N18 Ennis Bypass and N85 Western Relief Road

Site AR123, Clareabbey, Co. Clare

Final Archaeological Excavation Report

for Clare County Council

Licence No: 04E0019

by Graham Hull

Job J04/02

(NGR 134444 175333)

14th August 2006

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Summary

Site name: N18 Ennis Bypass and N85 Western Relief Road, Site AR123, Clareabbey, Co. Clare

Townland: Clareabbey

Parish: Clareabbey

Barony: Islands

County: Clare

SMR/RMP Number: N/A

Planning Ref. No: N/A

Client: Clare County Council, New Road, Ennis, Co. Clare

Landowner: Clare County Council, New Road, Ennis, Co. Clare

Grid reference: 134444 175333 (OSI Discovery Series, 1:50,000, Sheet 58. OS 6" Clare Sheet 33)

Naturally occurring geology: Patches of clay and sandy gravel

TVAS Ireland Job No: J04/02

Licence No: 04E0019

Licence Holder: Graham Hull

Report author: Graham Hull

Site activity: Excavation

Site area: 654m²

Sample percentage: 100%

Date of fieldwork: 5th to 9th February 2004

Date of report: 14th August 2006

Summary of results: Six small pits and a shallow hearth were examined. The features were damaged by modern ploughing/tillage. One of the features was radiocarbon dated to the 8th to 10th centuries AD.

Monuments identified: Early medieval pit cluster

Location and reference of archive: The primary records (written, drawn and photographic) are currently held at TVAS Ireland Ltd, Ahish, Ballinruan, Crusheen, Co. Clare.

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N18 Ennis Bypass and N85 Western Relief Road, Site AR123, Clareabbey, Co. Clare Final Archaeological Excavation Report

By Graham Hull

Report J04/02p

Introduction

This report documents the final results of an archaeological excavation of a cluster of early medieval pits and a small hearth (Site AR123) on the route of the N18 Ennis Bypass and N85 Western Relief Road at Clareabbey, Co. Clare (NGR 134444 175333) (Fig. 1). The excavation forms part of the Ennis Bypass Archaeological Contract 7.

A preliminary archaeological report for this site was produced in May 2004 (Hull 2004).

The National Monuments Act 1930 (as amended) provides the legislative framework within which archaeological excavation can take place and the following government publications set out many of the procedures relating to planning/development and archaeology:

Framework and Principles for the Protection of the Archaeological Heritage (DAHGI 1999a)

Policy and Guidelines on Archaeological Excavation (DAHGI 1999b)

Code of Practice between the National Roads Authority and the Minister for Arts, Heritage, Gaeltacht and the Islands (NRA/MAHGI 2001)

Project background

As part of the National Roads Authority scheme for upgrading the N18 Limerick to Galway Road, Clare County Council, in consultation with NRA Project Archaeologist Sébastien Joubert, requested a series of archaeological investigations along the route of the proposed Ennis Bypass and a Western Relief Road. The proposed scheme has an overall length of 21km and involves the construction of a 13.8km eastern bypass of Ennis from Latoon, north of Newmarket-on-Fergus, to Cragard, north of Barefield. The Western Relief Road is 7.1km long and is to link Killow and Claureen (Fig. 1).

A number of sites of archaeological interest were known to lie on the route of the new roads and the mitigation strategy agreed by the Project Archaeologist and the national licensing authorities for these sites was preservation by record, i.e. full archaeological excavation. Further sites, without surface expression, were located as the result of intensive test trenching along the course of the road (03E1291 Hull 2003 and 03E1293 Roger 2004). As preservation *in situ* was not a reasonable option, the resolution strategy for these new sites was also preservation by record.

The archaeological excavation and post excavation work were funded by Clare County Council through the National Roads Authority and part-financed by the European Union under the National Development Plan 2000-2006.

Location, topography and geology

The site was located in the townland of Clareabbey, in the parish of Clareabbey, barony of Islands, approximately 2km south-east of Ennis town centre (the O'Connell Monument) and was centred on NGR 134444 175333 (Figs 1 and 2).

The field in which the site was found was used as pasture and was located on land that sloped very gently down from east to west.

The topsoil in the field was between 0.10m and 0.15m thick and overlay a ploughsoil. This ploughsoil was between 0.15m and 0.20m thick and overlay the natural geological deposits. This geology was variegated patches of clay and sandy gravel with manganese flecking.

The archaeological deposits were seen to lie at approximately 4.4m above OD.

Archaeological background

As part of the environmental assessment process for the road scheme, Clare County Council commissioned desk-based and walkover surveys that formed part of an Environmental Statement (Babtie Pettit 2000) and an archaeological study for the Environmental Impact Statement (Doyle 1999). A total of 36 sites of known or potential cultural heritage significance were identified along the entire route of the proposed Ennis Bypass and Western Relief Road.

Earthwork and geophysical survey were undertaken on potential archaeological sites and invasive testing and excavation took place in 2002 and 2003 on some of the above ground sites affected by the proposed road (Aegis 2002, IAC 2003, Geoquest 2002, Earthsound 2003).

A systematic programme of testing along the new road route, involving the mechanical excavation of a central linear trench with offsets, took place in Summer/Autumn 2003. Twenty-two previously unknown sites, including cremation cemeteries, burnt stone spreads, enclosures and brick clamps were found (03E1291 Hull 2003 and 03E1293 Roger 2004). Monuments dating from the Bronze Age to the modern period were found.

Earlier phases of archaeological intervention on newly constructed stretches of the N18 (Dromoland to Carrigoran), to the immediate south of this road project, have demonstrated that the locality has a rich range of prehistoric and later monuments (99E0350 Hull and Tarbett-Buckley 2001).

Recent archaeological work on the BGE Gas Pipeline to the West in the neighbourhood of the new road route has tended to support the picture of continuous human activity in Co. Clare from the Neolithic and even becoming intensive from the Bronze Age. A number of burnt stone spreads and burnt mounds were excavated near the route of the new road in the summer of 2002 (MGL 2002).

A cluster of small pits and a hearth were observed during testing (Hull 03E1291 2003). These archaeological features were allocated the number AR123 and the site forms the subject of this report.

Burnt stone spreads and pits of prehistoric date were identified during testing and later excavated in neighbouring fields as part of this road project (AR121 04E0031 Taylor 2006a; AR122 04E0032 Taylor 2006b; AR124 04E0022 Hull 2006a; AR125 04E0023 Hull 2006b).

Excavation aims and methodology

A licence to excavate was granted to Graham Hull by the National Monuments Section of the Department of the Environment, Heritage and Local Government, in consultation with the National Museum of Ireland, on behalf of the Minister for the Environment, Heritage and Local Government. The licence number is 04E0019.

The aims of the excavation were to:

1) Preserve by record all archaeological deposits and features within the excavation area

2) Produce a high quality report of the findings

The fieldwork took place between 5th and 9th February 2004 and was directed by Graham Hull, supervised by Astrid Lesley Nathan and assisted by Jamie Parra Rizo, Tim Dean and Elisabeth Dos Santos.

The excavation area was rectangular, centred on the pits seen during testing and examined $654m^2$. Topsoil and overburden were removed by a 15 tonne, 360° , tracked machine, operated under direct and continuous archaeological supervision. The spoil was visually scanned for artefacts.

A full written, drawn and photographic record was made following procedures outlined in the TVAS Ireland Field Recording Manual (First Edition 2003).

Excavation results (Figs 2 to 5 and Plates 1 to 3)

A complete context list is given as Appendix 1.

Topsoil and tilled soil were removed by machine. The topsoil was between 0.10m and 0.15m thick and overlay tilled soil. This tillage horizon was between 0.15m and 0.20m thick and overlay the natural geological deposits. The geological deposits were variegated patches of clay and sandy gravel with manganese flecking.

The archaeological deposits stratigraphically pre-dated the tillage horizon and were cut into, or sat on top of, the natural geological deposits (Plate 1).

Four small pits (4, 11, 18 and 23), a small hearth (14) and a deposit of charcoal rich material (13) were identified. The features lay within 15m of each other. Additionally, two small pits (125 and 153) were recorded in the testing. No direct stratigraphic relationships were observed between any of the features but morphology and proximity suggest a single phase of activity.

Pit 4 was oval in plan and measured 1.03m (north to south) by 0.57m. The pit was truncated at the west by a tillage furrow (lazybed). Pit 4 had steeply sloping sides coming down to a flattish base and was 0.20m deep. A singular pit fill (3) was recorded. This fill was a mid brown sandy silt with infrequent sub-rounded stones and occasional charcoal flecks.

Pit 11 was truncated at the south-west by a tillage furrow and may have been circular in plan with a diameter of 0.4m. The pit was bowl shaped and was 0.18m deep. The fill of Pit 11 was a mid brown sandy silt with infrequent sub-rounded stones and frequent charcoal chunks (10). A sample of the charcoal was taken for species identification and potential radiocarbon dating.

Pit 18 was truncated at the south-west by a tillage furrow and was probably circular in plan with a diameter of 0.25m. The pit was bowl shaped and was 0.12m deep. The fill of Pit 18 (17) was identical to the fill of Pit 4. A small piece of iron slag adhering to fired clay (04E0019:1) was recovered from the pit fill.

Pit 23 was oval in plan, measured 0.48m (north to south) by 0.38m, had a bowl shaped profile and was 0.07m deep (Plate 3). The fill of Pit 23 was a brownish grey sandy silt with frequent charcoal chunks (22). A sample of the charcoal was taken for species identification and potential radiocarbon dating.

Hearth 14 was circular in plan and had a diameter of 0.3m (Plate 2). The feature was no more than 0.1m deep and was characterised by black charcoal and heat reddened natural clay. Clearly *in situ*

burning had taken place. A piece of iron slag (maximum dimension 40mm) (04E0019:2) was found in the hearth.

A deposit of charcoal rich material, 13, was recorded. This deposit measured 0.25m by 0.1m, had a maximum thickness of 0.03m and was composed of a silty ash with charcoal lying on the surface of the natural geological deposits.

It was noted that a wheeled vehicle (probably a 4x4 jeep) had become stuck in the backfilled testing area before excavation. Very deep ruts intruded into the natural geology. These ruts had seemingly destroyed two small pits seen in the testing. The pits (125 and 153) had been planned, half-sectioned and photographed in the testing (03E1291 Hull 2003). The pits were in the order of 0.35m to 0.45m across and were 0.1m deep (Fig. 5). The small size of the features and the evidence of ploughing in the field might indicate that the two features represented the remains of severely truncated postholes.

Finds

Three objects were recovered during the excavation. A catalogue of finds is given as Appendix 2.

Finds 04E0019:1 and 04E0191:2 are pieces of slag and vitrified clay (see below).

Find 04E0019:3 was a thought to be potentially a piece of a broken stone axehead and was found in the topsoil. The stone was examined by Dr Steve Mandal of the Irish Stone Axe Project and was observed to be made from shale (fine grained parallel laminated mudstone). The dominant rock types in the area are limestone and shale, so it is undoubtedly local in origin. However, the piece is a water rolled cobble, which does not appear to have been worked. The object is not therefore archaeological and consequently has not been retained.

The finds have been cleaned, numbered, labelled, properly packed and will be deposited with the National Museum of Ireland in accordance with *Advice Notes for Excavators* (NMI 1997).

Slag and other remains by Lynne Keys

A tiny quantity of material (32g) was recovered during excavation (Table 1). One piece was a fragment of slag undiagnostic of either iron smelting or smithing. The other material was a piece of vitrified hearth lining, which could have been produced by a domestic hearth. Neither suggests any high temperature activity was taking place on the site.

Find No. Cut Deposit		Deposit	Identification	Weight (g)	Maximum dimensions (mm)		
04E0019:1		14	Undiagnostic slag	24	30		
04E0019:2	18	17	Vitrified hearth lining	8	40		
			Total weight	32			

Table 1: Catalogue of slag and other remains

Samples

Samples of large charcoal pieces were taken from the fills of Pits 11 and 23. These samples were hand collected and were not wet sieved or floated.

Charred plant macrofossils by Val Fryer

Samples for the extraction of the plant macrofossil assemblages were taken from the fills of two pits.

Methods

The samples were hand collected by TVAS Ireland Ltd. The dried material was scanned under a binocular microscope at magnifications up to x 16, and the plant macrofossils noted are listed below on Table 2. All plant remains were charred. The density of material within each sample is expressed in the table as follows: x = 1 - 10 specimens, xx = 10 - 100 specimens and xxx = 100+ specimens.

Results

The assemblages were solely composed of charcoal fragments, with pieces larger than 5mm being present in both samples.

Sample No	1	3
Cut No	11	23
Deposit No	10	22
Charcoal <2mm		XX
Charcoal >2mm	XX	XX
Charcoal >5mm	XX	X
Sample volume (litres)		
Volume of flot (litres)	< 0.1	< 0.1
% flot sorted	100%	100%

Table 2: Charred plant macrofossils and other remains

Conclusions

As charcoal is the only material present, it is not possible to deduce the function of the pits. However, it would appear most likely that the assemblages are derived from low density scatters of refuse or wind-blown detritus, some or all of which probably became accidentally incorporated within the pit fills.

Charcoal by Simon Gannon

Introduction

Two samples of charcoal fragments were retrieved from two contexts from the site. Identification of taxa of the retrieved charcoal may assist in the reconstruction of the local, contemporary woodland-environment and the use of the woodland resources by the people responsible for the archaeological features.

Methodology

In sorting fragments suitable for identification a guide size of at least 2mm in radial cross-section was used. In this sort some samples were found to contain an unusually large number of fragments and sub-samples were taken, as detailed in Analysis Results.

Initially the grain direction of the fragments was identified before fracturing across their transverse plains. Identifications were made under microscopic examination, in most cases. Further fractures were made to reveal radial and/or tangential plains in cases where identification was more difficult.

Magnification of between x10 (hand lens) to x400 was used. Structural elements of the fragments were examined to allow for identification of roundwood, heartwood, and sapwood features.

Reference material comprised a reference collection of charred samples of taxa and reference publications, *Microscopic Wood Anatomy* (Schweingruber 1990) and *The Identification of the Northern European Woods* (Hather 2000).

Analysis Results

The results are summarized in Table 3. Classification follows that of *Flora Europae* (Tutin *et al* 1964-80). Certain related taxa cannot be securely differentiated on the basis of their anatomical characteristics and are assigned to their respective family groups as with the genera *Salix* and *Populus*, and the genera *Craetaegus*, *Malus* and *Sorbus*. Provisional identifications have been given in cases where the condition of the charcoal was degraded.

The various identifications of wood taxa were consistent with taxa from the following groups:

<u>Broadleaf taxa</u> Betulaceae. *Alnus* sp., alder Corylaceae. *Corylus* sp., hazel Fagaceae. *Quercus* sp., oak Oleaeceae. *Fraxinus* sp., ash Rosaceae.

Subfamily Pomoideae. *Craetagus* sp., hawthorn; *Malus* sp., apple; *Sorbus* spp., *Sorbus aucuparia*, rowan; *S. aria*, whitebeam; *S. hibernica*, Irish whitebeam, and other *Sorbus* species.

Table 3: Number of identified charcoal fragments per sample

Sample	Cut	Deposit	Context type	Alnus	Betula	Corylus	Corylus/ Alnus	Fraxinus	Pomoideae	Prunus	Quercus	Salicaceae	Taxus	Ulmus
1	11	10	Pit	-	-	4	-	-	2	-	17	-	-	-
3	23	22	Pit	8	-	2	18	4	-	-	-	-	-	-

(r: roundwood).

Discussion

Anatomical characteristics from charcoal fragments do not allow for identification of individual species in every case. Several species belong to groups of species, species of genera, of sub-families and of families that cannot be separated anatomically (Schweingruber 1990 andHather 2000). It is possible that a narrow range of species and, occasionally, one or two species can be indicated with a degree of confidence due to established factors, principally their native status and history of introduction by people (Huntley and Birks. 1983, Peterken 1996 and Scannell and Synott 1987). The following section places the given charcoal based taxa identifications in the context of defined tree species allowing for implications related to their environmental characteristics and possible use by ancient peoples to be drawn. Reference works consulted include Goldstein *et al* 1984, Huntley and Birks 1983, Kelly 1998, Mitchell 1978, O'Sullivan 1996, Rackham 1976-90, Raftery 1996, Scannell and Synott 1987 and Tutin *et al* 1964-80.

Taxa descriptions

Alder

The sole native species is *Alnus glutinosa*, Common Alder, Irish fearnóg (family – Betulaceae). <u>Environment indications</u>. Tolerant of nearly all soil types including relatively infertile soils, such as ironpan and peaty soils. Particularly tolerant of water logged conditions and is often a streamside tree. Has the ability to 'pioneer' into previously disturbed land. Native distribution throughout Ireland. <u>Uses in antiquity</u>. A hardwood suitable for a variety of artefacts and smaller structural timber. Tends to harden when in contact with water and therefore suitable for making piles etcetera. It burns quickly when used for firewood but has been found suitable for charcoal production.

Ash

There is a single native species, Fraxinus excelsior, ash, fuinseog (family - Oleaceae).

<u>Environmental indications.</u> Requiring deep, fertile, moist but well drained, soils. Grows well in mixed stands when not shaded. Widespread throughout Ireland.

<u>Uses in antiquity.</u> A strong but elastic wood suitable for many purposes including structural timber (not where in prolonged contact with water or soil). Coppices readily. Burns well even when green, partly due to low water content.

<u>Hazel</u>

There is a single native species, *Corylus avellana*, hazel, coll (family - Corylaceae).

<u>Environmental indications</u>. Botanically a shrub, but does not flower and fruit without sunlight, so is really a canopy tree preferring woodland edges and clearings though it bears moderate shade and is also found as understorey, typically in oak woodlands. Fairly tolerant of poor soils but does not grow on acid soils and preferring chalky, fertile, deep soil. Growing throughout Ireland.

<u>Uses in antiquity.</u> A tough and flexible wood, useful for small implements and small structural elements. Also grows easily in coppice-like form producing rods suitable for wattle and basketry type structures. Makes useful firewood.

Hawthorn/ Sorbus

The represented species is probably one or more of the following native members of the sub-family Pomoideae that includes several *Sorbus* species. (Family - Rosaceae).

Crab Apple, Malus sylvestris, cran fia-úll; hawthorn, Crataegus monogyna, sceach geal.

<u>Environmental indications</u>. Both species. Very rugged and adaptable to almost any climate and most soil types, requiring moist soil and can grow in semi-shade or no shade. Natural distribution throughout Ireland.

<u>Uses in antiquity.</u> Both species produce a very hard close grained wood, suitable for small implements such as mallets and splitting wedges. Both species make excellent fuel; *C. monogyna* can also make livestock barriers and is noted for being the hottest firewood.

Sorbus. One or more of the native group of at least six species that includes, the most widespread rowan, *Sorbus aucuparia*, caorthann, as well as whitebeam, *Sorbus aria*, fionncholl coiteann; and Irish whitebeam, *Sorbus hibernica*, fionncholl ghaelach.

<u>Environmental indications</u>. General. Very tolerant of soil quality generally, though requiring moist soil. Tolerating light shade, though fruiting better in a sunny position. Effective pioneer, Rowan natural to all of Ireland. Other *Sorbus* species native to Ireland have a much more restricted range within Ireland and elsewhere, with Irish whitebeam found only in Ireland.

<u>Uses in antiquity.</u> Heavy, close grained hard wood suitable for carving and useful for making bows, tool handles, mallet heads and, if sizable, beams etcetera. Coppices well.

<u>Oak</u>

There are two native species, pedunculate oak, *Quercus robur*, dair ghallda and sessile oak, *Quercus petraea*, dair ghaelach. (Family - Fagaceae).

<u>Environmental indications</u>. Broadly soil tolerant. *Q. robur* preferring alkaline or neutral soils rich in minerals, particularly damp clay soils and usually found in mixed woodland. *Q. petraea* preferring acid and lighter well drained soils, often in pure stands. Both species are naturally distributed throughout Ireland.

<u>Uses in antiquity.</u> Both species produce a hard wood resistant to abrasion and water degradation, particularly useful for structural timber and implements, poles and fencing. Woodland trees can be coppiced to produce stakes, straight poles etcetera. The density of oak wood makes for an optimum log lasting fire fuel (Rossen and Olson 1985).

The total range of taxa from AR123, Clareabbey, comprises alder (*Alnus*), ash (*Fraxinus*), hawthorn/apple/*Sorbus*-group (Pomoideae), hazel (*Corylus*) and oak (*Quercus*). There is a relatively varied diversity of species indicated in the local environment. The represented taxa belong to the groups of species represented in the native Irish flora and, conversely, non-native tree species such as lime (*Tilia*) and beech (*Fagus*) are not represented.

Generally, there are various, largely unquantifiable, factors that effect the representation of species in charcoal samples including bias in contemporary collection, inclusive of social and economic factors, and various factors of taphonomy and conservation (Théry-Parisot 2002). On account of these factors the identified taxa are not considered to be proportionately representative of the availability of wood resources in the environment but may be reflective of particular choice of fire making fuel from those resources.

Ash (*Fraxinus*) is the most numerous of the identified taxa and is the second most commonly represented from the total of Ennis Bypass sites. As noted above ash (*Fraxinus*) is a particularly useful fire fuel as well as being a likely commonly used structural/artefactual wood.

Conclusion

A varied woodland environment local to the site of AR123 is indicated by the range of taxa present in the samples. The identified taxa are consistent with the picture of wood use from most of the other Ennis Bypass sites. The charcoal of the site has probably derived from fire debris, and a particularly ready access to, and possible preference for ash (*Fraxinus*) as fire fuel is indicated.

Radiocarbon date

A radiocarbon determination from charcoal from one of the pits was made by Beta Analytic Inc, Miami, Florida (Table 4).

Table 4: Radiocarbon determination

Sample material	Cut	Deposit	Sample	Lab code	Radiometric age	Calendrical calibrations
Charcoal Corylus	23	22	3	Beta-211579	1140±40 BP	2 sigma (95%) Cal AD 790 to 990 1 sigma (68%) Cal AD 880 to 970

The charcoal sample was from a short-lived tree species. The radiocarbon determination may, then, be a relatively accurate indicator of the date of the backfilling of Pit 23. The pit, and presumably those associated with it, were then, used between the late 8^{th} and late 10^{th} centuries AD.

Discussion

The excavation of Site AR123 at Clareabbey, Co. Clare has provided evidence of probable domestic activity in the form of a small a cluster of small pits and a hearth, dated to between the late 8^{th} and late 10^{th} centuries AD.

The presence of a major ecclesiastical centre 475m to the north-east may be significant. Documentary evidence suggests that Clare Abbey was founded in AD 1189 by King Domnall Mór (Gwynn & Gleeson 1962, 452). The 19th/20th century antiquarian Thomas Westropp (1900) suggests that the abbey site was chosen because it was perceived as sacred and this may indicate the existence of an earlier church on the spot. The abbey is also sited within an area of general religious activity, represented by the church of Killoe (Killow) located a mile to the east, as well as the foundations, earthworks and well of Kilbreckan or Carntemple located a mile from Killow. Kilbreckan is said to be the earliest monastery in Clare, founded towards the end of the fifth century AD.

The archaeological deposits excavated at Site AR 123, predate the traditional founding of Clare Abbey by at least 200 years, but it is not inconceivable that the pits and hearth relate to an earlier Christian religious focus. Equally, the deposits may be purely domestic. Ringforts are commonly held to be the general settlement type at the end of the 1st millennium AD, although the closest known example of a ringfort is 1km to the east of Site AR123 (CL033-117). Site AR123 may then, represent unenclosed settlement near a religious centre between the years AD 790 to 990.

Archaeological potential off the road CPO

The archaeological deposits found during testing were fully resolved within the road CPO. The presence nearby of Clare Abbey might however indicate a reasonable potential for further archaeological deposits without surface expression outside the road-take.

Publication plan

A summary of the findings of the excavation has been submitted to *Excavations 2004*.

Copies of this final excavation report will be deposited with the Clare County Museum and the Local Studies Library, Ennis, Co. Clare

A summary article, describing the findings of this road project has been published in the local journal *The Other Clare* (Hull and Taylor 2005).

An illustrated information brochure describing the findings of this road project has been published by Clare County Council.

The stated aim of the National Roads Authority with regard to archaeological publication is clear, (O'Sullivan 2003) and it is anticipated that the results of this excavation will be disseminated as a component of a monograph dedicated to the archaeology of the Ennis Bypass. Publication is expected to take place in 2006/7 at the latest.

Graham Hull MIFA MIAI TVAS Ireland Ltd 14th August 2006

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Context	Description	Sample	Find No.
No.		No.	
1	Topsoil	-	04E0019:3 piece of
			shale - discarded
2	Natural	-	-
3	Fill of Pit 4	-	-
4	Pit cut	-	-
5	Fill of Furrow 6	-	-
6	Furrow cut	-	-
7	Fill of Furrow 8	-	-
8	Furrow cut	-	-
9	Fill of Furrow 19	-	-
10	Fill of Pit 11	1	-
11	Pit cut	-	-
12	Fill of Furrow 20	-	-
13	Charcoal rich deposit	-	-
14	Hearth	-	04E0019:2 slag
15	Sandy silt – natural	-	-
16	Fill of Furrow 21	-	-
17	Fill of Pit 18	-	04E0019:1 slag
18	Pit cut	-	-
19	Furrow cut	-	-
20	Furrow cut	-	-
21	Furrow cut	-	-
22	Fill of Pit 23	3	-
23	Pit cut	-	-
97	Fill of Pit 153 (only seen in testing 03E1291)	-	-
125	Pit cut (only seen in testing 03E1291)	-	-
133	Fill of Pit 125 (only seen in testing 03E1291)	-	-
153	Pit cut (only seen in testing 03E1291)	-	-

Appendix 1: Catalogue of features and deposits

Find No	Cut	Deposit	Category	Description	No pieces	Weight (g)
1	18	17	Slag	Fragment	1	8
2	-	14	Slag	Fragment	1	23
				Piece of shale – not		
3	-	1	Stone	archaeological	1	

Appendix 2: Catalogue of finds

NB. Find 3 has been discarded as it is not an archaeological artefact













Plate 1. Site AR123 during cleaning. Looking north



Plate 2. Hearth 14. Looking south. Scale 1m



Plate 3. Pit 23. Looking south. Scales 0.2m and 0.1m