114 and G192, was excavated along the south boundary of F296, and two groups of intercutting graves were excavated to the east of F296 within the boundary marked by the earlier ring of postholes. These include graves G311, G312, G309 and G358; and graves G159 and G160). Located within the ring of postholes denoting the limits of F296 were nine graves, G160, G191, G193, G199, G225, G226, G234, G324 and G375, that showed no physical relationships with other graves, therefore it was not possible to associate these with any phase of activity.

A series of roughly coursed low walls were built directly on top of the capstones of some graves, forming two sub-square spaces with rounded corners. The northern most of these spaces (10.0377) was particularly ephemeral with much of the stone being disturbed or removed prior to excavation. This wall was stratigraphically directly above graves G225, G246, G324 and G325, and in direct physical contact with the upper fills of graves G247 and G248. The southernmost structure (10.0373) was better preserved (*Plate 20*), with the wall appearing to be complete with an opening to the south which may have acted as an entrance way. The interior of this space was deliberately backfilled with rubble (10.0371) measuring 3.12m long and 1.00m wide. It consisted of a 0.12m thick loosely packed sub-angular to sub-rounded medium pebbles to medium cobbles with some being heat affected though there was no pattern to the distribution of heat affected stones. This indicates this may have been a mound rather than an open structure with an internal space and the possible entrance may simply be an area of poor survival. Structure (10.0373) was stratigraphically above graves G232, G334 and G351, and in physical contact with the upper fills or capstones of graves G213, G229, G231, G236, G237, G277, G243, G250 and G333. Radiocarbon dates of indeterminate plant material from the silt (10.0372) within rubble fill (10.0371) returned a late Roman to early medieval date of *c*. 382 - 538 AD. Four graves were located entirely within the inner faces of wall (10.0373) beneath fill (10.0371), these were the three adult graves G228, G230, G233 and neonate grave G244. Finds recovered from within the structure of (10.0373) were mostly worked stone and quern fragments, and may represent the use of stone materials readily available in the immediate area.

In the centre of structure (10.0373), cutting through G230 was posthole [10.1199]. One of the capstones (10.1178) from grave G230 had been removed in order to dig it (*see Plates 21 and 22*). The posthole was circular measuring 0.32m in diameter and 0.18m deep with vertical sides leading

gradually to a concave base. It had packing stones (10.1213) around the sides of the posthole and was filled by (10.1198), a soft dark brown silt sand. Sealing this feature was deposit (10.0371).

Finds recovered from deposits associated with F296 include Roman pottery (SF0154, SF0155 and SF0161), corded Roman or post-medieval nails (SF0156 and SF0174), Slag (SF0157 and SF0160), prehistoric lithics (SF0159 and SF0175), fired clay (SF0172 and SF0176), furnace lining (SF0173) and worked stone (SF0165, SF0179 and SF0180). It is likely that most, if not all, are residual and have no direct association with the graves. Graves G112, G159 and G160, within F296, showed evidence of reuse with schist slabs placed vertically across the grave. In grave G112 the schist slabs were located toward the east end of the grave creating a smaller space as the probably foot of the grave. In grave G159 and G160 (which were adjacent to one another) the vertical slabs were placed approximately in the centre, creating two spaces of roughly equal size (*Plate 23*). This may have been done to create an 'annex' to contain the remains of the original individual and re-use the original grave for a later internment. Evidence of this practice was identified at another early medieval cemetery at Llangefni, Anglesey which had better bone preservation (ABA, forthcoming). The density of graves in this area may suggest an alternative to constructing new cists or there may have been a practice of re-using family graves. Some of the graves within F296 contained later post holes placed in gaps within capstones which may have held grave markers for the purposes of locating or identifying graves, these included posthole [10.1791] between graves G193, G355 and G233; postholes [10.2312] and [10.1740] to the south of graves G233, G232, G250 and west of G351; Posthole [10.1129] in the centre of grave G230, though given this postholes central location within (10.0371) this posthole may have had a different purpose; Posthole [10.0918] at the east end of grave G333 and cutting G236; Posthole [10.1164] cut into the west end of grave G228 and posthole [10.1306] cut into the east end of grave G229.

- Posthole [10.1791] was circular measuring 0.22m in diameter and 0.19m deep with steeply sloping sides leading gradually to a concave base which was filled by (10.1790), a firm mid brown black sand silt with charcoal flecks.
- Posthole [10.2312] was sub-triangular with rounded corners, measuring 0.67m long, 0.45m wide and 0.34m deep with near vertical sides leading gradually to a concave base which was filled by packing stones (10.1730), between these and the cut was fill (10.1731), a firm mid brown black sand silt with frequent charcoal flecks. Overlying the packing stones was fill (10.1729), a firm mid brown black sand silt with frequent charcoal flecks. This posthole was cut by posthole [10.1740]. Posthole [10.1740] was oval measuring 0.46m long, 0.24m wide and 0.27m deep with vertical sides leading gradually to a concave base filled by (10.1739), a firm mid brown black sand silt with frequent sub-angular small to medium cobbles.
- Posthole [10.1129] was circular measuring 0.32m in diameter and 0.22m deep with near vertical sides leading gradually to a flat base which was filled by packing stones (10.1145). Overlying this was fill (10.1128), a soft dark brown silt sand with moderate inclusions of sub-angular coarse pebbles.
- Posthole [10.0918] was sub-oval measuring 0.40m long, 0.30m wide and 0.30m deep with vertical sides leading gradually to a flat base which was filled by packing stones (10.0919). Overlying this was fill (10.0917), a firm dark grey black silt with frequent charcoal and occasional daub inclusions.
- Posthole [10.1306] was oval measuring 0.46m long, 0.35m wide and 0.28m deep with near vertical sides leading gradually to a concave base which was filled by packing stones (10.1305). Overlying this was fill (10.1304), a soft dark brown sand silt.

Plate 23. Mid-excavation of grave G160 and G188 with vertical slap visible in grave G160, creating 'annex'. View from the North-West, 2m scale.

Six graves within F296 had no evidence of any remaining cist stones(G170, G248, G324, G325, G351 and G355) though this may be due to differing levels of preservation. Two graves within F296 contained the degraded remains of wooden linings (G216 and G238), with both of these graves also being lined with side stones though only G238 had capstones. Only five of the graves within F296 contained any human remains (G228, G230 (*Figure 18*), G233, G236 and G243 (*Figures 19 and 20*)), all had side stones and capstones except G243 which only had side stones. All the skeletal remains were in poor condition. Grave G228 contained indeterminate fragmentary remains of bone (SK10.1002; *see Plate 19*); G230 contained severely eroded teeth (SK10.1236) which indicated an individual aged 12-25 years old; G233 contained two individuals(SK10.1607 and SK10.2920), with (SK10.1607) consisting of the fragmentary remains of a skull, including a single tooth and some bone fragments judged to be an adult based on premolar wear patterns on the only surviving tooth (*Plate 24*); whilst (SK10.2920) consisted of fragmentary remains of burnt bone. G236 contained fragmentary remains of indeterminate skull and bone fragments (*Plate 25*). G243 contained the fragmented remains of a femur no age or sex could be determined (*see Plate 14*).

Plate 24. Mid-excavation of grave G233 with human remains SK10.1607. View from the East, 1m scale.

Plate 25. Mid-excavation of grave G236 with human remains SK10.1353 and the remains of wooden lining (below scale) within grave. View from the East, 0.1m scale.

Twelve of the graves had small finds which included slag, fired clay, lead fragments and flint associated with their fills. None of these finds appeared to be in their original context and were likely to be residual and associated with earlier activity at the site. Radiocarbon dating of skeletal material (10.1607) recovered from G233 returned an early medieval date of c. 551 – 643 AD. Two of the graves, G233 and G232, had been backfilled with a red and orange clay material prior to being covered by a capstone. This material was likely from an earlier possible hearth the graves had been cut through. This burnt clay contained large fragments of charcoal, slag, metal and some burnt bone fragments. The orange clay material in G233 was confined to the area of the head and upper torso of the body, with a stain which indicated a supine burial, whilst in G232 it was confined to the area around the feet.

G232 had been cut by the later G250 (*Figure 21 and 22*). This was a smaller juvenile grave which had been backfilled in a similar way before capping and had reused the cist originally constructed for G232, leaving only the very east end of the original grave undisturbed. The only area within F296 that did not contain any graves was a square of undisturbed natural to the north which became very conspicuous once all the graves had been excavated.

Beyond F296 the cemetery was generally well organised with distinct groups and rows which likely formed organically based on the visibility of existing graves. Most of the cemetery extended downhill to the east and south from F296 with a few exceptions lying to the west. At its southern limit the cemetery truncated an area of probable Romano-British industrial activity, likely to be associated with the settlement to the north. The southern limit of the cemetery was denoted by the earlier revetment wall associated with the earlier enclosed settlement, suggesting that it was still visible in the landscape while the cemetery was in use. The majority of the graves were within this boundary, cutting into either bedrock or pockets of colluvial silts overlying the bedrock, with only a handful of exceptions having been cut through the rubble of the wall (graves G060, G205,

G342, G359, G384, G397, G403 and G407). There were no graves cut into the natural gravels which dominated south of the wall. Small finds recovered from the graves include Roman and post-medieval pottery, worked stone fragments, animal bone, shell, slag, furnace lining, charcoal and metal fragments, most of which are likely residual elements present in the fill of the graves.

Within the cemetery more than half (19) of the neonate graves were in the southern half, with a particular concentration in the south-east quarter. The graves located to the east of Feature 296 were orientated east to west and were ordered in neat rows with little intercutting of graves. The graves immediately to the west of Feature 296 were orientated west-north-west to east-south-east with a number of the greaves intercutting one another especially at the northern limit of the cemetery where the graves were cut through the rubble associated with the settlement phase of the site.

Immediately south of Feature 296 the graves in the western half of the cemetery were orientated east to west whilst those in the eastern half were broadly north-west to south-east with the graves becoming more mixed before being orientated west-south-west to east-north-east at the southern limit of the cemetery, possibly due to following the line of the southern boundary. Intercutting of graves became more common around the area of Romano British industrial activity where stone walls, surfaces and other features were present. A small number of graves were cut through and then backfilled with rubble layer (10.1998) from the southern boundary wall.

There were several patterns in the distribution of different grave types across the cemetery. Of the nine graves with base stones there were six (graves G225 G226,G227, G260, G309 and G311) completely within the boundary of Feature 296 whilst three graves, G281, G376 and G388, lay outside the boundary of Feature 296, all by less than 5m. No other graves were found to have base stones.

Of the 43 graves that showed no evidence of stone lining, 20 of them were concentrated in the north-east quarter of the cemetery with 11 being immediately to the east of Feature 296. Six graves with no stone lining were located within Feature 296. Nineteen of these 43 graves were of a size likely to have contained a neonate/infant (4 x 0-1m long) or Juveniles (15 x 1-1.70m) with the remaining 23 being adult sized graves (longer than 1.70m). It is unclear if this concentration is the result of deliberate burial without a cist or a result of reuse of visible stones for other nearby graves, possibly indicating the relative age of some of the graves.

Of the 63 graves that had side stones but no capstones 38 were located in the north-east corner of the cemetery and 12 were located within Feature 296 itself, with the remaining 13 being scattered across the rest of the cemetery with no obvious pattern. It is likely that these graves originally had capstones but they may have been reused or lost. It is interesting to note the concentration of graves without capstones on the top of the plateau whilst far more graves had their capstones preserved to the south of the site where the overlying subsoils were deeper. This may be an indication of capstones visible on the surface being reused for later graves or loss through ploughing or other later land use.

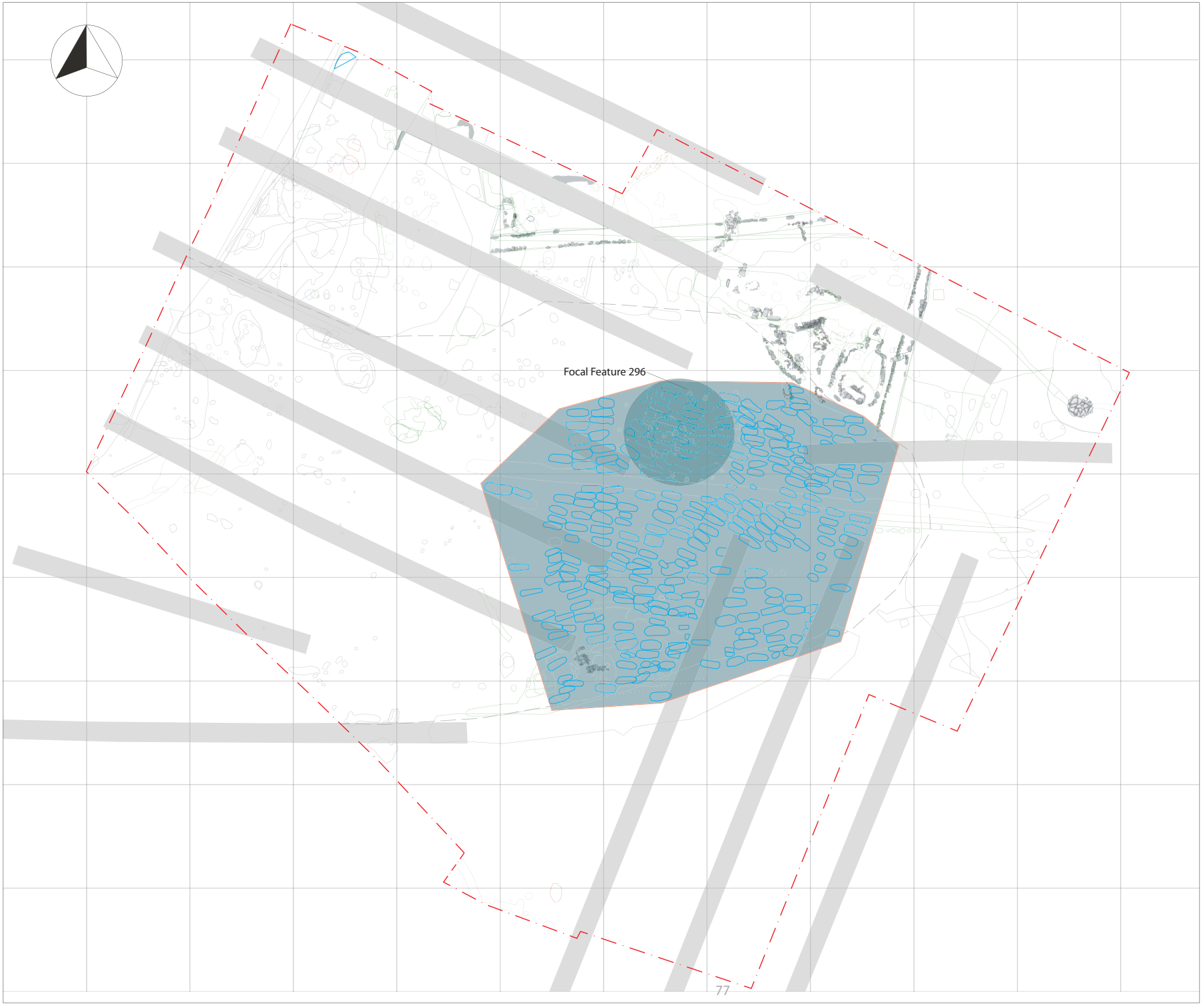
Twenty-three graves were identified during evaluation trenching by Headland Archaeology all of which were identified and recorded with new grave numbers during the ABA excavation to reduce the likelihood of counting errors:

- Five cist burials were identified during evaluation trenching in trench 2155 located immediately south-west of Feature 296; with 2155-004 equating to grave G116, 2155-005 equating to grave G118; 2155-006 equating to both grave G154 and G281; 2155-007 equating to grave G115 and 2155-008 equating to grave G287;
- Three burials were identified during evaluation trenching in trench 2156 located south of trench 2155 with 2155-004 equating to grave G412, 2156-008 equating to grave G334 and

2156-011 equating to grave G339. During the excavation phase a further four graves were identified partially within the footprint of this evaluation trench, they were graves G005, G270, G277 and G341, two of these are likely to equate to 2156-018 and 2156-029 identified in the sections of the evaluation trench;

- Five burials were identified during evaluation trenching in trench 2157 located south of trench 2156; with 2157-003 being revealed to not be a grave during the excavation phase whilst 2157-004 equates to grave G012, 2157-05 equates to grave G279, 2157-006 equates to grave G349 and 2157-007 equates to grave G280;
- Three possible burials were identified during evaluation trenching in trench 2164 which was located to the south of the cemetery lying across the southern boundary wall. Of the graves observed in plan 2164-004 equates to grave G258, 2164-030 equates to grave G305 and 2164-042 equates to grave G406.
- A further five potential graves were identified by Headland Archaeology, of these 2167-007 equates to grave G055, 2164-013 equates to grave G056, 2164-033 equates to grave G039, 2164-036 equates to grave G401 and 2164-044 equates to grave G051 with cut feature 2164-042 possible equating grave G406;
- Two burials were identified in plan during evaluation trenching in trench 2165 located in the southern portion of the cemetery east of trench 2164. Of the graves identified in plan 2165-007 equates to grave G198 and 2165-005 equates to G211. A further six graves were identified in section, of these 2165-008 equates to grave G197, 2165-010 was not visible upon the re-opening of the trench, 2165-022 equates to grave G210, 2165-012 likely equates to G207, 2165-015 likely equates to grave G205 and 2165-018 equates to grave G397. During the excavation phase a further three graves were identified within the footprint of this evaluation trench, graves G206, G208 and G209); ;
- No graves were identified during evaluation trenching in trench 2163, located immediately east of F296. During excavation six graves were identified the footprint of this evaluation trench, graves G135, G180, G320, G336 and G370.

Radiocarbon dating of bone samples recovered by Headland Archaeology from cist 2156-004 retuned a date of 1249 cal BP, placing the remains at *c*. 700 AD (8th century). Radiocarbon dating of charcoal and cereals from graves 2156-004 and 2156-011 in trench 2156, and graves 2157-004 and 2157-006 in trench 2157 returned dates of between 1836 cal BP (*c*. 114 AD) and 1392 cal BP (558 AD). However, the cereal and charcoal fragments are possibly residual elements within the grave fills and may not necessarily be representative of the date for the cemetery. Radiocarbon dating of skeletal remains recovered by ABA revealed early medieval dates ranging from *c*. 426 – 579 to 603 – 666 AD (see Table 2, section 4.5 and *Appendix XI & XII*).



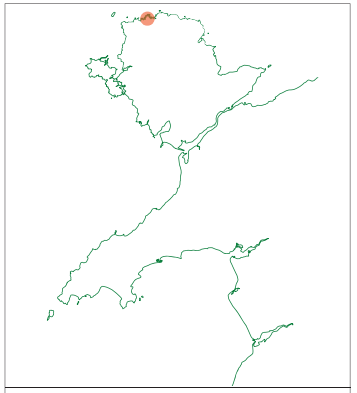


Figure 17
Wylfa Head excavation area.
Early Medieval activity.

Key

- Limit Of Excavation
- Evaluation Trenches
- Early Medieval Features
- Area of Early Medieval activity
- Area of Early Medieval Cemetery
- Extent of bedrock outcrop

Drawn By: KM

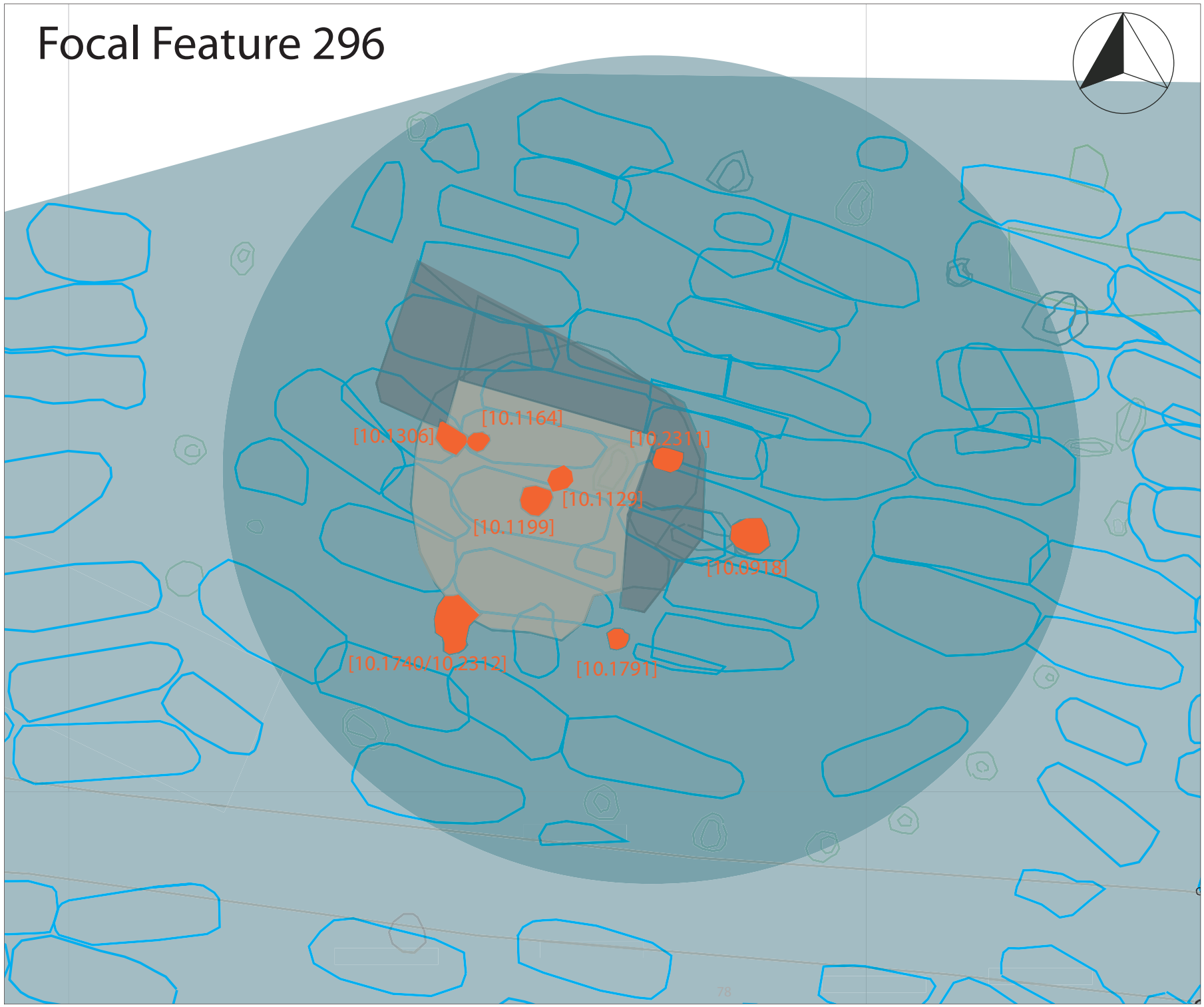
Date: 07/04/20 (edited 14/10/21)

Location: SH35769384

Project: AB1703 Wylfa Head

Archaeoleg Brython Archaeology

Focal Feature 296



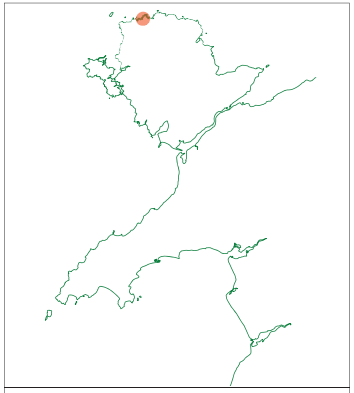


Figure 17a
Wylfa Head Early Medieval Cemetery Focal Feature 296

Key

- Evaluation Trenches
- Graves
- Area of Earlly Medieval Cemetery
- Wall of F296 (10.0373)
- Rubble Within F296 (10.0371)
- Postholes Associated with F296

Drawn By: KM/IGP

Date: 25/01/22

Location: SH35769384

Project: AB1703 Wylfa Head

Archaeoleg Brython Archaeology

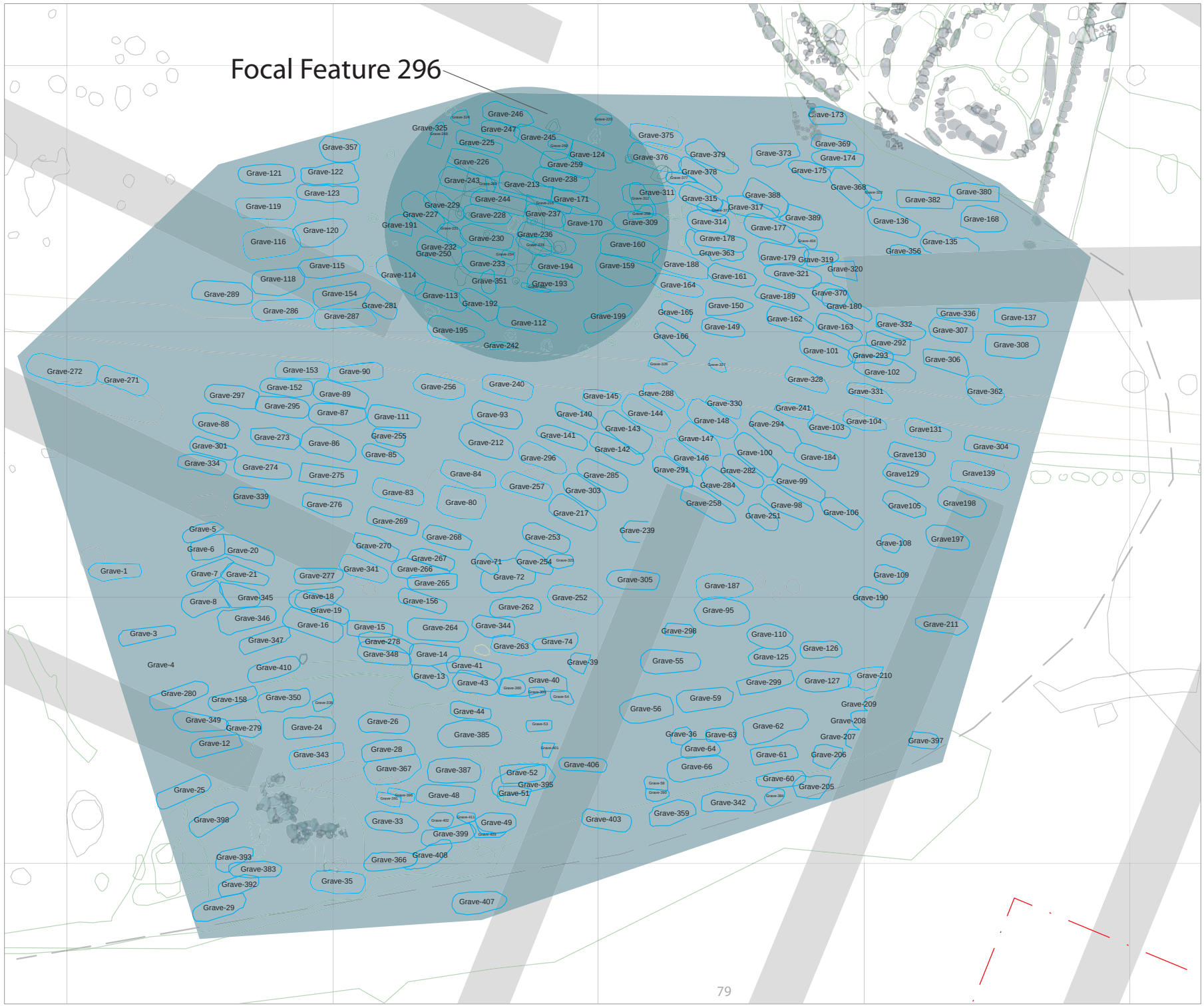


Figure 17b
Wylfa Head Early Medieval Cemetery with grave numbers.

Drawn By: KM

Date: 14/10/21

Location: SH35769384

Project: AB1703 Wylfa Head

Archaeoleg Brython Archaeology

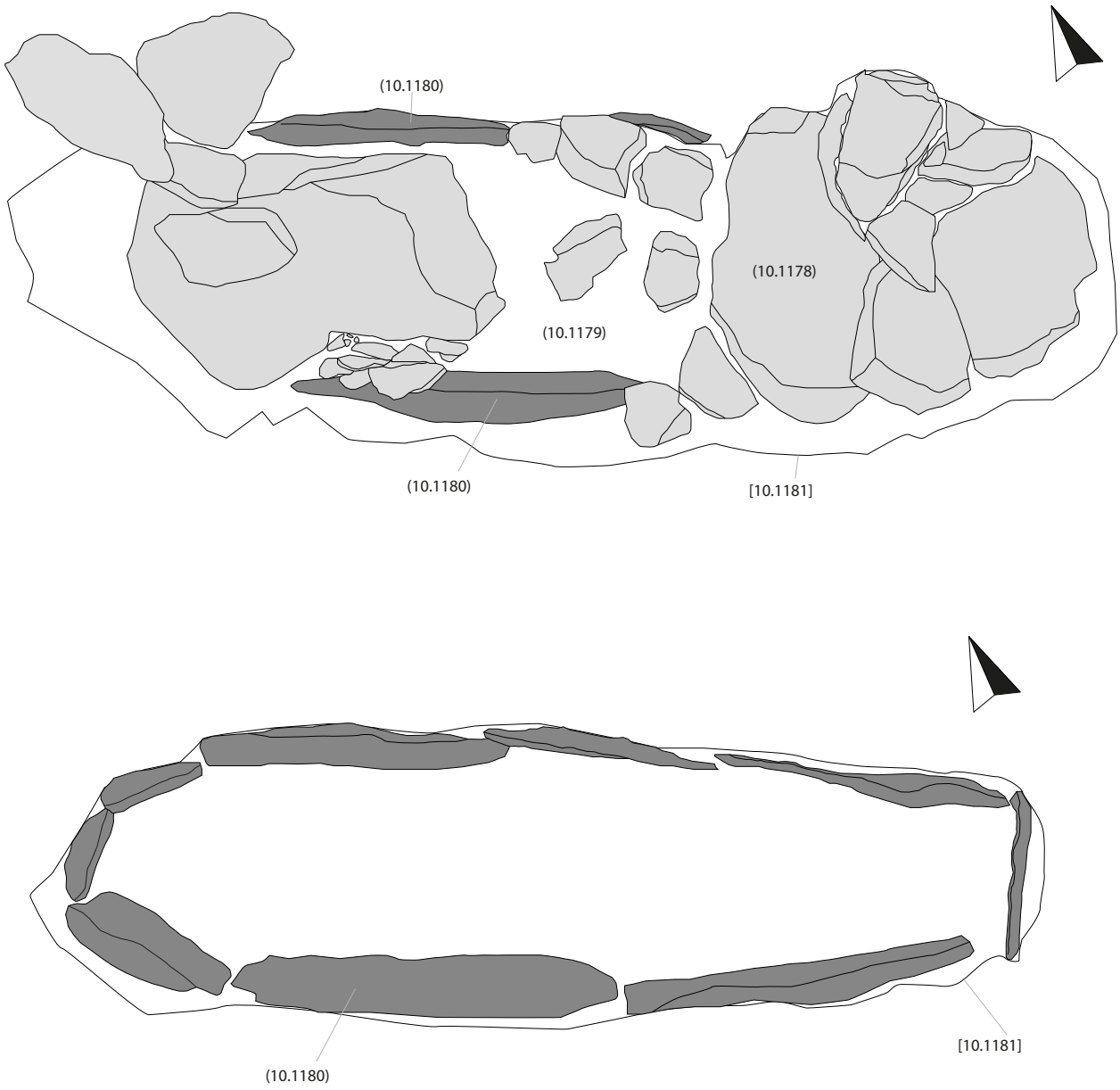
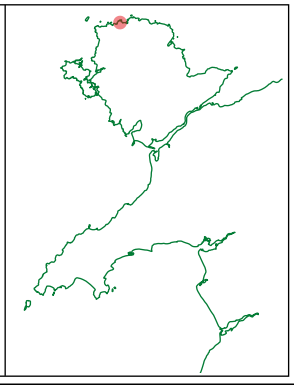


Figure 18
Plans of G230 showing position of capstones (10.1178) and side stones (10.1180).

Project No.	AB1703
Drawn By:	KM/IGP
Date:	14/10/2021
Location:	SH35769384

Key

Capstones
Side stones



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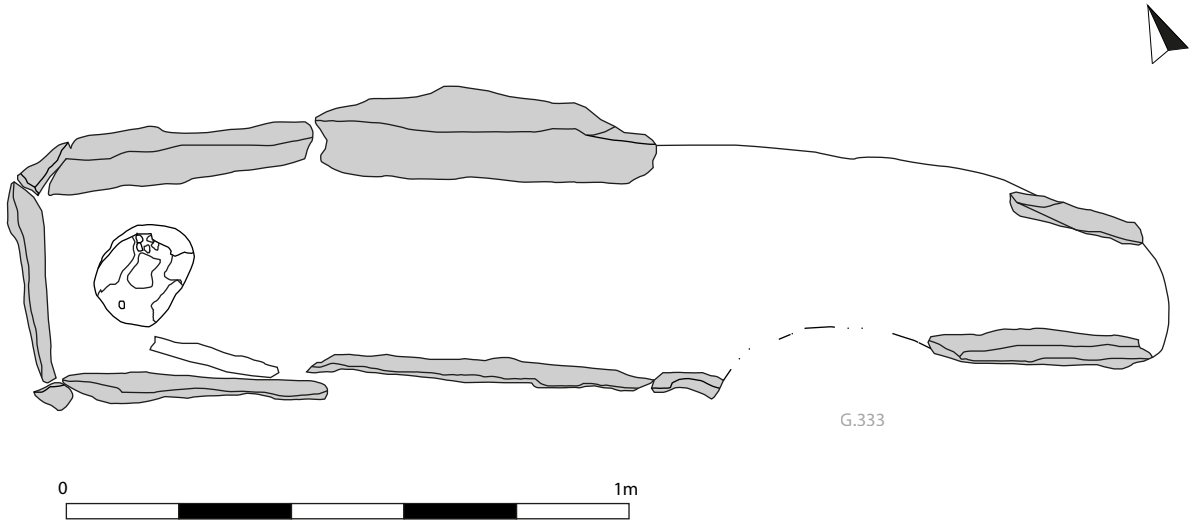


Figure 19. Plan of G.236 showing the sidestones (10.1011) and skeleton (10.1353) within cut [10.1007]

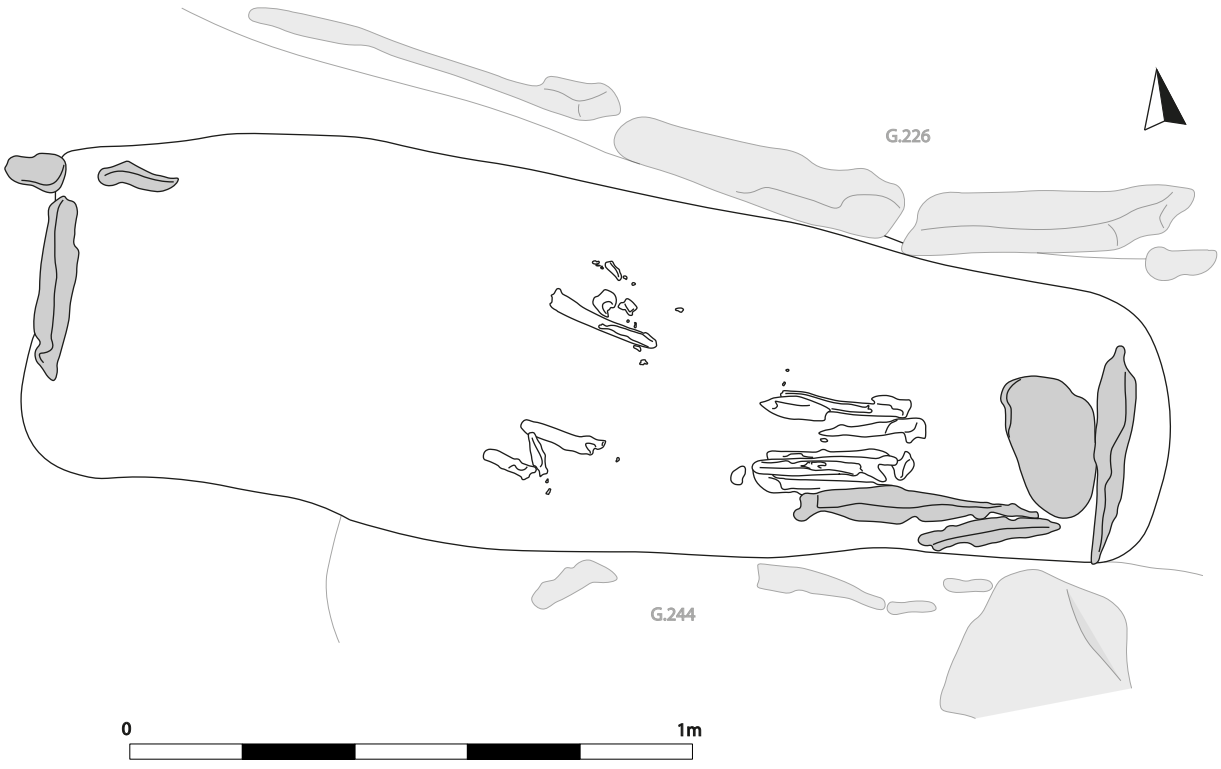


Figure 20. Plan of G.243 showing the sidestones (10.0803) and skeleton (10.0784) wthin cut [10.0803]

Figures 19 & 20
Graves G.236 and G243.

Project No.
AB1703

Drawn By:
KM/IGP

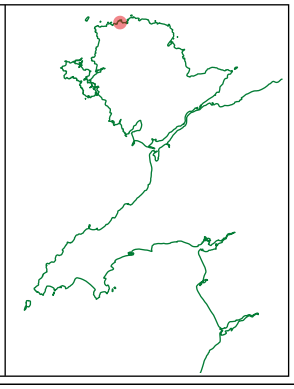
Date:
14/10/2021

Location:
SH35769384

Key

Stone

Bone



Archaeoleg Brython Archaeology

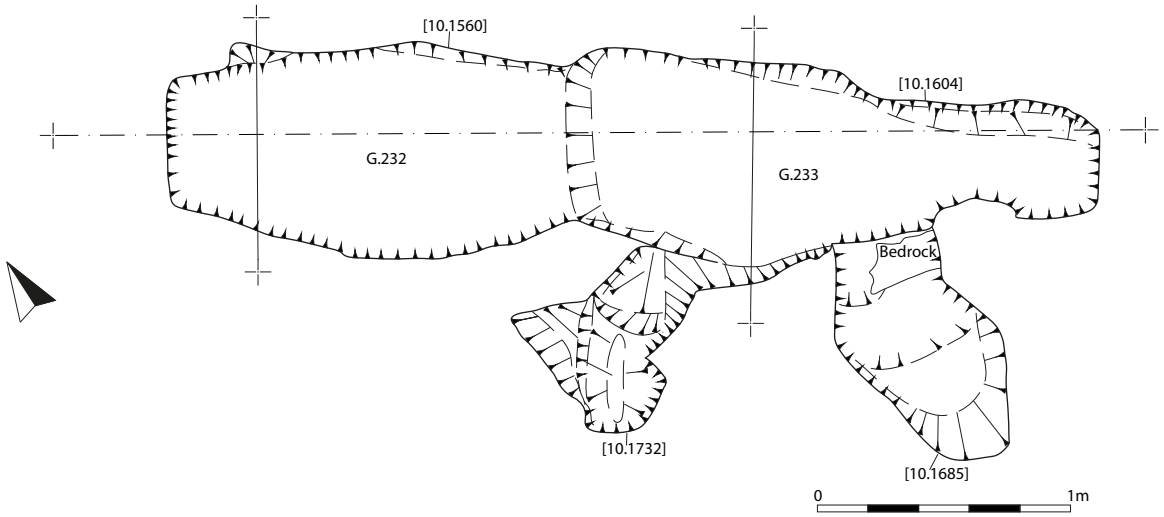


Figure 21. Plan showing the relationship between G.232 and G.233

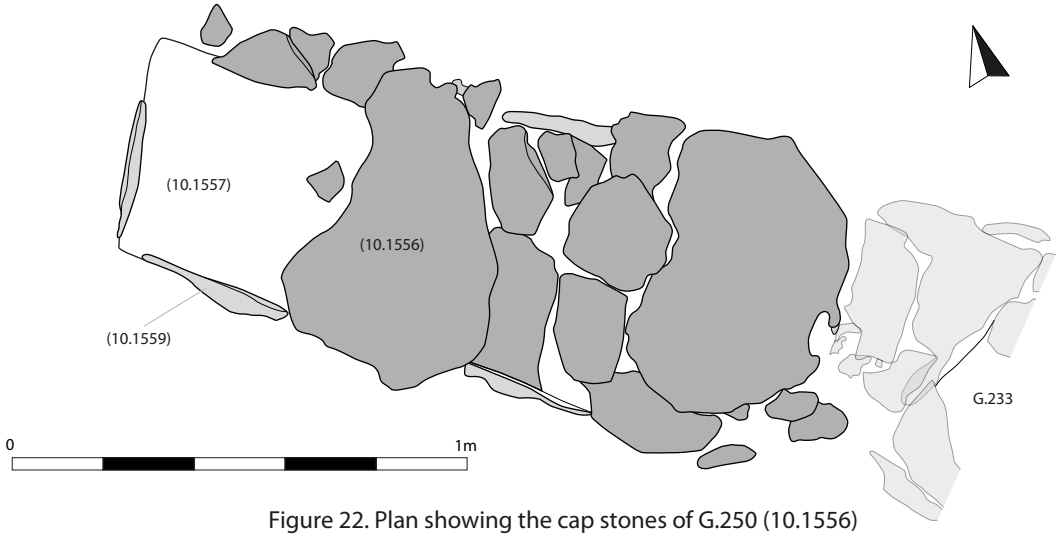


Figure 22. Plan showing the cap stones of G.250 (10.1556)

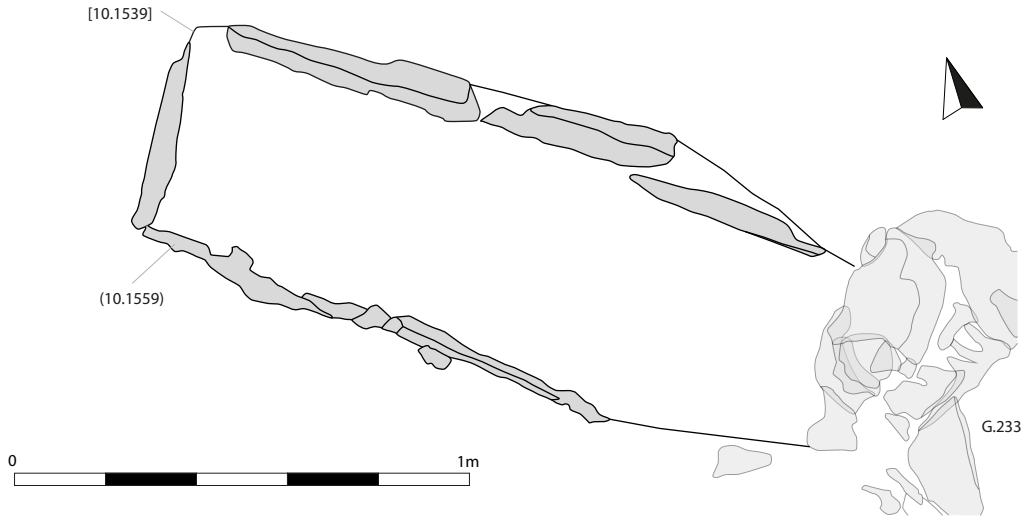


Figure 23. Plan showing the side stones of G.250 (10.1559)

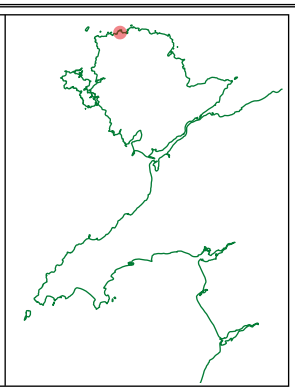
Figures 21 - 23
Graves G.232, GG.233 and G250.

Project No.	AB1703
Drawn By:	KM/IGP
Date:	14/10/2021
Location:	SH35769384

Key

Cap stones

Side stones



Archaeoleg Brython Archaeology

3.2.4 Period 7 (Post-medieval to modern)

A post-medieval ditch (F319) (HER GAT PRN 91825) which truncated several graves was the main feature of this period which interacted with the earlier archaeology (*Figure 24*). The ditch pointed towards a square, rock-cut shaft (HER GAT PRN 91826) which was located on the crest of the highest part of the site. No dating evidence was recovered from the ditch and shaft, but its character and nearby rock cut features from which post-medieval artefacts were recovered suggest that it is likely to be of a similar date. The finds from these nearby features included post-medieval ceramics, clay tobacco pipe fragments, and metalwork, mostly agricultural in origin. None of the finds are expected to be retained following initial assessment. Subsequent map regression has also shown that buildings associated with Wylfa House once stood immediately west of the shaft.

3.2.5 Features of undetermined date

Several features were identified on the top of the hill at the western edge of the excavation area from which no accurately datable evidence was recovered. These are likely to be associated with Iron Age and Romano-British activity at the site but could also date to the early medieval period. Most of the features consisted of small pits and post-holes (HER GAT PRN 91827) which appear to form structures, windbreaks or fences, and laid rough stone surfaces (Figure 25).

A linear trend of approximately 30 post-holes were excavated at the western limit of the excavation area:

- Post-hole [10.0085] was sub-circular, measuring 0.22m long, 0.17m wide and 0.34m deep with near vertical sides leading gradually to a blunt point base. A ceramic spindle whorl (SF121) recovered from the base suggest a possible Roman to Medieval date for this feature.
- Post-hole [10.0090], located immediately east of [10.0085], was sub-circular and measured 0.27m long, 0.22m wide and 0.26m deep. It had steep sloping sides leading to a rounded point base.
- Post-hole [10.0092], located immediately east of [10.0090], was sub-circular and measured 0.67m long, 0.35m wide and 0.30m deep. It had vertical sides leading to a flat base and had a possible quern stone (SF131) used as a packing stone towards the south-west end of the base.
- Post-hole [10.0106] was circular measuring 0.28m in diameter and 0.20m deep with steep sides leading to a concave base. The fill (10.0107) contained occasional inclusions of charcoal flecks.
- Post-hole [10.0109], located to the east of [10.0106], was circular and measured 0.34m in diameter and 0.30m deep with near vertical sides leading sharply to a concave base. The fill (10.0110) contained large packing stones.
- Post-hole [10.0114], located immediately east of [10.0109], was circular and measured 0.27m in diameter and 0.45m deep. It had near vertical sides leading to a flat base. The fill (10.0115) contained inclusions of charcoal and potential packing stones.
- Pit [10.0044] was sub-circular and measured 0.4m long, 0.26m wide and 0.22m deep. It had a vertical south side and gradual north side leading gradually to a flat base.
- Post-hole [10.0046], located north of [10.0044] was sub-circular in shape measuring 0.32m long, 0.21m wide and 0.17m deep. It had near vertical sides leading to a flat base that had been cut trough pit [10.0044]. The fill (10.0047) was a loose dark grey brown sand silt with inclusions of charcoal and numerous large packing stones. Within the centre of the post hole the fill appeared more organic in nature and indicative of the remains of a rotted or burnt post *in situ*.

- Post-hole [10.0056], located south-east of [10.0046], was circular and measured 0.14m in diameter and 0.18m deep. It had steep sides leading gradually to a concave base. The fill (10.0057) contained four small packing stones.
- Stake hole [10.0058], located south east of [10.0046] and adjacent to [10.0056], was circular in shape measuring 0.1m in diameter and 0.07m deep. It had steep sides leading imperceptibly to a concave base.
- Post-hole [10.0074], located to the east of [10.0058] was sub-circular and measured 0.5m long, 0.4m wide and 0.38m deep. It had vertical sides leading gradually to a flat base. The loose mid grey brown sand silt fill (10.0075) contained packing stones and was mostly removed during evaluation trench 2156-029.
- Post-hole [10.0025] was sub-circular and measured 0.25m long, 0.28m wide and 0.2m deep. It had with vertical sides leading sharply to a flat base. The fill (10.0024) contained occasional inclusions of sub-angular stones and charcoal flecks.
- Post-hole [10.0037], located immediately east of [10.0025], was circular and measured 0.38m in diameter and 0.13m deep. It had vertical sides leading sharply to a flat base. The fill (10.0036) contained inclusions of small sub-angular stones and occasional charcoal flecks.
- Post-hole [10.0026], located east of [10.0037], was circular and measured 0.32m in diameter and 0.14m deep. It had steep sides leading gradually to a concave base. The fill (10.0027) consisted of a compact mid brown gravel with inclusions of small angular stones.
- Post-hole [10.0028] was oval and measured 0.42m long, 0.23m wide and 0.07m deep. It had steep sides leading imperceptibly to an irregular base. The fill (10.0029) was similar to (10.0027).
- Post-hole [10.0067], located north of [10.0025], was circular and measured 0.26m in diameter and 0.19m deep. It had steed sides leading gradually to a concave base. The dark grey brown sand silt fill (10.0066) contained inclusions of occasional charcoal flecks and sub-angular stones.
- Post-hole [10.0137], located north-west of [10.0067] was sub-circular and measured 0.37m long, 0.36m wide and 0.07m deep. It had gradual sloping sides, steep to the west, leading gradually to a concave base. The fill (10.0136) contained occasional inclusions of small sum-angular stones
- Post-hole [10.0178], located north of [10.0137], was sub-circular and measured 0.52m long, 0.40m wide and 0.16m deep. It had steep sides leading gradually to a concave base. The fill (10.0177) consisted of a mid yellow brown silt clay with occasional inclusions of sub-angular stones.
- Post-hole [10.0197], located to the east of [10.0178], was sub-circular and measured 0.83m long, 0.60m wide and 0.30 deep. It had gradual sloping sides, steep to the north-east, leading gradually to a flat base. The fill (10.0196) contained moderate inclusions of large angular to sub-angular stones.
- Post-hole [10.0213], located west of [10.0197] was sub-circular and measured 0.27m long, 0.23m wide and 0.21m deep. It had steep sides leading gradually to a concave base. The fill (10.0212) contained occasional inclusions of medium sized angular stones.
- Post-hole [10.0159], located north of [10.0197], was sub-circular and measured 0.35m long, 0.25wide and 0.15m deep. It had steep sides leading gradually to a concave base. The fill (10.0160) consisted of a loose light orange grey clay silt with moderate inclusions sub-angular packing stones.

At the north-eastern end of the alignment was a group of eight postholes which were sealed by surface (10.0079)=(10.0080). This group consisted of a line of three post-holes [10.0198], [10.0217] and [10.0219], that contained a similar fill of friable mid orange brown sand clay with moderate

inclusion of small to large stones. To the east another line of five post-holes [10.0081], [10.0102], [10.0104], [10.0221] and [10.0223] was excavated and contained a similar fill of friable mid grey brown sand clay with moderate inclusions of small to large stones.

- Post-hole [10.0198] was sub-circular and measured 0.40m long, 0.36m wide and 0.26m deep. It had steep sides leading sharply to a concave base.
- Post-hole [10.0217] located north of [10.0198], was oval and measured 0.48m long, 0.26m wide and 0.15m deep. It had steep sides leading gradually to an irregular base.
- Post-hole [10.0219], located north of [10.0217], sub-circular steep sides leading gradually toa concave base.
- Post-hole [10.0081] was sub-circular and measured 0.34m long, 0.30m wide and 0.14m deep. It had near vertical sides leading sharply to a concave base.
- Post-hole [10.0102], located north of [10.0081], was sub-circular and measured 0.22m in diameter and 0.16m deep. It had steep sides leading sharply to a concave base.
- Post-hole [10.0104], located north of [10.0102], was circular and measured 0.50m in diameter and 0.31m deep. It had near vertical sides leading sharply to a concave base. The fill (10.0105) contained occasional inclusions of charcoal flecks.
- Post-hole [10.0221], located north of [10.0104], was sub-circular and measured 0.30m long, 0.24m wide and 0.09m deep. It had steep sides leading gradually to a concave base.
- Post-hole [10.0223], located north of [10.0221] was sub-circular and measured 0.56m long, 0.34m wide and 0.14m deep. It had steep sides leading gradually to a concave base. The fill (10.0224) interfaced with floor surface (10.0080).

Surface (10.0079) = (10.0080) measured 5.76m in length, 3.16m wide and 0.27m deep. This surface overlaid post-holes [10.0198], [10.0081] and [10.0102] The surface consisted of a friable mid grey brown sand clay with frequent inclusion of stone, and occasional inclusions of charcoal. Small finds recovered from the surface consisted of an irregular pebble (SF1042), a possible quern stone (SF1088) and daub (SF1104).

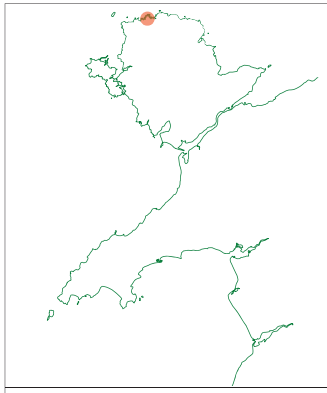


Figure 24
Wylfa Head excavation area. Post Medieval and Modern activity.

Key

- Limit Of Excavation
- Evaluation Trenches
- Post Medieval and Modern Features
- Extent of bedrock outcrop

Drawn By: KM

Date: 06/04/20 (edited 14/10/21)

Location: SH35769384

Project: AB1703 Wylfa Head

Archaeoleg Brython Archaeology

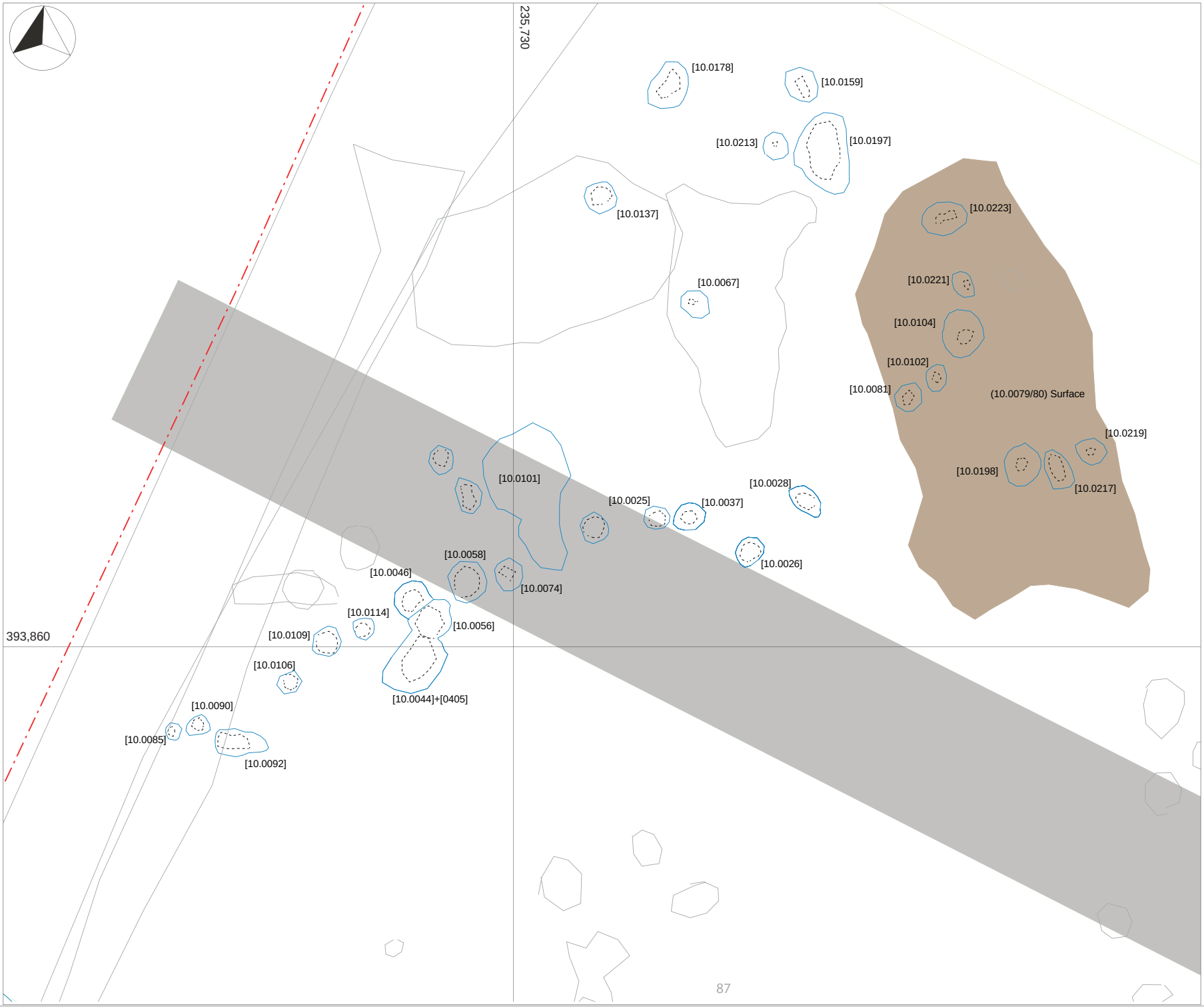


Figure 25
Undated Features
HER GAT PRN 91827

Key

- Cut
- Base
- Surface
- Evaluation Trench

Drawn By:	RN, IGP
Date:	25/01/22
Location:	SH 3573 9386
Project:	AB1703

Archaeoleg Brython Archaeology

4 Assessment of Potential and Significance

All finds were treated in accordance with the guidelines set out in Watkinson and Neal's (2001) and CIfA's (2014a; 2014b) standards and guidelines in collecting, packaging and documenting of archaeological materials. The finds assemblage (excluding human remains) and environmental samples were transferred to WA in April 2019 for curation and assessment of potential. All processing of artefact and ecofacts were undertaken away from site. At the time of writing the finds assemblage was under the curatorship of WA.

4.1 Finds Assessment

A total of 1932 small find numbers (SF), of which 34 were voided, was assigned to artefacts recovered during the excavation. Seventy-eight of these were reported as 'missing' by WA (Table 5.1, *Appendix V*). Of the 78 small find numbers, one metal find (SF0046) was sent with the metal finds assemblage to Cardiff University for immediate conservation, and only 56 of the 78 finds were identified as missing by ABA:

- CBM: SF0753, SF1454
- Metal: SF1570, SF1811, SF1812
- Fired Clay: SF0172, SF0176, SF0344, S0F611, SF1452
- Glass: SF1496, SF1560
- Lithic: SF0018-SF27, SF0053, SF0088, SF0133, SF0385, SF0643, SF0644, SF0815, SF0908, SF0966, SF0975, SF0977, SF1261, SF1836
- Mortar: SF0584, SF1453
- Pottery: SF0107, SF0287, SF0410, SF0591, SF0801, SF1320, SF1847
- Slag: SF0368, SF0508, SF0537, SF0607, SF0608, SF0612, SF0679, SF1344, SF1491, SF1498, SF1664
- Stone: SF1862

The finds assessment was compiled by Sue Thompson. Lithic artefacts were assessed by Miguel Gonzalez, the Prehistoric pottery by Frances Lynch, the Roman coins by Frank Gieccoand the large stone and slate artefacts were assessed by Megan Stoakley with assistance from Mike Mann. The full Finds Assessment Report is included as Appendix V.

4.1.1 Prehistoric Pottery

Five fragments of prehistoric pottery were recovered from the site:

- SF0560 – unstratified sherd from grave G025, possibly Neolithic, not received by Mrs. Lynch
- SF0861 – single sherd of hard red/black pottery broken in two, with sharp angular grid, including small pieces of dark mica and large pieces of a lighter rhyolite. Smooth black inner surface with abrasive red outer later with raised grits.
- SF1801 – single scrap of red/black pottery that was thinner and softer than SF0861, and with some quartz rather than mica.
- SF1418 (34 x 40 x 8mm) – fabric was sandy and soft, a grey beige on the outside and yellow beige on the interior with a light grey core. Contained dark stone grits. Inner surface eroded with outer surface smooth with slight regular striations as if grass-wiped.

- SF1438 (61 x 40 x 6-9mm) – fabric was lighter in colour than SF1418, but had the same texture and finish.

SF0861 and SF1801 are likely Bronze Age in date and generally similar to material recovered from sites around the Cemaes shore and the assemblage from EV9 near Tregele. SF1418 and SF1438, both from the same context (10.2375) was from the neck (240mm in diameter) of the same medium-sized bowl with an everted rim, and no significant shoulder. Whereas the shouldered bowl is often thought to be the characteristic form in the Neolithic of the Irish Sea area recent finds of settlement assemblages in Anglesey and elsewhere in North Wales have shown that shoulders are not often sharply defined, and that relatively straight sided bowls are not unusual. The Wylfa Head bowl may be similar to the one from the pit close to the large wooden building at Parc Bryn Cegin near Bangor (Kenney, 2008; Fig 8, SF0167) and further parallels can be found among the sherds associated with the Neolithic buildings at Parc Cybi, Holyhead (e.g. Pot 1796; Kenney *et al.,* 2020) and at Llanfaethlu (unpublished). What is less typical of the local 'Irish Sea Ware' is the soft compact fabric of these pieces. Irish Sea Ware is dark, hard-fired but with a vesicular surface from which grits have dissolved; and discoveries, from Dyffryn Ardudwy in 1960 to the present day, have been remarkably consistent (Williams and Jenkins 1976). The identification of these sherds as Early Neolithic Irish Sea Ware, therefore, is not very firmly based. The elements of shape are not particularly well-defined and the fabric is uncommon, but, equally, there is no compelling alternative, and the discovery of the Neolithic stone axes on the site provides evidence of activity in the 4th millennium BC which could provide a context for the pottery.

4.1.2 Roman Pottery

The Roman pottery assemblage consists of 262 (4635g) pottery sherds and included Black burnished ware (DOR BB1), Samian ware (LMV SA, SAM), Colour coated ware (LNV CC), mortaria fabrics (DOR BB1), Coarse grey wares (CO RE), Coarse oxidised wares (CO OX) and Amphora sherds (BAT AM 1/2). Wilderspool fabrics (WPMO) and Eastern Gaulish samian ware (ARG SA / CHF SA / TRI SA?) may also be present in the assemblage. Of the 262 Roman pottery sherds (total count), body sherds make up the bulk of assemblage (70%+), followed by rim sherds (20%+), bases (approximately 4%+) and handles (approximately 0.7%).

Vessel forms include jars, beakers, dog dishes and mortaria in a range of fabrics which included diagnostic rim and base sherds. Occasional surface treatments such as burnished lattice decoration on the Black burnished ware, and moulded Samian ware and rouletting was observed. No marker's stamps were seen. The small quantity of amphora body sherds recovered were undiagnostic. A similar range of fabrics and vessels was recovered from the A55 Anglesey Road Scheme (Evans, 2012: 177-191). Two Black burnished ware vessels (SF0152 and SF1532) appeared to have been repaired. Pottery re-use was seen in spindle whorl SF0121, made from oxidised micaceous fabric.

Further analysis is warranted and should incorporate other Roman pottery assemblages from the entire Wylfa complex. Diagnostic sherds such as rims and bases should be illustrated, as well as any decorated sherds and sherds with any discerning features such as rivets (SF**1532**) or mends. Reconstruction of conjoining sherds may be beneficial for aiding illustration and/or photography. Further analysis should include the r.EVE (*estimated vessel equivalent*) count and MNV count (*minimum number of vessels*).

4.1.3 Post-medieval Pottery

A total of 193 sherds (2100g) of post-medieval pottery were recovered during the excavation. The assemblage consists of coarse and fine glazed red and buff earthenware REFR, BEARTH), Buckley-type ware (BUCK), refined whitewares (REFW), banded wares (REFW SLIP), factory produced slipware, printed tableware (TPW/TRB), porcelain (PORC), stoneware (ENGS), Staffordshire-type slipware (STSL) and tin-glazed earthenware (TGW). The assemblage represents utilitarian household vessels such as storage jars, bowls, pancheons and tableware's dated from the 17th to 20th century. No further analysis was recommended.

4.1.4 Clay Tobacco Pipe

Seventeen fragment of clay tobacco pipe, weighing 42g, were recovered from nine context and unstratified deposits. The assemblage is in a moderate condition and included 14 stem and three bowl fragments with signs of post-depositional abrasion. The diameter of the bora ranged from approximately 2mm to 3mm, and no decoration of makers stamps were noted. One of the bowl fragments retained a spur and traces of ridge decoration, the second was decorated with a bird as part of the design and the third had a partial maker's stamp below the rim. The assemblage is likely late 17th to 19th century in date. A single clay pipe stem fragment, weighing 1g, was recovered from the environmental samples. No makers marks were seen, and the central bore was less than 2mm, suggesting a date of 18th-19th century. No further analysis was recommended.

4.1.5 Lithics

A total of 415 (4926.8g) worked lithics and 530g of unworked burnt stone was recovered during the excavation. The lithics were rapidly assessed, quantified and assigned to broad categories. Detailed technological attribute analysis was not undertaken.

The raw materials exploited consisted largely of flint derived from secondary sources (73%), in addition to black local chert (24%) and other lithologies (3%) such as volcanic tuff, Graig Lwyd Stone, rhyolite, shale and quartzite. The condition of the worked flint was varied with indication of patination (recorticated) that vary from a heavy opaque cream to light blue mottling. The recortication is potentially chronologically significant as the 'early' blade-based material was more frequently recorticated. The majority of pieces displayed some degree of edge damage, and generally corresponded to their depositional context, with finds from topsoil deposits displaying signs of heavy attrition characteristics of material from ploughzone contexts.

The assemblage consisted of 6.2% cores, 90% debitage and 3.6% retouched tools, most of which derived from the fills of cut features. Two contexts, 10.0002 (subsoil) and 10.1954 (a deposit of light grey silt sand with large concentration of flint), produced 38.7% of the assemblage. As a whole, the assemblage appeared to be chronologically mixed, with variability in the condition and technological trails of the finds.

Mesolithic/Neolithic material was represented by 142 blade-based removals, making up 34.2% of the unretouched removals indicating that a substantial portion of the assemblage is of this broad date. The blades were described as regular/prismatic blades and bladelets, with reductions largely undertaken using direct hard hammer percussion. Cores were dominated by multi-platform pieces bearing a mixture of blade-like and blade scars. Other core types included two striking platforms and keeled cores. The remainder of the assemblage consisted of flake-based material of varied

morphology with the majority hard hammer struck from simple unprepared striking platforms: 15.2% primary pieces, 7.7% secondary pieces and 52.5% tertiary pieces.

The fifteen retouched pieces recovered were dominated by scrapers represented by three types; circular, side-scraper and thumbnail. Two knife fragments and two microliths both scalene and one burin was also identified. Alongside the retouched pieces a number of pieces showed macroscopically visible traces of use indicative of being used at tools.

One clearly defined Neolithic tool kit was recovered from pit [10.0008] and consisted of three flaked axes (SF1210, SF1211 and SF1212) manufactured from Graig Lwyd stone, likely from the nearby axe factory of Penmaenmawr. Radiocarbon dating of charred material recovered from the pit confirms a Neolithic date of *c*. 3639-3515 BC. The axes are classified as D-Shaped, or Type A Thick-Butted. SF1211 was partially polished with the location of the polish indicating the presence of a handle. SF1212 was made of blue-green stone, possibly rhyolite, and presented traces of having been used as a hammer rather than an axe.

A further 82 (101g) of flint and chert pieces were recovered from 24 environmental samples.

Both the technological and typological aspects of the assemblage from Wylfa Head indicate a Mesolithic/Early Neolithic date for the flintwork and there were no clear indications of the presence of earlier or later material. The assemblage warrants further analysis and should be reported in full to give an opportunity to explore themes relating to the nature, significance and scale of flint and chert technology and its use both at the site and withing the wider landscape. Such themes include, but are not limited to:

- The chronology of flint and chert use at the site and continuities or disruptions in flint-working traditions across the transition Mesolithic/Neolithic, and choices made in the selection, acquisition and use of raw materials.
- Strategies and approaches taken to lithic reduction, the spatial and temporal organisation of lithic reduction and tool use both at the site and within the wider cultural landscape.
- The nature of the products and how these relate to the range of activities conducted at the site.
- The nature of the deposition and discard of flint waste and useable products, and how these may relate to wider concerns of the communities using them.

The significance of the flintwork merits it being published in some detail, alongside suitable illustrations. The publication text should include:

- A detailed description of the flint and chert assemblages and the technological strategies employed to make them, including metrical and technological analyses in order to allow it to be understood in its own right and to enable comparisons with other contemporary assemblages from the region.
- A description of the range of products that may have been manufactured and uses to which they may have been put.
- A consideration of spatial and chronological variations within the typological and technological composition of the material to explore how flint production, use and discard was structured across the site.
- An account of raw material variability, the possible sources and the implications that this may have had for the movement of people and resources within the wider landscape.
- An account of the possible uses and significances of the re-used material from later features, along with any comparable material from the region.

In order to realise this potential further work should concentrate on a full and detailed re-examination of the material:

- Recording in detail the typological, technological and metrical traits of the various significant assemblages, as well as the raw materials, condition and degrees of recortication.
- Refitting exercises combined with a detailed examination of the micro-debitage on selected suitable assemblages in order to elucidate pre-depositional history and discards patterns of the material.
- High-power examination of selected debitage for micro-wear traces to assess the degree to which unretouched flakes and blades may have been used.
- An examination of the contextual and distribution patterns of the assemblages.
- A consideration of the assemblages' relationships with other deposited materials, such as bone, pottery etc.
- Discussing how the material compares and contrasts to other lithic assemblages from the region and the implications that this may have for broader settlement strategies and patterns of landscape exploitation.
- Research and compilation of Mesolithic and Early Neolithic assemblages from the region;
- Research and compilation of raw material sources and products.

4.1.6 Slate

Eighty-six slates (879.85g) were recovered during the excavation. The slates were in moderate conditions with visible damage to edges and surfaces. A further 67 slates, weighing 368,337g, were later identified at the post-excavation assessment stage as originating from Area 15 (G162) [Wylfa Head], bring the total to 153 slates weighing 1,248,192kg. The slates stored at Menai Bridge comprise a 10% representative sample of the slates originally recorded during the excavations.

The slate fragments consist of cist slabs, capstones and possible structural remnants. The bulk of the material (60%+) were unmarked. Possible chiselled and smoothed edges indicative of working or dressing were observed on 27%+, with definite chiselled and smoothed edges observed on 10%+ of the assemblage. No tool marks, dressing marks or graffiti were observed on any of the flat surfaces of the slate. The slate is highly likely to be locally sources. Should the project proceed to publication, the slates would contribute to the interpretation and understanding of funerary practices at the site and of the wider funerary landscape. The unmarked and unstratified slates will not contribute significantly to the overall archaeological narrative of the site. Once analysis and publication have been completed, it is recommended that the slates are not retained with the archive. It is suggested that the slates could be donated to a local institution such as a church.

4.1.7 Stone

A total of 161 stone artefacts (95.252g) were recovered from 67 contexts and unstratified deposits during the excavation. The material was in generally good condition and heavily fragmented. The stone finds were manufactured from a range of geological sources and consist of a variety of objects related to a range of processes which took place at the site, including textile production and grain processing.

Textile production at the site is suggested by the recovery of 11 spindle whorls (complete and fragmented) and possible loom weights. The spindle whorls were made of sandstone, tuff and limestone with a diameter of between 37mm to 47mm and central hole of 3mm to 11mm. Radiating incised lines were noted on three specimens, SF0353, SF1277 and SF1769. The two possible loom weights consisted of flat circular disk of sandstone (SF1373) and slate (SF0301).

Several quern fragments were recovered, including saddle quern rubbers (SF0576, SF1088, SF1391, SF1392, SF1378, SF1444 and SF1449) and rotary quern (SF2238, SF0241, SF1279, SF1398). The stone assemblage also contained several stone fragments with shallow hallows with evidence of wear or burning, suggesting that they may have been utilised for grinding.

A polished green stone bead (SF286), possibly Bronze Age in date, with 30mm diameter and 12mm central hole was also recovered. A similar shaped faience bead was recovered from excavations at Cefn Cwmwd. The Cefn Cwmwd quoit-shaped bead was recovered from the fill of a shallow pit which contained cremated human bone; this pit formed part of a Bronze Age cemetery at the site. While it is suggested that the Wylfa Head quoit-shaped bead is of Bronze Age date, it remains possible that the bead is of later date and associated with the early medieval burials (*Appendix V)*.

A further 12 (746g) stone objects were recovered from 11 environmental samples during processing of the samples. The stone objects included rounded pebbles and possible whetstone, roof tile and worked fragments. Further analysis on the stone assemblage is warranted, including full comparative analysis and research with other similar artefactual assemblages from the Wylfa complex as well as sites in the wider vicinity.

4.1.8 Mortar

Twenty-four poorly preserved fragments (183g) of mortar were recovered from eight contexts. The assemblage consists of possible lime mortar, which tends to be very porous and crumbly, and is suggestive of buildings nearby. The small quantity and condition of the material, largely recovered from stoney rubble deposits and wall features, is of little archaeological value. No further analysis was recommended.

4.1.9 Industrial waste

Over 26kg of industrial waste fragments comprising slag and furnace lining were recovered during the excavation. A total of 168 fragments (2300g) of furnace lining were recovered during the excavation from 27 contexts and unstratified deposits. The fragments consisted of clay which had been subject to severe heat, with some fragments vitrified. External surfaces were generally bright red orange with some reduced to a dark grey.

The slag assemblage consisted of 682 fragments (23.87g) recovered from 83 contexts and unstratified material. Several convex objects (SF0596, SF0767, SF1459, SF1534, SF1790) may be potential hearth cakes. It was noted that all contexts containing furnace lining also contained slag, whilst contexts with the highest quantities of slag did not necessarily contain furnace lining.

Overall, the assemblage is indicative of multiple metal working processes being carried out on the site, such as bloomery smelting and smithing (*Appendix V*). Several convex objects including SF0596, SF0767, SF1459, SF1534 and SF1790 may be hearth cakes. It is likely that the assemblage is largely Iron Age to Roman in date. Further work, including XRF analysis of the material is warranted to identify which industrial processes was being carried out. Comparative research and further discussion of this material would benefit alongside analyses with other industrial material assemblages from the Wylfa site complex e.g. Area 9.

A further 5,444g of fired clay fragments were recovered from 160 environmental samples during sample processing. The bulk of the material consisted of small undiagnostic pieces with occasional

fragment of daub and furnace lining that are not necessarily associated with industrial activity. The clay fragments are of little archaeological significance.

4.1.10 Glass

Twenty-eight (98g) glass artefacts consisting of beads, bottle and window fragments were recovered during the excavation. The glass beads, both complete and fragmented include:

- Three wrapped annular beads of Iron to early medieval date; SF0341 (*Plate 24*) and SF1441 were both blue glass, and SF1561 had a yellow-ish amber colour.
- Four Roman beads; SF004 (*Plate 25*) a circular blue bead, SF0149 (*Plate 26*) a small green disc bead, SF1495 a tiny blue-green seed bead, and SF1689 a blue bead with tapered profile.

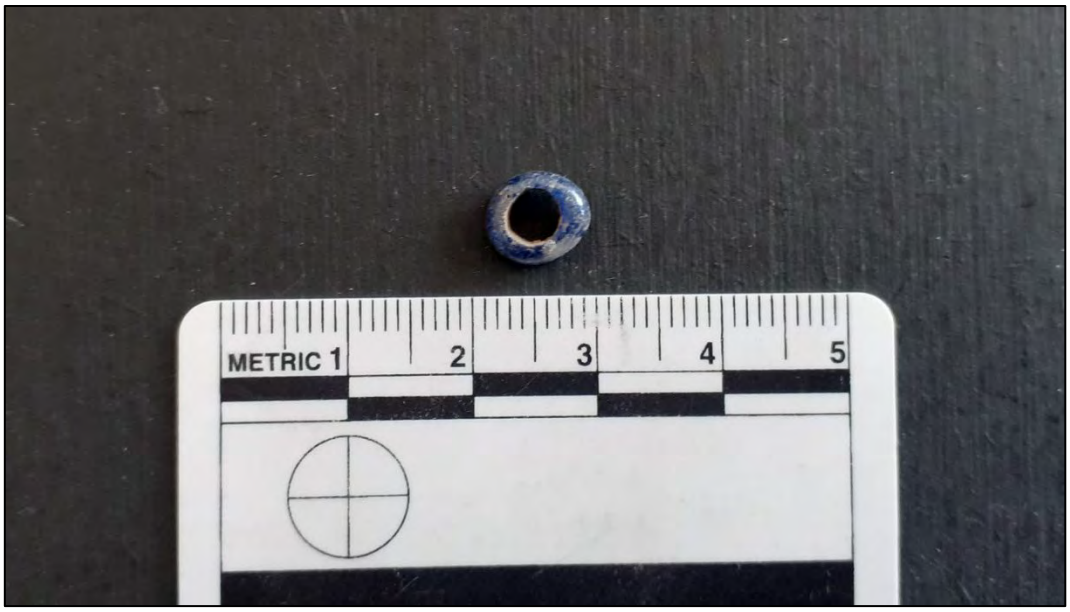


Plate 24. Iron Age to early-medieval wrapped annular blue glass bead (SF0341)

Plate 25. Roman circular blue glass bead (SF0004)

Plate 26. Roman green glass disc bead SF0149.

The remainder of the glass assemblage includes one rim of a large dish or bowl (SF1383), likely Roman in date, and several fragments of post-medieval to modern shards of bottle and window glass.

Fifteen additional glass finds were recovered from 15 environmental samples during processing. They include five beads recovered from graves G250 <1067>, G295 <717>, G317 <1449>, G378 <1454> and G390 <1461>, in addition to tiny shards of glass vessels, and a yellow glass fragment with possible etched decoration from G362 <1384>.

Further analysis of the prehistoric and Roman glass artefacts is warranted and should include comparative research with other such artefacts from the Wylfa site complex and the wider vicinity, in addition to Illustration and photography. No further work is required on the post-medieval to modern glass.

4.1.11 Metals

A total of 345 metal artefacts were recovered during the excavation, consisting of iron, lead and copper alloy objects, with an additional 35 (77g) metal finds recovered from 21 environmental samples during sample processing. The metal finds recovered from the environmental samples were in poor condition and consisted of small fragments of corroded iron and copper alloy, and one copper alloy penannular brooch recovered from deposit (10.1636) above G048.

The complete brooch was solid cast and has slightly flattened faceted terminals with grooves where they join the hoop. The brooch measured 30mm internally with an external diameter of 38mm. A fragment of the pin was also recovered. Due to surface erosion, and corrosion, it is not clear whether the terminals were ornamented. The brooch is Fowler's Group G, with a broad date of late Roman to early medieval (*Appendix V*).

4.1.11.1 Iron

A total of 275 (7,611g) iron objects were recovered from 51 contexts, with the majority of the finds being in a poor condition and highly corroded. The objects include:

- Nails and tacks – SF0081, SF0082, SF0089, SF0700, SF0705
- Horseshoes – SF0285, SF0317, SF0707, SF0708
- Buckles – SF0246, SF0693, SF1499
- Blades – SF0**147**, SF0**219**, SF0**599**, SF0**717**, SF**1517**, SF**1639, SF1656**
- Tools and agricultural detritus including barbed wire, linked chains and miscellaneous parts – SF0166, SF0204, SF0716
- A possible Roman stylus – SF1677
- Keys – SF0692
- A socketed/hafted tool – SF1859 (*Plate 27*)

Plate 27. Iron socketed/hafted tool SF1859.

The iron artefacts span the Roman to modern periods. Further analysis is recommended on the Roman and medieval artefacts, including comparative research with iron assemblages from different sites across the Wylfa complex. As the iron is in such poor condition, any tools and diagnostic artefacts can be illustrated using the x-radiography plates. It may be beneficial for the iron tools to be discussed alongside the whetstones and grinding stones to enhance past domestic and agricultural activities on the site.

4.1.11.2 Lead

Nineteen (900g) lead objects were recovered and were in a poor to moderate condition. The finds include weights of Roman or medieval date (SF0689 and SF1169) and unidentified fragments, including flat strips, scraps and cut-offs (SF0710. SF0251, SF0259 and SF0492-3). Further analysis is recommended, including comparative research and illustrations to enhance the interpretative analysis of domestic and trade activities as well as husbandry/fishing practices on the site. No further analysis is recommended on the miscellaneous strips, cut-offs and scraps.

4.1.11.3 Copper Alloy

A total of 59 (162g) copper alloy artefacts were recovered during the excavation. The finds were in poor to moderate condition with signs of corrosion. The objects include personal items such as brooches (SF0195, SF0452 and SF0674) and pins (SF1446 and SF1849), bracelet fragments (SF1774), a finger ring (SF1704), buttons (SF0005, SF0445, SF0691 and SF0706), buckles (SF0002 and SF0699), coins (SF0290, SF1465, SF1540 and SF1844) and unidentified fragments (SF0659, SF1594, SF1601 and SF1793-4).

Small find 452 (SF0452) is a damaged large disc or plate brooch (*Plate 28*) with blue enamelled concentric bands and dates to the 2nd century (Roman) and was recovered from the fill (10.1926) above the capstones of Grave 035, located at the southern end of the cemetery. The brooch is damaged but would have had a diameter of approximately 40mm with a central raised stud which is now missing. The brooch is similar to Colchester Type 257, and possibly corresponds to a Mackreth Triskele or 'enamelled series' type brooch (*Appendix V*). After conservation, the

decoration comprised a single concentric band of cobalt blue spots with an almost floral motif embossed at the centre.

Plate 28. Copper alloy disc or plate brooch (SF0452), dated to the 2nd century

Small find 195 (SF0195 [*Plate 29*]) is a trumpet brooch, dated to the 2nd century, it may also corresponds to Mackreth's type of plain trumpet brooch (*Appendix V*), and was recovered from unstratified deposited from evaluation trench 2153.

Plate 29. Copper alloy trumpet brooch (SF0195), dated to the 2nd century

The coins were identified as (*Appendix V and VI):*

- SF0639 (*Plate 30*) – A domitian, *As* dating to 85AD which was minted in Rome. Extremely worn and heavily corded;
- SF1465 –A radiate copy dating to *c*. 270-280 AD (possibly Valentinian II, bronze half Centenionalis, moderate ware and heavily corroded);.
- SF1540 (*Plate 31*) – A centenionalis dating to the reign of Valentinian I (365-367 AD), minted in Aquileia (north east Italy). Moderate wear.

Plate 30. Copper alloy Romano-British coin (*As*) in the name of Domitian (SF0639)

Plate 31. Copper alloy Romano-British coin (*Centenionalis*) in the name of Valentinian I (SF1540)

The copper alloy finds range in date from the Roman to post-medieval period. Further analysis was recommended on the Roman and medieval finds, including comparative research with other copper alloy assemblages from the Wylfa site complex. The items of personal adornment should be illustrated, including the brooches, rings, bracelet fragments and buckles. Further analysis on the items of personal adornment could incorporate the analyses of other assemblages of personal adornment from the Wylfa sites, for example glass beads. This could provide a more holistic interpretative approach, given that very few objects of personal adornment have been recovered from the Wylfa site complex as a whole.

4.2 Zooarchaeological Assessment

The total faunal assemblage consisted of 1043 fragments (1321g) of animal bone recovered during the Wylfa Head excavation, in addition to a small quantity of bone (39g) recovered from six environmental samples. Marine molluscs were hand-collected from ten contexts. The animal bone was identified as being in very poor condition with cortical bone surfaces, where present, damaged and laminated. The animal teeth were highly fragmented. The zooarchaeological material was identified and analysed according to guidelines in Baker and Worley (2019), Schmid (1972), Serjeantson (1996; 2009), Hillson (1992) and Ruscillo (2015), see Appendix VIII. The material was also assessed on its potential for age estimation, sex determination and measurements for withers heights. The full report by Megan Stoakley and Lynne F. Gardiner is included as Appendix VIII.

One potential human epiphyseal fragment (SF0834) was recovered from unstratified materials and sent to Cardiff University Bioarchaeology (CUBA) for analysis. The bone fragment (SF0834) was recovered from unstratified material and was preliminarily identified as belonging to a proximal or distal epiphyseal head of a limb bone and likely originated from one of the burials at Wylfa Head.

The bulk of the animal material comprises cattle and sheep/goat teeth, long bone and pelvis fragments. Per context, the minimum number of elements (MNE) totals 44 and the minimum number of individuals (MNI) totals 56. It must be noted however that MNE and MNI quantification per context significantly overestimates the number of individual animals identified at the site. The species breakdown is as follows: 60% *Bos tarus* sp. (cattle), 6% *Ovis aries* sp. (sheep), 2% *Equus caballus* sp. (horse), approximately 2% *Sus scrofa* sp. (wild boar), 4% Small mammals (similar in size from rodent to rabbit) and approximately 24% Indeterminate. All of the animal bone originates from adult individuals.

Collectively the assemblage is indicative of domestic food waste, with the teeth fragments likely representing casual loss. Due the fragmented nature of the assemblage sex determination is not possible and limited age estimation could potentially be carried out on the teeth specimens. No butchery marks, pathology and/or trauma was observed. Possible canid/rodent gnaw marks were identified on a probable cattle pelvis fragment (SF1205). The amount of potential data that can be obtained from the identifiable animal bone and shell assemblage is low and overall the finds are of low archaeological significance and no further analysis is required.

The bones recovered from the six environmental samples are highly abraded and fragmentary and not suitable for further analysis.

The majority of the marine shell fragments were identified as *Ostrea edulis* (the European flat oyster); in particular the right valve. Other shell species observed include *Patella vulgate* (common limpet), cf. *Buccinum undadum* (common whelk) and possible *Nucella lapillus* (dog whelk). The shell offers no interpretative value as the assemblage is too fragmented to observe any impact from human agency.

4.3 Palaeoenvironmental Assessment

A total of 1792 bulk environmental samples were taken during the excavation of Wylfa Head, of which 28 samples were voided upon investigation. A total of 1062 samples (40952kg) were processed by Wardell Armstrong LLP. (WA), and 708 samples was processed externally with the flots sent to WA for assessment. Samples were processed according to guidelines stipulated in the Wardell Armstrong LLP. Technical Manual No. 2 (2018) and Wardell Armstrong (2019). The assessment identified the significance and potential of the material for further analysis, and provided identification to species where practical to do so on material selected for radiocarbon dating. The full report by Freddie Sisson and Lynne F. Gardiner is included as Appendix IX.

4.3.1 Results

Overall, the samples were dominated by sandy silt sediment matrix. Artefactual material recovered from the dried residues was minimal and of low archaeological significance. The finds include pieces of pottery, flint, industrial waste, stone, iron, copper alloys, glass, worked stone, fired clay, ceramic building material and clay pipe. The material recovered from the flots are outlined below.

4.3.1.1 Charred Plant Remains (CPR)

CPR were present in large quantities within flots and generally considered to be in good condition. The plant remains consisted primarily of cereals with smaller quantities of non-economic plants. No chaff was observed. Thirty-four samples yielded over 100 items of CPR: Fill (10,0339) <187>, (10.2737) <1728>, and (10.2813) <1768>.The grave fills of (10.0870) <557>, (11.1170) <825>, (10.1280) <863>, (10.1569) <1099>, (10.1569) <1100>, (10.1992) <1388>, (10.1992) <1389>, (10.2132) <1462>, (10.2132) <1463>, (10.2132) <1464>, (10.2166) <1483>, (10.2170) <1491>, (10.2172) <1502>, (10.2172) <1503>, (10.2172) <1504>, (10.2199) <1514> and (10.2201) <1538>. The dark deposits of (10.2343) <1624> (10.2063) <1696>, (10.2631) <1700> and (10.2904) <1783>. The rubble/brick deposits (10.2633) <1644> and (10.2473) <1651>. The pit fills (10.2469) <1655>, (10.2867) <1767> and (10.2917) <1789>. The floor of (10.2082) <1697>. Occupation layer (10.2581) <1703>. Fill of [10.2088] (10.2770) <1743>. Gully terminus (10.2840) <1764>. Organic fills (10.2871) <1771> and (10.2773) <1772>. Posthole fills (10.2870) <1778>, (10.2911) <1786> and (10.2915) <1788>, and from around small find 10.2872 in cut [10.2874] (10.2873) <1779> and spread (10.2530) <1792>.

The CPR was most likely deposited as part of backfilling or later deposition, especially where the graves are concerned. The dispersal of the CPR covers different feature-types, such as floor deposits, postholes and features associated with a roundhouse. These charred grains are likely to reflect palaeodiets and crop husbandry practices.

Further work on the charred plant remains may shed light on aspects of crop husbandry practices. This is applicable to all cultural periods. Highlighted within the most recent draft (2016) of the

Regional Research Agenda for Wales is the desire to examine continuity of land use and crop types between cultural periods as is any discernible change in arable practices. It may be possible to address these, and analysis is recommended on the CPR obtained from the samples listed above.

4.3.1.2 Charcoal

Charcoal fragments tended to be small and abraded. Where species identification was carried out, Oak (*Quercus* sp.), Willow/poplar (*Salix/Populus*), Hazel (*Corylus avellana*), and Elm (*Ulmus campestris*) was identified. Relevant samples, yielding more than 5g of charcoal (*Appendix IX),* came from 212 grave fills, 5 burnt features and silt layer (10.1473) <1383>, (10.1964) <1386> and (10.2637) <1699>, charcoal layers (10.2000) <1403>, (10.2063) <1696>, (10.2688) <1706>, (10.2642) <1711> and (10.2614) <1735>, pit fills (10.2293) <1592>, (10.2383) <1612>, (10.2698) <1617>, (10.2433) <1637>, (10.2562) <1665>, (10.2599) <1688> (10.2700) <1713>, (10.2702) <1716>, (10.2732) <1719>, (10.2792) <1732>, (10.2755) <1740>, (10.2805) <1741>, (10.2827) <1755>, (10.2748) <1762> and (10.2867) <1767>, postholes (10.2385) <1611>, (10.2783) <1734>, (10.2809) <1747>, (10.2894) <1776> and (10.2913) <1787>, occupation layers (10.2581) <1703>, (10.2630) <1704>, (10.2689) <1705> and (10.2803) <1744>, and suspected hearth (10.2294) <1605>.

Charcoal from the grave fills is likely to be residual from the backfilling of the graves. The charcoal assemblages from occupation layers and posthole fills may be possible primary deposition. Those from ditch fills and pits probably relate to secondary deposition through the discard of domestic rubbish. The smaller amounts of charcoal (e.g. <1g) may be present through aeolian means and bioturbation. Charcoal analysis may be possible on the larger assemblages outlined above and would provide an overview of the species exploited. By examining ring curvature and diameters (if present) some statement on woodland management may also be possible.

4.3.1.3 Magnetic Material

A large amount of magnetic material was recovered from the Wylfa Head Cemetery site and examined under x45 magnification and identified as both plate and spherical hammerscale. The magnetic material related to industrial activity is seen mostly in the northern part of the site dating to the Iron Age and Roman period. Due to the large quantities recovered, and half of the 20% checked by WA containing plate and spherical hammerscale from across the site including the grave fills, it is likely to have been disturbed by the excavation of the Early medieval graves which cut into Iron Age/Roman features and redeposited as backfill. It was recommended that the magnetic matter from all samples be retained should further analysis be required to establish the relationship and extent of industrial activity at Wylfa Head.

4.3.1.4 Bone and Shell

The bone recovered consist of mixed human and animal bone remains. The animal remains were assessed by Megan Stoakley and discussed as part of the Zooarchaeological assessment. The human bone fragments were assessed by Ciara Butler and included in the Osteological assessment. Shell fragments were present in 20 flots, weighing 11g, and consisted mainly of terrestrial shell with little archaeological value and no further work was recommended.

4.4 Osteological Assessment

The excavation of human remains by ABA was undertaken in accordance with the Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England (English Heritage, 2005). The remains were removed from site and dry-cleaned using bamboo sticks and brushes and archived at the ABA offices. The material was then transported to Cardiff University Bioarchaeology (CUBA) for assessment and analysis. This involved complete osteological analysis including determination of age and sex, identification of pathology, stature estimation, dental analysis, as well as identification of appropriate individuals for further biochemical analyses. The results were compared with similar cemetery sites and osteological assemblages across Wales. All analysis adhered to the Cardiff University School of History, Archaeology, and Religion (SHARE) Code of Ethics. The full report by Ciara Butler and Richard Madwick, including methodological considerations and processes, is included as Appendix X.

4.4.1 Skeletal assemblage and Preservation

A total of 315 graves where excavated of which 109 graves contained the remains of 119 discrete individuals in varying states of preservation, in addition to 21 fragments of disarticulated human bone recovered from non-grave context. . Seven graves (G080, G099, G113, G116, G243, G287, G294) were identified as containing more than one individual in the field, though separate skeleton numbers were not always assigned. The number of graves containing two or more individuals was amended to ten during osteological analysis when repeated elements were discovered in a further three burials (G121, G281, G233), bringing the minimum number of individuals (MNI) to two for each. Of the shared burials, some were likely a double interment (though poor preservation makes this hard to discern), while a clear instance of grave reuse can be seen in G080. Orientation in the cemetery was generally west-east with head to the west, although in some areas rows of graves were oriented closer to NW-SE, likely due in part to the topography of the site.

The human remain were categorised as ‘extremely poor’, ‘poor’, ‘fair’, ‘good’ or ‘excellent’ depending on their level of completeness and preservation. The majority of individuals (104, or 87%) were less than 25% complete, and a significant part were less than 5%. None was classed as excellent (more than 75% complete). Despite low levels of completeness, investigation by element showed variability. Some individuals had intact crania of more than 75% complete, and one skull was classed as >95% complete (SK10.1109, G062). SK10.1397 (G308) had a mostly intact vault but with the left maxilla and temporal bone missing. SK10.0348 (G217) had similar but more extensive damage to left side of skull, involving parts of the occipital also. The cranium of SK10.0762 (G256) was just under 75% with a well-preserved vault but facial structures missing. No pre-depositional modifications such as gnawing, trampling or weathering were recorded in the assemblage derived from grave contexts.

Cortical layer damage was scored from 1 to 5+, with a score of 1 being optimal condition. Preservation at Wylfa Head was at the low end of the scale, though quite variable throughout the sample, ranging from scores of 3 to 5+. No individuals were scored as lower than a 3, which is defined as “most of bone surface affected by some degree of erosion; general morphology maintained but detail of parts of surface masked by erosive action”. In order to record palaeopathological conditions of the cortical surface, such as periostitis, a lesser degree of erosion would be preferential. A score of 5+ is equated to “extensive penetrating erosion resulting in modification of profile” (Brickley and McKinley, 2004: 16). All the remains were affected by surface erosion. These features are consistent with the burial environment, particularly as a result of the

acidic soil rather than heavy truncation or disturbance. Several instances taphonomic alteration were observed, such as potential water damage in the clavicle of SK10.0931 (G056) which was initially considered to be a possible fracture callus at assessment stage. During drying from wet or submerged conditions long bones can crack and warp (Pokines and Symes, 2013) and this individual was buried in a cist which was not backfilled. Evidence of insect activity, root staining in several individuals, and several bone fragments with organic staining that could be mistaken for burning was also identified.

Variable preservation across the site can be accounted for in many instances by burial context. Due to the acidic nature of the soil, the best preservation was in capped cists which were not backfilled, leaving the remains in a void. For example, G056 (SK10.0931), G062 (SK10.1109), and G256 (SK10.0762), which all contained skeletons of fair to good preservation with scores of 3 to 4 for surface preservation. Variability in skeletal preservation being affected by soil contact can be seen clearly in G217, which was originally a void cist burial but where partial collapse of the capstones at the foot end resulted in poor survival of elements of the lower body while preservation of the upper body was much better.

4.4.2 Age and Sex Determination

The estimation of biological sex relies primarily on the morphology of the pelvis and skull. Due to the lack of survival of pelvic elements most skeletons were sexed based on features visible on surviving skulls (e.g. nuchal crest, glabella, mental eminence *etc*.). Skeletons with sexually dimorphic characteristics on the skull could only be classed as possible male or female, or inconclusive if the characteristic were present but ambiguous. Sex estimation could only be achieved for ten individuals (1 Male, 1 Female, 5 Male? and 3 Female?). This extremely low proportion is due to the almost total absence of pelves within the assemblage. Generally poor surface preservation and high fragmentation meant that secondary diagnostic elements on the skull or distal humerus were often absent also. Sex estimation for juveniles was not attempted.

The estimation of age is also aided by features of the pelvis, for example the auricular surface and pubic symphysis. Because these were either absent or too fragmentary to use, age was determined mainly based on dental attrition (or eruption) as teeth were more commonly present. For sub-adults, identification relied on dental crown formation and eruption. Sixty-one individuals from Wylfa could be assigned to an age group. Poor preservation makes many of these estimates tentative at best, as in the above cases with question marks where only a few loose teeth survived. For the purposes of analysis, summary ages were derived by taking the middle of the ascribed range and, for adults, rounding it to the nearest decade (as appropriate). For example, individuals aged as 17–25 years were summarised as 20 years. The summary ages were then placed into a series of categories; 6 Older child, 5 Adolescent, 19 Young adult, 12 Middle adult, 4 Mature adult and 1 Older adult. Age estimates which only had a minimum, e.g. 16+, were not included. There is a peak in the young adult category (18 – 25 years). This is possibly an artefact of recovery bias, as lack of data on older adults may be due to the poorer survival of heavily worn teeth, or perhaps lower levels of dental attrition in this community, which may make the teeth of older individuals appear to belong to a younger person. The age-at-death estimates for Wylfa are tentative, and it is unlikely this age category saw the highest death rate in the community/communities using the burial ground. The age distribution shown is likely the result of preservation and methodological issues. However, it is possible that this cemetery does not represent a complete population and burial here could have been reserved for those of at least adolescent age.

4.4.3 Metric Analyses

Metric analysis of the material was severely limited due to the poor surface presentation and fragmentation of the remains. Cranial measurement was possible from seven individuals, whilst only 12 individuals presented sufficiently preserved long bones for width measurements. Measurement related to stature estimation was only possible on two individuals (SK10.1109 and SK10.1061). The height of SK10.1109 (G062) was calculated at 178cm +/- based on the fight femur. SK10.1061 (G275) had a complete, or nearly complete, tibia measuring 38.7cm including the medial malleolus. The limited results do not allow for any demographic investigation of stature or its links to diet and health.

4.4.4 Palaeopathology and Trauma

Few pathological conditions have been noted during assessment and analysis, likely due to the poor condition of the remains. As most of the skeletons are to a greater or lesser extent incomplete, the number of individuals with a given skeletal disease is likely to be also significantly underestimated. Pathological or traumatic bone changes were observed in 13 individuals and include endocranial lesions, osteoarticular disease of the spine, abnormal bony projections of the femur and humerus, lesions to the orbital roof, tooth decay and cysts and linear enamel hypoplasia that may be indicative of malnutrition, disease or genetic conditions. No trauma (healed or otherwise), apart from musculo-skeletal stress markers, was recorded in the assemblage.

4.4.4.1 Non-Specific Stress indicators

Non-specific indicators of stress, potentially related to nutritional deficiencies, chronic inflammation, or infectious disease, were recorded in four individuals. One case of mild or healed cribra orbitalia was recorded, in the right orbit of SK10.0471 (G116). Cribra orbitalia (porosity of the orbital roof), can range from mild microporosity to quite severe macroporosity with plaque formation. Though primarily attributed to iron-deficiency anaemia, cribra orbitalia is now considered to have multiple aetiologies, including vitamin C and D deficiency, chronic inflammation, and haemorrhagic processes. SK10.0417 was a possible female, aged at least 25, and also had possible degenerative joint disease of the right hip.

Dental/linear enamel hypoplasia (DEH or LEH) is a form of enamel defect considered to be a 'non-specific indicator of stress' occurring at the age of enamel formation. This stress may be due to nutritional deficiency, childhood illness, or localised trauma. Hypoplastic lines were identified in SK10.0294 (G093), SK10.0342 (G140) and SK10.1061 (G275), along with a further two possible cases which were difficult to confirm due to being partially obscured by fragmentation. The affected teeth were incisors and canines.

4.4.4.2 Joint Disease

The most commonly occurring manifestation of joint disease in archaeological skeletons is osteoarthritis. It can be recognised through eburnation, or the presence of osteophytes and a porous joint surface together. The hip and knee are the most commonly affected joints. Vertebrae is another common area to see osteophystosis or other sings associated with degenerative joint disease. The low rate of observation for these conditions in the Wylfa Head population is again likely due to issues of preservation.

Porosity possibly associated with degenerative joint disease was identified in SK10.0471 (G116). Microporosity and minor lipping (osteophystosis), associated with degenerative osteoarthritis in adults, was present on both facets of the left first and second cervical vertebrae (C1-C2 articulation) in SK10.0294 (G93), a juvenile aged 7-13. The individual was aged based on the presence of deciduous dentition, but the remains were very fragmentary, and no other osteological indications of age survived. A linear lesion of unknown aetiology was noted on the occipital bone, in the left atlanto-occipital articulation where the skull articulates with the first cervical vertebra (the atlas). This measured 0.5cm in length and 0.1cm in depth and had smooth margins. It may be traumatic or congenital, but this is difficult to investigate without the rest of the skeleton. The presentation of the pathology suggests osteoarthritis, but the age of the skeleton complicates this. Spondyloarthropathy is the term for a group of childhood rheumatic diseases which cause arthritis before the age of 16 and may span through adult life. It affects multiple synovial joints symmetrically, especially the small joints of the hands and feet, wrist, elbow, knee, shoulder and cervical spine. Although it does affect the cervical spine, these are the only joint surfaces present in the individual so multiple joint involvement cannot be investigated.

4.4.4.3 Musculo-Skeletal Stress Markers

Enthesophytes, a musculo-skeletal stress marker, was observed in one individual, SK10.0745 (G100). The age-at-death estimate for this individual is 33-55 years (based on dental attrition) and sex was indeterminate. SK10.0745 displayed a thickened linea aspera, with a marked enthesophyte of 7cm length and 1.5cm breadth, projecting of over 1cm in height at its maximum. This type of enthesophyte is known to begin from the medial and lateral margins of the linea aspera, but in this case both margins have connected due its marked expression and it is difficult to distinguish them. The formation of enthesophytes can be considered as a part of stress-induced response from the bones which may represent instability of the joints, may be the result of aging, or could be the outcome of some form of repeated activity or trauma.

4.4.4.4 Dental Health

Due to the acidic burial environment, dental enamel was brittle and often fragmented. Where part of any surface of a tooth was missing, that tooth was not included in analysis of pathological conditions such as carious lesions unless clear corresponding lesions could be identified in the alveolar bone. However, teeth were often found loose, hindering the investigation of alveolar involvement in dental pathologies. Calculus was also likely to be affected by poor preservation, as its presence was only noted in a handful of individuals and was often loosely attached to the tooth surface. Rates of periodontal disease (inflammation of gums leading to resorption of alveolar bone) were similarly obscured by the taphonomic erosion of bone around the alveoli. Teeth were present in 59 individuals. The count of complete teeth with minimal to no enamel fragmentation available for study was 420, approximately 11% of the total teeth which would be expected for complete preservation of 119 adults, not considering those juveniles of mixed dentition.

Dental pathology was recorded in 8 individuals (14% of individuals with teeth), including antemortem tooth loss, carious lesions, periapical cavities, and enamel defects such as LEH. Antemortem tooth loss was recorded in three individuals, all associated with periapical cavities, SK10.0762 (G256), SK10.1397 (G308) and SK10.1709 (G125). Seven teeth from five individuals had evidence of carious lesions, SK10.0997 (G289), SK10.1317 (G305), SK10.0762 (G256), SK10.1397 (G308) and SK10.1709 (G125). This rate of caries is low (1.7%), but it is possible that affected teeth were more susceptible to erosion in the burial environment having already been subject to

pathological enamel destruction. Agriculturalists with high carbohydrate intake are expected to have caries prevalence rates over 7%, indicating a lower carbohydrate diet than expected (this will be further investigated through the programme of isotope analysis).

Alveolar resorption as a result of periodontal disease was identified in one individual, SK10.1397 (G308), which also displayed antemortem tooth loss. The ages of individuals with caries and antemortem tooth loss show this is unlikely to be age related, with three out of five likely not older than 25. One older individual, SK10.0762 (G256), a possible male aged between 33- 55) displayed antemortem tooth loss, as did one female aged 33-35 (SK10.1397, G308).

4.4.5 Anatomical Variation and Nonmetric Traits

Variations in skeletal assemblages are usually recorded to help characterise a population or an individual. Traits can be hyperostotic, i.e., associated with abnormal bone growth; or hypostotic, which is associated with ossification failure. Other traits which do not fall into these categories include ossicles of the cranial sutures and variation in foramen number and location. Several anatomical variations were observed, however analysis of their prevalence was limited by the preservation state of the assemblage.

A retained metopic suture was recorded in SK10.0348 (G217), which occurs along the sagittal midline of the frontal, from the glabella to the coronal and sagittal sutures. This suture normally closes during childhood, but it can be a relatively common find in adults. Although it has been suggested that it results from abnormal growth of the cranial bones, hydrocephalus, heredity, or atavism, the genetic factor is the one currently accepted by most scholars. There is no evidence for this variation in any other individual, precluding any exploration or suggestion of affinity.

A rounded mass of enamel on the mesiolingual aspect of the tooth root, adjacent to the cementoenamel junction (CEJ) was recorded on the left second maxillary molar of SK10.1109 (G062). It was connected by a slight enamel extension to the crown with dentine visible at the surface of the enamel sphere. Enamel extensions and associated pearls typically take a different form than that observed here, occurring in the groove or bifurcation between roots. It seems likely that this example constitutes the same trait as that termed an enamel pearl. It has also variously been termed an enameloma, enamel pearl, droplet or globule. The pearl observed in SK10.1109 appears to be a composite pearl as the dentine part of structure is clearly visible.

A small mandibular torus was recorded in SK10.1397 (G308). A mandibular torus is a bony outgrowth located on the lingual side of the dental arch, in the canine or premolar region, above the attachment of the mylohyoid muscle. Their prevalence varies substantially between ethnic groups, with higher prevalence in Asian and Inuit populations. They are thought to be caused mainly by environmental factors, such as bruxism, vitamin deficiencies and calcium-rich supplements, although genetic background also plays a key role. The left clavicle of the same individual also presented an additional joint on the inferior lateral aspect of the shaft. This is called a coracoclavicular (or conoid) joint or facet due to its articulation between the corocoid process of the scapula and the clavicle. As well as articulating with the scapula and sternum, the clavicle is also connected to the first rib by the costoclavicular ligament and with scapula by coracoclavicular ligament. At times, the area of attachment of these ligaments on the clavicle, first rib, and scapula show faceted apophyses suggesting the presence of additional articulations. The coracoclavicular joint, as recorded in SK10.1397 exists between the clavicle and coracoid process of the scapula. The coracoclavicular joint has been recognized as an uncommon osteological feature in most groups. The incidence of coracoclavicular joint is more common in Asians than in Europeans or Africans and associated with increased frequencies of osteoarthritis in neighbouring joints, but unfortunately none were available in this individual for analysis.

A supracondyloid process of the humerus was observed in SK10.0348 (G217), a male aged between 25-35. This is a hook-like, bony spine of variable size that may project distally from the anteromedial surface of the humerus. The ligament of Struthers, which sometimes calcifies, extends from this bony "hook" along the medial border to the medial epicondyle. It is considered an uncommon finding and represents the vestigial remnant of climbing animals. It is still seen in many reptiles, most marsupials, cats, lemurs and American monkeys.

Sk10.0471 (G116) presented a nonmetric trait on a fragment of the left acetabulum of the pelvis. This triangular notch was located on the lunate surface, proximal to the acetabular fossa on the iliopubic side, approximately 1.5 x 1.5 cm in extent. This appears to be a variation of the trait known as an acetabular crease, which is a typical anatomical variant that appears to be a stable anatomical trait throughout adult life, with no predominant side and no correlation with sex. Variability of its occurrence between populations could be linked to greater biomechanical stress during childhood. The size and extent of the trait in this case is unusual, possibly it is closer to what San-Millán *et al.,* 2017 describe as an elongated lobe of the acetabular fossa than a true acetabular crease.

Squatting facets were observed in one individual, SK10.1221 (G274), and possibly in a second though this is unconfirmed due to taphonomy. The effects of squatting stress may induce bone remodelling in the form of facets at the distal tibia and talus articulation. In this case only the tibia was observable. Different incidences of these modifications can reflect the lifestyle of a population. They are common in modern Aboriginal Australians and Indians, and research of 13th century Europeans demonstrates their rates were higher in past European populations.

4.4.6 Disarticulated Remains

Twenty one small finds consisting of fragments of human bone from non-grave contexts were analysed. One of these was confirmed to be animal, and several had been assigned both small find numbers and skeleton numbers but were in fact from grave contexts. This left 13 context numbers to be analysed as disarticulated remains. Where possible, skeletal fragments were identified. Investigations then proceeded to determine the minimum number of individuals (MNI), age and sex. Considering disarticulated material as a whole, there are at least two individuals represented, as evidenced by the duplication of some teeth and skeletal elements. This brings the MNI for the site to 121.

No metrics or non-metrics were recorded within the disarticulated material, nor were any features related to sex or stature. Some age data was available from dental evidence, for example the teeth of a young adult were distinguishable. Taphonomy of the disarticulated material was consistent with the burials, including soil staining, cortical erosion, and post-mortem fragmentation.

4.4.7 Remains Recovered During Sample Processing

The combined weight of human remains resulting from soil samples in graves was 103g. In some cases, the bone deriving from grave soil samples was burnt where the individual in the burial was not. These have not been included with the summaries as they are unlikely to be from the inhumed individual(s) in the grave. The remains from sample processing of graves resulted in some additional individuals being added to the MNI for cemetery as they were from graves recorded in the field as having no surviving human remains, i.e. SK10.2925 (G044), SK10.2923 (G052) and SK10.2924 (G183).

4.4.8 Conclusion and Recommendation for Further Analysis

The Wylfa Head cemetery is one of the largest early medieval cemeteries excavated in Wales, and second in size only to the monastic site of Llandough in Glamorgan (a monastic site with 1026 inhumations in use from the mid 7th to early 11th century). This suggests use over a long period, probably by a wide section of society or possibly by members of several communities, allowing the exploration of questions relating to cemetery development and social identities. The only sites providing substantial comparative osteological data are Llangefni and Tywyn y Capel, both also on Anglesey, Llandough (Vale of Glamorgan), and Brownslade (Pembrokeshire). A further two significant cemeteries have been recently been excavated, but analysis is ongoing and results are not yet available. These are St Patrick's (Pembrokeshire) and Five Mile Lane (Glamorgan).

Due to the poor preservation at Wylfa, however, conclusions about demography and pathology distribution were tentative. Sex data from Wylfa head was extremely poor, resulting in only 1 male and 1 female, as well as 4 possible males and 3 possible females.

Tentative age ranges could often only be based on one attribute, namely dental attrition, and this precludes drawing any definite conclusions about age-at-death ranges in the population. Osteological analysis of the Wylfa Head skeletal material has identified some isolated pathologies and instances of trauma, as well as non-metric skeletal traits, but with poor preservation it is not possible to draw conclusions on distribution patterns. Those that were observed were related to non-specific stress (cribra orbitalia, linear enamel hypoplasia), and degenerative joint disease (porosity, osteophytosis).

Examination of correlations between grave location, age, sex, and/or non-metric traits were mostly unsuccessful. In terms of possible genetic links between individuals, the lack of any repeated non-metric traits which may be indicators of affinity precluded investigations. However, there are other methods to investigate this which were not within the remit of this analysis but may be possible in the future, for example biological distance and aDNA analysis.

Despite the MNI of the assemblage being among the largest in Wales from the Early Medieval, nearly half of those individuals consisted of less than 5% completeness and were in poor states of preservation. However, the importance of the assemblage cannot be disputed. Chemical analyses of a large number of individuals to investigate patterns across the site was recommended. The collection is well-suited to destructive analysis as it contains many undiagnostic fragments which otherwise provide little information. Ancient DNA (aDNA) analysis can be utilised to explore relationships between individuals buried in different areas of the cemetery.

Isotope analysis for diet and migration will answer questions which were not answered based on macroscopic investigations of skeletal remains. As migration is a key theme in studies of Early Medieval Wales, strontium ($^{87}Sr/^{86}Sr$) and oxygen ($\delta^{18}O$) isotope analyses are recommended, which can be supplemented by sulphur isotope analyses. Strontium isotope analysis provides a signal reflecting the local geology where an individual was raised, while oxygen provides a climatic signal. Analysis should focus on permanent dental enamel (preferably M1), as this is resistant to diagenesis and provides a snapshot for early life origins as enamel does not remodel after development. Unlike DNA, which would not distinguish the migrant from their descendants, strontium isotope analysis will identify only first-generation settlers. It is however recommended that aDNA analysis be undertaken and conducted on the same individuals that are analysed for provenancing isotope analysis. It is recommended that 100% of the available individuals (i.e., those with first molars present) are analysed for strontium and oxygen. $\delta^{13}C$/ $\delta^{13}N$ isotope analysis of bone collagen is optimally suited to address issues of diet. It is recommended that $\delta_{13}C/\delta_{15}N$ analysis be performed on all individuals.

Radiocarbon dates for eight individuals from Wylfa Head (section 4.5 and Table 2) suggest that the cemetery was in use from the 5th to 8th century AD. However, more samples will be needed to confirm this and identify patterns of use. It was recommended that bone from at least 10 more individuals should be dated, and that future analysis should align with The Research Framework for Early Medieval Wales (Edwards *et al*., 2016). The link between "Christian" cemeteries and earlier prehistoric sites, the date of abandonment of undeveloped cemeteries such as Wylfa Head, and the date and development of cist graves are all cited as priorities.

4.5 Radiocarbon Dating Results

Samples for radiocarbon dating were selected based on the archaeology of the site, i.e. selecting viable contexts that would yield useful information, and the results obtained from bulk environmental sample assessment, i.e. selecting suitable material for dating from the samples obtained from the selected contexts. Based on this criteria 21 samples were suggested for radiocarbon dating of which 20 were successfully dated (*Table 1*). The samples were sent to Beta Analytic Radiocarbon Dating Laboratory for analysis. Prior to dating, it was suggested that the charcoal samples were identified to species to select the shorter-lived species to mitigate against the potential 'old wood effect' that may present a radiocarbon date range older than the feature. In the absence of single growth entities such as charred plant remains and hazel nutshell fragments, charcoal was chosen for radiocarbon determinations. Where no short-lived species were observed the youngest i.e. twig, branch or periderm fragments from longer-lived species such as oak were selected (*Appendix IX*).

A further ten samples of human skeletal remains recovered from the excavated graves were sent to SUERC Radiocarbon Laboratory for analysis, of which eight were successfully dated (*Table 2*). The Radiocarbon dating results are presented in Appendix XI and XII, and the results are summarised below:

Table 1. AB1703 Wylfa Head Environmental Samples – Radiocarbon dating results

Sample No.	Context	Material	Results (probability %)	Period
1	10.0009 - fill of pit	Willow	3639 – 3515 cal BC (88.5%)	Neolithic
69	10.0134 - fill of pit	Wheat	66-222 cal AD (95.4%)	Roman
119	10.0234 - fill of pit	Wheat	663-778 cal AD (92.1%)	Early Medieval
215	10.0372 - rubble fill of feature F296	Indeterminate	382-538 cal AD (953.4%)	Late Roman – Early Medieval
231	10.0439 - silt material	Wheat	66-222 cal AD (95.4%)	Roman
491	10.0797 - fill of post hole	Barley	416-556 cal AD (95.4%)	Early Medieval
703	10.1021 - fill of ditch	Wheat	86-242 cal AD (95.4%)	Roman
784	10.1165 - fill of posthole	Indeterminate	313-406 cal AD (71.9%)	Late Roman
991	10.1424 - fill of posthole	Hazel	4-130 cal AD (95.4%)	Late Iron Age – Early Roman

Sample No.	Context	Material	Results (probability %)	Period
1401	10.2008 - fill of pit	Barley	124-258 cal AD (90.7%)	Roman
1696	10.2063 - deposit	Hazel	556-654 cal AD (95.4%)	Early Medieval
1586	10.2295 - cut of hearth	Oak	528-623 cal AD (75%)	Early Medieval
1688	10.2599 - fill of pit	Oak	206-345 cal AD (85.6%)	Middle – Late Roman
1683	10.2610 - fill of ditch / foundation fill	Elm	124-258 cal AD (90.7%)	Middle – Late Roman
1708	10.2696 - fill of pit	Barley	684-780 cal AD (61%)	Early Medieval
1725	10.2707 - fill of posthole	Barley	313-406 cal AD (71.9%)	Late Roman
1730	10.2730 - arbitrary spit / paleosol	Hazel	2817-2666 cal BC (73.7%)	Neolithic
1772	10.2773 - fill of pit	Barley	765-895 cal AD (87.9%)	Early Medieval
1757	10.2842 - fill of pit	Oak	49 cal BC – 72 cal AD (95.4%)	Late Iron Age – Early Roman
1773	10.2888 - fill of pit	Oak	321-422 cal AD (85.2%)	Late Roman – Early Medieval

Table 2. AB1703 Wylfa Head Skeletal Remains - Radiocarbon dating results

Grave	Skeleton	Results (probability %)	Period
G033	SK10.1772	Failed on collagen quality	
G056	SK10.0934	574 – 652 cal AD (95.4%)	Early Medieval
G080	SK10.0747	543 – 638 cal AD (95.4%)	Early Medieval
G080	SK10.0749	427 – 580 cal AD (95.4%)	Early Medieval
G100	SK10.0745	Failed on collagen quality	
G115	SK10.0620	532 – 630 cal AD (85.9%)	Early Medieval
G233	SK10.1607	551 – 643 cal AD (95.4%)	Early Medieval
G233	SK10.2920	426 – 579 cal AD (95.4%)	Early Medieval
G347	SK10.1741	603 – 666 cal AD (95.4%)	Early Medieval
G368	SK10.2182	530 – 611 cal AD (72.8%)	Early Medieval

5 Discussion and Statement of Potential

The evidence for long term site use and occupation revealed at the Wylfa Head site, though not necessarily continuously, provides an opportunity to add to the corpus of known sites locally and in the region. Overall, the site yielded a relatively small amount of finds in relation to the size of the excavation area and include material dating from the Mesolithic to early medieval period. The post medieval and modern finds are of little archaeological value. The data obtained from the zooarchaeological assemblage is limited, however, the assemblage is indicative of domestic food waste, with the bulk of the remains originating from sheep/goat and cattle, suggesting some form of pastoral farming/economy with potential evidence of shellfish consumption based on the recovery of oyster shells.

5.1 Period 1 (Mesolithic) and Period 2 (Early Neolithic)

Evidence of site use during the Mesolithic and Neolithic period was found in the form of Mesolithic microliths, general flint scatters, Prehistoric pottery, and Neolithic axes from discrete pits. Both the technological and typological aspects of the lithic assemblage indicate a Mesolithic to Early Neolithic date with no indications of the presence of earlier or later material in the assemblage.

The six Prehistoric pottery fragments, which were mostly undiagnostic body sherds, were recovered from deposits which had eroded from areas of later activity. One sherd (SF1801), likely to be Late Bronze Age in date, was recovered from context (10.2729) within a test pit to the north-east of the excavation area which also produced flakes and blades of flint and chert. Another sherd (SF861), also dated to the Late Bronze Age, retained traces of internal sooting and was recovered from deposit (10.1362), a natural accumulation of colluvium which had eroded from further upslope.

SF0560, SF1418 and SF1438 were identified as Early Neolithic, with SF1418 and SF1438 from the same medium-sized bowl which had an everted rim with no prominent shoulder, and is likely to be Irish-Sea ware. SF0560 was recovered from unstratified material to the north-east of grave G025. SF1418 and SF1438 was recovered from deposits of natural build-up of materials close to Wall (10.2374) located within Iron Age/Roman British activity areas.

Due to the small number of datable features and archaeological material, the information gained from the excavation and assessment is limited, and no discernible structural features or relationships can be ascertained between the excavated features. Further work on the excavated material will likely not yield information that would improve our understanding of prehistoric landscape organisation and enclosures at the site. However, further work is suggested for the lithic and stone artefacts to allow for themes relating to the nature, significance and scale of the stone flint and chert technology and its use, both at the site and withing the wider landscape, to be explored.

5.2 Period 3 (Later Bronze Age and Iron Age) and Period 4 (Romano-British)

The identification and recovery of datable material at the site has allowed for the identification of several occupation and land use phases dating from the Late Bronze Age to Romano-British period. The Romano-British enclosed settlement with possible origins in the Iron Age was not expected to be present but is no less important. The full extent of the settlement was not excavated as there would be no impact from the proposed development beyond the limits of the excavated area.

The discovery of several spindle whorls, loom weights and quern stones suggest that a range of processes such as textile working, and grain processing took place at the site. The slag, furnace lining, metal artefacts and magnetic residues, likely Iron Age and Romano-British in date, are indicative of metal working processes. Further work on the charred plant and cereal remains may shed light on aspects of crop husbandry practices and should be considered alongside the quern stones. Detailed archaeometallurgical analysis is required to identify the type and intensity of industrial processes, in addition to analysing the type, function and potential date of iron and lead finds. The copper alloy finds, including personal items such as brooches, buttons, buckles and coins are potentially Romano-British in date, but some may be later.

As pottery can serve as evidence of the phasing and chronology of the site, the Roman pottery assemblage (which includes Black Burnished ware, Samian ware, Colour Coated ware, Grey Ware, Oxidised wares and Amphora) warrants further analysis to refine fabric and form to indicate when and how the pottery was made and used. Assessment of the assemblage may aid the defining of possible cultural affinities and contribute to our understanding of the regional distribution of pottery. Similarly, the glass finds assigned to the Romano-British period (SF0004, SF0149, SF0321, SF1689, SF1383 and SF1495) warrant archaeometric and typological analysis to better determine date, form, function, technological processes and provenance which may provide valuable information regarding the production and trading of glass. Further work is also suggested for the stone finds to examine typology, function, technology and petrology which may allow for a better understanding of procurement, artefact production, heat treatment, use and possible trade and migration routes.

5.3 Period 5 (Early Medieval)

The Wylfa Head cemetery is one of the largest early medieval cemeteries to be fully excavated in Wales and as such provides a rare opportunity to learn about its occupants, their origins, burial practices, economy, and relationship to the modern community.

The most comparable local cemetery to Wylfa Head is Tywyn y Capel, on Holy Island, but the site has been greatly affected by coastal erosion for a long period of time and it is likely that many burials have been lost. The most recent excavations there revealed 124 burials, which showed that the cemetery was in use between the 7th and 13th centuries (Davidson *et al*., 2009). Llangefni, excavated in 2016 and 2017, contained the remains of 82 individuals with relatively good preservation for the region (ABA, forthcoming & Joyce, 2019). Two cemeteries likely to be of a similar date were also excavated during the clearance works at the Wylfa site at Area 7 (HER PRN GAT 91830) and Hotspot 11-13 (HER PRN GAT 91862) to the south-west.

Although the state of preservation at Wylfa Head was poor in comparison to other cemeteries of the period, the number of graves and the fact that approximately a third contained human remains makes the assemblage a valuable resource. This is amplified given that they were discovered in an area where human remains rarely survive and provides an opportunity where modern scientific techniques can be employed.

The date of the use life of the cemetery has been largely established as the style of the graves is typical of the early medieval period in North West Wales. However, as with the remainder of the Wylfa Head site, the early medieval cemetery's stratigraphic sequence is complex with indications of multiple phases of use and reuse intercut with possible Romano-British to post-medieval features. Radiocarbon dates of human bone samples recovered during evaluation trenching by Headland Archaeology in Trench 2156 date the remains at c. 700 AD (8th century), whilst cereals and charcoal from graves in Trench 2165 and 2157 returned dates between c. 114 AD (2nd century) and c. 558 AD (6th century). Although the 6th century date is plausible it is also possible that the

charcoal and cereal remains could be intrusive elements. Radiocarbon dates of charred material recovered from Feature 296 by ABA returned a date of *c*. 382-538 AD, suggesting a late Roman to early medieval date for the establishment of the cemetery. An early medieval date for the cemetery was confirmed by radiocarbon dating of skeletal remains excavated by ABA, which returned dates ranging from *c*. 426 to 666 AD. The small number of samples dated does not allow for Bayesian Analysis of the data. The dates suggest a comparatively early data of use and abandonment of the cemetery and appears to be broadly contemporary with Llangefni, for which the radiocarbon dates fall in the 5th to 7th centuries AD. Tywyn y Capel was reportedly in use from the 7th – 13th centuries (Davidson *et al*., 2009), and other cemeteries on Anglesey with minimal or no bone surviving are poorly dated. Brownslade in Pembrokeshire appears to have been in use between the 5th – 11th centuries (Groom *et al*., 2012), and Llandough near Cardiff between potentially late 4th and early 11th century AD (Holbrook and Thomas 2005). A mix of grave types, from fully stone-lined and capped to simple dug graves, is evidenced at all these sites, though the proportions differ. Within many sites, cist burials are better preserved.

The cist burials at Tywyn y Capel were generally well-preserved (Adlam and Wysocki, 2009), and at Llangefni preservation was better in the cists which contained capstones (Rusu and Madgwick 2017), which mirrors preservation at Wylfa Head. Only one dug grave at Wylfa Head contained any human remains. At Llangefni it was noted that long bones such as the femur, tibia, and humerus were most likely to survive, and skulls were normally recorded as being highly fragmented. This is the same pattern evidenced at Wylfa Head though the condition of the bone here is much poorer, as only the long bone shafts and very rarely any joints or epiphyses survived (Butler and Madwick, 2020 *Appendix X*).

Based on the Wylfa Head excavation results most of the graves consisted of long cist type burials. No evidence of cremated materials was found within the cemetery. Indication of wood staining (possible coffin burials or wooden cists) was only visible in four graves (G090, G215, G216, and G238) within Feature 296, the dense concentration of graves within the footprint of a possible timer roundhouse. The clustering of burials in Feature 296 could therefore be indicative of a separate distinct/intense period of use and/or kinship. However, the limited number of samples analysed for carbon dating during the assessment programme does not allow for clear distinction between the burials associated with Feature 296 and the rest of the cemetery.

Small finds recovered from graves within the rest of the cemetery include Roman brooch fragments (SF0542), Roman pottery, furnace lining, various metal fragments including lead, iron and copper, slag, animal teeth and bone fragments, shell fragments, lithics and worked stone, all of which is likely intrusive material relating to the other phases of activity at the site.

Due to the poor preservation of the human remains and survival of diagnostic elements, meaningful demographic and pathological analysis is limited. Estimations of sex was largely based on characteristics of the cranium, and age estimates based on dental attrition resulting in broad age categories. Additionally, many of the lesions associated with bone pathology (disease) and generalised health (non-specific stress indicators i.e. hypoplasia, cribra orbitalia and protic hyperostosis) may not be visible in the assemblage due to the erosion of the cortical surfaces. One male, one female and four possible males and 3 possible females were identified at Wylfa Head. At Llangefni, 50 were sexed, resulting in 13 males and 27 females, and it was suggested differential burial practice should be considered as a factor (Rusu and Madgwick 2017). This larger proportion of females at Llangefni is slightly paralleled at Tywyn y Capel. Of the adults, seven were identified as female, two as male, and one was unknown. It is noted that this could be due to chance survival as only a fraction of the original cist cemetery survived (Davidson *et al.,* 2009), or it may indicate that females were clustered in a specific area. In south Wales sites, sexes were more balanced; at Llandough, 30% of the individuals were determined to be male, while 25% were female, at

Brownslade, 33 skeletons were sexed, resulting in 16 males and 17 females (Butler and Madwick, 2020 *Appendix X*).

Though limited, the Wylfa Head age data was enough to draw some comparisons to other cemeteries. At Llangefni survival of infant remains were better, with two perinates and infants under 2 years. At Llangefni the larger proportion of individuals (n=26) were aged between 26 and 45, while at Wylfa Head the largest group (n=19, 36% of aged individuals) were those between 18-25. The age distribution of the cist burials at Tywyn y Capel include more non-adults (24 long cist graves containing 10 adults and 12 subadults), however, they are all children under the age of five. The lack of 12 to 18-year-olds may not be representative of mortality rates and it is possible that they were buried elsewhere (Davidson *et al*., 2009). The non-cist burials from Tywyn y Capel had a different mortality profile, with 42% of the sample being non-adult. At Brownslade, few deaths occurred in the youngest age categories (first months – 2 years), when compared to the total number of sub-adults recorded (Coard, 2012; 150). The falling mortality rate falls for the twelve to eighteen-year-olds, and rising mortality rate adults may be due specific periods of stress (diet) or a demanding lifestyle (Coard, 2012; *Appendix X*).

The limited pathological changes identified in the Wylfa Head assemblage were related to non-specific stress and degenerative joint disease. At Llangefni seven individuals were affected by cribra orbitalia and roughly correlate to the 10% rate of cribra orbitalia from Wylfa Head. Cribra orbitalia was identified in two individuals from Brownslade (2/52, 3.8%), and 138 at Llandough (138/385, 35.8%). At Llandough, juvenile morbidity revealed that from the sub-adult skeletons with orbits present, 46/62 (75%) exhibited cribra orbitalia. If the stress is occurring during childhood it is likely that cribra orbitalia would have healed by adulthood, explaining the lower rates in those groups. It is also possible that they indicate general ill-health in children who died young. No features of metabolic or endocrine illness were observed on the remains from Tywyn y Capel. Linear enamel hypoplasia was recorded on 8 out of 71 individuals with teeth at Llangefni, a rate of 11%. The same condition was present on three individuals from Brownslade (3/52, 5.8%) and 57 individuals from Llandough (57/551, 10.3%). The Wylfa Head rate was much lower (0.5%). The greater percentage of linear enamel hypoplasia at other sites is likely an artefact of poor preservation at Wylfa Head (Butler and Madwick, 2020 *Appendix X*).

Two cases of possible degenerative joint disease were identified at Wylfa. The prevalence of degenerative joint changes was higher at Tywyn y Capel, with 70% of the adult sample affected. At Llangefni evidence of joint disease was present in 20 of the adult (n= 65) individuals, a rate of 31%. The vertebral column was most commonly affected, while shoulder and hip joints were also affected. Llandough had an adult prevalence of 32.8% for osteoarthritis. Enthesophytes, identified in SK10.0745, were recorded on four individuals in the Llangefni assemblage. At Brownslade, preservation allowed for detailed analysis of musculo-skeletal markers on two males and two females which was not possible in the Wylfa Head assemblage (Coard 2012). Robusticity indicated strenuous activity especially in one individual (S532). This, along with bowing to the upper limb bones indicating strenuous arm movement, likely due to pattern of use and strenuous lifestyles (Butler and Madwick, 2020 *Appendix X*).

Better survival rate of teeth at Wylfa Head indicated greater evidence for dental pathology than other sites, however the rates of pathologies are likely underestimated. At Wylfa Head dental pathology (including LEH) was recorded in eight individuals (14% of individuals with teeth), and antemortem tooth loss in three individuals, all associated with periapical cavities. Seven teeth from five individuals had evidence of carious lesions. This rate of caries is very low (1.7%) in comparison with other sites. At Llangefni, of the 71 individuals with teeth, 11 had carious lesions and 13 antemortem tooth loss. The low rates of calculus observed at Wylfa Head contrast strongly with Tywyn y Capel, where calculus was present in approximately one-third of teeth (Davidson *et al*..

2009), but this is likely due to preservation rather than being representative of oral health (Butler and Madwick, 2020 *Appendix X*).

The Wylfa Head collection is thus well-suited to destructive analysis as it contains many undiagnostic fragments which otherwise provide little information. aDNA analysis can be utilised to explore relationships between individuals buried in different areas of the cemetery, and stable isotope analysis for diet and migration will answer questions which were not answered based on macroscopic investigations of skeletal remains.

5.4 Period 7 (Post-Medieval), Period 8 (Modern) and Features of Undetermined Date

The post-medieval ditch which truncated a number of graves warrant no further investigation. The post-medieval ceramics, consisting of glazed earthenware, Buckley-type ware, whiteware, slipware, porcelain and stone ware dating from the 17th to 20th century and represent utilitarian household vessels and tableware. The assemblage is mostly from unstratified contexts and is not expected to be retained following the initial assessment and are of low archaeological significance.

The clay tobacco pipe stem and bowl fragments, dated to the post-medieval period, showed some evidence of decoration. The fragments were recovered from largely unstratified, topsoil, subsoil and modern deposits and are of limited significance. The post-medieval and/or modern glass fragments consist mostly of green and brown bottle glass and window glass fragments recovered from topsoil, subsoil and modern deposits and also does not require further analysis. The metalwork (mostly agricultural in origin) are not expected to be retained following the initial assessment and are of low archaeological significance.

The features at the western edge of the site which cannot be closely dated due the lack of artefactual evidence should be dated to allow them to be placed in context in relation to the other activity in the area. The ceramic spindle whorl (SF121) recovered from posthole [10.0085] is likely to date to between the Roman and medieval period but still gives a wide date range potential. The postholes appear to form a linear trend, possibly a fence line, although it is unclear whether all the features are contemporary. It is also unclear from the excavation whether the postholes belong to a single phase of activity or show multiple episodes of construction and repair. Radiocarbon dating of suitable material from a selection of the features would allow them to be placed in context in relation to the other identified activity and allow better interpretation.

5.5 Conclusion and Realisation of Original Aims and Objectives

The original objectives stated in section 2.6 has largely been met in that material was recovered during the Wylfa Head excavation in order to date evidence of past activities, and samples were taken to better understand the past environment and land use.

The excavation initially targeted the early medieval cemetery identified during evaluation trenching. The original excavation area was extended to a total area of 5,525m^2 due to the identification of a Romano-British settlement during the excavation of the cemetery.

The excavation of the cemetery identified 315 graves . Most of the graves were stone lined and capped long-cist types. A dense concentration of graves in a prominent position on the site, identified as Feature 296, appears to have been the initial focus of funerary activity from which the remainder of the cemetery developed.

The settlement was not initially expected as it had not been identified during evaluation. It appeared to have evolved through a series of phases, possibly starting as an open settlement

during the Iron Age and becoming enclosed by substantial walls during the Romano-British period. As well as domestic activity, industrial activity was identified in the form of furnaces, suggesting that metalworking was undertaken at the site.

A Neolithic pit at the southern edge of the site was found to contain three stone axes and a cache of small polishing stones.

The earliest activity identified was a flint scatter from the Mesolithic period.

The material recovered from Wylfa Head is of high archaeological significance. Few artefacts appear to directly relate to the cemetery, but a significant assemblage of material associated with industrial activity, textile production and grain processing during the Romano-British period was recovered.

To fulfil the potential of the site data, the updated objectives and research questions have been set out below to provide a framework for proposed further analysis. Addressing the aims and objectives will be achieved through a detailed examination of the stratigraphy, contextual analysis of the datable finds and comparative research. An analysis of the character of the site, on the basis of landscape, structural remains, stratigraphy and finds, may also be used with evidence from other know sites, both locally and regionally, to identify whether the site represent a site of low or higher socio-economic status.

5.6 Mesolithic and Early Neolithic

1. *What relationships or patterns, if any, can been seen between the prehistoric features and their wider landscape setting?*
2. *What raw materials were used in Wales at during this period?*
3. *What types of artefacts are present, and what can these artefacts tell us about daily life, trade and/or ritual activity?*
4. *How extensive is the survival of deposits containing both archaeological and environmental evidence for these periods?*

5.7 Later Bronze Age and Iron Age

1. *Are the features and possible structural features associated with isolated structures or part of a larger settlement?*
2. *What types of artefacts are present, and what can these artefacts tell us about daily life, trade and/or ritual activity?*
3. *How extensive is the survival of deposits containing both archaeological and environmental evidence for these periods, and what can these tell us about agricultural practices?*

5.8 Romano-British

1. *Are the possible structural features associated with isolated structures or part of a larger settlement?*
2. *What evidence do the ditch features provide for landscape organisation and enclosure?*
3. *What is the relationship between the ditches and other features such as settlement features and burnt mounds / spreads?*
4. *What types of artefacts are present, and what can these artefacts tell us about daily life, trade and/or ritual activity?*

5. *How did the culture on the island change, and in what ways, between the Iron Age, Roman and early medieval periods?*
6. *How do the Roman Sites identified relate to their surrounding landscape both in terms of location and utilisation of the landscape?*

5.9 Early Medieval

1. *Establish the date of the use life of the cemetery via the recovery of datable artefacts or material (such as bone and charcoal) which is suitable to be subjected to scientific dating techniques. This should include Bayesian Analysis of the data recovered from scientific dating of the samples as well as pair series correlation. This latter is best applied to multiple samples recovered from the same context, and where that context can be identified as stratigraphically sound (i.e. unlikely to contain intrusive material) and short lived.*
2. *Establish the stratigraphic sequence of the burials within the cemetery area, and of those remains around/associated with the cemetery, to allow contemporary relationships with the wider site to be established.*
3. *Determine the presence, nature, character and date of any features associated with the burials, but which are not themselves burials – including (but not limited to) structural remains (such as post holes) and boundary features (such as ditches). Also, to determine the spatial and stratigraphic relationships of these features between themselves and the burials.*
4. *Gain information on the past environment of the cemetery site via the recovery, and study, of micro and macro fossils from the burial fills.*
5. *Determine what, if any, link existed between the cemetery site and other known archaeological sites in the region, with particular emphasis on those other archaeological sites identified in fields L1/F1/L20 by the trial trench evaluation.*

The following research objectives identified withing the WSI also warrant further investigation:

1. *To undertake detailed analysis of (early) medieval artefacts and their contexts in order to understand the chronological and typographic development, and use, of the artefacts.*
2. *The analysis of human remains for information on ~~date,~~ origins and diet.*
3. *The setting of the information gained from archaeological investigation into a broader*
4. *regional and national (including Britain and Ireland) context.*
5. *Gaining of insights into the chronology and process of Christian conversion, the evolution and changing functions of religious sites and the broader impact of these on the landscape and (early) medieval society in Wales.*
6. *Identifying, in so far as is possible, the settlement and ecclesiastical sites associated with cemetery sites in order to understand the interrelationships between settlement sites, parish catchment areas and cemetery catchment areas.*
7. *Gaining insights into the local farming economy and the wider exploitation of the natural environment – with particular reference to the exploitation of lakes and fens/bogs (such as the adjacent Tre'r Gof SSSI site) and the sea.*
8. *Gaining insights into long distance trade (via the analysis of recovered artefacts) especially in such products as pottery, glass and metalwork.*
9. *Establishing the extent of continuity or discontinuity between the late Roman and early medieval periods via analysis of environmental evidence (RO8), the agricultural economy (RO8), artefacts*

recovered (RO2) and changes in settlement patterns (RO6), trade (RO9) and burial/funeral practices (RO5).

10. *Understanding how the transition between the Late Roman and early medieval period on Anglesey (RO10) compares with the same period elsewhere in Wales and Britain.*
11. *Understanding what, if any, impact Irish and Scandinavian populations had on (early) medieval Wales (artefacts, agricultural economy, funerary practices etc).*

6 Proposal for Further work

The results from the investigation of the assemblage are of local and regional interest and should be considered along with similar findings from neighbouring archaeological areas. It is proposed that a detailed site report, incorporating stratigraphic and further specialist finds analysis as recommended by the specialist assessment reports (*Appendix V to X*) are produced:

- Roman Pottery - Full analysis to incorporate other Roman pottery assemblages from the entire Wylfa complex. Diagnostic sherds such as rims and bases should be illustrated, as well as any decorated sherds with discerning features such as rivets (SF **1532**) or mends. Reconstruction of conjoining sherds may be beneficial for aiding illustration and photography. Further analysis should include the r.EVE (*estimated vessel equivalent*) count and MNV count (*minimum number of vessels*).
- Slate - No further work was suggested, though it was recommended should the project proceed to publication the slates would contribute to the interpretations and understanding of the wider funerary landscape.
- Stone - Further analysis on the stone assemblage is warranted, including full comparative analysis and research with other similar artefactual assemblages from the Wylfa complex as well as sites in the wider vicinity. The assemblage, although it warrants a standalone report, would benefit with being discussed and analysed in conjunction with Area 20. All diagnostic and distinct artefacts warrant illustration.
- Industrial Waste - Further work, including XRF analysis of the material is warranted to identify which industrial processes was carried out on the site.
- Glass - Further analysis of the glass beads and Roman finds is warranted, included comparative research, illustration and photography.
- Iron - Further analysis is recommended on the Roman and medieval artefacts, including illustration and comparative research with iron assemblages from different sites across the Wylfa complex. The assemblage would benefit from being discussed alongside the stone assemblage to enhance past domestic and agricultural activities on the site.
- Lead - Further analysis is recommended, particularly on the weights, including comparative research and illustration to enhance the interpretative analysis of domestic and trade activities as well as husbandry/fishing practices on the site.
- Copper alloy finds - Further analysis is recommended on the Roman and medieval finds, including comparative research. Items of personal adornment should be illustrated, including the brooches, rings, bracelet fragments and buckles, in addition to comparative research/analysis of other assemblages of personal adornment from the Wylfa complex.
- Charred Plant Remains (CPR) - Further work on the charred plant remains may shed light on aspects of crop husbandry practices. Analysis is recommended on CPR obtained from samples <187>, <557>, <825>, <863>, <1099>, <1100>, <1388-9>, <1462-4>, <1483>, <1491>, <1502-4>, <1514>, <1538>, <1624>, <1644>, <1651>, <1655>, <1696-7>, <1700>, <1703>, <1728>, <1767-8>, <1743>, <1764>, <1771-2>, <1778-9>, <1783>, <1786>, <1788-9> and <1792>.
- Charcoal - Analysis may be possible on the larger assemblages from samples **<1383>, <1386>, <1403>, <1592>, <1605>, <1611-2>, <1617>, <1637>, <1665>, <1688>, <1696>, <1699>, <1703-6>, <1711>, <1713>, <1716>, <1719>, <1732>, <1734-5>, <1740-1>, <1744>, <1747>, <1755>, <1762>, <1767>, <1776> and <1787>. These may** provide an overview of the species exploited by the past peoples. Radiocarbon dating may be possible on the samples listed in Table 4, Appendix IX.

The lithic assemblage warrants further analysis and should be reported in full to explore themes relating to the nature, significance and scale of flint and chert technology and its use. This should include:

- Recording in detail the typological, technological and metrical traits of the various significant assemblages, as well as the raw materials, condition and degrees of recortication.
- Refitting exercises combined with a detailed examination of the micro-debitage on selected suitable assemblages, in order to elucidate pre-depositional history and discards patterns of the material.
- High-power examination of selected debitage for micro-wear traces to assess the degree to which unretouched flakes and blades may have been used.
- an examination of the contextual and distribution patterns of the assemblages.
- a consideration of the assemblages' relationships with other deposited materials, such as bone, pottery etc.
- discussing how the material compares and contrasts to other lithic assemblages from the region and the implications that this may have for broader settlement strategies and patterns of landscape exploitation.
- Research and compilation of Mesolithic and Early Neolithic assemblages from the region;
- Research and compilation of raw material sources and products.

The exploration of cemetery development and use over time is one of the key research questions posed at assessment stage, and Wylfa Head is in a unique position among the cemeteries of Anglesey to investigate this, as it may represent one of the earliest large cemeteries in Wales. Due to the poor preservation of the human remains recovered from Wylfa Head, the collection is well-suited for further destructive analysis (*Appendix X)*:

- aDNA analysis to explore relationships between individuals buried in different areas of the cemetery.
- Multi-isotope analysis of diet - Carbon ($\delta^{13}C$) and nitrogen ($\delta^{15}N$) from bone collagen for dietary reconstruction
- Strontium ($^{87}Sr/^{86}Sr$) on M1/M2 enamel for geological signal relating to childhood place of residence
- Oxygen ($\delta^{18}O$) isotope for comparable climatic signal for place of origin
- Both dietary and provenancing analysis may be augmented by sulphur ($\delta^{34}S$) isotope analysis of bone collagen for indication of coastal proximity and/or the consumption of marine foods (at least 50% of assemblage).

7 Storage and Archive Deposition

At the time of writing the paper and digital archive was held at the ABA offices in Bangor, Gwynedd. The finds assemblage and environmental samples was under the curatorship of WA, and the human remains under the curatorship of Cardiff University Bioarchaeology (CUBA). Upon completion of the project, and with agreement with HNP and the relevant stakeholders, the paper archive and digital data, including photographs will be lodged with the Royal Commission on Ancient and Historical Monuments of Wales (RCAHMW) in Aberystwyth, under an accession number yet to be assigned. ABA will hold a digital version of the archive indefinitely.

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