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HORIZON NUCLEAR POWER

WYLFA NEWYDD, ANGLESEY

AREA 9

ARCHAEOLOGICAL POST-EXCAVATION ASSESSMENT REPORT

DECEMBER 2021

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DECEMBER 2021

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SUMMARY

Wardell Armstrong LLP (WA) was commissioned by Horizon Nuclear Power to undertake the post-excavation assessment for archaeological excavations at the proposed new nuclear power station at Wylfa Newydd, Anglesey, Wales, centred on National Grid Reference (NGR): SH 36350 93450. The archaeological fieldwork programme was undertaken in support of a Development Consent Order application. The excavation was divided into defined areas and this report details the results of the archaeological excavation at Area 9.

Area 9 consisted of a single area within Field F1, centred on NGR SH 35594 93948 and covering 876m^2. The archaeological fieldwork was undertaken by Wessex Archaeology in two stages; the first between 8th and 25th August 2017, and the second between 18th and 24th April 2018.

The overall interpretation of the site, somewhat hampered by the excavation methods and circumstances, suggested a small roundhouse, accessed via a trackway, that may have been part of a wider open area. This was bordered by above ground rectilinear post-built structures along the northern side, an ancillary structure and working area to the south-west and a pit cluster and midden activity to the south.

The site may have been for limited domestic use, given the small size and low number of artefacts recovered, with the occupation subsidiary to the main focus on activities such as food processing of marine shellfish or similar. The purpose of the site might have been to provide specific items, perhaps for the nearby population and inhabitants, possibly those at the settlement area less than 1km away (Area 2) or the larger settlement to the south (Area 20).

The site would appear to be reasonably well planned with zoned activity areas and there was some evidence of repeated use, although the duration and whether it was seasonal, intermittent, or continuous and longer-term was unclear. The radiocarbon dates indicate Late Iron Age to Roman period occupation and activity.

CRYNODEB

Comisiynwyd Wardell Armstrong LLP (WA) gan Horizon Nuclear Power i gyflawni asesiad ol-gloddio archaeolegol ar gyfer cloddfau archaeolegol ar safle arfaethedig gorsaf bŵer niwclear Wylfa Newydd, Ynys Môn, Cymru, wedi ei ganoli ar Cyfeirnod Grid Cenedlaethol (NGR): SH 36350 93450. Ymgymerwyd ar y rhaglen waith maes archaeolegol i gefnogi cais Orchymyn Cydsyniad Datblygu (EN010007). Rhannwyd y rhaglen gwaith maes i lecynnau diffiniedig ac mae'r adroddiad hwn yn manylu canlyniadau cloddfa archaeolegol yn Area 9.

Roedd Area 9 yn cynnwys un llecyn, yng nghae F1, wedi ei ganoli ar NGR SH 35594 93948 ac

yn mesur 876m². Cwblhawyd y gwaith maes archaeolegol gan Wessex Archaeology dros ddau gyfnod, y cyntaf rhwng yr 8fed a'r 25ain o Awst 2017, a'r ail rhwng y 18fed a'r 24ain o Ebrill 2018.

Serch anhawster oherwydd dulliau cloddio, yn gyffredinol mae'r safle wedi ei ddehongli fel tŷ crwn bach gyda thrac a all wedi bod yn rhan o ardal agored mwy. I'r gogledd o'r tŷ crwn roedd tystiolaeth o strwythurau pyst uwch-ddaearol, petryalog. I'r de-orllewin roedd strwythur ategol ac i'r de roedd casgliad o bydewau a thomenni sbwriel.

Mae'n bosib bod y safle wedi bod o ddefnydd domestig cyfyngedig, oherwydd ei faint a'r nifer isel o arteffactau a nodwyd, gyda'r meddiannaeth yn eilradd i weithgareddau prosesu bwyd fel cregynbysgod neu debyg. Mae'n bosib bod y safle wedi darparu eitemau penodol, efallai i'r boblogaeth leol, efallai'r rhai yn byw yn yr anheddiad llai na 1km i ffwrdd (Area 2) neu'r anheddiad mwy i'r de (Area 20).

Mae'n edrych fel bod y safle wedi ei gynllunio gydag ardaloedd pwrpasol ar gyfer gweithgareddau a thystiolaeth o ailddefnydd. Nid yw'n glir am ba hyd o amser oedd y safle mewn defnydd, nac os oedd yn cael ei ddefnyddio yn dymhorol, ysbeidiol neu barhaol a mwy hirdymor. Mae dyddiadau radiocarbon yn dangos bod y safle yn dyddio rhwng yr Oes Haearn Hwyr a'r cyfnod Rhufeinig.

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The assessment report was written by Vix Hughes. The figures were produced by Helen Phillips and Valeria Tiezzi. The finds assessment report was compiled by Sue Thompson. The palaeoenvironmental work was supervised by Freddie Sisson and the team consisted of Megan Lowrie, Katherine Bostock, Jyoti Stuart, Paul Sherwood, Sophia Davies and Charlotte Manning. The palaeoenvironmental assessment was written by Freddie Sisson and overseen by Lynne F Gardiner. The project was managed by Frank Giecco and the report edited by David Jackson.

1 INTRODUCTION

1.1 Project Circumstances and Planning Background

1.1.1 Between July and August 2017, Wessex Archaeology undertook an archaeological excavation in Area 9, Field F1 at Wylfa Newydd, Anglesey, Wales, centred on National Grid Reference (NGR): SH 35594 93948 (Figure 1). This excavation was one of multiple defined areas excavated as part of a large scheme of works commissioned by Horizon Nuclear Power (HNP). The intention is to construct a nuclear power station, related plant and ancillary structures and offsite power station facilities for which a Development Consent Order application has been submitted to The Planning Inspectorate (EN010007).

1.2 Primary Reference Numbers (PRNs)

1.2.1 Historic Environment Record (HER) event numbers (‘PRNs’) were assigned following discussions between Wessex Archaeology and Nina Steele, Senior Historic Environment Record Archaeologist at Gwynedd Archaeological Trust (GAT). PRN45392 has been assigned to the Wylfa Newydd project as a whole and further event numbers have also been assigned to ‘noteworthy components’ of the project. Within Area 9, PRN76015 has been assigned to the Romano-British industrial activity. Further PRNs assigned for this area are presented in Table 1.1.

Table 1.1: primary reference numbers (PRNs) for area 9

PRN	Description	Associated context numbers/PRNs
PRN92010	Roundhouse, containing 17 postholes, Late Bronze Age/Early Iron Age	{9200}
PRN92011	7 postholes to east of roundhouse, Late Bronze Age/Early Iron Age	
PRN92012	Trackway, Late Bronze Age/Early Iron Age	
PRN92013	Pit, to the north of the trackway, Late Bronze Age/Early Iron Age	[9177]
PRN92014	Pits, Late Bronze Age/Early Iron Age	Group [9201]
PRN92015	Pits, Late Bronze Age/Early Iron Age	[9213], [9225], [9275]
PRN92016	Posthole structure, Late Bronze Age/Early Iron Age	
PRN92017	Ancillary structure, Late Bronze Age/Early Iron Age	
PRN92018	Pits, Late Bronze Age/Early Iron Age	[9201}
PRN92019	Trackway, Late Bronze Age/Early Iron Age	{9287}
PRN92020	Possible hearth, Roman	
PRN92021	Pits, Roman	
PRN92022	Pits, uncertain	
PRN92023	Posthole, uncertain	

PRN	Description	Associated context numbers/PRNs
PRN92024	Pit, uncertain	
PRN92025	Linear, uncertain	

1.3 Project Documentation

1.3.1 The project conforms to a brief prepared by HNP which was prepared in consultation with the Gwynedd Archaeological Planning Service (GAPS), the archaeological planning advisor to the Isle of Anglesey Council. A Written Scheme of Investigation (WSI) was then produced to provide a specific methodology based on the brief for a programme of archaeological excavation (HNP 2015). This was agreed with the archaeological planning advisor prior to the fieldwork taking place. This is in line with government advice as set out in Section 5.8 of the National Policy Statement for Energy (EN-1) (Department for Energy and Climate Change 2011).

1.3.2 This report outlines the fieldwork undertaken on site at Area 9, the results of this scheme of archaeological excavation and the subsequent programme of post-excavation assessment, in accordance with the Post-Excavation Assessment Method Statement. It follows on from a series of works consisting of desk-based assessments, geophysical surveys and two sets of evaluation trenches, culminating in the excavation fieldwork. The previous elements of work have been fully reported on (see bibliography where relevant).

1.3.3 The excavation of Area 9 was undertaken in two stages, one two-week period in August 2017 and a later one-week period in April 2018, with a hiatus of seven months.

2 EXCAVATION METHODOLOGY

2.1 Standards and Guidance

2.1.1 The archaeological excavation was undertaken following the Chartered Institute for Archaeologists (CIfA) *Standard and guidance for archaeological excavation* (CIfA 2014a), and in accordance with the Wessex Fieldwork Recording Manual (2015).

2.1.2 The fieldwork programme was followed by an assessment of the data as set out in the aforementioned standards, as well as the guidelines from Historic England (MoRPHE 2015) and the *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (CIfA 2014b).

2.2 Archaeological Excavation

2.2.1 The archaeological excavation of Area 9 comprised the strip map and sample of a single area within Field F1, totalling 876m^2. The defined area was identified for archaeological excavation based on the results of the previous archaeological evaluation.

2.2.2 The general aims of the project were:

- *to ensure the adequate recording of any archaeological remains revealed by the strip map and sample work;*
- *to identify, investigate and record the character, nature, extent and relationships of the archaeological remains discovered, to the extent possible by the methods put forward in the specification;*
- *to determine (so far as possible) the stratigraphic sequence and dating of the deposits or features identified;*
- *to integrate the results of the work into the wider historic and archaeological context of the landscape and to address relevant regional research objectives where applicable and so far as is possible;*
- *to disseminate the results through deposition of an ordered archive at the suitable repositories for both physical and digital material, the deposition of a detailed report at the Historic Environment Record (HER) and publication at a level of detail appropriate to the significance of the results;*
- *to undertake the works in such a way as to allow sufficient data to be gathered to address the various research objectives outlined below. This includes the investigation and recording of features, the identification, recording and collection of artefacts and ecofacts (including environmental samples) and the use of appropriate analytical methodologies / techniques when examining the record / artefacts.*

And specifically, for the Area 9 excavation:

- *To address archaeological research objectives posed by the Research Framework for the Archaeology of Wales (CIfA Cymru/Wales 2017).*
- *To establish the true nature and function of the various archaeological remains present, specifically to identify the presence of any agricultural, domestic, industrial or ritual activity and the character of such.*
- *To gain information on the past environment of the landscape surrounding the investigation area via the recovery, and study, of micro and macro fossils from the feature fills.*
- *To understand how the remains seen within the investigation area relate to other known features across the landscape (chronologically, stratigraphically as well as spatially),*
- *To gain insights into the local farming economy and the wider exploitation of the natural environment – with particular reference to the exploitation of lakes and bogs (such as the adjacent SSSI site) and the sea.*
- *To gain insights into regional, national and international trade (via the analysis of recovered artefacts) especially in such products as pottery, glass and metalwork, and how the development of social networks fitted into this.*
- *To gain insights into social organisation and settlement hierarchies.*
- *To identify and understand early field systems.*

2.2.3 Deposits considered not to be archaeologically significant were removed by a 360˚ tracked mechanical excavator with a toothless ditching bucket, under close archaeological supervision. The area was subsequently cleaned by hand. All possible features were inspected, and selected deposits were excavated by hand to retrieve artefactual material and environmental samples. In the case of burnt spreads or extensive deposits these were excavated in quadrants. Once completed all features were recorded according to the Wessex standard procedure (Wessex Archaeology 2015).

2.2.4 In an unusual circumstance there was a discontinuous programme of excavation with two stages of work, with the first occurring over two weeks in August 2017. After a seven-month gap, work was resumed for the second stage for one week in April 2018.

2.2.5 The larger features were excavated in quadrants during the first phase of excavation and the quadrants were recorded down to natural (e.g. within the Roundhouse) with features cut into the natural remaining unexcavated. Then the remaining quadrants were removed to this level. A handful of features were then excavated but work on the area was halted at short notice (2017). A team was sent in to complete excavation work months later in 2018, when the discrete features internal and external to the roundhouse were excavated.

2.2.6 A number of the features had been previously identified during the 2017 Headland evaluation and in some cases, the features were re-excavated to either fully remove the remaining fill material, or to re-establish the features in the wider context of the excavation.

2.2.7 On completion, the excavated area was reinstated by replacing the excavated material in the reverse sequence of which it was removed. Topsoil and subsoil were excavated and stored separately to prevent mixing.

2.2.8 All finds encountered were retained on site and initially stored by Wessex Archaeology. The material was then transferred to the Wardell Armstrong (WA) Carlisle office where they were identified, quantified and dated to period. A *terminus post quem* was then produced for each stratified context under the supervision of the WA Finds Officer, and the dates were used to help determine the broad date phases for the site. Following analysis, the finds were cleaned and packaged according to standard guidelines (Watkinson and Neal 2001). Please note, the following categories of material will be discarded after a period of six months following the submission of this report, unless there is a specific request to retain them (and subject to the collection policy of the relevant depository):

- modern pottery;
- and material that has been assessed as having no obvious grounds for retention.

2.2.9 The work is primarily summarised by investigation for clarity but related features and remains are linked throughout. Where contexts could be identified between the investigations, this has been done and the evaluation contexts are integrated into the excavation phased narrative where applicable.

2.2.10 Within the defined Periods (see below) broad phasing has been ascribed to the features, deposits and structures encountered during the investigations, and the results are presented below in chronological order. The Periods used are derived from those identified in the Research Framework for the Archaeology of Wales (CIfA Cymru/Wales 2017) and are consistent throughout the different areas of work, but within these, the Phases may not be directly compatible. The dating and phasing are provisional as is appropriate for an assessment of the site and may be refined in the light of evidence produced from detailed analysis of the dataset. It is also noted that imposing rigidly defined periods on a continuous process is somewhat of a contrivance but is done so for simplicity.

- Period 0 Natural Drift Geology
- Period 1 Palaeolithic and Mesolithic 250 000 – 4000 BC
- Period 2 Neolithic and Early Bronze Age 4000 – 1500 BC
- Period 3 Late Bronze Age and Iron Age 1500 BC – AD 43
- Period 4 Roman AD 43 - 410
- Period 5 Early Medieval AD 410 – 1100
- Period 6 Medieval AD 1100 - 1539
- Period 7 Post-medieval AD 1539 - 1750
- Period 8 Industrial and Modern AD 1750 – present
- Undated

3 SITE ARCHIVE

3.1 Description

3.1.1 A full professional archive has been compiled in accordance with the project specification, and the Archaeological Archives Forum recommendations (Brown 2011). The archive will be deposited with the Oriel Ynys Môn, with copies of the report sent to the Gwynedd Archaeological Trust HER, available upon request. The archive can be accessed under the unique project identifier WA19/CL12283/Area 9/35-2016.

3.1.2 The Site Archive comprises the material and documentary archives as follows (Table 3.1).

Category	Quantification
Context Sheets	287
Small finds	0
Bulk finds	3.52kg
Environmental samples	44 samples (600 l)
Monochrome film	0
Digital photographs	672
Rectified photographs	0
Hand drawn plans	46
Hand drawn sections	98
GPS survey pre-excavation plans	Yes
GPS survey excavation plans	Yes
TST surveyed excavation plans	No

Table 3.1: Quantification of excavation data

4 BACKGROUND

4.1 Location and Geological Context

4.1.1 Area 9 is located on the north Anglesey coast, approximately 900m northwest of the centre of Cemaes, situated to the northeast of the proposed development area (Figure 1). The site comprised a single field, centred at National Grid Reference (NGR): SH 35594 93948 (Plate 1). The coastline is 110m to the northwest and the Tre'r Gof Site of Special Scientific Interest (SSSI) is only 200m to the southeast.

4.1.2 Area 9 lay on level ground at approximately 24m above Ordnance Datum (aOD). The ground slopes down to the southeast towards the Tre'r Gof SSSI and there is a stone boundary wall along the east side of the field. Prior to the archaeological excavation, the fields were in use as improved agricultural land, characterised by enclosed arable fields.

4.1.3 The underlying solid geology within the area of investigation is mapped as mica schist and psammite of the Gwna and New Harbour Groups formed during the Ediacaran period between 541 to 635 million years ago. This is overlain by superficial deposits of Devensian till deposited up to 2 million years ago during the Quaternary period, in a local environment dominated by ice age conditions (BGS 2019). The natural substrate observed during the works at Area 9 comprised a mid orangey brown silty sand with outcropping of bedrock, which is consistent with the mapped geologies above.

4.1.4 The overlying soil is freely draining slightly acidic loam (Cranfield Soil and Agrifood Institute 2019) and was identified on the site as a mid-greyish brown sandy clay, up to 0.3m thick. A paler orangey brown relict ploughsoil subsoil lay below this and was up to 0.1m thick.

4.2 Historical and Archaeological Background

4.2.1 An archaeological baseline assessment was produced to assess the known historical and archaeological background of the site and the surrounding landscape to a distance of 6km (GAT 2012b), which was later reviewed and updated (Jacobs 2015). It is not intended to repeat that information here and what follows is an overview relating directly to the immediate environs of Area 9. For further details please refer to the original documents.

4.2.2 ***Period 1 - Palaeolithic and Mesolithic (25 000 – 4000 BC):*** There is no known Palaeolithic or Mesolithic activity within Area 9.

4.2.3 The earliest known activity on Anglesey comprises Mesolithic flint scatters located close to the coast, south of the proposed development area (GAT 2012b).

4.2.4 ***Period 2 – Neolithic and Early Bronze Age (4000 – 1500 BC):*** There is no previously known Neolithic or Early Bronze Age activity within Area 9. Across Anglesey remains of this date include megalithic and ceremonial sites, funerary sites, artefact scatters and find spots, with a small amount of settlement evidence from postholes and pits.

4.2.5 There are changes and transitions over time including the change from communal burial practices and their sites to individual burials, as evidenced by urn burials containing cremated remains and inhumations within cists.

4.2.6 Burnt mounds dating to the Bronze Age (*c.*2600-700 BC) are also common throughout Anglesey and North Wales (GAT 2012b). These are typically located near to, or alongside watercourses either in groups or individually (*ibid*). Burnt mounds can be found at Carrog (PRN 27515) located nearly 2km to the east of the proposed development site, and east of Penciw (PRN 3565) located nearly 6km to the east of the proposed development site (*ibid*).

4.2.7 Prehistoric remains were uncovered during the evaluation and excavation phases in the vicinity. These included burnt mounds and, in some instances, associated troughs or pits in Area 1 (Field L3), Area 13 (Field L1 East), and Fields K1, K4, C13 and C16. There was also evidence of possible occupation and activity associated with a significant lithic tool debitage assemblage in Area 14 (Field L1 Southeast).

4.2.8 ***Period 3 – Late Bronze Age and Iron Age (1500 BC – AD 43):*** There was no previously known Late Bronze Age and Iron Age activity within Area 9.

4.2.9 Evidence for activity of this period on Anglesey comes from hillforts, enclosed settlement sites (with roundhouses, fields etc), finds including hoards, but very little funerary evidence (GAT 2012b, Cuttler *et al.* 2012). Hillforts and related fortifications continue from the latter part of the Bronze Age into the Iron Age (*c.*800 BC - 43 AD). One of the largest promontory forts on the island at Dinas Gynfor is located almost 3km northeast of the Wylfa Newydd Development Area.

4.2.10 Evidence of small enclosed settlement sites, consisting of a single or a cluster of roundhouses, hut sites, rectilinear enclosures and concentric enclosures which are sometimes palisaded are located around Anglesey (Cuttler *et al.* 2012). These likely date to the late Iron Age and Romano-British (43-410) periods. Examples of known sites include farmsteads found at Cefn Du, Cefn Cwmwd and Melin y Plas which was discovered during the A55 archaeological works (Cuttler *et al.* 2012).

4.2.11 The archaeological investigations uncovered Iron Age remains within the wider landscape in Area 12 (Field L1 Central) 260m to the east, Area 2 (Fields L8, L12 and L16), 930m to the southeast, and Area 20 (Field O5 South), 1.4km to the south. These all had complete or partial roundhouses and associated features within them. In the adjacent field F2, Trench 2196 revealed a number of pits including several intercutting pits and two small ditches / gullies. The fills included heated fuel waste, food debris, marine shells and possible metal working residue. A radiocarbon date from one gully fill dated to 1958 +/- 29 cal BP (Headland Archaeology 2017, 8).

4.2.12 ***Period 4 – Roman (AD 43 – 410):*** There was no previously known Roman activity within Area 9. Anglesey was invaded in *c.*AD 60-61 by the Roman army and there is evidence of settlement sites, ephemeral military establishments (Jacobs 2015), scatters of Roman artefacts and Romano-British enclosure sites, however, the majority of this is located elsewhere and the northern part of Anglesey has very little evidence of occupation.

4.2.13 Roman period remains were revealed in fields F1 and F2 during the evaluation and comprised intercutting pits with varying fills including some with fuel waste from fires and marine shells. These were consistent with either domestic food waste or food processing waste (Headland Archaeology 2017).

4.2.14 ***Period 5 - Early Medieval (AD 410 – 1100):*** There is no previously known early medieval activity within Area 9, although a cemetery of this date has been excavated 200m to the east within Area 15 and settlement evidence has been found within Area 12.

4.2.15 Evidence of early medieval settlement in Anglesey is largely based on references made on documentary sources (Headland Archaeology 2017) which suggests a pattern of disparate farming sites located close to small ecclesiastical complexes across Anglesey (*ibid*).

4.2.16 Archaeological excavations have established that there is often a spatial relationship between early medieval settlement sites and cemetery site locations on Anglesey (Jacobs 2015) and it is thought that the use of long cist burials is consistent with the wider Welsh Christian burial practices of the 8th to 9th centuries (*ibid*). Other evidence includes occasional findspots, inscribed stones and a rare small fortified site at Porth Wen which may have related to the 9th century Viking raids.

4.2.17 The evaluation revealed a pit of 6th - 7th century date in Area 12, 260m to the east.

4.2.18 ***Period 6 - Medieval (1100 – 1539):*** By the 12th century, Area 9 was located within the *Talybolion commote* (a recognised regional unit of royal administration) with a royal manorial centre located at Cemaes (GAT 2012b).

4.2.19 The Talybolion commote was subsequently sub-divided into a number of smaller administrative centres called '*trefi'* (Jacobs 2015) which included: the ecclesiastical parishes of Llanfechell and Llanbadrig; the townships of Cemaes, Clegyrog, Llanfechell and Caerdegog; and the hamlet settlements of Cafnan, Tre'r Gof, Gwaunydog and Llanddygfael (*ibid*).

4.2.20 Documentary sources indicate that the pattern of medieval settlement on Anglesey during this period was characterised by largely unequal settlements with discrete areas of nucleation (Jacobs 2015). This pattern influenced later post-medieval and early-modern patterns and can be seen as agricultural land with intermittent farmsteads, small hamlets, and villages (*ibid*).

4.2.21 Archaeological evidence indicates that the practice of open-field farming, with narrow strips of arable pasture within large unenclosed fields located close to settlements was common and there is evidence of ridge-and-furrow, associated land clearance cairns, terraces, field boundaries, open fields, pens and small enclosures.

4.2.22 The medieval landscape also had agricultural buildings, domestic dwellings, mills and other structures though none are known to survive as complete upstanding remains. Only ecclesiastical elements show such survival on Anglesey. The distribution of medieval churches and settlement sites varies to include churches situated at the centre of each village or hamlet, to churches on the periphery of known settlement sites.

4.2.23 There were also undated ditches and field enclosures seen in some areas that may be part of the medieval landscape. For example, a large east-west aligned ditch in Area 17, corresponded to a surveyed geophysical anomaly and accorded with the projected line of an existing field boundary. The upper fill contained occasional charcoal flecks and a sherd of 13th/14th century medieval pottery. The southern edge of the ditch appeared to be truncated by a second, significantly smaller linear drainage feature, also likely to be of medieval or later date (Headland Archaeology 2017, 15).

4.2.24 ***Period 7 - Post-medieval (1539 – 1750):*** During the 17th and 18th centuries, Cemaes and Cemlyn Bay became principle centres of shipbuilding, fishing and later brickmaking and copper mining (*ibid*).

4.2.25 Although the rural landscape established during the medieval period continued into the post-medieval period there were fewer landowners that controlled larger areas of land and there were changes towards a more 'estate' systems with additional in houses and farmsteads established.

4.2.26 ***Period 8 – Industrial and Modern (AD 1750 – present):*** In the 19th century small-scale gentrification of the countryside continued with larger country houses and farmhouses being constructed or the existing ones being remodelled. Of this date, former Wylfa House and garden walls lie adjacent to the site (Dempsey 2016, Asset 73).

4.2.27 Agricultural land saw improvements to increase productivity during the post-medieval period such as draining of bog-land and changes to farming techniques, ploughing, manuring, enrichment, drainage, stock breeds and crop choices. The late 18th to 19th century land improvements are likely to have removed any remains of earlier surface and buried near-surface features, though fairly deep soils may have protected features cut into the substrata.

4.2.28 The recorded remains of post medieval field boundary systems are only part of the preserved landscape. For example, documented and existing boundaries may have been in place much earlier and subsequently denuded and buried, while newer ones added to extend areas of ownership or use.

4.2.29 The archaeological evaluations (Headland Archaeology 2017, Wessex Archaeology 2016) have demonstrated that this is not the complete picture and that there is a more complex landscape spanning the medieval to post medieval periods on Anglesey. Upstanding elements that can survive include clawdd (plural cloddiau). Within northwest Wales, the term is usually used to describe an earthen bank, often stone-faced (GAT 2012b). An unusual feature of stoneclad cloddiau is that the facing stones are commonly laid with their long axis vertical (DSWA 2013).

4.2.30 With the rise of the Industrial Revolution, the amount of industrial activity, such as mining, quarrying and brickmaking on Anglesey dramatically increased from the late 18th century onwards but declined in the early 20th century.

4.2.31 Population varied during this period with associated fluctuations in buildings such as new / remodelled wealthy dwellings, and more functional and modest ones becoming more common. This can be particularly identified for wartime accommodation and the more recent Power Station construction.

4.2.32 In 1960, the Central Electricity Generating Board (CEGB) applied for consent to build the existing Power Station with consent being granted in late 1961 (Jacobs 2015). In 1963 work began on the construction of the two Magnox reactors (*ibid*). The construction of the Power Station persisted throughout the 1960s, with Wylfa being the last and largest of this design of reactor (*ibid*). The Existing Power Station was officially commissioned in 1972 (*ibid*).

4.2.33 Construction of the two Magnox reactors and the Central Electricity Generating Board (CEGB) Power Station was a massive undertaking, involving excavating 13m below the existing ground level (*ibid*). The work took place for the CEGB between 1963 and 1972.

4.3 Previous Work

4.3.1 ***Documentary Research:*** An archaeological desk-based assessment was originally prepared in 2012 by Gwynedd Archaeological Trust (GAT 2012b). This set out the archaeological and historical background of the site and provided an assessment of the significance of all known and potential heritage assets up to 6km from the area of investigation to support the site preparation and clearance phase of works. An updated desk-based cultural baseline assessment was also prepared by Jacobs (2015) to support the DCO application.

4.3.2 The desk-based assessment (GAT 2012b) did not highlight any potential sites other than the likelihood of 'background agricultural features' such as field boundaries and ditches.

4.3.3 ***Geophysical Survey:*** The surveys (ASWYAS 2015; GAT 2011a, 2011b and 2012a) were unable to identify any results that could be interpreted as being of archaeological origin.

4.3.4 ***Archaeological Evaluation:*** Evaluation trenching took place from summer to autumn 2016. A total of 23 trenches that measured 1.8m wide and between 30m and 50m long were excavated in Field F1.

4.3.5 The trenches revealed the remains of two linear features, an undated field boundary ditch towards the southwest in Trench 2238 and a large east-west feature of probable natural origin that corresponded to an anomaly identified in the geophysical survey (Headland Archaeology 2017, 10), seen in Trenches 2224, 2225, 2226, 2227 and 2245.

4.3.6 The most significant results were located towards the southeast corner of the field, around Trench 2244. This trench revealed a large number of features including pits, postholes and what was originally thought to be a ditch (but excavation has revealed it to be a series of pits) that contained shellfish processing waste including limpet and whelk shells. Radiocarbon dating from one of the northern pit / posthole fills (**2244-045**), gave a date of 2040±29 cal BP (between 161 BC – AD 26), while dating from the fill (**2244-024**), of a southern pit gave a date of 1766±29 cal BP (between AD 142 – 378), suggesting the site might span the Late Iron Age to late Roman period (Headland Archaeology 2017).

4.3.7 It is thought that these features represented the western edge of a settlement site as no archaeological features were noted in the trenches to the west, north or south of Trench 2244. The area to the east was not investigated as it is the site of a registered ancient woodland and was subjected to significant ground reduction at an earlier period (HNP 2016, 7).

5 ARCHAEOLOGICAL EXCAVATION RESULTS

5.1 Introduction

5.1.1 The excavation of Area 9 was undertaken in two stages, a two-week period in August 2017 and a subsequent one-week period in April 2018, in Field F1 (Figure 2). The 876m^2 area of investigation targeted features recorded during the previous archaeological evaluation. The discontinuous programme of excavation works, with a hiatus of seven months, has produced some constraints on the results.

5.1.2 The excavation revealed a focus of concentrated activity covering an area approximately 30m by 20m in the southern half of the defined area (Figure 3). A number of grouped features associated with occupation and food processing activity were uncovered and thought to be of Late Iron Age to Roman date. The five grouped features consisted of:

- Group 9199 – Rectilinear structure(s), grouping of postholes;
- Group 9200 – Roundhouse, circular structure;
- Group 9201 – Pit cluster;
- Group 9286 –Ancillary structure (amorphous focus of pits, postholes and deposits) and;
- Group 9287 – Trackway / path

5.1.3 Results are detailed below, deposit numbers are given in **(parenthesis)**, cut numbers are given in **[square brackets]**. Group numbers are given in **{braces}**.

5.2 Results

5.2.1 An average of 0.3m of mid greyish brown sandy clay topsoil **(9001)**, and a further 0.1m of mid orangey brown sandy silt subsoil **(9002)**, was removed to reveal the archaeological features above the geology. The natural geological substrate **(9003)** comprised a mid orangey brown silty sand representing glacial till, with occasional patches of outcropping bedrock, consistent with the mapped geology. All features were stratigraphically sealed by the subsoil and truncated the underlying natural substrate.

5.3 Period 0 Natural Features

5.3.1 Two small features **[9258]** and **[9260]** were seen to the west of Group **{9200}**. Initially believed to be associated with the roundhouse, the two features were small, asymmetrical in plan and profile and the fills were unremarkable. The features were probably variations in the natural that had infilled.

5.3.2 To the north of Group **{9200}** was a small irregular circular feature **[9006]**, which had a single fill **(9007)** that contained no artefacts. The feature measured 0.6m by 0.1m deep and was probably an infilled undulation in the natural substrate (Figure 3).

5.4 **Period 3 – Late Bronze Age to Iron Age**

5.4.1 The five grouped features, Groups **{9199}**, **{9200}**, **{9201}**, **{9286}** and **{9287}**, may all have originated in the Late Iron Age but only three groups can be confirmed through radiocarbon dating at present; **{9199}**, **{9201}** and **{9286}**. They may have been constructed and used in any number of ways and the absolute chronology and, therefore, the duration of each phase is unclear. The activity assigned to this period has been separated into two phases, based on subtle stratigraphic relationships and a degree of spatial association, but it remains somewhat hypothetical at present.

5.5 ***Phase 1***

5.5.1 The earliest phase of archaeology was probably the construction of the Roundhouse Group **{9200}**, PRN92010; the establishment of the associated Trackway / path Group **{9287}**; and the commencement of pit formation to the southeast as Pit Cluster Group **{9201}** (Figure 4, Plate 2).

5.5.2 *Group {9200}*: this phase of activity consisted of the initial construction of the roundhouse, seen as a somewhat uneven truncation **[9060** and **9074]**, excavated into the natural to create a cleared area. The feature was roughly circular with a diameter of 6m and a depth of between 0.24-0.4m.

5.5.3 Within this area, and part of the construction process, were 17 probable posthole features, which were investigated and attributed to this phase. These consisted of **[9180**, **9182**, **9184**, **9209**, **9210**, **9218**, **9220**, **9223**, **9229**, **9231**, **9236**, **9238**, **9245**, **9255**, **9263**, **9266** and probably **9273]** (Figure 4, Plate 3). In general, the postholes were circular to oval in plan, with concave sides and bases, between 0.35 – 0.5m wide and 0.11 – 0.3m deep. Two of the features, **[9223]** and **[9231]**, were slightly smaller and were either more truncated or were possible stakeholes. The majority of the postholes demonstrated no evidence of the posts remaining in situ. Only one posthole, **[9209]**, showed reasonably clear evidence of stone packing material remaining (Figure 5, Plate 4). Posthole **[9266]** was the earliest feature in the central part of the roundhouse and was truncated by the later hearth feature **[9269]**, (Figure 5, Plate 5). The fills of several postholes contained small quantities of charcoal and charred plant material which suggested that the sediments were later infills rather than part of the original construction. The fills included **(9212**, **9255** and **9267)**.

5.5.4 To the immediate east of the roundhouse structure was an additional part of the group seen as seven postholes, PRN92011, suggested as being remnants of a possible external porch facing southeast. Postholes **[9076**, **9110** and **9112]** were positioned to the south, and postholes **[9240**, **9249**, **9251** and **9253]** were to the north (Plate 6). The postholes were comparable in form and size to the internal postholes, being between 0.2-0.5m in diameter and 0.1 – 0.45m deep, with concave sides and bases. Postholes **[9112]** and **[9249]** were the smallest. One posthole fill **(9252)** contained small quantities of charcoal and charred plant material which suggested that the sediment was a later infill rather than part of the original construction. It remains debatable whether posthole **[9240]** was part of the roundhouse circular structure or the porch area. Feature **[9019]** was discounted as a posthole and may have been the base of a small pit instead.

5.5.5 *Group **{9287}***: immediately to the east of the roundhouse and the possible porch was a northwest-southeast linear shallow depression, Group **{9287}**, which continued southeast beyond the excavated area. The feature was seen as a shallow construction cut or worn hollow-way **[9124**, **9130**, **9132**, **9134**, **9140**, **9145**, **9147**, **9162** and **9186]** and was thought to be a trackway, PRN92012, (Figure 4, Plates 2 and 7). It measured over 12.25m in length, was 4.5m wide and up to 0.25m deep. Within the evaluation trench, which was not re-examined, a posthole had been observed in the area of the trackway, but the precise stratigraphic relationship of posthole [**2244-037**] (Headland Archaeology 2017) to the trackway construction and its use was not identified.

5.5.6 A pit **[9177]**, PRN92013, to the north of the trackway **[9177]** may have been part of this phase of activity (Plate 8). It was stratigraphically truncated by posthole **[9191]**, Group **{9199}**. The pit had three fills;**(9178)**, **(9179)** and **(9190)**. The pit had been previously investigated in the evaluation as pit [**2244-048**], with a lower fill (**2244-049**) and an upper fill (**2244-050**) that was a dark greyish brown, sandy silt containing animal bone (cattle), charcoal and shell fragments. No ecofactual material was recovered during the excavation works.

5.5.7 Group ***{9201}***: this group comprised several intercutting pits, PRN92014, to the south of trackway group **{9287}**. However, only two pits could be confidently attributed to this phase. Pit **[9045]**, within the southern part of the cluster, was oval, measured 1.95m by 0.15m deep and had shallow sloping sides and an uneven base (Plate 9). It contained two fills **(9046)** and **(9047)**, which due to the shallow nature of the pit had no physical relationship. Fill **(9046)** was a darker clay with possible burnt stones, while fill **(9047)** was a paler clay; neither contained artefactual material. The pit was cut to the north by a later pit **[9042]** (=**[9064]**).

5.5.8 Pit **[9042]=[9064]**, was oval, measured 4m by 1.95m by 0.26m deep and had shallow sloping sides and an uneven base. It contained two fills **(9044)** and **(9043)**. The lower fill **(9044)** was a brown clay with occasional stones whilst the upper fill **(9043)** was greyish brown and contained inclusions of burnt stones and marine shells, identified as common limpet and dog whelks. Dating from a sample of barley (*Hordeum* sp.) grain from fill **(9043)** provided a radiocarbon age of 2160±30 BP (Beta-553552) giving a calibrated date range of 358-107 BC. Pit **[9042]** was part of pit **[9064]**. Pit **[9064]** was noted as having one fill **(9065)**, but photographic evidence would suggest that there was a lower stone rich fill overlain by an upper fill that appeared darker, with fewer stones and contained marine shells; this was likely to be an extension of **(9043)** (Plates 9 and 10). The pit cut the smaller pit **[9045]** to the south.

5.6 ***Phase 2***

5.6.1 The second phase of activity consisted of: the use and occupation of the Roundhouse Group **{9200}**; the establishment of rectilinear posthole built structures, Group **{9199}** to the north of the Trackway / path Group **{9287}**; the use of the trackway **{9287}**; the creation of a possible ancillary structure or work area, Group **{9286}** to the south; and the continuation of pit formation to the southeast as Pit Cluster Group **{9201}**, (Figure 6).

5.6.2 *Group* ***{9200}***: the continued use of the roundhouse during this phase was represented by the formation of three pits **[9213**, **9225** and **9275]**, PRN92015, although in each instance the stratigraphic relationships were not a certainty, due to the shallow nature of the features and related deposits. In addition, there was a feature of unknown function **[9216]**, on the northwest side of the roundhouse.

5.6.3 Pit **[9213]** appeared to cut a deposit **(9212)** associated with the Phase 1 posthole **[9210]**, (Figure 7, Plate 11). The pit was oval in plan and the fill contained a number of stones that appeared to be deliberately arranged around the sides and base, **(9215)**, which was subsequently overlain by fill **(9214)**.

5.6.4 Pit **[9225]** was located in the southeast quadrant and the single fill **(9226)** was a dark greyish black silty sand which had scattered stones and a small amount of probable hob nail fragments. Its eastern edge had been truncated by a small pit **[9227]**, (Plate

12).

5.6.5 Within the northern part of the roundhouse was a pit feature **[9275]**, which appeared to cut a Phase 1 posthole **[9273]** to the immediate north (Figure 7, Plate 13). Pit **[9275]** was described as having a single fill **(9274)** with occasional stones and charcoal, however, the photographic evidence would indicate that the inclined stones themselves may have been deliberately placed and formed potential edging. Above the fill was deposit **(9271)**, which was a dark orangey red clay that appeared to have been heat affected. It may have been part of the pit fill or part of a worn floor surface related to the later hearths **[9269]** or **[9279]**.

5.6.6 Feature **[9216]** was oval in plan with a single fill **(9217)** that contained a significant number of medium to large sub-rounded stones (Plate 13). The stones may have been part of a structure, such as a drain or wall, or possibly an attempt to fill a depression, which formed at the entrance of the roundhouse due to heavy footfall. The sample taken from the fill demonstrated a reasonable quantity of charred plant remains, which included oat and barley. The precise stratigraphic relationship with the roundhouse construction was not possible to discern.

5.6.7 *Group* ***{9199}***: to the north of, and apparently respecting, the trackway **{9287}**, was a group of features interpreted as postholes; PRN92016. The grouping extended over an area 8m by 6m. There were 17 postholes attributed to this group, together with two other features in the same location **[9166]** and **[9193]**. The 17 postholes consisted of **[9012**, **9014**, **9017**, **9021**, **9023**, **9025**, **9062**, **9104**, **9106**, **9108**, **9122**, **9153**, **9155**, **9157**, **9164**, **9195** and **9197]**, (Figures 6 & 7, Plate 14). There was a significant degree of variation in size, form and fills within Group **{9199}**. The postholes were either circular to oval in plan, ranged in size from 0.25 – 0.69m in diameter and between 0.1 – 0.47m in depth. The spatial arrangements could indicate the presence of one or more structures of undefined dimensions, but possibly rectilinear in plan. A date was obtained from a sample of oak (*Quercus* sp.) charcoal from fill **(9107)** of posthole **[9106]** providing a radiocarbon age of 2100±30 BP (Beta-553555), giving a calibrated date range of 197-47 BC, and comparable with that obtained from the evaluation (see below).

5.6.8 A further posthole **[9191]** had an unclear relationship with pit **[9177]**, although it was suspected that the posthole truncated the pit. The posthole was broadly similar to those within Group **{9199}**.

5.6.9 The two more anomalous features **[9166]** and **[9193]** were interspersed among the posthole cluster. Feature **[9166]** was a relatively large circular truncation that measured 0.86m by 0.26m deep. It had two fills, the lower fill **(9167)** and the upper fill **(9168)** which contained a single rounded large boulder. The feature may have been a pit into which the stone had been discarded or it may have been originally for the siting of the stone (the stone had become dislodged during machining). It was unlikely to have been a postpad given the dimensions of the stone itself.

5.6.10 The second feature **[9193]** was oval in plan and located within the central part of the cluster (Plate 15). It measured 0.65m by 0.15m deep and the single fill **(9194)** was noted as having charcoal and heat affected stones and there was one fragment of Roman black burnished ware pottery recovered. The feature was interpreted as the truncated remains of a possible hearth, though there was no evidence of in situ burning. It was mapped as being in the same location as the unexcavated pit [**2244-051**] observed during the evaluation phase.

5.6.11 The previous evaluation work recorded five other features in the area corresponding to Group **{9199}**. They may be additional to the excavation features and included: ovoid pit feature [**2244-033**], which contained three fills (**2244-034**), (**2244-035**) including an upper fill (**2244-036**) which produced numerous fragments of shell and some animal bone; posthole [**2244-039**] with its single fill (**2244-040**); posthole [**2244-046**], had a single fill (**2244-047**) with occasional flecks of charcoal; ovoid pit [**2244-042**] filled by (**2244-043**) and; ovoid pit [**2244-044**], filled by (**2244-045**), from which charcoal recovered was radiocarbon dated to 2040±29 cal BP, providing a Late Iron Age date range of 161 BC – AD 26.

5.6.12 *Group **{9286}***: PRN92017, to the south of the roundhouse was an ancillary structure which may have originated in this phase. The feature was an amalgamation of pits, postholes and deposits. The feature appeared to originate as a shallow slightly irregular truncation of the underlying natural **[9050**, **9072**, **9142** and **9171]**, (other voided numbers included 9058 and 9174), (Plate 16). It was sub-rectangular, measured 8.80m by 4.90m with six postholes cut into the edge and base. The postholes consisted of **[9052**, **9068**, **9119**, **9149**, **9202** and **9204]**. The postholes could potentially be separated into two sub-groups dependant on size and position. The first sub-group of large, more oval postholes positioned towards the edges included **[9052**, **9068** and **9119]**. The remaining three postholes **[9149**, **9202** and **9204]** were smaller and more centrally located. All except one of the postholes had a single fill, none contained any artefactual material. Fill **(9069)** of posthole **[9068]** contained stones that may have formed part of the original packing material. Posthole **[9119]** contained two fills, the lower one **(9121)** was overlain by fill **(9120)** which was noted as having rare charcoal inclusions (Figure 7).

5.6.13 *Group **{9201}**:* located southeast of the other groups was Pit Cluster Group **{9201}**, PRN92018, which is thought to have originated during Phase 1 and continued into Phase 2. The stratigraphically earliest pits assigned to Phase 2 were **[9093]** and **[9102]**. Both pits were located in the same area and were part of a complex sequence, originally seen in the evaluation trench. Pit **[9093]** was heavily truncated by later pits and was incomplete as a result. It contained a single undated fill (Figure 7, Plate 17).

5.6.14 Pit **[9102]** was more extensive, over 1.6m by 0.3m, and contained two fills; **(9101)** at the base and **(9100)** above (Figure 7, Plate 18). Neither of the fills contained any artefactual material, nor anything particularly suggestive of their function.

5.6.15 In addition to pits **[9093]** and **[9102]**, it is suggested that a number of other features in the vicinity might belong to Phase 2, although possibly not part of the Pit Cluster Group **{9201}**.

5.6.16 These consist of **[9004**, **9008**, **9010]** to the south, and **[9040]** and **[9114]** to the north. They may have been associated with other features on a north-south alignment observed during the evaluation [**2244-004**, **2244-006**, **2244-009**, **2244-041** and possibly **2244-004** and **2244-013**].

5.6.17 Features **[9004]** and **[9008]** were moderately sized, rounded but shallow and may have been the base of truncated pits (Plate 19). Feature **[9010]** was narrower, deeper and contained stones that may have been disturbed packing material, suggesting it was a posthole (Figure 7).

5.6.18 Feature **[9040]** was circular, relatively large with a flat base and contained a number of stones in the fill **(9041)**, (Figure 7, Plate 20). It may have been a large posthole with the stones once used as packing material. Feature **[9114]** was narrower and deeper, resembling a further posthole (Plate 21). The single fill **(9115)** contained no artefactual material.

5.6.19 *Group **{9287}***: within the trackway was a surviving area of stonework **(9188)**, PRN92019, (Plate 22). The stonework was comprised of a north-northwest – south-southeast alignment of medium sized, sub-angular stones. These were deliberately arranged in a flat horizontal manner and survived for a length of 2.1m. The stones were interpreted as being part of a surface that may have been more extensive in its original form and would represent the use of the trackway. They may have been a later addition to the worn hollow-way associated with Phase 1, rather than part of the original construction.

5.7 Period 4 – Roman

5.7.1 All five grouped features, Groups **{9199}**, **{9200}**, **{9201}**, **{9286}** and **{9287}**, are likely to have continued in use into the Roman period. The activity assigned to this period has been separated into two phases, based on subtle stratigraphic relationships and spatial association, but, as with the Period 3 features assigned to Phases 1 and 2, this remains tentative at present.

5.8 *Phase 3*

5.8.1 This phase of activity comprised the continued use of the Roundhouse Group **{9200}**; the use of Ancillary Structure Group **{9286}** and the continuation of pit formation in the Pit Cluster Group **{9201}**, (Figure 8). There was likely to be continued existence and use of the trackway **{9287}** and rectilinear posthole structures **{9199}** but there is no direct evidence for this during this phase.

5.8.2 *Group **{9200}***: during this phase a possible hearth was constructed in the central part of the interior, **[9269]**. The feature was sub-rectangular to amorphous in plan, with moderately sloped concave sides and flat base that measured 0.75m wide and 0.14m deep (Figures 8 & 9). The bowl-shaped feature was interpreted as a hearth, PRN92020. It was filled by **(9270)**, which was overlain by **(9268)**. The lower fill **(9270)** was a grey clay with occasional charcoal inclusions, while the upper fill **(9268)** was described as a dark blackish grey clay with frequent charcoal inclusions and burnt clay. However, it appeared to be more reddish in the photographic record (Plate 23), relatively level and similar to the Phase 2 deposit **(9271)**, which might suggest a possible layer or surface rather than fill. Adjacent to **[9269]** was an elongated feature **[9264]** with moderately sloping sides and flat base, 0.2m wide and 0.11m deep. The fill **(9265)** was similar to **(9270)** with rare charcoal inclusions. The feature was described as a flue but was more likely to simply be an irregular survival of the wider hearth feature **[9269]**. Both features were truncated to the north by feature **[9279]**.

5.8.3 Feature **[9276]** was located slightly to the north of the potential hearth and was amorphous in plan, with steeply sloping sides, the majority of the feature had been truncated to the south by the later feature **[9279]**, (Figure 9). There were two fills, the lower fill **(9277)** was a light yellowish brown probably derived from the surrounding natural substrate, and the upper fill **(9278)** was a darker blackish brown with charcoal inclusions. The upper fill was probably derived from fuel waste, though it may have been causal rather than deliberate dumping. Fill **(9278)** produced a fragment of bird bone and a small amount of industrial waste and charred plant remains, which suggested a mixed origin. The feature may be an earlier pit, but it was difficult to confirm whether it was part of a hearth, as there was no indication of in situ burning or the surrounding area / natural being heat affected.

5.8.4 On the southern side of the roundhouse interior, were three amorphous deposits, **(9233**, **9244** and **9247)**. These were within a slightly deeper area of the roundhouse and located against the construction cut edges in the south-eastern quadrant. Deposit **(9233)** was a dark brown sandy silt with charcoal inclusions and covered an area 0.6m by 0.4m and was up to 0.12m thick. It was deposited within the construction cut **[9234]**. It contained a reasonable amount of charcoal and charred plant remains.

5.8.5 Deposit **(9244)** was a dark black silty sand with some heat affected stones, charcoal and lenses of brown and red sediments (Plate 24). The material, which covered an area of 2m by 0.65m, and 0.2m deep, was consistent with small quantities of dumped material. It contained charcoal, relatively abundant charred plant remains and industrial waste, all detected in the sample. Deposit **(9247)** was a dark brown sandy silt with charcoal inclusions, but much less charred plant remains and no industrial material noted. It covered an area of 1.75m by 0.9m but was only 0.06m deep. The deposit was less consistent with **(9233)** and **(9244)** and may have resulted from a slightly different activity, trample instead of dumped or discarded material. All of the deposits contained miniscule amounts of unidentifiable burnt bone, observed in the samples taken.

5.8.6 *Group **{9201}***: in the pit group to the southeast there were visible re-cuts of pits and the creation of new pits intercutting the earlier ones. These were **[9035**, **9056**, **9087**, **9089**, **9091**, **9103**, **9136** and **9138]**, PRN92021.

5.8.7 Pits **[9091]** and **[9103]** represented the re-cutting of Phase 2 pits **[9093]** and **[9102]** respectively. Initial interpretations suggested that Pit **[9091]** was further re-cut by **[9089]** and subsequently by **[9087]**, but it is considered more likely that these represented differences between pit fills within **[9091]** rather than deliberate re-cuts. However, the initial cut numbers are shown on the corresponding figures for comparative purposes (see Figures 8 & 9, Plate 17). Pit **[9091]** equated to pit [**2244-028**] seen in the evaluation. It measured 0.95m wide, 0.3m deep, and was filled by a sequence of deposits **(9090**, **9088** and **9086)**. The primary fill **(9090)** was a light yellowy brown sandy clay, which was sealed by a light brownish grey stony silty sand **(9288)**. At the top of the sequence was a mid-brownish grey stony sandy silt **(9086)**, which had a layer of flattish stones at the base forming the interface with **(9088)** below. The upper fill was truncated by later pit **[9085]**.

5.8.8 To the immediate west was pit **[9103]**, which had no established relationship with pit **[9091]** and was truncated along the northern side by later pit **[9098]**, (Plate 18). The pit contained only one fill **(9099)** which was a mid-greyish yellow, stony silty sand (Figure 9).

5.8.9 Southeast of the pits **[9091]** and **[9103]** were separate pits **[9035**, **9056**, **9136** and **9138]**. Pit **[9035]** measured 0.5m by 0.15m deep and contained a single fill **(9036)**, which was a light yellowy brown with no artefactual material (Plate 25). The pit was cut by a later larger pit **[9037]**.

5.8.10 Pit **[9056]** measured 0.85m by 0.5m deep with steep concave sides and base. It contained a single fill **(9057)**, which was a dark greyish brown silty sand with occasional stones. The pit was cut by a later pit **[9054]**, (Plate 26).

5.8.11 Pit **[9136]** was the largest pit in the group and measured 1.55m by 0.42m deep with moderately steep concave sides and base. It had a single fill **(9137)** that was a mid-brownish grey silty clay with a moderate amount of stones, mostly seen on the western side and towards the base. This may have been a separate fill but was not identified as such during the excavation works (Plate 27).

5.8.12 To the immediate west was a smaller pit **[9138]**, although there was no established stratigraphic relationship between this and pit **[9136]**. Pit **[9138]** was smaller and slightly more squared in plan, and the single fill **(9139)** contained fewer stones. Neither pit fill produced any artefactual material, and both were sealed by an extensive layer **(9071)**, (Plate 27).

5.8.13 *Group **{9286}***: within the ancillary structure this phase of activity represented the main central pit **[9066]**, as well as pit **[9127]** and deposit **(9129)**.

5.8.14 Pit **[9066]** was rounded in plan, measured 3.6m by 1.9m and was up to 0.19m deep. It contained three discernible fills **(9161**, **9160** and **9067)**. Fill **(9161)** was a dark brownish black silt, probably fuel waste or burnt material, and fill **(9160)** was a mid-yellow brown patchy clay. The horizons between the deposits were not clear. Neither deposit contained any artefactual material. The uppermost deposit **(9067)** was a stone packed deposit above **(9160)** and was stratigraphically overlain by the Phase 4 sandy layer **(9126)**. Deposit **(9067)** was a compact layer of deliberately deposited sub-angular stones, which were reasonably well sorted, densely packed and did not appear consistent with a random dump or discard of material (Plate 28). Although a sample taken from the deposit produced a reasonable amount of charred plant remains, these may have percolated into the deposit from the upper zone and could indicate the function of the stones as a threshing / working surface. Radiocarbon dating of a wheat (*Triticum* sp.) grain from **(9067)** provided a radiocarbon age of 2030±30 BP (Beta-553551), giving a calibrated date range of 155 BC- AD 52, spanning the Late Iron Age/early Roman period.

5.8.15 Adjacent to the southwest side of pit **[9066]** was a small deposit **(9129)**, no more than 1m by 0.55m. Deposit **(9129)** was a mid-blackish red clay likely to be either in situ sediment affected by heat or a small spread of re-deposited heat affected material from nearby activity. It did not have a clear stratigraphic relationship with pit **[9066]** or deposit **(9126)**.

5.8.16 In the northwest quadrant of Group **{9286}**, pit **[9127]** was sub-rectangular to oval in plan with clear steep concave sides and base. It measured 1.65m by 0.6m and was 0.3m deep, with a single stony fill **(9128)** that contained charcoal inclusions.

5.9 ***Phase 4***

5.9.1 This phase of activity comprised the continued use of the Roundhouse Group **{9200}**; the use of the Ancillary Structure Group **{9286}** and the continuation of pit formation in the Pit Cluster Group **{9201}**, (Figure 10). There was likely to be continued existence and use of the trackway **{9287}** and rectilinear posthole structures **{9199}** but there is no direct evidence for this during this phase.

5.9.2 *Group {9200}*: the latest cut feature identified within the central part of the roundhouse was a hearth / pit **[9279]**, (Plate 29). This truncated the earlier features **[9269]** and **[9276]** and measured approximately 1.4m by 0.9m and 0.4m deep. Feature **[9279]** was oval in plan, with steep sloping sides and a concave base. It contained a sequence of fills from **(9280** at the base, through **9281**, **9282**, **9283**, **9285** to **9284)** at the top. The base deposit **(9280)** was a thin light grey clay possibly a lining. Above this was **(9281)** which was a thin mid red clay, affected by heat. Overlying this was **(9282)**, a 0.22m thick deposit of dark blackish brown silt with frequent charcoal inclusions and charred plant remains as demonstrated by the processed environmental sample. Sealing this was **(9283)** described as a thin light brown silt. Above this was **(9285)**, a dark blackish brown silt with charcoal inclusions and charred plant remains, again evident from the environmental sample. The uppermost fill **(9284)** was a thick mid red clay, affected by heat, and shared similar characteristics with deposits **(9268)** and **(9271)** from earlier phases. Deposits **(9282**, **9283**, **9284** and **9285)** all contained miniscule amounts of burnt bone, recovered from the environmental samples. Sealing the pit fills and extending over a wide area was deposit **(9189)**. Radiocarbon dating of a barley (*Hordeum* sp.) grain from fill **(9282)** of feature **[9279]** provided a radiocarbon age of 1660±30 BP(Beta-553553), equating to a calibrated date range of AD 260-529, although there is a statistically reduced chance of it being within a tighter time frame of AD 325-430.

5.9.3 *Group **{9201}***: the continuation of pit formation to the southeast comprised features **[9037**, **9054**, **9079**, **9081**, **9085**, **9095** and **9098]**.

5.9.4 Initial interpretations suggested that Pit **[9085]** was further re-cut by **[9081]** and subsequently by **[9079]**, but it is considered more likely that these represented differences between pit fills within **[9085]** rather than deliberate re-cuts. However, the initial cut numbers are shown on the corresponding figures for comparative purposes (see Figures 11, Plate 17). Pit **[9085]** truncated the earlier pit **[9091]**. Pit **[9085]**, measured 1.1m wide, 0.4m deep, and was filled by a sequence of deposits **(9084**, **9083**, **9082**, **9080** and **9078)**. The earliest fill **(9084)** was a light greyish brown sand, above which was a light brown sand **(9083)**, which was rich in marine shells, probably a rubbish dump (no shells were retained or sampled). Above this was a more sterile brown silt **(9082)**, overlying that was **(9080)**, a mid-grey silt and at the top of the sequence was a mid-yellowy brownish silt **(9078)**.

5.9.5 To the immediate west was pit **[9098]**, which had no established relationship with pit **[9085]** and truncated pit **[9103]** (Plate 18). Pit **[9098]** was considered to have been re-cut by **[9095]** but again, this is thought to be a change between deposits rather than a deliberate cut (Figure 11). The pit contained three fills, at the base was **(9097)** which was a light grey, stony, silty sand, with no artefacts. Above this was **(9096)**, a mid-brownish grey silt with occasional stones, and at the top was **(9094)** a mid-grey sand with frequent stones. Only fill **(9096)** contained any artefactual material and that consisted of a small amount of animal bone.

5.9.6 South of the pit agglomeration of **[9085]** and **[9098]** were pits **[9037]** and **[9054]**. Both of these pits truncated earlier Phase 3 pits.

5.9.7 Pit **[9037]** measured 0.7m by 0.25m deep and contained a single fill **(9038)**, which was a yellowy brown stony silt with no artefactual material. The pit cut the small adjacent pit **[9035]**.

5.9.8 Pit **[9054]** measured 0.7m by 0.22m deep with concave sides and base. It contained a single fill **(9055)**, which was a dark greyish brown silty sand with moderately frequent stones and no artefactual material. The pit cut the earlier southern pit **[9056]**, and although the fills were similar **(9055)** was slightly stonier.

5.9.9 It was difficult to equate the excavation findings to the evaluation findings with regard to the Pit Cluster **{9201}**. The evaluation recorded a large feature [**2244-017**], as being the largest and earliest in a sequence of intercutting pits. It may therefore be equivalent to pit **[9102]** or more likely **[9103]**. However, neither the sections nor the fill descriptions directly correlate. The evaluation described pit [**2244-017**] as having contained at least four episodes of deposition, including the significant 0.18m thick deposit (**2244-020**) of shell fragments in a mid-brown sandy silt (Headland Archaeology 2017), representing a midden, or dump of domestic refuse from the processing of edible crustaceans, primarily common limpets and dog whelks. The material recovered from this deposit closely corresponds with the significant amount of marine shells recorded within deposit **(9083)**, suggesting that pit [**2244-017**] is actually more closely related to the later Phase 4 pit **[9085]** identified during the excavation. However, no samples of deposit **(9083)** appear to have been taken, the quantity of shell having only been recorded on the context index, so the exact nature of the deposit remains unclear. It is also possible that survey inaccuracy relating to trench 2244 could be a factor in the uncertain identification in excavation of shell-midden pit 2044-017.

5.9.10 Three smaller pit features [**2244-021**], [**2244-023**] and [**2244-025**] truncated the western side of pit [**2244-017**]. The fill (**2244-022**)/(**2244-027**) of pit [**2244-021**] was charcoal rich suggesting fuel waste. From pit [**2244-023**] charred cereal grain, recovered from the fill (**2244-024**), was subject to radiocarbon analysis which returned a date of 1766±29 cal BP equated to a calibrated date range of 142 – 378 AD. Pit [**2244-023**] was in turn cut by pit [**2244-025**] which had two fills, the later fill (**2244-026**) contained fragments of animal bone (cattle) and large stones throughout its matrix, suggesting the pit was deliberately backfilled (Headland Archaeology 2017). However, it was difficult to correlate these features with the pits investigated during the excavation.

5.9.11 *Group* ***{9286}****:* within the ancillary structure were three deposits **(9126**, **9143** and

9173) thought to be part of this phase. Deposit **(9126)** was centrally located and covered an amorphous area up to 3.3m by 1.5m and 0.13m deep. It was a mid-yellowy brown sandy layer overlying the stony deposit **(9067)**.

5.9.12 Deposits **(9143)** and **(9173)** were seen as defined deposits within **(9051)**, which sealed the features associated with the ancillary structure. Deposit **(9143)** was a dark blackish brown silt with shell inclusions seen towards the northern side, while deposit **(9173)** was a mid-greyish brown silty sand with frequent small angular stones seen in the north-western quadrant. These deposits may represent the later use of the structure and may be part of the phase 5 activity, but this remains unclear at this stage. Neither of the deposits was recorded in plan or in section and the context sheets do not make their precise location clear.

5.10 *Phase 5*

5.10.1 The activity in this phase would appear consistent with a period of disuse, whether by rapid or gradual abandonment of all areas and features. The latest archaeological remains were the infilling deposits preserved in the uppermost depressions where the features were present. These were seen as spreads of material overlying the large but discrete areas of Groups **{9200}**, **{9201}**, **{9286}** and **{9287}**.

5.10.2 *Group* ***{9200}***: the roundhouse was sealed by deposits seen in the various quadrants. To the northwest was layer **(9189)**, a 0.05m thick dark greyish brown sandy silt, with frequent small to medium sub-angular stones and charcoal inclusions. Above this was layer **(9061)**, which was a 0.24m thick mid greyish black silt with frequent small sub-angular stones. A small number of pottery sherds were recovered from this layer, all of Roman date, including mortaria fragments. In the southeast quadrant the same sequence was seen as deposit **(9159)** 0.08m thick, overlain by layer **(9075)**, 0.24m thick (Plate 30). A small number of pottery sherds were recovered from layer **(9075)**, all of Roman date, including mortaria fragments.

5.10.3 *Group* ***{9201}***: in the south-eastern area of the pit cluster an upper sealing layer was identified **(9071)**. Deposit **(9071)** was a 0.35m thick dark greyish brown, silty sand with moderately frequent angular stones. It was recorded as sealing pits **[9054**, **9136** and **9138]**, (Plate 27).

5.10.4 *Group* ***{9286}***: overlying the features associated with Group **{9286}** was the uppermost layer recorded as deposits **(9051**, **9073**, **9144**, **9172)** (Plate 31). Deposits **(9051**, **9073** and **9144)** were all broadly similar and were a mid-dark brown sandy silt with occasional stones and marine shells (no shells were retained or sampled). At the western end **(9172)** was different and was a light-yellow clayey sand with patches of yellow and black clay. These deposits overlay Phase 4 deposits **(9143)** and **(9173)** although the transition was unclear, and they may have been part of ongoing deposition rather than distinct phases.

5.10.5 *Group* ***{9287}***: overlying the Phase 2 stone structure **[9188]** and the trackway was an uppermost layer which was investigated in quadrants and recorded as deposits **(9125**, **9131**, **9133**, **9135**, **9141**, **9146**, **9148** and **9163)**. The descriptions varied slightly for the deposits which may reflect circumstances or actual variations. In general, they were dark brown silt with variable amounts of small to medium sub-angular stones throughout. A small assemblage of pottery sherds was recovered from deposits **(9125**, **9131**, **9148** and **9163)**, all of Roman date, including black burnished ware fragments. A radiocarbon date was obtained from a sample of privet (*Ligustrum* sp.) charcoal from deposit **(9148)** which produced a radiocarbon age of 1780±30 BP (Beta-553554), that equated to a calibrated date range of AD 137-334, in the later Roman period, which confirmed the much broader ceramic dating.

5.11 *Unphased features*

5.11.1 A small number of features had no compatible physical or stratigraphic relationships with established phased features but were almost certainly related to the Late Iron Age/Roman activity on site (Figure 12). This included a small group of intercutting pits, comprising pit **[9033]**, cut by **[9031]**, which was in turn cut by **[9029]**, (Figure 13). These were all rounded pits to the southwest of the roundhouse **{9200}** and west of the ancillary structure **{9286}**; PRN92022. Each had a single fill and the middle pit in the sequence contained a fragment of possible quern stone, although it was undiagnostic and remains questionable.

5.11.2 Posthole **[9169]**, PRN92023, lay to the west of the ancillary structure **{9286}** to which it may have been related, but there was no evidence to indicate this. The posthole was approximately 0.5m wide and 0.5m deep with a single dark brown stony silt fill **(9170)** that contained no finds.

5.11.3 South of the trackway **{9287}** was the small spread **(9049)** of dark greyish brown silty sand within a slight depression **[9048]**, which may have been deliberate. Deposit **(9049)** contained no artefactual material.

5.11.4 A possible pit feature **[9027]**, PRN92024 to the southeast of the pit cluster **{9201}**, was sufficiently dissimilar to the pits and their fills that it may not have been related to the nearby activity. The feature was irregular to sub-rounded in plan, with steep straight sides and concave base. The single fill **(9028)** was a dark greyish brown sandy silt, with frequent medium angular stones but no artefacts.

5.11.5 North of the rectilinear structure **{9199}** was short possible linear feature, PRN92025, seen as terminus **[9175]**. It was aligned east-west, extended for over 1.2m continuing beyond the limit of excavation, was 0.5m wide and 0.2m deep. The single fill **(9176)** was a mid orangey brown silt with occasional stones but no artefactual or ecofactual material. It may have been a ditch or an elongated pit. It is possible that this feature post-dated the Late Iron Age/Roman activity.

5.11.6 From the evaluation phase there was a feature that did not spatially link to any of the Groups and was of note. Feature [**2244-013**] was ovoid and contained three fills, (**2244-014**) (**2244-015**), and the remains of a possible postpipe (**2244-016**). Deposit (**2244-015**) contained a significant amount of fired clay and vitrified slag along with three lithic artefacts, (Headland Archaeology 2017) which made it distinct in comparison to the other features identified during the excavation. Since almost none of the adjacent morphologically similar features were environmentally sampled, it is difficult to understand how typical or not this feature was in terms of its contents.

6 FINDS ASSESSMENT

6.1 Introduction and Methodology

6.1.1 A total of 151 artefacts, weighing 3,520g, were recovered from Area 9. The finds were in poor to moderate condition.

6.1.2 All finds were dealt with according to the recommendations made by Watkinson & Neal (1998) and to the Chartered Institute for Archaeologists (CIfA) Standard & Guidance for the collection, documentation, conservation and research of archaeological materials (CIfA 2014b). All artefacts have been boxed according to material type and conforming to the deposition guidelines recommended by Brown (2011), EAC (2014) and Oriel Ynys Môn.

6.1.3 The material archive has been assessed for its local, regional and national potential in line with the archaeological research framework for Wales (CIfA Cymru/Wales 2017).

6.1.4 Quantification of bulk finds by material and context is given in Table 5.1 and quantification of finds recovered from the environmental samples is given in Table 5.2.

Context	Material	Quantity	Weight (g)	Period / Date	Comments	Fabric Code (pottery)
9002	Cu Alloy	1	53	Modern	Screw fitting	
9002	Pottery	3	29	Roman	Oxidised sandy fabric. Highly abraded. Refitting	CO OX
9016	Pottery ?? Fired Clay??	1	3	IA? – Roman?	Oxidised. Quartz inclusions. Abraded	
9032	Stone	1	746		Fragment of very coarse conglomerate. Possible worn areas?	
9043	Animal Bone	17	68			
9061	Pottery	8	49	Roman	Mortaria. Abraded rim sherds of sandy oxidised fabric with reduced core	WPMO?
9061	Pottery	1	8	Roman	Oxidised sandy fabric. Abraded.	CO OX
9075	Iron	6	1	Roman?	Fragments of iron corrosion	
9075	Pottery	9	63	Roman	Oxidised sandy fabric. Abraded. Flagon body sherds. Bowl rim?	CO OX
9075	Pottery	1	16	Roman	Mortaria. Abraded rim sherds of sandy oxidised fabric with reduced core	WPMO?
9096	Animal Bone	2	2			
9125	Pottery	4	21	Roman	Oxidised sandy fabric. Highly abraded. Bowl rim?	CO OX
9131	Pottery	3	7	Roman	Oxidised sandy fabric.	CO OX

Context	Material	Quantity	Weight (g)	Period / Date	Comments	Fabric Code (pottery)
					Abraded.	
9137	Stone	1	1002		Natural. Discarded by Wessex	
9144	Animal Bone	2	1			
9148	Pottery	2	20	Roman	Black burnished ware. Body sherds. Lattice	DOR BB1
9148	Stone	1	1348		Natural? Soft sandstone/ mudstone with quartz veins. Small depressions on one surface.	
9152	Pottery	1	18	Roman	Samian moulded bowl	
9163	Pottery	2	17	Roman	Oxidised sandy fabric. Highly abraded. Jar rim?	CO OX
9181	Pottery	2	11	Roman	Black burnished ware. Body sherds. Lattice	DOR BB1
9183	Pottery	2	1	Roman	Black burnished ware. Body sherds. Lattice	DOR BB1
9194	Pottery	1	18	Roman	Black burnished ware. Body sherds. Lattice	DOR BB1
9285	Bone	80	18		Burnt Bone (Unwashed)	
Total		**151**	**3520**			

Table 5.1 Quantification of Bulk Finds by Context and Material

6.2 Prehistoric Pottery / Fired Clay *by Frances Lynch*

6.2.1 Area 9 is at the western end of the coastal series of investigations. The single fragment of pottery comes from the fill of Posthole [9014], which was located north of the trackway and east of possible roundhouse {9200}, close to the eastern extent of the excavation. The radiocarbon date of around 100 cal BC from a pit feature within another possible roundhouse, south-west of the trackway suggests some Iron Age activity. However, there is no artefactual confirmation of this date, unless one were to suggest that this very small piece of intensely red gritty pottery was from a Cheshire Salt Container. That category of pottery is made from Cheshire clays and the groups of rocks within it originate in the Lake District and derive from the southward spread of glacial clays. Consequently a tiny fragment would be difficult to identify definitively without careful analysis.

(9015)/(9016) fill of posthole [9014]

6.2.2 Single Sherd: 20 x 15 x 8-9mm; the colour is a bright red/orange throughout and the clay has a sandy feel, slightly abrasive to the touch. There are angular stone grits of various sizes and geologies which should be identified. One surface is relatively smooth, the other lumpy.

6.2.3 Previously, I have suggested that about a dozen fragments from Parc Cybi might be from a Cheshire Salt Container (erstwhile VCP), but only one passed muster with Dr Elaine Morris (Morris 2020). Since this type of pottery carries considerable historical implications for trading, social status and dating, I recommend that Dr Morris at Southampton University be contacted at analysis stage for identification.

6.3 Roman Pottery

6.3.1 Forty sherds of Roman pottery, weighing a combined total of 281g, were recovered from 12 contexts (Table 5.1). The pottery was in poor to moderate condition with highly abraded edges and surfaces.

6.3.2 The pottery was examined with a x10 hand lens and recorded according to published national guidelines (PCRG, SGRP & MPRG 2016). Where possible, mnemonic fabric codes were assigned using the National Roman Fabric Reference Collection (Tomber & Dore 1998) and the Roman Potsherd Atlas online (RPA 2020).

6.3.3 Roman pottery fabrics include oxidised coarse wares (CO OX), probable Wilderspool mortaria (WPMO), Type 1 Black Burnished ware (DOR BB1) and samian ware (SGTS?).

6.3.4 Vessel forms include mortaria with a beaded rim and rolled flange which is likely from the Wilderspool potteries in Cheshire, flagons and jars. The single fragment of samian is a body sherd of a moulded bowl, likely Dragendorff Form 37. Although abraded, the decoration includes a partial figure and a separate panel and suggests a Southern Gaulish production centre (Webster 1996).

6.3.5 It is difficult to suggest a precise date range for the Roman pottery assemblage given the abraded nature of the assemblage. The generic oxidised coarse wares and Black Burnished ware have a broad date of 1st to 4th century, however, the mortaria fragments, samian body sherd and flagon fragments indicate a 2nd century date.

6.4 Stone

6.4.1 Three stone fragments, with a combined weight of 3,096g, were recovered from three contexts (Table 5.1).

6.4.2 One fragment from context **(9137)** was previously discarded as natural. A very worn soft sandstone / mudstone flat pebble with quartz veins was recovered from **(9148)**. It has several small circular depressions measuring an average of 15mm on one face. These are naturally occurring features and the stone is not archaeological.

6.4.3 A fragment of possible worked stone was recovered from context **(9032)** comprising a fragment of very coarse quartz / pyrites conglomerate. Two possible worn areas survive which may indicate possible use as a quern stone although this is far from definite.

6.5 Metal

6.5.1 Seven metal artefacts, weighing a combined weight of 54g, were recovered from two contexts (Table 5.1). The metal was in very poor to moderate condition.

6.5.2 *Iron (Fe):* Six fragments of iron were recovered from context **(9075)**, weighing 1g. The fragments comprised little more than corrosion and it was not possible to identify the object. As Roman pottery was recovered from the context, it is likely that the iron artefact was of a similar date.

6.5.3 *Copper Alloy (Cu):* A single copper alloy find was recovered from the subsoil **(9002)** weighing 53g and was in moderate condition. The copper alloy artefact comprised a screw fitting of modern date and may be agricultural.

6.6 Animal Bone

6.6.1 A total of 101 fragments of bone, weighing 89g, were recovered from four contexts (Table 5.1). Tiny fragments of burnt bone were recovered from context **(9285)**, weighing 18g. The animal bone is discussed in the palaeoenvironmental section.

6.7 Finds from Environmental Samples

Context	Sample <xx>	Material	Weight (g)	Period / Date	Comments
9032	9001	Bone	<1	-	Wood?
9226	9017	Bone	<1	-	Burnt. Tiny fragments
9228	9027	Bone	<1	-	Burnt. Tiny fragments
9233	9024	Bone	<1	-	Burnt. Tiny fragments
9244	9025	Bone	<1	-	Burnt. Tiny fragments
9247	9031	Bone	<1	-	Burnt. Tiny fragments
9257	9035	Bone	<1	-	Burnt. Tiny fragments
9278	9041	Bone	<1	-	Burnt. Tiny fragments
9282	9044	Bone	<1	-	Burnt. Tiny fragments
9283	9045	Bone	<1	-	Burnt. Tiny fragments
9284	9046	Bone	<1	-	Burnt. Tiny fragments
9285	9047	Bone	<1	-	Burnt. Tiny fragments
9226	9017	Fe	12	Roman	Nail? And hobnails
9257	9035	Fe	2	Modern	Nail
9193 *(probably the fill 9194)*	9009	Fired Clay	7	-	Heavily abraded fragments
9267	9039	Fired Clay	11	-	Heavily abraded fragments
9148	9007	Glass	1	Roman	Green glass cylinder

Context	Sample <xx>	Material	Weight (g)	Period / Date	Comments
					bead
9212	9012	Pottery	3	Roman	Mortaria-hammer head rim and Colour coated ware
Total			**36 (max 48)**		

Table 5.2 Quantification of Finds from Environmental Samples

6.7.1 *Iron (Fe):* Iron artefacts were recovered from two environmental samples with a combined weight of 14g. The iron comprised several heavily corroded hobnail fragments and a possible handmade nail shaft <9017> **(9226)** of Roman date. A modern machine-made wire nail with light corrosion was recovered from <9035> **(9257)**.

6.7.2 *Glass:* A single artefact, weighing 1g, was recovered from sample <9007> **(9148)**, comprising a green glass cylinder bead which measured 16mm in length with an 6mm external diameter and 3mm internal diameter. The bead is in good condition although it does have a recent break. It is of likely Roman date.

6.7.3 *Fired Clay:* A total of 162g of fired clay fragments were recovered from four environmental samples. The fragments were heavily abraded and undiagnostic.

6.7.4 *Bone:* Tiny fragments of burnt bone were recovered from 12 samples and are discussed in the following palaeoenvironmental section.

6.7.5 *Recommendations:* While they need to be considered alongside the bulk finds assemblage, a separate data set is appropriate for the finds from environmental samples, as it represents a separate recovery and quantification strategy for the retrieval of finds.

6.8 Statement of Potential

6.8.1 In summary the finds assemblage is of small size, in a restricted range of material types (pottery, glass, stone, metal). The pottery appears to be exclusively of Romano-British date and includes one sherd of decorated samian (probably 2nd century AD). The condition of the pottery is poor; sherds are small and heavily abraded.

6.8.2 The small quantities of other finds are generally fragmented, broadly consistent with a Roman date, but are not themselves independently datable or of clear provenance.

6.8.3 The Roman finds recovered from Area 9 are of local and regional significance.

7 PALAEOENVIRONMENTAL ASSESSMENT

7.1 Introduction

7.1.1 Forty-four bulk samples were taken during the excavation on Area 9 (46 were originally noted by Wessex). There was a large sample bias in the recovery of ecofactual material from Area 9. The majority of samples were from the roundhouse **{9200}** group of features; 31 from the interior, a further four from the possible porch postholes and two from probable natural features to the rear of the roundhouse, 37 in total. In contrast there were only two for the ancillary structure **{9286}**; one from the pit cluster **{9201}**, two from the rectilinear structure/s **{9199}** and two from other discrete pit features. This on-site strategy effectively prohibits a full interpretation of the other features.

7.1.2 The roundhouse hearth was examined and not considered suitable for archaeomagnetic dating (Wessex Archaeology 2018b).

7.1.3 A total weight of 1049kg (600l) of sediment was processed for this stage of works. These were submitted for assessment along with some hand-collected animal bone. A total of 101 fragments of animal bone, weighing 89g, were recovered by hand from four contexts during the archaeological investigation at Area 9, Wylfa. A small quantity of animal bone, weighing less than 6g in total, was recovered from 12 environmental samples. The animal bone ranges from poor to good condition; the burnt animal bone is friable and chalky.

7.2 Methodology

7.2.1 This report presents the results of the assessment of the environmental samples, palaeobotanical and charcoal remains in accordance with Campbell et al. (2011) and English Heritage (2008). The assessment will establish the significance of the material and will only provide identifications where it was practicable to do so, such as, small quantities of plant material or charcoal identifications where radiocarbon determinations are sought. The report will focus on the preservational qualities and note the potential of the material to warrant analysis.

7.2.2 The bulk environmental samples were processed at Wardell Armstrong LLP following Wardell Armstrong (2018 and 2019). The colour, lithology, weight and volume of each sample was recorded using standard Wardell Armstrong pro forma recording sheets. The samples were processed with 500-micron retention and flotation meshes using the Siraf method of flotation (Williams 1973). Once dried, the residues from the retention mesh were sieved to 4mm and the artefacts and ecofacts removed from the larger fraction and forwarded to the finds department. The smaller fraction was scanned with a magnet for microslags such as hammerscales. This fraction was then examined for smaller artefacts such as beads. Once fully sorted, and all relevant material removed, the retent residues were discarded.

7.2.3 The flot plant macrofossils and charcoal were retained and scanned using a stereo microscope (up to x45 magnification). Any non-palaeobotanical finds were noted on the flot pro forma, cf. Table 7.1. Once fully sorted and all relevant material removed the flots were discarded.

7.2.4 The four common palaeoenvironmental materials (namely plant remains, charcoal, shell and bone), along with magnetic matter, will be listed within the results section and where none were present this will be stated.

7.2.5 Plant remains were identified using Cappers et al. (2012), Cappers and Bekker (2013), Cappers and Neef (2012), Jacomet (2006) and the author's reference collection. Nomenclature for plants followed Stace (2012) and Cappers and Neef (2012) for cereals.

7.2.6 In the absence of single growth entities such as charred plant remains and hazel nutshell fragments charcoal will be utilised for radiocarbon determinations. Charcoal was only identified to species to select the shortest-lived species for radiocarbon determination once the report author had determined what they would like dated. Where no short-lived species were observed the youngest i.e. twig, branch or periderm fragments from longer-lived species were selected. Once this was achieved no further identification was undertaken. Identification was undertaken using Hather (2000), Schweingruber (1982) and the author’s own reference collection. Nomenclature followed Stace (2010).

7.2.7 Guidelines adhered to for zooarchaeological analysis include ‘Animal Bones & Archaeology: recovery to archive’ (Baker & Worley 2019) plus reference material from Schmid (1972), Serjeantson (1996), Hillson (1992) and Ruscillo (2015). Identification of avian species was aided by Serjeantson (2009). The author’s in-house skeletal reference collection and technical manual were also used to aid identification of species. The material was also assessed on its potential for age estimation, sex determination and measurements for withers heights.

7.3 Results

7.3.1 Flot and finds data is presented in Table 7.1. Artefactual material recovered from the dried residues were minimal but contained examples of ceramic building material, iron, fired clay, glass, pottery and industrial waste. Sample numbers are referred to in the text as <xxx> format.

7.4 Charred Plant remains (CPR)

7.4.1 These were present in 28 samples and were in relatively good condition. From these nine samples yielded over 50 examples of CPR, these were: **(9217)** <9011> from the deliberate backfill of pit **[9216]; (9214)** <9013> from the deliberate backfill of posthole **[9213]**; **(9222)** <9016> from the primary fill of **[9220]**; **(9226)** <9017> from pit fill **[9225]**; **(9228)** <9027> from pit fill **[9227]**; **(9247)** <9031> from the fill of burnt feature **[9248]; (9256)** <9034> from posthole fill **[9255]**; **(9282)** <9044> and **(9285)** <9047> both from hearth fill **[9279]**.

7.4.2 Among the identified remains were cereals grains including oat (*Avena* sp.), barley (*Hordeum* sp.) and wheat (*Triticum* sp.).

7.5 Charcoal

7.5.1 This was present in 39 samples and was in relatively good condition. From these 39 samples ten yielded more than 5g of charcoal which were: **(9189)** <9008> from the fill of cut **[9060]; (9212)** <9012> from the deliberate backfill of posthole **[9220]; (9222)** <9016> from the fill of the posthole **[9220]**; **(9226)** <9017> from the fill of pit **[9225]**; **(9244)** <9025> from and uncategorised deposit layer; **(9228)** <9027> from the fill of pit **[9227]**; **(9247)** <9031> from the fill of burnt feature **[9248]; (9278)** <9041> from the fill of hearth **[9276]**; **(9282)** <9044> and **(9285)** <9047> both from the fill of hearth **[9279]**.

7.5.2 Among the identified remains were oak (*Quercus* sp.), privet (*Ligustrum* sp.), poplar/willow (*Salix/Populus* sp.) and the rose family (Rosaceae).

7.6 Shell

7.6.1 Shell was present in six samples and was in good condition and of marine origin. Of these six samples **(9032)** <9001> from secondary fill of pit **[9031]** presented 253g and **(9043)** <9002> from tertiary pit fill **[9042]** yielded 1337g. The other four samples presented no more than 2g. Identified as common limpet (*Patella vulgata*) and dog whelks (*Nucella lapillus*).

		Flots					Retent									
Context	<sample>	WF (g)	VF (ml)	CPR	Sh (g)	Ch (g)	Ch (g)	Bo (g)	CBM (g)	Fe (g)	FC (g)	Gl (g)	Pot (g)	Sh (g)	MM (g)	IW (g)
9032	9001	30.1	100	-		0.09	-	<1	-	-	-	-	-	253	<1	-
9043	9002	4	30	2	6	<0.01	-	-	-	-	-	-	-	1331	2	-
9107	9003	7.9	30	-		0.13	<1	-	-	-	-	-	-	-	<1	-
9017	9004	-	-	-	-	-	<1	-	-	-	-	-	-	-	<1	-
9067	9006	1.5	7	11		0.25	<1	-	-	-	-	-	-	-	<1	-
9148	9007	58.2	200	-		0.84	<1	-	-	-	-	<1	-	-	<1	-
9189	9008	234.4	600	-		9.7	12	-	-	-	-	-	-	-	4	6
9194	9009	53.1	110	22		1.06	<1	-	-	-	7	-	-	-	<1	-
9179	9010	12.7	120	-	2	<0.01	<1	-	-	-	-	-	-	-	<1	-
9217	9011	129.1	180	+++		3.81	<1	-	-	-	-	-	1	-	<1	-
9212	9012	113.8	200	30		8.05	3	-	-	-	-	-	1	-	2	2
9214	9013	10.3	45	56		0.47	<1	-	-	-	-	<1	-	-	<1	-
9219	9014	4.4	20	-		-	<1	-	-	-	-	-	-	-	<1	-
9221	9015	7	20	6		0.62	<1	-	<1	-	-	-	-	-	<1	-
9222	9016	54.5	160	+		6.42	4	-	-	-	-	-	-	-	5	-
9226	9017	172.5	420	52		19.53	<1	<1	-	1	-	-	-	-	4	21
9224	9018	0.1	<1	-		-	<1	-	-	-	-	-	3	-	<1	-
9230	9019	<0.01	<1	-		-	<1	-	-	-	-	-	-	-	<1	-
9232	9020	<0.01	<1	-		-	-	-	-	-	-	-	-	-	-	-
9242	9021	3.7	10	6		0.54	<1	-	-	-	-	-	-	-	<1	-
9206	9022	8.1	25	-		0.24	<1	-	-	-	-	-	-	-	<1	-
9207	9023	1.5	3	1		-	-	-	-	-	-	-	-	-	<1	-
9233	9024	20	55	22		3.71	<1	<1	-	-	-	-	-	-	<1	-
9244	9025	100.9	160	31		5.96	4	<1	-	-	-	-	-	-	33	81
9246	9026	0.7	7	2		0.07	<1	-	-	-	-	-	-	-	<1	-
9228	9027	128.1	380	+		18.38	5	<1	-	-	-	-	-	-	6	<1
9250	9028	2.1	10	-		-	-	-	-	-	-	-	-	-	-	-
9252	9029	18.5	55	11		0.5	<1	-	-	-	-	-	-	-	<1	-
9254	9030	10.2	30	5		0.15	<1	-	-	-	-	-	-	-	<1	-
9247	9031	161.6	460	++		12.79	<1	<1	-	-	-	-	-	-	29	-

		Flots					Retent									
Context	<sample>	WF (g)	VF (ml)	CPR	Sh (g)	Ch (g)	Ch (g)	Bo (g)	CBM (g)	Fe (g)	FC (g)	Gl (g)	Pot (g)	Sh (g)	MM (g)	IW (g)
9237	9032	1.6	10	3		0.21	<1	-	-	-	-	-	-	-	<1	-
9239	9033	0.6	2	2		-	-	-	-	-	-	-	-	-	<1	-
9256	9034	21.3	55	58		0.8	<1	-	-	-	-	-	-	<1	<1	-
9257	9035	<0.01	<1	-		-	<1	<1	-	1	-	-	-	<1	<1	-
9259	9036	0.2	2	-		-	-	-	-	-	-	-	-	<1	<1	-
9261	9037	<0.01	1	-		-	-	-	-	-	-	-	-	-	<1	-
9268	9038	6	20	8		0.14	<1	-	141	-	-	-	-	-	<1	-
9267	9039	2.8	10	10		0.14	<1	-	-	-	11	-	-	-	<1	-
9278	9041	88.4	220	29		5.96	<1	<1	-	-	-	-	-	-	3	8
9280	9042	<0.01	<1	-		-	-	-	-	-	-	-	-	-	<1	-
9281	9043	-	-	-	-	-	-	-	-	-	-	-	-	-	<1	-
9282	9044	66.6	260	98		16.39	12	<1	-	-	-	-	-	-	4	-
9283	9045	3.2	10	5		0.06	<1	<1	-	-	-	-	-	-	<1	-
9284	9046	8.9	25	9		0.64	<1	<1	-	-	-	-	-	-	4	-
9285	9047	265.5	550	++		25.75	<1	<1	3	-	-	-	-	-	8	-
9121	9121	1	5	-		-	<1	-	-	-	-	-	-	-	<1	-

Table 7.1 Flot and Finds information. C=context; <>=sample number; WF=weight of flot VF=volume of flot(ml); CPR=count of charred plant remains + is used as a term of abundance, it refers to +=100-199, ++=200-299, +++=300-399, ++++=400-499 and +++++=>500; Sh=shell; Ch=charcoal; Bo=bone; CBM=ceramic building material; Fe=iron; FC=fired clay; Gl=glass; Po=pottery; Sh=shell; MM=magnetised material; IW=industrial waste

7.7 Industrial residues

7.7.1 Magnetised material was present in 44 samples, this was examined under the microscope (x45 magnification) for microslags but none were present, the material was entirely natural stone. The magnetised material seems to be a constant factor of the natural substrates and the nature of the industrial waste requires confirmation.

7.8 Animal bone (Zooarchaeology)

7.8.1 Twelve samples yielded small bone fragments; all the samples yielded less than 1g of bone. The minimum number of individuals (MNI) observed is seven. Table 7.2 presents the zooarchaeological data. This includes a possible medium-sized ungulate bone and a possible wild avian species limb bone recovered from two samples. Breakdown of species is as follows: Large-sized ungulates (2), *Bos* sp. (1), Small Mammal (1), Medium-sized ungulates (1), avian species (1) and Unidentified Mammal (1). Anatomical elements include limb bones, fragmentary metatarsals and a scapular fragment.

Ctxt	Sample	Species	Includes elements	MNI	Butch	Gnaw	Path	Age	Measure?	Condition	Notes
Hand											
9043	N/A	Bos sp.	Scapula fragment (glenoid fossa, partial) and MT	1	N	N	N	Adult	N	Mod-poor	Unburnt, some lamination on cortical bone surfaces
9096	N/A	Large-sized ungulate	Limb bone fragments (2)	1	N	N	N	Adult	N	Poor-mod	Unidentified limb bone fragments
9144	N/A	Small Mammal	Limb bone fragments (2)	1	N	N	N	Adult	N	Mod-good	Unburnt, probable small mammal
9285	N/A	Large-sized ungulate	Limb bone	1	N	N	N	Adult ?	N	Poor	Burnt, very chalky
9285	N/A	Unidentified mammal	Unidentified epiphysis	1	N	N	N	Juvenile?	N	Poor	Burnt, very chalky
Samples											
9032	9001	N/A	N/A	-	-	-	-	-	N	<1g weight	Limb bone from medium-

Ctxt	Sample	Species	Includes elements	MNI	Butch	Gnaw	Path	Age	Measure?	Condition	Notes
											sized ungulate?
9226	9017	N/A	N/A	-	-	-	-	-	N	<1g weight	Burnt, fragments
9228	9027	N/A	N/A	-	-	-	-	-	N	<1g weight	Burnt, fragments
9233	9024	N/A	N/A	-	-	-	-	-	N	<1g weight	Burnt, fragments
9244	9025	N/A	N/A	-	-	-	-	-	N	<1g weight	Burnt, fragments
9247	9031	N/A	N/A	-	-	-	-	-	N	<1g weight	Burnt, fragments
9257	9035	N/A	N/A	-	-	-	-	-	N	<1g weight	Burnt, fragments
9278	9041	N/A	N/A	-	-	-	-	-	N	<1g weight	Bird bone, limb
9282	9044	N/A	N/A	-	-	-	-	-	N	<1g weight	Burnt, fragments
9283	9045	N/A	N/A	-	-	-	-	-	N	<1g weight	Burnt, fragments
9284	9046	N/A	N/A	-	-	-	-	-	N	<1g weight	Burnt, fragments
9285	9047	N/A	N/A	-	-	-	-	-	N	<1g weight	Burnt, fragments

Table 7.2 Animal bone quantification separated into hand collection and samples collection. Key: MNI= minimum number of individuals, Butch=any butchery marks observed?, Gnaw= any gnawing observed?

7.8.2 The vast bulk of the animal bone originates from adults; a possible epiphyseal head from an unidentified mammal recovered from **(9285)** may have originated from a juvenile animal.

7.8.3 Butchery marks, pathologies and canid / rodent gnaw-marks were not observed in this small assemblage.

7.8.4 Sex determination, age estimation and measurements for withers heights are not possible due to fragmentary and incomplete bones.

7.8.5 A very small quantity of burnt and unburnt animal bone was recovered from twelve environmental samples, weighing a total of <6g. The animal bone recovered from the environmental samples is in poor condition; the bone is very small and highly fragmented. Most of the bone is between 2mm-5mm in size. Identification of species was, for the most part, not possible due to their poor preservation and small size. Identification of anatomical elements for the vast bulk of the animal bone; no teeth fragments were present and anatomical elements are likely to comprise limb bone fragments. A very small limb bone from a (possibly wild) avian species was observed in **<**9041**> (9278)** <4mm and a small limb bone fragment from a possible medium-sized ungulate was recorded in **<**9001**> (9032)** >4mm.

7.9 Radiocarbon

7.9.1 Two charcoal samples and three charred cereal grains were submitted to Beta Analytic for radiocarbon determination.

7.9.2 The samples were treated according to Beta Analytics methodology (Beta Radiocarbon Dating 2020 unpub.). The production of the radiocarbon ages followed Riemer *et al.* (2013) and were calibrated to the calendar timescale following Bronk Ramsey (2009). The full results in the form of the radiocarbon certificates can be found in Appendix 5.

7.9.3 A sample of oak (*Quercus* sp.) charcoal from <9003> of fill **(9107)** from cut **[9106]** provided a radiocarbon age of 2100±30 BP (Beta-553555, 95.4% probability 197-47 cal BC).

7.9.4 A sample of privet (*Ligustrum* sp.) charcoal from <9007> of fill **(9148)** from quadrant **[9147]** provided a radiocarbon age of 1780±30 BP (Beta-553554, 95.4% probability cal AD 137-334).

7.9.5 A barley (*Hordeum* sp.) grain from <9002> of tertiary fill **(9043)** from cut **[9042]** provided a radiocarbon age of 2160±30 BP (Beta-553552, 95.4% probability 358-107 cal BC).

7.9.6 A wheat (*Triticum* sp.) grain from <9006> from deliberate backfill **(9067)** of pit **[9066]** provided a radiocarbon age of 2030±30 BP (Beta-553551, 95.4% probability 155 cal BC- cal AD 52).

7.9.7 A barley (*Hordeum* sp.) grain from <9044> of fill **(9282)** from hearth **[9279]** provided a radiocarbon age of 1660±30 BP (Beta-553553, 95.4% probability cal AD 260-529).

7.10 **Discussion**

7.10.1 Three samples <9031>, <9044> and <9047> contained abundant CPR, taken from areas of *in situ* burning or raked out and dumped material. The CPR from these samples was identified as oat and barley grains and can help to understand the types of crop being grown at Wylfa and in the wider landscape. The other samples can provide similar but more limited information including the range of crops being grown and used, as the material was within pits and postholes and likely to be discarded rubbish deposits. For these samples to have any meaning the pits and postholes from which they were recovered must first be dated by other means to establish their link to the areas of *in situ* burning. All are from within the Roundhouse Group **{9200}**, although this partly reflects on site sampling bias.

7.10.2 Samples **<**9031**>**, **<**9041**>**, **<**9044**>** and **<**9047**>** were all from *in situ* burning or raked out and dumped material from within the roundhouse and as such can help determine the types of plant preferred for fuel at the time of occupation. These were identified as a mix of oak (*Quercus* sp.), poplar/willow (*Salix/Populus*) and the rose family (*Rosaceae*) which compares favourably with other sites excavated at Wylfa and wider Anglesey such as at Cefn Cwmwd (Gale in Cuttler et al., 2012). Charcoal from the other deposits are more limited due to their re-deposited nature within pits and postholes and the relatively unsecured broad date of the features.

7.10.3 The common whelks and dog limpets in the shell assemblages recovered from the pits are likely to be a deposit of food waste due the large quantities and the location from which they have been recovered.

7.10.4 The animal bone assemblage likely represents domestic food waste. Very little interpretation can be gained from this small and highly fragmentary assemblage. Some of the material may be suitable for radiocarbon dating and while it is not possible to assign animal bone to a chronological period by visual examination, their recovery in conjunction with material dated to the Late Iron Age/Roman period may indicate that they are of a contemporary date.

7.11 **Statement of potential**

7.11.1 The material recovered from Area 9 can be used in conjunction with the other Wylfa excavations to assess the types of fuel used across the wider Anglesey landscape. However, it must be borne in mind that the remains from Area 9 are presently poorly understood in detail.

7.11.2 The burnt deposits from within the structures and the fills from the waste pits will provide valuable information on the type of industry taking place, fuel, diet, and environment.

7.11.3 The shell may also give us an insight into the types of marine mollusc preferred as a food source in North Wales.

7.11.4 The charred plant remains listed in 7.3.1 and charcoal listed in 7.4.1 should be analysed fully. The grain should be employed to produce a site-specific and intra-site narrative on food procurement strategies, palaeo-diet and crop husbandry practices. The charcoal (analysed by methodology in Huntley 2010; 57-60) may provide insights into wood and fuel procurement occurring on-site.

7.11.5 *Radiocarbon suitability*: material from further samples may be suitable for additional radiocarbon determination, the ones with higher quantities and CPR would be the preferred options. Overall, the rate of recovery of datable artefacts during excavation is notably poor in the region. As such, environmental samples are of high importance to provide data helping to establish a chronology and narrative. It must be stated that if further radiocarbon determination is sought from charcoal then the fragment must be identified to species prior to submission to select the shorter lived species to mitigate against the potential 'old wood effect' that may present a radiocarbon age far older than the feature.

7.11.6 Care must be employed for selection as this must also be based on the suitability of the feature, for example, a tertiary pit fill or secondary fill of gully would be unlikely to provide a usable date for the feature.

7.11.7 *Retention and discard*: At this stage all ecofactual material may be retained in case of possible requirements for further radiocarbon dates and analysis has been determined.

7.11.8 The magnetic matter from all samples may be discarded as it offers no further potential.

7.11.9 The animal bone assemblage is of low archaeological significance overall and no further analysis is necessary at assessment stage. However, all the animal bone from Wylfa should be presented if the excavations should go to publication. Some of the material may be suitable for radiocarbon dating.

8 CONCLUSIONS

8.1 Interpretation

8.1.1 The archaeological excavation of Area 9 in Field F1, within the proposed development site of a new nuclear power station at Wylfa Newydd, allowed the investigation and recording of the archaeological remains initially revealed during the archaeological evaluation. It must be noted that the discontinuous programme of excavation works, with two stages of work separated by a seven-month gap, has produced a less than ideal dataset for interpretation. The archaeological remains are presently poorly understood.

8.1.2 The remains were located in the southern half of Field F1 covering an area of approximately 30m by 20m. The remains were found to be relatively complete in terms of their plans but had been truncated or affected vertically, so that the upper elements of the features were incomplete.

8.1.3 The archaeology revealed in the open area excavation consisted of pits, postholes and large spreads of stony material with a single stone structure. There were significant numbers of smaller (0.6m and less) circular features of variable depths and diameters. Determining whether individual features were small pits or large postholes was difficult in many instances, as the features did not have characteristics to clearly illustrate their function. There were almost no features with preserved postpipes (where posts have rotted in place) or in situ packing material. Nor were many of the potential small pits filled with material suggesting discarded rubbish from adjacent activities. Judgements were made on comparisons of position, size, form, colouration, inclusions and spatial associations. It is recognised that as such this is subjective and open to reinterpretation.

8.1.4 The site uncovered five grouped features associated with occupation and a range of domestic activities including food processing of Late Iron Age to Roman date. The Roman pottery recovered from the layers sealing the roundhouse has provided a terminus ante quem for the roundhouse. There was also a small amount of Roman material retrieved from within posthole fills **(9181)** and **(9183)**, including fragments of black burnished ware. However, the lack of surviving material culture from the underlying discrete features does not preclude them from being of an earlier date.

8.1.5 A total of five radiocarbon dates were obtained from the excavation and two from the evaluation (Headland Archaeology 2017). Radiocarbon dating obtained during the evaluation, from the northern pit / posthole fill (**2244-045**), gave a date of 2040±29 cal BP (between 161 BC – AD 26), (Headland Archaeology 2017). This agreed with the results obtained during the excavation, whereby the posthole fill **(9107)** returned a date of 2100±30 cal BP (between 197 - 47 BC). Both are from the Rectilinear Structure Group **{9199}** and demonstrate that the dating results are consistent between the pieces of work.

8.1.6 The earliest date obtained was from pit fill **(9043)** in the Pit Cluster Group **{9201}**, which dated to 2160±30 cal BP (between 358 - 107 BC). Two other Iron Age dates obtained from features (including the evaluation) fell between 197 BC and AD 26, with a third spanning the Late Iron Age/early Roman period (155 BC – AD 52). The latest date obtained from fill **(9282)** of a possible hearth / pit feature in the Roundhouse Group **{9200}** was 1660±30 cal BP (between AD 260-529), while dating from two other features (including the evaluation) produced firm Roman dates between AD 137 and 378. The carbon dates obtained suggest the site spanned the Late Iron Age to late Roman period. The exact date and duration of each feature group has yet to be ascertained and the occupation of the site may have been continuous or intermittent.

8.1.7 There was a lack of artefactual material from all contexts which meant that dating of the deposits or features identified on this basis was not possible but accurate dating by scientific means, namely radiocarbon, may make further refinement possible, mostly focused on the roundhouse. The artefactual dating available suggested a broadly Roman date with only one sherd of decorated samian more closely datable to c.2nd century AD, which accords with some of the independent dating, but does not reflect the earlier phases of activity. This may indicate that the site and the occupants were essentially aceramic and utilised wood, skins and other organic based material for containers and utensils, none of which would be preserved in these conditions.

8.1.8 As a whole, the groups suggested the presence of a roundhouse **{9200}**, with a trackway **{9287}** leading away to the east and one or more rectilinear structures **{9199}** on the north side of the trackway. To the south was a possible ancillary structure **{9286}** and a pit cluster **{9201}**, likely used for discarded rubbish.

8.1.9 Due to the nature and dispersal of the archaeological remains it was not possible to establish a relationship between the disparate elements of the site. It could be argued that the characteristics of each imply that they were broadly contemporary and could represent zonal activities occurring at the same time. However, without detailed dating information it is difficult to be certain, and the site may have come into being as a series of stages with features coming into and going out of use at different points.

8.1.10 The archaeological remains in Area 9 were seen to demonstrate a moderately complex stratigraphic sequence. Although the features were sealed by the subsoil and in most cases, truncated the natural substrate, there were variations in stratigraphical sequences. In some of the groups, such as **{9199}**, there were no intercutting features as they were all discrete and few had more than one fill, other groups, such as **{9200}**, had numerous intercutting features and numerous fills. Although the vast majority of the archaeological recording is accurate it is noted that there are a few cases where there may have been either an oversimplification of stratigraphy e.g. pits **[9064, 9136, 9213** and **9275]**, which may have had more than one fill or; in the case of the intercutting pits there was possible over complication of stratigraphic sequences e.g. pits **[9091/9089/9087/9085/9081/9079]**.

8.1.11 For the main archaeological remains present on the site there were five suggested phases of activity, but it is noted that these may be oversimplified, and some comparisons may warrant further analysis. The features may therefore vary from single entities established for a short duration, to ones in use for a longer period of time and subject to alterations and changes throughout.

8.1.12 The earliest phase was probably the construction of the roundhouse **{9200}** and the establishment of the associated trackway / path **{9287}** although it is possible that the ancillary structure might have been earlier than the origin of the roundhouse, (see below).

8.1.13 Roundhouse **{9200}** was visible as a circular shallow truncation with associated postholes. There was no evidence for either walls or a drip gully although the fact the natural includes fractured and exposed bedrock may account for the lack of the latter. The roundhouse itself was approximately 6m in diameter which is compatible with others identified elsewhere on the project, but it is hypothesised that they may be smaller, in general in this region with potentially more adverse weather, than in areas with ameliorate conditions. Roundhouses in mainland England averagely range from 9m-13m, (Pryor 2004, 235-38) but can reach up to 25m in diameter.

8.1.14 The postholes were thought to be part of the wall and roof constructions, as are typical for such structures (Bewley 2003, 122), although they could also relate to internal divisions. A number of possible postholes to the immediate east, might indicate there was an external porch. This would relate well spatially to the trackway and suggested an entrance into the roundhouse on the eastern side which is a common arrangement (e.g. Oswald *et al* 2001). It was unclear if all the internal postholes would have been contemporary, they were not all uniform and there was little dating material. There was no evidence of intercutting postholes, which would have been a clear indication of replacements but it could be argued that postholes in close proximity can indicate replacement of posts, given that they spatially respect each other, but whether it demonstrates individual posts being replaced or wholesale rebuilding is unknown.

8.1.15 Trackway **{9287}** was a shallow northwest-southeast trending depression that continued southeast beyond the excavated area. It was difficult to determine whether the depression was formed by wear and activity or if it was the result of a deliberate truncation, but the form was consistent with it being interpreted as a trackway. It is unknown how far the trackway may have extended but it is interesting to note that if a straight line is continued in a south-eastern direction, the settlement c.850m away in Area 2 would be reached. It is equally plausible that the trackway is a worn area surrounded by activity zones and is both a routeway and an open 'yard' area.

8.1.16 It is possible that the occupation and activity at Area 9 might have been a smaller occupation / dwelling within the landscape of the larger settlement in Area 2 or it might have been a small specialised processing site that utilised bog and coastal resources and served or supplied that settlement.

8.1.17 Possibly following the construction of the roundhouse and trackway, Rectilinear Structure/s Group **{9199}** was likely established which appeared to respect the northern side of the trackway. The trackway itself may have had an alteration or addition to it at the western end. It was unclear, as there was only a small area preserved, but there appeared to be a possible paved area, **{9188}**. This may have been a deliberate formalised surface positioned in juxtaposition to the roundhouse entrance. It did not have characteristics that would suggest a drain or wall which would have impeded a route in through the entrance, and a 'processing' surface would also have been an inefficient spatial arrangement.

8.1.18 The evaluation uncovered a single posthole that had an unknown relationship with the trackway. It could indicate a possible pre-trackway structure, but no other postholes were identified beneath the trackway during the excavation.

8.1.19 The rectilinear structure/s consisted of 17 postholes that extended over an area 8m by 6m. The group were interpreted as postholes based on comparisons to the sizes of other more probable postholes, associated with the roundhouse, and the less ambiguous pits in the pit cluster **{9201}**. Whether the group constitutes one larger rectilinear building, several phases of a building or whether it reflects a number of smaller, 4 or 6 post-built structures is unclear. A fuller analysis of forms and potential spatial associations might elucidate this. There are known Iron Age sites with zonal activity showing pits to be spatially segregated from 4-6 post structures (for example Site M, Brown 2008 fig 59, p91; and in general Cunliffe 1991, 376) and the remains at Area 9 may demonstrate the same form of zonation, with above ground storage or related activities to the north of the trackway and below ground storage, rubbish pits, midden creation to the south. The interpretation of feature **[9193]** as a possible hearth could not be fully substantiated from the recorded data, the context record states it as a hearth, but the photographic evidence is less convincing, particularly when compared to other heated structures present on site.

8.1.20 The possible porch postholes towards the western end of the group are hypothetical and it is accepted that they may be attributable to the rectilinear structure/s instead.

8.1.21 The possible Ancillary Structure or work area Group **{9286}**, was established to the south of the roundhouse. The feature appeared to originate as a shallow slightly irregular truncation roughly 9m by 5m with postholes cut into the edge that may have been an associated nascent structure. The postholes could potentially be separated into two sub-groups dependant on size and indicate variation due to different structural components or different phases. The lack of overall sophistication compared to the roundhouse may imply that the feature had a contrasting function and could represent a sheltered external working area. Alternatively, it may have been an earlier feature and the roundhouse **{9200}** could have been a later 'upgrade', or perhaps rebuilt and the original version subsumed.

8.1.22 During this second phase there was demonstrable use of the roundhouse with a possible early hearth related feature, **[9275]**, and several small pits in evidence. The hearth related feature was a pit that appeared to be stone edged and contained low levels of charcoal possibly waste from an early hearth. It appeared to be sealed by a clay deposit that may have been the remains of a floor or surface.

8.1.23 With the structures all in use, the main formation of Pit Cluster Group **{9201}** commenced to the southeast, although there were at least two pits that had earlier origins, as might be expected, with rubbish being discarded as soon as occupation began. There is often a difficulty in ascribing a functional origin to pits that contain waste material since, as in the case of several of the present pits, they show evidence of being left open rather than immediately filled with debris and there is a consequential need to discard the excavated material. Hence pits can have a different primary purpose, including the extraction of sediment, to their secondary use for rubbish disposal. The earliest defined pits in the sequence had no observed material consistent with discarded rubbish.

8.1.24 The grouping contained small and large pits and there were some tentative indications that there may have been more than just rubbish pits in the vicinity, there may also have been some form of posthole structure, if combined with the evaluation data.

8.1.25 The third phase of activity seemed to represent the most intensive use of the site. There was continued use of the roundhouse, seen as intercutting hearth features in the central internal part. The description of the features as hearths might not be entirely accurate. Hearths are often defined as bases for fires used for domestic cooking and providing heat and light and as such might be relatively horizontal. It was difficult to easily define the sequence of activity and it is suggested that a number of heat affected clay deposits identified **(9271**, **9268** and **9284)**, although recorded as fills within different features and attributed to different phases may have all been part of a larger layer. This somewhat spurious data resulted from the excavation strategy. The layer may have been part of worn clay floor surface affected by adjacent heating activity or it could be the base of a hearth or hearths. The cut features / 'hearths' may have been fire pits with surrounding floors (Plates 32 and 33). As such, and when taken in consideration with the discarded burnt deposits (e.g. **9244** and **9247**) within the structure, this could indicate that the roundhouse may not have been used exclusively as a domestic dwelling.

8.1.26 Charred cereal grains (oats, wheat and barley) were present within the soil samples recovered from the roundhouse, indicating that grain processing and/or food preparation appears to have taken place in the vicinity of the settlement features. The presence of cereal remains implies a degree of permanence to settlement or access to arable agriculture present in the landscape.

8.1.27 The fuel sources, as demonstrated by the charcoal waste, were identified as a mix of oak (*Quercus* sp.), poplar/willow (*Salix/Populus*), privet (*Ligustrum* sp.) and the rose family (*Rosaceae*) this links in with the other sites excavated at Wylfa and wider Anglesey such as at Cefn Cwmwd (Gale in Cuttler et al., 2012). Whether the species represented deliberate fuel or accidental inclusion remains open to speculation.

8.1.28 A large stone filled pit was created, used and infilled in the ancillary structure, within the partially sheltered external working area during this phase. It has been suggested that the tightly packed upper deposit of stones within this feature could represent a working surface, although this remains speculative.

8.1.29 The pit cluster continued in use and there was evidence of rubbish from marine shells predominantly common limpets and dog whelks being discarded, along with smaller quantities of charcoal presumed to derive from fires, and animal bone, thought to be food waste. These are interpreted as refuse pits including shellfish processing waste originating from activities taking place in the adjacent structures. It was difficult to determine from the amount of waste whether it represented food waste from domestic needs or whether it resulted from a larger scale, industrial type of activity, particularly as one deposit associated with the group **(9083)** recorded as being rich in marine shells was never sampled. Of particular significance here is deposit (**2244-020**) recorded during the evaluation as being comprised of shell fragments in a mid-brown sandy silt, representing a midden, or dump of domestic refuse from the processing of edible crustaceans, primarily common limpets and dog whelks (Headland Archaeology 2017). It is probable that this deposit was closely associated with deposit (9083) recorded during the excavation. Also of interest is the comment that one very large, deep posthole from the area, had a stone rich fill that produced a lithic 'oyster smasher' (HNP 2016, 7).

8.1.30 The trackway and rectilinear structure/s probably persisted but there is no direct evidence for this during this phase.

8.1.31 The fourth phase comprised the continued use of the roundhouse, perhaps the cessation of the ancillary structure and the continuation of refuse disposal and the re-cutting of pits in the Pit Cluster Group **{9201}**.

8.1.32 The final phase of activity identified (Phase 5) was consistent with a period of disuse, whether by rapid or gradual abandonment of all areas and features. All the deposits attributed to this phase had significant amounts of stone inclusions which may reflect lost stone superstructures, wall foundations, surfaces etc, which were dismantled, robbed and reused elsewhere or became dilapidated. The resultant mixed material was persevered in the hollows formed by the structures and activities across the site. When viewed together on the post-excavation plan, the stones visible within the roundhouse reveal more about the internal organisation of the structure than was recognised on site (Plate 13).

8.1.33 Ironworking remains were noted in the evaluation e.g. [**2244-013**], towards the north eastern end of the study area (Fields F1, F2 and L1) on the coast of Camaes Bay. It may be suggested therefore that all were part of the same ironworking industry, and the industrial residues detected, albeit infrequently, at Area 9 could be part of a wider level of activity (Wessex Archaeology 2018b, Headland Archaeology 2017).

8.1.34 The overall interpretation of the site, somewhat hampered by the excavation methods and circumstances, suggested a smaller than average roundhouse, reached by a trackway, that may have been part of a wider open area, bordered by above ground rectilinear post-built structures along the northern side, an ancillary structure and working area to the south-west and a pit cluster and midden activity to the south. The site may have been for limited domestic use, given the small size and low number of artefacts, with the occupation subsidiary to the main focus on activities such as food processing of marine shellfish, or similar. The purpose of the site might have been to provide specific items, perhaps for the nearby population and inhabitants, such as those at the larger settlement in Area 2 less than 1km away. The site would appear to be reasonably well planned with zoned activity areas and there was some evidence of repeated use, although the duration and whether it was seasonal, intermittent or continuous and longer-term was unclear. The radiocarbon dates indicate Late Iron Age to late Roman occupation and activity.

8.2 Significance

8.2.1 The archaeological remains in Area 9 demonstrate small scale Late Iron Age to Roman occupation of an individual site. The nature and function of roundhouses, needs more nuanced interpretation (Bewley 2003, 121). Juxtaposition of the roundhouse with other structures is of significance when assessing the on-site activities that took place at Area 9. Each of the excavated sites needs to be recognised in its own right as well as in the context of the broader landscape. There is potential for occupation of the site in Area 9 to contribute to the broader understanding of Anglesey's archaeology. Other Iron Age and Roman settlement sites with round houses are known on Anglesey. Although Area 9 is of moderate regional significance due to the poorly dated nature of the relatively complex remains, the site can contribute to published research aims (CIfA Cymru/Wales 2003, 2011, 2017). Even without being able to produce a tightly dated sequence of activities, the site can be fitted into the development of the wider historic landscape.

8.2.2 The site is located in close proximity to the coast and adjacent wetland bog. The site may exist in isolation, but it is within a landscape with contemporary occupation sites including the large site in Area 20 (Wessex 2018e). Therefore, although the site is spatially distant it and the occupants may have had contact with the other sites. The variable nature of each site could indicate different activity centres. It could also suggest that some of the sites with specific / particular functions may have been seasonal or used intermittently. The accumulating data including that from Area 9 is advancing the understanding of the chronology, landscape setting, environmental context and function of such sites.

8.2.3 There remain questions as to the exact chronology between sites of the same broad period and to their relative chronology and whether Area 9 represents a specialised site perhaps exclusively processing shellfish, or whether it is purely a domestic habitation site, but one which prioritised utilisation of the immediate local resources over those less available. The general location may have favoured marine based industries such as salt panning, seaweed processing or food procurement, to supply more inland sites. It may also be able to consider permanent versus seasonal use and how this could relate to other sites in the hinterland (Gale 2010). Other key elements in the wider landscape are seen in Area 12 (Field L1 Central) 260m to the east, Area 2 (Fields L8, L12 and L16), c.850m to the southeast, and Areas 19 and 20 (Field O5), 1.4km to the south.

8.2.4 The remains of Area 9 share some of the characteristics of the varied sites and compare favourably. Geographical analysis of roundhouse locations in the vicinity would contribute to the understanding of the hierarchy of habitation in this area of Anglesey and northwest Wales.

8.2.5 The dating, characterisation and pattern of historic field systems is identified as a specific research aim in the WSI (HNP 2015, 2016) and understanding how the site functions amongst the development and degree of continuity of land divisions in Anglesey will contribute to this by examination with other sites.

8.2.6 The refuse found in features at Area 9 is significant in that it shows some variation to that recovered from other sites. This could indicate that the site was a focus for specific resource utilisation and could have been a particular element in the local farming economy. The location of the site would have allowed easier access for the exploitation of coastal resources. If shellfish specialisation was the focal activity at Area 9 it may be possible to investigate possible distribution and gain insights into local and regional trade.

8.2.7 The occupation site in Area 9, discovered during the excavation, provided a very limited range of artefacts, few of which were datable. The low level of rubbish discarded on Iron Age sites is a noted phenomenon (Hill 1995). Due to this lack of artefactual evidence from Area 9 it is difficult to gain further insights on many aspects that rely on material culture such as social change during the Late Iron Age to Roman eras, or understanding regional, national and international trade and how the development of social networks fitted into this.

8.2.8 The fills of discrete features, hearth related deposits and spreads are repositories of palaeoenvironmental data. There is particular emphasis on obtaining accurate radiocarbon dates in order that the chronology of sites and ceramic sequences can be ascertained. The samples from the features contained quantities of charcoal and charred plant remains including cereals. This augments their archaeological potential, as there is 'a general scarcity of environmental data from Anglesey' (Cuttler et al. 2012, 241) with which to reconstruct ancient farming practices and changes in the landscape. However, the potential is limited due to the biased on-site sampling strategy which focused primarily on the roundhouse, with almost no samples from the other four grouped features.

8.3 Recommendations

8.3.1 The archaeological remains will expand on our understanding of the archaeology of the Isle of Anglesey regarding the regional research framework of Wales (CIfA Cymru/Wales 2017). In order to do this, there is a need to combine the various datasets already produced into a searchable database that can allow the information to be unified and interrogated in a rapid and meaningful manner. This could also assist in producing an accessible resource for digital deposition and public dissemination.

8.3.2 In addition, the results of the Area 9 archaeological excavation should be incorporated along with the results of the wider Wylfa Newydd scheme and an ordered archive deposited at the suitable repositories for both physical and digital material, with the production of a detailed report at the Historic Environment Record (HER) and publication.

8.3.3 The excavation of the occupation site, and the ecofactual material recovered at Area 9 requires full analysis. This will provide fuller dating, characterisation and distribution of Late Iron Age to Roman activity on the site which will contribute to research aims on the wider setting of sites and exploitation of the natural environment. In particular, the Area 9 occupation data should be combined with data from Area 11 (Field L1 West), Area 2 (Fields L8, L12 and L16), Area 19 (Field O5 North), and Area 20 (Field O5 South).

8.3.4 A full analysis of the appropriate environmental samples and the plant species present in the charred plant remains will provide insights into the local farming economy and the wider exploitation of the natural environment. This will be particularly focused on the Late Iron Age to Roman periods since the secure data relates to that era. This would include submitting any further material suitable for radiocarbon dating, to further refine the duration of the various features and obtain a better understanding of the site development, particularly through the use of Bayesian statistics which been demonstrated benefits (Whittle, Bayliss and Healy 2011).

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Wessex Archaeology 2018b Wylfa Area 9 Field F1: Site summary Report Unpublished report ref. 209730.009 (Horizon Doc Ref: WYN-WES-CON-REP-00010)

Wessex Archaeology 2018c Wylfa Area 11 Field L1W: Site summary Report Unpublished report ref. 209730.011 (Horizon Doc Ref: WYN-WES-CON-REP-00013)

Wessex Archaeology 2018d Wylfa Area 20 Field O5 South: Site summary Report Unpublished report ref. 209730.20 (Horizon Doc Ref: WYN-WES-CON-REP-00021)

Williams, D, 1973, Flotation at Siraf, *Antiquity*, **47**, p198-202

APPENDICES

APPENDIX 1: CONTEXT INDEX

Context Number	Context Type	Description	Width	Height / Depth	Discussion
9001	Layer	Mid greyish brown sandy clay	N/A	0.3m	Topsoil
9002	Layer	Mid orangey brown sandy silt	N/A	0.1m	Subsoil
9003	Layer	Mid orangey brown silty sand, outcropping rock	N/A		Natural geology
9004	Cut	Circular, gently concave sides and flat base	0.5m	0.13m	Pit / posthole filled by 9005
9005	Fill	Dark blackish brown sandy silt, occasional small sub-angular stones and charcoal inclusions	0.5m	0.13m	Fill of pit / posthole [9004]
9006	Cut	Circular, irregular sides and base	0.6m	0.1m	Uncertain feature filled by 9007
9007	Fill	Mid greyish brown, sand, frequent small to medium sub-angular stones	0.6m	0.1m	Fill of uncertain feature [9006]
9008	Cut	Circular, gently concave irregular sides and flat base	0.65m	0.13m	Pit / posthole filled by 9005
9009	Fill	Dark greyish brown sandy silt, occasional small sub-angular stones	0.65m	0.13m	Fill of pit / posthole [9004]
9010	Cut	Circular, steep straight sides and concave base	0.45m	0.34m	Posthole filled by 9013
9011	Fill	Dark brown sandy silt, two medium sub-angular stones	0.45m	0.34m	Fill of posthole [9012]
9012	Cut	Oval, gently concave sides and base	0.6m	0.19m	Posthole filled by 9013
9013	Fill	Mid greyish brown silty sand, frequent small sub-angular stones, occasional charcoal	0.6m	0.19m	Fill of posthole [9012]
9014	Cut	Circular, steep irregular sides and an uneven base	0.69m	0.47m	Posthole filled by 9015 and 9016
9015	Fill	Mid brown silty sand, occasional small sub-angular stones	0.29m	0.09m	Lower fill of posthole [9014]
9016	Fill	Mid brown silty sand, occasional small sub-angular stones	0.69m	0.38m	Upper fill of posthole [9014]
9017	Cut	Circular, steep irregular sides and an uneven base	0.55m	0.26m	Posthole filled by 9018
9018	Fill	Mid brown silty clay, frequent small sub-angular stones, rooting	0.55m	0.26m	Fill of posthole [9017]
9019	Cut	Circular - sub-square, moderately steep concave sides and uneven base	0.52m	0.12m	Pit / posthole filled by 9020
9020	Fill	Mid reddish brown, sandy silt, occasional stone, rooting	0.52m	0.12m	Fill of pit / posthole [9019]
9021	Cut	Circular, steep concave sides and gently concave base	0.4m	0.21m	Posthole filled by 9022

Context Number	Context Type	Description	Width	Height / Depth	Discussion
9022	Fill	Mid brown silty sand, occasional small sub-angular stones, rooting	0.4m	0.21m	Fill of posthole [9021]
9023	Cut	Oval, gently concave sides and base	0.25m	0.07m	Posthole filled by 9024
9024	Fill	Mid brown silty sand, occasional small sub-angular stones	0.25m	0.07m	Fill of posthole [9023]
9025	Cut	Circular, gently concave sides and base	0.5m	0.13m	Posthole filled by 9026
9026	Fill	Mid brown silty sand, occasional small sub-angular stones	0.5m	0.13m	Fill of posthole [9025]
9027	Cut	Irregular - sub-rounded in plan, steep straight sides and concave base	0.7m	0.58m	Pit filled by 9028
9028	Fill	Dark greyish brown sandy silt, frequent medium angular stones	0.7m	0.58m	Fill of pit [9027]
9029	Cut	Oval, gradually sloped straight sides and concave base	0.85m	0.16m	Pit filled by 9030, cuts pit [9031]
9030	Fill	Light greyish brown silty sand, frequent small angular stones	0.85m	0.16m	Fill of pit [9029]
9031	Cut	Oval, gradually sloped straight sides and concave base	1.9m	0.5m	Pit filled by 9032, cut by pit [9029], cuts pit [9033]
9032	Fill	Mid greyish brown, silty sand, frequent medium angular stones, marine shells	1.9m	0.5m	Fill of pit [9031]
9033	Cut	Oval, steep straight sides, pointed base	0.65m	0.25m	Pit filled by 9034
9034	Fill	Mid brownish grey, silty sand, frequent small angular stones, rare marine shells	0.65m	0.25m	Fill of pit [9033]
9035	Cut	Circular, concave sides and base	0.5m	0.15m	Pit filled by 9036, cut by pit [9037]
9036	Fill	Light yellowish brown, sandy silt	0.5m	0.15m	Fill of pit [9035]
9037	Cut	Oval, moderately steep concave sides and base	0.6m	0.25m	Pit filled by 9038 and 9039, cuts pit [9035]
9038	Fill	Mid yellowish grey, sandy silt	0.6m	0.15m	Lower fill of pit [9037]
9039	Fill	Dark brownish grey, sandy silt, occasional charcoal, rooting	0.6m	0.1m	Upper fill of pit [9037]
9040	Cut	Circular, steep straight sides and concave base	0.7m	0.44m	Posthole (possible) filled by 9041
9041	Fill	Dark brown silty clay, 3-4 large stones, angular and rounded, moderately frequent small sub-angular stones	0.7m	0.44m	Fill of possible posthole [9040]
9042	Cut	Oval, steep concave sides and flat base	1.95m	0.26m	Pit filled by 9043 and 9044, cuts pit

Context Number	Context Type	Description	Width	Height / Depth	Discussion
					[9045]
9043	Fill	Mid brownish grey, silty clay, inclusions of burnt stones and marine shells	1.95m	0.26m	Upper fill of pit [9042]
9044	Fill	Mid greyish brown, silty clay, occasional stones, inclusions of burnt stones	0.5m	0.13m	Lower fill of pit [9042]
9045	Cut	Oval, concave sides and base	1.95m	0.15m	Pit filled by 9046 and 9047, cut by pit [9042]
9046	Fill	Dark brownish grey, silty clay, possible burnt stones	0.8m	0.15m	Fill of pit [9045]
9047	Fill	Mid brownish yellow sandy clay, occasional stones	0.7m	0.08m	Fill of pit [9045]
9048	Cut	Circular/rounded, gently concave sides and base	2.5m	0.22m	Pit filled by 9049
9049	Fill	Dark greyish brown silty sand, ossacional small stones	2.5m	0.22m	Fill of pit [9048]
9050	Cut	Irregular sides and base	4m	0.2m	Interface related to spread 9051
9051	Fill	Mid brown sandy silt, occasional stones, marine shells	4m	0.2m	Deposit infilling [9050]
9052	Cut	Oval, gently concave sides and base	0.6m	0.15m	Pit / posthole filled by 9053
9053	Fill	Mid blackish brown, silty sand, rooting	0.6m	0.15m	Fill of pit / posthole [9052]
9054	Cut	Oval, moderately steep concave sides and base	0.7m	0.22m	Pit filled by 9055, cuts pit [9056]
9055	Fill	Dark greyish brown, silty sand, moderately frequent stones	0.7m	0.22m	Fill of pit [9054]
9056	Cut	Oval, moderately steep concave sides and base	0.85m	0.5m	Pit filled by 9057, cut by pit [9054]
9057	Fill	Dark greyish brown, silty sand, occasional angular stones	0.85m	0.5m	Fill of pit [9054]
9058	Void	Irregular sides and base			Interface related to spread 9059, same as 9171
9059	Void	Mid brown sandy silt, occasional stones			Deposit infilling [9058]
9060	Cut	Circular feature, gently concave sides and base	6m	0.24m	Construction cut / interface, filled by 9061 and 9189, same as 9074
9061	Fill	Mid greyish black silt, frequent small sub-angular stones	3m	0.24m	Fill of 9060

Context Number	Context Type	Description	Width	Height / Depth	Discussion
9062	Cut	Oval, steep concave sides and concave base	0.53m	0.12m	Posthole (possible) filled by 9063
9063	Fill	Dark brown silty sand	0.53m	0.12m	Fill of possible posthole [9062]
9064	Cut	Oval/circular, moderately steep concave sides and base	>1m	0.26m	Pit filled by 9065
9065	Fill	Mid orangey grey, silty clay, frequent stones and marine shells at the top	>1m	0.26m	Fill of pit [9064]
9066	Cut	Circular / amorphous gently concave sides and base	1.9m	0.19m	Pit filled by 9161, 9160 and 9067
9067	Fill	Dark blackish brown silt, frequent angular stones, occasional burnt stones		0.2m	Deposit infilling [9066]
9068	Cut	Oval, steep straight sides and irregular base	0.6m	0.23m	Posthole filled by 9069
9069	Fill	Light greyish brown, silty clay, one large rounded stone, several medium angular stones	0.6m	0.23m	Fill of posthole [9068]
9070	Cut	Artificial interface - sondage	3m	0.35m	Sondage
9071	Fill	Dark greyish brown, silty sand, moderately frequent angular stones	3m	0.35m	Upper fill, overlying 9137 and 9139
9072	Cut	Irregular sides and base	1.6m	0.15m	Interface related to spread 9073
9073	Fill	Mid blackish brown sandy silt, occasional stones, rare marine shells	1.6m	0.15m	Deposit infilling [9072]
9074	Cut	Circular feature, gently concave sides and base	6m	0.24m	Construction cut / interface, filled by 9075 and 9159, same as 9060
9075	Fill	Mid greyish black silt, frequent small sub-angular stones	3m	0.24m	Fill of 9074
9076	Cut	Circular, steep concave sides and narrow concave base	0.38m	0.15m	Posthole filled by 9077
9077	Fill	Dark greyish brown, sandy silt, occasional small angular stones	0.38m	0.15m	Fill of posthole [9076]
9078	Fill	Mid yellowish brown, sandy silt	0.29m	0.09m	Fill of pit [9079]
9079	Cut	Circular, moderately steep concave sides and base	0.29m	0.09m	Pit or interface, filled by 9078
9080	Fill	Mid brownish grey, sandy silt, rare small stones	0.9m	0.2m	Fill of pit [9081]
9081	Cut	uncertain shape in plan, moderately steep concave sides and base	0.9m	0.2m	Pit or interface, filled by 9080
9082	Fill	Mid greyish brown, sandy silt	1.1m	0.14m	Fill of pit [9085]

Context Number	Context Type	Description	Width	Height / Depth	Discussion
9083	Fill	Light brown silty sand, Very frequent marine shells - 90%	0.4m	0.12m	Fill of pit [9085]
9084	Fill	Light greyish brown, silty sand, frequent small stones	0.96m	0.07m	Fill of pit [9085]
9085	Cut	Circular, moderately steep concave sides and base	1.1m	0.41m	Pit, filled by 9082, 9083, 9084 and probably 9078 and 9080
9086	Fill	Mid brownish grey, sandy silt, occasional small stones, including flat stones at base	0.95m	0.11m	Fill of pit [9087]
9087	Cut	Circular, irregular sides and base	0.95m	0.11m	Pit or interface, filled by 9086
9088	Fill	Light brownish grey, silty sand, moderately frequent small stones	0.63m	0.17m	Fill of pit [9089]
9089	Cut	Circular, moderately steep concave sides and base	0.63m	0.17m	Pit or interface, filled by 9088
9090	Fill	Light yellowish brown sandy clay	0.58m	0.05m	Fill of pit [9091]
9091	Cut	Circular, moderately steep concave sides and base	0.95m	0.3m	Pit filled by 9090 and probably 9086 and 9088
9092	Fill	Light brownish grey, silty sand, moderately frequent small stones	0.22m	0.21m	Fill of pit [9093]
9093	Cut	uncertain shape in plan, moderately steep straight sides and uneven base	0.22m	0.21m	Pit filled by 9092
9094	Fill	Mid grey silty sand, moderately frequent small stones	0.76m	0.17m	Fill of pit [9095]
9095	Cut	uncertain shape in plan, moderately steep concave sides and base			Pit or interface, filled by 9094
9096	Fill	Mid brownish grey, sandy silt, occasional small stones	0.95m	0.2m	Fill of pit [9098]
9097	Fill	Light grey silty sand, frequent small stones	0.62m	0.08m	Fill of pit [9098]
9098	Cut	uncertain shape in plan, moderately steep straight sides and uneven base	1.25m	0.36m	Pit filled by 9096 and 9097 and probably 9094
9099	Fill	Mid greyish yellow silty sand, moderately frequent small stones	0.42m	0.32m	Fill of pit [9103]
9100	Fill	Mid brownish grey silty sand, occasional small stones	1.6m	0.27m	Fill of pit [9102]
9101	Fill	Mid yellowish brown sandy silt	0.25m	0.04m	Fill of pit [9102]
9102	Cut	uncertain shape in plan, shallow irregular sides and concave base	1.6m	0.3m	Pit filled by 9100 and 9101
9103	Cut	uncertain shape in plan, moderately steep straight sides and	0.42m	0.32m	Pit or interface, filled by 9099

Context Number	Context Type	Description	Width	Height / Depth	Discussion
		concave base			
9104	Cut	Circular, moderately steep concave sides and base	0.5m	0.14m	Posthole filled by 9105
9105	Fill	Dark grey, sandy silt, occasional small angular stones	0.5m	0.14m	Fill of posthole [9104]
9106	Cut	Oval, steep concave sides and concave base	0.56m	0.46m	Posthole filled by 9107
9107	Fill	Mid yellowish brown, sandy silt, one large flat stone, moderately frequent medium angular stones	0.56m	0.46m	Fill of posthole [9106]
9108	Cut	Circular, moderately steep concave sides and base	0.5m	0.1m	Posthole filled by 9107
9109	Fill	Dark grey, sandy silt, occasional small angular stones	0.5m	0.1m	Fill of posthole [9106]
9110	Cut	Circular-oval, gently concave sides and base	0.31m	0.13m	Posthole filled by 9111
9111	Fill	Mid greyish brown, sandy silt, rare small angular stones	0.31m	0.13m	Fill of posthole [9110]
9112	Cut	Circular, moderately steep concave sides and base	0.2m	0.1m	Posthole filled by 9113
9113	Fill	Mid greyish brown, sandy silt, rare small angular stones	0.2m	0.1m	Fill of posthole [9112]
9114	Cut	Circular, vertical straight sides and flat base	0.49m	0.42m	Posthole filled by 9115
9115	Fill	Dark brown, silty clay, one large stone, moderately frequent small angular stones	0.49m	0.42m	Fill of posthole [9114]
9116	Cut	Circular, steep concave sides and uneven base	0.47m	0.18m	Pit / posthole filled by 9117
9117	Fill	Mid greyish brownsandy silt, moderately frequent stones, along edge	0.47m	0.18m	Fill of pit / posthole [9116]
9118	void	void	void	void	void
9119	Cut	Circular, vertical straight sides and flat base	0.46m	0.22m	Posthole filled by 9120 and 9121
9120	Fill	Mid grey, orange mottling, silty sand, rooting	0.46m	0.05m	Lower fill of posthole [9119]
9121	Fill	Mid grey, orange mottling, silty clay, occasional small stone, rare charcoal, rooting	0.46m	0.2m	Upper fill of posthole [9119]
9122	Cut	Circular, steep concave sides and gently concave base	0.7m	0.32m	Posthole filled by 9123
9123	Fill	Mid grey, orange mottling, silty clay, one large stone, rooting	0.7m	0.32m	Fill of posthole [9122]
9124	Cut	NW-SE linear feature, irregular sides and base	2.4m	0.2m	Trackway feature, filled by 9125

Context Number	Context Type	Description	Width	Height / Depth	Discussion
9125	Fill	Dark orangey brown sandy silt, occasional small angular stones, rare charcoal	2.4m	0.2m	Fill of trackway [9124]
9126	Layer	Mid yellowish brown sandy silt, amorphous in plan		0.13m	Deposit, infilling [9066]
9127	Cut	Sub-rectangular to oval, steep concave sides and gently concave base	0.6m	0.3m	Pit filled by 9128
9128	Fill	Dark blackish brown silty sand, frequent medium angular stones, charcoal	0.6m	0.3m	Fill of pit [9127]
9129	Layer	Mid blackish red clay	0.54m	unknown	Burnt deposit
9130	Cut	NW-SE linear feature, irregular sides and base	1.5m	0.25m	Trackway feature, filled by 9131
9131	Fill	Dark orangey brown silt	1.5m	0.25m	Fill of trackway [9130]
9132	Cut	NW-SE linear feature, irregular sides and base	1.1m	0.2m	Trackway feature, filled by 9133
9133	Fill	Dark blackish brown silty sand, moderately frequent small-medium angular stones, rare charcoal	1.1m	0.2m	Fill of trackway [9132]
9134	Cut	NW-SE linear feature, irregular sides and base	1.06m	0.07m	Trackway feature, filled by 9135
9135	Fill	Mid greyish brown silty sand, occasional angular stones	1.06m	0.07m	Fill of trackway [9134]
9136	Cut	Oval, moderately steep asymmetrical sides and flat base	1.55m	0.42m	Pit filled by 9137
9137	Fill	Mid brownish grey, silty clay, moderately frequent small stones	1.55m	0.42m	Fill of pit [9136], below 9071
9138	Cut	Oval, steep concave sides and flat base	1.3m	0.4m	Pit filled by 9139
9139	Fill	Mid brownish grey, silty clay, moderately frequent small stones	1.3m	0.4m	Fill of pit [9138], below 9071
9140	Cut	NW-SE linear feature, irregular sides and base	1.8m	0.14m	Trackway feature, filled by 9141
9141	Fill	Mid brown silty sand, frequent small angular stones	1.8m	0.14m	Fill of trackway [9140]
9142	Cut	Irregular sides and base	3.5m	0.2m	Interface related to spreads 9143 and 9144
9143	Fill	Dark blackish brown silt, shell inclusions	3.5m	0.1m	Lower fill of [9142]
9144	Fill	Dark blackish brown silt, occasional stones	3.5m	0.3m	Upper fill of [9142]
9145	Cut	NW-SE linear feature, irregular sides and base	1.55m	0.26m	Trackway feature, filled by 9146
9146	Fill	Dark brown silt, frequent small	1.55m	0.26m	Fill of trackway

Context Number	Context Type	Description	Width	Height / Depth	Discussion
		angular stones			[9145]
9147	Cut	NW-SE linear feature, irregular sides and base	2.4m	0.25m	Trackway feature, filled by 9148
9148	Fill	Dark greyish brown silt, moderately frequent medium and frequent small angular stones	2.4m	0.25m	Fill of trackway [9147]
9149	Cut	Circular, concave sides and base	0.3m	0.05m	Posthole filled by 9150
9150	Fill	Mid orangey brown, silt, rooting	0.3m	0.05m	Fill of posthole [9149]
9151	Cut	Circular, concave sides and base	0.32m	0.15m	Pit / posthole filled by 9152 – location unknown
9152	Fill	Mid grey, orange mottled, silty sand, occasional small stones	0.32m	0.15m	Fill of pit / posthole [9151]
9153	Cut	Circular, concave sides and base	0.4m	0.08m	Posthole filled by 9154
9154	Fill	Mid orangey brown, silty sand	0.4m	0.08m	Fill of posthole [9153]
9155	Cut	Circular, straight sides and concave base	0.4m	0.3m	Posthole filled by 9156
9156	Fill	Mid brown, silty sand, occasional small angular stones	0.4m	0.3m	Fill of posthole [9155]
9157	Cut	Circular, steep concave sides and concave base	0.34m	0.23m	Posthole filled by 9158
9158	Fill	Mid brown, silty clay, occasional small angular stones	0.34m	0.23m	Fill of posthole [9157]
9159	Fill	Dark greyish brown sandy silt, frequent small to medium sub-angular stones	3m	0.08m	Fill of 9074
9160	Fill	Mid yellowish brown clay, intermittent	0.3m	0.09m	Deposit, infilling [9066]
9161	Fill	Dark brownish black silt	1.4m	0.16m	Deposit, infilling [9066]
9162	Cut	NW-SE linear feature, irregular sides and flat base	1.5m	0.1m	Trackway feature, filled by 9163 – exact location unknown
9163	Fill	Mid brownish grey, silty clay, moderately frequent small stones	1.5m	0.1m	Fill of trackway [9162]
9164	Cut	Circular, moderately steep concave sides and base	0.33m	0.11m	Posthole filled by 9165
9165	Fill	Mid brown, silty sand, occasional small angular stones	0.33m	0.11m	Fill of posthole [9164]
9166	Cut	Circular, moderately steep concave sides and base	0.86m	0.26m	Pit / posthole filled by 9167 and 9168
9167	Fill	Light brownish yellos silty sand, occasional small angular stones	0.67m	0.08m	Lower fill of pit / posthole [9166]

Context Number	Context Type	Description	Width	Height / Depth	Discussion
9168	Fill	Mid brown, silty clay, one large sub-sounded stone, occasional small angular stones	0.86m	0.17m	Upper fill of pit / posthole [9166]
9169	Cut	Oval, steep concave sides and irregular base	0.53m	0.51m	Posthole filled by 9170
9170	Fill	Dark brown, silt, moderately fequent small - medium angular stones	0.53m	0.51m	Fill of posthole [9169]
9171	Cut	Irregular sides and base	1.5m	0.4m	Interface related to spread 9172 and 9173
9172	Fill	Light yellow clayey sand, patches of yellow and black clay	1.6m	0.25m	Upper deposit infilling [9171]
9173	Fill	mid greyish brown silty sand, frequent small angular stones	1.6m	0.13m	Lower deposit infilling [9171]
9174	void	void			void
9175	Cut	E-W linear ditch, terminus, moderately concave sides and flat base	0.5m	0.2m	Ditch filled by 9176
9176	Fill	mid orangey brown silt, occasional small sub-rounded stones	0.5m	0.2m	Fill of ditch [9175]
9177	Cut	Oval, steep concave sides and flat base	2.02m	0.73m	Pit filled by 9178, 9179 and 9190
9178	Fill	Mid brownish grey, silty clay, rare small stones	2.02m	0.24m	Lower fill of pit [9177]
9179	Fill	Dark brownish grey, silty clay, rare small stones	2.02m	0.62m	Middle fill of pit [9177]
9180	Cut	Oval, steep concave sides and flat base	0.45m	0.2m	Posthole filled by 9181
9181	Fill	Dark greyish brown, silty sand, moderately frequent small angular stones	0.45m	0.2m	Fill of posthole [9180]
9182	Cut	Circular, steep concave sides and flat base	0.42m	0.26m	Posthole filled by 9183
9183	Fill	Dark greyish brown, silty sand, frequent small angular stones	0.42m	0.26m	Fill of posthole [9182]
9184	Cut	Circular, steep concave sides and flat base	0.2m	0.15m	Posthole filled by 9185
9185	Fill	Dark greyish brown, silty sand, frequent small angular stones	0.2m	0.15m	Fill of posthole [9184]
9186	Cut	NW-SE linear feature, irregular sides and base	1.5m	0.21m	Trackway feature, filled by 9187 and 9188
9187	Fill	Dark brown silt	1.5m	0.21m	Fill of trackway [9186]
9188	Structure	NNW-SSE alignment of medium sized, sub-angular stones, arranged flat / horizontal, survival 2.1m length	0.7m	0.2m	Linear stone structure, fill of [9186]

Context Number	Context Type	Description	Width	Height / Depth	Discussion
9189	Layer	Dark greyish brown sandy silt, frequent small to medium sub-angular stones, charcoal	3m	0.05m	Fill of 9060
9190	Fill	Mid greyish brown, silty clay, rare small stones	2.02m	0.3m	Upper fill of pit [9177]
9191	Cut	Circular, moderately concave sides and base	0.31m	0.25m	Posthole filled by 9192
9192	Fill	Mid grey orange mottled, silty clay, rare small stones	0.31m	0.25m	Fill of posthole [9191]
9193	Cut	Oval, shallow irregular sides and base	0.65m	0.15m	Hearth filled by 9194
9194	Fill	Mid yellowy brownish orange silt, frequent charcoal and occasional heat affected stones	0.65m	0.15m	Fill of hearth [9193]
9195	Cut	Circular, steep straight sides and gently concave base	0.65m	0.35m	Posthole filled by 9196
9196	Fill	Mid greyish brown, silty sand, moderately frequent medium sized angular stones, rooting	0.65m	0.35m	Fill of posthole [9195]
9197	Cut	Oval, shallow irregular sides and base	0.59m	0.07m	Posthole / pit filled by 9198
9198	Fill	Dark greyish black silt, frequent angular small stones	0.59m	0.07m	Fill of posthole / pit [9197]
9199	Group	Rectilinear Structure/s - Posthole grouping, forming one or more structures			
9200	Group	Roundhouse			
9201	Group	Pit Cluster			
9202	Cut	Circular, steep straight sides and concave base	0.42m	0.25m	Posthole filled by 9203
9203	Fill	Mid brown, sandy silt	0.42m	0.25m	Fill of posthole [9202]
9204	Cut	Circular, gently concave sides and flat base	0.32m	0.1m	Posthole filled by 9205
9205	Fill	Mid brown, silty sand	0.32m	0.1m	Fill of posthole [9204]
9206	Fill	Mid orangey brown, sandy silt, moderately frequent small angular stones	0.18m	0.26m	Upper fill of posthole [9209]
9207	Fill	Dark brown, sandy silt, occasional small angular stones	0.11m	0.23m	Upper fill of posthole [9209]
9208	Fill	Mid grey medium-large limestone blocks and angular stones	0.07m	0.26m	Lower fill of posthole [9209], packing
9209	Cut	Circular-oval, steep straight sides and concave base	0.43m	0.26m	Posthole filled by 9206, 9207 and 9208
9210	Cut	Oval, steep concave sides and concave base	0.52m	0.24m	Posthole filled by 9211 and 9212

Context Number	Context Type	Description	Width	Height / Depth	Discussion
9211	Fill	Mid yellowish grey silty sand rare small sub-angular stones	0.52m	0.11m	Lower fill of posthole [9210]
9212	Fill	Dark blackish grey silty clay, rare smalll sub-angular stones, frequent charcaol and burnt clay inclusions	0.52m	0.12m	Upper fill of posthole [9210]
9213	Cut	Oval, steep concave sides and flat base	0.8m	0.26m	Pit / posthole filled by 9214 and 9215
9214	Fill	Dark yellowish grey silty sand rare small sub-angular stones	0.8m	0.26m	Upper fill of pit /posthole [9213]
9215	Fill	Light grey angular schist stones, forms bowl shape and one horizontal on top	0.8m	0.05-0.2m	Lower fill of pit / posthole [9213]
9216	Cut	Oval, moderately steep concave sides and base	0.92m	0.16m	Pit filled by 9217
9217	Fill	Dark brown sandy silt, frequent medium - large sub-rounded stones, rooting	0.92m	0.16m	Fill of pit [9216]
9218	Cut	Circular, steep concave sides and flat base	0.41m	0.11m	Posthole filled by 9219
9219	Fill	Mid reddish brown, sandy silt, frequent small angular stones	0.41m	0.11m	Fill of posthole [9218]
9220	Cut	Circular, steep concave sides and concave base	0.52m	0.29m	Posthole filled by 9221 and 9222
9221	Fill	Light orangey brown, silty sand, moderately frequent small stones	0.52m	0.11m	Lower fill of posthole [9220]
9222	Fill	Dark black, silty sand, one large rounded stone, charcoal	0.52m	0.15m	Upper fill of posthole [9220]
9223	Cut	Circular, steep concave sides and tapered base	0.16m	0.17m	Stakehole filled by 9224
9224	Fill	Dark blackish brown, silt	0.16m	0.17m	Fill of stakehole [9223]
9225	Cut	Circular, concave sides and base	0.52m	0.24m	Pit /posthole filled by 9226, cut by [9227]
9226	Fill	Dark greyish black, silty sand, moderately frequent small angular stones	0.52m	0.24m	Fill of pit / posthole [9225]
9227	Cut	Circular-oval, moderately steep concave sides and irregular flat base	0.62m	0.11m	Pit /posthole filled by 9228, cuts [9225]
9228	Fill	Dark black, silty sand, red burnt clay flecks	0.62m	0.11m	Fill of pit /posthole [9227]
9229	Cut	Circular, steep concave sides and base	0.3m	0.3m	Posthole filled by 9230
9230	Fill	Dark blackish brown, silt, frequent medium angular stones	0.3m	0.3m	Fill of posthole [9229]
9231	Cut	Circular, steep concave sides and tapered base	0.11m	0.08m	Stakehole filled by 9232

Context Number	Context Type	Description	Width	Height / Depth	Discussion
9232	Fill	Dark blackish brown, silt	0.11m	0.08m	Fill of stakehole [9231]
9233	Fill	Dark brown sandy silt, moderately frequent gravel, one large stone, occasional charcoal	0.61m	0.12m	Fill of uncertain feature [9234]
9234	Cut	Oval - sub-rectangular, gently irregular concave sides and base	0.61m	0.12m	Construction cut / interface, filled by 9233
9235	Layer	Light grey, silty sand, rare small stones	0.55m	0.05m	Deposit, silting, below [9236] and [9238]
9236	Cut	Circular-oval, steep concave sides and flat base	0.35m	0.12m	Posthole filled by 9237 and 9257
9237	Fill	Mid yellowish grey silty clay, rare small stones	0.35m	0.12m	Lower fill of posthole [9236]
9238	Cut	Circular-oval, steep straight sides and concave base	0.5m	0.18m	Posthole filled by 9239
9239	Fill	Mid-dark brownish grey, sandy clay, rare stones, charcoal	0.5m	0.18m	Fill of posthole [9238]
9240	Cut	Circular, steep straight sides and flat base	0.27m	0.32m	Posthole filled by 9241, 9242 and 9243
9241	Structure	Mid grey medium schist angular stones	0.1m	0.32m	Fill of posthole [9240], packing
9242	Fill	Dark brown silt	0.13m	0.32m	Lower fill of posthole [9240]
9243	Fill	Mid brown sandy silt	0.03m	0.32m	Upper fill of posthole [9240]
9244	Layer	Dark black silty sand, moderate frequency of small stones, some heat affected, lenses of brown and red sediments	0.65m	0.2m	Deposit / dump
9245	Cut	Circular-oval, steep straight sides and concave base	0.34m	0.17m	Posthole filled by 9246
9246	Fill	Dark brown, sandy silt, occasional medium sized angular stones	0.34m	0.17m	Fill of posthole [9245]
9247	Fill	Dark brown sandy silt, occasional small stones, one large stone, rare charcoal inclusions	0.98m	0.06m	Deposit / dump, infilling [9248]
9248	Cut	Oval - sub-rectangular, gently irregular sides and base	0.98m	0.06m	Construction cut / interface, filled by 9247
9249	Cut	Circular, steep straight sides and concave base	0.23m	0.1m	Posthole filled by 9250
9250	Fill	Mid brown, sandy silt, rare charcoal	0.23m	0.1m	Fill of posthole [9249]
9251	Cut	Circular, steep straight sides and concave base	0.51m	0.45m	Posthole filled by 9252

Context Number	Context Type	Description	Width	Height / Depth	Discussion
9252	Fill	Dark brown, sandy silt, rare small angular stones, rare charcoal	0.51m	0.45m	Fill of posthole [9251]
9253	Cut	Circular, steep straight sides and flat base	0.32m	0.2m	Posthole filled by 9254
9254	Fill	Dark brown, sandy silt, rare small angular stones, rare charcoal	0.32m	0.2m	Fill of posthole [9253]
9255	Cut	Circular-oval, steep concave sides and base	0.4m	0.22m	Posthole filled by 9256
9256	Fill	Light brown, sandy silt, occasional small angular stones at edges	0.4m	0.22m	Fill of posthole [9255]
9257	Fill	Dark blackish grey silty clay, rare stones, frequent charcoal inclusions	0.35m	0.04m	Upper fill of posthole [9236]
9258	Cut	Irregular, concave uneven sides and narrow concave base	0.27m	0.13m	Posthole (possible) filled by 9259
9259	Fill	Dark brown, sandy silt, occasional small angular stones	0.27m	0.13m	Fill of posthole [9258]
9260	Cut	Irregular, concave uneven sides and narrow concave base	0.14m	0.05m	Posthole (possible) filled by 9261
9261	Fill	Dark brown, sandy silt, occasional small angular stones	0.14m	0.05m	Fill of posthole [9260]
9262	Fill	Dark brown, sandy silt, occasional small angular stones, clay patches	0.49m	0.11m	Fill of posthole [9263]
9263	Cut	Oval - irregular, convex sides and concave base	0.49m	0.11m	Posthole filled by 9262
9264	Cut	Elongated oval, moderately slopped straight sides and flat base	0.2m	0.11m	Uncertain feature filled by 9265
9265	Fill	Dark blackish grey silty clay, rare small stones and charcoal	0.2m	0.11m	Fill of uncertain feature [9264]
9266	Cut	Oval, straight sides and flat base	0.4m	0.14m	Posthole filled by 9267
9267	Fill	Mid yellowish grey silty clay, occasional small stones	0.4m	0.14m	Fill of posthole [9266]
9268	Fill	Dark blackish grey sandy clay, rare small stones, frequent charcoal inclusions and burnt clay	0.45m	0.1m	Upper fill of pit / hearth [9269]
9269	Cut	Sub-rectangular to amorphous, moderately sloped concave sides and flat base	0.75m	0.14m	Pit / hearth, filled by 9268 and 9270, cut by 9279
9270	Fill	Dark yellowish grey sandy clay, occasional charcoal inclusions	0.75m	0.11m	Lower fill of pit / hearth [9269]
9271	Layer	Dark orangey red, clay	0.9m	0.08m	Surface
9272	Fill	Mid brown sandy silt, one large stone, moderately frequent small stones	0.39m	0.18m	Fill of posthole [9273]
9273	Cut	Sub-rectangular, steep straight sides and flat base	0.39m	0.18m	Posthole filled by 9272

Context Number	Context Type	Description	Width	Height / Depth	Discussion
9274	Fill	Light brown, sandy silt, occasional stones, rare charcoal	0.96m	0.23m	Fill of pit [9275]
9275	Cut	Oval, moderately steep concave sides and base	0.96m	0.23m	Pit filled by 9274
9276	Cut	Amorphous, steep straight sides and concave base	1.46m	0.39m	Pit / hearth, filled by 9277 and 9276, cuts 9273, cut by 9279
9277	Fill	Light yellowish brown, sandy silt	0.15m	0.09m	Lower fill of pit / hearth [9276]
9278	Fill	Dark blackish brown sandy silt, rare small stones, charcoal	0.6m	0.22m	Upper fill of pit / hearth [9276]
9279	Cut	Oval, steep straight sides and concave base	0.88m	0.4m	Pit / hearth, filled by 9280 to 9285, cuts 9276
9280	Fill	Light brownish grey clay, moderately frequent small stones	0.18m	0.02m	Fill of [9279], clay lining
9281	Fill	Mid orangey red, clay, moderately frequent small stones	0.22m	0.04m	Fill of [9279], clay lining
9282	Fill	Dark blackish brown sandy silt, rare small stones, frequent charcoal inclusions	0.75m	0.22m	Fill of [9279]
9283	Fill	Light yellowish brown sandy silt	0.36m	0.03m	Fill of [9279]
9284	Fill	Mid orangey red, clay	0.34m	0.09m	Fill of [9279]
9285	Fill	Dark blackish brown, sandy silt, rare small stones, frequent charcoal inclusions	0.52m	0.2m	Fill of [9279]
9286	Group	Ancillary Structure - activity area of pits and postholes			
9287	Group	Trackway - NW-SE aligned			

APPENDIX 2: HARRIS MATRIX

11111 Wessex excavation number
22222 Wessex or Headland evaluation number

APPENDIX 3: PLATES

Plate 1; general view of Area 9, facing NNE, 2 x 2m scale

Plate 2; general view of Roundhouse **{9200}** and other Groups, post and part excavated, facing SE, 2 x 2m scale

Plate 3; posthole **[9263]** and others, working shot, Roundhouse **{9200}**, facing E, 0.2m scale

Plate 4; posthole **[9209]**, Roundhouse **{9200}**, facing NE, 0.2m scale

Plate 5; posthole **[9266]** (on the right), truncated by the edge of **[9269]**, Roundhouse **{9200}**, facing E, 0.5m scale

Plate 6; postholes **[9253]**, **[9251]** and **[9249]** (left to right), Roundhouse {9200}, facing SW, 0.5m scale

Plate 7; deposit **(9147)**, Trackway **{9287}**, facing SE, 1m scale

Plate 8; pit **[9177]** and posthole **[9191]** (left), facing SW, 2 x 1m scale

Plate 9; intercutting pits **[9042]** and **[9045]**, Pit Cluster **{9201}**, facing N, 1m scale

Plate 10; pit **[9064]** =**[9042]**, Pit Cluster **{9201}**, facing S, 1m scale

Plate 11; pit **[9213]** (right) and posthole **[9210]**, Roundhouse {9200}, facing W, 1m scale

Plate 12; pits **[9225]** and **[9227]**, Roundhouse **{9200}**, facing N, 0.5m scale

Plate 13; Roundhouse **{9200}**, 'hearth' / pit **[9275]** and pit **[9216]**, (foreground) facing SE, 1m scale

Plate 14; postholes **[9153]**, **[9155]** and **[9157]**, Rectilinear Structure/s **{9199}**, facing W, 0.3m scale

Plate 15; feature **[9193]**, Rectilinear Structure/s **{9199}**, facing NW, 0.3m scale

Plate 16; Ancillary Structure **{9286}**, feature **[9066]**, postholes **[9202]** and **[9204]**, facing SE, 1m scale

Plate 17; intercutting pits **[9093]**, **[9091]** and **[9085]**, Pit Cluster **{9201}**, facing SE, 2m scale

Plate 18; intercutting pits **[9102]**, **[9103]** and **[9098]**, Pit Cluster **{9201}**, facing NW, 2m scale

Plate 19; pits **[9004]** and **[9008]**, facing N, 0.3m scale

Plate 20; posthole **[9040]**, facing W, 1m scale

Plate 21; posthole **[9114]**, facing NE, 0.3m scale

Plate 22; stone feature **{9188}** in Trackway **{9287}**, facing N, 1m scale

Plate 23; hearth features **[9264]** and **[9269]**, Roundhouse **{9200}**, facing S, 1m scale

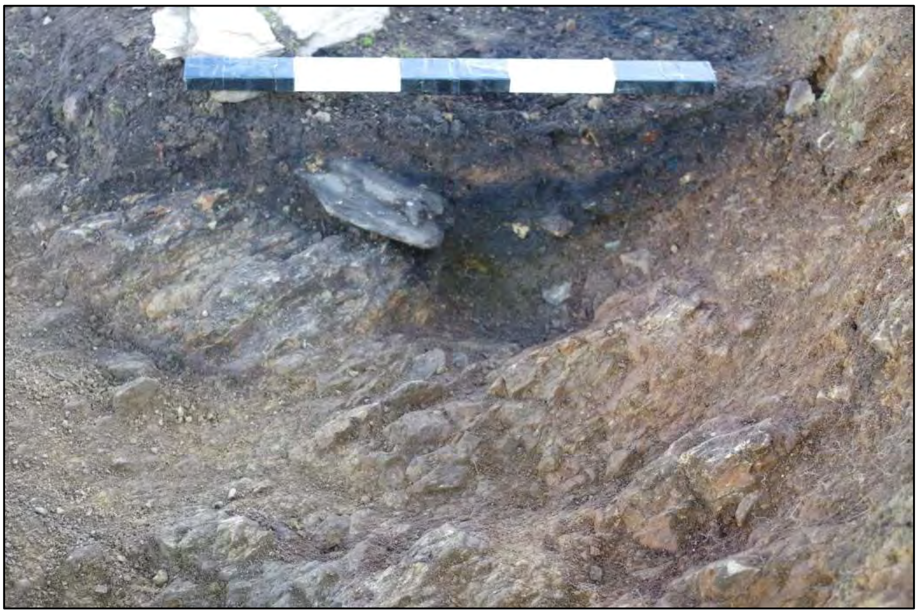


Plate 24; deposit **(9244)** in Roundhouse **{9200}**, facing NE, 0.5m scale

Plate 25; intercutting pits **[9035]** (left) and **[9037]**, Pit Cluster **{9201}**, facing SE, 2m scale

Plate 26; intercutting pits **[9054]** and **[9056]**, Pit Cluster **{9201}**, facing W, 1m scale

Plate 27; pits **[9136]** and **[9138]**, below deposit **(9071)**, Pit Cluster **{9201}**, facing S, 1m scale

Plate 28; stony pit fill **(9067)**, with adjacent deposits **(9126)** and **(9129)**, Ancillary Structure **{9286}**, facing N, 1m scale

Plate 29; hearth / pit **[9279]**, **[9276]** to right, Roundhouse **{9200}**, facing W, 1m scale

Plate 30; deposit **(9074)** in section, Roundhouse **{9200}**, facing NW, 2m scale

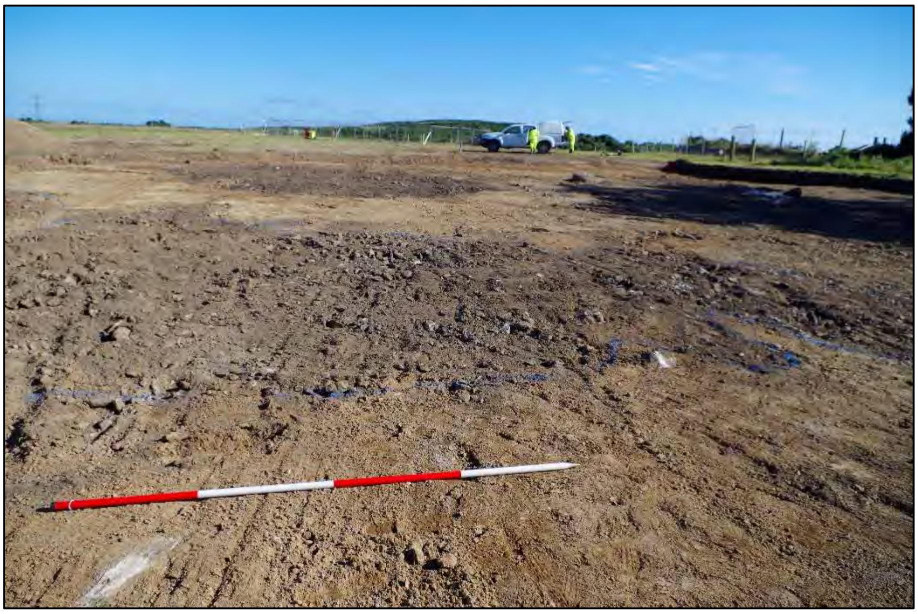
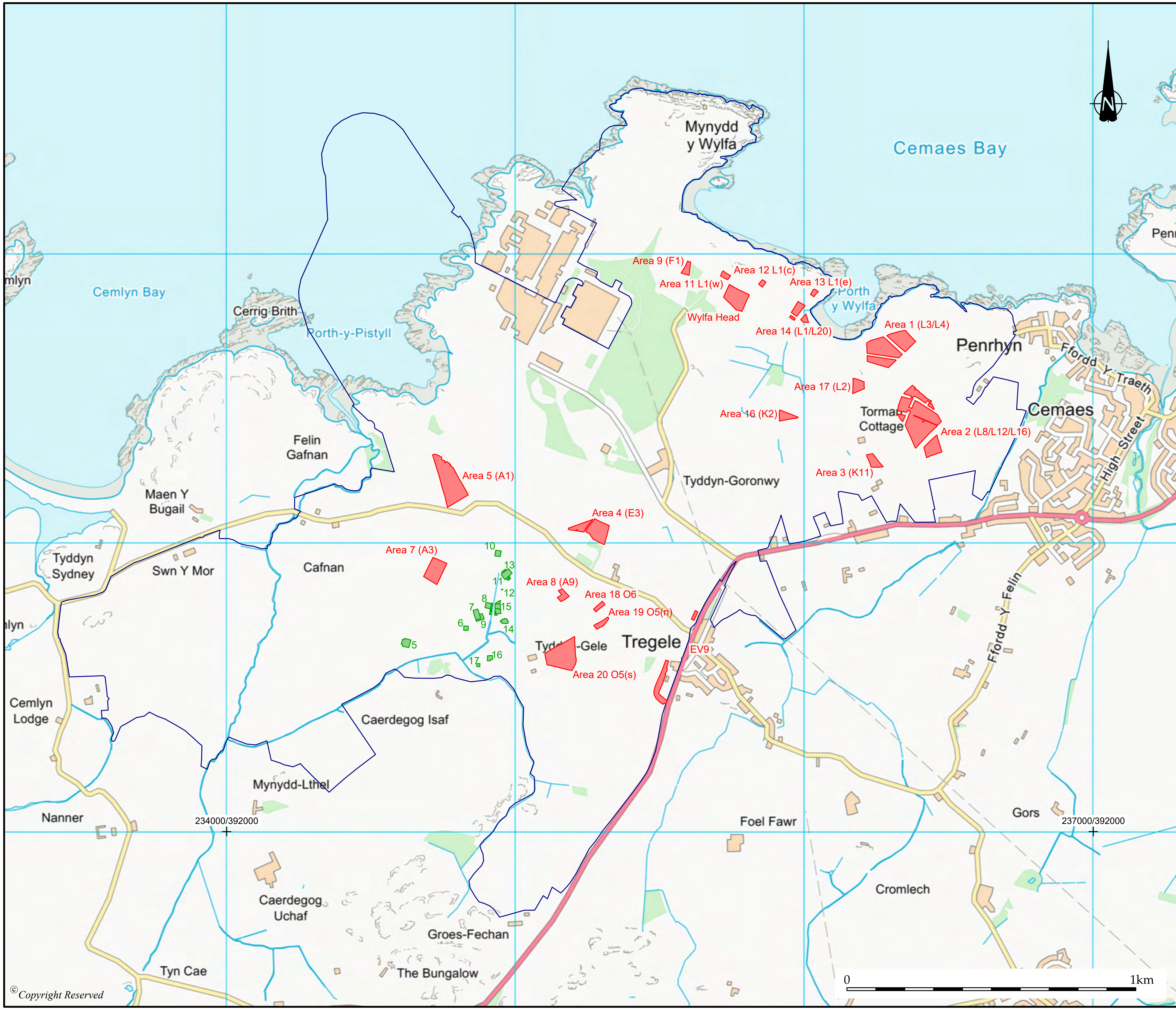


Plate 31; deposits **(9051)**, **(9144)** and **(9172)** pre-excavation, Ancillary Structure **{9286}**, facing N, 2m scale

Plate 32; hearth area within Roundhouse **{9200}**, facing S, 1m scale

Plate 33 post-excavation of **[9279]**, with **(9268)** red clay in foreground, Roundhouse **{9200}**, facing N, 2 x 1m scale

APPENDIX 4: FIGURES



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Wylfa Newydd development area

Excavation area

Hot spots

REVISION	DETAILS	DATE	DR'N	CHK'D	APP'D

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PROJECT

Area 9,
Wylfa Newydd, Anglesey

DRAWING TITLE

Figure 1:
Wylfa Newydd development area and excavated sites

DRG No.		REV
CL12283-901		A
DRG SIZE A3	SCALE 1:12,500	DATE Feb 2020
DRAWN BY HP	CHECKED BY DAC	APPROVED BY FG

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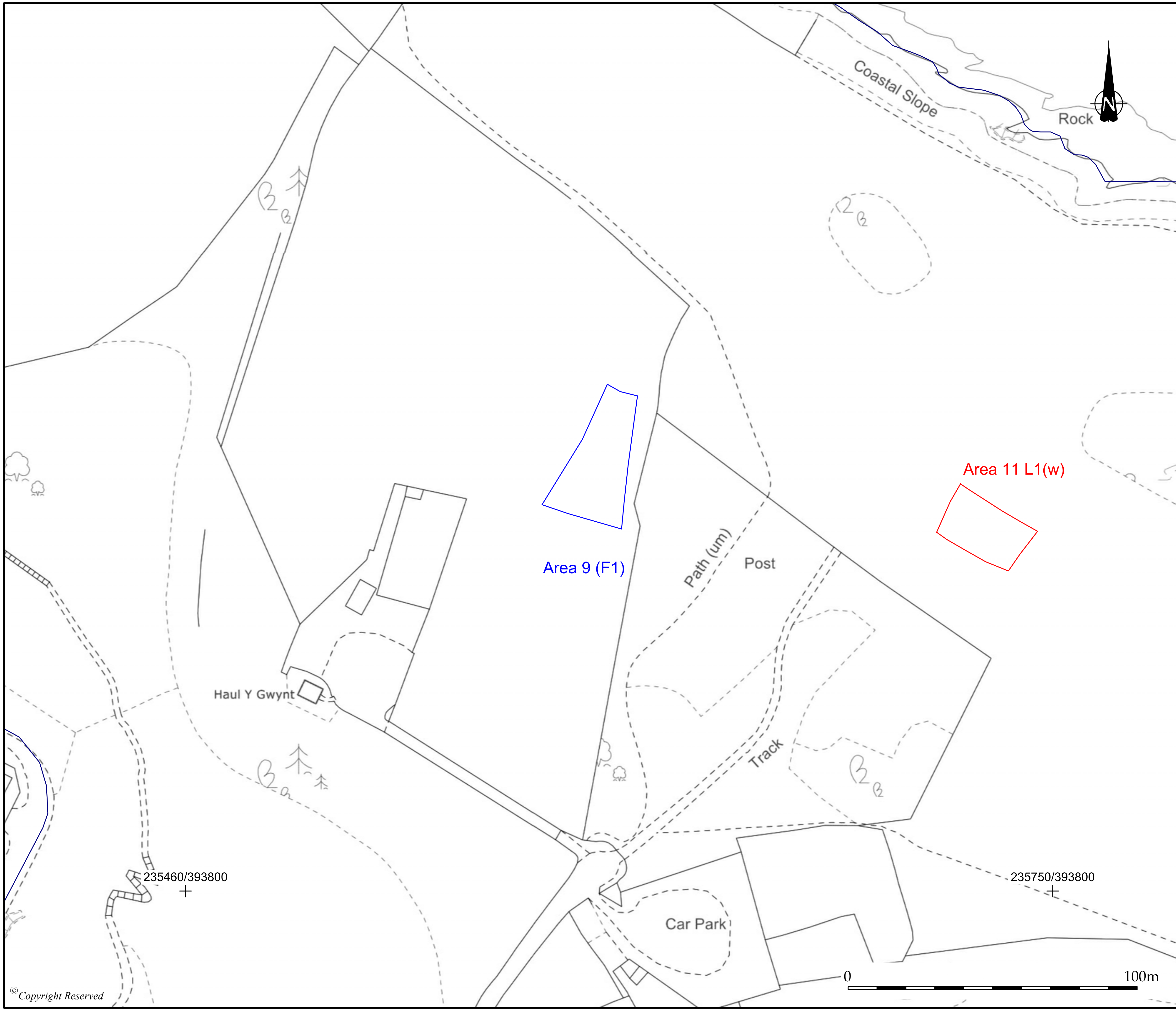

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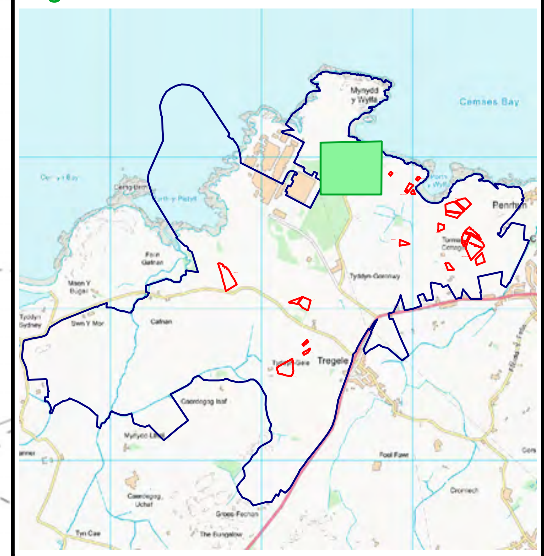
Wylfa Newydd development area

Excavation area

Excavation areas in vicinity

Figure location:



REVISION	DETAILS	DATE	DR'N	CHK'D	APP'D

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Area 9,
Wylfa Newydd, Anglesey

DRAWING TITLE

Figure 2:
Detailed site location

DRG No.		REV
CL12283-902		A
DRG SIZE A3	SCALE 1:1,250	DATE Jan 2020
DRAWN BY HP	CHECKED BY DAC	APPROVED BY FG

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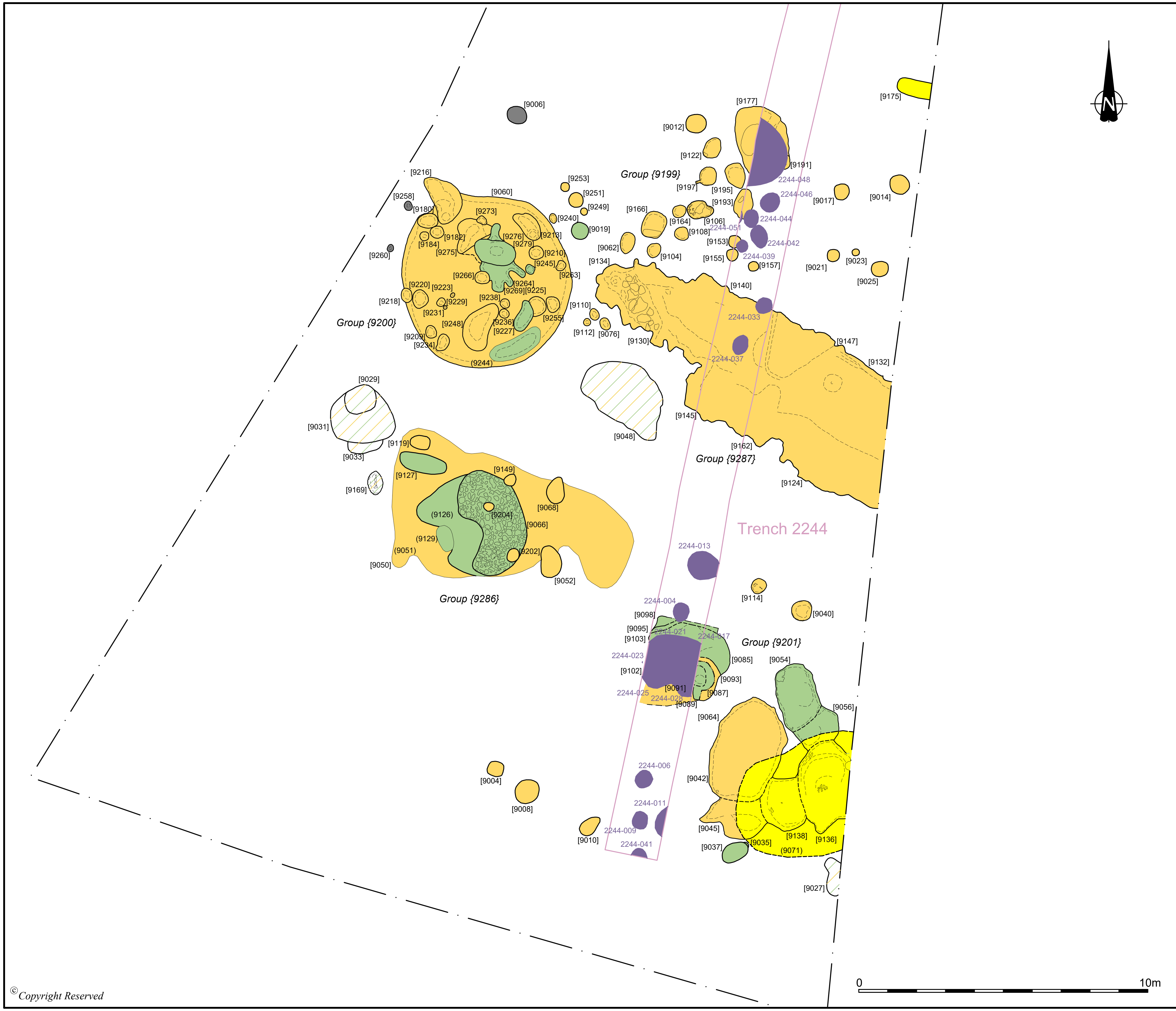

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(9000) Context numbers
Limit of excavation
Period 0 Natural
Period 3 Late Bronze Age and Iron Age 1500 BC – AD 43
Period 4 Roman AD 43 – 410
Period 3/4 unphased
Undated
Trench location
Features recorded in evaluation

REVISION	DETAILS	DATE	DR'N	CHK'D	APP'D
B	Addition of Trench features and context numbers	25/05/21	HP	MH	FG

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Area 9,
Wylfa Newydd, Anglesey

DRAWING TITLE
Figure 3:
Area 9; period plan

DRG No. CL12283-903		REV B
DRG SIZE A3	SCALE 1:125	DATE March 2020
DRAWN BY VT/HP	CHECKED BY DAC	APPROVED BY FG

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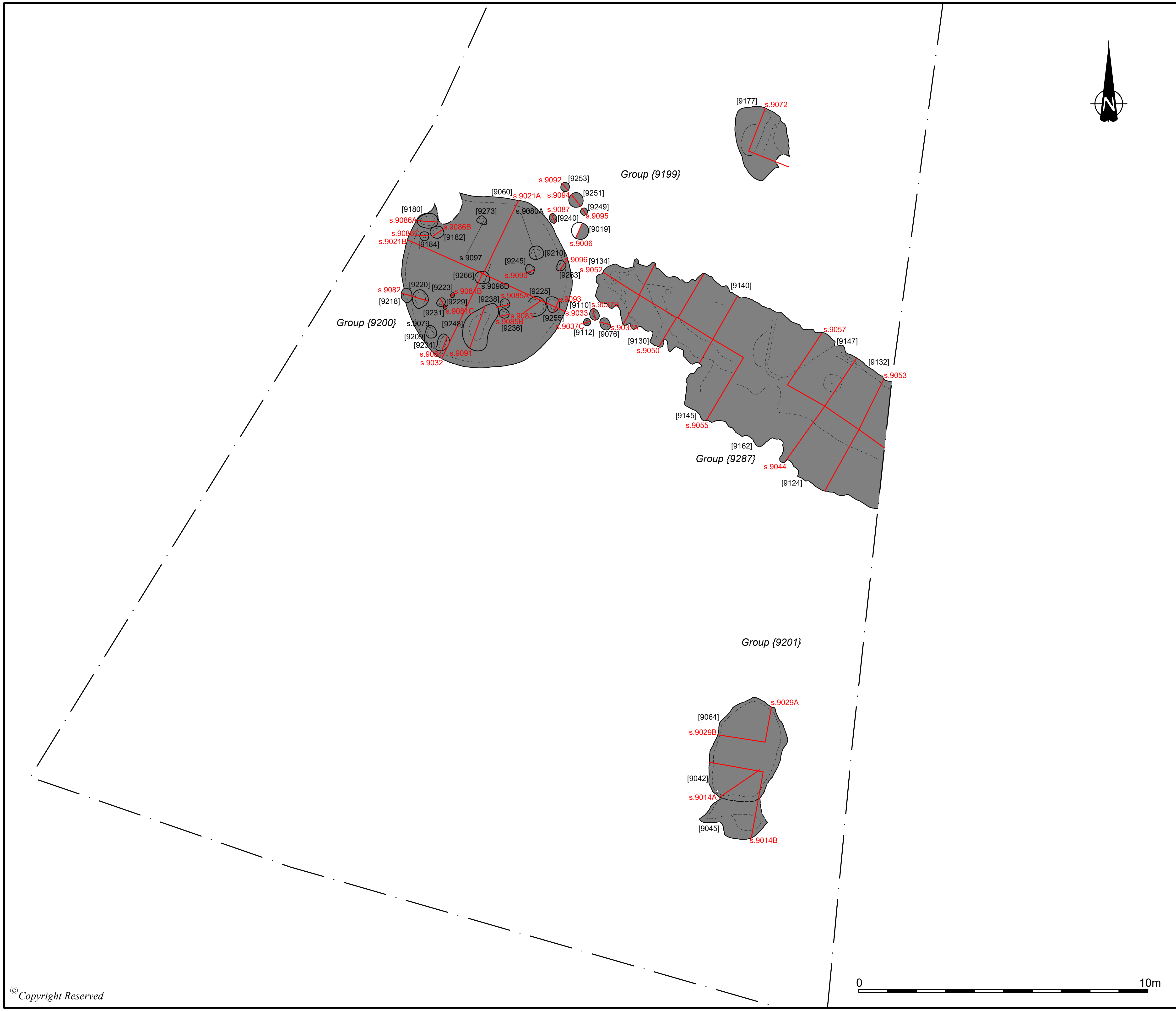

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(9000) Context numbers

Limit of excavation

Truncation line

Sections shown in further figures

Sections not shown in further figures

Excavated area

REVISION	DETAILS	DATE	DR'N	CHK'D	APP'D

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Area 9,
Wylfa Newydd, Anglesey

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Figure 4
Area 9; phase 1 plan

DRG No.		REV
CL12283-904		A
DRG SIZE A3	SCALE 1:125	DATE March 2020
DRAWN BY VT/HP	CHECKED BY DAC	APPROVED BY FG

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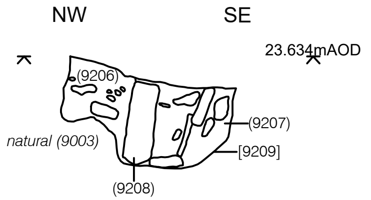
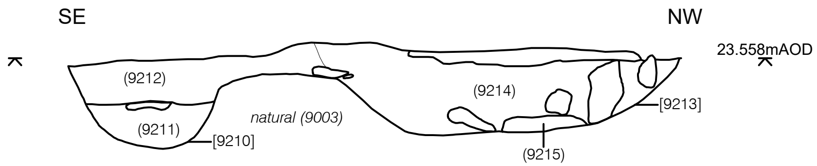
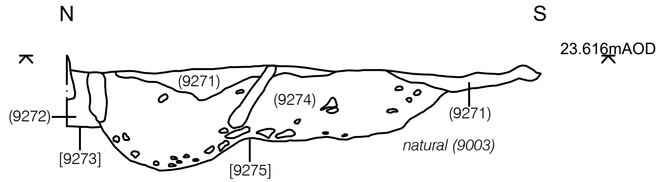


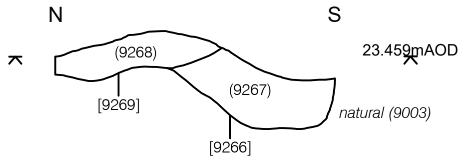
Section 9079. South-west facing section across posthole [9209].



Section 9080A. North-east facing section across features [9210] and [9213].



Section 9097. West facing section across features [9273] and [9275].



Section 9098D. West facing section across posthole [9266] and feature [9269].

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(9000) Context numbers

Limit of excavation

Height mAOD

Stones

REVISION	DETAILS	DATE	DRAWN	CHK'D	APP'D

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PROJECT

Area 9,
Wylfa Newydd, Anglesey

DRAWING TITLE

Figure 5:
Area 9; phase 1 sections

DRG No CL12283-905		REV A
SIZE A4	SCALE 1:20	DATE March 2020
DRAWN BY VT/HP	CHECKED BY DAC	APPROVED BY FG

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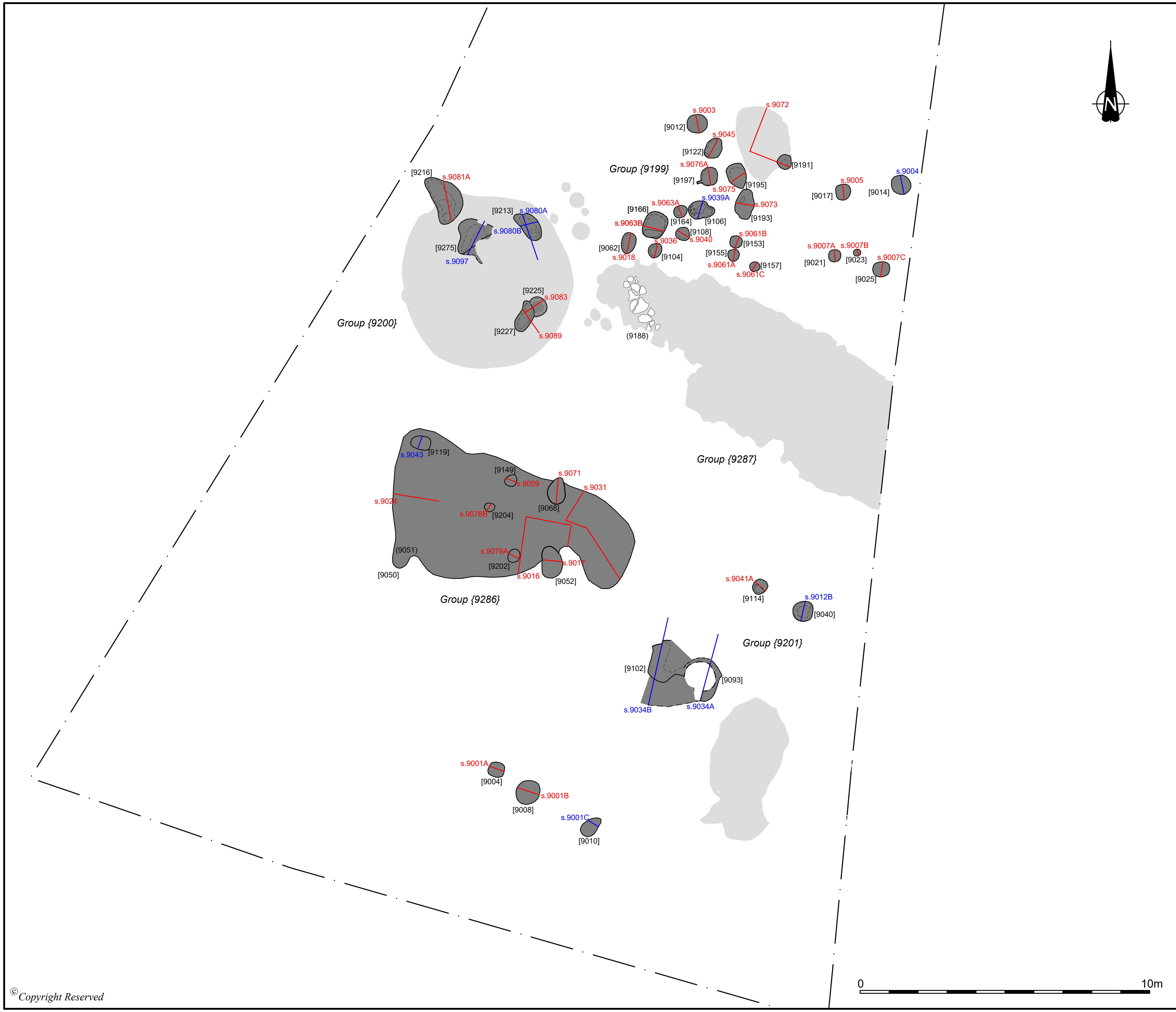

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(9000) Context numbers

Limit of excavation

Truncation line

Sections shown in further figures

Sections not shown in further figures

Excavated area

REVISION	DETAILS	DATE	DR'N	CHK'D	APP'D
B	Addition of contexts	25/05/21	HP	MH	FG

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Area 9,
Wylfa Newydd, Anglesey

DRAWING TITLE

Area 9; phase 2 plan

DRG No.	REV
CL12283-906	B

DRG SIZE	SCALE	DATE
A3	1:125	March 2020
DRAWN BY	CHECKED BY	APPROVED BY
VT/HP	DAC	FG

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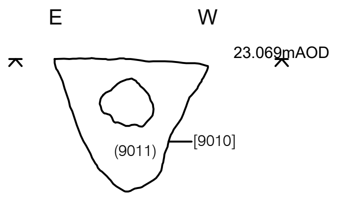
(9000) Context numbers

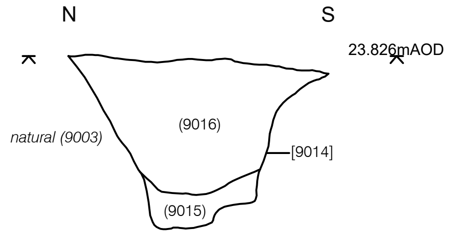
Limit of excavation

Height mAOD

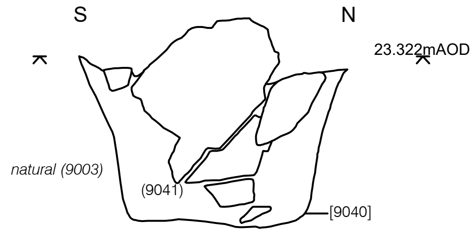
Stones



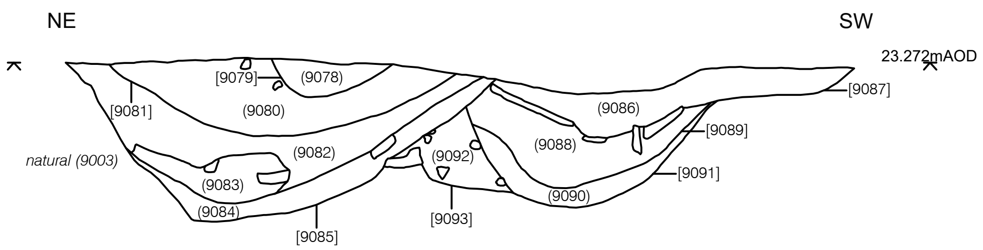
Section 9001C. North facing section across posthole [9010].



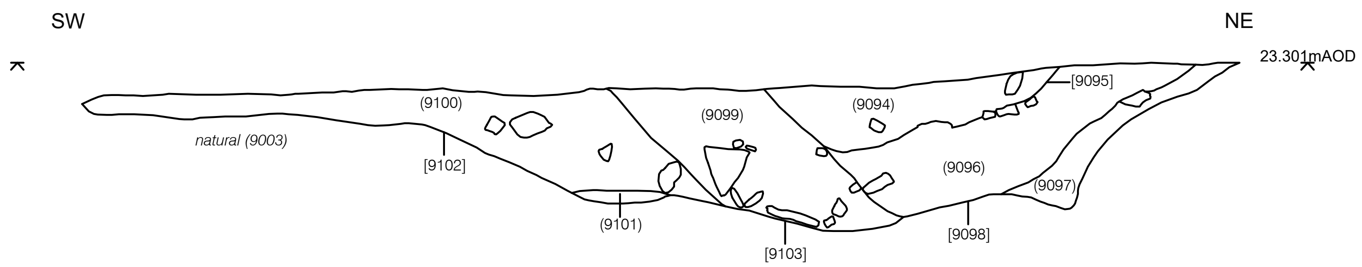
Section 9004. West facing section across posthole [9014].



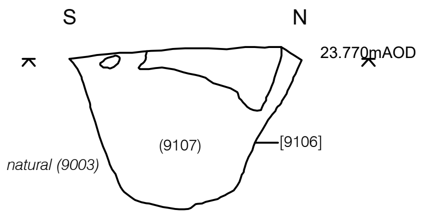
Section 9012B. East facing section across posthole [9040].



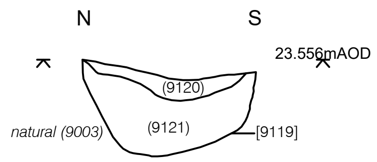
Section 9034A. North-west facing section across pits [9093], [9091] and [9085].



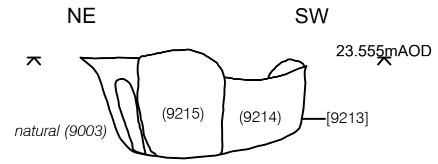
Section 9034B. South-east facing section across pits [9102], [9103] and [9098].



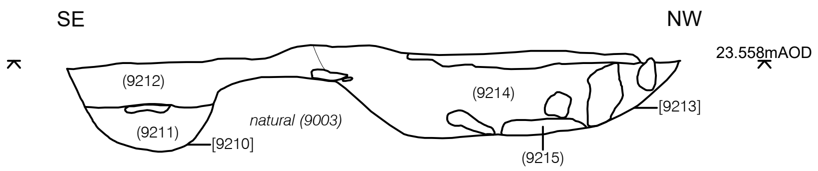
Section 9039A. East facing section across posthole [9106].



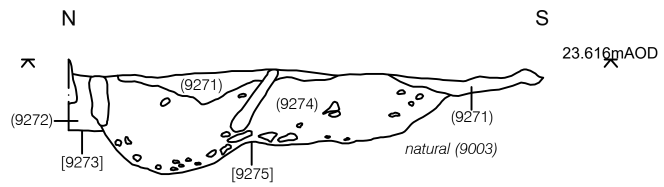
Section 9043. West facing section across posthole [9119].



Section 9080B. North-west facing section across pit [9213].



Section 9080A. North-east facing section across features [9210] and [9213].



Section 9097. West facing section across features [9273] and [9275].

REVISION	DETAILS	DATE	DR'N	CHK'D	APP'D

CLIENT

Horizon Nuclear Power

PROJECT

Area 9, Wylfa Newydd, Anglesey

DRAWING TITLE

Figure 7: Area 9; phase 2 sections

DRG No. CL12283-907		REV A
DRG SIZE A3	SCALE 1:20	DATE March 2020
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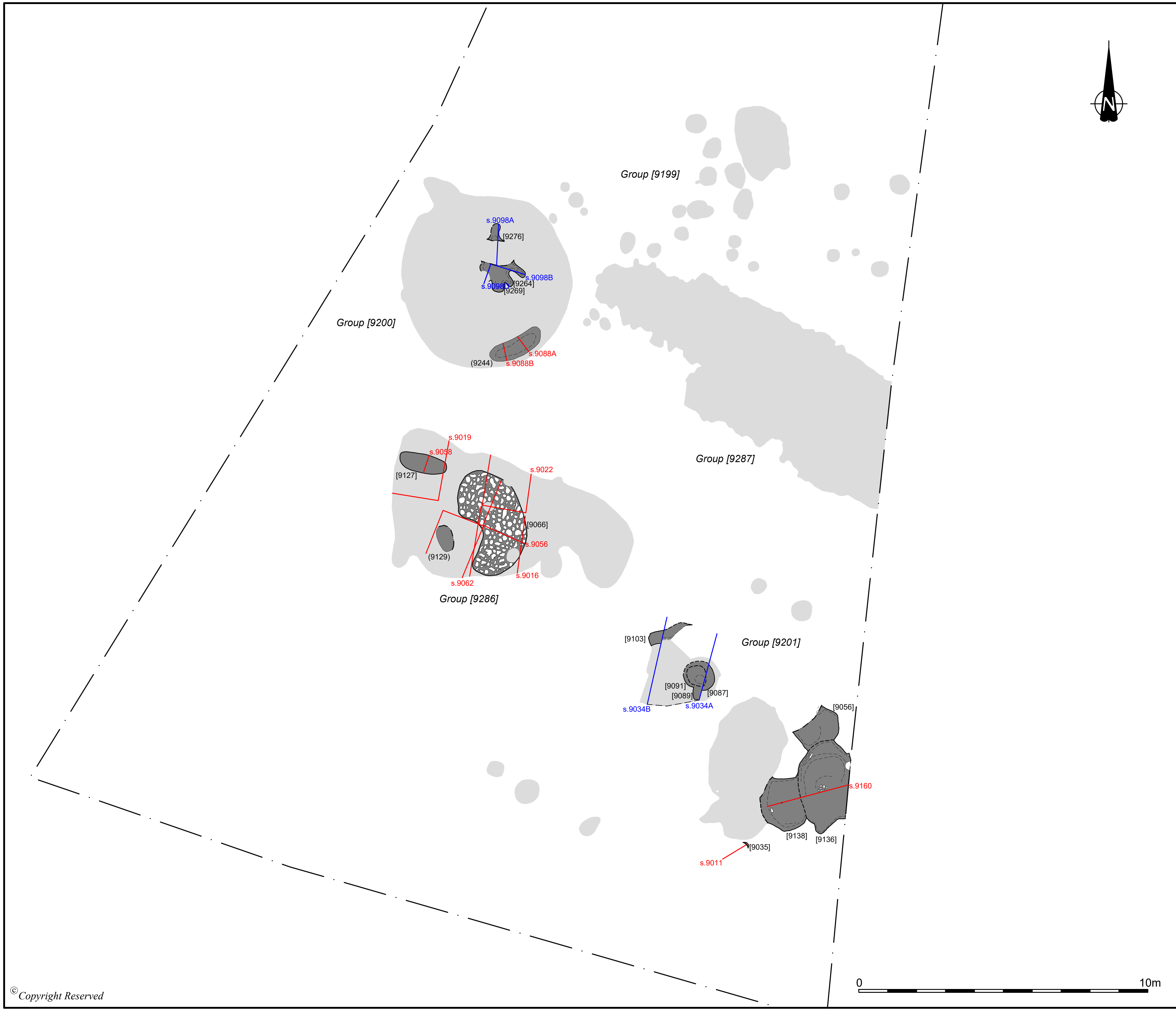

DO NOT SCALE FROM THIS DRAWING

(9000)	Context numbers
	Limit of excavation
	Truncation line
	Sections shown in further figures
	Sections not shown in further figures
	Excavated area

REVISION	DETAILS	DATE	DR'N	CHK'D	APP'D

CLIENT

Horizon Nuclear Power

PROJECT

Area 9,
Wylfa Newydd, Anglesey

DRAWING TITLE

Figure 8:
Area 9; phase 3 plan

DRG No.	REV
CL12283-908	A

DRG SIZE	SCALE	DATE
A3	1:125	March 2020

DRAWN BY	CHECKED BY	APPROVED BY
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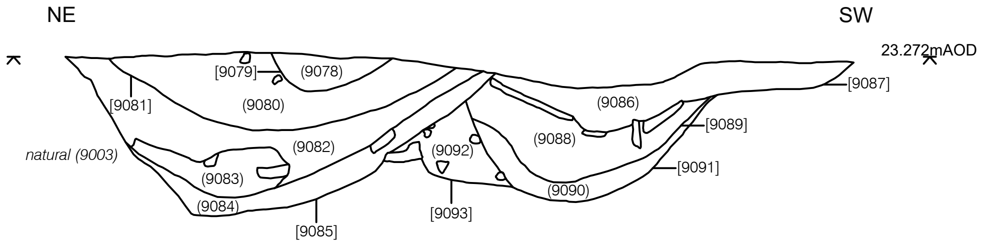
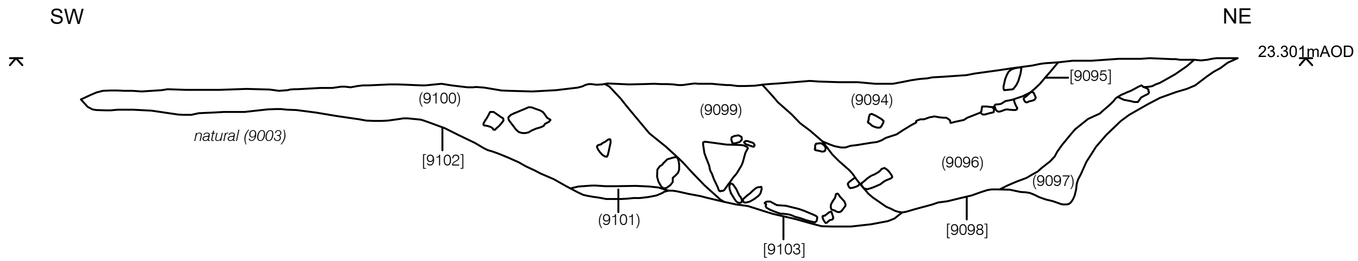
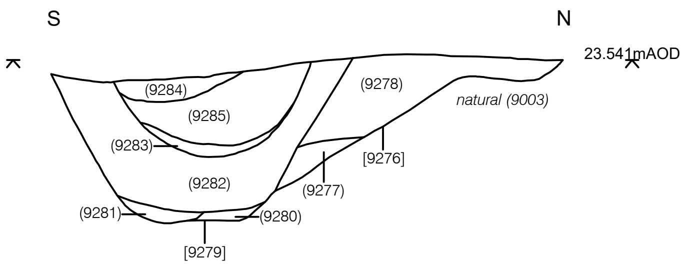


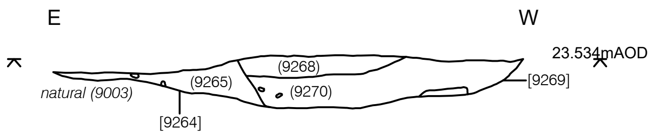
Section 9034A. North-west facing section across pits [9093], [9091] and [9085].



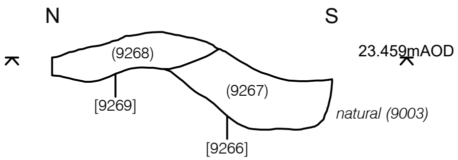
Section 9034B. South-east facing section across pits [9102], [9103] and [9098].



Section 9098A. East facing section across feature [9279] and [9276].



Section 9098B. North facing section across feature [9269] and [9264].



Section 9098D. West facing section across posthole [9266] and feature [9269].

0 1m

(9000) Context numbers

Limit of excavation

Height mAOD

Stones

REVISION	DETAILS	DATE	DRAWN	CHK'D	APP'D

CLIENT
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PROJECT
Area 9,
Wylfa Newydd, Anglesey

DRAWING TITLE
Figure 9:
Area 9; phase 3 sections

DRG No CL12283-909		REV A
SIZE A4	SCALE 1:20	DATE March 2020
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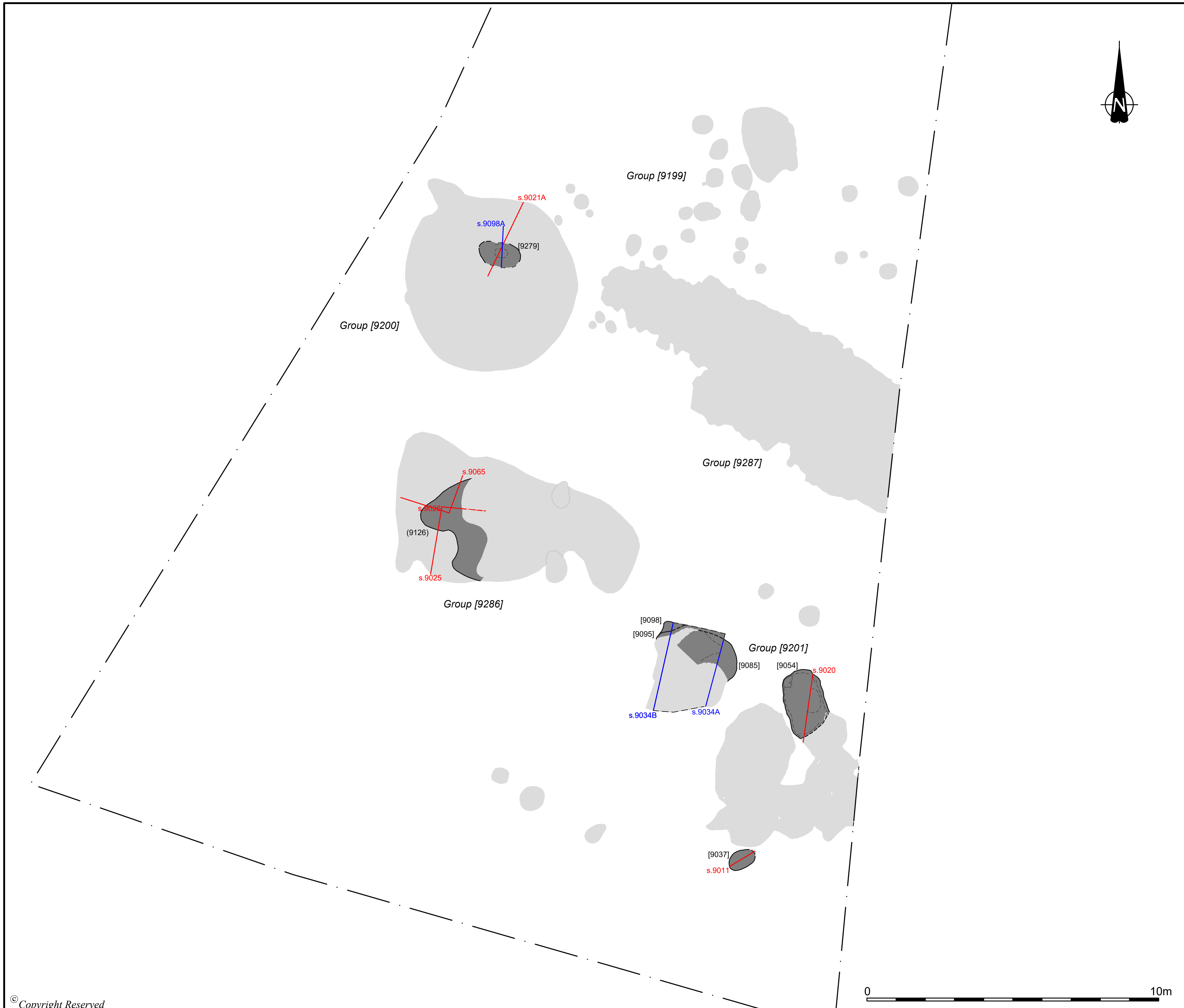

DO NOT SCALE FROM THIS DRAWING

(9000)	Context numbers
	Limit of excavation
	Truncation line
	Sections shown in further figures
	Sections not shown in further figures
	Excavated area

REVISION	DETAILS	DATE	DR'N	CHK'D	APP'D

CLIENT

Horizon Nuclear Power

PROJECT

Area 9,
Wylfa Newydd, Anglesey

DRAWING TITLE

Figure 10:
Area 9; phase 4 plan

DRG No. CL12283-910		REV A
DRG SIZE A3	SCALE 1:125	DATE March 2020
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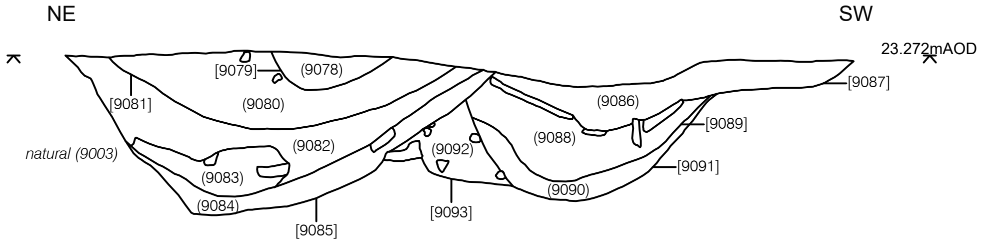
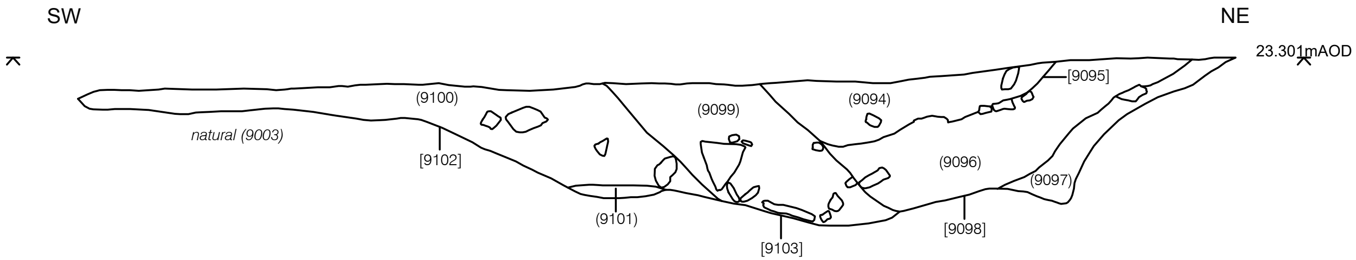
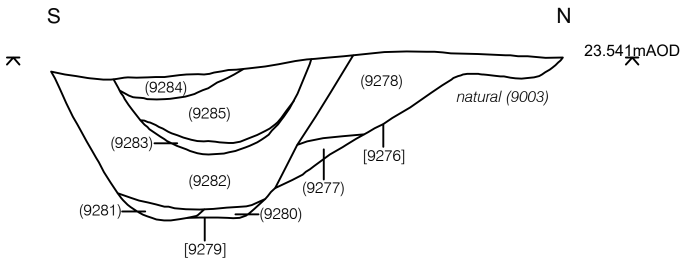


Section 9034A. North-west facing section across pits [9093], [9091] and [9085].



Section 9034B. South-east facing section across pits [9102], [9103] and [9098].



Section 9098A. East facing section across feature [9279] and [9276].

0 1m

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(9000) Context numbers

Limit of excavation

Height mAOD

Stones

REVISION	DETAILS	DATE	DRAWN	CHK'D	APP'D

CLIENT

Horizon Nuclear Power

PROJECT

Area 9,
Wylfa Newydd, Anglesey

DRAWING TITLE

Figure 11:
Area 9; phase 4 sections

DRG No CL12283-911		REV A
SIZE A4	SCALE 1:20	DATE March 2020
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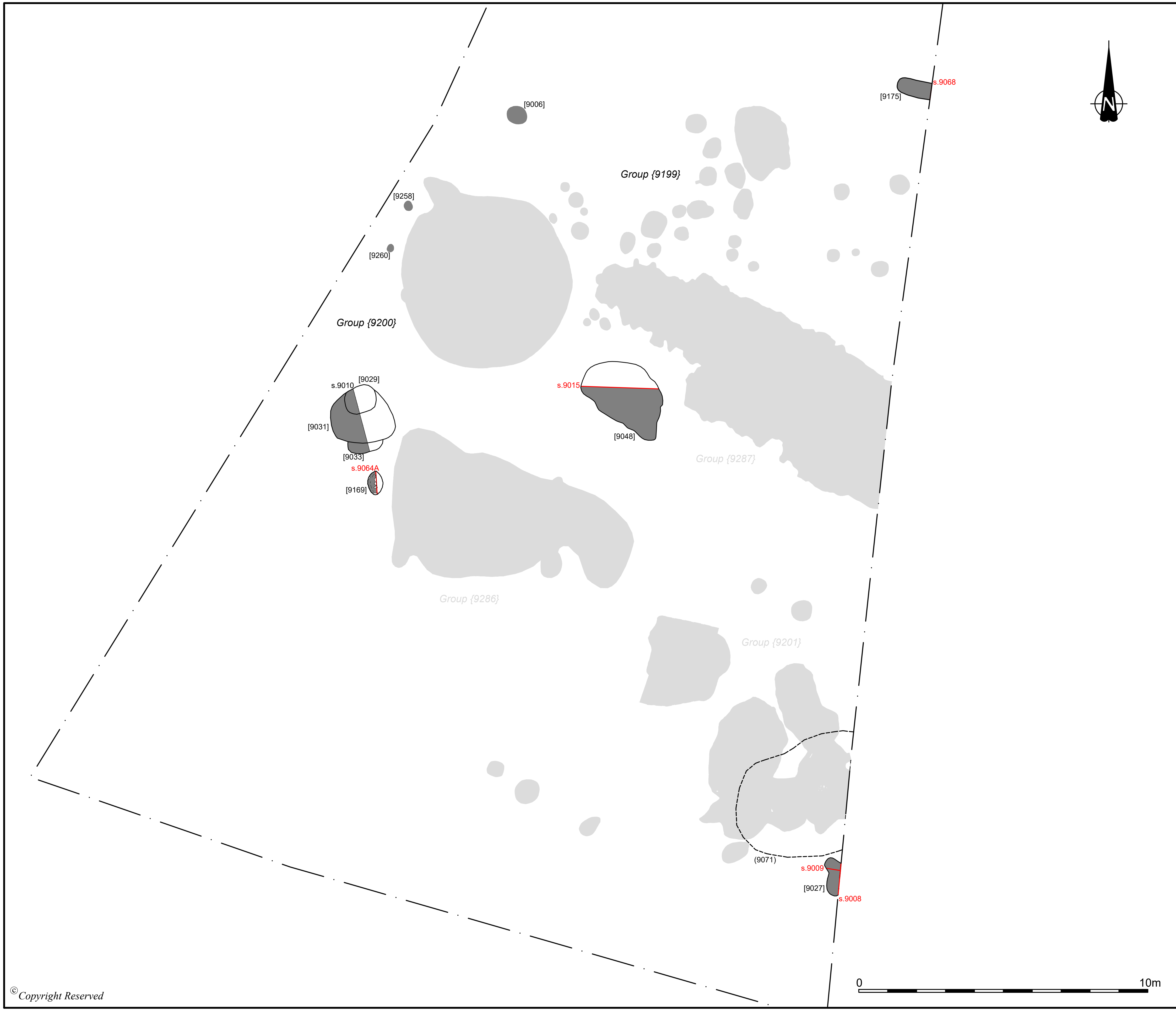

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(9000) Context numbers
Limit of excavation
Truncation line
Sections shown in further figures
Sections not shown in further figures
Excavated area
Natural features
Previous phases

REVISION	DETAILS	DATE	DR'N	CHK'D	APP'D
B	Addition of (9071)	25/05/21	HP	MH	FG

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Horizon Nuclear Power

PROJECT
Area 9,
Wylfa Newydd, Anglesey

DRAWING TITLE
Figure 12:
Area 9; unphased features plan

DRG No.		REV
CL12283-912		B
DRG SIZE: A3	SCALE: 1:125	DATE: March 2020
DRAWN BY: VT/HP	CHECKED BY: DAC	APPROVED BY: FG

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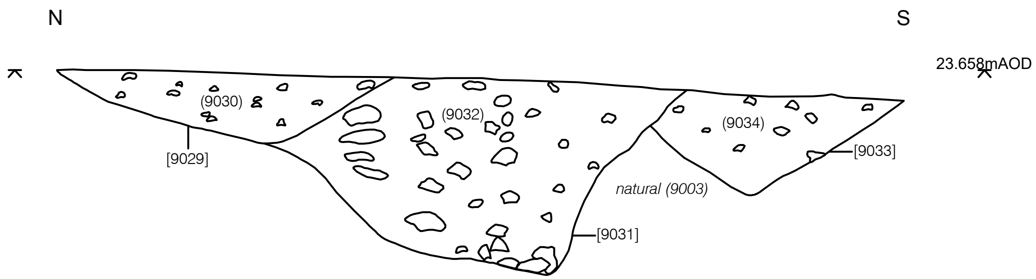
DO NOT SCALE FROM THIS DRAWING

(9000) Context numbers

Limit of excavation

Height mAOD

Stones



Section 9010. West facing section across pits [9029], [9031] and [9033].

0 1m

REVISION	DETAILS	DATE	DRAWN	CHK'D	APP'D

CLIENT

Horizon Nuclear Power

PROJECT

Area 9,
Wylfa Newydd, Anglesey

DRAWING TITLE

Figure 13:
Area 9; Unphased section

DRG No CL12283-913		REV A
SIZE A4	SCALE 1:20	DATE March 2020
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APPENDIX 5: RADIOCARBON CERTIFICATES

BetaCal 3.21

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL13)

(Variables: d13C = -21.4 o/oo)

Laboratory number **Beta-553552**

Conventional radiocarbon age **2160 ± 30 BP**

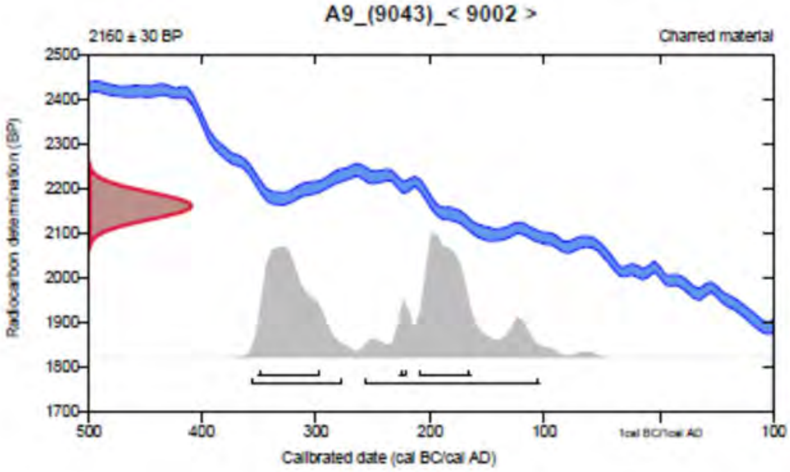
95.4% probability

(55.4%)	259 - 107 cal BC	(2208 - 2056 cal BP)
(40%)	358 - 279 cal BC	(2307 - 2228 cal BP)

68.2% probability

(34%)	352 - 299 cal BC	(2301 - 2248 cal BP)
(32.4%)	211 - 167 cal BC	(2160 - 2116 cal BP)
(1.8%)	228 - 223 cal BC	(2177 - 2172 cal BP)

A9_(9043)_< 9002 >



Database used
INTCAL13

References
References to Probability Method
Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. Radiocarbon, 51(1), 337-360.
References to Database INTCAL13
Reimer, et.al., 2013, Radiocarbon55(4).

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BetaCal 3.21

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL13)

(Variables: d13C = -24.2 o/oo)

Laboratory number **Beta-553551**

Conventional radiocarbon age **2030 ± 30 BP**

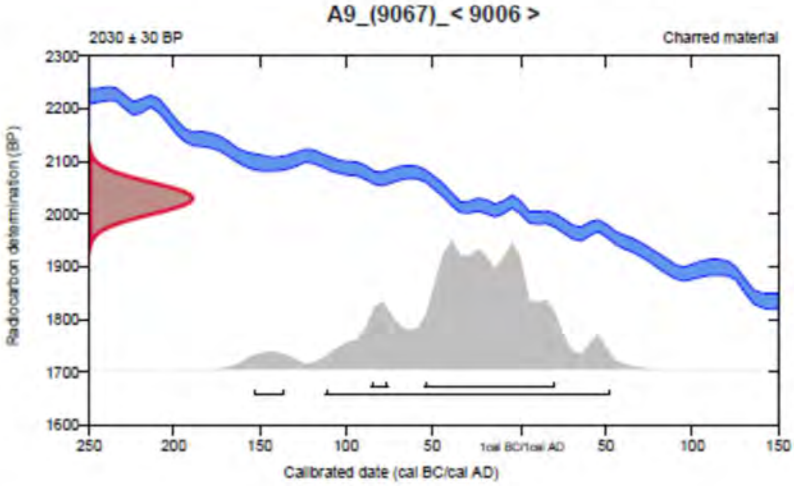
95.4% probability

(92.9%)	114 cal BC - 52 cal AD	(2063 - 1898 cal BP)
(2.5%)	155 - 138 cal BC	(2104 - 2087 cal BP)

68.2% probability

(63.1%)	56 cal BC - 20 cal AD	(2005 - 1930 cal BP)
(5.1%)	87 - 78 cal BC	(2036 - 2027 cal BP)

A9_(9067)_< 9006 >



Database used
INTCAL13

References
References to Probability Method
Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. Radiocarbon, 51(1), 337-360.
References to Database INTCAL13
Reimer, et.al., 2013, Radiocarbon55(4).

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Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL13)

(Variables: d13C = -27.7 o/oo)

Laboratory number **Beta-553555**

Conventional radiocarbon age **2100 ± 30 BP**

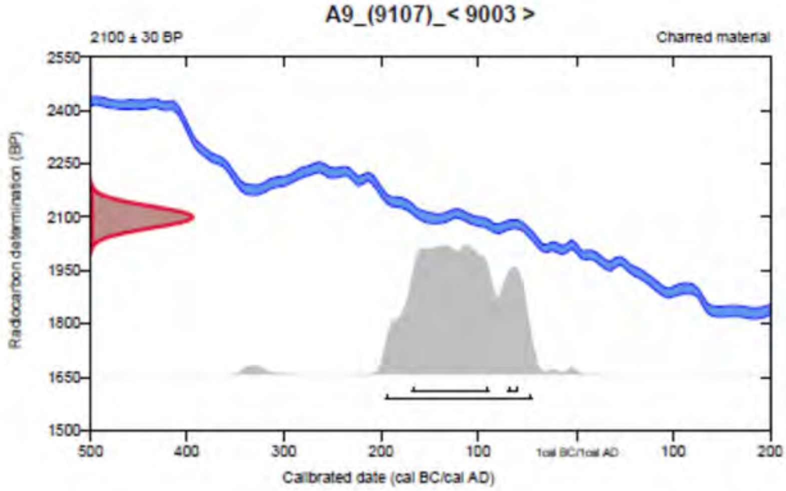
95.4% probability

(95.4%)	197 - 47 cal BC	(2146 - 1996 cal BP)

68.2% probability

(61.5%)	170 - 91 cal BC	(2119 - 2040 cal BP)
(6.7%)	71 - 61 cal BC	(2020 - 2010 cal BP)

A9_(9107)_< 9003 >



Database used
INTCAL13

References

References to Probability Method
Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. Radiocarbon, 51(1), 337-360.
References to Database INTCAL13
Reimer, et.al., 2013, Radiocarbon55(4).

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BetaCal 3.21

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL13)

(Variables: d13C = -26.8 o/oo)

Laboratory number **Beta-553554**

Conventional radiocarbon age **1780 ± 30 BP**

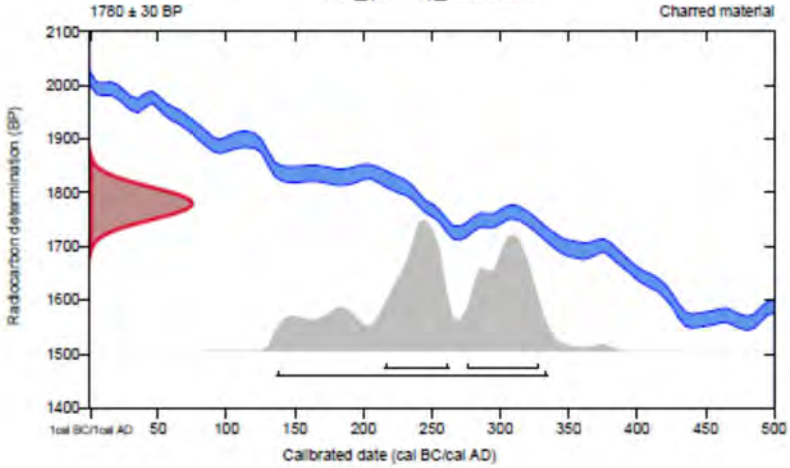
95.4% probability

(95.4%)	137 - 334 cal AD	(1813 - 1616 cal BP)

68.2% probability

(34.7%)	276 - 328 cal AD	(1674 - 1622 cal BP)
(33.5%)	216 - 262 cal AD	(1734 - 1688 cal BP)

A9_(9148)_< 9007 >



Database used
INTCAL13

References

References to Probability Method
Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. Radiocarbon, 51(1), 337-360.
References to Database INTCAL13
Reimer, et.al., 2013, Radiocarbon55(4).

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BetaCal 3.21

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL13)

(Variables: d13C = -21.0 o/oo)

Laboratory number **Beta-553553**

Conventional radiocarbon age **1660 ± 30 BP**

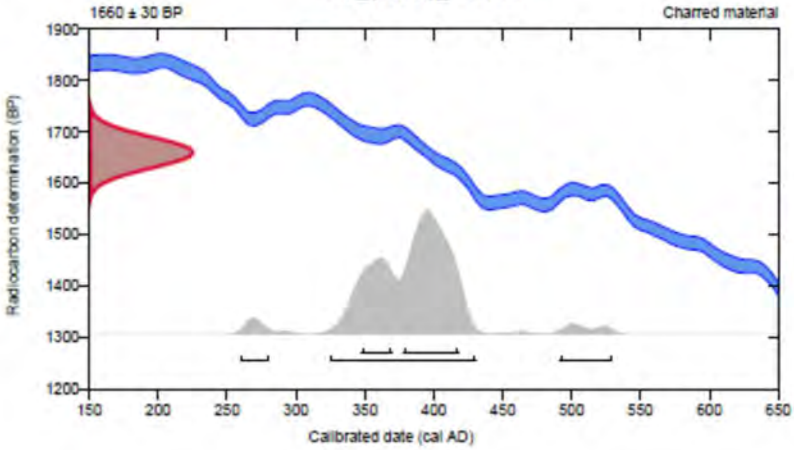
95.4% probability

(88.8%)	325 - 430 cal AD	(1625 - 1520 cal BP)
(3.5%)	492 - 529 cal AD	(1458 - 1421 cal BP)
(3.1%)	260 - 280 cal AD	(1690 - 1670 cal BP)

68.2% probability

(49.5%)	378 - 418 cal AD	(1572 - 1532 cal BP)
(18.7%)	348 - 369 cal AD	(1602 - 1581 cal BP)

A9_(9282)_< 9044 >



Database used
INTCAL13

References
References to Probability Method
Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. Radiocarbon, 51(1), 337-360.
References to Database INTCAL13
Reimer, et.al., 2013, Radiocarbon55(4).

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APPENDIX 6: GAZETTEER OF FEATURES ENCOUNTERED IN AREA 9

Feature	*Date*	*Description*	*easting,northing*
Possible processing site with settlement	Iron Age and Romano-British	A small roundhouse, accessed via a trackway, bordered by above ground rectilinear post-built structures along the northern side, an ancillary structure and working area to the south-west and a pit cluster and midden activity to the south. The site may have been for limited domestic use, given the small size and low number of artefacts recovered, with the occupation subsidiary to the main focus on activities such as food processing of marine shellfish or similar	235589,393951

APPENDIX 7: POST-EXCAVATION ASSESSMENT METHOD STATEMENT

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ENVIRONMENT AND SUSTAINABILITY
INFRASTRUCTURE AND UTILITIES
LAND AND PROPERTY
MINING AND MINERAL PROCESSING
MINERAL ESTATES
WASTE RESOURCE MANAGEMENT

HORIZON

WYLFA NEWYDD

POST EXCAVATION ASSESSMENT METHOD STATEMENT

APRIL 2019

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Telephone: +44 (0)1228 550575 www.wardell-armstrong.com

DATE ISSUED:	April 2019
JOB NUMBER:	**CL12271**

PREPARED BY:

Megan Stoakley	Finds and Archive Specialist	
Lynne Gardiner	Senior Environmental Archaeologist	

APPROVED BY:

Frank Giecco	Technical Director	

WYLFA NEWYDD POST EXCAVATION ASSESSMENT METHODOLOGY

Introduction

This document has been prepared to provide the client with an explanation of the Post Excavation Assessment (PXA) process and to provide Wardell Armstrong's own technical team, with clear guidance on undertaking the PXA for the Wylfa Newydd archaeological mitigation works. Post Excavation Assessment (PXA) is the first stage of a process of post-excavation analysis, publication and archive deposition. It provides quantification and initial assessment of the archive resulting from excavation and provides a framework to inform further investigation and publication. It is designed to ensure that Horizon Nuclear Power meet their requirements to secure discharge (by the two primary stakeholders: Gwynedd Archaeological Planning Service (GAPS) and CADW) of the early works archaeological mitigation programme at Wylfa Newydd.

It is based on the requirement described in the Written Scheme of Investigation for Trial Trenching and Excavation (2015) and Written Scheme of Investigation for Strip Map and Sample Excavation and Paleoenvironmental Assessment (2016). It is informed by the following guidance, Association of Local Government Archaeological Officers (ALGAO) Advice Note for Post-Excavation Assessment (2015), Conservation principles for the sustainable management of the historic environment in Wales CADW (2011), Chartered Institute for Archaeologists (CIfA) Standard and Guidance for Archaeological Excavation (2014) sections 3.4 to 3.6, and for human remains The British Association of Biological Anthropology and Osteoarchaeology Human Bones from Archaeological Sites. In addition, GAPS require reference to Society of Museum Archaeologists (1993), Selection, Retention and Dispersal of Archaeological Collections: Guidelines for use in England, Wales and Northern Ireland, as well as Welsh Office Circular 60/96, (1996), Planning and Historic Environment: archaeology.

This current document identifies the stages of the PXA process, then describes the broad tasks required for each stage. The document concludes with a report template containing individual sections within the PXA report and UPD.

Requirement for and Purpose of the Post Excavation Assessment

The PXA will follow a staged process of post excavation assessment detailed in Written Scheme of Investigation for Trial Trenching and Excavation (2015) and the Written Scheme of Investigation for Strip Map and Sample Excavation and Paleoenvironmental Assessment (2016).

As stated in the ALGAO *Advice Note for Post-Excavation Assessment*, "following the completion of archaeological fieldwork, it is standard practice for a post excavation assessment (PXA) to be undertaken". CIfA describe the purpose of a PXA as a means by which "the findings should be assessed against the original project design to determine the extent to which the original research aims have been met, and the identification of any new research questions to be incorporated in a post-excavation project design". CIfA further state that PXA work "must be carried out by suitably qualified and experienced staff, who must be apprised of the project design before commencing work. The post excavation manager should preferably be a corporate member of CIfA. The level of assessment of records and materials should be appropriate to the aims and purpose of the project".

In brief the PXA process involves cleaning, processing, sorting and cataloguing the finds and environmental samples and the ordering of the documentary site records to create an archive, and then assessment of that archive to focus further analysis and reporting on that archive. The archive consists of two elements, the material archive (finds, processed environmental samples and human remains) and the documentary archive (site records and ancillary research documentation such as notes on archival sources).

Post Excavation Assessment Stages and Outputs

The PXA consists of four separate, largely, though not necessarily, sequential stages; processing of the finds, palaeoenvironmental samples and any human remains (the material archive); archival preparation for data assessment and deposition (both material and documentary archive); data assessment and finally reporting. The outputs are two stand alone documents, although often bound together under a single cover as they will be in this case. The documents are the Data Assessment Report (DAR) which quantifies the data, identifies its significance and potential for further research, and the Updated Project Design (UPD), which scopes the response necessary by achieving the site's research potential and provides the basis for a cost for doing so.

The proposed work described in the UPD is entirely separate from the PXA and will form a future stage of work involving any necessary post-excavation research and leading to the publication of the results of the excavation. This future stage concludes with the deposition of the entire project archive with the Oriel Museum Anglesey. Funding of the required future research, publication and archive deposition for long-term curation is a requirement to secure final discharge of the 2017-2019 phase of fieldwork at the Wylfa site.

For Wylfa Newydd each site will have a separate DAR and UPD to allow GAPS/CADW and the client, to be fully appraised of the justifications for further analytical work. Each site can then be discussed in relation to its specific significance before arriving at a consensus with regard to further work requirements. There will also be a need for an overview DAR and UPD which will have two functions:

- To succinctly summarise the findings of the individual site DARs and UPDs following consultation and provide a cohesive assessment of the whole project as well as a basis for an overall justified costing for future work requirements.
- To provide a research statement regarding the overall potential of the Wylfa Newydd development area. Clearly many of the sites will not merit the publication of a standalone report. Consequently, the research potential of such sites will be best realised in contributing to period-based volumes that address regional research framework questions.

Stage 1 Processing

A summary of the processing requirements is given below. A more detailed breakdown of the required procedures for finds is contained in appendix 1 and for environmental samples in appendix 2.

Environmental sample processing involves sieving individual 10 litre tubs of soil samples for bulk samples (collected from site) in a purpose-built water filtration tank. The flots (floats) and retents (sinks) are then dried, bagged and labelled. More specialised forms of sample processing may be required for other samples taken such as column samples for insects, pollen monoliths or cores, but these represent only a tiny fraction of the samples collected.
Human remains (cremated and non-cremated) require different cleaning methods depending on their state of preservation. Non-cremated articulated and disarticulated human remains in good condition will undergo wet cleaning but without the bones being immersed in water. Human remains in poor condition must not be wet-washed and will have to be dry-brushed to avoid unnecessary damage to the remains.

Bulk finds are cleaned by washing. Small finds are cleaned according to the requirements of the material, this usually but not always involves washing. Following cleaning, most finds will need to be dried and some may require stabilisation to preserve them. Cleaning and stabilisation by material and object will be as described in Watkinson & Neal (1998). Specialist conservation will not be routinely undertaken at this stage as this will involve items being sent away to specialist laboratories and the consequent costs, but the conservation need will be defined by a specialist in conservation. Where an immediate conservation need is identified this will be addressed to ensure item stability.

Stage 2 Archival Preparation

Three tasks are required in stage 2 in relation to the material archive, marking in accordance with Oriel Museum guidelines, X-raying metal objects and boxing the finds and human bones for long term curation. There will be some need to carry out X-ray photography of metal objects to be able to identify them and assess their significance. Finds, mainly pottery, will need to be marked as appropriate. As some Prehistoric and Roman pottery is of a sandy fabric this can sometimes be difficult to place a mark directly on the fabric so clear nail varnish is required to prepare the location of the mark. Following marking the finds will be bagged and boxed. The archive boxes need to be made of acid free cardboard for long term conservation storage and will need to be purchased specifically for the project.

The documentary archive should have been appropriately ordered, indexed and catalogued before it left site, but it will require checking and final cross-referencing before it can be assessed. The checking will involve both digital and paper-based records and include a finalisation of plan and section data, both hand-drawn and recorded through a digital medium. Relevant HER entries will need to be listed in full detail. All records will need security copies. Paper records (drawn plans, sections and record sheets) will be scanned for digital archiving. The digitisation of all hand drawn plans and sections is to be avoided as not cost effective. Drawings for digitisation can be selected in the analysis phase when it is known which drawings will contribute to the publication. This ensures that all digitisation will be ‘heads up’ and only for the purposes of report illustration rather than ‘heads down’, thus removing the need for digitisation tablets and increasing efficiency.

Stage 3 Data Assessment

In all cases the assessment begins with a quantification of the items to be assessed, whether it be sample residues, finds or site records. The material archive assessment involves separate assessments of ecofacts, artefacts and any human remains. Further details of the finds assessment are contained in appendix 3.

Every flot and retent will be examined to establish whether they contain plant macrofossils, zooarchaeological remains, snail shells etc, artefacts or metal working residue. Ecofacts, residues and any artefacts are then extracted and examined. Ecofactual assemblages are identified and characterised. The assessment of individual ecofactual assemblages must be undertaken by a suitably-qualified palaeoenvironmentalist.

The finds assessment involves the quantification, identification and dating of the recovered artefacts. The finds assessment can only be compiled by a suitably-qualified finds specialist who can identify and spot-date the artefacts. Where necessary, specialists with local expertise will be consulted, especially regarding the pottery assemblages.

Radiocarbon dating, or any other form of absolute scientific dating, will be undertaken at the assessment stage, though some samples may need to be sent for testing to identify their suitability for dating. As this is an assessment a full suite of dates suitable for Bayesian analysis will not be undertaken but the potential for such future work will be highlighted in the UPD.
The documentary archive assessment involves identifying each site's stratigraphic phases assisted by a Harris Matrix. It is required that this will be done using the Harris Matrix generator software. Duplicate and false contexts will be identified, recorded and discarded.

Stage 4 PXA and UPD Reporting

Stage 4 results in the creation of the PXA report and the UPD. A detailed template for producing these documents follows. The documents produced will be technical grey literature reports and not publication reports.

Report Template

The following report template is laid out in accordance with the desired structure and layout of the report. Sentences in italics refer to the required illustrations whether drawings or photographs.

1. **Non-technical summary, including reasons for work, aims and summary results**

2. **Introduction**

2.1 Site location (include eight digit NGR), site code/ PRN reference, and Event Number

2.2 Scope of the project.

2.3 Dates/duration of fieldwork.

2.4 Outline of the site's character (including topsoil, subsoil and substrata descriptions, past land use impacts on preservation and impact of bioturbation) and how the site fits into the local archaeological landscape.

2.5 Brief summary of previous work including directly relevant nearby sites (i.e. likely to be part of same archaeologically represented activity), geophysical results, metal detecting results and evaluation results.

2.6 Explanation of the purpose of the assessment report and organisation of the report (refer to this report template and include as appendix 1).

2.7 *Site location map related to the development area.*

2.8 *Plan of site and excavated area (usually these will be the same).*

3. **Summary of the excavation methodology**

3.1 Proposals set out in the approved Written Scheme of Investigation for the fieldwork (copy of the Written Scheme of Investigation sections 4 and 5 only as appendix 2).

3.2 Any variations from the Written Scheme of Investigation with justifications.

3.3 Site planning strategy with justifications for the applied methodology.

3.4 A description of any avoidance strategies or re-burial methods used to preserve unexcavated archaeological remains in situ, indicating whether or not these will be subject to a monitoring scheme and, if so, providing a description of it or references to supporting relevant documentation.

4. **Site archive**

4.1 Summary details of the contents and organisation of the project archive

4.2 Quantification of documentary archive (including catalogues and indices) and details of current (give date) location of the paper archive. Details of the digital archive and arrangements for storage security.

4.3 Summary of work carried out on the documentary archive during post-excavation assessment.

4.4 Quantification of material archive (by storage box) and details of current (give date) location.

4.5 Summary of work carried out on the material archive, including nature of processing and cleaning, and any necessary preliminary conservation/stabilisation.

4.6 Details of any samples sent for scientific analysis or dating as a necessary precursor to costing a programme of analysis.

4.7 Agreed destination of the site archive (in all instances this will be the Oriel Museum, Anglesey) with a statement of any receiving repository conditions if necessary.

4.8 OASIS reference supported by completed data collection form as appendix 3.

4.9 *Representative sample photographs of site features that aid understanding of the assessment of stratigraphic data*.

5. Stratigraphic data

5.1 Summary of the nature of the investigated features/deposits described by phase in chronological order (not by individual context or feature), supported by a Harris matrix/matrices in appendix 4 (use context group numbers if appropriate).

5.2 Statement of significance of the stratigraphic data.

5.3 *Final pre-excavation plan.*

5.4 *Either an overall plan for all phases or individual phase plans or both as appropriate to the site's complexity.*

5.5 *Sections of key features with a location plan showing position of sections.*

5.6 *If relevant a more detailed plan of key structures.*

5.7 *Where relevant a structure through motion model illustration(s).*

6. Artefacts

6.1 Quantification (by weight in grams for bulk finds) of finds by type.

6.2 Description of condition, stability and the immediate and longer term conservation and storage needs by artefact group.

6.3 An assessment of the character, range and variety, date, meaning and significance of all recovered artefact groups.

6.4 Statement by a recognised specialist on the research potential of each individual artefact group. If no further work beyond assessment is considered necessary this should be clearly indicated.

6.5 Statement of significance for the retention of material and a proposal for a fully justified discard strategy for low/nil value assemblages, in agreement with GAPS/CADW.

6.6 *Supporting finds illustrations at appropriate scales (for the assessment wherever practicable scaled photographs should be used rather than line drawings).*

7. **Palaeoenvironment**

7.1 Quantification (by weight in grams) of the retents and flots available for analysis. Quantification by sample bucket where further portions of a sample are available and the assessment sub-sample has revealed that further sample processing is worthwhile for the additional data it may reveal. Sub-sampling will have been sufficient to characterise and understand a sample.

7.2 Factual summary of each type of sample (e.g. bulk organic, dendrochronological, monolith), quantity, preservation, post-depositional processes, curation and storage need by ecofact group.

7.3 An assessment of the character, range, variety and significance of all ecofactual groups (likely to include plant macrofossils, pollen, animal bone, shell, snails and insects).

7.4 Statement by a recognised specialist on the research potential of each individual ecofact group, including potential to provide scientific dating. If no further work beyond assessment is considered necessary, this should be clearly indicated.

7.5 Statement of significance for the retention of material and a proposal for a fully justified discard strategy for low/nil value assemblages, in agreement with GAPS/CADW.

7.6 *Representative photographs of key assemblages*.

8. **Human remains**

8.1 For inhumations quantify by number of burials and then summarise information on skeletal completeness in a table divided as >75%, -75%, -50%, <25%. For cremations, bone remains from each context should be quantified by weight in grams.

8.2 Factual data about the bone assemblage, describing the provenance of the skeletal material and the general condition of the remains. The condition of the bone will influence the information that can be gained from the assemblage.

8.3 Statement by a recognised specialist on the research potential of the human remains.

8.4 Note on the long-term arrangements for the curation or reburial of the human remains.

8.5 *Plans showing the location of burials or other deposits of human remains*

8.6 *Photographs and/or drawings of inhumation burials in situ or a structure through motion 3d model.*

9. **Discussion**

9.1 A brief summary of the character and significance of the site as represented through its stratigraphic, artefactual and palaeoenvironmental data. Include where relevant the results of any documentary research. If no further work beyond assessment is considered necessary, this should be clearly indicated. If further work is required then include 9.2, 9.3 and 9.4 below.

9.2 A tabulated list of relevant sources discovered (relevant books, articles, HER data, archival sources) quantity, variety, level of study of sources during post-excavation assessment.

9.3 Indicate applied studies that will be necessary for further analytical work. These might include, for example, comparative analysis, archival and/or cartographic research and intra and inter-site spatial analyses, site morphological studies, absolute dating methods, scientific techniques not covered by the standard suite of applications (e.g. specific chemical analyses, thin sectioning for soils or ceramic research, isotope studies, scanning electron microscopy, specific biological analyses etc).

10. **Statement of potential**

10.1 A summary of the potential of the data in terms of local, regional, national and international importance, referencing as relevant regional and national period and subject specific research agendas. This should include:

- an appraisal of the extent to which the site archive might enable the data to meet the original research aims of the project;
- a statement of the potential of the data in developing new research aims, to contribute to other projects and to advance methodologies;
- an assessment of the relevant level at which the site data might be published e.g. site specific publication, project landscape overview or background contextual data (choose one only).

10.2 An informed strategy for the detailed analysis of some or all data groups as recommended by relevant specialists to enable a reconstruction of the history and use of the site to be developed, in line with the site's relevant research potential (where no further work is recommended this section is not required). This strategy must include provision to incorporate the results of any earlier phases of archaeological work on a specific site, reappraising materials and artefacts recovered during earlier assessment and evaluation phases and, where appropriate, earlier excavation results - including, where possible, from neighbouring sites

10.3 *Map of the site in context at a regional or local level, showing other relevant sites and where appropriate connections and networks.*

11 **Bibliography of sources used in the compilation of the PXA**

12. **Updated Project Design**

12.1 Introduction including purpose of the UPD to provide details of a programme of analysis leading to the appropriate mechanism for the dissemination of the results of the project. Also, to provide a basis for costing the programme of analysis, publication and deposition of the archive.

12.2 Justification for the contents of the proposed programme of analysis and any theoretical approaches to be deployed, in relation to the site's statement of potential and proposal for publication/dissemination as appropriate:

- inclusion of main results in an overall synthetic volume only
- thematic paper on a specific research theme
- internet publishing through journal or proprietary website (stating whether all catalogues will be available and interactive)
- short illustrated site report for a journal
- section/chapter in edited monograph
- fully illustrated site monograph
- popular booklet (additional publication only and not to be the primary publication).

12.3 Proposal for analysis of the stratigraphic data concentrated on key feature groups.

12.4 Detail of illustrations required to support the stratigraphic analysis.

12.5 Detail of retention and discard strategy for the material archive.

12.6 Proposals for scientific dating (potentially an initial suite of dates and a second after provisional results from the artefact and ecofact analysis are received).

12.7 Proposals for a Bayesian analysis to refine chronologies, following consultation with Cadw regarding to the selection of contexts and samples for scientific dating.

12.8 Proposals, where relevant, for other forms of scientific analysis such as lipids, strontium or oxygen isotope analysis.

12.9 Details of illustrations required to support the artefact analysis.

12.10 Requirement for conservation works on material archive.

12.11 Proposals for further research, including archive visits and comparative analysis of other investigated relevant sites in order to contextualise the site data.

12.12 Details of resultant technical/archive report.

12.13 Publication report synopsis where relevant, including any additional illustrations required.

12.14 Proposals for monitoring and continued liaison with GAPS and CADW throughout the post-excavation analytical programme.

12.15 Staged programme and timetable for any proposed further work up to and including publication and archive deposition. Task list and Gantt chart.

Task breakdown for PXA

1. **Processing**

1.1 Environmental sample processing
1.2 Cleaning human remains
1.3 Bulk finds cleaning
1.4 Small finds cleaning
1.5 Artefact stabilisation

2. **Archival preparation**

2.1 Finds marking
2.2 X-raying metal objects
2.3 Archive box purchase
2.4 Boxing
2.5 Site record checking and cross-referencing
2.6 Compilation of list of archival sources
2.7 Records scanning

3. **Data assessment**

3.1 Zooarchaeological remains
3.2 Insects
3.3 Snails
3.4 Shells
3.5 Plant macrofossils
3.6 Pollen

3.7 Bulk finds
3.8 Small finds
3.9 Absolute dating laboratory consultation
3.10 Scientific analyses specialist consultation
3.11 Creation of phased matrices
3.12 Incorporation of phased data into project GIS

4. **Reporting**
4.1 PXA
4.2 UPD

APPENDIX 1 METHOD STATEMENT: STAGE 1 FINDS PROCESSING

Finds processing and assessment summary

At stage 1 the finds will be cleaned (usually but not always involving washing). At stage 2 the finds will marked, bagged and boxed. Once this is done in stage 3 the finds will be quantified and assessed; this involves the creation of an Excel spreadsheet into which are recorded numbers of items, weight and spot-dating and the finds are cross-referenced to the stratigraphic contexts from which they were derived. Having done this in stage 4 a report will be prepared on the assessment results. The work will be solely aimed at identifying significant assemblages for further future analysis as will be detailed in the Updated Project Design.
The following specification allows for the cleaning of bulk finds.

Washing and cleaning

Bulk artefacts (pottery, animal bone, glass, ceramic building material) are bagged up on-site and returned to the post-excavation department. The finds are washed and cleaned using two bowls (one to wash, one to rinse) and toothbrushes. The finds are placed in trays linked with newspaper – the site code, context number and (if applicable) the small find number is written either on the newspaper or on a tag attached to the tray with permanent marker. To increase the efficiency and speed of the finds' drying time, a drip-tray system is employed in which finds are put on newspaper first before being placed in the tray. This ensures excess water is soaked up (and is particularly useful for large, heavy fragments such as architectural stone and ceramic building material).

Organic finds are processed differently and will depend on whether they have been recovered from waterlogged deposits; leather, shale, jet, wood and worked bone that has been recovered from waterlogged deposits needs to be kept dark, dry and cool. Objects are cleaned primarily with soft wet brushes and they are bagged (with water in the bags) and are put in an organics fridge.

All metalwork (including copper alloy, lead and iron) and oyster shell is dry-brushed. Delicate metal and non-metal small finds are dry-brushed and placed in crystal boxes in trays on acid-free tissue paper. Plaster/mortar are dry-brushed and placed in labelled trays.
Human remains (cremated and non-cremated) are processed differently and will require different cleaning methods depending on their state of preservation. Non-cremated articulated and disarticulated human remains in good condition will undergo the same processing as bulk finds, but the bones are not immersed in water. The human remains will only be marked depending on the requirements of the curator and county repository. Human remains in poor condition must not be wet-washed and will have to be dry-brushed for remains to stabilise.

Time estimates for finds washing and cleaning

It must be emphasised that finds washing is hugely dependent on a wide range of variables, including the original burial environment (acidic soils, different soil types e.g. clay versus sand) and previous activity on the site (agricultural activity such as ploughing may damage the finds).

Find type	**Weight**	**Time**
Prehistoric pottery	1kg	1-2 hours
Roman pottery	1kg	1-1.5 hours
Saxon pottery	1kg	1-1.5 hours
Medieval pottery	1kg	1 hour
Post-medieval pottery	1kg	1 hour
CBM & daub	1kg	1-1.5 hours
Animal bone (good condition)	1kg	1-1.5 hours
Animal bone (bad condition)	1kg	1-2 hours

Human bone (complete skeleton, good condition)	7-8kg	1-1.5 days
Human bone (bad condition)	1kg	1-2 days
Glass	1kg	1-1.5 hours
Metalwork	1kg	1-1.5 hours
Oyster shell	1kg	1-1.5 hours
Flint	1kg	1 hour
Stone	1kg	1 hour
Leather	1kg	1-1.5 hours
Archaeometallurgical waste	1kg	1 hour
Plaster/Mortar	1kg	1-2 hours
Clay Pipe	1kg	1-1.5 hours

APPENDIX 2 METHOD STATEMENT: STAGE 1 ENVIRONMENTAL PROCESSING

Environmental processing and assessment summary

For environmental samples in stage 1 the samples will be processed. In stage 2 this material will be dried, bagged and sorted. In stage 3 this material will be examined to establish whether or not they contain plant macrofossils, zooarchaeological remains, artefacts or metal working residue. Having done this in stage 4 they will be required to prepare a report on the assessment results. They will not be instructed to analyse the materials derived from the flots and retents at the assessment stage. The work will be solely aimed at establishing significant flots and retents for further future analysis as will be detailed in the Updated Project Design. The following specification allows for the processing and assessment of bulk environmental samples and for waterlogged materials from a General Biological Analysis sample (GBA).

General Biological Analysis sample

The colour, lithology, weight and volume of the sample will be recorded on the sample sheet. The sample will be then be processed. All samples will be floated on a 250-300 mm mesh and the heavy residues washed over a 0.5-1 mm mesh as required by SCCAS. The flot should be air dried.

The flot should be 100% sorted with all relevant material being recovered, once this process has been completed, the remaining material may be discarded. Any plant remains should be quantitively recorded. All ecofactual material should be removed as should relevant artefactual material. Earthworm and nematode capsules should be counted but not recovered. If charcoal-rich a 2mm sieve should be used, the resultant material should then be subject to the same process outlined above. The data from the flot sorting should then be recorded into a spreadsheet (Excel) or database (Access).

Once dried the entire retent residue should be sorted. In order to ease sorting, the dried residues may be passed over a 4mm mesh, this also aids charcoal retention of a suitable size for ID. The dried residues should be described (colour, lithology, weight and volume of the individual fractions).

The <4mm fraction will be scanned with a magnet in order to pick up micro-slags, and 100% sorted for the recovery of artefacts and ecofacts.

The fine fraction will be sorted and any relevant material recovered. The sorted residues can then be discarded. Any resulting artefactual and ecofactual material should be recorded (abundance/actual quantities dependent on material and weighed).

Recording of the Environmental Data

Where possible quantify, counts of over 50 individuals per species can be referred to by levels of abundance, such as +=50-100, ++=100-200, +++=200-500 and ++++ to indicate greater than 500. If identification is not to species level then a distinction between cereals and weeds species (or non-economic taxa) should be made. The presence of chaff should be noted.

For long term storage, the plant remains should be stored in soda glass tubes with sample information, and identification (where relevant) clearly marked using pencil and a Tyvek label placed inside the tube.

Waterlogged Samples

Between 250 and 500ml of a 1l sub sample from the GBA is processed by placing the material in a 500µm sieve and washing the sample through until all of the sediment has been removed. The latter is essential or the fluid in which the sample is stored will become cloudy. Once clean the sample is removed from the sieve to an airtight jar and stored in ethanol (95% alcohol).

Paraffin Flotation

The remaining 9l of the GBA will be placed into a bucket filled with hot water to disaggregate the sample. A handful of the material is then placed in a 300µm sieve and washed until as much of the sediment as possible has been removed. The material is then tipped from the washing sieve into a further sieve and allowed to drain and dry. Once the sample has been completely processed, it will then be left to dry for an hour. The sample is then tipped back into the bucket and enough paraffin to coat the sample is added –multiple buckets may be required if the sample is large. This will be then allowed to stand for 15 minutes and cold water added to the bucket.

The bucket is then allowed to stand for a further 15 minutes. At this stage any insect sclera should have risen to the surface of the water as the paraffin adheres favourably to the chitin which forms the exoskeleton of the beetle. The top 2cm of bucket is then poured off through a 300µm sieve and this process is repeated twice more.

At the end of this process, the flots within the sieve will be washed using domestic washing up-liquid until all traces of both the paraffin and detergent have been removed. The latter is essential as any trace of either left on the flot will render the storage medium cloudy. The sample is then stored in ethanol (95% alcohol) inside an airtight jar.

METHOD STATEMENT STAGES 2 AND 3 FINDS ASSESSMENT

Summary

The finds assessment involves the quantification, identification, dating and significance assessment of the recovered artefacts. The assessment of significance happens in stage 4 when the context of the finds can be taken into account as their significance is not solely based on the object's intrinsic interest. The finds assessment can only be compiled by a suitably-qualified finds specialist who can identify and spot-date a wide range of artefacts.

The finds assessment will adhere to a number of national guidelines, including CIfA (2017), Historic England, EAC (2014), Brown (2011) and Watkinson & Neal (1998) as well as the specific county museum's own standard requirements plus national and regional fabric codes (prehistoric through to post-medieval pottery). The finds assessment will make recommendations to be included in the UPD (updated project design). These may include further literary research and comparative analysis, AMS C14 dating, strontium or oxygen isotope analysis, Bayesian scientific methods plus illustration / photography.

The following specification allows for the quantification, identification and dating and significance assessment of the finds.

Stage 2

Certain types of find, when dry, are then marked; this can be dependent on the curator and the county repository. Finds, including pottery, CBM, animal bone, glass and clay tobacco pipe, are marked with the site code, context number, small find number and the museum accession number (if applicable). The finds are marked using permanent Indian ink (Winsor & Newton); for finds with rough surfaces (applicable to all types of pre post-medieval pottery), a small patch of acrylic or nail varnish is applied to provide a smoother surface.

Types of finds and ecofactual remains that are not marked include human bone, leather, shale, jet, all metalwork, plaster/mortar, oyster shell, slag and wood.

Once the finds are dry and marked, they are quantified and bagged in zip-lock self-sealable bags and the site code, context number, small find number and museum accession number is written on the bags. For small finds and delicate/fragile artefacts, 2 layers of acid-free ridged foam is cut and inserted into the bag beforehand and the artefact is sandwiched between the two layers.

The non-metal artefacts, when bagged, are placed in acid-free archive boxes and they are ordered by material type and by context. Boxes should not weigh over 6kg. Metal artefacts and some organic finds are kept in Stewart tubs with a bag of silica gel and humidity strip indicators. WA Ltd's in-house archive labels are then put on the front of the box.

Time estimates for finds marking and bagging and boxing
Marking 30-40 seconds per artefact e.g. per bone, per pot sherd.
Bagging and boxing 1 box at 6 kg full capacity – 30-40 minutes.

Stage 3
Once processed (cleaned and dried stage 1 and marked stage 2) the finds will need to be assessed. In stage 3 preliminary recording and description of the assemblage is undertaken and an Excel spreadsheet is created. This stage is where the artefacts are quantified, weighed, spot-dated and where additional comments / notes are made. The Excel spreadsheet (or Access database) forms a critical part of the finds assessment and every finds report must have one. The preliminary recording is conducted by a suitably-qualified finds specialist, with a proven record and appropriate local knowledge.

Time estimates for preliminary recording
Recording and describing 1 box (6 kg) of finds = 1-3.75 hours dependent on the nature of the items.

Materials costs to be considered to PXA
In addition to the person costs there is a material cost for storage materials, including boxes, silica gel, acid free tissue and zip-lock bags, for the artefacts and the human bone. For example, finds and documentary archive boxes need to be acid free for long term storage. Appropriate temporary storage and monitoring of waterlogged artefacts is required, prior to conservation.

There will be some need to carry out X-ray photography of metal objects to be able to assess their significance.

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