ARDAL 20 WYLFA NEWYDD, MAES O5S / WYLFA NEWYDD AREA 20, FIELD O5S

Lliniaru Archeolegol / Archaeological Mitigation





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65	Mid-ex shot of well {330947}	WAD44_P2_100_IMG3035	
66	Post-ex shot of well {330947}	WAD44_P2_100_IMG3258	
67	Pre-ex shot of well {330947}	WAD44_P2_100_IMG2876	
68	Mid-ex shot of well {330947}	WAD44_P2_100_IMG3008	
69	Mid-ex shot of roundhouse #30505	P1010222	
70	Post-ex overview shot of roundhouse #30505	WAD64_100_IMG3275	

Plate	Description	Archive Reference	
71	Elevation of wall structure [20981] in roundhouse #30505	WAD63_106_IMG0906	
72	Wall {331043} and gully [330571] in roundhouse #30505	WAD64_100_IMG2424	
73	Mid-ex shot of pit and posthole group #30406	WAD63_101_IMG0080	
74	Stone posts from #30406 leading towards the entrance of roundhouse #20462	WAD63_102_IMG0008	
75	Mid-ex shot of stone lined pit [20578]	WAD63_101_IMG0205	
76	Plan shot of stone lined pit [20578] with stone still in situ	WAD63_103_IMG0286	
77	SE facing section of pit [20555] in pit grp #331291	WAD63_100_IMG1317	
78	Plan shot of stone in pit [20555]	WAD63_102_IMG0112	
79	Mid-ex shot of Roundhouse grp #20462 showing ring gully, stone capped drains and wall from grp #20637	P1010443	
80	Shot of stone capped drainage gully [20705]	WAD63_102_IMG0677	
81	Overview shot of slot through wall {20523} in group #20591	WAD63_101_IMG0196	
82	Detail view of slot through wall {20542} with gully {20580} visible in wall {20523}	WAD63_101_IMG0314	
83	Detail view of gully {20580}	WAD63_102_IMG0071	
84	Overview shot of walls in enclosure group #20637 and #20591	P1010298	
85	Shot of beehive quern in situ in group #20637	WAD63_102_IMG0606	
86	Detail shot of beehive guern in group #20637	WAD63_103_IMG0327	

Plate	Description	Archive Reference
87	Working shot of excavation in group #20637	P1010365
88	Possible floor surface {20367} in group #20637	WAD63_100_IMG1158
89	Pre-ex shot of drain and hearth group #30162	WAD63_102_IMG0001
90	Pre-ex shot of drain and hearth group #30162 with walls of enclosure group #20637	WAD63_102_IMG0430
91	NW facing section of pits [20176] and [20285] showing layers of hillwash sealing pits.	WAD44_P1_100_IMG0482

1 CRYNODEB ANNHECHNEGOL

Comisiynwyd Ymddiriedolaeth Archeolegol Gwynedd gan Wardell Armstrong, ar ran Horizon Nuclear Power i gynnal asesiad ôl-gloddio o'r lliniaru archeolegol a gwblhawyd yn rhan ogleddol O5South yn Wylfa Newydd. Roedd y lliniaru archeolegol yn cynnwys cloddio a recordio ac fe'i gwnaed gan Wessex Archaeology fel rhan o'r gwaith o baratoi a chlirio'r safle. Roedd y safle wedi'i leoli yng ngwaelod dyffryn bas, 450m i'r gorllewin o anheddiad Tregele. Datgelodd y cloddiad olion anheddu a diwydiannol yn dyddio o'r Oes Efydd, Oes Haearn a gyfnodau Rhufeinig ac roedd yn cynnwys twmpathau llosg, llociau a thai crwn wedi'u hadeiladu o gerrig. Ategwyd hyn gan gasgliad arteffact amrywiol, a oedd yn cynnwys tystiolaeth ar gyfer gweithgaredd cynhanesyddol cynharach. Gyda'i gilydd, roedd y canlyniadau'n cynrychioli safle o bwysigrwydd cenedlaethol wrth nodi anheddiad helaeth parhaus dros gyfnod sylweddol o amser. Yn seiliedig ar y canlyniadau hyn, argymhellir i astudio a dadansoddi yn fwy mireinio

2 NON-TECHNICAL SUMMARY

Gwynedd Archaeological Trust has been commissioned by Wardell Armstrong, on behalf of Horizon Nuclear Power to undertake a post-excavation assessment of the archaeological mitigation completed in the northern part of O5 South at Wylfa Newydd. The archaeological mitigation comprised excavation and recording and was undertaken by Wessex Archaeology as part of the site preparation and clearance. The site was located in the base of a shallow valley, 450m to the west of the settlement of Tregele. The excavation revealed settlement and industrial remains dating from the Bronze Age, Iron Age and Roman periods, including burnt mounds, stone built roundhouses and enclosures. This was complemented by a varied artefact assemblage, which included evidence for earlier prehistoric activity. Collectively, the results represented a site of national importance in identifying continued extensive settlement over a considerable time period. Based on these results, more refined study and analysis is recommended.

3 INTRODUCTION

3.1 Site location

The archaeological excavation and recording area was located in the base of a shallow valley, 450 m to the west of the settlement of Tregele, at NGR SH35169261. The area was designated O5 South and measured 8,352m² (Figure 01). Historic Environment Record event primary reference numbers (PRNs) were assigned following discussion with Nina Steele, Senior Historic Environment Record Archaeologist at the Gwynedd Archaeological Trust. 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 Areas 18, 19 and 20, PRN76024 has been assigned to the earliest phase of prehistoric activity, PRN76023 has been assigned to Iron Age activity and PRN76023 has been assigned to Romano-British activity. All works were carried out in accordance with the Written Scheme of Investigation (Horizon Nuclear Power (HNP) 2015), and Technical Update (HNP 2016), as agreed with Gwynedd Archaeological Planning Service.

3.2 Scope of the project

The archaeological excavation and recording at the Wylfa Newydd site was undertaken as part of the site preparation and clearance. All works were carried out in accordance with the Written Scheme of Investigation (Horizon Nuclear Power (HNP) 2015), and Technical Update (HNP 2016), as agreed with Gwynedd Archaeological Planning Service. The excavation was one element in a large scheme of works associated with the proposed construction of a nuclear power station at Wylfa (Wylfa Newydd). This current report has been commissioned by HNP as a supporting document for the application for the Development Consent Order (DCO) and represents the first phase of post excavation assessment regarding the archaeological investigations at the Wylfa Newydd site. The post-excavation assessment is being undertaken in accordance with the Post Excavation Assessment Method Statement (Wardell Armstrong 2019).

3.3 Dates/duration of fieldwork

The fieldwork was undertaken in two phases between July 2017 and December 2018. Phase 1 was completed between July 2017 and May 2018; Phase 2 was completed between July 2018 and December 2018.

3.4 Site character and archaeological background

O5 South covered part of a north facing hillside and the base of a shallow valley, 450m to the west of the settlement of Tregele; the Site slopes down from 26.90 m above Ordnance Datum (aOD) in the south of the site to 19.50 m aOD in the north west of the site. The underlying geology consists of metaphoric mica schist and psammite bedrock overlaid by superficial deposits of Devensian till (BGS 2019). As highlighted in the Gwynedd Archaeological Trust Baseline Assessment report (Cooke et al. 2012), the soils are made up of slightly acidic, loamy soils which are free draining and the land use is one of arable and pastoral grazing fields. The local landscape is characterised by a largely dispersed settlement of farms and cottages; field boundaries are largely walls or stone-faced earth banks (*ibid*. 05). The lands immediately around the existing power station have been landscaped and a new plantation of native and conifer trees was planted shortly after construction on the south-east side.

Within the local landscape there was previously no clear evidence of prehistoric activity in the immediate vicinity of the Wylfa headland, but within the wider landscape, Neolithic and Early Bronze Age ceremonial monuments were known, 2.5 km south of Wylfa including standing stones and a chambered tomb, near Llanfechell (Scheduled Monuments AN 80 and AN 30; PRN 3047, 3048 and 3046) as well as three possible Bronze Age ring barrows (PRN 7362 and PRN 27534). The visual evidence of later prehistoric activity on Anglesey is largely represented by defended enclosures and settlements (Cooke et al. 2012: 06). The place-name 'Cestyll' at the western neck of the Wylfa headland at Porth y Pistyll may represent the former location a coastal promontory fort, although nothing now survives (PRN 3538, 3539). A prominent headland 3.5km to the east of Wylfa, at the northernmost extent of the island, is occupied by one of the largest promontory forts on Anglesey called Dinas Gynfor (SM A038; PRN 3067), whilst an enclosure at Llifad (SM AN 79; PRN 3053), east of Llanfechell, might be of similar date (ibid.). Undefended and lightly defended hut circle settlements occur across northern Anglesey. Archaeological excavations in advance of the A55 expressway across Anglesey, and in advance of construction of the Parc Cybi business park at Holyhead, 15km to the southwest, both revealed the presence of a much greater density of settlement than was formerly known, hidden by many years of cultivation, but still retaining considerable archaeological evidence. Direct evidence of settlement in the Roman period was previously absent from the north coast of Anglesey and the local area. Several copper cakes (ingots) recovered from the vicinity of the copper mines at Parys Mountain, south of Amlwch are considered good indicators that copper was extracted from the mine in the Roman period. One copper cake was found within the southern part of the proposed

development area, to the west of Tregele (PRN 3063) (*ibid.*). The results from O5 South have significantly changed the local archaeological landscape in identifying multi-period settlement activity, principally from the Iron Age and Roman period and with additional evidence of Mesolithic and Bronze Age activity.

3.5 Summary of previous archaeological investigations

Archaeological work carried out in association with the project prior to the excavation of O5 South included:

- desk based assessment (Cooke et al. 2012). The desk based assessment concluded that the existing field pattern in the area may have ancient origins, and that further field systems and boundaries were likely to survive within the Site.
- geophysical surveys (ASWYAS 2015; Hopewell 2011a-b; Hopewell 2012). The geophysical survey of the Site was inconclusive and the responses that were apparent were interpreted as changes in the underlying geology (ASWYAS 2015).
- trial trenching (Wessex Archaeology 2016; Headland 2017). Evaluation trial trenching took place in 2016. Twenty four trenches were dug in Field 05 (Figure 02. The trenches were 1.8 m wide and between 30 m and 50 m long. Eleven of the trenches identified archaeological remains consisting of boundary ditches, pits, postholes, stone deposits and a subterranean structure. O5 South was focused on three trenches 371, 373 and 1301, which revealed a potential burnt mound and a packed stone deposit which was interpreted as consolidation for the wet ground. Overall, this area incorporated the location of twelve evaluation trenches.

3.6 Post-excavation assessment

As defined in the post-excavation method statement (<u>Appendix 1</u>), the purpose of the post-excavation assessment is to provide quantification and initial assessment of the archive resulting from excavation and provides a framework to inform further investigation and publication. The outputs are two standalone documents: 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 current report encompasses the DAR only.

4 SUMMARY OF THE EXCAVATION METHODOLOGY

4.1 Proposals set out in the approved Written Scheme of Investigation for the fieldwork

All work was undertaken in accordance with the detailed methodology set out in the Written Scheme of Investigation (WSI) (HNP 2015) in compliance with current standards and guidance, e.g. ClfA guidance (CifA 2014a-c) and Historic England guidance (Historic England 2015). A copy of the Written Scheme of Investigation (sections 4 and 5 only) are included as Appendix 2.

The specific aims of the archaeological excavation and recording, as described in the WSI (HNP 2015; 2016), were:

- 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 establish the condition, age and stratigraphic sequence, of any archaeological / historical remain identified.
- 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), with particular reference to the prehistoric activity in the fields to the west and the medieval activity to the north.

The specific research objectives of the archaeological excavation and recording, as described in the Technical Update to the WSI (HNP 2016), were to consider the results in relation to the following *Research Framework* documents:

- Review of the Research Framework for the Archaeology of Wales: North West Wales
 Neolithic and Early Bronze Age (Burrow, 2010).
- Review of the Research Framework for the Archaeology of Wales: North West Wales
 Later Bronze Age and Iron Age (Gale, 2010).
- A Research Framework for the Archaeology of Wales Romano British (AD 43-AD 410) (Davies, 2011).

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

The Technical Update defined a series of research objectives further to the Research Framework criteria, based on the following:

- 1. Confirmation of the date, nature, character and extent of potential prehistoric and medieval sites in an order that they can be placed into the wider context of Anglesey during these periods. There is particular emphasis on obtaining accurate C14 dates in order that the chronology of sites and ceramic sequences can be ascertained.
- 2. There is an emphasis on understanding the wider settings of prehistoric sites with specific reference to 'Understanding how sites work in the landscape, permanent/seasonal use and understanding the social role of hillforts' (Gale, 2010). It is possible that the remains within the proposed investigation area form part of the wider setting of the prehistoric and / or medieval remains seen to the west, north and south.
- To undertake detailed analysis of prehistoric artefacts and their contexts in order to understand the chronological and typographic development, and use, of the artefacts.
- 4. Placing the setting of the information gained from the archaeological investigation into a broader regional and national (including Britain and Ireland) context.
- 5. Gaining insights into the local farming economy and the wider exploitation of the natural environment with particular reference to the exploitation of lakes and bogs.
- 6. Gaining insights in social change during the Late Bronze Age / Early Iron Age period via analysis of the material culture.
- Identifying and understanding early field systems, their development and degree of continuity.
- 8. Roman Medieval transition. Establishing the extent of continuity or discontinuity between the late Roman and early medieval periods via analysis of environmental evidence, the agricultural economy and land use, the type of artefacts recovered, changes in settlement patterns and types and, changes in trade patterns.
- Understanding how the transition between the late Roman and early medieval period on Anglesey compares with the same period elsewhere in Wales and Britain.

- 10. To undertake detailed analysis of (early) medieval artefacts and their contexts in order to understand the chronological and typographic development, and use, of the artefacts.
- 11. Further understanding and identification of pastureland in locations other than upland locations – specifically such locations as coastal wetlands, elevated wetlands and moors.
- 12. Develop our understanding of known, but poorly understood, monument types, such as those seen here (burnt mounds, etc). Including focusing on such aspects as;
 - a. Date:
 - b. Length of 'use life' and re-use;
 - c. Structure:
 - d. Location (within the landscape);
 - e. Association with other features and site types;
 - f. Associated finds types and;
 - g. Function.
- 13. Gaining insights into social organisation and settlement hierarchies.
- 14. Develop a better understanding of medieval towns and their impact on earlier settlements and the surrounding hinterland.

All archaeological features were investigated and recorded by Wessex Archaeology as per standard procedure set out in the Wessex Archaeology fieldwork manual (Wessex Archaeology 2015). Environmental sampling was undertaken in accordance with Wessex Archaeology's Guidelines for Environmental Sampling (Wessex Archaeology) along with current guidance provided by Historic England (English Heritage 2011).

4.2 Any variations from the Written Scheme of Investigation with justifications

No variations from the Written Scheme of Investigation (Horizon Nuclear Power (HNP) 2015) or Technical Update (HNP 2016) have been identified.

5 SITE ARCHIVE

5.1 Summary of the contents and organisation of the project archive

The project archive comprises digital record sheets including context sheets, structure and group sheets. Digital registers include environmental, objects (artefacts), graphics (drawing) and photographic registers. Drawn records includes A1, A3 and A4 permatrace (plans and sections). Paper records include environmental sample sheets, photographic register, context register, objects register and graphics register. Survey data comprises two CAD based drawings of the entire site. Scanned images include the A1, A3 and A4 permatrace (plans and section). Digital information is currently stored on a Western Digital portable hard drive (1TB). Paper records are filed in sequential order. The A3 and A4 permatrace are organised sequentially (by drawing number) in eight A3 ring binders; the A1 drawings are stored separately in individual order.

5.2 Quantification of documentary archive

The documentary archive comprises:

Data Category	Number	
Contexts	4681	
Small Finds	107	
Bulk Finds	697	
Environmental Samples	677	
Monochrome	0	
Digital photographs	16079	
Rectified photographs	3259	
GPS surveyed digital pre-excavation plans	0	
TST surveyed digital excavation plans	1	
Hand drawn plans	426	
Hand drawn sections	1115	

Table 1 - Documentary Archive

The digital and paper archive currently resides at the Gwynedd Archaeological Trust (Craig Beuno, Garth Road, Bangor, Gwynedd LL57 2RT). Both archives are routinely stored in a secured area at the Gwynedd Archaeological Trust offices. The digital archive is currently stored on a Western Digital portable hard drive (1TB). Paper records are filed in sequential

order. The A3 and A4 permatrace are organised sequentially (by drawing number) in eight A3 ring binders; the A1 drawings are stored separately in individual order. All paper records are stored in two 64 litre opaque storage boxes.

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

The documentary archive has been reviewed by Gwynedd Archaeological Trust staff and collated, organised and assessed for completeness. Permatrace drawings were scanned for archiving and illustration purposes. Specific records were checked and amended where necessary. Explanatory notes have been added where required to relevant sheets and stratigraphy re-interpreted where necessary. Matrices were created for relevant group areas and illustrated using *ArchEd* software. Digital photographs were organised in sequential order by camera.

5.4 Quantification of material archive and details of current location.

The material archive comprises a total of 691 bulk finds, weighing 40,340g, from 121 contexts; a further 107 artefacts were allocated Small Find numbers with a combined weight of 85,549g, recovered from 66 contexts. The finds assemblage was transferred to Carlisle and assessed by Wardell Armstrong, where it is currently archived. All finds were dealt with according to the recommendations made by Watkinson & Neal (1998) and to the Chartered Institute for Archaeologists (ClfA) Standard & Guidance for the collection, documentation, conservation and research of archaeological materials (ClfA 2014b). All artefacts have been boxed according to material type and conforming to the deposition guidelines recommended by Brown (2011), EAC (2014) and The Oriel Museum. The project has the unique identifier WA 2020 / CL12283 / 117360.

5.5 Details of samples submitted for scientific analysis

The following samples were submitted for radiocarbon dating. They were selected for testing in order to get a broad range of dates across O5 South with reference to the best material for dating suggested in the specialist reporting.

Context	Cut	Feature type	Sample	Material
20291	20285	Pit – SE pit group	20010	Charred material
20577	20576	Hearth – Group #20462	20065	Charred material
20812	20807	Pit – Group #20637	20083	Charred material
30068	30231	Hearth Group #20774	20154	Charred material
30137	30136	Pit – Group #30505	20164	Charred material
30214	30215	Pit – Group #30508	20189	Charred material
30362	30361	Stone lined gully – Group #20984	20227	Charred material
331188		Layer – Group #331848	320464	Charred material
331267	331266	Pit – Possible BA pit group	320442	Charred material
331388	331387	Drain – Group #332430	320523	Charred material
331683	331684	Pit – Group #30491	320471	Charred material
331952	331951	Hearth – Group #20871	320489	Charred material
332335	332121	Pit – Group #332072	320550	Charred material
332432	333031	Hearth - Group #333568	320592	Charred material
332701	332574	Hearth – Group #332920	320558	Charred material
333310	333511	Pit - Group #333333/333608	320649	Charred material
333329	333241	Trough – Group #20984	320628	Charred material
333544	333298	Pit – Group #333498	320646	Charred material

Table 2 - Radiocarbon Dating - selected samples

5.6 Agreed destination of the site archive

The agreed destination of the site archive is Oriel Ynys Môn, (Rhosmeirch, Llangefni, LL77 7TQ). Accession will be in accordance with the Oriel Ynys Môn – Guidelines for the preparation and deposition of archaeological archive (2012).

6 STRATIGRAPHIC DATA

6.1 Summary of archaeological features/deposits

6.1.1 Introduction

The features and deposits identified in O5 South have been divided into areas (Figure 03) and are described by phase in chronological order within these areas. The features located outside of the lettered areas are mostly discrete pits or linear features. The periods adopted during the phasing of the post-excavation assessments are based upon the periods and dates thereof as outlined by A Research Framework for the Archaeology of Wales. Relevant Harris matrices are reproduced in Appendix 4. Where possible, group context numbers have been used to define specific features; to assist with additional phasing, individual context numbers are also used. For reference, deposits are represented by round brackets, cuts with square brackets, structures with braces and groups prefaced with a hashtag. To assist with interpretation, reference is also made to the preliminary radiocarbon dating results (Appendix 9) and to the results of the artefact assessment (Section 7). The chronological phasing presented below was based on a combination of dateable material, stratigraphy and comparative analysis.

6.1.2 General stratigraphy

The topsoil was 0.15–0.25 m thick and generally comprised mid brown grey silt, it overlay mid-brown grey silt clay subsoil around 0.15 m thick. The underlying geology comprised orange brown clay with occasional pebbles and cobbles. The Site was characterised by settlement and industrial remains dating from the Bronze Age to Romano-British periods.

6.1.3 Site formation

Layers of colluvium (hillwash) were present on the central slope and across the flat valley floor in the northern part of the Site. The colluvium was up to 0.5 m thick at the base of the slope and present in large areas across the upper slope and valley floor. At least two major layers were identified which sealed significant archaeological horizons. The colluvium closely resembled the mixed glacial till (the natural geology), and in some cases was only identified by following archaeological features which extended below it.

6.1.4 Area A

6.1.4.1 Introduction

Area A is located in the northwestern corner of O5 South and is characterised by both Bronze Age and Iron Age remains, the most substantial of which is a partially extant stone walled Iron Age roundhouse (#330577). Bronze Age remains include a pit group, possible roundhouse and a burnt mound (Figure 04).

Across the O5 South excavation area there are 8 features that are either wells or stone lined pits. The summary created at the end of the fieldwork states that the wells were characterised by having 'roughly coursed stone lining' whereas the stone lined pits had 'upright slabs' (Wessex Archaeology, 2018, Section 5.4.8). This definition is imperfect however as the features defined by group numbers #30492 and #332814 have both roughly coursed stone and upright slabs, with #30492 interpreted as a storage pit and #332814 defined as a well. Further research into both storage pits and wells from the Iron Age period is needed in order to be able to confidently interpret these features. For the purposes of this report structures that are approximately 1.5m deep or greater with evidence for clay lining are defined as being wells, the other structures that do not fit this criteria as storage pits.

6.1.4.2 Bronze Age

6.1.4.2.1 Burnt Mound - Group #30508 (SH 35114 92609)

Burnt mounds are a common feature within the British Isles and consist of a mound of charcoal rich soil and heat effected stone usually associated with a water-filled trough and situated near to a watercourse. The function of burnt mounds is debated though there are three main interpretations, cooking (Wood, 2000), saunas (Barfield & Hodder, 1990) and brewing (Quinn & Moore, 2007).

Burnt mound (group #30508) was located at the north-western side of O5 South in the central part of Area A. The feature consisted of an oval shaped deposit of burnt mound material (30115) measuring 5m in length, 3.05m in width with an average depth of 0.2m (Figure 05). It is possible that the original extent of the mound was much larger and was truncated by later activity or over machining in the area. Another deposit of burnt mound material is situated approximately 7m to the southwest of the main deposit (30115). This smaller section of burnt mound material falls within the footprint of trench 371 from the evaluation phase. In was not excavated during the evaluation but was noted as being 2.1m by 1.2m in plan and sealed by an alluvial deposit (Wessex Archaeology, 2016, pg 63). Pit [331334] adjacent to the small deposit of burnt mound material was noted as containing charcoal and burnt stone within the fill which supports the hypothesis that the mound was originally a larger feature.

Pit [30215] was completely sealed by the burnt mound material, whilst pit [30212] was situated to the immediate west of the mound material, partially under the mound itself. Pit [30215] was cut into the natural, had a diameter of 1.22m, depth of 0.22m and contained one single mid to light grey clayey silt fill (30214). Pit [30212] was also cut into the natural, had a diameter of 1.34m, depth of 0.20m and contained one single mid greyish brown silty clay fill (30213). A radiocarbon date from the fill of pit [30215] returned a post-medieval date which must be considered anomalous and the result of the sample being contaminated until further testing can be undertaken (context (30214), sample <20189>, Beta-553512; Figure 06 – number 2).

6.1.4.2.2 Possible Bronze Age Roundhouse (SH 35109 92598)

Possible roundhouse defined by gully [330724] was situated c.17m south of roundhouse group #330577, in the northwest of the site. The group included pits and postholes and was encircled by a possible ring gully [330724] (Figure 07). Gully [330724] was curvilinear in plan, 4m in length, 0.3m wide and 0.07m deep. The features were cut into the natural substrate (20003/330565) and appeared to have been heavily truncated by both trench 1300 from the evaluation phase and the initial machine stripping of the excavation area. This group is presumed to be Bronze age based on its position the stratigraphic sequence as no absolute date has been obtained for this area. The recording of this group is not clear and needs more work to define the features with more certainty.

6.1.4.2.3 Bronze Age Pit Group (SH 35122 92600)

To the south west of burnt mound group #30508 was a sub-circular group of intercutting pits and postholes measuring 10m east to west and 7.5m north to south (Figure 08). Around 40 different features were investigated within this small area suggesting reuse of the area over a sustained period of time. The group was interpreted on site as Bronze Age due to the miss-identification of Roman briquetage as Bronze Age pottery. The group was sealed by a deposit (330733), which included Roman briquetage, industrial waste (slag or fired clay), a fragment of a rubber made from coarse sandstone and two slate discs, providing a terminus ante quem for the activity stratigraphically earlier in this group (Plates 01 & 02). Radiocarbon dating from the fill (331267) of pit [331266] within the group returned an Iron Age date of 360 – 100 cal BC (Beta-553507; Figure 06 – number 12), suggesting some of the activity was from this period. This pit was one of the latest in the stratigraphic sequence and may not date the group in its entirety (Figure 06). Daub was recovered from fill (331551) of posthole [331550] within the group, as well as fill (331333) from a nearby pit [331334].

6.1.4.3 Iron Age

6.1.4.3.1 Roundhouse Group #330577 (SH 35107 92613)

Roundhouse #330577 was located in the north western corner area A, at the valley bottom. It had been heavily truncated during initial archaeological investigation (evaluation and mitigation) and only the northernmost half was extant.

The earliest feature within the footprint of roundhouse #330577 was a silted up pit [331363]. This pit was circular in plan with a diameter of 0.70m and a depth of 0.11m. This pit was situated outside of the extant structural remains of the roundhouse but within the arc of the drip gully so has been included in this section. The pit was cut into the natural and contained one single fill (331365), a mid brownish grey silty clay with a significant amount of stone and charcoal inclusions.

The construction sequence for the roundhouse began with a redeposited natural levelling deposit (331147/331241), which created a raised compact flat area and provided a dry, stable construction surface in the wet area at the valley base (Figure 09). This was sealed by a smooth and compact mid greyish brown mottled sandy clay layer that was likely the initial floor surface of the roundhouse ((330749) = (330844)) (Plate 03). This deposit extended beyond the extent of the structure under the roundhouse walls.

The extant roundhouse walls were curvilinear in plan, 11.2m in length, 1.55m width and survived to a maximum height of 0.57m giving the roundhouse an internal diameter of

approximately 9m. A cobble foundation layer (331076) of small and medium sized stones sits directly on the clay layer. The roundhouse walls were constructed from an inner and outer facing of large schist stones {330622} with the resulting cavity then filled in with a rubble core within a silty clay matrix (330621) (Figure 10; Plate 04). One orthostat {331146} defines an entrance way to the west of the building, the opposing orthostat having been removed in trench 1300 during the evaluation (per comms Ashley Batten).

A number of postholes within the interior ([330891] [330893] [330898] [330902] [330934]) were interpreted as roof supports (Figure 11). The postholes were generally sub-circular in plan with and ranged in diameter from 0.20m to 0.42m. They all appeared to have been deliberately backfilled and had no evidence for post pipes or in situ post packing. Several internal pits represented the initial occupation of the roundhouse ([330913] [330938] [330940] [331370]). The use of these pits was unclear, but they had been backfilled deliberately, most likely for levelling and as they cut into the floor layer (330749), they most likely post-dated construction.

Two stone lined gullies, [330715] and [330967] represent the next phase of building within the roundhouse. Gully [330715] was curvilinear in plan and the extant section was 9.2m in length, 0.6m width and 0.2m deep (Figure 12). It is probable that this gully would have continued into the missing southernmost section of the roundhouse so would have been substantially longer. The gully appears to have been stone lined though this lining has been disturbed by later modifications to the roundhouse. Gully [330967] was also stone lined, linear in plan with a length of 5.6m width of 0.5m and depth of 0.2m (Figure 13). The route of this gully could be traced into the southernmost section of the roundhouse footprint though its depth has been truncated in this area. It is probable that these gullies were also stone capped but this is impossible to determine due to later modifications to the floor of the roundhouse.

The roundhouse entrance has been modified after construction of the internal gullies with four postholes ([331416], [331044], [331368] and [331369], support for a new roof over the entrance. Posthole [331044] was sub-circular in plan, 0.37m in length, 0.25 width, 0.35 in depth and contained packing stones. Posthole [331416] was also sub-circular in plan 0.5m in length, 0.30m width, 0.34m in depth and contained large packing stones. Posthole [331044] cuts gully [330715] and posthole [331416] cuts gully [330967] showing the entrance modifications to be a later addition to the roundhouse. The other two postholes, [331369] and [331368], were found in the truncated area of the roundhouse, but their positioning in plan suggested they were related (Figure 09; Plate 05).

Following the entrance modifications large, robust schist slabs ({330840} {330841} {330930}) were placed over clay floor (330749) perhaps to raise or improve the floor surface; these also provided capping over gully [330967] and part of gully [330715] (Figure 11 & 12; Plate 06). This feature appears to have been heavily robbed, perhaps to provide materials for other structures.

The next activity identified within the roundhouse included the deposition of burnt mound material (330652), (330689) and (330690) over the slab floor, possibly to raise the floor level (Figure 14). It is probable that this material was from burnt mound group #30508 that is situated approximately 6m to the southwest of the centre of the roundhouse. Gully [330715] was also backfilled at this time suggesting the it was no longer necessary. Context (330708) was a layer of stone, similar to the wall core of the roundhouse that followed the northern wall of the roundhouse, suggesting it was wall collapse; this may have been deliberate demolition as part of abandonment, or to provide more material to raise the floor. Another deposit of burnt mound material (330711) followed this.

The roundhouse does not appear to have been occupied after this time; rather the area has been used for dumping of material. Periods of natural silting followed by dumps of stone or burnt mound material characterise upper layers of stratigraphy. Rubble layers (330759), (330643) and (331246), located close to the roundhouse walls, are likely wall collapse possibly due to natural decline or demolition/robbing of materials for use elsewhere.

6.1.4.3.2 Well Group #30492 (SH 35117 92597)

Well #30492 was located in the southern part of Area A. The construction cut [30341] for the well measured 1.92m in diameter and 1.51m in depth and cut two linear gullies ([30156] and [30154]) and a pit [30339]. It is unknown whether the gullies were originally one longer feature that has been truncated by the construction of the well, or were used in conjunction with the well. The pit appears to serve no function when considered alongside the well and is therefore most likely to predate the structure. Lining deposit (30395) and a number of large schist slabs, measuring 0.87m by 0.57m by 0.25m on average, were placed around the lower part of the well against the cut. The upper part of the well was circular in plan and roughly coursed using smaller schist stones measuring 0.45m by 0.30m by 0.15m on average. Dark greyish brown clay (30414) possibly represents the remains of bonding between the coursing of the stones. Fills (30428), (30413), (30300) and (30228) appear to be deposits accumulated over time after the feature has gone out of use.

There were four postholes, [30359], [30305], [30337] (and one unexcavated), situated in a rough rectangular arrangement around the well which suggested there was once a structure closely associated with the well when it was in use (Figure 15). Fragments of possible daub were recovered from fills (30300) and (30428) and a fragment of Roman briquetage was also found within fill (30428) which is probably residual. A primary chert flake was found within layer (30171), which was the uppermost layer around the structure, and a chert core fragment from pit fill (30228). Both of these finds are more than likely intrusive.

6.1.5 Area B

6.1.5.1 Introduction

Area B was located to the north west of the excavation area adjacent to the northern most baulk section. The area was characterised by the remains of an Iron Age roundhouse, a storage pit and two groups of postholes representing the remains of post build structures. A cobbled surface (331324) appears to have covered the majority of the area. The storage pit and posthole groups were located under this layer and the roundhouse above it placing the roundhouse as the latest structure in the area (Figure 16).

6.1.5.2 Iron Age

6.1.5.2.1 Pit Group #331170 (SH 35135 92618)

Group #331170 consisted of a stone lined pit {331418}. The structure had been constructed using local schist with coursed circular walls (Plate 07 & 08). Construction cut [331309] for the pit measured 2.77m in length, 1.69m wide and was 1.64m deep (Figure 17). A single large stone was placed on the base of the cut and very rough coursing was placed around the cut. The upper stone coursing was slightly broader than the pit cut, 2.10m wide and was far better constructed suggesting that this section was always above ground level.

Within the upper coursing was a larger stone protruding into the centre of the pit, which may have been a step used in order to access the pit (Plate 09 & 10). Three cobble-rich layers were found surrounding {331418}, (331324) overlying (333259) overlying (333281). Two hammerstone/rubbing stones, one elongated pebble whetstone and one slate disc were recovered from (333259).

6.1.5.2.2 Group #333590 (SH 35135 92618)

Group #333590 consisted of 6 post holes ([333388], [333386], [333499 = [333384], [331233], [331139] and [331171], see table below for details) arranged in a rectangle

comprising two rows of three postholes, each row aligned north - south, and each pair of postholes roughly opposite each other east – west (Figure 17). There were re-cuts to three of the postholes, suggesting longevity of use. At least three and possibly all six of the postholes cut through a cobble layer (333281) which measured 6.3m by 3.9m and 0.07m deep.

The arrangement seemed typical of a granary structure, but it was difficult to ascertain if the structure associated with the postholes was still standing when the well/stone lined pit was in use. Cut [331501] for storage pit {331418} truncated posthole [333386] slightly, suggesting that the pit was the later structure. However, the fact all the features cut through the same cobble layer (331281), and the central location of the structure, suggests they were relatively contemporaneous.

Cut No	Description	Length	Width	Diameter	Depth	Filled by
		(m)	(m)	(m)	(m)	
331139	Circular posthole			0.95	0.42	331140
331171	Sub-circular posthole	1.02	1.30		0.57	331172
331233	Circular posthole	0.80	0.70		0.45	331234
333386	Sub-circular posthole	0.52	0.43		0.28	333387
333388	Sub-circular posthole	0.60	0.46		0.2	333389
333499	Circular posthole			0.56	0.33	333500

Table 3 – Group #333590 Features

6.1.5.2.3 Group #333681 (SH 35134 92622)

Group #333681 was situated c.4m to the north of pit group #331170 (Figure 17) and consisted of a group of postholes (see table below) forming at least one east - west aligned rectangular post built structure, possibly a granary. The fact the some of the postholes cut each other may suggest the structure was used for a prolonged period. Most of the postholes were revealed after the removal of cobble layer (331324) suggesting it was largely contemporary with groups #331170 and #333590, which were also sealed by this pebble layer.

Cut No	Description	Length	Width	Diameter	Depth	Filled by
		(m)	(m)	(m)	(m)	

Cut No	Description	Length	Width	Diameter	Depth	Filled by
		(m)	(m)	(m)	(m)	
333151	Sub-circular pit	0.82	0.55		0.36	
333153	Sub-circular pit	0.76	0.56		0.37	333466
333418	Oval posthole	0.41	0.6		0.39	333419
333416	Oval posthole	0.48	0.8		0.22	333417
333144	Oval posthole	0.60	0.55		0.39	333145 333146
333306	Sub-circular posthole	0.34	0.47		0.22	333307 333396
333305	Oval posthole	0.45	0.35		0.05	333304
333302	Sub-circular posthole	0.49	0.5		0.11	333303
332385	Sub-rectangular posthole	0.8	0.6		0.6	332386
333679	Circular posthole			0.45	0.48	333680
333271	Circular Pit	0.7	0.65		0.35	333272 333273
333374	Sub-circular posthole	0.5	0.48			333375
333372	Sub-circular posthole	0.46	0.38		0.3	333443 333373
333444	Circular posthole			0.3	0.08	333445
333370	Sub-oval posthole	1.2	0.87		0.15	333371

Table 4 - Group #333681 Features

6.1.5.2.4 Roundhouse #331596 (SH 35126 92621)

As with the other roundhouses on O5 South, roundhouse #331596 was built on large foundation. The foundation layers ((331645), (331646) and (331648)) were located on top of cobbled surface (331324) which sealed groups #333681, #331170 and #333590 discussed in this section. This cobbled surface sealed a number of features currently of unknown date and function but clearly pre-dating the extant roundhouse remains though it is probable that these represent an earlier roundhouse. One of these features, drain {331329} extended from the roundhouse, underneath threshold {331659} (discussed below) mirroring the arrangement seen in other roundhouses on the site (e.g. Groups #20462 and #20774). The drain was curvilinear in plan, 10m in length, 0.8m wide and a maximum of 0.3m deep.

Above the foundation layer was a possible floor surface (331644). This layer was a midorangey yellow silty clay measuring 3.68m by 3.34m and a maximum of 0.16m deep. Three pits, [331903], [331964] and [331901] truncate the floor surface to the east, while postholes [331805], [331807] and [331809] truncate it to the north west (Figure 18).

Not much of the walls of this roundhouse remained in situ. The wall {331660} was curvilinear in plan, 1.62m in length, 0.54m wide and had a maximum height of 0.08m (Figure 19). It was constructed from schist stones with no formal coursing remaining. To the east of the remnants of the wall was possible threshold {331659}. The threshold was constructed from large schist stones and measured 1.5m by 0.71m. The stones appear to have been repurposed as one of the stones has a tenon joint (Plate 11).

Wall structure {331658} was a separate linear arrangement of stones that crossed the entire roundhouse structure, running roughly east to west; it was interpreted as a later structure and not part of this roundhouse. The wall was 1.45m in length, 0.45m wide with a maximum height of 0.1m and was constructed from schist stone with no evident coursing remaining.

6.1.6 Area C

6.1.6.1 Introduction

Area C consists of the partial structures located in the northern most baulk section of the site. The extent remains are hard to fully interpret as they represent only a small part of the roundhouses (Figure 20).

6.1.6.2 Iron Age

6.1.6.2.1 Roundhouse Group #331694 (SH 35123 92629)

Roundhouse group #331694 represented the partial remains of a roundhouse wall situated in the northern limit of excavation for O5 South (Plate 12 & 13). It appeared to be very similar in construction to the other Iron Age roundhouse walls on O5 South, with an outer wall structure [331923], inner wall structure [331763] and wall core (331908) (Figure 21). Due to the limited amount of visible remains further interpretation was not possible.

6.1.6.2.2 Roundhouse Group #331838 (SH 35130 92633)

Roundhouse group #331838 was situated partially in the northern baulk of the site on the flat area at the base of the valley. This area of O5 South is prone to flooding and efforts appear to have been made at all the structures in this area to raise the houses above the flood zone and reinforce the ground (Plate 14).

A clay layer (332269) sits on directly on the natural underlying dark brown silty clay organic layer (332268) which spread beyond the limits of the extant roundhouse remains. These layers appear to be unrelated to the roundhouse remains though this is hard to prove definitively given how little of the structure was within the excavation area. A sub-circular pit [331985] measuring 1m in length, 0.9m in length and 0.4m deep cut organic layer (332268). This pit contained one single fill, a grey brown clay which was probably a deliberate backfill before the construction of the roundhouse. This pit is cut by drain [331984], a v-shaped linear with a length of 1.8m, width of 0.4m and depth of 0.3m with stone lining {331983}. Metalled surface (331917) measured 2.4m in length, 0.58 in width and between 0.14m and 0.22m in height within the excavation area. It consisted of a large spread of sub-oval and flat stones and sits directly on the natural.

Both the metalled surface and the drain were covered by stone platform/floor {331919} (Figure 22, Plate 15 & 16). The stone platform was created using large flat stones and measured 2.18m in length, 2m width and between 0.1 and 0.16m in height. There were no

signs of the stones being worked but they were likely selected as a suitable floor surface as they were naturally level and flat. The stones between the metalled surface and the platform displayed wear so this may have been a threshold. The stones of the floor also capped drain [331983] mirroring the arrangement found in other roundhouses on O5 South particularly roundhouse group #330577 in area A.

6.1.6.2.3 Roundhouse Group #331741 (SH 35146 92641)

Roundhouse Group #331741 consisted of the remains of a possible roundhouse that extended beyond the northern limit of excavation. A metalled surface (332928) was evident over the area surrounding and under the roundhouse remains very similar and possibly contemporary with the metalled surface noted in roundhouse group #331838 to the south west. Overlying the metalled surface were a series of rubble layers (332379), (331743), (331730) and (331742) used as levelling layers prior to the roundhouse construction, probably to raise the structure further from the ground surface as it is liable to flooding. Cut into the levelling layers are seven postholes: [332105], [332108], [332311], [332366], [332312] and [332313] that were interpreted as former roof supports.

The only visible remains of a wall {331728} measured 3.2m by 1.2m and survived to a height of 0.67m (Figure 23, Plate 17 & 18). It was constructed from large stone fragments irregularly coursed and had a rubble core. Stone lined and capped drain {331737} was cut into rubble layer (331742) and ran in SW – NE towards the wall remains though any relationship between the drain and walls was not apparent due to the lack of extant remains (Plate 19 & 20).

6.1.7 Area D

6.1.7.1 Introduction

Area D was located at the base of the valley in an area prone to flooding adjacent to the northern most baulk of the excavation area. Remains in the area consist of a possible Bronze Age roundhouse and an Iron Age roundhouse, which had been truncated through the centre by evaluation trench 373 (Figure 24). The only features noted within this trench in the evaluation report were pits and postholes near roundhouse #20984 in area F.

6.1.7.2 Bronze Age

6.1.7.2.1 Roundhouse Group #333333 (SH 35146 92620)

A possible Bronze Age roundhouse, group #333333, was located in the southern part of area D. This group included a western drip gully #333482 (Plate 21), an eastern drip gully #333507, and several pits and postholes (#333608; Figure 25). The drip gullies defined an internal diameter of c.8m with a large gap between their termini on the north side of the roundhouse.

The majority of the features were cut into colluvium layers ((333671), (333596) and (333670)), with only two features, posthole [333515] and pit [333511], cut directly into the natural substrate (330565). Posthole [333515] was sub-circular in plan, 0.70m by 0.76m and 0.16m deep. Pit [333511] was sub-oval in plan and contained three fills. Fill (333310) from pit [333511] returned a Neolithic date of 3640 – 3370 cal BC (context (333310), Beta-553503; Figure 06 – number 10).

The above features were cut by the later drip gullies of the roundhouse. The east drip gully (#333507) was curvilinear in plan, c.4.5m in length, 0.4m width, 0.10m deep with a ushaped base and cut posthole [333515]. The west drip gully (#333508) was curvilinear in plan, c.8m in length, 0.4m width, 0.13m deep with a u-shaped base and cut pit [333511].

There were a number of pits, postholes and stake holes located adjacent to the drip gullies. The largest of these pits [333587] and [333589] were located almost central to the area defined by the drip gullies. Pit [333587] is the earliest of the pits, was circular in plan, with a diameter of 2.25m and contained one single fill. Pit [333589] cut pit [333587], was sub-oval in plan, 1.70m by 1.10m and 0.30m deep. Neither pit contained any charcoal meaning they do not represent the remains of an internal hearth. They were cut into the same colluvial deposits as the drip gullies suggesting they were contemporaneous.

All of these features were covered by a later hillwash deposit (330597). A later phase of features which will be discussed below in the Romano British section.

6.1.7.3 Iron Age

6.1.7.3.1 Roundhouse Group #331373 (SH 35140 92629)

Group #331373 represented the remains of a possible Iron Age roundhouse situated to the north west of area D. This feature had been heavily truncated by evaluation trench 373 and no features were recorded in the trench in the area of the roundhouse.

The roundhouse had an approximate external diameter of 15m and internal diameter of 13m (Figure 26). The walls were constructed by excavating a construction cut [331755], which was then packed with sub-angular limestone rubble to provide a solid foundation for the walls. Wall {331756} was constructed from a series of large flat limestone blocks, was 0.7m wide and survived to a maximum height of 0.4m.

A compact clay floor (331754) was identified within the footprint of the roundhouse which consisted of a mid to light brown clay with a diameter of c.6m (Plate 22). There were a number of features cut into floor layer, including three internal gullies [332223], [332225] and [332433]. Gully [332223] was linear in plan, 0.48m by 0.4m, 0.32m deep and was mostly lost to evaluation trench 373 though there were the remnants of a stone lining the cut. Gully [332225] was linear in plan, c.4m in length, 0.48m width, 0.21m deep and was also truncated by the evaluation trench though evidence did remain for a stone lining. Gully [332433] measured 0.6m by 0.45m and was 0.38m deep.

A stone-lined linear feature [331759] was also identified, which followed the eastern and southern perimeter of the roundhouse wall; this was interpreted as another internal drain. This feature appeared to turn at its southernmost point and ran towards the wall structure {331756}, possibly exiting the structure at this location (although this was unclear from the extant archaeology). This arrangement would be consistent with other internal drains found elsewhere in O5 South (#20462 and #20774).

A series of circular features truncated floor surface (331754), three pits and one posthole. Posthole [331786] was sub-circular in plan, 0.21m by 0.23m, 0.45m deep and contained a number of packing stones. Pit [331788] was sub-circular in plan, 0.75m in length, 0.57 width and 0.28m deep. Pit [332194] was sub-circular in plan and measured 0.46m by 0.4m and

was 0.10m in depth. Large pit [332617] measured 1m by 0.9m and was 0.3m deep and appears to have been deliberately backfilled and levelled with stones. In plan these features did not appear to form an arrangement suggestive of supporting posts for a roofed structure.

The remaining feature associated with the roundhouse was a north-south orientated wall {331760}, which was clearly above and post-dated the roundhouse activity. The wall was curvilinear in plan, 4.8m in length, 0.82m wide and had a maximum height of 0.4m and possibly represented the remains of a later enclosure.

6.1.7.4 Romano British

6.1.7.4.1 Features Overlying Roundhouse Group #333333 (SH 35146 92620)

Overlying the Bronze Age roundhouse discussed above was a possible wall {333265} and two crude metalled surfaces (333264) and (333274). Wall {333265} was linear in plan, measured 3.65m in length, 0.4 in width and had a maximum height of one course, 0.3m. The metalled surfaces butted against this wall making them later features. (333264) was situated to the east of wall {333265}, covered a 5.6m by 1.8 area and was 0.15m deep. (333274) was situated to the west of wall {333265} and covered a 4.8m by 1.3m area. A possible Roman weight was recovered from metalled surface (333264) (Figure 27; Plate 23).

6.1.8 Area E

6.1.8.1 Introduction

Area E was located at the bottom of the slope to the immediate south of area B. This area contained a group of pits and two roundhouses dating to the Iron Age (Figure 28). The east of area E was partially truncated by evaluation trench 1301, which also truncated area J to the south. The trial trenching report (Wessex Archaeology, 2016, pg 63) records a stone deposit (130105) covering the northern most third of the trench that the report suggested was to stabilise waterlogged ground.

6.1.8.2 Iron Age

6.1.8.2.1 Pit Group #332920 (SH 35131 92605)

A group of intercutting pits, group #332920, were situated to the west of area E. Eleven pits in total were identified [332581], [332032], [332574], [332579], [332143], [332753], [332114], [332242], [332146], [332803] and [332699] (Figure 29). Four of the pits [332699], [332803], [332242] and [332753] were cut into alluvial deposit (331634) which was situated above the natural and below the hillwash layer.

Pit [332803] was circular in plan with a diameter of 1.38m and depth of 0.42. Pit [332699] was circular in plan measuring 0.7m in diameter and 0.45m deep. It is probable that these pits had relationships with the adjacent features but these were not recorded by the original excavators. Pit [332242] was sub-circular in plan, 1.18m in length, 1.2m wide and had a depth of 0.28m. [332242] was cut by pit [332114] which was oval in plan and measured 3.9m by 2.4m with a depth of 0.27m and by pit [332146] was sub-circular in plan, 1.86m by 1.56m and 0.27m deep. [332114] was in turn cut by pit [332143] which was sub-circular in plan with a diameter of 1.78m and depth of 0.34m. Pit [332143] also cut pit [332753], which was sub-rectangular in plan, measuring 1.37m in length, 0.58m width and 0.12m deep.

The remaining pits were cut into the hillwash layer suggesting they could be later features. Pit [332579] was sub-oval in plan, 2.75m by 1.6m and 0.4m deep and was cut by pit [332574]. [332574] was circular in plan, measured 3m in diameter and had a depth of 0.57m. This was a large flat bottomed pit that appear to have silted up before being partially backfilled before being the location of intense burning. A radiocarbon date was obtained from fill (332701) of pit [332574] (Figure 06 – number 13) which returned a date of 390 – 200 cal BC (Beta-553511). Pit [332581] was oval in plan, 1.3m by 0.9m and 0.21m deep and pit [332032] was sub-circular in plan, 2.12m in length, 1.3m wide and 0.15m deep.

6.1.8.2.2 Roundhouse Group #332430 (SH 35142 92608)

A proposed roundhouse (#332430) was located to the east of Area E. An arcing stone internal drain [331387] with partial stone capping and lining still intact was cut into colluvium deposit (331386) at the southern side of the roundhouse (Figure 30, Plate 24). The drain was curvilinear in plan 15.8m in length, 0.41m wide and 0.34m deep. Three pits, [331449], [331589] and [331118] were interpreted as broadly contemporary with the drain. Pit [331449] was sub-oval in plan, 0.26m in length, 0.71m wide and 0.14m in depth. Pit [331589] was circular in plan, 0.10m in diameter and 0.15m deep. Pit [331118] was sub-circular in plan, 0.52m in length, 0.34m wide, 0.22m deep and contained two fills, one with abundant charcoal. A radiocarbon date from the fill of drain [331387] returned an Iron Age date of 370 – 180 cal BC (context (331388), Beta-554148; Figure 06 – number 18), which was similar to that returned for the nearby pit group (#332920 discussed above) suggesting they were broadly contemporary.

A separate drain (contexts [331954] = [332354] = [332412], (Plate 25)) ran downslope on a southeast to northwest orientation across the flatter interior of the roundhouse, before turning west. This drain was approximately 5m in length, 0.28m wide and 0.09m deep. A stone lined hearth [331689] was located at the centre of the roundhouse and appeared to be contemporary with this drain. The hearth has an approximate diameter of 0.92m, depth of 0.21m and had a clay and stone lining.

Traces of a possible external wall were identified on the western side of drain [331387], with two earthfast orthostats inserted through the fill of drain [331387], forming a possible narrow doorway {331469} (Plate 26). As the stones are inserted through the fill of drain [331387] the features must be presumed to represent two different phases in the life of the roundhouse, the drain an earlier feature that has gone out of use before the doorway was constructed. No further traces of the roundhouse wall were identified, suggesting it had been robbed out in its entirety.

Two features forming separate arcs in the northern part of the roundhouse were interpreted as the remains of post-built structures that predated the phase of occupation represented by drains. One set included a group of smaller postholes ([332537], [332539], [332562], [332507], [332917], [331011]), a gully [332478] and stakeholes ([332595] and [332597]) (Figure 31). The second set consisted of several postholes ([332486], [332488], [331142], [331144] [330768], [331177], [331028], [332985], [331957], [332303], [333059]) (Figure 30).

6.1.8.2.3 Possible Roundhouse wall {331235} (SH 35137 92611)

The remains of a part of a wall of a potential roundhouse was identified to the immediate north west of roundhouse #332430. The potential roundhouse was very poorly preserved with only a small section of a stone surface {331235} and wall {331637} remaining (Figure 32).

{331235} represented a stone surface 3.8m in length, 1.6m in width and 0.30m deep constructed using local schist stone. The surface abutted wall {331637} which was curvilinear in plan, 1.6m long, 0.6m wide and built using dry stone construction techniques. Only a single course of this wall remained extant with large inner and outer facing stones sealing a rubble core (Plate 27). Although most of the wall was missing, the curvilinear shape suggests it could have originally formed a roundhouse wall that was robbed out in order to construct other buildings in the adjacent area (Plate 28).

Two postholes [331957] and [332303] were identified which could represent evidence for timber roof over the structure (Plate 29). It appears that the packing stones of posthole [331957] were incorporated into the stone surface suggesting the posthole was already in situ before the construction of the surface.

Nearby pit group #332920 seemed to respect the extrapolated circumference of this roundhouse; whilst the postulated plan of the roundhouse would have crossed the footprint of roundhouse group #332430. Due to the limited archaeological evidence from structure [331235], it was not clear whether this was earlier or later than roundhouse group #332430.

6.1.9 Area F

6.1.9.1 Introduction

Area F is located almost centrally to the northern most baulk of the excavation area. This area contains the remains of a Bronze Age burnt mound onto which an Iron Age roundhouse has been constructed (Figure 33).

6.1.9.2 Bronze Age

6.1.9.2.1 Burnt Mound (30307) (SH 35160 92640)

A large burnt mound (30307) covered an 8m by 8m area, was 0.2m in depth, and sealed a number of features; three pits, a stone lined pit, two postholes and a trough (Figure 34). These features were all stratigraphically above a thin mid orangey brown silt layer (333167) that sat on the natural. Pit [333247] was sub-oval in plan, 0.51m in length, 0.26 wide, and 0.12m deep and contained one single fill. This was cut by small pit/posthole [333517], which was sub-circular in plan, 0.19m by 0.16m and 0.10m deep. Pit [333251] was sub-circular in plan with a diameter of 0.35m and depth of 0.10m. Stone lined pit sub-oval in plan, 1.3m by 0.9m and 0.25m deep. It was stone lined on the base with pieces of local schist stone {333338}. Posthole [333253] was sub-circular in plan, 0.37m in length, 0.33m width and 0.14m deep. Posthole [333179] was sub-circular in plan, 0.45m by 0.4m and 0.2m deep. Postholes [333253], [333179] and pit/posthole [333517] were located around trough [333241] suggesting a possible structure associated with the trough.

Trough [333241] was sub-rectangular in plan, 2.8m in length, 1.55m wide and was 0.43m deep (Plate 30). The sides were almost vertical and there was no evidence for a clay lining. It is possible that the trough could have been wood lined when in use but there is no evidence for this remaining. The trough contained 3 fills (333329), (333328) and (333327). (333329) was the charcoal rich basal fill of the trough, which was 0.11m in depth (Figure 35; Plate 31). A radiocarbon date from (333329) <320628> returned a Late Bronze Age date of 1090 – 900 BC (Beta-553504; Figure 06 – number 5).

6.1.9.3 Iron Age

6.1.9.3.1 Roundhouse #20984 (SH 35160 92640)

The burnt mound material (30307) appears to have been levelled and used to create a platform for the roundhouse (Plate 32). A metalled surface (330842) almost entirely circling the roundhouse was possibly also an attempt to further stabilise the surrounding area (Figure 36).

The metalled surface continued northeast into roundhouse #331249 in area H, and southwest (as contexts 332927 and 332928). A number of postholes ([332778], [332313], [332312], [332500], [332926], [332278], [332558], [332408], [332327], [333023], [332869]) were cut into the metalled surface, which possibly represented the remains of a 4 or 6 post granary structure and other associated features (Figure 37). The postholes were all circular or sub-circular in plan and were between 0.56m and 1.4m in diameter and an average depth of 0.45m. The majority contained large schist packing stones placed vertically against the cut.

Another layer of metalling (333163) made from smaller pebbles was also identified beneath the main metaling deposit (Plate 33) which is probably a foundation layer for metalled surface (330842). The walls of the roundhouse, {331409} and {30324}, were constructed on top of metalled surface (330842) (Figure 38; Plate 34).

The walls of the roundhouse were curvilinear in plan and constructed with internal {30324} and external {331409} coursed facing filled with a rubble core (331477). The external facing is far more complete than the internal facing though they both appear to have been dry stone construction using schist and limestone blocks and slabs. The outer facing was extant to a maximum height of two courses or 0.33m and the walls had a width of c.1m. The position of the walls give the roundhouse an external diameter of c.9.5m and internal of c.8.5m.

The roundhouse had an internal drainage system comprising two main gullies: stone lined gully [331150] and gully [331160]. Stone lined gully [331150] was curvilinear in plan and c.20m in length, with an average width of 0.26m and average depth of 0.15m (Plate 35 & 36). The gully fluctuated between being v-shaped and u-shaped along it length and was lined and capped by medium sized stone and slate pieces, the capping stones generally larger than the lining. Gully [331160] was curvilinear in plan, approximately 6m in length, 0.35m wide and an average depth of 0.17m. Both gullies get broader and deeper towards the western side of the roundhouse suggesting this is where the water was being channelled out of the roundhouse, possibly through an entrance as with other roundhouses on O5 South (#330577, #20774, #20462) (Figure 38). They were both cut into burnt mound material (30307), however, when looking at the gullies in their entirety the stone capped gully appears to be cut from higher up in the stratigraphic sequence suggesting that they were not contemporary and several alterations had taken place between the construction of the gullies (Figure 39 & 40). A radiocarbon date was sought from fill (30362) of stone lined gully

[30361] which returned a date of 1680 - 1930 cal AD which was obviously not a date associated with the use of the feature (Beta-553509; Figure 06 - number 11).

There were a number of postholes within the roundhouse walls that could be evidence of a timber roof however they do not form a full circle and are concentrated in the south quadrant and interspersed with a number of pits. The postholes had an average diameter of 0.35m and depth of 0.4m and the majority contained at least one possible packing stone and were cut into burnt mound material (30307).

A possible hearth [330897] is recorded as being located in the NW quadrant of the roundhouse and is the only feature interpreted as a hearth within the roundhouse. The hearth was sub-circular in plan, 0.74m by 0.48m with a depth of 0.2m and contained a charcoal rich fill (30528). Unfortunately, the records for this feature are compromised and the exact location of this feature is currently unknown.

Pit [331311], the fill of which (331312) contained a late Iron Age La Tène III type brooch or Nauheim derivative type (SF320039) was located in the north east quadrant of the roundhouse. The pit was sub-circular in plan, 1m by 0.93m and 0.44m deep. Stone lined pit [330950] was cut into this earlier pit and measured 0.54m by 0.5m and was 0.31m deep. It was lined with stone and slate and was capped by one large single stone. The location of this pit relatively central to the roundhouse and the stone lining suggests a storage function for this feature.

Overlying the roundhouse were two abandonment layers (30035) and (30028). Artefacts recovered from these layers include a waisted stone probably used for metal working from layer (30028), spindle whorls from layers (30028) and (30035) and a primary flint flake also from (30035).

6.1.10 Area G

6.1.10.1 Introduction

Area G contains features dating to the Iron Age and Romano British period and is situated on the slope of the hill relatively central to O5 South. This area contains the remains of two roundhouses, a well, a wall and a capped drain (Figure 41). There are also some earlier undated features located underneath one of the roundhouses. Until a broader programme of radiocarbon dating is undertaken these will be tentatively dated as bronze age.

6.1.10.2 Bronze Age

6.1.10.2.1 Features under roundhouse #20871 (SH 35158 92617)

To the west of Area G there are a number of intercutting pits and a possible hearth (Figure 42). The earliest pit in the sequence is [333139] which was sub oval in plan with a length of 1.96m by 1.52m with a depth of 0.21m. It contained two fills, an orange sand basal fill covered by a dark grey sandy fill and appeared to be capped by medium sized stones. Pit [333139] was cut by pit [333005], which was sub-circular in plan, contained two fills and was also capped by stones. Pit [333005] was cut by pit [333453], which was circular in plan and contained one single fill. These pits were stratigraphically below a charcoal rich layer of dark blackish brown sandy silt, which was cut by later pit [333002], which was circular in plan with a diameter of 1.2m, depth of 0.44m and contained two fills.

The earliest pit [333139] was also cut by pit [333285], which was sub-circular in plan, 2m by 1.94m with a depth of 0.2m. Hearth [332954] cut the upper fill of pit [333285]. Hearth [332954] was circular in plan, 1.37m by 1.2m with a depth of 0.11m. It was lined by a grey clay (332955) which contained a number of stones that measured between 0.05m and 0.11m in length. Above the clay lining was a charcoal rich fill (332956) which had a depth of 0.08m. The charcoal rich fill was sealed beneath the uppermost red clay fill (332957). Two more discrete pits were located close by. Pit [333422] was circular in plan, contained three fills, and had stone lining around the edge (Plate 37). Pit [332860] was sub-circular in plan, had a diameter of 1.1m, depth of 0.25m and contained one single fill.

All of the above features were below a large colluvium layer (332882). This mid-yellowish brown sandy silt covered a large area, at least 10m in length and width and was 0.17m deep. The layer represents a period of abandonment within the area.

Six pits were cut into the colluvium (332882), a group of four and a group of two. The earliest in the group of four was pit [332543] which was circular in plan with a diameter of 1m and depth of 0.2m containing one single fill. This pit was cut by [332541] a large, relatively shallow pit with a diameter of 2m and depth of 0.35m also containing one single fill. Large pit [332261] cuts pit [332541]; it measured 1.8m by 2m with a depth of 0.95m and contained three fills. This was then cut by pit [332256], a sub-circular pit 0.76m in length, 1.6m width and 0.45m deep. The pit had two fills and large flat sub angular stones at the base.

The earliest in the group of two was pit [332330], which had a length of 1.3m, width of 1m and depth of 0.2m. It had two fills, (332331) a medium greyish brown silty clay containing a number of large stones and (332332) a medium brownish grey sandy silt. The pit was truncated by later pit [332191]. [332191] was a large pit, 2.65m in length, 1.4m width and 0.65m deep containing a compact gravelly fill (332192) and a medium brown silty clay (332193). These six pits are all stratigraphically earlier that layer (330996), a dark greyish brown sandy clay that represents another period of abandonment.

Due the period of abandonment represented by colluvium layer (332882) it is unclear whether the later series of six pits dates to the Bronze Age or are later features. They are provided with a terminus ante quem by the Romano British roundhouse situated above them however, it will require a programme of radiocarbon dating to definitively assign these features to a time period.

6.1.10.3 Iron Age

6.1.10.3.1 Well Group #332814 (SH 35169 92633)

Group #332814 represented a large well {332554} with cantilevered steps. The construction cut for the well [30284] had a maximum diameter of 2.1m at the top of the structure, and was 2.8m deep. The cut was lined with a thick clay deposit (333683) and large slabs of schist (Figure 43; Plate 38). An extra-long piece of schist was used as a support for the lowest of the cantilevered steps suggesting the steps were integral to the design (Figure 44; Plate 39). There were four steps in total, the bottom three were thinner slabs of schist that protruded into the well and were weighed down by large stones, on top of which the next step was placed. The top step was a larger stone that acted as a step and a weight for the slab below. The uppermost steps were sat on a levelling layer (331989).

After the lining of the well and construction of the steps the circular stone structure at the top of the well was added. This was built from smaller schist pieces that wrapped around the stone steps and were therefore the last part of the structure to be built. It was a dry stone

construction but a clay lining deposit (333683) was present behind the upper stones highlighting the need to keep the feature watertight (Plate 40 & 41). Three fills were identified within the well; an organic-rich primary fill (332355), which contained a circular shaped peg with clear tool marks (SF320076), followed by two phases of backfill, (30285) and (30301), deposited after the well was no longer required or the land was repurposed.

6.1.10.3.2 Enclosure Groups #30491 and #331848 (SH 35173 92621)

Situated to the south east of well #332814 is enclosure group #30491 which consists of multi-phase rubbish pits with a later wall {30379} constructed above (Figure 45).

The earliest features stratigraphically are a series of discrete pits. Pits [30333] and [30484] were only recorded in section as they had been heavily truncated by the construction cut for later wall {30379} however both pits had a depth of at least 0.35m and were cut into the natural. The remaining six pits in this group were all cut into layer (330755), a mid-greyish brown silty sand with frequent cobble inclusions, possibly representing a rough metalled surface.

Of the ten pits cut into metalled surface (330755), four were truncated by later wall {30379}. Pit [331913] was circular in plan with a diameter of 0.72m and contained one single fill. Pit [331488] was circular in plan with a diameter of 0.69m, depth of 0.28m and contained one single fill. Pit [331505] was sub-circular in plan, 0.57m in length, 0.40m width and 0.11m deep. Pit [331684] was oval in plan, 0.75m by 0.70m and 0.21m deep. A radiocarbon date was obtained from fill (331683) of pit [331684], which returned a date of 190–0, cal BC (Beta-554150; Figure 06 – number 8).

The remaining six pits were cut into metalled surface (330755), but not cut by wall {30379}. Pit [331960] was sub-circular in plan, 0.48m deep and contained one single fill. Pit [331778] was circular in plan with a diameter of 1m and depth of 0.4m. Pit [331638] was circular in plan, 0.70m in diameter and 0.10m deep and contained one single fill. Pit [331640] was also circular in plan with a diameter of 0.8m and depth of 0.14m. Pit [331489] had a diameter of 0.90m, depth of 0.11m and pit [331642] was 1.20m in length, 0.14m width and 0.24m deep. A spindle whorl (SF320074) was recovered from fill (331643) of pit [331642].

Wall {30379} was constructed in a very similar way to wall {20703} from group #20704 (see area I) with schist orthostats placed within a construction cut [30335] as revetment then the wall built up against the orthostats (Plate 42). The wall was linear in plan and measured at least 8.2m in length, 1.3m width with a maximum height of 0.4m. At most three courses

remain of the wall facing {30379}, which was built from large local schist stone. The wall contains a rubble core consisting of various sizes of stone contained in a mid greyish brown sandy silt matrix. Whilst the radiocarbon date obtained from pit [331684] does not directly date {30379}, it does give a terminus post quem for the wall. It is possible that wall {30379} continued to run SE-NW and eventually ended at well #332814. The remains of the wall were not well preserved in this area and the records are somewhat confused and need further analysis however, it appears that [30456] for wall {30379} and cut [332020] with rubble fill (332021) represent the same physical feature. [332020] cuts [30284] the construction cut for the well placing the wall stratigraphically later than the well though it is probably relatively contemporary.

The pits were covered by a fine silt layer (331188) marking a period of disuse. This layer abutted wall $\{30379\}$ indicating the wall was already standing by this time. A radiocarbon date was obtained from this layer that returned a date of 20-220 cal AD (Beta-554151; Figure 06- number 16). When this date is considered in conjunction with the date returned from fill (331683) of pit [331684] (Beta-554150; 190-0 cal BC), it was clear that wall $\{30379\}$ was constructed between these two dates and is most likely Iron Age as layer (331188) will have built up over a prolonged period of time.

Approximately 5m to the south west of wall {30379} was stone-capped drain {330853} (Plate 43). The drain was 17.4m in length and 1m wide and situated within construction cut [330906]. The stone capping of drain {330853} was constructed using large stones selected to fit into one another and comfortably cover the drain. At various points, the construction cut [330906] for the drain was supplemented with large stones on one or both sides seemingly to help support the capstone and in some areas, it was clear that these had slipped. A piece of Black Burnished Ware was recovered from alluvial layer (330907) into which drain {330853} was cut.

Ditch [330904] ran roughly parallel to {330853} c.3metres to the southwest. [330904] was 8.65m in length and 0.51m wide with a depth of 0.16m. This ditch ran into a second stone-capped drain {331317}, which was 5m in length, 0.7m wide and had a similar construction to {330853}. {331317} ran SSW-NNE downhill towards {330853}, but any relationship between them had been lost.

Wall {330756} ran parallel to wall {30379} c.5m to the south west and was situated adjacent to stone capped drain {330853}. The construction cut [330908] for wall {330756} cut through light greyish yellow gravely silt layer (330753) which overlay the stone capped drain

{330853} which was probably a deliberate backfill event (Figure 46). {330756} was 15m in length, 0.5m width, had a maximum height of 0.17m and was constructed from local schist stone with no visible coursing still extant. Disuse layer (331188) also abutted this structure but not to the same extent as {30379}. The radiocarbon date for layer (331188) should therefore be considered a terminus ante quem for wall {330756} as well as wall {30379}. Another wall structure [331085] seems to have been an attempt to add on a return wall at the south end of wall {30379} heading towards the end of structure {330756}. {331085} was constructed from local schist stone as facing with a earth and stone core and survived to a maximum of 3 courses high. Wall {331085} appears to be roughly built in comparison to the earlier walls and was laid against wall {30379} and ended abruptly c.0.5m before {330756}.

[331355], the construction cut for wall {331085} was cut into disuse layer (331188) providing a terminus post quem for the wall of 20 – 220 cal AD (Beta-554151; Figure 06 – number 16).

6.1.10.4 Romano British

6.1.10.4.1 Roundhouse Group #20774 (SH 35180 92627)

Roundhouse Group #20774 represented the remains of a roundhouse situated adjacent to Group #331848. The earliest features within roundhouse #20774 are four pits, a gully and a stone capped drainage gully all cut into the natural and beneath a layer of redeposited natural (30234) (Figure 47; Plate 44). Shallow pit [330737] was sub-circular in plan, 1m in length, 0.6m in width with a depth of 0.05m. Pit [330770] was sub-circular in plan, 0.52m length, 0.25 width and had a depth of 0.13m. It contained a single charcoal rich fill and burnt stones suggesting use as a fire pit. Pit [330739] measured 0.5m in length, 0.4m width with a depth of 0.15m and pit [330741] had a length of 0.25m, width of 0.2m and depth of 0.10m. Gully [330743] is located in the probable entrance to the roundhouse and was 1.1m in length, 0.42 wide with a depth of 0.10m. Drainage gully with stone capping {30477} was located under one of the walls, which suggests there was an earlier structure before the extant walls (Plate 45).

A stone capped gully and three pits were cut into redeposited layer (30234). Stone capped gully {30398} was curvilinear in plan and formed a question mark shape running out of the probable roundhouse entrance (Plate 46). Cut [30055] for the gully was v-shaped and measured 8m in length, 0.32m wide and 0.23 deep. [30055] cut pit [30003], which was circular in plan with a diameter of 0.8m and depth of 0.16m. The final two pits located under redeposited natural (30234) were pit [30382], which measured 0.35m by 0.8m and was cut by pit [30465], which measured 0.22m by 0.2m. Another layer of redeposited natural (20764) sealed these features.

There were two additional gullies within the roundhouse, [20847] and [20849]; the positioning of [20849] was problematic as it appeared in plan to be situated where a wall should have been if a full circle was extrapolated from the remaining walls {20824} and {30476} (Plate 47). Gully [20847] was curvilinear in plan, measured 1.65 by 0.6m and had a depth of 0.17m. Gully [20849] was curvilinear in plan with a length of 5m, width of 0.5m and maximum depth of 0.3m.

The roundhouse had walls {20824} and {30476} on the south (uphill) side of the roundhouse; no remaining structures were visible on the northern (downhill) side (Figure 47). In total the extant walls were 8.8m in length, between 0.45 and 0.8m width and survived to a maximum height of 0.5m. The construction cut [30311] for the walling was cut into redeposited natural layer (20764) and had two termini suggesting that a more substantial structure was needed on the southern side of the roundhouse, possibly to control and channel water flow away from the structure.

A water management gully [20796] was situated around the outside of the roundhouse and was adjacent to another gully slightly to the southeast [30191]. These gullies appeared to merge in the area of enclosure group #331848 to the south west. Water management gully [20796] and gully [30191] cut wall {30379} from the enclosure group #331848.

A large number of pits and postholes were investigated within the interior of the roundhouse however, a definitive ring of postholes to support a roofed structure is hard to discern with confidence. It is likely that not all the features belong to the same phase of construction but without dating evidence, it is hard to date these largely discrete features. The features in the south quadrant were cut into a re-deposited natural layer (30234) which would suggest they belong to a later phase of construction.

Two cut features within the roundhouse were interpreted as hearths, [20836] and [30231]. Hearth [20836] was sub-circular in plan and measured 0.8m by 0.6m and was 0.2m deep. It contained one fill (20837), a dark reddish brown sandy clay with moderate charcoal and burnt clay inclusions. Hearth [30231] had a diameter of 1m and depth of 0.07m. It contained one fill (30068), a charcoal rich dark blackish brown sandy clay. A radiocarbon date was obtained from fill (30068) of hearth [30231] which returned a date of 80 – 250 cal AD (Beta-553510; Figure 06 – number 17).

6.1.10.4.2 Roundhouse Group #20871 (SH 35158 92617)

Roundhouse Group #20871 consisted of a ring gully 11.50m in diameter, circular stone capped internal drain and was situated to the west of area G (Plate 48). The roundhouse was located on the valley slope; the northern half of the roundhouse was on an artificial platform (330996) which covered a large area and was up to 0.07 m thick. This created a level platform off the side of the slope onto which the roundhouse was built. The platform overlay the Bronze Age features discussed earlier in the Bronze Age section of Area G.

Terrace cut [331680] lowered the ground level under the southern section of the roundhouse abd was then filled with redeposited material (332253), (331068), (330901) and (331681) in order to create a level platform in conjunction with artificial platform (330996) to the north. External to the roundhouse on the southern side were two water management gullies [331773] and [330832] (Plate 49 & 50). Gully [331773] was curvilinear in plan, 7m by 0.5m and 0.28m deep and gully [330832] was curvilinear in plan, 5m by 0.26m and 0.15m deep (Figure 49). These features channelled water around and away from the roundhouse. As with roundhouse #20774 these features were situated on the southern (uphill) side of the roundhouse.

External drip gully [330834] was curvilinear in plan and at least 5m in length, 0.83m width and 0.10m deep. Situated adjacent to drip gully [330834] was a stone capped drain {331317} already discussed above in conjunction with the stone capped drains in #331848 (Figure 49). No direct relationship between these features was found even though they are very close to each other, which could suggest they were relatively contemporary and were in use at the same time.

There were a number of internal features that could be pits or postholes but no circular ring of postholes could be discerned due to disturbance during the abandonment phase and later (Figure 50, 51 & 52). Cut [331219] was the only feature found within the interior of roundhouse that appeared to be a posthole with packing stones though it is possible that some of the pits were also actually postholes.

A hearth [331951] was situated centrally in the roundhouse very close to stone lined pit {332015} (Figure 48). Hearth [331951] was sub-circular in plan and contained two fills, (331952) a dark reddish brown charcoal rich sandy clay and (331953), a light yellowish brown sandy silt. Fill (331952) returned a radiocarbon date of 60 - 230 cal AD (Beta-553508; Figure 06 – number 9). Stone lined pit {332015} was 0.55m by 0.31m and 0.28m deep and had large flat stones surrounding the cut creating a circular outline.

6.1.11 Area H

6.1.11.1 Introduction

Area H is located in the northeast corner of O5 South, adjacent to the northern most baulk section, at the bottom of the hill slope in an area prone to flooding. The area contains two roundhouses, possible granaries and two wells all currently thought to be Iron Age in date (Figure 53).

6.1.11.2 Iron Age

6.1.11.2.1 Roundhouse Group #331249 (SH 35171 92653)

Roundhouse Group #331249 was situated to the west of area H and extended beyond the northern limit of excavation (Plate 51).

Foundation layer (331731) for the roundhouse sealed two pits, [332970] and [332968], and a posthole [332972], which predated the roundhouse. There were a number of postholes found within the roundhouse structure: [331609], [332423], [331770], [332844], [332842], [332825], [332464], [332631], [332633] and [332657]. These were cut into foundation layer (331731) which the roundhouse was built (Figure 54). A chert thumbnail scraper was found in (332658) the fill of posthole [332657].

A yellow clay-rich layer (331328) found in patches covering an area of 3m by 6m across the centre of the roundhouse, was potentially the remains of a floor layer that had a maximum depth of 0.10m. This sealed a light orange brown silty clay layer (331437) that possibly represented an earlier occupation layer measuring 5.6m by 3.4m. A whetstone/grinding stone was recovered from this layer. An earlier possible occupation deposit (331460), a mid brown grey silty clay measuring 2.5m by 1.5m, lay stratigraphically below (331437) (Figure 55 & 56).

An internal gully (group #331998) was sealed by (331437) and cut through (331460). It was linear in plan, approximately 5m in length, 0.28m wide and 0.16m deep. The fill contained a number of flat stones representing the remains of a possible stone lining.

The roundhouse walls were not well preserved but partial remains were noted on the south west and north eastern sides of the roundhouse. Wall {332567} on the south western side of the roundhouse was much better preserved than {332570} on the north eastern side (Figure 54 & Plate 52). Wall {332567} was curvilinear in plan, 7.26m in length, 1.2m wide and had a

maximum height of 0.53m. The inner facing of the wall was constructed from large boulders and the outer facing from smaller thinner stones with a rubble core between the facings. Internal gully #331998 exited the roundhouse through a possible entrance located by the southeast facing baulk of O5 South, indicated by a possible threshold stone at the end of structure {332567} (Plate 53).

Some potentially modern features were identified that truncated the round house most notably, an animal burial pit [331533]. A pebble drain, similar to a French drain (group #332684), was identified outside the roundhouse. A robber trench, group #332685, removing the drain side stones and outer skin of the roundhouse wall {332570}, subsequently truncated the roundhouse.

A metalled surface (331929) extended between roundhouse #331249 and roundhouse #20984 which was possibly equivalent to (330842) from that group (See #20984, Area F). This could possibly represent a trackaway between the two structures.

6.1.11.2.2 Well Group #333678 (SH 35187 92661)

Group #333678 was a large well originally identified in Headland Archaeology evaluation trench #2044 (Plate 54 & 55).

The well was partially excavated in plan by hand to a depth of c.1m, following this the unsecure structural stones at the top were removed by machine and the well was further machine excavated to a depth of c.2.6m at which point water ingress and lack of stability made further excavation unfeasible.

Construction cut [331009] for the well was seen to flare out toward the top to an approximate diameter of 4m before narrowing at lower levels to a shafted construction with a diameter of c.2.5m (Figure 57). The well was constructed from large schist stones {331006} arranged using drystone construction techniques with some of the stones exceeding 1m in size, at least 7 courses of these stones survived. The well contained three similar organic rich fills (331007), (333652) and (333653). Unlike the other wells on site, this feature did not have large orthostats lining the cut of the well however the depth of the feature and constant flooding points to its use as a well not a storage pit.

A sunken trackway structure [333564] filled with a cobble (332460) was linear in plan, 4m in length, 2.4m wide and led towards the well from the west. This feature continued under the

northern baulk of the excavation area so the dimensions represent part of a trackway that is probably much larger.

6.1.11.2.3 Roundhouse Group #333568 (SH 35181 92659)

Group #333568 represented the remains of an Iron Age roundhouse that was heavily truncated by later archaeological features and evaluation trench 2044 (Plate 56 & 57). Roundhouse #333568 truncates well #333678 discussed above.

The extant roundhouse wall {331075} had three surviving courses and a shallow foundation cut [331200] (Figure 57). {331075} was curvilinear in plan, 3.2m in length, 1m wide and had a maximum height of 0.4m. It was constructed using local schist stone in courses using dry stone construction techniques. The inner facing was much better preserved than the outer and there was evidence for a rubble core. There appeared to be only one main floor surface (333258), which measured 6m by 4m and up to 0.2m deep, composed of re-deposited glacial clay for levelling.

At the centre of roundhouse there was a large hearth feature (group #333498) with related flue and oven. The hearth [333298] measured 1.9m by 1.35m, 0.16m deep and cut through multiple postholes/stakeholes, which may have been associated with an earlier smaller hearth. The hearth was subsequently modified with a recut for a flue, [333549], joining the hearth to stone oven [333108] (Figure 58). This large hearth suggested the building may have been used for industrial production. Surrounding the hearth were multiple postholes, with the larger postholes likely to have been roof supports and several smaller postholes and stakeholes related to the hearth (Figure 58).

Following the disuse of the roundhouse, there appeared to be a phase of deliberate demolition to the south of the structure, signified by deposits (332461) and burnt patch (332432) (Figure 57). Two radiocarbon dates were obtained from the roundhouse: one from (333544), fill of hearth [333298] (group #333498), and one from burnt patch (332432). Context (333544) returned a date of 410 – 230 cal BC and (332432) a date of 360 – 160 cal BC, both mid to Late Iron Age (Beta-553513 and Beta-554147 respectively; Figure 06 – numbers 7 and 3).

6.1.11.2.4 Well {331724} (SH 35181 92652)

Well {331724} was located to the south of roundhouses #331249 and #333568, and to the south west of well #333678. The well was circular in plan with a diameter of 1.8m and was constructed using schist stone in courses. Gully [332171] led into the well from the

northwest cutting the well at a depth of c.0.8m (Plate 57). [332171] was linear in plan, 7.52m in length, 0.75m wide, 0.58m deep and possibly channelled water into the well from a nearby watercourse. A definitive depth of this feature is currently unclear though it was probably at least 1m deep (Plate 59).

Like well #333678, well {331724} does not have the large orthostats associated with the other wells at O5 South. The presence of orthostats was outlined earlier (Section 6.1.4.1) as one of the criteria, in conjunction with depth of feature, used to differentiate between the wells and storage pits. However, the presence of gully [332171] running into {331724} point to use as a well as the most reasonable interpretation for this feature (Figure 57).

Associated contexts were metalled surfaces (331881) and (331882), which abutted the well, and {332024}, an open sided rectangular structure that had been constructed upon metalled surface (331881). {332024} was constructed from schist stone and only survived one course high and butted the well structure to the north, west and south. Gully [332171] cut the structure at its most northwesterly point. Gully [332171] and the construction cut for {331724} both truncate features associated with roundhouse #333568.

6.1.11.2.5 Posthole Group #333186 (SH 35189 92665)

A posthole group #333186 was situated c.6m north east of well group #333678. The arrangement in plan suggested a possible 4 or 6 post structure, commonly interpreted as granaries, though the southeast facing baulk of O5 South could have obscured further features that would aid in further understanding (Figure 59).

Cut No	Description	Length	Width	Diameter	Depth	Filled by
		(m)	(m)	(m)	(m)	
333114	Circular posthole			0.75	0.23	333115
333116	Re cut of [333114]					
333118	Circular posthole			0.75	0.38	333161
						333119
333120	Sub-circular posthole			0.95	0.5	333162
						333121
333131	Sub-circular posthole			0.9	0.4	333132
						333158
333133	Sub-circular posthole			1.2	0.5	333159
						333134

Cut No	Description	Length	Width	Diameter	Depth	Filled by
		(m)	(m)	(m)	(m)	
333142	Circular posthole			0.63	0.35	333160 333143
333225	Sub-circular posthole	0.85	0.7		0.42	333226

Table 5 – Group #333186 Features

6.1.12 Area I

6.1.12.1 Introduction

Area I is located to the east of O5 South on the hill slope and contains a possible Iron Age enclosure and well. A later Romano British roundhouse has been built into part of the possible enclosure (Figure 60).

6.1.12.2 Iron Age

6.1.12.2.1 Enclosure Group #20704 (SH 35195 92641)

Enclosure Group #20704 was a stone-built structure consisting of two main walls, {20703} and {20978}, with later structural additions, wall {20979}, {20980} and {30517} (Figure 61; Plate 60).

Wall {20703} was 12m in length, 0.7m width with a maximum height of 0.47m and ran SE to NW across area I. The wall was constructed using large schist orthostats as revetment before construction of the wall proper from sub angular pieces of schist (Plate 61). There was a packing/levelling layer of re-deposited natural (331912) on the internal side of the orthostats, possibly the material removed from construction cut [20935]. Deposit (20936) was then packed around the orthostats to fix them securely in place. Levelling layer (331708) was situated on top of the re-deposited natural layer (331912) to provide the foundation of wall [20703] (Figure 62; Plate 62 & 63). Large schist stones, irregularly coursed were placed on this foundation layer to form the wall. A similar construction technique using orthostats as revetment can been seen with wall {30379} in enclosure group #331848 (Area G).

Wall {20978} measured 5.13m in length, 1.m in width with a maximum height of 0.57m and ran NE to SW, perpendicular to wall {20703}. Wall {20978} was constructed from the same materials and using the same construction methods as wall {20703} and they appear to be keyed into each other suggesting a single construction event. The internal deposits (Figure 63) did not appear to run under wall {20703} but rather butted against it suggesting the internal area was levelled after the walls were built. The internal layers did continue under wall {20979} suggesting this was a later addition. Only one course remained of wall {20979} which ran NE to SW, perpendicular to wall {20703} and measured 2.8m in length and 0.88m across. A second dividing wall {20980}, also running NE-SW perpendicular to {20703} measured 2.54m in length and was 0.82m across. This wall was constructed using large

sub rounded stones, three courses of which were still extant which contrasted with the materials used in earlier walls {20703} and {20978}.

Wall {30517}, initially believed to be part of wall {20703}, was also a later addition to the enclosure and was constructed using similar materials to wall {20980}. It measured 3.4m in length, 0.8 width and had a maximum height of 0.45m. Removal of stone deposit (30490), which obscured the point where walls {20703}, {20980} and {30517} met, showed the construction cut for wall {30517} cutting the foundation layer of wall {20703}. Due to truncation by evaluation trench 374 and other later archaeological features, it was uncertain how far to the northwest this wall originally ran, however it is possible that wall structure [30111] to the northwest was also a continuation of this wall making a larger enclosure. Roundhouse group #30505, which was a later addition, was situated between wall structures [30517] and [20980] and will be discussed in the Romano British section of Area I below (Plate 64).

A number of pits and postholes were located within the interior and immediate exterior of this group. None of these features had any direct relationship with the structural elements within this group and it was not possible to determine whether they were contemporary with the structure or not (Figure 61). The largest of these features, pit [30220] cut through a possible occupation layer (30114); the pit contained three fills: (30158), (30304) and (30342). There were three gullies within the confines of the enclosure: [30460], originally thought to be a gully running parallel to or beneath wall structure [20703]; was later interpreted to be a natural channel which had collected a gravelly clay fill. A small find #320052 (flint) was recovered from the gravel filling this channel (30461). Gully [30459] continued under the enclosure walls suggesting it predated the enclosure. A sample from fill (332335) of Pit [332121], situated c.5m southeast of the enclosure was sent for radiocarbon dating and returned a date of 20 cal BC – 130 cal AD (Beta-553502; Figure 06 – number 6).

6.1.12.2.2 Well {330947} (SH 35188 92647)

Well {330947} was situated approximately 3.5m to the NW of the end of wall {30517}. It appears to have been constructed in a very similar way to well #30492, with large schist slabs lining the well cut (Plates 65 & 66) and smaller stones arranged in courses at the top of the well (Plates 67 & 68).

The construction cut for the well [332755] measured 1.6m by 1.64m and had a depth of 1.7m and was lined with a mid greyish brown silty clay (332717). Large schist stones were then placed vertically against the clay lining and smaller stones arranged in courses to form well

{330947}. The well contained three fills, (332722) a reddish brown silty clay, (332555) a dark brown silty clay and (330948) a mid greyish brown silty sand. During excavation the feature was continuously filling with water indicating that the cut reached below the natural water table for the area.

6.1.12.3 Romano British

6.1.12.3.1 Roundhouse Group #30505 (SH 35189 92643)

Roundhouse Group #30505 had been constructed at the north end of Iron Age enclosure group #20704. #30505 consisted of three walls, {20981}, {30147} and {331043}, which defined the outline of the roundhouse, as well as internal layers and features. Wall {20981} was originally identified on the eastern side of evaluation trench #374 and was probably the same wall as {30147} and {331043} that lay on the western side of the evaluation trench (Figure 64; Plate 69). The trench truncated the eastern edge of wall structure {30147}, the southern and northwestern edge of wall {20981}, and the northeastern edge of wall structure {330143}.

Wall {20981} was 4.8m in length, 0.4m width and had a maximum height of 0.3m. It was constructed from local schist stone and survived to a maximum of four courses. The wall had a single skin on the internal side as it was built against walls {30517} and {20980}, part of enclosure #20704. Levelling layers (30264), (30486), (30506) and (333561) were located inside the roundhouse and also below the curvilinear wall (Figure 65 & 66; Plate 70 & 71). Wall {30147} was 1.9m in length with a maximum height of 0.28m. It was also constructed from schist stone but only a single course survived. Wall {331043} was 2.5m by 0.36m and had a maximum height of 0.2m. This was the least well preserved of the 3 walls with barely a single course remaining in situ.

An investigative slot was placed through wall {20981} and {20980} to determine the relationship between groups #30505 and #20704. The northeast facing section of the slot showed the curvilinear wall {20981} abutting the large facing stones of wall {20980}. A construction cut [330964] for the curvilinear wall {20981} was only visible underneath the stones as a cut into levelling layer (30264). Between walls {20981}, {20980} and {30517} was a rubble layer (30515) which appeared to be tumble that filled the gap between the walls (Figure 64).

The roundhouse had an entrance facing downhill towards the west that was marked by two postholes. The first, [330874], measured 0.41m by 0.44m with a depth of 0.21 and was

located at the southwestern end of wall {330143}, and posthole [330876] which measured 0.43m by 0.28m, was 0.22m deep and was located at the north western end of wall {30147} (Figure 64 & 67). External to the roundhouse was a shallow curvilinear gully [330571] measuring 2m by 0.45m and 0.1m deep, which curved around and respected wall {30147}, terminating at the entrance to the roundhouse to the south east of posthole [330876] (Plate 72).

There were a number of features internal to the roundhouse. On the western side of evaluation trench 374, pit [30241] had a diameter of 2.64m and depth of 0.4m and was cut into the natural. It contained three fills and had a stone capping layer (30244) from which a waisted stone for metal working (SF20019) was recovered. The siting of pit [30241] in the probable entrance to the roundhouse suggested that it predated the structural elements in this group and the stone capping could be interpreted as a rough floor surface that postdated the pit.

Pit [30371] was heavily truncated by evaluation trench 374 but the extant remains measured 1m by 0.7m with a depth 0.44. Pit [30371] cut pit [30241] suggesting it may post date the roundhouse. Gully [30376] was located adjacent to both the pits and it appeared in plan that the gully [30376] was earlier than pit [30371] however, this relationship was lost in section due to the evaluation trench. It also appeared that [30371] was later than large stone capped pit [30241]. To the east of the evaluation trench layers a series of levelling layers (30264), (30486), (30506) and (333561) were located both under wall {20981} and internal to the structure. Pit [30245] with a diameter of 0.4m and depth of 0.09m was cut into layer (30264) and contained one charcoal rich fill (30246).

Two abandonment layers, (30148) and (30149) situated either side of the evaluation trench and likely the same layer, were noted covering the features in the roundhouse. Cut into layer (30149) was fire pit [30136], which measured 1m in length, 0.75m width and had a depth of 0.1m. The pit was lined with redeposited natural (30138) and filled with charcoal rich deposit (30137). Radiocarbon dating from this pit returned a date of 60-230 cal AD (Beta-553506; Figure 06 – number 4). Roman Pottery was recovered from layer (30149) along with half a base stone of quern. Over 30 hobnails were recovered from layer (30148), which were potentially from a Roman period shoe.

6.1.13 Area J

6.1.13.1 Introduction

Area J is characterised by structures dating to the Romano British period, including a roundhouse and rectangular structure and it situated at the top of the hill slope on the southern limit of excavation (Figure 68).

6.1.13.2 Iron Age

6.1.13.2.1 Pit and Posthole Group #30406 (SH 35137 92574)

Group #30406 incorporated a pit and posthole alignment in close proximity to roundhouse group #20462 and are probably the earliest features in area J (Figure 69). This group consisted of 16 postholes, 6 pits, stone tumble, and was cut by post-medieval ditch group #332691.

The earliest features in this group are a series of three large intercutting pits (Plate 73). The earliest pit in the sequence is [20484], which was sub-circular in plan and measured 1.6m by 1.8m with a depth of 0.35m. This pit contained one single fill (20485), a loose mid-grey brown silty clay. This was cut by pit [20486] that had a diameter of 1.9m and depth of 0.5m. Pit [20486] contained one single fill (20487), a mid-greyish/yellow brown silty clay. The final pit in the sequence was pit [20488], which measured 1.75m by 2.65m and had a depth of 0.5m. This pit contained 4 fills, (20489), (20490), (20518) and (20519).

These pits appear to have gone out of use before a possible four post structure was constructed represented by post holes [20532], [20592], [20516] and [20682]. Posthole [20532] had a diameter of 1.2m and depth of 0.72m. It contained three fills with large packing stones. This posthole was cut into the natural but was situated adjacent to and almost cutting pit [20488] supporting the theory that the intercutting pits had already gone out of use prior to the posthole being excavated.

Posthole [20592] measured 0.35m by 0.43m and had a depth of 0.55m. The posthole contained three fills and had large slab packing stones. This posthole was cut into the uppermost fill (20487) of pit [20484]. Posthole [20516] had a diameter of 0.7m and depth of 0.7m and was cut into the uppermost fill of pit [20488] the latest of the intercutting pits in the sequence. Posthole [20682] had a diameter of 0.55m and contained large packing stones. This posthole appears to be unexcavated, possibly due to excavation restraints imposed by Horizon at the end of Phase 1 of the excavations.

Four additional postholes [20587], [20600], [20598] and [20596] were also found in close proximity to the large pits and four post structure. These were all cut into the natural and averaged 0.45m in diameter and between 0.06m and 0.23m in depth. A larger posthole/pit [20684] was located adjacent to southern most baulk of the excavation area. It measured 1.25m by 0.8m and had a depth of 0.42m. As these were all discrete features it is unclear whether these features pre or postdate the pits and four post structure. Flint debitage from fill (20601) of posthole [20600] could be residual.

Seven stone postholes [20618], [20620], [20674], [20676], [20678], [20680] and [20498] were located to the immediate east of the intercutting pit group and were arranged in a curvilinear shape trending to the north east towards the entrance of roundhouse #20462 (Plate 74). All of the postholes contained large packing stones, they average 0.66m in diameter and ranged from 0.25m to 0.46m in depth.

Three additional intercutting pits were located to the immediate east of the stone postholes. Pit [20547] had a diameter of 1.3m, depth of 0.6m and was cut into the natural and contained three fills. The uppermost fill (20549) was cut by the next pit in the sequence [20722]. Pit [20722] measured 1.37m in diameter with a depth of 0.88m and also contained 3 fills. The uppermost fill (20725) was cut by the next pit in the sequence [20726]. Pit [20726] was the largest of the three with a diameter of 1.95m and depth of 0.88m. It also contained three fills. It seems clear that the pits were used in sequence of a period of time with one being filled before the next was cut. There is no direct stratigraphic relationship between the stone posts and the pits however it seems reasonable to suggest that they are not contemporary due to their proximity as the pits would have impacted negatively on the stability of the stone posts. The pits were cut by post medieval field boundary group #332691.

Overlying the stone postholes and the intercutting pits described above was a stone tumble layer {20473} which was initially interpreted as a wall but appears to be tumble from the stone postholes. Roman pottery was recovered from tumble {20473} and as the tumble is one of the later features in this group it provides a terminus ante quem for the group. No Iron Age finds were recovered but a firm date may be possible from further analysis of the ecofacts recovered in this area.

6.1.13.2.2 Storage Pit [20578] (SH 35132 92584)

Stone lined pit [20578] was located c.8m west of pit and spread group #331291 (see Romano British section below). It measured 1.9m in diameter and had a maximum depth of 0.8m. The stones lining the pit were large and angular and were very similar to those seen in well group #30492, situated 20m to the northwest in area A, but the pit was noticeably shallower with no evidence of upper coursing (Plate 75 & 76). The depth of the feature and lack of clay lining on the cut means this feature is currently classified as a storage pit using the criteria outlined in section 6.1.4.1. Pit [20578] contained one single fill, a mid brown sandy silt with a grey hue. This pit was adjacent to pit [20602] in which a Roman coin was discovered, although there was no direct relationship between the two pits. All of the stone lined pits were interpreted as Iron Age on site, but the proximity of this pit to Roman period activity could suggest a later date for this feature.

6.1.13.3 Romano British

6.1.13.3.1 Intercutting Pit Group #331291 (SH 35142 92584)

Intercutting pits and spreads (#331291) were located adjacent to roundhouse group #20462. 10 Pits ([20786], [20905], [20955], [20957], [20951], [20778], [20784], [20876], [20781] and [20555]) 2 spreads ([20557] and [20559]) and a natural feature ([20561]) were contained within a 14m by 5m area in two distinct groups, the pits to the north of the spreads (Figure 70).

Probably the earliest pit in the sequence is [20786], which was 2.1m by 1m and 0.4m deep. This pit was cut by [20905] a large pit measuring 2.5m by 3.13m and 0.91m deep. Adjacent to but not cutting pit [20905] is pit [20955], which had a diameter of 0.9m and depth of 0.29m. Both [20905] and [20955] are cut by pit [20957], a substantial feature measuring 2.2m by 1.7m and 0.48m deep. This pit was then cut by [20951], another substantial pit measuring 1.57 by 0.8m by 0.23m. Pit [20778] was located at the western edge of the group of intercutting pits. It was a large and deep pit measuring 3.4m by 1.7 with a depth of 0.9m. It contained a large amount of stone in the upper fill (20779) and a piece of Samian ware. This pit cuts the earliest pit in the group [20786].

Situated next to pit [20778] are three more pits that showed no relationship on excavation with the other pits. Given the proximity of these pits the lack of relationship is surprising and may it have been lost during the machining of the area but this is just conjecture. The earliest of these three pits is [20784], a large but shallow feature measuring 1.6m by 1.4m with a depth of 0.1m. A piece of ceramic, possibly part of an amphora was recovered from

this pit. Pit [20784] was cut by pit [20876], which measured 1.7m by 0.9m and was 0.52m deep. The latest pit in the sequence was [20781], another large feature measuring 2.2m by 1.8m by 0.73m deep.

Spreads (20559), (20557), pit [20555] and natural feature (20561) were situated directly outside the entrance to roundhouse #20462 which also dates to the Roman period. Spread [20557] is the earliest feature measuring 3m by 2m, 0.1m deep and consisted of a mid greyish brown clayey silt. This spread was cut by pit [20555], which measured 2.47m by 2.12m and was 0.6m deep. There were larger stones found within the sole fill of this pit (20556). They did not appear to be placed on the cut to form a lining, but were generally located towards the bottom of the fill (Plate 77 & 78). Spread [20559] measuring 3.5m by 3m with a depth of 0.25m, overlay pit [20555] and consisted of a charcoal rich dark reddish brown clayey silt suggestive of burning in the area. Capped drain structure [20461] from the roundhouse #20462 (see below) cut spread (20559) placing the construction of the roundhouse later than the spreads.

The arc of the northern pits seems to respect the position of roundhouse #20462 (Figure 49) though there was no definitive proof that these groups were in use at the same time although they do both date to the Roman period. In addition to the pottery, industrial waste (slag) was recovered from fills (20632) and (20779) of pit [20778].

6.1.13.3.2 Roundhouse Group #20462 (SH 35147 92578)

Roundhouse #20462 was located in the central part of area J. The roundhouse appeared to have been constructed using wattle and daub as there was no evidence of stone walls or a wall gully (Figure 71; Plate 79). There were a number of postholes (See matrix in appendix 4 for full context number list) located within the roundhouse which represent a support structure for the roof and walls. All of the postholes were cut into the natural.

The roundhouse had an internal capped drain system with up to three phases. Drainage gully [20543] with stone capping {30036} and drainage gully [20744] with stone capping {30037} were the earliest gullies within the roundhouse. Gully [20543] was curvilinear in plan, measured 5m in length, 0.10m width and had a depth between 0.06m and 0.12m. Gully [20744] was curvilinear in plan, was 10m in length, 0.3m in width and between 0.08m and 0.24m in depth. Any relationship between these gullies was lost due to the construction of a later gully [20705] with capping {20461} and {30012}, later truncation by field boundary group #332691 and disturbance caused by an evaluation trench 1301. It is worth noting that no archaeological features were recorded within the trial trench in the area of the

roundhouse. The later drainage gully [20705] formed a question mark shape in plan, measured 7m in length, 0.85 in width, and had an average depth of 0.3m. This gully cuts the earlier gullies and continued through a possible entrance on the south western side of the roundhouse (Plate 80). A piece of Samian Ware was recovered from fill (20636) in intervention [20635] through the latest drainage gully and fragments of daub from fill (20464) in intervention [20463] through the latest drainage gully. The latest drainage gully cuts spread (20559) from group #331291, which was situated adjacent to roundhouse group #20462 (Figure 70). This stratigraphically places the roundhouse later that the pit and spread group.

There were four possible hearths ([20574], [20610], [20576] and [20469]) and two pits ([20686] and [20528]) located centrally within the roundhouse. A radiocarbon date was obtained from fill (20577) of hearth [20576] which returned a date of 80-230 cal AD (Beta-553505; Figure 06- number 1).

The remains of a ring/drip gully [20418] was identified on the southern side of the roundhouse, which was cut by enclosure wall structure [20658] from Group #20637 to the northeast. The drip gully was curvilinear in plan and measured 10m in length, 0.56m in width with an average depth of 0.19m.

All of the features within the roundhouse were stratigraphically below layer (20617) which is described as a possible occupation layer. This layer consisted of a light greyish brown sandy silt which measured 5m by 8m with an average depth of 0.08m. Industrial waste/fired clay was recovered from this layer.

6.1.13.3.3 Enclosure groups #20591, #20637 and #30162 (SH 35160 92578)

Enclosure Group #20591/#20637/#30162 extended east from the side of roundhouse #20462; it measured 18.60 m long (east to west) and was over 18 m wide, extending into the southern limit of excavation (Figure 72). During the initial excavation it was unclear if groups #20591 and #20637 formed part of the same structure therefore they were assigned two separate group numbers.

Group #20591 included walls {20523} and {20542} (Plate 81) and a stone lined gully [20580] (Plate 82 & 83). Both walls {20523} and {20542} were linear in plan, constructed from sub angular boulders with irregular coursing and survived to a maximum height of 0.3m. The walls have been built within construction cuts into which a pebble foundation

deposit had been placed. Stone lined gully {20580} cuts the walls where they meet at the north east corner of the possible enclosure. The gully has a length of 1.7m, width of 0.23m and depth of 0.15m. Some of the stones on the southern side of the gully look like they have been deliberately placed to control the water flow out of the enclosure to the north.

Group #20637 comprised the remaining structural remains in the immediate area and the discrete features contained within and surrounding the possible enclosure.

The earliest features in this group are two pits and a gully which were all cut by the construction cut for wall {20420}={20658}={20573}. Pit [20807] had a diameter of 1.77m and depth of 0.22m and was situated mostly under wall {20420}. A sample from fill (20812) from this pit returned a date of 242-386 cal AD (Beta-554149; Figure 06 – number 15) and provides a terminus post quem for the structural features in this group. Pit [20449] measured 0.9m by 0.83m and had a depth of 0.14m. Gully [30061] ran along the length of wall {20573} on its eastern upslope side and was cut by the construction cut for the wall suggesting it was an earlier feature not related to the structural remains in this group. It was linear in plan measuring at least 10m in length, 0.77 width and had a depth of 0.16m.

Wall {20420}={20658}={20573} was far less well preserved than wall {20523} from group #20591 (Plate 84) and had been disturbed by trench 372 during the evaluation phase. No features were recorded in this part of the trench in the trial trenching report. Like wall {20523} a construction cut had been excavated prior to wall {20420}={20658}={20573} being built, however, only a small section of wall at the western end showed signs of a pebble foundation layer with the rest having a clayey silt bedding layer as foundation for the stones of the wall. An almost complete top stone of a beehive quern was recovered from wall structure [20573] (SF20006; Plate 85 & 86). The construction cut [20651] for wall structure [20658] cut into the occupation layer (20617) of roundhouse group #20462 (Figure 71).

There were a number of pits situated within the central area of groups #20591 and #20637. Roman pottery (4 sherds of Black Burnished Ware) was recovered from (20717), which was the fill of a large trough like pit [20716], which measured 2.2m by 1.1m and was 0.45m deep. Black Burnished Ware was also recovered from the uppermost burnt fill (30022) of shallow pit [30019] which measured 1.58m by 1.28m and had a depth of 0.1m.

Located in the south eastern part of area J are the remains of a possible roundhouse. A possible entranceway with a metalled surface (20361) was located between walls {20520} and {20359} (Plate 87). Wall {20520} was curvilinear in plan, 8m in length, 1.5m width and

had a maximum height of 0.37m. Once the tumble was removed, three courses of medium to large schist stone were clearly visible on the northern face of the wall. Wall {20359} was also curvilinear in plan but was never excavated fully as an extension to the excavation area over this feature was never undertaken. Also unexcavated was a possible floor surface {20367} adjacent to wall {20359} (Plate 88). From the limited information available it appears to have been constructed from similar material to that found in wall {20520}. Two postholes [20985], and [20987] were located in wall structure [20520] suggesting a timber superstructure associated with the stone walls.

Metalled surface (20361) measured 3.7m by 4.2m and had a maximum depth of 0.15m. It was created from small to medium stones sat directly on natural and in some patches there were multiple deposits of stone suggesting repairs had been undertaken. The surface covered the area between walls {20520} and {20359} and did not extend under wall {20520}. It is impossible to know definitively whether the surface extended under wall {20359} but the surface appeared to abut this wall rather than extend under it.

Within the possible roundhouse interior, a pit [20612], which had a diameter of 1.2m, and depth of 0.38m was located. The uppermost fill of this pit (20366) contained a considerable amount of charcoal. It may have been a later or contemporary feature with the structures as there was no direct relationship with the walls or the metalled surface.

An internal gully [20872] ran N-S between walls {20359} and {20520} then turned west parallel with wall {20520}. The gully was therefore L-shaped in plan with a length of 9m, width of 0.41m, depth of 0.27m and cut the metalled surface (20361). The location of the gully across the possible entranceway is a little strange and the other gullies noted in roundhouses on O5 South lead out of the entrance (see #20462). It is likely that this was a later feature after the roundhouse had gone out of use as it cuts pit [20612] and wall {20520}.

Group #30162 consisted of a stone capped drain and hearths and was located to the immediate west of the possible roundhouse (Plates 89 & 90). The earliest feature in this group is pit [20882], which had a diameter of 0.55m and depth of 0.4m. The fills of this pit were rich in charcoal suggesting a fire pit was located here prior to the creation of more formal hearths. The earliest hearth {20827} was stratigraphically above pit [20882] and was constructed using large local schist stones. Above this hearth was a layer of pinkish yellow heat effected clay with a diameter of 1m onto which another hearth {20771} had been constructed also from large local schist stone. Adjacent to these hearths was V-shaped

drain {20772}, which was linear in plan, 4m in length, 0.5m in width and 0.11m deep. The drain had no direct stratigraphic relationship with the hearths but the proximity of the features suggests they were related. Cut [20748] of drain {20772} cuts wall {20420} of the enclosure. Stakeholes/post holes ([20999], [30001] and [20880]) were discovered around the hearths suggesting a structure or frame was present when the feature was in use.

6.1.13.4 Post-Medieval

6.1.13.4.1 Field Boundary Group #332691 (SH 35165 92599)

A post-medieval field boundary was identified during the mitigation which corresponds with the 1st-3rd Ed Ordnance Survey 25 inch to one mile County Series maps, Anglesey Sheets II.10 and II.11, 1887, 1899 and 1913 (Figure 73). Most of the deposits along its length yielded a large quantity of late post-medieval pottery sherds and ferrous objects; along with the historic mapping, these proved useful for excluding this feature from the prehistoric/Romano British landscape. The boundary ran from the baulk southwest of roundhouse group #20462 on a northeast alignment, truncating walls within group #331848 and disappearing from view before continuing on the same alignment towards the outskirts of group #20774. The NW to SE boundary also shown on the mapping does not appear to have been identified during the excavation.

6.1.14 Area K

6.1.14.1 Undated

6.1.14.1.1 Pit Groups (SH 35191 92577)

Area K was characterised by a spread of mostly discrete pits and natural features (Figure 75). The full list of features in this area is contained in the table below. Features that have been recorded as being bioturbation or probable natural features have been highlighted in green. 13 features in total in this area have been attributed to this category though some other features currently classified as pits in the archive are described as having irregular sides and bases, which could point to them also being bioturbation. Many of the features in this area are stratigraphically placed below the subsoil rather than the hillwash/colluvium layer that seals the majority of the prehistoric/Romano British features and structures across the site suggesting a relatively recent date. The shallow nature of some of these features seems to preclude their usefulness as pits or postholes. It is possible therefore that they were originally larger features cut through the subsoil which would place them as either post-medieval or modern.

5 pits (highlighted yellow in the table below) were recorded as being beneath colluvium suggesting an earlier date. This hypothesis is supported but not definitively proved by a radiocarbon date obtained from the largest of these pits. Pit [20285] was 1.32m in diameter, 0.8m deep and contained 4 fills (Plate 91). The uppermost fill (20291) in this pit was a charcoal rich mid-dark brown silty clay from which a radiocarbon date of 130-260 cal AD (Beta- 554145; Figure 06 – number 14) was obtained.

Two other pits produced artefacts dating to or possibly dating to the Roman period, neither of which was noted to be under colluvium. Pit [20079] sub oval in plan, 3.20m in length, 1.6m width and 0.52m deep. It contained 4 fills, two of which produced artefacts tentatively dated to the Roman period. A flat sub circular piece of slate identified as a possible Roman weight was recovered from fill (20243) the basal fill of this pit and a possible Roman/Post Med fitting from fill (20081). Pit [20191] was roughly sub oval in plan and contained three fills. A sherd of black burnished ware was recovered from the uppermost fill of this pit (20192).

As the hillwash/colluvium layer closely resembled the natural glacial deposits at O5 South, the features excavated and recorded during the early phases of work on site do not

necessarily note the presence of colluvium deposits and it is entirely possible that some of the features noted in this section were cut into the colluvium rather than the natural.

Cut No	Description	Length	Width	Diameter	Depth	Filled by
		(m)	(m)	(m)	(m)	
20046	Ditch	5.0	1.56		0.52	20047
						20048
						20049
20050	Pit			1.7	0.31	20051
						20052
						20053
						20054
20055	Pit pos shrub bowl	2.10	1.50		0.17	20056
						20057
20062	Pit under colluvium layer			2.2	0.53	20063
	(20078)					20064
						20065
20069	Pit	2.24	2.6		0.40	20066
						20067
						20068
20070	Pit	2.70	2.20		0.72	20071
						20072
20073	Pit			1.30	0.22	20074
						20075
20079	Pit	3.2	1.6		0.52	20080
						20081
						20082
						20243
20101	Shrub bowl			0.93	0.11	20102
20103	Shrub bowl			0.85	0.10	20104
20113	Pit			2.35	0.82	20114
						20115
						20183
						20174
						20175
						20184

Cut No	Description	Length	Width	Diameter	Depth	Filled by
		(m)	(m)	(m)	(m)	
20122	Pit	1.8	1.08		0.34	20123
						20131
20126	Pit			1.55	0.38	20127
						20128
						20129
						20130
20132	Pit	3.0	0.40	0.40	0.40	20133
20134	Pit			1.60	0.25	20135
						20136
20137	Pit with charcoal rich fill			1.70	0.64	20138
	(20140), sealed by					20139
	colluvium (20141)					20140
						20141
20142	Natural Hollow			0.5	0.10	20143
20144	Pit	1.20	1.05		0.17	20145
20146	Shallow Pit	1.57	1.0		0.24	20147
						20148
20156	Pit	1.40	0.50		0.56	20153
						20154
						20155
20159	Pit	2.40	1.00		0.58	20157
						20158
20163	Pit	1.10	1.0		0.60	20160
						20161
						20162
20166	Pit			1.10	0.32	20165
						20166
20169	Pit	0.72	0.80		0.40	20167
						20168
20172	Tree throw	1.26	1.08		0.10	20173

Cut No	Description	Length	Width	Diameter	Depth	Filled by
		(m)	(m)	(m)	(m)	
20176	Pit located under colluvial	1.20	0.96		0.93	20177
	layers (20288) and					20185
	(20289)					20178
						20290
						20186
						20179
						20180
						20181
						20182
20187	Pit	2.00	1.90		0.40	20188
						20217
20189	Natural Feature	1.10	0.57		0.27	20218
						20219
						20190
20191	Burnt pit	1.85	2.10		0.32	20295
						20296
						20192
20193	Tree throw	0.86	0.94		0.18	20194
20195	Tree throw	1.51	1.16		0.18	20196
						20197
20198	Pit	1.60	0.60		0.25	20199
						20200
20201	Pit	1.40	0.76		0.33	20202
						20203
						20204
20205	Pit pos tree throw	1.8	1.3		0.22	20206
Miles I						20207
20208	Pit	0.75	0.4		0.15	20209
20210	Pit capped with colluvium			1.96	0.30	20211
	(20212)					
20213	Shallow Pit			1.0	0.18	20214
20215	Shrub bowl	1.04	0.53		80.0	20216
20220	Pit	2.00	0.7		0.35	20221

Cut No	Description	Length	Width	Diameter	Depth	Filled by
		(m)	(m)	(m)	(m)	
20222	Pit	3.00	1.30		0.45	20223
						20224
20225	Pit	2.00	0.65		0.40	20226
20227	Pit	0.96	1.00		0.32	20228
						20294
20229	Pit	1.86	1.46		0.3	20230
20232	Small Pit	1.06	1.10		0.10	20233
20241	Shallow Pit	0.68	0.50		0.20	20242
20244	Pit			2.10	0.24	20245
						20246
20247	Pit			0.95	0.20	20248
						20249
20250	Pit	0.92	0.70		0.23	20251
20252	Posthole – patches of in			0.40	0.22	20253
	situ burning					20254
						20255
20256	Shallow pit	1.8	1.75		0.18	20257
20258	Pit	1.07	0.80		0.18	20259
20260	Pit			1.43	0.26	20261
20262	Pit			0.94	0.32	20263
						20264
						20265
20267	Small curvilinear gully	1.70	0.22		0.10	20268
20274	Pit	1.0	0.8		0.18	20275
20276	Irregular shaped pit	0.87	0.44		0.23	20277
20278	Pit with irregular base	2.08	1.96		0.28	20279
			100			20280
						20281
						20282
						20347
20285	Pit located under colluvial			1.32	0.80	20286
	layers (20288) and					20287
	(20289)					20291
						20292

Cut No	Description	Length (m)	Width (m)	Diameter (m)	Depth (m)	Filled by
20301	Posthole		0.31		0.17	20302
						20303
20304	Shallow pit			0.8	0.09	20305
20308	Pit with charcoal rich fill	0.65	0.48		0.15	20309
20310	Shallow feature pos shrub bowl	1.50	1,12		0.09	20311
20312	Shallow Pit	1.92	1.04		0.19	20313
						20314
20315	Pit	1.26	0.92		0.11	20316
20317	Pit	0.85	0.56		0.13	20318
20319	Pit	1.60	1.0		0.45	20320
						20321
20327	Small Pit	0.90	0.95		0.20	20328
20329	Pit	1.6	0.6		0.15	20330
20331	Pit	1.56	2.00		0.52	20332
20335	Pit			1.20	0.27	20336
						20341
20337	Shurb bowl with charocoal rich fill	0.75	1.50		0.10	20338
20339	Tree throw	3.5	0.75		0.10	20340

Table 6 – Area K Pit Groups

6.2 Statement of significance of the stratigraphic data

The stratigraphic data represented a significant concentration of multi-period activity, primarily characterised by Iron Age and Roman period settlement with limited evidence for Neolithic and Bronze Age activity. The results are of local, regional and national importance. Locally, the results have changed the archaeological landscape from one of mainly prehistoric ritual and defensive activity, to one that includes more complex prehistoric and Roman period settlement. Regionally, the results complement the discovery of multi-period settlement at the Parc Cybi business park in Holyhead (Kenney 2011 and forthcoming), the Parc Bryn Cegin business park near Bangor (Kenney 2008) and along the A55 road scheme in Anglesey (Cuttler, et al. 2012). The site represents activity across a wide chronological and spatial context, which has provided a much clearer understanding of the development of the landscape and the results contribute to an array of research issues, previously highlighted in the Research Framework and the Technical Update research objectives (Technical Update (HNP 2016). These include more robust chronologies through radiocarbon dating, understanding settlement patterns/landuse, and interactions between newcomers and indigenes in the Roman period. Equally, the results were significant for the lack of identified medieval archaeology, with no siginificant opportunity to explore in detail the key research objectives such as the transition between the late Roman and early medieval and the continuity of settlement and land use into this period.

7 ARTEFACTS

7.1 Quantification of finds by type

A total of 691 bulk finds, weighing 40,340g, were recovered from 121 contexts during the archaeological investigation; a further 107 artefacts were allocated Small Find numbers with a combined weight of 85,549g, recovered from 66 contexts. The artefact assemblage was assessed by Wardell Armstrong. The quantities are summarised below, with full details in the Wardell Armstrong report (cf. Appendix 8).

Material	Quantity	Weight (g)
Ceramic Building Material	3	6
(CBM)	3	0
Chert	134	3964
Fired Clay	336	2825
Glass	1	6
Industrial Waste	19	393
Iron	7	141
Lithic	22	254
Pottery	126	1379
Stone	53	31008

Table 7 - Quantification of Bulk Finds

Material	Quantity	Weight (g)
Cu Alloy	9	194
Fired Clay	11	505
Industrial Waste	3	68
Iron	4	115
Lithic	5	80
Pottery	5	30
Stone	60	83928
Wood	7	304

Table 8 - Quantification of Small Finds

Material	Weight (g)
Clay Pipe	3
Iron	10065
Fired Clay	68
Flint	-
Glass	-
Industrial Waste	34174
Leather	5
Metal/Slag	-
Plaster?	7931
Pottery	108
Shell	-
Worked Stone	456

Table 9 - Quantification of Finds recovered from environmental samples

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

As discussed in the artefact assessment report, 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 The Oriel Museum (2012). The project has the unique identifier WA 2020 / CL12283 / 117360.

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

7.3.1 Pottery

Dating evidence is provided primarily by the pottery, and this includes Romano-British and post-medieval/modern material. The Romano-British assemblages consisted largely of a mixture of Samian and Black Burnished ware.

7.3.1.1 Roman

A total of 82 Roman pottery sherds were recovered from 25 contexts and weighing 771g. They were assessed as being in poor to moderate condition with some evidence of post-depositional abrasion. Fabric types included Black Burnished ware (DOR BB1), Samian ware (SAM), Mancetter-Hartshill white ware (MAH WH) along with a very small quantity of coarse oxidised ware (CO OX) and highly abraded colour coated ware (possibly LNV CC) and small body sherds of possible amphora (BAT AM 1 / 2). Vessel types included black burnished ware jars and dishes, samian bowls and dishes as well as Mancetter-Hartshill hammer head mortaria. The pottery assemblage had a broad date range but was largely early 2nd to 3rd century in date. A broader date was suggested for possible briquetage (Cheshire) fragments from (330733) – a layer overlying a possible Bronze Age and Iron Age pit group, and (30428), and the middle fill from stone lined pit group #30492.

- The sherds were recovered from a variety of features and contexts, including:
- (20004) Hillwash;
- (20192) fill of pit [20191];
- (20364) layer covering structure 20361 from group #20637;
- (20442) cut feature associated with (20443) and (20444);
- (20467) a deposit overlying the western part of roundhouse #20462;
- (20473) wall tumble from group # 30406;
- (20636) fill of drainage gully [20635] in roundhouse group #20462;
- (20717) fill of large trough like pit associated with group #20637, included 4 sherds of Black Burnished ware;
- (20773) from drain and hearth features #group 30162;
- (20779) fill of pit [20778] in pit group #331291 (Samian);
- (20785) fill of pit [20784] pit group #331291;
- (30022) Burnt top fill of shallow pit [30019] Black Burnished Ware;
- (30064) fill of pit [30063] not in but possibly related to group #30162 hearth and drain;
- (30149) layer in roundhouse group #30505 believed to be post abandonment layer;
- (30354) clay layer under hearth (20771) group #30162;
- (330590) fill of pit [330589];
- (330678) tree throw disturbance of pit [330673];
- (331008) hillwash like layer around well 331006;
- (331110) alluvial layer;
- (331471) a mixed derivation cleaning layer.

7.3.1.2 Post-Medieval

A total of 32 post-medieval pottery sherds were recovered from 11 contexts, weighing 448g. The sherds were in moderate condition with some evidence of post-depositional abrasion.

The post-medieval pottery was dominated by black-glazed Buckley-type red earthenware (BUCK, CRE), with a small quantity of clear-glazed red and buff earthenware as well as refined white earthenware with transfer print decoration (TPW). Additional post-medieval pottery sherds were recovered from six palaeoenvironmental samples and included refined white ware (REFW and TPW) and coarse red earthenwares (CRE). The post-medieval pottery was identified in the assessment report as representing typical household vessels including large utilitarian bowls, jars and table ware including a large jug and a transfer printed tureen. The assemblage has a likely date range of late 18th to 19th century. A single abraded clay tobacco pipe stem was also recovered from the palaeoenvironmental sample; it was described as undecorated and had a central bore of 3mm and likely dates to the 17th to 18th century.

The sherds were recovered from a variety of features and contexts:

- (20002) subsoil;
- (20004) hillwash;
- (20009) ploughsoil;
- (20011) fill of pit [20010];
- (20408) fill of small ditch [20407];
- (20527) fill of post- medieval field boundary [20526] group #332691;
- (20982) subsoil layer above roundhouse group #20774;
- (330645) fill of ditch [330629];
- (330812) Evaluation trench backfill in group #20871;
- (331526) fill of drainage gully [331525] in roundhouse group #331249; and
- (331729) possible roundhouse wall running under the Northern Baulk of site.

7.3.2 Fired Clay

A total of 326 fragments of fired clay weighing 2,558g, were recovered from 39 contexts. The fired clay was described in the assessment report as being in poor to moderate condition, comprising small, abraded fragments, mainly daub with frequent small stone inclusions. Occasional surfaces were noted among the fragments and two distinct fabrics were noted: a soft easily abraded sandy daub with occasional small stone inclusions and a hard-fired fabric

with very frequent sharp stone inclusions, which was frequently heavily fired or vitrified, and interpreted as likely to be part of a kiln or furnace lining.

The daub was recovered from a variety of features and contexts, including:

- (20464) fill of drainage gully [20463] in roundhouse group #20462;
- (30300) fill of [30341] stone lined storage pit group #30492;
- (30400) deposit associated with Group #332814;
- (30428) fill of [30341] stone lined storage pit group #30492;
- (330814) layer post-dating the occupation of roundhouse group #20871;
- (331020) fill of posthole [331019];
- (331094) layer covering pit group #332430;
- (331258) layer overlying southern quadrant of roundhouse group #20871;
- (331333) fill of possible pit [331334]; situated just north of possible Bronze Age pit group;
- (331443) layer in area of pits near storage pit group #30492;
- (331551) fill of posthole [331550, situated in a circular intercutting pit group
- (331628) fill of pit [331627] in roundhouse group #20871;
- (331987) re-deposited natural layer covering postholes associated with platform structure group #332556;
- (332240) fill of pit [332239] near wall group #331848 and roundhouse Group #20871;
- (333087) <320619> fill of pit 333135 located in the west quadrant of roundhouse group #20871.

The assemblage also included fine-walled fragments of a coarse oxidised fabric with very frequent coarse stone inclusions, some of which may be further fragments of Cheshire briquetage. The report stated that it was difficult to confidently date the fired clay / daub fragments but based on other artefacts recovered from the area a late prehistoric to Roman date was suggested.

Eleven additional fired clay fragments weighing 550g were recovered from the small finds assemblage, which included fragments of heavily vitrified possible furnace lining: SF320034 from layer (331094) covering pit group #332430, and a fragment of rolled fired clay SF320041, from context (331310) a fill of possible well structure 331418 in group #331170. The latter was of unknown function but possibly used as a bung. Possible structural daub fragments were also identified: SF320084, from context (333109) within oven/pit [333108]. Over 10,000g of possible fired clay fragments were recovered from the palaeoenvironmental

samples, which were very small and frequently heavily abraded, but included both the fine and coarse sandy fabrics identified in the bulk finds assessment. Possible briquetage fragments were also recovered from samples <20212> from context (30300) a fill of storage pit [30341] from pit group #30492, <20243> from context (30428) a fill of stone lined storage pit [30341] from group #30492 and <320472> from context (331695) a fill of fire pit [332035].

7.3.3 Industrial Waste

A total of 19 industrial waste fragments, weighing a combined total of 393g, were recovered from eight contexts:

- (20617) layer in RH group #20462 noted as a possible occupation layer;
- (20632) fill of pit [20631] in pit group #331291;
- (20753) fill of pit [20752];
- (20779) fill of pit [20778] in pit group #331291 roman pottery (Samian) also recovered from this context;
- (30176) layer of re-deposited natural above burnt stones;
- (330733) layer above possible Bronze Age pit group;
- (331339) fill of posthole [331340]; and
- (331379) fill of pit [331378].

The assessment report stated that the industrial waste comprised possible slag, but several fragments recovered as slag were vitrified fired clay, and the report suggested most of the material may be heavily over-heated / overfired clay, burnt earth / turves or fuel ash rather than metal slag. A total of 34,174g fragments of possible industrial waste were recovered from 169 palaeoenvironmental samples. The material was assessed as likely burnt earth rather than slag.

7.3.4 Iron

A total of seven iron objects, with a total weight of 772g, were recovered as bulk finds from three contexts and as unstratified material. The contexts were: hillwash (20004), ploughsoil (2009) and a layer within wall group #331848, which overlies an earlier pit group. The assessment report stated that the iron was in poor condition and all artefacts were heavily corroded. Diagnostic artefacts included nails and a tapered object of unknown purpose, possibly an agricultural implement. A large socketed object was recovered from the ploughsoil context (20009). Seven iron objects were also recovered as small finds with a total weight of 440g that were in poor condition and heavily corroded, limiting identification. Artefacts included possible nail fragments SF320043 from layer (331494) in group #332072 overlying gully [331751]; SF20081 (unstratified) a partial knife blade with a central square

tang; SF20005 from subsoil (20002), identified as Roman to medieval in date, whilst possible shoe cleat fragments SF320026 from context (330924) a fill of gully [330871] under structure 331043 and a single chain link SF20011 from hillwash were thought likely to post-medieval in date. A total of 30g of iron artefacts were recovered from seven palaeoenvironmental samples and included nails and over 30 hobnails recovered from <20193>, context (30148) the uppermost layer in roundhouse group 30505, was potentially from a single shoe, likely Roman in date; a single fragment of undiagnostic iron or slag was also recovered.

Overall the iron objects were given a broad Roman to post-medieval date.

7.3.5 Stone

A total of 53 stone artefacts were recovered as bulk finds from 24 contexts and as unstratified material during the excavation at O5 South, with a combined weight of 31,008g

- (20004) hillwash;
- (20040) fill of pit [20036];
- (20049) fill of [20046];
- (20061) fill of [20060];
- (20081) fill of [20079] eastern edge of site;
- (20192) fill of [20191], which also included Roman pottery (Black Burnished);
- (20243) fill of [20079];
- (20321) fill of [20319];
- (20422) overburden over structure [20420] group #20637;
- [30070] fill of [30069] in RH group #20774;
- [30476] wall in roundhouse group #20774;
- [330601] subsoil;
- [330733] layer above possible Bronze Age pit group;
- [331076] wall foundation in roundhouse group #330577;
- [331324] possible metalled surface;
- [331437] possible floor surface in roundhouse group #331249;
- [331443] layer in area of pits near storage pit group #30492;
- (331738) fill of stone lined drain #331741];
- [332130] layer to the northeast of well structure [331006];
- [332240] fill of pit [332239] near wall group #331848;
- [332346] foundation layer under drain [331329] below roundhouse group #331596;
- [332673] upper fill of pit [332640];
- [332759] fill of pit [332761];

• [333259] middle surface of three 'pebble' layers located around well/pit group #331170; seals the cut for the well/pit.

The worked stone artefacts had a broad date from prehistoric to Roman. The artefacts included both worked stone and modified natural pebbles and were recovered as both bulk and small finds. The artefacts were associated with crafts and industry, including quern stones, spindle whorls and loom weights as well as hammer stones which could span the same period. Worked stone included rubbers for saddle querns showing heavy use wear and the artefact assessment report suggested similar objects were identified during mitigation for the A55 road scheme (Smith 2012), which were dated to the Iron Age and remained in use into the Romano-British period. Further examples were allocated small find numbers.

Several whetstones were recovered which included both worked stone fragments and naturally elongated pebbles with artificial wear. The whetstones would have been used as sharpening stones and the artefact assessment report stated that whilst it was difficult to confidently assign a date to these objects, a late prehistoric to Roman date was considered likely.

Loom weights associated with textile production were also identified, comprising flat circular slate discs; additional slate discs without perforations were also recovered suggesting they were being made on site, whilst a thicker flat circular disc of sandstone was also recovered that was interpreted as a possible pot lid.

Several hammerstones were identified from different contexts. A well-made convex stone fragment with a partial hourglass perforation was recovered from hillwash context (20004), which was identified as a possible perforated hammerstone or mace of Mesolithic to Neolithic date; it was thought to be similar to an artefact recovered from Hampshire (ref.: HAMP-399025, PAS online 2020). A handheld hammerstone was recovered from a layer to the northeast of well structure [331006], context (332130), which comprised a flattened subcircular pebble with heavily pecked and worn flattened ends; two oval hammerstones with both surface wear and areas of peck marks were also recovered from the middle surface of three 'pebble' layers located around well/pit group #331170, which sealed the cut for the well/pit, context (333259). It was thought likely that the hammerstones had a range of uses over a long period, relating to the lithic artefacts and possible later metalworking.

The report also identified several unworked stone objects, including quartz and occasional small fragments of burnt stone, along with occasional naturally worn stones with no obvious artificial wear that were not considered archaeologically significant.

In addition to the bulk finds assemblage, a total of 16 stone artefacts with a combined weight of 83,928g were recovered as small finds from 46 contexts. These included quern fragments, dominated by saddle querns, with rotary querns represented by the top stone of an almost complete beehive quern SF20006, from Structure 20573 – southernmost wall of rectangular enclosure group #20637, and half of a base stone SF20012, from post abandonment layer (30149) in roundhouse group #30505. The saddle querns were largely represented by the following broad well-worn rubbers: SF20018 [20775] from a pit located between group #20774 and group #30505, SF320031 from layer (331392), and SF320078 from layer (332081). The rubbers recovered as small finds were of a similar coarse sandstone to those recovered as bulk finds.

A possible trough quern SF320089, from layer (330861) in group #20984, was noted as similar to an example recovered from Cefn Cwmwd (Smith 2012), comprising a flat base and shallow concave hollow, with a fine rather than coarse sandstone, suggesting its use as a grinding stone rather than quern.

Pebbles adapted for use as rubbing stones were also identified, including a wedge shaped stone with possible wear on base SF20014, from layer (30028) in group #20984, an elongated pebble with concave wear SF32006, from context (332052) fill of drain [332050], and SF320058, from layer (331929), situated between roundhouses #20984 and #331249. SF320066, from context (332115) – a fill of [332114] in group #332920, was a flat based fine sandstone rubbing or polishing stone with a well-worn base and was also possibly pecked. Roughly spherical stones coarse sandstone SF320056 and SF320067, the latter from stone-rich layer (332080), had several areas of wear and were likely used as rubbing / polishing stones SF331373. From colluvium layer (331595), above features in group #331373, was a well-worn rounded pebble of coarse pudding stone that was likely used as a rubbing or grinding stone.

Several whetstones were recovered including SF320057, from layer (331864) under wall group #331694, which was a rectangular fragment of a possible whetstone (possibly chert) shaped following the strata of the rock formation. SF320004, from context (331203), fill of small pit [331202], was a 'cache of stones' which included a squared whetstone of finegrained stone and two elongated pebbles with wear. Two waisted stones were recovered: SF20013, from layer (30028) in group #20984, and SF20019, from context (30244, a fill of

stone capped pit [30241] in group #30505, had a pecked waist for hafting and were probably used as metal working hammers (Smith 2012). A similar object recovered from Gwynedd is recorded on the Portable Antiquity Scheme with a Bronze Age date GAT-09E9E4 (PAS online 2020). A small flattened circular bun-shaped stone SF20020, from layer (30035) covering the interior of roundhouse group #20984, also displayed pecking on both surfaces and is a likely hammer-stone.

Several spindle whorls were recovered, which were flat and circular with a central hole drilled from both sides:

- SF20008 from re-deposited natural layer (20764) from above internal gully [30055] and small pit [30466] in group #20774;
- SF20010 from layer (30035) under hillwash covering interior of roundhouse group #20984;
- SF20015 from layer (30028) under hillwash external to roundhouse group #20984;
- SF20016 capping layer (30262/30035) for structure group #20984;
- SF320022 stone layer (330542) from group #330577;
- SF320024 stone layer (330540) from group #330577;
- SF320027 burnt mound material (330652) from group #330577; and
- SF320045 layer (331008), possible hillwash.

A very well-made spindle whorl SF320074, from context (331643), fill of pit [331642] situated under wall 30379 and part of group #30491, had a narrow groove surrounding the central hole on each side and described as noticeably smaller and lighter than most of the whorls. A single decorated spindle whorl was noted, SF320027, from layer (30035) covering the interior of roundhouse group #20984, had crudely carved radiate lines on one face. It is difficult to date these artefacts because very similar objects were used over an extended period of time, however, the average central hole size of 7mm suggests a Roman date. (Walton Rogers 1997)

Several perforated objects were also recovered similar *to* spindle whorls, including a possible bead SF320023 with a central hole of 5mm which would be very small for a spindle, and a fragment SF20017, from layer (30171) in stone lined pit/well group #30492, had a very large central hole of 15mm which is more likely a small weight rather than spindle whorl.

Possible loom weights consisting of several roughly circular flat slate discs with irregular central holes were identified:

- SF320040 from a metalled surface surrounding well 331309 –part of group #331170;
- SF320046 from layer (331008) around well structure [331006];
- SF320054 a rubble layer (331730) under wall structure [331728];
- SF320064 from a metalled surface in group #20984 external to roundhouse and below roundhouse wall structure [30324];
- SF320085 from layer (333264) in group #333333; associated with wall (333265), which sealed a drip gully;
- SF320086 from a levelling deposit within group #331249; and
- SF320087 from context (333428), a fill of hearth flue [333429] part of group #333498.

SF320038, from context (330733), a layer overlying a possible Bronze Age pit group was similar in form to the other loom weights but sub-square in shape rather than sub-circular. Shaped slate discs without a hole included SF320079 from a layer of cobbles (332460) located to the northwest of well structure [331006] and overlain by possible roundhouse wall structure [331839], and SF320081 (unstratified) were also recovered.

Several slate fragments were recovered with partial holes that appeared to be fragments of rectangular objects rather than the circular weights: SF320053 from rubble layer (331730) under wall structure [331728] and SF320082, from an abandonment layer (331731) in group 331249. A fragment of slate with possible grooves on one surface, SF320032, from colluvial deposit (330909) beneath hillwash (330597) and above alluvial deposit (331372) was probably unworked and naturally occurring.

A fragment of a very hard green-black stone vessel was recovered, SF320075, from alayer in roundhouse group #331373, and was highly polished and had a plain rim, slightly thickened externally. Roughly half of a ring fragment of similar stone was also recovered SF320065 from context (332172), which was the deliberate backfill of drain [332171] that fed well structure [331724].

Several well-shaped sub-rectangular stones were recovered with cup marks on the upper surface, including SF320025 from context (30417), a fill of pit [30416] in roundhouse group #20774, SF320030 from hillwash context (330597) and SF320050 from levelling deposit (331742) under drain group #331471. All had a pecked cup mark in the upper surface and a hard-concreted material on the base. Similar objects have been suggested as small mortars or stone lamps (Smith 2012). SF320049, found in (331614), fill of drain [331613] in

roundhouse group #331249, was a sub-rectangular sandstone block with a well-worn oval cup mark and was also a portable mortar.

A triangular stone with a deep cup on the upper surface: SF320072, from re-deposited natural layer (331586) under metalled surface (330842) outside roundhouse group #20984, was thought to resemble Roman oil lamps and was a likely lamp or mould although no evidence of burning or heat was seen on the object.

Possible worked stone artefacts were recovered from four palaeoenvironmental samples including slate fragments with rough perforated holes and a fragment of a shale ring from sample <20233>, context (30261) - a possible occupation layer in roundhouse group #30505 and situated directly under context (30148) which contained a possible Roman shoe. The shale ring fragment was identified as similar to one recovered during the A55 road scheme across Anglesey, which was given a likely Roman date, with an identical internal diameter, although the overall width was smaller.

7.3.6 Lithics

A total of 24 (322.48g) lithics were recovered during the investigation, including contexts:

- (20002) subsoil;
- (20004) hillwash;
- (20601) fill of posthole [20600] group #30406;
- (30035) layer under hillwash covering interior roundhouse group #20984;
- (30171) layer (30171) from group #30492 incorporating stone lined lined pit/well;
- (30186) fill of gully [30185];
- (30228) fill of stone lined pit [30341] from group #30492;
- (330597) hillwash same as 20004;
- (330728) fill of tree bowl [330727];
- (331008) hillwash like layer around well structure [331006];
- (331021) fill of possible pit [331265] in the north quadrant of roundhouse group #20871;
- (331324) possible metalled surface;
- (331595) from colluvium layer above group #331373;
- (332240) fill of pit [332239] near wall group #331848;
- (332658) fill of posthole [332657] in roundhouse group #331249;
- (332672) fill of pit [332640] described as colluvium so capping fill; and

• (332673) upper fill of pit [332640], latest of two intercutting pits and overlain by layer of colluvium.

The technological traits of the assemblage, particularly the characteristics of the retouched tools, strongly suggests a Late Mesolithic to Early Bronze Age date. The assemblage was recovered from the fill of cut features, the majority of which produced very small assemblages of under 5 worked lithics.

The assessment report states that all the lithics within the assemblage were individually examined and assigned to a category according to debitage, core or tool type, with cores/core fragments further classified by platform and removal type and complete specimens/tested nodules individually weighed. The condition and degree of cortication was noted for each artefact, along with evidence of burning, breakage and use. The condition of the lithics was identified as "very good", most of the assemblage is in a fresh or minimally damaged condition implying negligible post-depositional disturbance; with only one piece with a light cortication.

The assemblage comprised two lithologies: a black fine-grained local chert (45.8%) and flint (54.1%). The artefact assessment report stated that flint was not readily available locally and was sourced from pebbles recovered in quite small sizes from the drift or on the beaches. Black chert was more easily available from cobbles from the drift or from *in situ* tabular material outcropping in the limestone of northeast Anglesey; the chert was available in larger pieces but does not have the good flaking quality of the flint. The assemblage comprised 66.6% debitage, 12.5% of cores and core fragments and 20.8% of retouched tools, all with very similar proportions in both lithologies.

The flakes and blades were both hard and soft hammer struck, with some having evidence of platform preparation. The assemblage included a single platform blade core and a discoidal and tabular single platform flake cores, together with a crested blade from context (332673), upper fill of pit [332640], which was identified as the only evidence for core rejuvenation. Five scrapers were identified, including two side scrapers over flakes, two thumbnail scrapers over blades and a fragment of a circular scraper over a tertiary flake. The cores were interpreted as Mesolithic in date, with the remainder of this assemblage dating from the Mesolithic or Early Neolithic, with the bladelets more likely to be Mesolithic.

A single flint fragment was recovered from palaeoenvironmental sample <320469>, from fill (331641) of pit [331640] in enclosure group #331848. The fragment was interpreted as likely débitage and showed very little evidence of post-depositional wear.

7.3.7 Copper Alloy (Cu).

Nine copper alloy artefacts were recovered from the small finds assemblage with a total weight of 194g, they were in poor to moderate condition and were of Late Iron Age to Roman date.

The artefacts included a near complete, Late Iron Age La Tène III type brooch or Nauheim derivative type: SF320039, from context (331312), fill of pit [331311] located in the northeast quadrant of roundhouse group #20984, formed from one continuous piece of metal and sprung at the head. It was identified as similar to SUSS-BF130F (PAS online 2020) on the Portable Antiquity Scheme database, and interpreted as Late Iron Age to early Roman in date. Two fragments of a horse bridle bit SF20007, from context (20763), fill of pit [20762] located in the south quadrant of roundhouse group #20774, comprising a circular ring cheek piece and mouth bar were recovered, and seen as very similar to an example recorded on the Portable Antiquity Scheme SFNMGW-2995AA (PAS online 2020) which also have a suggested Late Iron Age to early Roman date.

A cast bronze mount SF20003, from layer (20467) overlying the western part of Roundhouse #20462, in the form of a human face probably representing Medusa was identified; the artefact assessment report stated that such head mounts were thought to have been a symbol of protection and Roman in date. SF320029, associated with wall structure [30111] was a possible fitting comprising an irregular fragment 30mm in length with an extended foot.

A highly corroded coin: SF20004, from (20623) – a fill of pit [20602], was recovered with a small perforation near the edge suggesting it may have been used as a necklace pendant (diameter = 26mm, 3.4g). The coin was suggested as likely to comprise a double maiorina of the emperor Magnentius (Sear 2014, RCV Vol V. 18774) and dated to 350-353 AD, with the perforation a later embellishment when no longer in use as a coin. The evidence of secondary use for this object may sit in the early to high medieval periods.

7.3.8 Glass

The assessment report stated that a single glass artefact was recovered from context (20753), which was the fill of pit [20752] and weighed 6g. The glass comprised a small body shard of abraded green glass that was possibly a fragment from an onion bottle, with a late 18th to 19th century post-medieval date. A single small shard of clear window glass was also recovered from the palaeoenvironmental samples, which was interpreted as post medieval in date. A second tiny fragment was identified as natural quartz.

7.3.9 Wood

Two wood small finds were recovered from two samples with a combined weight of 304g; the objects have been stored in dark and wet conditions in the WA Carlisle cold store. One of the objects appeared to be worked: SF320076, from the primary fill (332355) of well structure [332554] from group #332814 was a shaped circular peg 130mm x 25mm, with clear tool marks. The fragments recovered as SF320077, from context (332717), fill of [332755]/possible well structure [330947] from group #332072, were small unworked pieces of twisted branches or root.

7.3.10 Plaster

A total weight of 7931g of possible plaster fragments were recovered from a single palaeoenvironmental sample <320610>, from layer (331210), a possible path near stone lined pit/well Structure [330947] from group #332072. These fragments were described as a hard but friable material with large inclusions of natural slate with hard concreted material bonding them. The bonding material was identified as similar to the possible industrial waste and may represent a rough ground surface.

7.4 Statement on the research potential of each artefact group

7.4.1 Pottery

7.4.1.1 Roman

The artefact assessment report states that further analysis is warranted on the Roman pottery and ceramic assemblage, including illustration and also comparative research with other archaeological sites from Wylfa plus archaeological sites in the wider vicinity.

7.4.1.2 Post-Medieval

The artefact assessment report states that no further work is warranted on the post-medieval pottery.

7.4.2 Fired Clay

The artefact assessment report states that further work is warranted on the fired clay assemblage, including comparative research with similar material from other archaeological sites at Wylfa plus sites in the wider vicinity. Radiocarbon analysis of environmental material from contexts where fired clay was recovered is recommended to narrow down the date of the fired clay artefacts.

7.4.3 Industrial Waste

The artefact assessment report states that further analysis on the industrial waste may be warranted, including X-ray fluorescence (XRF) analysis, which would allow for the composition of the slags to be known and allow for an understanding of any processes involved in the technology.

7.4.4 Iron

The artefact assessment states that further work is not recommended on the iron artefacts.

7.4.5 Stone

The artefact assessment *report* states that the worked stone artefacts warrant further analysis and illustrative work is recommended as well as comparative research with the other archaeological sites at Wylfa and sites in the wider vicinity.

7.4.6 Lithics

The artefact assessment report states that the lithics were individually numbered and recorded in order to facilitate revisiting the material and appending further data at a later stage.

7.4.7 Copper Alloy (Cu).

The artefact assessment report states that further work is warranted.

7.4.8 Glass

The artefact assessment report states that no further work is recommended on the glass artefacts.

7.4.9 Wood

The artefact assessment report states that further work may be warranted on the worked wood, including illustrative work, species identification and comparative research with the other archaeological sites at Wylfa Newydd and also in the wider vicinity.

7.4.10 Plaster

The artefact assessment report does not provide any recommendations for further work.

7.4.11 Overall Significance

The research potential of the material assemblage recovered from Area 20 is very high and further work should focus on the following categories: Roman pottery, fired clay, industrial waste, lithics, copper alloy and wood. All material is to be retained for full analysis and publication phase works.

7.5 Statement of significance for the retention of material and a proposal for discard strategy

Overall, the artefact assessment report states that the assemblage is of high archaeological potential and of local and regional significance and possibly national importance, covering a broad Mesolithic to post-medieval date, with a large proportion dating to the Late Iron Age to Roman period. Whilst the metal artefacts were described as being in a "poor condition", they are deemed significant in representing a Late Iron Age to early Roman date consistent with the first Roman activity in Britain, a period of particular relevance to the Research Framework. Likewise, the possible briquetage fragments have a similar date. The large stone assemblage also contains objects associated with crafts and industry, including quern stones, spindle whorls and loom weights as well as hammer stones which could span the same period.

The lithic artefacts indicate earlier Mesolithic activity within the site, whilst occasional post-medieval to modern finds are likely a result of agricultural practices and are deemed of little archaeological interest. The report states that further analysis is certainly warranted on the material in general, particularly on the worked stone, lithics, fired clay and industrial waste, including illustrative work, XRF analysis and comparative research with other archaeological sites at Wylfa and in the wider vicinity.

7.5.1 Pottery

7.5.1.1 Roman

The artefact assessment report states that further analysis is warranted on the Roman pottery and it is recommended that these artefacts are retained for further analysis.

7.5.1.2 Post-Medieval

The artefact assessment report states that no further analysis is warranted on the post-medieval pottery and it is recommended that these artefacts are not retained for further analysis as they are a low value assemblage.

7.5.2 Fired Clay

The artefact assessment report states that further work is warranted on the fired clay assemblage and it is recommended that these artefacts are retained for further analysis.

7.5.3 Industrial Waste

The artefact assessment report states that that further work is warranted on the fired clay assemblage and it is recommended that these artefacts are retained for further analysis.

7.5.4 Iron

Whilst the artefact assessment report states that further work is not recommended on the iron artefacts, it is recommended these artefacts are retained and archived at Oriel Ynys Môn (Rhosmeirch, Llangefni, LL77 7TQ) in accordance with their *Guidelines for the preparation and deposition of archaeological archive* (2012). This is due to their cumulative value as evidence of Roman activity.

7.5.5 Stone

The artefact assessment report states that the worked stone artefacts warrant further analysis and illustrative work and it is recommended that these artefacts are retained for this purpose as well as their cumulative value as evidence of regional crafts and industry.

7.5.6 Lithics

The artefact assessment report states that the lithics artefacts warrant further analysis and illustrative work and it is recommended that these artefacts are retained for this purpose as well as their cumulative value as evidence of Late Mesolithic to Early Bronze Age activity.

7.5.7 Copper Alloy (Cu).

The artefact assessment report states that the copper alloy artefacts warrant further analysis and illustrative work and it is recommended that these artefacts are retained for this purpose as well as their cumulative value as evidence of Late Iron Age to late Romano-British activity.

7.5.8 Glass

The artefact assessment report states that no further analysis is warranted on the post-medieval glass and it is recommended that the glass is not retained for further analysis as it is of low value.

7.5.9 Wood

The artefact assessment report states that further work may be warranted on the worked wood, including illustrative work, species identification and comparative research. It is recommended that that worked wood is retained for further analysis but that the wooden

fragments (SF320077) are not retained as they are small unworked pieces of twisted branches or root.

7.5.10 Plaster

The artefact assessment report does not include recommendations for further analysis, but it is recommended that the plaster fragments are retained for future potential analysis as evidence of a former ground surface.

7.6 Supporting finds illustrations

7.6.1 Pottery

No illustrative finds drawings or photographs have taken place for the assessment.

7.6.2 Fired Clay

No illustrative finds drawings or photographs have taken place for the assessment.

7.6.3 Industrial Waste

No illustrative finds drawings or photographs have taken place for the assessment.

7.6.4 Iron

No illustrative finds drawings or photographs have taken place for the assessment.

7.6.5 Stone

No illustrative finds drawings or photographs have taken place for the assessment.

7.6.6 Lithics

No illustrative finds drawings or photographs have taken place for the assessment.

7.6.7 Copper Alloy (Cu).

No illustrative finds drawings or photographs have taken place for the assessment.

7.6.8 Glass

No illustrative finds drawings or photographs have taken place for the assessment.

7.6.9 Wood

No illustrative finds drawings or photographs have taken place for the assessment.

7.6.10 Plaster.

No illustrative finds drawings or photographs have taken place for the assessment.

8 PALAEOENVIRONMENT

8.1 Introduction

The palaeoenvironmental assessment was completed by Wardell Armstrong (Ref. CL12283_Area_20_enviro_report; Appendix 7). The bulk environmental samples were processed at Wardell Armstrong LLP. 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; once dried, the residues from the retention mesh were sieved to 4mm and the artefacts and ecofacts removed from the larger fraction for further assessment. 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. The flot plant macrofossils and charcoal were retained and scanned using a stereo microscope (up to x45 magnification); once fully sorted and all relevant material removed the flots were discarded.

8.2 Quantification of the retents and flots available for analysis.

A total of 616 bulk samples were taken during excavation, with a total weight of 15301kg (9508l) of sediment processed for the assessment.

8.3 Factual summary of each type of sample, quantity, preservation, post-depositional processes, curation and storage need by ecofact group

8.3.1 Charred Plant Remains

Charred plant remains were present in 116 samples and were identified as being in good condition with the majority identified as cereal grains. These included:

- (20291) <20010> from the secondary pit fill [20825] located in the southeast pit group;
- (20464) <20025> secondary drainage fill from of gully [20463] in roundhouse group #20642;
- (20630) <20047> from secondary fill of pit [20629] that was part of an intercutting pit system cut by the drip gully for roundhouse #20462;

- (20471) <20058> from the fill of a post-medieval ditch or gully [20470], group #332691;
- (30068) <20154> from the hearth of roundhouse #20744;
- (30427) <20245> from the fill of posthole [30431] that was external to roundhouse group #20984;
- (20908) <20261>, which was a fill of pit [20909] located adjacent to wall 30379 in group #331848,
- (331419) <320441>, from layer in the southern quadrant of roundhouse group #20871;
- (331827) <320481>, from a layer in the central area of roundhouse group #20871;
- (330761) <320343> from a layer of silting in roundhouse group #20984
- (331430) <320460> from a fill of pit [331428];
- (331714) <320474> fill of pit [331712];
- (332103) <320498> from a burnt spread of charcoal located near postholes of platform structure group #332556; and
- (332701) <320558> from the fill of a hearth in pit group #332920.

8.3.2 Charcoal

Charcoal was present in 455 samples and were identified as being in good condition and mostly (although not limited to) comprised of oak (*Quercus* sp.) or willow/poplar (*Salix/Populus*). Fifteen samples yielded more than 50g, these were:

- (20063) <20002> from the tertiary pit fill [20062] located in southeast pit group;
- (20309) <20012> from the secondary pit fill [20308] located in southeast pit group;
- (20464) <20025> from the secondary fill of gully [20463] in roundhouse group 20462;
- (20338) <20014> from the secondary fill of tree throw [20337] located in southeast pit group;
- (330644) <320282> from a deposit of burnt mound material possibly used to raise the floor level within roundhouse group 330557;

- (330711) <320291> from a deposit of burnt mound material possibly used to raise the floor level within roundhouse group 330557;
- (330659) <320304> from a gully adjacent to the ring gully for roundhouse group 20774;
- (331267) <320408> from pit fill [331266] located in possible Bronze Age pit group;
- (331365) <320427> from pit [331363] located in roundhouse group 330577 within a ring gully associated with the roundhouse.
- (331382) <320431> from a burnt deposit in hearth [331371] in roundhouse group 330577;
- (331455) <320463> from the fill of drain [331542] in roundhouse group 331249;
- (30307) <320615> and (30307) <320616> both from a burnt mound deposit that is cut by roundhouse group 20984;
- (333328) <320627> from the fill of trough [333241]; and
- (333329) <320628> from the fill of trough [333241] in roundhouse group 20984

8.3.3 Animal Bone

Small fragments of animal bone were recovered from 47 samples with a combined weight of 60g. The report identified a minimum number of 14 individual animals, per context, from the assessed samples (subject to change with further analysis as many of the fragments comprise maxillary and mandibular teeth, which may have originated from one jaw). Species present include cattle (Bos sp.) n=6, medium (dog, sheep, goat sized) and large-sized (equivalent to cattle or horse size) ungulates (2 each), horse (Equus sp.) and sheep/goat (Ovid/Capra sp. (1 each). Animal bone from six contexts were not identifiable to species or anatomical element due to their poor condition and small size. Anatomical elements include teeth and post-cranial bones, including metapodials, femurs, humerae, radii, tibiae, phalanges and vertebrae. Small fragments of pelves and scapulae were also noted. Only adult animals were identified, while no butchery, pathology or canid/rodent gnaw-marks were observed in the assemblage. The report identified a very small quantity of burnt animal bone in 49 environmental samples, weighing a total of 73.5g. The animal bone was in poor condition, characterised by very fragmented small bones; as a result, identification of species and anatomical elements was not possible due to their poor preservation and small size.

8.3.4 Shell

Shell was present in eleven samples in very small fragments, it was identified as terrestrial and weighed a combined 12g.

8.3.5 Magnetised Material

Magnetised material was present in 341 of the samples with a combined weight of 2kg. It was scanned under a microscope (x45 magnification) and was seen to mainly be made up of heat altered stone with very occasional microslags mixed in.

8.4 An assessment of the character, range, variety and significance of all ecofactual groups

The palaeoenvironmental samples were characterised by charred plant remains and charcoal. The larger charred plant remain deposits were recovered from fills of gullies, and pits or other unrecorded layers. Wood charcoal from O5 South was dominated by oak and willow fuel debris and was mostly not from *in situ* burning, but from waste deposition in fills of pits, postholes, gullies and middens. Charcoal from <320615> and <320616> were deemed useful for further discussion as they are from burnt mound material (30307) which the features associated with roundhouse #20984 are cut into. A trough was found under this material suggesting the material had not moved far and represents and almost *in situ* burnt mound.

The magnetised material was recovered from a range of deposits and since most of it comprised of heat affected stones it seems to have been part of the middening processes along with the charcoal and charred plant remains. From this it can be suggested that areas of burning were regularly cleared out and deposited into areas designated for refuse.

The animal bone assemblage may comprise domestic food waste or the animals may simply have died from natural causes; the teeth fragments likely represent casual loss. The report stated that while it is not possible to assign animal bone to a chronological period by visual examination, their recovery in conjunction with prehistoric to Roman artefacts may indicate that they are of a contemporary date.

8.5 Statement on the research potential of each individual ecofact group, including potential to provide scientific dating.

The palaeonviromental remains from O5 South comprised a large assemblage of six hundred and sixteen bulk samples that provide an invaluable dataset from a large multiperiod site located within a wider archaeological landscape.

The processed charred plant remains and charcoal have potential for further analysis both in their own right, as well as in contributing to an overarching landscape scale study in conjunction with the samples from the other Wylfa excavation sites. Collectively, the results provide further information on wider landscape use through crop, tree and land management, as well as fuel use, and could also contribute to understanding the wider settings of prehistoric sites. These results would make a valuable contribution to the theme of Settlement and Landuse, which is a major research priority highlighted in the Review of the Research Framework for the Archaeology of Wales: North West Wales – Later Bronze Age and Iron Age (Gale, 2010), as well as being a key research objective in Technical Update to the Written Scheme of Investigation for this project (HNP 2016). The aim of this research theme is to understand how sites work within the landscape, including whether they are permanent or seasonal and using this information to help understand social organisation (Gale, 2010: 02).

The palaeoenvironmental report identified areas of definite *in situ* burning, including <320558> from a hearth in group #332920 contained within pit [332574] and <20154> from a hearth in roundhouse group #20774, which contained barley and oat grains, indicative of crop management activity similar to that at Cefn Du, on Anglesey, in the Late Iron Age and early Roman period. The report suggested this shows that there may be a consistent style of crop management and usage across this time period in Anglesey and likely across the wider landscape. In addition, further analysis of the charcoal may indicate fuel wood selection over time, the casual collection of any available wood for domestic fuel or the choice of specific species. Comparisons of charcoal from the periods present may indicate changes in woodland management or fuel wood choice and the burnt mounds might also provide interesting comparisons in the wood used across the Wylfa Newydd sites. The report suggests there are links with the wider Anglesey landscape, with charcoal recovered from Cefn Cwmwd also showing oak as a source of fuel. The key priority in advance of the analysis stage is securely dating of the contexts from which the samples were recovered; where possible from either typological or absolute methods, i.e., artefacts or radiocarbon

dating. The palaeoenvironmental assessment report stated that the key charred plant remains and charcoal samples may be suitable for radiocarbon determination. For the charcoal, the priority would be to select the shorter lived species to mitigate against the potential old wood effect.

8.6 Statement of significance for the retention of material and a proposal for discard strategy

The palaeoenvironmental assessment report states that at this stage all ecofacts should be retained until initial radiocarbon dates have been obtained and further analytical work has been completed.

The magnetic matter from all samples may be discarded as it cannot give us any further information on human activity. The report states that the animal bone assemblage is of low archaeological significance overall and no further analysis is necessary.

9 DISCUSSION

9.1 Summary of the character and significance of the site

Collectively, the stratigraphic, artefactual and palaeoenvironmental data have provided a significant addition to the archaeological record and are of national importance in their scale and complexity. The results from O5 South represent a major site, with the stratigraphy and assemblages having value in their own right whilst also making a significant contribution to the overarching landscape study provided by the collective Wylfa Newydd results. One of the research objectives in the Technical Update to the Written Scheme of Investigation for this project (HNP 2016), was Confirmation of the date, nature, character and extent of potential prehistoric and medieval sites in an order that they can be placed into the wider context of Anglesey during these periods (ibid.). The results identified activity with a broad chronology and demonstrated widespread settlement and use of the landscape. Prior to this, the main indicators of settlement and continued land use on this scale in the local area were the results from the Parc Cybi business park development, 15km to the southwest in Holyhead and also the Parc Bryn Cegin site near Bangor, 34km to the southeast. The results from O5 South demonstrate that such activity and level of occupation was more widespread and not confined to specific settlement areas within the region. Of note is that prior to the excavation at O5 South, the local archaeological landscape was mainly characterised by ritual and defensive archaeological remains, visible within the landscape. The results from O5 South change this narrative and provide direct evidence of domestic and industrial activity from the Late Mesolithic/Early Neolithic to the Roman period; activity that was hidden beneath a post-medieval agricultural landscape.

The evidence for Late Mesolithic to Bronze Age activity is fairly limited, but the number of such sites from Anglesey and northwest Wales is small (Kenney 2011) and these results are of regional importance in adding to this record. The identification of the Bronze Age activity is significant as settlement sites from the Bronze Age are rare, likely because construction methods have failed to leave any archaeological trace (ibid), and burnt mounds are important for suggesting the location of settlement. The reuse of mound material as a base for roundhouses is direct evidence of continued activity in a specific area from the Bronze Age into the Iron Age; the siting of one roundhouse, with the burnt mound trough in the centre, may be of particular relevance. The Iron Age in particular is strongly represented within the stratigraphic record, with extensive evidence of settlement across the landscape through the large number of roundhouses. The significance of this settlement activity is

enhanced by the continuation of occupation and land use into the Roman period and the establishment of additional roundhouses and associated settlement activity. The artefactual material was of particular importance and value in this instance for identifying the periods of occupation through a varied assemblage of metalwork and pottery. Of particular note were the copper alloy artefacts, which included a near complete, Late Iron Age La Tène III type or Nauheim derivative type brooch, similar to an example from West Sussex, which was Late Iron Age to early Roman in date. Two fragments of a horse bridle bit similar to an example from Swansea and also thought to be Late Iron Age to early Roman in date were recovered. Also found was a cast bronze mount from the Roman period that was decorated with a possible image of Medusa and was similar to an example from Cheshire. The artefact assemblage is of high archaeological potential and of local and regional significance and possibly national importance, covering a broad Mesolithic to post-medieval date, with a large proportion dating to the Late Iron Age to Roman period. The metal artefacts, along with stone objects associated with crafts and industry, as well as the briquetage fragments, are deemed significant in representing a Late Iron Age to early Roman date. This is a period of particular relevance to the Research Framework for the Archaeology of Wales - Romano British (AD 43-AD 410) (Davies, 2011), and along with the extensive settlement activity encountered, make major contributions to informing the research themes highlighted in the research framework, particularly settlement patterns and interaction between Roman occupiers and the indigenous population (ibid.). For settlement patterns, the research framework questions "to what extent did the pre-existing settlement determine that of the Roman period" and the results from O5 South so far suggest a continuation of settlement type and location, with the key indicators of change being the artefact assemblage and the re-siting of settlement activity uphill. Area 4 at Wylfa Newydd identified a Roman enclosure within an area once occupied by small-scale later prehistoric settlement and the Area 4 report (Wardell Armstrong, 2020) suggests the enclosure would have had direct views of the settlement activity in O5 South and the Roman enclosure may have been positioned to monitor the local populace (ibid.); the Roman period enclosures encountered in O5 South appear to be later than some of the Roman period roundhouses in the same location, suggesting these enclosures formed a different function. These results also feed into the research theme of interaction between Roman occupiers and the indigenous population, which focusses on assessing relationships between the two as evidenced by settlement activity, with the current results from O5 South and Area 4 suggesting continued occupation under Roman rule that led to further settlement or re-settlement within the site. The cobbled surfaces between roundhouses in O5 South were interpreted as further evidence of the use of space and the control of movement both within and outside the settlement area and similar evidence was found at Parc Cybi. Compared to Area 4, the artefact results from O5 South are more informative for the Iron Age and Roman period, but as with Area 4, there was no Iron Age or earlier pottery. The suggestion given in the Area 4 report (*ibid*.) is that the local population in Anglesey may have been largely aceramic in the Iron Age; a trend noted from Ireland, the Isle of Man, Wales, northern England and lowland Scotland. The Roman enclosure in Area 4 is thought to been reused in the early medieval period after abandonment, sometime between the 7th and late 9th centuries AD when it was apparently re-used as a defensible enclosure. Other evidence of reuse of abandoned features during the early medieval period at Wylfa Newydd was also found in Area 2, Area 12 and Area 14. Within the Area 4 enclosure a penannular brooch was recovered from a primary sediment layer relating to the early medieval re-use of the ditched enclosure; this deposit was radiocarbon dated to the 7th to 9th century AD, whilst the brooch typology also suggested 7th century origin (Wardell Armstrong 2020). In comparison, a coin dated to the mid-4th century AD recovered from a pit in O5 South, showed evidence of reuse, possibly as a neck pendant, also suggesting further occupation beyond the Roman period.

Collectively, the artefacts from O5 South demonstrate the national and international links present throughout this period and are a reminder that these were not isolated settlements but part of a larger network of habitation and trade. The subsequent medieval period was under-represented on site, with post-medieval agricultural and domestic activity more prevalent and evident.

The palaeoenvironmental results make a valuable contribution to the theme of Settlement and Landuse within the prehistoric period, which is a major research priority in the Review of the Research Framework for the Archaeology of Wales: North West Wales - Later Bronze Age and Iron Age (Gale, 2010), as well as being a key research objective in Technical Update to the Written Scheme of Investigation for this project (HNP 2016). The results provided good evidence of domestic activity, to complement the features and artefacts encountered. The charred plant remains and charcoal was mostly not from in situ burning, but from waste deposition in fills of pits, postholes, gullies and middens, and indicated largescale domestic activity, such as crop management and wood fuel selection. As highlighted in the palaeoenvironmental report for O5 South, the charred plant remains mirrored Late Iron Age and early Roman period activity at Cefn Du in central Anglesey, which suggested a consistent style of crop management and usage across this time period in Anglesey. The charcoal included oak, a fuel source also favoured elsewhere within the Wylfa Newydd site (such as in Area 4), as well as with parallels in Cefn Cwmwd in Anglesey, suggesting consistency in woodland management and usage across this region. palaeoenvironmental results from Parc Cybi (Kenney, 2020) also identified oak as a primary source of fuel; this evidence was used to suggest that there was woodland nearby and

preferred wood could be collected (*ibid*.: 317). At Parc Cybi, a change in fuel source was evident from the Early Medieval period when a wider range of species were used to fuel corn dryers, suggesting a change in the available woods during this period and that the expansion of woodland in the post-Roman period was represented by shrubby species expanding onto previously open land (*ibid*.). Evidence for this transition was not identified within the O5 South results.

9.2 Tabulated list of relevant sources

The key sources utilised for the post-excavation assessment were:

- Cooke, R, Davidson, J, and Hopewell, D, 2012 Proposed Nuclear Power Station Wylfa, Ynys Mon: Archaeological Baseline Assessment Report. Unpublished GAT report 999
- 2. Cuttler, R., Davidson, A. & Hughes, G. 2012. A Corridor Through Time: The Archaeology of the A55 Anglesey Road Scheme. Oxford.
- 3. Kenney, J, 2008, Recent Excavations at Llandygai, near Bangor, North Wales, GAT Report 764.
- 4. Kenney, J, 2011, Parc Cybi, Holyhead: post excavation assessment of potential report, GAT Report 954.
- 5. Kenney, J, 2020, *Parc Cybi, Holyhead Final Report on Excavations, GAT Report forthcoming.*

These reports and monographs were a key source of information for the post-excavation assessment, in detailing the known archaeological record within the region and highlighting parallel discoveries, feature types and interpretation. The results at Parc Cybi and Parc Bryn Cegin in particular provided insight into similar multi-period local sites that represented extensive settlement patterns and land use. This was complemented by the results from the A55 road scheme, which encompassed a broad length of Anglesey from one coastline to another, and also identified extensive period relevant activity that provided useful comparative analysis of regional trends.

9.3 Suggested further analytical work

9.3.1 Introduction

The stratigraphic, artefactual and palaeoenvironmental results have established the main periods and activity present on site and have indicated the key themes relevant for further analytical work in all three areas. The site has been characterised as evidence of continued settlement and use, with activity from the Late Mesolithic/Early Neolithic to the late Roman period identified. The majority of the stratigraphic evidence relates to the Iron Age and Roman periods as are the key artefact assemblages, and the palaeoenvironmental results. An initial round of radiocarbon dating from selected features has further refined the chronology and interpretation. Post-medieval/modern remains were identified but do not warrant further analysis.

9.3.2 Late Mesolithic / Neolithic Activity

This activity was represented by lithic assemblages and a pit, the latter with a preliminary radiocarbon date from the fourth millennium BC. Further study of the location of this activity within the wider landscape, through comparative analysis to other known sites and artefact typologies, will allow further understanding of possible activity and settlement distribution.

9.3.3 Bronze Age Activity

This activity was represented by lithic assemblages and features, including potential settlement activity and remains of burnt mounds. Burnt mounds in particular can indicate settlement over a wide chronological span, from Late Neolithic through to Early Iron Age (Kenney, 2011: 136). The initial radiocarbon dating has suggested a date of 1090 – 900 cal BC – Late Bronze Age, which helps provide a clearer understanding of the use and relationship with other local sites. The identification of a bunt mound beneath Iron Age roundhouse group #20984 is of particular importance in suggesting continuation of activity. The settlement activity in group #333333 was interpreted as a possible Bronze Age roundhouse. Further dating will be required to confirm this chronology.

9.3.4 Iron Age Settlement

As with activity at Parc Cybi and Parc Bryn Cegin, the extent of Iron Age settlement on the site provides a significant potential for studying all aspects of settlement development and use, including duration of use for individual roundhouses and the settlement as a whole. Preliminary radiocarbon dating has suggested occupation from the 5th century BC to the beginning of the Roman period (cf. Appendix 9) and this can be examined further through

more refined dating strategies. An examination of spaces between roundhouses and the spaces within roundhouse can also be developed, through more detailed examination of the alignment of key elements, including interior structures as well as exterior surfaces, such as cobbled areas.

9.3.5 Roman Period Settlement

The current evidence suggests continuation of settlement type and location, with the key indicators of change being the artefact assemblage and the siting of settlement activity further uphill. The interpretation of additional roundhouses is based on artefact recovery and assessment, coupled with preliminary dating and it will be vital for further analysis to determine whether these roundhouses relate to local resettlement, settlement expansion or settlement continuation. This can be examined through refined stratigraphic analysis and refined radiocarbon dating. The preliminary radiocarbon dating suggests occupation from the 1st century AD to the 3rd century AD and this is generally complemented by the results of the artefact assemblage, although a 4th century Roman coin was recovered, suggesting continuation of occupation to some degree. The assemblage includes pottery artefacts specific to the Roman period, as well metal artefacts from the Late Iron Age to early Roman period, and a later Roman coin. The pottery assemblage is well understood and further analysis could be limited to illustration work for archiving; for the metalwork, initial comparative analysis has been completed and related items identified, but further comparative analysis could be warranted to understand the relevance of the brooch, horse bit and cast bronze mount in particular and the frequency of such artefacts in the local, regional and national archaeological record. Spatial analyses of the Roman period artefacts across the site could yield further information on settlement distribution.

9.3.6 Early Medieval and Medieval Settlement

No specific evidence of early medieval and medieval settlement was identified within O5 South. A 4th century Roman coin reused as a necklace pendant was recovered from a pit fill that may be from this period that could be evidence of early medieval or later activity. No further analysis of the coin as an artefact is recommended, but comparative analysis with artefact reuse across Wylfa Newydd within this period is recommended, along with further radiocarbon dating of suitable samples from the area incorporating the pit, is proposed.

9.3.7 Proposals

In summary, the following further analyses are proposed for O5 South:

- comparative site and settlement analyses for all periods identified (excluding postmedieval/modern);
- intra and inter-site spatial analyses for the roundhouses;
- absolute dating methods through radiocarbon dating of key features and relationships (excluding post-medieval/modern); and
- XRF analysis of industrial waste, which would allow for the composition of the slags to be known and allow for an understanding of any processes involved in the technology.

10 STATEMENT OF POTENTIAL

10.1 Summary of the potential of the data in terms of local, regional, national and international importance

10.1.1 An appraisal of the extent to which the site archive might enable the data to meet the original research aims of the project;

The specific aims of the archaeological excavation and recording, as described in the WSI (HNP 2015; 2016), were:

- 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 establish the condition, age and stratigraphic sequence, of any archaeological / historical remain identified.
- 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), with particular reference to the prehistoric activity in the fields to the west and the medieval activity to the north.

The archaeological excavation and recording has established the nature and function of multiple features within the site and has identified the presence of multi-period domestic and industrial activity that collectively is of national importance. This has been characterised mainly by Iron Age and Roman period settlement, along with earlier settlement and activity, which were collectively identified by stratigraphic analysis, as well as artefactual and palaeoenvironmental assessment. Additional activity included examples of earlier prehistoric activity, including Mesolithic findspots and Bronze Age burnt mounds. The Iron Age and Roman period stratigraphy in particular was well established, including complex structural remains spread across a wide area, with supporting evidence of the control of movement both within and outside the settlement area via cobbled surfaces. The palaeoenvironmental results suggested a consistent style of crop management and usage across this time period, with a predominance of barley and oat grains, which mirrored other contemporary sites in Anglesey. The site was also notable for the periods not identified, specifically, the lack of robust evidence of medieval activity, which could not be identified or demonstrated within the excavated areas. This lack of evidence does not indicate complete absence during this

period, but it does highlight that settlement would likely have been elsewhere locally and that evidence of land management is not readily identifiable.

In addition to the specific aims of the project identified in the WSI, the Technical Update to the WSI (HNP 2016) identified the key national and regional Research Framework documents as well a series of updated research objectives. From the Research Framework, the key documents addressed by the O5 South archive are:

- Review of the Research Framework for the Archaeology of Wales: North West Wales Neolithic and Early Bronze Age (Burrow, 2010). The key research theme within this that is of particular relevance to O5 South is *Settlement* and the "(N)eed for more work on settlement sites in areas where palaeoenvironmental evidence can be obtained" (Burrow, 2010: 03). The identification of Neolithic and Bronze Age settlement activity within O5 South is an important addition to this research theme and the archaeological record. More robust radiocarbon dating where possible will enhance this data and contribute further to the research theme.
- Review of the Research Framework for the Archaeology of Wales: North West Wales - Later Bronze Age and Iron Age (Gale, 2010). Two key themes from the review relevant to O5 South are Chronology and Settlement and Landuse. For Chronology, the review stated that this is a key theme and overriding aim, with emphasis placed on radiocarbon dating where suitable materials survive. The review highlights that by 2010, of the 750 roundhouses excavated, "only 10% are dated and often relying on only one date" (ibid.: 02). A total of eleven Iron Age roundhouses were identified within O5 South, along with other settlement activity, and the current results provide additional dating and chronologies for this period, both through radiocarbon dating and artefactual evidence, enhancing the archaeological record. To further contribute to this research theme, a more robust radiocarbon dating strategy is recommended. For Settlement and Landuse, this is highlighted in the review as a major research priority, with a need to "Understand how sites work in the landscape, permanent/seasonal.....We cannot understand social organisation without resolving questions of land use first", with a need for "targeted excavation of type sites for dating purposes as well as longer term nation landscape projects" (ibid.: 02). The results from O5 South, along with neighbouring areas such as Area 4, are of particular significance in identifying particular site types and establishing a pattern of settlement and land use through stratigraphy, artefacts and palaeoenvironmental evidence and dating. The latter in particular are important for informing woodland and crop management as well as the use of resources for fuel. but further comparative

- analysis could be warranted to understand the relevance of period specific artefacts encountered and the frequency of such artefacts in the local, regional and national archaeological record, coupled with spatial analyses of the artefacts across the site to yield further information on settlement distribution;
- A Research Framework for the Archaeology of Wales Romano British (AD 43-AD 410) (Davies, 2011). There are five key themes within the research framework Settlement Patterns, Interaction between Roman occupiers and indigenous population, The archaeology of the early campaigning years, Funerary and Ritual and Technology and Industry. Of particular relevance to O5 South are the first two themes. In terms of settlement patterns questions asked for this theme within the research framework include: to what extent did the pre-existing settlement pattern determine that of the Roman period, and, how did the Roman communication infrastructure affect pre-existing and subsequent settlement patterns. At O5 South, four roundhouses, two enclosure structures and a pit group were dated to the Roman period, using a combination of artefacts, stratigraphy and construction methods, with phasing evident with their occupation and use; the settlement activity was located uphill away from the majority of the Iron Age activity which was situated mainly on the valley floor. What this currently suggests is that the pre-existing settlement pattern was retained but relocated; with a smaller number of roundhouses established; comparatively, in Area 4, the Roman enclosure was thought to have been positioned to monitor the local populace, whereas the Roman period enclosures encountered in O5 South appear to be later than some of the Roman period roundhouses in the same location. In terms of the theme of Interaction between Roman occupiers and the indigenous population, the emphasis in the research framework was placed on assessing interactions by investigating high-status settlements, which can include hill-forts, 'small towns', villas and especially military vici. Whilst the results from O5 South do not qualify with these site types, the scale of the settlement is important and there are signifiers, as with Area 4, of local population control. Overall, the results from O5 South provide an important contribution to these themes and questions and further analysis of the archive and more robust dating is warranted to explore these themes further.
- A Research Framework for the Archaeology of Wales: North West Wales Early Medieval c. AD 400-1070 (Nancy Edwards et al. 2016). This research framework highlights eight research priorities:
 - Identification of potential early medieval sites, particularly secular settlements, through collation and assessment of new and existing information sources –

- Whilst reuse of abandoned secular features during the early medieval period at Wylfa Newydd was found in Areas 2, 4 12 and 14, similar evidence was lacking within O5 South, with possible activity limited to a Roman coin reused as a pendant necklace, recovered from a pit fill;
- 2. Confirmation of potential early medieval sites through fieldwork, trial excavation and the application of dating techniques separate to the results from Areas 2, 4 12 and 14, currently there is a lack of potential early medieval sites at O5 South, beyond suggestions of activity possibly from the reused coin;
- 3. Full archaeological investigation and characterisation of a sample of identifiable early medieval sites, both secular and ecclesiastical, in different regions, through fieldwork and excavation, and an understanding of their location in the wider landscape, both physical and temporal as above, no specific early medieval sites were identified beyond suggestions of activity possibly from the reused coin;
- 4. Detailed analysis of early medieval artefacts and their contexts and characterisation of site assemblages currently this is suggested by the reused coin, which was interpreted as a double maiorina of the emperor Magnentius and dated to 350-353 AD, with the perforation a later embellishment when no longer in use as a coin. The coin was in a highly corroded state and no further recommendations are currently made for more detailed analysis. Comparative analysis with artefact reuse across Wylfa Newydd within this period is recommended along with a radiocarbon dating strategy for activity within the area of the coin;
- 5. Identification and analysis of environmental evidence from excavated samples and increased pollen sampling the palaeoenvironmental assessment for O5 South has been completed, which included the context (20623) from which the reused coin was recovered. Collectively, the results demonstrated evidence for crop and woodland management as well as wood fuel selection, primarily associated with the Iron Age and Roman settlement activity. At Parc Cybi near Holyhead, a change in fuel source was evident from the Early Medieval period when a wider range of species were used to fuel corn dryers, suggesting a change in the available woods during this period and that the expansion of woodland in the post-Roman period was represented by shrubby species expanding onto previously open land; evidence for this transition was not identified within the O5 South results.
- 6. Analysis of human remains for information on origins, demography, health, nutrition and transfer of pathogens no such evidence or activity was identified within the confines of O5 South;

- 7. Improving understanding of the chronological framework for the period through the application of all available methods and increased use of radiocarbon dating, especially on multi-period sites an initial radiocarbon dating strategy has been completed for key features across O5 South, with primary focus on the main Iron and Roman settlement sites; the results provided a good indication of the settlement transitions across the site, but do not provide any supporting information for the early medieval period; a radiocarbon dating strategy for activity within the area of the coin may provide chronological evidence for this period;
- 8. Engaging with relevant research on early medieval material culture elsewhere in Britain and Ireland thereby setting the evidence from Wales within a broader context Comparative analysis with artefact reuse across Wylfa Newydd and elsewhere within this period may assist with the further interpretation of the coin necklace pendant.

A Research Framework for the Archaeology of Wales: North West Wales – Medieval *c.*AD 1100 – 1539 (Longley, 2010). This research framework identified ten priority themes, comprising:

- 1. Norman expansion into Wales and 'Normanisation'
- 2. Castle building, including earthwork castles
- 3. Monasteries and monastic reform
- 4. 14th century desertion and depopulation
- 5. Rural communities and settlements
- 6. Emergence of towns
- 7. Landscape interpretation
- 8. Upland settlement
- 9. Boundaries, in time and space
- 10. Interdisciplinary research.

Currently, the results from O5 South do not provide any evidence or information in support of these themes. Currently, the evidence for later activity beyond the Iron Age and Roman period settlement is a reused Roman coin and post-medieval agricultural land management. If the further radiocarbon dating strategy for activity within the area of the coin and elsewhere on O5 South provides chronological evidence for this period, then priority themes 5 and 7 could be reconsidered.

The Technical Update defined a series of research objectives further to the Research Framework criteria and included the following:

- Confirmation of the date, nature, character and extent of potential prehistoric and medieval sites in an order that they can be placed into the wider context of Anglesey during these periods. There is particular emphasis on obtaining accurate C14 dates in order that the chronology of sites and ceramic sequences can be ascertained. The current site data from O5 South has identified multi-period activity from the Bronze Age through to the Roman period, with particular emphasis on large-scale Iron Age settlement activity and Roman period resettlement that forms part of a wider settlement landscape across Wylfa Newydd. Period specific chronologies have been generally established to identify phases of use within specific roundhouses and areas. The results correspond well with the activity identified at Parc Cybi in Holyhead, as well as in central Anglesey during the A55 scheme. The lack of ceramic evidence outside the Roman period at O5 South corresponds with similar aceramic results from Area 4.
- There is an emphasis on understanding the wider settings of prehistoric sites with specific reference to 'Understanding how sites work in the landscape, permanent/seasonal use and understanding the social role of hillforts' (Gale, 2010). It is possible that the remains within the proposed investigation area form part of the wider setting of the prehistoric and / or medieval remains seen to the west, north and south. As discussed above in relation to the Review of the Research Framework for the Archaeology of Wales: North West Wales Later Bronze Age and Iron Age (Gale, 2010), the results from O5 South, along with neighbouring areas such as Area 4, have established a pattern of settlement and land use through stratigraphy, artefacts and palaeoenvironmental evidence and dating.
- To undertake detailed analysis of prehistoric artefacts and their contexts in order to understand the chronological and typographic development, and use, of the artefacts. A detailed analysis of the prehistoric artefacts has been completed as part of the overall artefact assessment. A total of 24 lithics were recovered, with a Late Mesolithic to Early Bronze Age date; 53 worked stone artefacts were recovered as bulk finds from 24 contexts and as unstratified material, with a broad date from prehistoric to Roman; nine copper alloy artefacts were recovered that were of Late Iron Age to Roman date. These results form an important part of the Wylfa Newydd archaeological record and have contributed specific chronological and typological data that allows for further comparative analysis across the scheme.
- Placing the setting of the information gained from the archaeological investigation into a broader regional and national (including Britain and Ireland) context. *The*

results from O5 South provide an invaluable dataset from a large multi-period site located within a wider archaeological landscape and have been interpreted in relation to the other areas in Wylfa Newydd, as well as in Anglesey and the local region. The results can be considered on their own, as well as within Wylfa Newydd, as being of national importance.

- Gaining insights in social change during the Late Bronze Age / Early Iron Age period
 via analysis of the material culture. The artefactual material did not provide significant
 evidence of social change between these periods through material culture, although
 period specific chronologies and typologies were identified.
- Gaining insights into the local farming economy and the wider exploitation of the
 natural environment with particular reference to the exploitation of lakes and bogs.
 No specific evidence relating to the exploitation of lakes and bogs was recovered, but
 evidence of woodland and crop management was identified through the
 palaeoenvironmental assessment.
- Identifying and understanding early field systems, their development and degree of continuity. The results from O5 South were more illustrative of settlement activity across a broad time range rather than identifying early field systems.
- Roman Medieval transition. Establishing the extent of continuity or discontinuity between the late Roman and early medieval periods via analysis of environmental evidence, the agricultural economy and land use, the type of artefacts recovered, changes in settlement patterns and types and, changes in trade patterns. No direct evidence of this was forthcoming from O5 South, with a reused 4th century Roman coin being indirect evidence of activity within the medieval period. There was no stratigraphic evidence of settlement reuse that was identified in Area 4 and elsewhere at Wylfa Newydd.
- Understanding how the transition between the late Roman and early medieval period
 on Anglesey compares with the same period elsewhere in Wales and Britain. As
 above, the lack of stratigraphic or direct evidence signifying transition between these
 two periods limits the contribution O5 south can make to this research objective.
- To undertake detailed analysis of (early) medieval artefacts and their contexts in order to understand the chronological and typographic development, and use, of the artefacts. The only possible (early) medieval artefact is the reused Roman coin and further analysis will be reliant on comparative analysis of this with other examples of reuse within Wylfa Newydd and elsewhere.
- Further understanding and identification of pastureland in locations other than upland locations – specifically such locations as coastal wetlands, elevated wetlands and

moors. The current evidence from O5 South does not contribute to this research objective.

- Develop our understanding of known, but poorly understood, monument types, such
 as those seen here (burnt mounds, etc). Including focusing on such aspects as;
 - o Date;
 - Length of 'use life' and re-use;
 - o Structure;
 - Location (within the landscape);
 - Association with other features and site types;
 - Associated finds types and;
 - o Function.

Burnt mound activity was identified within O5 South. Whilst burnt mounds in particular can indicate settlement over a wide chronological span, from Late Neolithic through to Early Iron Age (Kenney, 2011: 136), the initial radiocarbon dating for this feature type at O5 South has suggested a Late Bronze Age date range of 1090 – 900 cal BC. The identification of a bunt mound beneath an Iron Age roundhouse was of particular importance in suggesting reuse of a location within a landscape as well as reuse of a feature type.

- Gaining insights into social organisation and settlement hierarchies. The current evidence from O5 South does not provide further detailed insight into social organisation or settlement hierarchies.
- Develop a better understanding of medieval towns and their impact on earlier settlements and the surrounding hinterland. The current evidence from O5 South does not contribute to this research objective.

10.1.2 Statement of the potential of the data in developing new research aims, to contribute to other projects and to advance methodologies;

The data represents activity across a wide chronological and spatial context and has contributed to an array of research issues highlighted in the Research Framework and the Technical Update research objectives discussed in 10.1.1. These include providing more robust chronologies through radiocarbon dating, understanding settlement patterns and land use, and highlighting interactions between newcomers and indigenes in the Roman period, through the continued use of settlement areas and the inclusion of a more varied material culture. The data has further potential to add to the existing research through more radiocarbon dating for key feature types within each period, spatial analyses of the artefacts across the site to inform settlement distribution as well as comparative analysis of artefact types in each period with examples from other Wylfa areas, as well as further afield. As part of this, further analysis of the O5 South site archive and site survey data is required.

10.1.3 Assessment of the relevant level at which the site data might be published

The results will be published in a suitable format for use by the archaeological profession and the public. A fully illustrated site monograph is proposed for Wylfa Newydd, with the results from O5 South incorporated as a section/chapter within that. The section/chapter will summarise the principal results with the specialist reports and radiocarbon dating results integrated. The section/chapter will discuss local, regional and national archaeological research frameworks, and the contribution made by the O5 South results. General photographs along with key illustrations detailing the main feature groups/types and their distribution will be included, as well as selected artefacts. The information will be prepared using the results of the final post-excavation report. In addition to the monograph chapter, shorter contributions to national journal(s) should also be considered, e.g., a summary of results in the Council for British Archaeology (Wales), to allow for additional public dissemination.

10.2 An informed strategy for the detailed analysis of data groups to enable a reconstruction of the history and use of the site to be developed, in line with the site's relevant research potential.

An informed strategy for the detailed analysis of the main periods and activity has been established, based on the stratigraphic, artefactual and palaeoenvironmental results and the key themes from the research framework and research objectives. Further analytical work based on these results and specialist recommendations has been presented. The history and use of the site is generally understood and this can be developed further through additional thematic and specialist analysis. The results from each period will be considered within the wider landscape and the contribution this makes to our understanding of the regional archaeology will be analysed, based on the project. The relationship between sites of the same period and different periods will also be considered, both across Wylfa Newydd and further afield, with particular attention paid to the stratigraphic results from the preceding evaluation phases on site as well as from the Parc Cybi Development to the southwest (Kenney J. 2020), which parallels Wylfa Newydd in the complexity of results. The absence of archaeology will be examined also, including the lack of earlier prehistoric activity, and medieval activity; this will also be considered in relation to the Wylfa Newydd landscape overall as well as the local archaeological landscape, including Parc Cybi and other sites of relevance. Further specialist analysis will include absolute dating methods through radiocarbon dating of key features and relationships further to the initial round of dating, as well as XRF analysis of industrial waste, which would allow for the composition of the slags to be known and allow for an understanding of any processes involved in the technology.

10.2.1 Neolithic

A radiocarbon date from a pit located in the northwestern section of O5 South (Area D) returned a Neolithic date of 3640 – 3370 cal BC (Beta-553503). This pit was cut by later Bronze Age activity and was the only confirmed Neolithic feature identified on site. Further analysis of the multiphase activity that included this feature is required to understand the stratigraphy and spatial chronology. Further radiocarbon dating within the group is proposed to inform this.

10.2.2 Bronze Age/Iron Age (Figure 76)

10.2.2.1 Pit Group

A circular intercutting pit group was located on the northwestern side of O5 South (Area A). The group was interpreted on site as Bronze Age in origin, but the intercutting nature of the pits suggested use and reuse over a period of time. Radiocarbon dating from the fill of a pit within the group returned an Iron Age date of 360 – 100 cal BC (Beta-553507), suggesting some of the activity was from this period; this pit was one of the latest in the stratigraphy and may not date the group in its entirety. The group was sealed by a deposit which included Roman briquetage and other contemporary artefact. Further analysis of the multiphase activity that formed the feature group is required to understand the multi-period stratigraphy and spatial chronology. Comparative feature analysis and further radiocarbon dating within the group is proposed to inform this.

10.2.2.2 Burnt Mounds

A substantial burnt mound (30307) was located in the northern end of the site (Area F). The mound material sealed two postholes, a stone lined pit and a trough. A radiocarbon date from the primary fill of the trough returned Late Bronze Age a date of 1090 – 900 BC (Beta-553504). The burnt mound material was subsequently used as a base for a roundhouse, with the trough situated almost central to the roundhouse, suggesting the placement of the roundhouse was influenced by the position of the burnt mound. Whilst a general date for the burnt mound has been provided, further analysis of the feature and the later roundhouse is required to understand the multi-period stratigraphy and spatial chronology. Comparative feature analysis, including other examples of burnt mound reuse on site, and further radiocarbon dating, if viable, is proposed to inform this.

Another burnt mound, was located at the northwestern side of O5 South. The feature included burnt mound material and two pits (Area A). A radiocarbon date from the fill of a pit sealed by the mound returned a post-medieval date which must be considered anomalous (Beta-553512). This area was truncated by two northwest to southeast orientated evaluation trenches and another small patch of burnt mound material located 6m to the southeast may have been part of the same mound. The mound activity was situated c.6m southwest of the centre of a roundhouse group and burnt mound material had been used within the roundhouse to raise the floor level, suggesting the siting of roundhouse was influenced by the location of the burnt mound. Whilst a radiocarbon date for the burnt mound has been provided, this appears anomalous and further dating is required, if viable. Comparative feature analysis, including other examples of burnt mound reuse on site, is proposed to inform this.

A possible roundhouse, was located in the northwestern section of O5 South, which included drip gullies, several pits and postholes (Area D). The majority of the features were cut into colluvia, with two earlier features, a posthole and pit, cut by the drip gullies. The pit returned the Neolithic date. All of these features were covered by later colluvia as well as a later phase of structural features, including a wall structure and crude metalled surfaces. A possible Roman weight was recovered from the metalled surface and these features evidently postdated the earlier settlement remains. Further analysis of the activity within the pit group to understand the spatial chronology; the stratigraphy is generally understood but radiocarbon dating could provide additional information, if viable. This would also allow comparison with other period relevant roundhouses.

A possible roundhouse defined by drip gully [330724] was situated c.17m south of roundhouse group #330577 in the northwest of the site (Area A). The group included pits and postholes and was encircled by a possible ring gully [330724]; the features were cut into the glacial horizon and there were no other associated features. Further analysis of the activity within the pit group to understand the spatial chronology; the stratigraphy is generally understood but radiocarbon dating could provide additional information, if viable. This would also allow comparison with other period relevant roundhouses.

10.2.3 Iron Age (Figure 77)

10.2.3.1 Roundhouses

The Iron Age remains were the most prominent and extensive on site. They consisted of eleven stone built roundhouses, five stone lined wells, two stone lined storage pits, four granaries and cobbled surfaces. The roundhouses were between 9m and 11.30m in diameter and were in varying states of preservation, with structural remains (walls and/or drains) and rubble in all examples.

A roundhouse, located towards the western end of O5 South comprised multiple internal features (Area E). A radiocarbon date from a drain fill returned an Iron Age date of 370 – 180 cal BC (Beta-554148), which was similar to that returned for a nearby pit group (#332920; Beta-553511), suggesting they were broadly contemporary. Another roundhouse, [331235] was located nearby and the area had been heavily truncated by a north-south aligned evaluation trench (Area D). Further analysis of the activity and spatial chronology within the roundhouse and with neighbouring roundhouses are required, supported where possible with further radiocarbon dating to provide more definitive chronologies.

A roundhouse located at the western corner of O5 South, at the valley bottom (Area A). It had been heavily truncated during initial archaeological investigation (evaluation and mitigation) and only the northernmost half was extant. Within the extant remains there was evidence for a phases pre-construction, construction, alteration and abandonment. Further analysis of the phased activity and spatial chronology within the roundhouse is required, along with comparison with neighbouring roundhouses. This should be supported where possible with radiocarbon dating to provide more definitive chronologies for the roundhouse phases.

Roundhouse #331596 (Area B) incorporated multiple structural elements, including an internal drain running underneath the threshold structure, mirroring the arrangement seen in other roundhouses on the site (e.g. roundhouses #20462 and #20774). As with other roundhouses within O5 South, the roundhouse was built on a large foundation layer (e.g. roundhouses #330577 and #20984). Several discrete features were discovered under the foundation mound and probably used for storage and waste management, which predated the roundhouse. Further analysis of the activity and spatial chronology within the roundhouse and with neighbouring roundhouses are required, supported where possible with radiocarbon dating to provide more definitive chronologies.

A possible roundhouse was identified in the western part of O5 South (Area E) and comprised two structures: {331235} representing a stone surface which and wall {331637}. Not much of these structures remained intact, but the curvilinear shape of the wall and construction methods used suggested a roundhouse that was possibly robbed out to build other structures in the area. A nearby pit group #332920, which returned an Iron Age date of 370 – 180 cal BC (Beta-554148), seemed to respect the extrapolated circumference of this roundhouse; whilst the postulated outline of the roundhouse would have crossed the footprint of roundhouse group #332430. Due to the limited archaeological evidence from {331235}, it was not clear whether this was earlier or later than roundhouse group #332430. Further analysis of the activity and spatial chronology of the roundhouse and with neighbouring roundhouses are required (particularly roundhouse #332430), supported where possible with radiocarbon dating to provide more definitive chronologies.

Roundhouse #331373 (Area D) was situated between roundhouse #331596 and #20984. The roundhouse had been heavily truncated by an evaluation trench but there was still evidence of internal construction and activity that was similar to other roundhouses, including gully arrangement found in roundhouses #20462 and #20774. A series of circular features truncating the floor surface; in plan these features did not appear to form an arrangement

suggestive of supporting posts for a roofed structure and were interpreted as later in the stratigraphy and possibly post-dating the roundhouse. A north-south orientated wall was clearly stratified above and post-dated the roundhouse activity; a similar feature was identified at roundhouse #331596; both of which could suggest similar later enclosure structures. Further analysis of the activity and spatial chronology within the roundhouse and with neighbouring roundhouses are required, supported where possible with radiocarbon dating to provide more definitive chronologies. Particular focus on the relationship of the roundhouse to the later circular features and enclosure.

Roundhouse #20984 (Area F) incorporated multiphase activity and included the use of burnt mound material (30307) as a foundation deposit. The burnt mound material was leveled and used to create a platform for the roundhouse, whilst a metalled surface surrounding the foundation layer was possibly an attempt to further stabilise the surrounding area. The metalled surface continued northeast into roundhouse Group #331249 and southwest (as contexts 332927 and 332928). A number of postholes were cut into the metalled surface, which possibly represented the remains of a 4 or 6 post granary structure. Another layer of metalling made from smaller pebbles was also identified beneath the main metaling deposit. The walls of the roundhouse appeared to have been built on top of the metalled surface. The roundhouse had an internal drainage system comprising two main gullies forming a question mark shape in plan that was also seen in Roman period roundhouses #20774 and #20462. A radiocarbon date was sought from the gully fill returned an anomalous date of 1680 – 1930 cal AD (Beta-553509). Numerous features and layers were encountered within the roundhouse structure and a stone lined pit contained a late Iron Age La Tène III type brooch or Nauheim derivative type (SF320039). Other artefacts from within the roundhouse were a trough quern/grinding stone, a waisted stone probably used for metal working from layer, spindle whorls and a primary flint flake also from (30035). Further analysis of the multiphase activity and spatial chronology within the roundhouse and with neighbouring roundhouses are required, supported where possible with radiocarbon dating to provide more definitive chronologies. Comparative feature analysis, including other examples of burnt mound reuse.

Roundhouse #331249 (Area H) was situated to the east of roundhouse group #20984 and was partially obscured by the southeast facing limit of excavation. Numerous postholes found within the roundhouse structure, which were cut into foundation layer upon which the roundhouse was built. A posthole and two pits were found beneath the foundation layer and possibly predated the occupation of the roundhouse. A metalled surface (331929) ran between roundhouse Group #331249 and roundhouse Group #20984 and was possibly equivalent to (330842) from that group. Further analysis of the activity and spatial

chronology within the roundhouse and with neighbouring roundhouses are required, supported where possible with radiocarbon dating to provide more definitive chronologies.

Roundhouse #333568 (Area H) represented the remains of possible Iron Age roundhouse which was heavily truncated by later archaeological features and an evaluation trench. At the centre of roundhouse there was a large hearth feature with related flue and oven. The hearth cut through multiple postholes/stakeholes, which may have been associated with an earlier smaller hearth. Surrounding the hearth were multiple postholes, with the larger postholes likely to have been roof supports and several smaller postholes and stakeholes related to the hearth. Following roundhouses disuse there appeared to be a phase of deliberate demolition to the south of the roundhouse, possibly related to the construction of another roundhouse to the south. Two radiocarbon dates were obtained from the roundhouse: one from the fill of hearth and one from the fill of a later charcoal layer/hearth; they returned a date of 410 - 230 cal BC and (332432) and a date of 360 - 160 cal BC respectively, both mid to late Iron Age (Beta-553513 and Beta-554147). The roundhouse appeared later in the stratigraphic sequence then the well located to the southeast (group #333678), as the roundhouse wall overlaid a cobbled track associated with the well. The roundhouse was earlier than a well structure to the south. Further analysis of the activity and spatial chronology within the roundhouse and with neighbouring roundhouses are required, including comparative dating analysis. The radiocarbon dates for this roundhouse suggest occupation and use during the mid to late Iron Age; comparative analysis of dating from other roundhouses is required.

Roundhouse Group #331694 (Area C) represented the partial remains of a roundhouse wall situated in the south east facing limit of excavation for O5 South. It appeared to be very similar in construction to the wall in roundhouse #20984; due to the small amount of visible structure further interpretation was not possible. Limited further analysis due to small amount of visible archaeology; general comparison with other roundhouses required.

Roundhouse #331838 (Area C) was situated approximately 25m to the northeast of roundhouse #330577. The structure was only partially exposed with the rest being beyond the southeast facing limit of excavation. The drainage system was similar to examples found in other roundhouses on O5 South particularly roundhouse #330577. The extensive destruction layer within the roundhouse signified abandonment. Further analysis of the activity and spatial chronology within the roundhouse and with neighbouring roundhouses are required, including the use of similar drainage systems. Further radiocarbon dating where possible to provide more definitive chronologies.

Roundhouse #331741 (Area C) consisted of the remains of a possible roundhouse that was partially obscured by the southeast facing limit of excavation. Seven postholes within the roundhouse were interpreted as a former roof structure. Further analysis of the activity and spatial chronology within the roundhouse and with neighbouring roundhouses are required, including the use of similar drainage systems. Further radiocarbon dating where possible to provide more definitive chronologies.

10.2.3.2 Wells

Five substantial wells were recorded. These were circular, between 1.20 m and 3.30 m in diameter and at least 1.50 m deep.

Group #332814 (Area G) represented a large well with cantilevered steps. The construction cut for the well was lined with a thick clay deposit and large slabs of schist and drystone walling was added as lining. [331724] was a stone well located close to well #333678 at the northeastern end of O5 South (Area H). Associated features included metalled surfaces, which abutted the well, and an open sided rectangular structure constructed on the metalled surface (331881).

Group #333678 (Area H) was a large well situated to the northeast of O5 South near well [331724]. A sunken trackway structure led to the well. The well was earlier than roundhouse #333568 as a wall of the roundhouse sealed the trackway; soakaway/well was the latest feature to be constructed in this area.

Well #30492 (Area A) was located to the western side of O5 South; the construction of the pit was very similar to that of well group #332814. Well [330947] (Area I) was situated adjacent to roundhouse group #30505. It was constructed in a very similar way to the other wells on site (e.g., Group #30492).

Further analysis of the activity and spatial chronology represented by the wells and with neighbouring activity are required.

10.2.3.3 Storage Pits

Two storage pits were identified at O5 South; the pits were generally circular, up to 2 m across and 1.2 m deep.

Storage pit #331170 (Area B) had been constructed using local schist with a larger stone placed in the base of the features and coursed circular walls. This pit was similar to, but much deeper than stone lined pit [20578], which was located c.40m to the southwest. There were four postholes situated in a rough rectangular arrangement around the pit which suggested there was once a structure closely associated with the pit when it was in use.

Stone lined pit [20578] (Area J) contained schist slabs which lined the pit cut. The pit was adjacent to pit [20602] in which a Roman coin was discovered, although there was no direct relationship between the two pits. All of the stone lined pits were interpreted as Iron Age on site, but the proximity of this pit to Roman period activity could suggest a later date for this feature.

Further analysis of the activity and spatial chronology represented by the storage pits and with neighbouring activity are required. Further consideration as to the use of the pits.

10.2.3.4 Possible Granaries

A posthole group forming a granary (Area H) were situated c.6m north east of well group #333658. The arrangement in plan suggested a possible 4 or 6 post structure. There are other examples of possible 4 and 6 post structures across O5 South, notably groups #30406, #333590 and #333681.

Group #30406 (Area J) incorporated a pit and posthole alignment in close proximity to roundhouse group #20462. This group consisted of 16 postholes, 6 pits, stone tumble, and was cut by a post-medieval ditch. The arrangement of postholes [20592], [20516], [20682] and [20532] was suggestive of a possible granary or other four post structure. Roman pottery was recovered from wall tumble <20473> and flint debitage from fill (20601) of posthole [20600].

Group #333590 (Area B) consisted of 6 post holes arranged in a rectangle comprising two rows of three postholes, each row aligned north - south, and each pair of postholes roughly opposite each other east — west with stone lined pit #331170 located centrally to the postholes. Group #333681 (Area B) was situated c.4m to the north of pit group #331170 and consisted of a group of postholes forming at least one east - west aligned rectangular post built structure, possibly a granary. Further analysis of the activity and spatial chronology of the granaries and with neighbouring activity are required, supported where possible with further radiocarbon dating to provide more definitive chronologies.

10.2.3.5 Enclosure type structures

Two enclosure type structures (#30491/#331848 and #20704) were identified within O5 South; they were partly constructed using orthostats. A radiocarbon date was obtained from a pit fill associated with #30491 (Area G) returned a date of 190 – 0 cal BC (Beta-554150). A ring gully from roundhouse group #20774 ran over the top of the wall for #30491.

Enclosure Group #20704 (Area I) was a stone built structure consisting of two main walls and later structural additions. A number of pits and postholes were located within the interior and immediate exterior of this group. None of these features had any direct relationship with the structural elements within this group and it was not possible to determine whether they are contemporary with the structure or not. A radiocarbon date from a pit fill c.5m southeast of the enclosure returned a date of 20 cal BC – 130 cal AD (Beta-553502), suggesting it was a later Iron Age/Roman period feature.

Further analysis of the activity and spatial chronology of the enclosure type structures, associated activity and neighbouring activity are required. One enclosure is likely earlier than Roman period roundhouse #20774, based on stratigraphy and radiocarbon dating. Further radiocarbon dating, particularly of the pits and postholes in enclosure group #20704 are required to provide more definitive chronologies.

10.2.3.6 Intercutting pit group

A group of intercutting pits #332920 (Area E) were situated near to the Bronze Age pit group, roundhouse {331235} and roundhouse #332430. Eleven pits were identified; a radiocarbon date from one of the pit fills returned a date of 390 – 200 cal BC (Beta-553511), which was very similar to that returned for the drain found in roundhouse #332430. Further analysis of the activity and spatial chronology of the pit group and neighbouring activity are required. The radiocarbon dating suggests it may be contemporary with roundhouse #332430. Further radiocarbon dating is required to provide a more definitive chronology.

10.2.4 Roman (Figure 78)

10.2.4.1 Roundhouses

Four roundhouses (#20462, #20871, #20774 and #30505) and two enclosure structures (#20591/#20637, #331848) and a pit group (#331291) were dated to the Roman period. The features in this phase were initially dated using a combination of artefacts, stratigraphy and

construction methods; the roundhouses were subsequently dated by radiocarbon dating. The initial radiocarbon dating suggested the roundhouses were active during the same period and in some cases, later activity was also identified, whilst some of the construction methods used in the roundhouses were similar to those used for the Iron Age roundhouses. The Roman period settlement activity within O5 South was generally located uphill away from the Iron Age activity.

Roundhouse #20462 (Area J) was located in the south western quadrant of O5 South and may have been constructed using wattle and daub as there was no evidence of stone walls or a wall gully. The internal gully formed a question mark shape that was similar to that used in Iron Age roundhouse #20774. A radiocarbon date from the fill of a hearth returned a date of 80 – 230 cal AD (Beta-553505). The remains of a ring/drip gully was identified on the southern side of the roundhouse, which was cut by enclosure #20637 (Area J) to the northeast; suggesting the roundhouse went out of use before the enclosure was built. This hypothesis was supported by a radiocarbon date from enclosure #20637 of 240 – 390 cal AD (Beta-554149). Further analysis of the activity and spatial chronology of the roundhouse and with contemporary roundhouses, earlier Iron Age roundhouses and later activity are required. Further radiocarbon dating could provide a more roust chronology.

Roundhouse #20871 consisted of a ring gully 11.50 m across, and circular stone capped internal drain (Area H). It was located on the valley slope; the northern half of the roundhouse was on an artificial platform up to 0.07 m thick, which created a level platform off the side of the slope. The platform overlay numerous early (possibly Bronze Age) pits and was located in the central area of O5 South, adjacent to enclosure #331848 and comprised multiple phases of activity, including construction and abandonment. A radiocarbon date from a hearth situated centrally in the roundhouse returned a date of 60 - 230 cal AD (Beta-553508), which was similar to the date from roundhouse #20462. Further analysis of the activity and spatial chronology of the roundhouse and with contemporary roundhouses, the earlier possible Bronze Age activity and the Iron Age roundhouses are required. Further radiocarbon dating could provide a more robust chronology.

Roundhouse Group 20774 (Area G) represented the remains of a roundhouse situated adjacent to Group #331848. A radiocarbon date has been obtained from a hearth returned a date of 80 – 250 cal AD (Beta-553510), similar in range to that from roundhouse #20462 and Roundhouse #20871. Further analysis of the activity and spatial chronology of the roundhouse and with contemporary roundhouses are required. Further radiocarbon dating could provide a more robust chronology.

Roundhouse #30505 (Area I) was constructed at the north end of Iron Age structure 20704. Radiocarbon dating from a fire pit returned a date of 60-230 cal AD (Beta-553506), the same as roundhouse #20871, and similar to roundhouse #20774 and roundhouse #20462. Further analysis of the activity and spatial chronology of the roundhouse and with contemporary roundhouses are required. Further radiocarbon dating could provide a more robust chronology.

10.2.4.2 Enclosure Groups

Enclosure Group #20591/#20637/#30162 (Area J) extended east from the east side of roundhouse 20864; it measured 18.60 m long (east to west) and was over 18 m wide (into the southern limit of excavation). The group included multiple structures and metalled surfaces. Roman pottery (Black Burnished Ware) was recovered and a pit fill returned a radiocarbon date of 242-386 cal AD (Beta-554149). This date helped understand the stratigraphic relationships between the enclosure group and roundhouse #20462, suggesting the roundhouse was the earlier structure which was later truncated by the enclosure. The chronology of this enclosure in relation to the earlier Roman period roundhouse is generally understood. Further radiocarbon dating could provide a more robust chronology.

10.2.4.3 Group #331848

Group #331848 (Area G) was situated adjacent to and appears to be related to enclosure #30491. This group predominantly involved phases of dewatering the area. An initial cobbled surface was cut by pits, two of which were later cut by a wall. A radiocarbon date from one of the pit fills returned a date of 190 – 0 cal BC (Beta-554150), suggesting an initial Iron Age period of use. A fine silt layer covered the pits and abutted the wall, marking a period of disuse; a radiocarbon date from the layer returned a date of 20 – 220 cal AD (Beta-554151), suggesting further activity in the Roman period, with the wall constructed and used sometime between these date ranges. Further analysis of the activity and spatial chronology is required. Additional radiocarbon dating could provide a more robust chronology.

Stone capped drain/hearths

Group #30162 (Area J) consisted of a stone capped drain and hearths. Stakeholes/post holes were identified around the hearth suggesting a structure or frame was present when the feature was in use. An earlier pit, was discovered under all these features. The pit was filled with a charcoal rich deposit suggesting an earlier fire pit may have been used first before the stone built hearths. Further analysis of the activity and spatial chronology is required. Radiocarbon dating could provide a more definitive chronology.

10.2.4.4 Intercutting Pits

A series of intercutting pits and deposits #331291 (Area J) located adjacent to roundhouse #20462. A capped drain running from the roundhouse cut one of the deposits suggested the roundhouse was the later activity, but the recovery of Roman pottery including amphora and Samian ware sherds from the deposits suggest they were generally contemporary with the roundhouse. Further analysis of the activity and spatial chronology is required. Radiocarbon dating could provide a more definitive chronology.

In summary, the following further analyses are proposed:

- · comparative site and settlement analyses for all periods identified;
- intra and inter-site spatial analyses for the roundhouses and other key features; and
- absolute dating methods through radiocarbon dating of key features and relationships (all periods identified).

10.3 Recommendations

Specific recommendations for retention, illustration and discard of artefacts and retention and discard of ecofacts are included in the specialist results in this report; they are summarised below along with further recommendations for the project archive, project datasets, radiocarbon dating and dissemination.

- Archive: a detailed review and analysis of the O5 South archive to inform the next stage of post-excavation. This will require a review of existing datasets, including documentation, digital data and site survey data. This information will inform any further radiocarbon dating strategies and comparative analyses of feature types and artefact types.
- Illustrations: the illustrations prepared for the current report comprised overviews of the spatial distribution of key features and groupings, as well as key bulk sections. Additional more detailed illustrations are recommended, including sections and plans for all significant features where the depth and complexity of deposits are important or relationships are discussed in detail in the text. In addition, thematic illustrations will be prepared showing the distribution of features/groupings by period, both within O5 South, as well as across the Wylfa Newydd site. In addition, illustration of diagnostic artefacts is recommended, including Roman pottery sherds, lithics, Copper Alloy and wood.
- Radiocarbon dating: an initial suite of dates have been completed as part of the post-excavation assessment phase. The dating was based on a selection of stratigraphically significant features and contexts. The dating was completed by Beta Analytic and results are summarised within this report. The dating results provided guiding chronologies for key feature groups and helped differentiate the varied periods of activity on site, complementing the material archive in many cases. In particular, the dates were useful for suggesting which roundhouses and were from the Roman period; the latter in particular were useful for providing a general chronology for the four Roman roundhouses. Absolute dating methods through radiocarbon dating of key features and relationships is now recommended to inform further interpretation and address the project research objectives.
- Palaeoenvironmental data: this dataset has the potential to inform crop and fuel management and provide insight in the wider context of Anglesey and North Wales through comparative analysis of results from Wylfa Newydd and other regional activity and further comparative analysis is recommended

- Artefacts: The report states that further analysis is certainly warranted on the material
 in general, particularly on the Roman pottery, worked stone, lithics, fired clay and
 industrial waste, including illustrative work, XRF analysis and comparative research
 with other archaeological sites at Wylfa and in the wider vicinity.
- Datasets: the archive datasets and specialist results should be combined into a searchable database that can allow the information to be unified and interrogated in a rapid and meaningful manner from which further detailed analysis could then be undertaken. This could also assist in producing an accessible resource for digital deposition and public dissemination.
- Dissemination: The results from O5 South should be disseminated to the archaeological profession and the public to allow others to use this information. This is proposed through the following media:
 - Deposition of an report and Event Primary Reference Number/Primary Reference Number dataset to the regional Historic Environment Record (HER); and
 - Academic publication (section/chapter in edited monograph).

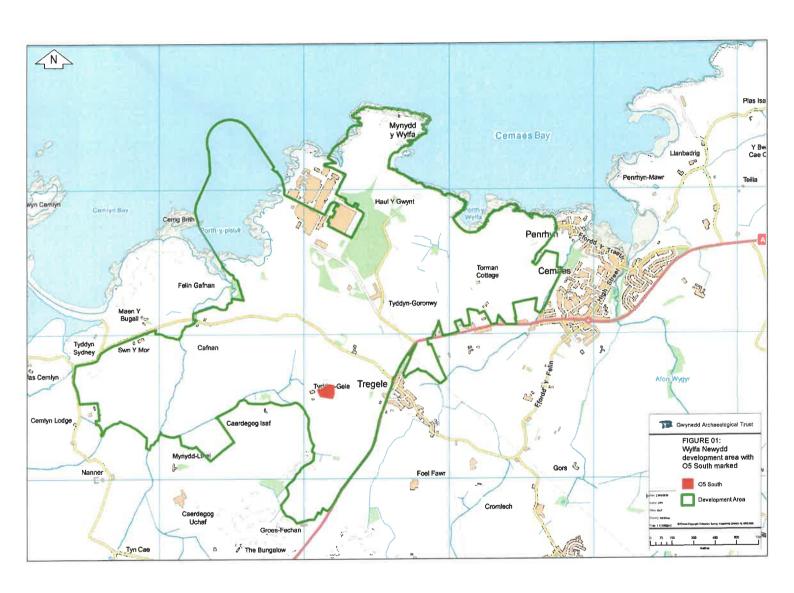
For the academic publication, the results will be incorporated as a section/chapter within a fully illustrated site monograph that will incorporate the results of the overall Wylfa Newydd excavation and recording programme undertaken for the site preparation and clearance.

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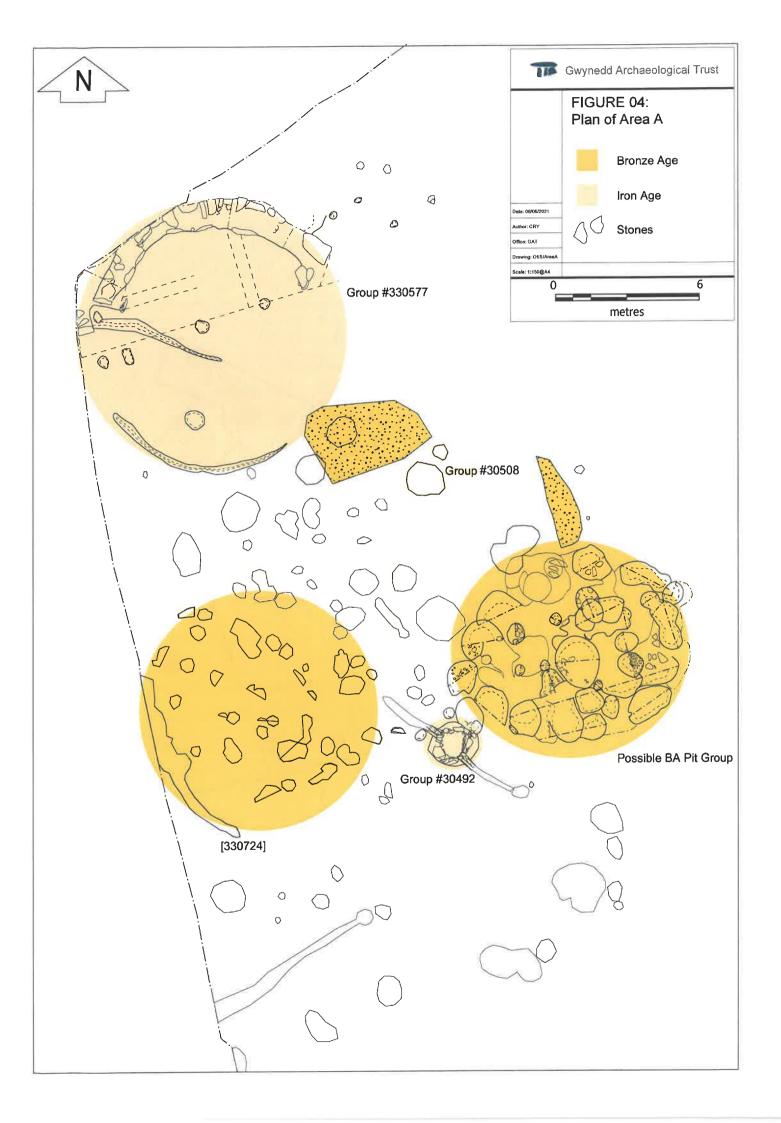
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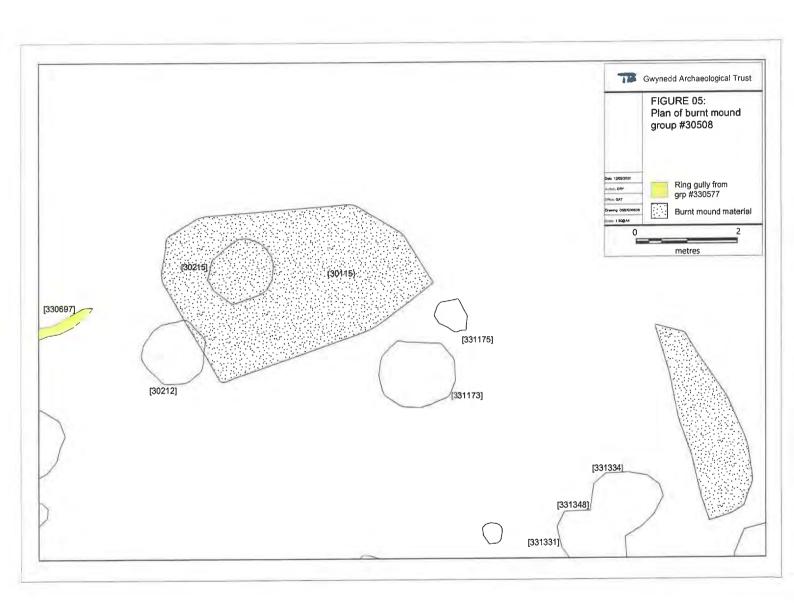
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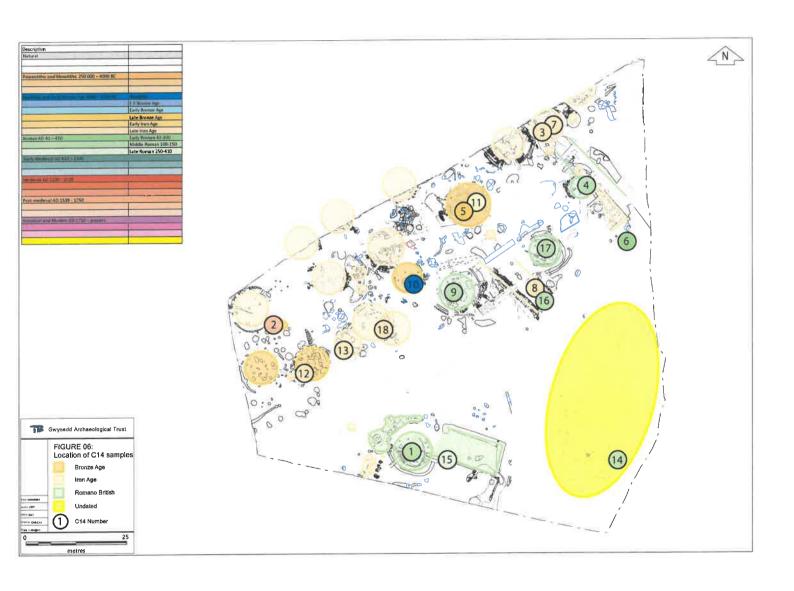


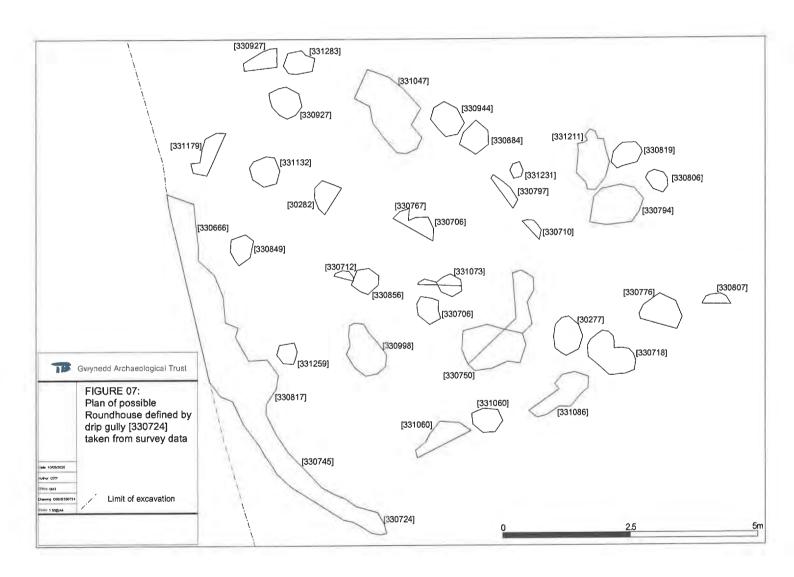


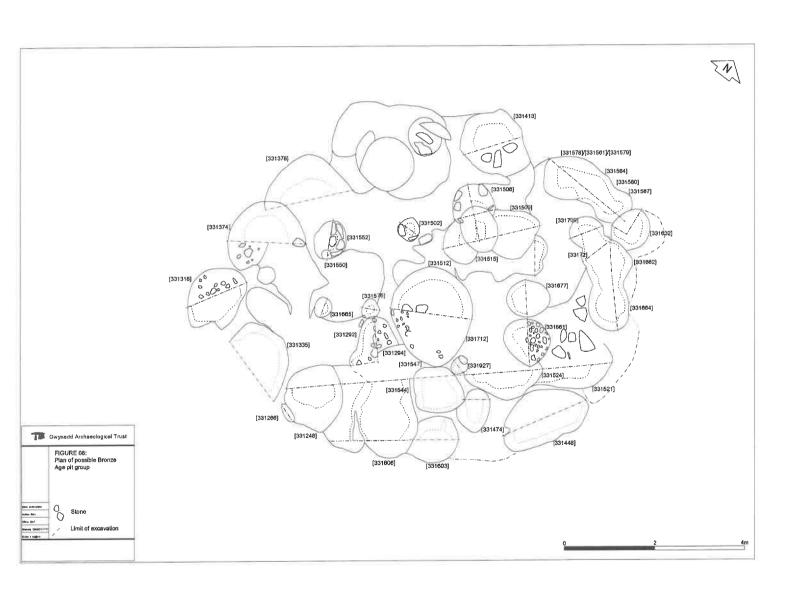


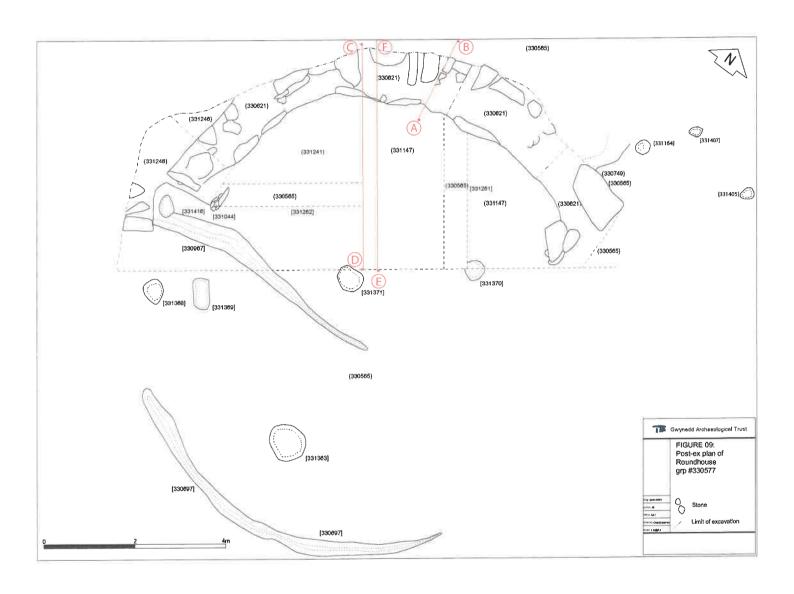


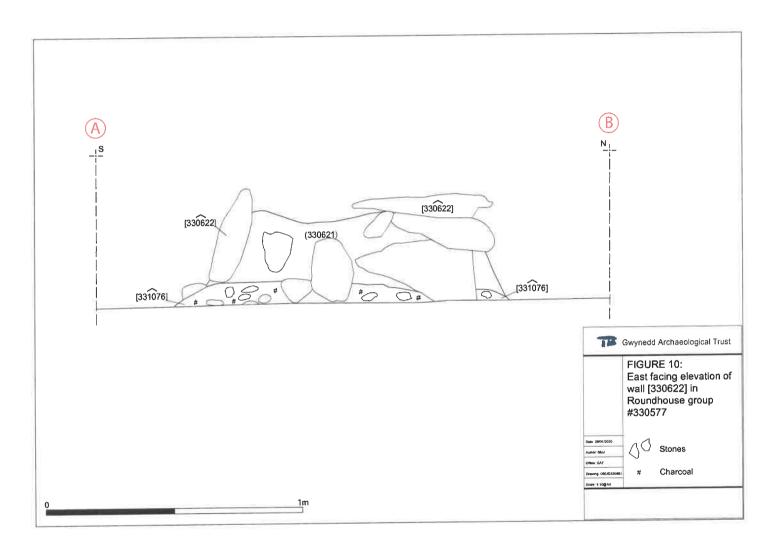


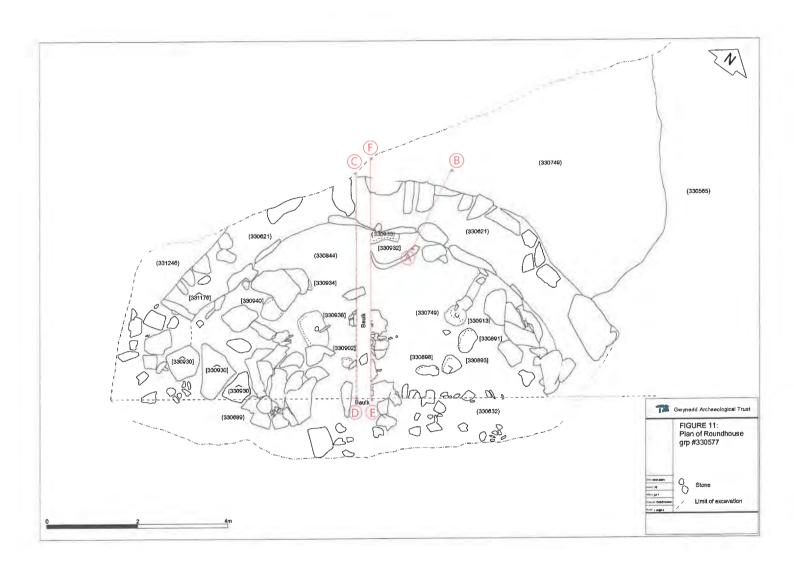


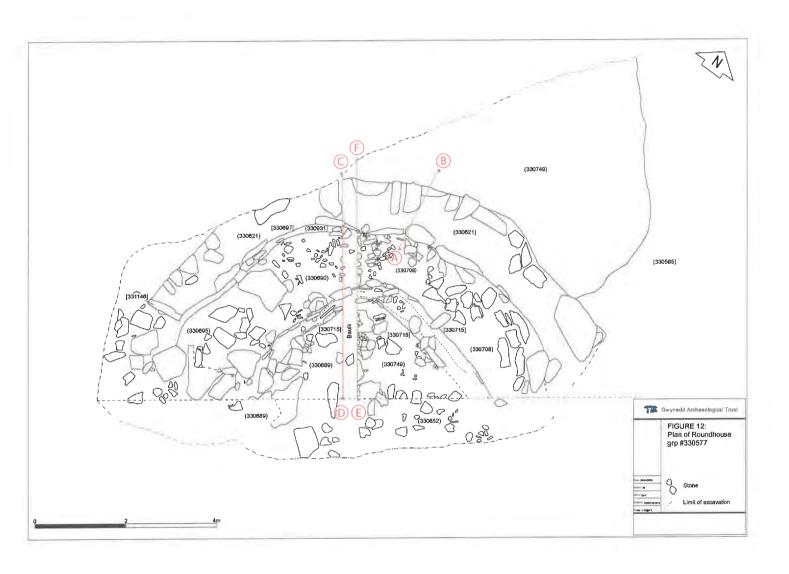


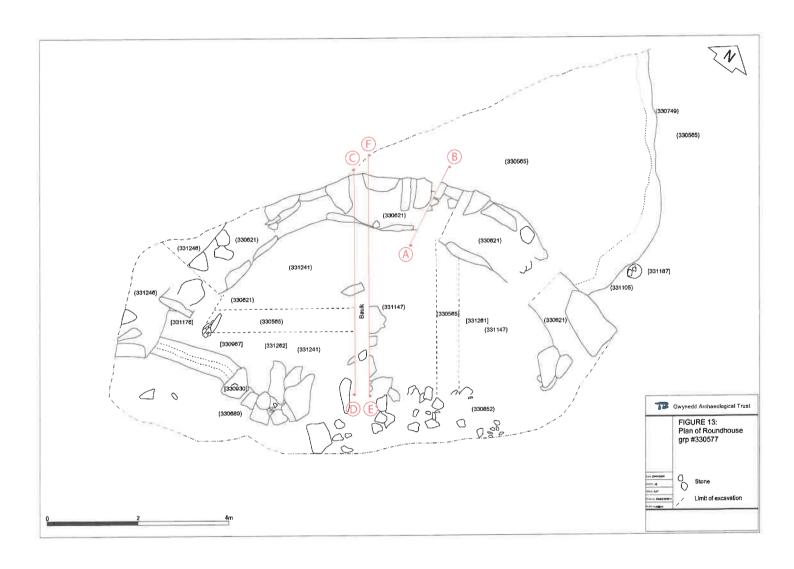


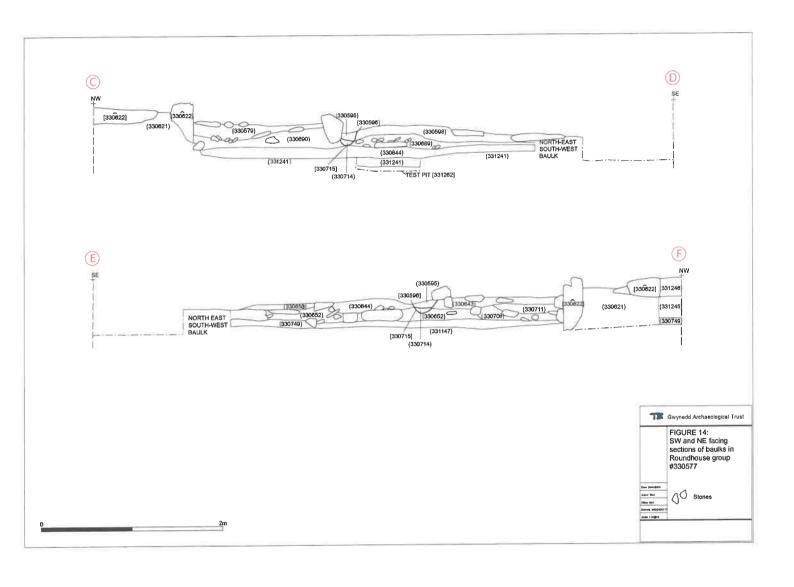


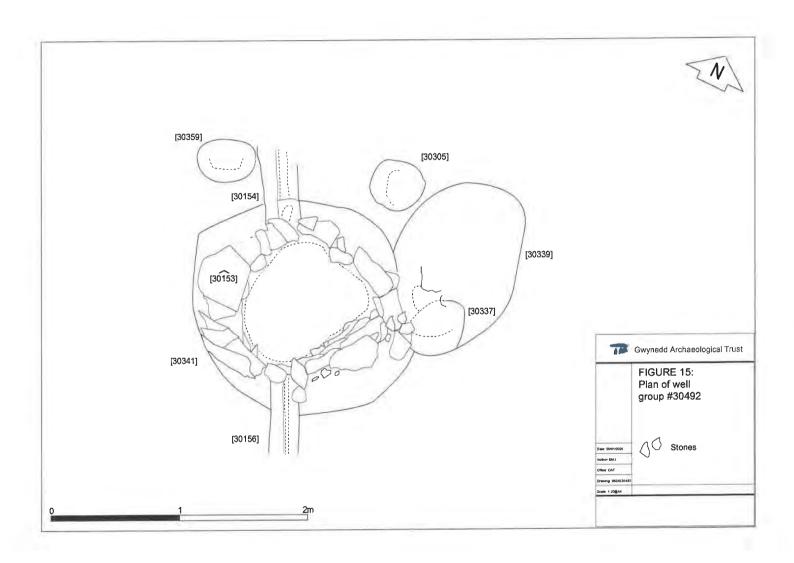


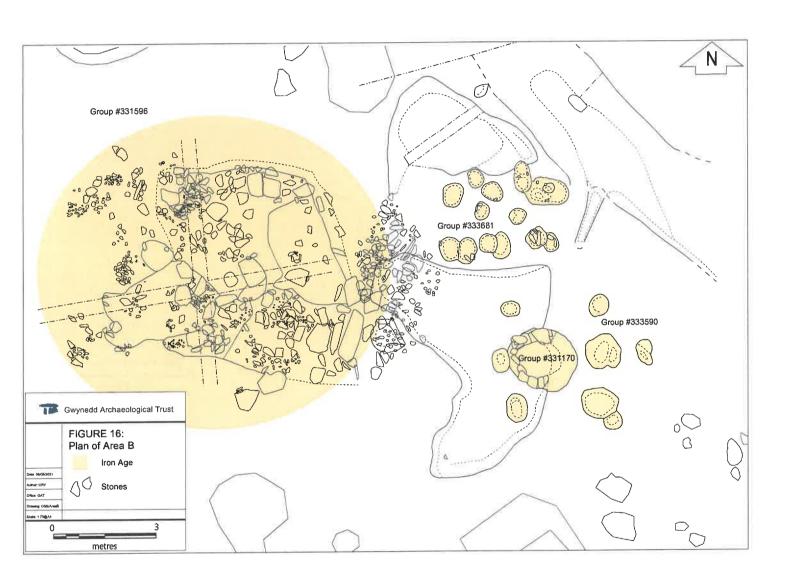


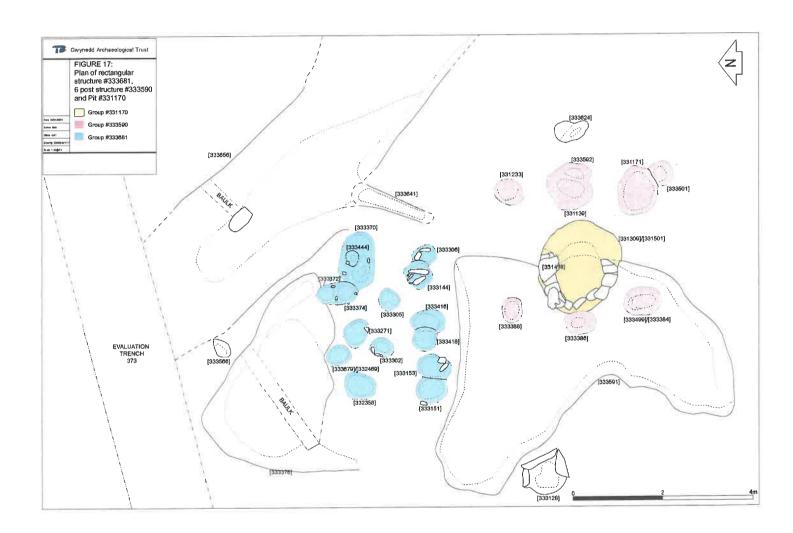


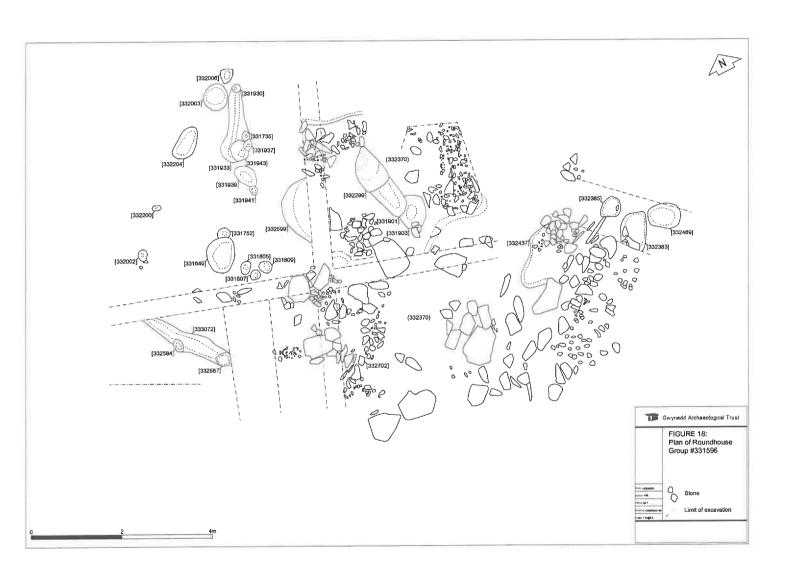


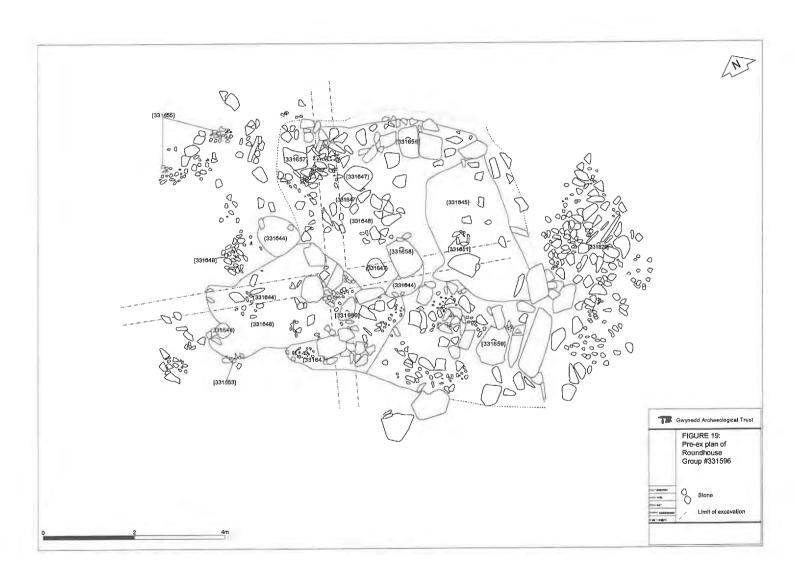


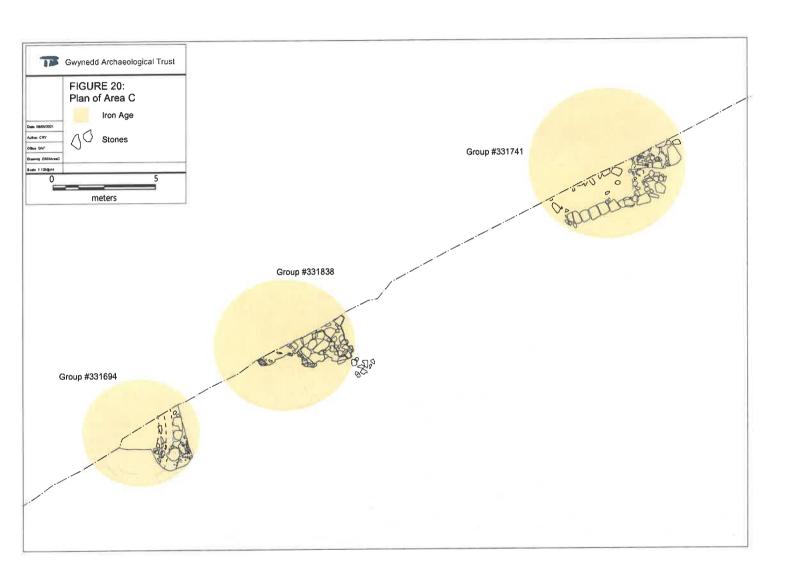


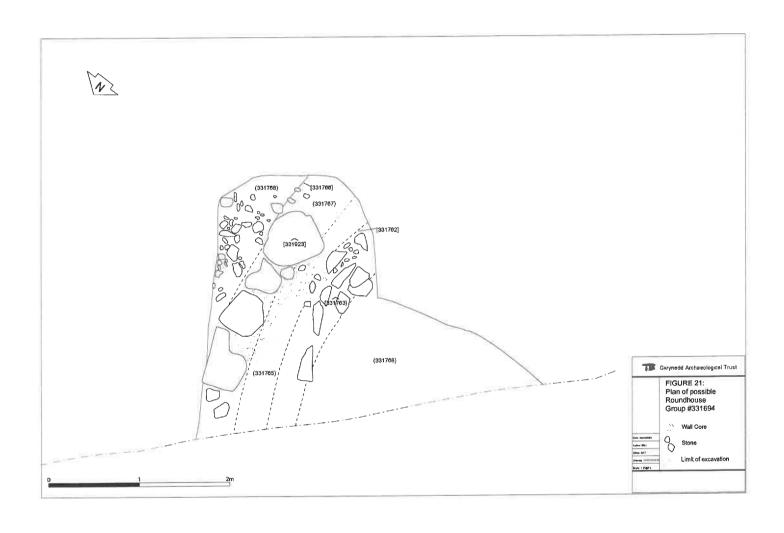


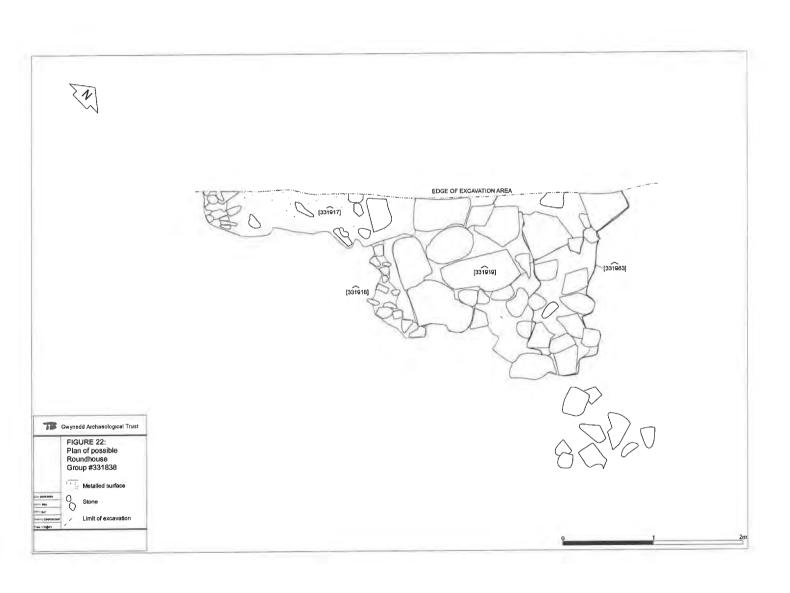




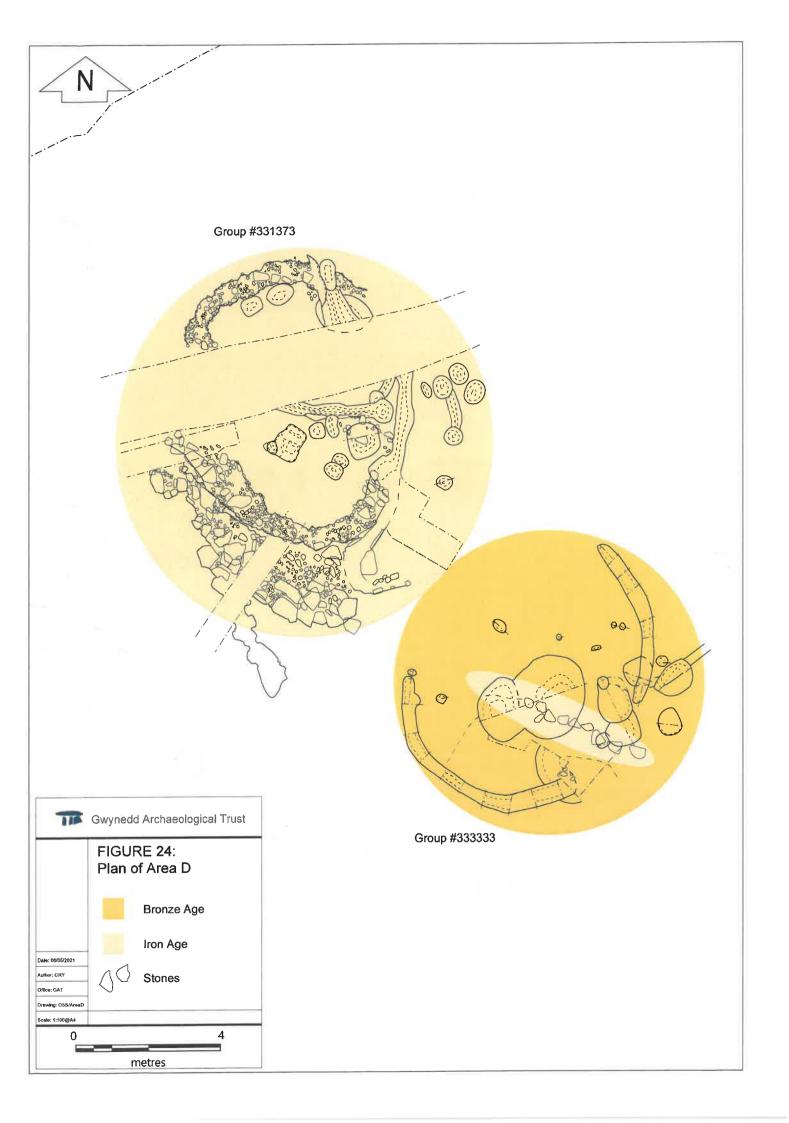


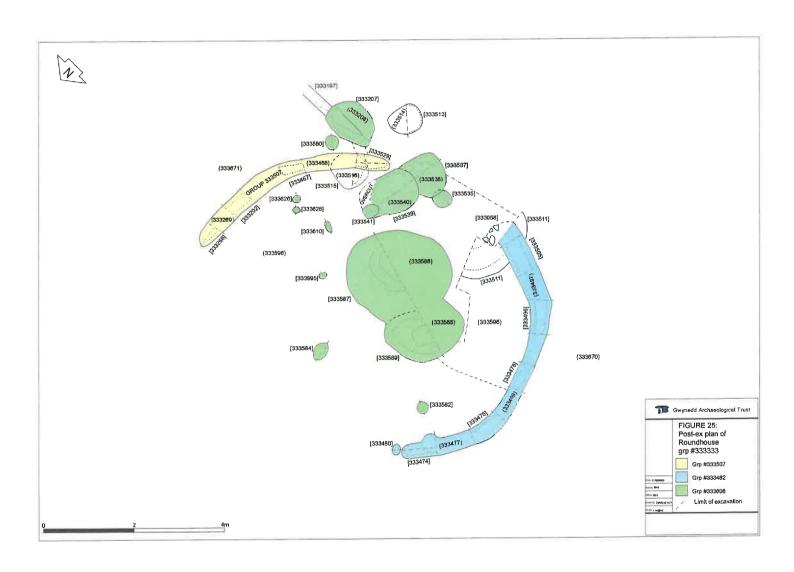


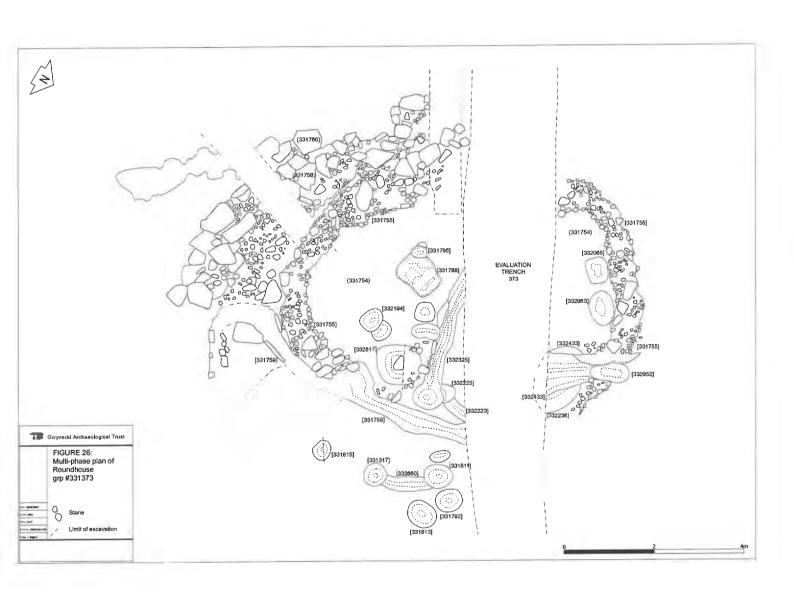


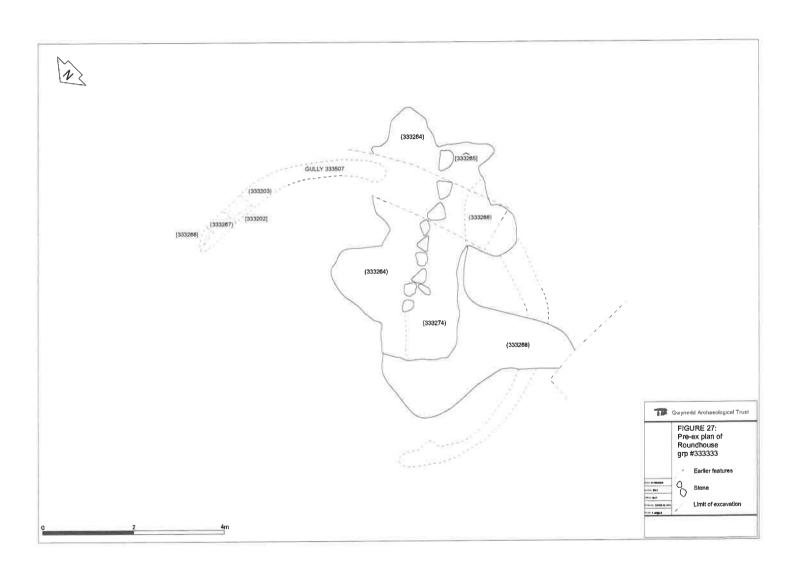


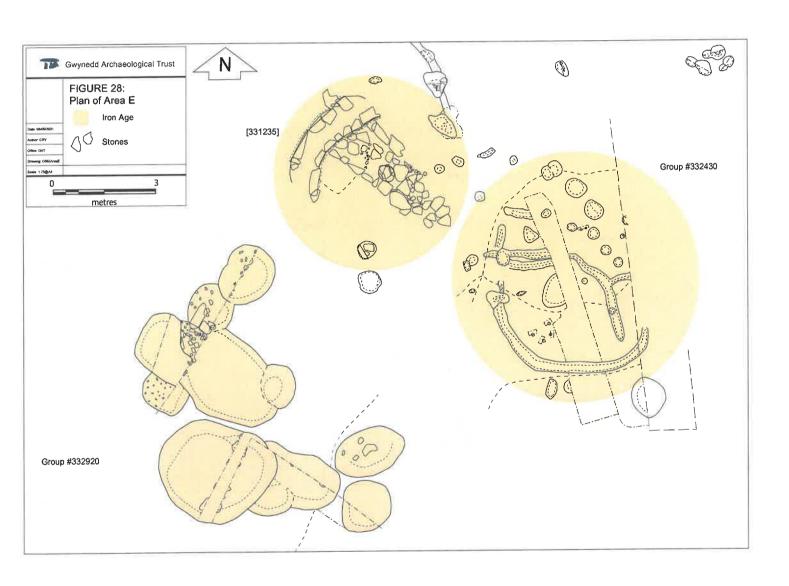


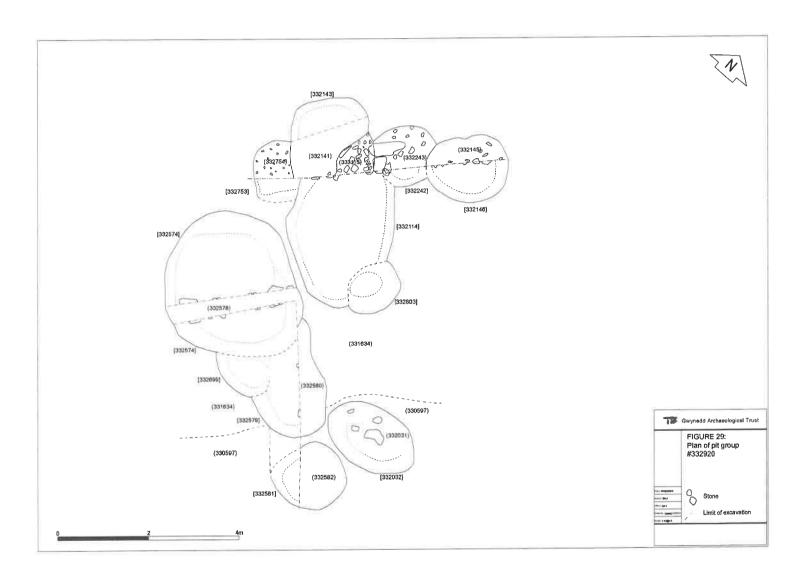


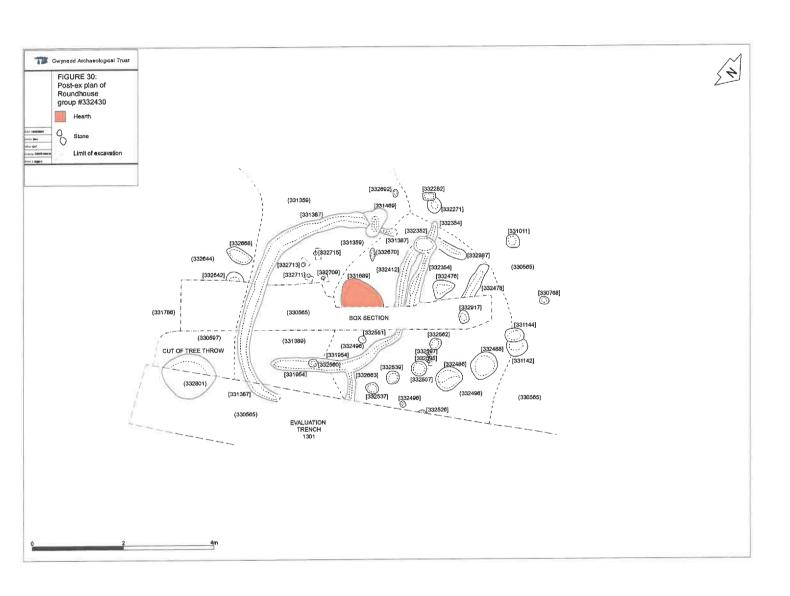


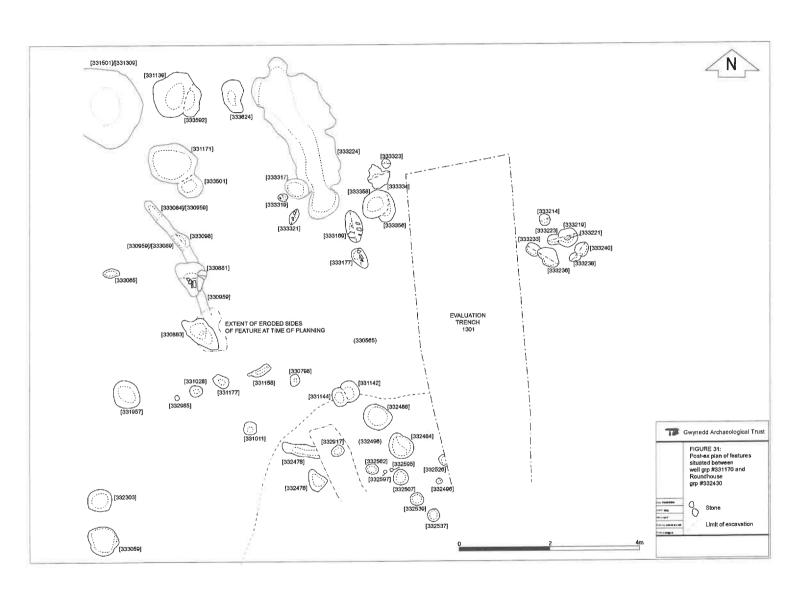


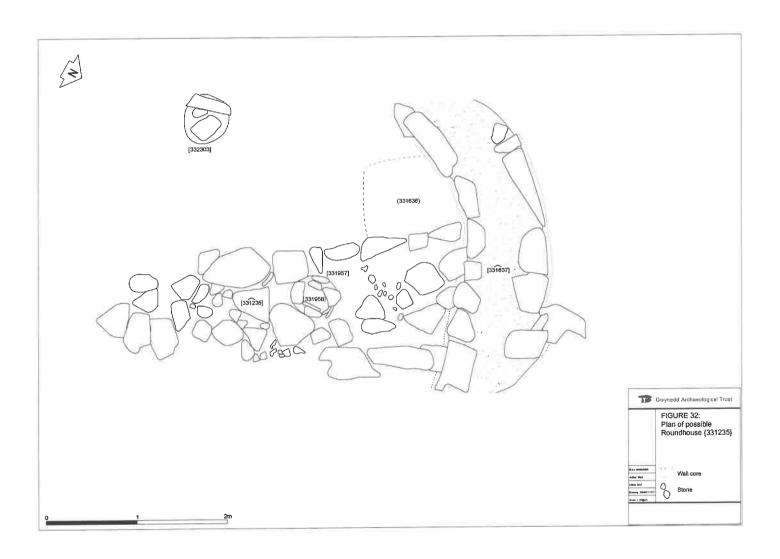


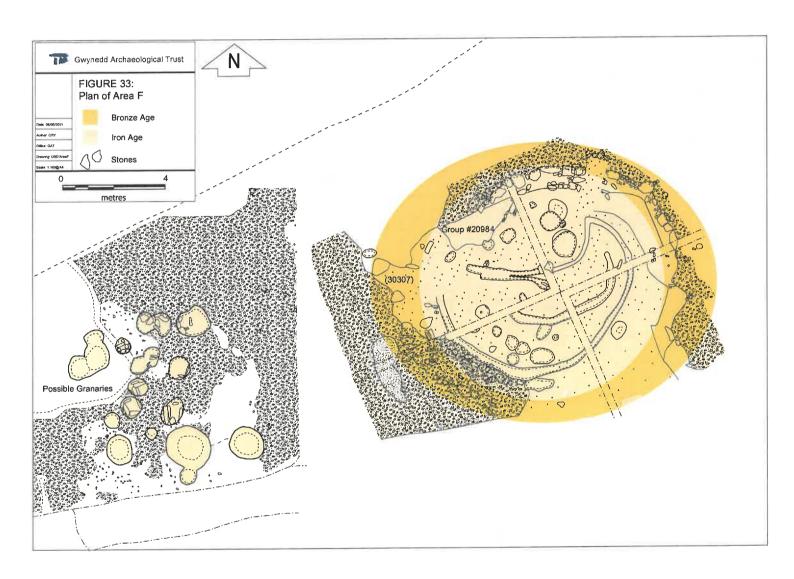


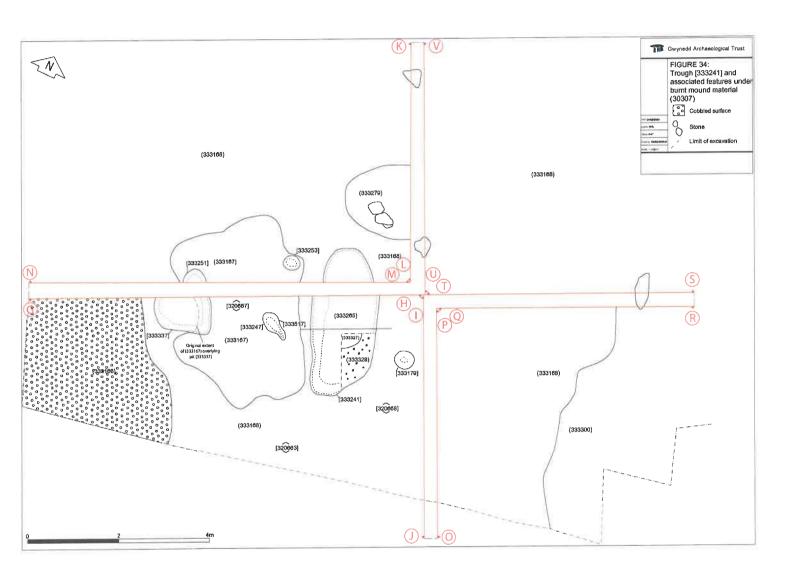


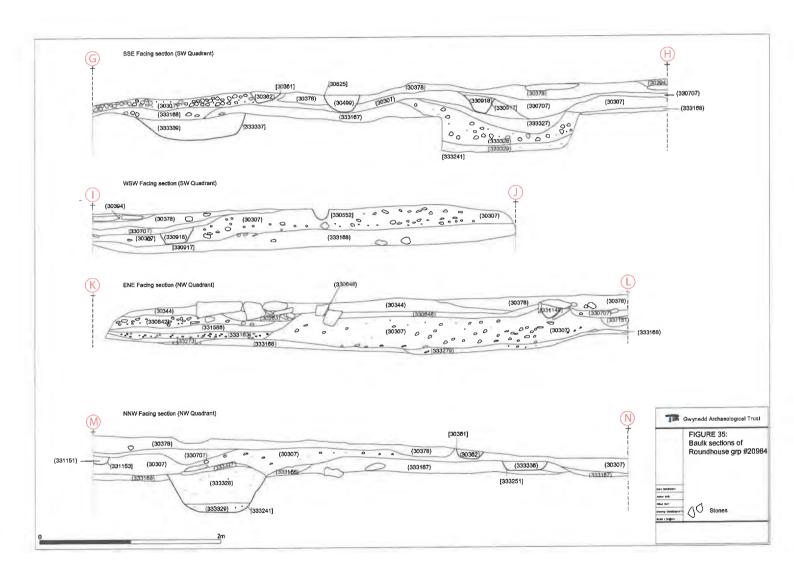


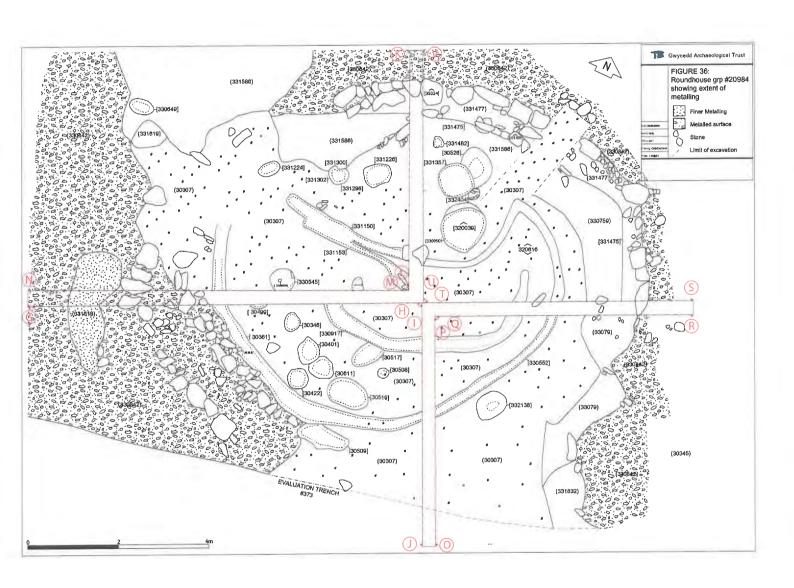


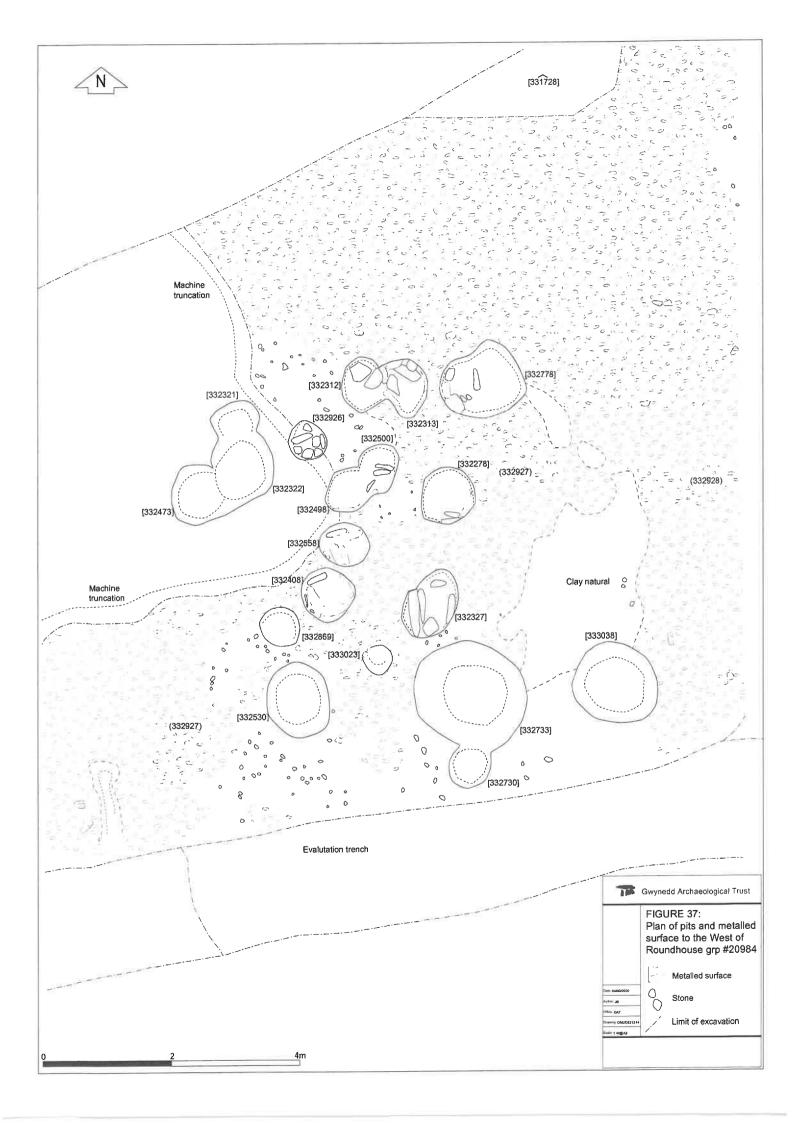


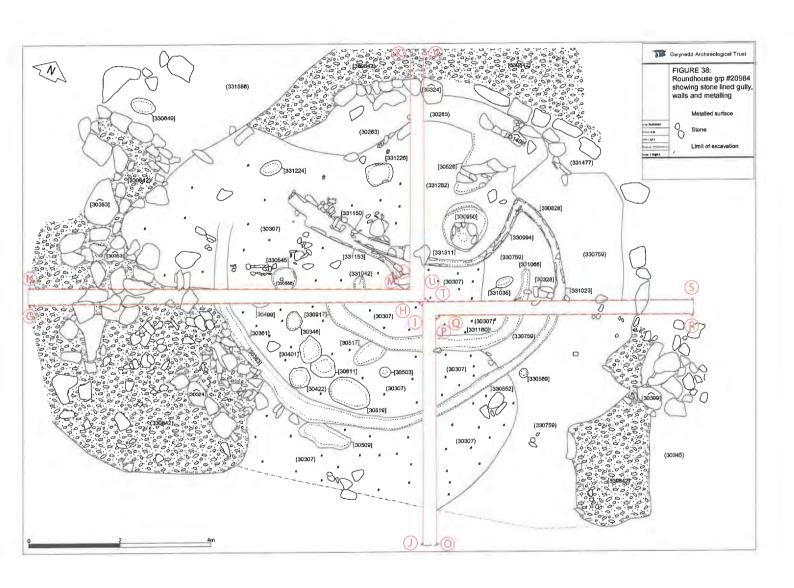


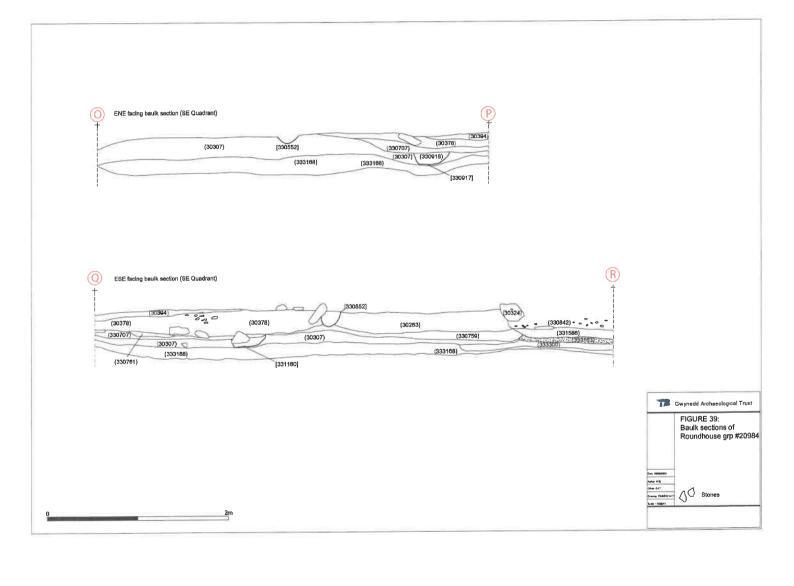


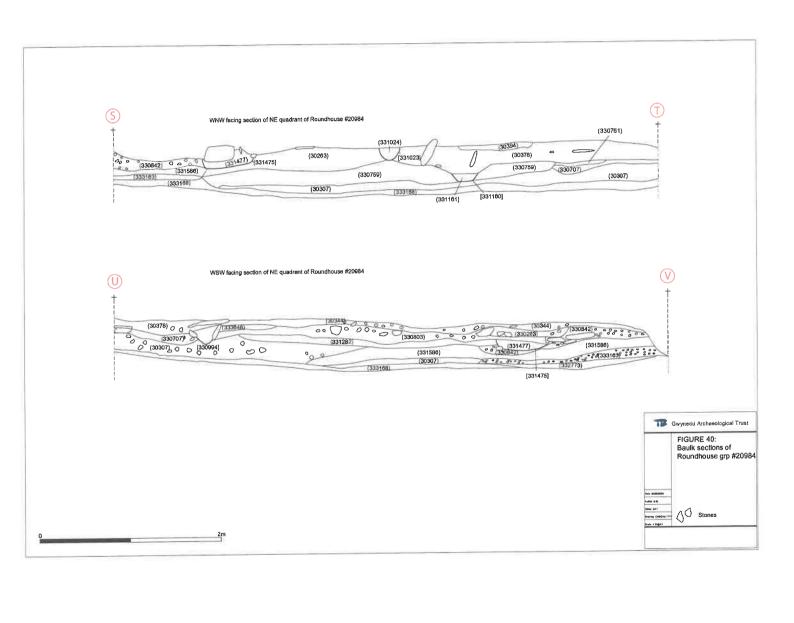


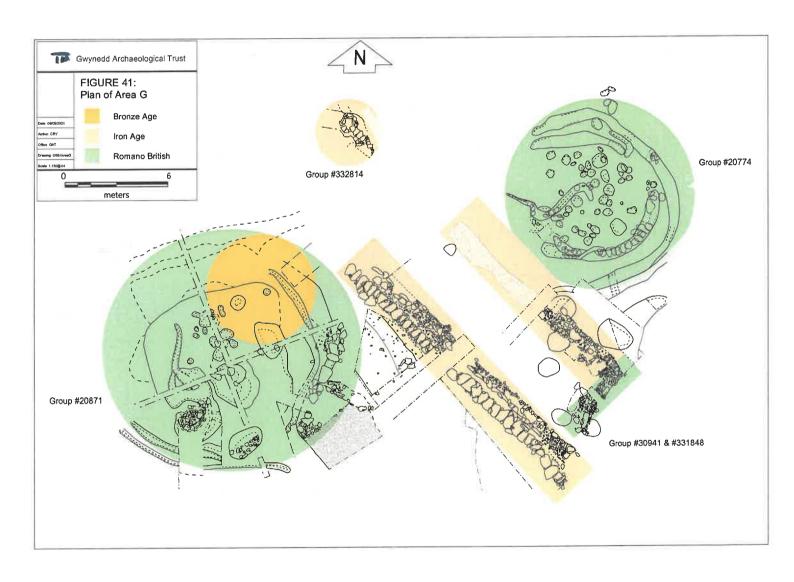


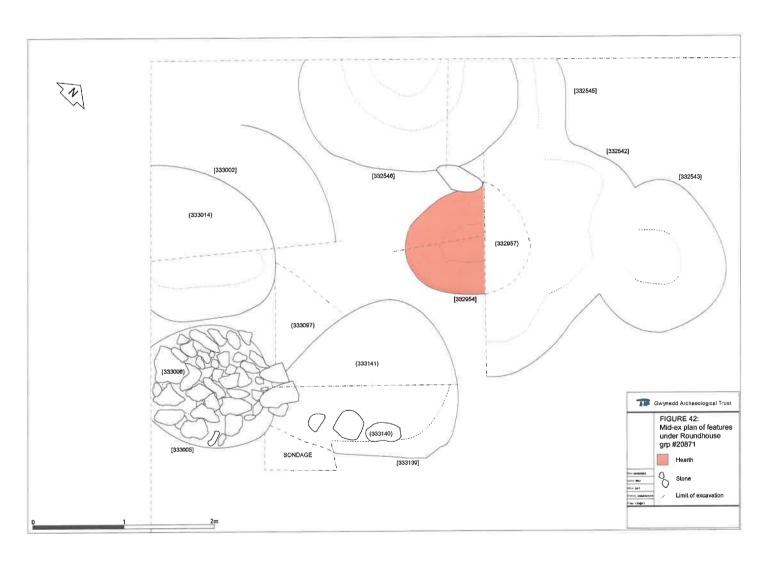


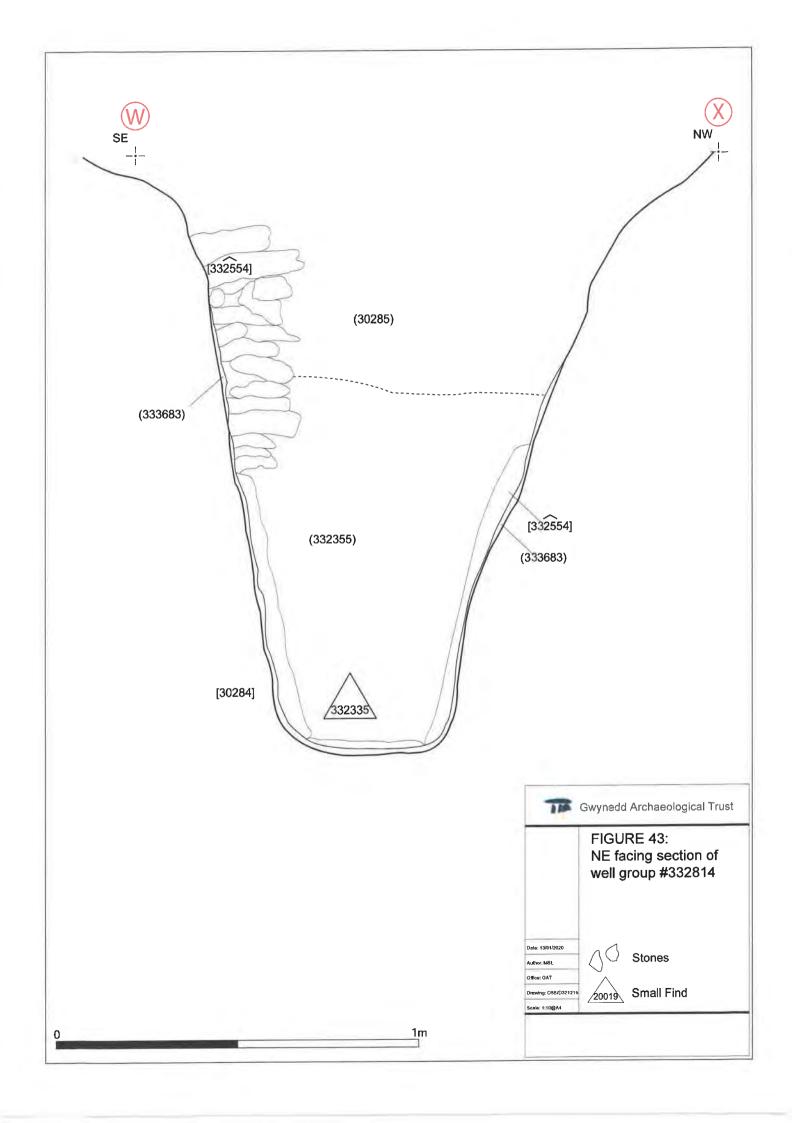


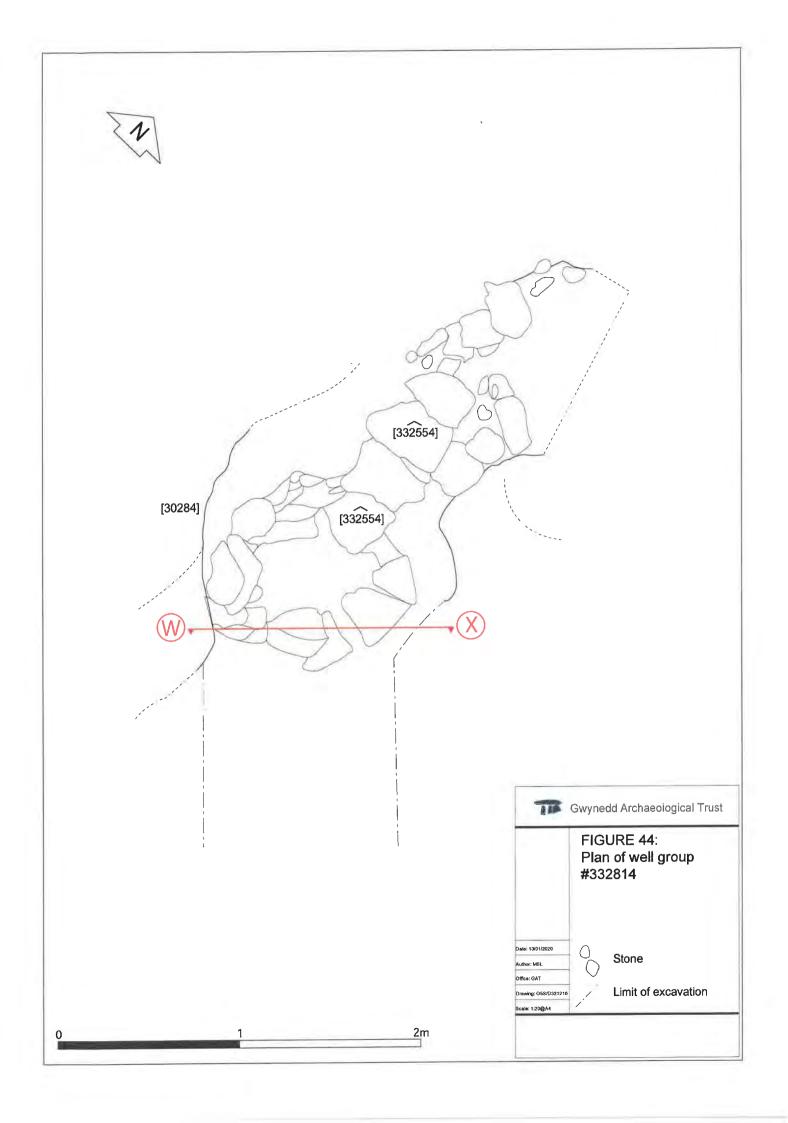


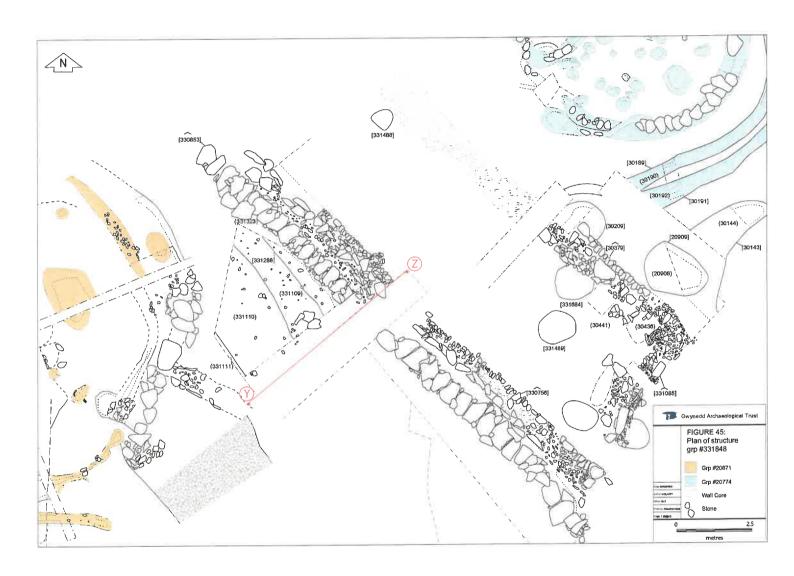


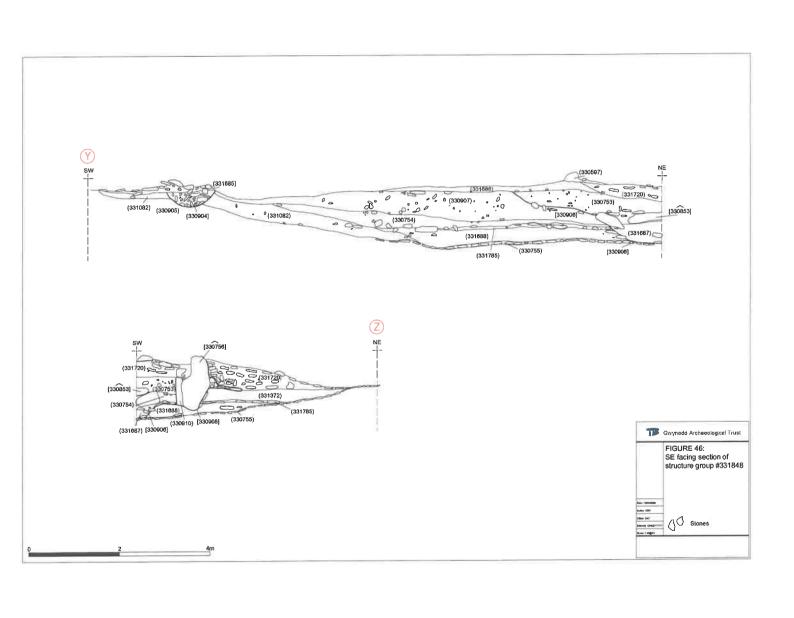


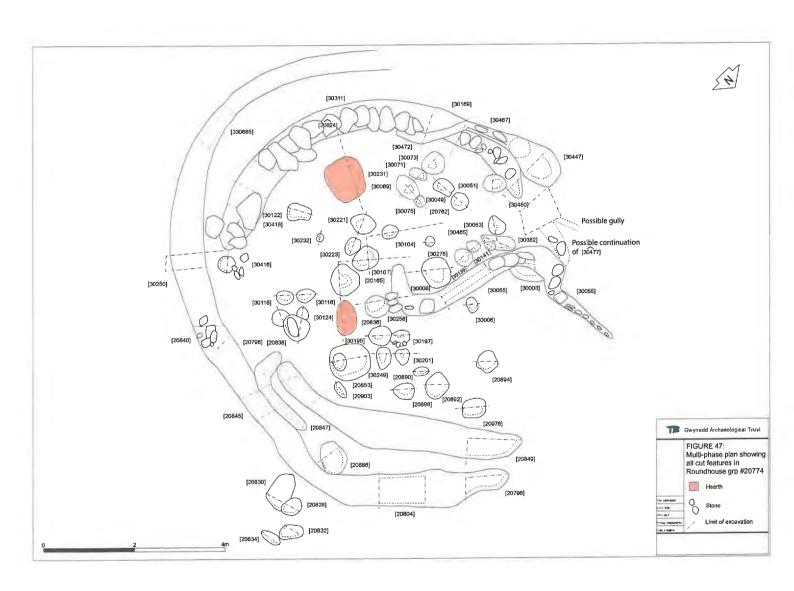


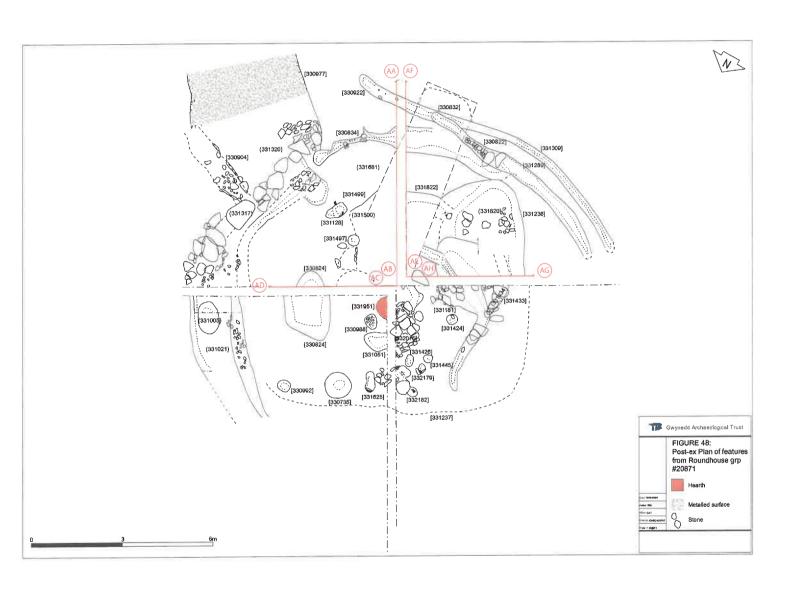


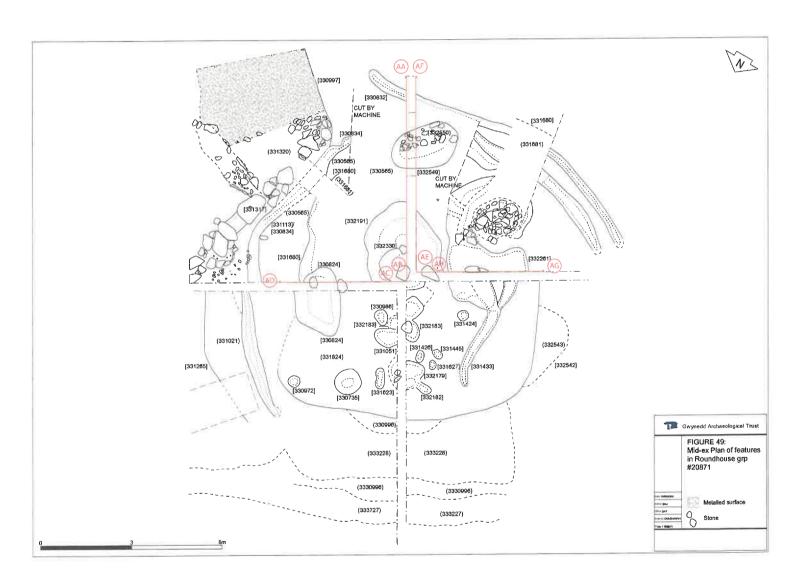


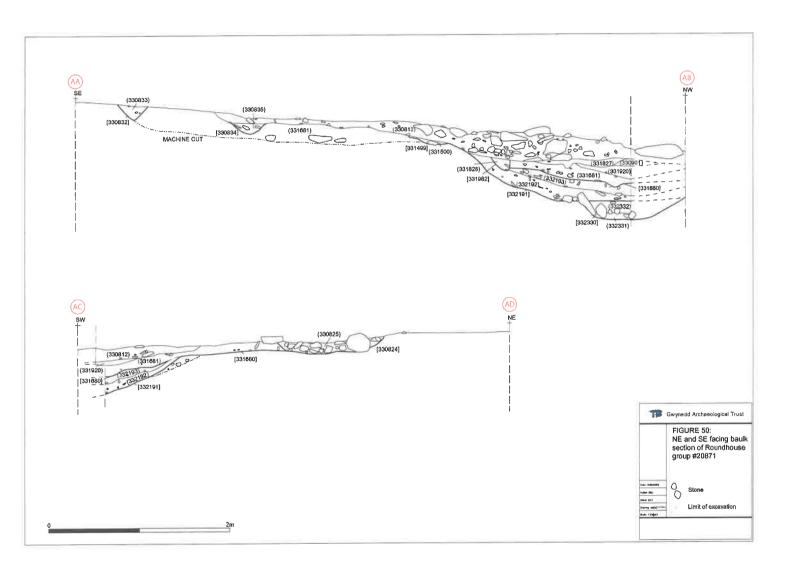


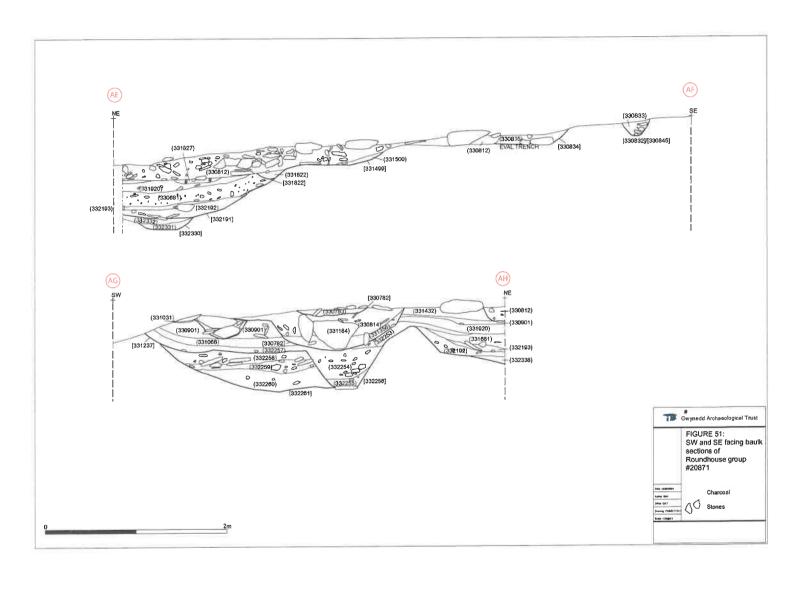


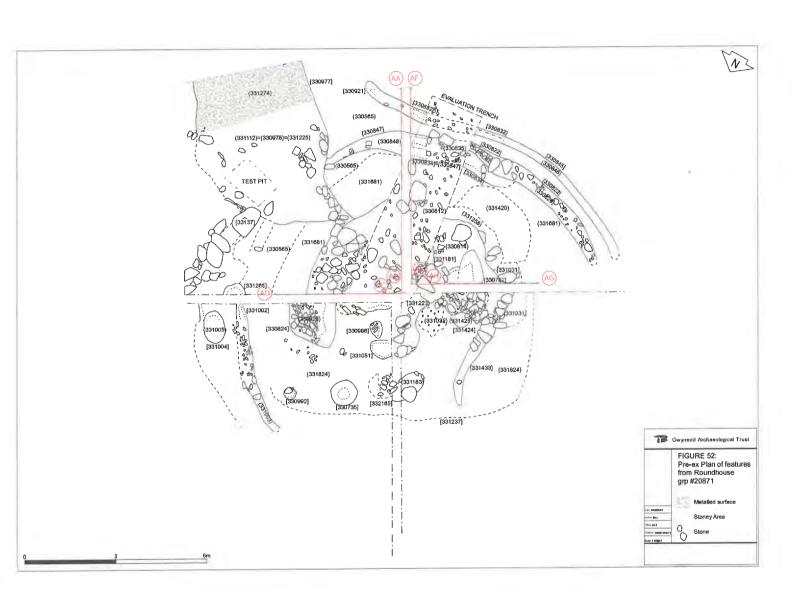


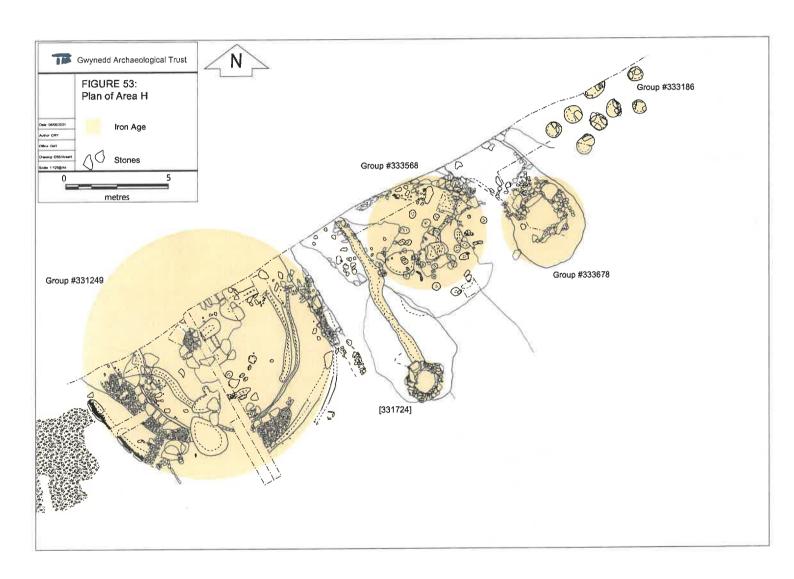


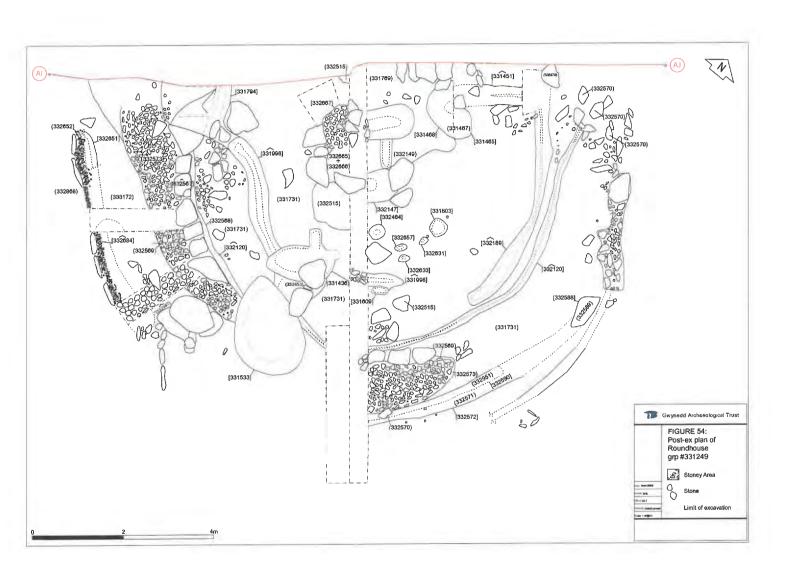


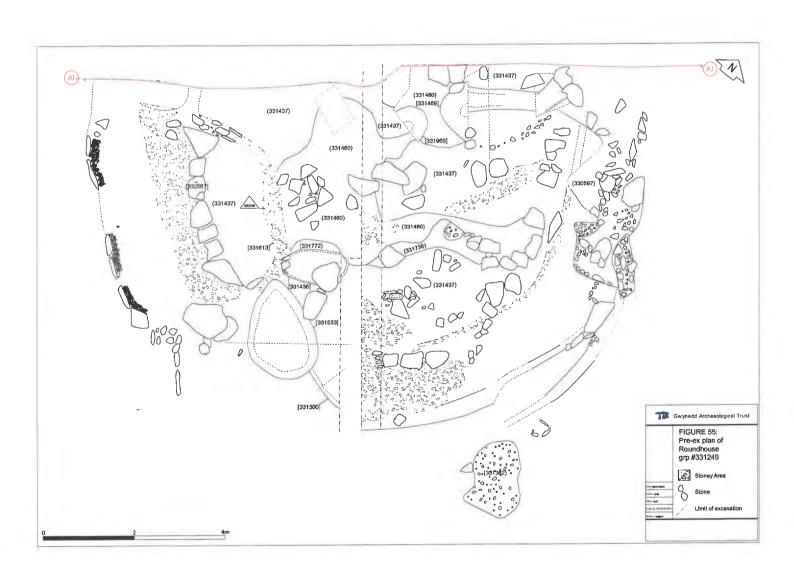


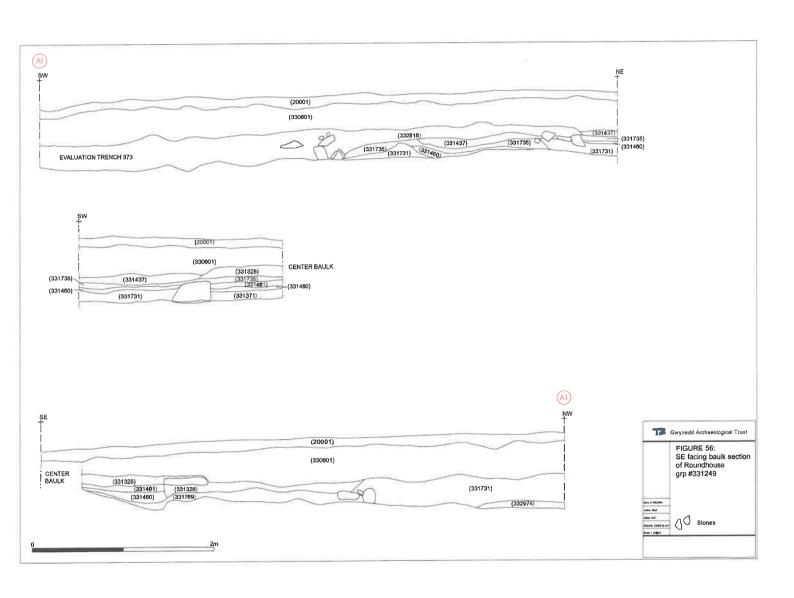


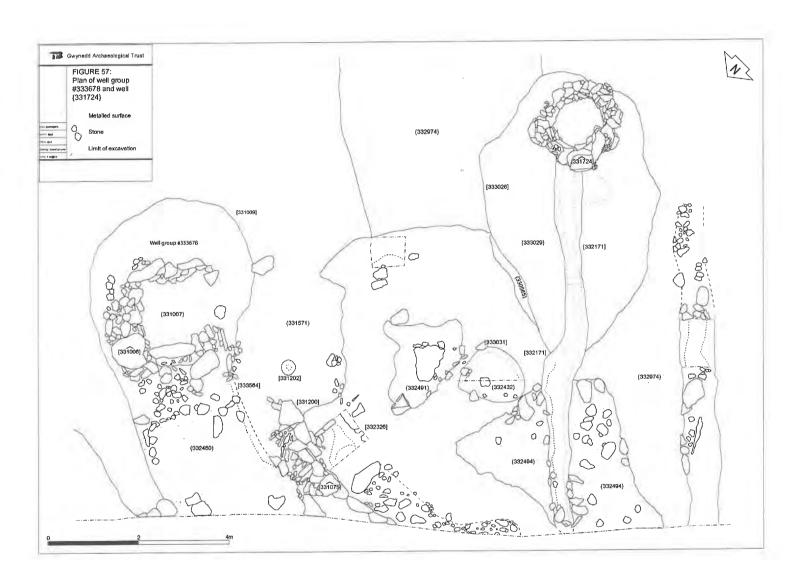


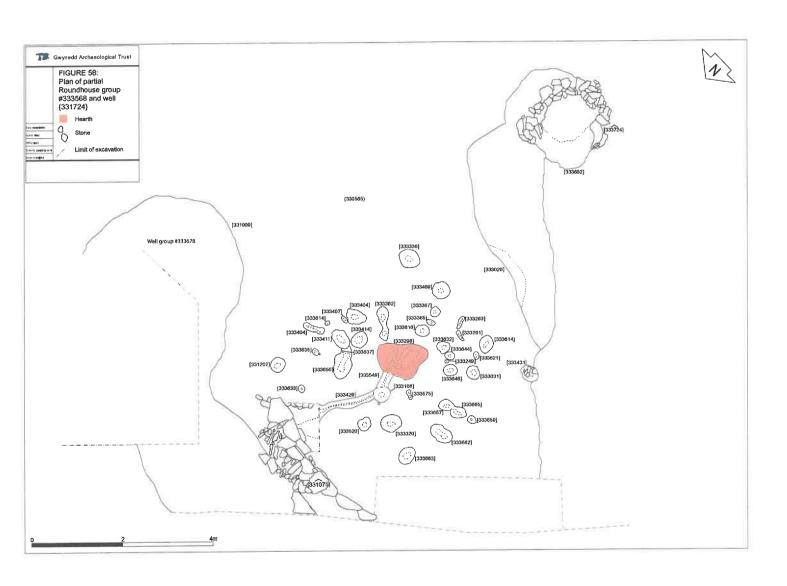


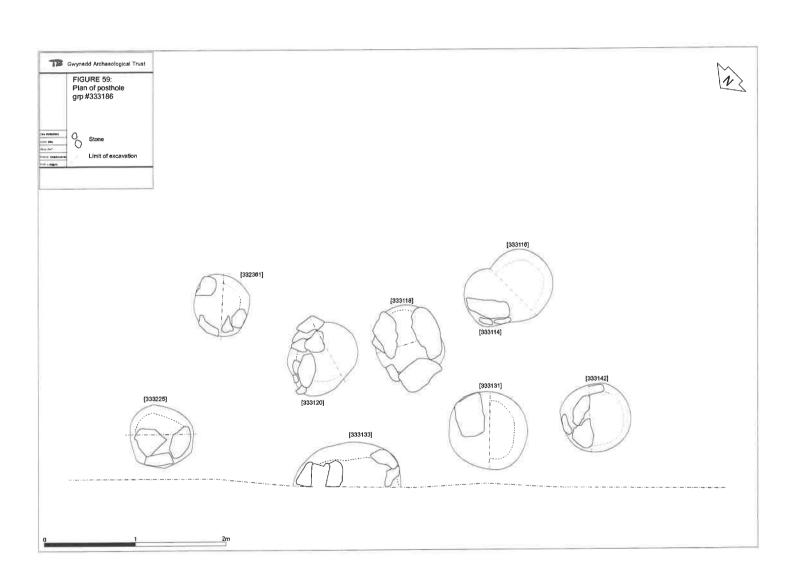


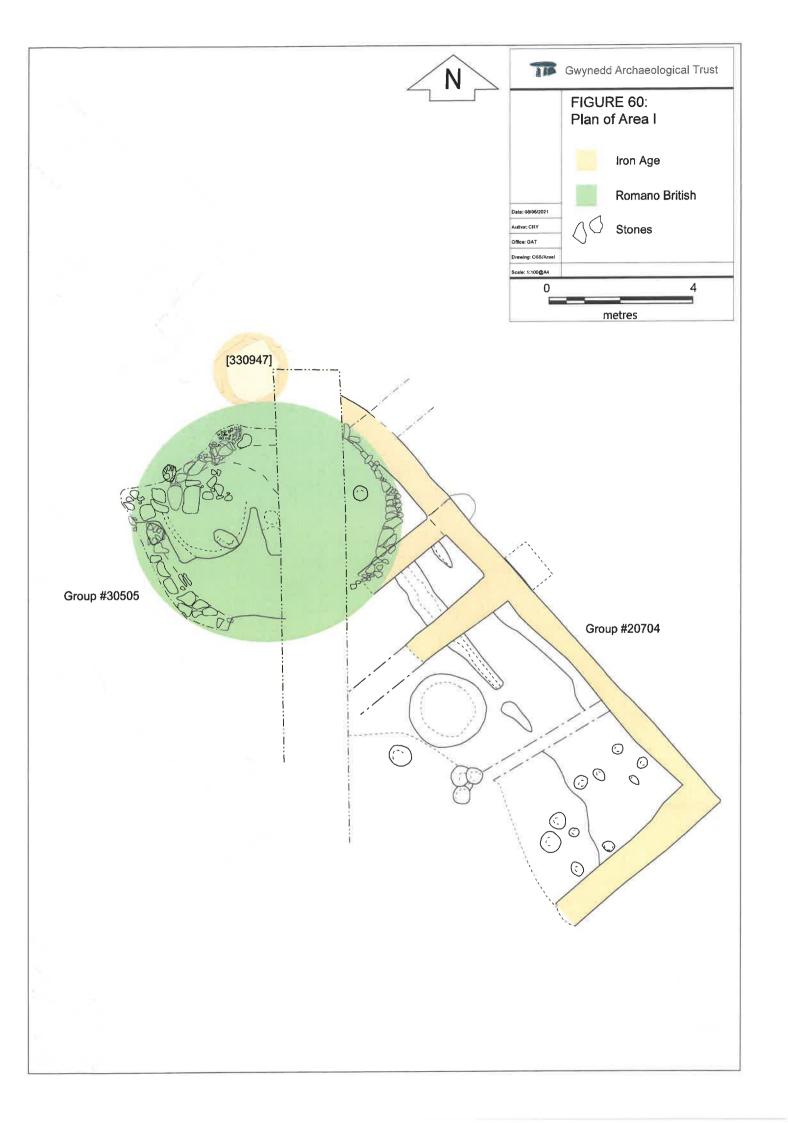


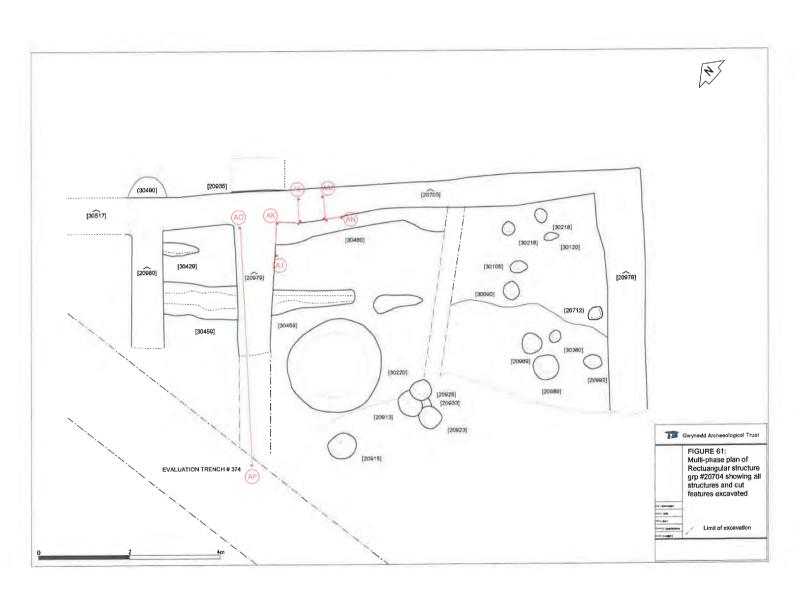


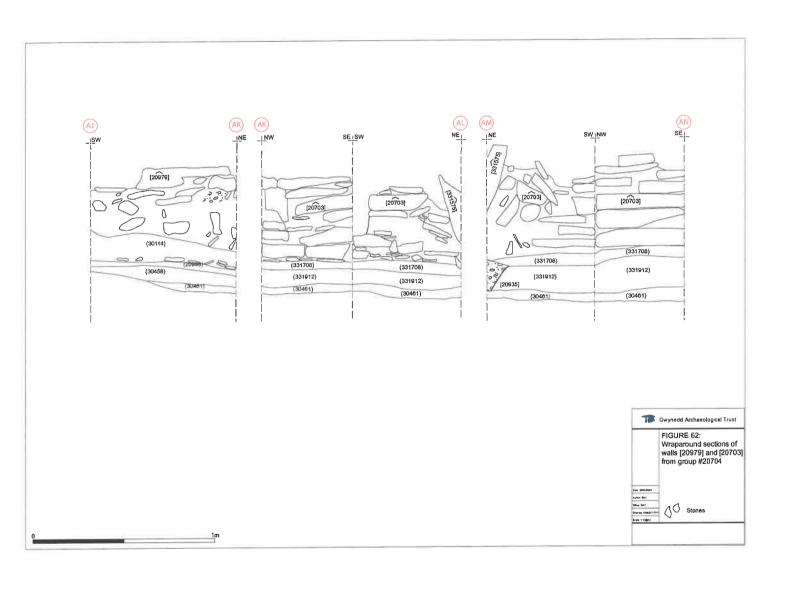


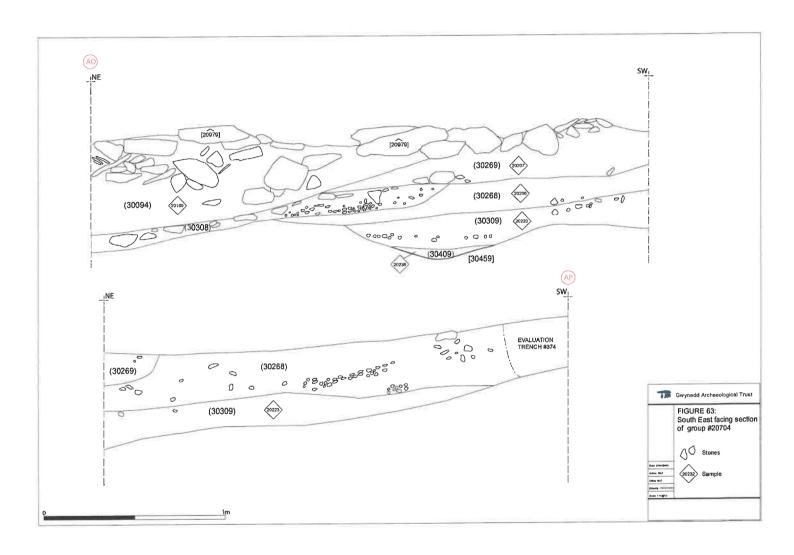


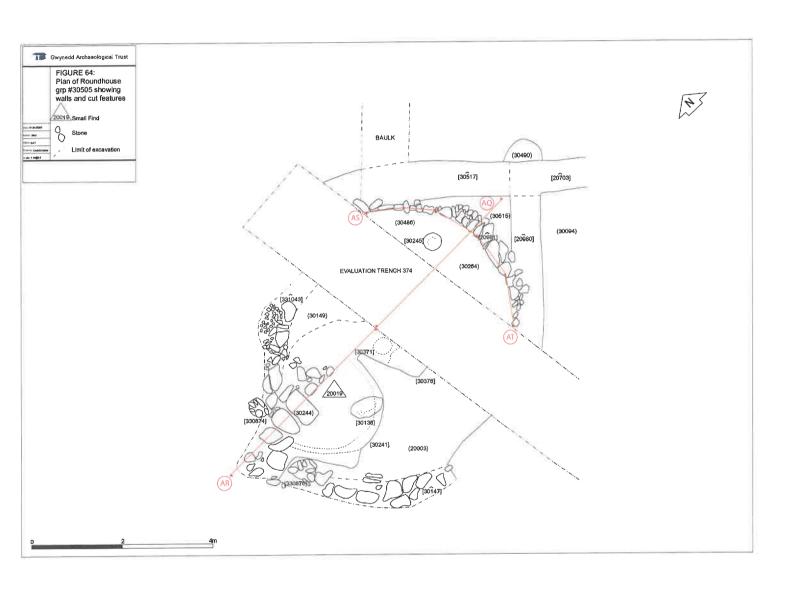


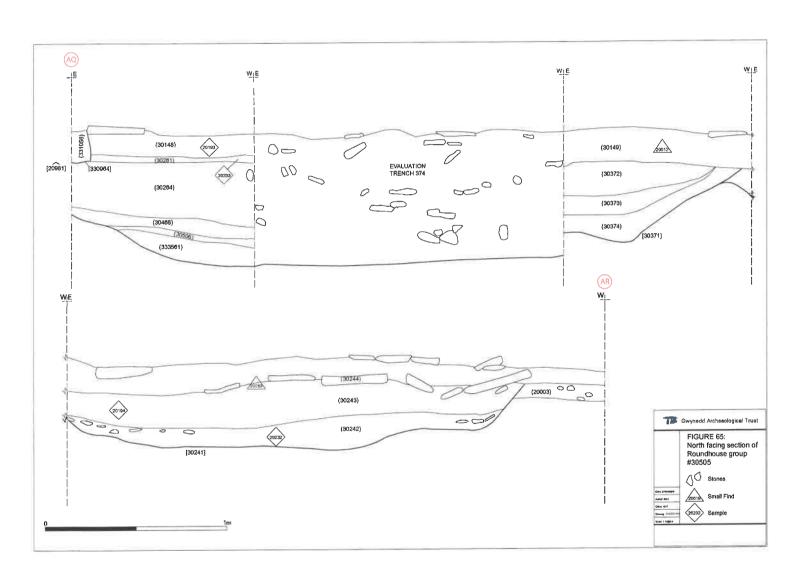


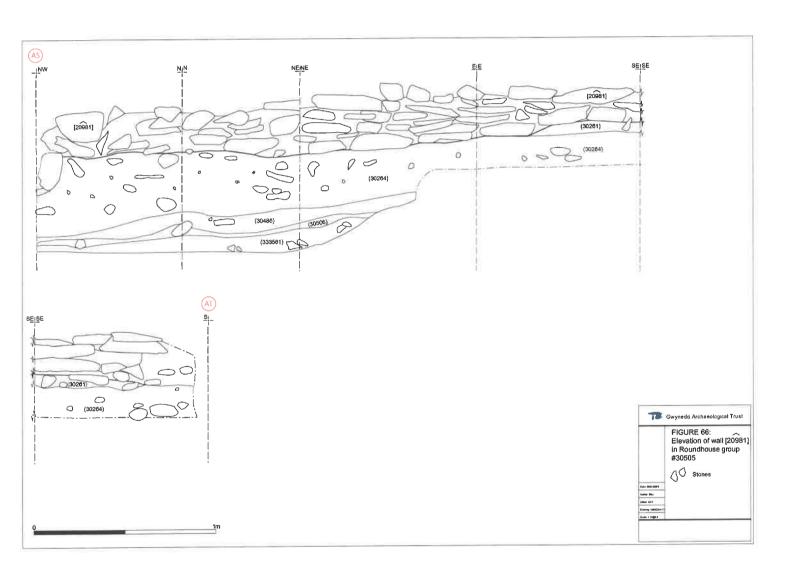


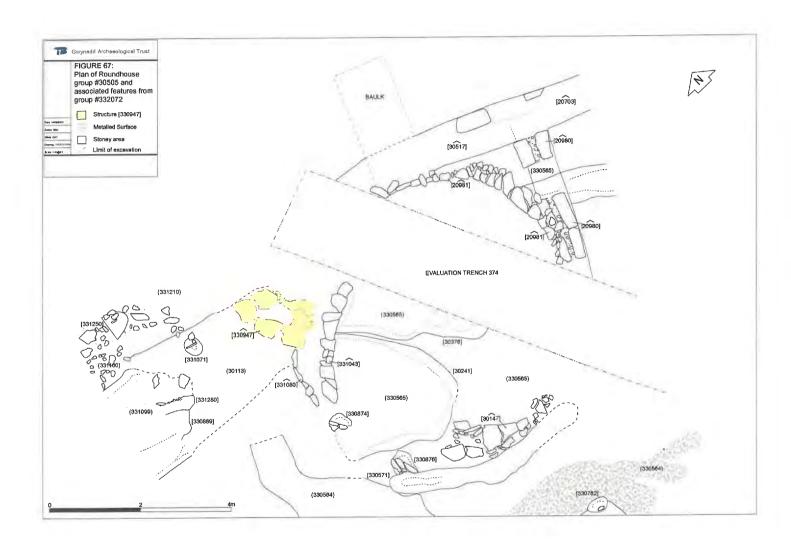


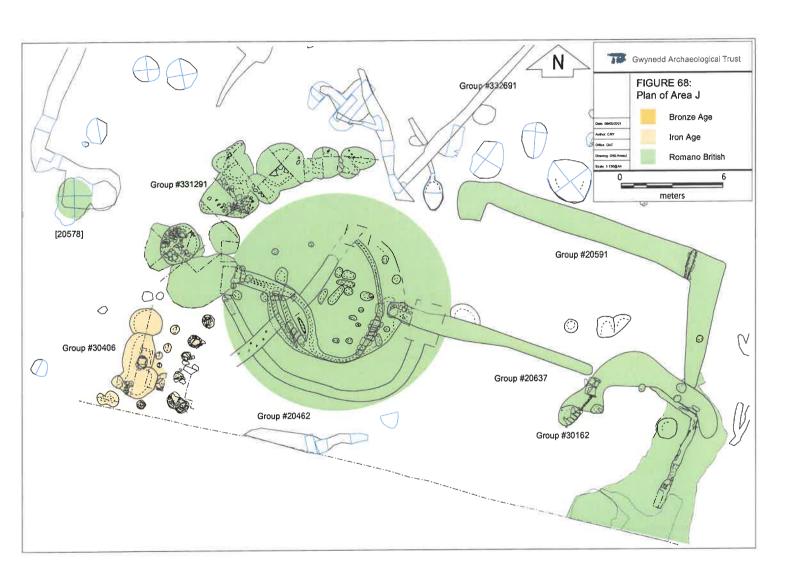


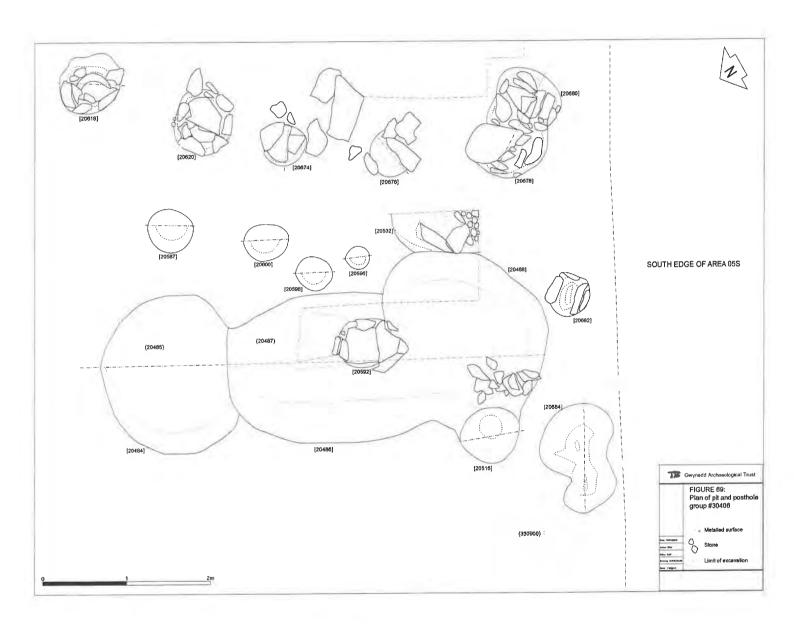


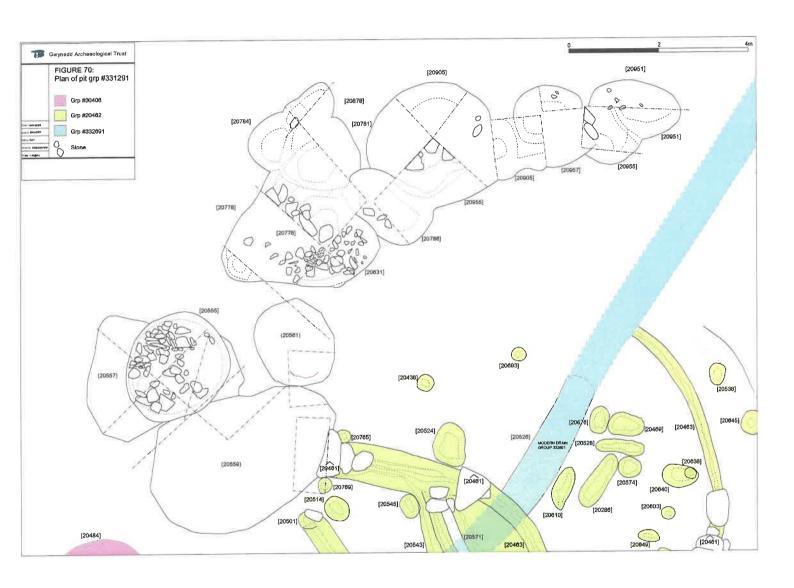


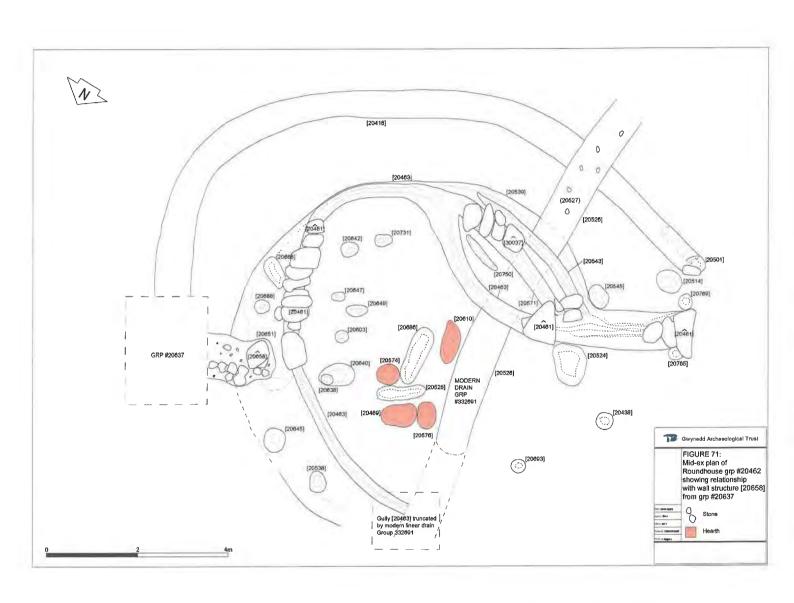


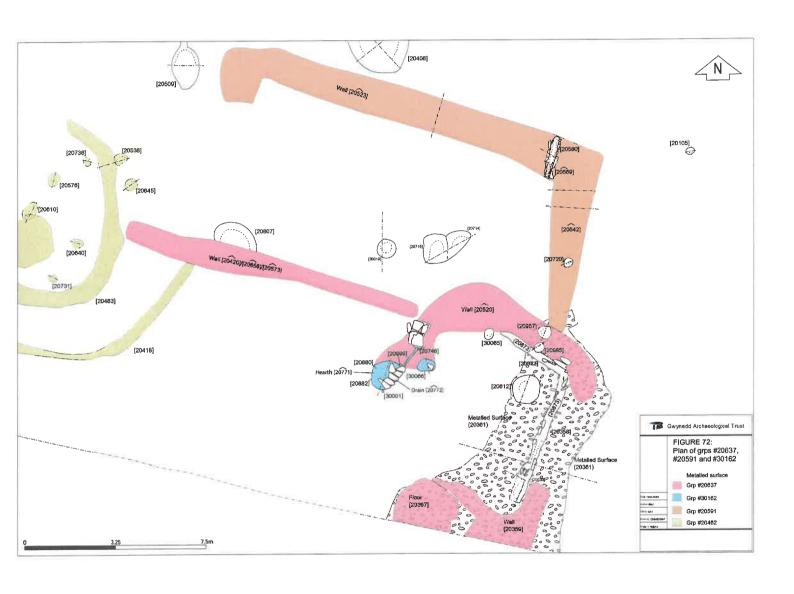


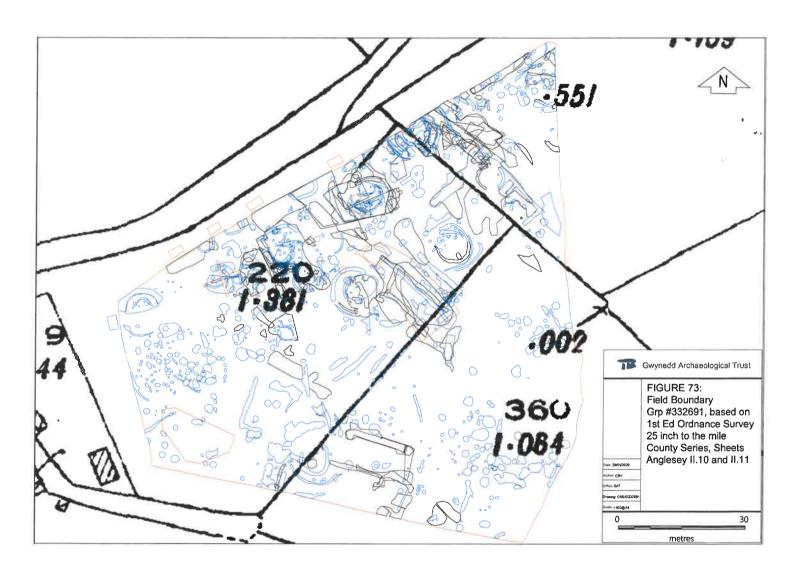


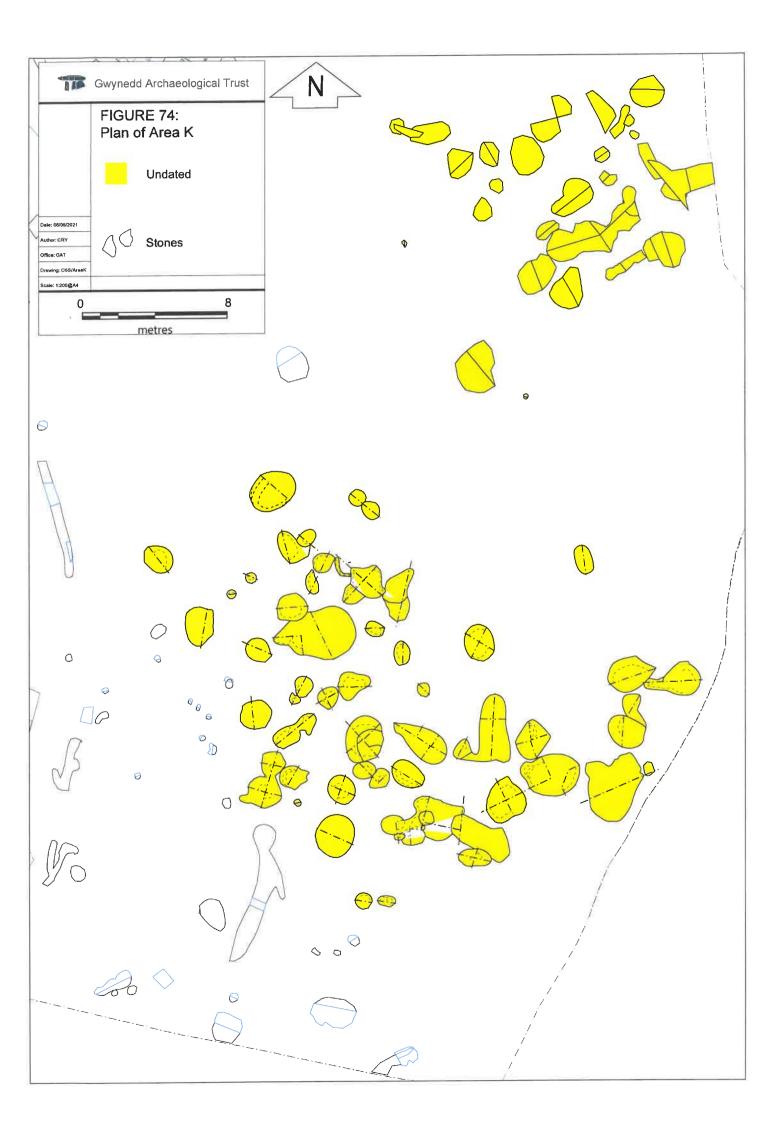


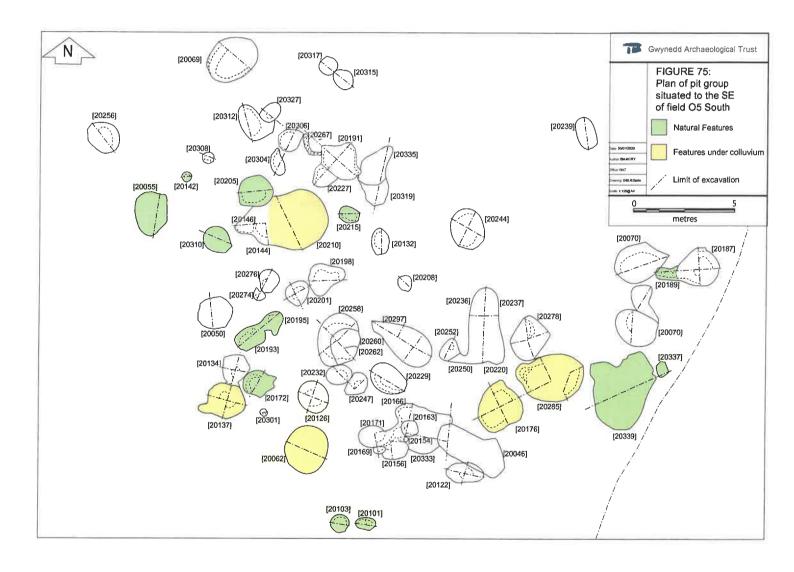


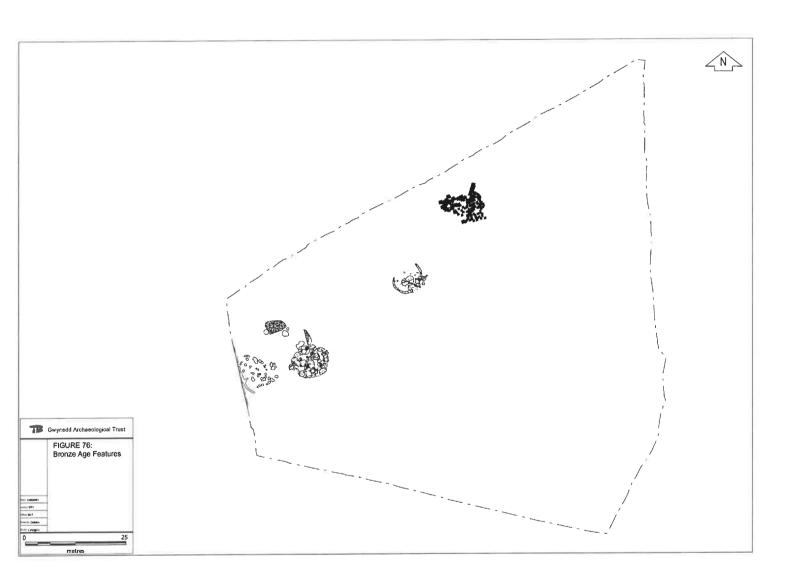


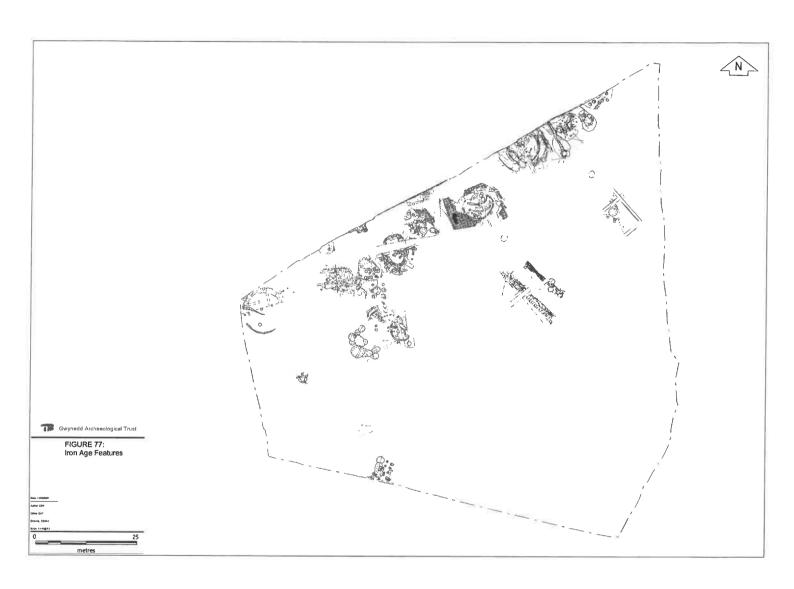












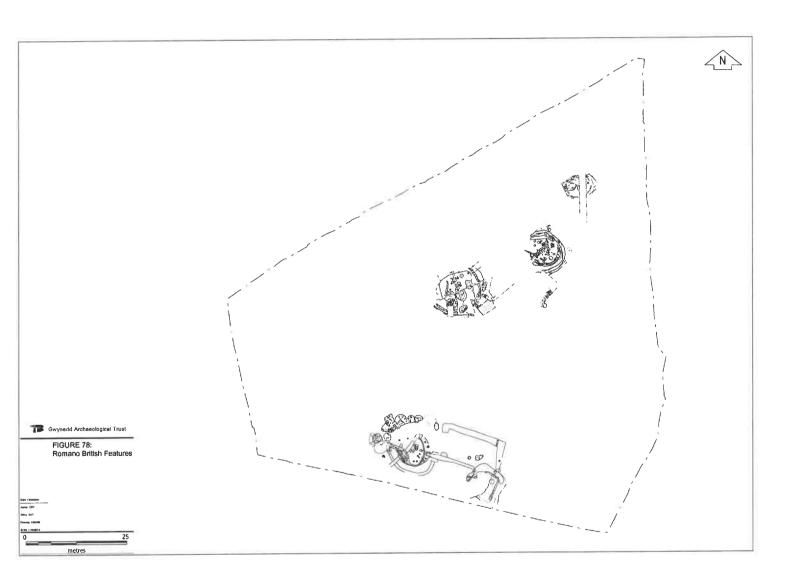




Plate 01: Pre-ex of possible bronze age pit group; scale: 2x2m (archive reference: P1020153).



Plate 02: Post-ex of possible bronze age pit group; scale: 2x2m (archive reference: P1030019).



Plate 03: Mid-ex shot of NE quad of Roundhouse grp #330577; scale: 1x1m (archive reference: WAD64_101_IMG3785).



Plate 04: Detail shot of intervention through wall $\{330622\}$; scale: 1x1m (archive reference: WAD44_P2_100_IMG0749).



Plate 05: Detail shot of Roundhouse entrance with postholes and remaining orthostat; scale: 1x1m (archive reference: WAD44_P2_100_IMG0836).



Plate 06: Pre-ex shot of Roundhouse #330577; scale: 2x2m (archive reference: P1010488).



Plate 07: Pre-ex of stone lined pit {331418} from grp #331170; scale: 2x2m (archive reference: WAD44_P2_100_IMG0395).



Plate 08: Mid-ex of stone lined pit $\{331418\}$ from grp #331170; scale: 1x1m (archive reference: WAD44_P2_100_IMG1181).



Plate 09: Mid-ex of stone lined pit {331418} from grp #331170; scale: 1x0.5m (archive reference: WAD64_101_IMG4638).



Plate 10: Mid-ex of stone lined pit $\{331418\}$ from grp #331170; scale: 1x1m (archive reference: WAD44_P2_100_IMG1241).



Plate 11: Overview shot of threshold {331659}; no scale (archive reference: P1030264).



Plate 12: Pre-ex shot of group #331694; no scale (archive reference: P1020874).



Plate 13: NW facing section through group #331694; scale: 1x1m (archive reference: WAD44_P2_100_IMG1930).



Plate 14: Overview shot of group #331838; no scale (archive reference: WAD44_P2_100_IMG1862).



Plate 15: Overhead shot of stone platform {331919}; no scale (archive reference: P1020960).



Plate 16: Detail shot of stone platform {331919}; scale: 1x1m, 1x2m (archive reference: WAD44_P2_100_IMG1858).



Plate 17: Pre-ex shot of group #331741; scale: 1x1m (archive reference: WAD44_P2_100_IMG1651).



Plate 18: Section through wall {331728}; scale: 1x1m (archive reference: WAD44_P2_100_IMG1845).



Plate 19: Stone capping {331737} of drain; scale: 1x0.5m (archive reference: WAD44_P2_100_IMG1838).



 $Plate \ 20: Stone \ lining \ structure \ \{331739\} \ of \ drain; \ scale: 1x2m \ (archive \ reference: WAD69_103_IMGP3282).$



Plate 21: Post-ex shot of western gully #333482 in Roundhouse #333333; scale: 1x0.5m (archive reference: WAD64_105_IMG8589).



Plate 22: Pre-ex overview shot of Roundhouse #331373; scale: 2x2m (archive reference: P1020767).



Plate 23: Wall $\{333265\}$ and cobbling $\{333264\}$ overlying roundhouse drip gullies #333507 and #333482; scale: 1x2m (archive reference: WAD64_104_IMG8059).



Plate 24: Post-ex overview shot of roundhouse #332430; scale: 2x1m (archive reference: P1030985).



Plate 25: Drains $\{332354\}$ and $\{332412\}$ in roundhouse #332430; scale: 1x1m (archive reference: WAD64_103_IMG6367).



Plate 26: Remains of doorway {331469} in roundhouse #332430; scale: 1x1m (archive reference: WAD64_103_IMG6220).



Plate 27: Mid-ex shot of surface {331235} and wall {331637}; scale: 1x2m (archive reference: WAD44_P2_100_IMG1196).

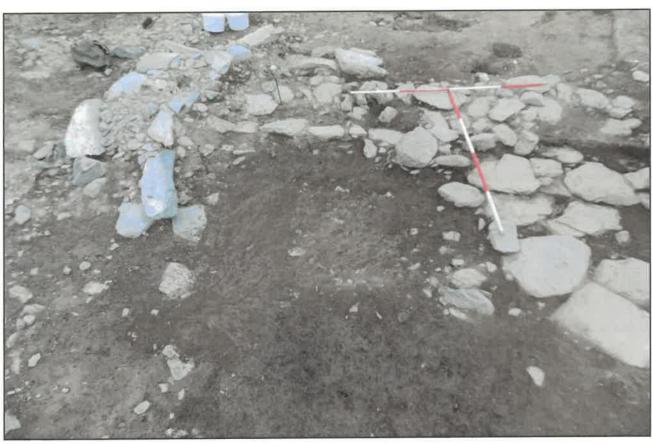


Plate 28: Overview shot of surface {331235} and wall {331637}; scale: 2x1m (archive reference: P1020156).



Plate 29: NW facing section of posthole [331957] and surface {331235}; scale: 1x1m (archive reference: WAD64_103_IMG5975).



Plate 30: Pre-Ex shot of trough [333241] found under burnt mound material (30307); scale: 1x1m (archive reference: WAD64_104_IMG8113).



Plate 31: Section of trough [333241] as seen in the SE facing baulk section; scale: 1x2m (archive reference: WAD64_105_IMG8451).



Plate 32: Overview shot of Roundhouse grp #20984 showing feature cut into burnt mound material (30307); scale: 2x2m (archive reference: P1010517).



Plate 33: Detail of finer metalling (333163) under metalled surface (330842); scale: 1x2m (archive reference: WAD44_P2_100_IMG1543).



Plate 34: Overview shot of Roundhouse grp #20984 showing wall $\{30324\}$ and $\{331409\}$ with metalled surface (330842); scale: 2x2m (archive reference: P1010524).



Plate 35: Overview shot of roundhouse #20984 showing stone lined gully; no scale (archive reference: P1020165).



Plate 36: Detail shot of stone lined gully in roundhouse #20984; scale: 1x2m (archive reference: WAD64_101_IMG4034).



Plate 37: Pit [333422] under roundhouse grp #20871; scale: 1x1m (archive reference: WAD-TBC_100_IMG1135).



Plate 38: Post-ex shot of well #332814 from above; scale: 1x1m (archive reference: WAD64_103_IMG6789).



Plate 39: Post-ex shot of well #332814 showing large stone supporting steps; scale: 1x0.2m (archive reference: WAD64_103_IMG6805).

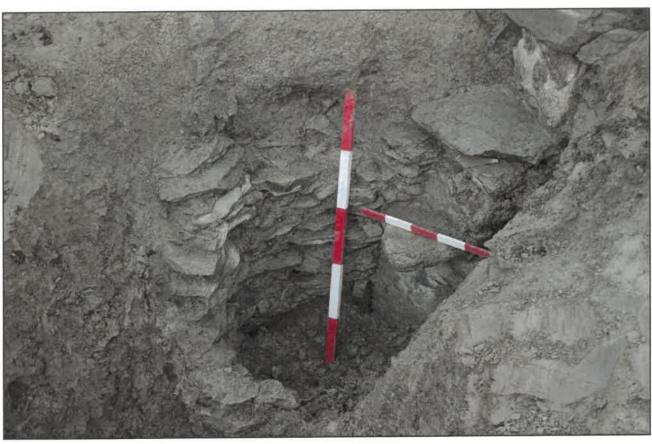


Plate 40: Mid-ex shot of well #332814; scale: 1x1m, 1x0.5m (archive reference: WAD64_103_IMG6571).



Plate 41: Mid-ex shot of well #332814 showing steps; scale: 1x1m, 1x0.5m (archive reference: WAD64_103_IMG6580).



Plate 42: NW facing section through wall {30379} with orthostats visible; scale: 2x1m (archive reference: WAD44_P2_100_IMG2897).



Plate 43: Detail view of stone capped drain {330853}; scale: 1x2m (archive reference: WAD64_101_IMG3860).

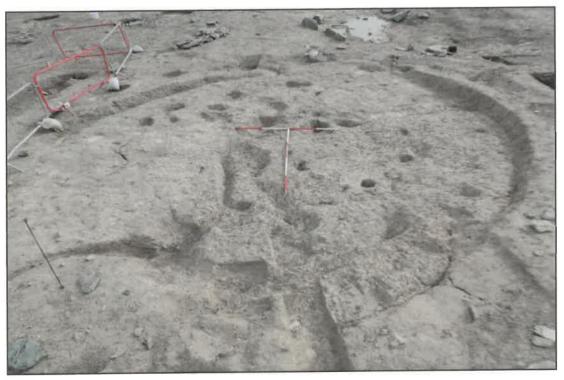


Plate 44: Roundhouse #20774 after removal of redeposited natural layer (30234); scale: 2x2m (archive reference: P1010558).



Plate 45: Wall foundation {30477} under running under redeposited natural layer (30234); scale: 1x1m (archive reference: WAD76_100_IMG0084).



Plate 46: Roundhouse #20774 before removal of redeposited natural layer (30234); scale: 2x2m (archive reference: P1010503).



Plate 47: Pre-ex shot of roundhouse #20871; scale: 1x2m, 1x1m (archive reference: P1010948).



Plate 48: Mid-ex of roundhouse #20774; scale: 1x2m (archive reference: P1010233).



Plate 49: Intervention through stone capped gully in Roundhouse #20871; scale: 1x0.5m (archive reference: WAD44_P2_100_IMG1070).



Plate 50: Plan shot of gullies [331733] and [330832] in S quad of Roundhouse #20871; scale: 1x1m (archive reference: WAD64_102_IMG5573).



Plate 51: Pre-ex overview shot of roundhouse #331249; scale: 1x2m, 1x1m (archive reference: P1020124).



Plate 52: Mid-ex overview shot of roundhouse #331249; scale: 2x2m (archive reference: WAD44_P2_100_IMG2496).



Plate 53: Detail shot of possible doorway {330834}; scale: 1x1m (archive reference: WAD44_P2_100_IMG1777).



Plate 54: Pre-ex of well {331006} in grp #333678; no scale (archive reference: P1020058).



Plate 55: Pre-ex of well {331006} in grp #333678; scale: 2x2m (archive reference: P1020940).

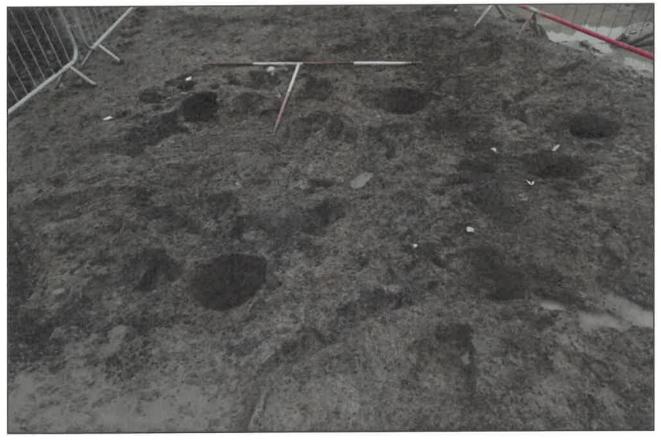


Plate 56: Post-ex overview shot of partial roundhouse #333568; scale: 1x2m, 1x1m (archive reference: WAD-TBC_100_IMG1359).



Plate 57: Wall {331075} and roundhouse #333568; no scale (archive reference: P1030946).



Plate 58: Well [331724] with connecting drain [332171]; scale: 1x2m, 1x0.5m (archive reference: WAD64_103_IMG7146).



Plate 59: Mid-ex of well {331724}; scale: 1x1m (archive reference: WAD64_104_IMG8302).



Plate 60: Post-Ex shot of enclosure #20704; scale: 1x2m, 1x1m (archive reference: P1010264).



Plate 61: Orthostats on the NE side of wall {20703}; scale: 1x0.5m, 1x0.4m (archive reference: WAD63_106_IMG0888).



Plate 62: SW facing elevation of wall {20703}; scale: 1x1m (archive reference: WAD63_106_IMG0865).



Plate 63: Slot through wall {20703}; scale: 1x0.5m (archive reference: WAD44_P2_100_IMG1664).



Plate 64: Walls {20703}, {20979} and {20980} in group #20704 with roundhouse #30505; scale: 1x2m, 1x1m (archive reference: P1010275).



Plate 65: Mid-ex shot of well {330947}; scale: 1x1m (archive reference: WAD44_P2_100_IMG3035).



Plate 66: Post-ex shot of well {330947}; scale: 1x1m (archive reference: WAD44_P2_100_IMG3258).



Plate 67: Pre-ex shot of well {330947}; scale: 1x1m (archive reference: WAD44_P2_100_IMG2876).



Plate 68: Mid-ex shot of well {330947}; scale: 1x1m (archive reference: WAD44_P2_100_IMG3008).



Plate 69: Mid-ex shot of roundhouse #30505; scale: 2x2m (archive reference: P1010222).



Plate 70: Post-ex overview shot of roundhouse #30505; scale: 2x2m (archive reference: WAD64_100_IMG3275).

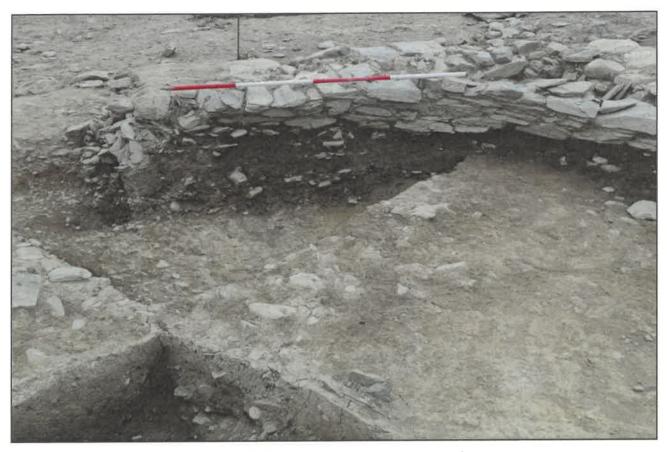


Plate 71: Elevation of wall structure [20981] in roundhouse #30505; scale: 1x2m (archive reference: WAD63_106_IMG0906).



Plate 72: Wall $\{331043\}$ and gully [330571] in roundhouse #30505; scale: 1x2m (archive reference: WAD64_100_IMG2424).



Plate 73: Mid-ex shot of pit and posthole group #30406; scale: 1x2m (archive reference: WAD63_101_IMG0080).



Plate 74: Stone posts from #30406 leading towards the entrance of roundhouse #20462; scale: 1x1m (archive reference: G2557_XXX).



Plate 75: Mid-ex shot of stone lined pit [20578]; scale: 2x1m (archive reference: WAD63_101_IMG0205).



Plate 76: Plan shot of stone lined pit [20578] with stone still in situ; scale: 1x0.5m (archive reference: WAD63_103_IMG0286).



Plate 77: SE facing section of pit [20555] in pit grp #331291; scale: 1x1m (archive reference: WAD63_100_IMG1317).



Plate 78: Plan shot of stone in pit [20555]; scale: 1x1m (archive reference: WAD63_102_IMG0112).



Plate 79: Mid-ex shot of roundhouse #20462 showing ring gully, stone capped drains and wall from group #20637; scale: 1x2m, 1x1m (archive reference: P1010443).



Plate 80: Shot of stone capped drainage gully [20705]; scale: 1x0.5m (archive reference: WAD63_102_IMG0677).

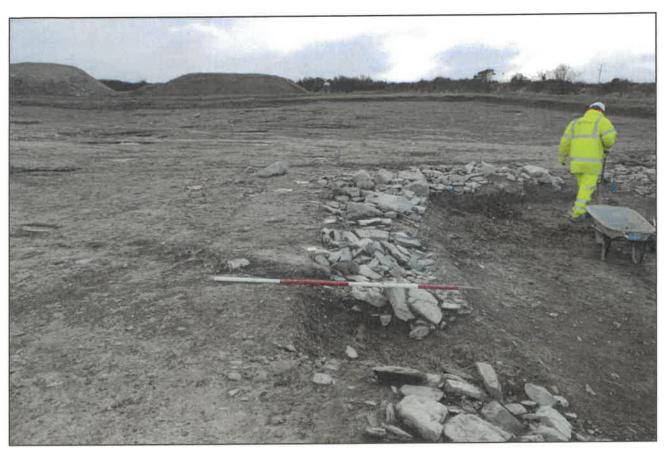


Plate 81: Overview shot of slot through wall {20523} in group #20591; scale: 1x2m (archive reference: WAD63_101_IMG0196).



Plate 82: Detail view of slot through wall $\{20542\}$ with gully $\{20580\}$ visible in wall $\{20523\}$; scale: 1x1m (archive reference: WAD63_101_IMG0314).



Plate 83: Detail view of gully {20580}; scale: 1x0.3m (archive reference: WAD63_102_IMG0071).



Plate 84: Overview shot of walls in enclosure group #20637 and #20591; scale: 2x2m (archive reference: P1010298).



Plate 85: Shot of beehive quern in situ in group #20637; no scale (archive reference: WAD63_102_IMG0606).



Plate 86: Detail shot of beehive quern in group #20637; scale: 1x0.5m (archive reference: WAD63_103_IMG0327).



Plate 87: Working shot of excavation in group #20637; no scale (archive reference: P1010365).



Plate 88: Possible floor surface {20367} in group #20637; scale: 1x2m (archive reference: WAD63_100_IMG1158).



Plate 89: Pre-ex shot of drain and hearth group #30162; scale: 1x2m, 1x1m (archive reference: WAD63_102_IMG0001).



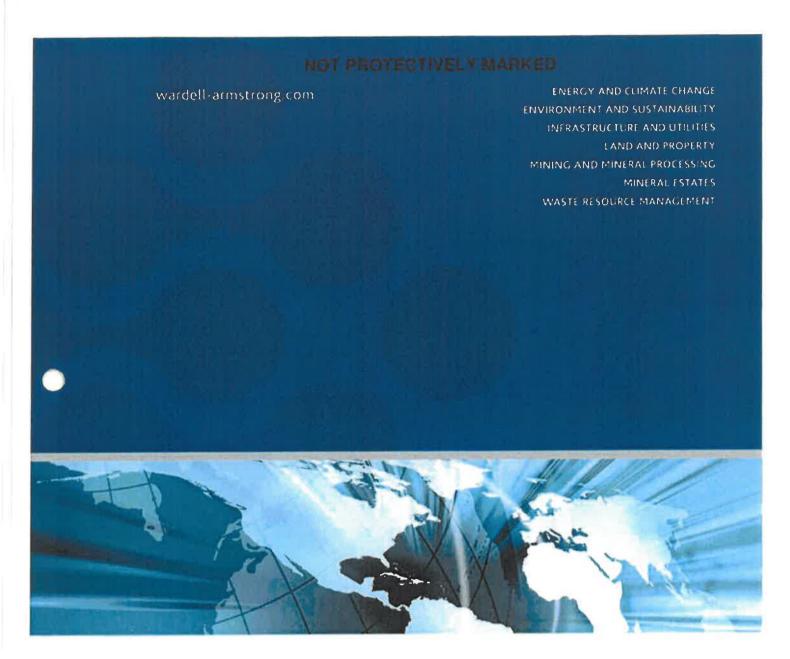
Plate 90: Pre-ex shot of drain and hearth group #30162 with walls of enclosure group #20637; no scale (archive reference: WAD63_102_IMG0430).



Plate 91: NW facing section of pits [20176] and [20285] showing layers of hillwash sealing pits.; scale: 1x0.5m (archive reference: WAD44_P1_100_IMG0482).

12 APPENDIX 1

12.1 Reproduction of Wardell Armstrong Post-Excavation Assessment Method Statement, April 2019



HORIZON

WYLFA NEWYDD

POST EXCAVATION ASSESSMENT METHOD STATEMENT

APRIL 2019

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

ENERGY AND CLIMATE CHANGE

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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.

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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 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 be covered by an overarching site wide 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 UPD 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.

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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

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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 (cvs will be provided upon request).

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 (cvs will be provided upon request). 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.

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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.

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3.4 If applicable 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.

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- 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 (cvs will be provided upon request).
- 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 stage scaled photographs will be used rather than line drawings).

7. Palaeoenvironment

- 7.1 Quantification (by weight in grams) of the retents and flots available for analysis.
- 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.

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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 (cvs will be provided upon request).
- 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

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- 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

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

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- 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

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- 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

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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 acidfree tissue paper. Plaster/mortar are dry-brushed and placed in labelled trays.

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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

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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%

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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 9I 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

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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.

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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.

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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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13 APPENDIX 2

13.1 Reproduction of Written Scheme of Investigation sections 4 and 5



PROCUREMENT SPECIFICATION FOR POST EXCAVATION ASSESSMENT

Technical / Performance Specification

DCRM Ref Number:

Revision: 0.1

Comments:

Ac	iditional Requirements or Controls	
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Approvals Table				
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ODEOUS ATION TITLE	DCRM Reference No	Revision:	0.1	
SPECIFICATION TITLE		Issue date:	dd/mm/yyyy	

Revision History				
Date	Rev No.	Summary of Changes	Ref Section	Purpose of Issue

SPECIFICATION TITLE DCRM Reference No Revision: 0.1 Issue date: dd/mm/yyyy

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1 Background to Requirements

Between 2017 and 2019 Horizon Nuclear Power (HNP) undertook a major programme of archaeological excavation at the Wylfa Newydd site in advance of the construction of a new nuclear power station. This work involved 30 open area excavations, with some undertaken as set piece excavations and others as strip map and sample excavations. This phase of fieldwork was concluded in January 2019. In February 2019 it was announced that the Wylfa Newydd project was being put into a suspended state. As a result of this all further works on the site have been suspended.

During the fieldwork undertaken during this period, an archaeological record of these sites has been created, and archives produced for each site. Works are currently underway to process the finds and environmental samples recovered from these sites, and to assess the archaeological potential of the human remains recovered from excavation at the Wylfa Newydd site. This work has been undertaken to stabilise the archive for future assessment. This document sets out the requirements for undertaking this assessment of the archaeological potential of the evidence accumulated during the excavations undertaken at Wylfa. It is the understanding of HNP that this work is necessary in advance of a requirement being placed upon the Development Consent Order relating to the development of the Wylfa Newydd nuclear power station being granted. The contractor will be required to undertake the full assessment of the archaeological assemblage (excluding human remains) recovered from the 30 sites investigated and report these findings with HNP who will disseminate the results. Additionally, the contractor will be required to integrate the assessment of the human remains into their reports where appropriate.

2 The Requirements

The contractor should tender for:

The production of a MoRPHE compliant assessment report for each site where archaeological excavation has occurred. The report should be produced following the relevant CiFA published guidelines. This report shall include as a minimum:

- A non-technical Summary;
- Site code and project number
- The Planning Reference number and PRN No's;
- The date and location within the Wylfa Newydd site boundary of the archaeological excavation;
- An account of the background and circumstances of the work;
- A catalogue of the archaeological archive, its location, and the intended repository (with accession number);
- A statement of curation requirements for the archive;
- A brief overview of the previously known archaeology of the site;
- A description of the methods used during excavation;
- A stratigraphic account of the archaeological contexts investigated at the site;
- Specialist reports detailing the results of the assessment of the artefacts and environmental samples;

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- Where appropriate, the integration of the specialist report detailing the results of the assessment of any human remains encountered on site;
- Where appropriate, a specialist report detailing the results of the submission of samples suitable for Radiocarbon Sampling;
- An assessment of the archaeological significance of the site in relation to other sites in the region;
- A conclusion, detailing a recommendation of any potential further post excavation work;
- Full bibliography of all sources used;
- Plans and sections of the archaeology identified at the site. These should include:
 - A scaled plan of the site, it's location, a north arrow and all relevant keys;
 - Detailed scaled plans and sections of individual features as necessary;
- Any relevant photographs illustrating the archaeology at the site. These should be scaled, and the length of the scales should be noted within the photograph label;
- Harris Matrices as appropriate of archaeological deposits and features identified at the site to be included as an appendix; and
- A copy of the specification to be included as an appendix

The production of a programme detailing the process by which the assessment reports will be delivered, highlighting key delivery dates within the programme. This must be submitted and agreed with HNP prior to starting the production of the assessment reports.

Monthly reporting of the progress of the programme detailing any issues or slippage which may have occurred and highlighting those areas of the programme ahead of schedule.

The submission of the report to HNP should be provided for within the tender. Initially the report will be submitted prior to the Date for Completion in a format suitable for editing and comment.

The production of an Updated Project Design (UPD) to address further Post Excavation work required should be provided for in the tender. The UPD will be submitted to HNP as a draft for comment following the submission of the assessment reports. The draft UPD shall be submitted to HNP in advance of the Date of Completion. Allowance within the tender price should be made for adjustment to the UPD following receipt of comments by HNP.

Edits of the reports should be provided for within the tender. The edits will be undertaken after the report has been submitted to HNP and will be undertaken by Subject Matter Experts employed by HNP. A final version of the assessment report will be submitted to HNP in a .PDF format following the acceptance of edits and comments from HNP and the implementation of any edits and comments. In addition, five bound copies will be submitted for disbursement by HNP.

3 Deliverables

All sites which have undergone either full excavation or strip map and sample will have undergone full archaeological assessment, and a report detailing the results of this assessment produced.

Highlighting of those sites which are likely to warrant further post excavation work in the form of analysis and publication.

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To produce archaeological assessments of each site of sufficient quality to guide the production of an Updated Project Design (UPD) to deliver any further analysis and publication as necessary.

To produce a UPD detailing the further analysis and publication of the archaeological excavations at the Wylfa Newydd site.

To ensure the integrity of the archaeological archive produced from each site and to ensure each archive is deposited at a suitable repository.

4 Methodology

All archives pertaining to the excavations will be transferred from Horizon Nuclear Power to the appointed contractor. This will include all physical remains, digital records and paper archives which HNP currently store.

A documented transfer of title must take place between HNP and the appointed contractor during this transfer to ensure the contractor acknowledges receipt and responsibility of these archives.

A works programme detailing key staff, staff numbers and key milestone target dates must be submitted to and agreed with HNP prior to the commencement of work. This must detail each site specifically and identify key tasks and dates which must be undertaken in order to successfully complete by deadline date.

A Method Statement of how the reports are to be produced and appropriate RAMS must be submitted alongside the works programme. This should reference the works programme. This must be agreed by HNP prior to the commencement of work.

As a minimum, the Method Statement include and address the following;

- Introduction detailing the contractors understanding of the background and scope of the archaeological assessment works;
- The contractors understanding of the requirement and purpose of the assessment of the archaeology recovered from sites at Wylfa Newydd;
- The contractors Post Excavation Assessment stages and the output of those stages
- An overview of the contractor's report template in which the archaeological assessment will be presented;
- A task breakdown of those areas of work expected to be undertaken during the assessment;
- A brief summary detailing those staff expected to manage the works and staff expected to undertake each aspect of the assessment. An accompanying organogram should be included;
- The professional standards the contractor will be working to during the archaeological assessment works, and those professional bodies the organisation belong to. Individuals working on this project belonging to professional bodies should also be detailed;
- Details of any external sub-contractors the appointed contractor will use during the course
 of the assessment works. These details should include their qualifications along with any
 relevant professional bodies they may be a member of; and
- Relevant works liabilities and insurances

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During the assessment works a monthly report will be produced to inform HNP of progress as a method by which both HNP and the contractor can identify key issues which may affect the program at an early stage and mitigate likely problems before they arise.

Where required, a digital copy of all reports in Microsoft Word and illustrations as georeferenced AutoCAD drawings (.dwg) shall be made available to HNP during the assessment process.

A copy of the draft assessment report will be submitted to HNP for review. HNP will liaise with the Curator regarding comments and edits which may be required. When finalising the report, the contractor will take into account any comments made by HNP and the curator and issue a finalised report which remedies any faults identified. The finalised report will be issued to HNP ten days after receipt of the HNP comments on the draft assessment report.

Each finalised report will be issued to HNP as;

- · Five bound printed copies; and
- A digital copy in a .PDF format

The appointed contractor upon instruction by HNP will also issue;

- A digital copy of each assessment report in a .PDF format to the local curator
- A bound printed copy and digital .PDF copy of each assessment report to the HER
- A bound printed copy and digital .PDF copy of each assessment report to the Royal Commission on Ancient and Historical Monuments in Wales

No digital assessment reports shall exceed 20MB in size.

Following the submission of the assessment reports the contractor will also produce an Updated Project Design (UPD) in accordance with MoRPHE guidelines upon instruction by HNP. This UPD will detail the further analysis, reporting, publishing and archiving work required to discharge any requirements placed upon the DCO.

The UPD will include a costed programme detailing tasks and resources required to deliver works required beyond the assessment stage. The full cost of publication will be included within the UPD. A table of the programme will be included as an appendix.

Sites not requiring further work beyond the assessment stage should be highlighted within the UPD, accompanied by the reasons for not taking the work further. This UPD will be submitted to HNP to comment. HNP will liaise with the Curator regarding the UPD and the contractor will take into account any comments issuing an edited copy to HNP remedying any faults identified. The contractor will be expected to resubmit an revised copy of the UPD ten working days after receipt of the HNP comments.

5 Standards

All work will be undertaken to recognised ClfA's published guidance. When undertaking the archaeological assessment work, the contractor shall specifically refer to section 3.4 of;

ClfA (2014) Standard and guidance for archaeological excavation.

During the planning, organisation, management and execution of the the archaeological assessment works the contractor shall refer to MoRPHE guidance;

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Historic England (2015) Management of Research Projects in the Historic Environment

During the archaeological assessment work, the following guidance should also be consulted where appropriate;

- APABE (2017) Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England, Advisory Panel on the Archaeology of Burials in England, London.
- BABAO online (2018) Code of Ethics. http://www.babao.org.uk.
- BABAO online (2018) Code of Practice. http://www.babao.org.uk.
- Brown, D.H. (2011) Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation, Archaeological Archives Forum
- Europae Archaeologia Consilium (EAC) (2014) A Standard and Guide to Best Practice for Archaeological Archiving in Europe. EAC Guidelines 1: Belgium.
- Historic England (2018) Waterlogged Organic Artefacts: Guidelines on their Recovery, Analysis & Conservation. Historic England.
- Historic England (2018) Archaeological Evidence for Glassworking: Guidelines for Recovering, Analysing and Interpreting the Evidence. Historic England.
- Historic England (2014) Animal Bones and Archaeology: guidelines for best practice. Swindon: Historic England.
- Historic England (2018) The Role of the Human Osteologist in an Archaeological Fieldwork Project. Historic England.
- Mitchell, P D & Brickley, M (Eds.) (2017) Updated Guidelines to the Standards for Recording Human Remains. BABAO/ClfA.
- Watkinson, DE & Neal, V (1998) First Aid for Finds. RESCUE, The British Archaeological Trust: London.

Other guidance relating to best practice on subjects not addressed in the guidance above should be utilised and referred to as appropriate.

6 Not Used

7 Attachments

	Site Summary Report		
	REF	Area	Author
1	WYN-BRY-CON-REP- 00001 v1.2	Wylfa Head	Brython
2	WYN-BRY-CON-REP- 00002 v1.2	Area 7	Brython

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3	WYN-BRY-CON-REP- 00013 v1.2	Area 8	Brython
4	WYN-BRY-CON-REP- 00010 v1.2	Hotspot 5	Brython
5	WYN-BRY-CON-REP- 00008 v1.2	Hotspot 6	Brython
6	WYN-BRY-CON-REP- 00012 v1.2	Hotspot 7 & 9	Brython
7	WYN-BRY-CON-REP- 00006 v1.2	Hotspot 8	Brython
8	WYN-BRY-CON-REP- 00005 v1.2	Hotspot 10	Brython
9	WYN-BRY-CON-REP- 00011 v1.2	Hotspot 11 & 13	Brython
10	WYN-BRY-CON-REP- 00007 v1.2	Hotspot 12	Brython
11	WYN-BRY-CON-REP- 00009 v1.2	Hotspot 14	Brython
12	WYN-BRY-CON-REP- 00014 v1.1	Hotspot 15	Brython
13	WYN-BRY-CON-REP- 00004 v1.2	Hotspot 16	Brython
14	WYN-BRY-CON-REP- 00003 v1.2	Hotspot 17	Brython
15	WYN-WES-CON-REP- 00004	Area 1 (Field L3&L4)	Wessex
16	WYN-WES-CON-REP- 00006	Wylfa Newydd Area 2 (Fields L8, L9, L11, L12, L13, L16)	Wessex
17	WYN-WES-CON-REP- 00007	Wylfa Area 3, Field K11	Wessex
18	WYN-WES-CON-REP- 00019	Wylfa Newydd Area 4, Field E3	Wessex

SPECIFICATION TITLE	DCRM Reference No	Revision:	0.1	
		Issue date:	dd/mm/yyyy	

19	WYN-WES-CON-REP- 00008	Wylfa Area 5, Field A1	Wessex
20	WYN-WES-CON-REP- 00010	Wylfa Newydd Area 9, Field F1	Wessex
21	WYN-WES-CON-REP- 00014	Wylfa Area 12, Field L1 central	Wessex
22	WYN-WES-CON-REP- 00013	Wylfa Area 11, Field L1 west	Wessex
23	WYN-WES-CON-REP- 00015	Wylfa Area 14 Fields L1/L20	Wessex
24	WYN-WES-CON-REP- 00016	Wylfa Area 16, Field K3	Wessex
25	WYN-WES-CON-REP- 00009	Wylfa Area 17, Field L2	Wessex
26	WYN-WES-CON-REP- 00012	Wylfa Area 18, Field O6	Wessex
27	WYN-WES-CON-REP- 00021	Wylfa Newydd Area 20, Field O5s	Wessex
28	WYN-WES-CON-REP- 00020	Wylfa Newydd Area 19, Field O5n	Wessex
29	661062	EV9 Cable Diversion	RSK

8 References (not used)

REF. No.	DOCUMENT NUMBER	TITLE	
			_

Table 1: References

	DCRM Reference No	Revision:	0.1	
SPECIFICATION TITLE		Issue date:	dd/mm/yyyy	

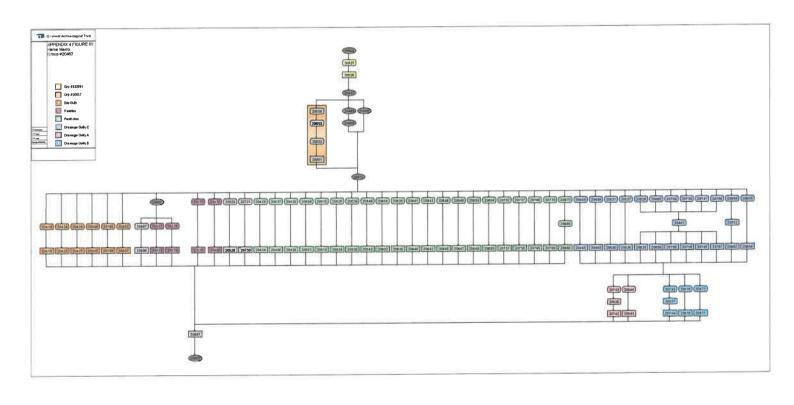
14 APPENDIX 3

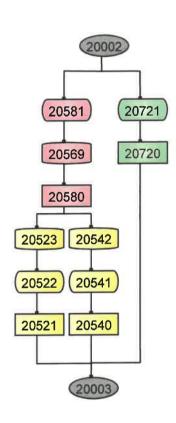
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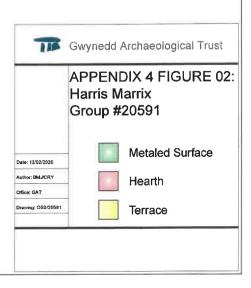
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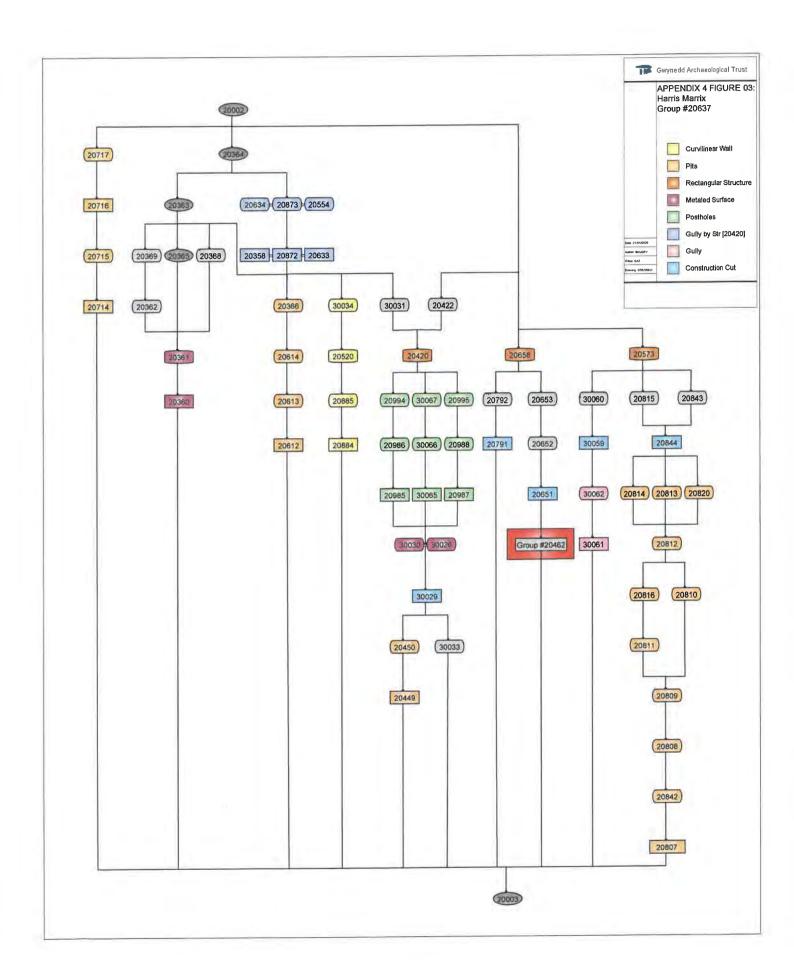
15 APPENDIX 4

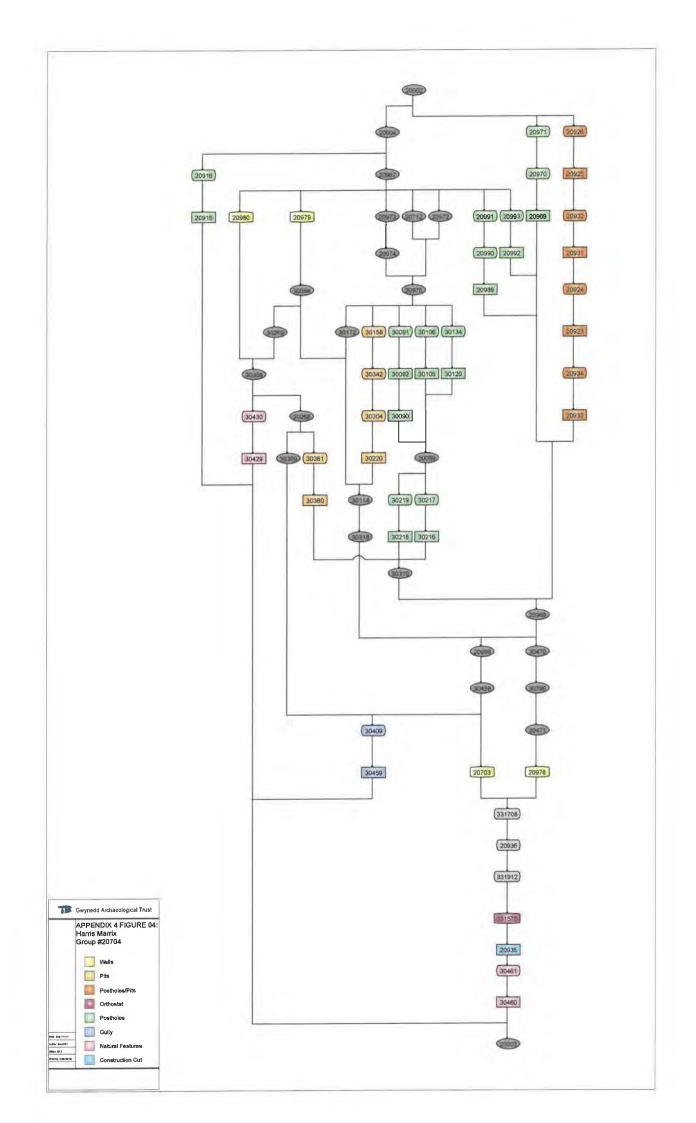
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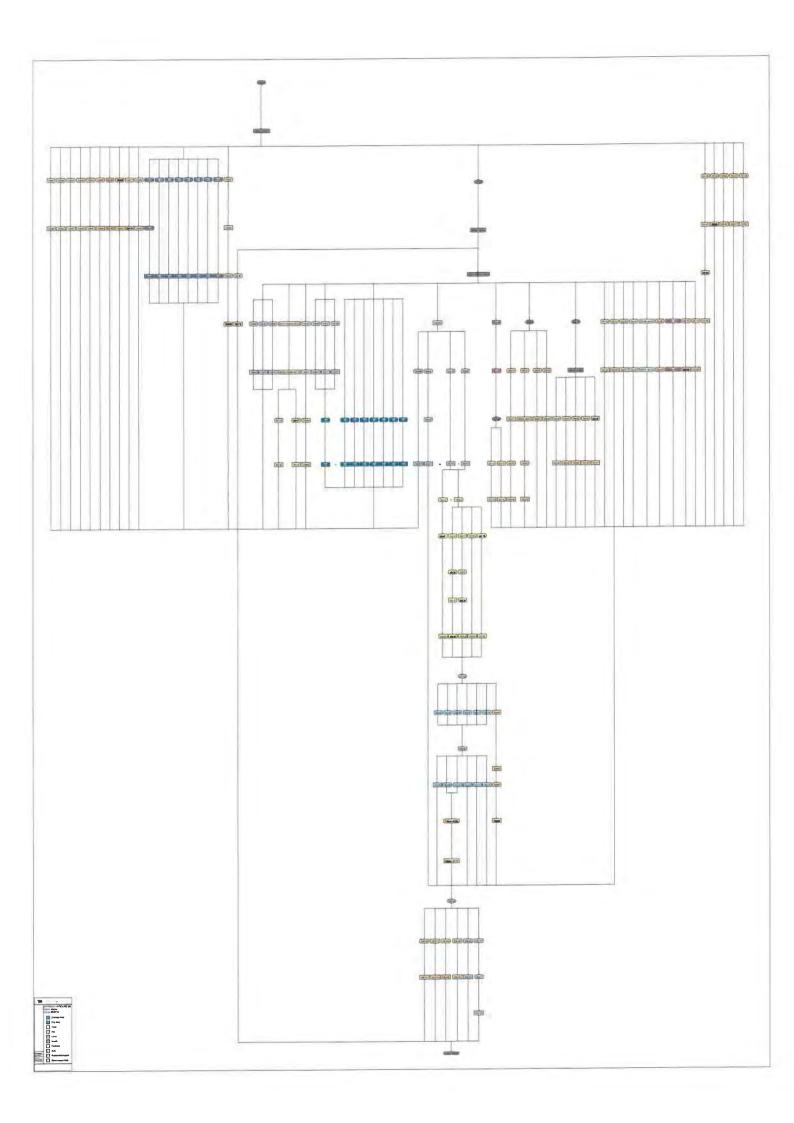


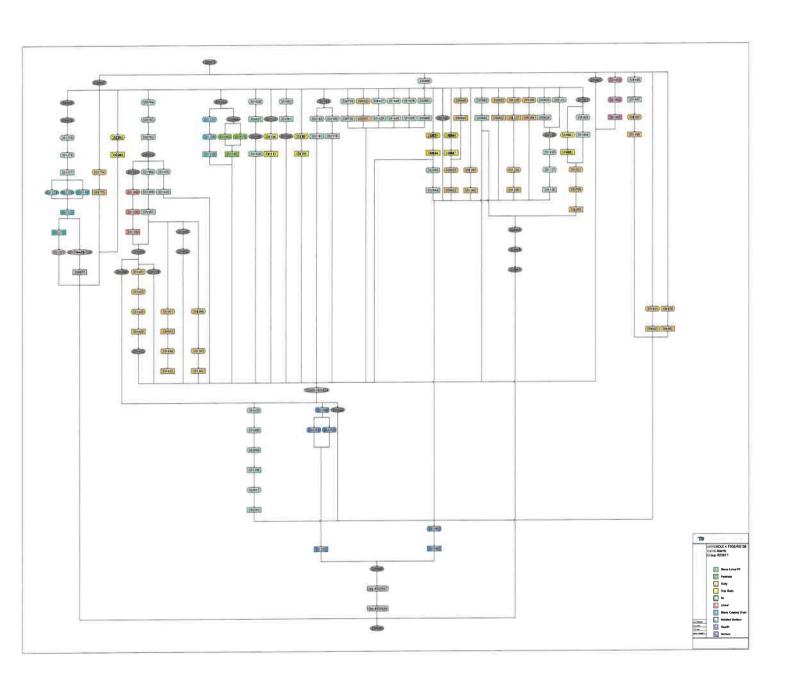


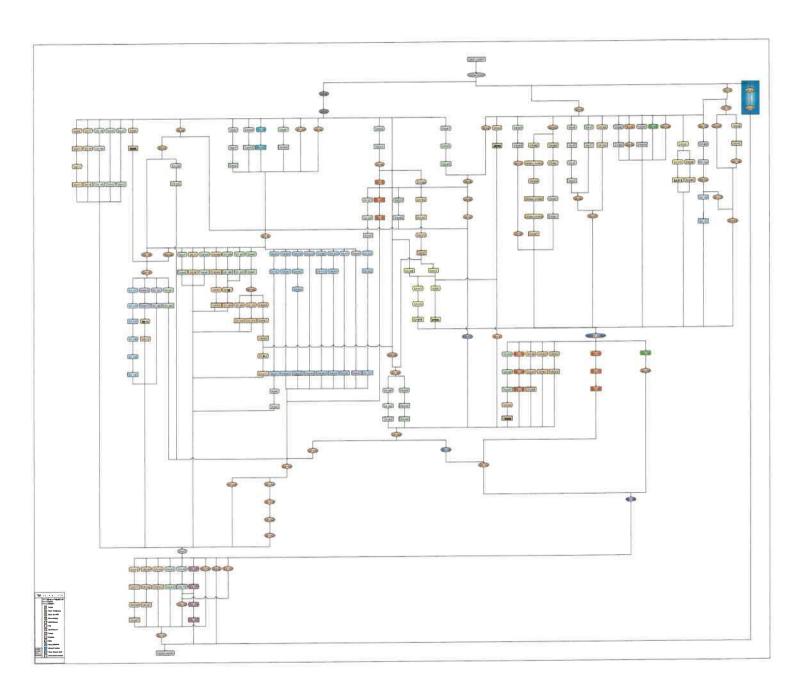


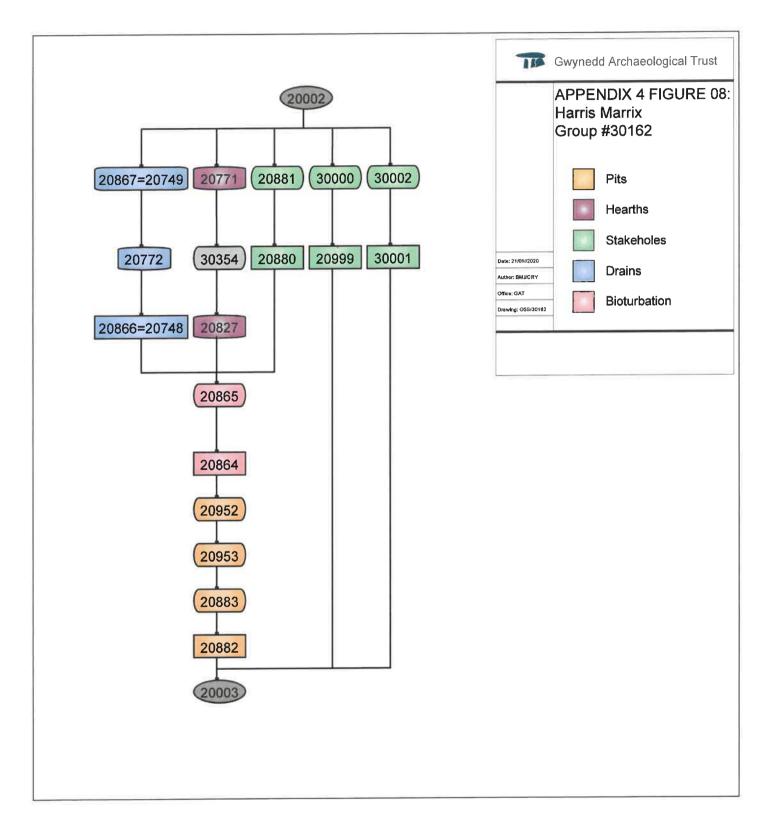


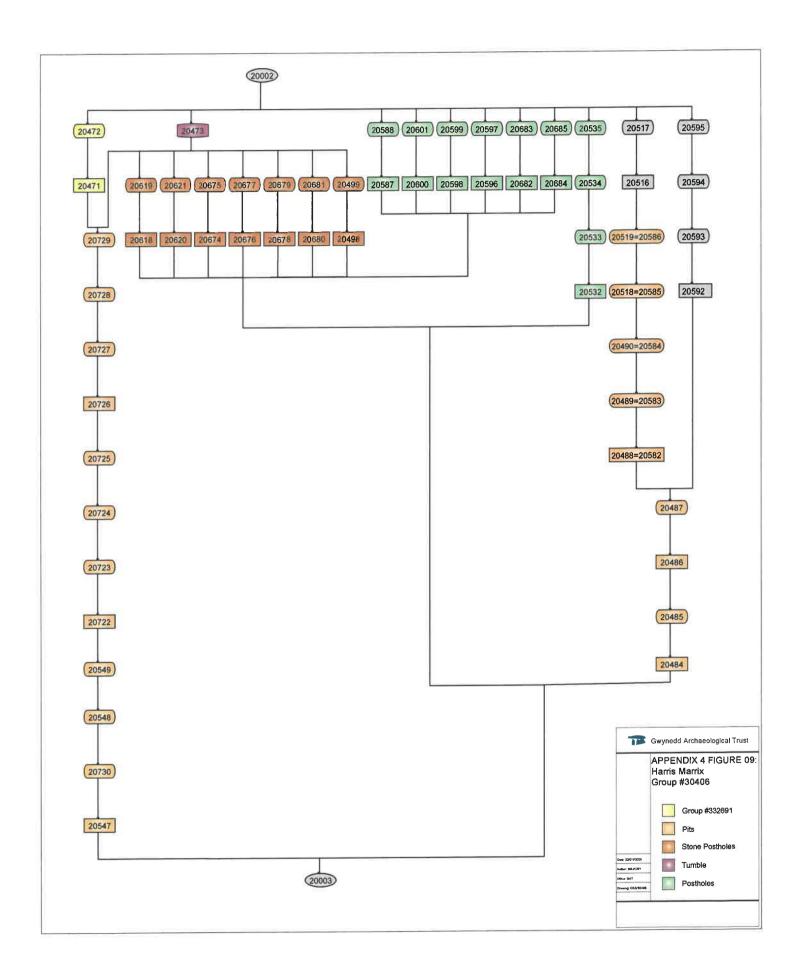


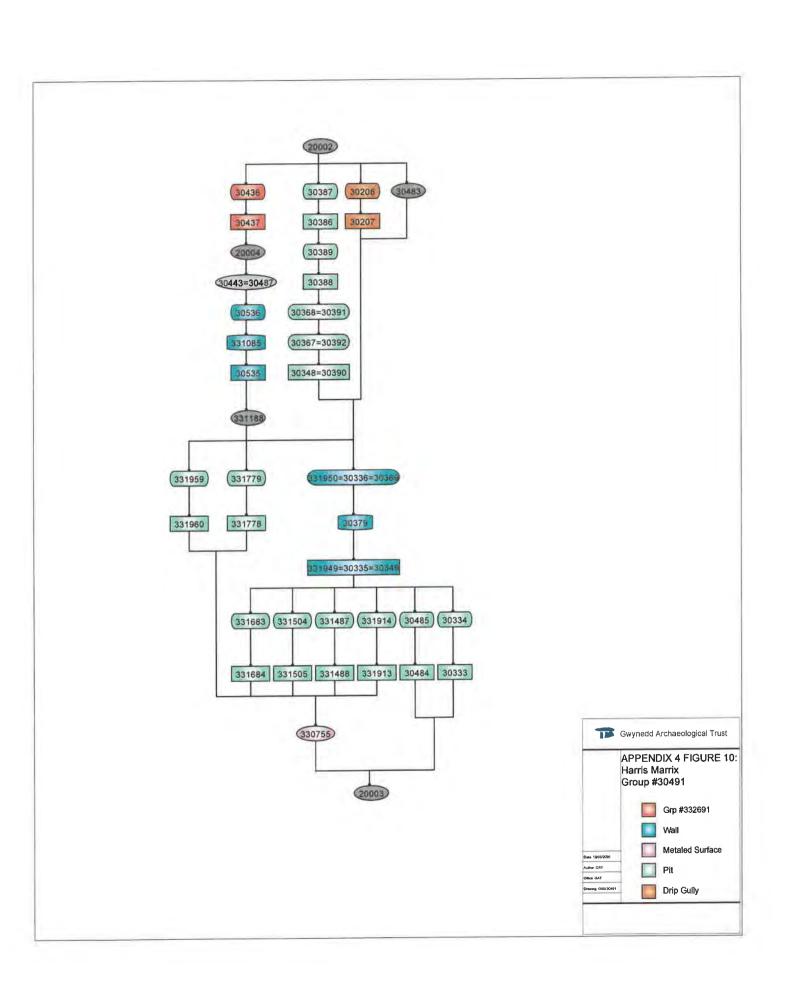


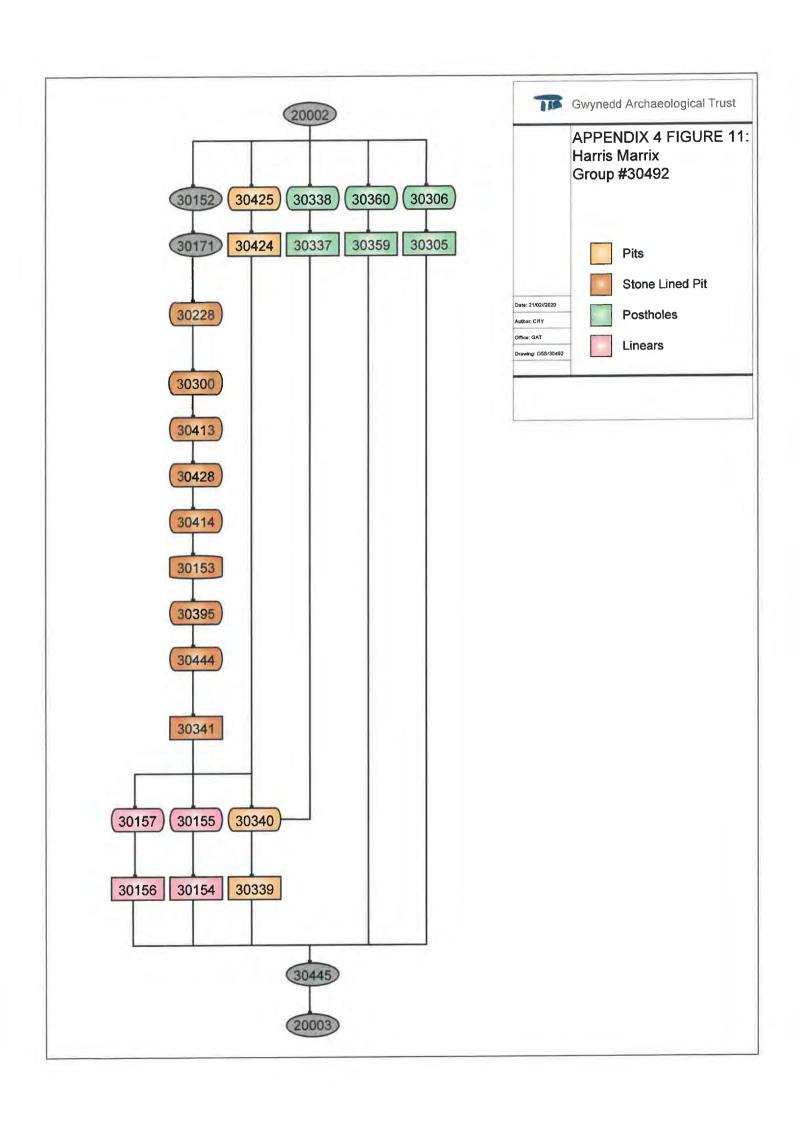


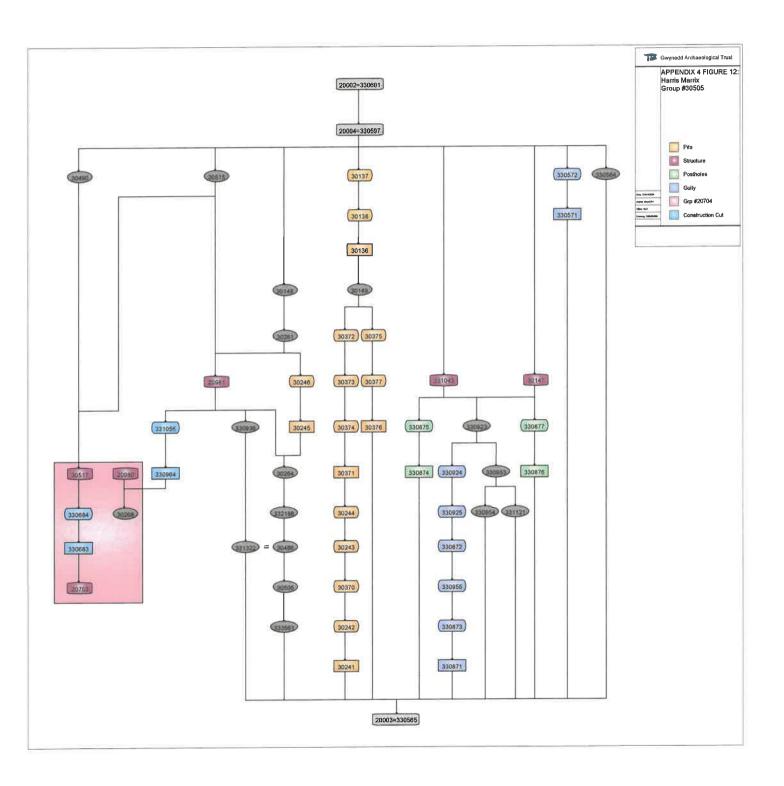


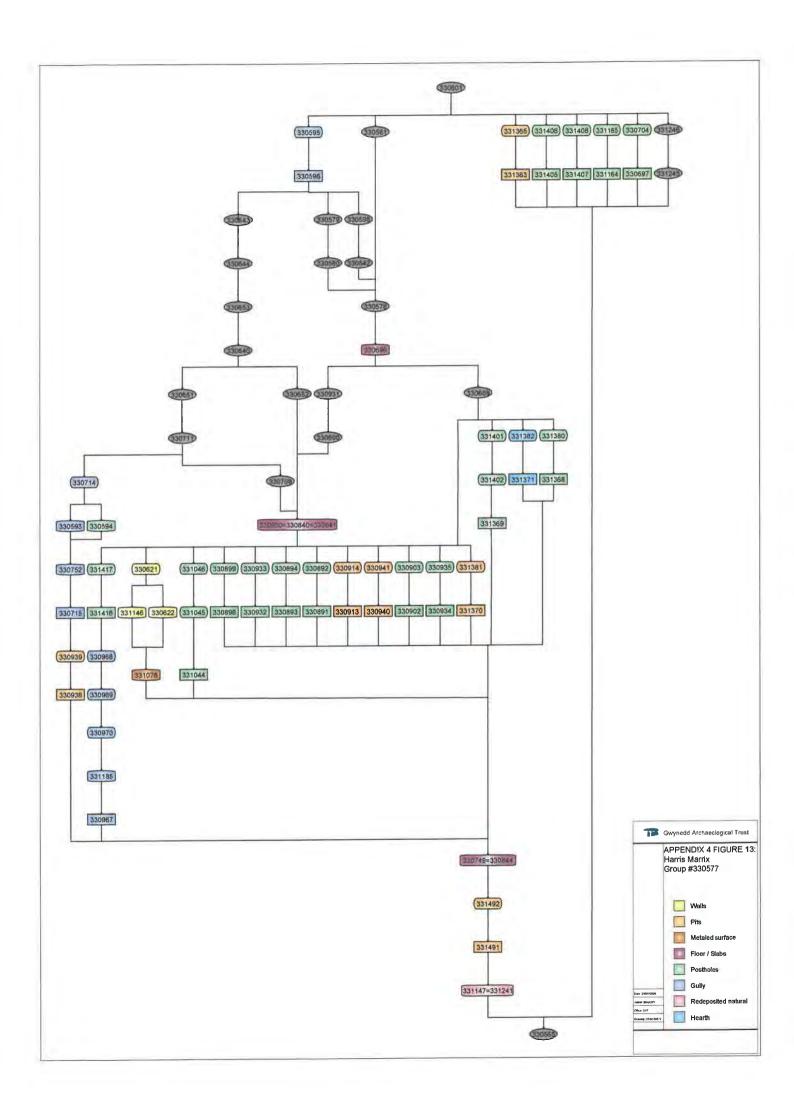


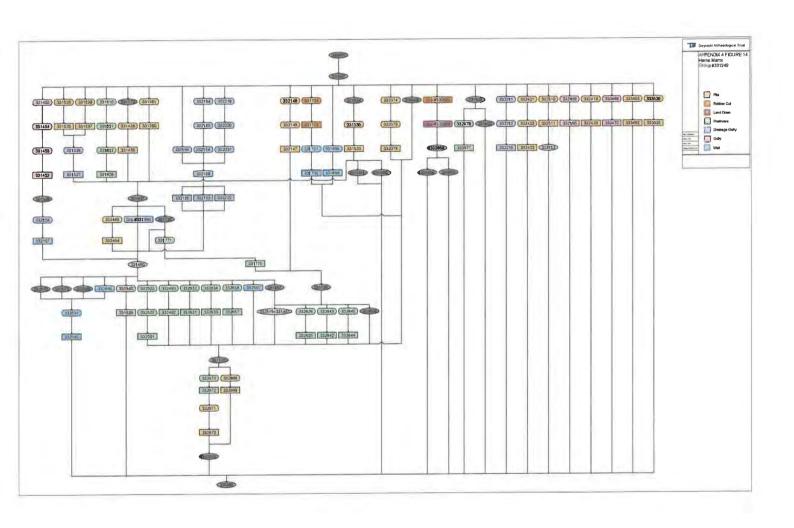


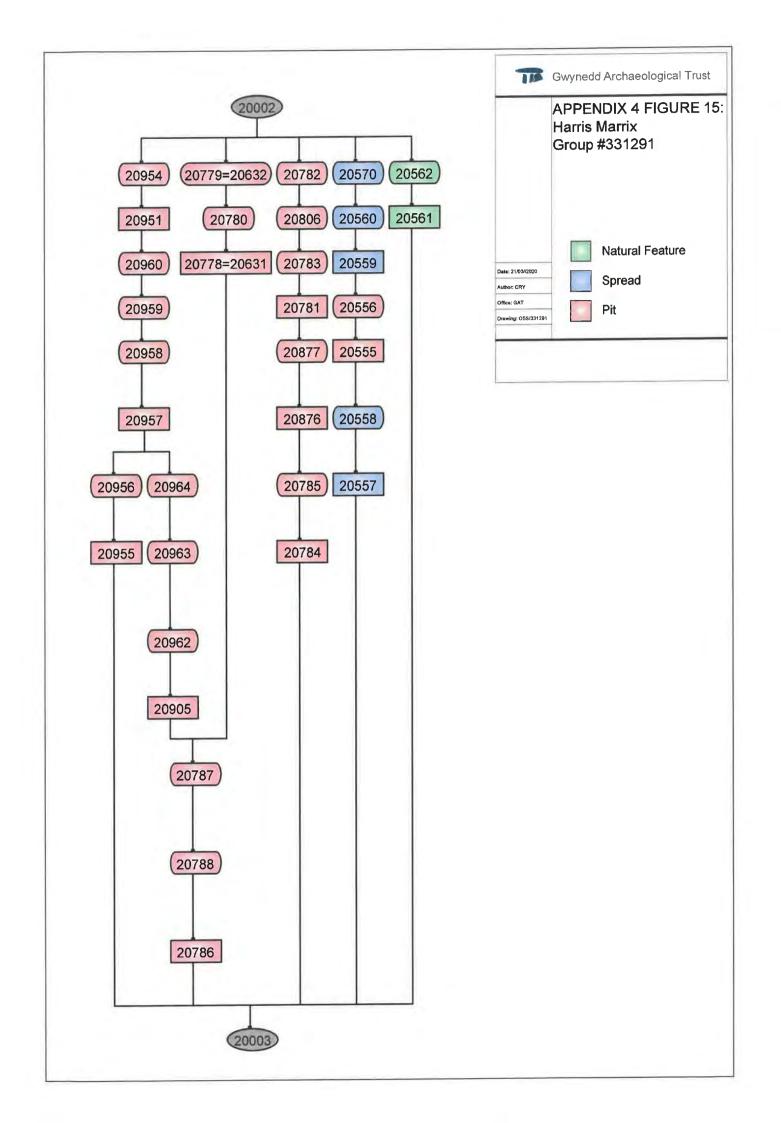


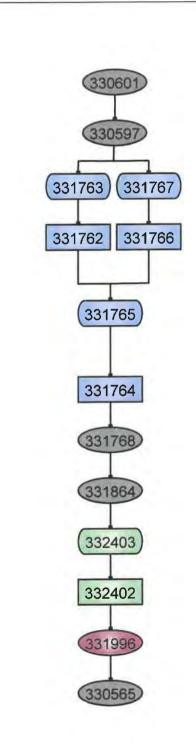


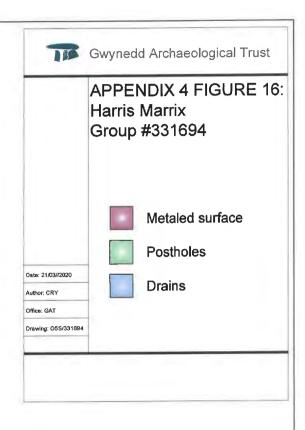


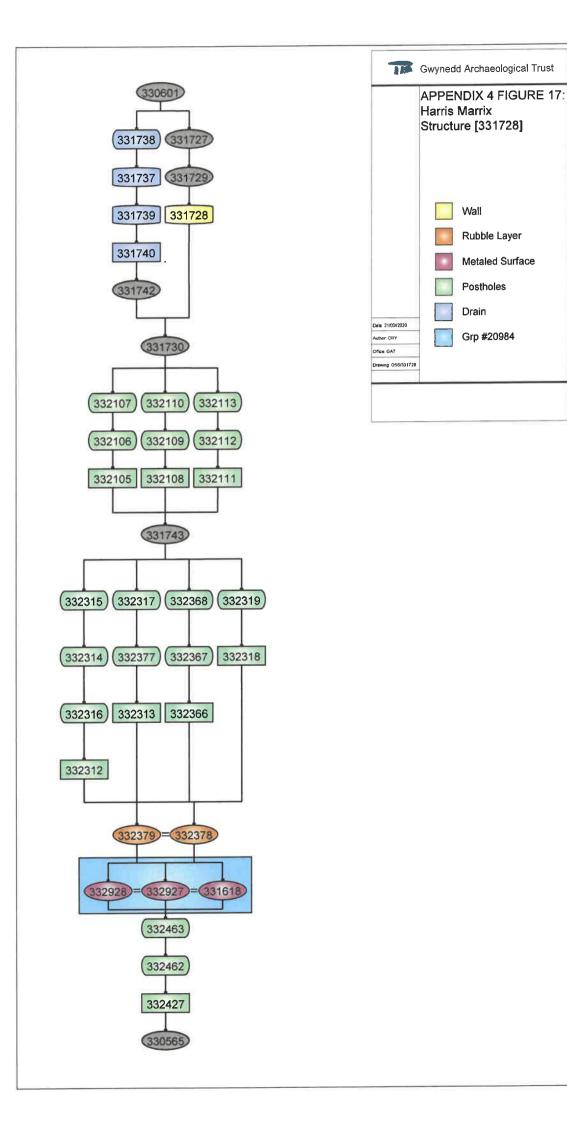


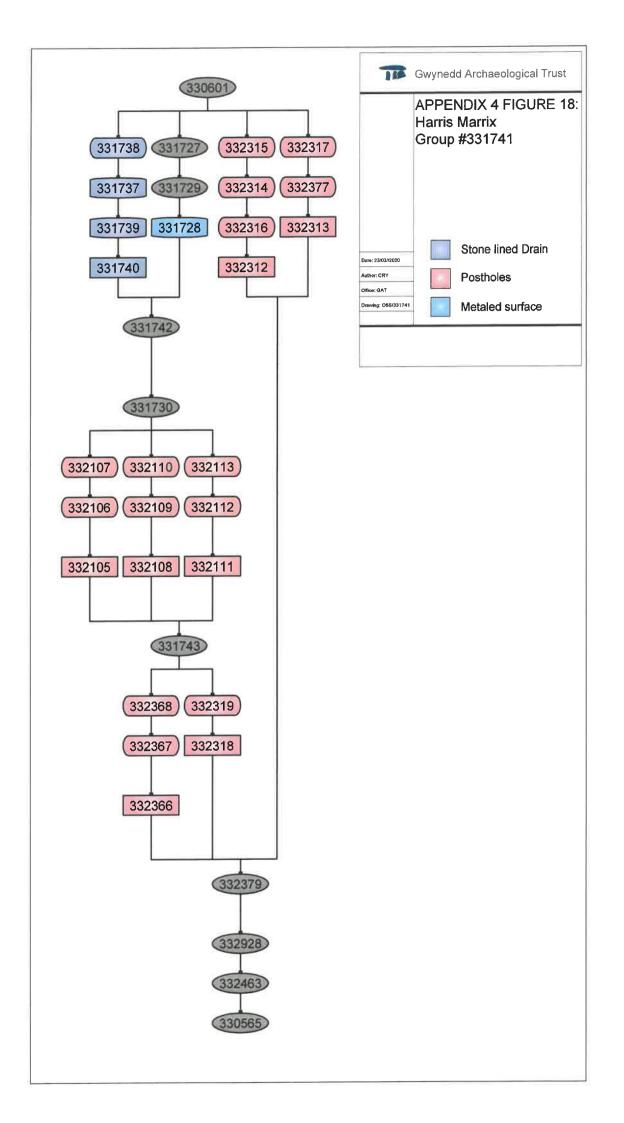


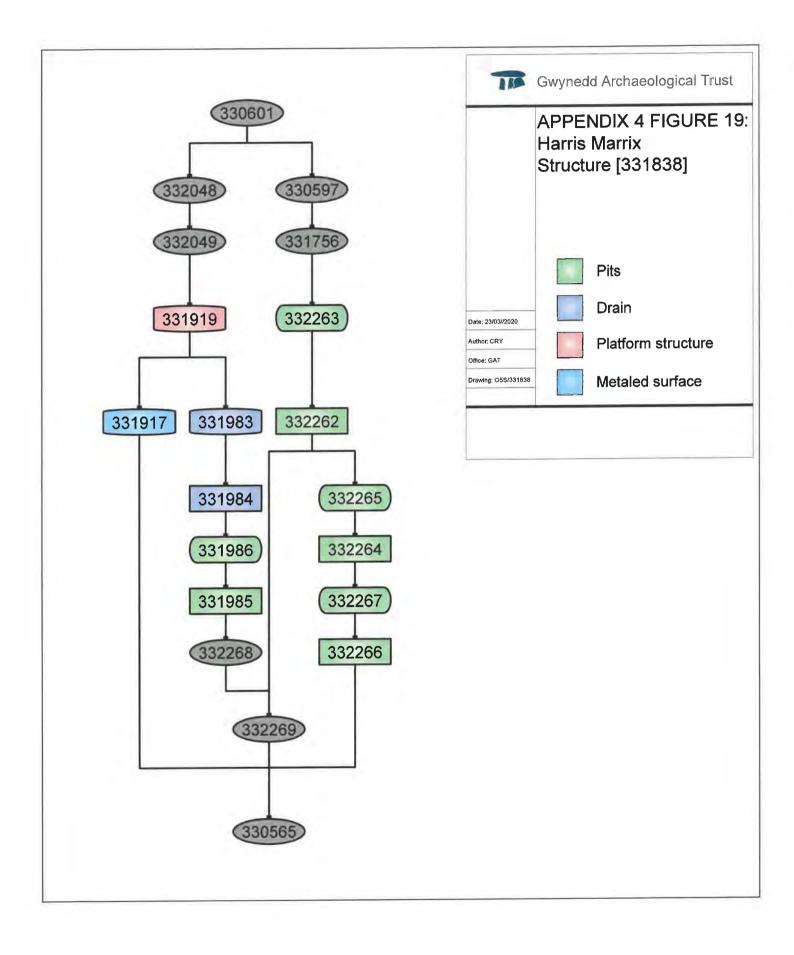


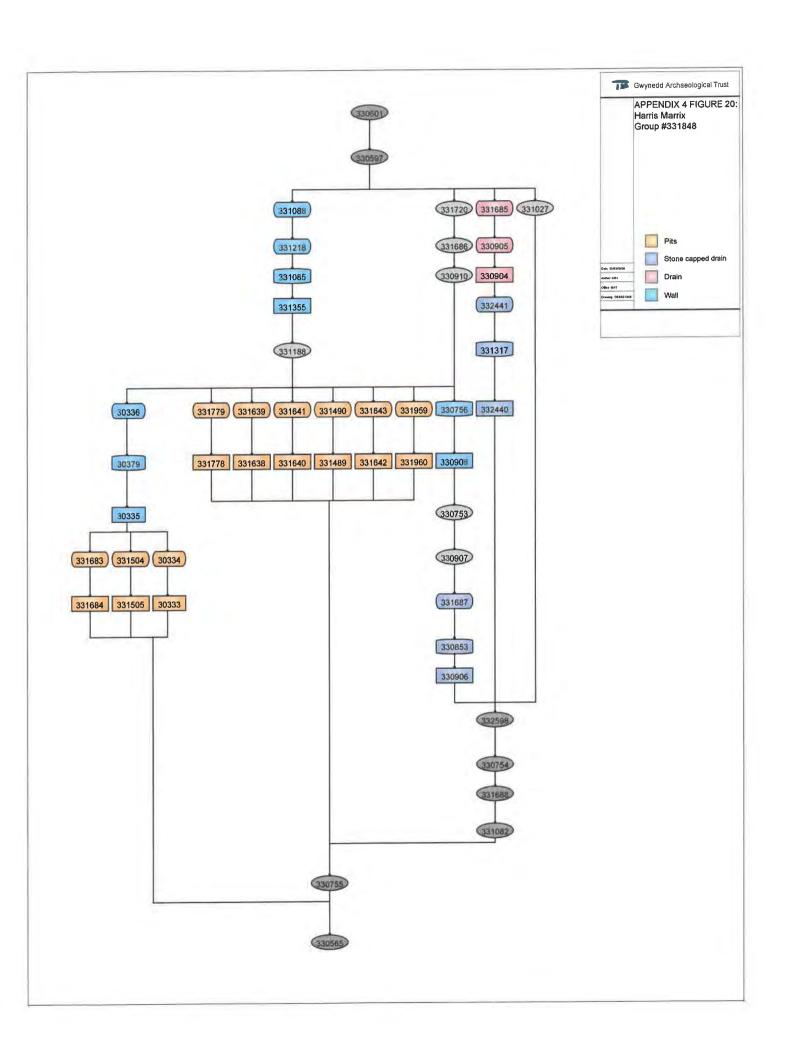


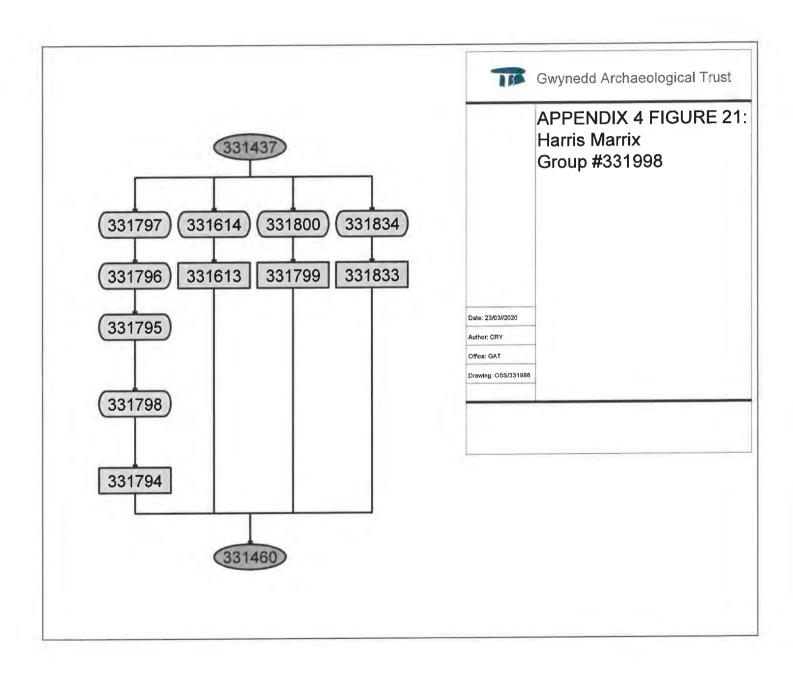


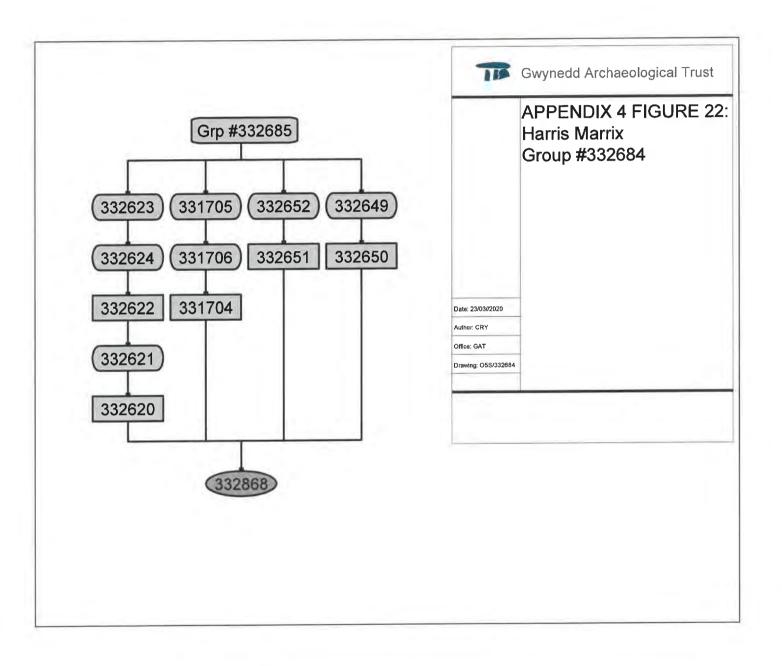


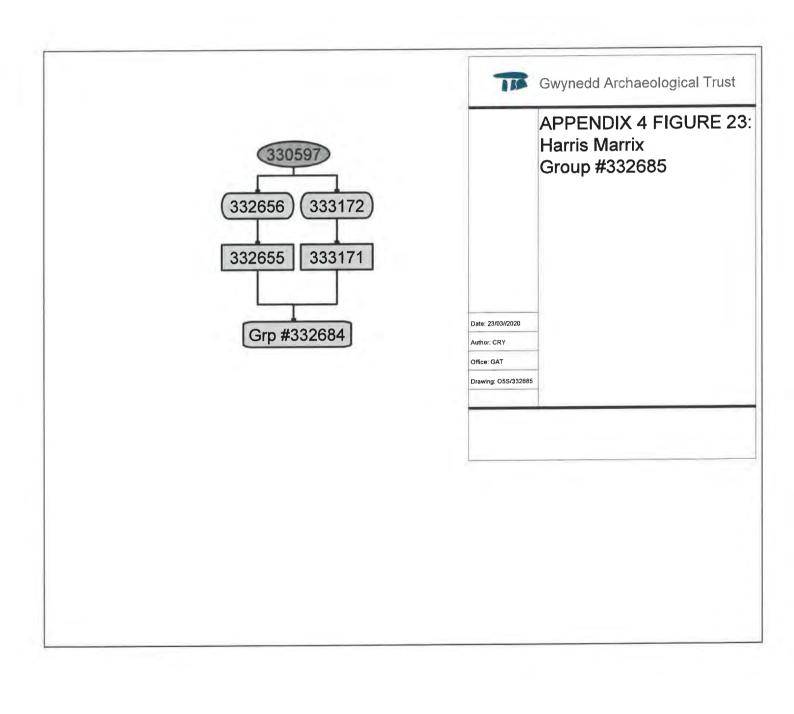


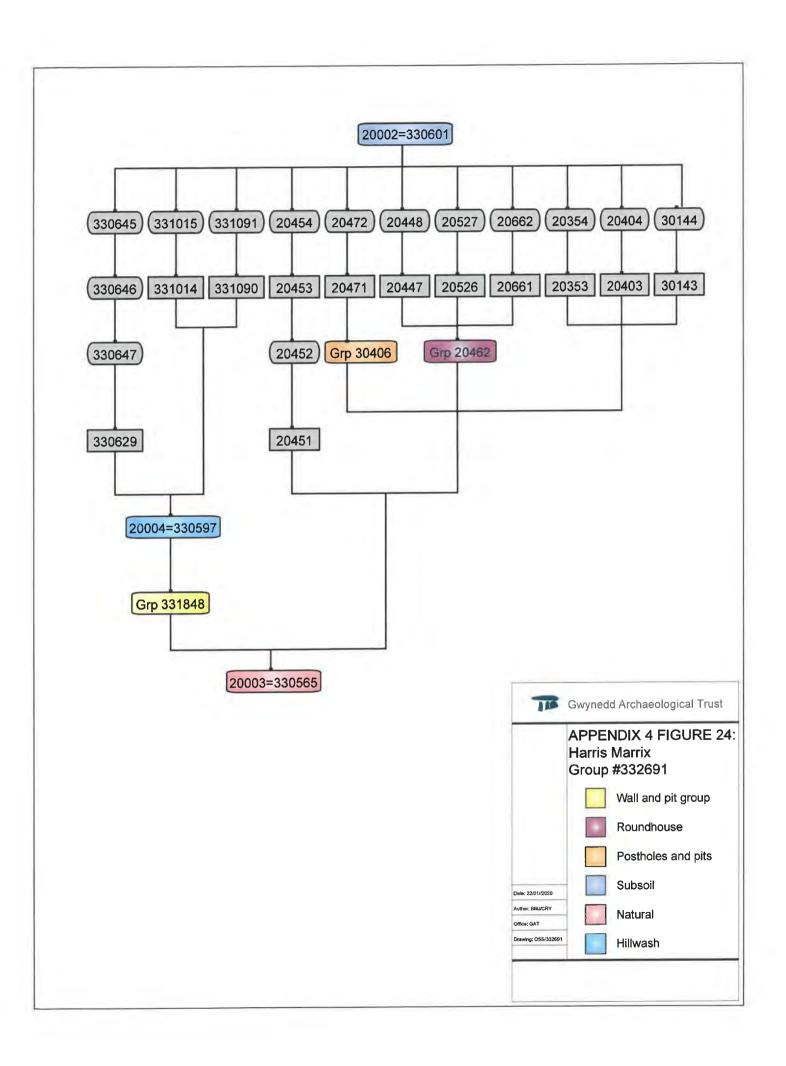


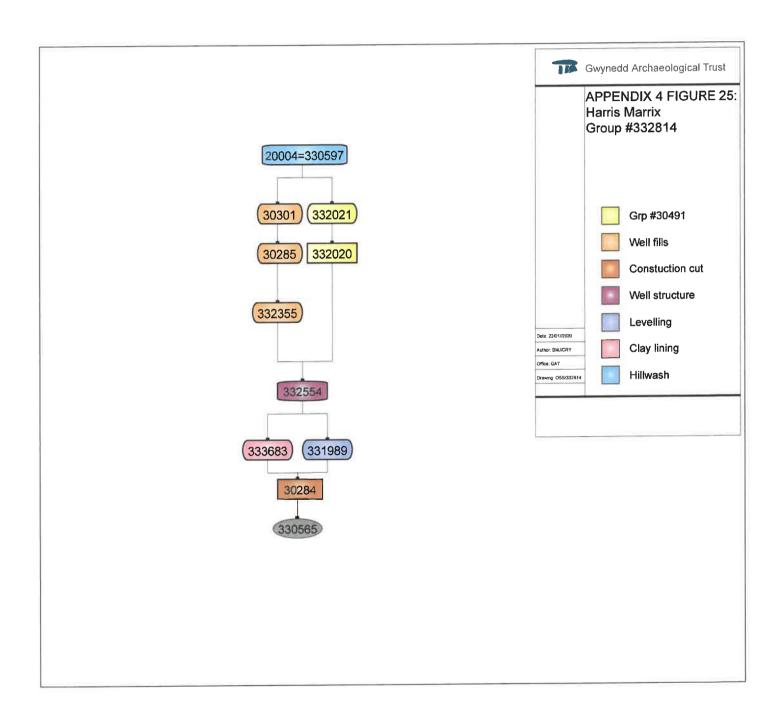


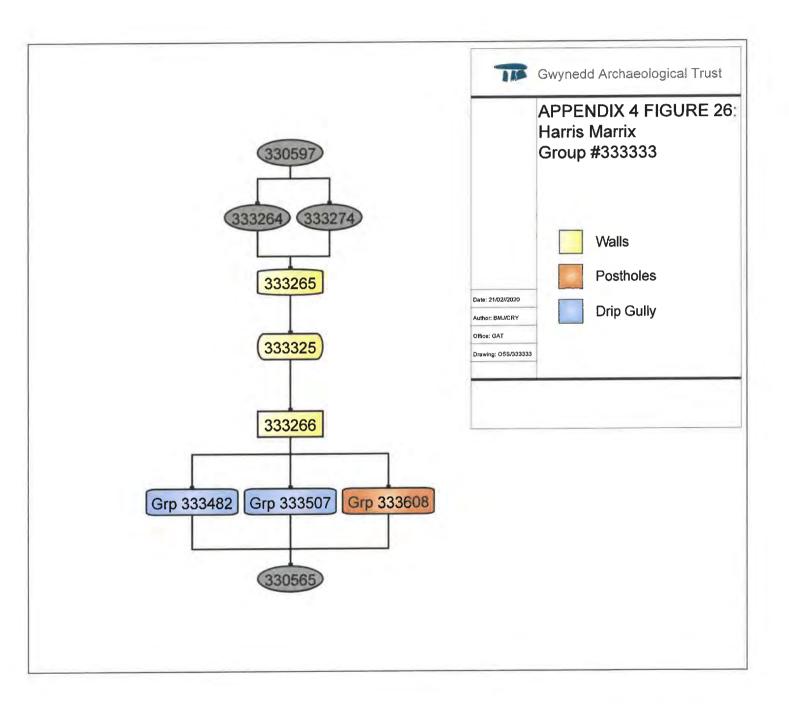


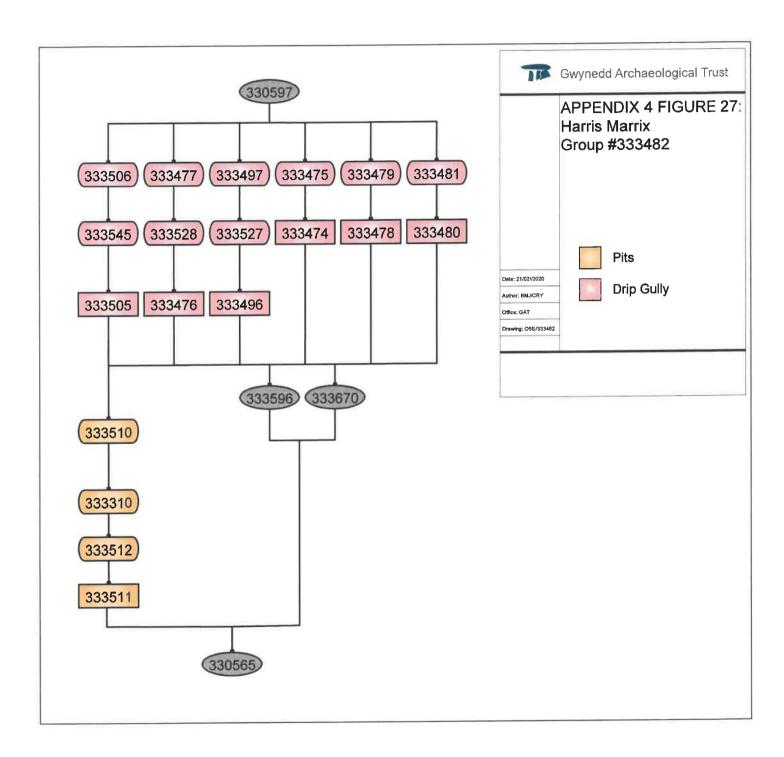


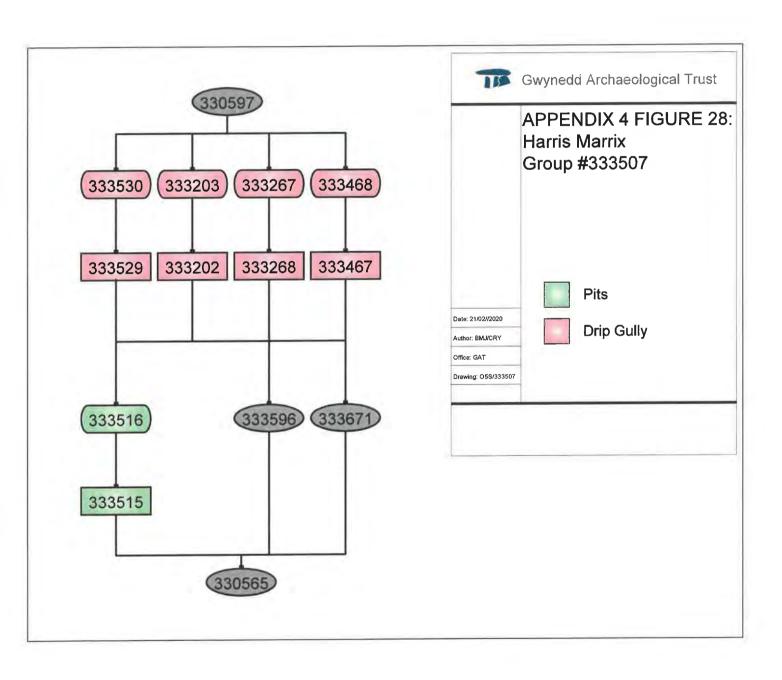


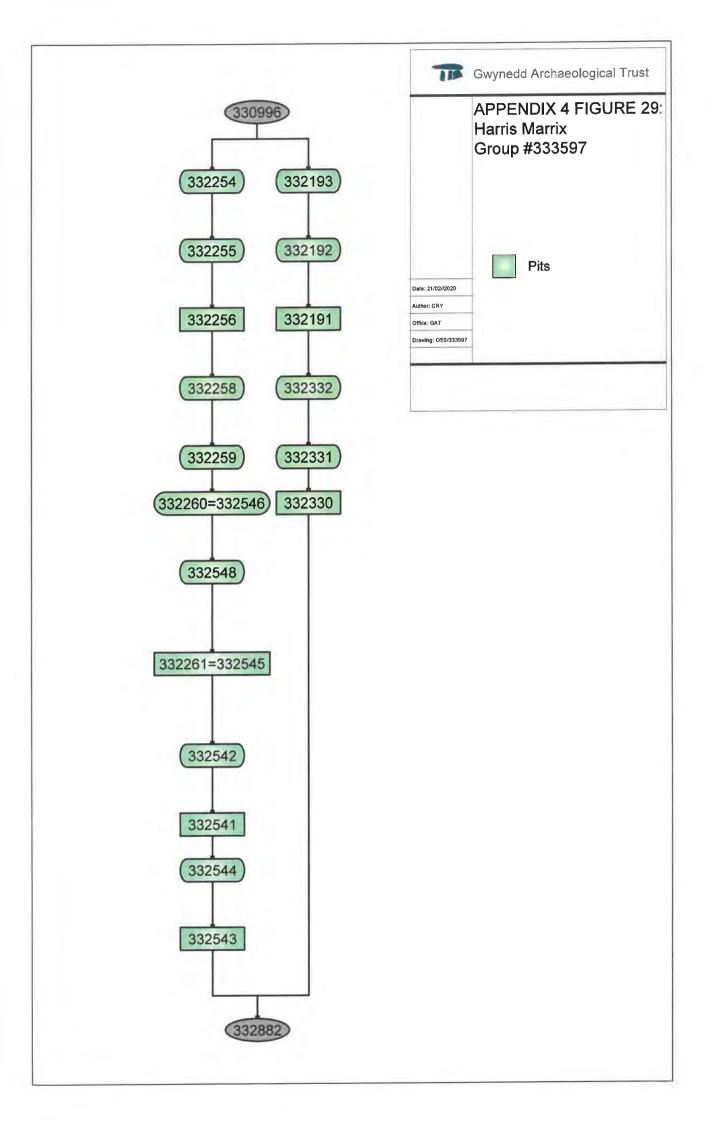


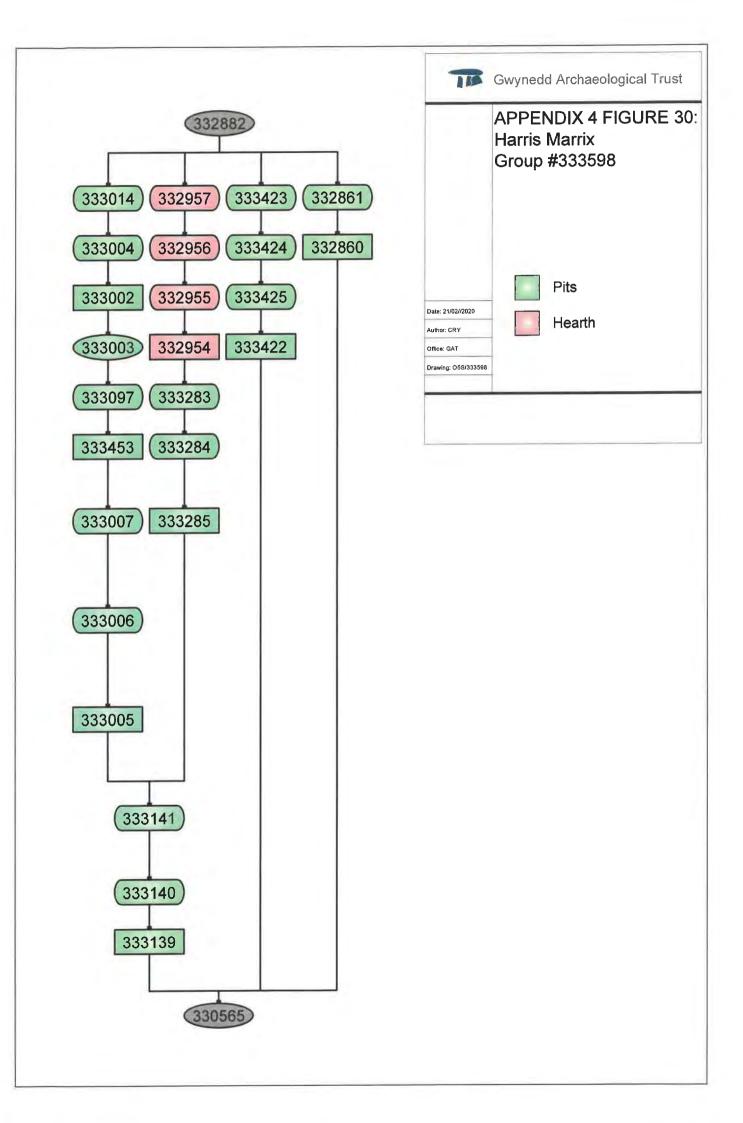


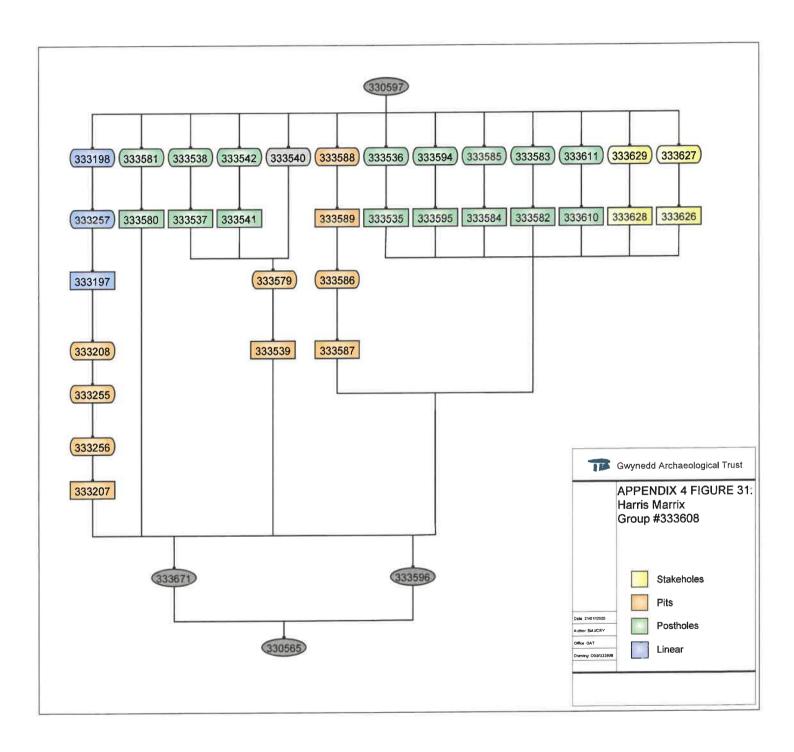


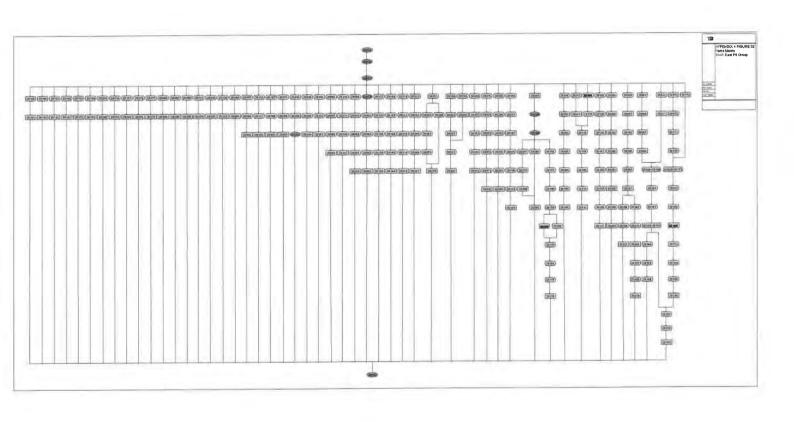


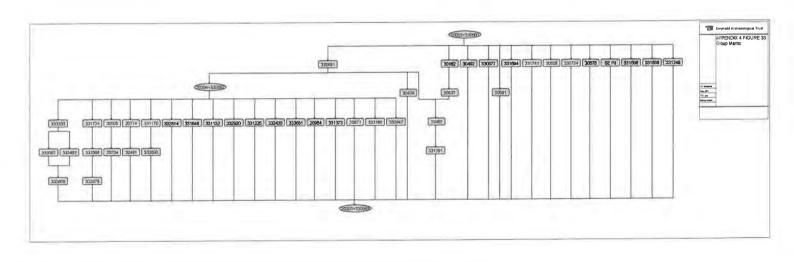






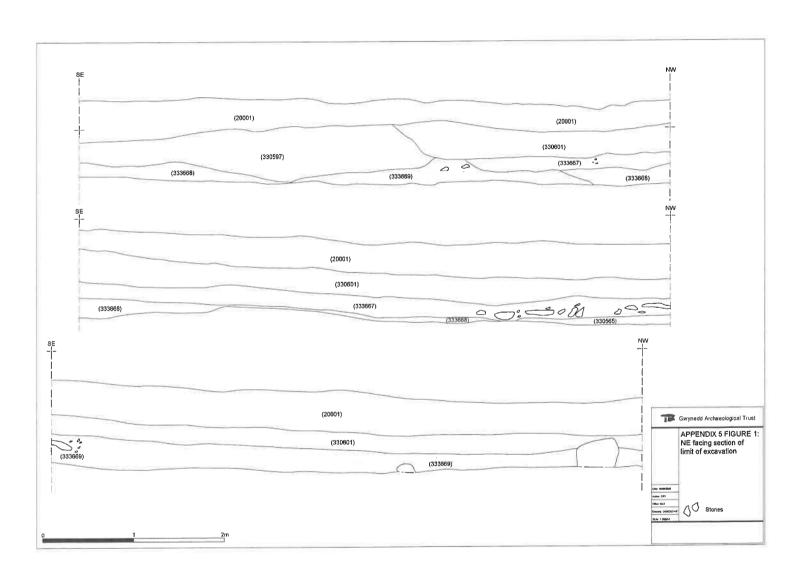


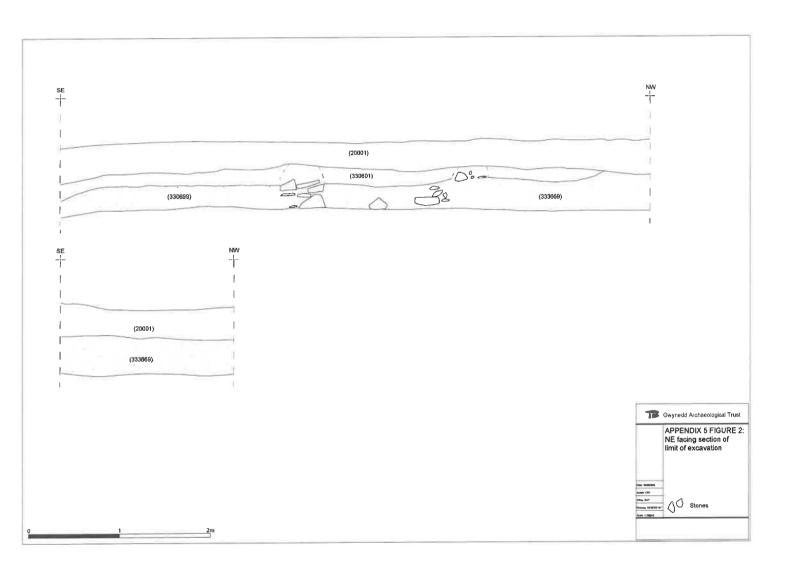


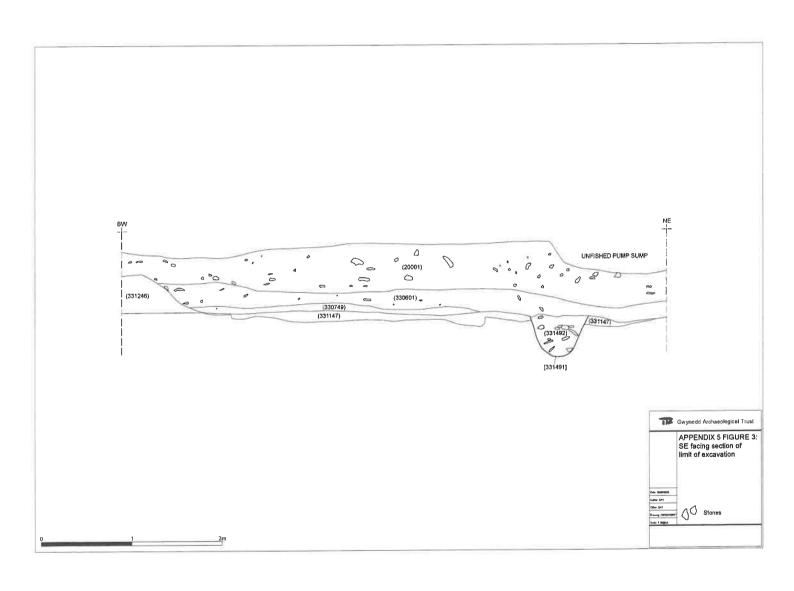


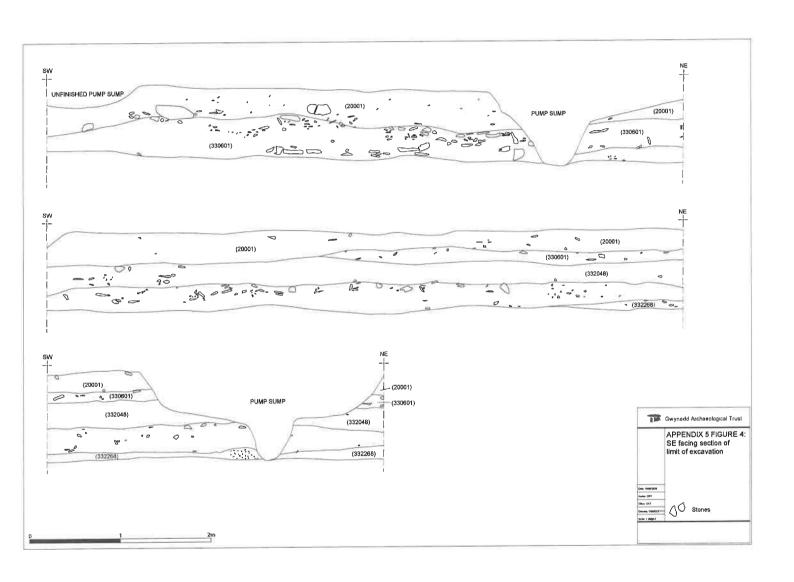
16 APPENDIX 5

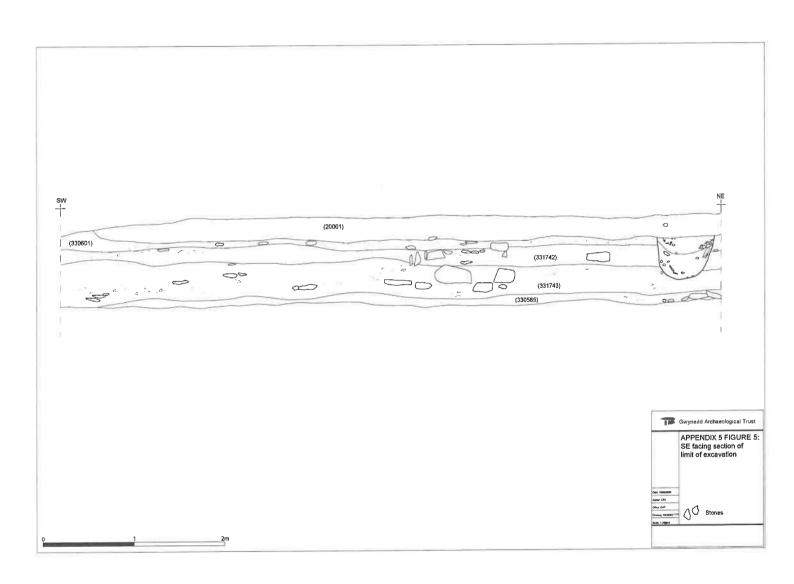
16.1 Bulk Section Figures

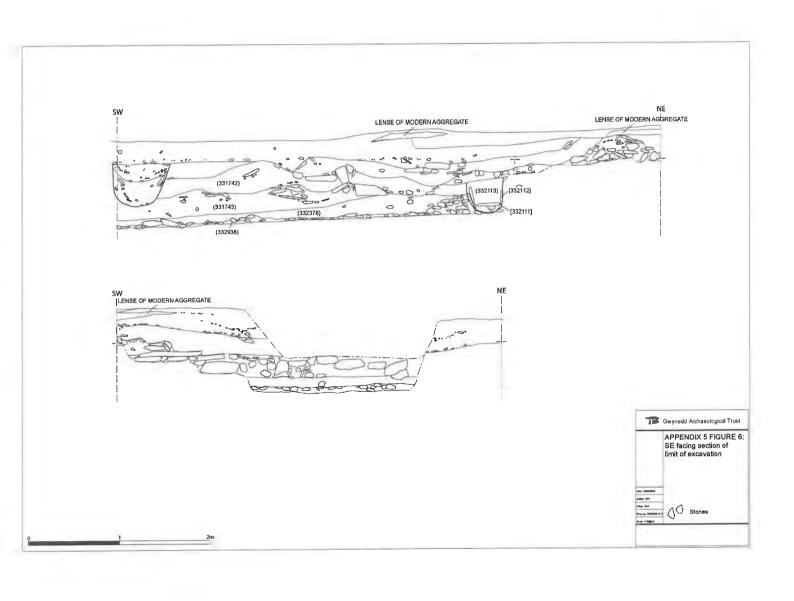


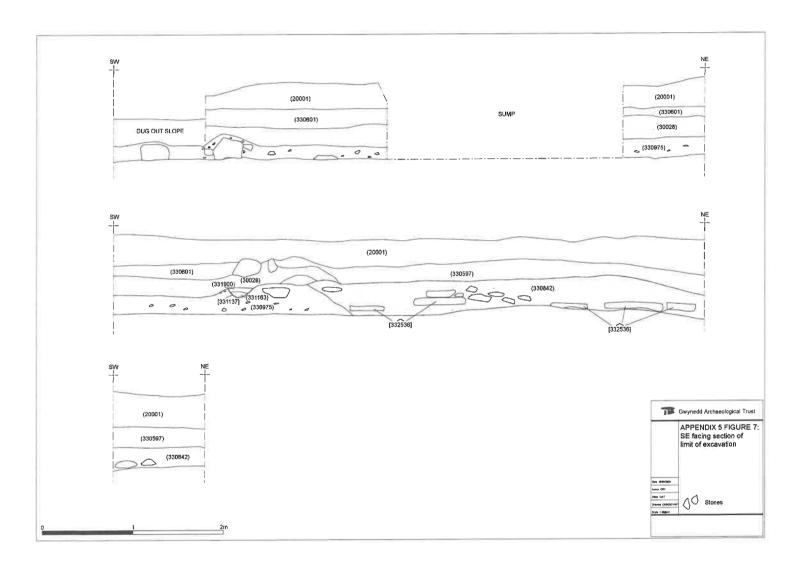


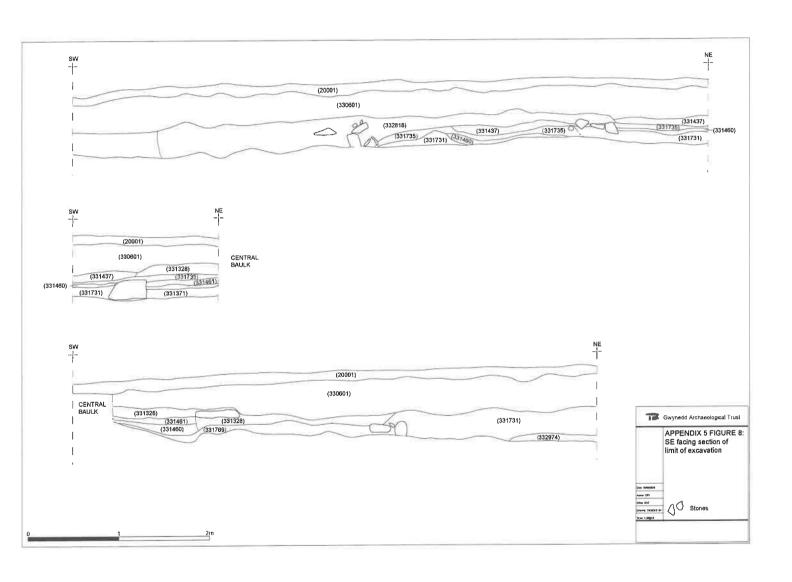


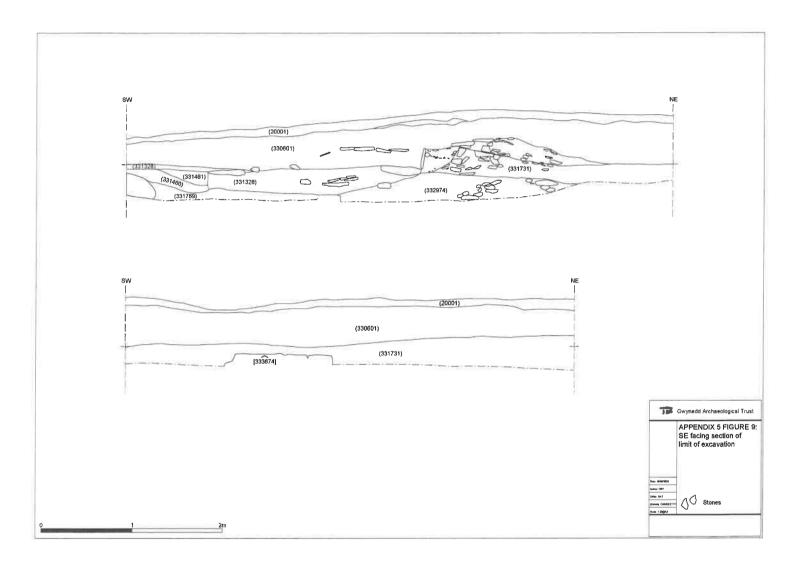


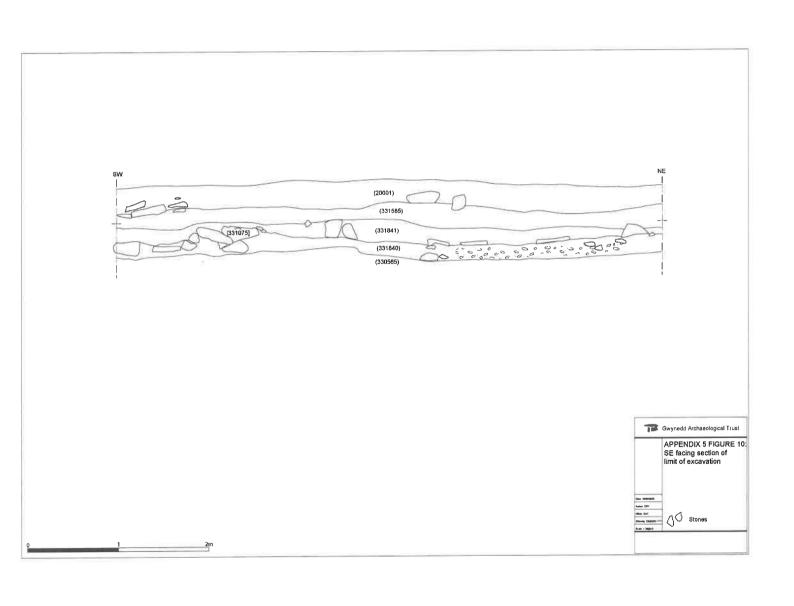


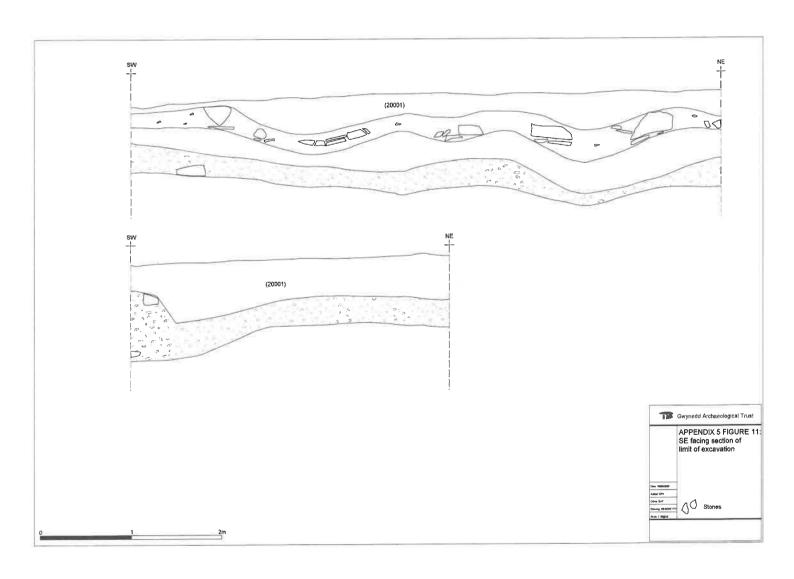


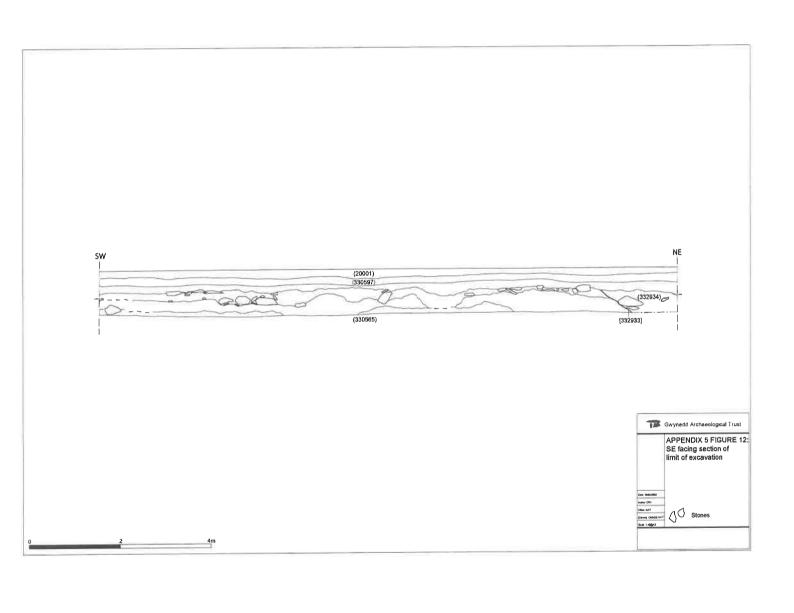


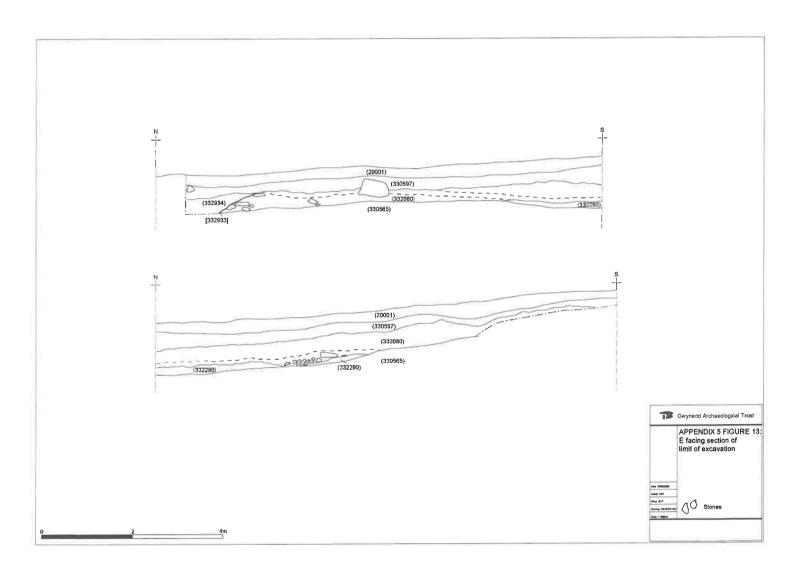












17 APPENDIX 6

17.1 Bulk Section Plates



Appendix 6 Plate 01: NE facing baulk section; (archive reference: WAD64_105_IMG8916).



Appendix 6 Plate 02: NE facing baulk section; (archive reference: WAD64_105_IMG8917).



Appendix 6 Plate 03: NE facing baulk section; (archive reference: WAD64_105_IMG8918).



Appendix 6 Plate 04: NE facing baulk section; (archive reference: WAD64_105_IMG8919).



Appendix 6 Plate 05: NE facing baulk section; (archive reference: WAD64_105_IMG8920).



Appendix 6 Plate 06: NE facing baulk section; (archive reference: WAD64_105_IMG8921).



Appendix 6 Plate 07: NE facing baulk section; (archive reference: WAD64_105_IMG8922).



Appendix 6 Plate 08: NE facing baulk section; (archive reference: WAD64_105_IMG8923).



Appendix 6 Plate 09: NE facing baulk section; (archive reference: WAD64_105_IMG8924).



Appendix 6 Plate 10: NE facing baulk section; (archive reference: WAD64_105_IMG8925).



Appendix 6 Plate 11: NE facing baulk section; (archive reference: WAD64_105_IMG8926).



Appendix 6 Plate 12: NE facing baulk section; (archive reference: WAD64_105_IMG8927).



Appendix 6 Plate 13: NE facing baulk section; (archive reference: WAD64_105_IMG8928).



Appendix 6 Plate 14: NE facing baulk section; (archive reference: WAD64_105_IMG8929).



Appendix 6 Plate 15: NE facing baulk section; (archive reference: WAD64_105_IMG8930).



Appendix 6 Plate 16: NE facing baulk section; (archive reference: WAD64_105_IMG8931).



Appendix 6 Plate 17: NE facing baulk section; (archive reference: WAD64_105_IMG8932).



Appendix 6 Plate 18: NE facing baulk section; (archive reference: WAD64_105_IMG8933).



Appendix 6 Plate 19: NE facing baulk section; (archive reference: WAD64_105_IMG8934).



Appendix 6 Plate 20: NE facing baulk section; (archive reference: WAD64_105_IMG8935).



Appendix 6 Plate 21: NE facing baulk section; (archive reference: WAD64_105_IMG8936).



Appendix 6 Plate 22: NE facing baulk section; (archive reference: WAD64_105_IMG8937).



Appendix 6 Plate 23: NE facing baulk section; (archive reference: WAD64_105_IMG8938).



Appendix 6 Plate 24: NE facing baulk section; (archive reference: WAD64_105_IMG8939).



Appendix 6 Plate 25: NE facing baulk section; (archive reference: WAD64_105_IMG8940).



Appendix 6 Plate 26: NE facing baulk section; (archive reference: WAD64_105_IMG8941).



Appendix 6 Plate 27: NE facing baulk section; (archive reference: WAD64_105_IMG8942).



Appendix 6 Plate 28: NE facing baulk section; (archive reference: WAD64_105_IMG8943).



Appendix 6 Plate 29: NE facing baulk section; (archive reference: WAD64_105_IMG8944).



Appendix 6 Plate 30: SE facing baulk section; (archive reference: WAD64_105_IMG8945).



Appendix 6 Plate 31: SE facing baulk section; (archive reference: WAD64_105_IMG8946).



Appendix 6 Plate 32: SE facing baulk section; (archive reference: WAD64_105_IMG8947).



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Appendix 6 Plate 33: SE facing baulk section; (archive reference: WAD64_105_IMG8949).



Appendix 6 Plate 35: SE facing baulk section; (archive reference: WAD64_105_IMG8950).



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Appendix 6 Plate 37: SE facing baulk section; (archive reference: WAD64_105_IMG8952).



Appendix 6 Plate 38: SE facing baulk section; (archive reference: WAD64_105_IMG8953).



Appendix 6 Plate 39: SE facing baulk section; (archive reference: WAD64_105_IMG8954).



Appendix 6 Plate 40: SE facing baulk section; (archive reference: WAD64_105_IMG8955).



Appendix 6 Plate 41: SE facing baulk section; (archive reference: WAD64_105_IMG8956).



Appendix 6 Plate 42: SE facing baulk section; (archive reference: WAD64_105_IMG8957).



Appendix 6 Plate 43: SE facing baulk section; (archive reference: WAD64_105_IMG8958).



Appendix 6 Plate 44: SE facing baulk section; (archive reference: WAD64_105_IMG8959).



Appendix 6 Plate 45: SE facing baulk section; (archive reference: WAD64_105_IMG8960).



Appendix 6 Plate 46: SE facing baulk section; (archive reference: WAD64_105_IMG8961).



Appendix 6 Plate 47: SE facing baulk section; (archive reference: WAD64_105_IMG8962).



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Appendix 6 Plate 54: SE facing baulk section; (archive reference: WAD64_105_IMG8969).



Appendix 6 Plate 55: SE facing baulk section; (archive reference: WAD64_105_IMG8970).



Appendix 6 Plate 56: SE facing baulk section; (archive reference: WAD64_105_IMG8971).



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Appendix 6 Plate 58: SE facing baulk section; (archive reference: WAD64_105_IMG8973).



Appendix 6 Plate 59: SE facing baulk section; (archive reference: WAD64_105_IMG8974).



Appendix 6 Plate 60: SE facing baulk section; (archive reference: WAD64_105_IMG8975).



Appendix 6 Plate 61: SE facing baulk section; (archive reference: WAD64_105_IMG8976).



Appendix 6 Plate 62: SE facing baulk section; (archive reference: WAD64_105_IMG8977).



Appendix 6 Plate 63: SE facing baulk section; (archive reference: WAD64_105_IMG8978).



Appendix 6 Plate 64: SE facing baulk section; (archive reference: WAD64_105_IMG8979).



Appendix 6 Plate 65: SE facing baulk section; (archive reference: WAD64_105_IMG8980).



Appendix 6 Plate 66: SE facing baulk section; (archive reference: WAD64_105_IMG8981).



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Appendix 6 Plate 68: SE facing baulk section; (archive reference: WAD64_105_IMG8983).



Appendix 6 Plate 69: SE facing baulk section; (archive reference: WAD64_105_IMG8984).



Appendix 6 Plate 70: SE facing baulk section; (archive reference: WAD64_105_IMG8985).



Appendix 6 Plate 71: SE facing baulk section; (archive reference: WAD64_105_IMG8986).



Appendix 6 Plate 72: SE facing baulk section; (archive reference: WAD64_105_IMG8987).



Appendix 6 Plate 73: SE facing baulk section; (archive reference: WAD64_105_IMG8988).



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Appendix 6 Plate 96: SE facing baulk section; (archive reference: WAD64_105_IMG9069).



Appendix 6 Plate 97: SE facing baulk section; (archive reference: WAD64_105_IMG9070).



Appendix 6 Plate 98: SE facing baulk section; (archive reference: WAD64_105_IMG9071).



Appendix 6 Plate 99: SE facing baulk section; (archive reference: WAD64_105_IMG9072).



Appendix 6 Plate 100: SE facing baulk section; (archive reference: WAD64_105_IMG9073).



Appendix 6 Plate 101: SE facing baulk section; (archive reference: WAD64_105_IMG9074).



Appendix 6 Plate 102: SE facing baulk section; (archive reference: WAD64_105_IMG9075).



Appendix 6 Plate 103: SE facing baulk section; (archive reference: WAD64_105_IMG9076).



Appendix 6 Plate 104: SE facing baulk section; (archive reference: WAD64_105_IMG9077).



Appendix 6 Plate 105: SE facing baulk section; (archive reference: WAD64_105_IMG9078).



Appendix 6 Plate 106: SE facing baulk section; (archive reference: WAD64_105_IMG9079).



Appendix 6 Plate 107: SE facing baulk section; (archive reference: WAD64_105_IMG9080).



Appendix 6 Plate 108: SE facing baulk section; (archive reference: WAD64_105_IMG9081).



Appendix 6 Plate 109: SE facing baulk section; (archive reference: WAD64_105_IMG9082).



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Appendix 6 Plate 111: SE facing baulk section; (archive reference: WAD64_105_IMG9084).



Appendix 6 Plate 112: SE facing baulk section; (archive reference: WAD64_105_IMG9085).



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Appendix 6 Plate 114: SE facing baulk section; (archive reference: WAD64_105_IMG9087).



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Appendix 6 Plate 122: SE facing baulk section; (archive reference: WAD64_105_IMG9162).



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Appendix 6 Plate 124: SE facing baulk section; (archive reference: WAD64_105_IMG9168).



Appendix 6 Plate 125: SE facing baulk section; (archive reference: WAD64_105_IMG9174).



Appendix 6 Plate 126: SE facing baulk section; (archive reference: WAD64_105_IMG9177).



Appendix 6 Plate 127: SE facing baulk section; (archive reference: WAD64_105_IMG9180).



 $Appendix\,6\,Plate\,128; SE\,facing\,baulk\,section; (archive\,reference; WAD64_105_IMG9183).$



Appendix 6 Plate 129: SE facing baulk section; (archive reference: WAD64_105_IMG9189).



 $Appendix\ 6\ Plate\ 130:\ SE\ facing\ baulk\ section;\ (archive\ reference:\ WAD64_105_IMG9192).$



Appendix 6 Plate 131: SE facing baulk section; (archive reference: WAD64_105_IMG9195).



Appendix 6 Plate 132: SE facing baulk section; (archive reference: WAD64_105_IMG9198).



Appendix 6 Plate 133: SE and W facing baulk section; (archive reference: WAD64_105_IMG9201).



Appendix 6 Plate 134: W facing baulk section; (archive reference: WAD64_105_IMG9204).



Appendix 6 Plate 135: W facing baulk section; (archive reference: WAD64_105_IMG9207).



Appendix 6 Plate 136: W facing baulk section; (archive reference: WAD64_105_IMG9210).



Appendix 6 Plate 137: W facing baulk section; (archive reference: WAD64_105_IMG9213).



Appendix 6 Plate 138: W facing baulk section; (archive reference: WAD64_105_IMG9216).

18 APPENDIX 7

18.1 Palaeoenvironmental assessment Report: Wardell Armstrong, 2020

7 Palaeoenvironmental assessment

7.1 Introduction

- 7.1.1 Six hundred and sixteen bulk samples were taken during the excavation on Area 20. A total weight of 15301kg (9508l) of sediment was processed for this stage of works. Further details for each sample can be found in Table 7.1.
- 7.1.2 These were submitted along with 331 fragments (8,487g) of animal bone for assessment as well as 73.5g of animal bone from the samples.
- 7.1.3 The environmental assessment was undertaken by Freddie Sisson with the zooarchaeological assessment by Megan Stoakley.

7.2 Methodology

- 7.2.1 The assessment was undertaken following guidance in Campbell *et al.* (2011) and following protocol stated in Wardell Armstrong (2018, 2019).
- 7.2.2 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.
- 7.2.3 The bulk environmental samples were processed at Wardell Armstrong LLP. The colour, lithology, weight and volume of each sample was recorded using standard Wardell Armstrong pro forma recording sheets. cf. Table 7.1. 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. Finds from samples are presented in Table 7.2.
- 7.2.4 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. Tables 7.3. Once fully sorted and all relevant material removed the flots were discarded.
- 7.2.5 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.
- 7.2.6 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).

7.3 Results

- 7.3.1 Silty clay dominated the samples' sediment matrix with lesser quantities of sandy clay sediments, further data can be observed in Table 7.1
- 7.3.2 Flot and finds data is presented in Table 7.2 and 7.3.
- 7.3.3 Artefactual material recovered from the dried residues were minimal but contained examples of pottery, glass, clay pipe, ceramic building material, fired clay, leather, plaster, industrial waste, worked stone and iron.
- 7.3.4 CPR: Charred plant remains (CPR) were present in one hundred and six samples and were in good condition with the majority identified as cereal grains. Of these sixteen yielded over one hundred examples of CPR, these were: (20901) <20010> from the secondary pit fill [20825], (20464) <20025> from secondary gully fill [20463], (20630) <20047> from secondary pit fill [20629], (20471) <20058> from the fill of ditch or gully [20470], (30068) <20154> from the hearth of roundhouse 20744, (30427) <20245> from the fill of posthole [30431], (20908) <20261>, (331419) <320441> and (331827) <320481> all from unknown layers, (330761) <320343> from a spread in curvilinear 20984, (331430) <320460> from and uncategorised cut, (33114) <320474> from gully fill [331113], (332103) <320498> from an burnt deposit with no known location and (332701) <320558> from the fill of a hearth within pit [332574].
- CHARCOAL: Charcoal was present in four hundred and fifty-five samples and was in relatively 7.3.5 good condition mostly (although not limited to) oak (Quercus sp.) or willow/poplar (Salix/Populus). Of these fifteen samples yielded more than 50g, these were: (20063) <20002> from the tertiary pit fill [20062], (20309) <20012> from the secondary pit fill [20308], (20464) <20025> from the secondary fill of gully [20463], (20338) <20014> from the secondary fill of tree throw [20337], (330644) <320282> which was a backfill of burnt material in an unrecorded cut/feature, (330711) <320291> from the burnt deposit in roundhouse 330577, (330359) <320304> from the primary/secondary fill of bioturbation layer [330658], (331267) <320408> from pit fill [331266], (331363) <320427> from and unnumbered pit, (331382) <320431> from a burnt deposit in hearth [331371], (331455) <320463> from the fill of [331542], (30307) <320615> and (30307) <320616> both from an unnumbered burnt mound layer, (333328) <320627> from the fill of trough [333241] and (333329) <320628> from the fill of trough [333241]. Whilst oak and willow/poplar was predominantly employed for radiocarbon determination, elm (Ulmus sp.) from <20164> was also used.
- 7.3.6 SHELL: Shell was present in eleven samples in very small fragments, it was identified as terrestrial and weighed a combined 12g.
- 7.3.7 BONE: Small fragments of animal bone were recovered from forty-seven samples with a combined weight 60g. Any relevant examples will be discussed in the zooarchaeological section of this report.
- 7.3.8 MAGNETIC MATTER: Magnetised material was present in three hundred and forty-one of the samples with a combined weight of 2kg. It was scanned under a microscope (x45)

- magnification) and was seen to mainly be made up of heat altered stone with very occasional microslags mixed in.
- 7.3.9 ZOOARCHAEOLOGY: Per context, the minimum number of individuals (MNI) observed are 14. This is subject to change with further analysis, as many of the fragments comprise maxillary and mandibular teeth, which may have originated from one jaw. Breakdown of species is as follows: cattle (Bos sp.) n=6, medium (dog, sheep, goat sized) and large-sized (equivalent to cattle or horse size) ungulates (2 each), horse (Equus sp.) and sheep/goat (Ovid/Capra sp. (1 each). Animal bone from six contexts were not identifiable to species or anatomical element due to their poor condition and small size. Anatomical elements include teeth and post-cranial bones, including metapodials, femurs, humerae, radii, tibiae, phalanges and vertebrae. Small fragments of pelves and scapulae were also noted. Animal bone quantification is presented in Tables 7.4 and 7.5.
- 7.3.10 Only adult animals were observed in the assemblage.
- 6.1.7 No butchery, pathology or canid / rodent gnaw-marks were observed in the assemblage.
- 6.1.8 Sex determination, age estimation and measurements for withers heights will be hampered by the poor preservation and incompleteness of most of the bones. Some limited age estimation techniques could be conducted on the teeth, while some phalanges could be measured for withers heights calculations.
- 6.1.9 A very small quantity of burnt animal bone was recovered from 49 environmental samples, weighing a total of 73.5g. The animal bone recovered from the environmental samples is in poor condition; the bone is very small and highly fragmented. Identification of species and anatomical elements was not possible due to their poor preservation and small size.

7.4 Discussion

- 7.4.1 As can be seen in 7.3.4 most large CPR deposits were recovered from fills of gullies, and pits or other unrecorded layers. Of those recovered from areas of definite *in situ* burning <320558> and <20154> they were identified as barley and oat grains. This shows similar crop management activity as that at Cefn Du (Ciaraldi, in, Cuttler *et al.*, 2012; 222) in the Late Iron Age and Early Roman Britain period. This shows that there may be a consistent style of crop management and usage across this time period in Anglesey and likely across the wider landscape.
- 7.4.2 From the charcoal we are seeing the same type of species observed across the Wylfa excavations with Area 20 showing the same use of oak and willow. This links in with the wider Anglesey landscape with charcoal recovered from Cefn Cwmwd also showing oak as a source of fuel (Gale, in, Cuttler et al., 2012: 218). The charcoal recovered in large quantities (see 7.3.5) was mostly from fills of pits, postholes and gullies and along with most of the CPR not being recovered from areas of burning suggested that most of the ecofactual material was recovered from area of middening for burnt material. Charcoal from <320615> and <320616> may also be useful for further discussion but as they are classed as burnt mound layers with no evidence of in situ burning, they are unlikely to relate to the feature or area where they are found.
- 7.4.3 The magnetised material was recovered from a range of deposits and since most of it comprised of heat affected stones it seems to have been part of the middening processes

- along with the charcoal and CPR. From this it can be suggested that areas of burning were regularly cleared out and deposited into areas designated for refuse.
- 7.4.4 Zooarchaeological discussion: The animal bone assemblage may comprise domestic food waste or the animals may simply have died from natural causes; the teeth fragments likely represent casual loss.
- 6.1.11 While it is not possible to assign animal bone to a chronological period by visual examination, their recovery in conjunction with prehistoric to Roman artefacts may indicate that they are of a contemporary date.

7.5 Statement of potential and recommendations

- 7.5.1 The condition of the remains suggests that further work could be done in conjunction with the wider Wylfa excavations to discuss human activity at Area 20 and in the wider landscape to assess crop, tree and land management. To this end it is recommended that those stated in sections 7.3.4 and 7.3.5 is analysed although the context must be securely dated prior to analytical work; either via typological or absolute methods.
- 7.5.2 The animal bone assemblage is of low archaeological significance overall and no further analysis is necessary.
- 7.5.2 Radiocarbon suitability: material from samples listed in 7.3.4 and 7.3.5 may be suitable for radiocarbon determination. It must be stated that if a 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.
- 7.5.3 If there is charcoal and CPR present within a context listed in Tables 7.2 and 7.3 but not stated within sections 7.3.4 or 7.3.5 these can undergo further assessment to gauge their suitability for submission.
- 7.5.4 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.
- 7.5.5 Retention and discard: At this stage all ecofacts should be retained until initial radiocarbon dates have been obtained and further analytical work has been completed.
- 7.5.6 The magnetic matter from all samples may be discarded as it cannot give us any further information on human activity at Area 20.

7.6 Acknowledgments

7.6.1 Freddie Sisson supervised the environmental team who consisted of Rebecca Blakeney, Megan Lowrie, Katherine Bostock, Jyoti Stuart, Paul Sherwood, Oliver Tallis, Jessica McGreevy, Sophia Davies, Saskia Winslow, Charlotte Manning, Niall Grant and Tatjana Cass. Lynne F. Gardiner edited this report.

7.7 References

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Table 7.1 Sample Information

C	0	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
20039	20001	3	20036	Fill of pit	silty clay	34	21	4766	4200
20063	20002	4	20062	Tertiary fill of pit	silty sand	47	28	88838	9600
20121	20003	4	20120	Secondary fill of pit	clay	44	31	8194	5700
20149	20004	4		Cut of pit	silty clay	37	28	6128	5900
20179	20005	4	20176	Secondary fill of pit	silty sand	37	23	7255	4500
20081	20006	4	20079	Mid fill of pit	silty clay	46	26	14422	9000
20202	20007	4	20201	Secondary fill of pit	clay	36	23	5633	4420
20254	20008	2	20252	Secondary fill of posthole	silty clay	16	9	3372	2300
20192	20009	4	20191	Upper fill of burnt pit	sandy clay	51	31	8315	5100
20291	20010	1	20285	Secondary fill of pit	silty clay	10	6	1519	1000
20292	20011	1	20285	Secondary fill of pit	clay	9	5	1656	1100
20309	20012	4	20308	Secondary fill of pit	silty sand	34	23	12858	9900
20300	20013	4	20297	Secondary fill of pit	clay	41	25	9401	6200
20338	20014	2	20337	Secondary fill of tree throw	silty clay	22	11	4902	3700
20356	20015	1	20355	Fill of posthole	clay	12	8	3300	2220
20384	20016	4	20383	Deliberate backfill of posthole	clay	52	30	7897	3900
20371	20017	4	20370	Fill of uncategorised feature	clay	44	20	8103	7400
20369	20018	1		Layer of uncategorised deposit	clayey silt	9	6	2392	1300
20363	20020	2		Layer of uncategorised deposit	clay	19	10	4595	3000
20365	20021	1		Layer of uncategorised deposit	sandy clay	3	2	1083	800
20384	20022	4	20383	Deliberate backfill of posthole	silty clay	39	24	7806	5200
20422	20023	1	30029	Secondary fill of construction cut	sandy clay	11	7	5235	3800
20560	20023	4	20559	Fill of spread	clay	46	29	0	0
20537	20024	1	20536	Secondary fill of gully	silty clay	12	7	4332	3300
20464	20025	4	20463	Secondary fill of gully	silty clay	36	20	10935	8200
20465	20026	2		Secondary fill of layer	silty clay	20	11	6640	4050
20470	20027	1	20469	Primary fill of hearth	sandy clay	11	7	5660	3800
20556	20028	4	20555	Fill of pit	sandy clay	47	26	17160	12000
20486	20029	4		Cut of pit	silty clay	42	23	29003	22100
20589	20030	2	20587	Deliberate backfill of pit	silty clay	20	13	3731	4100
20593	20031	2	20592	Tertiary fill of posthole		32	15	12419	82500
20607	20032	1		Laver in roundhouse 20462	silty clay	12	8	5461	4200

C	0	TQ	Cut	Desc	Matrix	PW	PV	SW	5
20608	20033	1		Voided layer	silty clay	14	9	3059	34
20611	20034	1	20610	Fill of hearth	clay	12	8	4920	37
20577	20035	1	20576	Fill of hearth	sandy clay	11	6	3874	30
20489	20036	4	20488	Tertiary fill of pit	silty clay	43	23	6851	48
20554	20037	4	20358	Secondary fill of gully	sandy clay	58	39	15534	111
20366	20038	1	20612	Fill of burnt deposit in pit	silty clay	8	8	2458	17
20613	20039	1	20612	Secondary fill of pit	clay	8	5	3770	27
20614	20040	1	20612	Secondary fill of pit	sandy clay	8	6	1187	70
20623	20041	4	20602	Secondary fill of pit	clay	40	28	13668	108
20617	20042	4		Laver in roundhouse 20462	sandy clay	40	32	17961	149
20467	20043	4		Laver in roundhouse 20462	sandy clay	46	28	15947	98
20581	20043	1	20580	Secondary fill of uncategorised cut	silty clay	11	5	3018	16
20468	20045	4	20300	Laver in roundhouse 20462	silty sand	44	29	16586	104
20632	20046	6	20631	Fill of pit	silty clay	74	40	20812	138
20630	20047	4	20629	Secondary fill of pit	silty clay	34	24	8236	60
20639	20048	1	20638	Primary fill of posthole	silty clay	10	6	4234	30
20643	20049	1	20642	Secondary fill of posthole	clayey silt	8	5	3270	21
20622	20050	1	20602	Secondary fill of pit	silty sand	13	8	3921	31
20624	20051	1	20628	Deliberate backfill of posthole	silty clay	5	3	2078	14
20706	20052	4	20705	Secondary fill of gully	silty clay	40	27	17232	105
20529	20052	4	20528	Primary fill of pit	silty sand	40	27	15176	119
20712	20054	1	20320	Laver in structure 20704	silty clay	3	2	392	25
20687	20056	1	20686	Fill of pit	sandy clay	14	8	5044	34
20717	20057	2	20716	Fill of pit/trough	silty sand	25	14	5137	33
20741	20058	4	20740	Fill of ditch/gully	silty sand	41	28	13662	90
20745	20059	2	20744	Fill of gully	silty clay	21	12	7247	50
20577	20065	2	20576	Fill of hearth	sandy clay	14	8	5354	38
20639	20066	1	20638	Primary fill of posthole	silty clay	10	8	3849	27
20539	20067	1	20538	Primary fill of posthole	silty sand	7	3	2748	19
20650	20068	1	20649	Primary fill of possible pit	silty clay	9	5	2932	18
20643	20069	1	20642	Secondary fill of posthole	sandy clay	11	9	4344	31
20646	20070	1	20645	Primary fill of posthole	sandy clay	11	5	5105	31
20743	20071	4	20742	Fill of gully	silty clay	39	22	12429	85
20709	20072	4	20705	Secondary fill of gully	silty clay	41	26	13626	97
20,03	20072	-							

C	Ö	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
20606	20073	2	20605	Secondary fill of pit	clay	14	15	8693	5600
20611	20074	3	20610	Fill of hearth	sandy clay	40	24	15212	9800
20470	20076	4	20469	Primary fill of hearth	silty sand	32	15	13966	9200
20546	20077	1	20545	Primary fill of posthole	silty clay	11	6	3660	2650
20749	20078	3	20748	Fill of uncategorised cut	sandy clay	33	19	9200	6600
20666	20079	2		Layer in roundhouse 20462	silty sand	18	9	5683	3300
20419	20081	4	20418	Secondary fill of ring ditch	silty clay	41	27	11138	9500
20782	20082	4	20781	Deliberate backfill of pit	clayey silt	45	28	12499	1000
20812	20083	4	20807	Fill of pit	sandy clay	43	27	11852	7900
20825	20084	4		Layer in roundhouse 20774	sandy clay	35	27	9488	7200
20826	20085	4		Burnt deposit in roundhouse 20774	silty clay	41	30	6728	7400
20837	20086	3	20836	Primary fill of hearth	sandy clay	29	18	10750	7300
20829	20087	3	20828	Fill of pit	clayey silt	41	23	8876	5800
20831	20088	1	20830	Secondary fill of pit	silty sand	6	3	1797	1100
20854	20090	4	- 1	Secondary fill of roundhouse 20774	silty clay	45	27	15611	1020
20833	20092	1	20832	Fill of pit	silty clay	13	8	4284	320
20896	20093	2		Unexcavated VOID	silt	23	15	6092	4200
20887	20094	2	20886	Primary fill of posthole	silty clay	19	12	2891	3300
20889	20095	1	20888	Secondary fill of pit	clayey silt	12	7	4088	280
20893	20097	1	20892	Secondary fill of posthole	silty clay	10	6	3310	2400
20918	20100	4	20917	Secondary fill of gully	silty clay	39	23	11336	7100
20916	20101	3	20915	Deliberate backfill of uncategorised cut	silty clay	35	20	10468	7200
20930	20103	4	20929	Secondary fill of gully	silty clay	42	32	14730	9600
20924	20104	1	20923	Fill of pit	silty clay	15	9	4052	2800
20926	20105	2	20925	Fill of pit	sandy clay	28	16	6159	6000
20932	20106	3	20931	Fill of pit	silty sand	43	25	13549	8400
20934	20107	1	20933	Fill of pit	silty clay	15	9	3158	2500
20943	20108	6	20941	Fill of cist	sandy clay	68	49	15639	1000
20942	20109	1	20941	Primary fill of cist	silty clay	12	7	1600	1200
20942	20110	2	20941	Primary fill of cist	sandy clay	18	10	2823	2000
20942	20111	1	20941	Primary fill of cist	sandy silt	5	4	1130	800
20942	20112	1	20941	Primary fill of cist	sandy clay	10	8	1266	1300
20952	20120	2	20882	Upper fill of pit	sandy clay	26	14	6624	6700
20973	20121	2	20172	Secondary fil of tree throw	silty clay	10	8	2879	3050

C	0	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
20974	20122	1		Burnt deposit in structure 20704	sandy clay	6	3	969	800
20942	20123	1	20941	Primary fill of cist	silty clay	8	6	1777	1400
20942	20124	1	20941	Primary fill of cist	silty clay	4	2	690	475
20942	20125	1	20941	Primary fill of cist	sandy clay	4	2	647	475
20942	20126	1	20941	Primary fill of cist	silty clay	5	pale grey	2158	1600
20895	20127	1	20894	Fill of pit	clayey silt	4	4	1393	800
20977	20128	1	20976	Secondary fill of pit	silty sand	3	1	900	600
20983	20129	2		Laver in roundhouse 20774	silty clay	16	10	5961	3700
20990	20130	1	20989	Burnt fill in pit	silty clay	6	5	1307	1200
20991	20131	4	20989	Secondary fil of pit	silty sand	45	30	3812	480
20998	20132	2	20303	Layer in structure 20704	clay	17	11	4543	3000
30005	20137	4	30247	Fill of drainage gully	silty sand	35	25	14670	890
30007	20138	1	30006	Secondary fill of pit	sandy clay	4	3	1036	575
30009	20139	4	30008	Secondary fill of pit	silty clay	50	30	11281	750
20988	20142	1	50000	Laver in structure 20704	silty clay	9	7	2451	140
20975	20143	4		Occupation layer in structure 20704	sandy clay	40	28	10319	945
30021	20144	2	30019	Fill of shallow pit	silty sand	18	13	4242	270
30022	20145	1	30027	Burnt fill of ditch	silty clay	8	5	1075	700
30050	20147	1	30049	Primary fill of pit	clay	9	4	2979	180
20763	20148	1	20762	Primary fill of pit	silty clay	7	5	2774	190
30052	20149	1	30051	Secondary fill of pit	sandy clay	9	4	2121	120
30056	20151	4	30055	Secondary fill of gully	silty sand	39	24	11929	750
30064	20153	2	30063	Fill of pit	silty clay	29	14	10815	680
30068	20154	4	30231	Fill of hearth in roundhouse 20744	silty clay	29	22	8993	600
30070	20155	1	30069	Primary fill of pit/posthole	silty clay	6	3	2104	140
30074	20156	1	30073	Secondary fill of pit	silty sand	7	3	1984	130
30076	20157	1	30075	Primary fill of pit	silty clay	1	1	358	250
30083	20158	4		Layer in feature group 20871	sandy clay	42	25	11297	710
30093	20159	4		Spread in roundhouse 20744	clay	36	24	9114	800
30094	20160	4		Layer in structure 20704	clayey silt	21	14	3315	210
30108	20161	4	30107	Primary fill of posthole	silty clay	36	25	15034	1000
30123	20162	1	30122	Secondary fill of pit	clay	13	9	3679	300
30129	20163	2	30128	Fill of pit/posthole	silty sand	22	18	4325	350
30137	20164	2	30136	Burnt deposit of fire Pit	clay	19	13	6516	415

C	<>	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
30140	20165	1	30139	Secondary fill of pit	silty sand	5	3	1918	1200
30142	20166	1	30141	Secondary fill of pit	sandy clay	7	5	2117	1600
30146	20168	1	30145	Fill of pit/posthole	clayey silt	10	7	2286	1700
30115	20169	4		Layer in burnt mound 30508	silty clay	55	32	16151	4000
30152	20170	4		Layer in stone lined pit	silty clay	38	27	12397	1000
30166	20173	4	30165	Primary fill of pit	silty clay	36	23	12158	1010
30089	20175	4		Floor surface in structure 20704	clayey silt	48	24	12831	8000
30158	20176	4	30220	Deliberate backfill of posthole	sandy silt	43	29	11047	8200
30173	20177	3		Layer of in situ burning	sandy silt	37	24	9034	7800
30184	20178	1		Layer of in situ burning	silty clay	11	7	4685	3200
30180	20179	1		Layer of in situ burning	silty sand	11	7	3178	2400
30171	20180	4		Layer in stone lined pit 03491	silty clay	40	33	10130	7200
30172	20181	2		Uncategorised layer in structure 20704	clayey silt	22	13	6940	4200
30196	20182	1	30195	Secondary fill of hollow/pit	silty clay	4	3	1092	700
30197	20183	1		Cut of pit	silty clay	6	4	1841	1600
30200	20184	1	30199	Secondary fill of pit/hollow	clay	8	6	2188	1400
30202	20185	1	30201	Secondary fill of pit/hollow	sandy clay	5	3	1235	900
30213	20186	4	30212	Fill of uncategorised cut	clay	47	28	23556	1740
30217	20187	1	30216	Fill of posthole	clayey silt	5	3	1404	1100
30219	20188	1	30218	Fill of posthole	silty sand	11	7	3722	2400
30214	20189	4	30215	Fill of uncategorised cut	silty clay	46	32	17763	1290
30222	20190	2	30221	Primary fill of pit	sandy clay	16	12	4907	2800
30224	20191	2	30223	Primary fill of posthole	silty sand	19	12	4445	310
30148	20193	4		Silt layer in roundhouse 30505	silty sand	35	22	8615	600
30243	20194	4	30241	Secondary fill of pit	silty clay	41	26	17197	1590
30246	20195	1	30245	Fill of pit	silty clay	9	7	1293	950
30254	20196	1		Burnt layer in roundhouse 20774	clay	9	7	2013	1400
30114	20197	4		Layer in structure 20704	silty clay	51	30	19312	1150
20968	20198	4		Layer in structure 20704	sandy silt	49	33	14455	1010
30106	20200	1	30105	Fill of posthole	sandy silt	5	3	894	600
30091	20201	1	30090	Fill of posthole	sandy silt	10	7	2999	2000
30256	20203	3	30255	Primary fill of pit	clay	31	18	5015	3900
30259	20204	3	30258	Primary fill of posthole	sandy clay	40	25	9334	8800
30260	20205	4		Layer in roundhouse 20774	silty clay	46	27	16929	1100

C	O	TO	Cut	Desc	Matrix	PW	PV	SW	5V
30268	20206	4		Laver in structure 20704	silty sand	59	32	19406	1490
30269	20207	4		Secondary fill layer in structure 20704	sandy clay	48	28	15426	101
30228	20208	4	30341	Secondary fill of construction cut	silty clay	48	32	17047	120
30281	20209	1	30279	Fill of posthole	silty clay	10	8	2316	200
30300	20210	4	30341	Secondary fill of construction cut	silty sand	50	32	6754	460
30303	20211	4	30302	Secondary fill of pit	silty clay	48	28	12895	900
30300	20212	4	30341	Secondary fill of construction cut	clay	42	24	11060	700
30306	20213	1	30305	Fill of posthole	silty clay	8	5	1316	120
30310	20214	4		Layer of redeposited natural in structure [20704]	silty sand	53	34	14287	880
30293	20215	4	30292	Fill of pit/posthole	sandy clay	37	26	13770	101
30312	20216	4	30311	Fill of foundation wall	silty clay	29	24	8326	645
30329	20217	4	30311	Fill of foundation wall	sandy clay	45	27	15619	101
30338	20218	1	30337	Fill of posthale	silty clay	11	8	2877	230
30340	20219	2	30339	Secondary fill of pit	clayey silt	23	15	7139	580
30304	20220	4	30220	Primary fill of pit	clay	55	26	28993	189
30342	20221	4	30220	Secondary fill of pit	silty clay	51	32	15044	933
30332	20222	4	30311	Fill of foundation wall	silty clay	34	23	11285	780
30309	20223	4		Laver in structure 20704	silty clay	63	32	41010	203
30350	20224	4	30326	Primary fill of gully	silty clay	40	28	11870	86
30362	20227	4	30361	Primary fill of gully	silty clay	41	25	25044	201
30366	20228	1	30365	Fill of small pit	silt	10	6	1968	350
30347	20229	2	30346	Fill of posthale	silty clay	16	10	8082	570
30381	20230	1	30380	Deliberate backfill of stake hole	silty clay	3	2	1568	100
30383	20231	1	30382	Fill of pit	silty clay	13	8	3738	240
30242	20232	4	30241	Secondary fill of pit	clay	44	29	16269	114
30261	20233	4		Layer in roundhouse 30505	clay	40	33	9161	600
30402	20234	4	30401	Fill of pit	sandy clay	54	30	27769	187
30387	20236	1	30386	Fill of uncategorised cut	sandy clay	3	2	535	20
30389	20237	1	30388	Fill of uncategorised cut	silty clay	13	9	3167	210
30409	20238	4	30459	Fill of small linear in structure 20704	sandy clay	55	35	19350	119
20909	20239	4		Spread/Layer	clayey silt	48	30	12740	74!
30413	20240	4	30341	Secondary fill of construction cut	clayey silt	46	28	10874	73
30396	20241	4		Layer in feature 20704	silty clay	52	32	13630	90
30428	20243	4	30341	Secondary fill of construction cut	silty clay	61	27	21386	126

C	0	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
30430	20244	1	30429	Primary fill of possible gully	silty clay	13	5	5365	3300
30427	20245	2	30431	Fill of possible posthole	sandy silt	24	11	14685	12000
30441	20246	4	00.02	Laver in structure 30491	silty clay	46	29	9351	6200
30414	20247	1	30341	Placed deposit in construction cut	sandy clay	11	6	2831	2350
30444	20248	2	30341	Secondary fill of construction cut	silty clay	24	11	7916	5600
30445	20249	2		Natural in stone lined pit 30492	sandy clay	25	13	19358	12700
20998	20250	4		Laver in structure 20704	clayey silt	62	33	32723	19400
30458	20251	4		Layer in structure 20704	clay	59	30	26231	15600
30461	20252	2		Natural deposit in structure 20704	silty clay	36	16	24574	6500
30443	20253	1		Laver in structure 30491	silty clay	10	6	4040	300
30434	20254	1	30435	Fill of posthole	silty clay	13	7	9436	6400
30486	20255	4	00.00	Lower layer in roundhouse 30505	silty clay	39	25	9834	6200
30504	20256	1	30503	Deliberate backfill of posthole	clayey silt	10	7	4504	3600
30307	20257	1	00000	Levelled burnt mound material in curvilinear 20984	silty clay	14	8	9332	6500
30510	20258	2	30509	Secondary fill of small pit	silty clay	23	15	14317	1040
30514	20259	4	30513	Deliberate backfill of pit	silty clay	37	27	9587	1090
30320	20260	4		Void	silty sand	45	27	18408	1310
20908	20261	4	20909	Layer	silty clay	43	29	9345	8400
30502	20262	2	30498	Post pipe in voided cut	clay	24	14	9772	7600
30307	20263	4		Levelled burnt mound material in curvilinear 20984	sandy clay	60	32	38804	3665
30211	30272	4		Layer of tumbled stones in curvilinear 20984	sandy clay	41	19	20037	1350
332902	30575	1	332901	Fill of pit	silt	5	2	819	500
333339	32063	4	333241	Primary fill of trough	silty clay	44	22	0	0
331379	320042	4	331378	Fill of cut	sandy clay	46	33	8096	6000
333194	320168	1	333193	Secondary fill of uncategorised cut	sandy clay	8	8	0	0
330547	320264	1	330545	Deliberate backfill of posthole	sandy clay	5	2	1461	1200
330556	320265	1	330555	Deliberate backfill of posthole	silty sand	4	2	1146	850
330544	320266	1	330543	Fill of posthole	silty clay	9	6	3689	2500
330572	320268	1	330571	Secondary fill of gully	sandy clay	12	8	5993	4100
330549	320269	2	330548	Deliberate backfill of uncategorised cut	sandy clay	23	16	12770	7600
30494	320203	4	330310	Layer in curvilinear 20984	sandy clay	43	26	19136	1300
30378	320270	4		Layer in curvilinear 20984	clayey silt	47	26	19879	1292

C	O	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
330600	320273	4	330599	Fill of cut	silty sand	51	28	7797	5400
330580	320275	4		Burnt mound laver	clayey silt	51	27	23470	15100
330579	320276	4		Laver of wall tumble	clayey silt	46	25	24688	16100
330605	320278	4	330604	Fill of cut	silty clay	48	24	1460	9700
330607	320279	2	330606	Fill of cut	sandy clay	26	15	7163	6800
330595	320280	1	330596	Secondary fill of gully	clay	6	4	1585	1300
330632	320281	1	330604	Fill of cut	sandy silt	4	1	633	500
330644	320282	4		Deliberate backfill of burnt material	sandy silt	26	18	14835	1110
30343	320283	2		Layer of loose rubble/stones in curvilinear 20984	sand	24	16	8588	6650
30553	320284	2		Platform for structure in curvilinear 20984	clay	28	13	9917	7500
330655	320285	2	330654	Secondary fill of gully	silty sand	19	12	5196	4400
330675	320286	2	330673	Fill of cut	silty sand	21	11	7750	5000
330705	320287	1	330706	Fill of posthole	silty sand	6	4	2222	1900
330709	320288	1	330710	Fill of posthole	clayey silt	9	7	1964	1350
30394	320289	4		Redeposited natural in curvilinear 20984	silty sand	37	25	14796	1130
30343	320290	2		Layer of loose rubble/stones in curvilinear 20984	silty sand	21	14	10023	8100
330711	320291	3	330539	Burnt deposit in north quadrant of roundhouse 330577	clay	31	23	10732	9500
330651	320292	3		Silting layer	silty clay	28	21	15442	1320
330652	320293	4		Dumped burnt mound material	silty sand	37	28	10043	1060
330717	320294	2	330716	Fill of posthole	sandy clay	25	17	6137	470
330719	320295	2		Unknown	sand	25	18	4134	320
330736	320296	3	330735	Primary fill of pit	silty sand	36	19	7648	498
330595	320297	4	330596	Secondary fill of gully	clayey silt	44	25	9785	1170
330751	320298	3	330750	Fill of cut	silty sand	27	20	6982	570
330744	320299	2	330743	Secondary fill of drainage gully	silty clay	21	12	6916	410
330738	320300	1	330737	Secondary fill of possible pit	clayey sand	5	4	952	800
330740	320301	1	330739	Secondary fill of possible posthole	sand	3	2	968	600
330771	320302	1	330770	Fill of firepit	silty sand	10	6	5222	3200
330690	320303	4	550110	Dumped burnt material	silty sand	43	29	14977	1245
330659	320304	4	330658	Primary or secondary fill of bioturbation	silty sand	38	26	13930	1140
330784	320305	4	330782	Secondary fill of pit	sandy silt	41	27	10436	6600
30263	320306	4	350.52	Rubble layer in curvilinear 20984	silty sand	56	33	26391	1770
330786	320307	4		Unknown	silty sand	58	29	21449	1320

C	0	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
330788	320308	4	- 207	Unknown	sandy clay	55	35	18513	12000
330777	320309	2	330776	Fill from unexcavated pit	silty clay	26	17	6482	4600
330779	320310	2	330778	Fill of pit	silty sand	25	16	6666	5000
330804	320311	2		Layer in curvilinear 20984	silty sand	26	15	9678	7700
330813	320312	4		Void	silty clay	40	27	8003	6100
330825	320313	4	330824	Fill of pit	silty clay	52	31	23924	15000
330851	320314	1	330849	Fill of cist	clay	11	8	1471	1000
330861	320315	1		Layer in curvilinear 20984	silty clay	9	5	3773	4350
330862	320316	4		Deliberate back fill of pit	silty clay	41	24	7828	8150
330823	320320	4	330822	Secondary fill of water management gully	sand	54	30	21828	13400
330878	320321	4	330879	Fill of cut	silty sand	42	29	15820	10200
330854	320322	2	330856	Fill of cist burial	silty clay	19	11	4291	3500
330899	320323	1	330898	Deliberate backfill of stake hole	sandy silt	5	3	857	1200
330648	320324	1		Uncategorised	sandy clay	11	9	3450	3100
330855	320325	1	330856	Fill of cist burial	clayey silt	12	7	3251	2200
330903	320326	1	330902	Fill of posthole	silty sand	2	2	422	400
330812	320327	4	<	Deliberate backfill	silty sand	50	32	14049	9000
330914	320328	1	330913	Deliberate backfill of pit	sandy silt	8	5	3164	2100
330892	320331	1	330891	Deliberate backfill of posthole	silty clay	11	8	5481	4400
330894	320332	1	330893	Deliberate backfill of posthole	clay	5	4	1080	1050
330922	320333	2	330921	Fill of unexcavated and uncategorised cut	silty clay	23	14	8865	6000
330926	320334	2		Spread	silty sand	9	10	592	450
330935	320335	1	330934	Deliberate backfill of posthole	silty clay	5	2	1523	900
330928	320336	1	330927	Primary fill of cist	silty sand	9	8	1627	1200
330939	320338	4	330938	Deliberate backfill of pit	clayey silt	35	25	14735	12500
330829	320339	2	330828	Secondary fill of gully	silty sand	17	10	4634	4100
330941	320340	1	330940	Tertiary deliberate backfill of pit	silty sand	12	7	6955	5000
330946	320341	1	330944	Primary fill of cist/large posthole	clayey silt	13	8	2872	2500
330949	320342	5	330950	Secondary fill of storage pit	silty clay	50	32	21221	16300
331393	320342	4		Oven lining in roundhouse 332430	sandy clay	52	27	15962	10400
330761	320343	1		Spread in curvilinear 20984	sandy clay	2	2	1956	1500
331392	320343	4		Burnt layer	clayey silt	44	31	6447	4600
330962	320344	3	330961	Fill of cut	silty sand	44	27	7787	5600
330715	320346	1		Stone lined gully cut, drain	silty sand	13	8	5260	4000

C	0	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
330968	320347	1	330967	Secondary fill of stone lined gully	silty clay	1	1	343	350
330918	320348	4	330917	Fill of gully/construction cut	sandy silt	57	34	26577	18400
330982	320351	4	330981	Fill of posthole	silty clay	31	19	9126	7600
330985	320352	1	330984	Fill of posthole	silty clay	12	8	4317	3500
330995	320353	2	330994	Secondary fill of roundhouse gully	silty clay	18	11	5098	4000
331003	320354	4	331002	Fill of gully	silty sand	47	27	12452	7500
330993	320355	1	330992	Primary fill of pit	silty clay	10	7	3207	1900
331000	320356	4	330999	Fill of cut	silty clay	47	33	6545	4400
330814	320358	7		Layer	silty sand	64	54	12024	7900
331008	320360	4		Hillwash	sandy silt	51	34	16974	11400
331007	320361	3	331009	Secondary fill of possible well construction cut	silty clay	38	18	7848	6481
331007	320362	1	331009	Secondary fill of possible well construction cut	sandy silt	10	4	1587	900
331042	320363	1		Layer in curvilinear 20984	silty sand	7	5	1695	1200
331036	320365	1	331035	Fill of posthole	sandy clay	8	4	1623	1300
331031	320366	2		Laver	silt	17	10	5643	3475
331052	320367	3		Unknown	silty sand	37	23	12376	7750
331040	320368	2	331039	Laver	silty clay	2	2	536	450
331076	320369	4		Wall foundation layer	silty clay	45	26	14772	15200
330621	320370	4	330622	Wall core	sandy clay	39	27	11067	11000
330823	320370	1	330822	Secondary fill of water management gully	silty sand	9	5	2475	1600
330875	320371	1	330874	Fill of posthole	clay	8	3	2665	1800
330877	320372	1	330876	Fill of posthole	clayey sand	8	4	2377	1800
331087	320373	1	331086	Fill of cut	sandy silt	12	9	2273	1800
330872	320374	3	330871	Fill of gully	sandy clay	24	17	6930	5100
331064	320375	3	331280	Fill of pit	clay	25	20	12034	11600
331119	320376	1	331118	Fill of cut	clay	13	9	5751	4000
330843	320378	1		Layer	silty sand	12	7	4728	4400
331151	320379	2	331153	Secondary fill of drainage gully	silty clay	21	15	6044	4800
331136	320381	3	331132	Fill of cut	clayey silt	38	26	5569	4200
330749	320382	4	504202	Floor laver	silty sand	43	24	4916	4300
330975	320383	2		Layer	sandy clay	25	14	6960	6700
331163	320384	1	331137	Fill of gully	silty clay	14	8	5882	3700
331096	320385	1	331095	Fill of ditch terminus	clayey silt	11	8	2304	1650
331068	320386	4	331237	Laver on terrace cut	sandy clay	55	31	13729	9850

C	0	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
331174	320388	4	331173	Secondary fill of posthole	sandy clay	42	27	8848	8500
331079	320389	1	331078	Fill of small pit	sandy clay	11	5	2972	2200
330739	320390	1	3320.0	Cut of small posthole	sandy clay	11	8	2996	2800
331172	320391	4	331171	Secondary fill of posthole	clay	51	32	12798	9400
331140	320392	1	33139	Fill of posthole	clayey silt	9	6	2160	1700
331183	320393	2		Laver	silty sand	18	14	1244	1100
331221	320394	1	3312319	Fill of unrecorded cut	silty sand	14	8	4598	3000
331222	320395	2		Layer	silty clay	24	15	7415	5200
331213	320396	1		Layer	silty clay	3	2	686	550
331223	320397	1	331224	Secondary fill of posthole	clay	10	6	2633	2000
331234	320398	4	331233	Fill of posthole	clayey silt	44	23	9934	7900
331005	320399	4	331004	fill of pit	silty clay	48	32	7270	4700
331243	320400	2	331242	Fill of drain gully	clayey sand	22	14	5500	3600
331244	320401	3	331242	Fill of drain gully	silty clay	34	22	4787	6000
331225	320402	1	331226	Fill of pit	sandy clay	9	5	4396	3300
331247	320403	4	331248	Fill of pit	clayey sand	39	21	6466	5000
331258	320404	4		Layer	silty clay	46	35	8356	5900
331264	320405	1	331263	Deliberate backfill of pit	silty clay	10	7	2581	2200
331205	320406	4		Void	sandy clay	47	29	18325	1250
331269	320407	1		Layer	sandy clay	12	7	3070	1900
331267	320408	2	331266	Fill of pit	sandy clay	19	13	3504	4000
331161	320409	3	331160	Fill of gully	clayey sand	32	18	17985	1320
330759	320410	4		Redeposited natural	silty sand	50	21	27054	1900
330872	320411	4	330871	Fill of gully	silty sand	48	28	11012	7350
331251	320412	1	331250	Fill of pit	sandy clay	6	5	2985	3600
331294	320413	2		Cut	clayey silt	24	16	7997	6700
30263	320414	4		Rubble layer in curvilinear 20984	sandy clay	51	32	19814	1470
331206	320415	2		Void	silty clay	27	16	9714	7300
331319	320416	4	331318	Fill of cut	sandy clay	51	32	11775	8690
331310	320417	4	331309	Fill of cut	silty clay	43	29	7639	6600
331312	320418	4		Unrecorded	sandy clay	45	25	23774	1850
331312	320419	2		Unrecorded	silty sand	19	13	5860	5800
330704	320421	4	330697	Secondary fill of drip gully	silty clay	49	32	15079	1210
331299	320422	1	331298	Deliberate backfill post hole	sandy clay	2	1	356	250

C	0	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
331300	320423	1		Pit	silty sand	7	4	1980	1500
331303	320424	1	331302	Deliberate backfill of posthole	silty sand	2	1	296	250
331714	320424	-	331712	Secondary fill of pit	sandy silt			7931	6000
30113	320425	4		Layer	clayey silt	46	30	10956	7500
331367	320426	2	331366	Fill of gully	sandy silt	15	11	5176	3400
331363	320427	4		Pit	sandy clay	49	30	28222	19000
331359	320428	2	331357	Pit fill in posthole cut	sandy clay	16	9	6043	6000
331380	320429	4	331368	Deliberate backfill of posthole	sandy clay	53	34	17339	17100
331381	320430	2	331370	Deliberate backfill of posthole	sandy silt	18	14	6640	6000
331382	320431	4	331371	Burning deposit in hearth	clayey sand	40	25	23888	18400
331401	320434	4	331369	Secondary fill of posthole	sandy silt	48	27	16597	1130
331402	320435	2	331369	Secondary fill of posthole	silty clay	14	9	4852	3500
331400	320436	4	331248	Fill of pit	clayey sand	43	27	4438	5300
331404	320437	2	331397	Fill of cut	sandy clay	25	15	5090	4200
331403	320438	4	331309	Fill of cut	silty clay	46	24	15215	1200
331424	320439	1		Cut of pit	silty clay	10	7	1730	1100
331032	320440	3		Layer	sandy clay	29	24	7256	4950
331419	320441	3	110	Layer	silty clay	27	21	4411	3400
331267	320442	1	331266	Fill of pit	sandy clay	11	7	2694	2000
331165	320443	1	331164	Deliberate backfill of posthole	silty sand	2	2	636	400
331434	320445	3	331433	Deliberate backfill of drain	silty sand	35	21	10646	8200
331436	320446	1		Cut of pit	silty clay	8	5	0	0
331446	320447	1	331445	Primary fill of pit	silty clay	9	5	1622	900
331427	320448	2	331426	Primary fill of pit	sandy clay	20	13	3929	2800
331420	320449	4		Fill	clay	50	31	10003	6400
331129	320450	4		Secondary fill of layer	sandy clay	56	35	26169	1570
331477	320451	3	331475	Secondary fill of construction cut	sandy clay	36	23	12407	9000
331492	320452	2	331491	Deliberate backfill of pit	silty clay	23	13	8453	6200
331490	320454	2	331489	Fill of pit	clay	27	16	7417	6200
331484	320455	5	331482	Fill of posthole	sandy silt	55	34	9610	6850
331240	320457	1	331239	Secondary fill of uncategorised cut	silty clay	8	6	2188	1300
331203	320458	1	331202	Deliberate backfill of pit	sandy silt	10	7	2444	1600
30344	320459	4	30526	Layer of rubble in pit	sandy silt	36	23	15527	1280
331430	320460	1	331428	Fill of uncategorised cut	silty clay	8	7	1933	1200
331430	320460	1	331428	Fill of uncategorised cut	Silty Clay			1300	

C	0	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
331431	320461	1	331428	Fill of uncategorised cut	silty clay	10	6	2815	1800
331493	320462	4	_	Hillwash	silty sand	49	32	13808	8925
331455	320463	1	331452	Fill of cut	silty sand	11	8	5027	3800
331188	320464	4		Possible occupation layer	sandy silt	53	32	16217	10700
331626	320465	1	331625	Secondary fill of pit	clayey silt	8	5	2159	1400
331628	320466	1	331627	Primary fill of pit	clay	3	2	3062	190
331630	320467	2	331632	Fill of pit cut of posthole	sandy clay	24	16	7358	6000
331639	320468	2	331638	Layer in refuse pit	silty clay	26	17	3927	4000
331641	320469	2	331640	Fill of pit	silty sand	28	15	5797	4000
331643	320470	2	331642	Fill of pit	sandy clay	31	17	6370	6600
331683	320471	3	331684	Fill of pit	silty clay	30	21	8979	6500
331695	320472	4	332035	Primary fill of oven cut	silty sand	41	27	5458	5300
331771	320473	4	331770	Fill of pit	silty clay	47	24	17449	11300
331114	320474	3	331113	Fill of gully	silty clay	34	20	0	0
330846	320476	1	330845	Secondary fill of gully	sandy silt	6	4	1655	1200
331779	320477	2	331778	Fill of pit	sandy clay	23	17	4950	4900
331824	320478			Layer	sandy clay			11372	7100
331821	320479	4.		Unrecorded	sand	47	32	8850	5800
331820	320480	4		Secondary fill layer	clay	44	28	11262	6700
331828	320480	1	331982	Fill of culvert	silty sand	13	7	3295	2100
331827	320481	3		Layer	sandy clay	28	22	4525	3000
30474	320482	1	30475	Fill of pit	silty clay	8	5	3147	2500
331738	320483	4	331740	Fill of uncategorised cut	sandy clay	41	29	21774	19900
331618	320484	1		Metalled surface	silty clay	15	9	7620	5900
331907	320485	1	331817	Occupation layer in cut	silty clay	9	6	2503	1900
331828	320486	3	331982	Fill of drain gully	clayey silt	39	25	10243	6560
30436	320487	1	30437	Fill of uncategorised cut	sandy clay	6	3	508	500
331902	320487	1	331901	Fill of cut	silty clay	12	9	2972	2700
331920	320488	3		Layer	sandy silt	33	20	7498	5800
331952	320489	1	331951	Primary fill of hearth	silty clay	11	8	3231	2100
331959	320490	2	331960	Secondary fill of uncategorised cut	silty clay	24	17	6717	4700
331995	320491	4		Layer	clayey silt	59	34	39593	25400
331994	320492	4	331992	Fill of land drain	silty clay	45	23	6626	5800
331959	320493	4	331960	Natural secondary fill of uncategorised cut	silty clay	45	29	13672	9700

C	0	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
332043	320494	2	332183	Fill of structured pit	silty clay	23	16	7489	4500
331971	320495	2	331970	Fill of tree throw	sandy clay	18	12	5553	4400
332041	320496	1	002270	Burnt layer	clayey silt	10	7	2129	1800
332103	320498	4		Burnt deposit	clay	43	26	10283	7800
332029	320499	4		Layer	silty sand	33	21	4208	4200
332139	320500	2	332138	Fill of posthole	sandy clay	29	18	11578	8000
332052	320501	3	332050	Fill of drain	silty sand	30	22	9977	7400
332149	320502	3	332147	Fill of cut	sandy silt	39	20	19437	1600
331956	320503	1		Burnt layer	clay	8	5	1377	900
331390	320504	1		Burnt layer	silty clay	10	8	0	0
332195	320504	2	332194	Fill of cut	sandy clay	20	11	1494	1500
332180	320505	2	332179	Fill of pit	sandy clay	31	18	7882	7100
30500	320506	1		Void	silty clay	12	8	3723	2200
332156	320507	2	331328	Fill of drainage gully	silty clay	26	15	13214	9350
332170	320508	2	332169	Fill of gully	silty clay	24	13	12640	850
332195	320509	_	332194	Fill of cut	silty clay			7839	6200
332193	320510	2	332191	Fill of pit	clay	23	15	4578	3000
332217	320511	4	332216	Unexcavated fill of stone lined pit	clayey sand	34	22	9907	7500
30048	320512	1	30047	Fill of cut	silty clay	12	8	4182	3125
332297	320513	1	332296	Primary fill of small pit	sandy silt	12	7	5175	3600
332298	320514	1	332296	Secondary fill of small pit	sandy silt	11	5	4059	3000
332341	320516	1	332119	Fill of cut	clay	14	8	4737	3100
332334	320517	1	332121	Fill of pit	sandy clay	15	8	6409	5400
332337	320518	3	332121	Fill of pit	sandy silt	42	21	21097	1265
332930	320518	1	332929	Fill of pit	sandy silt	12	9	3159	3000
332384	320519	1	332383	Deliberate backfill of pit	sandy clay	13	7	4623	4100
332386	320520	1	002000	Unrecorded	silty sand	15	7	6032	4200
332351	320521	-	332352	Fill of cut	silty clay			2029	3300
332405	320522	1	332404	Deliberate backfill of posthole	silty clay	6	3	1329	1400
331388	320523	4	331387	Secondary fill of roundhouse drain	sandy clay	42	33	8140	6300
331958	320524	2	331957	Fill of posthole	silty clay	25	16	7721	6000
332307	320525	1	332331	Unrecorded	silty clay	5	3	1209	800
332306	320526	1		Unrecorded	sandy clay	3	3	669	500
332305	320527	1	332303	Fill of cut	silty clay	1	1	277	225

C	<>	TO	Cut	Desc	Matrix	PW	PV	SW	SV
332465	320528	1	332464	Fill of cut	clayey silt	8	4	3623	2600
332470	320529	1	332469	Fill of pit in cut of posthole	clay	13	7	7044	3600
330979	320530	1	330944	Fill of stone lined gully	silty clay	15	9	3746	3000
333206	320530	2		Silt layer	silty clay	23	16	7068	5400
332064	320532	1		Unrecorded	clay	11	6	2873	2120
332064	320533	1		Unrecorded	clay	12	7	2546	1900
332353	320534	1	332354	Fill of drain	silty sand	9	7	1245	1000
332411	320535	1	332412	Fill of cut	silty clay	10	9	2108	1800
331393	320536	1		Oven lining layer	clay	5	4	1021	700
332486	320537	1		Cut	clay	10	7	2281	1600
332489	320538	1	332488	Fill of cut	silty sand	11	5	2302	1900
332477	320539	1	332476	Deliberate backfill of pit	clayey silt	6	5	1306	1000
332588	320540	2		Drain extension	silty clay	19	9	2162	1600
332555	320541	4	332755	Fill of pit/tank	sandy clay	46	25	13179	8400
333013	320541	1		Unrecorded	silty clay	6	4	1558	900
332602	320542	1	332599	Pit fill	silty sand	14	8	5636	4800
332538	320543	1	332537	Secondary fill of posthole	silty clay	2	1	280	225
332540	320544	1	332539	Primary fill of posthole	silty clay	7	4	1460	1200
332563	320545	1	332562	Fill of cut	silty sand	4	2	589	500
332669	320547	1	332668	Fill of cut	sandy clay	12	9	2316	1800
30285	320549	4	30284	Tertiary fill of pit	silty clay	51	30	4938	4300
332335	320550	6	332121	Fill of pit	sandy clay	65	43	8152	5000
331955	320551	1		Unrecorded	sand	13	8	3199	3000
332707	320553	1	332706	Fill of gully	silty sand	8	5	2446	1800
332708	320553	4		Layer	silty clay	49	31	11202	7350
331693	320554	1	331689	Secondary fill of hearth	silty clay	1	1	277	200
331692	320555	2	331689	in situ burning in hearth	silty sand	2	2	207	150
331691	320556	1	331689	Redeposited natural in hearth	clay	1	1	152	100
331690	320557	2	331689	in situ burning in hearth	clay	2	2	373	200
332701	320558	2	332574	Fill of hearth in pit	silty clay	22	17	3522	3300
332543	320560	4		Pit	silty clay	54	32	9405	9000
332712	320561	4	332711	Secondary natural fill of stakehole	sand	60	29	14958	10000
332722	320562	1	332755	Fill of well/tank	clayey silt	3	2	634	450
332728	320563	5	332727	Primary fill of hearth	clay	49	38	12936	9550

C	0	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
331674	320564	7	331673	Deliberate backfill of gully	sandy clay	7	7	1373	900
331672	320565	3	331671	Deliberate backfill of gully	silty clay	3	3	760	600
332759	320567	2	332761	Fill of pit	clay	29	16	4018	2800
332731	320568	4	332733	Secondary fill of pit	silty clay	44	31	18776	11700
332528	320569	4	332530	Fill of pit	silty sand	47	24	2239	16700
332836	320570	1	332835	Fill of pit	sandy clay	7	4	1897	1300
332800	320572	4	331689	Deliberate backfill of hearth	silty clay	4	4	229	150
332859	320573	2	332697	Fill of cut	silty clay	17	12	6162	4900
332445	320574	4		Layer	clay	41	24	7736	6300
332686	320576	1	332690	Top fill of pit	silty clay	10	8	3414	2800
332796	320577	4	332795	Primary pit fill	sandy clay	50	32	4386	3000
332803	320579	2		Pit cut	silty sand	11	5	1275	800
332957	320580	3	332954	Fill of hearth	silty clay	33	20	4171	3900
332956	320581	1		Unrecorded	clay	7	4	821	400
332955	320582	1	332954	Primary fill of hearth	silty clay	7	4	1218	700
332461	320583	4	002001	Burnt layer	silty sand	50	29	24714	13900
332938	320584	1	332937	Fill of posthole	silty sand			1163	600
332547	320586	4	00200	Pit cut	silty sand	52	27	9532	6600
333003	320587	4	333002	Fill of pit	sandy silt	42	24	7051	5550
333004	320588	2	333002	Fill of pit	clayey silt	24	13	5696	3900
332938	320589	1	332937	Fill of posthole	silty clay	7	4	0	0
333006	320589	1	333005	Fill of pit	sandy silt	7	5	2178	1300
333007	320590	4	333005	Fill of pit	clay	47	28	14039	10400
332432	320592	1	330331	Hearth layer	clavey silt	10	8	3022	2500
333010	320593	4	333009	Fill of pit/posthole	silty clay	36	27	8627	6460
333047	320594	1	333046	Fill of posthole	sandy clay	15	9	2423	1500
333057	320595	1	332993	Fill of pit	clay	6	4	1191	800
333058	320596	1	332993	Fill of posthole	clay	3	2	1123	800
333060	320597	1	333059	Fill of pit	sandy clay	4	2	1069	900
331586	320598	4	555055	Redeposited natural	clay	50	27	8916	6000
332124	320598	3	332123	Fill of pit	sandy clay	47	25	24447	17200
331570	320599	2	JULIEU	Occupation layer	clayey silt	25	16	9313	6500
331570	320600	2		Occupation layer	silty sand	25	13	8741	6000
331570	320601	2		Occupation layer	sandy silt	24	17	9627	6100

C	0	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
331570	320602	2		Occupation layer	silty clay	25	17	8836	5800
333112	320604	2	333298	Deliberate deposit in hearth	silty clay	24	14	9221	6300
333109	320605	1	333108	Placed deposit in triangular stone lined pit	silty clay	6	3	688	550
333095	320606	1	333094	Fill of cut	sandy clay	16	8	4901	3700
333147	320607	1	333108	Deliberate deposit in triangular stone lined pit	clay	9	5	1676	1450
333157	320608	1		Unrecorded	sandy clay	10	6	3614	2700
330924	320609	2	330871	Tertiary foil of gully	silty clay	17	12	5490	4540
331210	320610	2		Layer	sandy clay	20	13	13638	13000
330890	320611	2	330889	Fill of pit	clay	17	12	6294	5500
333180	320613	1	333179	Fill of pit/posthole	clay	7	8	5946	4600
333196	320614	2	333195	Secondary fill of pit	silty clay	25	14	7516	5200
30307	320615	4		Burnt mound laver	silty clay	36	31	15198	10900
30307	320616	2		Burnt mound layer	silty clay	27	15	13346	9100
333146	320617	3	333144	Natural secondary fill of posthole	clay	48	23	17243	10680
333194	320618	1	333193	Secondary fill of uncategorised cut	silty sand			2570	1700
333087	320619	4	333135	Fill of pit	sandy clay	41	26	8990	8000
333130	320621	2	333128	Fill of posthole	sandy silt	28	17	10898	10200
333254	320624	1	333253	Deliberate backfill of posthole	silty clay	8	5	2120	1700
333355	320624	2	333026	Primary fill of well	sandy clay	14	10	3278	2600
333327	320626	4	333241	Cut of trough	clay	53	33	6110	4000
333328	320627	4	333241	Fill of trough	clavey silt	67	32	39728	27300
333329	320628	2	333241	Fill of trough	silty clay	31	19	11132	9400
333362	320629	1		Laver	clay	11	8	2128	1800
333336	320630	2	333251	Fill of pit	silty clay	16	11	3736	3200
333339	320631		333337	Fill of pit	sandy clay			3781	2700
333401	320633	1	333400	Secondary mixed fill of hearth	silty clay	11	5	3175	2000
333318	320634	2	333317	Fill of posthole	clavey silt	32	18	0	0
333389	320635	1	333338	Fill of posthole	clayey silt	14	8	2406	1850
333359	320636	2	333358	Deliberate backfill of posthole	sandy clay	17	12	3979	3700
333357	320637	1	333356	Secondary fill of pit	sandy clay	5	1	1089	700
333337	320638	4	333384	Fill of cut	clay	54	32	10859	9500
333497	320639	2	333496	Fill of gully	sandy clay	33	15	10465	6550
333146	320640	1	333144	Secondary natural fill of posthole	clay	12	5	1284	1100
333308	320641	1	333144	Cut of pit	clay	5	5	1481	1000

C	0	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
333475	320642	1	333474	Secondary fill of gully terminus	clay	6	3	968	700
333477	320643	1	333476	Fill of gully	clay	11	10	5202	4000
333479	320644	1	333478	Fill of gully	sandy silt	12	7	3814	3000
333297	320645	2	333549	Redeposited natural in flue	silty clay	21	12	5323	3600
333544	320646	2	333298	Burnt deposit in hearth	sandy silt	17	14	3689	2600
333112	320647	2	333111	Fill of posthole	sandy clay	21	13	5355	4700
333299	320648	2	333549	Charcoal deposit on flue	sandy clay	21	14	5287	4200
333310	320649	1	333511	Fill of pit	clay	10	8	2187	2400
320458	320650	4		Unrecorded	clay	34	21	7210	5700
333459	320651	2	333460	Fill of pit	sandy clay	25	10	11338	7700
333387	320652	3	333386	Fill of posthole	clay	35	21	9090	7000
333574	320653	2	333573	Secondary fill of pit	clayey silt	22	15	7171	4970
333481	320654	1	333480	Secondary fill of gully	sandy silt	1	1	135	100
333248	320655	1	333247	Deliberate backfill of pit	clay	10	7	2603	2000
333506	320656	1	333505	Fill of gully	sandy clay	10	8	1782	1400
333530	320657	1	333529	Fill of ring gully	silty clay	11	8	0	0
333502	320658	2	333501	Deliberate backfill of posthole	sandy clay	19	10	4272	4700
333558	320660	1	333557	Fill of pit	sandy silt	6	4	1663	1300
333560	320661	1	333559	Fill of pit/posthole	silty clay	3	1	576	700
333560	320662	2	333559	Fill of pit/posthole	silty sand	24	18	6144	6000
333168	320663	3	-	Palaeosoil	silty sand	33	18	4945	3900
333468	320664	1	333467	Fill of gully	sandy silt	8	7	1447	2400
333203	320665	1	333202	Primary fill of gully	sandy clay	12	10	3588	2700
333269	320666	1	333202	Cut of posthole	clay	15	8	3554	2500
333168	320667	4		Palaeosoil	clay	54	34	7879	5800
333168	320668	4		Palaeosoil	silty clay	60	35	12227	11600
333586	320670	3	333587	Fill of pit	sandy silt	33	20	10197	8900
333588	320671	3	333589	Fill of unexcavated pit	clav	40	20	12328	8400
333574	320672	1	333573	Secondary fill of pit	silty sand	9	6	1958	1600
333593	320673	1	333592	Secondary fill of posthole	silty clay	5	2	1226	800
333611	320674	1	333610	Fill of post pad	sandy clay	3	1	0	0
333642	320675	1	333010	Unrecorded	clay	11	9	2091	1400
333652	320676	2	331009	Fill of well	silty clay	25	14	3484	2700
333653	320677	4	331009	Fill of well	silty clay	41	26	2312	2200

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Ċ	0	TQ	Cut	Desc	Matrix	PW	PV	SW	SV
333638	320678	1	333637	Fill of cut	clay	12	7	2210	1500
30308	320835	4	333037	Layer	silty clay	31	28	26978	16700
330733	320975	4		Layer	silty clay	40	25	10771	7000
330578	330274	4		Layer	silty clay	28	20	8703	6550
330689	330277	2	330541	Burnt deposit in roundhouse 330577	clay	18	13	5716	4700
330769	330317	1	330768	Fill of posthole	sandy silt	4	3	930	700
330884	330319	2	330883	Fill of posthole	silty clay	14	8	2255	1700
332643	330546	1	332642	Fill of cut	sandy clay	4	3	2082	1200
332727	320563	1	332012	Cut of hearth	Silty clay	9	8	3515	2100

Key: C=context; <>=sample number; TQ=tub quantity processed; Cut=cut number of feature; Desc=description of feature; Matrix=matrix of processed sediment; PW=processed weight(kg); PV=processed volume(I); SW=sorted weight(g); SV=sorted volume(ml)

Table 7.2 Finds from Samples

C	0	Во	CBM I	Ch	CP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster	Pot	Shell	WS
20039	20001			<1						277			54			
20063	20002			117												
20121	20003									364			1			
20149	20004	<1		10				/				11				
20179	20005			<1			41			102		5				
20081	20006						24			123		<1	1			
20202	20007		<1	<1								6				
20254	20008			20						14						
20192	20009		4-106	28						89						
20291	20010		12	10								<1				
20292	20011			<1					-		-					
20309	20012			84				32		112		<1				
20300	20013									53		10				
20356	20015		2	7			4-2					1				
20384	20016			<1								G - S				
20371	20017			2								7				
20369	20018		26	<1								<1				

C	0	Во	CBM	Ch	CP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster	Pot	Shell	WS
20363	20020	DU	CDIVI	<1	4.1	Crist	1.5	10	01033		2001.10.187	.,,				
20365	20020		-	<1												
20384	20021	_		29												
20422	20022	-	1	34								<1			7	
20537	20023	_		<1						19						
20464	20024			54				-				3				
20465	20025		<1	7			7					<1				
20403	20027		50	15								<1			1	
20556	20027		30	13				154		291		3				
20486	20028			20						150		35				
20589	20029			20		-				60						
20593	20030			<1					-						> =	
20607	20031			-11								6				
20611	20032			<1								<1				
20577	20035		24	2								<1				
20489	20035	<1	24	4	-		-			17						
20554	20037			<1								4				
20366	20037			<1						78		25				
20613	20038			36		1										
20614	20039			<1								<1				
20623	20040			4		1				168						
20617	20041	<1		6						179		10				
20467	20042	12		5						10	5	<1		<1		
20581	20043							<1			V	<1			-	
20468	20045			3						28				<1		
20632	20046		9	16								18			1	
20630	20047			22												
20643	20049			<1												
20624	20051									49						
20706	20052									17		5			()	
20529	20052		5	<1				<1	1			2				
20712	20054			<1												
20687	20056		3	<1								<1				
20717	20057			23			9									

C	<>	Во	CBM	Ch	CP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster	Pot	Shell	WS
20741	20058	-		12	1					<1						
20745	20059		1	<1				4.5								
20577	20065		74	16								3				
20639	20066			4				LEE		10	-					
20539	20067		<1	<1				1				<1	1			_
20650	20068		<1	<1				<1				<1				
20643	20069		11.	<1												_
20646	20070			2				1000		24						
20743	20071			<1			5									
20709	20072			4				(167						
20606	20073		1	<1						63						
20611	20074		1	<1						5		3	1			
20470	20076			6				-								
20546	20077		<1	<1				(3				
20749	20078		1	31								<1				
20666	20079			<1												
20419	20081		1	<1						20			J-5-1			
20782	20082			27						74						
20812	20083		Contract of	17						404						
20825	20084		1 - 1	6					-							
20826	20085		18	<1						35		20	/	-		
20837	20086		9	<1				1				<1	P -			
20829	20087			<1						1500		9				
20831	20088		1 - 2 1	<1		1				lin in		<1				
20854	20090		3	3						14		3				
20833	20092			<1								<1				
20896	20093		7	11								4				
20887	20094			<1								6				
20889	20095			<1						0						
20893	20097											<1				
20918	20100			<1						20						
20916	20101			<1		4				<1		<1				
20930	20103	<1	5 1							-		7				
20926	20105		11	<1								3				

C	0	Во	CBM	Ch	CP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster	Pot	Shell	WS
20932	20106		Sie/iti	<1		313.4										
20934	20107															
20943	20108			<1										<1		
20942	20109			<1								<1				
20942	20110		<1	<1								<1				
20942	20112			<1			1					<1				
20952	20120			25								<1				
20973	20121			3								34				1
20974	20122		30	3								8				
20942	20123				(T.E	1-5-1	U		-			<1				
20942	20124				-					<1		3		_		-
20942	20125			<1								<1				
20942	20126		/													
20895	20127		1	<1								<1				
20977	20128											<1				
20983	20129			<1				9				52				
20991	20131			6	1					46		3				
20998	20132				1											
30005	20137			3								7				
30007	20138		<1	<1								<1				
30009	20139			3					0 = = = 1			<1			1	
20988	20142			<1		1										
20975	20143			4					2-2-			11				
30021	20144		3	26								<1				
30022	20145			40			33					6				
30050	20147		<1	<1	-							<1				
20763	20148											<1				
30052	20149		<1	<1								<1				
30056	20151			2						66						_
30064	20153			25						6						
30068	20154		1	<1						5					1000	
30070	20155											<1				
30074	20156											3				
30076	20157			<1								<1				

12	- 1	D -	CDM	Ch	CP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster	Pot	Shell	1
30083	20158	Во	CBM 4	<1	CF.	Crnj	re	100	Qiqss	100	reather (P)	IAITAA	Crasco	100	Silen	Ť
30093	20158	<1		<1				<1								1
30094	20160	-1		<1				-		1		5				1
30108	20161	<1		12						32						1
30123	20162	-1		<1				<1				<1	(E .]			1
30129	20163		3	26								<1	/			1
30123	20164	<1	1403	2		1		38				10	1-2-			1
30140	20165		2,00	-								<1	7			
30142	20166			<1				2				3				
30146	20168															
30115	20169									1009						
30152	20170			8								13				
30166	20173			<1												
30089	20175									22						
30158	20176						12	12								
30173	20177			4						71						
30184	20178											<1				
30180	20179		<1	<1								<1				
30171	20180			5						55						
30172	20181			<1						405						
30196	20182		<1									<1				
30197	20183															4
30200	20184		<1	3						-		<1	1			4
30213	20186			<1						1203						4
30217	20187		-	<1						6						4
30219	20188		7	<1		<1						<1				
30214	20189			<1						1286		11				-
30222	20190		<1	5	-							<1				-
30224	20191		<1	7	1000							<1				-
30148	20193			3			<1	20		-		4				
30243	20194			<1											-	-
30246	20195		3	36								6				
30254	20196		17	3						-		<1				1
30114	20197	1		<1						1						J

C	0	Во	CBM	Ch	CP	CPR)	Fe	FC	Glass	ÍM	Leather (g)	MM	Plaster	Pot	Shell	WS
20968	20198		<1			1						<1				
30106	20200			<1								<1				-
30256	20203											<1				-
30259	20204		12	<1							1	3				-
30260	20205		28	7								<1				-
30268	20206			<1												-
30228	20208			4	-					46						-
30281	20209	<1		6								- 5				-
30303	20211			<1										<1		-
30300	20212		8	<1												-
30306	20213			<1	-											-
30293	20215			4						734					_	-
30312	20216		16	2								22				-
30329	20217			<1											-	-
30338	20218			5	1		-					4	4			-
30340	20219	<1													-	+
30342	20221			<1												-
30332	20222			<1								7				-
30309	20223		6	3	-							27				-
30350	20224			20						155		<1	-			-
30362	20227														-	_
30366	20228			<1								5				\vdash
30347	20229			6	1	12.		1-	-	15		6	-			-
30383	20231			<1	7										-	-
30242	20232	<1		<1			<1			3						-
30261	20233	<1		<1								3	-			3
30402	20234			7	01					60				_		-
30387	20236		<1	<1		7		-				<1				-
30409	20238			<1						19	1.25	7			/	-
20909	20239	<1	5	3		-						28				-
30413	20240										7					-
30396	20241		32	<1	1							<1	-		-	-
30428	20243			3				106				6				-
30430	20244			<1		<1						<1	1		-	

C	0	Во	CBM	Ch	CP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster	Pot	Shell	WS
30441	20246	<1		<1												
30414	20247			<1												
30444	20248			<1				-								
30445	20249		<1	<1								<1				
20998	20250									<1			9			
30458	20251									44			-			
30461	20252															
30443	20253		<1	3								<1				
30434	20254		65	7								<1				
30486	20255		1	<1						165		10-11	1			
30504	20256			<1						1						
30307	20257			10						6						
30510	20258			- 3				85								
30514	20259			3					-	17		1		<1		
30320	20260			10						106						
20908	20261											35				
30502	20262		14	6				<1				2	-			
30307	20263			3						21		10	-			
30211	30272			3												
331379	320042	<1	1	<1						105	1					
330547	320264							13				<1				
330556	320265		4									<1				
330544	320266			<1						242						
330549	320269		187	4						37		<1				
30494	320270			15												
30378	320271			23								10				
330600	320273			8												
330580	320275		394	3						334		2				
330579	320276			30								11		3		
330605	320278			5				239								
330607	320279			4								1				
330595	320280	<1	3	9								13				
330632	320281		4	9		1					1					
30343	320283	50.4	1 - 7							221		4				

C	0	Bo	CBM	Ch	CP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster	Pot	Shell	WS
30553	320284			10			52					<1				
330655	320285			18								11		-		
330705	320287		<1	6								<1				
330709	320288			2				<1				3				
30394	320289	<1		9						97		6				
30343	320290		1	8												
330711	320291			269				1				<1				
330651	320292									186	1					
330652	320293		<1	<1						35		3				_
330717	320294			4												
330719	320295			<1	1,000				<1			<1				-
330736	320296											2				-
330595	320297		21	3								3				
330751	320298			6				8				4				
330771	320302			3								<1				
330690	320303		1	47						301		5				
330659	320304	<1		60	- 1			6				10				
330784	320305		16	<1												-
30263	320306			2	H =					131		<1				-
330786	320307			<1				1				<1				_
330788	320308			<1	1					7	1,				-	-
330777	320309	2		1				118				3				_
330779	320310	1	153	<1				1		13		<1			100	-
330804	320311			<1						10		4				-
330813	320312	<1		<1				11								-
330825	320313			<1												-
330851	320314			<1								<1				-
330861	320315		9	<1						146	,1	<1				-
330862	320316		<1	25						105		5			1	
330823	320320															-
330878	320321			<1						16					1	-
330854	320322									137						-
330899	320323			1												-
330648	320324			6								8				

C	S> 1	Во	CBM	Ch	CP	CPR)	Fe	FC	Glass	1W	Leather (g)	MM	Plaster	Pot	Shell	WS
330812	320327			3						<1		3		<1		
330892	320331			43						165						
330894	320332			33												
330922	320333		1							126						
330926	320334		<1	<1								4				
330935	320335			<1												
330928	320336			<1								<1				
330939	320338			7						473						
330829	320339			3	-					198						
330941	320340			3						161		1				
330946	320341		[- TI	<1						-		<1		vi.		
330949	320342	<1		5						883						
331393	320342			<1				100				23				
330761	320343			<1	T			6		42		<1		1		
331392	320343			<1												
330715	320346			3						30		3				
330968	320347									21						
330918	320348			18						45		24				
330982	320351			<1												
330985	320352			<1						15						
330995	320353			9									1			
331003	320354											<1				
330993	320355											<1				
331000	320356		25	2								6				
330814	320358	<1	146	<1								32				400
331008	320360			<1	1			4-4	Y	119						
331007	320361		77 1	6						9		<1			1	
331007	320362	3	2	<1						-		<1			15	
331042	320363		54	14								2				
331036	320365		83	<1							//					-
331031	320366			<1				29			4	6			-	
331052	320367			<1				<1				21				
331040	320368	<1		12					1			6	1		1	
331076	320369			2												

С	0	Во	CBM	Ch	ĊP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster	Pot	Shell	WS
330621	320370			4						848					1	
330823	320370											3				
331087	320373			<1								<1				
330872	320374			<1				5		20		12				
331064	320375			20												
330843	320378							63								
331151	320379			5	L. L.					37						
331136	320381			<1												
330749	320382		1	<1						261	1					
331163	320384			38								<1				-
331096	320385			<1		12 2				164		<1				
331068	320386			11						80		11				
331174	320388			3												
331079	320389			<1						197					11.2.11	
330739	320390									39					10-0	
331172	320391			3					<1	31						
331140	320392											<1				
331183	320393		<1	4								20				
331221	320394			<1							1					
331222	320395			<1	1.00											
331213	320396		5	4							1	<1				
331223	320397			11						155						
331234	320398			<1						77		15				
331005	320399	<1		7		1						41				
331243	320400											6				
331244	320401	<1										<1				
331225	320402			<1								<1				
331247	320403			<1								4				
331258	320404	<1		<1			1	7								
331264				<1						5		5				
331205	320406			44								3			-	
331269	320407			<1	112							9				
331267	320408						-									
331161				27						277	1/	3	1			

C	0	Во	CBM	Ch	CP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster	Pot	Shell	WS
330759	320410			11						458	1					
330872	320411			<1						1		10				
331251	320412									242						
331294	320413	<1		5						45						
30263	320414			6						786						
331206	320415			8						-	-					
331319	320416			4								<1				
331310	320417			<1						<1						
331312	320418	<1	10-14	8						1147						
331312	320419	1	4							13						
330704	320421			5						174		10	/			
331299	320422		25	<1								<1	9			
331300	320423			9								9				
331303	320424	<1	i a	3								<1				
331714	320424			<1				P = 0		95		2			1	
30113	320425			2						117						
331359	320428			2										105		
331380	320429								5	369	/					
	320431			76												
331401	320434			6						341		<1			1	
331402	320435		12	<1								<1				
331400	320436									70		21				
331404	320437		F	3						27						
331424	320439											5				
331032	320440			<1								4			<1	
331419	320441			<1								23				
331267	320442			<1												
331446	320447		14	<1								<1				
331427	320448			<1				14				14				
331420	320449		b	<1								21				
331477	320451			<1						485			10-			
331492	320452									1209				-		
331490	320454	10		10				<1								
	320455		18	2	_			J = = 3				<1				

C	0	Во	CBM	Ch	CP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster	Pot	Shell	WS
331240	320457											<1				
331203	320458			<1								<1				
331430	320460	<1		<1			_					8				
331493	320462		<1	<1								<1				
331455	320463			77								<1				
331188	320464			10								32				
331628	320466		3	<1	/ =							7				
331630	320467		1													
331639	320468			<1								<1				
331641	320469	<1		17								7				
331643	320470			10										2		
331683	320471	12		43								5				
331695	320472			4				25								
331771	320473									68						
330846	320476			<1	1.0	4										
331779	320477		<1	2							1	10				
331824	320478	<1		<1						<1		5				
331820	320480			<1						<1		8				
331827	320481			<1												
30474	320482			<1								5				
331738	320483			<1						6345				1-0		
331618	320484			17						194		19				
331907	320485			1			7					5				
331828	320486			<1								6				
30436	320487									557						
331902	320487			5												
331920	320488			<1	V					9		28				
331959	320490			5								1				
331995	320491									164					15.0	
331994	320492	1		2								1				
331959	320493			8							L -					
332043	320494			<1			-			<1						
331971	320495			6				-				3				
332041	320496	<1	15-60	<1						12		34				

Ç	<>	Во	CBM	Ch	CP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster	Pot	Shell	WS
332103	320498			28				5				10				-
332029	320499			<1								<1	1			-
332139	320500									426						-
332052	320501			23												-
332149	320502			3					5.00			<1				_
331956	320503		1	<1									1			-
332195	320504			12												-
30500	320506			<1				5				<1				
332156	320507			4						170						_
332170	320508		28							379		10				
332195	320509			<1						203			-			_
332193	320510									<1		6				
332217	320511						53.1			154						_
30048	320512			30	-						- 1	<1	-			
332297	320513			<1				1				<1				
332298	320514			<1						52						
332341	320516			4						523						
332334	320517		79	<1	-					-		<1				
332337	320518		(5						192		20				
332384	320519			<1												
332386	320520		F	<1				1		53						
332351	320521			<1				-								
331388	320523			2								6				
331958	320524			6						400		<1				
332306	320526			<1				12		35		<1				
332305	320527	<1		<1				6				<1				
332465	320528			6				144				<1				
332470	320529	<1		<1						87		<1				
330979	320530	<1														
333206	320530		57	5								4				
332064	320532		1	2								<1				
332064	320533		2	1								1				
332353	320534			<1								1				
332411	320535							1				1				

C	0	Bo	CBM	Ch	CP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster	Pot	Shell	WS
331393	320536		-	<1								<1				
332486	320537			<1								<1				
332489	320538									67				h		
332477	320539			<1								-				
332588	320540			<1		(1	0-0			6		41				
332555	320541			<1						14		6		1		
332602	320542									280						
332538	320543			<1								<1				
332540	320544			<1												
332563	320545			<1												
332669	320547			<1									-			
30285	320549			<1												
332335	320550	<1		<1								<1				
331955	320551							1-		12		<1	V			
332707	320553											<1				
332708	320553			<1								12				
331693	320554	- 55		<1												
331692	320555			<1												-
331691	320556			<1						F						
331690	320557			2								<1				-
332701	320558			6								6				-
332543	320560								12-2-1			2				-
332722	320562			<1						15-5-1						
332728	320563		<1	<1								9				-
331674	320564			3								<1				
332759	320567		7	<1								3				
332731	320568			16						96		30				
332528	320569			<1						511						-
332836	320570		Length	<1								4				
332800	320572			<1											-	-
332859	320573									218				_		
332445	320574	<1	10	10								26	1	-		
332686	320576									124		<1				
332796	320577	T.	1	<1								5				

C	0	Во	CBM	Chi	CP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster I	Pot	Shell	WS
332803	320579	-	W-817	26	-											
332957	320580		30	6								40				
332956	320581			<1						1		9				
332955	320582			<1								5				
332461	320583			<1								38	ITE IL			
332938	320584			<1						1				1		
332547	320586			<1		<1										
333003	320587		21	16								30			<1	
333004	320588			<1						26		<1				
332938	320589			<1				1.1		11			1			
333006	320589		1	<1								<1				
333007	320590		<1	<1						81		16				
332432	320592		1.00	4								4		/		
333010	320593		10	4				1				6				
333047	320594	18	1							15				4		
333058	320596											<1				
333060	320597	3-0-01	<1							47				/		
331586	320598		58	3				113		439		<1				
332124	320598) - T_	
331570	320599		<1	2								7				
331570	320600			<1								25				
331570	320601		1	3								6				
331570	320602		12	<1								6				
333112	320604			<1								13				
333109	320605		14	14								6				-
333095	320606									50						
333147	320607	<1	105	22				-				8				-
330924	320609	<1	126	5						<1		4			<1	-
331210	320610												7931			
330890	320611		1772	5	/							20				
333196	320614			2								7				
30307	320615		162	171								1				
30307	320616		121	58								3				
333146	320617									-		<1				

C	0	Bo	CBM I	Ċh	CP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster	Pot	Shell	WS
333087		00	2	6			- 10	1.00	0.000	1.13		26				53
	320621		-	<1							V .	<1				
333254				<1								2				
333355			<1	<1								<1				
333337	320626		32	4								2				
333328			2713	120								3				
333329			130	220								6				
333362			99	1								2				
333339			35	13	7							<1	1			
	320633			<1		1			-			<1	-			
333389				<1								<1				
	320636			<1								11				
333357				3	1	-						<1				
	320638			<1						17		8				-
333497	320639		11	<1								11				1
333146			<1	2								<1			<1	
333308	320641		1	<1			-					<1				
	320641			-1								<1				
333477	320642			<1		1						12				
333479				<1								10				
333297				<1								6				
333544	320645 320646	_	2	3					-			10				
333112	320647			<1								8				
333299				5	-							12				
				26								6				
333310				<1	-							<1				
320458				<1	-	+			-			<1				
333459				<1								3				
333387				12								<1				
333574		_		12		-	-					<1				
	320654		12	<1						15		<1	-			
333248			12	<1		-				1.5		<1				
	320656			<1								4				
333502				2	-	-						1				
333558	320660				1	_				-	-		-			-

C	0	Во	CBM	Ch	CP	CPR)	Fe	FC	Glass	IW	Leather (g)	MM	Plaster	Pot	Shell	WS
333560	320661			<1								<1				
333560	320662		15	<1			= 1					<1				
333168	320663		<1	10						5		<1			1	
333468	320664			15						1		5				
333203	320665		1 1 1 1	<1				DOT				<1				A
333269	320666		3	<1								<1				
333168	320667			<1								<1				
333168	320668		31	26						100		1				
333586	320670							1				18	1			
333588	320671			2								13				
333574	320672			<1								14				-
333593	320673			<1								8				
333642	320675		<1	<1						1		<1				
333652	320676			<1								<1				-
333653	320677			<1								<1				
333638	320678		29	<1								4				
330578	330274	3		14						10000		10				1
330769	330317	_		<1						<1						
330884	330319								T V	41			/			
332643	330546											<1				
332727	320563											<1	1			

Key: C=context; <>=sample number; Bo=bone(g); CBM=ceramic building material(g); Ch=charcoal(g); CPR=charred plant remains(g); Fc=iron(g); FC=fired clay(g); Glass=glass sherds(g); IW=industrial waste(g); Leather=leather pieces(g); MM=magnetised material(g); Plaster=plaster pieces(g); Pot=pottery sherds(g); shell=shell fragments(g); WS=worked stone(g)

Table 7.3 Flot information

С	<>	WF	VF	CPR	Ch	Shell
20039	20001	5.4	10			
20063	20002	7.3	30	2	0.18	
20121	20003	1.2	10			
20149	20004	7.6	20	68		
20179	20005	0.6	5			
20081	20006	5	13			
20202	20007	3.9	10			
20254	20008	1.4	10			
20192	20009	2.6	17	26	<0.01	
20291	20010	1.5	13	(+)		
20292	20011	8.5	10	43		
20309	20012	26.5	35		0.28	
20300	20013	36.6	50	9		
20338	20014	118.2	325		100.58	
20356	20015	2.3	5		200.00	
20384	20015	14	35			
	20017	10.4	29	2		
20371			15	2		
20369	20018	2.1			<0.01	
20363	20020	5.5	25		<0.01	
20365	20021	<1	<1		0.40	
20384	20022	4.2	30		0.42	
20422	20023	30.3	80	8	1.66	-
20560	20023	64.6	140	24	2.26	
20537	20024	0.2	0.5			
20464	20025	49.4	110	(+)	3.48	
20465	20026	16.1	55	77		
20470	20027	0.3	<0.5			
20556	20028	57.9	120	4		
20486	20029	0.9	6	5		
20589	20030	1.3	10	1	0.29	
20593	20031	1.8	10			
20607	20032	1.4	1			
20608	20033	0.6	2			
20611	20034	6.1	5			
20577	20035	0.2				
20489	20036	34.6	60			
20554	20037	9.4	26	6	0.35	
20366	20038	13.8	20			
20613	20039	0.3	0.5			
20614	20040	7.4	12			
20623	20041	6.7	27			
20617	20041	7.7	55	8		
20467	20042	0.7	5	1	0.09	
	20043		60		0.05	
20581		20.3	5			
20468	20045	1.7		4		
20632	20046	18.7	90	_	1.2	
20630	20047	3.9	30	(+++)	1.3	
20639	20048	26.4	60			
20643	20049	4.6	5	-		
20622	20050	15.2	20	3		
20624	20051	1.2	2			
20706	20052	9.8	35	1		

С	<>	WF	VF	CPR	Ch	Shell
20529	20053	13	25			
20712	20054	4.8	20		2.42	
20687	20056	0.3	1			
20717	20057	10.2	15			
20741	20058	41.4	220	(++)	5.05	
20745	20059	31.8	50	33	2.08	
20577	20065	9.4	25		0.62	
20639	20066	1.2	7			1
20539	20067	5.1	5			
20650	20068	0.1	<1			
20643	20069	1.8	5	4		
20646	20070	0.5	1			
20743	20071	44.6	60			
20709	20072	50.2	65	2		
20606	20073	1.6	5	10		
20611	20074	1.2	10			
20470	20076	2.4	6			
20546	20077	9.3	14			
20749	20078	6.7	20	3	0.06	
20666	20079	7.2	7	5		
20419	20081	40.7	85			
20782	20082	7.7	30	19		
20812	20083	6.5	20	73	0.16	1
20826	20085	60.3	160	/5	0.12	
20827	20085	9.6	20	3	0.42	
20829	20086	12.9	25	1	0.42	1
		-	1	1	-	-
20831	20088	0.3		2		
20854	20090	23.3	45			
20833	20092	0.5	7	2		
20896	20093	1.4		3		
20887	20094	1.2	10			-
20889	20095	1	8	4	0.45	
20893	20097	1.2	6	1	0.16	
20918	20100	1.6	15		2.24	
20916	20101	7.3	25		<0.01	-
20930	20103	23.1	50			
20924	20104	2.1	8		0.1	
20926	20105	4.5	25		0.45	
20932	20106	20.8	30			
20934	20107	2.2	10		0.14	-
20943	20108	9.2	35	13	<0.01	
20942	20109	0.3	4	3		
20942	20110	2	15			
20942	20111	3.1	10			
20942	20112	1.2	10	2		
20952	20120	0.9	3	7		
20973	20121	8.7	16	2		
20974	20122	17.2	45	4	0.23	
20942	20123	0.5	3	1		
20942	20124	12.3	15			
20942	20125	2.3	7			
20942	20126	1.1	5	1	0.06	
20895	20127	6	32	2	0.27	

C	<>	WF	VF	CPR	Ch	Shell
20977	20128	0.5	5	1		
20983	20129	17.7	40	3	<0.01	
20990	20130	6.4	15	26	0.18	
20991	20131	2.8	10			
20998	20132	3.6	15	2	0.19	
30007	20138	10	15		0.06	
30009	20139	23.7	50	3	0.85	
20988	20142	0.2	<1			
20975	20143	76.6	127	4	1.89	
30021	20144	0.1	<0.5			
30022	20145	25.8	50	9	0.19	
30050	20147	3.1	10		0.18	
20763	20148	0.9	3		0.17	
30052	20149	10.6	16		0.09	
30056	20151	15.2	30	1	0.4	
30064	20153	13.8	26	5	0.97	
30068	20154	32.5	90	(++)	2.02	
30070	20155	1.6	3	3		
30074	20156	0.7	2	1		
30074	20157	1.3	5			
30083	20158	38.6	135	12	0.07	
30094	20160	39.7	50	4	0.94	
30108	20161	19.7	60	42	0.64	
30123	20162	1	10		0.0.	
30129	20163	118.5	190		7.84	
30137	20164	17.8	80	7	4.62	
30140	20165	0.5	1			
30142	20166	3.1	15	2	0.56	
30146	20168	1.3	4			
30115	20169	9.7	33			
30152	20170	17.7	37	67	0.52	
30166	20173	3.4	25	1	0.59	
30089	20175	0.7	3	-	0.00	
30158	20176	7.3	25	3	0.5	
30173	20177	37.4	80	1	0.0	
30173	20178	5.6	30	-		
30180	20179	1.4	4			
30171	20180	0.5	4	12		
30172	20181	0.6	4	12		
30196	20182	0.8	5	3	0.1	
30197	20183	1.2	4		0.2	
30200	20183	0.9	3			
30200	20185	0.5	3			-
30202	20185	2.2	15			
30219	20188	1.7	3			
30213	20189	24.2	35	1		
		16.5	60	18	3.09	
30222 30224	20190	9.4	30	10	3.03	
30148	20191	14.7	30	5	0.85	
30243	20193	2.6	18		0.83	
30245	20194	75.3	210	2	23.86	
30254	20195	12.7	40	1	1.42	
20968	20198	4.2	35	-	4.74	

C	<>	WF	VF	CPR	Ch	Shel
30106	20200	11.9	11			
30091	20201	4.4	9			
30256	20203	4.1	10			
30259	20204	16.1	25	8	0.47	100
30260	20205	1.9	37		0.12	
30268	20206	6.2	50			
30269	20207	19.7	30			
30228	20208	25.5	35			
30281	20209	4.7	20	3		
30300	20210	35.3	40		0.06	
30303	20210	6.9	90	2	0.00	
30300	20211	1	12	-		
30306	20212	3	12		<0.01	
30310	20213	0.5	1		10.01	
30293	20214	7.4	15			
30312	20215	18.4	45	4	0.75	
		-	22	1	<0.01	
30329	20217	2.6	5	1	<0.01	
30338	20218	2.4		1	0.21	
30340	20219	14.6	21		0.21	
30304	20220	18.3	20			-
30342	20221	20.6	30	5	0.00	
30332	20222	64	100	4	0.83	
30309	20223	16.8	20		0.00	
30350	20224	32.3	30	3	0.08	-
30362	20227	2.9	10	4		
30366	20228	2.5	10			
30347	20229	6	20			
30381	20230	1.2	2	2		
30383	20231	8	25	2	0.27	
30242	20232	24.4	40	11	2.02	
30261	20233	58.1	120	28	5.98	
30402	20234	2.2	14	4		
30387	20236	6.7	15	1	0.18	
30389	20237	0.9	12			
30409	20238	7.1	12			
20909	20239	9.7	20	47		
30413	20240	1.6	14			
30396	20241	32.6	40		0.07	
30430	20244	3.5	5			
30427	20245	7.1	12	(+)	0.18	
30441	20246	14.2	30			
30414	20247	2.1	3			
30444	20248	0.7	14			
30445	20249	1.4	10			
20998	20250	3.6	10			
30458	20251	2.2	4			
30461	20252	7.6	9			
30443	20253	10.4	16	1		
30434	20254	2.7	4			
30486	20255	0.7	1			
30504	20256	43.5	100	4	0.62	
30307	20257	9.8	20		0.24	
30510	20258	14.3	40		0.75	

С	<>	WF	VF	CPR	Ch	Shell
30514	20259	36.2	40	8	0.54	-1-1-1-1
30320	20260	16.9	70		1.18	
20908	20261	15.3	50	(+)	1.79	
30502	20262	4.9	10	1		
30307	20263	46.7	80	1	2.06	
30211	30272	9	30	-	<0.01	
331379	320042	31	48		10.01	-
330547	320264	0.6	4			-
330556	320265	0.0	1			
	320265	10.4	20			
330544	320268	3.7	20			
330572			35	2	0.4	
330549	320269	20.6	35		0.19	-
30494	320270	11.1		-		-
30378	320271	38.5	100	5	1.85	-
330600	320273	1.6	13		0.24	1
330580	320275	14	90		0.35	1
330579	320276	25.9	150		0.35	
330605	320278	37.6	80			
330607	320279	1.6	15		0.00	
330595	320280	33.6	50	3	0.66	
330632	320281	5.8	15		0.33	
330644	320282	215.6	533	8	72.58	-
30343	320283	27.3	36			
30553	320284	17.3	35			
330655	320285	0.2	1		0.18	
330675	320286	0.6	3			
330705	320287	1.2	8	1		
330709	320288	30.1	400	5	0.19	
30394	320289	27.3	45	1	0.25	1
30343	320290	32.6	50		0.21	
330711	320291	40.9	210		6.73	
330651	320292	100	300	5	2.18	
330652	320293	5.1	35	5		
330717	320294	6	36	5	0.57	
330719	320295	57.3	80	3	0.8	
330736	320296	7.8	35	2		
330595	320297	5.4	35	1	<0.01	
330751	320298	3.8	15			
330744	320299	23.9	40		0.32	
330738	320300	7.8	9		/	
330740	320301	0.1	<0.5			
330771	320302	0.4	4			
330690	320303	3.4	45	1	<0.01	
330659	320304	1	5	10	0.1	
330784	320305	11.8	130	28	0.86	
30263	320306	30.8	35	1	0.06	
330786	320307	4.1	25	1		
330788	320307	17.2	35	-	0.16	
	320308	0.9	5	2	3.10	
330777	320310	9.5	27	1	0.26	
330779	320310	29.9	37	-	0.20	1
330804			90	13	1.41	-
330813	320312	13.7 9.6	70	13	0.2	-

С	<>	WF	VF	CPR	Ch	Shell
330851	320314	2	18	2	7	
330861	320315	1.3	2			
330862	320316	7.2	25			
330823	320320	7.6	34			
330878	320321	9.2	30		0.3	
330854	320322	3	25	1		
330899	320323	4	10		0.07	
330648	320324	4.7	11	2	<0.01	
330855	320325	13	20			
330903	320326	1.2	7		0.08	
330812	320327	59.7	200	19	0.64	
330914	320328	1.3	15			
330892	320331	16.1	39		0.83	
330894	320332	17.9	30		0.31	
330922	320333	10.3	40			
330926	320334	0.4	2			
330935	320335	0.2	0.5			
330933	320336	1.8	20	1		
330939	320338	19.1	35			
330829	320338	7	15			
330941	320333	2.1	3	-		
330941	320340	2.1	15	1		
		3.5	8	_ +		
330949	320342			10	0.14	-
331393	320342	51.5	60	10	0.14	
330761	320343	0.1	0.5	(++)	1.93	-
331392	320343	18.4	90			-
330962	320344	1.3	16			-
330715	320346	3.3	25			-
330968	320347	1.4	1			-
330918	320348	22.2	40	10	1.58	
330982	320351	10.1	30			
330985	320352	1	5		0.08	
330995	320353	0.8	2			
331003	320354	43	100	1		
330993	320355	11	35			
331000	320356	32.5	45	2	0.09	
330814	320358	57.3	200	10	0.53	
331008	320360	12.9	30			
331007	320361	3	15	2		
331007	320362	16	80	8		
331042	320363	10.8	19	8	0.27	
331036	320365	13.7	15		0.08	
331031	320366	25.4	60	7	1.69	
331052	320367	11.3	55	20	0.54	
331040	320368	1.1	3		0.15	
331076	320369	3.7	80			
330621	320370	31.4	90		0.3	2
330875	320371	0.5	1			
330877	320372	5.2	10			
331087	320372	1.2	6	1		
330872	320373	37.7	45		<0.01	
331064	320374	14.1	20		0.06	
221004	320375	19.8	80		8.73	

C	<>	WF	VF	CPR	Ch	Shell
330843	320378	8	10			
331151	320379	43	50			
331136	320381	7.9	90			
330749	320382	2	10			
330975	320383	30	36		0.22	
331163	320384	0.2	0.5			
331096	320385	1.9	30			
331068	320386	15.3	35	11		
331174	320388	58.2	100	12		1
331079	320389	0.6	7			-
330739	320390	37.4	55	20		
331172	320391	9.4	15			
331140	320392	1.7	4			
331183	320393	174.3	350	2	3.78	
331221	320394	4.5	30	-	0.08	
331221	320394	71	100	4	0.84	
		9.7	15	-	0.11	
331213	320396 320397	13.4	25	-	0.11	
331223					0.90	-
331234	320398	0.4	4			
331005	320399	4.9	35	4	0.2	-
331243	320400	27.3	40	4	0.3	-
331244	320401	36	100	8	0.58	
331225	320402	4.1	5			
331247	320403	0.4	0.5			
331258	320404	7.6	33	28	0.69	
331264	320405	11.4	15	2	0.06	
331205	320406	35.1	70		10.87	
331267	320408	176.8	570		77.81	
331161	320409	10.9	19			
330759	320410	1.3	16	1		
330872	320411	9.6	14	10	0.07	
331251	320412	1.5	3			
331294	320413	23.8	30	5		
30263	320414	6.1	12			
331206	320415	24.1	30			
331319	320416	14.1	33		<0.01	
331310	320417	43.5	60			
331312	320418	3.4	3			
331312	320419	3.6	4		<0.01	
330704	320421	10.1	71			
331299	320422	0.8	1			
331300	320423	0.2	<0.5			
331303	320424	3.8	7			
331714	320424	3.3	35			
30113	320425	137.4	280			
331367	320426	4.6	17		0.41	
331363	320427	16.5	36		146.9	
331359	320428	3.7	3		<0.01	
331333	320429	4.5	30			
331380	320430	5	30			
331382	320431	30.9	56			
331401	320431	0.6	14	1		
331401	320434	1.8	9			

_		NA/E	VF	CPR	Ch	She
C 331400	<> 320436	WF 0.9	11	6	Cii	3110
331404	320430	23.2	200	-		
331403	320437	32.6	36			1
331424	320438	11.3	50	11	1.23	
331032	320439	23.9	100	61	0.9	
331419	320441	55.4	140	(+)	6.53	
331267	320442	7.8	10		5.00	
331165	320443	0.9	5		-	
331434	320445	6.5	65	3	0.59	
331436	320446	1	10	7	-	1
331446	320447	16.2	55	63	2.08	
331427	320448	3.6	35	34	0.23	
331420	320449	19.7	95	14	0.21	
331129	320450	38.1	80	5	0.63	
331477	320451	1	4			
331492	320452	11.3	38			
331490	320454	32.3	65	15	2.4	
331484	320455	0.4	1		0.05	
331240	320457	2.5	14	10	0.43	
331203	320458	0.6	0.5			
30344	320459	0.9	1.5	7		
331430	320460	16.1	45	(+)	2.14	
331431	320461	5.1	30	38	0.37	
331493	320462	5.3	15			
331455	320463	2.1	4			
331188	320464	27.4	80	63	3.93	
331626	320465	4.4	15	1	0.45	
331628	320466	5.8	25	16		
331630	320467	16.9	26	21	0.22	
331639	320468	43.1	60	9	0.76	
331641	320469	16.1	30	7	0.14	
331643	320470	29.6	45		0.46	
331683	320471	30.1	35	4	0.22	
331695	320472	2.5	15	54		
331771	320473	2.2	10			
331114	320474	0.7	5	(+)		
330846	320476	31.6	55		<0.01	
331779	320477	44.9	50	23	0.21	
331824	320478	17.1	110	51	3.4	
331821	320479	6.3	25	2	<0.01	
331820	320480	30.9	40	3	<0.01	
331828	320480	6.2	10	5		
331827	320481	21.8	50	(+++)	1.13	
30474	320482	0.1	<0.1			
331738	320483	4.7	10			
331618	320484	5.1	12			1
331907	320485	3.8	10			1
331828	320486	1.1	5	4		
331902	320487	3.6	11			
331920	320488	3.2	15	23	0.09	
331952	320489	7.4	25	5		
331959	320490	7.5	25	11	0.4	
331995	320491	14.9	45	4		1

C	<>	WF	VF	CPR	Ch	Shell
331994	320492	38.7	90	16	0.12	
331959	320493	3.4	6	1	<0.01	
332043	320494	25.8	100	2	0.9	
331971	320495	12.8	21	_		
332041	320496	0.9	2			
332103	320498	30.5	60	(+)	0.85	
332029	320499	8.5	25		<0.01	
332139	320500	8.4	35		10.00	
332052	320501	10.6	30	14	0.1	
331956	320503	36.9	37	13	0.48	
331390	320504	4.9	13	(++)	0.1	
332195	320504	1.7	5	2	<0.01	
332180	320505	29	90	15	2.52	
30500	320506	1.4	10	17	2.52	
		3.6	7			
332156	320507	32.1	35			
332170	320508			1	0.13	1
332195	320509	15.8	25	1	0.13	1
332193	320510	37.9	30	1	0.08	-
332217	320511	0.5	7			-
332298	320514	7.2	10		0.26	
332341	320516	12.8	13		0.26	
332334	320517	<0.01	<0.5			
332337	320518	28.8	30			
332384	320519	6	8			
332386	320520	1.8	2			
332351	320521	12.4	20		0.09	
332405	320522	0.5	0.5			
331388	320523	36.6	55	58	1.71	
331958	320524	7.6	20			
332307	320525	0.5	1			
332306	320526	2.8				
332305	320527	0.1	<0.5			
332465	320528	0.6	<0.5			
332470	320529	2.5	4	39		
333206	320530	0.3	1			
332064	320532	0.8	3			
332064	320533	6.4	30	2		
332353	320534	26.2	34	1	0.05	
332411	320535	41.2	60	6	0.36	
331393	320536	0.4	0.5			
332486	320537	8.8	11	2	<0.01	
332489	320538	10.6	14			
332477	320539	2.5	13		0.09	
332588	320540	16.7	25	1	0.22	
332555	320541	2	12			
332602	320542	0.1	0.5		0.66	
332538	320543	10.2	25			
332540	320544	0.2	0.5			
332563	320545	0.2	0.5			
332669	320547	3.9	15			
30285	320549	1.1	9	21		
332335	320550	33.1	100			
331955	320551	3.2	10			

Ċ	<>	WF	VF	CPR	Ch	Shell
332707	320553	0.5	4			
331693	320554	8.7	9			
331692	320555	0.8	1			
331691	320556	1.4	1			
331690	320557	1.4	4	1		
332701	320558	7.4	30	(++++)	0.08	
332543	320560	5.8	18	76		
332712	320561	9.6	100			
332722	320562	1.6	13			
332728	320563	1.2	5	2		
331674	320564	5.1	14	6		
331672	320565	0.5	1			
332759	320567	1.3	5			
332731	320568	9.4	25	9	0.31	
332528	320569	1.3	2		0.02	
332836	320570	0.2	1			
332800	320572	1.3	1			1
332859	320572	2.9	7			
332445	320574	12.7	40	52	0.05	
		13.6	16	JZ	0.03	-
332686	320576		5	1		
332796	320577	2.8	25	14		
332957	320580	11.1		14		
332956	320581	0.5	0.5		-0.01	-
332955	320582	0.2	0.5		<0.01	-
332461	320583	110.9	140		0.25	-
332938	320584	0.5	0.5			_
332547	320586	1	8	44	0.26	-
333003	320587	45	115	11	0.26	-
333004	320588	2.7	10	24		
333006	320589	0.2	1			
333007	320590	62.7	50			
332432	320592	27.6	55	20		-
333010	320593	0.2	1			1
333047	320594	1.2	1			-
333057	320595	2.6	5			
333058	320596	<0.01	<0.01			-
333060	320597	0.4	0.5			-
331586	320598	16.3	25			
331570	320599	5.7	10			-
331570	320600	21.5	35			-
331570	320601	9.9	13			-
331570	320602	0.2	1			
333112	320604	13	22			-
333109	320605	1.2	7			-
333095	320606	9.2	10			-
333147	320607	2.8	10			
333157	320608	8.1	5			
330924	320609	5.9	25			
331210	320610	0.3	1			
330890	320611	6.9	20			
333180	320613	0.7	2			
333196	320614	18.8	20			
30307	320615	2.1	10			L

С	<>	WF	VF	CPR	Ch	Shell
30307	320616	8.1	15	2		
333146	320617	78.5	65			
333194	320618	0.8	2			
333087	320619	23	50	54	0.14	
333130	320621	4.8	10	2		
333355	320624	1.5	3			1
333327	320626	0.7	2			
333328	320627	49.3	100		0.5	
333329	320628	234.7	660		60.77	
333362	320629	2.1	5	6		
333336	320630	4.8	6			
333339	320631	0.3	1			
333401	320633	1.1	4			
333318	320634	0.3	1			
333389	320635	2	4			
333359	320636	1.9	10			
333357	320637	0.2	<1			
333337	320639	2.2	5			
333146	320640	1.9	5			
333308	320640	1.5	1			
333475	320642	0.6	1			
333477	320642	0.0	1			
	320644	0.1	1			
333479	320645	1.5	5	4		
333297			15	11	0.88	
333544	320646	2.7		11	0.00	
333112	320647	24.4	55			-
333299	320648	0.1	<1		0.1	-
333310	320649	8.8	15		0.1	-
320458	320650	6.3	10	_		-
333459	320651	2.8	3			-
333387	320652	0.7	1			
333574	320653	15.7	20			
333481	320654	0.1	<1			-
333248	320655	1.2	5	3		
333506	320656	7.8	10			
333530	320657	1.4	5	6		
333502	320658	4.7	10	1		
333558	320660	0.2	<1			
333560	320662	0.9	10			
333168	320663	2.4	3			
333468	320664	20.9	40		3.97	
333203	320665	6.2	12			
333269	320666	2.1	5			
333168	320667	0.3	2			
333168	320668	82.4	100			
333586	320670	5.2	13	5		
333588	320671	20.6	35			
333574	320672	103	510	3		
333593	320673	0.2	1			
333611	320674	0.5	3			
333642	320675	0.4	2			
333652	320676	10.8	55			
333638	320678	2.1	5	7		

С	<>	WF	VF	CPR	Ch	Shell
330689	330277	19.5	80	51	1.28	
330884	330319	4.1	6			
332643	330546	0.1	<0.5			
332727	320563	0.6	1	18		

Key: C=context; <>=sample number; WF=weight of flot(g); VF=volume of flot(ml); CPR=count of charred plant remains; Ch=charcoal (g); Shell=shell fragments(g)

Table 7.4: Quantification of bone by context

Context	Species	Includes elements	MNI	Butch	Gnaw	Path	Age	Measure?	Condition
30284	Large-sized ungulate	Limb bone fragment	1	N	N	N	N	N	Very poor
330601	Bos sp	Phalange, tooth, MC, MT, pelvic frag	1	N	N	N	N	N	Very poor
330733	Large-sized ungulate	Probable limb bone fragments	1	N	N	N	N	N	Very poor
330749	Bossp	Tooth fragments	1	N	N	N	Α	N	Poor
330949	Not identifiable	Limb bone fragments	-	N	N	N	N	N	Poor
331007	Not identifiable	Limb bone fragment, tiny (SF 320048)	1	N	N	N	N	N	Poor
331008	Not identifiable	Probable limb bone fragments		N	N	N	N	N	Very poor
331098	Medium-sized ungulate	Limb bone fragments (SF 320036)	1	N	N	N	N	N	Poor
331379	Not identifiable	Burnt limb bone fragments		N	N	N	N	N	Poor
331535	Bos sp	Tibiae, femur, humerae, radii, phalanges, calcaneii	3	N	N	N	A	Y	Very poor
331854	Bos sp	Tooth fragments	1	N	N	N	N	N	Poor
331963	Not identifiable	Probable limb bone fragments	-	N	N	N	N	N	Very poor
332049	Bos sp	Tooth fragments	1	N	N	N	N	N	Poor
332167	Ovid/Caprid sp?	Tooth fragments	1	N	N	N	N	N	Poor
332796	Bos sp	Tooth fragments	1	N	N	N	Α	N	Poor
333047	Equus sp, medium- sized ungulate	s sp, medium- Tooth fragments		N	N	N	N	N	Poor

Key= MNI= minimum number of individuals, Butch= any butchery marks observed?, Path= any pathologies present, Age= can an age be assigned?

Table 7.5: Quantification of bone from samples by context number

Context	<e></e>	Material	Qty 1-10	Qty 11-50	Weight (g)	Weight <1g	>4mm	<4mm
20930	20103	Bone	YES		0.5	YES	YES	
30093	20159	Bone	YES	-	0.5	YES	YES	10
30108	20161	Bone	YES		0.5	YES	YES	-
30137	20164	Bone	YES	1.	0.5	YES	YES	- 11-
30281	20209	Bone	YES	-	0.5	YES	YES	11
30340	20219	Bone	YES		0.5	YES	YES	
20149	20004	Bone	YES	-	0.5	YES	-	YES
20489	20036	Bone	YES		0.5	YES	YES	-
20617	20042	Bone	YES		0.5	YES	YES	C.V

Context	<e></e>	Material	Qty 1-10	Qty 11-50	Weight (g)	Weight <1g	>4mm	<4mm
30312	20216	Bone	YES	-	0.5	YES	YES	-
30261	20233	Bone	YES		0.5	YES	YES	
20909	20239	Bone	YES		0.5	YES	YES	-
30242	20232	Bone	YES		0.5	YES	YES	-
30441	20246	Bone	YES	-	0.5	YES	YES	
30441	20246	Bone	YES	-	0.5	YEŞ		YES
330578	330274	Bone	YES	-	3	-	YES	-
330659	320304	Bone	-	YES	0.5	YES	YES	-
330777	320309	Bone	YES	-	2		YES	-
330779	320310	Bone	YES	-	0.5	YES	-	YES
330779	320310	Bone	YES	-	1	-	YES	-
330813	320312	Bone	YES	-	0.5	YES	YES	-
330813	320312	Bone	YES	-	0.5	YES	-	YES
331379	320042	Bone	YES		0.5	YES	YES	
330595	320280	Bone	YES		0.5	YES	YES	-
303415	320289	Bone	YES	-	0.5	YES	YES	-
330949	320342	Bone	YES	-	0.5	YES	YES	
331007	320362	Bone	YES	-	3	-	YES	-
331040	320368	Bone	YES	-	0.5	YES	-	YES
331005	320399	Bone	YES	-	0.5	YES	YES	-
331244	320401	Bone	1	YES	0.5	YES	YES	-
331294	320413	Bone	YES	-	0.5	YES	-	YES
331312	320418	Bone	YES		0.5	YES	YES	-
331312	320419	Bone	-	-	1	4 -	YES	
331714	320424	Bone	YES	-	0.5	YES	YES	-
33143	320460	Bone	YES	-	0.5	YES	YES	-
331641	320469	Bone	YES	-	0.5	YES	YES	-
331683	320471	Bone	-	YES	8	-	YES	
331683	320471	Bone	1 -	-	4	116-	-	YES
331824	320478	Bone	YES		0.5	YES	YES	-
331994	320492	Bone		YES	1	4/5-	YES	-
332041	320496	Bone	YES	-	0.5	YES	YES	-
332041	320496	Bone	YES	-	0.5	YES	-	YES
332305	320527	Bone	YES		0.5	YES	YES	

Context	<e></e>	Material	Qty 1-10	Qty 11-50	Weight (g)	Weight <1g	>4mm	<4mm
332470	320529	Bone	YES		0.5	YES	YES	-
333047	320594	Bone	-	YES	6		YES	- 1
333047	320594	Bone	YES		12		YES	-
333047	320594			111-	0.5	YES	-	YES
330814	320358	Bone	1.	YES	0.5	YES	YES	-
331258	320404	Bone	YES		0.5	YES	YES	
331490	320454	Bone		YES	10	- 1-	YES	
331490	320454	Bone		YES	0.5	YES	-	YES
333206	320530	Bone	YES		0.5	YES	YES	-
332335	320550	Bone	YES		0.5	YES	YES	- 1
332445	320574	Bone		YES	0.5	YES	YES	
333147	320607	Bone		YES	0.5	YES	YES	
330924	320609	Bone	YES	1	0.5	YES	YES	-
TOTAL					73.5			

Key= <E>= sample number

19 APPENDIX 8

19.1 Artefact Assessment Report: Wardell Armstrong, 2020

AREA 20: FINDS ASSESSMENT

Introduction

A total of 691 bulk finds, weighing 40,340g, were recovered from 121 contexts during an archaeological investigation on Area 20 (Table 2). A further 107 artefacts were allocated Small Find numbers with a combined weight of 85,549g, recovered from 66 contexts (Table 3). The finds assemblage was transferred to Carlisle and assessed by Wardell Armstrong.

All finds were dealt with according to the recommendations made by Watkinson & Neal (1998) and to the Chartered Institute for Archaeologists (ClfA) Standard & Guidance for the collection, documentation, conservation and research of archaeological materials (ClfA 2014b). All artefacts have been boxed according to material type and conforming to the deposition guidelines recommended by Brown (2011), EAC (2014) and The Oriel Museum. The project has the unique identifier WA 2020 / CL12283 / 117360.

The material archive has been assessed for its local, regional and national potential in line with the archaeological research framework for Wales (www.archaeoleg.org.uk).

The finds assessment was compiled by Sue Thompson. Lithic artefacts were assessed by Miguel Gonzalez. The identification of the Roman coin was undertaken by Frank Giecco.

Quantification of bulk finds by material and context is given in Table 2 and Small Finds in Table 3; quantification of lithic artefacts is given in Tables 1 and 4. Quantification of finds recovered from the environmental samples is given in Table 5.

The metal artefacts were sent for x-radiography analysis; the plates are as follows: XRK20/1; XRK20/2; XRK30/3; KXR20/5.

Roman Pottery

A total of 82 Roman pottery sherds were recovered from 25 contexts and weighing 771g (Table 2). They were in poor to moderate condition with some evidence of post-depositional abrasion.

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 2019 online).

The Roman pottery comprised a limited range of fabrics including Black Burnished ware (DOR BB1), Samian ware (SAM), Mancetter-Hartshill white ware (MAH WH) along with a very small quantity of coarse oxidised ware (CO OX) and highly abraded colour coated ware (LNV CC?) and small body sherds of possible amphora (BAT AM 1 / 2).

Vessel types included black burnished ware jars and dishes, samian bowls and dishes as well as Mancetter-Hartshill hammer head mortaria. The pottery assemblage has a broad Roman span but is largely early 2nd to 3rd century in date.

Possible briquetage fragments were also recovered (330733) (30428) comprising coarse sandy oxidised fabrics. The very coarse fragments are potentially Cheshire briquetage, used in the production and transport of salt and Iron Age to Roman in date (Morris 2012, 176-177)

(https://www.mellorarchaeology-2000-

<u>2010.org.uk/archaeology/finds/briquetage.htm</u>). Further possible examples were recovered along with the fired clay.

Further analysis is warranted on the Roman pottery and ceramic assemblage, including illustration and also comparative research with other archaeological sites from Wylfa plus archaeological sites in the wider vicinity. Illustration is warranted on all diagnostic sherds, especially rims and bases plus any refitting sherds/decorated pieces and any showing repairs. Pottery from (20192), (20364), (20422), (20473), (20636), (30149), (30064), (330678), (331110) and (331646) should be illustrated along with the briquetage from (30428), (320069), (330733) and (331854).

Post-medieval Pottery

A total of 32 post-medieval pottery sherds were recovered from 11 contexts, weighing 448g (Table 2). The sherds were in moderate condition with some evidence of post-depositional abrasion.

The pottery was examined with a x10 hand lens and recorded according to nationally published guidelines (PCRG, SGRP & MPRG 2016). Where possible, mnemonic fabric codes were assigned when they could be identified; this was undertaken using material published by MOLA (2015).

The post-medieval pottery was dominated by black-glazed Buckley-type red earthenware (BUCK, CRE), with a small quantity of clear-glazed red and buff earthenware as well as refined white earthenware with transfer print decoration (TPW).

The post-medieval pottery represents typical household vessels including large utilitarian bowls, jars and table ware including a large jug and a transfer printed tureen. The assemblage has a likely date range of late 18th to 19th century.

No further work is warranted on the post-medieval pottery.

Fired Clay

A total of 326 fragments of fired clay fragments, weighing 2,558g, were recovered from 39

contexts (Table 2). The fired clay was in poor to moderate condition and tended to be small, abraded fragments.

In the main, the fired clay comprised daub fragments with frequent small stone inclusions. Occasional surfaces were noted among the fragments. Two distinct fabrics were noted; a soft easily abraded sandy daub with occasional small stone inclusions and a hard-fired fabric with very frequent sharp stone inclusions, which was frequently heavily fired or vitrified, and likely to be part of a kiln or furnace lining.

The fired clay assemblage includes fine-walled fragments of a coarse oxidised fabric with very frequent coarse stone inclusions. Although most of these fragments are small, occasional pieces are more diagnostic and may be further fragments of Cheshire briquetage (Morris 2012, 176-177).

It is difficult to confidently date the fired clay / daub fragments but other finds recovered from the area suggest a late prehistoric to Roman date.

Further work is warranted on the fired clay assemblage, including comparative research with similar material from other archaeological sites at Wylfa plus sites in the wider vicinity. Radiocarbon analysis of environmental material from contexts where fired clay was recovered is recommended to narrow down the date of the fired clay artefacts.

Industrial Waste

A total of 19 industrial waste fragments, weighing a combined total of 393g, were recovered from eight contexts (Table 2).

The industrial waste comprised possible slag, however, several fragments recovered as slag were vitrified fired clay, and most of the material may actually be heavily over-heated / overfired clay, burnt earth / turves or fuel ash rather than metal slag.

Further analysis on the industrial waste may be warranted, including XRF analysis which would alloy for the composition of the slags to be known and allow for an understanding of any processes involved in the technology. Further analysis alongside the fired clay may also be beneficial.

Iron

A total of seven iron objects, with a total weight of 772g, were recovered as bulk finds from three contexts and as unstratified material (Table 2). The iron was in poor condition and all artefacts were heavily corroded.

The iron artefacts include nails and a tapered object of unknown purpose, possibly an agricultural implement. A large socketed object was recovered from context (20009).

A broad date range of Roman to post-medieval has been assigned to the iron artefacts.

Further work is not recommended on the iron artefacts.

Glass

A single glass artefact was recovered from context (20753), weighing 6g (Table 2). The glass comprised a body shard of green glass and was abraded.

The glass shard was small but likely a fragment of bottle glass, possibly an onion bottle. Frequent tiny air bubbles were noted within the glass.

A date of post-medieval (late 18th to 19th century) has been assigned to the glass.

No further work is recommended.

Stone

A total of 53 stone artefacts were recovered as bulk finds from 24 contexts and as unstratified material during the excavation at Area 20, with a combined weight of 31,008g (Table 2). Four stone finds were missing from the assemblage.

The stone artefacts included both worked stone and modified natural pebbles and were recovered as both bulk and small finds. Worked stone included rubbers for saddle querns showing heavy use wear. Similar objects were recovered during the A55 road scheme which dated to the Iron Age and appear to have remained in use into the Romano-British period (Smith 2012). Further examples were allocated small find numbers.

Several whetstones were recovered which included both worked stone fragments and naturally elongated pebbles with artificial wear. It is difficult to confidently assign a date to these objects, however, a late prehistoric to Roman date is likely. The whetstones would have been used as sharpening stones.

Textile production was indicated by possible loom weights comprising flat circular slate discs, with further examples recovered as small finds. Slate discs without perforations were also recovered suggesting they were being made on site. A thicker flat circular disc of sandstone was also recovered which was a possible pot lid.

Several hammerstones were recovered as bulk finds. A well-made convex stone fragment with a partial hourglass perforation recovered from context (20004) was a possible perforated hammerstone or mace of Mesolithic to Neolithic date; it is similar to an artefact recovered from Hampshire (HAMP-399025, PAS online 2020). A handheld hammerstone was recovered from context (332130), comprising a flattened sub-circular pebble with heavily pecked and worn flattened ends. Two oval hammerstones with both surface wear and areas of peck marks were also recovered from context (333259). It is likely that the

hammerstones had a range of uses over a long period, relating to the lithic artefacts and possible later metal-working.

Several unworked stone objects included quartz and occasional small fragments of burnt stone were recovered, along with occasional naturally-worn stones with no obvious artificial wear and which were not considered archaeologically significant.

The worked stone artefacts have a broad date from prehistoric to Roman.

The worked stone artefacts warrant further analysis and they should be considered alongside the small finds. Illustrative work is recommended on all visibly worked pieces, tools and functional domestic objects (e.g. pot lids) from (20004), (20243), (20422), (30070), (330601), (331437), (331443), (332130), (332240) and (332259). This should be undertaken along with comparative research with the other archaeological sites at Wylfa and sites in the wider vicinity.

Lithics

A total of 24 (322.48g) lithics were recovered during the archaeological excavation at Area 20 (Tables 1 and 4).

All the lithics within the assemblage were individually examined and assigned to a category according to debitage, core or tool type. Cores/core fragments were further classified by platform and removal type; complete specimens and tested nodules were individually weighed. The condition and degree of cortication was noted for each artefact, along with evidence of burning, breakage and use. Dating was attempted throughout. The lithics were individually numbered and recorded in order to facilitate revisiting the material and appending further data at a later stage.

Condition. The condition of the lithics is very good, with only one piece with a light cortication, most of the assemblage is in a fresh or minimally damage condition implying negligible post-depositional disturbance.

Raw material. The entire assemblage is made up equally of two lithologies, a black fine grain, good quality local chert (45.8%) and flint (54.1%). Flint is not easily available, locally only from pebbles from the drift or on the beaches, eroded from the drift, in quite small sizes. Black chert is more easily available from cobbles from the drift or form in situ tabular material outcropping in the limestone of North East Anglesey. The chert is available in larger pieces but is not of such good flaking quality as the flint.

The assemblage. The assemblage derives from the fill of cut features, the majority of which produced very small assemblages under 5 worked lithics. In many cases, it is likely that these smaller assemblages represent residual material caught up in the fills of later features.

The assemblage is made up of 66.6% debitage, 12.5% of cores and core fragments and 20.8% of retouched tools, with very similar proportions in both lithologies.

	Flint	Chert
Cores	2	1
Debitage	8	8
Retouched Tools	3	2

Table 1. Composition of the assemblage

The flakes and blades in this site are both hard and soft hammer struck, with some having evidence of platform preparation. The debitage includes a single platform blade core and a discoidal and tabular single platform flake cores, together with a crested blade (332673), which is the only evidence for core rejuvenation.

Apart from the cores, which appear to be Mesolithic in date, the remainder of this assemblage could date to the Mesolithic or Early Neolithic, although the bladelets are more likely to be Mesolithic.

Also forming part of this assemblage are five scrapers, two side scrapers over flakes, two thumbnail scrapers over blades and a fragment of a circular scraper over a tertiary flake. The technological traits of the assemblage, particularly the characteristics of the retouched tools, strongly suggests a Late Mesolithic / Early Bronze Age.

Small Finds

A total of 107 objects were recovered as small finds from Area 20 with a total weight of 85,549g (Table 3). The small finds comprise stone and lithic artefacts, fired clay, metal, pottery and wood, and were in were in poor to moderate condition.

Stone: a total of 16 stone artefacts with a combined weight of 83,928g were recovered as small finds from 46 contexts.

The stone small finds include quern fragments, dominated by saddle querns. Rotary querns include the top stone of an almost complete beehive quern **SF20006**, and half of a base stone **SF20012**. A small possible rotary quern or mortar include small and roughly shaped stone fragment **SF20009** with a deep worn bowl with a 50mm diameter central hole but which also has a small hollow within the bowl.

Saddle querns are largely represented by broad well-worn rubbers (SF20018, SF320031, SF320078, SF331392). The rubbers recovered as both bulk and small finds were of a similar coarse sandstone and 330x140x50mm size. Fragments of saddle querns were also recovered well-worn grinding areas SF20021 and SF320080

SF320089 was a possible trough quern similar to an example recovered from Cefn Cwmwd (Smith 2012), with a flat base and shallow concave hollow but is fine rather than coarse sandstone which may suggest use as a grinding stone rather than quern.

A range of natural shaped pebbles adapted for use as rubbing stones, including a wedge shaped with possible wear on base SF20014, and elongated pebble with concave wear SF32006 and SF320058. SF320066 was a flat based fine sandstone rubbing or polishing stone with a well-worn base also possible pecked. Roughly spherical stones coarse sandstone SF320056 and SF320067 had several areas of wear and were likely used as rubbing / polishing stones SF331375 was a well worn rounded pebble of coarse pudding stone? Likely used as a rubbing or grinding stone.

SF320033 comprises a fragment of worn sandstone and is possibly natural.

Several whetstones were recovered including **SF320057**, a rectangular fragment of a possible whetstone (chert?) shaped following the strata of the rock formation. **SF32004** was a 'cache of stones' which included a squared whetstone of fine-grained stone and two elongated pebbles with wear.

Two waisted stones were recovered **SF20013** and **SF20019**, which had a pecked waist for hafting and were probably used as metal working hammers (Smith 2012). A similar object recovered from Gwynedd is recorded on the Portable Antiquity Scheme with a Bronze Age date GAT-09E9E4 (PAS online 2020). A small flattened circular bun-shaped stone **SF20020** also displayed pecking on both surfaces is a likely hammer-stone.

Several spindle whorls were recovered which were flat circular with a central hole drilled from both sides (SF20008, SF20010, SF20015, SF20016, SF320022, SF320024, SF320027, SF320045). A very well-made spindle whorl SF320074 with a narrow groove surrounding the central hole on each side was noticeably smaller and lighter than most of the whorls. A single spindle whole was noted to have any form of decoration, SF320027 had crudely carved radiate lines on one face. It is difficult to date these artefacts because very similar objects were used over a wide period, however, the average central hole size of 7mm suggests a Roman date. (Walton Rogers 1997)

Several perforated objects were also recovered similar spindle whorls, including a possible bead **SF320023** with a the central hole of 5mm which would be very small for a spindle, and a fragment **SF20017** which had a very large central hole of 15mm which is more likely a small weight rather than spindle whorl.

Possible loom weights consisting of several roughly circular flat slate discs with irregular central holes (SF320040, SF320046, SF320054, SF320064, SF320084, SF320086, SF320087). SF32037 was similar bur sub-square rather than sub-circular. Shaped slate discs without a hole SF320079 and SF320081 were also recovered.

Several slate fragments were recovered with partial holes which appeared to be fragments of rectangular objects rather than the circular weights **SF320053** and **SF320082**, possibly tile fragment. A fragment of slate with possible grooves on one surface **SF320032** was probably unworked and naturally occurring.

A fragment of a very hard green-black stone vessel was recovered (SF320075). The fragment is highly polished and has a plain rim, slightly thickened externally. Roughly half of a ring fragment of similar stone was also recovered SF320065.

Several well-shaped sub-rectangular stones were recovered with cup marks on the upper surface. **SF320025**, **SF320030**, **SF320050** had a pecked cup mark in the upper surface and a hard-concreted material on the base. Similar objects have been suggested as small mortars or stone lamps (Smith 2012). **SF320049** was a sub-rectangular sandstone block with a well-worn oval cup mark and was also a portable mortar.

A triangular stone with a deep cup on its upper surface **SF320072** is reminiscent of roman oil lamps and was a likely lamp or mould although no evidence of burning or heat was seen on the object.

All stone reported as small finds should be illustrated.

Lithics. Five lithic artefacts were assigned small find numbers. These were assessed along with the bulk finds and are included in the discussion above.

Iron (Fe). Seven iron objects were recovered as small finds with a total weight of 440g. The iron objects were in poor condition and were heavily corroded.

Due to the heavy corrosion it was difficult to identify the iron artefacts, however, they included likely nail fragments **SF320043** and fittings **SF20081**. A partial knife blade with a central square tang **SF20005** is Roman to medieval in date similar to BH-5FA5AE on the Portable Antiquity Scheme database (PAS online 2020).

Possible shoe cleat fragments **SF320026** and a single chain link **SF20011** are likely post-medieval in date.

The iron small finds have a broad Roman to post-medieval date.

Copper Alloy (Cu). Five small finds numbers were allocated to 9 copper alloy artefacts were recovered with a total weight of 194g. They were in poor to moderate condition.

A near complete, late Iron Age La Tène III type brooch or Nauheim derivative type **SF320039** formed from one continuous piece of metal and sprung at the head. It is similar to SUSS-BF130F (PAS online 2020) on the Portable Antiquity Scheme database, and late Iron Age to early Roman in date.

Two fragments of a horse bridle bit **SF20007** comprising a circular ring cheek piece and mouth bar were recovered, very similar to an example recorded on the Portable Antiquity Scheme SFNMGW-2995AA (PAS online 2020) which also have a suggested late Iron Age to early roman date.

A cast bronze mount **SF20003** in the form of a human face probably represents Medusa. The object is very worn but clear facial features and hair can be made out. These Medusa head

mounts are thought to have been an apotropaic symbol of protection and roman in date LVPL-766D45 (PAS online 2020).

SF320029 was a possible fitting comprising an irregular fragment 30mm in length with an extended foot. A highly corroded coin **(SF20004)** was recovered with a small perforation near the edge suggesting it may have been used as a necklace pendant (diameter = 26mm, 3.4g). The coin is likely to comprise a double maiorina of the emperor Magnentius (Sear 2014, RCV Vol V. 18774) and dates to 350-353 AD. It was likely perforated long after its use as a coin (*Pers. Comm.* Giecco 2020).

The copper alloy small finds are of late Iron Age to Roman date. Illustration should occur on SF20003, SF20004, SF20007, SF320029 and SF32039.

Further work is warranted.

Fired Clay. A total of 11g of fired clay fragments weighing 550g were recovered from Area 20 as three small finds.

These include fragments of possible furnace lining which were heavily vitrified (SF320034).

A fragment of rolled fired clay with a 20mm x 15mm diameter was recovered (**\$F32004**). Its function is not known but it may have acted as a bung. **\$F32008** comprised possible structural daub fragments.

Wood. Two wood small finds were recovered from two samples. The wood was stored in refrigerated conditions in water and had a combined weight of 304g.

Only one of the objects appeared to be worked; **SF320076** was a shaped circular peg 130mm x 25mm, with clear tool marks. The fragments recovered as **SF320077** were small unworked pieces of twisted branches or root.

Further work may be warranted on the worked wood, including illustrative work, species identification and comparative research with the other archaeological sites at Wylfa and also in the wider vicinity.

Finds from Environmental Samples

Over 52,880g of potential artefacts were recovered from environmental samples (Table 5).

Pottery. Post-medieval pottery was recovered from six samples. The pottery included refined white ware (REFW and TPW) and coarse red earthenwares (CRE). The fragments were very small and represent household tablewares dating to the 18th and 19th centuries.

Clay Pipe. A single abraded clay tobacco pipe stem was recovered from environmental samples. It was undecorated and had a central bore of 3mm and likely dates to the 17th to

18th century.

Glass. A single small shard of clear window glass was recovered from the samples. The fragment is post medieval in date. A second tiny fragment is probably a natural quartz crystal rather than a glass shard.

Leather. A single leather fragment was recovered from sample <20043>. The leather is a shoe fragment and retains several small metal tacks and is probably post-medieval in date.

Metal. A total of 30g of iron artefacts were recovered from seven samples. The iron was in poor to moderate condition.

The iron included nails and over 30 hobnails recovered from <20193>, potentially from a single shoe, likely Roman in date.

A single fragment of undiagnostic iron or slag was also recovered.

Fired Clay. Over 10,000g of possible fired clay fragments were recovered from environmental samples. The fired clay tended to comprise very small and frequently heavily abraded.

It was noted that the fired clay recovered from the samples included both the fine and coarse sandy fabrics recovered as bulk finds. Occasional possible briquetage fragments were also recovered from samples <20212>, <20243> and <320472>.

Industrial Waste. A total of 34,174g fragments of possible industrial waste were recovered from 169 samples. The material was assessed as likely burnt earth rather than slag; the material hard but friable and very small undiagnostic lumps.

Plaster. A total weight of 7931g of possible plaster fragments were recovered from a single sample <320610>. These fragments comprised a hard but friable material with large inclusions of natural slate with hard concreted material bonding them. Occasional surface areas were also noted.

The bonding material was similar to the possible industrial waste and possibly represents a rough ground surface.

Lithics. A single flint fragment was recovered from sample <320469>. The fragment was likely débitage and showed very little evidence of post-depositional wear.

Stone. Possible worked stone artefacts were recovered from four environmental samples. The stone comprised slate fragments with rough perforated holes. A fragment of a shale ring was recovered from sample <20233>. The shale fragment is similar to one recovered during the A55 road building scheme which was given a likely Roman date, with an identical internal diameter, although the overall width is smaller.

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.

Should the project proceed to publication, the finds recovered from the environmental samples, particularly the lithics and stone artefacts, should be considered alongside the bulk finds.

Discussion

The metal artefacts were in poor condition but are of note as they represent a late Iron Age to early Roman date consistent with the first Roman activity in Britain. Likewise, the possible briquetage fragments have a similar date. The large stone assemblage also contains objects associated with crafts and industry, including quern stones, spindle whorls and loom weights as well as hammer stones which could span the same period.

The lithic artefacts indicate earlier use of the site, while occasional post-medieval to modern finds were probably a result of agricultural practices and are consequently of little archaeological interest.

Statement of Potential

The finds recovered from Area 20 have a broad date of Mesolithic to post-medieval, although a large proportion are late Iron Age to Roman. The finds assemblage is of high archaeological potential and of local and regional significance (and national?). Further analysis is certainly warranted on the material, particularly on the worked stone, lithics, fired clay and industrial waste, including illustrative work, XRF analysis and comparative research with other archaeological sites at Wylfa and in the wider vicinity.

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Table 2: Quantification of Bulk Finds by Context and Material

Context	Material	Qty	Wgt (g)	Period	Comments	Fabric
20002	Lithic	1	25	Prehistoric	Flint	
20002	Pottery	1	2	Post Med	Buff earthenware. Clear glaze	CRE
20002	Pottery	3	38	Post Med	Coarse red earthenware. Clear glaze	CRE
20004	Iron	2	631	Roman-Post Med	Socketed object - tapered. Heavily corroded with large concretions 200x30x25mm	
20004	Lithic	3	4	Prehistoric	Flint	
20004	Pottery	1	1	Post Med	Coarse red earthenware. Clear glaze	CRE
20004	Pottery	1	1	Roman?	Samian? Highly corroded	SAM
20004	Stone	1	109	Roman?	Pot lid? Flat disc 63x63x20mm Sandstone?	
20004	Stone	1	86	Mesolithic- Neolithic	Worked stone fragment. Fine sandstone. Hour-glass perforation. Hammerstone/ mace fragment?	
20009	Iron	1	8	Roman-Post Med	Nail fragment? Heavily corroded 33mm	
20009	Pottery	1	5	Post Med	Coarse red earthenware. Black glaze	CRE
20009	Pottery	1	1	Post Med	Coarse red earthenware. Brown glaze, slip decoration	REFR
20011	Chert	1	10		Missing	
20011	Pottery	1	1	Post Med	Fine red earthenware, Black glaze	DOR BB1
20040	Chert	1	7		Missing	10
20040	Stone	4	590		MISSING	
20047	Chert	1	55		Missing	
20049	Chert	1	16		Missing	
20049	Stone	1	194		Naturally worn pebble. Irregular shape due to rock strata	
20057	Chert	5	512		Missing	
20061	Chert	2	40		Missing	
20061	Stone	3	759		MISSING	
20065	Chert	20	474		Missing	
20078	Chert	1	192		Missing	
20078	Chert	10	57		Missing	
20080	Chert	61	972		Missing	
	Stone	7	1455	-	MISSING	
20081		2	25	Roman	Black burnished ware, Bowl rim, Beaded rim	DOR BB1
	Pottery	1	163	Nothan	Burnt stone fragment, Heat affected, 70mm x 40mm x 50mm	
20192	Stone		306		Missing	
20243	Chert	10	101	Roman?	Weight, Flat subcircular, Slate, 80x85x7mm Central hole 18x13mm	3
20243	Stone	1	21	RUIIIIII	Missing	
20275	Chert	4	77	-	Missing	
20277	Chert	5				
20286	Chert	1	34		Missing	
20321	Chert	1	243		Missing Part Annual Conton 20	1
20321	Stone	1	79		Burnt stone. Unworked 60x40x30mm	1
20351	Chert	1	503	-	Missing	MAH WH
20364	Pottery	1	18	Roman	Mortaria. Mancetter-Hartshill hammer head rim. Abraded	IVIAN VVI

20408	Pottery	1	1	Post Med	Coarse red earthenware. Black glaze	CRE
20422	Pottery	5	100	Roman	Black burnished ware. Dog dish with rivet repair. Body sherds of jar	DOR BB1
20422	Stone	1	133		Elongated pebble. Whetstone. 165x 27x15mm	
20464	Fired Clay	1	6	Prehist - Roman	Daub? Very soft sandy fired clay. Stone inclusions. Abraded	
20467	Pottery	10	65	Roman	Samian. Highly abraded. Bowl	SAM
20473	Pottery	17	187	Roman	Mortaria. Mancetter-Hartshill hammer head rim. Refitting sherds	MAH WH
20527	Pottery	11	142	Post Med	Transfer printed (Blue) refined white earthenware. Base of tureen? Refitting sherds	TRB, REFW
20579	Pottery	1	0.5		Missing	
20601	Lithic	1	3	Prehist	Flint	
20617	Industrial waste/fired Clay	1	166	Prehist - Roman	Unwashed	
20623	Pottery	3	0.5	Tremot Hornan	Missing	SAM
20023	Industrial	3	0.5	-	THIS MIG	
20632	Waste	2	1	Prehist - Roman	Slag. Missing	
20632	Pottery	3	19	Roman	Samian. Highly abraded	SAM
20636	Pottery	1	13	Roman	Samian, Abraded, Flanged bowl	SAM
20717	Pottery	4	13	Roman	Black burnished ware body sherds	DOR BB1
20734	Fired Clay	6	106	Prehistoric - Roman	Soft sandy fabric with stone inclusions. Abraded. One fragment highly vitrified	
20753	Glass	1	6	Post Med	Green glass, abraded. 6mm thickness. Frequent tiny air bubbles. Onion bottle?	
20753	Industrial Waste	3	38	Prehist - Roman	Slag. Lightweight. Aerated. Vitrified	
20773	Pottery	3	51	Roman	Black burnished ware. Jar. Lattice	DOR BB1
20779	Industrial Waste	1	4	Prehist - Roman	Slag? Fuel Ash? Light weight crumbly vitrified material. Aerated	
20779	Pottery	5	14	Roman	Samian. Abraded	SAM
20785	Pottery	1	11	Roman	Amphora? Very sandy oxidised fabric. Highly abraded	BAT AM 1/
20967	Chert	2	42		Missing	
20982	Pottery	1	23	Post Med	Coarse red earthenware black glazed	REFR
20982	Pottery	2	7	Post Med	Refined white earthenware. Jug? Handle	REFW
30022	Pottery	4	41	Roman	Black burnished ware. Jar. Lattice	DOR BB1
30028	Fired Clay	13	42	Prehist - Roman	Highly fired. Very frequent stone inclusions	
30035	Lithic	1	4	Prehistoric	Flint	
30064	Pottery	2	1	Roman	Colour coated ware. Highly abraded. Rouletted	FUA CC35
30070	Stone	3	5530	Prehist -Roman	Fragments of saddle quern rubber. Heavy use wear. Coarse sandstone? 310mm x 140mm x 75mm	
30098	Chert	2	94		Missing	
30144	СВМ	3	6		Missing	
30149	Pattery	3	32	Roman	Black burnished ware. Jar rim sherd	DOR BB1
30171	Lithic	1	6	Prehistoric	Chert	-
30186	Lithic	1	9		Missing	
30228	Chert	5	309		Missing	
30228	Lithic	1	109	Prehistoric	Chert	

				Prehistoric -		
30262	Fired Clay	1	4	Roman	Large inclusions	
30262	Pottery	1	4		Missing	
30300	Fired Clay	33	105	Prehist - Roman	Daub, Stone inclusions	
30300	Fired Clay	1	6	Prehist - Roman	Heavily vitrified	
30354	Pottery	1	12	Roman	Black burnished ware, Base sherd	DOR BB
30400	Fired Clay	2	28	Prehist - Roman	Daub	
30428	Fired Clay	3	20	Prehist - Roman	Daub	
30428	Pottery?	1	30	Prehist - Roman	Coarse oxidised fabric with large coarse inclusions. Briquetage?	
30476	Stone	1	6670		Part of structure 30476. Coarse granite? Sub-rounded block 180mm x 160mm x 130mm. Possible remnants of wear/ weathering. Not obviously worked.	
320069	Pottery?	3	17	Prehist - Roman	Fired Clay? Briquetage? Coarse fabric, large inclusions	
	Industrial			Prehistoric -		
330176	Waste?	4	88	Roman	Slag? Burnt ground? Light weight and easily breaks	
330590	Pottery	1	26	Roman	Samian dish, body sherd. Abraded.	BUCK
330597	Fired Clay	4	9	Prehist - Roman	Large inclusions. Abraded	
330597	Lithic	1	6	Prehistoric	Flint	
330601	Stone	1	122	Roman?	Spindle whorl? / Weight? Slate subcircular 87x80x6mm with off centre perforation 12mm	
330605	Fired Clay	14	330	Prehist - Roman	Heavily fired. Larger lumps	
330645	Pottery	3	120	Post Med	Buckley-type black glazed red earthenware. Handled jar	CRE
330678	Pottery	2	12	Roman	Samian bowl, Rim sherd. Abraded.	SAM
330728	Lithic	1	16	Prehistoric	Chert	
330733	Fired Clay	140	832	Prehist - Roman	Thin walled. Occasionally vitrified	
330733	Industrial waste	1	20	Prehist - Roman	Slag? Fired clay? Heavily vitrified	
330733	Pottery?	1	28	Prehist - Roman	Coarse oxidised fabric with large coarse inclusions. Briquetage?	
330733	Pottery?	1	19	Prehistoric - Roman	Coarse oxidised fabric with large coarse inclusions. Fired Clay?	
330733	Stone	3	379	Prehist - Roman	Fragment of rubber? Coarse sandstone with two worn surface fragments. 2 x slate discs 85x80x10; 6x65x5mm	
330812	Pottery	4	20	Post Med	Black glazed red earthenware. Jar?	DOR BB:
330814	Fired Clay	1	2	Prehist - Roman	Daub, Abraded	
331007	Fired Clay	1	10	Prehist - Roman	Mould fragment?	1
331008	Lithic	1	1	Prehistoric	Flint	
331008	Pottery	1	13	Roman	Black burnished ware. Jar rim x 1.	DOR BB
331008	Pottery	2	12	Roman	Coarse greyware body sherd	CO RE
				Prehistoric -		
331020	Fired Clay	1	3	Roman	Daub. Abraded	
331021	Lithic	1	32	Prehistoric	Flint	
331076	Stone	2	76		Quartz fragments. Unworked. White quartz	
331094	Fired Clay	16	150	Prehistoric - Roman	Daub. Abraded. Vitrified	
331110	Pottery	1	33	Roman	Black burnished ware. Black-burnished ware dish. Pot repair?	DOR BB:
331188	Iron	1	23	Roman-Post Med	Highly corroded, Nail? 80mm	

331234	Fired Clay	6	25	Prehist - Roman	Heavily vitrified	
331258	Fired Clay	1	6	Prehist - Roman	Daub. Abraded	
331324	Fired Clay	1	17	Prehist - Roman	Heavily vitrified	
331324	Lithic	1	1	Prehistoric	Flint	
331324	Stone	1	24	Roman?	Weight fragment? Slate 60x50x5mm. Pecked perforation 18x10mm with wear	
331333	Fired Clay	6	40	Prehist - Roman	Daub. Abraded. Vitrified	
331339	Industrial waste/ fired Clay	6	60	Prehist - Roman	Unwashed	
331341	Fired Clay	1	12	Prehist - Roman	Heavily vitrified	-
331352	Fired Clay	1	7	Prehist - Roman	Vitrified. Rim? Crucible?	
331379	Fired Clay	9	317	Prehist - Roman	Large limps. Abraded	
331379	Fired Clay? Pottery?	2	25	Prehist - Roman	Coarse reduced handmade fabric, frequent inclusions	
331379	Industrial waste/fired Clay	1	16	Prehist - Roman	Unwashed	
331415	Fired Clay	1	4	Prehist - Roman	Thin walled	-
331437	Stone	1	1010	Prehist - Roman	Fragment of large whetstone/ grinding stone? Fine grained stone with wear/ longitudinal cut marks?	
331443	Fired Clay	10	89	Prehist - Roman	Daub. Large inclusions	
331443	Stone	1	586	Prehist - Roman	Quern fragment? Rubber? 110x60x55mm Coarse sandstone?	
331471	Pottery	1	10	Roman	Black burnished ware. Jar rim	DOR BB1
331526	Pottery	1	11	Post Med	Buckley-type black glazed red ware	CRE
331535	Fired Clay	1	52	Prehist - Roman	Large inclusions	
331551	Fired Clay	1	7	Prehist - Roman	Daub. Large inclusions	
331595	Lithic	2	5	Prehistoric	Chert	
331628	Fired Clay	1	16	Prehist - Roman	Daub	
331646	Pottery	2	20	Roman	Samian bowl	SAM
331714	Fired Clay	1	4	Prehist - Roman	Large Inclusions	
331728	Pottery	1	76	Post Med	Black glazed red earthenware. Jar	REFR
331741	Stone	1	19	Prehist - Roman	Spindle whorl. Flat circular. Tuff? 38x38x12mm Central drilled hole 7mm	
331776	Fired Clay	10	77	Prehist - Roman	Large inclusions. Thumb print	
331854	Pottery?	1	27	Prehist - Roman	Coarse oxidised fabric with large coarse inclusions. Briquetage?	CO OX??
331856	Fired Clay	5	37	Prehist - Roman	Heavily fired, large inclusions. Blackened surface on one fragment	
331987	Fired Clay	9	24	Prehist - Roman	Daub. Large inclusions	
332027	Fired Clay	8	104	Prehist - Roman	Heavily fired, large inclusions. Blackened	
332040	Pottery	4	12	Roman	Coarse oxidised ware. Jar rim. Abraded	
332082	Fired Clay	1	5	Prehist - Roman	Abraded	
332130	Stone	1	926	Prehistoric	Hammer stone. Flattened subcircular pebble with pecked wear at either end	
332177	Fired Clay	1	19	Prehist - Roman	Large inclusions	
332240	Fired Clay	2	12	Prehist - Roman	Daub	
332240	Lithic	1	2	Prehistoric	Chert	
332240	Stone	1	373	Prehist - Roman	Frailment of whetstone 140x60x30mm. Squared edges Fine sandstone?	

332290	Fired Clay	1	14	Prehist - Roman	Large inclusions. Thin walled	
332346	Stone	1	2130		Rounded cobble. No obvious artificial wear	
332443	Fired Clay	3	6	Prehist - Roman		
332472	Fired Clay	3	5	Prehist - Roman	Vitrified. Lightweight and abraded	/
332658	Lithic	1	6	Prehistoric	Chert	
332672	Lithic	1	10	Prehistoric	Chert	
332673	Lithic	1	10	Prehistoric	Chert	
332673	Stone	2	144		Fragments of a triangular stone with surface wear. Probably natural	
332759	Stone	4	49		Unworked fragments of possible heat affected stone	
332799	Fired Clay	3	4	Prehist - Roman	Abraded	
333087	Fired Clay	3	2	Prehist - Roman	Daub. Abraded	
333259	Stone	4	1783	Prehist - Roman	2 x hammerstone / rubbing stone with wear and pecked areas 130x80x40mm; 115x80x40. 1 x elongated pebble whetstone 120x30x20mm. 1 x slate disc 80x80x5mm	
333274	Pottery?	2	2	Prehist - Roman	Fired Clay?	?
U/S	tron	1	36	Roman-Post Med	Nail	
U/S	fron	2	74	Roman-Post Med	Tapered object 170x15x10mm. Agricultural fitting?	
U/S	Lithic	1	4	Prehistoric	Chert	
U/S	Lithic	1	1	Prehistoric	Flint	
U/S	Pottery	1	37		Missing	
U/S	Stone	2	694		Flat based rounded pebble 160x60x40mm - possible wear. Fragment of slate 70x65x5mm with partial hole 7mm	
U/S	Stone	1	6640		MISSING	
U/S	Stone	1	133		Nr [14145]	
U/S	Stone	1	51	Roman?	Spindle whorl/ weight. Slate. Sub-circular 70x65x5mm, central perforation 12x11mm	
Total		691	40340			

Table 3: Quantification of Small Finds

Context	SF	Material	Qty	Wgt (g)	Period	Comments
20081	20001	iron	3	325	Roman-Post Med	Fitting? Two fragments of T shaped bar 200x25x20mm. Small nail? Highly corroded
20467	20003	Cu Allov	1	28	Roman	Mount. Medusa. Clear face with staring eyes and hair 35x40mm Cast bronze
20623	20004	Cu Allov	1	4	Roman	Coin. 26mm diam. Highly corroded with small hole near edge. Rev would be SALVS DD NN AVG ET CAES with large Chi- Rho. double majorina of the emperor Magnentius. See RCV Vol v. 18774. AD350-353.
20002	20005	Iron	1	86	Roman-Med	Knife (incomplete) 65x35mm tapered square tang central to blade 110mm
20573	20006	Stone	1	9,010	Prehist - Roman	Beehive quern. Almost complete top stone 280x240x120mm Sub-round hole 50x40mm. 2 parallel incised lines around top
20763	20007	Cu Alloy	2	146	Late Iron Age- Early Roman	Snaffle bit. Cheek piece ring 75x71mm external 55x55mm internal circular profile. Mouth piece square profile with subcircular loops 66mm
20764	20008	Stone	1	43	Roman?	Spindle whorl, Fine sandstone 57x46x18mm. Off centre hole drilled from both sides 7mm
20420	20009	Stone	1	3250	Prehist -Roman	Fragment of rotary quern? 220x110x110mm Worn hollow with central hole c. 50mm diameter
30035	20010	Stone	1	31	Roman?	Spindle whorl. Fine sandstone, Flat circular 45x45x15mm. Drilled central hole 7mm
20004	20011	Iron	1	16	Roman-Post Med	Chain link. Corroded, 42x30x8mm
30149	20012	Stone	1	11980	Prehist -Roman	Rotary quern base? Roughly half, Worn upper surface 320 diam. 300x160x200mm Coarse sandstone

30028	20013	Stone	1	1810	Bronze Age	Waisted Stone. Hammer stone? Weight? Wedge shaped rounded pebble with pecked waist. 160x100x80mm
30028	20014	Stone	1	707	Prehist -Roman?	Rounded wedge shaped pebble. Possible wear on flat base
30028	20015	Stone	1	24	Roman?	Spindle whorl. Flat subcircular. 50x47x7mm Central drilled hole 8mm. Crudely made
30262	20016	Stone	1	19	Roman?	Spindle whorl. Fine sandstone, Flat circular 40x40x10mm. Drilled central hole 7mm
30171	20017	Stone	1	8	Roman?	Spindle whorl fragment? Weight, c.Half. 40x10mm Central drilled hole 15mm
20776	20018	Stone	1	2450	Prehist -Roman	Fragment of saddle quern rubber. Slightly asymmetrical. Coarse hard sandstone. 200 x 140 x 60mm Heavy use wear
30244	20019	Stone	1	1950	Bronze Age	Waisted Stone. Hammer stone? Weight? Egg shaped rounded pebble with pecked waist. 180x100x80mm
30035	20020	Stone	1	474	Bronze Age- Roman	Worked stone. Bun shaped circular with flattened border. Wear and pecking seen on both surfaces
20984	20021	Stone	1	20184	Prehist -Roman	Saddle quern. Almost complete 360x280x90mm Sub-rectangular. Heavy wear on upper surface. Coarse sandstone
330733	32037	Stone	1	24	Roman?	Perforated stone fragment. Slate. Weight? 70x50x3mm hole 13x9mm
330733	32088	Stone	2	890	Prehist -Roman	Quern fragment? Coarse stone, worn areas 80x70x85mm; 70x70x40mm
330542	320022	Stone	1	47	Roman?	Spindle whorl. Slate? Flat sub-circular 65x65x 7mm. Central hole 8mm diameter
330644	320023	Stone	1	24	Prehist -Roman	Spindle whorl? Bead? 30x30x28mm Central drilled hole 5mm
330540	320024	Stone	1	20	Roman?	Spindle whorl. Tuff? Flat circular 33x31x18mm Slightly off centre hole 7mm diameter
30417	320025	Stone	1	1805	Prehist -Roman	Roughly square block of fine sandstone 140x130x50mm with shallow cup 35x35x5mm pecked in upper surface
330924	320026	Iron	1	5	Post Med?	Flat curved fragment 35x10mm.Shoe cleat? Highly corroded
330652	320027	Stone	1	12	Roman?	Spindle whorl. Tuff? Flat circular 30x30x15mm. Drilled central hole 7mm
330872	320028	Lithic	1	3	Prehistoric	Flint
209730	320029	Cu Alloy	1	11	Roman?	Fitting? Fragment of irregular shape with extended flat base? Corroded.
330597	320030	Stone	1	1254	Roman?	Rough slab 160x120x35mm with shallow pecked cup S0x50x15mm on one surface
331392	320031	Stone	1	556	Prehist - Roman	Fragment of saddle quern rubber? 120x120x20mm. Heavily worn base, top missing.
330909	320032	Stone	1	882		Slate fragment 160x140x20mm. Possible grooves on one surface. Natural?
330909	320033	Stone	1	512		Fragment of fine sandstone. Possible wear? Natural?
331094	320034	Fired Clay	4	80	Prehist - Roman	Furnace lining? Heavily vitrified.
331312	320039	Cu Alloy	4	5	Late Iron Age- Early Roman	Brooch. Near complete, late Iron Age La Tène III type brooch or Nauheim derivative type SUSS-BF130F 80x5mm. 3x fragments of flat headed pin
331314	320040	Stone	1	73	Roman?	Spindle whorl/ weight. Slate disc 80x70x5mm with roughly central hole 15x10mm
331310	320041	Fired Clay	1	10	Prehist - Roman	Abraded. Fragment of rolled, fired clay 20x15 diameter 30mm length CO OX
331310	320041	Pottery	3	22	Roman	Sandy oxidised fabric. Flagon body sherds?
331494	320042	Iron	1	8	Roman-Post Med	Highly corroded fragment 35x10x7mm. Square profile. Nail?
331203	320043	Stone	4	944	Prehist -Roman	Cache of stone' 1x squared whetstone fragment, fine-grained 70x43x23mm. 2x elongated pebbles with use wear 130x50x25mm; 115x50x30mm. 1 fragment of unworked stone
331008	320045	Stone	1	28	Roman?	Spindle whorl. Flat circular 42x42x15mm Central drilled hole 7mm diameter
331008	320045	Stone	1	25	Roman?	Spindle whorl/ weight, Slate disc 60x55x4mm with roughly central hole 10x8mm
221009	J20040	Stolle	•			Portable mortar? Roughly rectangular block of coarse sandstone? 150x90x70mm With deep elongated cup
331614	320049	Stone	1	1250	Prehist -Roman	12x70x40mm in upper surface with significant wear
331742	320050	Stone	1	918	Prehist - Roman	Sub rectangular worked block 140x80x50mm with pecked cup mark 70x55x20mm in upper surface. Slag?/burnt accretions? on base
331714	320051	Industrial Waste	3	68	Prehist - Roman	Light weight. Vitrified
30461	320052	Lithic	1	18	Prehistoric	Flint
331730	320053	Stone	1	1864	Roman - Post Med	Roof tile fragment 280x 180x 25mm? Slate. Perforated at one end 12x 15mm
331730	320054	Stone	1	60		Spindle whorl/ weight. Slate disc 80x80x4mm with roughly central hole 11x9mm

331595 Total	331373	Stone	107	85549	riemaconce	Manuel Stone Student Land Baster Lands State Company
U/S	330088	Lithic	1	389	Prehistoric?	Rubbing stone/ grinder? Pudding stone? 100x60x40mm
330861	320089	Stone	1	4436 31	Prehist -Roman Prehistoric	hollow Chert
333428	320087	Stolle	1	-	150muni	Trough quern? Grinding stone? Fine sandstone 210x200x60mm. Sub-rectangular flat based slab with shallow concave
333428	320086	Stone	1	8	Roman?	Spindle whorl? Weight? Very thin flat circular 41x41x2mm disc with central hole 3mm diameter
333264	320084	Stone	1	75	Roman?	Spindle whorl? Loom weight? Slate. Subcircular 80x77x6mm with off centre circular hole 10mm diameter
333109	320084	Stone	1	94	Roman?	Weight. Tuff? Roughly flat circular 70x60x20mm with central hole pecked from both sides 9x5mm
331755	320083	Fired Clay	6	415	Prehist - Roman	Structural fragments?
331755	320082	Lithic	1	27	Prehistoric	Chert
331731	320081	Stone	2	155	Roman?	Slate fragments. Tile fragments? Each with partial 10mm hole. 120x45x10; 70x55x8
U/S	320080	Stone	1	47	Roman?	Disc, Slate, 70x65x5mm
332868	320079	Stone	1	9080	Prehist - Roman	Saddle quem fragment, Well worn depression 300x300x100mm
332460	320078	Stone	1	121	Roman?	Slate disc. Similar to weights but without central hole 90x90x5mm
332081	320077	Stone	1	2945	Prehist - Roman	Saddle quern rubber. Complete 330x140x 50mm Concave lengthways. Heavy wear on both surfaces. Sandstone
332717	320076	Wood	6	260		Fragments of unworked root? Stored under water in fridge
332355	320075	Wood	1	44	Tremst Woman	Worked wood, Peg. 130x25mm. Stored under water in fridge
332566	320075	Stone	1	18	Prehist -Roman	Polished stone yessel. Black rim fragment Similar stone 5F320065
331643	320074	Stone	1	5	Roman?	Spindle whorl. Slate. Lathe turned? 37x35x2mm Flat circular. Central circular hole 8mm diam with narrow surrounding groove on both sides
331586	320073	Stone	1	14	Roman?	Spindle whorl Flat circular with rough radiate lines on one face 33x33x15mm Central drilled hole 8mm
331586	320072	Stone	1	161	Roman	Lamp / mould? 120x60x26mm at widest point narrowing to 15mm, Triangular flat stone with a oval worn cup mark 65x40x18mm and shallow groove at point end
331210	320068	Pottery	1	7	Roman?	Sandy oxidised fabric. Internal glaze? Residue? Body sherd. Abraded CO OX
322080	320067	Stone	1	475	Prehist -Roman	Roughly spherical with several worn faces 70mm diam.
332115	320066	Stone	1	727	Prehist - Roman	Flat based rubbing / polishing stone? Fine sandstone. Wear and possible pecking to flat base 160x80x30mm
33172	320065	Stone	1	4	Prehist - Roman	Ring Fragment Polished stone. Similar stone SF320075 Roughly half. 30mm external diameter 16mm internal diamete Roughly circular profile with flattened external edge
330842	320064	Stone	1	48	Roman?	Spindle whorl/ weight. Slate disc 65x60x5mm with roughly central hole 11x11mm
U/S	320063	Lithic	1	1	Prehistoric	Chert
332052	320062	Stone	1	1195	Prehist -Roman	Elongated pebble 200x80x50mm Whetstone?
331493	320059	Pottery	1	1	Roman	Samian body sherd. Highly abraded
331929	320058	Stone	1	124	Prehist -Roman	Whetstone? Elongated flat pebble. Fine sandstone. Concave wear. 145x40x10mm SAM
331864	320057	Stone	1	71	Prehist -Roman	Whetstone? 180x25x14mm Chert? Rectangular fragment
33004	320056	Stone	1	608	Prehist -Roman	Roughly spherical with several worπ faces 80x65x60mm

Table 4: Quantification of lithic artefacts

Context	Raw Material					Measures				Class	Category	Subcategory		
no.	Туре	Colour	Lustre	Texture	Opacity	Cortex	Patination	L	w	T	Wgt	Caess	category	
30171	Chert	Black	Dull	Fine	Opaque	Nco	None	31,9	19.7	11.3	6.24	Debitage	Flake	Primary flake
221224	Elint	Orange	Shiny	Fine	Onaque	Nco	None	16.8	12.3	1.7	0.47	Debitage	Chip	Chip

330597	Flint	Brown	Shiny	Fine	Opaque	Nco	None	25.1	24.5	7.5	5.64	Retouched tool	Scraper	Side scraper
20601	Flint	Brown	Shiny	Fine	Opaque	Nco	None	31	15.1	7.9	3.21	Debitage	Chip	Chip
U/S	Flint	White	Dull	Fine	Translucid	Nco	None	20.4	15.8	3.2	0.85	Debitage	Blade fragment	Proximal fragment tertiary. Blade
20004	Flint	Beige	Shiny	Fine	Opaque	Nco	None	26.9	19.1	3	1.75	Debitage	chip	Chip
20004	Flint	Beige	Shiny	Fine	Opaque	Nco	None	20.5	10.4	7.2	1.45	Debitage	chip	Chip
20004	Flint	Beige	Shiny	Fine	Opaque	Nco	None	13.2	13.4	4.5	0.75	Debitage	chip	Chip
300035	Flint	Beige	Shiny	Fine	Opaque	CoD	None	25.7	19.5	5.3	3.47	Debitage	Flake	Primary flake
331008	Flint	Grev	Shiny	Fine	Opaque	NcoD	None	14	11.6	5.4	0.81	Debitage	chip	Chip
330728	Chert	Grev	Dull	Medium	Opaque	Nco	None	39.1	37.3	11.3	16.3	Debitage	Flake	Primary flake
331021	Flint	Olive	Shiny	Fine	opaque	NcoD	None	43.3	46.4	15	33.51	Core	Core fragment	Discoidal core
332758	Chert	Black	Dull	Fine	Opaque	Nco	None	27.8	25.5	8.4	5.44	Retouched tool	Scraper	Thumbnail scraper
30228	Chert	Black	Dull	Fine	Opaque	Nco	None	31.2	47	39.5	110	Core	Core fragment	Tabular core for blades
332240	Chert	Black	Dull	Fine	Opaque	Nco	None	32.9	15	3.7	2.31	Debitage	Blade	Bladelet
332672	Chert	Grey	Dull	Medium	Opaque	Nco	None	31.2	34.1	9.9	10.23	Retouched tool	Scraper	Circular scraper
331595	Chert	Grev	Dull	Medium	Opaque	Nco	None	24	21.8	6	1.8	Debitage	Flake	Tertiary flake
332673	Chert	Black	Shiny	Fine	Opaque	Nco	None	24.3	42.7	12.5	10.26	Debitage	Core preparation flake	Core edge preparation flake
20002	Flint	Red	Shiny	Fine	Opaque	Nco	None	22.8	35.6	27.3	24.75	Core	Core fragment	Single platform blade core
331755 SF320083	Chert	Black	Shiny	Fine	Opaque	Nco	None	49.8	31.9	15	27.58	Debitage	Blade	Blade
U/S	Chert	Black	Shiny	Fine	Opaque	Nco	None	34.2	25.4	4.5	3.68	Debitage	Flake frag.	Tertiary flake. Soft hammer.
330872 5F320028	Flint	Beige	Shiny	Fine	Opaque	NcoD	Light	18.8	24.9	5.7	2.73	Retouched tool	Scraper	Thumbnail scraper
U/S SF330088	Chert	Grey	Dull	Fine	Opaque	Nco	None	42.9	45.6	14.8	31.37	Debitage	Flake	Tertiary flake
30461 SF320052	Flint	Beige	Shiny	Fine	Opaque	Nco	Light	43	33.1	11.2	17.88	Retouched tool	Scraper	Side scraper

Table 5: Finds recovered from environmental samples

Context	<e></e>	Material	Period	Weight (g)	Comments
20039	20001	Ind waste		277	
20121	20003	Ind waste		364	
20179	20005	Ind waste		102	
20081	20006	Fe	Roman - Post Med?	24	Highly corroded fragments of single object. Ring fragment? 70mm
20081	20006	Ind waste		123	
20222	20007	Fired Clay			

20254	20008	Ind waste		14	
20192	20009	Ind waste		89	
20291	20010	Fired Clay		12	
20309	20012	Fired clay		32	Coarse fabric
20309	20012	Ind waste		112	
20300	20013	Ind waste		53	
20356	20015	Fired Clay		2	
20369	20018	Fired Clay		26	
20537	20024	Ind waste		19	
20465	20026	Fired Clay			
20470	20027	Fired Clay		50	
20556	20028	Fired clay		154	Daub? Abraded
20556	20028	Ind waste		291	
20466	20029	Ind waste		250	
20589	20030	ind waste		60	
20577	20035	Fired Clay		24	
20489	20036	Ind waste		17	
20366	20038	Ind waste		78	
20623	20041	Ind waste		168	
20617	20042	Ind waste		179	
20467	20043	Ind waste		10	
20467	20043	Leather	Roman - Post Med	5	Shoe fragment. Small narrow tacks 10mm retained within leather
20467	20043	Pottery	Post Med		TPW and CRE 19th century
20581	20044	Fired clay			
20468	20045	Ind waste		28	
20468	20045	Pottery	Post Med		TPW 19th century
20632	20046	Fired Clay		9	
20624	20051	Ind waste		49	
20706	20052	Ind waste		17	
20529	20053	Fired Clay		5	
20687	20056	Fired Clay		3	
20717	20057	Fe	Roman - Post Med	9	Nail. Flat head roughly square shaft
20741	20058	Ind waste			
20577	20065	Fired Clay		74	
20639	20066	Ind waste		10	
20539	20067	Fired Clay			
20650	20068	Fired clay?		-0	
20646	20070	Ind waste		24	
20743	20071	Fe	Roman - Post Med	5	Highly corroded. Ring fragment? 30mm
20709	20072	Ind waste		167	
20606	20073	Ind waste		63	
20611	20074	Ind waste		5	

20419	20081	Ind waste		20		
20782	20082	Ind waste		74		
20812	20083	Ind waste		404		
20826	20085	Fired Clay		18		
20826	20085	Ind waste		35		
20837	20086	Fired Clay		9		
20854	20090	Fired Clay		3		
20854	20090	Ind waste		14		
20896	20093	Fired Clay		7		
20918	20100	Ind waste		20		
20916	20101	Ind waste				
20943	20108	Pottery	Post Med	3	REFW 19th century	
20942	20110	Fired Clay				
20974	20122	Fired Clay		30	Stone	
20942	20124	Ind waste				
20983	20129	Fired clay		9		
20991	20131	Ind waste		46		
30007	20138	Fired Clay				
30021	20144	Fired Clay		3		
30022	20145	Fe	Roman	33	Hobnails x 60, domed head 10mm with square shaft c.7mm	
30050	20147	Fired Clay				
30052	20149	Fired Clay				
30056	20151	Ind waste		66		
30064	20153	Ind waste		6		
30069	20154	Ind waste		5		
30083	20158	Fired Clay		4		
30093	20159	Fired clay				
30108	20161	Ind waste		32		
30123	20162	Fired clay				
30129	20163	Fired Clay		3		
30137	20164	Fired clay		38	Coarse Fabric	
30137	20164	Fired Clay?		1403	Heated stone	
30142	20166	Fired clay		2		
30115	20169	Ind waste		1009		
30089	20175	Ind waste		22		
30158	20176	Fe	Roman - Post Med	12	Highly corroded tapered object	
30158	20176	Fired clay		12	Coarse Fabric. Abraded	
30173	20177	Ind waste		71		
30180	20179	Fired Clay				
30171	20180	Ind waste		55		
30172	20181	Ind waste		405		
30196	20182	Fired Clay				
30200	20184	Fired Clay				

30213	20186	Ind waste	1	1203		_
30217	20187	ind waste		6		
30217	20187	Fired Clav		7		
30219	20189	Ind waste		1286		
20222	20190	Fired Clay		1200		
30224	20190	Fired Clay		_		
30148	20191	Fe Fe	Roman - Post Med	_	Highly corroded. Nail?	_
	20193	Fired Clay	Roman - Post Med	3	riginy corroded. Nair:	
30246				17		
30254	20196	Fired Clay	-	17		_
20968	20198	Fired Clay		42		_
20259	20204	Fired Clay		12		_
30260	20205	Fired Clay	-	28		_
30228	20208	Ind waste		46		_
30303	20211	Pottery	Post Med		REFW, Buff earthenware 18th-19th century	_
30300	20212	Fired Clay		8	Briquetage?	
30293	20215	Ind waste		734		_
30312	20216	Fired Clay		16		
30309	20223	Fired Clay		6		_
30350	20224	Ind waste		155		
30347	20229	Ind waste		15		
30242	20232	Ind waste		3		
30242	20232	Metal / slag?				_
30261	20233	Worked stone	Roman?	3	Shale? Ring fragment 40mm external 20mm internal diam 4mm deep. Flat base	
30402	20234	Ind waste		60		
30587	20236	Fired Clay				
30409	20238	Ind waste		19		
20909	20239	Fired Clay		5		
30396	20241	Fired Clay		32		
30428	20243	Fired clay	V	106	Briquetage?	
30445	20249	Fired Clay				
20998	20250	Ind waste	15			
30458	20251	Ind waste		44		
30443	20253	Fired Clay				
30434	20254	Fired Clay?		65	Burnt stone	
30486	20255	Ind waste		165		
30307	20257	Ind waste		6		
30510	20258	Fired clay		85		
		Fired Clay?		1		
30514	20259	Pottery?	Prehistoric-Med		Sandy fabric, large inclusions. Heavily abraded	
30514	20259	Ind waste		17		
30320	20260	Ind waste		106		
30502	20262	Fired Clay		14		
30307	20263	Ind waste		21		

30308	20835	Ind waste		8	
30211	30272	Ind waste		1003	
331379	320042	Ind waste		105	
330547	320264	Fired clay		13	
330544	320266	Ind waste		242	
330549	320269	Fired Clay?		187	Stone
330549	320269	Ind waste		37	
330580	320275	Fired Clay?		394	Stone
330580	320275	Ind waste		334	
330579	320276	Pottery	Post Med	3	CRE 18th-19th century
330689	320277	Ind waste		64	
330605	320278	Fired clay		239	Daub? Abraded
330595	320280	Fired Clay		3	
330632	320281	Fired Clay		4	
30343	320283	Ind waste		221	
30553	320284	Fe		52	
330705	320287	Fired Clay			
330709	320288	Fired clay			
303415	320289	Ind waste		97	
330651	320292	Ind waste		186	
330652	320293	Fired Clay			
330652	320293	Ind waste		35	
330719	320295	Glass	Post Med		Clear window? Glass
330595	320297	Fired Clay		21	
330751	320298	Fired clay		8	
330690	320303	Ind waste		301	
330659	320304	Fired clay		6	
330784	320305	Fired Clay		16	
30263	320306	Ind waste		131	
330788	320308	Clay pipe	Post Med	3	Stem fragment. Abraded. Bore 3mm. 17th - 18th century
330788	320308	Ind waste		7	
330777	320309	Fired clay		118	Coarse fabric
330779	320310	Fired Clay		153	Daub?
330779	320310	Ind waste		13	
330804	320311	Ind waste		10	
330813	320312	Fired clay		11	
330861	320315	Fired Clay		9	
330861	320315	Ind waste		146	
330862	320316	Fired Clay			
330862	320316	Ind waste		105	
330878	320321	Ind waste		16	
330854	320322	Ind waste		137	
330812	320327	Ind waste			

330812	320327	Pottery	Post Med		CRE 18th-19th century	
330892	320331	Ind waste		165		
330922	320333	Ind waste		126		
330926	320334	Fired Clay				
330939	320338	Ind waste		473		
330829	320339	Ind waste		198		
330941	320340	Ind waste		161		
330949	320342	Ind waste		883		
331392	320343	Fired clay		6		
330761	320343	Ind waste		42		
330715	320346	Ind waste		30		
330968	320347	Ind waste		21		
330918	320348	Ind waste		45		
330985	320352	Ind waste		15		
331000	320356	Fired Clay		25		
330814	320358	Fired Clay		25		
330814	320358	Fired Clay		145		
330814	320358	Worked stone		400	Slate fragments with perforations. Irregular shape. Weight? Tile?	
331008	320360	Ind waste		119		
331007	320361	Ind waste		9		
331007	320362	Fired Clay		2		
331042	320363	Fired Clay		54		
331036	320365	Fired Clay		83		
331031	320366	Fired clay		29		
331052	320367	Fired day				
330621	320370	Ind waste		848		
330872	320374	Ind waste		20		
330843	320378	Fired day		63	Coarse Fabric, Abraded	
331151	320379	Ind waste		37		
330749	320382	Ind waste		261		
331096	320385	Ind waste		164		
331168	320386	Ind waste		80		
331079	320389	Ind waste		197		
330739	320390	Ind waste		39		
331172	320391	Glass?			Quartz crystal, Natural	
331172	320391	Ind waste		31		
331172	320393	Fired Clay		- 1		
331213	320396	Fired Clay		5		
331213	320397	Ind waste		155		
331234	320398	Ind waste		77		
331258	320404	Fired clay		7		
331264	320404	Ind waste		5		

331251 331294	320410	Ind waste		458	
224204	320412	Ind waste		242	
	320413	Ind waste		45	
30263	320414	Ind waste		786	
331310	320417	Ind waste			
331312	320418	Ind waste		1147	
331312	320419	Fired Clay		4	
330704	320421	Ind waste		174	
331299	320422	Fired Clay		25	
331714	320424	Ind waste		95	
30113	320425	Ind waste		117	
331359	320428	Pottery		105	
331380	320429	Ind waste		369	
331401	320434	Ind waste		341	
331402	320435	Fired Clay		12	
331400	320436	Ind waste		70	
331404	320437	Ind waste		27	
331032	320440	Shell			
331446	320447	Fired Clay		14	
331427	320448	Fired clay		14	Coarse Fabric, Abraded
331477	320451	Ind waste		485	
331492	320452	Ind waste		1209	
331490	320454	Fired clay			
331484	320455	Fired Clay?		18	Stone
331493	320462	Fired Clay			
331628	320466	Fired Clay		3	
331641	320469	Flint	Prehistoric		Debitage?
331071	320103	Fired Clay?	1		
331643	320470	Pottery?		2	Reduced to dark grey. Very coarse with large inclusions
331695	320472	Fired clay	Iron Age - Roman?	25	Briquetage?
331711	320473	Ind waste		68	
331779	320477	Fired Clay			
331824	320478	Ind waste		111	
331820	320480	Ind waste			
	320483	Ind waste		6345	
331738	320484	Ind waste		194	
		Ind waste		557	
331618	320487			9	
331618 331902	320487				
331618 331902 331920	320488	Ind waste		164	
331618 331902 331920 331995	320488 320491	Ind waste Ind waste			
331618 331902 331920 331995 332043	320488 320491 320494	Ind waste Ind waste Ind waste			
331618 331902 331920 331995 332043 332041	320488 320491 320494 320496	Ind waste Ind waste Ind waste Ind waste		164	
331738 331618 331902 331920 331995 332043 332041 332103 332139	320488 320491 320494	Ind waste Ind waste Ind waste		164	

332149	320502	Ind waste	96	
320506	320506	Fired clay	5	
332156	320507	Ind waste	170	
332170	320508	Fired Clay	28	
332170	320508	Ind waste	379	
332195	320509	Ind waste	203	
332193	320510	Ind waste		
332217	320511	Ind waste	154	
332298	320514	Ind waste	52	
332341	320516	Ind waste	523	
332334	320517	Fired Clay	79	
332337	320518	Ind waste	192	
332386	320520	Ind waste	53	
331958	320524	Ind waste	400	
332306	320526	Fired clay?	12	Stone. Natural
332306	320526	Ind waste	35	
332465	320528	Fired clay	144	
332470	320529	Ind waste	87	
333206	320530	Fired Clay	57	
332064	320533	Fired Clay	2	
332489	320538	Ind waste	67	
332588	320540	Ind waste	6	
332555	320541	Ind waste	14	
332602	320542	Ind waste	280	
331955	320551	Ind waste	12	
332728	320563	Fired Clay		
332731	320568	Ind waste	96	
332528	320569	Ind waste	511	
332859	320573	Ind waste	218	
332445	320574	Fired Clay	10	
332686	320576	Ind waste	124	
332957	320580	Fired Clay	30	
333003	320587	Fired Clay	21	
333003	320587	Fired Clay		
333003	320587	Shell		
333004	320588	Ind waste	26	
333006	320589	Ind waste	11	
333007	320590	Fired Clay		
333007	320590	Ind waste	81	
333013	320591	Fired Clay		
333010	320593	Fired Clay	10	
333047	320594	Ind waste	15	
332759	320597	Fired Clay		

333060	320597	Ind waste	47	
31586	320598	Fired Clay	58	
332124	320598	Fired clay?	113	Heated stone. Natural
332124	320598	Ind waste	439	
331570	320599	Fired Clay		
331570	320602	Fired Clay	12	
333109	320605	Fired Clay	14	
333095	320606	Ind waste	50	
333147	320607	Fired Clay	105	
330924	320609	Fired Clay	126	
330924	320609	Ind waste		
331210	320610	Plaster?	7931	Not plaster. Large angular stone fragments set in hard friable burnt? material
330890	320611	Fired Clay	1772	Daub
333196	320614	Worked stone?		Natural fragment
30307	320615	Fired Clay	162	Stone
30307	320616	Fired Clay?	121	Stone
333087	320619	Fired Clay	2	
333087	320619	Worked stone	53	Fragment of slate? With perforation. Weight?
333355	320624	Fired Clay		
333327	320626	Fired Clay	32	
333328	320627	Fired Clay	2713	Stone. Natural
333329	320628	Fired Clay	130	Stone
333362	320629	Fired Clay	99	
333385	320638	Ind waste	17	
333497	320639	Fired Clay	11	
333146	320640	Fired Clay		
333544	320646	Fired Clay	2	
333248	320655	Fired Clay	12	
333248	320655	Ind waste	15	
333560	320662	Fired Clay	15	
333168	320663	Fired Clay		
333168	320663	Ind waste	5	
333269	320666	Fired Clay	3	
333168	320668	Fired Clay	31	
333642	320675	Fired Clay		
333638	320678	Fired Clay	29	
330769	330317	Ind waste		
330884	330319	Ind waste	41	
30148	20193?	Fired clay	20	Natural stone
Total			52880	

20 APPENDIX 9

20.1 Radiocarbon Dating Report: Beta Analytic, 2020

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

(Variables: d13C = -21.6 o/oo)

Laboratory number Beta-554145

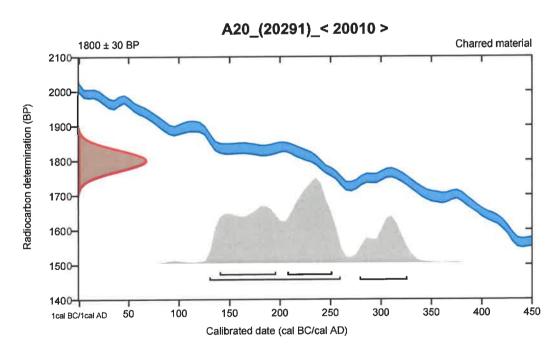
Conventional radiocarbon age 1800 ± 30 BP

95.4% probability

(79%)	130 - 260 cal AD	(1820 - 1690 cal BP)
(16.4%)	279 - 326 cal AD	(1671 - 1624 cal BP)

68.2% probability

(34.7%)	208 - 252 cal AD	(1742 - 1698 cal BP)
(33.5%)	140 - 196 cal AD	(1810 - 1754 cal BP)



Database used

References

References to Probability Method

Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. Radiocarbon, 51(1), 337-360.

References to Database INTCAL13

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

(Variables: d13C = -25.9 o/oo)

Laboratory number Beta-553505

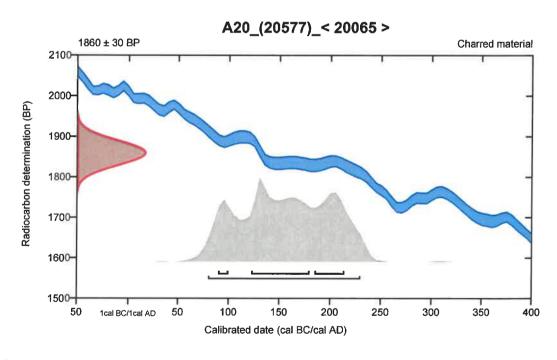
Conventional radiocarbon age 1860 ± 30 BP

95.4% probability

(95.4%) 80 - 230 cal AD (1870 - 1720 cal BP)

68.2% probability

(41.4%)	123 - 180 cal AD	(1827 - 1770 cal BP)
(20%)	185 - 214 cal AD	(1765 - 1736 cal BP)
(6.9%)	90 - 100 cal AD	(1860 - 1850 cal BP)



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

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

(Variables: d13C = -24.2 o/oo)

Laboratory number Beta-554149

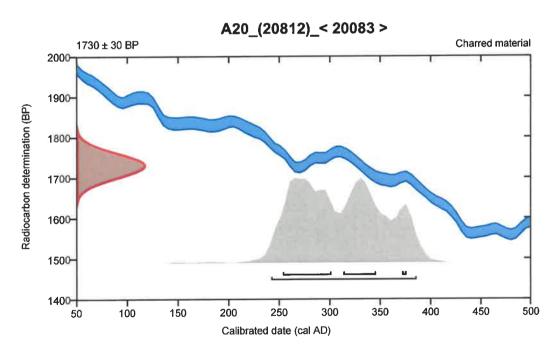
Conventional radiocarbon age 1730 ± 30 BP

95.4% probability

(95.4%) 242 - 386 cal AD (1708 - 1564 cal BP)

68.2% probability

(41%)	254 - 302 cal AD	(1696 - 1648 cal BP)
(25%)	314 - 346 cal AD	(1636 - 1604 cal BP)
(2.2%)	372 - 376 cal AD	(1578 - 1574 cal BP)



Database used

References

References to Probability Method

Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. Radiocarbon, 51(1), 337-360.

References to Database INTCAL13

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

(Variables: d13C = -23.3 o/oo)

Laboratory number

Beta-553510

Conventional radiocarbon age

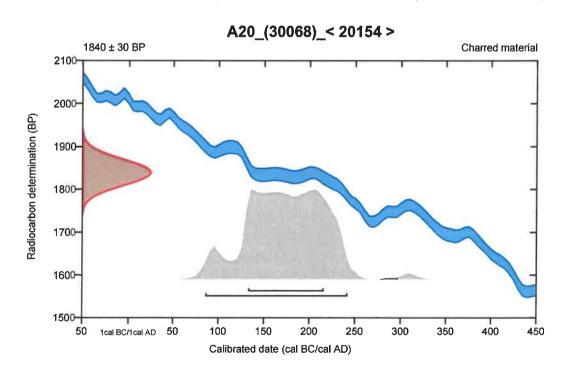
1840 ± 30 BP

95.4% probability

(95.4%) 86 - 242 cal AD (1864 - 1708 cal BP)

68.2% probability

(68.2%)133 - 216 cal AD (1817 - 1734 cal BP)



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

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

(Variables: d13C = -22.0 o/oo)

Laboratory number Beta-553506

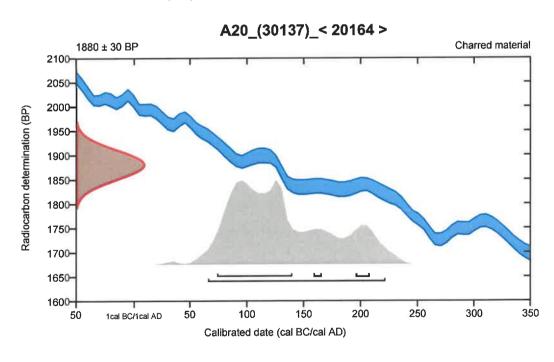
Conventional radiocarbon age 1880 ± 30 BP

95.4% probability

(95.4%) 66 - 222 cal AD (1884 - 1728 cal BP)

68.2% probability

(59.3%)	74 - 140 cal AD	(1876 - 1810 cal BP)
(5.9%)	196 - 208 cal AD	(1754 - 1742 cal BP)
(3%)	159 - 166 cal AD	(1791 - 1784 cal BP)



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

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

(Variables: d13C = -25.1 o/oo)

Laboratory number Beta-553512

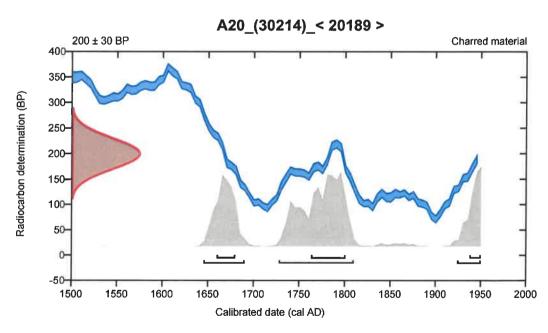
Conventional radiocarbon age 200 ± 30 BP

95.4% probability

(53.5%)	1728 - 1810 cal AD	(222 - 140 cal BP)
(26%)	1646 - 1690 cal AD	(304 - 260 cal BP)
(15.9%)	1925 - Post cal AD 1950	(25 - Post cal BP 0)

68.2% probability

(36.8%)	1764 - 1801 cal AD	(186 - 149 cal BP)
(19.2%)	1660 - 1680 cal AD	(290 - 270 cal BP)
(12.3%)	1938 - Post cal AD 1950	(12 - Post cal BP 0)



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

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

(Variables: d13C = -25.4 o/oo)

Laboratory number Beta-553509

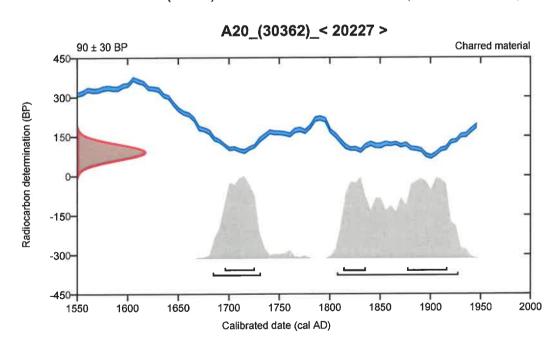
Conventional radiocarbon age 90 ± 30 BP

95.4% probability

(69.2%)	1807 - 1928 cal AD	(143 - 22 cal BP)
(26.2%)	1684 - 1732 cal AD	(266 - 218 cal BP)

68.2% probability

(30.5%)	1877 - 1917 cal AD	(73 - 33 cal BP)
(22%)	1696 - 1726 cal AD	(254 - 224 cal BP)
(15.7%)	1814 - 1836 cal AD	(136 - 114 cal BP)



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

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

(Variables: d13C = -23.3 o/oo)

Laboratory number Beta-554151

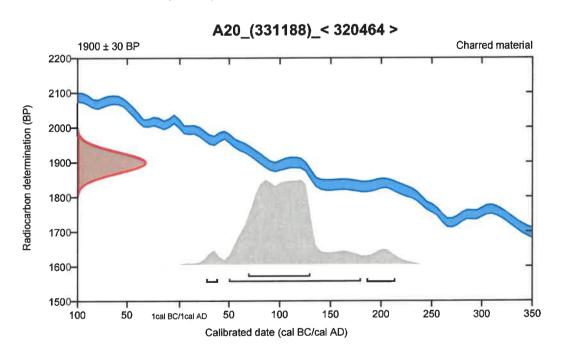
Conventional radiocarbon age 1900 ± 30 BP

95.4% probability

(88.4%)	50 - 180 cal AD	(1900 - 1770 cal BP)
(5.1%)	186 - 214 cal AD	(1764 - 1736 cal BP)
(1.9%)	28 - 39 cal AD	(1922 - 1911 cal BP)

68.2% probability

(68.2%) 69 - 130 cal AD (1881 - 1820 cal BP)



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).

Beta Analytic Radiocarbon Dating Laboratory

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

(Variables: d13C = -24.4 o/oo)

Laboratory number Beta-553507

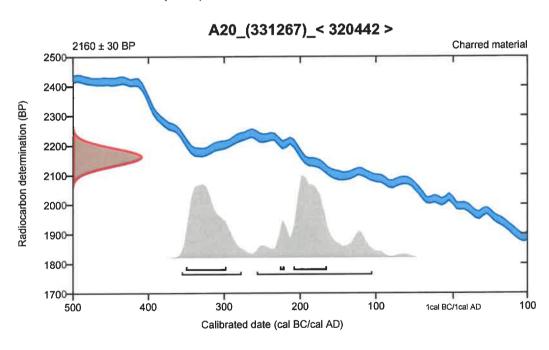
Conventional radiocarbon age 2160 ± 30 BP

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)



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

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

(Variables: d13C = -24.7 o/oo)

Laboratory number Beta-

Beta-554148

Conventional radiocarbon age

2200 ± 30 BP

95.4% probability

(95.4%) 366 - 186 cal BC

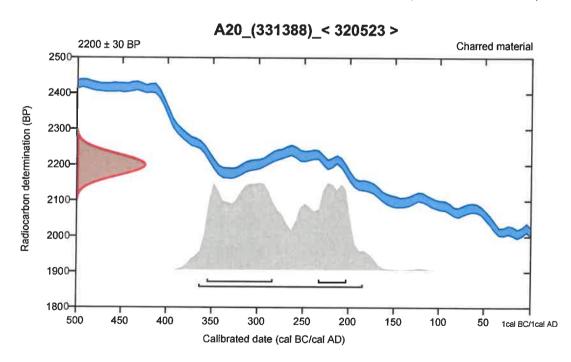
(2315 - 2135 cal BP)

68.2% probability

(46.9%) 357 - 285 cal BC (21.3%) 235 - 204 cal BC

(2306 - 2234 cal BP)

(2184 - 2153 cal BP)



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

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

(Variables: d13C = -27.1 o/oo)

Laboratory number Beta-554150

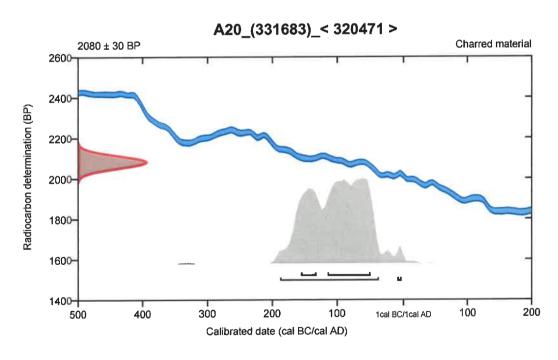
Conventional radiocarbon age 2080 ± 30 BP

95.4% probability

(94.5%)	190 - 38 cal BC	(2139 - 1987 cal BP)
(0.9%)	9 - 3 cal BC	(1958 - 1952 cal BP)

68.2% probability

(52%)	116 - 51 cal BC	(2065 - 2000 cal BP)
(16.2%)	157 - 134 cal BC	(2106 - 2083 cal BP)



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

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

(Variables: d13C = -24.1 o/oo)

Laboratory number Beta-553508

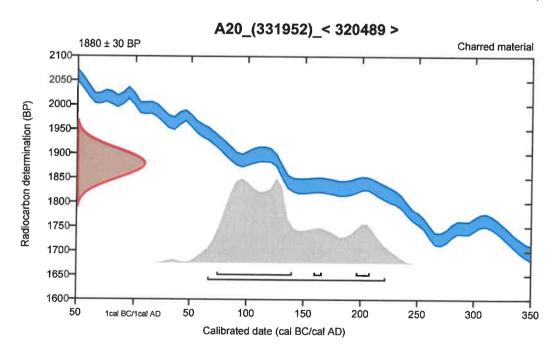
Conventional radiocarbon age 1880 ± 30 BP

95.4% probability

(95.4%) 66 - 222 cal AD (1884 - 1728 cal BP)

68.2% probability

(59.3%)	74 - 140 cal AD	(1876 - 1810 cal BP)
(5.9%)	196 - 208 cal AD	(1754 - 1742 cal BP)
(3%)	159 - 166 cal AD	(1791 - 1784 cal BP)



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).

Beta Analytic Radiocarbon Dating Laboratory

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

(Variables: d13C = -25.9 o/oo)

Laboratory number Beta-553502

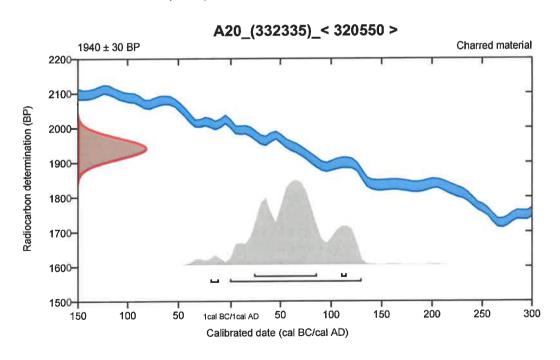
Conventional radiocarbon age 1940 ± 30 BP

95.4% probability

(94.2%)	0 cal BC - 130 cal AD	(1950 - 1820 cal BP)
(1.2%)	20 - 12 cal BC	(1969 - 1961 cal BP)

68.2% probability

(65%)	24 - 86 cal AD	(1926 - 1864 cal BP)
(3.2%)	110 - 115 cal AD	(1840 - 1835 cal BP)



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

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

(Variables: d13C = -22.0 o/oo)

Laboratory number Beta-554147

Conventional radiocarbon age 2180 ± 30 BP

95.4% probability

(95.4%) 361 - 168 cal BC

(2310 - 2117 cal BP)

68.2% probability

(44.7%) 354 - 291 cal BC (2303 - 2240 cal BP) (23.5%) 232 - 193 cal BC (2181 - 2142 cal BP)

A20_(332432)_< 320592 > 2180 ± 30 BP Charred material 2500 2400 Radiocarbon determination (BP) 2300 2200-2100 2000 1900 1800-1700-450 400 350 500 300 250 200 150 100 1cal BC/1cal AD Calibrated date (cal BC/cal AD)

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).

Beta Analytic Radiocarbon Dating Laboratory

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

(Variables: d13C = -24.2 o/oo)

Laboratory number Beta-553511

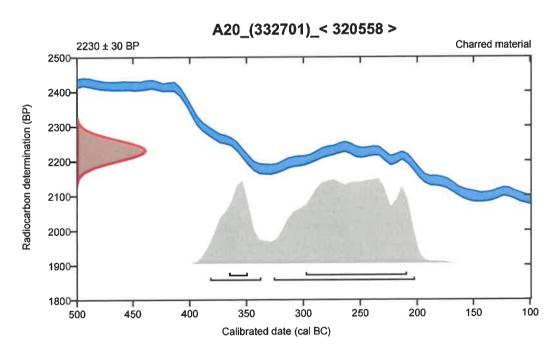
Conventional radiocarbon age 2230 ± 30 BP

95.4% probability

(74.6%)	328 - 204 cal BC	(2277 - 2153 cal BP)
(20.8%)	384 - 339 cal BC	(2333 - 2288 cal BP)

68.2% probability

(58.2%)	300 - 211 cal BC	(2249 - 2160 cal BP)
(10%)	367 - 351 cal BC	(2316 - 2300 cal BP)



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

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

(Variables: d13C = -28.1 o/oo)

Laboratory number B

Beta-553503

Conventional radiocarbon age

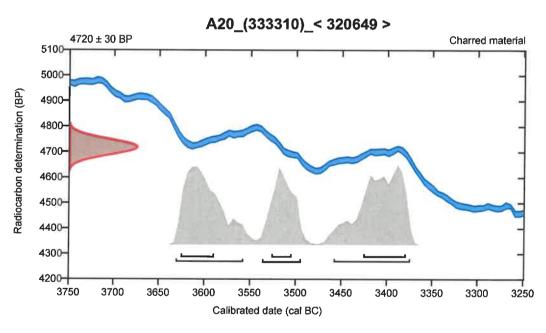
4720 ± 30 BP

95.4% probability

(40.2%)	3460 - 3376 cal BC	(5409 - 5325 cal BP)
(34.5%)	3633 - 3559 cal BC	(5582 - 5508 cal BP)
(20.7%)	3538 - 3496 cal BC	(5487 - 5445 cal BP)

68.2% probability

(30.6%)	3427 - 3381 cal BC	(5376 - 5330 cal BP)
(24%)	3627 - 3591 cal BC	(5576 - 5540 cal BP)
(13.6%)	3528 - 3506 cal BC	(5477 - 5455 cal BP)



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

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

(Variables: d13C = -26.5 o/oo)

Laboratory number Beta-553504

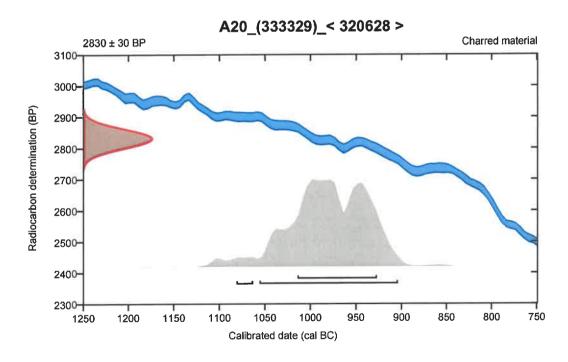
Conventional radiocarbon age 2830 ± 30 BP

95.4% probability

(93.8%)	1058 - 906 cal BC	(3007 - 2855 cal BP)
(1.6%)	1083 - 1065 cal BC	(3032 - 3014 cal BP)

68.2% probability

(68.2%) 1016 - 929 cal BC (2965 - 2878 cal BP)



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

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

(Variables: d13C = -22.8 o/oo)

Laboratory number Beta-553513

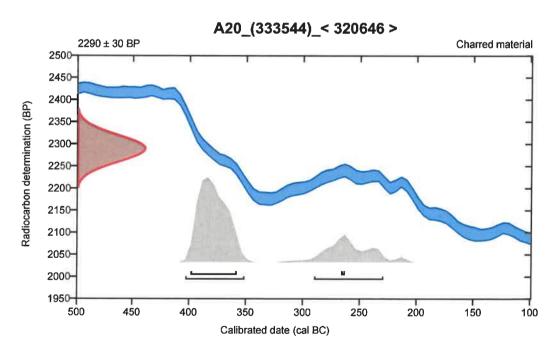
Conventional radiocarbon age 2290 ± 30 BP

95.4% probability

(70.8%)	405 - 353 cal BC	(2354 - 2302 cal BP)
(24.6%)	292 - 231 cal BC	(2241 - 2180 cal BP)

68.2% probability

(65.7%)	400 - 360 cal BC	(2349 - 2309 cal	BP)
(2.5%)	268 - 265 cal BC	(2217 - 2214 cal	BP)



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



Gwynedd Archaeological Trust Ymddiriedolaeth Archaeolegol Gwynedd

