Centre for Archaeological Fieldwork

School of Archaeology and Palaeoecology

Queen's University Belfast



Data Structure Report: No. 38.

Excavations at Ballyarnet, Co. Londonderry **AE/04/64**

On behalf of



Data Structure Report: Ballyarnet, County Londonderry

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(Grid Reference J54745384)

(CAF DSR 038)

(Licence No. AE/04/64)

(SMR No. LDY 14A:026)

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1. Summary

1.1 The site of the Ballyarnet investigations lies on the edge of Ballyarnet Lake, 4 km to the northwest of Derry City. The area where the excavations took place lay on the margin of the existing fens around the lake, where a drainage ditch had exposed some archaeological materials, recorded in the SMR as LDY14A:026. The ground to the north-west of the site sloped up to Racecourse Road, 200 m away and some 6 m above the level of the archaeological deposits.

- 1.2 Building on work previously undertaken at the site in July and August 2002, the 2004 excavations addressed the on-going risk to the waterlogged deposits that is posed by drainage on the site. Trenches from 2002 were incorporated into two larger trenches and the area that appears to be immediately under threat was excavated. Additional trenches were opened across the mound to the north of the lake settlement and the palisade.
- 1.3 The 2004 investigations clarified the sequence identified in 2002 and identified the mound to the north as modern. The lake settlement, dated to 1742-1524 BC, survived as a palisade enclosing a surface of brushwood and roundwood. The total area enclosed by the palisade could not be identified from the trenches opened in 2002 and 2004 although it now appears to be larger than 20 m in diameter. It is possible that reclamation to the east has buried, or removed, associated deposits in this location. A c. 6 m diameter structure (Structure 1) was present as a setting of posts and a central hearth. This was sealed by a substantial deposit of burnt stone and charcoal.
- 1.4 Finds recovered during the 2002 and 2004 excavations now include sherds of up to twenty-three Cordoned Urns and a number of undecorated vessels, two tanged projectile points, a fragment of a quoit-shaped faience bead, metalworking slags, chipped flint and quartz including some scrapers and other modified tools, a possible fishing weight or loom weight, quern fragments, hammerstones, rubbing/abraiding stones, an anvil stone and other stone tools. Some tiny fragments of bone were recovered from the large hearth in Structure 1.
- 1.5 The evidence to date suggests that a waterlogged occupation site, of some significance and dated to the Middle Bronze Age, is present at SMR LDY14A:026. The trench across the mound to the north suggested that it was constructed in the eighteenth century or later and is unrelated to the prehistoric occupation at the site.
- 1.6 The survey and excavation at the site had identified that ongoing drainage at the site poses a threat of degradation to any waterlogged archaeological materials present. Any future management strategies for the site should take this factor into consideration.

1.7 The excavations were directed by John Ó Néill of the Centre for Archaeological Fieldwork, School of Archaeology and Palaeoecology, Queen's University Belfast under licence number (AE/04/64) and were staffed by volunteers from the United States and the University of Exeter. Partial funding was supplied by Environment and Heritage Service: Built Heritage. It is recommended that a programme of post-excavation analysis is conducted in order to resolve further issues regarding the nature of the occupation site and to meaningfully publish both seasons of excavation and bring the project to completion.

2. Introduction

2.1 General

2.1.1 The following report details the preliminary results of the archaeological excavation at Ballyarnet, undertaken by the Centre for Archaeological Fieldwork, School of Archaeology and Palaeoecology at Queen's University Belfast in conjunction with Dr. Bruce Bradley of the University of Exeter in April and May 2004. This programme of work was undertaken on behalf of the Environment and Heritage Service, DOE NI, who funded the survey and excavations.

2.2 Background

- 2.2.1 Ballyarnet Lake lies 4 5 km to the north-west of Derry City, around 1.5 km from the shores of Lough Foyle (see Figure 1). Now surrounded by farmlands, a golf course and residential developments, the lake and its surrounding fens have been retained by the local council as a public park. The fenlands around the lake include some stands of willow, alder and hazel and substantial reed lawns largely obscuring the remaining area of open water in the centre of the lake basin. The fens are fringed by meadows, with the land rising quite steeply away from the basin to the north and south. Maps of the area indicate streams feeding into the lake from the south-west and exiting to the north east, although the modern developed landscape prevented identification of the streams. The extent of the surface water of the lake has shrank since that indicated by the first edition OS map (see Figure 2), due to the recent drainage.
- 2.2.2 The site was first reported to EHS by Mr. Ian Leitch, a local amateur archaeologist and member of the Templemore Archaeological Field-Walkers Society. He had noted that deposits of peat, excavated as part of a drainage operation by the local council, contained quantities of clay, stone, burnt stone, charcoal and worked wood. At least one stone feature was noted on the ground surface, several metres from the drainage ditch. Closer examination produced a number of artefacts, and the site was duly referred to Environment and Heritage Service. A subsequent inspection by Environment and Heritage Service staff confirmed the initial findings and the site was entered on the Sites and Monuments Record as LDY14A:026.
- 2.2.3 A palaeoenvironmental study of samples taken from the lake settlement in 2002 has been completed (Plunkett and Whitehouse 2004) and further work, funded by the British Academy, is ongoing. The sample used in the study covered the period from the occupation of the site in around 1700-1500 BC back to 2880-2590 BC (Gill Plunkett, pers.com.). The pollen samples indicated that the area of the settlement was rarely, if ever, subjected to flooding and a gradual change from a closed, wooded landscape to a more open one in which farming activity is apparent. Samples that date to the period immediately pre-dating the occupation of

the site indicate that there was some activity in the century or so preceding the construction of the lake settlement. Preliminary investigation of the pollen and coleopteran samples suggest that the surface of the fen was becoming increasingly dry at the time the settlement was built.

- 2.3 Reason for Excavation and Research Objectives
- 2.3.1 The limited excavation in 2002 established the nature and date of the structure present at the site, and, identified the threat posed by the ongoing drainage of the fens around Ballyarnet Lake. To inform future management and protection strategies for the site further excavation of the exposed areas was undertaken in 2004 prior to further deterioration of the waterlogged deposits,.
- 2.4 Archiving
- 2.4.1 A copy of this report has been deposited with the Environment and Heritage Service, DOE NI. All site records and finds are temporarily archived within the School of Archaeology and Palaeoecology, Queen's University Belfast. Site records, including context sheets, plans and photographic archive, small finds and samples, as retained by the School of Archaeology and Palaeoecology, are listed in the Appendices at the end of this report.
- 2.5 Credits and Acknowledgements
- 2.5.1 The excavations were directed by John Ó Néill, under licence number AE/04/64, and Bruce Bradley and supervised by Ronan McHugh and Claire McGranaghan. The excavation team consisted of volunteers from the US (Georgine Booms, Duane Patton, Jill Patton, Kathryn Brainerd, Howard Brainerd, Betty Hoover, Doug Eldred, Margaret Grant) and students from the University of Exeter (Lynda Aiano, Shusei Katagiri, Mervyn Long, Suzanne Lilley, Richard O'Neill, Ann Oldroyd). Access to the site was permitted by Derry City Council, and facilitated by the local residents, particularly Mr. Pat Quigley.
- 2.5.2 The illustrations and images included in this report were produced by Ruth Logue, Ronan McHugh and John Ó Néill. Additional photographs were supplied by Doug Eldred. The aerial photograph (Plate 1) was acquired from the R.A.F. archives for Northern Ireland.

Greencastle Portstewart • Portrush Rathmullan • Buncrana Milford . Muff . County Limavady Ballyarnet . Eglinton Londonderry County Donegal Derry Dungiven 15km

Figure 1. General location map.

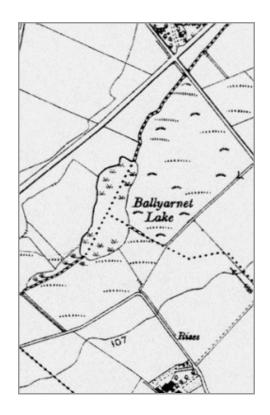


Figure 2: Ordnance Survey: County Londonderry, Sheet 14A, 6 inch series, 1936 (not reproduced to scale). Extent of Lake is that depicted on the 1st edition map (1830), with the convention for marsh indicating the extent of encroachment by 1936.

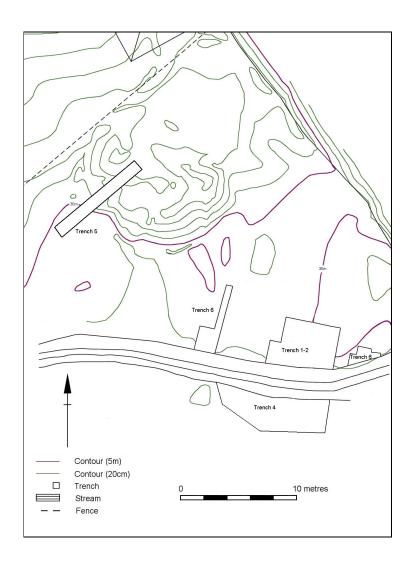


Figure 3. Plan showing the layout of the trenches from the 2004 excavation.

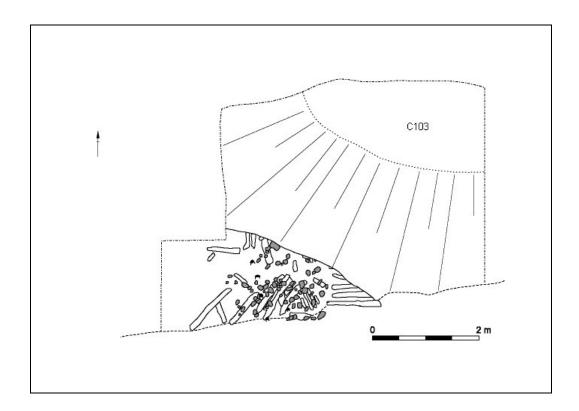


Figure 4. Plan showing the extent of the burnt material (C103) in Trench 1/2.

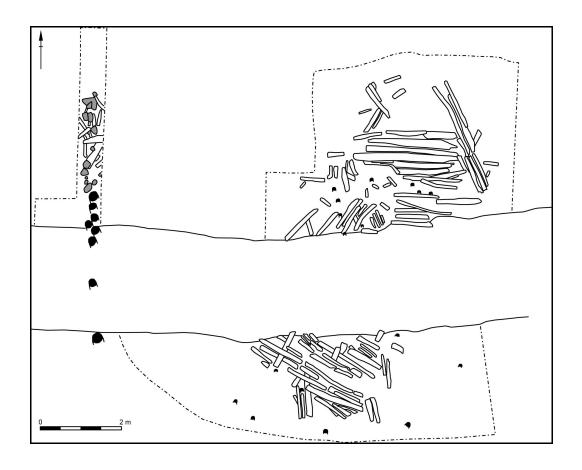


Figure 5. Plan showing the extent of the timber platform and the location of upright posts.

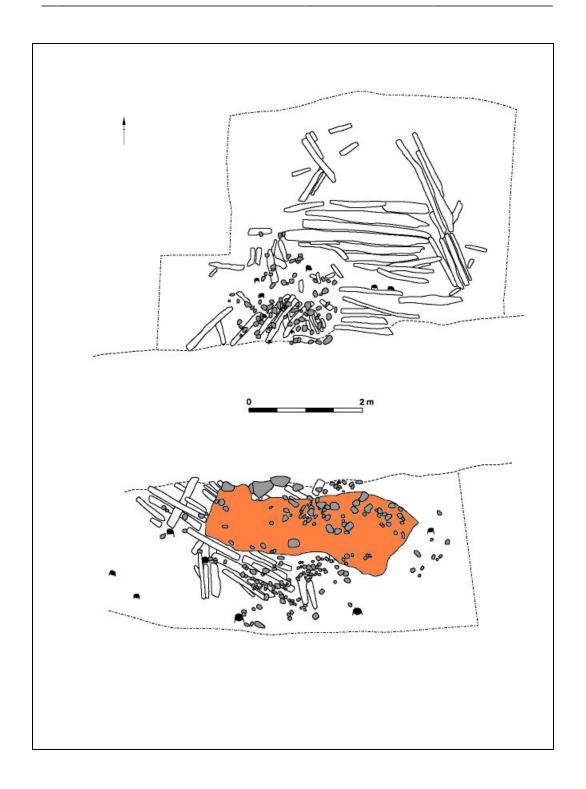
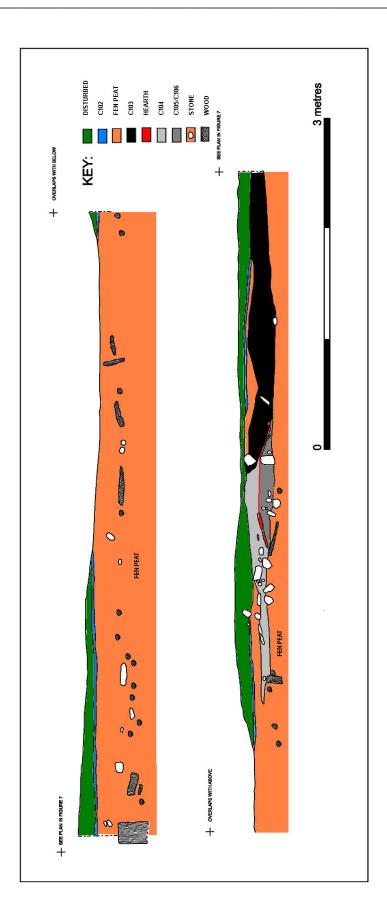


Figure 6. Plan showing the location of the stone deposits and hearth (orange).



Schematic section through the archaeological deposits showing the relationship of the various deposits. Figure 7.

3. Excavation

3.1 Methodology

- 3.1.1 The excavation was carried out by re-opening the trenches which were investigated in 2002. On that occasion, four separate trenches, labelled Trenches 1 to 4, were opened across the top of the deposits visible in the drainage ditch. The 2002 trenches measured 2 m by 2m, although there were slight variations in each, depending on the nature of the edge of the drainage ditch in which the archaeological deposits had been originally exposed.
- 3.1.2 In 2004, Trenches 1 and 2 were re-opened and the joined together, and are described below as Trench 1-2. Trench 3 was partially re-opened and extended to the north. Trench 4 was re-opened and extended. An additional trench, Trench 5, was opened across the mound to the north of the area investigated in 2002. Further investigation of the exposed deposits in the drainage ditch, to the east of Trench 1-2 was recorded as Trench 6. The trench layout is shown in Figure 3.
- 3.1.3 The excavations were undertaken by hand and the context record for the site was created using the standard context recording method. Individual features were photographed both prior to, and following, excavation and included in a series of overall plans (Scale 1:20) of the site which were prepared throughout the course of the excavation. Section drawings (Scale 1:20) were undertaken of relevant archaeological features (for details of site photography see Appendix Three and for field illustrations see Appendix Four). In addition to the photography and illustration, the principal site records consisted of context sheets augmented by separate registers of small finds (Appendix Five) and samples (Appendix Six). Following the completion of the site recording, the excavation trenches were manually backfilled.

3.2 Account of the excavations

- 3.2.1 It is intended that the Harris Matrices for the site (see Appendix Two) are referred to whilst reading the following accounts of the stratigraphic sequences of Trenches 1-2,3, 4, 5 and 6. Some of the superficial deposits recorded during the excavation are not discussed below but are listed in Appendix One.
- 3.3 Trench 1-2.
- 3.3.1 Trench 1 from the 2002 excavations was located on the northern side of the drain and originally measured 2 m by 2 m, with the southern limits conforming to the edge of the

drain, while Trench 2 was located 1 m to the east of Trench 1. Trench 2 had been laid out along the same baseline as Trench 1, with the northern limits parallel and at 2 m from the edge of the drainage ditch. In 2004, the two trenches were re-opened and the baulk between them removed. In the course of the excavation the trench was extended by 1 m to the north and a further extension measuring 2 m by 1 m was excavated to the west.

- 3.3.2 The deposits investigated in 2002 were identified as the upcast material from the drainage ditch which had been dug through the structure. On removal of the backfill from the 2002 excavations, the disturbed peat deposits were removed, and recorded as 101. This layer was up to 0.35 m deep. Finds from this deposit included recent finds such as brick, glass and cream wares, as well as prehistoric lithics and pottery. Some slag recovered at this level was similar to material found at lower levels and may also be prehistoric in date.
- 3.3.3 The thin gravel, sand and peat layer (102) was exposed by removing 101 and this deposit appeared to seal the *in situ* prehistoric deposits. This layer was present across the whole trench and was up to 0.10 m in depth. Finds from this deposit include finds of modern glass, slag and prehistoric pottery. Excavation of 102 exposed a substantial deposit of burnt material (103) and exposed areas of the stone deposit 104.
- 3.3.4 The deposit of burnt material (103) was present across an area measuring 5 m by 4 m and extended beyond the western, northern and eastern limits of the trench (see figure 4 and plate 1). The surface of this layer sloped towards the west and south, with the highest area being in the north-east where the deposit was up to 0.30 m deep. The deposit was composed of fire-effected sandstone in a charcoal-rich peaty soil. The sandstone formed some 10% of the deposit, however, this figure is deceptive as the relative proportion of stone was increasing towards the north-eastern corner of the trench. Washed out material from this deposit was present across the excavated deposits in Trench 4 and in Trench 1-2, where it overlay a deposit of stone (104) and a layer of wood (105).
- 3.3.5 Finds from 103 included a substantial quantity of sherds of Cordoned Urn, two tanged projectile points and a number of pieces of chipped and work stone, a fragment of a quoit-shaped faience bead, a stone weight, and, a number of hammerstones and other stone tools.
- 3.3.6 The stone deposit (104) was present at the southern end of Trench 1-2 and had been truncated by the excavation of the drainage ditch (see figure 6). The surviving area of

104 measured 2 m (east-west) by 1 m (north-south). The deposit of stone included unburnt sandstone pebbles up to 150 mm in length. While none of the stone in 104 showed signs of heat damage, the stone lay in a peaty soil that was heavily stained by charcoal. Finds from 104 included chipped stone and sherds of Cordoned Urn. In recording the section of the drain in 2002, 10 mm thick lenses of fired clay could be identified with this deposit, although they could not be recovered on excavation in 2004. When 104 was removed it was found to rest directly on a deposit of wood, recorded as 106, and 105, where the wood was very badly decayed.

- 3.3.7 The wooden platform (106) had been deposited directly onto fen peat (see figure 5 and plate 2). The state of preservation of this wood varied widely with some timbers retaining bark and some structure while others were completely rotted (these areas were recorded during the excavation as 105). There was no evidence to suggest that the platform had been pegged into place (although some vertical elements were recorded) and none of the horizontal wooden elements of the structure appeared to have been fixed *in situ*. It could be estimated that more than 90% of the wooden elements were roundwood (i.e. > 60 mm diameter), although this figure may not be representative as the brushwood may have rotted beyond the point where it could be identified. The horizontals were grouped by orientation, some aligned east-west, and some aligned north-south. In some places transverse elements were present beneath the surface layer of wood, although the platform was mainly constructed with a single layer.
- 3.3.8 A small number of finds were recovered from areas recorded as 105 during the excavation. No finds were recovered from under the wooden platforms or between the horizontal timbers. The finds recorded as coming from 105 were mostly present at elevations 0.10 m higher than the rest of the wooden platform.
- 3.4 Trench 3.
- 3.4.1 Trench 3 lay 5 m to the west of Trench 1-2, at the edge of the stratigraphic sequence visible in the drain face. In 2002, excavation of the upper, disturbed deposits and the adjoining area of the drainage ditch produced a number of upright posts, none of which were suitable for dendrochronological analysis. In 2004, a 2 m by 1 m area was re-opened adjoining the drainage ditch and an extension measuring 4 m by 1 m was opened along the alignment of the palisade.
- 3.4.2 The removal of the disturbed soils (301) and peat deposit (302) at the upper levels of Trench 3 exposed the top of two further palisade posts (see plate, numbered 315 and 316, while the tip of a third, 317, was recovered from the drainage ditch. Both

posts were retained for further analysis. A stone and wood deposit (311), similar to those noted in Trenches 1-2 and 4, was uncovered beneath the dist)urbed soils (301) across the rest of the trench. This deposit was made up of a rough dump of pieces of wood and stone. A number of finds of pottery, slag and flint were recovered from this deposit along with a possible anvil stone. Due to pressure of time, 311 was recorded, but not fully excavated. A penny of George III, dated 1780, was recovered from the surface peat deposit (302).

3.5 Trench 4.

- 3.5.1 Trench 4 from the 2002 excavations was located on the southern side of the drain, directly opposite the original Trench 1 (see figure 3). Originally, Trench 4 measured 2 m by 2 m, with the northern limits conforming to the edge of the drain. In 2004, the trench was re-opened and extended towards the south, east and west. The maximum dimensions of the trench were 9 m (east-west) by 3 m (north-south) although the increasingly wet ground to the south-west of the trench inhibited practical investigation of this area.
- 3.5.2 The deposits investigated in Trench 4 in 2002 were identified as the upcast material from the drainage ditch which had been dug through the structure. On removal of the backfill from the 2002 excavations, the disturbed peat deposits were removed, and recorded as 401. This layer was up to 0.15 m deep. Finds from this deposit included recent finds such as an iron nail, brick, glass and cream wares. Prehistoric lithics, stone tools and pottery were also recovered from 401. As with Trench 1, slag recovered at this level was similar to material found at lower levels and may be prehistoric in date.
- 3.5.3 The thin gravel, sand and peat layer (402) was exposed by removing 401 and this deposit appeared to overlie and seal the *in situ* prehistoric deposits. This layer was present across the whole trench and was up to 0.10 m in depth. Finds from this deposit include prehistoric pottery, lithics and stone tools, but also include a small number of finds of modern glass and pottery in the upper 30 mm of the deposit. Excavation of 402 exposed a substantial deposit of stones (404), a hearth (406 415) and exposed portions of an underlying wooden platform (417). In 2002, the deposit 402 had been subdivided into two layers, 402 and 403, based on the visibility of gravel and fine inclusions in section. On fuller excavation this division was considered superficial. Another deposit that was noted in section in 2002 was a burnt layer (405), analogous to 103 in Trench 1. This deposit could not be identified during excavation in 2004.

3.5.4 The stone deposit (404), which was exposed on the removal of 402, was present over an area measuring 3.6 m (east-west) by 2.2 m (north-south) and had been truncated by the drain to the north (see figure 6). The deposit consisted of a 0.15 m deep layer of loose stones, mainly sandstones between 50 and 150 mm in length. Finds from this deposit included flint, pottery and worked stone. The excavation of this stone deposit exposed a large hearth and underlying wooden platform.

3.5.5 An extensive deposit of fire-hardened clay and charcoal, first noted in the 2002 excavations, was fully exposed on removal of 404. This was recorded in section where the archaeological deposits were exposed in the drainage ditch in 2002, and partially investigated. At that time, the extent of the stone deposit, 404, was unknown, and it was thought that the feature may have functioned as some form of furnace. Full excavation in 2004 revealed that the deposit of fire-hardened clay extended across an area measuring some 3.2 m (east-west) by 1 m (north-south). In 2002, at least nine alternating layers of charcoal and fire-hardened clay were noted in section. In the course of excavation of this feature it was found that the layers of fire-hardened clay were actually discontinuous lenses of material. At the same time, charcoal deposits were noted as discontinuous lenses within layers of fire-hardened clay. As such, a second section was recorded through this feature where seven alternating deposits of fire-hardened clay and charcoal were noted. A flint scraper, a flint flake, a piece of pottery and occasionally traces of burnt bone were recovered from this feature. The basal levels of this feature were a deposit of fire-hardened clay resting directly on a layer of wood, 406, described below.

3.5.6 The wooden layer, 406 (see figure 5 and plate 4), was present across an area measuring roughly 4 m (east-west) by 2 m (north-south). The state of preservation of this wood varied with many timbers retaining bark and some structure while others were in a very poor condition. As with Trench 1-2, there was no evidence to suggest that the platform had been pegged into place and none of the horizontal wooden elements of the structure appeared to have been fixed in situ. It could be estimated that more than 90% of the wooden elements were roundwood (i.e. > 60 mm diameter), unlike Trench 1-2 this figure is probably representative as enough brushwood survived to be identified in situ. The horizontals were grouped by orientation, mostly aligned northwest-southeast, occasionally interspersed with some perpendicular (i.e northeast-southwest) elements. In some places, north-south horizontals were present, mainly at the edges of the group of roundwoods orientated northwest-southeast. The platform was mainly constructed with a single layer, with no clear evidence of a substructure. A number of vertical posts were recorded around the edges of the area of wood. These include a rough arc of posts, recorded as 429 (0.98 m in length), 431 (0.65 m in length), 432 (0.86 m in length) and 433 (0.68 m in

length). If extrapolated, these posts would form part of a 6 m diameter circle. Two posts would lie within this circle, 430 (1.65 m in length) and 434 (0.28 m in length). Two further posts were recorded to the southwest of this group, 435 (0.49 m in length) and 436 (0.57 m in length).

- 3.6 Trench 5.
- 3.6.1 Trench 5 was opened through the edges of the mound to the immediate north of the other trenches (see figure 3 and plate 5). The mound was recorded in 2002 and considered to be a possible crannóg. The trench through the mound suggested that it was formed of a series of dumped deposits of sterile gravel and other materials. A number of sherds of blackware were recovered from the surface of the peat directly beneath the mound, and a clay pipe stem and slag fragments were recovered from the sod overlying the mound (501).
- 3.7 Trench 6.
- 3.7.1 A small area was cleaned back along the face of the northern side of the drainage ditch, some 2 m to the east of Trench 1-2. For the purposes of recording, this was described as Trench 6 although it was confined to clearing a narrow area of 0.50 m back from the drainface exposure. The purpose of the trench was to confirm that the archaeological deposits visible in section were *in situ*, as opposed to having been deposited in that location during drain cutting. The trench confirmed that a number of peat deposits (601 and 602) overlay a deposit of burnt stone and charcoal (604). This deposit (i.e. 604) was present for 5 m to the east of limits of Trench 1-2. This exposure was present in the last accessible section of the drainface as it deepened travelling east away from the main archaeological deposits, at this point the peat sequence and archaeological deposits were truncated by the drainage ditch and an adjoining ditch which marked the edge of the field.
- 3.8 Phasing of the stratigraphic sequences
- 3.8.1 The Harris Matrices of Trenches One to Four were provisionally phased following the 2002 excavations. That phasing of the archaeological deposits was largely dependent on the exposed sections of the drain, the 2004 excavations have not altered the general phasing as noted in 2002, and have clarified a number of outstanding issues. A simplified matrix is included as Appendix Two.

- 3.8.2 The initial phase saw the construction of a palisade and timber platform. This was followed by an occupation sequence, divided here into three phases. This division is based around the main characteristics of the archaeological deposits.
- 3.8.3 The initial use of the hearth in Trench 4, and noted in section in Trench 1-2 began as a clay deposit placed directly onto the wooden platform. At least four additional clay surfaces were added to this feature. As the hearth seems to be enclosed by the setting of upright timbers this may indicate the construction and use of a structure (Structure 1) here in this initial phase. Projecting the lines of the posts identified in the 2004 excavation suggests that the posts formed a ring around 5 m in diameter.
- 3.8.4 At the end of the sequence of re-surfacing of the hearth a rough stone deposit was added across the interior of Structure 1 and over the top of the hearth. A similar stone deposit overlay the wooden platform in Trench 3.
- 3.8.5 A substantial deposit of burnt stone and charcoal overlay the stone surface and wooden platform. Some washed out material from this deposit was present across other areas of the site.
- 3.8.6 The whole occupation sequence is sealed by evidence of peat formation separated from the modern upcast from the drainage ditch by a thin layer of gravel and small stones. A possible phase of attempted reclamation is indicated by the mound to the north of Trench 1-2.

3.9 Artefactual Dating

3.9.1 A quantity of lithics, pottery and other finds were recovered during the excavation (see Appendix Five). Provisional analysis of the artefacts suggests that the finds from the platform and occupation levels as well as large number of finds from superficial contexts are consistent with a single cultural phase. These include sherds from at least twenty-one Cordoned Urns and two undecorated vessels, two tanged arrowheads, a small number of scrapers and flint flakes, hammerstones, quern fragments, other stone tools, an anvil stone, a perforated stone, a polished stone axe, slag and a fragment of a faience bead. A radiocarbon sample taken from the outer rings of a palisade post in 2002 produced a date of 3344+/-39 BP (UB-4893) or 1742-1524 BC. The type and form of the lithics present on the site would be consistent with this type of date (M. O'Hare, pers.comm.). Some pieces of slag were recovered from secure prehistoric contexts along with these finds. Further evidence for a mid-second millennium BC date can be found in the toolmarks present on the base of the

palisade posts. The type and form of these toolmarks are consistent with flat bladed bronze axes.

3.9.2 A small number of finds such as the sherds of creamware and blackware, early modern glass and the penny of George III, dated 1780 indicate renewed interest in the site from the late eighteenth century onwards. The attempted reclamation indicated by the mound to the north of the occupation site appears to date from some time after this date.



Plate 1. View of burnt deposit (C103) in Trench 1/2.



Plate 2. Exposed timber platform in Trench 1-2 looking south.

Plate 3. The tops of palisade posts in Trench 3.



Plate 4. View of the hearth in Trench 4 during excavation.



Plate 5. View of Trench 5 during excavation.



Plate 6. View of the remains of the structure in Trench 4.

4. Results and Discussion

4.1 Results

- 4.1.1 The 2004 investigations at Ballyarnet have shed further light on the nature of the earlier lake settlement. Some detailed discussion of the excavation results is possible at this time, although it is still provisional and speculative.
- 4.1.2 The archaeological deposits at Ballyarnet are defined by an initial timber platform, retained by a palisade and dating to. A number of posts from the palisade were removed during the excavations, along with three posts disturbed during the original construction of the drainage ditch. The outer year-rings from the oak palisade post returned a date of 3344+/-39 BP (UB-4893) or 1742-1524 BC.
- 4.1.3 The highly sedimented nature of the upper peats at Ballyarnet and the low coleopteran content are consistent with the drainage which has taken place around the lake. The increasing humification of the lower peats, from the upper surface deposits down to 0.98 m, might not be simply a product of the modern alterations to the local hydrology, and could indicate a change in the peat-forming environment. Alternatively it could be consistent with contemporary fluctuations in the water-table of the lake and changes in discharge or deforestation of the lands upslope of the site. Further light should be shed on these issues through a programme of analysis of the environmental samples.
- 4.1.4 Future management and protection strategies for the site may need to consider the degree of the threat posed by the drainage of the fen to the integrity of the structure, and its waterlogged components. The removal of moisture from sensitive artefactual material - such as microfaunal and microfaunal material, textiles, basketry and other organic materials - leads to serious loss of structure and complete decay of the artefactual material. It may be prudent to consider this factor in future management strategies for the site. The 'do nothing scenario' would prevent further destruction of the site through excavation, although, in the long term, it would also see the loss of all but the most robust of the archaeological materials, such as inorganic artefacts, charcoal and clays. It would be possible to either construct a membrane across this section of the drainage ditch to preserve the deposits in situ. Alternatively, the drainage channel could be diverted around the structure. Both of these options would require further excavation to facilitate construction of the membrane and to ascertain the extent of the site, and to identify a suitable course for the new drain. The absolute solution would be to seek preservation by full record, although this would the most costly option, since it would require a complete excavation.

- 4.2 Preliminary discussions of the artefactual assemblages recovered at Ballyarnet
- 4.2.1 A preliminary examination of the lithics recovered in 2002 revealed that the tanged projectile point is of Ballyclare type (M. O'Hare pers.comm.) and is made from basalt, probably Causeway Basalt (I. Meighan pers.comm.). The use of non-flint or chert sources for tanged points is not unparalleled as a rhyolite tanged point has been recovered from Monvoy, County Waterford (Zvelebil, Moth and Peterson 1989). A quantity of lithic material was recovered in 2004, including a second tanged point, scrapers and a number of other modified and struck pieces. This assemblage is currently being studied by Anne Oldroyd at the University of Exeter.
- 4.2.2 The stone tools recovered during the 2002 and 2004 investigations include hammerstones and other stones that show evidence of having been used as percussive or abraiding implements. A small number of quern fragments and a possible anvil stone were also recovered. These objects are being studied by Dr. Bruce Bradley of the University of Exeter.
- 4.2.3 The fragment of faience recovered from 103 in Trench 1-2 is from a quoit shaped bead. Preliminary examination by Dr. Alison Sheridan of the National Museum of Scotland has indicated that the glaze is well preserved in comparison with beads from funerary contexts and it is hoped that a small portion may be subjected to chemical analysis (Sherdian, pers.comm.).
- 4.2.4 Some 500 sherds of pottery were recovered during the excavation, around 400 of which were from archaeological contexts, with the remainder being recovered from disturbed and superficial deposits. The majority of the sherds of pottery can be identified as Cordoned Urn (sensu Kavanagh 1976; Waddell 1995). A preliminary survey of the pottery assemblage was undertaken to provide an assessment of it's archaeological potential. On the basis of various characteristics, such as rim form, presence/absence of internal and external cordons, and, decoration form and location, some twenty-three vessels are present, including two which are not Cordoned Urns, one undecorated coarseware and another represented by a sherd of thick-walled coarse pottery with a rolled rim.
- 4.2.5 The designs on the Ballyarnet assemblage were executed using cord-impressions, incised lines and comb-impressions. Three undecorated vessels were also recorded (or 14.3% of the total). Cord-impressed ornament is present on four vessels (19%), including one vessel which also has incised decoration. Incised ornament is recorded on twelve vessels (or 57.1%), including one vessel which also has cord-impressed

ornament. Comb-impressions are recorded on two vessels (or 9.5%). Decorative motifs include triangles, herringbone, chevrons, zig-zags and diagonal lines present in panelled and hatched designs, all typical of the range of motifs represented on the Irish and Scottish series of Cordoned Urns.

- 4.2.6 The presence of a significant assemblage of Cordoned Urn in a non-funerary context is paralleled in Ireland at a number of sites, such as Meadowlands, Co. Down (Pollock and Waterman 1964), Moynagh Lough, Co. Meath (Bradley 1991), The Heath, Co. Laois (Keeley 1993) and Kilbride, Co. Wicklow (Breen 1997). A similar pattern is noted on a number of other sites, which did not receive extensive investigation, e.g. Skillet's Pipe, Ballyrenan, County Down (note in Pollock and Waterman 1964, 57) and Sheepland, Co. Down (Waterman 1975). At Meadowlands, Moynagh Lough, Skillet's Pipe and Sheepland, the sequence of deposits which represent the occupation phases include substantial amounts of burnt stone and charcoal, conventionally classed as burnt mound deposits (e.g. see Buckley 1990). In his review of the Early Bronze in the north of Ireland, ApSimon includes some eleven non-funerary contexts for Cordoned Urn from a total of thirty-eight sites (ApSimon 1969, 65).
- 4.2.7 The largest published assemblage from a non-funerary context are those from Meadowlands where twenty-one vessels can be distinguished from the published drawings (Pollock and Waterman 1964). The available literature for Moynagh Lough suggests that twelve vessels can be distinguished (e.g. Bradley 1997). The recovery of Cordoned Urns from non-funerary contexts is also recorded for Scotland, such as at Luce Sands in Wigtownshire (McInnes 1962-3).
- 4.2.8 A brief comparison of the modes of decoration on the Irish and Scottish assemblages and the Ballyarnet and Meadowlands assemblages reveals considerable variation (see figure 8). The greater range of decorative techniques, such as stab and shell decoration, as found at Meadowlands, are not replicated on the Ballyarnet assemblage. However, the Ballyarnet assemblage has a much higher incidence of incised decoration, and lower occurrence of cord-impressed decoration, than the examples from funerary contexts. One example from Ballyarnet carries both techniques, a feature noted on a sherd from Meadowlands (Pollock and Waterman 1964, 46) and an example from Rath, County Louth (Kavanagh 1976, No. 38). Another feature of the Ballyarnet assemblage is the presence of cordons around 10-20 mm below the rim, with a zone of ornament between the rim and cordon. This occurs on four of the Ballyarnet examples, and on a few examples from funerary contexts (e.g. Kavanagh 1976, Nos. 6, 12, 16, 27 and 44) and at least one example from Meadowlands (Pollock and Waterman 1964, figure 11.1).

4.2.9 While the range of techniques found at Meadowlands is not paralleled at Ballyarnet, it would appear that that assemblage still differs in a number of respects from the funerary Cordoned Urns, similar to Meadowlands. The Cordoned Urn pottery from Moynagh Lough (Bradley 1997) included both comb-impressed and undecorated sherds, similar to Ballyarnet and Meadowlands. The two illustrated sherds from Sheeplands both appear to represent different Cordoned Urn style vessels, one of which is cord-impressed and one decorated with comb-impressions (Waterman 1975, 87, fig. 3.2 and fig. 3.3). The comb-impressed Cordoned Urns are only paralleled in one find, which appears to have come from a burial, at Killineer in Couth Louth (Kavanagh 1976, No. 35).

	Ireland	Ballyarnet	Meadowlands	Ireland	Scotland
	[N=35]	[N=21]	[N=21]	revised	[N=73]
				[N=79]	
Undecorated	5.7%	14.3%	0% (?)	6.3%	23.3%
Internal cordon	20%	23.8%	23.8%	22.8%	32.9%
Incised decoration	11%	57.1%	28.8%	29.1%	23.3%
Cord impressed decoration	82.9%	19%	52.4%	57%	50.7%
Comb impressed decoration	2.9%	9.5%	9.5%	7.6%	5.5%

Figure 8: Comparative figures for the occurrence of various decorated forms and internal cordons on Cordoned Urns from Ireland and Scotland (after Waddell 1995, 113-4), Ballyarnet, Meadowlands (based on the illustrations in Pollock and Waterman 1964), with comparative revised figures included for Ireland based on Waddell's figures and the Ballyarnet, Meadowlands and Sheepland assemblages. The Meadowlands assemblage also includes one stab decorated and one shell-impressed example. The Moynagh Lough finds are not included since overall detail of the assemblage is unavailable.

Altanagh, Tyrone

Ballyarnet , Derry

Altanagh, Tyrone

Kilcroagh , Antrim

Moynagh Lough, Meath

Sum [Cordoned Urns]

2500CalBC

2000CalBC

1500CalBC

1000CalBC

Calibrated date

Figure 9: Calibrated dates for Cordoned Urn.

- 4.2.10 In the report on the 2002 investigations it was suggested that the date from the palisade post at Ballyarnet would fall within the date range of Cordoned Urns from around 1900-1400 BC. A radiocarbon sample taken from the outer rings of a palisade post in 2002 produced a date of 3344+/-39 BP (UB-4893) or 1742-1524 BC. A small number of accepted dates for Cordoned Urns are shown along with a summed plot in figure 9. This includes dates from Altanagh (Williams 1986), Kilcroagh (Hedges et al 1993) and Moynagh Lough (Bradley 1991). A date range of around 1800 –1500 BC could be proposed for the use of Cordoned Urns in Ireland, based on these samples.
- 4.3 Preliminary discussion of the structural evidence.
- 4.3.1 The form of the settlement at Ballyarnet is well attested to in the archaeological record in Ireland. Roughly contemporary lake settlements, spanning the date range of 1742-1524 BC for Ballyarnet, are known from Moynagh Lough dated to 1880-1660 BC (Bradley 1991), and Cullyhanna dated to 1526 BC (Hodges 1958; Hillam 1976). The Meadowlands site appears to have lain beside sloblands in the Quoile estuary, and has produced dates and material culture from the same period (Pollock and Waterman 1964). Apart from the last example (which was only partially investigated) the lake settlements are characterised by a relatively superficial surface deposit, with some evidence for both structures and an enclosing palisade. While the artefactual return

from Cullyhanna was poor (twelve pieces of flint and a sherd of coarse pottery), Moynagh Lough produced sherds of at least twelve Cordoned Urns, scrapers, amber, bronzes, bone objects and a variety of stone tools. Meadowlands also produced a large quantity of Cordoned Urn sherds and lithics.

- 4.3.2 Parallels for the archaeological materials present on the site can be found in the existing archaeological record. The sequence of deposits which represent the occupation phases include substantial amounts of burnt stone and charcoal. Similar deposits are known from other settlement sites where Cordoned Urn has been recovered (e.g. see Waddell 1995), such as Meadowlands, Co. Down (Pollock and Waterman 1964), Skillet's Pipe, Ballyrenan, Co. Down (note in Pollock and Waterman 1964, 57) and Sheepland, Co. Down (Waterman 1975), Moynagh Lough, Co. Meath (Bradley 1991), The Heath, Co. Laois (Keeley 1993), Kilbride, Co. Wicklow (Breen 1997) and Rathmullan, Site 10, Co. Meath (Bolger 2000).
- 4.3.3 The structure that is represented by the uprights in Trench 4 merits further discussion here (see Plate 6). The general range of house structures reported from Bronze Age sites is reasonably well known (e.g. Doody 2000). While a series of general morphological comparisons are given in Doody's paper, the main structural traditions appear to be (i) circular houses with no internal roof supports; (ii) circular houses with a central roof support; (iii) circular houses with an inner ring of roof supports; (iv) rectangular houses with no internal roof supports; and (v) rectangular houses with internal roof supports. Some variations in the treatment of the outer walling are also attested, with bedding trenches and free-standing uprights recorded, with both single and double walls associated with both types. Stone footed walls have also been reported, along with a small number of stone-built houses.
- 4.3.4 In 2000, Doody published information on the 78 Bronze Age houses then identified in the archaeological record. A survey of the 1999 to 2002 volumes of *Excavations: Summary Accounts of Archaeological Excavations in Ireland* and a number of other sources suggests that a further 68 structures have now been identified. This number has increased further in the interim, with, e.g., radiocarbon dating confirming that the vast majority of the 77 structures at Corrstown in Antrim are Bronze Age in date (Conway *pers.comm.*).
- 4.3.5 In terms of structures, Meadowlands produced evidence for two house structures, House A and House B. House A was 4 m in diameter and House B was 7 m in diameter. Both were constructed of a ring of posts, around 2 m apart, with occasional double posts. House B may have had a porch and, in places, a footing trench. At Moynagh Lough, House 1 was 6 m in diameter with posts spaces at 1.50 m, while

House 2 was 6.8 m in diameter. Both were constructed of a single ring of posts. The house at Cullyhanna was 6 m in diameter, but differed from the other examples in that it had an internal ring of posts.

- 4.3.6 Houses with free standing posts and a broadly similar date to Ballyarnet are known from Cloghers in Co. Kerry (Kiely 2000), where Structure B was 5 m in diameter. At Colp West, Co. Meath, a circular structure, F13, was dated to 1428-1046 BC (Clarke and Murphy 2001). A second possible example was found at Colp West and a nearby pit that contained Cordoned Urn was dated to 1600-1300 BC (Clarke and Murphy 2001). Other examples include Hut 1 at Curraghatoor, where a pit inside the structure dated to 1115-914 BC (Doody 1990), a possible double ringed structure at Curraghtoor, Hut 5, dated to 1432-1056 BC (Doody 1990).
- 4.3.7 Cordoned Urn pottery was associated with another house site at Site 10 Rathmullan which had a 'superficial similarity to to Structure 12 at Chancellorsland' (Bolger 2001). A slot built round house was excavated at Kilsharvan 5, Co. Meath and dated to 1400-1190 BC (Russell 2001). Two broken halves of a Late Bronze Age socketed spearhead were recovered from the slot trench on this site, suggesting a date towards 1200 BC rather than 1400 BC. This style of house is in use for quite a long time and is known from Killoran, Co. Tipperary, where a group of houses were built in 1775-1430 BC, and at Kilmurry North, Co. Wicklow, where a structure was dated to 1520-1310 BC (Ó Néill 2000; Ó Néill 2001). The recent excavations at Corrstown, Co. Antrim have produced as many as 60 structures of this type that date to the same period, with the site known to extend beyond the limits of excavation (Conway *pers.comm.*). Another two houses, with stone-footed outer walls, present at Ballyprior Beg in Co. Antrim are of similar date (Suddaby 2001).
- 4.3.8 A comparison of current information with regard to vernacular architecture in Ireland between *c*. 1750 BC and 1200 BC suggests that a number of forms are present, including enclosed and open settlements, isolated houses and aggregated settlements, with Corrstown now suggesting that some substantive nucleated settlement was present in Ireland around, or just after, 1500 BC. While the representative nature of artefactual assemblages from these occupation sites is generally difficult to assess, the spectrum of materials from Ballyarnet and Moynagh Lough, and in some respects, Meadowlands, stand out. In a broader sense, the evidence from habitation sites from the middle centuries of the second millennium BC appear to reflect some degree of economic stratification in contemporary society.
- 4.3.9 The use of spaces located close to water, both on islands and the coast, has been identified as involving places where particular activities take place (e.g. O'Sullivan

1998, 92-93). Some commentators have preferred to see this within the framework of settlement hierarchies (e.g. Grogan *et al* 1996) with particular reference to the association of these coastal settlements with metalworking (Cooney and Grogan 1994, 160). Others have preferred to interpret these sites within a cosmological framework, seeking meaning in an interconnection between metal, water, death and re-birth (Fredengeren 2002). Where these studies observe any subdivisions of the Bronze Age, it tends to follow longstanding divisions based on metalworking evidence. In the light of the emerging evidence from the recent profusion of excavations, it is becoming possible to develop suitable models for a settlement chronology for the Bronze Age, independent of the metalworking chronology. This should allow for meaningful discussion of longer-term processes, such as the ebb and flow of heterarchical settlement patterns.

4.3.10 To return to Ballyarnet, the various settlement forms in the period around 1700-1500 BC include Moynagh Lough, Cullyhanna, and Meadowlands, which may have been enclosed, unenclosed houses at Killoran and possibly Corrstown, Colp West and Rathmullan, Site 10. This does not preclude the existence of additional forms of settlement where structural evidence does not survive. The range of artefactual material at the three coastal or lacustrine sites (Ballyarnet, Moynagh Lough, Meadowlands) suggests that these sites may represent an upper tier of the contemporary settled landscape. In the period immediately after 1500 BC, we see the emergence of the large-scale aggregated settlement at Corrstown and then, by 1200 BC, the appearance of hillforts. Whether the artefactually rich settlements prior to 1500 BC indicate the presence of emporia whose economic function influences the emergence of large nucleated settlements (and possibly, in turn, hillforts, by the twelfth century BC), requires further research.

5. Recommendations for further work

5.1 Introduction

- 5.1.1 It is proposed that a programme of post-excavation analysis, including dating, of material recovered during the 2004 excavations should be undertaken to meaningfully publish the results of the excavation. This is detailed in the accompanying Costed Assessment.
- 5.2 Programme of post-excavation analysis of materials recovered during the 2002 and 2004 excavations.
- 5.2.1 Analysis of some of the materials recovered during the 2002 and 2004 seasons would be required to inform the final published report. This wood include: identification of the wood samples to species, the subsequent dating of at least of a further sample by radiocarbon (in the absence of a suitable dendrochronology sample), detailed examination of the pottery recovered during the excavation and examination of the possible metalworking debris.
- 5.2.2 A number of the groups of finds are already being studied as part of the post-excavation programme including the stone tools and lithic assemblages and the faience bead.
- 5.2.3 Some seventy samples of archaeological wood were taken as samples during the course of the excavation (these are listed in Appendix Six below). Specialist analysis, including identification to species level and the recovery of further information regarding its origin and growing conditions would provide a context for the initial construction of the palisade and timber platform.
- 5.2.4 An additional dating sample from one of the structural timbers would be required to confirm that the various elements of the site are of similar date.
- 5.2.5 While initial examination of the pottery assemblage has been undertaken, further detailed study, and, organic residue analysis would be required to complete the study of the pottery assemblage.
- 5.2.6 One hundred finds of slag-like material were recovered in the course of the excavations. This material may have been the by-product of metalworking being

undertaken on the site. To this end, some specialist identification and analysis should be undertaken to ascertain the origin of this material.

- 5.3 Analysis of the Environmental Samples.
- 5.3.1. Palaeoecological investigations of Ballyarnet Lake currently being undertaken by Dr. Nicki Whitehouse and Dr. Gill Plunkett of the School of Palaeoecology and Archaeology and are ongoing.

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Appendix One: Context list

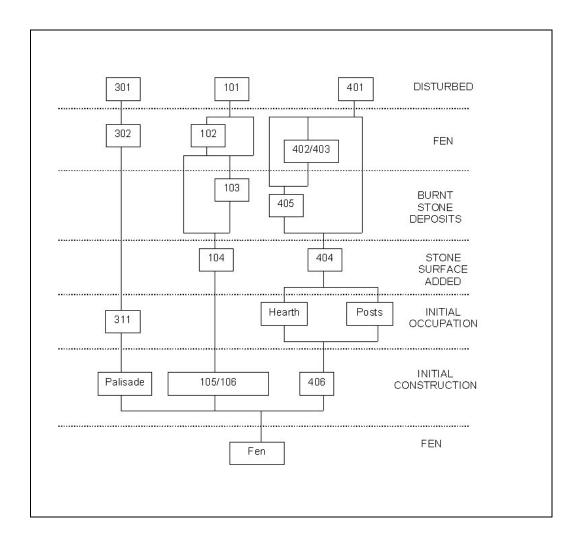
The description of contexts given here supercedes information given in Appendix One of the unpublished report on the 2002 excavations.

Context No.	Trench No.	Description
101	1-2	Surface deposit of upcast peat and sods.
102	1-2	Layer of gravel and small stones.
103	1-2	Deposit of burnt stone and charcoal
104	1-2	Stone deposit in peat-rich matrix.
105	1-2	Degraded wood, same as 106.
106	1-2	Wooden surface
301	3	Surface deposit of upcast peat and sods, same as 101.
302	3	Layer of gravel and small stones, same as 102.
305	3	Palisade Post.
306	Drain	Palisade Post.
307	Drain	Palisade Post.
308	Drain	Palisade Post.
309	Drain	Palisade Post.
310	3	Palisade Post.
311	3	Wood and stone deposits, possibly same as 106
315	3	Palisade Post.
316	3	Palisade Post.
317	3	Palisade Post.
401	4	Surface deposit of upcast peat and sods. same as 101.
402	4	Layer of gravel and small stones, same as 102.
403	4	Layer of gravel and small stones, same as 402 and 102.
404	4	Stone deposit in peat-rich matrix, same as 104.
405	4	Deposit of burnt stone and charcoal, same as 103.
406	4	Wooden platform, same as 418.
407	4	Layer of fired clay.
408	4	Charcoal rich silty clay.
409	4	Layer of fired clay.
410	4	Charcoal rich silty clay.
411	4	Layer of fired clay.
412	4	Charcoal rich silty clay.
413	4	Layer of fired clay.
414	4	Charcoal rich silty clay.

Context No.	Trench No.	Description			
415	4	Layer of fired clay.			
416	4	Same as 402.			
417	4	Same as 405.			
418	4	Wooden platform.			
419	4	Layer of fired clay.			
420	4	Charcoal rich silty clay.			
421	4	Layer of fired clay.			
422	4	Charcoal rich silty clay.			
423	4	Layer of fired clay.			
424	4	Layer of fired clay.			
425	4	Charcoal rich silty clay.			
426	4	Layer of fired clay.			
427	4	Charcoal rich silty clay.			
428	4	Layer of fired clay.			
429	4	Upright post.			
430	4	Upright post.			
431	4	Upright post.			
432	4	Upright post.			
433	4	Upright post.			
434	4	Upright post.			
435	4	Upright post.			
436	4	Upright post.			
501	5	Topsoil			
502	5	Gravel deposit.			
503	5	Gravel deposit.			
504	5	Silty loam.			
505	5	Gravelly loam.			
506	5	Discontinuity – possible cut.			
507	5	Pit (cut).			
508	5	Gravelly sandy silt.			
509	5	Pit (cut).			
510	5	Gravel deposit.			
511	5	Clay deposit			
512	5	Interface of clay and gravel.			
513	5	Gravel deposit.			
601	6	Topsoil			
602	6	Dark clay.			

Context No.	Trench No.	Description			
603	6	Clay lens within 601.			
604	6	Burnt deposit, same as 103.			
605	6	Clay deposit.			
606	6	Peat.			

Appendix Two: Harris Matrices



Matrix 1: Schematic overall phasing of the archaeological deposits at Ballyarnet occupation site.

Appendix Three: Photographic Record

Digital Images:

1	Mound to the north of lake settlement
2	Mound to the north of lake settlement
3	View of edge of mound in Trench 5, wheel ruts in foreground
4	View of the hollow in the top of the mound
5	View of top of mound
6	Wheel ruts in Trench 5
7	General working shot
8	Surveying in finds
9	Working shot of Trench 5
10	View of box section through Trench 5
11	View Trench 5
12	Trench 4 with occupation surface and posts
13	Trench 4 with stone deposits and posts
14 15	View of Trench 4
15 16	Trench 4 from the north-west Trench 4 from the north-east
17	Structure 1
17	Firing debris and peat in Trench 1-2
19	Firing debris and peat in Trench 1-2 Firing debris from the north
20	Firing debris from the west
21	Firing debris in Trench 1-2
22	Firing debris from the north-east
23	Firing debris from the east
24	Close-up of hearth in Structure 1, Trench 4
25	Exposed clay surface of hearth in Trench 4
26	Working shot, Trench 5
27	View across Structure 1.
28	View of stones and posts.
29	Looking south across the wooden platform
30	Stones in Trench 1-2
31	Structure 1, from the north
32	Structure 1
33	Structure 1, from the east
34	Structure 1, from the north-east
35	Structure 1, from the north
36	Anvil in situ, Trench 3
37	Hearth in Structure 1, in section
38	Hearth in Structure 1
39	Extension of hearth section
40	Hearth, in section
41	Palisade post <i>in situ</i> , Trench 3
42	Palisade posts <i>in situ</i> , Trench 3
43 44	Wooden surface, Trench 1-2
4 4 45	Working shot, Trench 1-2
45 46	Wooden surface, Trench 1-2 Detail of wooden surface
47	Wooden surface
48	Wooden surface from the north
46 49	Wooden surface
50	Wooden surface from the east
51	Wooden surface from the east Wooden surface from the north-east
52	Wooden surface from the west
53	Wooden surface from the north

54	View of Trench 5
55	View of Trench 5 after excavation
56	View of edge of mound
57	Working shot of clay hearth during excavation
58	Trench 3 with superficial deposits removed
59	Sherd of blackware in situ in Trench 5
60	Occupation level, Trench 3
61	Occupation level, Trench 3
62	Final section of hearth
63	View of hearth after excavation

Appendix Four: Field Drawing Register (2004)

Drawing No.	Scale	Туре	Description	Date and initials
1	1:20	Plan	Plan of Trench 4	14/4/04; LS & AO
2	1:20	Plan	Plan of Trench 1.	20/4/04; CMcG
3	1:20	Section	Section of Trench 5.	19/4/04; BB
4	1:20	Section	Section of Trench 5.	20/4/04; SL & AO
5	1:20	Section	Section of Trench 6.	20/4/04; RMcH
6	1:20	Section	Section of Trench 5.	20/4/04; SL & AO
7	1:20	Plan	Plan of Trench 1	21/4/04; JO'N
8	1:20	Plan	Plan of Trench 4	21/4/04; JO'N

Appendix Five: Small Finds Register

The finds listed here are those recovered during 2004.

Find No.	Material	Туре	Trench	Context	Comment
4040	stone	worked slate	4	401	
4041	wood	post?	4	401	
4042	burnt stone	toggle?	4	401	
4043	slag	lump	4	401	
4044	wood	post?	4	401	
4045	slag	lump	4	401	
4046	quartz	flake	4	401	
4047	flint	burnt	4	401	
4048	flint	flake	4	401	
4049	slag	lump	4	401	
4050	stone	worked slate	4	401	
4051	ceramic	pottery	4	401	burnt clay
4052	stone	lump	4	401	building brick?
4053	slag		4	401	burnt clay
4054	quartz	flake	4	401	
4055	slag	lump	4	401	
4056	quartz	flake	4	401	
4057	slag	lump	4	401	
1058	flint	flake	4	401	
4059	quartz	flake	4	401	
4060	ceramic	pottery	4	401	
4061	slag	lump	4	401	
4062	stone	worked slate	4	401	
4063	ceramic	pottery	4	401	
4064	ceramic	pottery	4	401	
4065	slag	lump	4	401	
4066	ceramic	pottery	4	401	decorated
4067	ceramic	pottery	4	401	
4068	flint		4	401	
4069	metal?		4	401	
4070	ceramic	pottery	4	401	
4071	flint		4	401	
4072	flint		4	401	
4073	ceramic	pottery	4	401	
4074	slag	lump	4	401	
4075	slag	lump	4	401	
4076	flint		4	401	
4077	ceramic	pottery	4	401	
4078	ceramic	clay pipe	5	501	clay pipe
4079	slag	lump	1 1	101	
4080	slag	lump	5	501	
4081	slag	lump	5	501	
4082	slag	lump	5	501	
4083	flint		1	101	de e conte do dos ele cont
4084	ceramic	pottery	1	101	decorated rimsherd
4085	ceramic	pottery	1	101	decorated rimsherd
4086 4087	stone	lumn	1 1	101 101	
4088	slag	lump	4	401	
	quartz	fragment			
4089	slag	fragment worked	1 1	101 101	
4090 4091	stone	worked	1	101	
4091 4092	quartz			401	
4092 4093	glass	fragment	4 4	401 401	
	slag	fragment			
1094 1005	quartz	fragment	4	401	
4095	slag	fragment		401	
4096 4097	slag	fragment	4 4	401 401	
	slag	fragment			
4098	slag	fragment	4 4	401 401	
4099 4100	slag slag	fragment fragment	4	401 401	

Find No.	Material	Туре	Trench	Context	Comment
4101	slag	fragment	4	401	
4102	slag	fragment	4	401	
4103 4104	slag slag	fragment fragment	4 4	401 401	
4105	slag	fragment	4	401	
4106	ceramic	pottery	4	401	
4107	stone	hammerstone	4	401	
4108	slag	fragment	4	401	
4109	slag	fragment	4	401	
4110	ceramic	burnt clay	4	401	burnt clay
4111 4112	slag	fragment	4 4	401	
4112	metal? flint	nail flake	4	401 401	
4114	slag	fragment	4	401	
4115	ceramic	pottery	4	401	
4116	ceramic	pottery	4	401	
4117	ceramic	pottery	4	401	
4118	flint	flake	4	401	
4119	ceramic	pottery	4	401	
4120 4121	ceramic ceramic	pottery	4 4	401 401	
4121	slag	pottery fragment	4	401	
4123	slag	fragment	4	401	
4124	slate	fragment	4	401	burnt slate
4125	ceramic	brick	4	401	
4126	slag	fragment	4	401	
4127	slate	fragment	4	401	bevelled edges
4128	slag	fragment	4	401	
4129	ceramic	fired clay	4	401	
4130 4131	slag Metal	fragment iron nail	4 4	401 401	
4132	slag	fragment	4	401	
4133	slag	fragment	4	401	
4134	slag	fragment	4	401	
4135	ceramic	fired clay	1	101	mould fragment? Between 101 and charcoal
4136	ceramic	pottery	1	101	cream ware
4137	ceramic	pottery	1	101	cream ware
4138 4139	slag	fragment	1	101	
4140	slag slag	fragment fragment	1 1	101 101	
4141	slag	fragment	1	101	3 pieces
4142	glass	fragment	1	101	modern, black
4143	slag	fragment	1	101	
4144	ceramic	pottery	1	101	
4145	ceramic	pottery	1	101	
4146	ceramic	burnt clay	1	101	4 pieces
4147 4148	slag	fragment	1	101 101	2 pieses
4149	ceramic slag	pottery fragment	1 1	101	2 pieces
4150	slag	fragment	1 1	101	
4151	ceramic	pottery	1	101	modern
4152	ceramic	pottery	1	101	modern
4153	stone	haemitite	4	401	
4154	slag	fragment	4	401	
4155	ceramic	pottery	4	401	cream ware
4156 4157	glass	fragment	4 4	401 401	modern
4157	slag slag	fragment fragment	4	401	+
4159	slag	fragment	4	401	
4160	slag	fragment	4	401	
4161	wood	sample	1	101	
4162	wood	sample	1	101	
4163	ceramic	pottery	1	101	cream ware
4164	ceramic	fragment	1	101	
		Driok	1 1	101	1
4165 4166	ceramic ceramic	brick fired clay	1 1	101	

Find No.	Material	Туре	Trench	Context	Comment
4168	wood	charcoal	1	101	
4169	ceramic	pottery	1	101	cream ware
4170	slag	fragment	1	101	
4171	slag	fragment	1	101	
4172	ceramic	brick	1	101	
4173	slag	fragment	1	101	
4174	wood	charcoal	1	101	
4175	slag	fragment	1	101	0!
4176 4177	glass	fragment fragment	1 1	101 101	2 pieces
4177	slag ceramic	brick	1	101	
4179	slag	fragment	1 1	101	
4180	flint	flake	1	101	chert?
4181	flint	flake	1	101	
4182	ceramic	pottery	1	101	2 pieces
4183	slate	fragment	1	101	·
4184	flint	fragment	1	101	heated?
4185	ceramic	pottery	1	101	
4186	ceramic	pottery	1	101	cream ware
4187	slag	fragment	4 4	401	
4188 4189	flint slag	fragment fragment	4	401 401	
4189	ceramic	pottery	4	401	
4191	ceramic	pottery	4	401	
4192	ceramic	pottery	4	401	
4193	ceramic	pottery	4	401	
4194	ceramic	pottery	4	401	
4195	ceramic	pottery	4	401	
4196	ceramic	pottery	4	401	
4197	ceramic	pottery	4	401	
4198	ceramic	pottery	4	401	
4199	ceramic	pottery	4	401	
4200	ceramic	pottery	4 4	401	
4201 4202	ceramic ceramic	pottery pottery	4	401 401	
4202	ceramic	pottery	4	401	
4204	ceramic	pottery	4	401	
4205	ceramic	pottery	4	401	
4206	ceramic	pottery	4	401	
4207	slag	fragment	4	401	
4208	ceramic	pottery	4	401	
4209	flint	scraper	4	401	
4210	ceramic	pottery	4	401	
4211 4212	ceramic	pottery	4 4	401	
4212	ceramic ceramic	pottery	4	401 401	
4214	ceramic	pottery	4	401	
4215	flint	flake	4	401	
4216	ceramic	pottery	4	401	
4217	stone	burnisher	4	401	
4218	flint	flake	4	401	
4219	stone	hammerstone	4	401	
4220	ceramic	pottery	4	401	
4221	quartz	flake	4	401	
4222	flint	scraper	4	401	
4223 4224	stone	hammerstone	4 4	401 401	
4224	quartz slag	hammerstone fragment	4	402	
4226	ceramic	pottery	4	401	undecorated
4227	soil	sample	4	402	a
4228	soil	sample	4	402	
4229	glass	fragment	1	102	2 pieces
4230	ceramic	pottery	1	102	cream ware
4231	ceramic	fired clay	1	102	modern
4232	ceramic	pottery	1	102	
4233	ceramic	fired clay	1	102	
4234	flint	flake	1	102	2 nicess
4235	ceramic	fired clay	1	102	2 pieces

Find No.	Material	Туре	Trench	Context	Comment
4236	slag	fragment	1	102	
4237	glass	fragment	1 1	102	
4238 4239	flint	debitage	4	402 402	
4239	flint quartzite	flake drill?	4	402	
4241	flint	debitage	4	402	
4242	flint	debitage	4	402	
4243	flint	debitage	4	402	
4244	flint	scraper	4	402	thumbnail scraper
4245	stone	hammerstone	4	402	
4246	quartz	pieces	4	402	
4247 4248	flint	debitage	4	402 402	
4248	stone ceramic	hammerstone fragment	5	510	
4249	flint	flake	4	402	
4251	flint	flake	4	402	
4252	ceramic	pottery	4	402	
4253	ceramic	pottery	4	402	
4254	ceramic	pottery	4	402	multiple pieces
4255	ceramic	pottery	4	402	
4256	flint	debitage	4	402	III I
4257 4258	ceramic ceramic	pottery	4 4	402 402	multiple pieces 2 bags
4259	flint	flake	4	402	2 bags
4260	flint	flake	4	402	
4261	ceramic	pottery	4	402	
4262	stone	hammerstone	4	402	
4263	flint	flake	4	402	
4264	flint	flake	4	402	2 pieces
4265	ceramic	pottery	4	402	
4266	ceramic	pottery	4	402	P. L. L.
4267 4268	stone	axe heated?	4	402 402	polished stone axe
4269	stone flint	flake	4	402	
4270	flint	flake	4	402	
4271	ceramic	pottery	4	402	
4272	ceramic	pottery	4	402	
4273	ceramic	pottery	4	402	modern
4274	stone	hammerstone	1	103	
4275	ceramic	pottery	1 1	103	2 sherds
4276 4277	quartz	flake	1 1	103 103	
4277	quartz flint	core?	1 1	103	
4279	ceramic	pottery	1 1	103	rimsherd
4280	ceramic	pottery	1 1	103	milanora
4281	flint	flake	1	103	
4282	ceramic	pottery	1	103	2 pieces
4283	flint	flake	1	103	
4284	ceramic	pottery	1	103	
4285	flint	flake	1 1	103	
4286 4287	ceramic	pottery	1 1	103 103	
4288	ceramic ceramic	pottery pottery	1	103	
4289	glass	fragment	5	510	
4290	flint	flake	1	103	
4291	ceramic	pottery	1	103	
4292	flint	flake	1	103	
4293	ceramic	pottery	1	103	
4294	flint	flake	1 1	103	5 pieces
4295	ceramic	pottery	1	103	2 pieces
4296 4297	quartz	flake flake	1 1	103 103	
4297	flint flint	flake	1	103	
4299	stone	sandstone	1 1	103	
4300	stone	sandstone	1 1	103	
4301	flint	flake	1	103	
4302	ceramic	pottery	1	103	
4303	flint	pottery	1	103	

Find No.	Material	Туре	Trench	Context	Comment
4304	ceramic	pottery	1	103	12 pieces
4305	ceramic	pottery	1	103	
4306	ceramic	pottery	1	103	rimsherd
4307	ceramic	pottery	1	103	
4308	ceramic	pottery	1	103	6 pieces
4309	ceramic	pottery	1	103	
1310	ceramic	pottery	1	103	Cordoned
1311	ceramic	pottery	1	103	decorated
1312	ceramic	pottery	1	103	
4313	ceramic	pottery	1	103	
1314 1315	ceramic	pottery	1	103	3 pieces
1316	ceramic	pottery	1 1	103 103	
4317	ceramic	pottery	1	103	
4318	ceramic ceramic	pottery	1 1	103	Cordoned
4319	ceramic	pottery	1	103	2 pieces
4320	ceramic	pottery	1 1	103	2 pieces
4321	flint	flake	1	103	
1322	slag	fragment	1	102	
1323	flint	flake	1	103	
+323 4324	ceramic	brick	5	512	modern
4325	stone	iron rich	5	512	modem
4326	ceramic	pottery	5	512	modern
4327	ceramic	pottery	1	103	2 pieces
4328	ceramic	pottery	1 1	103	rimsherd
4329	ceramic	pottery	1 1	103	Timenera
4330	ceramic	pottery	1	103	decorated
4331	stone	gold flecked	1	103	Gooratoa
4332	flint	flake	1	103	
4333	stone	gold flecked	1	103	
4334	stone	gold flecked	1	103	
4335	flint	flake	1	103	
4336	ceramic	pottery	1	103	Cordoned
4337	flint	flake	1	103	2 pieces
4338	flint	flake	1	103	2 pieces
4339	flint	flake	1	103	2 pieces
4340	ceramic	pottery	1	103	•
1341	stone	gold flecked	1	103	
4342	ceramic	pottery	1	103	Cordoned
4343	ceramic	pottery	1	103	13 pieces
4344	ceramic	pottery	1	103	Cordoned
4345	glass	fragment	3	302	
4346	slag	fragment	3	302	
4347	slag	fragment	3	302	
4348	metal	coin	3	302	George III, 1780 penny
4349	ceramic	pottery	1	103	decorated
4350	ceramic	pottery	1	103	
4351	ceramic	pottery	1	103	Cordoned
4352	ceramic	pottery	1	103	Cordoned
4353	glass	faience	1	103	fragment of bead
4354	ceramic	pottery	1	103	
4355	ceramic	pottery	1	103	Cordoned
4356	slate	fragment	1	103	
4357	ceramic	pottery	1	103	decorated
4358	ceramic	pottery	1	103	
4359	ceramic	pottery	1	103	
4360	ceramic	pottery	1	103	
4361	stone	weight	1	103	
1362	ceramic	pottery	1	103	
4363	ceramic	pottery	1 1	103	
4364	stone	gold flecked	1	103	
4365	ceramic	pottery	1	103	
	stone	gold flecked	1	103	
4366			1	103	Cordoned
4367	ceramic	pottery			
4367 4368	ceramic	pottery	1	103	
4367					3 pieces

Find No.	Material	Туре	Trench	Context	Comment
4372	stone	gold flecked	1	103	
4373	flint	flake	1	103	
4374 4375	quartz	fragment	4	103 404	
4375	stone stone	hammerstone modified	4	404	one ground face
4377	ceramic	pottery	4	402	rimsherd
4378	flint	flake	4	402	
4379	stone	quern	4	402	
4380	ceramic	pottery	4	402	
4381	stone	hammerstone	4	402	
4382	ceramic	pottery	4	402	
4383 4384	ceramic ceramic	pottery	4	402 402	
4385	ceramic	pottery	4	402	
4386	ceramic	pottery	4	402	
4387	ceramic	pottery	4	402	
4388	stone	hammerstone	4	402	
4389	flint	core	4	402	
4390	stone	modified	4	401	
4391	flint	flake	1	103	
4392	flint	flake	6	604	
4393 4394	flint flint	flake flake	6	604 604	
4395	slag	fragment	6	604	
4396	ceramic	pottery	6	604	
4397	metal	iron	6	601	nail
4398	ceramic	pottery	1	103	
4399	ceramic	pottery	1	103	
4400	flint	flake	1	103	
4401	ceramic	pottery	1	103	
4402 4403	ceramic ceramic	pottery	1	103 103	rimsherd
4404	ceramic	pottery	1 1	103	Illiisileiu
4405	ceramic	pottery	1 1	103	
4406	ceramic	pottery	1	103	
4407	ceramic	pottery	1	103	
4408	stone	gold flecked	1	103	
4409	ceramic	pottery	1	103	
4410	flint	flake	1	103	0
4411 4412	ceramic quartz	pottery modified	1 1	103 103	Cordoned
4413	stone	gold flecked	1	103	
4414	stone	gold flecked	1	103	
4415	ceramic	pottery	1	103	9 pieces
4416	ceramic	pottery	1	103	decorated
4417	ceramic	pottery	1	103	
4418	ceramic	pottery	1	103	rimsherd
4419	ceramic	pottery	1	103	
4420 4421	stone flint	gold flecked flake	1 1	103 103	
4421	ceramic	pottery	1 1	103	
4423	stone	gold flecked	1	103	
4424	ceramic	pottery	1 1	103	
4425	stone	gold flecked	1	103	
4426	flint	flake	1	103	
4427	flint	flake	1	103	
4428	ceramic	pottery	1	103	
4429	ceramic	pottery	1 1	103	rimsherd
4430 4431	ceramic ceramic	pottery pottery	1 1	103 103	Cordoned
4432	ceramic	pottery	1	103	Cordoned
4433	quartz	fragment	1	103	flecked
4434	flint	flake	1	103	
4435	flint	flake	1	103	3 pieces
4436	flint	projectile point	1	103	
4437	flint	flake	1	103	
4438	ceramic	pottery	1	103	O mia
4439	ceramic	pottery	1	103	2 pieces

Find No.	Material	Туре	Trench	Context	Comment	
4440	ceramic	pottery	1	103		
4441	flint	flake	1	103	3 pieces	
4442	ceramic	pottery	1	103		
4443	flint	flake	1	103		
4444	ceramic	pottery	1	104	Cordoned	
4445	flint	flake	1	104	of one of the stand	
4446 4447	ceramic	pottery	3	311 311	rimsherd	
4447	flint flint	debitage debitage	3 3	311		
4449	flint	scraper	4	402		
4450	flint	flake	4	402		
4451	stone	hammerstone	4	402		
4452	stone	hammerstone	4	402		
4453	bone	fragment	4	404		
4454	ceramic	pottery	1	104	rimsherd	
4455	ceramic	pottery	1	103	imionora	
4456	ceramic	pottery	1	103	2 pieces	
4457	ceramic	pottery	1	103	rimsherd	
4458	ceramic	pottery	1	103		
4459	ceramic	pottery	1	103		
4460	ceramic	pottery	1	103		
4461	flint	flake	1	103		
4462	ceramic	pottery	1	103	decorated	
4463	ceramic	pottery	1	103	2 pieces	
4464	ceramic	pottery	1	103		
4465	ceramic	pottery	1	103		
4466	ceramic	pottery	1	103	rimsherd	
4467	ceramic	pottery	1	103	decorated	
4468	ceramic	pottery	1	103	4 = 1 = 2 = 2	
4469 4470	ceramic	pottery	1 1	103 103	4 pieces	
4470	ceramic ceramic	pottery	1 1	103	basesherd	
4472	quartz	fragment	1 1	103	worked?	
4473	ceramic	pottery	1	103	Worked:	
4475	ceramic	pottery	1	103		
4476	ceramic	pottery	1	103		
4477	ceramic	pottery	1	103	2 pieces	
4478	ceramic	pottery	1	103	•	
4479	ceramic	pottery	1	103		
4480	ceramic	pottery	1	103		
4481	ceramic	pottery	1	104		
4482	ceramic	pottery	1	104	decorated	
4483	ceramic	pottery	1	104	16 pieces	
4484	ceramic	pottery	1	104		
4485	ceramic	pottery	1	104	6 pieces	
4486	ceramic	pottery	1	104	2 pieces	
4487	ceramic	pottery	1	104	13 pieces	
4488	ceramic	pottery	1	104	5 pieces	
4489	ceramic	pottery	1	104	9 pieces	
4490 4491	quartz ceramic	fragment pottery	1 1	103 103		
4491	ceramic	pottery	1	103	decorated	
4492	ceramic	pottery	1	103	uecorateu	
4494	flint	flake	1	103	3 pieces	
4496	ceramic	pottery	1 1	104	concentration of sherds	
4497	flint	core	4	404	3011001111411011 01 0110143	
4498	flint	flake	4	404		
4499	flint	flake	4	404		
4500	stone	worked	4	404		
4501	flint	flake	4	404		
4502	glass	fragment	4	402		
4503	ceramic	brick	4	402		
4504	glass	fragment	4	402		
4505	flint	debitage	4	404		
4506	flint	debitage	4	404		
4507	flint	debitage	4	404		
4508	stone	worked	4	404		
4509	flint	flake	4	404		

Find No.	Material	Туре	Trench	Context	Comment
4510	ceramic	pottery	4	404	
4511	ceramic	pottery	4	404	
4512	ceramic	pottery	4	404	
4513	quartz	fragment	4 4	404 404	
4514 4515	stone ceramic	worked pottery	4	404	
4516	quartz	fragment	4	404	
4517	quartz	fragment	4	404	
4518	quartz	fragment	4	404	
4519	ceramic	pottery	4	404	
4520	ceramic	pottery	4	404	
4521	ceramic	pottery	4	404	
4522 4523	flint	flake	4 4	404 404	
4523	ceramic flint	pottery flake	4	404	
4525	quartz	fragment	4	404	
4526	ceramic	pottery	4	404	
4527	ceramic	pottery	4	404	
4528	ceramic	pottery	4	404	
4529	ceramic	pottery	4	404	
4530	ceramic	pottery	4	404	2 bags
4531 4532	flint	debitage	4 4	404 404	
4532	flint flint	flake flake	4	404	
4534	flint	flake	4	404	
4535	ceramic	pottery	4	404	
4536	ceramic	pottery	4	404	
4537	ceramic	pottery	4	404	
4538	stone	worked	4	404	
4539	flint	flake	4	404	
4540	quartz	fragment	4	404	
4541 4542	flint	flake	4 4	404 404	
4543	ceramic ceramic	pottery	4	404	
4544	ceramic	pottery	3	311	
4545	slag	fragment	3	311	
4546	ceramic	pottery	1	103	
4547	ceramic	pottery	1	103	
4548	ceramic	pottery	1	103	
4549 4555	ceramic	pottery	1	103	
4556	stone ceramic	worked pottery	1 1	103 103	
4557	flint	flake	1	103	
4558	ceramic	pottery	1	103	rimsherd
4559	ceramic	pottery	1	103	Cordoned
4560	ceramic	pottery	1	103	4 pieces
4561	ceramic	pottery	1	103	
4562	flint	flake	1	103	deser to t
4563 4564	ceramic	pottery	1	103 103	decorated
4564	ceramic ceramic	pottery	1 1	103	rimsherd 2 pieces
4566	ceramic	pottery	1	103	2 pieces
4567	ceramic	pottery	1	103	_ p.3000
4568	ceramic	pottery	1	103	
4569	ceramic	pottery	1	103	rimsherd
4570	ceramic	pottery	1	103	decorated
4571	ceramic	pottery	1	103	decorated
4572	flint	flake	1 1	103	2 pieces
4573 4574	ceramic ceramic	uncertain uncertain	1 1	103 103	2 pieces 2 pieces
4574	ceramic	pottery	1	103	decorated
4576	ceramic	pottery	1	103	rimsherd
4577	ceramic	pottery	1	103	
4578	ceramic	pottery	1	103	
4579	ceramic	pottery	1	103	
4580	flint	flake	1	103	
4581	flint	flake	1	103	
4582	ceramic	pottery	1	103	

Find No.	Material	Туре	Trench	Context	Comment
4583	flint	flake	1	103	
4584	flint	flake	1	103	
4585	flint	flake	1	103	
4586	ceramic	pottery	1 1	103	rimsherd
4587	ceramic	pottery	1 1	103	doorstad
4588	ceramic	pottery	1	103 103	decorated
4589 4590	ceramic	pottery	1 1	103	3 pieces rimsherd
4590	ceramic ceramic	pottery pottery	1 1	103	ninsilera
4592	ceramic	pottery	1 1	103	
4593	flint	flake	1	103	
4594	ceramic	pottery	1 1	103	Cordoned
4595	flint	flake	1 1	103	001001100
4596	ceramic	pottery	1	103	rimsherd
4597	flint	flake	1	103	
4598	ceramic	pottery	1	103	
4599	ceramic	pottery	1	103	
4600	ceramic	pottery	1	103	
4601	ceramic	pottery	1	103	rimsherd
4602	ceramic	pottery	1	103	decorated
4603	ceramic	pottery	1	103	
4604	ceramic	pottery	1	103	
4605	ceramic	pottery	1	103	
4606	ceramic	pottery	1	103	rimsherd
4607	ceramic	pottery	1	103	
4608	ceramic	pottery	1	103	
4609	ceramic	pottery	1	103	rimsherd
4610 4611	flint	flake worked	1 1	103 103	
4612	stone	pottery	1	103	
4613	ceramic stone	hammerstone	1	103	
4614	flint	flake	1	103	
4615	ceramic	pottery	1 1	103	2 pieces
4616	ceramic	pottery	1	103	2 p.0000
4617	ceramic	pottery	1	103	
4618	stone	worked	4	404	
4619	flint	flake	4	404	
4620	stone	worked	4	404	
4621	ceramic	pottery	4	404	
4622	stone	hammerstone	4	404	
4623	flint	flake	4	404	
4624	stone	hammerstone	4	404	
4625	quartz	fragment	4	404	
4626	flint	core	4	404	
4627	flint	fragment	4	404	
4628	ceramic	pottery	4	404	
4629 4630	ceramic	pottery	4	404 404	
4630	flint	core	4	404	
4632	stone stone	worked worked	4	404	
4633	ceramic	pottery	4	404	
4634	ceramic	pottery	4	404	
4635	flint	flake	4	404	
4636	flint	flake	4	404	
4637	stone	worked	4	404	
4638	ceramic	pottery	4	404	
4639	stone	worked	4	404	
4640	stone	worked	4	404	
4641	stone	hammerstone	4	404	
4642	ceramic	pottery	4	404	
4643	flint	flake	4	404	
4644	flint	flake	4	404	
4645	ceramic	pottery	4	404	
4646	flint	flake	4	404	
4647	flint	pottery	1	105	
4648	ceramic	pottery	1	105	
4649	ceramic	pottery	1	105	
4650	ceramic	pottery	1	105	

Find No.	Material	Туре	Trench	Context	Comment
4651	ceramic	pottery	1	105	
4652	quartz	fragment	4	404	
4653	flint	flake	4	404	
4654	quartz	fragment flake	4 4	404 404	
4657 4658	flint flint	flake	4	404	
4659	flint	flake	4	404	
4660	flint	flake	4	404	
4661	flint	flake	4	404	
4662	ceramic	pottery	4	404	
4663	flint	flake	4	404	
4664	ceramic	pottery	4	404	
4665	flint	flake	4	404	
4666 4667	ceramic ceramic	pottery pottery	4 4	404 404	
4668	ceramic	pottery	4	404	
4669	ceramic	pottery	4	404	
4670	ceramic	pottery	4	404	
4671	ceramic	pottery	4	404	
4672	ceramic	pottery	4	404	
4673	ceramic	pottery	4	404	
4674	flint	flake	4	404	
4675	ceramic	pottery	4	404	
4676 4677	stone ceramic	worked pottery	4 4	404 404	
4678	ceramic	pottery	4	404	
4679	ceramic	pottery	4	404	
4680	ceramic	pottery	4	404	
4681	ceramic	pottery	4	404	
4682	ceramic	pottery	4	402	
4683	ceramic	pottery	4	404	
4684 4685	quartz	hammerstone	4 4	404 402	
4686	stone wood	worked horizontal	1	106	
4687	wood	horizontal	1	106	
4688	wood	horizontal	1	106	
4689	wood	horizontal	1	106	
4690	wood	horizontal	1	106	
4691	wood	horizontal	1	106	
4692	wood	horizontal	1	106	
4693 4694	wood	horizontal	1 1	106 106	
4695	wood wood	horizontal horizontal	1	106	
4696	wood	horizontal	1	106	
4697	flint	flake	1	103	
4698	flint	flake	1	103	
4699	wood	horizontal	1	106	
4700	wood	horizontal	1	106	
4701	wood	horizontal	1	106	
4702	wood	horizontal	1	106	
4703 4704	wood wood	horizontal horizontal	1 1	106 106	
4704	flint	flake	1	106	
4706	wood	horizontal	1	106	
4707	wood	horizontal	1	106	
4708	wood	horizontal	4	406	
4709	wood	horizontal	4	406	
4710	wood	horizontal	4	406	
4711	wood	horizontal	4	406	
4712	wood	horizontal	4 4	406	
4713 4714	wood wood	horizontal horizontal	4	406 406	
4714	wood	horizontal	4	406	
4716	wood	horizontal	4	406	
4717	wood	horizontal	4	406	
4718	wood	horizontal	4	406	
4719	wood	horizontal	4	406	
4720	wood	horizontal	4	406	

Find No.	Material	Туре	Trench	Context	Comment
4721	ceramic	pottery	1	103	
4722	stone	worked	1	103	
4723	wood	post	1	106	
4724	stone	worked	1	103	
4725	stone	worked	1	103	
4726	wood	post	1	106	
4727	wood	post	1	106	
4728	wood	post	1	106	
4729	wood	post	1	106	
4730	wood	post	1	106	
4731	wood	post	1	106	
4474a	flint	flake	1	103	
4474b	flint	flake	1	103	

Appendix Six: Samples Register

Samples No.	Туре	Comment	Trench	Context
4227	soil	sample	4	402
4228	soil	sample	4	402
4041	wood	post?	4	401
4044	wood	post?	4	401
4161	wood	sample	1	101
4162	wood	sample	1	101
4168	wood	charcoal	1	101
4174	wood	charcoal	1	101
4686	wood	horizontal	1	106
4687	wood	horizontal	1	106
4688	wood	horizontal	1	106
4689	wood	horizontal	1	106
4690	wood	horizontal	1	106
4691	wood	horizontal	1	106
4692	wood	horizontal	1	106
4693	wood	horizontal	1	106
4694	wood	horizontal	1	106
4695	wood	horizontal	1	106
4696	wood	horizontal	1	106
4699	wood	horizontal	1	106
4700	wood	horizontal	1	106
4701	wood	horizontal	1	106
4702	wood	horizontal	1	106
4703	wood	horizontal	1	106
4704	wood	horizontal	1	106
4706	wood	horizontal	1	106
4707	wood	horizontal	1	106
4708	wood	horizontal	4	406
4709	wood	horizontal	4	406
4710	wood	horizontal	4	406

4 4 4	406 406
	406
4	
	406
4	406
4	406
4	406
4	406
4	406
4	406
4	406
1	106
1	106
1	106
1	106
1	106
1	106
1	106
4	404
	4 4 4 4 4 1 1 1 1 1 1 1