GWYRIAD CEBL EV9 WYLFA / WYLFA EV9 CABLE DIVERSION

Post-excavation Assessment Report

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

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Post-excavation Assessment Report

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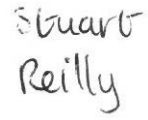
Originated by	Document Author	Stuart Reilly		17/03/21
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Revision History			
Rev No.	**Summary of Changes**	**Ref Section**	**Purpose of Issue**
01	Grammar	Throughout document	Wardell Armstrong Approval
	Additional information on stratigraphic data	6.1	
	Additions to Bibliography	11	
	Edit to Figure 03.2	16	
02	Additional information on description of features & location of sites	6.1	GAPS Approval
	Dates and details from 6.1.2 included in 6.2.4	6.2.4	
	Recommendations for further work on artefacts	7.4,9 & 10	
	Illustrations to be enlarged	Appendix 5	
	Context Register & Lithics report	Appendices 4 & 10	

CONTENTS

1 CRYNODEB ANNHECHNEGOL

Comisiynwyd RSK i gynnal ymchwiliad stribed, map a sampl archeolegol yn ystod gwaith daear ar gyfer Gwyro Ceblau Wylfa EV9 ar ran Carillion. Cyflawnwyd yr holl waith yn unol â'r Cynllun Ymchwilio Ysgrifenedig ar gyfer stribed, Map a Sampl Archeolegol (Hayes 2017) fel y cytunwyd gyda Gwasanaeth Cynllunio Archeoleg Gwynedd. Mae Horizon wedi gofyn am gwyriad cebl 132kV i'r Grid Cenedlaethol er mwyn caniatáu adeiladu Gorsaf Bŵer Niwclear Wylfa B. Mae'r llwybr cebl yn cychwyn yn yr is-orsaf 132kV wrth ymyl yr orsaf ynni niwclear presennol, ac mae'r gwyriad yn ymestyn am bellter o 2.15km, gan derfynu i'r de o bentref Tregele.

Datgelodd yr ymchwiliad archeolegol bedwar maes o weithgaredd archeolegol, sy'n cynnwys yn fras, dri grŵp pwll wedi'u gwasgaru ar hyd y cynllun a ffos gylch strwythurol gyda nodweddion cysylltiedig wedi'u lleoli yng nghanol y llwybr dargyfeirio cebl. Mae'r nodweddion wedi esgor ar arteffactau sy'n arwydd o weithgaredd yr Oes Efydd a chasgliad mawr o gerameg addurnedig o ddiwedd yr Oes Neolithig a'r Oes Efydd Ddiweddarach. Argymhellir asesu ar gyfer pob categori data. Dylid ystyried y data o'r wefan hon wrth ddadansoddi a chyhoeddi holl wefan Wylfa Newydd.

2 NON-TECHNICAL SUMMARY

RSK was commissioned to undertake an archaeological strip, map and sample investigation during groundworks for the Wylfa EV9 Cable Diversion on behalf of Carillion. All works were carried out in accordance with the Written Scheme of Investigation for an Archaeological Strip, Map and Sample (Hayes 2017) as agreed with Gwynedd Archaeology Planning Service. The 132kV cable diversion has been requested to National Grid by Horizon to allow construction of the Wylfa B Nuclear Power Station. The cable route starts at the 132kV substation next to the existing nuclear power station, and the diversion extends for a distance of 2.15km, terminating south of the village of Tregele.

The archaeological investigation uncovered four areas of archaeological activity including three pit groups scattered across the length of the scheme and a structural ring ditch with associated features positioned at the centre of the cable diversion route. The features have yielded artefacts indicative of Neolithic and Bronze Age activity including a large assemblage of decorated Late Neolithic and Later Bronze Age ceramics. Assessment is recommended

for all data categories. The data from this site should be considered in the analysis and publication of the whole Wylfa Newydd site.

3 INTRODUCTION

3.1 Site location

The cable route starts at the 132kV substation (NGR SH 35119362) next to the existing nuclear power station, and the diversion extends for a distance of 2.15km, terminating south of the village of Tregele (NGR SH 36009207). The area was designated EV9. The PRN reference was GATHER1229 and the Event Primary Reference number was 45800.

3.2 Scope of the project

RSK was commissioned to undertake an archaeological strip, map and sample investigation during groundworks for the Wylfa EV9 Cable Diversion on behalf of Carillion. All works were carried out in accordance with the Written Scheme of Investigation for an Archaeological Strip, Map and Sample (Hayes, 2017) as agreed with Gwynedd Archaeology Planning Service. This project 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 Horizon Nuclear Power (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); see Appendix 1.

3.3 Dates/duration of fieldwork

The fieldwork was undertaken between June and November 2017.

3.4 Site character and archaeological background

The cable route extends in a south easterly direction, from NGR SH 35119362 to the west of Tregele, terminating at Tower EV009 at NGR SH 36009207. The topography within the corridor is gently undulating, crossing farmland which has been under both pasture and arable cultivation. The route crosses the A5025, two farm tracks and a single watercourse.

The underlying geology is of metamorphic rock, flaggy and laminate green-mica schist of the New Harbour Group of the Mona Complex. The schist contains bands and erins of quartz,

jasper and calcite. The bedding planes dip in the northerly direction. Dolerite dykes can be seen outcropping along the coastline. Glacial erosion has reduced the landform to a generally level surface. Hollows are filled with brown clay or gravel.

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. 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 in northern Anglesey. Archaeological excavations in advance of the A55 across Anglesey, and in advance of construction of the Parc Cybi (Kenney, 2011) 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. However, 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.).

3.5 Summary of previous archaeological investigations

Archaeological work carried out in association with the project prior to the excavation of EV9 included:

- desk based assessment (Cooke et al. 2012). The desk based assessment covered the scheme west of the A5025 (i.e. Fields 9A to 21). The 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 footprint of the route west of the A5025.

- geophysical surveys (ASWYAS 2015; Hopewell/2011a-b; Hopewell 2012). The GAT geophysical work focused on 'Area 5' which equates to EV9 Field 14. The survey indicated that the field had been heavily cultivated possibly landscaped and is crisscrossed with fine linear anomalies consistent with several phases of deep ploughing. However, the geophysical survey did not identify a stone-filled pit cut into the subsoil which was discovered during subsequent trial trenching (Hopewell 2012, 19). The subsequent ASWYAS geophysical survey area corresponds with EV9 Fields 9 to 18. The survey identified an anomaly (A-127) interpreted as the remains of a field system that pre-dates the existing 18/19th century field layout in Field O11 (EV9 Field 13) and a possible circular enclosure in Field O17 (EV9 Field 9) (HNP 2015, 21). The possible feature in Field O17 lay outside of the cable diversion easement.

- RSK geotechnical ground investigation with an accompanying archaeological watching brief was undertaken in May-June 2016. The watching brief identified Neolithic remains to the west of Tregele, with no evidence of archaeological activity in trial pits to the south of the village. Trial Pit 4 (located in EV9 Field 14) identified two postholes. Post hole [40] provided '*a terminus post quem placing the activity in or after the mid-Neolithic to Late Bronze Age. This date is broadly consistent with a radiocarbon date obtained for adjacent pit [43] which places the activity in the latter half of the Early Neolithic period.*' (Hayes 2016, 16).

3.6 Post-excavation assessment

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.

3.7 Site location map related to the development area (see Appendix 4; Figure 1)

4 SUMMARY OF THE EXCAVATION METHODOLOGY

4.1 Proposals set out in the approved Written Scheme of Investigation (Appendix 2)

All works were carried out in accordance with the Written Scheme of Investigation for an Archaeological Strip, Map and Sample (Hayes 2017) and in compliance with current standards and guidance, e.g. ClfA (2014a-c) and Historic England (2015). The specific aims of the archaeological strip map and sample, as described in the WSI (Hayes 2017), were:

- To secure the recording of any archaeological features exposed during the topsoil strip within the cable easement;
- To undertake a controlled topsoil and subsoil strip within the agreed area by mechanical excavator under close archaeological supervision to expose the potential archaeological horizon;
- To demarcate and protect any areas of identified archaeological remains from plant movements prior to archaeological recording.
- To undertake a detailed survey of the extent, layout and profile of archaeological features within the agreed area.
- To manually excavate and record a sample of the archaeological features (to include written, drawn, photographic and digital GPS survey records);
- To recover any archaeologically significant artefacts from identified archaeological features for specialist examination and reporting sufficient to characterise their date, nature and significance;
- To recover and assess palaeoenvironmental samples of deposits considered to be of archaeological potential.
- To prepare a report on the strip, map and sample investigation, including an assessment of any finds and palaeoenvironmental samples retained and an assessment of the heritage significance of the results.
- To submit an ordered archive to the nominated recipient organisation.

All archaeological features were investigated and recorded as per current guidance provided by Historic England (English Heritage 2011) and CIfA's Standards and Guidance for Archaeological Excavation (2014a).

4.2 Any variations from the Written Scheme of Investigation with justifications

No variations of work were undertaken

4.3 Site planning strategy with justifications for the applied methodology

As outlined in the Written Scheme of Investigation (Hayes 2017), further to discussion with Senior Planning Archaeologist at Gwynedd Archaeological Planning Service (GAPS) and the results of the archaeological watching brief of the RSK geotechnical ground investigation it was agreed that a suitable approach to mitigate the potential impact on unknown archaeological remains within this corridor was a strip, map and sample investigation. The aim of the strip, map and sample investigation was to secure the recording of any archaeological features exposed during the topsoil strip within the cable easement.

5 SITE ARCHIVE

5.1 Summary of the contents and organisation of the project archive

The project archive is comprised of a paper archive (e.g. paper context sheets, hand drawn sections and plans on permatrace sheets) and a digital archive (e.g. digital photographs, GPS location information).

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 A3 and A4 permatrace (plans and sections). Paper records include environmental sample sheets, photographic register, context register and graphics register. Scanned images include the A3 and A4 permatrace (plans and section). Digital information is securely stored within the GAT digital storage). Paper records are filed in sequential order.

5.1.1 Summary of Paper Archive

The paper archive comprises:

- 242 no. written context sheets of all features.
- 153 no. drawings (sections/plans).
- 97 no. samples.
- 185 no. artefacts.

5.1.2 Summary of Digital Archive

The digital archive:

- In total 616 digital photographs were taken between 20th June and 13th November 2017.
- Archaeological features were surveyed in using GPS.

5.2 Quantification of documentary archive

The documentary archive comprises:

Data Category	Number
Contexts	242
Artefacts	185
Environmental Samples	97
Digital photographs	616
GPS surveyed digital post-excavation plans	4
Drawings (hand drawn) sections & plans	153

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 (which includes digital copies of the paper archive) is securely stored within the GAT digital storage. Paper records are filed in sequential order. The A3 and A4 permatrace are organised sequentially (by drawing number) in a locked filing cabinet. All paper records are stored in paper folders in a locked filing cabinet.

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

The documentary archive has been reviewed and checked by GAT during the post-excavation phase, in preparation for delivery and storage at Oriel Ynys Môn.

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 the date in which they were taken.

5.4 Quantification of material archive and details of current location.

The material archive comprises a total of 185 artefacts, weighing 5906g, from 69 contexts. The finds assemblage is currently split between the Gwynedd Archaeological Trust (lithic, stone etc.) and the home of the specialist Frances Lynch (pottery) as of 06/03/20. 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 Ynys Môn. The project has the unique identifier WA 2020 / CL12283 / 117360.

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

The material archive:

- The artefacts recovered from site have been quantified, examined and labelled in the Project Register (see Appendix 3). The stone and lithic artefacts were cleaned and bagged by RSK prior to transfer to GAT. The pottery sherds have been cleaned for examination by the specialist Frances Lynch in preparation for assessment. Pottery sherds recovered during ecofact processing were in affect 'cleaned' and subsequently dried in a controlled environment alongside the flots and residues. There is no requirement for preliminary conservation or stabilisation of the pottery sherds as they are suitably robust and well-preserved (Frances Lynch pers. comm.).

- The ecofact assessment was completed as a two stage process, based on the following methodology:

    1. The bulk sample was processed in house by GAT. This consisted of flotation and wet sieving using a 500 micron mesh to collect the residue (which collects more than the 1mm = 1000 micron), with the flot collected in a 250 micron mesh. The residues were sorted to recover artefacts and non-floating ecofacts. Once sorted the residues were discarded. The flots were weighed, catalogued and examined for charred macroplant remains (see Appendix 3).

    2. Recovered charred macroplant was sent for specialist assessment to AOC Archaeology (Table 2). The charred macroplant was sieved using a 4mm, 2mm and 1mm system of stack sieves and subsequently examined under magnification (x10 and up to x100). Macroplant identifications were completed and confirmed using modern reference material and seed atlases stored at AOC Edinburgh. Taxonomic and nomenclature for plants were based on Stace (2010). Charcoal fragments 4mm and larger were collected for species identification and recommendations have been made for any subsequent analysis and radiocarbon dating (see Appendix 6 – AOC report).

AOC have not made any preliminary recommendations for the conservation/stabilisation of the ecofacts assemblage.

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

The following ecofactual material, further to being processed and sorted in house by GAT, were sent to AOC for specialist analysis:

Sample No.	Context No.	Notes	Flot Weight (g)
1	1	good charcoal	72
2	3	good charcoal	64
3	5	good charcoal	198
4	7	sparse charcoal	14
5	8	good charcoal	68
6	10	good charcoal	2
7	20	good charcoal	31
8	22	good charcoal	51
9	14	good charcoal	29
10	16	sparse charcoal	4
11	23	good charcoal	57
12	27	very sparse charcoal	32
13	29	very sparse charcoal	26
14	31	good charcoal	222
15	53	good charcoal	56
16	55	sparse charcoal	11
17	51	good charcoal	153
18	61	sparse charcoal	99
19	71	good charcoal	90
20	73	very sparse charcoal	40
21	69	good charcoal	92
22	77	good charcoal	11
23	79	good charcoal	25
24	81	good charcoal	23
25	75	very sparse charcoal	7
26	59	good charcoal	30
27	85	sparse charcoal	81

Sample No.	Context No.	Notes	Flot Weight (g)
28	63	good charcoal	34
29	87	good charcoal	88
30	51	good charcoal	101
31	69	good charcoal	92
32	83	good charcoal	23
33	71	good charcoal	195
34	109	good charcoal	129
35	103	good charcoal	50
36	105	good charcoal	152
37	109	good charcoal	67
38	111	sparse charcoal	22
39	107	good charcoal	95
40	113	good charcoal	20
41	115	good charcoal	74
42	121	good charcoal	84
43	125	good charcoal	38
44	123	good charcoal	40
45	127	very sparse charcoal	5
46	129	very sparse charcoal	9
47	131	good charcoal	50
48	133	sparse charcoal	18
49	135	good charcoal	5
50	138	no charcoal - sandy flot	58
51	145	good charcoal	8
52	147	good charcoal	25
53	149	good charcoal	67
54	152	good charcoal	35
55	153	good charcoal	14
56	155	good charcoal	8
57	157	good charcoal	14
58	160	good charcoal	37
59	162	good charcoal	305
60	164	abundant charcoal	1398

Sample No.	Context No.	Notes	Flot Weight (g)
61	165	sparse charcoal	8
62	182	no charcoal - sandy flot	242
63	169	good charcoal	9
64	171	good charcoal	9
65	173	good charcoal	20
66	175	good charcoal	94
67	179	good charcoal	131
68	181	good charcoal	239
69	185	good charcoal	63
70	187	good charcoal	80
71	188	good charcoal	52
72	190	very sparse charcoal - dirt	287
73	193	sparse charcoal - dirt	138
74	194	flot missing - charcoal recovered from residue	
75	195	good charcoal	867
76	200	abundant charcoal	49
77	201	good charcoal	56
78	205	good charcoal	18
79	207	good charcoal	20
80	209	good charcoal	243
81	211	some charcoal, very dirty flot	505
82	213	good charcoal	309
83	215	good charcoal	37
84	217	good charcoal	234
85	218	good charcoal	10
86	220	good charcoal	135
87	222	good charcoal	27
88	224	sparse charcoal	19
89	228	sparse charcoal	22
90	230	sparse charcoal	30

Sample No.	Context No.	Notes	Flot Weight (g)
91	232	sparse charcoal	5
92	234	good charcoal	240
93	236	good charcoal	18
94	238	good charcoal	40
95	239	good charcoal	41
96	241	good charcoal	26
97	215	good charcoal	61

Table 2: Flots sent for specialist analysis

Samples from the following contexts were submitted for radiocarbon dating:

1. Fill (51) of pit [52] as this context produced sherds of possible Middle Bronze Age pottery and two definite sherds of Grooved Ware. It also has ‘notable concentration’ of hazelnut shells;

2. Fill (71) of pit [72] as this context produced sherds/fragments from the same pot of Fengate Ware and also has ‘notable concentration’ of hazelnut shells;

3. Fill (195) of [197] as this is a sealed context of a section of the ring ditch cut (most likely the remnants of a round house) with viable charcoal fragments of non-oak variety present;

4. Fill (164) of [163] as this was a large pit situated within the arc of the ring ditch (according to the context sheet it produced Bronze Age pottery) and contained large concentration of cereal grain viable for radiocarbon dating;

5. Fill (05) of pit [04] as it produced possible sherds of Early Bronze Age pottery and has charcoal or hazelnut shells that would be viable for radiocarbon dating.

5.7 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

The archaeological strip, map and sample conducted during groundworks for the Wylfa EV9 Cable Diversion identified four areas of archaeological activity in Fields 1 & 2, 9, 9A and 14 (PRN 45800; Figure 01). The archaeology summarised below is in chronological order as currently understood. 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.*

6.1.1 Later Neolithic

The archaeology uncovered within the easement in Field 14 (north of the village of Tregele and west of the A5025) was concentrated toward the southern edge of the field centred around NGR SH 35618 927455. Field 14 was a large, relatively flat field of pasture defined by a mixture of matured hedgerows, low stone walls and post and wire fences. The field was bounded by the A5025 along the east, the main entrance road to Wylfa Nuclear Power Station to the north and a minor country road along with other fields of pasture to the south and west.

It comprised two discrete pit clusters and one ditch (Figure 02).

Group/Number	Feature Type	Contexts
Pit Cluster 1		
5	Discrete Pits	[52], [70], [72], [74] & [80]
3	Discrete Postholes	[76], [78] & [82]
Pit Cluster 2		
3	Discrete Pits	[54], [56] & [62]
Ditch		
1	Ditch	[64/66]

Table 3: Field 14 Archaeological Features

The main concentration of features (Pit Cluster 1) were self-contained yet spatially discrete group of five pits and three postholes, laid out on a northeast – southwest orientation, the edge of which was defined by a ditch set on the same alignment to the immediate south southeast. The pits and postholes were oval or circular in plan and aside from pit [74] and posthole [78], were comparable in size.

Pit Cluster 1 was defined by ditch [64/66] that was aligned southwest – northeast. Ditch [64] had an excavated length of 4.5m and ditch an exposed length of 8.0m, with a gap of 5.5m between the two. There were no indication of terminals and it was uncertain whether the gap represented a break in parts of a segmented ditch, was due to erosion/plough damage creating a gap in a continuous ditch, or an entranceway into an enclosure (although no returns/ parallel ditches were observed the other side of the pits). The ditches had a maximum width of 0.6m and depth of 0.15m, with a variable cut, varying from being gently sloping (30°) sides and an irregular base to having steep (45°) sides and a flattish base. The fill of ditch [64], fill (63) comprised firm dark brown silty clay with moderate sub-angular and angular gravel and small stones (up to 40mm) and occasional small rounded stones. While the fill of ditch [66], fill comprised firm grey-brown silty clay with frequent angular and sub-angular gravel and small stones (up to 40mm).

The pits were aligned parallel with the ditch [64/66]. Pit [80] was located at the southwestern end of the cluster being oval in plan measuring 1.0m x 0.8m and orientated in a northeast-southwest direction. The cut was 0.27m deep, with irregular, stepped sides and a flattish base. The single fill (79) comprised firm dark brown silty clay with 30% angular stone (up to 80mm), very occasional rounded stones and occasional charcoal flecks.

To the immediate northeast was pit [72] circular in plan measuring 0.82m in diameter. The cut was 0.16m deep, with irregular stepped sides and a flattish base. The single fill (71) was a firm dark brown silty clay with approximately 30-40% angular stone fragments, very occasional fire cracked stones and moderate inclusions of charcoal flecks and fragments (up to 0.03m).

To the northeast was pit [70] oval in plan measuring 1.05m x 0.9m, orientated in a northeast-southwest direction. The cut was 0.28m deep, with steep (45°-60°) sides, very steep (85°) in the north, and an irregular/slightly concave base. There was a slump/primary fill (83) in the northern half of the pit. This deposit was a firm yellow brown silty clay with occasional angular gravel and small stones (up to 30mm). The main principal fill of the pit (69) is comprised firm dark brown silty clay with moderate quantities of angular and sub-angular gravel and small stones (up to 50mm), very occasional larger stones (up to 120mm) and moderate charcoal flecks.

To the immediate northeast was pit [52] that was oval in plan orientated northeast-southwest and measuring 0.95m x 0.7m. The cut was 0.32m deep, with very steep/near vertical (70°-85°) sides and a flattish/slightly concave base. A slump/primary fill (67) was observed in the

northern half of the pit. A slump/primary fill (67) was observed in the northern half of the pit. This deposit comprised firm yellow/brown silty clay with occasional gravel and small stones, and was up to 0.12m thick. The principal fill (51) comprised firm, dark brown silty clay with approximately 20-30% large sub-angular and sub-rounded stones, 0.1 x 0.1 x 0.1m to 0.4 x 0.3 x 0.2m in size. There was also a moderate quantity of gravel and small stones (up to 0.05m), occasional larger fire-cracked stones (up to 100mm) and charcoal flecks throughout the fill.

To the northeast was pit [74] that was oval in plan measuring 0.6m x 0.45m orientated in an east-west direction. The cut was 0.25m deep, with very steep (70°-80°) sides and a slightly concave base. The single fill (73) is comprised firm brown silty clay with very occasional angular gravel and small stones (up to 0.04m).

At the northeastern end of the pit cluster was pit [86] was circular in plan measuring 0.75m in diameter. The cut was 0.28m deep, with very steep (70°) sides and a flattish base. The single fill (85) comprised firm dark brown silty clay with 30% angular stone fragments (generally up to 70mm, but 10% of the fill is larger stones measuring 0.1-0.2m in size), and occasional charcoal flecks.

Posthole [76] was circular in plan measuring 0.2m in diameter and was positioned to the immediate northeast of pit [52]. The cut was 0.9m deep, with steep (50°-60°) sides and a concave base. The single fill (75) is was a firm dark yellow-brown silty clay with occasional angular gravel and small stones and occasional charcoal flecks.

Postholes [78] and [82] were located to the north of the pit cluster. Posthole [78] was circular in plan measuring 0.35m in diameter. The cut was 0.13m deep, with very steep (70°) sides and an irregular base. The single fill (77) was a firm brown silty clay with occasional angular gravel and small stones, very occasionally larger.

Pit [82] was circular in plan measuring 0.38m in diameter. The cut was 0.18m deep, with very steep (70°) sides and a slightly concave base. The single fill (81) comprised firm dark brown silty clay with occasional angular gravel and small stones, very occasionally larger and very occasional charcoal flecks.

Pit Cluster 2 was located to the north of Pit Cluster 1 and was comprised of three pits [54], [56] and [62], arranged linearly within approximately 2.5m.

Pit [54] was circular in plan measuring 0.6m in diameter. The cut was 0.1m deep, with shallow (30°) sides and a flattish base. The single fill (53) was a firm grey-brown silty clay with occasional angular and sub-angular gravel and small stones and very occasional charcoal flecks.

To the immediate south was pit [56] that was circular in plan measuring 0.4m in diameter. The cut was 90mm deep, with gently sloping (30°-45°) sides and a slightly concave base that slopes to the north. The single fill (55) comprised firm grey-brown silty clay with occasional sub-rounded, sub-angular and angular gravel and small stones.

To the immediate south was pit [62] circular in plan measuring 1.15m x 1.0m. The cut was 0.12m deep, with irregularly sloping (30°-60°) sides and an uneven base, which was slightly concave in the north. The single fill (61) comprised firm grey-brown silty clay with occasional angular and sub-angular gravel and small stones and very occasional larger angular stones (up to 0.2m) some of which were fire cracked. Occasional charcoal flecks were also present in this fill.

The fills of pits [52], [70] and [72] produced diagnostic sherds of pottery (Figure 03 & Plates 01 - 09). The fills (51), (67) of pit [52] and fill (69) of pit [70] produced sherds of Grooved Ware, while the sherds and fragments of pottery recovered from (71) of pit [72] belong to the same pot of Fengate Ware.

Fengate Ware and Grooved Ware are pottery styles which date from the Later Neolithic. Radiocarbon dates for Fengate Ware extends from 3500 to 2500 BC (Gibson 2002, 80) and persists until as late as 2000 BC (Malone 2001, 239). It is part of the Peterborough Ware/Impressed Ware pottery tradition that emerges in Britain during the Later Neolithic typically consisting of pots with flat bases, splayed bodies and collard rims (Gibson 2002, 78). Grooved Ware, in comparison, originates in Scotland in the early third millennium BC (Malone 2001, 239) and in southern England later from around 2800 BC (Gibson 2002, 84) or even as late as 2500 – 2300 BC (Malone 2001, 239). Grooved Ware tends to be tub, bucket or barrel-shaped pots with flat bases decorated with heavy grooved patterns, rusticated ribs and cordons (Malone 2001, 239).

In North Wales there is increasing recognition of stylistic merging, as noted at Clynnog, Gwynedd and Llanfaethlu, Anglesey, which would suggest that Fengate and Grooved Ware are broadly contemporary. At present though this has not been substantiated by radiocarbon dating, which places Fengate Ware some 200 to 300 years prior to the emergence of Grooved Ware (Lynch, 2020).

During the archaeological watching brief of the RSK geotechnical ground investigation along the route for the Wylfa EV9 Cable Diversion Neolithic remains to the west of Tregele were identified and investigated. Trial Pit 4 (located in EV9 Field 14) identified two postholes. The presence of prehistoric pottery along with radiocarbon dates from the archaeological features uncovered within Trial Pit 4 (NGR SH 35619 92747) place them in the latter half of the Early Neolithic (4980 ± 30 BP, or 3890-3885 cal BC, 3795-3690 cal BC and 3680-3660 cal BC) (Hayes 2016, 15).

Representative ecofact samples taken from key features (51) of pit [52] and (71) of [72] were submitted for radiocarbon dating. Fill (51) produced a date range of 3091 to 2921cal. BC at 95.4% probability while fill (71) returned a date range of 3137 to 3012 cal. BC at 47.8% probability. The radiocarbon dates complement the ceramic dating evidence of the Later Neolithic pottery styles recovered and identified from these features from within the pit group.

6.1.2 Earlier Bronze Age features

The archaeology identified at the southeastern terminal of the EV9 easement (NGR 236004, 392074) was concentrated in Fields 1 & 2. The features were uncovered in large fields of pasture, set within a gentle, undulating landscape. The fields are located to the south of Cromlech Terrace, east of the village of Tregele. The archaeology identified within the easement consisted of two discrete pit clusters, along with a gully and spread (Figures 04 & 05 and Pates 22 - 26).

Group/Number	Feature Type	Contexts
Pit Cluster Field 1		
3	Discrete Pits	[21], [24], [26]
Pit Cluster Field 2		
5	Discrete Pits	[02], [04], [06], [11], [13]
Miscellaneous		
1	Spread	[09]
1	Gully	[15]

Table 4: Fields 1 & 2 Archaeological Features

Pit Cluster Field 1 was comprised of a loose group of 3 discrete pits [21], [24] and [26]. The pits were oval and circular in plan and varied in size and depth. Pit [21] was roughly circular in plan with a diameter of 0.4m and depth of 0.13m. The cut had gently sloping sides that merged with a concave base. It was filled by (20) a soft mid-brown silty clay with occasional sub-rounded small stones.

Pit [24] was oval in plan, measuring 0.7m x 0.6m with a maximum depth of 0.25m. The cut had steep sides with a southwest – northeast sloping base. It contained two fills. The primary fill (23) was a firm dark brown silty clay mixed with moderate flecks of charcoal. It was overlaid by (24) a firm mid-brown silty clay mixed with moderate small stones.

Pit [26] was the largest feature of the cluster, being oval in plan and measuring 1.2m x 1.4m with a depth of 0.18m. The cut had gently sloping sides that merged with a flat base. It contained a single fill (25) a compact mid-brown silty clay with a concentration of medium sized stones at the eastern terminal of the pit.

Pit Cluster in Field 2 consisted of a loose group of spatially discrete features, comprised of five pits [02], [04], [06], [11] and [13] along with an associated gully [15] and spread (09). The pit [02] was oval in plan measuring 0.6m x 0.4m with a depth of 0.08m. The cut had an indistinguishable slope that merged with slightly concave base. It was filled by (01) a firm

dark greyish brown silty clay mixed with frequent flecks of charcoal and occasional small stones.

To the north of pit [02] were the pits [06] and [13]. Pit [06] was roughly circular in plan with a diameter of 1.0m and maximum depth of 0.12m. The cut had irregular gently sloping sides and a slightly concave base. It was filled by (05) a mixed deposit of light brownish red clay mixed with black silty clay with frequent charcoal flecks. The fill appeared to be a burnt deposit taken from a hearth.

To the immediate east of pit [06] was the irregular in plan pit [13] that measured 2.3m x 1.0m with a maximum depth of 0.10m. The cut had indistinguishable sides and a relatively flat base. It was filled by (12) a firm mid-greyish brown silty clay mixed with occasional small stones.

To the northwest of these features were the two circular in plan pits [04] and [11]. The pits were in close proximity to one another but did not intercut. Pit [04] had a diameter of 1.0m and depth of 0.08m. The cut had indistinguishable sides and a relatively flat base. It was filled by (03) a firm mid-brown silty clay mixed with occasional small stones.

To the immediate east of pit [04] was pit [11] which had a diameter of 0.80m and depth of 0.06m. The cut had indistinguishable sides and a relatively flat base. It was filled by (10) a firm mid-brown silty clay mixed with occasional small stones.

The gully [15] was irregular in plan, orientated east – west and extended from the western edge of the easement. It was set between pits [02] and [06]. The gully had an exposed length of 3.8m and maximum width of 1.0m with a depth of 0.10m. The cut had gradually sloping sides that merged with an uneven base. It was filled by (14) a firm mid-greyish brown silty clay mixed with occasional small stones.

Spread (09) was an amorphous deposit of loose light brownish red clay mixed with black silty clay with moderate charcoal flecks, located close to the northern edge of the easement in Field 2. It measured approximately 1.0m x 1.2m with a shallow depth of 0.10m. There was discernible cut and it did not cover other archaeological features, although it was located to the immediate east of bioturbation (07) and (08).

The majority of the features did not produce artefacts but a limited number of pottery sherds were recovered, some of which were diagnostic. The pottery sherds from contexts (03) and (07) have been assessed to be of Earlier Bronze Age date, with the rim sherd from (03) of pit

[04] being the top of a Late Collared Urn rim. This combined with an ecofact sample selected from (05) of pit [04] returning a date of 1908 to 1750 cal. BC at 95.4% probability, places the pit and potentially the associated activity within the Earlier Bronze Age (2400 to 1500 BC). In addition, the archaeological features are located to the immediate northwest of the remnants of a possible burial chamber, Cromlech, Llanfechell (PRN 3046) located at NGR SH 3604692003.

6.1.3 Later Bronze Age and Iron Age

The archaeology uncovered within Fields 9 and 9A, based on the assessment of the sherds of pottery recovered from the features of these sites and preliminary radiocarbon dates, place them within the Later Bronze Age (1500 – 650 BC).

The archaeology uncovered within the easement in Field 9 (west of the village of Tregele) was concentrated in the eastern half of the field, adjacent to the A5025 centred around NGR SH 35495 92473. It comprised a concentrated cluster of features (predominantly small pits) and two outlying features (Figure 06 & Plates 19 - 21). The site was positioned on marginal ground, to the immediate south of a stream that also separated it from the archaeological features identified in Field 9A.

Group/Number	Feature Type	Contexts
Group of features		
6	Small Pits	[146], [150], [154], [156], [170] & [172]
2	Post holes	[148] & [158]
Outlying Features		
1	Ditch/Field Boundary	[139]
1	Large Pit	[183]
Natural Features		
2	Natural Disturbance	[166] & [168]

Table 5: Field 9 Archaeological Features

The archaeology identified within the easement of Field 9A (west of the village of Tregele) was concentrated along the southern field boundary centred on NGR SH 35483 92506. It was composed of the incomplete remnants of a curvilinear ditch that had an internal diameter of 12.0m as well as a ring of 11 postholes with an approximate internal diameter of 7.5m and associated stakeholes, postholes and pits (Figures 07, 08 & 09 & Plates 10 - 18). The site was positioned on a gentle, south facing slope immediately adjacent to a small stream that physically separated it from the archaeology concentrated in Field 9.

Group/Number	Feature Type	Contexts
Ring of Postholes		
11 v	Postholes	[104], [242], [110], [116], [112], [114], [216], [184], [174], [126] & [198]
Ring Ditch		
1	Ring Ditch	[118/191/196/197/198/199/202/ 206/208/210/212/214/219/221/229] (recorded as 13 separate interventions)
1	Associated with ring ditch	[231/233]
Internal Features of Ring of Post holes & Ring Ditch		
2	Intercutting Pits	[178] & [180]
1	Spread	(123)/(124)
6	Stakeholes	[128], [130], [132], [134], [136] & [227]
1	Post hole	[237]
1	Beam Slot	[120]
Internal to Ring of Postholes & external to Ring Ditch		
1	Post Hole	[106]
Internal Features to Ring Ditch & External to Ring of Postholes		
3	Pits	[122]. [163] & [186]
2	Postholes	[159] & [225]
1	Post hole with post pipe	[235] with [161]
2	Stakeholes	[176] & [223]
1	Linear	[151]

Table 5: Field 9A Archaeological Features

6.1.4 Field 9

The majority of the features identified within Field 9 were in close proximity with limited intercutting that extended along a north – south axis (Figure 06). Pit [146] was on the northern most edge of this irregular line of features. The pit was oval in plan measuring 0.4m x 0.3m with a maximum depth of 0.06m. The cut had gently sloping sides that merged with a

slightly concave base. It was filled by (145) was a loose mid-greyish brown silty clay mixed with frequent small stones and occasional flecks of charcoal.

To the immediate east of pit [146] there was a pair of postholes [148] and [158] that were adjacent but distinct to one another. Posthole [148] was oval in plan measuring 0.38m x 0.30m and a maximum depth of 0.15m. The cut had steep sides, in particular along the northern edge, with an irregular base that was stepped and became concave at the northern side of the feature. It had a single fill (147) a firm mid-brown silty clay mixed with occasional large stones.

To the immediate south of [148] was the posthole [158] that was roughly circular in plan with a diameter of 0.30m and depth of 0.05m. The cut had relatively steep sides that merged with a slightly concave base. It was filled by (157) a loose mid-greyish brown silty sandy clay mixed with moderate small stones.

To the immediate south of the postholes and pit [146] was the pit [156] that was roughly oval in plan measuring 0.50m x 0.30m with a depth of 0.07m. The cut had relatively steep sides that merged with a slightly concave base. It was filled by (155) a loose mid-greyish brown silty sandy clay mixed with moderate small stones.

To the immediate south was pit [154] that was roughly circular in plan with a diameter of 0.50m and a depth of 0.09m. The cut had relatively steep sides that merged with a flat base; the southern edge had been partially truncated by pit [150]. It had a single fill (153) a loose dark greyish black silty sandy clay mixed with moderate small stones and moderate flecks of charcoal.

Pit [154] was partially truncated by pit [150] along its southern edge. Pit [150] was also circular in plan with a diameter of 0.53m and depth of 0.18m. The cut had relatively steep sides and a concave base. It was filled by (149) a loose dark grey silty sandy clay mixed with frequent small and medium sized stones.

To the east of pit [150] was the pit [170] that was roughly oval in plan, measuring 0.41m x 0.32m with a depth of 0.06m. The cut had gently sloping sides that merged with a slightly concave base. It had a single fill (169) a firm dark-greyish black silty clay mixed with moderate charcoal flecking and small stones.

Northeast of pit [170] was the oval in plan pit [172] that measured 0.38m x 0.35m,with a shallow depth of 0.05m. The cut had relatively steep sides and a flat north – south angled

base. It was filled by (171) a firm dark-greyish black silty clay mixed with moderate charcoal flecking and small stones, a small number of which were heat fractured.

The features located within the eastern half of Field 9 but separate from the core cluster of features outlined above, included a large pit [183] and remnants of a ditch [139]. Pit [183] was oval in plan measuring 1.40m x 1.16m with a depth of 0.23m. The cut was steep along the north northwest side but otherwise had quite a gradual break of slope that merged with a shallow concave base. It had a single fill (182) was firm dark greyish brown silty clay mixed with moderate medium sized stones and occasional fleck of charcoal.

The segment of ditch [139] was orientated north – south, extending south from the edge of the easement for a visible distance of 1.70m, with a maximum width of 0.65m. The cut had steep almost vertical sides and a concave base. It had two fills (137) and (138). The basal fill (138) was a firm dark-greyish brown silty clay mixed with infrequent small stones and it was overlaid by (137) a cohesive mid-brown silty clay mixed with moderate small stones.

The pottery recovered from the pit cluster and associated features (Figure 09) in Field 9 along with the pottery from the habitation site of Field 9A are very uniform though the assemblage probably represents about eight vessels. All of the sherds are featureless except for four base sherds and six fairly simple upright rims. The pottery sherds from this assemblage are comparatively hard and well-fired. This characteristic makes it very similar to pottery identified at another excavation conducted for the Wylfa Newydd project, Area 5, approximately 1km north west of Tregele. The pottery from EV9 and Area 5 are closely comparable to pottery from the Middle Bronze Age round house from Glanfeinion, near Llandinam, Powys (Britnell et al 1997). The pottery from Glanfeinion was associated with dated material of 1400-1170 cal BC (Lynch, 2020).

In addition it should be noted that stratigraphically, the ring of postholes are later than the ring ditch as two of the postholes [189] and [216] truncate the cut and fills of the ring ditch. The features within Field 9A indicate at least two phases of habitation, as denoted by the ring ditch and later ring of postholes, possibly over a relatively confined period of time.

Representative ecofact samples taken from key features (164) of [163] and (195) of [197] were submitted for radiocarbon dating. The former returned a radiocarbon date range of 1129 to 974 cal. BC at 91.7% probability and the latter a date range of 1087 to 919 cal. BC with a 94.7% probability. This would place both features within the Later Bronze Age and concur with the assessment of the ceramic assemblage recovered from Field 9A.

6.1.5 Field 9A

The archaeology identified within the easement of Field 9A was centred on the incomplete remnants of a curvilinear ditch that had an internal diameter of 12.0m. The ditch had an exposed length of approximately 15m with a variable width and depth. The width of the ditch varied from being relatively narrow at the extremities, for example at [208] it measured 0.36m and 0.48m at [221] to 1.0m at [212] close to the centre of the feature. It was a fairly shallow feature, with depth ranging from 0.10m at [219] to 0.19m at [196]. The form of the ditch also varied. At the apparent terminals there was a single ditch cut that tended to have quite steep sides with a concave base. A single cut for the ditch was evident until the centre of the ring ditch at which point between interventions [196/197] and [212] two distinct cuts were present. The double, parallel cut was most distinct at [196] and [197] with both being steep sided, almost vertical with concave bases. They measured 0.18m in width and 0.10m in depth. The presence of the parallel linears may represent a re-cut of the ditch which along with other features identified during the excavation would suggest repeated use of the site for habitation. The ring ditch was most likely a drip gully, given the majority of the cut was quite shallow and it arced downslope toward an adjacent stream (the stream formed the boundary between Fields 9A and 9). The cuts [196] and [197] though given their steep sided profiles would suggest the presence of a more structural element, to support the base of a wattle frame possibly. The ring ditch was filled by a fairly uniform firm dark brown or dark greyish brown sandy clay mixed with variable concentrations of occasional to frequent small stones along with occasional medium to large angular stones, notably at interventions [198], [199] and [212].

Features physically connected with the curvilinear ditch and most likely broadly contemporary included the linear [231/233] and [120]. Linear [120] extended at a right angle from the inner, western edge of the curvilinear ditch at intervention [118], with a slight return at the western terminal. It had a length of 0.50m, width of 0.12m and depth of 0.06m. There was a single fill (119) a firm mid-brown sandy clay that was indistinguishable from (117) of [118]. This would suggest that the two features were broadly contemporary.

The linear [231/233] was orientated east – west for a distance of 2.50m with a maximum width and depth of 0.16m and 0.06m respectively. It integrated with the curvilinear ditch at intervention [229] and was most broadly contemporary as the fills (228) and (230) were indistinguishable being a firm mid-brown sandy clay with no inclusions.

A variety of pits, postholes, stakeholes, linear and probable beam slot were uncovered within the internal diameter of the curvilinear ditch. The majority of the archaeology therein while clustered together off-centre of the internal diameter and adjacent to the eastern stretch of the ditch, were discrete features that did not intercut one another. The exceptions being pit [180] and posthole [178] and posthole [161] and pit [163].

Posthole [161] was located at the approximate centre of the interior of the curvilinear ditch being roughly circular with a diameter of 0.40m and depth of 0.31m. The cut had vertical sides and an uneven base. The posthole was filled by (162) a loose mid-grey sandy clay mixed with moderate small stones. It was partially truncated at the southeast edge of pit [163].

Pit [163] was oval in plan, measuring 0.75m x 1.40m with a depth of 0.28m. The cut had steep sides and a relatively flat base. It contained a single fill (164) a loose dark grey sandy clay mixed with frequent small angular stones.

Pit [180] was located to the east of [163]. The pit was roughly oval in plan, measuring 0.65m x 0.35m with a depth of 0.32m. The cut had steep almost vertical sides and a slightly undulating base. It was filled by (181) a loose mid-brown sandy clay mixed with occasional small stones. The pit was cut along the southwestern edge by [178].

Posthole [178] was roughly circular in plan with a maximum diameter of 0.60m and depth of 0.40m. The cut was steeped sided, that narrowed toward a slightly concave base. It had a single fill (179) a loose mid-brown sandy clay mixed with moderate small and medium sized angular stones. The northern edge of the posthole was partially defined by large angular stones.

The remaining internal pits [122] and [186] were comparable in size and depth; a maximum of 0.55m and 0.17m respectively. Pit [122] though had gradually sloping sides compared to the almost vertical sides of [186]. The fills were also comparable with both being a dark grey sandy clay with moderate charcoal flecking.

The remaining four postholes, [159], [176], [225] and [237] varied in diameter from 0.12m to 0.32m but were comparable in depth at a maximum of 0.21m; the shallowest was [159] at 0.10m. All of the postholes had vertical sides and a concave base, aside from [159] which was quite flat in comparison. All of the fills were comparable being loose mid-grey sandy clay with occasional small stone inclusions.

There was a cluster of six stakeholes, [128], [130], [132], [134], [136] and [227] positioned between intervention [198] of the curvilinear ditch and pit [180]. The stakeholes were not laid out in an obvious pattern and were discrete cuts. They were comparable in diameter and depth, typically being 0.10m and 0.14m respectively. The cuts had vertical sides with a tapered rounded point and were backfilled by a loose dark grey sandy clay.

At the eastern end of the internal area there was a linear [151] that was parallel with the curvilinear ditch between intervention [118] and [191]. The linear measured 1.20m x 0.25m with a depth of 0.13m and the cut had vertical sides with a flat base. It contained a single fill (152) a loose mid brown sandy clay mixed with infrequent small stones. Based on the profile of the linear and it being immediately adjacent to [120], this could be the remains of a beam slot.

The ring of postholes was comprised of 11 postholes that formed a rough circle which arced around the eastern limit and interior of the curvilinear ditch. At two locations the associated postholes [189] and [216] truncated the ditch at interventions [118] and [210] respectively. There was a greater concentration of (five) postholes along the southern edge of the ring, with four postholes ([112], [114], [116] & [216]) aligned on an east – west axis and were within 1.0m of one another. The remaining postholes were move evenly spaced, aside from between postholes [104] and [242] where there was a gap of approximately 3.0m. The postholes were typically circular or roughly circular in plan, the diameter varying from a minimum of 0.32m ([104]) to a maximum of 0.70m ([242]); on average the diameter was closer to 0.49m. The postholes tended to be relatively deep, ranging from 0.15m ([126]) to 0.32m ([242]); on average the depth was 0.23m. The cuts had steep or vertical sides with a concave base. The fills were typically a soft dark brown sandy clay with moderate to frequent stone inclusions. Some of the fills, such as (125) of [126] also had frequent flecks of charcoal. Sherds of pottery were recovered from [112], [116], [126] and [174].

The ring of postholes enclosed several features that were also within the interior of the curvilinear ditch, such as postholes [178] and [237], as well as the cluster stakeholes and the pit [180]. The only feature that was entirely situated within the ring of postholes and not the curvilinear ditch was the large posthole [106] which was positioned to the immediate east of intervention [198/199] and the west of postholes [104] and [242]. This substantial posthole measured 0.76m x 0.38m and had a depth of 0.38m. The cut had stepped sides that became vertical near the base which was flat. It contained three fills (108), (107) and (105). The primary fill (108) was a firm mid-brown sandy clay with no inclusions. It was sealed by fill (107) a thin (0.04m deep) band of black silty clay mixed with frequent charcoal flecking. This

in turn was overlaid by (105) a coarse deposit of mid-brown sandy clay mixed with very frequent small angular stones, from which flint debitage was recovered.

6.2 Statement of significance of the stratigraphic data

6.2.1 Stratigraphic and structural data

This section of the report will discuss the significance of the stratigraphic data.

6.2.2 Later Neolithic

The identification of Neolithic settlement and the understanding of its character and development is an important aim in North Wales. *The Research Framework for the Archaeology of Wales* has outlined how Neolithic settlement within Wales should be understood as being represented by a range of features, such as, pits, postholes, stakeholes, hearths and artefact scatters. There should not be a fixation on solely structural remains or the identification of 'houses' to illustrate how and where the population of this era lived (Pannett 2017, 7). It has also been extolled by the framework research group that greater emphasis is required on the material culture of the Neolithic and palaeoenvironmental evidence, where viable, should be obtained to provide as rounded a picture as possible of settlement during the period (Burrow 2010, 3-4). On this basis the pit cluster in Field 14 has a role to play in contributing to the understanding of settlement during the Neolithic within Anglesey and North Wales.

The fills of pits [52], [70] and [72] produced diagnostic sherds of pottery (Figure 03 & Plates 01 - 09). The fills (51), (67) of pit [52] and fill (69) of pit [70] produced sherds of Grooved Ware, while the sherds and fragments of pottery recovered from (71) of pit [72] belong to the same pot of Fengate Ware.

Fengate Ware and Grooved Ware are pottery styles which date from the Later Neolithic. Radiocarbon dates for Fengate Ware extends from 3500 to 2500 BC (Gibson 2002, 80) and persists until as late as 2000 BC (Malone 2001, 239). It is part of the Peterborough Ware/Impressed Ware pottery tradition that emerges in Britain during the Later Neolithic typically consisting of pots with flat bases, splayed bodies and collard rims (Gibson 2002, 78). Grooved Ware, in comparison, originates in Scotland in the early third millennium BC (Malone 2001, 239) and in southern England later from around 2800 BC (Gibson 2002, 84) or even as late as 2500 – 2300 BC (Malone 2001, 239). Grooved Ware tends to be tub, bucket or barrel-shaped pots with flat bases decorated with heavy grooved patterns, rusticated ribs and cordons (Malone 2001, 239).

In North Wales there is increasing recognition of stylistic merging, as noted at Clynnog, Gwynedd and Llanfaethlu, Anglesey, which would suggest that Fengate and Grooved Ware are broadly contemporary. At present though this has not been substantiated by radiocarbon dating, which places Fengate Ware some 200 to 300 years prior to the emergence of Grooved Ware (Lynch, 2020).

During the archaeological watching brief of the RSK geotechnical ground investigation along the route for the Wylfa EV9 Cable Diversion Neolithic remains to the west of Tregele were identified and investigated. Trial Pit 4 (located in EV9 Field 14) identified two postholes. The presence of prehistoric pottery along with radiocarbon dates from the archaeological features uncovered within Trial Pit 4 (NGR SH 35619 92747) place them in the latter half of the Early Neolithic (4980 ± 30 BP, or 3890-3885 cal BC, 3795-3690 cal BC and 3680-3660 cal BC) (Hayes 2016, 15).

Representative ecofact samples taken from key features (51) of pit [52] and (71) of [72] were submitted for radiocarbon dating. Fill (51) produced a date range of 3091 to 2921cal. BC at 95.4% probability while fill (71) returned a date range of 3137 to 3012 cal. BC at 47.8% probability. The radiocarbon dates complement the ceramic dating evidence of the Later Neolithic pottery styles recovered and identified from these features from within the pit group.

6.2.3 Earlier Bronze Age

The Earlier Bronze Age is grouped with the Neolithic as a succinct period within the *Research Framework for the Archaeology of Wales.* On this basis the understanding of the character and development of settlement in this period are an important research aim in North Wales. The framework highlights how there is an apparent lack of evidence for settlement during the Later Neolithic and Earlier Bronze Age and outlines the need to determine if this is reflective of the nature of the archaeological resource or is it not being recognised during excavation (Pannett 2017, 8). To aid this distinction it has also been recommended that material culture of the Earlier Bronze Age and palaeoenvironmental evidence, where viable, should be obtained to provide as rounded a picture as possible of settlement during the period (Burrow 2010, 3-4). As such, the discrete cluster of pits in Field 2 will contribute to evidence of settlement during the Earlier Bronze Age within Anglesey and North Wales.

The majority of the features did not produce artefacts but a limited number of pottery sherds were recovered, some of which were diagnostic. The pottery sherds from contexts (03) and

(07) have been assessed to be of Earlier Bronze Age date, with the rim sherd from (03) of pit [04] being the top of a Late Collared Urn rim. This combined with an ecofact sample selected from (05) of pit [04] returning a date of 1908 to 1750 cal. BC at 95.4% probability, places the pit and potentially the associated activity within the Earlier Bronze Age (2400 to 1500 BC). In addition, the archaeological features are located to the immediate northwest of the remnants of a possible burial chamber, Cromlech, Llanfechell (PRN 3046) located at NGR SH 3604692003.

6.2.4 Later Bronze Age

The Research Framework for the Archaeology of Wales has outlined that a greater understanding of settlement chronology as well as settlement and land use is required for the Late Bronze Age and Iron Age in Wales. As such, where suitable materials survive radiocarbon dating should be undertaken. Emphasis was also placed on the need for a dated ceramic sequence for the period (Gale 2010, 2-3). The archaeology uncovered within Fields 9 and 9A, based on the assessment of the sherds of pottery recovered from the features of these sites and preliminary radiocarbon dates, place them within the Later Bronze Age (1500 – 650 BC).

The pottery recovered from the pit cluster and associated features (Figure 09) in Field 9 along with the pottery from the habitation site of Field 9A are very uniform though the assemblage probably represents about eight vessels. All of the sherds are featureless except for four base sherds and six fairly simple upright rims. The pottery sherds from this assemblage are comparatively hard and well-fired. This characteristic makes it very similar to pottery identified at the Area 5 excavation conducted for the Wylfa Newydd project, near Cestyll, approximately 1km north west of Tregele. The pottery from EV9 are closely comparable to pottery from the Middle Bronze Age round house from Glanfeinion, near Llandinam, Powys (Britnell et al 1997). The pottery from Glanfeinion was associated with dated material of 1400-1170 cal BC (Lynch, 2020).

In addition it should be noted that stratigraphically, the ring of postholes are later than the ring ditch as two of the postholes [189] and [216] truncate the cut and fills of the ring ditch. The features within Field 9A indicate at least two phases of habitation, as denoted by the ring ditch and later ring of postholes, possibly over a relatively confined period of time.

Representative ecofact samples taken from key features (164) of [163] and (195) of [197] were submitted for radiocarbon dating. The former returned a radiocarbon date range of 1129 to 974 cal. BC at 91.7% probability and the latter a date range of 1087 to 919 cal. BC

with a 94.7% probability. This would place both features within the Later Bronze Age and concur with the assessment of the ceramic assemblage recovered from Field 9A.

The artefactual material and the radiocarbon dates from Fields 9 and 9A should be reviewed in conjunction with comparable archaeological sites investigated within the Wylfa Newydd development boundary to better inform the archaeological record for the Later Bronze Age in Anglesey and North Wales.

7 ARTEFACTS

7.1 Quantification of finds by type

Artefact Type	Combined Weight (in grams)
Pottery	1386
Lithic	540
Stone	3102
Metal	101
Bone	17
CBM	21

Table 7: Quantification of finds by type

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

7.2.1 Pottery

The vast majority of the pottery assemblage is prehistoric in origin, being predominantly Late Neolithic (Grooved and Fengate Ware) and Later Bronze Age in date, with a smaller quantity being of Earlier Bronze Age date. The assemblage of prehistoric pottery ranges from undiagnostic crumbs and small fragments to distinct rim sherds and diagnostic decorated body sherds. The majority of the pottery sherds are in a robust, stable condition.

In the immediate term the pottery will be retained within clean and labelled polythene bags stored within suitably packed, padded cardboard boxes. The pottery will be returned from the specialist and transferred to Wardell Armstrong, with a view for short to medium term storage at a facility on Anglesey.

Long term the pottery will be transferred along with accompanying documentation to the Oriel Ynys Mon for conservation.

7.2.2 Lithic

The lithic artefacts were predominantly (approximately two thirds of the assemblage) comprised of flint or chert debitage. The remainder of the lithic assemblage comprised a mixture of flint and chert blades and scarpers along with flint pebbles and flint cores. The diagnostic of the lithic assemblage, like the pottery, is of Late Neolithic and Bronze Age date.

In the immediate term the lithics will be retained within clean and labelled polythene bags stored within suitably packed, padded cardboard boxes. The lithics will be returned from the specialist and transferred to Wardell Armstrong, with a view for short to medium term storage at a facility on Anglesey.

Long term the lithic assemblage will be transferred along with accompanying documentation to the Oriel Ynys Mon for conservation.

7.2.3 Stone

There were comparatively few stone artefacts retrieved from EV9, with the majority of the artefacts being recovered from a handful of features that made up the ring of postholes in Field 9A. The remaining artefacts were from a pit in Field 14 or were unstratified, which included the stone mace head but it was noted that this was recovered during the soil strip of Field 14. The stone artefacts are broadly prehistoric in date, with the mace head most likely being of Late Neolithic origin and while not datable types of objects the possible loom-weight fragment, a spindle whorl, a hammer-stone, three polishing stones and a possible rubbing stone are a good fit for the Later Bronze Age date of the settlement features from Field 9A (G. Smith, 1, 2020).

In the immediate term the stone artefacts will be retained within clean and labelled polythene bags stored within suitably packed, padded cardboard boxes. The stone artefacts will be returned from the specialist and transferred to Wardell Armstrong, with a view for short to medium term storage at a facility on Anglesey.

Long term the stone artefact assemblage will be transferred along with accompanying documentation to the Oriel Ynys Mon for conservation.

7.2.4 Metal, Burnt Bone & CBM

The remaining artefacts consist of magnetic residue, burnt bone and ceramic building material (CBM). They are relatively limited in quantity having been recovered from soil samples during residue sorting.

The burnt bone is comprised of small fragments that typically weigh under 1.0g. The bone was recovered from either the fills of the pit group in Field 14 or the features within Field 9A, associated with the ring ditch and ring of postholes. It is the result of domestic food waste.

The magnetic residue consists of a relatively limited quantity with a mean weight of 10.5g. It was predominantly recovered from fills associated with the ring ditch and ring of postholes in Field 9A.

The CBM was a mixture of probable lining or base of a kiln and burnt clay, probably accidently heated/hardened through contact with a heat source. The majority of the CBM was sourced from fills associated with the ring ditch and ring of postholes in Field 9A. This combined with the presence of magnetic residue and burnt bone would underscore this being an area of habitation.

In the immediate term these artefacts will be retained within clean and labelled polythene bags stored within suitably packed, padded cardboard boxes. They will be returned from the specialist and transferred to Wardell Armstrong, with a view for short to medium term storage at a facility on Anglesey.

Long term the magnetic residue, burnt bone and ceramic building material CBM assemblage will be transferred along with accompanying documentation to the Oriel Ynys Mon for conservation.

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

7.3.1 Pottery

The pottery recovered from EV9 was concentrated within a handful of features located in Fields 9, 9A and 14.

The pit cluster in Field 14 produced 800 plus sherds of Grooved Ware; of the nine pits that constituted the main group, six contained pottery sherds and rim sherds. The recovered sherds are highly decorated being comparable with Grooved Ware recovered from the contemporary sites of Llanfaethlu, Parc Cybi, Holyhead (Kenney, 2011) and Penmynydd with the incurved rims, cross hatching, fingernail marks and dots being typical of the characteristic local style. There are though aspects of the styling of the Grooved Ware pottery from Field 14 that are not directly comparable with local examples, such as decoration on the inside of the base, exemplified on the eccentrically decorated pot 69f with concentric grooves on the inside of the flat base. This stylistic flare is more comparable with examples of Scottish Grooved Ware, such as the pottery from Links of Noltland (Lynch, 2020).

In addition to the Grooved Ware, fill (71) of pit [72] contained 62 sherds from the same pot that has been ascribed as Fengate Ware. The pot displayed characteristics of this style of Late Neolithic pottery, as there were "*fingernail chevrons on the rim, a collar with pits under it and flared lower body with narrow base"* (Lynch, 2020). The presence of the two distinct Late Neolithic pottery styles within a pit group was also uncovered at the nearby site of Llanfaethlu. The decorative style of the Fengate Ware pot from EV9 is also comparable to that identified at Clynnog, Gwynedd (Lynch, 2020).

The remaining prehistoric pottery is of Later Bronze Age date and was predominantly recovered from the fill ([210], [212], [214] & [219]) of the ring ditch and several of the postholes ([126], [174] & [216]) that comprised the ring of postholes in Field 9A. A similar type of coarse, undecorated fabric was recovered from three of the features ([148], [150] & [154]) of the pit cluster in the adjacent Field 9. The pottery from these sites is comparable to pottery sherds recovered from Area 5 and Glanfeionion; the latter is of Middle Bronze Age date (Lynch, 2020).

The presence of Grooved and Fengate Ware in the pit cluster of Field 14, adds to the growing number of known Late Neolithic sites on Anglesey, in particular along the western

coast of the island. The decorative styling on the Grooved Ware sherds underlines a characteristic local style of this type of late Neolithic pottery while the eccentric pot sherd 69f indicates influences from a wider area, probably as far as the Orkney Islands, which hints at stylistic influences extending along the west coast of Britain. The presence of the fragments of a single Fengate Ware pot in pit [72] set amongst a group of pits that produced predominantly sherds of Grooved Ware contributes to the increasing archaeological evidence for the merging of the two styles (Lynch, 2020). The information gleaned from EV9 is of local and national importance for the contribution to Late Neolithic habitation and pottery styles.

The limited ceramic assemblage from Fields 1 and 2 indicate Earlier Bronze Age activity in the vicinity of Llanfechell. The presence of Collared Urns within this assemblage and a radiocarbon date from (03) of 1908 – 1750 cal. BC for the rim sherd of a Collard Urn, underline habitation during this period of prehistory.

The evidence of Later Bronze Age pottery from the habitation sites identified in Fields 9 and 9A greatly contributes to the archaeological record on a local and national level. The assemblage is considered to be "*the largest and most important assemblage of later Bronze Age pottery in Anglesey and probably in north Wales. It is important not only because of the amount of material – some 15 separate pots -- but because it comes from good structural features which confirm that people were settled here in a substantial wooden round house*" (Lynch, 2020, 25). This in conjunction with the known Bronze Age sites from within the Wylfa Newydd site, such as the probable Later Bronze Age activity at the nearby site at Cestyll (Area 5) and the settlement evidence at Area 20/05 South to the immediate west, will greatly contribute to the knowledge of the period for Anglesey and North Wales, where there is a comparative dearth of current information.

7.3.2 Lithic and Stone

The overall assemblage derives from two different methods of retrieval, first from hand excavation and second from floatation sieving. Lithic material was recovered from five fields 1, 5, 9, 9A and 14 but only in any significant quantity in Fields 9A and 14. Flint is available locally as pebbles from the glacial drift, to be found eroding out of the cliffs or on beaches. The chert is black in colour and again found from cliff exposures or on beaches, generally in larger pieces than flint. It varies widely in quality from fine, flint-like, to very coarse. Such chert is also available as *in situ* layers within the limestone of east Anglesey (Greenly 1919) but there is no sign that any of that material was used here. It was notable within the

assemblage that while in Field 9A flint and chert were equally represented, in Field 14 the majority of the lithic material was flint (G. Smith, 4-6, 2020).

The stone artefact assemblage from EV9 is also fairly limited in size with a total of 10 objects and artefact type that were recovered from Field 9A and Field 14. The majority of the stone artefacts were recovered from a handful of features that made up the ring of postholes in Field 9A. This location combined with the domestic nature of the artefacts, for example polishing and hammer stones, alongside the other artefacts recovered from the field, would denote it as being that of a habitation site. They are fairly nondescript artefacts and as such are not datable types of objects.

The one stone artefact of significance was the stone mace head which had not been fully perforated and as such may have been lost or discarded before the object was complete. The mace head is made from a small cobble of medium grained igneous stone carefully pecked to a slightly cuboid, egg-shape. There are deeply pecked concavities on two opposing sides and it must be assumed that this represents an unfinished shaft-hole perforation (G. Smith, 1, 2020). Mace heads were symbols of status as much as a weapon in the Neolithic and Bronze Age. It is a rare, significant artefact and as such should be considered an important find locally and nationally.

7.3.3 Metal, Burnt Bone & CBM

The remaining artefacts of magnetic residue, burnt bone and ceramic building material (CBM) are relatively limited in quantity having been recovered from soil samples during residue sorting. These artefacts are not distinct and contribute little information to the nature and date of the sites from which they were retrieved. As such they are of little archaeological significance.

7.4 Statement on the research potential of each artefact group

7.4.1 Pottery

The following actions are recommended:

- Illustrate the pottery sherds recovered from site to publication standard and where viable illustrate the sherds and rims into individual vessels for comparative analysis with assemblages from other comparable sites;
- In combination with comparable pottery assemblages from within the Wylfa Newydd development boundary, it is recommended that residue analysis of suitable pottery sherds is undertaken to determine their usage for cooking or for presence of dairy farming during the Later Neolithic and Later Bronze Age; and
- Petrological analysis of the Later Bronze Age pottery to determine the origin of black and white rhyolite grit used within the fabric of the pots.

7.4.2 Lithic, Stone, Metal, Burnt Bone & CBM

It is recommended further analysis of the small lithic assemblage from Field 14 as it was recovered from a Later Neolithic settlement which is currently not well understood in Anglesey. The mace head from Field 14also should be illustrated and the type of rock it is made from identified. In addition, the perforated stone loom weight (find number 176) and spindle whorl (find number 174) from Field 9A should be illustrated either through drawing or photography.

Otherwise no further work beyond assessment is required for the remaining artefact assemblage (i.e. lithic, stone, metal, burnt bone and CBM) from EV9.

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

It is recommended that the pottery assemblage from EV9 should be retained for further analysis (as outlined above) and for its national and international significance, in particular the Grooved Ware and Fengate Ware (cf. Sections 6.1 & 6.2).

The lithic material and stone mace head should be retained as examples of local lithic technology from later prehistory and the comparative rarity and national significance of the mace head.

The remainder of the artefactual assemblage is not distinct and contribute little information to the nature and date of the sites from which they were retrieved; they are of little archaeological significance. On this basis it is recommended these artefacts are discarded.

These recommendations will be undertaken further to consultation and in agreement with GAPS/Cadw.

8 PALAEOENVIRONMENT

8.1 Quantification of the retents and flots available for analysis.

Sample No.	Context No.	Notes	Flot Weight (g)
1	1	good charcoal	72
2	3	good charcoal	64
3	5	good charcoal	198
4	7	sparse charcoal	14
5	8	good charcoal	68
6	10	good charcoal	2
7	20	good charcoal	31
8	22	good charcoal	51
9	14	good charcoal	29
10	16	sparse charcoal	4
11	23	good charcoal	57
12	27	very sparse charcoal	32
13	29	very sparse charcoal	26
14	31	good charcoal	222
15	53	good charcoal	56
16	55	sparse charcoal	11
17	51	good charcoal	153
18	61	sparse charcoal	99
19	71	good charcoal	90
20	73	very sparse charcoal	40
21	69	good charcoal	92
22	77	good charcoal	11
23	79	good charcoal	25
24	81	good charcoal	23
25	75	very sparse charcoal	7
26	59	good charcoal	30
27	85	sparse charcoal	81
28	63	good charcoal	34
29	87	good charcoal	88

Sample No.	Context No.	Notes	Flot Weight (g)
30	51	good charcoal	101
31	69	good charcoal	92
32	83	good charcoal	23
33	71	good charcoal	195
34	109	good charcoal	129
35	103	good charcoal	50
36	105	good charcoal	152
37	109	good charcoal	67
38	111	sparse charcoal	22
39	107	good charcoal	95
40	113	good charcoal	20
41	115	good charcoal	74
42	121	good charcoal	84
43	125	good charcoal	38
44	123	good charcoal	40
45	127	very sparse charcoal	5
46	129	very sparse charcoal	9
47	131	good charcoal	50
48	133	sparse charcoal	18
49	135	good charcoal	5
50	138	no charcoal - sandy flot	58
51	145	good charcoal	8
52	147	good charcoal	25
53	149	good charcoal	67
54	152	good charcoal	35
55	153	good charcoal	14
56	155	good charcoal	8
57	157	good charcoal	14
58	160	good charcoal	37
59	162	good charcoal	305
60	164	abundant charcoal	1398
61	165	sparse charcoal	8
62	182	no charcoal - sandy flot	242

Sample No.	Context No.	Notes	Flot Weight (g)
63	169	good charcoal	9
64	171	good charcoal	9
65	173	good charcoal	20
66	175	good charcoal	94
67	179	good charcoal	131
68	181	good charcoal	239
69	185	good charcoal	63
70	187	good charcoal	80
71	188	good charcoal	52
72	190	very sparse charcoal - dirt	287
73	193	sparse charcoal - dirt	138
74	194	flot missing - charcoal recovered from residue	
75	195	good charcoal	867
76	200	abundant charcoal	49
77	201	good charcoal	56
78	205	good charcoal	18
79	207	good charcoal	20
80	209	good charcoal	243
81	211	some charcoal, very dirty flot	505
82	213	good charcoal	309
83	215	good charcoal	37
84	217	good charcoal	234
85	218	good charcoal	10
86	220	good charcoal	135
87	222	good charcoal	27
88	224	sparse charcoal	19
89	228	sparse charcoal	22
90	230	sparse charcoal	30
91	232	sparse charcoal	5
92	234	good charcoal	240

Sample No.	Context No.	Notes	Flot Weight (g)
93	236	good charcoal	18
94	238	good charcoal	40
95	239	good charcoal	41
96	241	good charcoal	26
97	215	good charcoal	61

Table 8: Flots available for analysis.

8.2 Factual summary of each type of sample

The archaeological strip, map and sample investigation during groundworks for the Wylfa EV9 Cable Diversion retrieved bulk samples of archaeological features based on the following sampling strategy:

- 50% (by volume) of all enclosure ditches;
- 10% (by volume) of all linear boundaries, with all terminals and intersections investigated (if relationship is unclear);
- 100% of all structural features (walls, foundations, slots and post/stakeholes);
- 50-100% of all pits depending on age and quantity of material culture present; and
- 5-10% of tree-throws, to confirm interpretation, and record any deposition of artefacts.

Bulk samples were taken from relevant features for potential ecofactual information and radiocarbon dating. The contexts sampled and the number and volume of the bulk samples taken are outlined in Table 9.

Sample No.	Context No.	Context	Purpose of Sample	Number of bags	Volume (L)	% of deposit sampled
1	1	Fill of pit [002]	Bulk/C14	1	10	
2	3	Fill of pit [004]	Bulk/C14	2	20	

Sample No.	Context No.	Context	Purpose of Sample	Number of bags	Volume (L)	% of deposit sampled
3	5	Fill of pit [006]	Bulk/C14	2	20	
4	7	Rooting	Bulk/C14	1		
5	8	Rooting	Bulk/C14	1	10	
6	10	Fill of pit [011]	Bulk/C14	1	5	
7	20	Fill of pit [021]	Bulk/C14	1	10	
8	22	Fill of [024] tree bole	Bulk/C14	1	10	
9	14	Fill of [015], natural gully	Bulk/C14	1		
10	16	Fill of [017], natural gully	Bulk/C14	1	8	
11	23	Fill of [024] tree bole	Bulk/C14	1	10	
12	27	Fill of [028] re-cut	Bulk/C14	1	5	
13	29	Fill of ditch [030]	Bulk/C14	1	5	
14	31	Tree roots	Bulk/C14	1	5	
15	53	Fill of pit [054]	Bulk/C14	1	10	50
16	55	Fill of pit [056]	Bulk/C14	1	5	50
17	51	Fill of waste pit [052]	Bulk/C14	3	30	25-50
18	61	Fill of waste pit [062]	Bulk/C14	3	30	50
19	71	Fill of waste pit [072]	Bulk/C14	3	25	50
20	73	Fill of pit/posthole [074] - a lot of bioturbation	Bulk/C14	1	10	25
21	69	Fill of pit [070]	Bulk/C14	4	40	50
22	77	Fill of posthole/pit [078]	Bulk/C14	1	10	100
23	79	Fill of pit [080]	Bulk/C14	1	10	25-30
24	81	Fill of posthole/pit [082]	Bulk/C14	1	10	100
25	75	Fill of posthole/pit [076]	Bulk/C14	1	3	100
26	59	Charcoal rich part of bioturbation	Bulk/C14	1	2	50
27	85	Fill of pit [086]	Bulk/C14	3	30	50
28	63	Fill of ditch [064]	Bulk/C14	2	20	10.-20
29	87	Fill of pit [088]	Bulk/C14	1	5	100
30	51	Fill of waste pit [052]	Bulk/C14	3	30	25-50
31	69	Fill of pit [070]	Bulk/C14	2	10	50
32	83	Fill (primary) of waste pit	Bulk/C14	1	10	50

Sample No.	Context No.	Context	Purpose of Sample	Number of bags	Volume (L)	% of deposit sampled
		[070]				
33	71	Fill of waste pit [072]	Bulk/C14	2	10	50
34	109	Fill of pit [080]	Bulk/C14	2	30	25-30
35	103	Fill of post hole [104]	Bulk/C14	1	10	100
36	105	Fill of post hole [106]	Bulk/C14			100
37	109	Fill of Posthole [110]	Bulk/C14	2		100
38	111	Fill of Posthole [107] & [108]	Bulk/C14			100
39	107	Mixed lower fills of posthole [106]	Bulk/C14	3	20	100
40	113	Fill of posthole [106]	Bulk/C14	2		100
41	115	Fill of posthole [116]	Bulk/C14	2		100
42	121	Fill of posthole [122]	Bulk/C14	2		100
43	125	Fill of posthole [126]	Bulk/C14	2		100
44	123	Fill of posthole [124]	Bulk/C14	1	5	100
45	127	Fill of stake hole [128]	Bulk/C14	1	0.25	50
46	129	Fill of stake hole [130]	Bulk/C14	1	0.5	100
47	131	Fill of steak hole [132]	Bulk/C14	1	0.5	100
48	133	Fill of steak hole [133]	Bulk/C14	1	0.5	100
49	135	Fill of steak hole [136]	Bulk/C14	1	0.5	100
50	137	Primary fill of ditch [138]	Bulk/C14	3	40	<10%
51	145	Fill of possible pit [146]	Bulk/C14	1	3	100
52	147	Fill of posthole [148]	Bulk/C14	1	10	100
53	149	Fill of pit [150]	Bulk/C14	2	30	100
54	152	Fill of possible beam slot	Bulk/C14	2		
55	153	Fill of pit [154]	Bulk/C14	2	25	100
56	155	Fill of [156]	Bulk/C14	1	5	100
57	157	Fill of possible posthole [158]	Bulk/C14	1	3	100
58	160	Fill of posthole [159]	Bulk/C14			100
59	162	Fill of posthole [161]	Bulk/C14			100
60	164	Fill of posthole/pit [163]	Bulk/C14			100
61	165	Fill of [166]	Bulk/C14	1	3	100
62	182	Fill of pit [183]	Bulk/C14	12	150	100

Sample No.	Context No.	Context	Purpose of Sample	Number of bags	Volume (L)	% of deposit sampled
63	169	Fill of pit [170]	Bulk/C14	1	10	100
64	171	Fill of pit [172]	Bulk/C14	1	3	100
65	173	Fill of posthole [174]	Bulk/C14	2		100
66	175	Fill of stake hole [176]	Bulk/C14	1		100
67	179	Fill of posthole [178]	Bulk/C14			100
68	181	Fill of pit/posthole [180]	Bulk/C14			100
69	185	Fill of pit/posthole [184]	Bulk/C14			100
70	187	Fill of pit [186]	Bulk/C14			100
71	188	Fill of posthole [189]	Bulk/C14	2	20	100
72	190	Single fill of ditch [191]	Bulk/C14	4	60	100
73	193	2' Fill of ditch [169/197]	Bulk/C14	3	40	100
74	194	1' Fill of ditch [196]	Bulk/C14	1	10	100
75	195	1' fill of ditch [197]	Bulk/C14	1	10	100
76	200	Single fill of ditch [198/199]	Bulk/C14	11		100
77	201	Single fill of ditch [202]	Bulk/C14	2	25	100
78	205	Fill of ring ditch [206] - Bioturbated	Bulk/C14	2	25	100
79	207	Fill of ring ditch [208]	Bulk/C14	1	15	100
80	209	Fill of ring ditch [210] - Contamination from [216]	Bulk/C14	6	75	
81	211	Fill of ring ditch [212] - Bioturbated	Bulk/C14	14	150+	100
82	213	Fill of ring ditch [214] - Bioturbated	Bulk/C14			100
83	215	Fill of pit [216]	Bulk/C14	2	30	100
84	217	2' fill of ring ditch [219]	Bulk/C14	2	20	100
85	218	1' fill of ring ditch [2019]	Bulk/C14	1	7	100
86	220	Fill of ring ditch [221] - Bioturbation from hedgerow	Bulk/C14	1	10	100
87	222	Fill of stake hole [223]	Bulk/C14	1	0.5	100
88	224	Fill of pit [225]	Bulk/C14	1	20	100
89	228	Fill of [229]	Bulk/C14	1	10	100

Sample No.	Context No.	Context	Purpose of Sample	Number of bags	Volume (L)	% of deposit sampled
91	232	Fill of possible ring ditch [233]	Bulk/C14	1	5	100
92	234	Backfill to post pipe [161] in posthole [235]	Bulk/C14	4	60	100
93	236	Fill of possible stake hole [237]	Bulk/C14	1	7	
94	238	Fill of tree throw [240] (NW end)	Bulk/C14	2	20	50
95	239	Fill of tree throw [240] (S end)	Bulk/C14	1	10	50
96	241	Fill of posthole [242]	Bulk/C14	1	15	100
97	215	Fill of posthole [216]	Bulk/C14	2	20	50

Table 9: Bulk Sample Register

The bulk samples were deposited and kept in polythene rubble sacks for short term storage and preservation until they were processed for ecofactual assessment.

The ecofact assessment was completed as a two stage process, based on the following methodology:

1. The bulk sample was processed in house by GAT. This consisted of flotation and wet sieving using a 500 micron mesh to collect the residue (which collects more than the 1mm = 1000 micron), with the flot collected in a 250 micron mesh. The residues were sorted to recover artefacts and non-floating ecofacts. Once sorted the residues were discarded. The flots were weighed, catalogued and examined for charred macroplant remains (see Appendix 6).

2. Recovered charred macroplant was sent for specialist assessment to AOC Archaeology. The charred macroplant was sieved using a 4mm, 2mm and 1mm system of stack sieves and subsequently examined under magnification (x10 and up to x100). Macroplant identifications were completed and confirmed using modern reference material and seed atlases stored at AOC Edinburgh. Taxonomic and nomenclature for plants were based on Stace (2010. Charcoal fragments 4mm and larger were collected for species identification and recommendations have been made for any subsequent analysis and radiocarbon dating (see Appendix 6).

The assemblage is in a stable condition. It will be retained within clean and labelled polythene bags stored within suitably packed, padded cardboard boxes. The assemblage will be returned from the specialist and transferred to Wardell Armstrong, with a view for short to medium term storage at a facility on Anglesey.

Long term the ecofactual assemblage will be transferred along with accompanying documentation to the Oriel Ynys Mon for conservation.

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

8.3.1 Introduction

A total of 96 flots were submitted to *AOC Archaeology Group* to be assessed. The flots were assessed by Rosie Bishop of Durham University and the additional charcoal and hazelnut sub samples were quantified by Genoveva Dimova of AOC Archaeology Group. The aim of the assessment was to establish the potential of the environmental evidence to contribute to understanding the function of the features uncovered during the archaeological mitigation as well as establishing the chronology of the site through radiocarbon dating.

8.3.2 Results

The AOC assessment report stated that charred plant remains >1mm were present in most samples in low-moderate numbers, with 77% of the samples producing at least one quantifiable plant macrofossil and 32% of the samples producing more than ten quantifiable specimens (Table 1). Uncharred modern seeds >1mm were present in most (91%) of the examined samples and fungal sclerotia were present in just 12% of samples. Charred plant remains <1mm were relatively scarce, with just 54% of the examined samples producing at least one quantifiable plant macrofossil and only 4 samples (4%) containing more than ten specimens (Table 2). Wood charcoal was extremely prevalent throughout the assemblage, with 98% of the samples producing charcoal fragments and 46% of the samples producing more than 50 specimens.

8.3.2.1 Cultivated plant remains

As outlined in the AOC assessment report a total of 71 cereal grains and 103 cereal chaff fragments were recovered. The cereal grains were present in a range of contexts (44%) from across the site in small quantities. Only three samples produced more than 10 cereal grains:

context 164 (sample 60), context 193 (sample 73) and context 200 (sample 76). The cereal grain was generally fairly poorly preserved, with most grains falling within the three worst preservation classes according to Hubbard and al Azm's (1990) preservation scale (P4-P6). However, a number of well-preserved specimens were also present; these were identified to genus or species level and several of these will be suitable for radiocarbon dating (see table 1).

The assemblage was dominated by barley (Hordeum sp.) (69%), with wheat also present (31%). The majority of the barley grains identified to species level were hulled barley (Hordeum sp. hulled) but four naked barley grains were also identified (Hordeum sp. naked). Both naked and glume wheats were present in the assemblage, with emmer (Triticum diccocum L.) and emmer/spelt (Triticum diccocum L./spelta L.) grains slightly more prevalent (six grains) than naked wheat grains (T. aestivum/durum/turgidum) (three grains). Cereal chaff was present in 25 samples in small (<20 specimens per sample) quantities. The preservation of this material ranged from poor to good, but most of the specimens will be identifiable to genus or species.

8.3.2.2 Wild plant remains

The AOC assessment report stated that over 2000 hazel (Corylus avellana L.) nutshell fragments were recovered from the samples. These nutshell remains were present in 46% of the samples, with notable concentrations (>90 fragments) coming from context 71 (samples 19 and 33), context 109 (sample 34), context 51 (sample 17 and 30), context 79 (sample 23) and context 63 (sample 28). These short-lived specimens would provide excellent material for radiocarbon dating.

Stem bases and nodes and roots/tubers/rhizomes were fairly frequently recovered. These remains are dominated by monocotyledon culm bases (<2mm), which are present in 33% of the samples. The small size of the culm bases suggests that they are derived from non-cultivated plants rather than from cereal culms.

Weed seeds were moderately frequent in the assemblage: 136 specimens were extracted from the flots. The assemblage included very poorly preserved and fairly-well preserved specimens, and further identification will be possible for a fair proportion of these seeds.

A small number of remains of other wild fruit/nuts were present in the assemblage, which also require further identification: one fruit stone and pericarp fragment, three possible

pericarp fragments and four possible catkin/fruits. Three buds were also recovered but are not identifiable further.

8.3.2.3 Charcoal

As outlined in the AOC assessment report in total, 5041 charcoal specimens were recovered from the analysed flots. The charcoal was generally well preserved and initial rapid assessment suggests that the assemblage is dominated by deciduous taxa, including a mixture of oak and short-lived species, of which the latter will be suitable for radiocarbon dating. Several of the contexts contained heavily mineral- or earth- coated specimens, and whilst they may be identifiable to genus or species, these fragments are not recommended for radiocarbon dating.

8.3.2.4 Other remains recovered from flots

The AOC assessment report stated that a tiny indeterminate bone fragment was recovered from context 220 (sample 86) and single land mollusc specimens from context 87 (sample 29) and context 185 (sample 69). A concentration of material which appears to be mineralised hazelnut shell was present in contexts 238 (sample 94) and 239 (sample 95).

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

The AOC assessment of the samples has produced a substantial well-preserved assemblage of wood charcoal. This assemblage has the potential to provide useful information about human-woodland interactions in early prehistoric Wales, and it is recommended that a sub-sample of the charcoal fragments from each of the major contexts is identified to assess woodland exploitation patterns.

The assessment also revealed that the assemblage contains a good quantity and range of charred plant macrofossils, which will add to our understanding of early prehistoric crop husbandry and wild plant gathering practices in Britain. The range of cereal species and wild nut remains recovered fits with the general pattern of plant exploitation in Neolithic and Bronze Age Britain (Bishop et al 2009; Jones & Rowley-Conwy 2007; Treasure et al 2020), but radiocarbon dating of the remains and further understanding of the phasing of the site will be necessary to fully consider the significance of the assemblage. The relative prevalence of cereal chaff and weed seeds in the assemblage is of potential significance, as this material is fairly rare in an early prehistoric context (ibid). This material should be fully

identified to allow a full consideration of the nature of crop cultivation and processing strategies at the site. The assessment of the <1mm flots revealed that charred plant macrofossils, including weed seeds and cereal chaff were present in low densities. It is recommended that a larger sub-sample of the <1mm flots is examined, especially for the contexts producing cereal chaff. However, given the low densities of charred plant remains in the <1mm flots and the size of the flots, full analysis of all <1mm flots is not recommended (particularly for the very large flots e.g. sample 60, context 164: sample mass is 1398g).

Material suitable for radiocarbon dating is present in a range of contexts across the site and includes specimens of deciduous wood charcoal, hazel nutshell and cereal grains. It is recommended that a full report discussing the significance of the plant macrofossil and charcoal remains is produced after the dating and the chronology and phasing of the site has been fully established. The assemblage is in a stable condition and should be retained for long-term storage.

8.5 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.

It is recommended that the entirety of the ecofactual assemblage should be retained, at least until further analysis and radiocarbon dating of the material is undertaken, to utilise the information contained therein to its greatest potential for the betterment of understanding the occupation and use of the archaeological sites.

These recommendations will be undertaken further to consultation and in agreement with GAPS/Cadw.

9 DISCUSSION

9.1 Summary of the character and significance of the site

The archaeology identified during the archaeological strip, map and sample investigation during groundworks for the Wylfa EV9 Cable Diversion was concentrated within Fields 1 & 2, 9, 9A and 14. The stratigraphic features of pit/post hole clusters found in Fields 1 & 2, 9A and 14 are comparable in composition and nature to other sites of Later Neolithic, Earlier Bronze Age and Later Bronze Age date both in Anglesey and North Wales, as well as throughout the UK. The ring ditch and ring of postholes for phases of probable roundhouse habitation is again not uncommon either within the local region or nationally but the possibility of it being of Later Bronze Age date is of greater significance within Wales given the comparative paucity of settlement sites from this period of prehistory.

The artefacts recovered from the archaeological sites, aside from the mace head, are not uncommon for this period of prehistory and for Anglesey or North Wales. The greatest contribution from the artefactual assemblage is the pottery as it represents activity from the Later Neolithic and Later Bronze Age. The Grooved Ware recovered from the scheme fits well within the local variation of the pottery style and of particular note sherd 69f with its eccentric decoration and probable decorative influences from outside of the region. Aside from the stone mace head, which is of probable Later Neolithic origin, the remaining artefacts are not uncommon and are typically associated with habitation sites from this period both within Wales and throughout the UK.

The palaeoenvironmental data produced cereal species and wild nut remains that are typical of Neolithic and Bronze Age sites and are comparable with contemporary sites both locally and nationally. What is of interest though is the relative prevalence of cereal chaft and weeds seeds within the assemblage which is of potential significance, as this material is fairly rare in an early prehistoric context.

Additional analysis of the artefacts, in particular of the pottery sherds is recommended. Specifically the pottery sherds should be illustrated to publication standard for comparative analysis with assemblages from other comparable sites and residue analysis of suitable pottery sherds should be undertaken to determine their usage for cooking or for presence of dairy farming during the Later Neolithic and Later Bronze Age. Petrological analysis of the Later Bronze Age pottery should also be conducted to determine the origin of black and

white rhyolite grit used within the fabric of the pots. It is also recommended that the Later Neolithic mace head and selected stone artefacts are illustrated to publication standard.

9.2 A tabulated list of relevant sources discovered

Quantity	Author(s)	Title	Date of Publication
1	Burrow, S.	Neolithic & Earlier Bronze Age Wales (4,000 BC – 1,500 BC) Research Framework for the Archaeology of Wales	2010
1	Cleal, R & MacSween, A.	Grooved Ware in Great Britain and Ireland	1999
1	Gale, F.	Later Bronze Age and Iron Age Wales (1,500 BC – 43 AD) Research Framework for the Archaeology of Wales	2010
1	Gibson, A.	Prehistoric Pottery in Britain and Ireland	2002
1	Hayes, L.	Wylfa EV9 Cable Diversion Fields 9 – 14: Interim Summary of Archaeological Works	2017
1	Malone, C.	Neolithic Britain and Ireland	2001
1	Pannett, A.	Neolithic & Earlier Bronze Age Wales (4,000 BC – 1,500 BC) Research Framework for the Archaeology of Wales	2017

9.3 Summary of the Results

9.3.1 Comparative Analysis

To assist in placing the archaeology uncovered along the route of the Wylfa EV9 Cable Diversion within a regional and national context it is recommended that comparative analysis of sites such as Parc Cybi, Holyhead, Lanfaehtlu, Penmynydd, Aberffraw, Anglesey as well as Parc Bryn Cegin near Bangor and Clynnog, Gwynedd is necessary.

9.3.2 Intra and inter-site spatial analyses

The archaeology within the route of the Wylfa EV9 Cable Diversion was concentrated in five fields, the largest concentration of which being the Later Bronze Age habitation located in Fields 9A and 9. The archaeology present within the pit/posthole clusters and habitation areas was primarily comprised of isolated succinct and discrete earth cut features with minimal inter-cutting, which originate from three separate unrelated periods of activity during the Later Neolithic, Earlier Bronze Age and Later Bronze Age.

The most notable intra-site relationships occurred within the Later Neolithic pit cluster in Field 14 and the Later Bronze Age habitation area in Field 9A. The features within the pit cluster of Field 14 were discrete and did not intercut although the presence of two distinct Later Neolithic pottery styles, Fengate Ware and Grooved Ware, while stylistically similar, especially within a regional context, most likely represent at least two distinct periods of activity at this location. This observation is based on current academic thinking in regards to the dates of use for Fengate and Grooved Ware, which would indicate that Fengate Ware was in use some 200 to 300 years prior to the first appearance of Grooved Ware (Lynch 2020).

The preliminary radiocarbon dates taken from pits [52] and [72] appear to contribute to the current belief that chronologically Fengate Ware predates the first appearance of Grooved Ware and that there is a gap of several hundred years between the two pottery styles. In the case of the pit group within Field 14 these initial radiocarbon results suggest that pit [72] was backfilled with (71) and the Fengate Ware pot was interred some 46 to 91 years prior to the deposition of the Grooved Ware and fill (51) in pit [52].

The pit cluster at Field 14 could also be linked chronologically as well as ceramically with the sites at Clynnog, Gwynedd and Llanfaethlu, Anglesey; the latter being located a few miles south. Clynnog and Llanfaethlu also produced sherds of Fengate and Grooved Ware that

like Field 14 displayed a merging of the two styles, as the "*pots with incurved rims and horizontal or wavy cordons which are a particular feature of this region, seem to be the vehicle for most of this stylistic merging*" (Lynch 2020, 12).

The scatter of archaeological features uncovered in Fields 1 and 2 would indicate temporary, possibly seasonal occupation. While there was comparatively few artefacts recovered from these features and a lack of diagnostic pottery or lithics, the preliminary radiocarbon date of the Earlier Bronze Age retrieved from fill (05) of pit [04] in Field 2 is of some regional significance; given the paucity of settlement evidence from this period of prehistory within Anglesey and North Wales.

The archaeology at the Later Bronze Age site in Field 9A also implies a period of activity and re-use. Unlike Field 14 though, the pottery is not sufficiently distinct to suggest a chronological order for the features present but stratigraphically it is clear that the ring ditch pre-dates the ring of postholes. The ring ditch had been backfilled/silted up prior to the construction of the ring of postholes, as postholes [189] and [216] truncate the cut and fill of the ring ditch. This would imply a re-use of the site and continued, if quite confined, activity on the site.

In addition, the pottery recovered from Fields 9 and 9A have very close parallels with the Later Bronze Age site excavated close to Cestyll (Area 5), 1km to the north west of Tregele. Indeed in "*the opinion of Dr David Jenkins the two assemblages are virtually indistinguishable and technologically very clo*se" (Lynch 2020, 17).

The results of the preliminary radiocarbon dates from a section of the ring ditch fill (195) of [197] and large pit [163] located within the arc of the ring ditch, would appear to broadly concur with the ceramic evidence. In archaeological terms there is little chronological separation between the pit and the ring ditch, with the backfilling of [197] preceding that of [163] by a maximum of 42 years. Indeed the backfilling and use of the features overlap by around a century. This would appear to underline the belief that activity on the site was relatively confined, possibly even continuous, as inferred by the ceramic assemblage.

9.3.3 Recommendations

The specialist assessment of the environmental assemblage has recommended the following actions for further analytical work:

- a sub-sample of the charcoal fragments from each of the major contexts is identified to assess woodland exploitation patterns;

- the relative prevalence of cereal chaff and weed seeds in the assemblage is of potential significance as such it should be fully identified to allow a full consideration of the nature of crop cultivation and processing strategies at the site. It is recommended that a larger sub-sample of the <1mm flots is examined, especially for the contexts producing cereal chaff;

- material suitable for radiocarbon dating is present in a range of contexts across the site and includes specimens of deciduous wood charcoal, hazel nutshell and cereal grains. It is recommended that a full report discussing the significance of the plant macrofossil and charcoal remains is produced after the dating and the chronology and phasing of the site has been fully established.

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 Research Aims of the Project

One of the key aims of the Written Scheme of Investigation for an Archaeological Strip, Map and Sample (Hayes 2017) and the Written Scheme of Investigation for Strip Map and Sample Excavation and Palaeoenvironmental Assessment (WSI, Horizon 2017) was "*the assessment and analysis of any archaeological remains recorded during the works will be undertaken with reference to the results of archaeological investigations carried out for the Wylfa Newydd site as a whole, as well as the wider known archaeology of the surrounding landscape, in order to establish their significance at local, regional and national levels*" (Hayes 2017, 5 & HNP 2017, 20). The assessment of the archaeology uncovered along the route of EV9 has been undertaken in this report and recommendations have been made for the analysis of the relevant aspects of the archaeological artefactual and ecofactual archive.

The Grooved Ware, Fengate Ware and Later Bronze Age pottery has close parallels with contemporary sites in Anglesey and North Wales. A case in point being the pottery recovered from the fills of the ring ditch and ring of postholes in Field 9A which is closely comparable with the Later Bronze Age material from Area 5, approximately 1km to the west of EV9, an excavation conducted under the aegis of the Wylfa Newydd Project (Lynch 2020).

10.1.2 Statement of Potential

The assessment of the artefacts and ecofacts recovered from the excavation of the archaeological sites within the Wylfa EV9 Cable Diversion has provided more insight about the areas of habitation and helps to place them more within both a local and national context. The ceramics recovered from Fields 9, 9A and 14 revealed activity from the Later Neolithic to Later Bronze Age, as indicated as well, to a lesser degree by the lithic and stone artefact assemblage.

The ecofactual assemblage contained a range of cereal species and wild nut remains that fit with the general pattern of plant exploitation in Neolithic and Bronze Age Britain. The assessment also revealed that the assemblage contains a good quantity and range of charred plant macrofossils, which will add to our understanding of early prehistoric crop husbandry and wild plant gathering practices in Britain. Notably the relative prevalence of cereal chaff and weed seeds in the assemblage is of potential significance, as this material is fairly rare in an early prehistoric context.

The combined picture produced from the assessment of the artefacts and ecofacts coalesce to strongly suggest that this area was inhabited from the Later Neolithic to the Later Bronze Age. This observation has been corroborated by preliminary radiocarbon dates thus underlining that these areas of habitation are of real significance at a local and national level. This is further underscored by the Research Framework for the Archaeology of Wales, as it was recognised that there is a "*need for more work on settlement sites in areas where palaeoenvironmental evidence could also be obtained*" (Burrow 2010, 3) and "*in general the need for greater emphasis on the material culture of the period"* (Burrow 2010, 4), in relation to the Neolithic and Early Bronze Age. Further to this the Research Framework for the Archaeology of Wales more recently also placed greater emphasis on what constitutes evidence for settlement during the Neolithic and Early Bronze Age and that the scope should be broadened to include a range of features including pits, postholes, stakeholes, hearths and artefact scatters rather than simply Neolithic 'house' and other structural remains to explain how and where the population of the era lived (Pannett 2017, 7).

The Research Framework for the Archaeology of Wales also places a greater emphasis being required for understanding the chronology of the Late Bronze Age and Iron Age of Wales. It recommends that radiocarbon dating should be routine where suitable materials survive, particularly in relation to settlement given the relative paucity of dates for

roundhouses and in relation to a dated ceramic sequence for the period (Gale 2010, 2-3 & Anon. 2016).

The information garnered from the habitation sites identified along the route of EV9, in particular taken in conjunction with information gained from contemporary sites within the Wylfa Newydd Project will greatly add to the picture of prehistoric life on Anglesey. It has the potential as well to provide a greater chronological knowledge of pottery from the Later Bronze Age once the artefactual evidence is compared with additional secure radiocarbon dating.

10.1.3 Dissemination and Publication

It is recommended that the site data from EV9 should be published as part of a project landscape overview of the Wylfa Newydd Project based on the highly likely inter-site relationship with other sites within the development boundary, for example Area 5. This approach to the dissemination and publication of all of the archaeological sites investigated, to date, as part of the Wylfa Newydd Project, would advance the knowledge of archaeology within the region and as such would be of regional and national importance.

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.

It is proposed that an informed strategy for the detailed analysis, as recommended by the relevant specialists, is undertaken for the pottery assemblage and aspects of the ecofactual assemblage to assist in the reconstruction and understanding of the use of the sites uncovered along the route of Wylfa EV9 Cable Diversion. To this end it is recommended that:

- the pottery sherds recovered from site are illustrated to publication standard and where viable illustrate the sherds and rims into individual vessels for comparative analysis with assemblages from other comparable sites;
- in combination with comparable pottery assemblages from within the Wylfa Newydd development boundary, it is recommended that residue analysis of suitable pottery sherds is undertaken to determine their usage for cooking or for presence of dairy farming during the Later Neolithic and Later Bronze Age;
- a sub-sample of the charcoal fragments from each of the major contexts is identified to assess woodland exploitation patterns;
- the relative prevalence of cereal chaff and weed seeds in the assemblage is of potential significance as such it should be fully identified to allow a full consideration of the nature of crop cultivation and processing strategies at the site. It is recommended that a larger sub-sample of the <1mm flots is examined, especially for the contexts producing cereal chaff;
- material suitable for radiocarbon dating is present in a range of contexts across the site and includes specimens of deciduous wood charcoal, hazel nutshell and cereal grains. It is recommended that a full report discussing the significance of the plant macrofossil and charcoal remains is produced after the dating and the chronology and phasing of the site has been fully established; and
- based on the promising results of the preliminary radiocarbon dates, more extensive radiocarbon dating is required to validate these results and to better understand the length of occupation of the habitation sites, in particular the Later Bronze Age activity in Field 9A.

The strategy for further detailed analysis will also incorporate the results of the archaeological watching brief of the RSK geotechnical ground investigation and a reappraisal of the pottery and ecofacts recovered from the features identified and sampled in Trial Pit 4. The features were uncovered in the vicinity of the pit cluster uncovered in Field 14 and are of particular relevance given the recovery of Fengate and Grooved Ware.

The pottery recovered from neighbouring and contemporary sites within the Wylfa Newydd Project boundary, such as Area 5 that also produced Later Bronze Age pottery sherds and sites beyond the site boundary but which are in close proximity, such as the Neolithic landscape uncovered at nearby Llanfaethlu, will contribute to the understanding of the sites at EV9 and an understanding of occupation on Anglesey during the Later Neolithic and Later Bronze Age.

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12 APPENDIX 1

12.1 Reproduction of Wardell Armstrong post-ex assessment method statement

wardell-armstrong.com

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

HORIZON

WYLFA NEWYDD

POST EXCAVATION ASSESSMENT METHOD STATEMENT

APRIL 2019

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WYLFA NEWYDD POST EXCAVATION ASSESSMENT METHODOLOGY

Introduction

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

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

Requirement for and Purpose of the Post Excavation Assessment

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

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

Human remains (cremated and non-cremated) require different cleaning methods depending on their state of preservation. Non-cremated articulated and disarticulated human remains in good condition will undergo wet cleaning but without the bones being immersed in water. Human remains in poor condition must not be wet-washed and will have to be dry-brushed to avoid unnecessary damage to the remains.

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

Stage 2 Archival Preparation

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

The documentary archive should have been appropriately ordered, indexed and catalogued before it left site, but it will require checking and final cross-referencing before it can be assessed. The checking will involve both digital and paper-based records and include a finalisation of plan and section data, both hand-drawn and recorded through a digital medium. Relevant HER entries will need to be listed in full detail. All records will need security copies. Paper records (drawn plans, sections and record sheets) will be scanned for digital archiving. The digitisation of all hand drawn plans and sections is to be avoided as not cost

effective. Drawings for digitisation can be selected in the analysis phase when it is known which drawings will contribute to the publication. This ensures that all digitisation will be 'heads up' and only for the purposes of report illustration rather than 'heads down', thus removing the need for digitisation tablets and increasing efficiency.

Stage 3 Data Assessment

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

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

Stage 4 PXA and UPD Reporting

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

Report Template

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

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

2. **Introduction**

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

2.2 Scope of the project.

2.3 Dates/duration of fieldwork.

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

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

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

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

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

3. **Summary of the excavation methodology**

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

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

3.3 Site planning strategy with justifications for the applied methodology.

3.4 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.*

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*.

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**

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

- 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

APPENDIX 1 METHOD STATEMENT: STAGE 1 FINDS PROCESSING

Finds processing and assessment summary

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

Washing and cleaning

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

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

All metalwork (including copper alloy, lead and iron) and oyster shell is dry-brushed. Delicate metal and non-metal small finds are dry-brushed and placed in crystal boxes in trays on acid-free tissue paper. Plaster/mortar are dry-brushed and placed in labelled trays.

Human remains (cremated and non-cremated) are processed differently and will require different cleaning methods depending on their state of preservation. Non-cremated articulated and disarticulated human remains in good condition will undergo the same processing as bulk finds, but the bones are not immersed in water. The human remains will only be marked depending on the requirements of the curator and county repository. Human remains in poor condition must not be wet-washed and will have to be dry-brushed for remains to stabilise.

Time estimates for finds washing and cleaning

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

Find type	**Weight**	**Time**
Prehistoric pottery	1kg	1-2 hours
Roman pottery	1kg	1-1.5 hours
Saxon pottery	1kg	1-1.5 hours
Medieval pottery	1kg	1 hour
Post-medieval pottery	1kg	1 hour
CBM & daub	1kg	1-1.5 hours
Animal bone (good condition)	1kg	1-1.5 hours
Animal bone (bad condition)	1kg	1-2 hours
Human bone (complete skeleton, good condition)	7-8kg	1-1.5 days
Human bone (bad condition)	1kg	1-2 days
Glass	1kg	1-1.5 hours
Metalwork	1kg	1-1.5 hours
Oyster shell	1kg	1-1.5 hours
Flint	1kg	1 hour
Stone	1kg	1 hour
Leather	1kg	1-1.5 hours
Archaeometallurgical waste	1kg	1 hour
Plaster/Mortar	1kg	1-2 hours
Clay Pipe	1kg	1-1.5 hours

APPENDIX 2 METHOD STATEMENT: STAGE 1 ENVIRONMENTAL PROCESSING

Environmental processing and assessment summary

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

General Biological Analysis sample

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

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

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

The <4mm fraction will be scanned with a magnet in order to pick up micro-slags, and 100%

sorted for the recovery of artefacts and ecofacts.

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

Recording of the Environmental Data

Where possible quantify, counts of over 50 individuals per species can be referred to by levels of abundance, such as +=50-100, ++=100-200, +++=200-500 and ++++ to indicate greater than 500. If identification is not to species level then a distinction between cereals and weeds species (or non-economic taxa) should be made. The presence of chaff should be noted.
For long term storage, the plant remains should be stored in soda glass tubes with sample information, and identification (where relevant) clearly marked using pencil and a Tyvek label placed inside the tube.

Waterlogged Samples

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

Paraffin Flotation

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

required if the sample is large. This will be then allowed to stand for 15 minutes and cold water added to the bucket.

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

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

METHOD STATEMENT STAGES 2 AND 3 FINDS ASSESSMENT

Summary

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

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

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

Stage 2

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

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

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

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

Time estimates for finds marking and bagging and boxing

Marking 30-40 seconds per artefact e.g. per bone, per pot sherd.

Bagging and boxing 1 box at 6 kg full capacity – 30-40 minutes.

Stage 3

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

Time estimates for preliminary recording

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

Materials costs to be considered to PXA

In addition to the person costs there is a material cost for storage materials, including boxes, silica gel, acid free tissue and zip-lock bags, for the artefacts and the human bone. For example, finds and documentary archive boxes need to be acid free for long term storage.

Appropriate temporary storage and monitoring of waterlogged artefacts is required, prior to conservation.

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

13 APPENDIX 2

13.1 Reproduction of Written Scheme of Investigation

HORIZON
NUCLEAR POWER

ENERGY WORKING FOR BRITAIN

PROCUREMENT SPECIFICATION FOR POST EXCAVATION ASSESSMENT

Technical / Performance Specification

DCRM Ref Number:

Revision: 0.1

Additional Requirements or Controls			
LISTED READERS ONLY		LEGALLY PRIVILEGED	

Comments:

Distribution		
Required for Listed Readers Only and Legally Privileged but can be used with other markings		

Approvals Table				
	Horizon Role	**Printed Name**	**Signed Name**	**Date**
Authored by	Role	Rhodri Owen		
Reviewed by	Role	David Palmer		
Checked by	Head of Section	Joep Wouters		
Approved by	HLT Representative	Anthony Webb		

SPECIFICATION TITLE	DCRM Reference No	Revision:	0.1
		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

Contents

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;

- 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.

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

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 CIfA's published guidance. When undertaking the archaeological assessment work, the contractor shall specifically refer to section 3.4 of;

- CIfA (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;

- 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/CIfA.
- 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

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

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

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

14 APPENDIX 3

14.1 Reproduction of Project Register for Artefacts

Find No.	Sample No.	Context No.	Material	Description	Weight (g)	Context Description
1	<02>	3	pottery	prehistoric pottery	14	Fill of pit [004]
2	<04>	7	pottery	prehistoric pottery	22	Rooting
3	<09>	14	metal	magnetic residue	4	Fill of [015], natural gully
4	<16>	55	lithic	chert debitage	0	Fill of pit [056]
5	<17>	51	bone	burnt bone	0	Fill of waste pit [052]
6	<17>	51	lithic	flint debitage	17	Fill of waste pit [052]
7	<17>	51	lithic	flint blade	4	Fill of waste pit [052]
8	<17>	51	pottery	prehistoric pottery	37	Fill of waste pit [052]
9	<18>	61	lithic	flint debitage	0	Fill of waste pit [062]
10	<18>	61	pottery	small fragment of pottery	1	Fill of waste pit [062]
11	<19>	71	metal	magnetic residue	10	Fill of waste pit [072]
12	<19>	71	pottery	prehistoric pottery	130	Fill of waste pit [072]
13	<19>	71	bone	burnt bone	0	Fill of waste pit [072]
14	<19>	71	lithic	flint debitage	4	Fill of waste pit [072]
15	<20>	73	pottery	small fragment of post-medieval pottery	0	Fill of pit/posthole [074]
16	<20>	73	metal	magnetic residue	4	Fill of pit/posthole [074]
17	<20>	73	pottery	prehistoric pottery	0	Fill of pit/posthole [074]
18	<21>	69	lithic	flint debitage	22	Fill of pit [070]
19	<21>	69	lithic	flint scrapers	14	Fill of pit [070]
20	<21>	69	lithic	chert debitage	0	Fill of pit [070]
21	<21>	69	pottery	prehistoric pottery	218	Fill of pit [070]
22	<21>	69	stone	hammer stone - broken	238	Fill of pit [070]
23	<22>	77	pottery	prehistoric pottery	11	Fill of posthole/pit [078]
24	<23>	79	bone	burnt bone	0	Fill of pit [080]
25	<23>	79	pottery	prehistoric pottery	46	Fill of pit [080]
26	<23>	79	lithic	flint blades	1	Fill of pit [080]
27	<23>	79	lithic	flint debitage	0	Fill of pit [080]
28	<24>	81	lithic	flint debitage	2	Fill of posthole/pit [082]
29	<24>	81	lithic	chert debitage	1	Fill of posthole/pit [082]

Find No.	Sample No.	Context No.	Material	Description	Weight (g)	Context Description
30	<24>	81	pottery	prehistoric pottery	5	Fill of posthole/pit [082]
31	<25>	75	pottery	prehistoric pottery	4	Fill of posthole/pit [076]
32	<25>	75	CBM	clay	4	Fill of posthole/pit [076]
33	<27>	85	lithic	flint debitage	5	Fill of pit [086]
34	<28>	63	pottery	prehistoric pottery	6	Fill of ditch [064]
35	<28>	63	lithic	flint & chert debitage	1	Fill of ditch [064]
36	<30>	51	lithic	flint debitage	8	Fill of waste pit [052]
37	<30>	51	pottery	prehistoric pottery	97	Fill of waste pit [052]
38	<30>	51	lithic	flint debitage	0	Fill of waste pit [052]
39	<31>	69	lithic	flint & chert debitage	0	Fill of pit [070]
40	<31>	69	pottery	prehistoric pottery	79	Fill of pit [070]
41	<32>	83	pottery	prehistoric pottery	9	Fill (primary) of waste pit [070]
42	<33>	71	pottery	prehistoric pottery	72	Fill of waste pit [072]
43	<33>	71	lithic	chert debitage	0	Fill of waste pit [072]
44	<33>	71	lithic	flint debitage	4	Fill of waste pit [072]
45	<34>	79	bone	burnt bone	0	Fill of pit [080]
46	<34>	79	lithic	flint debitage	1	Fill of pit [080]
47	<34>	79	pottery	prehistoric pottery	28	Fill of pit [080]
48	<36>	105	CBM	plaster	3	Fill of post hole [106]
49	<36>	105	metal	magnetic residue	21	Fill of post hole [106]
50	<36>	105	pottery	prehistoric pottery	17	Fill of post hole [106]
51	<37>	109	lithic	chert tool	5	Fill of Posthole [110]
52	<37>	109	bone	burnt bone	1	Fill of Posthole [110]
53	<39>	107	bone	burnt bone	1	Mixed lower fills of posthole [106]
54	<42>	121	lithic	flint debitage	2	Fill of posthole [122]
55	<43>	125	lithic	chert debitage	3	Fill of posthole [126]
56	<43>	125	pottery	prehistoric pottery	18	Fill of posthole [126]
57	<43>	125	metal	magnetic residue	13	Fill of posthole [126]
58	<44>	123	CBM	clay	2	Fill of posthole [124]
59	<44>	123	pottery	prehistoric pottery	1	Fill of posthole [124]
60	<52>	147	pottery	prehistoric pottery	38	Fill of posthole [148]

Find No.	Sample No.	Context No.	Material	Description	Weight (g)	Context Description
61	<52>	147	CBM	lining/base of kiln?	279	Fill of posthole [148]
62	<53>	149	pottery	prehistoric pottery	24	Fill of pit [150]
63	<53>	149	metal	magnetic residue	3	Fill of pit [150]
64	<54>	152	lithic	flint debitage	1	Fill of possible beam slot
65	<54>	152	bone	burnt bone	1	Fill of possible beam slot
66	<55>	153	lithic	chert debitage	2	Fill of pit [154]
67	<55>	153	pottery	prehistoric pottery	15	Fill of pit [154]
68	<55>	153	CBM	daub	5	Fill of pit [154]
69	<56>	155	lithic	chert debitage	10	Fill of [156]
70	<57>	157	CBM	lining/base of kiln?	109	Fill of possible posthole [158]
71	<60>	164	pottery	prehistoric pottery	35	Fill of posthole/pit [163]
72	<60>	164	bone	burnt bone	1	Fill of posthole/pit [163]
73	<63>	169	CBM	lining/base of kiln?	35	Fill of pit [170]
74	<65>	173	pottery	prehistoric pottery	5	Fill of posthole [174]
75	<65>	173	stone	hammer stone	744	Fill of posthole [174]
76	<64>	171	CBM	lining/base of kiln?	91	Fill of pit [172]
77	<64>	171	metal	magnetic residue	1	Fill of pit [172]
78	<65>	173	metal	magnetic residue	6	Fill of posthole [174]
79	<66>	176	pottery	prehistoric pottery	1	Fill of stake hole [176]
80	<68>	181	lithic	chert blade	4	Fill of pit/posthole [180]
81	<68>	181	pottery	prehistoric pottery	15	Fill of pit/posthole [180]
82	<68>	181	lithic	flint debitage	3	Fill of pit/posthole [180]
83	<68>	181	bone	burnt bone	1	Fill of pit/posthole [180]
84	<69>	185	lithic	chert debitage	1	Fill of pit/posthole [184]
85	<70>	187	pottery	prehistoric pottery	183	Fill of pit [186] - Pottery rich
88	<70>	187	lithic	flint debitage	0	Fill of pit [186] - Pottery rich
89	<71>	188	lithic	flint debitage	23	Fill of posthole [189]
90	<71>	188	lithic	chert debitage	2	Fill of posthole [189]

Find No.	Sample No.	Context No.	Material	Description	Weight (g)	Context Description
91	<72>	190	bone	burnt bone	0	Single fill of ditch [191]
92	<72>	190	pottery	prehistoric pottery	1	Single fill of ditch [191]
93	<72>	190	lithic	flint debitage	1	Single fill of ditch [191]
94	<72>	190	lithic	chert debitage	5	Single fill of ditch [191]
95	<73>	193	metal	magnetic residue	26	2' Fill of ditch [169/197]
96	<73>	193	bone	burnt bone	1	2' Fill of ditch [169/197]
97	<73>	193	pottery	prehistoric pottery	8	2' Fill of ditch [169/197]
98	<75>	195	metal	magnetic residue	9	1' fill of ditch [197]
99	<75>	195	lithic	flint debitage	7	1' fill of ditch [197]
100	<76>	200	lithic	chert debitage	1	Single fill of ditch [198/199]
101	<76>	200	pottery	prehistoric pottery	20	Single fill of ditch [198/199]
102	<76>	200	lithic	flint debitage	1	Single fill of ditch [198/199]
103	<76>	200	CBM	plaster (burnt)	2	Single fill of ditch [198/199]
104	<76>	200	bone	burnt bone	2	Single fill of ditch [198/199]
105	<77>	201	lithic	flint debitage	16	Single fill of ditch [202]
106	<78>	205	lithic	flint debitage	6	Fill of ring ditch [206] - Bioturbated
107	<78>	205	metal	magnetic residue	13	Fill of ring ditch [206] - Bioturbated
108	<79>	207	metal	magnetic residue	17	Fill of ring ditch [208]
109	<80>	209	bone	burnt bone	1	Fill of ring ditch [210]
110	<80>	209	pottery	prehistoric pottery	32	Fill of ring ditch [210]
111	<80>	209	metal	magnetic residue	29	Fill of ring ditch [210]
112	<81>	211	pottery	prehistoric pottery	141	Fill of ring ditch [212] - Bioturbated
113	<81>	211	lithic	flint debitage	9	Fill of ring ditch [212] - Bioturbated
114	<81>	211	bone	burnt bone	3	Fill of ring ditch [212] - Bioturbated

Find No.	Sample No.	Context No.	Material	Description	Weight (g)	Context Description
115	<82>	219	pottery	prehistoric pottery	40	Fill of ring ditch [214] - Bioturbated
116	<82>	219	lithic	flint debitage	0	Fill of ring ditch [214] - Bioturbated
117	<83>	215	pottery	prehistoric pottery	7	Fill of pit [216]
118	<83>	215	lithic	chert tool	9	Fill of pit [216]
119	<84>	217	pottery	prehistoric pottery	1	2' fill of ring ditch [219]
120	<84>	217	lithic	flint debitage	0	2' fill of ring ditch [219]
121	<85>	218	bone	burnt bone	0	1' fill of ring ditch [2019]
122	<88>	224	CBM	clay	126	Fill of pit [225]
123	<88>	224	metal	magnetic residue	13	Fill of pit [225]
124	<89>	228	CBM	clay	5	Fill of [229]
125	<89>	228	lithic	chert debitage	7	Fill of [229]
126	<89>	228	pottery	prehistoric pottery	2	Fill of [229]
127	<89>	228	metal	magnetic residue	5	Fill of [229]
128	<91>	232	metal	magnetic residue	1	Fill of possible ring ditch [233]
129	<92>	234	lithic	chert	29	Backfill to post pipe [161] in posthole [235]
130	<93>	236	metal	magnetic residue	2	Fill of possible stakehole [237]
131	<95>	239	bone	burnt bone	1	Fill of tree throw [240] (S end)
132	<95>	239	metal	magnetic residue	13	Fill of tree throw [240] (S end)
133	<96>	241	metal	magnetic residue	10	Fill of posthole [242]
134	<96>	241	bone	burnt bone	1	Fill of posthole [242]
135	<97>	215	lithic	chert debitage	5	Fill of posthole [216]
136	<97>	215	pottery	prehistoric pottery	3	Fill of posthole [216]
137		50	pottery	8 sherds		Subsoil
138		51	pottery	28 sherds - 3 in fine bottom row		Dump in waste pit
139		51	pottery	53 sherds		Dump in waste pit
140		63	pottery	2 sherds		Ditch fill

Find No.	Sample No.	Context No.	Material	Description	Weight (g)	Context Description
141		67	pottery	4 sherds - large decorated fragment		Slump in waste pit
142		69	pottery	20 sherds, decorated fragments		Dump in waste pit
143		69	pottery	25 sherds		Dump in waste pit
144		69	pottery	45 sherds, 10 fine/decorated		Dump in waste pit
145		69	pottery	15 small fragments		Dump in waste pit
146		71	pottery	47 sherds		Dump in waste pit
147		75	pottery	18 sherds		Post hole fill
148		79	pottery	18 sherds		Dump in waste pit
149		81	pottery	2 sherds		Post hole fill
150		99	pottery	1 post-medieval sherd		Field boundary ditch fill
151		182	lithic	1 chert?		Pit fill
152		182	CBM	1 CBM?		Pit fill
153		188	lithic	2 chert		Post hole fill
154		188	stone	grindstone?		Post hole fill
155		209	pottery	3 sherds		Ring ditch fill
156		811	CBM	1 CBM		Ring ditch fill
157		211	pottery	5 sherds		Ring ditch fill
158		213	pottery	11 sherds		Ring ditch fill
159		217	pottery	1 sherd		Ring ditch fill
160		230	pottery	8 sherds		Ring ditch fill
161		238	pottery	1 sherd		Tree throw fill
162		175	lithic	chert debitage	102	
163			lithic	chert	16	Field 1, feature 2
164		185	lithic	flint core	3	
165		121	lithic	flint scraper	14	
166			lithic	chert debitage	9	Field 1, feature 3
167		169	lithic	flint pebble	6	
168		121	lithic	chert debitage	30	
169		Unstratified	stone	polishing stone	100	BA site
170		Unstratified	lithic	chert debitage	0	

Find No.	Sample No.	Context No.	Material	Description	Weight (g)	Context Description
171		Unstratified	lithic	chert debitage	20	Field 1
172		184	lithic	chert scraper	25	BA site
173		186	lithic	chert debitage	36	
174		185	stone	spindle whorl - schist	25	BA site
175		23	lithic	chert debitage	5	
176		Unstratified	stone	net sinker/roof weight	354	BA site
177		103	lithic	flint pebble	19	Pit fill
178			lithic	chert and flint debitage	5	Field 5, Pit fill
179		Unstratified	lithic	chert debitage	14	BA site
180		184	stone	grind stone	139	BA site
181		173	stone	grind stone	224	BA site
182		173	stone	polishing stone - chert	676	BA site
183		185	stone	hammer stone	172	
184		Unstratified	stone	mace head	430	
185			bone	burnt bone	3	Field 2, Pit fill

15 APPENDIX 4

15.1 Context Register

CONTEXT REGISTER

PROJECT NAME: WYLFA EV9 DIVERSION **PROJECT CODE:** WEV917

Context Number	Description	Field Number	Photos	Plan	Section (1:10 scale)
(01)	FILL OF SHALLOW PIT	2	5618-5621	16	15
[02]	CUT OF SHALLOW PIT	2	5618-5622	16	15
(03)	FILL OF [04]	2	5623	02	01
[04]	SHALLOW PIT	2	5623	02	01
(05)	FILL OF SHALLOW RICH PIT	2	5624	22	21
[06]	CUT OF SHALLOW PIT	2	5624-5625	22	21
(07)	ROOTING ACTIVITY	2	5626-5628		
(08)	ROOTING ACTIVITY	2	5626-5628		
(09)	BURNT AREA	2	5626-5629		
(10)	FILL OF [11]	2	5630	04	03
[11]	POSSIBLE PIT	2	5630	04	03
(12)	FILL OF [13]	2	5636-5638	06	05
[13]	SHALLOW PIT	2	5636-5638	06	05
(14)	FILL OF [15]	2	5639-5640	20	17
[15]	GULLY – WESTERN TERMINUS	2	5639-5640	20	17
(16)	FILL OF [17]	2	5641-5642	20	18
[17]	GULLY – MID SLOT	2	5641-5642	20	18
(18)	FILL OF [19]	2	5643-5647	20	18
[19]	GULLY – EASTERN TERMINUS	2	5643-5647	20	19
(20)	FILL OF [21]	1	5648	08	07
[21]	POSSIBLE PIT	1	5648	08	07
(22)	FILL OF [24]	1	5649	10	09
(23)	FILL OF [24]	1	5649	10	09
(24)	TREE BOLE	1	5649	10	09
(25)	POSSIBLE PIT FILL	1	5650-5652		
[26]	CUT OF POSSIBLE PIT	1	5650-5652		
(27)	FILL OF [28]	4	5659-5662	12	13
[28]	RE-CUT WITHIN (29)	4	5659-5662	12	13
(29)	FILL OF [30]	4	5659-5662	12	11
[30]	CURVING DITCH	4	5659-5662	12	11
(31)	TREE ROOTS FILL	5	5674-5675	14	13

Context Number	Description	Field Number	Photos	Plan	Section (1:10 scale)
[32]	'CUT' OF TREE ROOTS	5	5674-5675	14	13
(33)	FILL OF [34]	15	45-47	53	54
[34]	DITCH	15	45-47	53	54
(35)	FILL OF [36]	16	35-36, 41-44	55	56
[36]	LINEAR	16	35-36, 41-44	55	56
(37)	FILL OF [38]	15	49-51	51	52
[38]	LARGE LINEAR	15	49-51	51	52
(39)	FILL OF [46]	15	52-54	49	50
[40]	POSTHOLE	14	SAME AS [74]?	GM	GM
[41]	POSTHOLE	14	SAME AS [86]?	GM	GM
(42)	FILL OF PIT [43]	14	-	GM	GM
[43]	PIT	14	-	GM	GM
(44)	FILL OF POSTHOLE [41]	14	-	GM	GM
(45)	FILL OF POSTHOLE [40]	14	-	GM	GM
[46]	SMALL LINEAR	14	52-54	49	50
(47)	FILL OF [48]	15	27, 29-30, 133-8	47	48
[48]	STRAIGHT LINEAR	15	27, 29-30, 133-8	47	48
(49)	TOPSOIL	14	-	N/A	
(50)	SUBSOIL	14	-	N/A	
(51)	FILL OF PIT [52]	14	55, 57, 61-63, 89-95, 126-7, 147-9	22	29
[52]	PIT	14	55, 57, 61, 92-95, 126-7, 147-9, 171	22	29
(53)	FILL OF [54]	14	66-69, 71-72, 98-103, 105	23	24
[54]	PIT	14	66-69, 71-72, 98-103, 105	23	24
(55)	FILL OF [56]	14	66-67, 70-72, 98-103, 105	23	25
[56]	PIT	14	66-67, 70-72, 98-103, 105	23	25

Context Number	Description	Field Number	Photos	Plan	Section (1:10 scale)
(57)	FILL OF [58]	14	73-75	GPS	
[58]	STONE HOLE	14	73-75	GPS	
(59)	FILL OF [60]	14	58-59, 79-81	32	37
[60]	ELONGATED DISTURBANCE	14	58-59, 79-81	32	37
(61)	FILL OF PIT [62]	14	66-67. 98-105	23	26
[62]	PIT	14	66-67. 98-105	23	26
(63)	FILL OF [64]	14	83-85	31	35-36
[64]	LINEAR	14	83-85	31	35-36
(65)	FILL OF [66]	14	86-88	27, 30	33-34
[66]	LINEAR	14	86-88	27, 30	33-34
(67)	SLUMP IN [52]	14	92-95		29
(68)	NATURAL	14	ALL	22, 23, 27, 30-32	N/A
(69)	FILL OF PIT [70]	14	117-9, 147-9	22	38
[70]	PIT	14	117-9, 147-9, 171	22	38
(71)	FILL OF PIT [72]	14	107-9, 131	27	28
[72]	PIT	14	107-9, 131, 167, 169	27	28
(73)	FILL OF PIT [74]	14	55, 57, 113-5, 147-9	22	39
[74]	PIT	14	55, 57, 113-5, 147-9	22	39
(75)	FIL OF POSTHOLE [76]	14	125-127	N/A	41
[76]	POSTHOLE	14	125-129	22	41
(77)	FILL OF POSTHOLE/PIT [78]	14	118, 120-2, 124, 126-7	40	42
[78]	POSTHOLE/PIT	14	118, 120-2, 124, 126-7	40	42
(79)	FILL OF PIT [80]	14	130-131	27	43
[80]	PIT	14	130-131, 167, 169	27	43
(81)	FILL OF POSTHOLE/PIT [82]	14	118, 122-4, 126-7	40	44
[82]	POSTHOLE/PIT	14	118, 122-4, 126-7	40	44
(83)	SLUMP/1° FILL PIT [70]	14	117-119	N/A	38
84	NATURAL	15			

Context Number	Description	Field Number	Photos	Plan	Section (1:10 scale)
(85)	FILL OF PIT [86]	14	55- 57, 111, 147-9	22	GM
[86]	PIT	14	55-57, 111, 147-9	22	GM
87	FILL OF [88]	15	163-6	46	
[88]	PIT?	15	163-6	46	
89	TOPSOIL	15			
90	SUBSOIL	15			
91	TOPSOIL	16			
92	SUBSOIL	16			
93	NATURAL	16			
94	TOPSOIL	9a			
95	FILL OF [96]	9a	241-2, 250-2, 257-8, 263-4, 273-5, 277	66, 70	65, 69
[96]	FIELD BOUNDARY DITCH = [141]	9a		66, 70	65, 69
97	FILL OF [98]	9a	241-2, 253-6, 263-4, 277	68	67
[98]	FIELD BOUNDARY DITCH = [204]	9a		68	67
99	FILL OF [100]	9a	257-8, 262, 274-6 464-8	70, 107	69, 106
[100]	FIELD BOUNDARY DITCH	9a		70, 107	69, 106
101	FILL OF [102]	9a	262, 272-4, 289-90 464-8	70, 109	69, 108
[102]	FIELD BOUNDARY DITCH	9a		70, 109	69, 108
103	FILL OF [104]	9a	286	NO	57
[104]	SMALL PIT/ POSTHOLE	9a	286, 294	126, 127	57
105	FILL OF [106]	9a	285	NO	58
[106]	PIT	9a	285, 295	127	58
107	LOWER FILL OF [106]	9a	285	NO	58
108	LOWER FILL OF [106]	9a	285	NO	58
109	FILL OF [110]	9a	278, 282-4	NO	59
[110]	POSTHOLE	9a	278, 282-4, 293	127, 128	59
111	FILL OF [112]	9a	280, 282-4	NO	61
[112]	POSTHOLE	9a		127, 124	61

Context Number	Description	Field Number	Photos	Plan	Section (1:10 scale)
113	FILL OF [114]	9a	279, 282-4, 291	NO	62
[114]	POSTHOLE	9a	279, 282-4	124	62
115	FILL OF [116]	9a	281-4	NO	60
[116]	POSTHOLE	9a	281-4, 292	128	60
117	FILL OF [118]	9a	296-7, 298-302	73	71
[118]	RING DITCH	9a		73	71
119	FILL OF [120]	9a	303-4	73	71
[120]	BEAM SLOT?	9a		73, 126	71
121	FILL OF [122]	9a	307	NO	63
[122]	POSTHOLE	9a	307, 319	125, 126	63
123	SPREAD/ FILL OF [124]	9a	305-6	74	72
[124]?	POSSIBLE POSTHOLE/ INTERFACE	9a		74	72
125	FILL OF [126]	9a	308	NO	64
[126]	POSTHOLE	9a	308, 320	125, 126	64
127	FILL OF [128]	9a	305-6	NO	NO
[128]	STAKEHOLE	9a	305-6, 321-2	127	140
129	FILL OF [130]	9a	NO	NO	NO
[130]	STAKEHOLE	9a	321-2	124	144
131	FILL OF [132]	9a	NO	NO	NO
[132]	STAKEHOLE	9a	321-2	124	143
133	FILL OF [134]	9a	N/O	NO	NO
[134]	STAKEHOLE	9a	321-2	127	142
135	FILL OF [136]	9a	N0	NO	NO
[136]	STAKEHOLE	9a	321-2	127	141
137	2° FILL OF [139]	9	323-6	76	75
138	1° FILL OF [139]	9		NO	75
[139]	DITCH	9		76	75
140	FILL OF [141]	9a	287-8	103	102
[141]	FIELD BOUNDARY = [96]	9a		103	102
142	NATURAL	9a	N/A	N/A	N/A
143	TOPSOIL	9	N/A	N/A	N/A
144	NATURAL	9	N/A	N/A	N/A

Context Number	Description	Field Number	Photos	Plan	Section (1:10 scale)
145	FILL OF [146]	9	341-2	81	77
[146]	PIT?	9	341-2	81, 82	77
147	FILL OF [148]	9	343-4, 351-2	81	78
[148]	POSTHOLE	9	343-4, 351-2, 365-8	81, 82	78
149	FILL OF [150]	9	347-8	81	80
[150]	PIT	9	347-8, 359-62	81, 82	80
[151]	BEAM SLOT	9a	337-40	126	91, 92, 93
152	FILL OF [151]	9a	337-40	126	
153	FILL OF [154]	9	345-8	81	80
[154]	PIT	9	345-8, 360-2	81, 82	80
155	FILL OF [156]	9	348	81	80
[156]	DISTURBANCE?	9	348, 362	81, 82	80
157	FILL OF [158]	9	350-2	81	79
[158]	POSSIBLE POSTHOLE	9	350-2, 365-8	81, 82	79
[159]	POSTHOLE	9a	354-5, 358	125	90
160	FILL OF [159]	9a	354-5, 358	NO	90
[161]	POSTHOLE-POSTPIPE	9a	355-8, 370-3	125	86
162	FILL OF [161]	9a	355-8	NO	86
[163]	POSTHOLE/PIT	9a	355-8, 370-3	125	86
164	FILL OF [163]	9a	355-8	NO	86
165	FILL OF [166]	9		N/A	NO
[166]	DISTURBANCE?	9		82	
167	FILL OF [168]		405-6	81	83
[168]	NATURAL FEATURE-Disturbance of stones	9	405-6, 416	81	83
169	FILL OF [170]	9	407-8	81	84
[170]	SMALL PIT	9	407-8 415	81, 82	84
171	FILL OF [172]	9	409-10	81	85
[172]	SMALL PIT	9	409-10, 417	81, 82	85
173	FILL OF [174]	9a	402-3	NO	88
[174]	POSTHOLE	9a	402-4	125	88
175	FILL OF [176]	9a		NO	N/A
[176]	STAKEHOLE	9a		125	98, 147
177	VOID	N/A	N/A	N/A	N/A

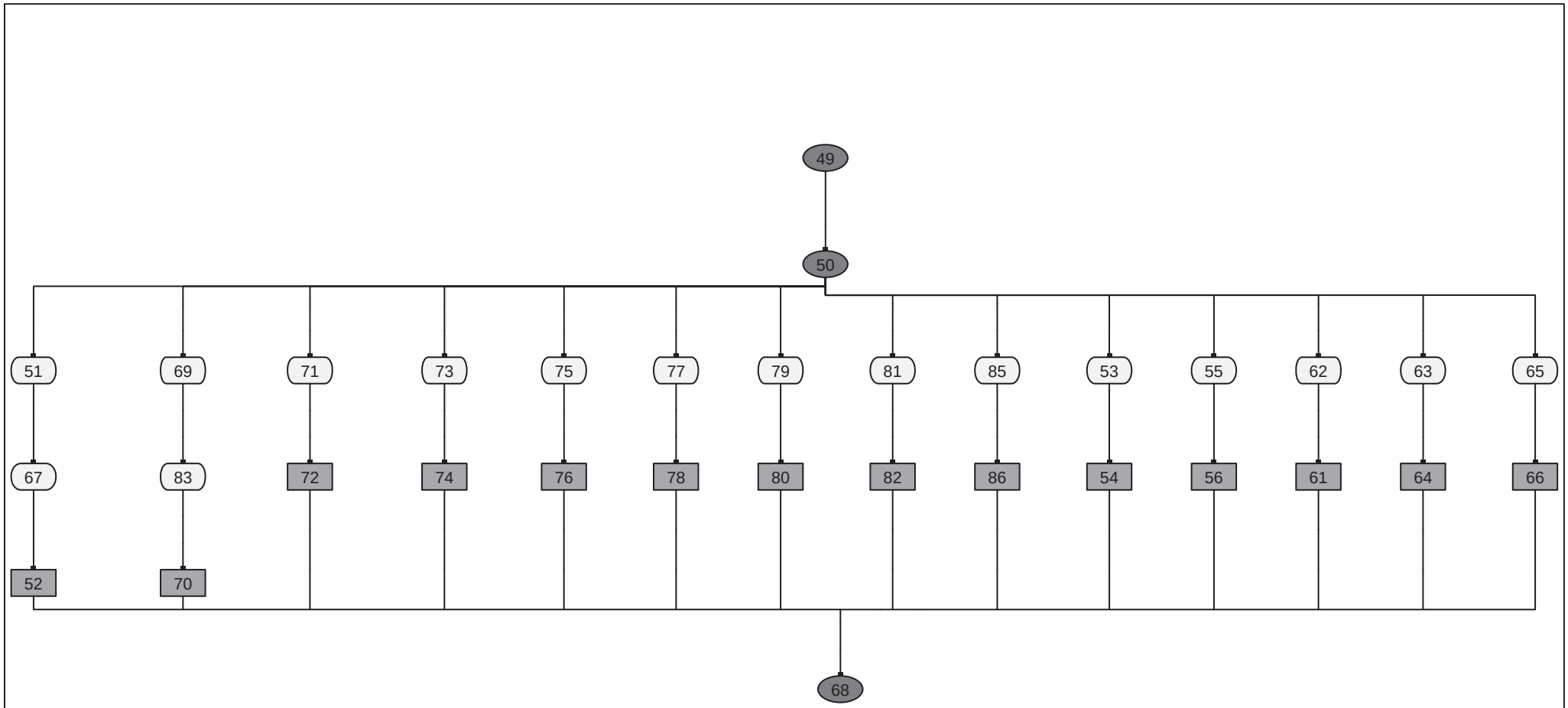
Context Number	Description	Field Number	Photos	Plan	Section (1:10 scale)
[178]	DEEP POST HOLE	9a	414, 445	124	87
179	FILL OF [178]	9a	414	NO	87
[180]	SHALLOW PIT/POSTHOLE	9a	414, 445	124	87
181	FILL OF [180]	9a	414	NO	87
182	FILL OF [183]	9	429-32	96	95
[183]	PIT	9	429-33	96	95
[184]	TRUNCATED PIT	9a	434	124	94
185	FILL OF [184]	9a			94
[186]	Posthole	9a	435, 442	124	99
187	FILL OF [186]	9a	435	NO	99
188	FILL OF [189]	9a	436-41		97
[189]	POSTHOLE	9a	436-41		97
190	FILL OF [191]	9a	446-9		116, 117
[191]	RING DITCH	9a	446-9	126	116, 117
192	ROOTING/ NATURAL DEPOSIT	9a			
193	2° FILL OF DITCH [196/197]	9a	450-3		100, 101
194	1° FILL OF DITCH [196]	9a	450-3	NO	100, 101
195	1° FILL OF DITCH [196]	9a	450-3	NO	100, 101
[196]	INNER PART OF RING DITCH	9a	450-3	126	100, 101
[197]	OUTER PART OF RING DITCH	9a	450-3	126	100, 101
[198]	RING DITCH/RUT	9a	454-5	127	119, 120
[199]	RING DITCH/RUT	9a	454-5	127	119, 120
200	FILL OF [198/199]	9a	454-5		119, 120
201	FILL OF [202]	9a	456-9		114, 115
[202]	RING DITCH	9a	456-9	121	114, 115
203	FILL OF [204]	9a	460-3	104, 126	105
[204]	FIELD BOUNDARY DITCH = [98]	9a	460-3	104, 126	105
205	FILL OF [206]	9a	469-72		112, 113
[206]	RING DITCH	9a	469-72	121, 122	112, 113
207	FILL OF [208]	9a	473-7		111
[208]	RING DITCH	9a	473-7	122	111

Context Number	Description	Field Number	Photos	Plan	Section (1:10 scale)
209	FILL OF [210]	9a	478-9, 489-90 (491-3)		131, 132
[210]	RING DITCH	9a	489-90 (491-3)	124	131, 132
211	FILL OF 212]	9a	480-7		129, 130
[212]	RING DITCH	9a	480-7	127, 124	129, 130
213	FILL OF [214]	9a	488, 497-500	123	133, 134
[214]	RING DITCH	9a	497-500	124	133, 134
215	FILL OF [216]	9a	491-3		130
[216]	PIT/ POSTHOLE?	9a	491-3		130
217	2° FILL OF [219]	9a	501-5		135, 136
218	1° FILL OF [219]	9a	501-5	NO	135, 136
[219]	RING DITCH	9a	501-5	123, 124	135, 136
220	FIL OF [221]	9a	506-8		137
[221]	TRUNCATED RING DITCH	9a	506-8	123	137
222	FILL OF [223]	9a	N/A		
[223]	STAKEHOLE	9a		125	146
224	FILL OF [225]	9a	509-13		110
[225]	POSTHOLE	9a	509-15	125	110
226	FILL OF [227]	9a	NO	NO	
[227]	STAKEHOLE	9a		145	
228	FILL OF [229]	9a	523-7		148, 149
[229]	RING DITCH	9a	523-7	121	148, 149
230	FILL OF [231]	9a	523-7		148, 149
[231]	PART OF RING DITCH?	9a	523-7	121	148, 149
232	FILL OF [233]	9a	528-30		150
[233]	PART OF RING DITCH?	9a	528-30	122	150
234	BACKFILL OF POSTHOLE [235]	9a	516-8		139
[235]	POSTHOLE FOR POSTPIPE [161]	9a	516-20		139
236	FILL OF [237]	9a	521-2		151
[237]	STAKEHOLE/BIOTURBATION	9a	521-2	126	151
238	FILL OF [240]	9a	531-2, 538-9		NO
239	FILL OF [240]	9a	540-1		138

Context Number	Description	Field Number	Photos	Plan	Section (1:10 scale)
[240]	TREE THROW	9a	538-41		138
241	FILL OF [242]	9a	533-4		NO
[242]	POSTHOLE	9a	542-6	127	152

16 APPENDIX 5

16.1 Harris Matrices



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APPENDIX 4 FIGURE 01

Matirx of Field 14 EV9

KEY

LAYER

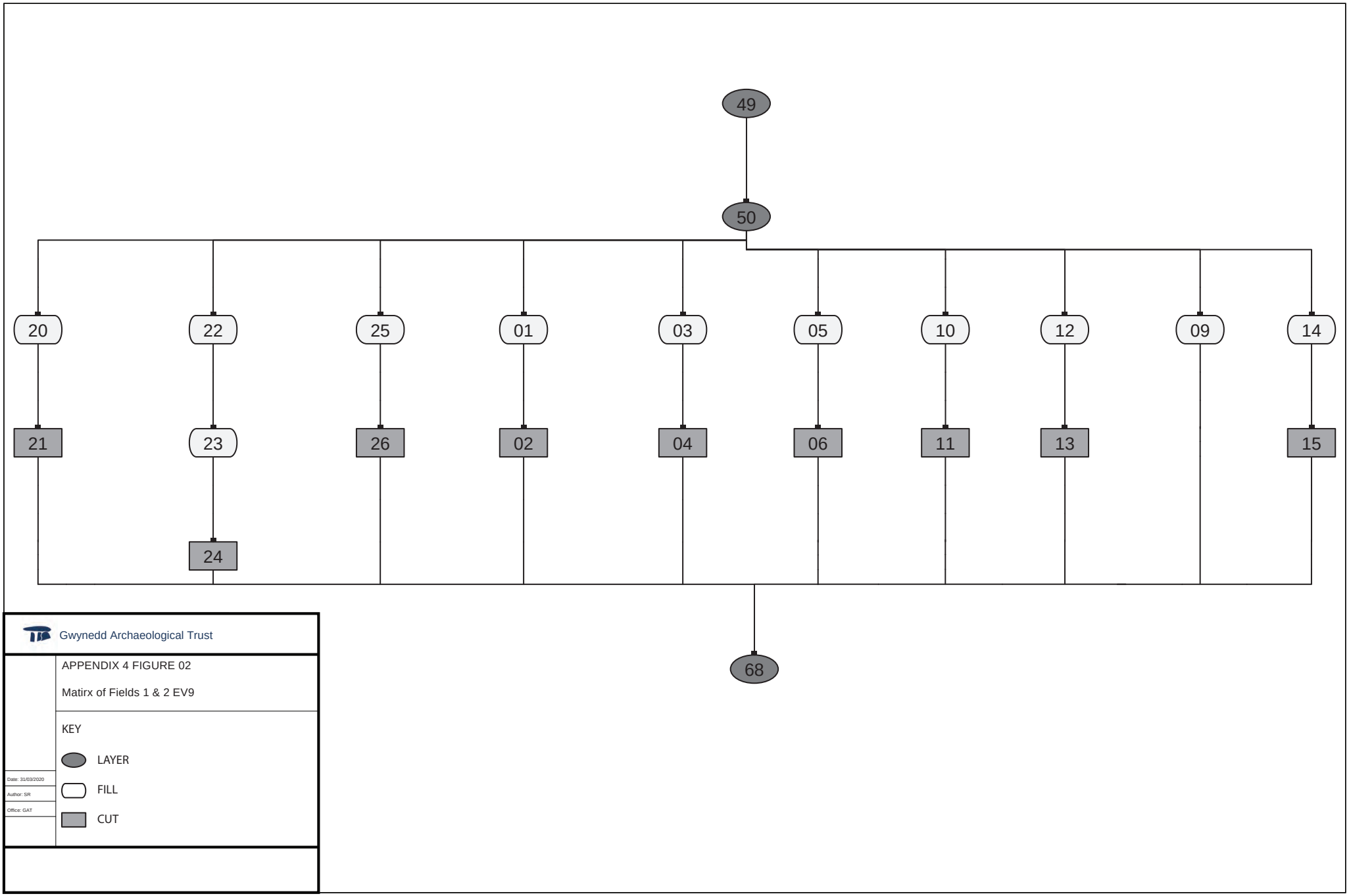
FILL

CUT

Date: 31/03/2020

Author: SR

Office: GAT


49
50
20
22
25
01
03
05
10
12
09
14
21
23
26
02
04
06
11
13
15
24
68
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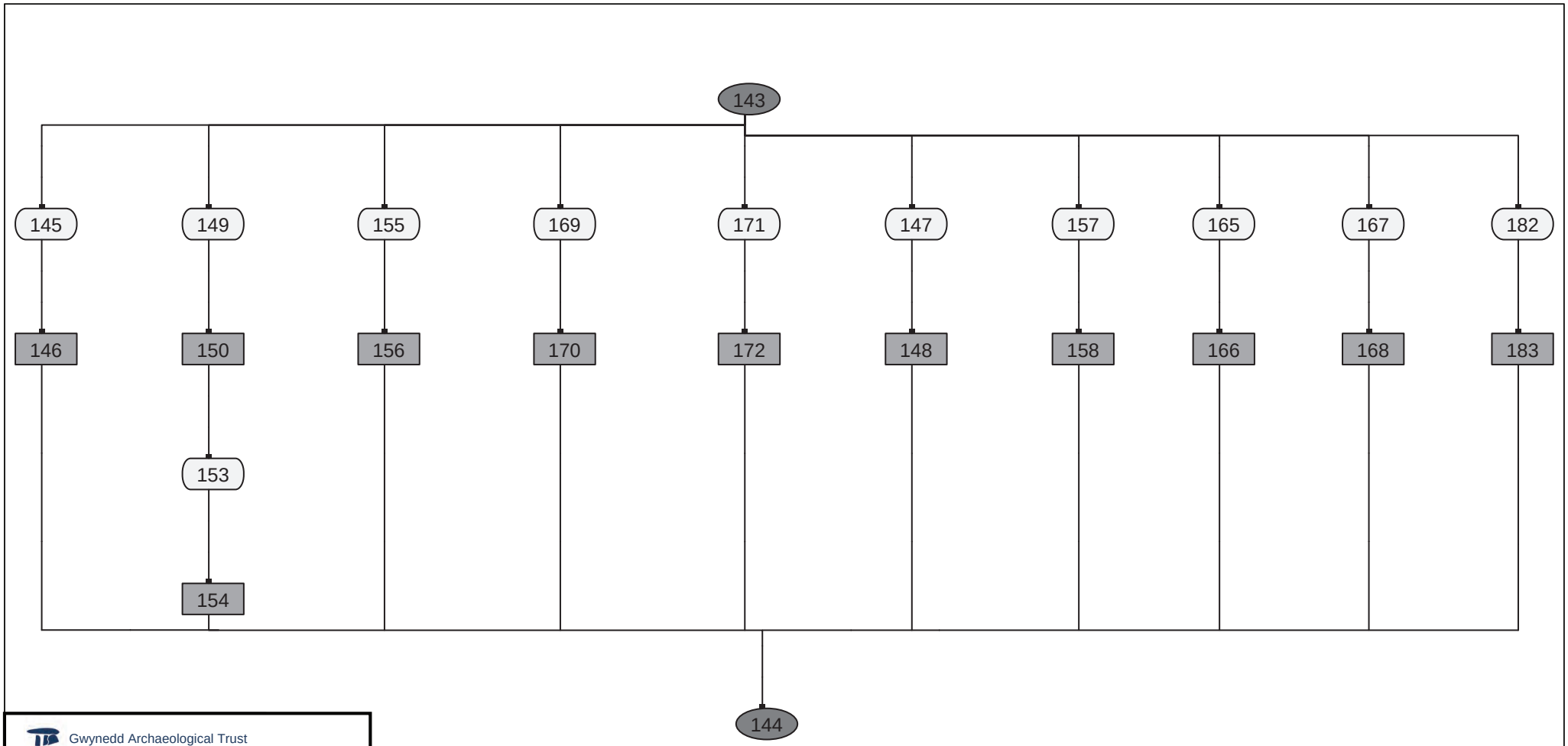
APPENDIX 4 FIGURE 02
Matirx of Fields 1 & 2 EV9
KEY
LAYER
FILL
CUT
Date: 31/03/2020
Author: SR
Office: GAT



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APPENDIX 4 FIGURE 03

Matirx of Field EV9

KEY

LAYER

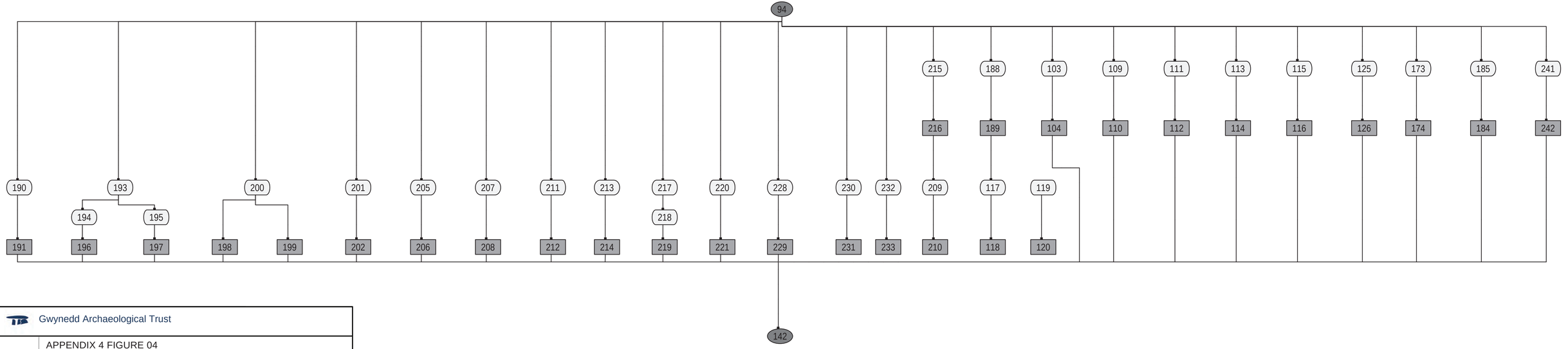
FILL

CUT

Date: 31/03/2020

Author: SR

Office: GAT



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APPENDIX 4 FIGURE 04

Matirx of Field 9A - Ring Ditch & Ring of Posts EV9

KEY

LAYER

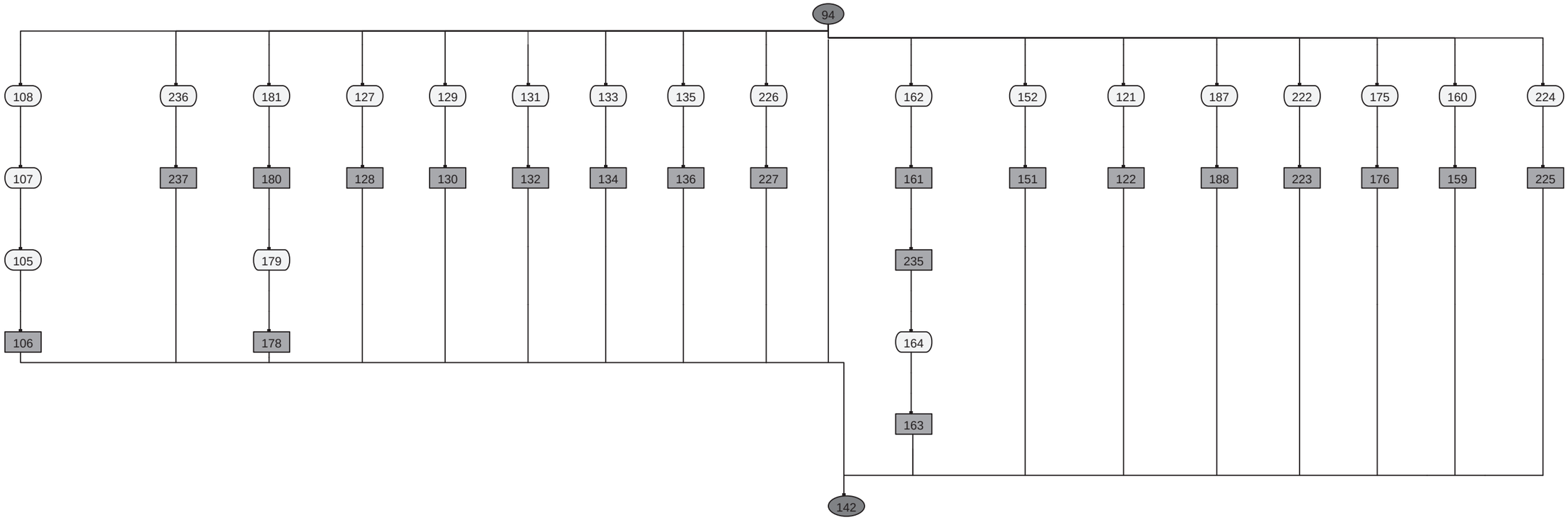
FILL

CUT

Date: 31/03/2020

Author: SR

Office: GAT



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APPENDIX 4 FIGURE 05

Matirx of Field 9A Miscellaneous Features EV9

KEY

LAYER

FILL

CUT

Date: 31/03/2020

Author: SR

Office: GAT

17 APPENDIX 6

17.1 Figures of EV9

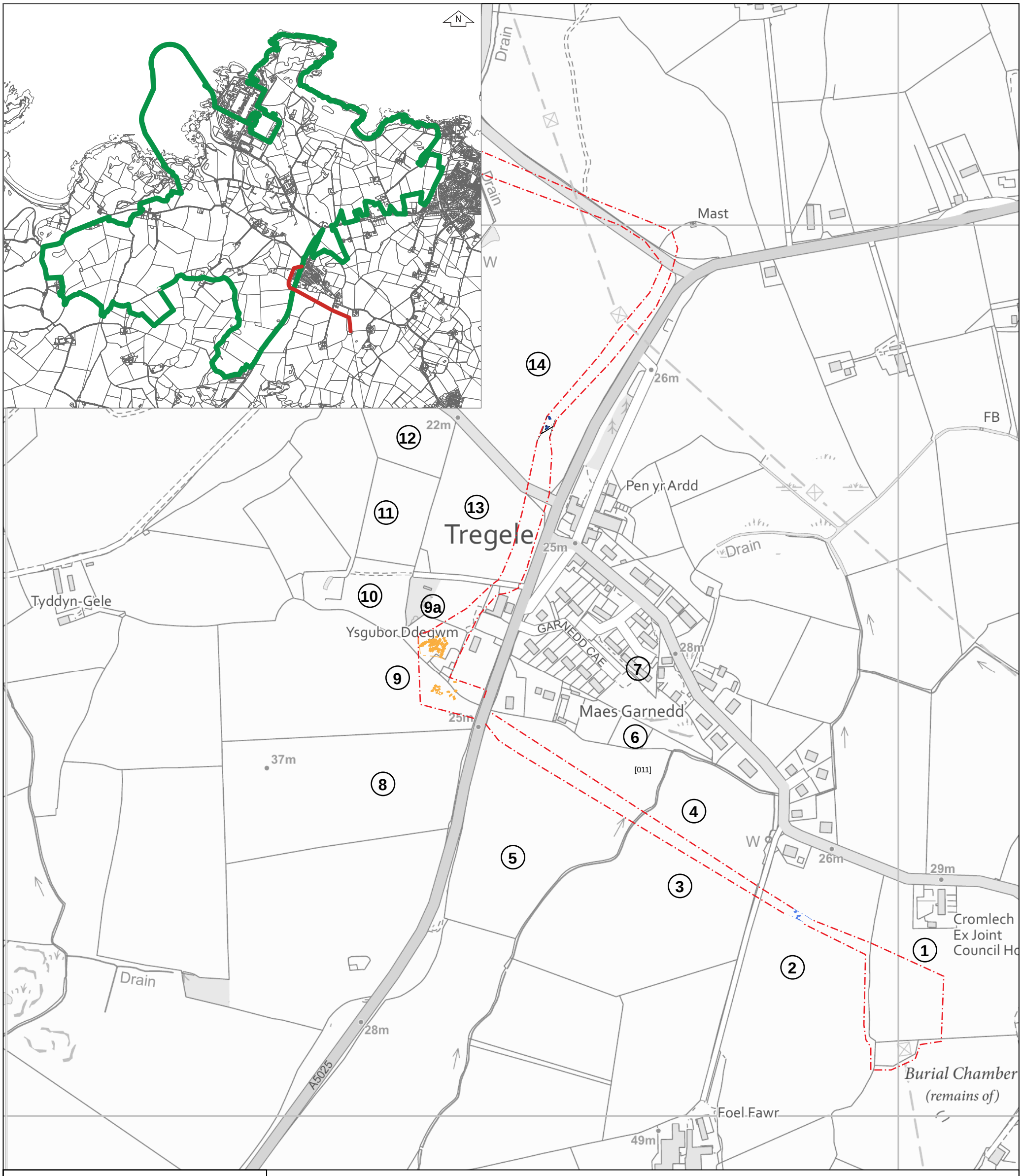

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FIGURE 01

EV9 and Archaeological sites location plan

Date: 16/04/2020

Author: SR

Office: GAT

Scale: N/A

KEY

EV9 Evaluation Route

Wylfa Development Outline

1 Field Number

Chainage of EV9

N

N

[66]

(65)

[66]

(65)

BIOTURBATION

(79)

[80]

(71)

S28

[72]

(81)

[82]

(77)

[78]

(69)

[70]

(51)

S29

[52]

S41

[76]

[74]

[86]

(85)

LINEAR PETERING OUT

(63)

[64]

(53)

S24

(61)

(55)

S26

S25

[62]

[56]

[54]

Gwynedd Archaeological Trust

FIGURE 02

Field 14 location of features

Date: 02/03/2020

Author: BMJ

Office: GAT

Drawing: 22 - 45

Scale: 1:60@A3

0 0.5 1 2

metres

Figure 03.1: South-east facing section of pit [70]

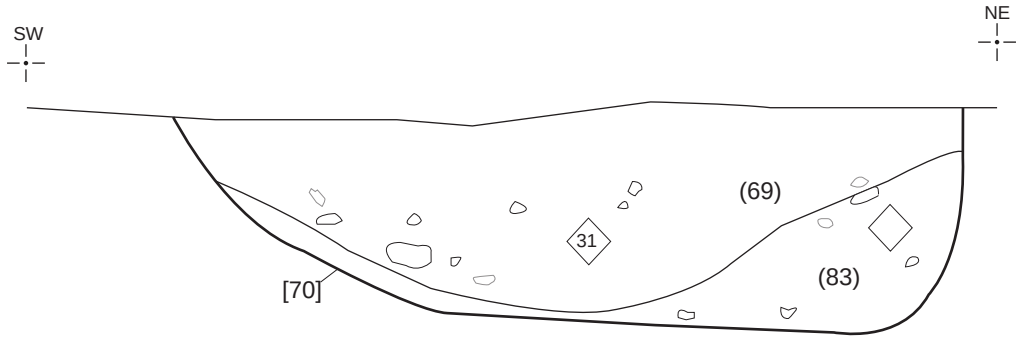

Figure 03.2: South-east facing section of pit [52]

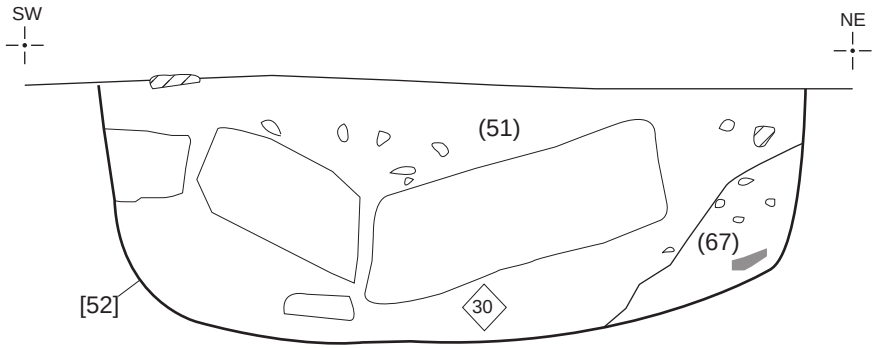

Figure 03.3: South-east facing section of pit [80]

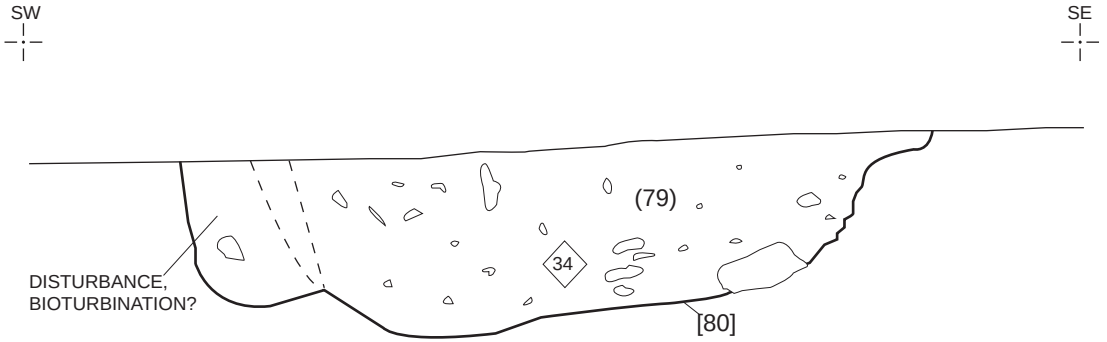

Fig 03.4: East facing section through cut [52]

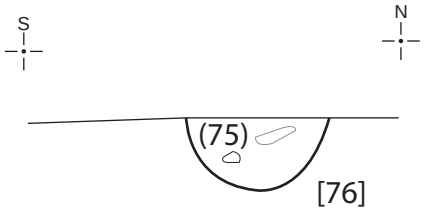

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FIGURE 03

Sections of selected features in Field 14.

KEY

Stone

Pot

Charcoal #

Fire Cracked Stone

Date: 02/03/2020

Author: BMJ

Office: GAT

Drawing: 38/29/43/41

Scale: 1:10 @ A4

0 1m

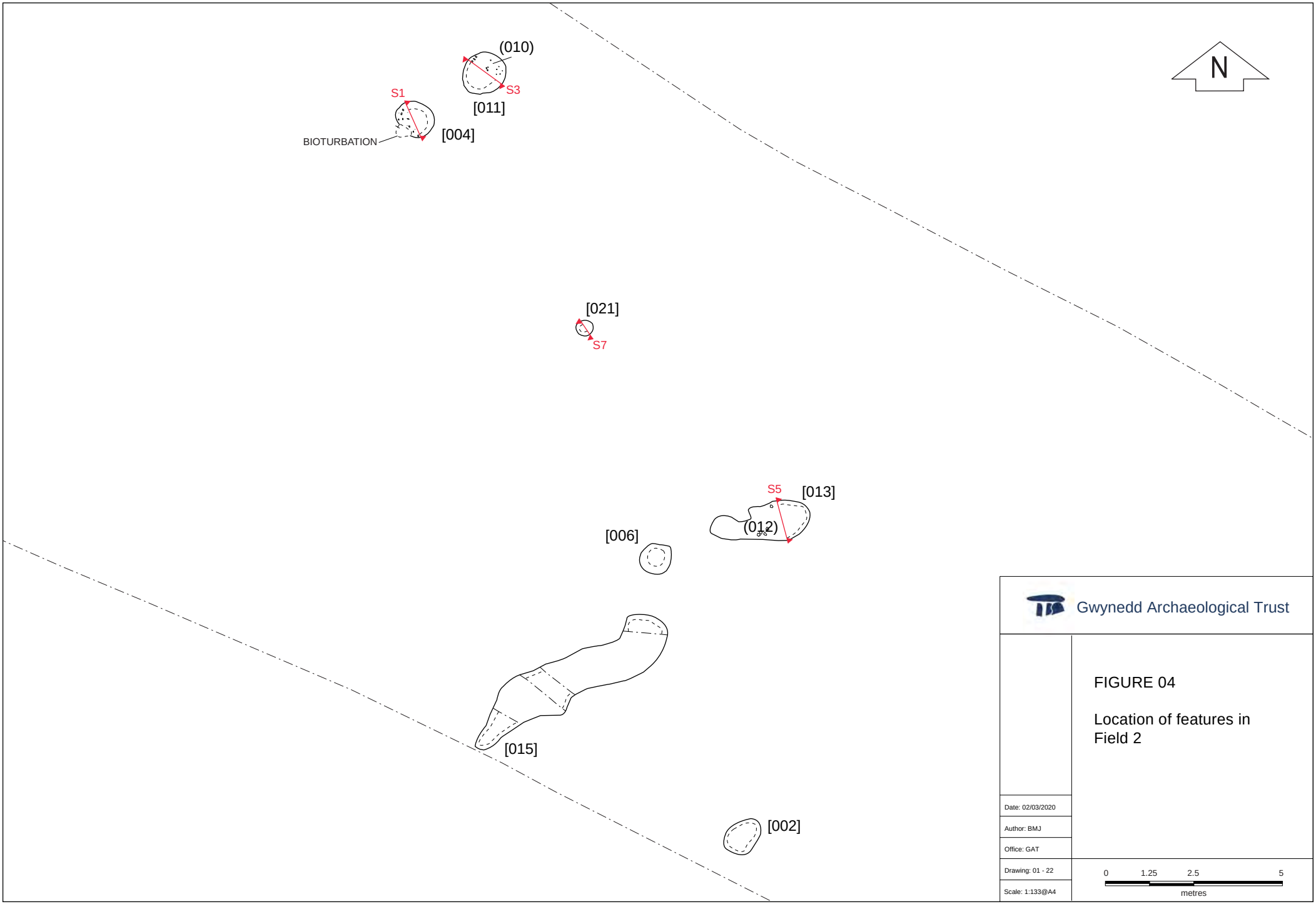

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FIGURE 04

Location of features in Field 2

Date: 02/03/2020

Author: BMJ

Office: GAT

Drawing: 01 - 22

Scale: 1:133@A4

0 1.25 2.5 5

metres

Fig 05.1: Field 2. Southwest facing section through [02]

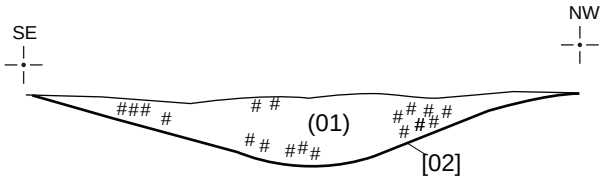


Fig 05.2: Field 2. North facing section through [06]

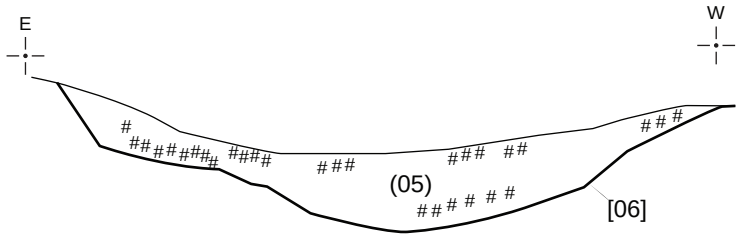


Fig 05.3: Field 2. East facing section through [004]

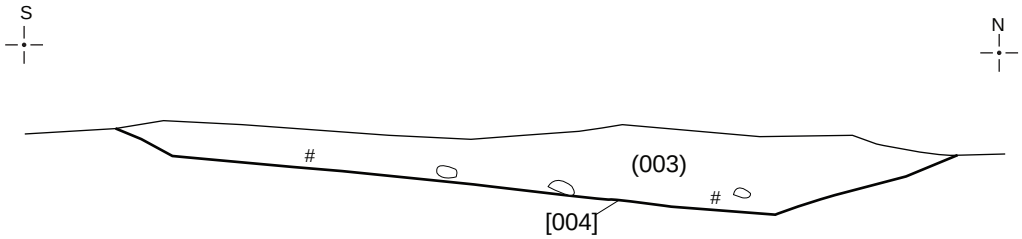
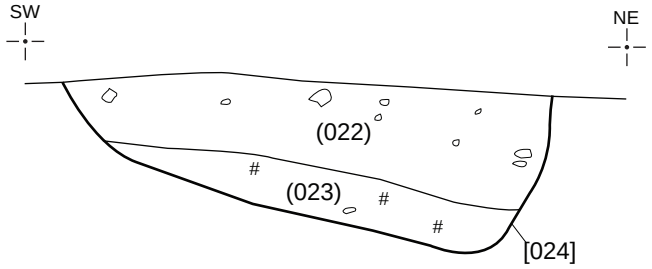


Fig 05.4: Field 2. South-East facing section through [024]



Gwynedd Archaeological Trust

FIGURE 05

Sections of selected features in Field 2.

KEY

Stone

Charcoal #

Date: 02/03/2020

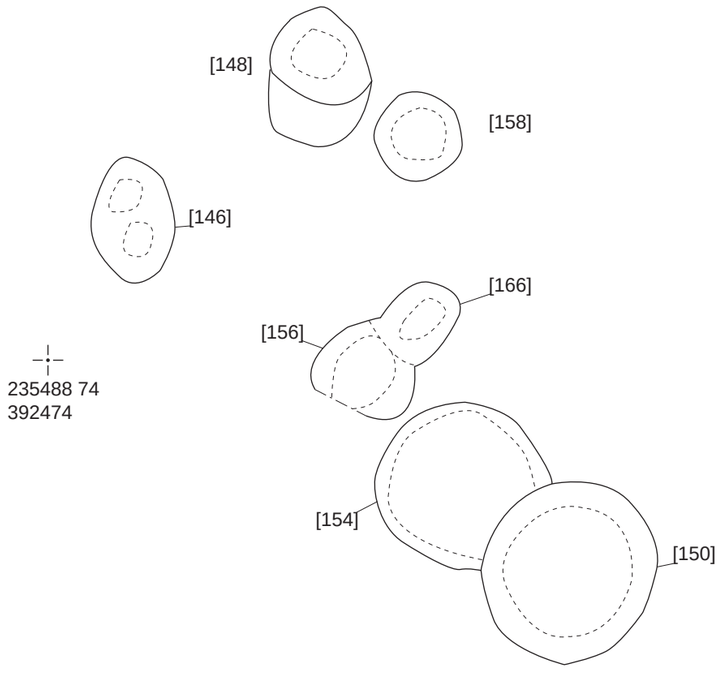
Author: BMJ

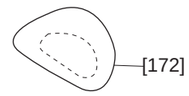
Office: GAT

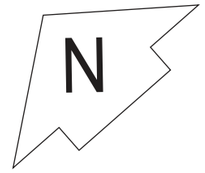
Drawing: 01/09/15/21

Scale: 1:10 @ A4

0 1m







Gwynedd Archaeological Trust

FIGURE 06:

Field 9 location of features

Date: 26/02/20

Author: MSL

Office: GAT

Drawing: EV9/ Field 9

Scale: 1:20@A3

0 1 2m

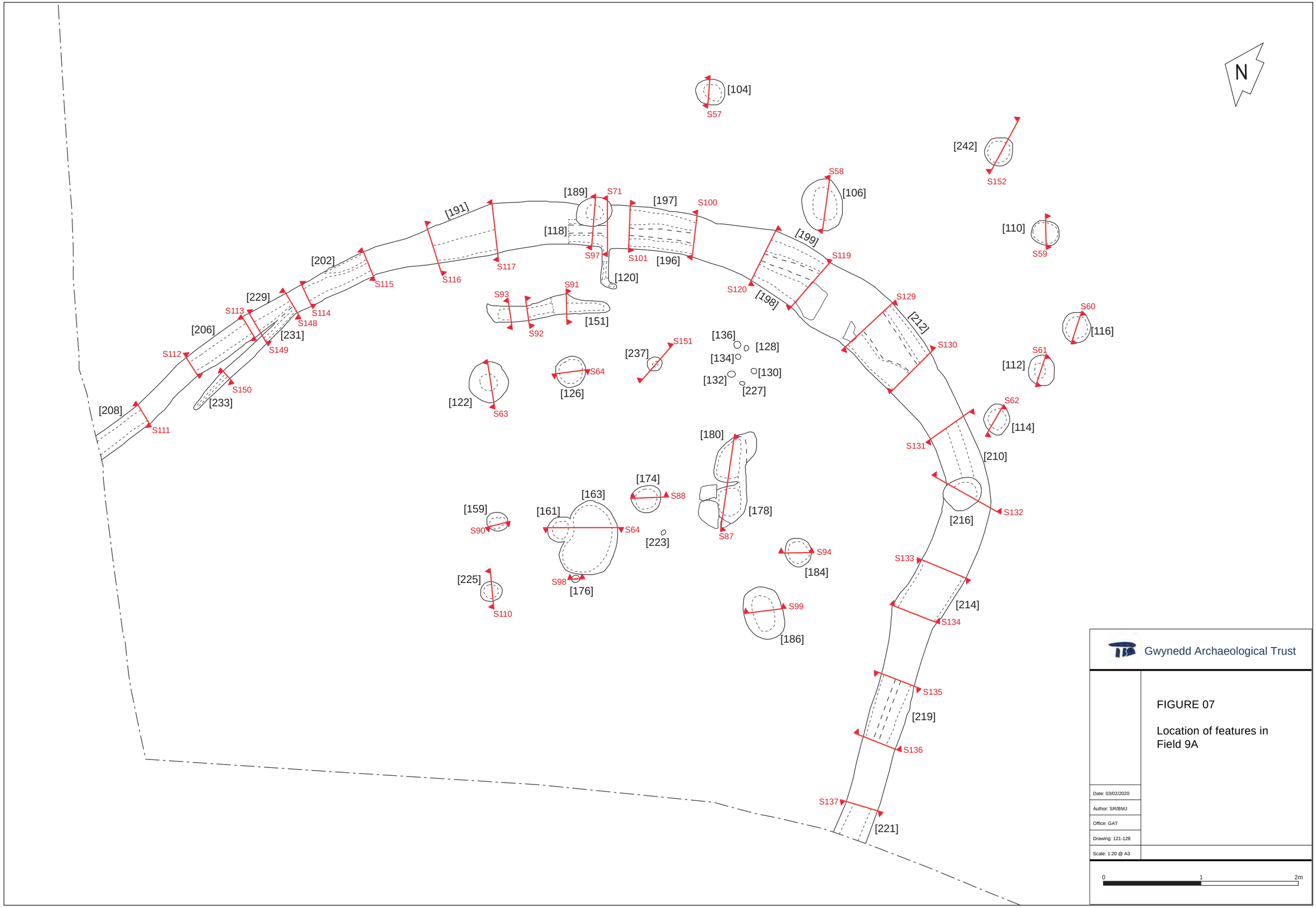

N
[104]
S57
[242]
S152
S58
[106]
[110]
S59
[189]
S71
[197]
S100
[118]
S97
S101
[196]
[120]
[199]
S119
S120
[198]
S129
[212]
S60
[116]
[191]
S117
[202]
S115
S116
[229]
S113
S114
S148
[206]
[231]
S112
S149
S150
[233]
[208]
S111
S93
S91
S92
[151]
[136]
[128]
[134]
[130]
[132]
[227]
S151
[237]
S64
[126]
[122]
S63
S61
[112]
S62
[114]
S130
S131
[210]
[180]
[174]
S88
[178]
S87
S132
[216]
[159]
S90
[163]
[161]
S64
[223]
S94
[184]
S133
[214]
S134
[225]
S110
S98
[176]
S99
[186]
S135
[219]
S136
S137
[221]
Gwynedd Archaeological Trust
FIGURE 07
Location of features in Field 9A
Date: 03/02/2020
Author: SR/BMJ
Office: GAT
Drawing: 121-128
Scale: 1:20 @ A3
0
1
2m

Fig 08.1: Northeast facing section through [163] and [161]

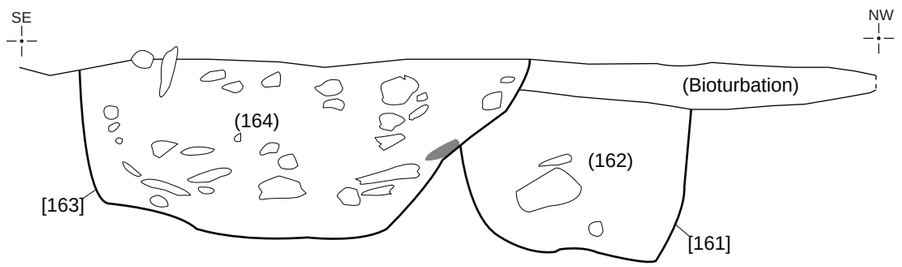


Fig 08.2: Northwest facing section through [216] and [210]

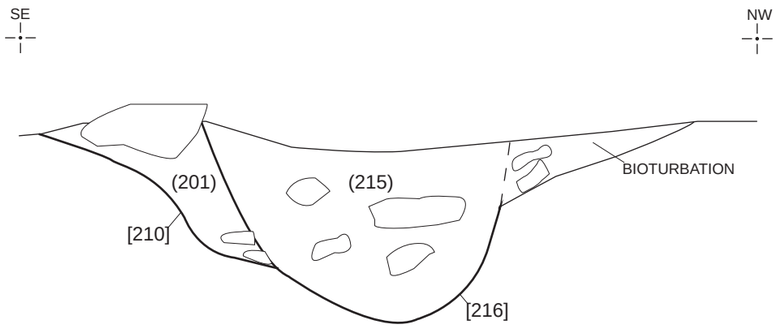


Fig 08.3: Northwest facing section through [197] & [196]

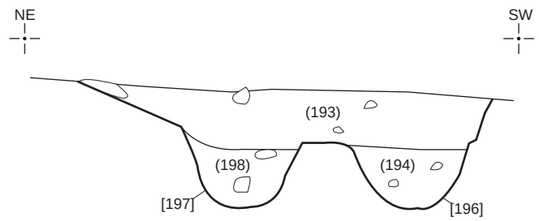


Fig 08.4: Southeast facing section through [210]

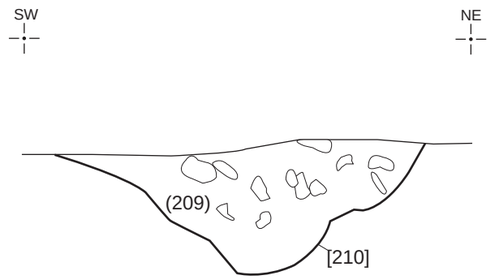


Fig 08.5: South facing section through [212]

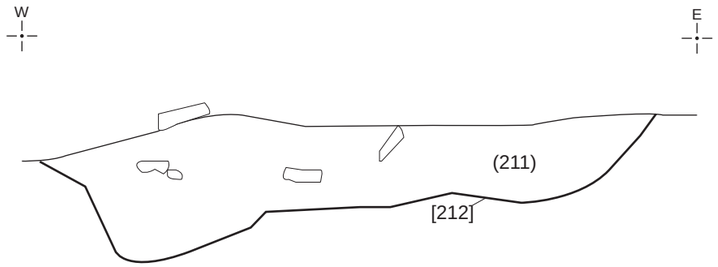


Fig 08.6: Northeast facing section through ring ditch [214]

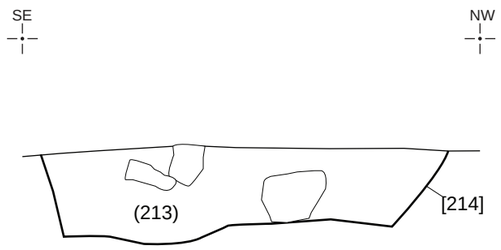


Fig 08.7: Northeast facing section through [219]

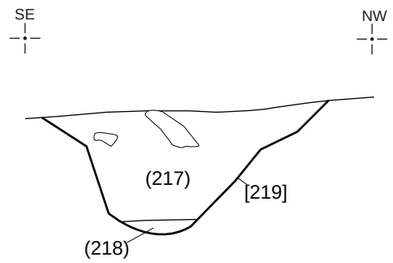
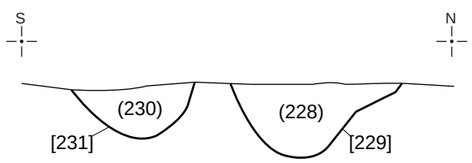


Fig 08.8: East facing section through [231] and [229]



Gwynedd Archaeological Trust

FIGURE 08

Sections of selected features in Field 9A.

KEY

Stone

Pot

Charcoal #

Date: 02/03/2020

Author: BMJ

Office: GAT

Drawing: 86&89/132/100/131/129/134/136/149

Scale: 1:10 @ A3

0 1m

Fig 09.1: Southeast facing section through [116]

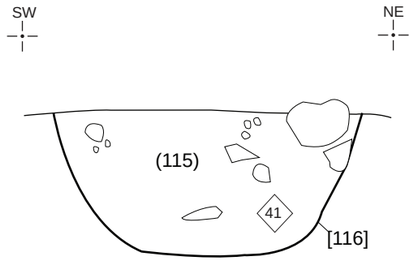


Fig 09.2: Southwest facing section through [126]

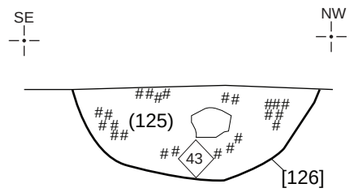


Fig 09.3: Northwest facing section through [122]

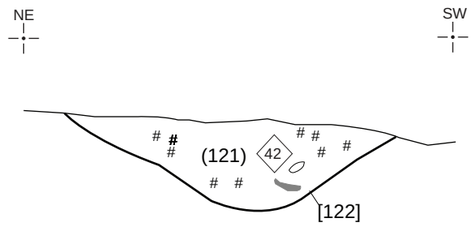


Fig 09.4: East facing section through [170]

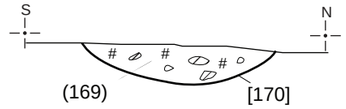


Fig 09.5: West facing section through [150], [154] and [156]

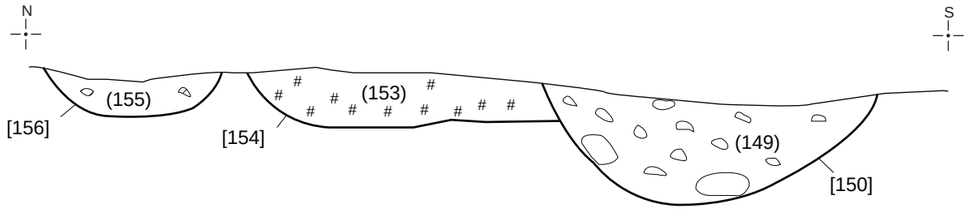


Fig 09.6: East-southeast facing section through [183]

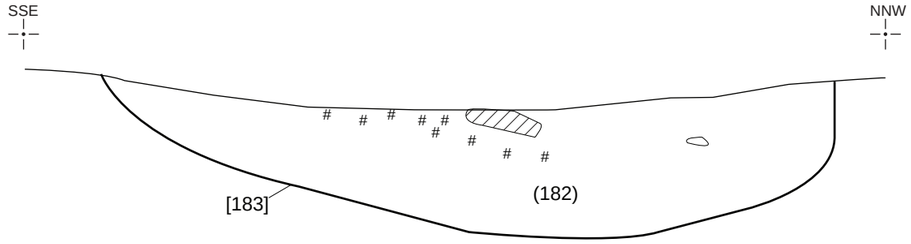


Fig 09.7: Northwest facing section through [189]

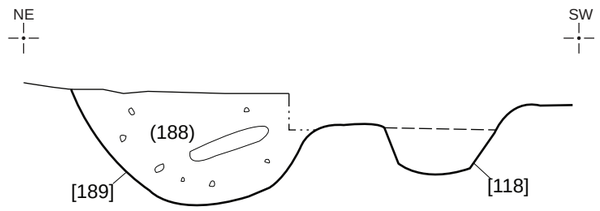


Fig 09.8: Southeast facing section through [178] and [180]

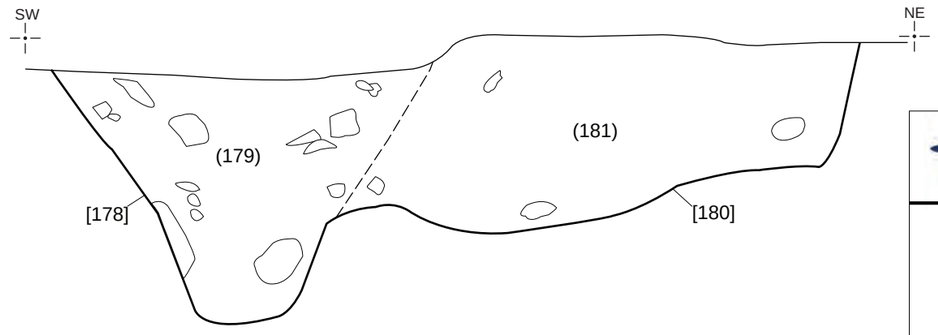


Fig 09.9: Southwest facing section through [174]

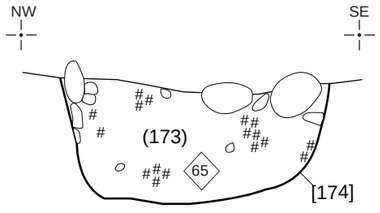
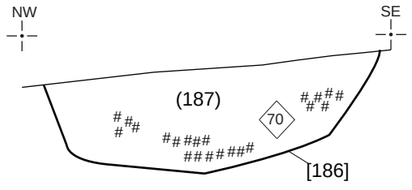


Fig 09.10: Southwest facing section through [186]



Gwynedd Archaeological Trust

FIGURE 09

Sections of selected features in Fields 9 and 9A.

KEY

Stone

Pot

Charcoal #

Fire Cracked Stone

Date: 02/03/2020

Author: BMJ

Office: GAT

Drawing: 60/64/63/84/80/93/97/87/88/99

Scale: 1:10 @ A3

0 1m

18 APPENDIX 7

18.1 Plates for EV9

Plate 01: Field No. 14 - Southeast facing section of pit (Context 52); scale: 1x1m (archive reference: 92-95).

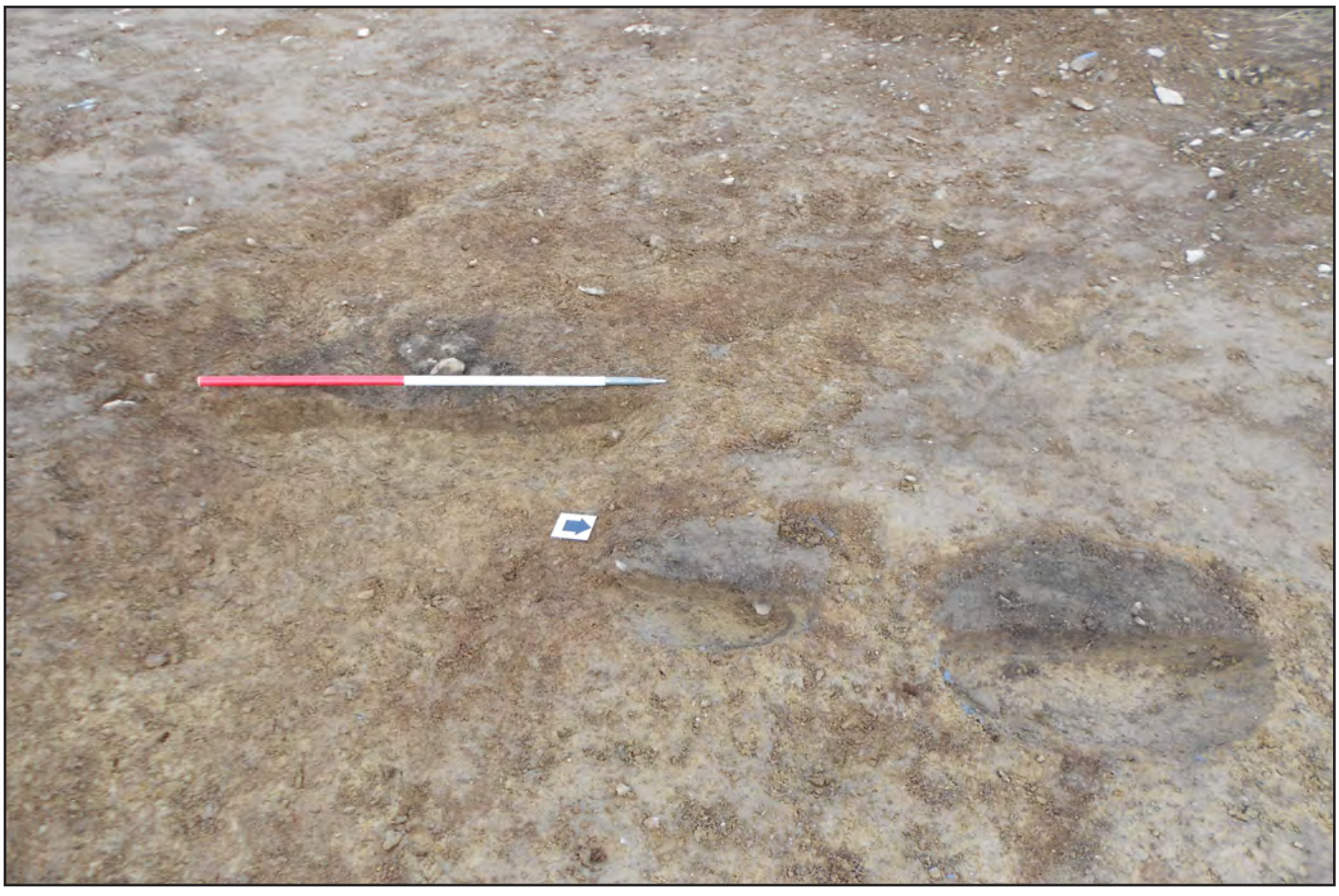


Plate 02: Field No. 14 - View from east of half excavated pit group (Contexts 54, 56 & 62); scale: 1x1m (archive reference: 105).

Plate 03: Field No. 14 - Southeast facing section of pit (Context 72); scale: 1x1m (archive reference: 107-9).

Plate 04: Field No. 14 - Northwest facing section of posthole (Context 86); scale: 1x1m (archive reference: 111).

Plate 05: Field No. 14 - West facing section of pit (Context 74), with posthole [Context 40] in the foreground; scale: 1x0.5m (archive reference: 114).

Plate 06: Field No. 14 - Southeast facing section of pits and postholes in Pit Cluster 1 (Contexts 52, 70, 78 & 82); scale: 1x1m (archive reference: 118).

Plate 07: Field No. 14 - East-southeast facing section of pits and postholes in Pit Cluster 1 (Contexts 78 & 82); scale: 1x0.5m (archive reference: 124).

Plate 08: Field No. 14 - Southeast facing section of pits in Pit Cluster 1(Contexts 80 & 72); scale: 1x1m (archive reference: 131).

Plate 09: Field No. 14 - View from northeast of line of excavated pits; scale: 1x1m (archive reference: 172-6).

Plate 10: Field No. 9a - View from west of postholes (Contexts 110, 112, 114 & 116); scale: 1x1m (archive reference: 284).

Plate 11: Field No. 9a - East facing section of posthole (Context 106); scale: 1x1m (archive reference: 285).

Plate 12: Field No. 9a - View from northwest of ring ditch and postholes; scale: 1x1m & 1x0.5m (archive reference: 309-311).

Plate 13: Field No. 9a - View from northwest of partially excavated posthole (Context 189) that cuts the ring ditch; scale: 1x0.5m (archive reference: 436-438).

Plate 14: Field No. 9a - West facing section of Ring Ditch (Context 191); scale: 1x0.5m (archive reference: 446-447).

Plate 15: Field No. 9a - Northwest facing section of Ring Ditch (Context 191); scale: 1x0.5m (archive reference: 450).

Plate 16: Field No. 9a - Post-excavation view of the site from the north; scale: 1x2m (archive reference: not applicable).

Plate 17: Field No. 9a - Post-excavation view of the site from the east; scale: 1x2m (archive reference: not applicable).

Plate18: Field No. 9a - View from the northwest of fully excavated Posthole [225]; scale: 1x0.5m (archive reference: 515).

Plate 19: Field No. 9 - West facing section Pit [150] truncating Pit [154]; scale 1x1m (archive reference: 348).

Plate 20: Field No. 9 - Northeast facing section Pit [183]; scale 1x1m (archive reference: 429).

Plate 21: Field No. 9 – Excavated features located within Field No. 9 looking southeast; scale 1x1m (archive reference: 421).

Plate 22: Field No. 01 – General view from on top of the hill; scale 2x1m (archive reference 14).

Plate 23: Field No. 02 – West facing section through pit 02; scale 1x1m (archive reference 21).

Plate 24: Field No. 02 – East facing section through pit 04; scale 1x1m (archive reference 23).

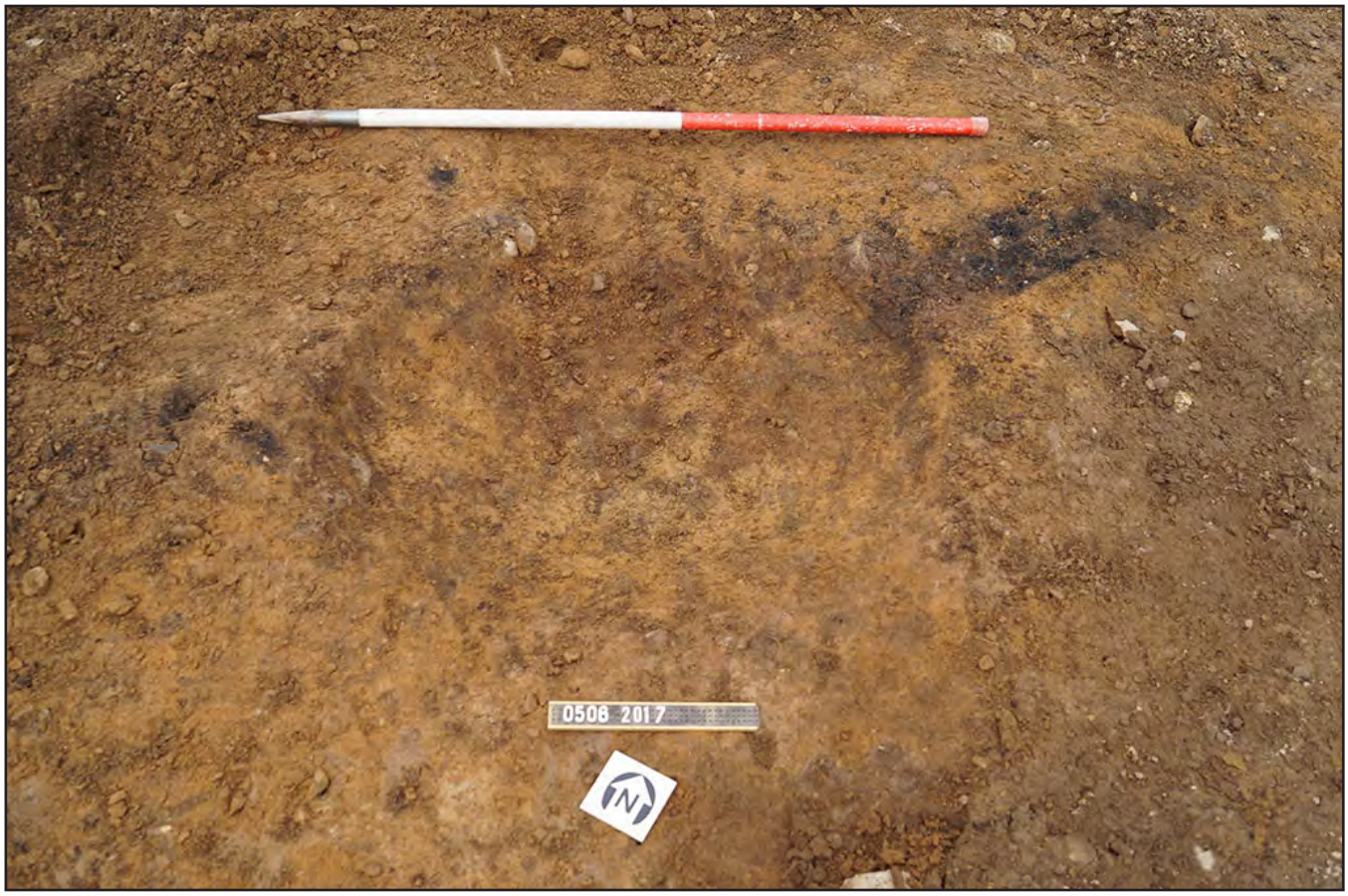


Plate 25: Field No. 02 – Post-excavation view of pit 06 looking East; scale 1x1m (archive reference 25).

Plate 26: Field No. 01 – Southeast facing section through pit 24; scale 1x0.5m (archive reference 49).

19 APPENDIX 8

19.1 Reproduction of Palaeoenvironmental Assessment Report (AOC)

Wylfa EV9 Cable Diversion: Environmental Assessment

AOC Project no: 25127
Site Code: G2633
Date: January 2020

AOC Archaeology Group

ARCHAEOLOGY | HERITAGE | CONSERVATION

Wylfa EV9 Cable Diversion:

Environmental Assessment

On Behalf of: Gwynedd Archaeological Trust (GAT)

National Grid Reference (NGR): Various

AOC Project No: 25127

Main author: Rosie Bishop

Data quantification assisted by: Genoveva Dimova

Date of Report: 28/01/2020

This document has been prepared in accordance with AOC standard operating procedures.

Author: Rosie Bishop **Date: 27/01/2020**
Approved by: Jackaline Robertson **Date: 28/01/2020**
Final Report Stage:

Enquiries to: AOC Archaeology Group
Edgefield Industrial Estate
Edgefield Road
Loanhead
EH20 9SY

Tel. 0131 440 3593
Fax. 0131 440 3422
e-mail. edinburgh@aocarchaeology.com

www.aocarchaeology.com

Introduction

This report presents the results of the assessment of the samples from a prehistoric site located near Tregele, Anglesey, Wales and considers the potential for further work on the assemblage. The bulk samples were taken from a series of negative features (pits, postholes and a ring ditch for a roundhouse) which are believed to range in date from the Late Neolithic to late Bronze Age. A total of 96 flots were submitted for assessment.

Methods

Bulk samples were retrieved from the site and floated using standard procedures. The flots were assessed by Rosie Bishop of Durham University. The additional charcoal and hazelnut sub samples were quantified by Genoveva Dimova of AOC Archaeology Group. The flots were dry-sieved with 4mm, 2mm, 1mm, 0.5mm and 0.3mm sieves and sorted using a stereomicroscope at x7.5-60 magnification. Several of the flots were very large, and therefore for the larger flots, a riffle box (van der Veen and Fieller 1982:290) was used to create reasonable sized sub-samples for sorting. For this assessment, sub-samples of the 0.5mm flots were analysed to assess for the presence of charred remains and the potential for further analysis of the <1mm flots.

The charred plant remains and charcoal were fully quantified up to a maximum of 50 specimens per context. Larger concentrations of ecofact remains were semi quantified using the following recording system: *=50-100, **=100-200, ***=200-500 and ****=>500. Charred cereal chaff and wild weed seeds were recorded but not further identified at this stage of analysis. Uncharred plant macrofossils were noted but not identified. The wood charcoal was sorted from the >4mm fraction only, as identification is very difficult below this size (Pearsall 2000:130). All plant macrofossil identifications were made using botanical literature (e.g. Cappers *et al* 2006; Jacomet 2006) and modern reference material from the Department of Archaeology, Durham University. Nomenclature follows Stace (2010).

Results

Summary of plant macrofossils and charcoal

Tables 1 and 2 present the results of the plant macrofossil assessment. Charred plant remains >1mm were present in most samples in low-moderate numbers, with 77% of the samples producing at least one quantifiable plant macrofossil and 32% of the samples producing more than ten quantifiable specimens (Table 1). Uncharred modern seeds >1mm were present in most (91%) of the examined samples and fungal sclerotia were present in just 12% of samples. Charred plant remains <1mm were relatively scarce, with just 54% of the examined samples producing at least one quantifiable plant macrofossil and only 4 samples (4%) containing more than ten specimens (Table 2). Wood charcoal was extremely prevalent throughout the assemblage, with 98% of the samples producing charcoal fragments and 46% of the samples producing more than 50 specimens.

Cultivated plant remains

A total of 71 cereal grains and 103 cereal chaff fragments were recovered. The cereal grains were present in a range of contexts (44%) from across the site in small quantities. Only three samples produced more than 10 cereal grains: context 164 (sample 60), context 193 (sample 73) and context 200 (sample 76). The cereal grain was generally fairly poorly preserved, with most grains falling within the three worst preservation classes according to Hubbard and al Azm's (1990) preservation scale (P4-P6). However, a number of well-preserved specimens were also present; these were identified to genus or species level and several of these will be suitable for radiocarbon dating (see table 1).

The assemblage was dominated by barley (*Hordeum* sp.) (69%), with wheat also present (31%). The majority of the barley grains identified to species level were hulled barley (*Hordeum* sp. hulled) but four naked barley grains were also identified (*Hordeum* sp. naked). Both naked and glume wheats were present in the assemblage, with emmer (*Triticum diccocum* L.) and emmer/spelt (*Triticum diccocum* L./*spelta* L.) grains slightly more prevalent (six grains) than naked wheat grains (*T. aestivum*/*durum*/*turgidum*) (three grains). Cereal chaff was present in 25 samples in small (<20 specimens per sample) quantities. The preservation of this material ranged from poor to good, but most of the specimens will be identifiable to genus or species.

Wild plant remains

Over 2000 hazel (*Corylus avellana* L.) nutshell fragments were recovered from the samples. These nutshell remains were present in 46% of the samples, with notable concentrations (>90 fragments) coming from context 71 (samples 19 and 33), context 109 (sample 34), context 51 (sample 17 and 30), context 79 (sample 23) and context 63 (sample 28). These short-lived specimens would provide excellent material for radiocarbon dating.

Stem bases and nodes and roots/tubers/rhizomes were fairly frequently recovered. These remains are dominated by monocotyledon culm bases (<2mm), which are present in 33% of the samples. The small size of the culm bases suggests that they are derived from non-cultivated plants rather than from cereal culms.

Weed seeds were moderately frequent in the assemblage: 136 specimens were extracted from the flots. The assemblage included very poorly preserved and fairly-well preserved specimens, and further identification will be possible for a fair proportion of these seeds.

A small number of remains of other wild fruit/nuts were present in the assemblage, which also require further identification: one fruit stone and pericarp fragment, three possible pericarp fragments and four possible catkin/fruits. Three buds were also recovered but are not identifiable further.

Charcoal

In total, 5041 charcoal specimens were recovered from the analysed flots. The charcoal was generally well preserved and initial rapid assessment suggests that the assemblage is dominated by deciduous taxa, including a mixture of oak and short-lived species, of which the latter will be suitable for radiocarbon dating.

Several of the contexts contained heavily mineral- or earth- coated specimens, and whilst they may be identifiable to genus or species, these fragments are not recommended for radiocarbon dating (see table 1).

Other remains recovered from flots

A tiny indeterminate bone fragment was recovered from context 220 (sample 86) and single land mollusc specimens from context 87 (sample 29) and context 185 (sample 69). A concentration of material which appears to be mineralised hazelnut shell was present in contexts 238 (sample 94) and 239 (sample 95).

Conclusions and Recommendations

The assessment of the samples has produced a substantial well-preserved assemblage of wood charcoal. This assemblage has the potential to provide useful information about human-woodland interactions in early prehistoric Wales, and it is recommended that a sub-sample of the charcoal fragments from each of the major contexts is identified to assess woodland exploitation patterns.

The assessment also revealed that the assemblage contains a good quantity and range of charred plant macrofossils, which will add to our understanding of early prehistoric crop husbandry and wild plant gathering practices in Britain. The range of cereal species and wild nut remains recovered fits with the general pattern of plant exploitation in Neolithic and Bronze Age Britain (Bishop *et al* 2009; Jones & Rowley-Conwy 2007; Treasure *et al* 2020), but radiocarbon dating of the remains and further understanding of the phasing of the site will be necessary to fully consider the significance of the assemblage. The relative prevalence of cereal chaff and weed seeds in the assemblage is of potential significance, as this material is fairly rare in an early prehistoric context (*ibid*). This material should be fully identified to allow a full consideration of the nature of crop cultivation and processing strategies at the site. The assessment of the <1mm flots revealed that charred plant macrofossils, including weed seeds and cereal chaff were present in low densities. It is recommended that a larger sub-sample of the <1mm flots is examined, especially for the contexts producing cereal chaff. However, given the low densities of charred plant remains in the <1mm flots and the size of the flots, full analysis of all <1mm flots is not recommended (particularly for the very large flots e.g. sample 60, context 164: sample mass is 1398g).

Material suitable for radiocarbon dating is present in a range of contexts across the site and includes specimens of deciduous wood charcoal, hazel nutshell and cereal grains. It is recommended that a full report discussing the significance of the plant macrofossil and charcoal remains is produced after the dating and the chronology and phasing of the site has been fully established. The assemblage is in a stable condition and should be retained for long-term storage.

References

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Table 1 Charred Macroplant from >1mm flots. N.B.: Totals not adjusted for sub-sampling.

Project		
Sample Number		
Context Number		
Flot Mass (g)		
% Analysed (>1mm)		
Species	**Name**	**Part**
Cereals (charred)		
Hordeum sp. hulled symmetric	Hulled Barley straight grain	Caryopsis/es
Hordeum sp. hulled asymmetric	Hulled Barley twisted grain	Caryopsis/es
Hordeum sp. hulled	Hulled Barley	Caryopsis/es
Hordeum sp. naked symmetric	Naked Barley straight grain	Caryopsis/es
Hordeum sp. naked asymmetric	Naked Barley twisted grain	Caryopsis/es
Hordeum sp. naked	Naked Barley	Caryopsis/es
Hordeum sp.	Barley	Caryopsis/es
Triticum sp.	Wheat	Caryopsis/es
Triticum diccocum L.	Emmer Wheat	Caryopsis/es
Triticum diccocum L./spelta L.	Emmer Wheat/Spelt Wheat	Caryopsis/es
Triticum sp. naked (T. *aestivum /durum /turgidum*)	Free-threshing Wheat	Caryopsis/es
Cerealia sp.	Indet. Cereal	Caryopsis/es
Cerealia sp.	Cereal: not further identified.	Chaff: Glume base/spikelet fork/rachis fragment
Wild species (charred)		
Weed seeds	Weed seeds: not further identified.	Seed/achene/nut
Corylus avellana L.	Hazel	Nutshell fragments (>4mm)
Corylus avellana L.	Hazel	Nutshell fragments (>2mm)
Corylus avellana L.	Hazel	Nutshell fragment (>1mm)
Monocotyledon	Indet.	Culm node (>1mm)
Monocotyledon	Indet.	Culm base (>2mm)
Monocotyledon	Indet.	Culm base (>1mm)
Unknown	Indet.	Root/tuber/rhizome (>2mm)
Unknown	Indet.	Root/tuber/rhizome (<2mm)
Unknown	Indet.	Bud
Unknown	Not identified	Nut kernel or fruit pericarp
Unknown	Not identified	Fruit stone + pericarp fragment
Unknown	Not identified	Possible fruit pericarp fragment

Unknown	Not identified	Possible fruit/catkin fragments
Other charred remains		
Charcoal (>4mm)		Frags
Charcoal (<4mm)		
Fungal sclerotia (charred)		
Other environmental remains		
Mollusc (>2mm)		
Mollusc (>1mm)		
cf. Corylus avellana L.	Hazel?	Possible Mineralised Nutshell fragments (>2mm)
Unknown	Indet.	Bone fragment (>2mm)
Modern Contamination		
Uncharred seeds (>2mm)		
Uncharred seeds (>1mm)		
C14 Recommendations		
Non-oak charcoal present?		
Recommendations for C14		

Key=all samples below 50 counted in full, all samples above 50 semi quantified; *50-100;

PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127
1	2	3	4	5	6	7
1	3	5	7	8	10	20
72	64	198	16	68	2	31
50%	100%	25%	100%	100%	100%	100%
		2				
		2				
	1	4				
	1					
	3		1	1		
		1	1			
	2	4			1	1
	P	P		P		P
	7	1			3	
	1					
	11					
			1			

						3
*	*	**	25	*	22	46
P	P	P	P	P	P	P
	1		18			1
			1		1	
	10	4	8	1	6	1
Y	Y	Y	Y	N	Y	Y
Charcoal	Charcoal	Charcoal or nutshell	Charcoal	n/a	Charcoal	Charcoal

** =100-200; ***= 200-500 ****=>500 F = fragment; P = Present; Y = Yes; N = No.

PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127
8	9	10	11	12	13	14
22	14	16	23	27	29	31
51	29	4	57	32	26	222
100%	100%	100%	100%	100%	100%	25%
				1		
				1		
1	2					
4						
30			5			
P	P		P			
	2					
					1	
1			1			

1						
*	18	9	**	3	1	**
P	P	P	P	P	P	P
43			7			1
						1
12	1	1	2	3	3	
Y	Y	Y	Y	Y	Y	N
Charcoal or nutshell	Charcoal	Charcoal	Charcoal or nutshell	Not recommended	Not recommended	n/a

PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127
15	16	17	18	19	20	21
53	55	51	61	71	73	69
56	11	156	99	90	40	102
100%	100%	50%	100%	100%	100%	50%
		1				
			1	1		1
2		25	1	*		*
7	1	**	8	****		24
P	P	P	P	P		P
			1			
		1				

22	3	**	7	**		*
P	P	P	P	P	P	P
1		1				
1					15	
3	2	12	2	5	***	3
Y	Y	Y	Y	Y	N	Y
Charcoal or nutshell	Charcoal	Nutshell	Nutshell	Nutshell	n/a	Charcoal or nutshell

PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127
22	23	24	25	26	27	28
77	79	81	75	59	85	63
11	25	23	7	30	81	34
100%	100%	100%	100%	100%	100%	100%
						1
						1
		2				
	1	1				4
7	6	3			5	25
14	**	22	1		21	*
P	P	P	P			P
		1				
		1				2

9	34	20	1	40	37	**
P	P	P	P	P	P	P
				1		
						5
3	5	12	8	2	11	11
Y	Y	Y	Y	Y	Y	Y
Nutshell	Nutshell	Nutshell	Not recommended	Charcoal	Nutshell	Nutshell

PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127
29	30	31	32	33	34	35
87	51	69	83	71	109	103
88	127	92	25	200	129	50
50%	50%	50%	100%	50%	50%	100%
1			1			
	1					
					1	
	7	8	2	28	44	
	*	*	*	***	***	
	P	P	P	P	P	
					2	
					1	
				1		
	1					
	3					

**	**	40	*	*	*	*
P	P	P	P	P		P
1						
						2
3	5	9	7	8	5	46
Y	Y	Y	Y	Y	Y	Y
Charcoal	Nutshell	Nutshell	Nutshell	Nutshell	Nutshell	Charcoal

PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127
36	37	38	39	40	41	42
105	109	111	107	113	115	121
152	67	22	96	20	75	84
25%	100%	100%	50%	100%	100%	100%
	1				2	
						1
						1
	1					
	1	1			1	
						1
	4	1		2	1	4
		1				3
	P		P			P
2	6			8	4	14
	1					
						1

37	*	10	*	*	*	*
P	P	P	P	P	P	P
		2				1
*	**	3	17	18	*	44
Y	Y	Y	Y	Y	Y	Y
Charcoal	Charcoal	Charcoal	Charcoal	Charcoal	Charcoal	Charcoal

PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127
43	44	45	46	47	48	49
125	123	127	129	131	133	135
38	40	5	9	50	18	5
100%	100%	100%	100%	100%	100%	100%
				1		
	1					
		1				
	1			1		
	1					
3	1			1	3	
				2		
3				1	1	
8						
1	1					
2						

*	*	3	8	30	8	7
P	P		P	P	P	P
			1			
1						
24	35					1
Y	Y	Y	Y	Y	Y	Y
Charcoal	Charcoal	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended

PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127
50	51	52	53	54	55	56
138	145	147	149	152	153	155
58	8	25	67	35	14	8
100%	100%	100%	100%	100%	100%	100%
				1		
				1		
1						
				3		
3				1		
3				1		
10				4		
5						

	8	43	****	**	12	23
P	P	P	P	P	P	P
5	2	3	28	37	4	
N	Y	Y	Y	Y	Y	Y
n/a	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended	Not recommended

PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127
57	58	59	60	61	62	63
157	160	162	164	165	182	169
14	37	312	1398	8	242	9
100%	100%	12.25%	3.06%	100%	50%	100%
			1			
			4			
			1			
			3			
			1			
			8		1	
	1	2	4		5	
	1		2		8	
					4	
		1			3	
					1	
					3	

45	*	**	*	17	1	6
P	P	P	P	P	P	P
					1	
11	5	21	7	12	10	4
Y	Y	Y	Y	Y	Y	Y
Not recommended	Charcoal	Charcoal	Cereal grain (or Charcoal)	Not recommended	Not recommended	Not recommended

PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127
64	65	66	67	68	69	70
171	173	175	179	181	185	187
9	23	94	131	240	63	81
100%	100%	50%	50%	25%	100%	50%
			2			
	1					
			1			
		1		1	1	
						1
			1			
		1		4	4	1
	1	1	2	2	2	
	1			2	2	1
				1		
		1	2	6	1	1
			P			
			3	2	2	
			1			1

*	*	**	**	**	**	*
P	P	P	P	P	P	P
			1			
					1	
					1	1
	29	21	31	19	*	*
Y	Y	Y	Y	Y	Y	Y
Not recommended	Charcoal	Charcoal	Charcoal	Charcoal	Charcoal	Charcoal

PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127
71	72	73	74	75	76	77
188	190	193	194	195	200	201
53	288	139		867	49	56
100%	100%	100%		100%	6.13%	100%
		3				
					1	
		5		1	3	
		2				
					4	
1	2	5		1	6	2
3					4	2
	5	6			1	
			1			
	2					3
		1				
10	17	3		7		1
		2				

*	*	*	20	40	*	*
P	P	P	P	P	P	P
					1	
52	**	**		*	23	44
Y	Y	Y	Y	Y	Y	Y
Not recommended	Charcoal	Charcoal	Charcoal	Charcoal	Charcoal	Not recommended

PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127
78	79	80	81	82	83	84
205	207	209	211	213	215	217
18	20	248	512	311	37	237
100%	100%	25%	12.25%	25%	100%	25%
		1				
			1			
		1				
			1			2
				1		4
		1	2	2		14
2						1
		1		1		
						P
		2	3			3
				1		
	1	1		3		1

19	9	*	**	***	22	**
P	P	P	P	P		P
					1	
38	21	21	*	27	15	**
Y	Y	Y	Y	Y	Y	Y
Not recommended	Not recommended	Charcoal	Charcoal	Charcoal	Charcoal	Charcoal

PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127
85	86	87	88	89	90	91
218	220	222	224	228	230	232
10	135	27	19	22	30	5
100%	50%	100%	100%	100%	100%	100%
	1					
1						
	1					
	1					1
	3				1	
				1		

*	*	**	5	13	16	3
P	P	P	P	P	P	P
	1					
1	1					
21	*		23	48	19	10
Y	Y	Y	Y	Y	Y	Y
Not recommended	Not recommended	Charcoal	Not recommended	Not recommended	Not recommended	Not recommended

PX 25127	PX 25127	PX 25127	PX 25127	PX 25127	PX 25127
92	93	94	95	96	97
234	236	238	239	241	215
240	18	41	41	26	61
25%	100%	100%	100%	100%	100%
				1	2
3			1	2	1
2					2
				1	
		1	1		
		P			
			1		
		1			
1					

**	19	*	*	*	*
P	P	P	P	P	P
1					
		P	P		
19	12	*	*	23	47
Y	Y	Y	Y	Y	Y
Charcoal	Charcoal	Charcoal	Charcoal	Charcoal	Charcoal

20 APPENDIX 9

20.1 Reproduction of Professor Frances Lynch Report

POTTERY FROM EV9 DIVERSION ON THE WYLFA ESTATE: FIELDS NEAR TREGELE

Frances Lynch

Written September 2018 Revised April 2020 on receipt of contextual information

INTRODUCTION : CONTEXT OF EXCAVATION.

The site was dug as part of the preparations, involving a variety of archaeological contractors, for the construction of Wylfa Newydd Power Station. EV9 Diversion, near Tregele, was dug by RSK on behalf of National Grid who were planning to reorganise the pylon lines across the island. The work was carried out over some five months in the summer and autumn of 2017. The bankruptcy of Carillion in January 2018 caused a financial crisis in the Wylfa Estate work and preparations for post-excavation tasks were endangered and delayed. Matt Jones of CR Archaeology, who had been working in a private capacity for RSK in November 2017, agreed privately to deal with the finds. He recognised the similarity to their own material from Llanfaethlu and feared that it might disappear into an anonymous store. He and Cat Rees sorted the material and contacted Frances Lynch to look at the Late Neolithic pottery. They also brought with them pottery labelled 'BA Site'. This, it later transpired, was also from the EV 9 excavations, coming from pits and post holes mainly in Field 9a. Subsequently more pottery from Field 9a, mainly from the excavation of the ditch, was also brought over. In 2019 Gwynedd Archaeological Trust was awarded a contract by Wardell Armstrong to deal with the soil samples, and access was provided to fuller field records.

There were two main areas of excavation: **Fields 9 and 9a** (NGR SH 355 925) where a shallow ring ditch was found with some probable post holes. There is pottery from pits and postholes of a putative round house and from the fill of the relatively shallow, 0.5 - 1m wide ditch. It is consistently hard, quite thick and undecorated, with predominantly simple upright rims. It looks **Middle to Late Bronze Age** in date and this is confirmed by a radiocarbon date from Pit 164. The bulk of the evidence comes from Field 9a.

The other focus of activity was **Field 14** (NGR SH 356 927) about 200m to the NNE of Field 9/9a. Here there was a cluster of nine pits of variable size, six of which contained pottery. The majority of this pottery is highly decorated **Grooved Ware**, but in one pit there is a large

urn-like jar which has all the characteristics of **Fengate Ware**. There is also some undecorated pottery which, at first glance looked similar to the later Bronze material in field 9a, but it is consistently less well fired and is very likely to be Late Neolithic. A radiocarbon date from Pit 52 confirms this.

Some limited activity by RSK also took place near Llanfechell (SH 36004 92074) which has been added to the end of this report

CATALOGUE OF POTTERY

Field 14

A cluster of six pits without structural features contained 200 + sherds of Grooved Ware together with charcoal, burnt stone and some struck flakes of local chert. Sieving of the soil samples has produced a further 620 sherds (mainly crumbs), most of which belong to pots already represented, but there are small quantities of at least 5 new pots among the assemblage.

The bulk of the interesting finds come from Pits 70, 72 and 80, together with 52 which was clearly filled at the same time as Pit 70, since sherds from a distinctive pot (69e) occur in both pits.

Pit 52 (*See note at end of this section relating to Evaluation Trenching her in 2016*.)
Context 50 is said to be OGS. I think this may mean that it was picked up from the surface of the upper fill before the pit was recognised.
Context 51 is the main upper fill of Pit 52. It also contains large angular stones.

50 1 bag 3 featureless sherds from two different pots + 1scrap and 3 crumbs.
I sherd (55 x 30 x 9mm) is in a very hard fired red fabric with a lot of angular stone grit (this might be Grooved Ware This is now joined (in residues in Sample 30) by a larger decorated sherd probably from this same pot (51 b). The other sherds (60 x 35 10mm and 55 x 40 x 12mm) are in a paler red fabric with smaller grits similar to that in 51a

51 1 box 71 sherds of which 37 are crumbly fragments, all in a red fabric. **(Pot 51a**) Not many retain the full wall thickness; 19 larger sherds in rather light red fabric but they also have lost an inner or outer surface. 2 of these are very thick (60 x 50 x 16 and 40 x 30 x 25mm) They are all undecorated. There are a further 13 featureless but very thick sherds often split and generally 'crumbly'. The clay is fine-sandy and stone grits are relatively sparse. There are a few thick, crumbly pink sherds from Pit 70 (69g) which are comparable to 51a, as are the sherds from Context 75. None have any distinctive features, except the pink, crumbly fabric and large angular grits.

This material is superficially similar to the Later Bronze Age pottery from Field 9/9a, some 150m away. But closer examination shows that the nature of the firing is very

different. The later material is extremely hard and well-fired; it contains a lot of stone grit of various sizes and the fabric is compact, though the finish is often rather rough and small raised grits occur on the surfaces giving it a distinctive gritty feel. It is easier to feel the difference than to see it. Dr David Jenkins, examining macroscopically a representative sample, separated the sherds from Context 50 from those found at Field 9a.

This undecorated material is recorded as coming from an upper fill (Context 51) with large stones in Pit 52 but there is no reason to think that the pottery is not contemporary with the decorated material from the lower fill (Context 67) since 51 also contains 7 small sherds of the distinctive lightweight vesicular fabric found in context 67 and also **2 sherds** (30 x 25 x 10mm and 40 x 30 x12mm) in a similar dark brown lightweight vesicular fabric. The smaller one has 4 lightly cut grooves with a hint of whipped cord in one. This is almost certainly from the same pot as the sherd from **69e,** having the same fabric and the same use of whipped cord in the grooves. More of this very lightweight vesicular fabric comes from the residues from Context 51, as does a sherd from the rim of Pot 69e.

Residues context 51 Sample 17. 44 crumbs and 8 small sherds of red/grey pottery with smallish stone grit, similar to 51a.

1 rimsherd *certainly from **Grooved Ware Pot 69e** (40 x 40 x 8mm). It is badly eroded but whipped cord is visible on the red outer surface. It has the same dark lightweight fabric, of which there are 2 other small scraps.

Residues Context 51 Sample 30. 39 crumbs and scraps of red/grey pottery + 7 small sherds similar to 51a. 2 smooth surfaced sherds (both c .28 x 38 x 8mm).
4 small thinner beige sherds with smooth surface; 2 small yellow sherds (possibly part of **Pot 69b).**

9 fragments of Pot **69e**, one with curved whipped cord lines is part of a rim*; 2 red/grey sherds with small grits (larger 40 x 43 x 8mm), possibly part of **69e**.

1 large body sherd (65 x 50 x 10mm) with 3 vertical lines of stab marks (probably too small for fingernail marks), Hard fairly smooth fabric with variably sized stone grits. Red exterior and dark interior. **This is a new pot, 51b*, not previously recognised**. There is 1 undecorated sherd probably from it in Context 50.

3 fragments of thinner black pottery, 1 possibly part of a rim, with small close-set chevrons (51c*).

67* This is a remnant of the lower fill of **Pit 52**

1 bag 1 dec Grooved Ware sherd + 6 frags from the same pot (**69 e**).

This large sherd (80 x 75 x 10mm) has a diameter of 340mm and is decorated by simple grooves and by grooves into which whipped cord has been pressed. There are 4 simple grooves at the bottom of a band of decoration above them are two circular grooves with whipped cord making a roundel or wave pattern between upper and lower bands of cut grooves. The fabric is beige on the outside, darker inside and is lightweight and slightly vesicular. The fabric and the rare use of whipped cord suggest that this sherd belongs to Pot 69e although it is rather lighter in colour than the sherd from Pit 70 and those from context 51.

Pit 70

83 Context 83 is the primary fill of Pit 70. The only material from it is from residues.

Residues from context 83 Sample 32. 5 crumbs and 2 small sherds (both 20 x 18 x 5-6m) in dark red fabric. Possibly part of a thin bowl such as 69 a, c, or d.

69* Context 69 is the main fill of Pit 70 This contains a great deal of pottery – 33 sherds Grooved Ware (Rims and body) from perhaps 8 different pots. There is also 13 featureless body sherds which belong to Pot 69e and

69a* The upper part of an incurved bowl or jar 210mm in diameter. The height is uncertain. The fabric is reddish brown and very hard and thin but it does contain stone grit. The decoration consists of 6 rounded grooves and cordons interspersed with two broader bands with chevrons carried out with sharp fingernails. The inner edge of the rim also has fingernail marks. The second cordon seems to have had some raised motif but unfortunately it is broken at the point. The top chevron band has 4 drilled depressions which seem to be primary since the chevrons are altered around them. In addition to the 5 illustrated sherds there are 2 small decorated scraps which belong. **Residues** have produced 9 more sherds of this pot but unfortunately none join the original pieces. One* shows the upper cordon ending in a curl.

69b* This is another incurved bowl in a very different fabric – pale orange/beige and rather soft so the decoration has been rubbed and eroded. It contains small angular grits, including quartz, which is not common in this collection. There are 2 decorated sherds and 4 undecorated ones which probably belong to this pot. There are 2 base sherds (35 x 50 x 8-16 and 33 x 25 x 12+mm) which may belong since the fabric is pale and soft. This base is 100mm in diameter suggesting that this bowl was quite squat, perhaps 100mm tall.

Residues contain 11 more sherds of this kind of bowl in pale rather soft fabric, but variations in design and colour suggest that **at least 4 bowls of this kind existed**. There are 2 incurved rims* and another more upright rim* with the suggestion of an impressed cordon beneath it. Cordoned body sherds also suggest slight variations from the form of 69b.

69c* Very little remains of this incurved rim jar and it is not possible to estimate the diameter. The section that survives suggests that it may have been more straight-sided than a and b; more like a smaller version of 69e. The fabric is very similar to 69a, very hard and thin, but darker brown with a slightly greasy feel. The band of grooves at the top are very sharply cut and are enhanced by fingernail marks which also occur in the inner edge of the rim. **Residues** produced 5 more decorated fragments* which are clearly part of the same pot.

69d* This is another small jar with incurved rim in pale beige clay, very thin and much rubbed. The decoration of narrow scored lines with fingernail marks between them is ill-defined. Like the others it has fingernail marks across the inner edge of the rim. No more of this pot was found in Residues.

69e* is represented in Pit 70 by a single rimsherd (55 x 40 x 9mm) in the very distinctive dark lightweight fabric discussed in relation to the material from Pit 52. But the lower body is represented by 13 featureless sherds in a red fabric with darker interior. It contains masses of angular stone grit but is lightweight, slightly vesicular and rather crumbly -- the distinctive features of this pot 69e. The largest sherd is 60 x 50 x 14mm. Though the colouring is rather redder than the upper sherds from context 69 it matches the larger rimsherd from context 51. The diameter of the jar is 340mm, a large size for a rather poorly fired pot.

The rim is sharply inturned, decorated on the inside by close-set vertical lines and on the outside (where there is a good deal of ancient damage) with whipped cord maggots. Below this are 3 cut grooves. Two other pieces of the rim, found in Residues from Context 51, show the same close-set vertical lines on the inside, but suggest that outside may have had a more curvilinear design, which may

accommodate the possible circles shown on the sherd in this fabric from Context 67 (lower fill of Pit 52). A small sherd from 69 shows 2 cut grooves and another badly eroded sherd from Residues in 69 shows two definite grooves above or below an undecorated band. A third line may be the result of excavation damage.

69 f* This is a very eccentric pot and it is difficult to know what the decorative scheme was, except that the entire surface was covered with filled lozenges and roundels, the fillings being fingernail marks, lattice and dots. The rim is not present but there is evidence for 2 cordons at the top and I would guess that there were two more above (see Links of Noltland (above). One very unusual feature is the circular grooves on the inside of the base. The diameter at the top is 222mm and at the base 140mm creating a flared profile which allows a view of the internal decoration of the base. The fabric is reddish brown, thin and hard, very similar to that of 69a. In addition to the 11 sherds illustrated there are 4 others (largest 50 x 25 x 7mm) which clearly belong to this pot. Residues produced a further 8 small sherds from this pot.

69 g 8 featureless sherds in **thick pink fabric** rather liable to crumble. Three large pieces (largest 70 x 50 x 16mm) clearly come from the lower body of a jar 240mm in diameter. This is comparable to the pink crumbly sherds from Contexts 50 and 51. Since Pits 52 and 70 are less than 1m apart it is not surprising that they contain sherds from some of the same pots, but, rather surprisingly, this one seems to be represented only by lower body sherds without any sign of a base.

Additional pots from Residues

69 h* a single rimsherd from a small incurved bowl with fingernail marks on the inner edge of the rim and pricked dots on the top. A bowl similar to 69b – d and to 79b - c.

69 j* Two small straight rimsherds (1 illustrated) with incisions over the top of the rim and on the outside. This band of decoration at the top has a groove below. A small bowl or cup, the fabric is similar to 69c.

69 k* A fragment of damaged rim in a very hard black fabric. A rounded cordon with pricked decoration is probably from close to a slightly curved rim, similar to 69ba.

Residues from Context 69 Sample 21. 81 scraps and crumbs + 44 small decorated pieces from Pots 69a , 69b, and 69c and possibly 69f and a body sherd (52 x35 x9mm) from 69e + new pots h, j and k.

Residues from Context 69 Sample 31. 72 crumbs, 8 small sherds, various relatively thin fabrics + 6 fragments of Pot 69a; 4 small pieces from Pot 69b; and 2 pieces of the very thin Pot 69d.

Pit 72

Context 71* is the only fill of Pit 72

1 box 59 sherds 1 rimsherd, a small segment of collar and neck and a large section of lower body. All the sherds and fragments in the main deposit are from the same pot. The Residues however produced three decorated sherds and 6 featureless body sherds which were not from this vessel.

71a* The urn is about 200mm in diameter at the shoulder and perhaps 120mm at the base and 220mm tall.

The collar is slightly curved with an internally bevelled rim decorated with a chevron of fingernail marks. No decoration survives on the outside of the remaining pieces of collar but just beneath the overhang is one pit made with a fingertip. The one surviving segment of the neck is, like the collar, undecorated. The fabric is bright red with a lot of medium crushed stone grit, protruding from the outer surface in the lower part. The upper part is smoother and better fired. Such a pot has all the characteristics of **Fengate Ware**.

Residues from Context 71 Sample 19. 70 crumbs of red fabric as in 71a. 6 featureless sherds (largest 28 x 35 x 23mm) in red /brown fabric with angular stone grit, visible on the outer surface similar to the large segment of body in the main find. 1 rimsherd from 71a (29 x 24 x 10mm).

17 crumbs and scraps in a harder, darker fabric. 1 light brown, smooth surfaced featureless sherd (35 x 26 x 11mm) in a much denser grey fabric with large angular grits visible on the inner surface.

Residues from Context 71 Sample 33. 1 Fragment of 71a rim, 1 body sherd (40 x 40 x 10mm) and 5 scraps from 71a. 7 small featureless sherds in a hard dark fabric.

71b* 1 hard dark grey **rimsherd,** (20 x 25 x 15) incurved, with 2 lines of whipped cord deeply impressed by a thumbnail on the sloping inner face. On the outside, counter-hatched sloping lines of whipped cord and of stab marks.

71 c* 1 smaller **rimsherd** (23 x 17 x 13mm) in similar hard dark fabric with larger grits. This is less well decorated, with light fingernail marks on the top of the flat rim and sharply cut diagonal lines on the outside. 1 small sherd (15 x 16 x 8mm) with two sharply cut lines crossing, might belong to this second pot at some thinner point. The featureless dark hard sherds in both samples might belong with these rims. **Both these rims are new pots and they are Grooved Ware.**

Pit 80

Context 79 is the fill of a large Pit 80 on the east side of the cluster.

1 bag 16 sherds (4 rimsherds all different, in separate bag within main one). Small quantities of several different pots.

79a* a single sherd (33 x 40 x 5mm) from the incurved 'rim' of a small bowl or jar. The 'rim' is damaged and it is possible that this is a break and that the piece is a base sherd with a slight omphalos. It sits well on a table in this position, but the presence of decoration so close to the base would be unusual. The decoration is a narrow band of sharp fingernail chevrons on the outside. The fabric is hard orange on the outside, grey inside with large isolated stone grits.

79b* a small section of slightly incurved rim with fingernail chevrons in the inner slope of the rim. Fabric similar to 79a.

79c* Another scrap of incurved rim with fingernail chevron on the inner slope of the rim and two lines of fingernail marks on the outer surface of the rim. Very hard, grey fabric. One featureless sherd may belong.

79d* 1 crumb from an inward sloping rim decorated with whipped cord maggots inside and out. Fabric red with large granite grits. 1 sherd (40 x 30 x 8mm), 3 scraps and 4 crumbs similar reddish fabric.

3 body sherds, orange smooth exterior, much protruding grit on the inside (largest sherd 70 x 50 x 9mm). Probably from 79a

2 body sherds (larger 55 x 70 x 13mm) with smaller grits protruding from the red outer surface; inner surface smooth and black. Probably from 79d.

Residues from context 79 Sample 23. 3 featureless sherds (all c. 36 x 25 x 10-11mm) beige throughout with a lot of large stone grit including mica, 5 scraps and 11 crumbs broadly similar to the sherds, but some redder.

Residues from context 79 Sample 34. 17 tiny crumbs, 3 larger crumbs and 2 scraps in hard dark fabric, 2 crumbs in softer red fabric and 2 small sherds in hard red/black fabric with angular grit, perhaps similar to 79d.

Field 14: Smaller features on the periphery of the cluster, with few finds

Context 63 is the fill of a small shallow ditch (Feature 66/64) in Field 14 a few metres to the south of the pit cluster

1 bag 1 frag + 1crumb soft pink crumbly fabric. Wall thickness incomplete.

Residues Context 63 Sample 28 Find 34 1 small sherd and 2 fragments of hard black thin pottery possibly from Pots 69 c or d. The pink crumbly pottery is similar to Pot 51a.

Context 73 is the fill of Pit/Posthole 74 at the north end of the pit cluster.

This feature was damaged by an earlier trial excavation and contains no other finds except the 3 tiny pink crumbs from Residue Sample 20.

This earlier evaluation trench revealed 2 postholes and 2 undistinctive sherds which were judged to be prehistoric but could not be closely dated. One of the postholes may be PH 74 (pers. comm. Laurence Hayes).

Context 75 is the fill of a very small posthole/pit 76 , close to Pit 52

1 bag 4 featureless sherds +16 frags mainly as the large sherds, but I crumb is beige.

The four pink/grey sherds are all from the same pot with prominent quartz grits. Three are thick (55 x 45 x18; 50 x 40 x19 and 35 x 33 x 16mm). The fourth (25 x 22 x 8mm) has split. These pieces are very similar to Pot 51a from Pit 52, but not part of the same pot because of the quartz grits.

Residues from Context 75 Sample 25. 1 scrap and 3 crumbs of hard pale beige fabric, possibly part of Pot 69 b or c from Pit 70.

Context 77 is the fill of posthole/pit 78 on the west side of the cluster.

Residue from Context 77 Sample 22. 1 lightweight beige/black sherd (35 x 25 x 8mm) as Pot 69e from Pit 70, + 3 scraps similar.

Context 81 is the fill of Pit 82 on the west side of the cluster.

1 bag 1 small sherd (35 x 20 x 5mm, perhaps incomplete wall) + crumb.

Residues from Context 81 Sample 24 1 scrap of pink/black fabric with large angular stone grits. Possible deliberate impression on outer surface. And 3 tiny black crumbs.

Comment on the Late Neolithic Pottery from Field 14

Twenty individual vessels can be recognised. The majority are decorated quite extravagantly with grooves and raised cordons and a variety of surface patterns, carried out by mainly fingernail or sharp incision and by impressions of fine twisted cord. The shapes vary from straight-sided tubs (69f) to vessels with incurved rims. Some of these (such as 69e, c and d) may have been quite straight-sided; others such as 69a and b may have had a rounded bowl shape. The size varies: 69e is over 300mm in diameter and 69f is about 200mm across; 71b and c have heavy rims and may have come from large jars, as must 51a and 51b (though their shape is unknown). But most of the other rims (such as 69c, d, h, and i, are small and rather thin, and must have come from small bowls or cups. The pottery might have been used in quite a variety of work and domestic contexts before it was broken and thrown onto a midden.

This group of pits does not exhibit a great deal of mixing, in contrast to the situation at Llanfaethlu, but there are several links between Pits 52 and 70 which suggest that they were filled at the same time – or, more likely, were filled in by material from the same midden. There has been a lot of discussion of the role of these pits, the only indicators of settlement in the later Neolithic, and the social significance of the material found in them. After many wasted hours I (and I hope others) have come to the conclusion that the broken pottery is rubbish incorporated in middens which became a source of material to fill in the holes. The question remains: why were the holes dug in the first place? And what prompted the decision to fill them in, beyond the inconvenience of falling into them on a dark night?

Having dismissed a ritual explanation for the presence of broken sherds in the pits does not mean that the pottery is without social meaning. Traditional pottery always has social messages and because it is likely to be locally made, and it is easily broken, it can document very sensitively the history, connections and aspirations of its makers and users. Style is something we can recognise across the millennia, even though we cannot fully understand it.

The style to which the majority of this pottery belongs is **Grooved Ware**. This is a style which has a very extensive distribution, from the Orkneys to the Thames Estuary, but was, until the last twenty years, judged to be very rare in Wales and mainly confined to the Marches. Now, with largescale commercial excavations stripping extensive areas, the unprepossessing pits in which it is normally found are being dug more frequently. Several quite large assemblages have been found in North West Wales. Those which are most

relevant are from Parc Cybi, Holyhead; Llanfaethlu only a few miles from Tregele, Penmynydd in the middle of Anglesey, and close to the megalithic tomb at Bryn Celli Ddu. Material from Parc Bryn Cegin near Bangor and from Clynnog also have points of similarity.

Pot 69a is extraordinarily similar to a smaller pot from Llanfaethlu and 69b is comparable to bowls from Parc Cybi and Penmynydd. The neat incurved rims from 69c and d are like others from Llanfaethlu and the slightly odd curving lines running up to the rimtop on 69e and 71b can find a particularly close parallel at Llanfaethlu. The wavy band of grooved and pitted decoration on 69b has parallels there too. The rounded incurved rim pots are perhaps a particular feature of the north Wales version of Grooved Ware because they seem to be unusual elsewhere. Unfortunately the lower parts of these pots seldom survive and the complete vessel is difficult to reconstruct. Pots 69 e, c and d suggest that the walls may have been quite straight, giving a conical profile.

Pot 69f is so eccentric that it has few close parallels but the shape, the technique of decoration and the rare internal grooving of the base can be found in the general family of Grooved Ware in a wider area. Decoration on the inside of the base is rare, but not unknown in Scottish Grooved Ware (Sheridan in Cleal and Macsween 1999, 121) where the pot from Links of Noltland has a very similar shape with a band of cordons at the rim. In fact the basic tub shape of this pot is fairly common in the Clacton sub-style of Grooved Ware across the whole country and, allied to more sober decoration, can be found at Parc Bryn Cegin, Bryn Celli Ddu and Parc Cybi.

Pot 71a from Pit 72 is an urn-shaped jar with virtually no decoration except a chevron of fingernail marks inside the bevelled rim and pit(s) beneath the collar. The relatively narrow base, the pits under the collar and the rim decoration are all highly characteristic of **Fengate Ware** rather than Grooved Ware. Fengate Ware, a development of earlier impressed Wares such as Ebbsfleet and Mortlake and arguably a precursor to the ubiquitous Collared Urn of the Early Bronze Age, overlaps with its predecessors in chronological range but has normally been judged to have disappeared before the arrival of the fashion for Grooved Ware. However the merging of the two styles is now being recognised at a number of sites and, as here, there are instances of direct association. The bulk of the pottery in Pit 72 belongs to this one Fengate jar and it might be argued that this pit is earlier than the others. But the 2 rims from the residues from Pit 72 are definitely Grooved Ware, comparable to Pot 69e and to others from Llanfaethlu. Our uncertainty about the role of these pits and the circumstances of their filling, of course, makes this association difficult to fully understand, but it does suggest that Fengate Ware was still around at the beginning of the 3rd millennium

BC. If the argument that Fengate Ware was influential in the development of Collared Urns is accepted, it needs to have had a long life.

The recognition of stylistic merging between pottery styles is quite readily accepted in the progression of the various groups of Impressed Wares (Ard and Darvill 2015). In the case of Grooved Ware, which has carried an unnecessary load of 'social' significance because of its appearance at major monuments in Wessex, there seems to be more resistance to the idea. But in North West Wales there are interesting instances of stylistic merging at Clynnog in Caernarfonshire (GAT publication forthcoming) and at Llanfaethlu in Anglesey only a few miles from Tregele. At Clynnog there are pots with pits beneath the collar and wavy grooved decoration on the collar itself; at Llanfaethlu a series of pits with typical Grooved Ware have also produced a Fengate style collar with fingertip pits beneath it, and other collared pots with Fengate traits. The pots with incurved rims and horizontal or wavy cordons which are a particular feature of this region, seem to be the vehicle for most of this stylistic merging. But Terry Manby has drawn attention to a jar very like 69e which he calls Fengate Ware from Sewerby Cottage, in Yorkshire (Manby in Fenton-Thomas 2009, 170) and the ascription of some pots from the Walton Basin could be made either way (Gibson 1999), so it is likely that, if the dates begin to merge, the stylistic affinities will be recognised more widely.

At present the difficulty with the argument above remains the dating. The general currency of Fengate ware is still some 200 - 300 years earlier than the first appearance of Grooved Ware (Garwood 1999). This remains true at the nearest dated series of pits, Parc Cybi at Holyhead where pits with Fengate Ware are distinct in terms both of location and date from those with Grooved Ware . It is to be hoped that it will be possible to obtain good radiocarbon from the pits in Field 14.

Tregele Anglesey

Two small sherds were received for comment from Laurence Hayes.

Wylfa EV Cable Diversion

"The only archaeological features identified were in test pit 4, located at NGR SH 35618.7 92747.2 approximately 50m to the north west of the Douglas Inn on the north west side of the village of Tregele. The trial pit was located in a single large field in use as pasture.

The features comprised two post holes [40] and [41] at the southern end of the trial pit and a shallow pit [43] at the northern end, all cut into the natural clay and sealed by the existing topsoil."

The sherds had been found in Pit 40, one of two pits interpreted as postholes, because of the **stone packing** in the one in which the pottery was found. A shallower pit was found in the same evaluation trench.

The colour, firing and tempering are the same on both pieces which show recent breaks. It is likely that they derive from the same pot. But very little can be said about the style of pottery to which they belong since the outer surface is lost. It is a red, reasonably well-fired fabric with a lot of angular stone grit (see report by Dr David Jenkins). It is clearly prehistoric and could belong to the mid Neolithic Impressed Ware series or to the Later Bronze Age jars. Middle Neolithic pottery is now being found more frequently in the region (Parc Bryn Cegin, Bangor (Kenney 2008); Parc Gybi, Holyhead (Kenney 2007) and Llanfaethlu (*Current Archaeology* 2015) because of more extensive excavation strategies which are revealing the non-structural pits from which they come. The later Bronze Age jars are relatively rare on the island, but have been found at Capel Eithin (White and Smith 1999, p 79 C14).

I would guess that they belong to the latter series, but Dr Jenkins, who has more specialised knowledge of the geology and petrology of the tempering, compares it to the Neolithic series. One can confidently say that the sherds are not Early Neolithic Irish Sea Ware which has a very characteristic dark, vesicular fabric and is the style consistently found in the postholes of the rectangular houses discovered at Parc Bryn Cegin, Parc Gybi and Llanfaethlu.
Frances Lynch June 28th 2016

E-mail from Laurence Hayes April 3rd 2020

In terms of the location of the two sherds you are correct- they came from Field 14. We found them in Trial Pit 4 in 2016, which had been excavated to assess ground conditions ahead of the main diversion works. There were three pits in a cluster- the sherds came from pit [40], but we also got charcoal out of pit [43] which we had carbon dated (were you aware of this?) the dating was as follows:

Sample 1 (comprising charred Maloideae species wood from pit [43]) has been dated to 4980 ± 30 BP, or Cal BC 3890-3885, Cal BC 3795-3690 and Cal BC 3680-3660 (2σ). This date range places the contents of the pit in the latter half of the Early Neolithic period (4000-3000 BC).

The features were re-exposed during the main cable diversion works when the topsoil strip passed through Field 14. I believe that Pit [52] recorded in field 14 during the EV9 project is the same feature as pit [40] recorded during the 2016 watching brief. LH

David Jenkins was right. These sherds are clearly the same as the undecorated, crumbly red pottery from Pit 52 which caused the same Mid Neolithic / Later Bronze Age debate in early 2020. The date is not particularly helpful, but at least it is in the right millennium.
Frances Lynch April 2020.

FIELDS 9 AND 9A

In 2017 several boxes of Middle Bronze pottery were included with the Late Neolithic material but their origin was not clear. The boxes were simply labelled ‘Wylfa BA site’. They did have context numbers but no accompanying documentation. In late 2018 Matt Jones of CR Archaeology delivered another box of pottery. This came from work in November 2017 in Fields 9 and 9a and related to a Later Bronze Age area of settlement. Sherds found during the sieving of samples from these fields have been added to this material. Laurence Hayes of RSK has confirmed that the ‘BA site’ material had also come from Fields 9 and 9a of EV 9.

Finds from EV9 examined in 2018. This material is from contexts (209, 211, 213, 217, 230) within the fill of a shallow curving ditch. This ditch is very slight, about 1m – 0.5m wide and less than 0.5m deep. It is not particularly circular and may not be a closed ring but the visible diameter is about 12m. It is possible to suggest that there is a ring of postholes (about 7.5m in diameter) overlying this silted ditch. Features 216 and 189 (probable postholes) clearly cut it. The pottery comes from the filling of the ditch which does not seem to have had a complex history. Pottery was found in 8 of the 13 cuts which penetrated the fill.

Similar sherds come from 8 of the 13 probable postholes of the putative round house which was about 6.5m in diameter with a possible entrance porch (2m wide) on the WNW side. This structure overlay the ditch, so it cannot be contemporary with it, but the similarity of the pottery from ditch and postholes (admittedly very undistinctive) suggests that they are not much apart in date. Sherds were also found in two pits within the ‘house’ and two pits just outside it. Only Pit 186, within the enclosed space and just outside the putative house, contained any significant number of sherds (32).

In Field 9 there was a deposit of 20 sherds from Pit 170 and a few pieces from Pits 150 and 154.

Field 9a

Field 9a contains the main settlement evidence -- the 'Ring ditch' and pits and postholes**.** Fields 9 and 9a are adjacent on either side of a modern field boundary and ditch at the foot of a slight slope. The structures in Field 9a are on the slope and thus better drained.

Material from the fill of the 'Ring Ditch'

Context 230 7 sherds, all join on ancient breaks to make a section of the lower part of a rounded jar.

1 section of a flat base (100 x 50 x 15mm) 200mm in diameter. The wall splays outwards to 300mm and four other sherds (which join into two segments of wall 90 x 40 x 14mm and 90 x 60 x 14mm) suggest a rounded pot with perhaps a final diameter of 340mm. The thickness of the wall is 14mm. The fabric is pinky beige throughout, fairly smooth surfaced but with a lot of tempering which tends to break the surface. There is another smaller sherd (45 x 45 x 14mm) and a scrap 15mm thick, both in the same fabric.

Context 228 Residues Sample 89 Find 126 1 scrap red pottery.

Context 190 Residues sample 72, find 92. 1 red crumb.

Context 193 Residues Sample 73 Find 97. 2 x scraps of red/black hard pottery,7-8mm thick with much small quartz grits.

Context 200 Residues Sample 76, Find 101. 2 small red/black sherds, 8mm thick; 2 softer red /grey sherds, all with much small ? quartz grits + 11 red crumbs.

Context 211 A sherd (50 x 50mm) from a flat base (thickness 13-16mm) with an upright wall (11mm thick). The diameter is 160mm and the fabric is red/black, very hard and with a good deal of tempering.

A wall sherd (75 x 42 x 10mm) is rather greyer than the base and had a diameter of about 340mm. It is not as encrusted as the wall sherd from 209.

There is 1 smaller featureless sherd (30 x 25 x 10mm) of similar hard grey fabric and 1 piece of burnt clay.

Context 209 A wall sherd joins one in 211.

Wall sherd (50 x 70 x 10mm) in very hard red/black fabric with a good deal of tempering. This joins a piece from 211 at a recent break.

Another wall sherd (70 x 50 x 10-12mm) is in a hard but rougher surfaced fabric with much tempering. The inner surface is heavily encrusted with burnt material. The diameter of the pot is about 340mm.

A featureless sherd (30 x 35 x10mm) is in a similar hard fabric.

1 scrap may be part of the base sherd in 211.

213 5 sherds from 3 different pots.

Two wall sherds do not join but are clearly part of the same pot (perhaps the 209/211 one), creating a section of straight wall (120 x 60-70 x 10mm) 280mm in diameter. The fabric is pale beige and very hard fired, with a lot of tempering.

2 smaller sherds (30 x 30 x 10 mm and 20 x 25 x 10mm in a hard yellow/grey fabric, which contains a different tempering.

1 scrap of orange/black softer fabric with a lot of tempering.

217 Single wall sherd encrusted on the inside with burnt material as in 209, to which the fabric is similar. Sherd size 60 x 60 x 11-15 and the diameter is 300mm with a slight curve at the thinner end of the sherd.

Pit 216 (context 215) cuts the ring ditch and might be a posthole of the putative house.

Residues Context 25 Samples 83 and 97 Find 117 and 136. 1 small sherd 8mm thick in dense red fabric with small stone grits + 1 crumb same. Indistinguishable from the other Later Bronze Age material.

Pit 189 has the same relationship.

Material from the fill of pits/postholes in the area enclosed by the Ring Ditch.

Post holes 126, 174, 184, 216 (see above), might be part of a putative house of which 122 and 161 might be the outer porch

Context 121 Fill of Posthole 122

121* 1 rimsherd + 1 sherd both in brown very hard fabric with masses of medium angular grits which would be worth analysing to clarify the date. This is a rare fabric. 187a may be the same.

The rimsherd (77 x 50 x 9mm) is from a simple pot 300-340mm in diameter. There are 4 evenly spaced **fingernail marks** 30mm below the rim. The top of the out-turned rim is unusually angular, the angles created by some sharp blade.

The sherd (40 x 35 x 10mm) has one fingernail mark and is clearly part of the same pot as the rim.

The fabric of both is beige/brown throughout, extremely well fired and very hard. It contains a lot of varied stone grits of medium (3mm) to small (1mm) size. It contains a pale rhyolite, an unusual pale brown material unique to this pot, and a well crushed darker rock.

Context 123 Sample 44 Find 59 from **Pit/PH 122** (*Context 123 is used twice, for PH 122 and for a spread above a group of stakeholes near the centre of the house*). 1 scrap (20 x 20 x 8mm) of hard red/ beige pottery with medium rhyolite grits which break the surface.

Context 125 Fill of Pit or **Posthole 126**

125* 7 sherds + 1 base. 4 of the sherds join (on recent breaks) to make a single **section of lower body** (100 x 70 x 11mm) from a flared jar or urn 160-200mm in diameter. The fabric has a brownish red exterior and black interior; the external surface is rough with protruding grits, the interior is smoother. The stone grits are angular, fairly plentiful and varying in size from medium to large. 1 smaller sherd (35 x 25 9mm) and 2 scraps are similar.

The base segment is 60 x 30 x 50mm high with a wall thickness of 11mm and a base thickness of 12mm. The diameter is 160mm. Two small wall sherds join the base and establish the flared shape. The base is pinker and has more plentiful smaller grits, but is likely to be from the same pot.

Context 125 Sample 43 Find 56 from **Pit PH 126**

1 small sherd (30 x 30mm) with variable thickness 12-8mm, brown/black fabric with small grits (perhaps from the pot in PH 122); 1 fragment of red pottery with small grits and a scrap of red pottery with larger grits (20 x 20 x 9) which may be from the tip of a rounded **rim**.

Context 164 Sample 60 Find 71 **Fill of Posthole/pit 163** *This looks as if it is a pit cut by PH 161*

7 small sherds and scraps of coarse red pottery c. 10mm thick, all from the same pot with some exceptionally large (20mm) stone grits. 1 sherd (37 x 35 x 8-12mm) is close to a flat base. The radiocarbon date coms from this pit.

Context 173 Fill of **Posthole 174**

173 3 small featureless sherds + 5 fragments recently broken from 1 of them. Hard beige/grey fabric with large angular stone grit.

Context 173 Sample 65 Find 74 **Fill of Posthole 174**

Scrap (20 x 20 x 10mm) of hard orange /black pottery with stone grit. Probably the same pot as the other sherds but colour brighter because of washing.

Context: **Stakehole** *Probably from Stake hole 176*

5 featureless sherds (largest 35 x 35 x 10mm, smallest 30 x 20 x 8mm) in hard pink fabric inside and out with much well crushed grit. Context 176 Sample 66 Find 79 from **Stakehole 176** 3 crumbs 1 red and 2 black.

Context 181 From large **Pit 180**

181 3 featureless sherds (2 join on an ancient break) (all c. 25 x 25 x 8-10 mm) + 1 crumb of hard red /grey fabric with much small stone grit creating an abrasive outer surface, similar to those from 169 and 187. .

Context 181 Sample 58 Find 81 from large **Pit 180**

1 small rimsherd (25 x 20 x 17mm) turned inwards in hard black pottery with medium-small angular rhyolite grits. This is a rare fabric.

1 scrap of red/black pottery with small grits

Context 187 (*though 186 on bag*) Fill of large **Pit 186** 66 pieces of pottery in all.

187* 38 sherds + 2 bases + 1 rim. Several sherds have similar fabrics but at least 4 different variations can be recognised. This single rim is very similar to Find 121.

187a A single everted rimsherd (40 x 22 x 9mm) in a very hard dark brown fabric with much small-medium grits including rhyolite. The outer slope of the out-turned rim is sharply cut, as in 121, of which it *might* be a part.

187b A section (67 x 50 15mm) of a flat base and wall; 120 in diameter at base; 135 higher up – a flared profile with a slight foot. The fabric has a great deal of medium grat in variable stones. The inner surface is smooth but the outer one is eroded with angular grits protruding. The colour is pink/beige throughout. 2 other sherds (50 x 40 x 13 and 37 x 22 x 13mm) are likely to be from the same pot.

187c A section (59 x 30 x 12mm) of a flat base and wall which might be from 187b but the inner surface is smoother and the wall is thinner. Similar plentiful grit medium-small, rhyolite of different colours. 1 bodysherd (50 x 37 x 10mm) with a diameter of 300mm may belong, together with 5 smaller sherds (smallest 20 x 25 x 9mm).

187d 8 featureless body sherds with a darker inner surface. Pink/beige outer surface and grey interior, otherwise similar hard, well gritted fabric, the largest sherd is 70 x 70 x 10 with a possible diameter of 280mm.

187e 8 featureless body sherds with a grey interior and thinner than those in 187d, but similarly hard and girt-filled. Largest 40 x 25 x 9mm and smallest 20 x 25 x9mm.

There is a bag of small sherds and crumbs which would be useful for analysis.

Context 187 Sample 70 Find 85 Fill of large **Pit 186**.

4 rimsherds and 21 body sherds

187f 3 simple **upright rimsherds** from the same pot include a fragment with evidence for a **small perforation under the rim**.

The larger section joins (on an ancient break) to another sherd making a section 50 x 50 x 10-12mm which might suggest a diameter of 280-300mm. There are 2 very small fragments with the same sharply flattened rim top; one has a small perforation below the rim. The outer surface is pinky/beige, the inner is dark grey. There is 1 featureless sherd (40 x 30 x 11mm) in similar fabric and thickness, and 4 thinner (c.7mm) pieces. All are very hard, orangey brown / dark grey with plentiful small stone grits including rhyolite and other rocks, possibly mica. There are 2 small sherds and 5 scraps which are probably from this same pot.

187e **A second upright rim** (35 x 25 x8-10mm**)** is similar but thinner and redder with slightly less grit. There are some large (8mm) rhyolite grits. Another featureless

sherd (40 x 30 x 8mm), and 2 smaller ones and 2 fragments may belong to this pot. This rim is very similar to the rims from context 115.

In addition there are 3 featureless pieces of darker red fabric, 6 pieces with a yellower outer surface and pale grey interior, and 2 thick pinky/ beige pieces which are very similar to the bases from the main excavation of this pit.

Finds from pits/postholes outside the Ring Ditch

Post holes 104, 112, 116 might be part of the house.

Context 103 Fill of small pit/Posthole 104

103 1 featureless sherd (30 x35 x 8mm). Hard red fabric with much medium to large stone grit (rhyolite) similar to 169b.

Context 105 Sample 36 Find 50 from **Pit 106** from just outside the Ring Ditch, but within putative house .

4 small featureless sherds of hard beige pottery 8-10mm thick with mainly small - medium stone grits. 2 sherds join to make a segment 52 x 35 x 10mm with a diameter of 140mm. The other 2 are smaller 15x 15 and 21x 15mm.

Context 111 Fill of Posthole 112

111* 1 flat **base sherd** (40 x 25 x 11-15mm) in pink/beige hard fabric with large stone grits + 1 crumb

Context 115 Fill of Posthole 116

115* 2 **upright rimsherds** from the same pot + 1 featureless sherd.

The rims are in a hard light-brown fabric with a black core and a lumpy outer surface with large but relatively infrequent stone grits. This rim is rather carelessly made, as is 187e.

The wall sherd (30 x 30 x 8mm) is in a rather redder fabric with more rounded rhyolite grits, than the rims.

Context 238 Find 116 This is from a ‘tree throw ‘ Feature 240 in Field 9a (not on plan)

A single wall sherd (40 x 38 x 10mm) in a hard red/black fabric very similar to the other MBA pottery.

Field 9

Field 9 contains a group of 9 pits or postholes, six of them quite close together, the other three more widely scattered. Four contain pottery. Only Pit 170 has a significant amount.

Context 147 Sample 52 Find 60 from fill of **Posthole 148.**
1 thin dark scrap (18 x 14 x7mm) of a possible simple rim, similar to those in Context 115.
2 sherds of dense gritty red pottery with very large rhyolite grits, more rounded than most.

Context 149 Sample 53 Find 62 from **Pit 150**
2 wall sherds (the larger 40 x 27 x 8mm) from the same pot, 8-10mm thick in dense pale grey fabric with small and medium rhyolite grits, relatively smooth surfaces. This is an unusual colour and might be due to waterlogging.

Context 153 Sample 55 Find 67 Fill of **Pit 154**
5 pieces of iron-stained concretion or possibly burnt pottery. Pit 154 is cut by Pit 150.

Context 169 Fill of small **Pit 170**

169* Some 25 sherds, fragments and crumbs probably from 4 different pots, all with broadly similar fabric, which is common throughout the assemblage. One is a small cup, the others are all large jars. The sherds are relatively large but there are not many useful joins.

169a is represented only by 2 joining sherds (40 x 25 x 8 and 30 x 23 x 8mm) which form a segment of base 50mm long with a diameter of 80mm. This size and the thinness of the base (9mm) and wall (8mm) suggest an individual eating bowl. It is made in a deep red clay, as hard the large jars, but with less angular grit.

169b This larger pot is represented by a rimsherd, 2 base sherds and two large body sherds. Unfortunately none of these join to make a full profile but the upright rim and the straight wall from the base suggest a simple, cylinder–like jar.

The upright rim (63 x 50 x 10mm) is sharply cut to a flat top with a likely diameter of 150mm. It is very slightly incurved.

The 2 pieces of base vary in thickness (45 x 22 x 14 mm base thickness and 35 x 24 x 11mm base thickness) but both show an upright wall and are very similar in fabric, a red lumpy clay with a lot of medium-large angular grits. The base has a diameter of about 140mm.

Both body sherds (70 x 84 x10mm and 70 x 40 x 10mm) have diameter s of 140mm. There is a smaller sherd (40 x0 30 x 8mm) which is likely to belong to this jar.

The exterior colour is a pinky beige, the inside is more grey; it is well fired but the surfaces are poorly finished, very lumpy with large (9mm) stone grits protruding.

169c is made in a very similar hard, pinky beige fabric with a great deal of large-medium angular stone grits, including lots of rhyolite visible on the outer surface, though the inner is smoother. The distinction from 169b is the diameter which must be about 340mm across. Two large featureless sherds (70 x 50 x 9mm and 70 x 42 c 9mm) belong.

169d There are 3 body sherds (all in the region of 55 x 40 x 8-12mm) of this pot which is probably about 300mm in diameter. The main distinction is a paler beige outer surface and the use of more rounded grits of medium size, not very evenly distributed in the clay.

Unstratified sherds from Field 9/9a

12 sherds + frags of which 6 are all from the base of a large jar. 2 large pieces of base and 4 smaller ones join to make a section 170 x 50 x 10-15mm with a wall height of 50mm. The diameter of is 220mm and the jar was straight-sided. The fabric is a pinky beige, inside and out with a grey core. The inner surface is quite smooth but the outer one is very rough, with masses of angular stone grit protruding, perhaps due to erosion of the surface because it seems to be a little less hard-fired than most of the others, though the colour and gritting are similar. There are 2 other featureless sherds of this red fabric.

6 pieces of a different harder beige /grey fabric similar to other sherds from field 9a, Though it is not possible to ascribe these unstratified sherds to any particular pot, they are clearly part of the Middle/Late Bronze Age assemblage.

Comment on the Later Bronze Age pottery

This collection is undoubtedly the largest and most important assemblage of later Bronze Age pottery in Anglesey and probably in north Wales. It is important not only because of the amount of material – some 15 separate pots -- but because it comes from good structural features which confirm that people were settled here in a substantial wooden round house and that they had probably been there for some time, since the house overlies a silted ditch. Moreover a radiocarbon date of 1129-974 cal. BC has come from Pit 163, a pit cut by one of the postholes of the house. This stratigraphy raises the question of whether the pottery from the ditch fill differs from the sherds from the postholes of the house and the various pits. The pottery from the ditch is certainly a very uniform group and there is at least one link between the material from different cuts, but I do not judge that one can see a significant difference between this group and the smaller, more varied groups of sherds from the postholes and pits, so that the separation in time cannot be long.

The style of pottery is rather undistinctive and so it is good to have a radiocarbon date, even if it is rather broad. The pottery is predominantly a very hard-fired pinky/beige fabric containing a very large amount of stone grit in which a 'black and white' rhyolite is very prominent. The pots are competently fired but carelessly made in that surfaces have seldom been smoothed on the outside, have a lot of protruding grit and the circuit of the rim is often distorted and clumsily formed. One feature which perhaps goes against this trend is that the rims of three pots (Contexts 121, 187a, 169b) have been crisply sliced to a sharp edge before drying. The pot from Context 121 is the only one which shows any decoration – a ring of deep fingernail impressions 30mm below the out-turned rim. This out-turned rim is itself rare, the others are mainly simple upright rims with no elaboration. Cordons might be expected on some of these jars but, although there are several quite large body sherds, none show any hint of a cordon or shoulder. The predominant shape, therefore, is a simple jar, four of them barrel-shaped, three slightly flared and a very large one (Context 230) with a more rounded body.

Later Bronze Age Pottery from North Wales

In Anglesey there is Middle – Late Bronze Age material from Capel Eithin (Smith and White 1999), from Parc Cybi, (Kenney *forthcoming*), and from recent excavations at Newborough (GAT G2530). More widely in North Wales there is material from Llandegai (Lynch and Musson 2001), Bush Farm, Felinheli (Longley *et al* 1998), Rhuddlan (Quinnell and Blockley 1994) and Castell Odo on the Lleyn (Alcock 1960); and in Mid Wales there are important dated and stratified assemblages from the Breiddin Hillfort (Musson 1991) and a house site at Glanfeinion (Britnell *et al* 1997).

All are characterised by minimal decoration and simple shapes (mostly tall jars), the use of heavily stone-gritted fabric, often with rough surfaces and quite frequently with perforations below the undistinctive rims. In Anglesey the use of a distinctive 'black and white' rhyolite is common, especially common at EV9. The origin of this material should be sought through petrological analysis.

The bowl from context 121 with everted rim and fingernail marks below it, is the most distinctive of the pots and it is very similar to Vessel 7 from the Middle Bronze Age round house at Glanfeinion, near Llandinam, Powys (Britnell *et al* 1997, 188-93). This Powys site also provides good parallels for a number of the structural features in Field 9a as well as the pottery, though the shallow ditch, 12m across, which surrounds the concentric ring of postholes within it is the contemporary drip channel from the roof; whereas at Field 9a there is clearly some disjunction. The quantity and range of pottery from the two sites is comparable; there are 11 vessels from Glanfeinion and they are rather better preserved, in that about a third of the height is present in 4 instances. There are also some elements of very limited decoration. The hard firing and use of various sizes of angular stone grit is a feature of both assemblages.

The upright rims at EV9 can be compared to that on Vessel 1 at Glanfeinion but it perhaps surprising that there is only one internally bevelled rim at EV9 (from the ditch fill in Cutting 211) since this is very common at Glanfeinion and Rhuddlan, and also seen at the recently excavated site at Newborough. The rarity of perforations under the rim is another contrast with other sites such as Rhuddlan, Llandegai and Capel Eithin, but the small size of most rimsherds may explain this.

The tall barrel shape of most of the jars at Glanfeinion is comparable to those at EV9 and it is interesting that Vessel 9 has a rounded body very like that from the EV 9 ditch fill (230). Breiddin has a number of more rounded bowls (Musson 1991, 120, fig 52) such as the small one from Pit 106 and perhaps some of the other smaller rims. This hillfort site also provides a parallel in size, if not shape, for the very small cup, 169a (Musson 1991 Fig 52.64). Such small cups or bowls are rare at this period when tableware may have been made from wood. The very small collection from Parc Cybi confirms that not all Later Bronze Age pottery is coarse and rough-surfaced, but it is all very utilitarian and gives the impression that social hierarchies and identities were no longer expressed through pottery. This is the period when metal vessels first appear in richer households, alongside some finely made wooden containers.

Pottery from Fields 1 and 2 near Cromlech Farm, Llanfechell.

Excavated by RSK 2017 for National Grid.

Field 1 Feature 2

1 small sherd (20 x 20 x 5mm) and 3 crumbs of dense brown clay without visible grit. Possibly 2 lines of indentations on the surface 7mm apart.

Field 1 Feature 5

1 sherd (25 x 20 x 15mm) with a clear line of twisted cord above a rounded cordon, or shoulder or the bottom of a collar on a Collared Urn. The fabric is dark, very hard and profusely gritted with angular stone including small flecks of mica.

1 sherd (30 x 25 x 11mm) with a similar rounded profile. There is a hint of a line above the curve. The fabric is the same as the first sherd.

1 featureless sherd (40 x 30 x 7mm), slightly curved with a hard brown surface.

Context 003 Sample 2 Find 1 (exact location unknown).

1 rimsherd (30 x 26 x 6-10mm). A simple rounded, probably upright rim in a very hard smoothly finished brown fabric with angular stone grits and hints of mica. This is too well-made to be Later Bronze Age and might the top of a Late Collared Urn rim.

Context 007 Sample 4 Find 2 (exact location unknown).

1 sherd (31 x 20 x 15mm) with hints of 2 hyphenated lines 7mm apart. The fabric is very hard with a lot of angular stone grits, a black inner surface (sooted) and red outer. This fabric is broadly similar to the pieces from Feature 5, but unlike that of the sherd from Feature 2. There are 2 scraps in this same fabric, 1 certainly the same, the other is thinner.

2 scraps of featureless hard red/black pottery 6mm thick which could be compared to the MBA material from EV9 Fields 9/9a but is not really datable and could equally be Early Bronze Age.

Comment

The sherds from Feature 5 and the rimsherd from Context 3 could all be identified as Collared Urns of Early Bronze Age date and a radiocarbon date from Context 003 confirms this identification, giving a date of 1908 – 1750 cal. BC for the rim.

Fields 1 & 2 are at SH 36004 92074. This location is close to the site of the lost megalithic tomb (SH 3604 9200) near Cromlech Farm where a small excavation was conducted in 2006 by George Smith of Gwynedd Archaeological Trust (Smith 2013). This examined the rock outcrop on which the tomb had stood and found a few sherds of Beaker pottery. Typologically these looked early in the sequence of Beakers but associated C14 dates (2300-2130 cal BC and 2090-2050 cal BC) seem somewhat too late. Equally such dates would be rather early for the Urn pottery found in Field 1, which has a more appropriate but still rather early date (above) if we are talking about a Late Collared Urn. Nonetheless both the artefacts and the dates serve to confirm what the presence of a megalithic tomb, standing stones and barrows and hilltop enclosures, already tells us: that the area around Llanfechell was a focus for settlement from the early Neolithic to the Iron Age; whether continuous or sporadic is more difficult to say.

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21 APPENDIX 10

21.1 Reproduction of George Smith Report

LITHIC ASSESSMENT G2633 WYLFA EV9 G. H. Smith

Objects of other stone

There are 10 objects of which two are from Field 14 and eight from Field 9A (Table 1).

One object from Field 14 is a burnt pebble fragment and this could suggest that there was some burnt mound type/cooking activity associated with the other evidence of Late Neolithic settlement activity in that area. The other object is of considerable interest. It is a complete but unfinished mace-head made from a small cobble of medium grained igneous stone carefully pecked to a slightly cuboid, egg-shape. There are deeply pecked concavities on two opposing sides and it must be assumed that this represents an unfinished shaft-hole perforation. Simple pebble mace-heads occur in the Later Mesolithic but more refined and often decorative mace-heads like this are of Later Neolithic date and seem to have been non-functional, special items (Roe, 1979). Although not found in a stratified context it was found in the general area of Later Neolithic activity that probably represents settlement and deserves special attention.

The eight objects from Field 9A are mainly domestic in nature and so correspond with other excavated evidence of settlement. They comprise a possible loom-weight fragment, a spindle whorl, a hammer-stone, three polishing stones and a possible rubbing stone. There were also three burnt stone fragments that might belong to burnt mound type cooking activities although such pieces are usually found in considerable quantities and in association with particular types of features. Most of these pieces are made from locally available fluvio-glacial cobbles except for the spindle whorl, which is made from stone probably collected from an *in situ* source as this rock type occurs on Anglesey. These are not in themselves datable types of objects but fit well with the Later Bronze Age date assigned to the settlement features there.

Table 1 Summary of stone objects

Field	General type	Specific type	Material	Record find no	Context	Comment	Draw
14	Burnt pebble frag		coarse igneous	22	69		No
14	Mace head		medium igneous	184	unstratified		Yes
9A	Burnt pebble?		coarse igneous	183	185		No
9A	Burnt pebble frag		dolerite?	180	184		No
9A	Perforated stone	Loom-weight?	sandstone	176	unstratified	Half of a sub-angular natural cobble with a wide hour-glass perforation	Yes
9A	Spindle whorl		micaceous schist	174	185	A thin plaque nibbled to an approximate circle and with a nibbled, slightly off-centre perforation	Yes
9A	Utilised pebble	Hammer stone	fine sandstone	75	173	photo?	No
9A	Utilised pebble	Polisher	Mudstone	182	173	photo?	No
9A	Utilised pebble	Polisher?	flint?	169	unstratified	photo?	No
9A	Utilised pebble?	Rubbing stone?	Sandstone	181	173	A cobble with a few approximate flat facets, most likely to be just natural	No

Summary assessment

The mace-head is a rare and special item and, although not a stratified find, deserves publication in its own right along with identification of the rock type. If the details of the settlement in Field 9A are published then two other objects (see Table 1) deserve illustration by drawing or photography but do not require further study.

Reference

Roe, F. 1979. Typology of stone implements with shaftholes. In T.H. McK. Clough & W.A. Cummins (eds), *Stone axe studies*, CBA Res. Rep. 23, London, 23-48.

Flaked flint and chert

The objects derived from two sources - firstly hand collected during excavation and secondly from floatation sieving. The majority came from the latter and, because of the method used, included a number of smaller objects, under 10mm max length, most of which are uninformative. However, the method does mean that the micro sized pieces of Mesolithic activity do not get missed. There were also a number of natural gravel pieces, mainly of flint.

Objects came from five fields, 1, 5, 9, 9A and 14 but only in any significant quantity in Fields 9A and 14. The raw material used was flint and chert. Flint is available locally as pebbles from the glacial drift, to be found eroding out of the cliffs or on beaches. The chert is black in colour and again found from cliff exposures or on beaches, generally in larger pieces than flint. It varies widely in quality from fine, flint-like, to very coarse. Such chert is also available as *in situ* layers within the limestone of east Anglesey (Greenly 1919) but there is no sign that any of that material was used here. The variation in proportions used of flint and chert is possibly meaningful, culturally and it can be seen to be variable, notably between Fields 9A and 14 (Table 2).

Table 2 Proportions of flint and black chert by field

Field	Flint	Black chert
1	-	6
5	1	3
9	-	2
9A	32	31
14	52	8

Field 1

These were all waste pieces, none informative as to date or function.

Field 5

These comprise three irregular fragments of chert and one piece of burnt flint pebble, none informative as to date or function.

Field 9

Both pieces are waste fragments, not informative as to date or function.

Table 3 Summary of flint and chert objects from Field 9A

	burnt piece	*core frag*	*chip*	*core trimming*	*flake*	*flake frag*	*irregular frag*	*natural piece*	*retouched piece*	*spilt pebble frag*
chert	-	3	3	1	10	6	5	2	1	-
flint	3	-	1	-	2	1	1	19	2	2

Field 9A

This is quite a small assemblage of flaked material considering the amount of settlement activity and may illustrate how flaked stone tools were declining in use. Notable is the greater use of chert material, in contrast to the earlier assemblage from Field 14, below. This probably relates to changes in the usage patterns with a decline in need for flaked stone for finer types of tool. However, two of the three retouched pieces were of probable Mesolithic date, comprising a narrow blade microlith and a possible narrow blade microlith fragment. The other object is only a possible damaged small convex scraper. It may be, then, that at least some of the objects do not belong with the Later Bronze Age settlement found in this field but with an earlier phase of activity. Closer study of the contexts in which they were found may help to explain this. The narrow blade microlith RF 120 is worth illustrating if needed.

Field 14

Table 4 Summary of flint and chert objects from Field 14

	burnt piece	*core frag*	*chip*	*core trimming*	*flake*	*flake frag*	*irregular frag*	*natural piece*	*retouched piece?*	*utilised flake?*
chert	1	3	-	-	1	1	1	1	-	-
flint		5	1	4	18	9	4	2	5	1

The predominant use of flint is notable here. Also of note is the presence of four scalar waste pieces, using a technique usually used where the available raw material is only small pebbles, typical of early Neolithic assemblages, for instance at Trefignath, near Holyhead (Healy 1987), before better, imported material became available. At the same time and in contrast, at least 20 of the pieces are made from a fine quality, dark flint. This is unlike any of the local pebble flint and a few pieces have fresh, unrolled white cortex so this material is

likely to have been an import from some considerable distance. There is evidence from the Late Neolithic assemblage at Bryn Cefni, Bangor of imported flint, although that was different in colour to that here, suggesting a different source (Kenney 2008). A cache of large imported flint blades has also been found in Snowdonia, showing that such trade or transport was taking place (Davies 1939).

The retouched pieces comprise two serrated blades RF 7 and RF 36.1 (one with polish/gloss), a serrated blade fragment RF 36.2, a convex scraper RF 19.1 and a cutting tool RF 18.2 all deserve illustration if publication takes place. These all suggest a complex of domestic activities, possible wide ranging contacts and some status taking into account the stone mace-head also found here.

Summary assessment

The objects from most of the areas do not produce much useful information and do not need further study. The exception is the assemblage from Field 14, which although small, adds to understanding of the probable Later Neolithic settlement activity there, of a period which is not yet well understood in Anglesey. It is hoped that these pieces and their related objects and contexts can be properly studied and published.

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22 APPENDIX 11

22.1 Reproduction of SUERC Radiocarbon Dating Certificates

Scottish Universities Environmental Research Centre
Rankine Avenue, Scottish Enterprise Technology Park, East Kilbride, Glasgow G75 0QF, Scotland, UK
Director: Professor F M Stuart Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

09 March 2020

Laboratory Code	SUERC-92506 (GU55266)
Submitter	Ciara Clarke AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	Wylfa EV9
Context Reference	5
Sample Reference	Sample 3
Material	Charred nutshell : Corylus avellana
$\delta^{13}C$ relative to VPDB	-24.2 ‰
Radiocarbon Age BP	3509 ± 27

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

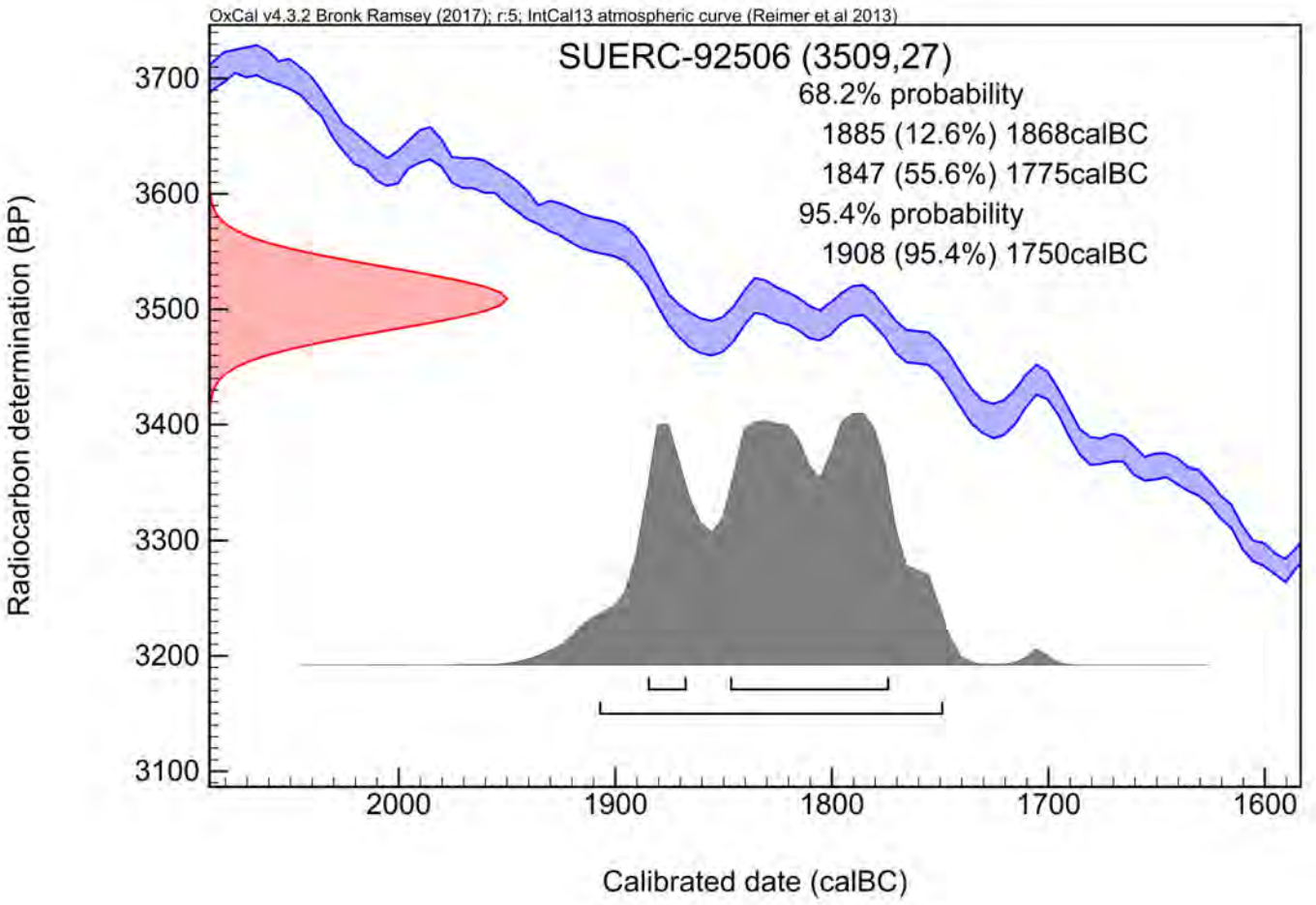
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

Checked and signed off by :



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*

† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

09 March 2020

Laboratory Code	SUERC-92507 (GU55267)
Submitter	Ciara Clarke AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	Wylfa EV9
Context Reference	51
Sample Reference	Sample 17
Material	Charred nutshell : Corylus avellana
$\delta^{13}C$ relative to VPDB	-22.6 ‰
Radiocarbon Age BP	4394 ± 27

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

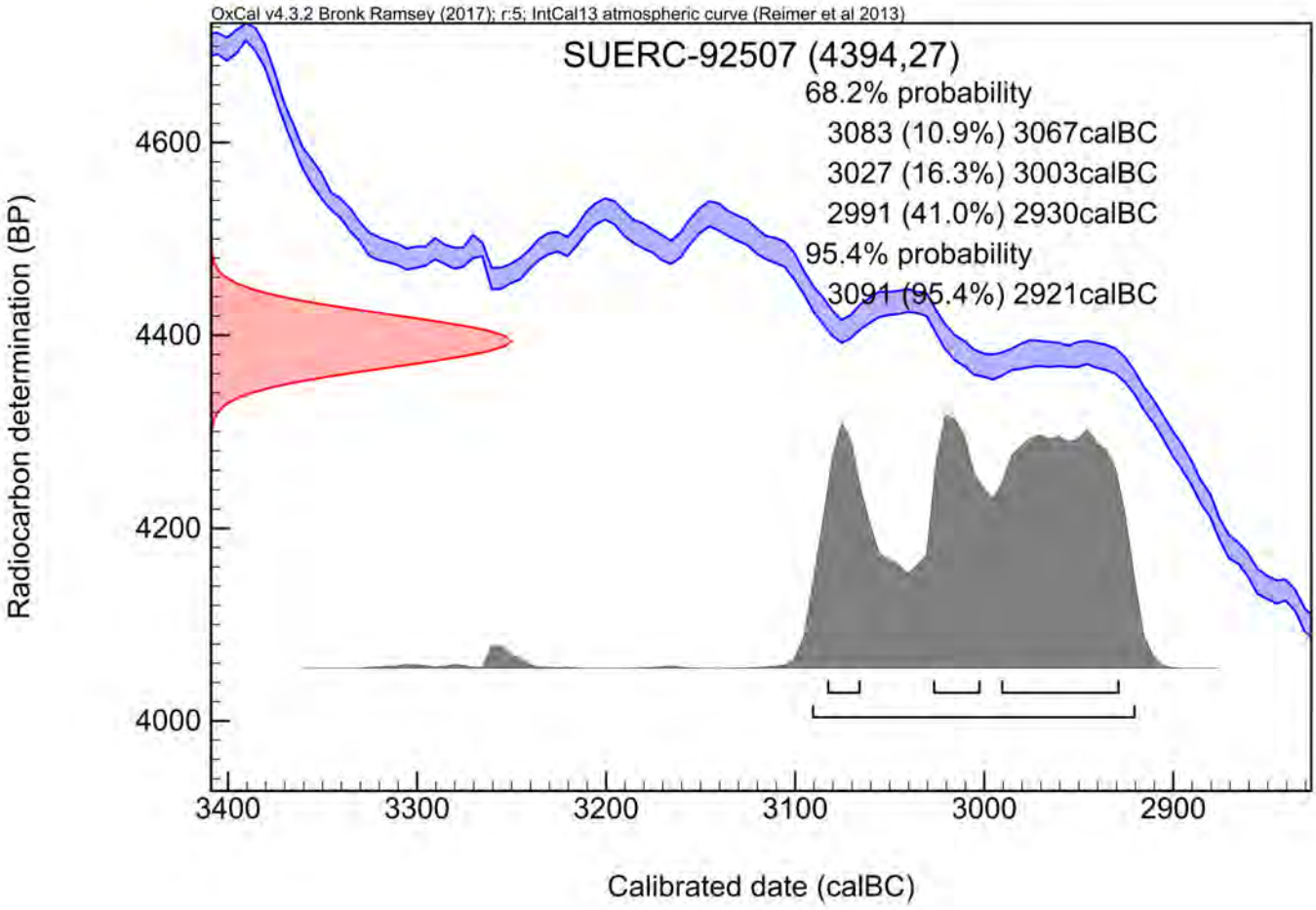
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

Checked and signed off by :



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*

† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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Director: Professor F M Stuart Tel: +44 (0)1355 223332 Fax: +44 (0)1355 229898 www.glasgow.ac.uk/suerc

RADIOCARBON DATING CERTIFICATE

09 March 2020

Laboratory Code	SUERC-92508 (GU55268)
Submitter	Ciara Clarke AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	Wylfa EV9
Context Reference	71
Sample Reference	Sample 19
Material	Charred nutshell : Corylus avellana
$\delta^{13}C$ relative to VPDB	-24.4 ‰
Radiocarbon Age BP	4449 ± 27

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

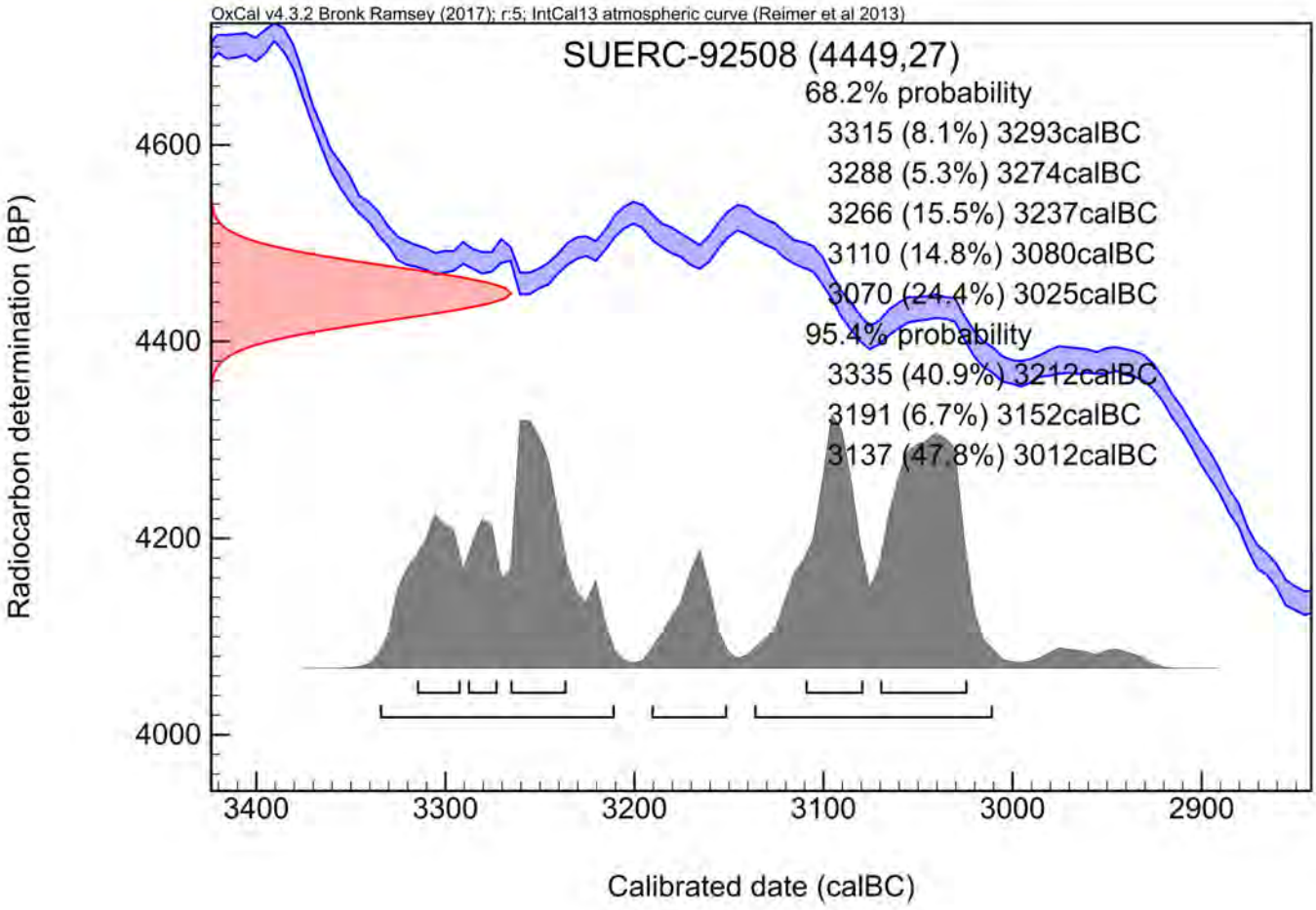
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

Checked and signed off by :



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

Please contact the laboratory if you wish to discuss this further.

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† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

09 March 2020

Laboratory Code	SUERC-92509 (GU55269)
Submitter	Ciara Clarke AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	Wylfa EV9
Context Reference	164
Sample Reference	Sample 60
Material	Charred cereal grain : Cereal indet
$\delta^{13}C$ relative to VPDB	-23.3 ‰
Radiocarbon Age BP	2880 ± 27

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

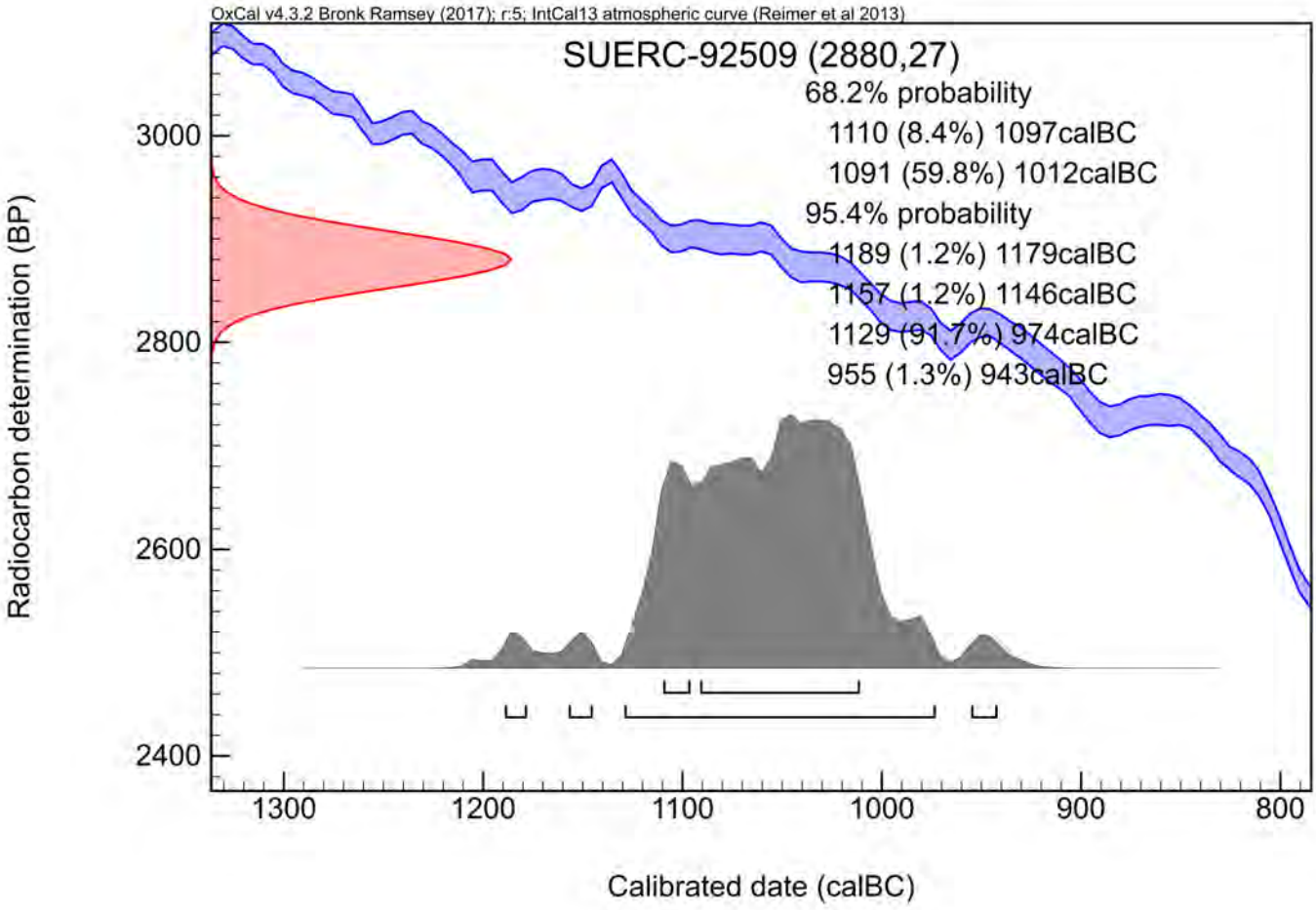
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

Checked and signed off by :



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

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* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*

† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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RADIOCARBON DATING CERTIFICATE

09 March 2020

Laboratory Code	SUERC-92513 (GU55270)
Submitter	Ciara Clarke AOC Archaeology Group Edgefield Road Industrial Estate Loanhead Midlothian EH20 9SY
Site Reference	Wylfa EV9
Context Reference	195
Sample Reference	Sample 75
Material	Charcoal : Corylus avellana
$\delta^{13}C$ relative to VPDB	-24.9 ‰
Radiocarbon Age BP	2841 ± 27

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD) and requires calibration to the calendar timescale. The error, expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

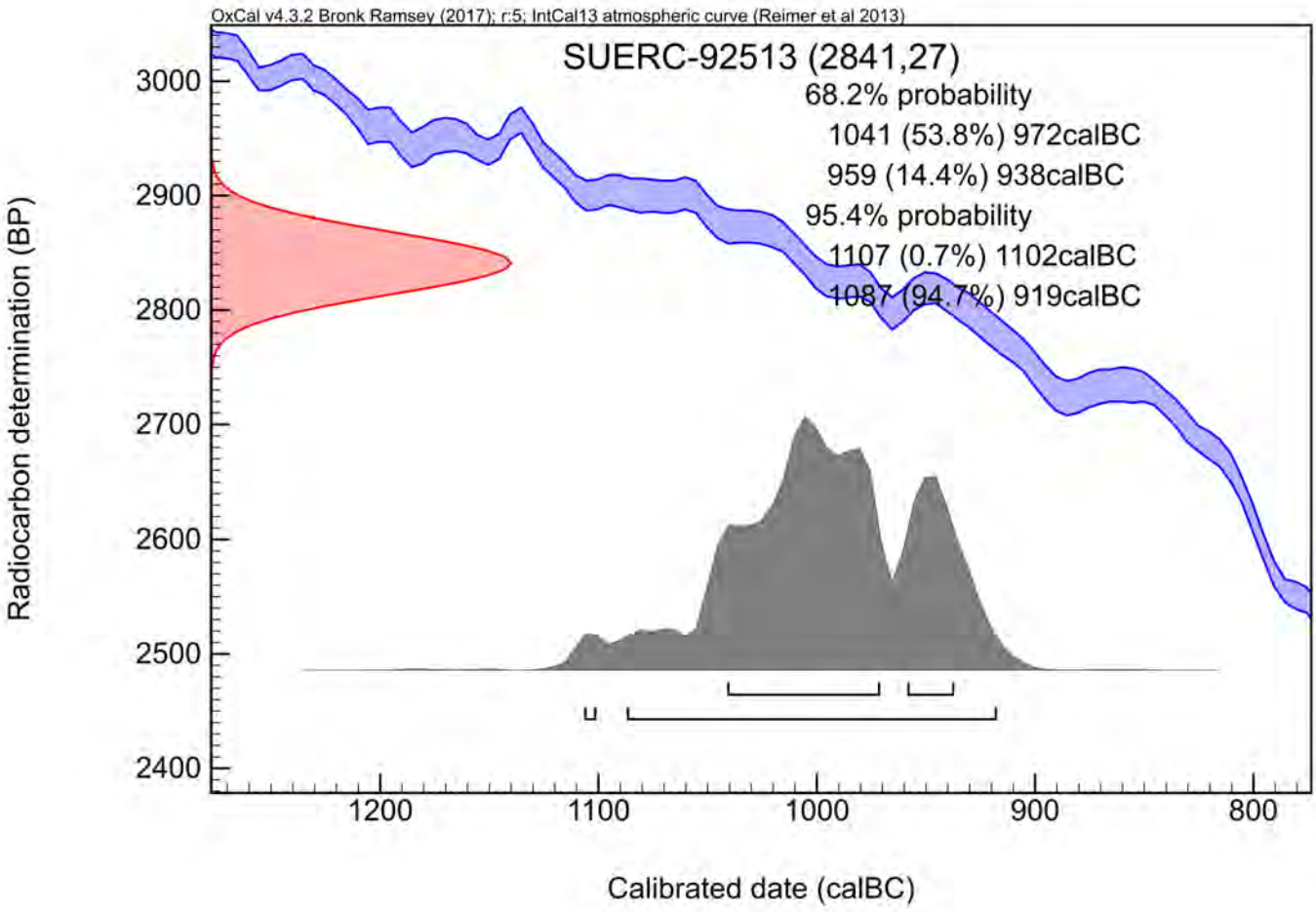
Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Laboratory and should be quoted as such in any reports within the scientific literature. The laboratory GU coding should also be given in parentheses after the SUERC code.

Detailed descriptions of the methods employed by the SUERC Radiocarbon Laboratory can be found in Dunbar et al. (2016) *Radiocarbon 58(1) pp.9-23.*

For any queries relating to this certificate, the laboratory can be contacted at suerc-c14lab@glasgow.ac.uk.

Conventional age and calibration age ranges calculated by :

Checked and signed off by :



The radiocarbon age given overleaf is calibrated to the calendar timescale using the Oxford Radiocarbon Accelerator Unit calibration program OxCal 4.*

The above date ranges have been calibrated using the IntCal13 atmospheric calibration curve†

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* Bronk Ramsey (2009) *Radiocarbon 51(1) pp.337-60*

† Reimer et al. (2013) *Radiocarbon 55(4) pp.1869-87*

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