Archaeological Excavations on land at Foxhills, Brackley Northamptonshire: Assessment Report and Updated Project Design

Report number: 17/88

Author: Stephen Morris

Illustrators: Joanne Clawley and Olly Dindol

Project Manager: Anthony Maull & Adam Yates
Site Code: ENN108219
NGR: SP 592 387

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OASIS REPORT FORM

PROJECT DETAILS	**OASIS number: molanort 1-2935524**	
Project title	Archaeological Excavations on land at Foxhills, Brackley, Northamptonshire: Assessment Report and Updated Project Design	
The earliest evidence of activity was a small amount of residual Neolithic/early Bronze flint work. The site displayed limited early Iron Age activity with only two possible postholes. The main occupation was middle Iron Age and comprised three separate foci within an agglomerated settlement. Each foci contained much the same type of features and structures that collectively comprised four ring ditched roundhouses, a rectilinear building, enclosing structural postholes and hearths. There were 18 other circular structures and rectilinear enclosures, 46 square four or six-post granary storage structures and as many as 110 grain storage pits. This also included five large intercutting pit clusters. Other discrete pits and postholes were also present, with some of the postholes possible forming parts of fence lines. There were clearly phases of reorganisation on more than one occasion throughout this period which was evident from the shift in land use in each of the settlements. The settlement declined by the late Iron Age by which point activity was limited to two circular enclosures, a stone spread and a few storage pits. A reasonable assemblage of finds, including locally made pottery, animal bone, eight saddle querns, 16 copper alloy and iron objects; 10 pieces of worked bone and antler, some charred cereal grains and small amount of slag were recovered from many of the features. The presence of a large number of grain storage facilities in association with the moderate number of saddle querns retrieved indicates grain production and processing was probably central to the function of this settlement during the middle Iron Age.		
Project type	Excavation	
Previous work	Desk based assessment (Bennett-Samuels 2006) Geophysical surveys (GSB 2007) and (Fisher *et al* 2012), evaluation trenching (Jones and Chapman 2012)	
Future work	Unknown	
Monument type and period	Iron Age settlement	
Significant finds	Middle to late Iron Age pottery, 8 saddle querns, slag	
PROJECT LOCATION		
County	Northamptonshire	
Site address	Land at Foxhills, Brackley, Northamptonshire	
Easting & northing	SP 592 387	
Area	*c*8ha	
Height OD	118m- 137m aOD	
PROJECT CREATORS		
Organisation	MOLA Northampton	
Project brief originator	Lesley-Ann Mather, Northamptonshire County Council (Mather 2015)	
Project Design originator	MOLA (MOLA 2014)	
Director/ Supervisor	Simon Markus (MOLA)	
Project Manager	Anthony Maull (MOLA) Adam Yates (MOLA)	
Sponsor or funding body	Bellway Homes Ltd	
PROJECT DATE		
Start date	February 2016	
End date	May 2016	
ARCHIVES	Location	Content
Physical	MOLA Northampton ENN 108219	Middle to late Iron Age pottery, animal bone, 8 saddle querns flint, small finds, slag and charred plant remains
Paper		Proforma sheets, plans, sections, black and white contact sheets, colour slides and digital photograph contact sheets
Digital		Report, map and site data, digital images
BIBLIOGRAPHY		
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Author(s)	Stephen Morris	
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Abstract

Between February and May 2016 MOLA (Museum of London Archaeology) carried out archaeological mitigation on land at the Foxhills site, Brackley, Northamptonshire.

The works were undertaken on behalf of Belway Homes Ltd. The earliest evidence of activity was a small amount of residual Neolithic/early Bronze flint work. The site displayed limited early Iron Age activity with only two possible postholes. The main occupation was middle Iron Age and comprised three separate foci within an agglomerated settlement. Each foci contained much the same type of features and structures that collectively comprised four ring ditched roundhouses, a rectilinear building, enclosing structural postholes and hearths. There were 18 other circular structures and rectilinear enclosures, 46 square four or six-post granary storage structures and as many as 110 grain storage pits. This also included five large intercutting pit clusters. Other discrete pits and postholes were also present, with some of the postholes possible forming parts of fence lines. There were clearly phases of reorganisation on more than one occasion throughout this period which was evident from the shift in land use in each of the settlements. The settlement declined by the late Iron Age by which point activity was limited to two circular enclosures, a stone spread and a few storage pits.

A reasonable assemblage of finds included locally made pottery, animal bone, eight saddle querns, some charred cereal grains and small amount of slag were recovered from many of the features. The presence of a large number of grain storage facilities in association with the moderate number of saddle querns retrieved indicates grain production and processing was probably central to the function of this settlement during the middle Iron Age. Other finds mainly from the early to middle Iron Age comprised 16 copper alloy and iron objects; 10 pieces of worked bone and antler. The artefacts included copper alloy jewellery items; a segmented brooch/ring, a armlet fragment and a glass bead; Functional items include a vessel/container handle made from copper alloy "wire", a possibly iron cauldron hanger hook and a sharpening stone. Craft working implements comprise an almost complete bone weaving comb and needle, a pointed bone blade and a decorated antler handle.

1 INTRODUCTION

1.1 Background

MOLA (Museum of London Archaeology) was commissioned by Belway Homes Ltd. to undertake an archaeological excavation prior to residential development of land at Foxhills, near Brackley, Northamptonshire (NGR SP 592 387; Fig 1). Two areas were excavated (Sites 1 and 2), totalling *c*2.5ha, across the centre of the development area. The excavation was the final stage of archaeological work which followed on from a series of archaeological investigations.

The first phase work comprised a desk-based assessment (DBA) undertaken by CgMs Consulting (Bennett-Samuels 2006). This was followed by a geophysical

survey (GBS 2007). A second geophysical survey then took place (Fisher *et al* 2012), followed by evaluation trenching (Jones and Chapman (2012).

Planning consent was granted for residential development of the site in November 2012 (S/2012/1557/MAO). A brief was issued by the Northamptonshire County Council Archaeological Advisor (Mather 2015), setting out the requirements for works. To fulfill this, a Written Scheme of Investigation was provided by MOLA (Yates 2016). The work was undertaken in accordance with Section 12 of the National Planning Policy Framework (DCLG 2012), the Chartered Institute for Archaeologists *Standards and guidance: archaeological excavation* (CIfA 2014a) and *Code of Conduct* (CIfA 2014b), and the procedural document *Management of Research Projects in the Historic Environment* (Historic England 2015).

1.2 Location and topography

The proposed development site comprises *c*8ha of land, located in an area that most recently consisted of pasture fields and areas of scrub to the north of Brackley, close to Foxhill Spinney. It occupied a gentle sloping north-east facing scarp at an elevation of between 118-137m (aOD), which overlooked a small stream which drains south-eastwards into the River Great Ouse.

The east side of the site lay adjacent to the A43 trunk road and a petrol station, with the western edge of the site is defined by a former railway line (depicted on the 1990 second Edition Ordnance Survey Map), which under current plans, will be retained as a wildlife corridor. The area to the south side of the site was bounded by residential development previously the location of the former Brackley Sawmills, which was archaeologically excavated 2011 and 2014 (Figs 2, 5 and 6, Wolframm-Murray 2011 and Muldowney 2016).

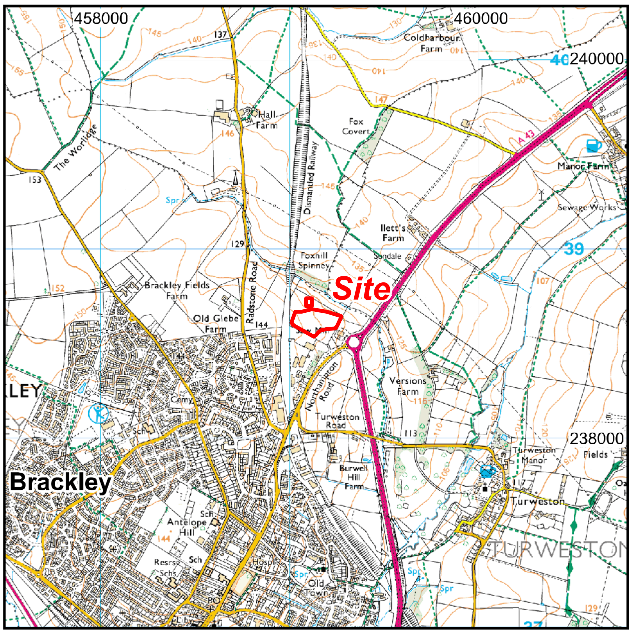
1.3 Geology by Steve Critchley

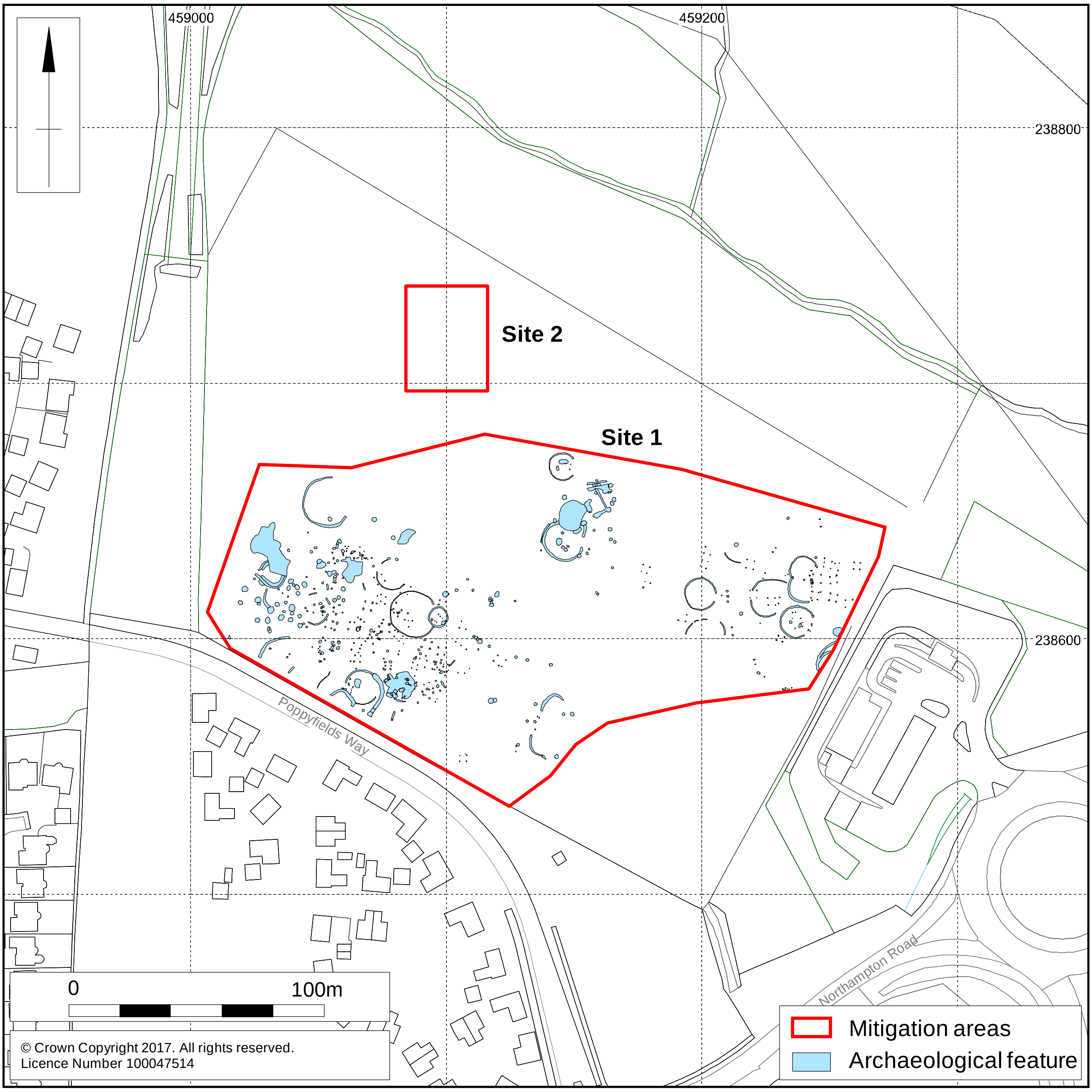
The site is underlain by a sequence of Middle Jurassic Great Oolite Group strata comprising, with the lower portion of the site occupied by the Horsehay Sand Formation and the Taynton Limestone Formation which outcropped on the upper parts of the site. The only drift deposit, alluvium is present in the base of the stream valley along the northern margin of the site (BGS 2017).

The deposits in the lower part of the site were composed of pale grey to off white fine grained calcareous sands, with some better cemented bands of sandy limestone. In the Brackley part of Northamptonshire these beds pass non-conformably upwards into the ooidal Taynton Limestone which is characterised by a thick bedded competent white to pale brown well sorted fossiliferous limestone with subordinate calcareous sandstones (Figs 3 and 4).

The substantive bed of dark grey clays/mudstones seen mid site does not fit into the rock types associated with these two formations and so may be a locally restricted bed between the two and not mapped by the British Geological Survey on the current geological map. This was a significant stratum as the Iron Age development appeared to be restricted to the dryer and more compact limestone geology in the upper and lower parts of the site.

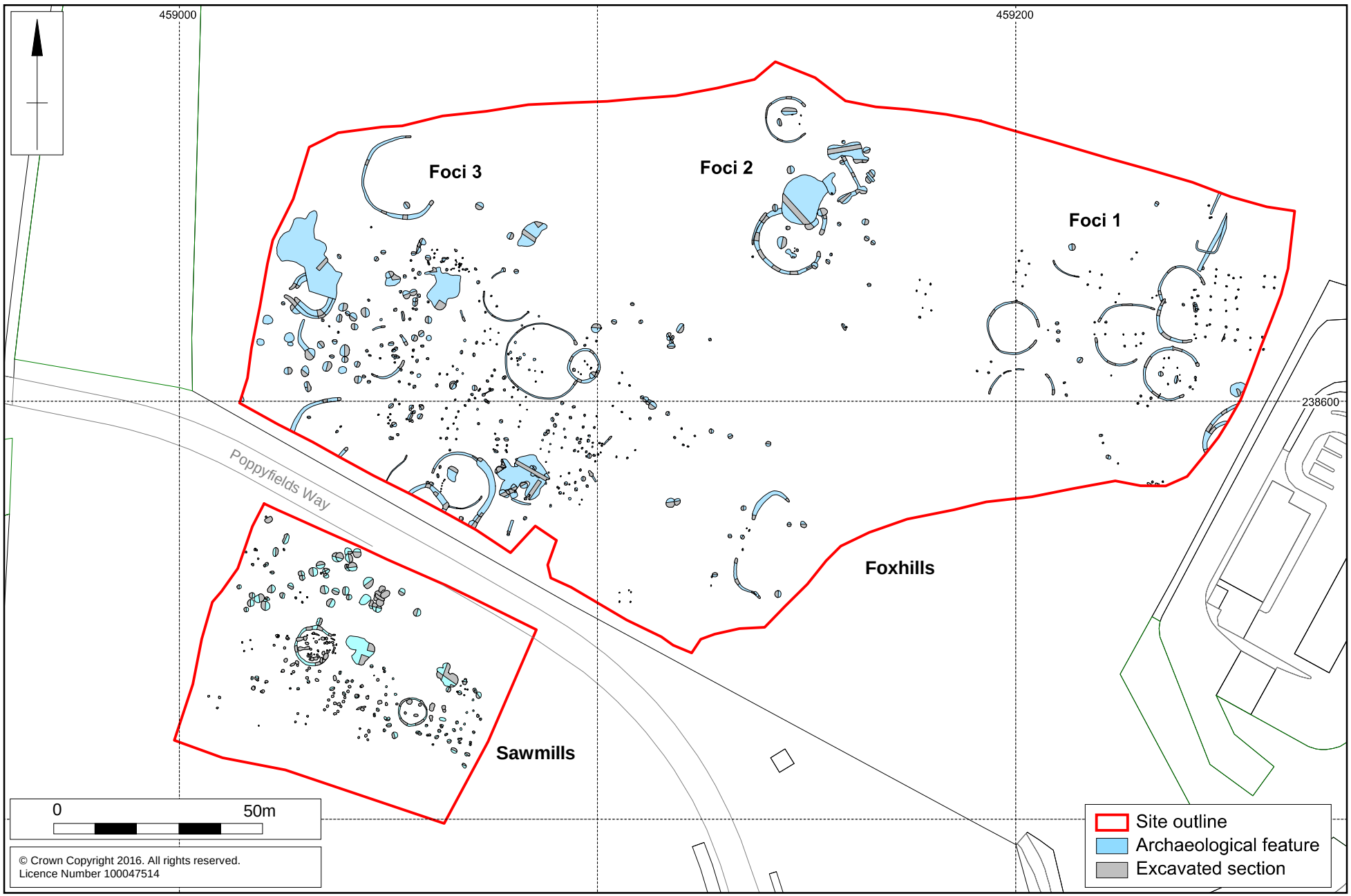
There had also been much alteration by periglacial ground ice action with locally extensive disruption of the limestone bedding and decalcification of some parts reducing these to fine grained loosely consolidated quartz rich sands. There was extensive decalcification of the Horsehay Sand Formation making it susceptible to erosion by groundwater springs and surface water downslope runoff.





Scale 1:2500

Site location and archaeological features Fig 1



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Brackley Foxhills site and Brackley Sawmills site Fig 2

Aerial view of Site 1, facing east, with the high ground in the foreground, on which the Iron Age occupation lay over the Taynton Limestone Formation, separated from the Horsehay Sand Formation (background) by a substantive bed of anomalous dark grey clays/mudstones Fig 3

Aerial view of Site 1 (mid-ground) and Site 2 (lower left corner), Fig 4, facing north-west

These were seen to be infilled by later periglacially derived light brown to reddish brown silty sands and clays. The proximity of the underlying Whitby Mudstones Formation which is an aquiclude, would have allowed groundwater within the pervious Horsehay and Taynton Formations to drain by surface seeps and springs downslope near to the junction with the underlying mudstones.

1.4 Historical and archaeological background

A desk-based assessment (DBA) relating to this area was undertaken by CgMs Consulting (Bennett-Samuels 2006). This included a search of the Historic Environment Record for Northamptonshire (HER).

The DBA recorded prehistoric activity comprising a fragment of a Bronze Age flanged axe or palstave located to the north of the site (HER 7267/0/0). Activity of the later prehistoric date was evidenced by La Tene I and II brooches found during the construction of the Brackley bypass in 1986, approximately 350m south of the proposed development site (HER 5837/0/0).

A number of undated cropmark sites were also known from aerial photography which may be late prehistoric or Romano-British in origin. These include enclosures to the south-east (HER 152) and north-west (HER 1411) of the proposed development site (Fig 6). A small excavation and a watching brief were carried out prior to the construction of the petrol filling station immediately to the south-east of the site, next to the A43 roundabout (Fig 5; HERs 5626, 8260, and 9476). A small undated cemetery was found comprising six shallow graves with at least nine or ten individuals. The limits of the cemetery are uncertain, and apart from small, probably residual sherds of Iron Age pottery, no dating evidence was found. Pits with some Iron Age pottery were found nearby, and an alignment of stake holes, two pits and a ditch are also recorded from the vicinity.

Recent evaluation at Radstone Fields has found evidence of a middle Iron Age settlement 500m to the north-west of the present site (OAS 2010). The settlement comprised a series of ring ditch enclosures, most of which exhibited more than one phase of use. A series of smaller gullies, pits and postholes were also noted (Figs 5 and 6). The finds dated almost exclusively to the middle Iron Age, with only slight evidence of an earlier influence. There was no evidence that the settlement persisted into the late Iron Age.

Approximately 150m north-east of the proposed development site, an inhumation burial and a scatter of Roman pottery were found during ploughing in 1979 (HER 154/0/1). Metal coins, a brooch and pottery were also found during metal detecting in the vicinity in 1992, indicating a possible Romano-British settlement in the locality (HER 154, 154/0/0). Further Roman activity is also attested by a 1st-century brooch and coins during metal detecting in the course of the construction of the Brackley bypass in 1986, south of the application site (HER 5837/0/0). An extensive Roman settlement is known from Brackley's Old Town, approximately 1km to the south (NGR SP 592 372, RCHME 1982, 23). Building to the south during the early 1970s found coins, pottery, roof and flue tiles, tesserae, plaster, a cobbled floor and wall foundations, indicating occupation during the late Roman period.

Brackley was probably founded during the 7th century AD. A planned town was established during the Norman period as a second settlement along the new road from Northampton to Oxford. During the medieval period, the settlement thrived through the wool trade and was granted a Borough Charter in 1260, when it had grown to be the one of the wealthiest towns in Northamptonshire. The site lies within a medieval open field landscape associated with the Old Town, with the system extending northwards from the Old Town as far as the stream forming the northern

boundary to the site. Medieval sites relating to the settlement at Brackley are present to the south of the development area, including the two hospitals of St Leonard and St James, and St John. The post-medieval period is denoted by the opening of the Great Central Railway through the Old Town in 1899, which was closed in 1966 (Wolframm-Murray 2011).

Detailed magnetometer surveys (GSB 2007 and Fisher *et al* 2012) of the present application site indicated the presence of buried archaeological features. The surveys highlighted a number of circular features, as well as possible pits. Given that Iron Age features have been found directly to the west and south of the site, it was considered likely that the remains were of a similar date.

Subsequent trial trench evaluation comprised twenty-one trenches (Jones and Chapman 2012). This located archaeological remains within eight trenches on the top of a north-east facing within the site. These encompassed a group of roundhouse ring ditches, postholes and pits. A single posthole produced early Iron Age pottery, probably dating no later than the 6th century BC. The majority of the pottery, including the material associated with the roundhouses, was dated to the middle to late Iron Age, 4th to 1st centuries BC. A single large pit produced a mixed pottery assemblage dating to the late Pre-Roman Iron Age, indicating that occupation had continued into the early decades of the 1st century AD. The remaining trenches contained no archaeological features.

Between June and October 2014 Albion Archaeology undertook open-area excavation in advance of mixed-use development by Albion Land plc on land off Northampton Road, Brackley (Fig 5). An area of *c*3ha was excavated divided into two main sites.

A middle Iron Age settlement was excavated c200m to the south of the proposed development that was characterized by roundhouses, ditched enclosures, post-built structures and an abundance of storage pits (Luke *et al* 2016). Similar features were found to the south and in the southern excavation area, although these were smaller in number and occurred in a much lower density than in the main settlement area.

Brackley Sawmills, immediately to the south of the site, has also been subject to archaeological evaluation (Wolframm-Murray 2011) and archaeological mitigation (Muldowney 2016) (Figs 2 and 5). The site was located over naturally-formed linear hollow, which was the setting for part of an early-middle Iron Age settlement that contained a series of structures including a roundhouse-type building and four-post structures, which were very likely to be granaries. On the slightly higher chalky ground there was at least one further four-post structure plus multiple grain-storage pits, pits and a possible well. A complete bone-handled reaping hook was recovered within the roundhouse; saddle querns and discrete deposits of burnt grain were also recovered from features across the site.

1.5 Methodology

The mitigation strategy was set out in a brief (Mather 2015) and an approved Written Scheme of Investigation (Yates 2016). Management of the excavation for MOLA was undertaken by Adam Yates and Anthony Maull.

The NCC brief stipulated a programme of open area excavation within the development area. The excavation comprised two sites (Fig 1); Site 1 targeted features identified by previous geophysical and trial trench evaluation in the central part of the site (Fig 7) and Site 2 was a strip, map and record undertaking in a 20m sq. block of land, laying *c*30m to the north of the main site, targeting potential

features identified by geophysical survey. The total excavation area was approximately 2.4ha in extent.

A provision was made to extend the excavation where significant features were encountered on the edges of the excavation, which allowed for 10m strips, until such features were no longer encountered or questions relating to the nature of the features resolved. The extent of any extensions was to be agreed with the Archaeological Advisor at Northamptonshire County Council (NCCAA), the MOLA Project Managers and the Client.

The excavation areas were measured in and marked out, prior to the commencement of work, using Leica System 1200 GPS operating to an accuracy of +/- 0.05m to Ordnance Survey National Grid.

Removal of the topsoil and modern overburden was carried out by tracked 360^{o} mechanical excavator, fitted with a toothless ditching bucket, operating under constant archaeological supervision. Mechanical excavation proceeded to the natural substrate or the first significant archaeological horizon. The spoil generated was stockpiled on site according to type.

The spoil heaps and excavated areas were scanned with a metal detector to ensure maximum finds retrieval. The location of all archaeological features and deposits was initially plotted by GPS and subsequently supplemented by detailed scale 1:50 plans. All archaeological deposits encountered during the course of the excavation were fully recorded, following standard MOLA procedures (MOLA 2014) and in accordance with the WSI (Yates 2016). All deposits were given a separate context number. They were described on pro-form context sheets to include details of the context, relationships and interpretation. A full digital photographic record was maintained.

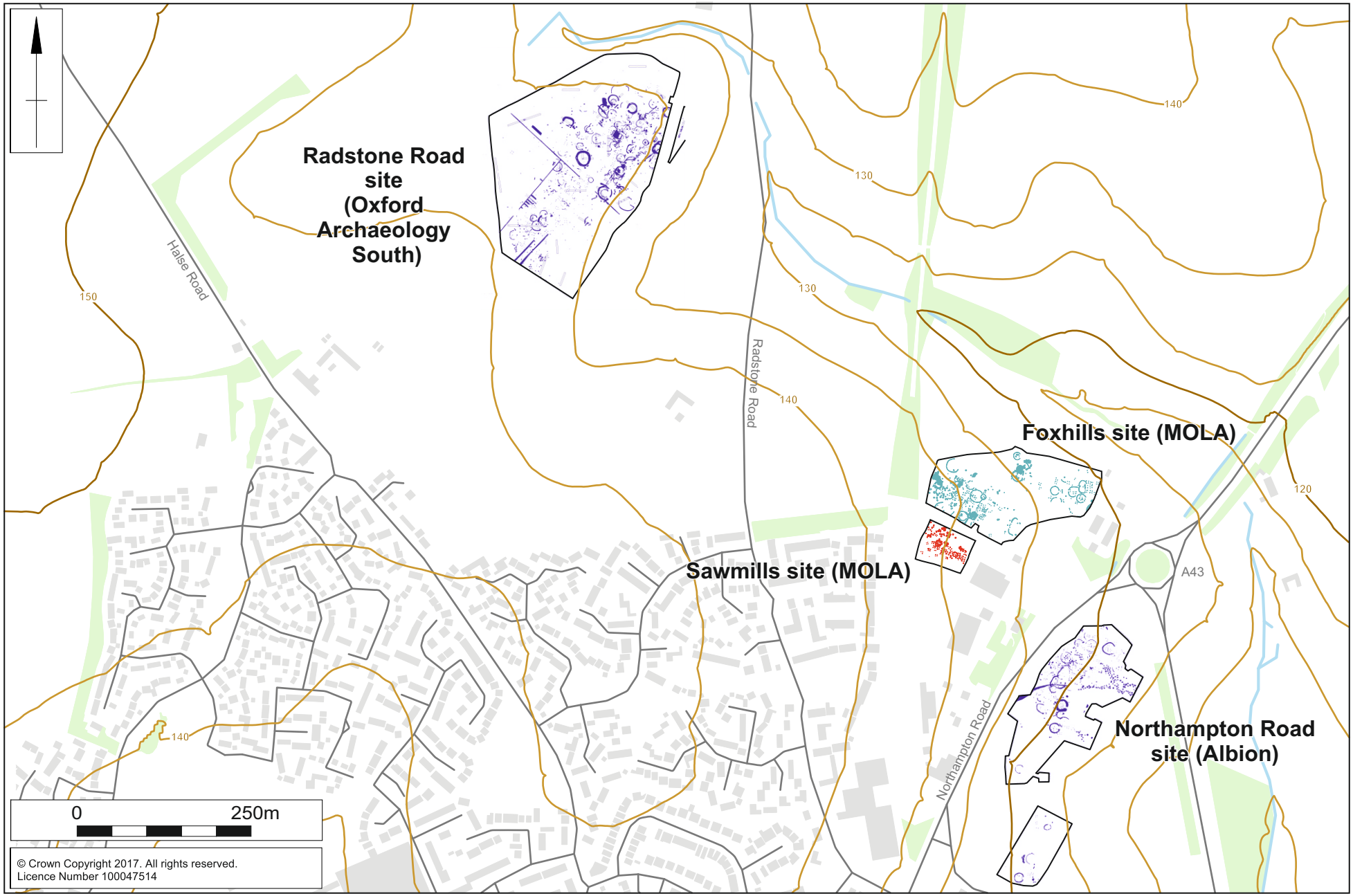
Monitoring of the programme of fieldwork was carried out by Lesley-Ann Mather, the County Archaeological Advisor for Northamptonshire County Council. The initial monitoring meeting was held once a sufficient portion of the development area had been stripped and the base plan for that area has been produced. The result of the meeting confirmed a site excavation methodology and a schedule for further monitoring meetings.

All works were carried out in accordance with the Chartered Institute for Archaeologists *Code of Conduct* (CIfA 2014b), and *Standard and Guidance: Archaeological Excavation* (CIfA 2014a). All works conformed to the Historic England procedural document *Management of Research Projects in the Historic Environment* (HE 2015). The excavations took place between February and May 2016.

2 RESEARCH OBJECTIVES

2.1 General objectives

The general purpose of an archaeological investigation is to determine and understand the nature, function, and character of an archaeological site in its cultural and environmental setting, with specific aims to preserve the archaeological evidence by record and to attempt a reconstruction of the history and use of the site. The broad archaeological objectives for the archaeological works were identified in the brief provided by the County Archaeological Advisor for NCC (Mather 2015).



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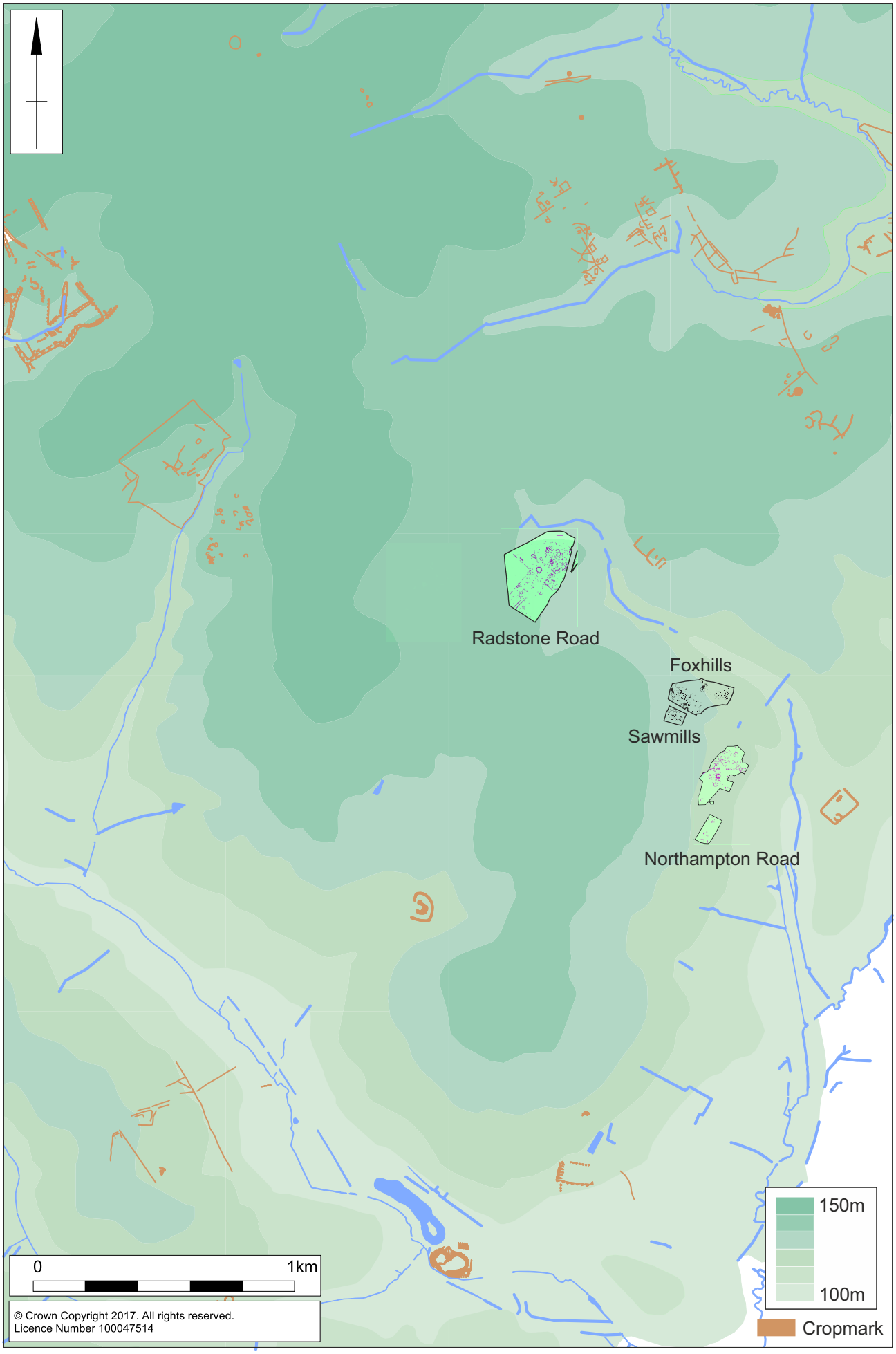
Excavations at Brackley Fig 5



Scale 1:20000

Sites within the wider landscape, related to height above sea level

Fig 6

Scale 1:2500 (A4)

The geophysical survey results and the trial trenches

Fig 7

2.2 Research agenda

Further research objectives can be identified through reference to the East Midlands Research Agenda (Knight *et al* 2012). The research agenda identifies specific areas of interest and objectives that were considered a focus of all excavations that take place within the East Midlands. This site has the potential to assist in meeting some of the Iron Age research objectives and of particular relevance to this site are the following agenda items:

- 4.5 Late Iron Age settlements
- 4.6 Field systems and major linear boundaries
- 4.7 Ritual and structured deposition and religion
- 4.8 Agricultural economy and landscape

These agendas will be reviewed against the evidence presented below and adapted and reassessed where appropriate and relevant.

3 SUMMARY OF EXCAVATION RERSULTS

3.1 Summary of the Iron Age landscape

Foxhills contained elements of three domestic/industrial foci within an aggregated settlement that was part of a much more extensive Iron Age landscape, which had developed along the north-east facing scarp of a small valley on the edge of Brackley (Figs 5 and 6). Evidence retrieved from recent mitigation works, evaluation trenching, geophysical survey (GSB 2007 and Fisher *et al* 2012) and the recording of cropmarks, in the vicinity of this site showed that it was a fairly intensely occupied setting. These recent archaeological works extended over a 1km to the north-west from the Foxhills trial trenching (Jones and Chapman 2012) to the Radstone Fields evaluation (OAS 2010) and excavation, lying at least 0.5km to the south to the Northampton Road site (Luke *et al* 2016), with a probability of the settlements continuing beyond the limits of the excavations (Figs 5 and 6).

The evidence from the cropmarks also suggests there was also occupation along the scarp edge and on the valley side opposite to Foxhills and the other noted sites (Fig 6). The sites lay mainly between the 120m and the 145m contours that in most part overlay the upper limestone strata of the middle Jurassic geology (Fig 6).

Although this appeared to be a generally densely occupied area in the Iron Age there were clearly concentrations of activity at or close to Foxhills, inclusive of the adjacent Sawmills site (Muldowney 2016) and the other two noted two areas. All of the sites had settlement remains of similar appearance, characterised mainly by a series ring ditches for possible roundhouses, roughly circular or penannular ditched enclosures, a large number of square four-post-built storage structures and multiple grain-storage pits in displayed distinct groupings (Fig 2).

Although probably developing in the early Iron Age the main of period of activity at Foxhills/Sawmills was in the middle Iron Age period, declining in the late Iron Age. The domestic foci areas passed through several sub-phases' of redevelopment during middle Iron Age by partial shifting its location and re-establishing afresh, often overlapping the previous areas of occupation. This resulted in many features on these sites such as the ring ditches and circular enclosures displaying inter-cutting and overlapping with the groups of post structures and pits. These sites probably represented a number of small areas occupied by family groups.

There was a generally similar appearance in the different areas of the agglomerate settlement, with the greater part of their pottery assemblages dated to early-middle to middle Iron Age, which represented the height of activity within the various domestic foci. A small quantity of pottery indicates they probably developed from a small scale settlement in the early Iron Age. The limited amount of pottery recovered from the late Iron Age demonstrates a decline from the middle Iron Age settlement.

The utilitarian nature of artefacts recovered from these sites together with the common pit and four to six-post structures, demonstrate they were agricultural economies. They probably had an emphasis on large-scale grain processing and storage of cereals, based on the number of probable four-post storage structures and storage pits, from which charred wheat and barley grains were recovered. The recovery of saddle and rotary querns attests to the grain processing, especially from the Sawmills site from where there was also a reaping-hook retrieved. A pruning hook found at the Northampton Road site further emphasised the importance of cultivation. Livestock was represented by cattle and sheep remains and to a lesser extent pig and horse from all the sites.

Evidence from the different settlements areas indicates that they were mixed farming communities who undertook some craft production, with the manufacture and repair of textiles demonstrated by the recovery of associated artefacts such as ceramic loom weights, a weaving comb and a bone bobbin, including worked antler, bone needles and awls that were possibly used for leather working.

Metalworking was also probably carried out on small scale with evidence of iron smelting and possibly non-ferrous waste material from both Sawmills and the Northampton Road site, from which iron knives, nails, pins and other metal objects were possibly being produced on the sites, including the above mentioned agricultural implements.

Overview of area of occupation within Foxhills

As described above the site occupied a north-east facing valley side that sloped gently to a small stream which no doubt had some influence on the establishment of this Foxhills site and the closely associated Iron Age settlements to the south and north-west.

The layout of the Foxhills settlement was distinctly divided into two areas (Fig 2), with a down slope area of occupation (Foci 1 and 2) separated from the settlement located on the upper part of the scarp (Foci 3) by a *c*40m wide north-west to south-east strip of ground that was largely unoccupied (Figs 8-11, 17 and 18). The incline of the scarp may have had a partial effect on the non-development of part of the site but strictly speaking it was not so steeply sloping as to prevent occupation. At ground level there was no reason not to occupy this area, but the machine stripping of the site revealed a geological bed of restrictive dark grey clays and mudstones not recorded on the BGS 1;50,000 maps for this area (Figs 4 and 5). During the excavation it was noted that this area was subject to periodic flooding following heavy rainfall and it can be assumed that the Iron Age occupants may have encountered this stratum and found it was unsuitable for structural development or any other practical use, especially in the winter months. As noted above the areas of occupation lay over the more solid and better drained limestone geology.

3.2 Summary of excavation results

Although separated, the two areas contained three middle Iron Age domestic/ industrial foci (Foci 1-3), comprising similar types of features and structures that included four ring ditched roundhouses and a rectilinear structure enclosing postholes and hearths. There were 18 other circular structures and a rectilinear enclosure, 46 four or six-posthole structures and as many as 110 grain storage pits. This also included five large intercutting pit clusters (Figs 8-11, 17 and 18). Other discrete pits and postholes were also present, with some of the postholes possibly forming parts of fence lines. As already discussed there were clearly multiple phases of reorganisation, which was evidenced from the shift in land use in each of the domestic foci, especially noticeable from the intercutting ring ditches, the overlapping posthole structures, pits and enclosure features.

The site was occupied by three foci in an agglomerated settlement each probably worked probably by extended families. Most of the activity comprised features relating almost solely to grain processing and storage, which included a great number of grain storage pits and four to six-posthole structures, probably granary related. The eight fragments of saddle querns recovered from the site suggest widespread processing was being undertaken. The moderate quantity of retrieved animal bone, some of which was articulated, also indicates that farm stock rearing had been part of the economy. It seems likely that the ring ditches not occupied by roundhouses and the other enclosures functioned as animal stockades or pens.

3.3 Site chronology

The dating evidence of the settlement was based on selected pottery context groups across the site, which displayed a broad picture of the settlement's development. In addition the distribution of the recovered saddle querns, largely associated with middle Iron Age activity was also plotted. There was limited stratigraphy of features, though groups of features and structures could be determined by specific dating. Undated features and deposits were phased according to their probable association with dated archaeological features.

Although there was a very small amount of evidence of early Iron Age occupation (600-400 BC), the site was predominately occupied from the early-middle and middle-late Iron Age, with the settlement probably at its peak through the 3rd and 2nd centuries BC. A lower level of activity continued into the late Iron Age, probably declining into the 1st century BC. Broad phases outlined below included multiple smaller events, particularly during the middle Iron Age where the relocating of settlements was occurring over short periods of time, possibly as a generational activity (Table 1).

Four broad phases of activity were identified:

- Period 1: Early Iron Age (600/400 BC)
- Period 2: Early-middle Iron Age (400 – 250BC)
- Period 3: Late-middle Iron Age (250 – 100 BC)
- Period 4: Late Iron Age (1st century BC)
- Period 5: Medieval to the post-medieval (11th century to the 18th century AD)

Table 1: Site chronology

Period/Phase		Description
	Early prehistoric	Neolithic/early Bronze worked flint
Period 1	Early Iron Age (600/400 BC)	Limited settlement activity
		Posthole [705] and pit [722]
Period 2	Early-middle Iron Age (400 – 250BC)	Three foci areas
		Two roundhouses (with postholes and hearths)
		One sub-rectangular structure
		Nine circular structures (probable roundhouses)
		One sub-rectangular enclosure
		30 Storage pits
		Two pit clusters
		Pits, postholes
Period 3	Late - middle Iron Age (250 – 100 BC)	Three settlement areas
		Two roundhouses (with postholes and hearths)
		Four circular structures (probable roundhouses)
		One sub-rectangular enclosure
		28 four or six-post storage granaries
		One pit clusters
		Pits, postholes
Period 4	Late Iron Age	Three settlement areas
	(1st century BC –	One enclosures and a structure
	early 1st century AD)	Metalled stone surface
		Pits, postholes
Period 5	Medieval – post-medieval	Medieval ridge and furrow plough scars (north-east to south-west across site) and post-medieval sheep pen

Ring ditches, enclosures other ditches

The excavation at Foxhills recorded an Iron Age settlement. There were a number of ring ditches or enclosures recorded across the site (Figs 8-11 and 18). Most of the ring ditches were sub-rounded or circular in plan and varied in size. These features survived in various states of preservation, from a complete plan to severely truncated that were recorded as arcs. Most ditches survived well enough to calculate the diameter and a minority were near complete with entranceways preserved. A few only survived as arcs, but these were still allocated structure numbers as they were likely to be the remains of ploughed out ring ditches. A few ring ditches contained postholes of the former structure and/or a hearth. Several contained no postholes including some of the near complete ring ditch examples, which may suggest that some of the postholes had originally been dug only to a shallow level.

Most, if not all, the ring ditches relate to eaves-drip gullies of former domestic dwellings or structures for industrial or craft activities. These have all been given structure numbers but in a few cases the ring ditches that had relatively large diameters may in fact have formed enclosures. In these cases they have been designated with both a structural and an enclosure number. This was true of Structure 16/Enclosure 2, with an internal diameter of 17m and Structure 22/Enclosure 4 with an internal 18m diameter. Structure 19/Enclosure 3 was a broad

open sided curvilinear enclosure. Two other possible Iron Age ditches were also identified as boundaries or enclosures.

There were two features that may relate to sub-rectangular structures. Structure 11 survived as an L-shaped feature, which may have been the remains of timber slots. This feature may have had two external two external postholes.

Four-post structures and pits

A large number of four-post structures were recorded. These are very likely to relate to granaries and have therefore been recorded as G1-G46. These are individual pits, but these have not been individually numbered for this UPD report. A few pit groups were also found and these have been given designated numbers prefixed with PG identification.

3.4 Early Iron Age 600/400 BC (Period 1)

The evidence for occupation in the early Iron Age was extremely limited, and comprised two possible unrelated features, posthole [705]; which was identified in the area of Foci 1, during the evaluation stage (Jones and Chapman 2012) and Pit [722], located in Foci 3 (Fig 9).

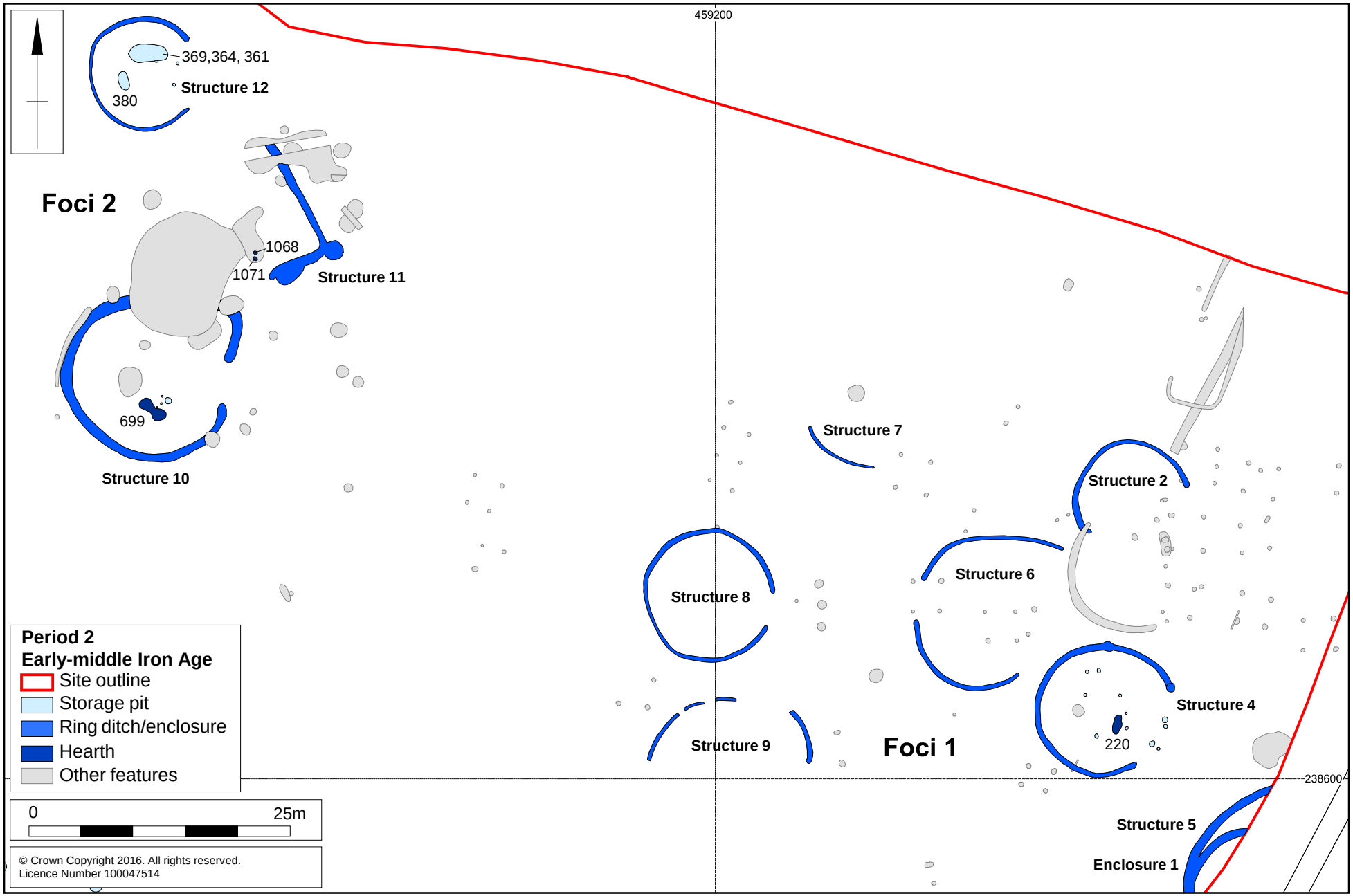
In the evaluation stage (Jones and Chapman 2012), a single posthole [705], located on the east side of Trench 7, produced a small group of pottery that could be assigned to the early Iron Age, probably the 6th-5th centuries BC, due to the presence of a grey carinated vessel, with lines of incised zig-zag decoration.

It is possible that Pit [722], identified in the current excavation, might date to the early Iron Age, perhaps broadly contemporary with the posthole producing the zigzag decorated sherds. While zigzag decoration does not continue into the middle Iron Age, vessels with fingertip decoration do appear in the early-middle Iron Age, indicating this pit may be later.

3.5 Early-middle Iron Age 400 – 250 BC (Period 2)

The site had clearly become occupied by the early-middle Iron Age as a cluster of at least three domestic and/or industrial foci (Foci 1, 2, and 3) formed loose agglomerate type settlement, with each foci probably centered on an extended family group (Figs 8 and 9). The foci comprise a number of ring ditches, a possible rectilinear structure, an enclosure and a series of pits. Features of undetermined dating are assigned to Period 2 and 3.

Two of these foci (1 and 2) were located at the east end of the site. Foci 2 was centered on the north side of the site. Foci F1 was to the east of Foci 2 and comprised seven ring ditches or sub-circular enclosures (Structures 2, 4-9 and Enclosure 1). Foci 2 comprised two ring ditches (Structures 10 and 12) and sub-rectangular feature Structure 11.


Scale 1:500
Foci 1 and 2 Period 2 early-middle Iron Age
Fig 8
459200
238600
369,364, 361
380
Structure 12
Foci 2
1068
1071
Structure 11
699
Structure 10
Structure 7
Structure 2
Structure 6
Structure 8
Structure 4
220
Structure 9
Foci 1
Structure 5
Enclosure 1
Period 2
Early-middle Iron Age
Site outline
Storage pit
Ring ditch/enclosure
Hearth
Other features
0
25m
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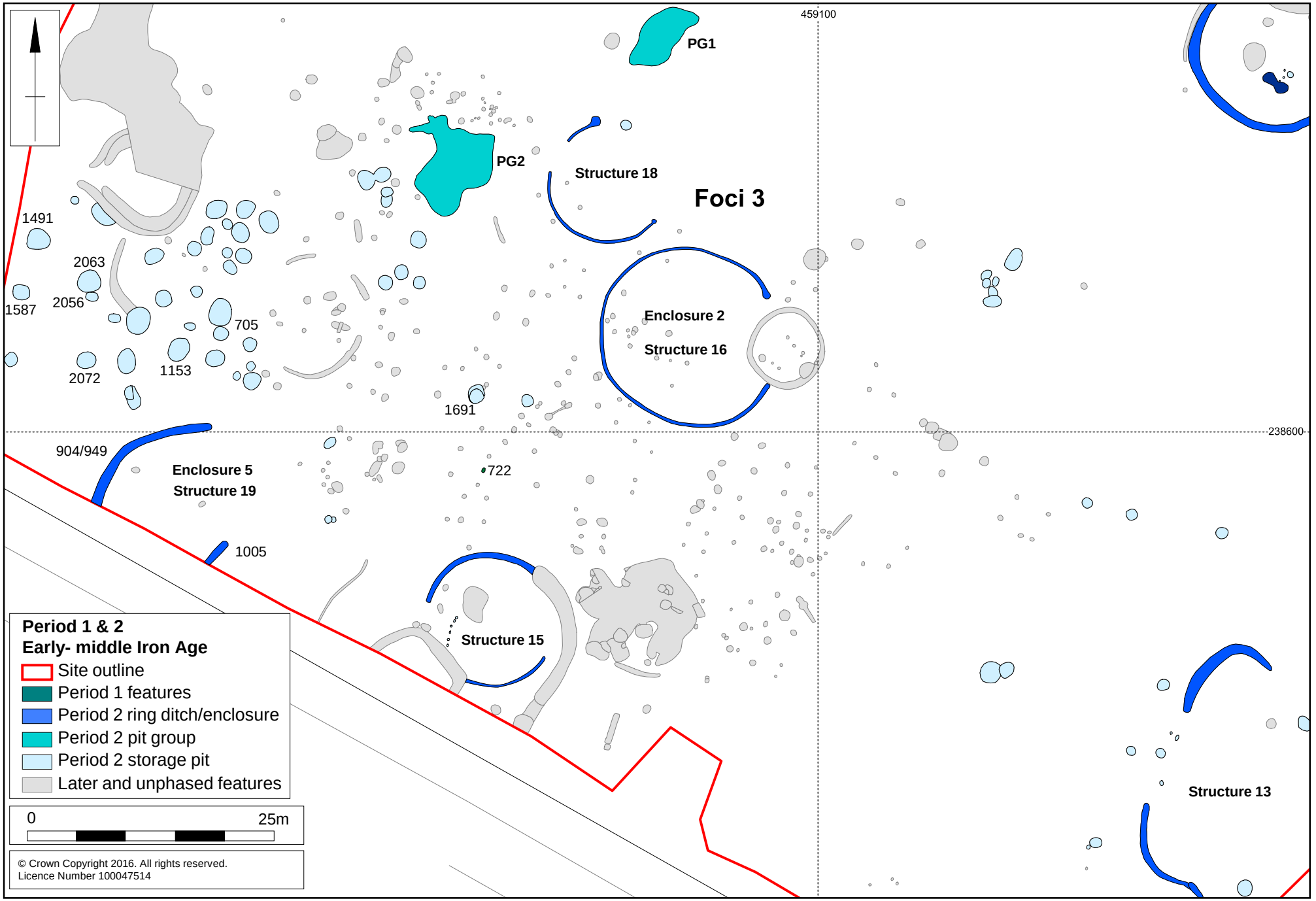
Scale 1:500
Foci 3 Periods 1 and 2 early-middle Iron Age
Fig 9
459100
238600
PG1
PG2
Structure 18
Foci 3
1491
2063
2056
1587
705
1153
2072
1691
Enclosure 2
Structure 16
904/949
Enclosure 5
Structure 19
722
1005
Structure 15
Structure 13
Period 1 & 2
Early- middle Iron Age
Site outline
Period 1 features
Period 2 ring ditch/enclosure
Period 2 pit group
Period 2 storage pit
Later and unphased features
0
25m
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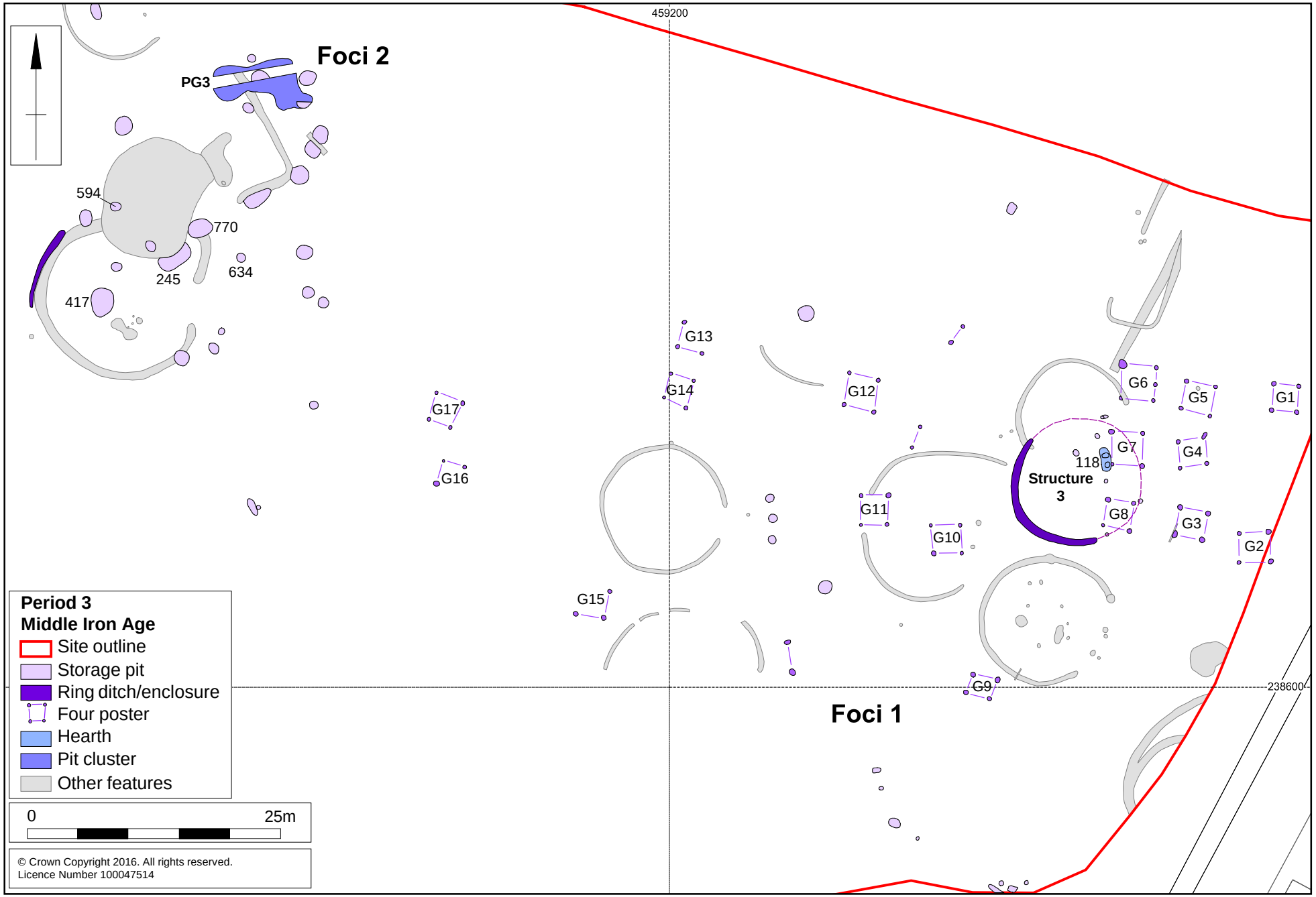
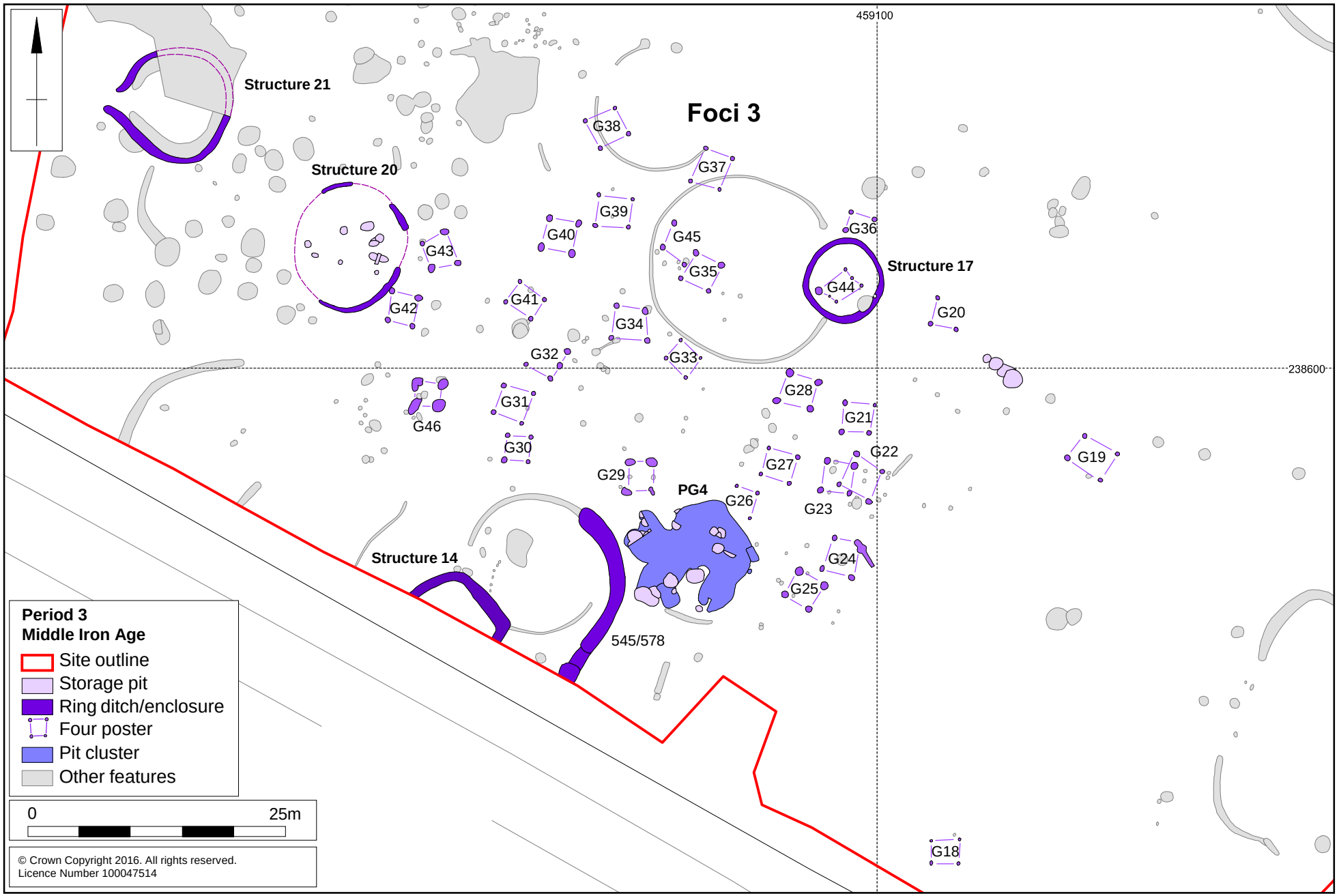
Scale 1:500



Foci 1 and 2 Period 3 middle Iron Age Fig 10

Scale 1:500



Foci 3 Period 3 middle Iron Age Fig 11

Foci 1

Structures 4 (Foci 1) and 10 (Foci 2) were potentially the remains of roundhouses, as they retained internal features relating to occupation, including internal postholes, a possible storage pit and possible hearths and working hollows. The other ring ditches did not contain any surviving internal features. Structure 2 may include some postholes, where it was overlapped by a later Structure 3, although no features lay within it outside the intersection (Fig 8).

Structure 4

The ring ditch of Structure 4 may have been the foundation for a roundhouse with an internal diameter of 13m (Figs 8 and 12). This was a near complete ring ditch forming the possible outline of the roundhouse, with the shallow cut 0.10m to 0.16m deep and between 0.44m to 0.56m wide representing a beam slot foundation for the walls. The probable posthole construction on the east side possibly marked the location of a doorway. One of the postholes produced early Iron Age pottery, retrieved during the evaluation stage.

An arrangement of five internal postholes made a rough 5m circle within the middle, which could have held posts that acted as central supports for the roundhouse. Another two postholes at an intermediate position between the central posts and the north side of the ring ditch may be the evidence of another ring of structural supports.

Also in this central area was a shallow elongated feature [220] that was 1.06m wide by 0.70m long and up to 0.23m deep which contained dark grey brown fill with patches of burnt clay, scorched limestone fragments and charcoal, possibly representing a hearth. Adjacent to this was a possible shallow circular working hollow *c*0.80m wide and up to 0.09m deep. These features most likely indicate the occupation of the structure.

(Foci 2 (Fig 8)

Structure 10

Structure 10 was the largest of the ring ditches identified, it had a slightly flattened east side where an entrance was located and the ditch terminals turned in marginally, producing an irregular internal span of 15m-16.5m (Fig 8). The ring ditch was a fairly large feature with a steep V-shaped cut, 0.43m to 0.59m deep and between 0.89m to 0.99m wide. It probably represented an eaves-drip gully enclosing a roundhouse, with a few sundry internal postholes and hearth [699].

The most significant internal feature was a broad spread of burnt material [699] that was 3.60mm long and up to 1.30m wide. It was a shallow layer no deeper than 0.02m-0.10m and probably represented a shifting hearth and/or hearth rake out debris, becoming part of an internal floor. The spread of burnt material included frequent charcoal, burnt and semi-burnt clay, with shell inclusions and some partially burnt limestone fragments. Some Iron Age pottery and animal bone was also recovered from the deposit.

A small pit was located just to the east side of the hearth, which also contained some burnt remains, as well four small postholes or stakes holes. These features with the hearth more than likely signify the occupation of the structure.

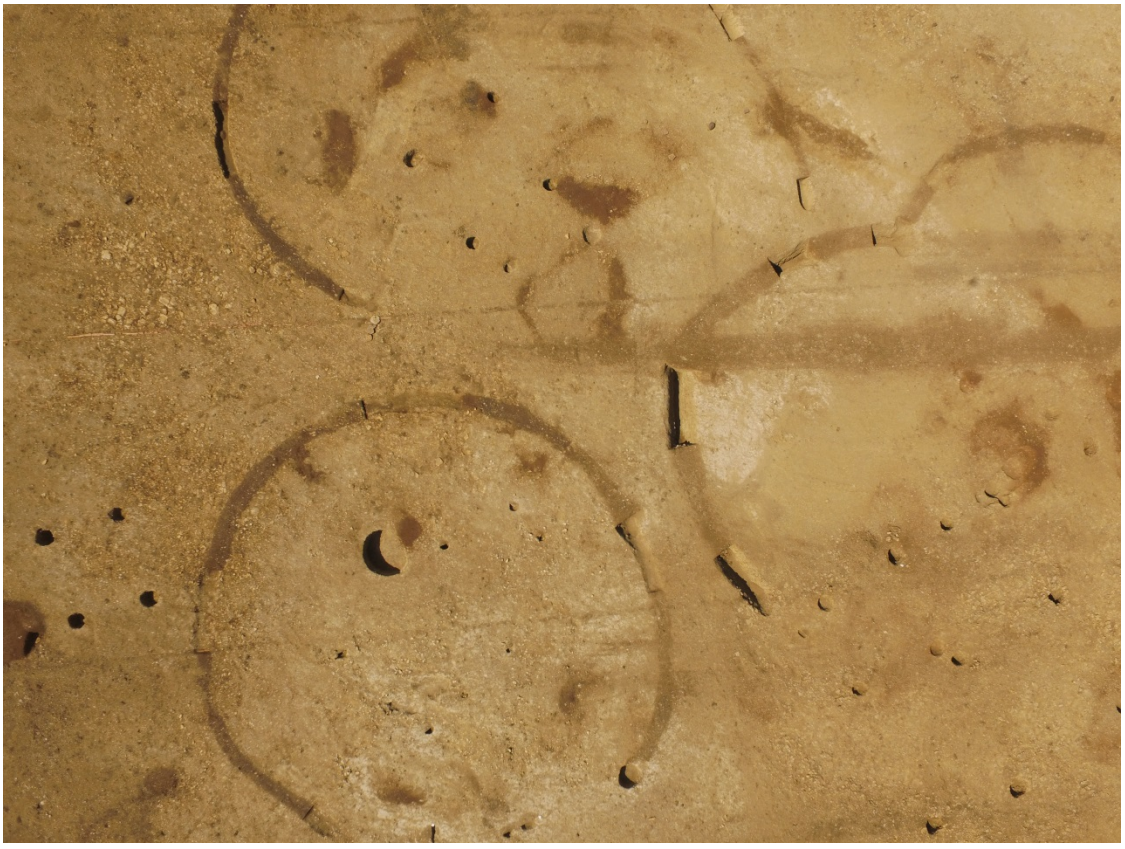
Storage pits that were later cut across this area, partially truncated the enclosure, which was also partially sealed by a large stone spread [238] (Fig 15).

Structure 12

Structure 12 may represent a small ring ditch, with a shallow U-shaped cut, 0.20m to 0.50m wide and between 0.08m to 0.16m deep (Fig 8). The ring ditch may have enclosed a round house, as it retained two inset postholes adjacent to an east-facing entrance, which may represent doorposts or gateposts. An exceptionally large pit [369], with two recuts and smaller storage pit [380], were placed inside, which may be contemporary with the ring ditch (See Storage Pits, below).

Other ring ditches and enclosures (Foci 1)

Structures 2, 5, 6, 7, 8 and 9 had no internal postholes surviving. Their internal diameters were between 11m to 14m, with variable sized ditch profiles (Figs 8 and 12). Structures 5, 6 and Enclosure 1 had steep V-shaped ditches that were between 0.35m to 0.79m wide and 0.30m to 0.40m deep. Structure 6 may have also represented an enclosure, displaying a narrow entrance on its west side, with a completely open east-facing side up to 17m wide, but this may have been partially closed off by a wattle fence line, indicated by the presence of two postholes. Structures 2, 7, 8 and 9 had shallower U-shaped profiles 0.10m to 0.40m deep and between 0.30m to 0.60m wide. Structure 8 was a near complete ring ditch, with a narrow east-facing entrance, but Structures 7 and 9 were very fragmented ring ditches.



Aerial view of ring ditches, Structures 2, 3, 4 and 6 in Foci 1, facing west, Fig 12

Sub-rectangular structure 11

Sub-rectangular Structure 11 survived as an L-shaped ditch slot that was at least 13m long and *c*6m wide, which had a steep V-shaped profile that varied from 0.10m to 0.50m deep, with a span of 0.40m to 0.90m. The only possible internal features were the two hearths [1068] and [1071] sited just to the west side that were set up on some limestone slabs (Fig 8).

Hearth [1068] was centred over a large limestone slab and was slightly scorched. Feature [1071] formed a shallow roughly sub-circular scorched hollow in the ground surface or possible beaten earthen floor. These two hearths spanned between 0.60m to 0.80m, and were up to 0.12m deep. A small amount slag was recovered from a nearby occupation layer, which may relate to these hearths and could suggest Structure 11 was a building where metalworking or a smithing was undertaken.

Foci 3

Foci 3 was located on the higher ground at the western end of the site. It comprised three circular ring ditches (Structures 15, 18 and Structure 16/Enclosure 2), sub-circular Structure 19/Enclosure 3 and a sub-rectangular enclosure, Structure 13 (Figs 9 and 13). None of the ring ditches could be positively identified to having enclosed roundhouses. What was notable in this area was *c*30 large grain storage pits (discussed further below) that lay at the west end of the site in an irregular group, suggestive of a planned setting that respected the structures.

On the northern periphery of Foci 3 were two pit clusters PG1 and PG2 which have been suggested to be small quarry or borrow pits, from which the natural limestone or clay was possibly utilised as construction materials or for the manufacture of domestic products.

The remains of a possible sub-rectangular enclosure (Structure 13) was located towards the southern edge of the site, with a few associated grain storage pits. These features appeared to be disassociated with the main part of Foci 3, laying *c*30m apart, which may suggest they were elements of another foci lying beyond the southern excavation boundary, probably associated with the adjacent Sawmills site.

Structures 15, 16, 18 and 19

Ring ditch Structure 15 had a 12.5m-13m internal width and a shallow U-shaped gully up to 0.14m deep and 0.30m wide. A curvilinear line of six closely spaced post or stakes holes may represent internal features positioned on the south-west side of the ring ditch. The south part the ring ditch and line of postholes were truncated by sub-rectangular enclosure, Structure 14.

Structure 16 was a large ring ditch with an east facing entrance and an internal diameter of 18m. It had a U-shaped cut between 0.29m to 0.55m wide and 0.10m to 0.17m deep.

Structure 18 was a fragmented ring ditch with a *c*12m internal diameter and a U-shaped cut, up to 0.12m deep and 0.35m wide. Its point of interest was a north-facing entrance, with a large pit located at either side at the ditch terminals. Although the east side terminal was not observed in the excavation, it was recorded in the evaluation. These could be interpreted as the position of possible gate posts.

Possible sub-circular enclosure Structure 19 (Enclosure 3), was composed of *c*16m long curvilinear boundary ditch [904]/[949], turning from the south-west to the east. Short 3m long ditch [1005], may have formed the opposing east side, creating a broad *c*11m wide open north-east facing side, between the terminals. Both ditches were V-shaped and 0.60m to 0.80m wide and up to 0.50m to deep that became shallower towards the terminals. The open side may have been closed by a fence line indicated by two postholes.

Sub-rectangular enclosure, Structure 13

Sub-rectangular enclosure Structure 13 was up to 25m long and at least 8m wide and composed of two opposing curvilinear V-shaped ditches on a north-east to south-west alignment. The ditches were between 0.20m to 0.30m deep and 0.51m to 0.64m wide. On its west side the 10m wide gap between the two ditches may have been partially blocked by fence-line represented by two postholes and the east side was open and displayed no evidence of a boundary.

Aerial view of ring ditches, Structures 16 and 17 in Foci 3, Fig 13

Storage pits (Periods 2 and 3)

There was as many as 110 pits that were probably utilised for the storage of grain, within the excavated area. In Foci 1 and 2 there were 30 probable storage pits, of which 24 were clustered around and cutting Structures 10, 11 and 12, which lay to the west side of this area. At least 68 storage pits were encountered in Foci 3, with another 12 unexcavated features that may represent storage features. Of a total of possibly 80 pits, 34 pits were clustered in an apparent sinuous pattern between Structures 20 and 21. The pits were largely dated to Periods 2 and 3, with two distinct concentrations. The earliest group was established to the west side of Foci 3 during Period 2 and the later cluster within Foci 2 in Period 3.

They were largely circular/sub-circular features, with a few oval in shape. Their use as storage pits was suggested by their form, with steep to near vertical sides and flat-based cuts, with some exhibiting under-cutting towards the base. Some pits exhibited stepped sides, which may be for the purpose of access into the deep pits, or possibly representing recuts.

The general diameter of the pits was broadly between 0.55m to 1.95m, but in the main from 1.00m to 1.75m wide. The pits were between 0.17m to 1.00m deep, with the great variation as result of truncation, probably from later agricultural activity, but most pits displayed depths from 0.35m and 0.55m.

Amongst these storage pits there were approximately 22 exceptionally large features, ranging between 1.55m to 3.51m wide and 0.50m to 1.44m deep. Eight of the features were located on the northern edge of the site grouped around Structures 10, 11 and 12 in Foci 1 and 2. On the higher ground eleven of the 14 large pits were also grouped together amid the large cluster of storage pits between Structures 19, 20 and 21, which appears to emphasise that specific areas were selected for the location of the pits.

Most pits displayed a series of depositional events with some possible natural silting, suggesting partial abandonment, to deliberate backfilling, with the pits being utilised as convenient receptacles for the disposal of domestic and other waste.

Notable pits (Period 2)

Three initial storage pits [361], [364] and [369] were of particular interest as a result of the content of their fills when they later become used for refuse. They formed an intercutting group in Foci 2, within ring ditch Structure 12 (Figs 8 and 14).

Pits [361], [364] and [369]

These three pits formed a group, less than 25m to the north of a possible location for a roundhouse (Structure 10) and lying inside ring ditch, Structure 12, although this may not be a contemporary feature. Pit [269] was quite likely a former storage pit 3.5m long and 1.5m wide, with near vertical sides and flat base. The two recut pits were also large, but lay mostly within the initial cut (Fig 15). All three pits contained a quantity of animal bone, which would have interest for further investigation. Although the charcoal content was low the charred plant remains is considered to merit further analysis. Pit [261] also included two domestic finds; an iron double-hooked fitting, possibly a cauldron hanger and an opaque green glass jewellery bead.

Pits clusters (Periods 2-4: Fig 14)

There were five pit clusters within the site (Pit clusters PG1-5), which differed distinctly in form from the storage pits in that they were multiple groups of inter-cutting medium to large sized features (Figs 9, 10, 11 and 18). They appeared to be an integral part of the settlement pattern as they were located adjacent or close to the areas of occupation but largely respected the other features.

Pit groups PG1 and PG2 were associated with Period 2 and were located on the north side of Foci 3 (Fig 8). Pit group PG3 was situated in Foci 2 (Fig 10), overlying Structure 11 and PG4 was located in Foci 3 (Fig 11), adjacent to the east side of boundary ditch [545]/[578]. Both these pit groups were probably established during

Period 3. PG5 was associated with Period 4 and was located to the north side of Structure 21 in Foci 3 (Fig 18).

Large grain storage pits [369] and recuts, [364] and [369], lying inside ring ditch, Structure 12. Their final use was as waste pits, facing south-east, Fig 14

At the full report stage the pits and pot clusters will be analysed by period. For the purpose of this UPD report analysis of the pits and pit clusters have been amalgamated. At least 60 pits from the pit clusters were excavated representing an estimated ten to twenty percent of the total pits within the five clusters. They were generally medium to large features, with the majority having diameters of between 0.70m and 1.90m. Approximately two thirds of the excavated pits had depths between 0.12m-0.40m, with the remainder no deeper than 0.40m-0.80m. They were mostly oval to sub-circular shape, with varying profiles from steep sided U-shaped cuts to more rounded forms. Some pits were slightly irregular and uneven in shape, which may have been the result of the erosion of the sides and causing partial silting, indicative of the pits being left open to the elements.

The initial purpose of the pits would generally appear to suggest they were quarry or borrow pits to access the local natural limestone or clay deposits. The extracted clay may have been utilised in the production of either domestic artefacts, or for construction material, such as floor surfaces, facing wattle and daub walls, lining pits, kilns or hearths, although no remains of features pertaining to its use have survived. Similarly the usage of limestone in the construction of hard standing surfaces, as in the case of the substantial stone surface [238], which may represent a grain threshing floor.

The backfilling of the pits probably occurred partly as the overburden soil and redeposited spoil from a pit being excavated and deposited in a disused pit, usually

with some artefactual remains. Some pits were most likely backfilled totally in this fashion probably over a short period of time, while other pits were only partially filled and left to natural silting. Like the storage pits once the pits were open they probably became useful as convenient rubbish tips of domestic material from the adjacent areas of occupation.

Due to the density of the pits large shallow hollows were formed over them as a result of the mass excavation and the settling of the fills, allowing them to be masked by thin overlying spread of silting deposits. The spread material overlying PG3 appears to extend beyond the pits and covers a large part of ring ditch Structure 21, suggesting that it also laid within a hollow.

3.6 Middle-late Iron Age 250 – 100 BC (Period 3)

There was probably no break in the settlement between Periods 2 and 3 but a continuous occupation, but only differentiated by the type of pottery. The three main areas of occupation (Foci 1-3) were still in use, but displayed localized shifting of the settlement pattern, including apparent changes in function within each area.

The middle Iron Age occupation comprised the following elements:-

- Circular and sub-rectangular structures
- Four-post structures and pits (mostly from storage)
- Pit clusters
- Stone spread

Foci 1

In this period of new additions to Foci 1 included the addition of another ring ditch and roundhouse (Structure 3) overlying previous ring ditch Structure 2. Some of the ring ditches (Structures 6, 8 or 10) associated with Period 1 still formed landscape elements during this period, including the ring ditch Structure 5/Enclosure 1 located on the eastern edge of the excavation (Fig 10).

At least 17 square four-post structures that were spread across the settlement, eight of which were laid out in rough rows at the east edge of the site (see below). It is thought these structures supported raised granaries. Some of the granary structures were placed over the roundhouses, suggesting there was probable sub-phasing within Period 3 to account for this development. Several dispersed storage pits and postholes were also probably associated with this phase.

Structure 3

Structure 3, was also a probable roundhouse with a similar internal diameter of 13m to ring ditch Structure 4. It similarly contained the remains of internal features including postholes, and a possible hearth and/or working hollow (Figs 10 and 12).

Structure 3 survived just as the west half of a ring ditch, with four postholes possibly defining the east side. The ring ditch probably represented an eaves-drip gully that was between 0.40m to 0.90m wide, with a steep 0.20m to 0.30m deep U-shaped profile, increasing to 0.80m deep V-shaped cut.

A group of internal features lay to the east side that included six randomly located postholes, three of which were cut by a shallow 0.28m deep elongated pit [118] or possible working hollow (0.70m x 1.35m) that contained a significant quantity of broadly dated middle Iron Age pottery. It also included a moderate amount of animal bone, occasional slag, occasional burnt/fired clay and heat-affected limestone fragments, which may suggest it was a hearth, indicating a domestic dwelling rather than an animal pen.

Foci 2

Foci 2 appears to have been abandoned by its occupants during this period as it became a focus for pitting, possible storage features or quarries, although it is suggested Structure 12 was unaffected and may have continued to function as a roundhouse or enclosure (Fig 10; see Storage pits, Periods 2 and 3 above).

Stone-filled pits (Period 3)

Five pits with deposits that included large dumps of stone debris were noted in Foci 2. These deposits all contained a substantial number of roughly hewn medium to large limestone blocks and slabs. The five pits appear to pre-date the Period 4 large stone spread [238]. Pit [594] lay below the stone spread and four other pits [245], [417], [634] and [770] were located close to the east and south sides of the layer, possibly backfilled with surplus stone from the spread (Figs, 10, 15 and 16).

Large storage pit [245] overlapped by stone spread [238], facing east, Fig 15

Large storage pit [417], with stone filled deposit (415), located to the south of stone spread [238], facing west, Fig 16

Foci 3 (Figs 9, 11 and 18)

Foci 3 in this period comprised two circular/sub-circular ring ditches (Structures 17 and 21) and a sub-rectangular enclosures (Structure 14), with a ring ditched roundhouse (Structure 20) at the centre of the area. Structure 17 also included a post-built feature that probably represented a six-post granary structure at its centre. It was possible that ring ditch Structure 16, although designated part of the previous phase (Period 2) may have acted as an enclosure on the west side of Structure 17 (Figs 11 and 13) as their positions appear to respect each other.

A penannular enclosure (Structure 21) was positioned close to the west edge of the excavation. It had a west-facing entrance. Sub-rectangular Structure 14 was partially visible on the southern edge of the excavation area and may have been animal enclosures.

There were at least 28 post-built ‘granary’ structures, mainly of four-posts, with a few having five to six-postholes. These were spread across the area between Structures 17 and 20 (see below)

The structures were generally focused in the central and eastern part of Foci 3 avoiding the western area around Structure 21, where a number of storage pits were grouped. It is thought that by this period that these pits were probably no longer utilized for storage, but had most likely been backfilled or become used for domestic waste similar to pits [1691], [1791] and [1153] (See below).

A broad curvilinear *c*20m long enclosure ditch [545]/[578], was also located on the southern edge of excavation adjacent to the east side of Structure 14 and a large pit cluster (PG4) was located adjacent to the east side of the enclosure ditch (see p26 above).

Structure 17 and 20 (Fig 11)

Structure 20 was a heavily fragmented ring ditch *c*11m internal diameter, with the largest part of the ditch displaying a V-shaped cut up to 0.47m deep and 0.88m wide. It appeared to contain up to 10 postholes that may have formed structural features for a roundhouse.

Circular ring ditch Structure 17 formed a complete circle with a shallow U-shaped profile, 0.10m to 0.29m deep and between 0.55m to 0.68mm wide. The complete circle had an internal diameter of 6.5m-7m (Figs 11 and 13).

The circular ring ditch enclosed several internal features including a small pit and six postholes in a parallel linear arrangement, which most likely represents a raised granary structure (G44). This may have been placed deliberately inside the ring ditch, although it was laid off-centre to the south-west side. A similar ring gully feature occurred on the Sawmills site and also contained a four-post structure. It was suggested that the ring ditch represented an eaves-drip gully, not contemporary with four-post structure, but lay around a probable hayrick (Muldowney 2016). A similar ring ditch and four-post-structure was encountered on the Long Dole site at Crick (Chapman 2015, 43). The existence of these other examples suggests the positioning may be more than a random chance.

Structures 14 and 21

Structure 14 and curvilinear ditch [545]/[578] were located on the southern edge of the site. Sub-rectangular enclosure Structure 14 continued to the south-west beyond the edge of excavation. It was at least 8m wide internally, with a broad U-shaped ditch that was between 0.56m to 1.39m wide and 0.27m to 0.56m deep.

The largest ditched feature was Structure 21, a penannular shaped enclosure, with an internal span of 10m and a west facing entrance that with terminals protruded slightly further to the west. The initial cut was a broad U-shaped cut up to 0.42m deep and at least 1m wide, which was recut in Period 4 (See Structure 21, Period 4).

A broad curvilinear *c*20m long enclosure ditch [545]/[578], turning from the north-east to the north-west encroached on the east side of Structure 14. It was composed of a large V-shaped ditch that was 0.88m to 1.40m wide and up to 0.76m deep, which became shallower towards its north-west facing terminal. This ditch probably formed part of a boundary/drainage ditch.

Four and six-post structures and storage pits (Period 3)

All four-post and six-post structures, including most pits have been temporarily assigned to Period 3. At the full report stage the phasing of these features will be reassessed. Amongst and overlying some of the circular and sub-rectangular structures were a great many probably grain storage facilities in the form of mainly square four-post standing structures and frequent small to large storage pits, which were largely grouped together by feature type, although some of the pits displayed a more dispersed arrangement. The shifting pattern of the occupation areas can be

observed by the overlapping of the former enclosures and ring ditches by the groups' storage features (Figs 10 and 11).

Four and six-post structures

There were at least 40, four-post assemblages and another six, with five to six-post structures, all interpreted as probably supporting above ground granaries. The four-post structures formed a basic square or slightly sub-square ground plan, with posts at either corner, but some of the structures appear to have additional supporting posts placed in the middle of one side or on two of the opposing sides to create five or six-post constructions. The post spacing of these structures were on the whole between 2.5m to 3m along the sides from corner to corner, although a few had longer sides up to *c*3.5m, with the occasional smaller 2m to 2.5m squares.

Seventeen of these possible structures were laid out across the east side of the site (Foci 1), with eight of them displaying an arrangement of lines and rows which may continue beyond the eastern edge of excavation. Other granaries in this area were either paired or stood alone. Some of the structures were superimposed on Structures 2, 3 and 6. The 29 structures in Foci 3, although mostly grouped together centrally, displayed a more uneven arrangement, overlapping ring ditch Structures 16, 17 and 18. Some pairs of similar spaced postholes maybe the surviving remains of these structures, so the estimation of numbers may be slightly greater and will be determined at the full report stage after an in depth study.

The postholes were circular to oval in shape and mostly had U-shaped profiles that had steep to near vertical sides and flat to slightly concave bases. There was an apparent distinction between the average size of the postholes in the north part of the site, where they were slightly smaller and the upper plateaued part of the site (Foci 3), which had perceivably broader features. The general size of the postholes in Foci 1 were between 0.22m and 0.46m deep, with spans from 0.25m to 0.52m, whereas the postholes in Foci 3 had similar spread of depths from 0.20m to 0.56m, but many exhibited broader and more rounded U-shaped profiles that were 0.29m to 0.78m in size. Both areas included some heavily truncated postholes, surviving only as shallow scoops of the features base, from 0.05m up to 0.15m deep.

In Foci 3 a well-constructed and preserved four-post structure (G38) had near vertical sided U-shaped postholes, measuring between 0.51m to 0.58m deep, with diameters from 0.35m to 0.57m. It was located across the ring ditch of Structure 18, clearly demonstrating the two features belonged to two separate phases of activity.

It noticeable that the broader postholes on the higher ground included more obvious remains of stone post packing, which probably would be required as stabilising material in the broader holes. The variance in construction between the two areas may be the result differing excavation methods, and/or the result of lesser stability of the ground and the greater availability of the natural limestone (Taynton Limestone Formation) that was largely used as packing, which appeared to be more readily available at or close to the surface in higher part of the site.

Several of the postholes had evidence for possible post-pipes, which were approximately half the postholes diameter. Some of the postholes in Foci 3 exhibited slightly broader and more rounded U-shaped profiles that included more obvious remains of stone post packing. Most of the post holes displayed no more than two fills, excluding any potential post-pipe cuts and fills.

Notable pits (Period 3)

Some pits initially utilised for grain storage later became used for refuse. Three of the pits [1153], [1691] and [1791] were located in Foci 3, in the close vicinity and encircling ring ditch Structure 20. The location of these waste pits adjacent to the roundhouses (Structure 10 in Foci 2 and Structure 20 in Foci 3), was probably no coincidence, as they were appropriate places for the dumping of waste. It is possible pit [1791] may be associated with the later phase (Period 4), as its upper fills contained pottery relating to Period 4.

Pit [1153]

Pit [1153] was located close to the east side of Structure 20 and appeared to have been utilised for the disposal of cess waste, as all its seven deposits contained cessy material, from which possible dietary and parasitic evidence could be retrieved during further analysis of the samples. A significant charcoal assemblage was also recovered from fill (1149) in the form of small chips and, as recommended in the charred remains assessment, further analysis should be undertaken. Furthermore the quality of the charcoal deposit may make it suitable for radiocarbon dating analysis. A good quantity of animal bone was also found which would warrant further investigation, especially for bones of smaller animal species, such as fish or bird.

Pit [1691] and [1791]

Pit [1691] laid *c*12m to the north of Structure 20 and pit [1791] lay a similar distance to the south-east of it. Both pits contained a moderate to good assemblage of animal bone that is worthy of further analysis and both included a moderate content of charred plant remains and charcoal, which also requires further investigation. Amongst the deposits of pit [1791] an antler point was retrieved, with surface incisions indicating it was possibly used as a tool. The burnt remains included cereal grains (wheat, oat and barley), wood charcoal and fuel ash slag, from which suitable samples should be selected for radiocarbon dating analysis. It should be noted Pit [1791], may be more closely associated with Period 4 (see below).

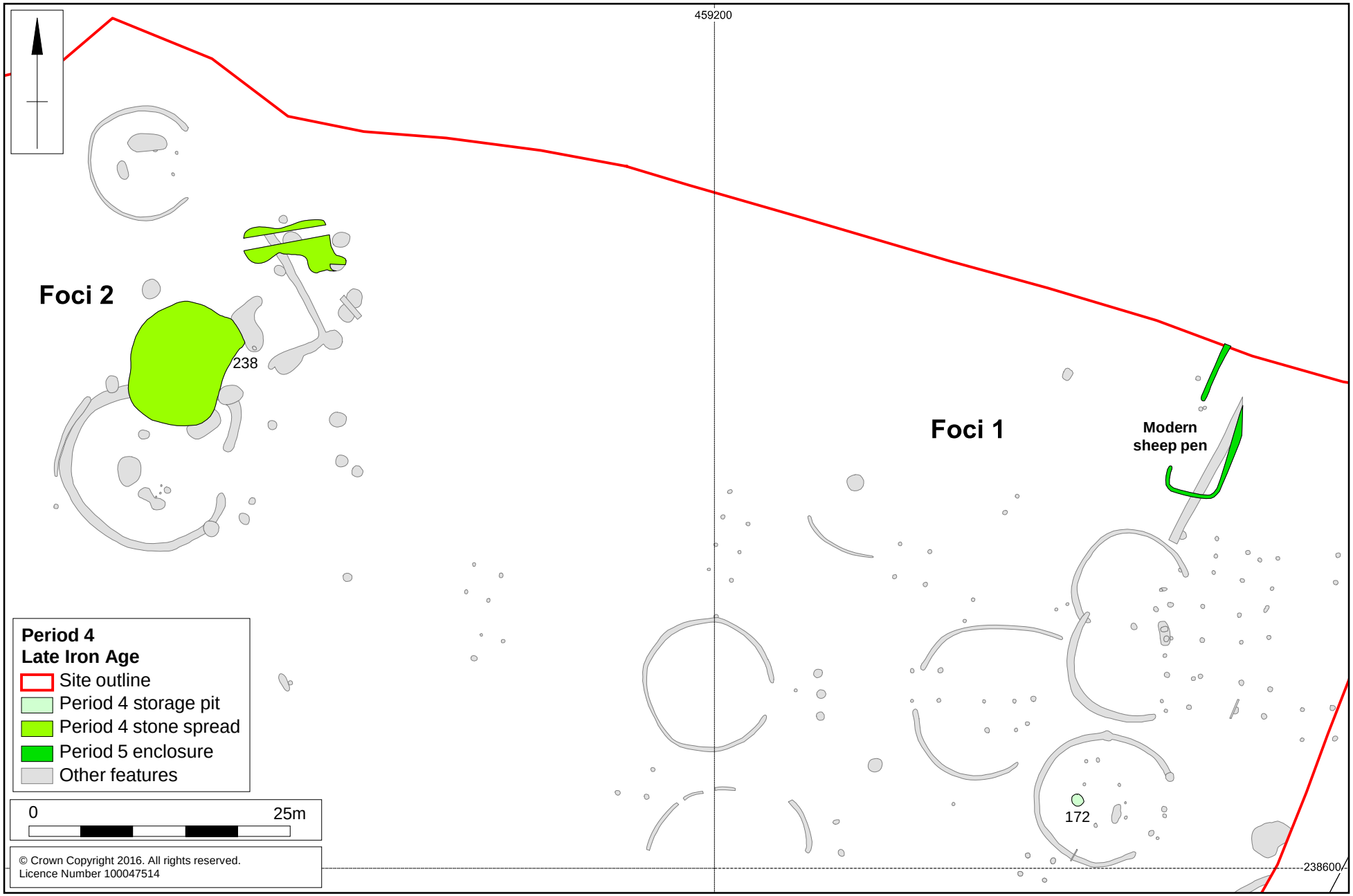
Stone filled pits (Period 3)

A group of five pits [1491], [1582], [2056], [2063] and [2072], with deposits that included large dumps of stone debris were noted, in Foci 3. These deposits all contained a substantial number of roughly hewn medium to large limestone blocks and slabs. An item of jewellery was found in pit [2056] in the form of a decorated copper alloy armlet fragment, a piece of iron strip was also retrieved. Pit [2072] contained a slate saddle quern and a fragment of copper alloy sheet. Closely associated with these pits was pit [2127] containing two bone implements, one was a pointed blade.

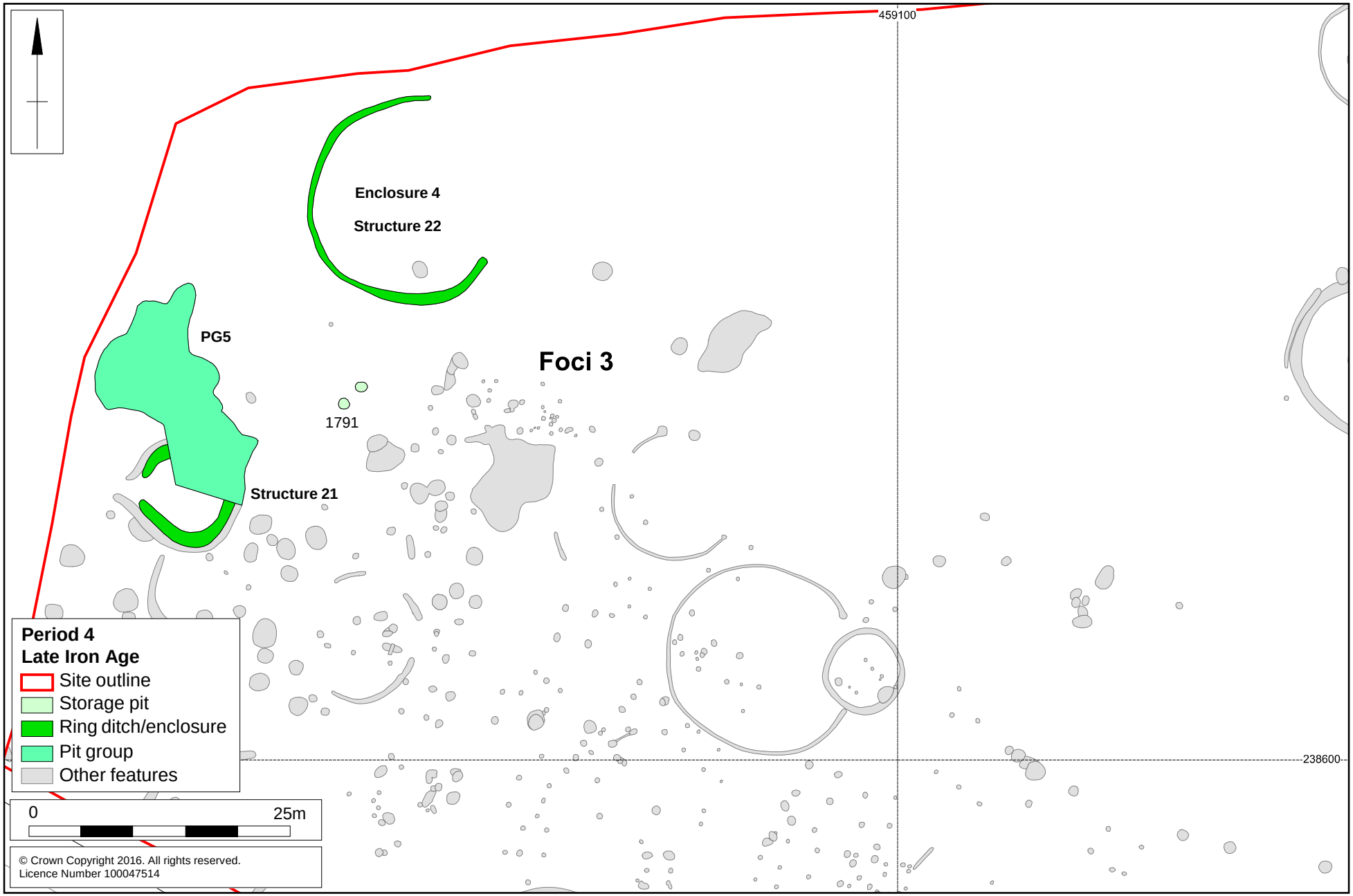
They were closely grouped on the western edge of the site. The stone recorded in the pits may have originally formed a surface associated with the nearby enclosures or possibly around the pits when had been actively in use as storage units. The stone was then cleared and dumped into the abandoned pits. The artefacts recovered from these pits would imply they probably lay close to working areas and occupation.

Pit clusters (PG) 3 and 4

Pit group PG3 was situated in Foci 2, overlying Structure 11 and PG4 was located in Foci 3, adjacent to the east side of boundary ditch [545]/[578] (See Pit Clusters in Period 2, p26 above).



Foci 1 and 2 Periods 4 and 5 late Iron Age and recent activity Fig 17


Scale 1:500
459100
Enclosure 4
Structure 22
PG5
Foci 3
1791
Structure 21
238600
Period 4
Late Iron Age
Site outline
Storage pit
Ring ditch/enclosure
Pit group
Other features
0
25m
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Foci 3 Period 4 later Iron Age
Fig 18

3.7 Late Iron Age 1st century BC (Period 4)

By the 1st century BC most of the settlements had been virtually abandoned as in Foci 1 and 2, or were greatly in decline as in Foci 3 (Figs 17 and 18).

Foci 1

A single isolated storage pit [172] was noted lying on the south-eastern side of Foci 1, possibly indicating a remnant of activity or a peripheral feature of site that may lay to the east of the development area (Fig 17). It seems to have been reused as a dump for refuse that included limestone rubble, frequent charcoal waste, burnt animal bone and Iron Age pottery characteristic of the late Iron Age (1st century BC).

Foci 2

Stone Spread [238]

The late Iron Age activity in this area related to the construction of a large and thick substantial sub-square spread of redeposited limestone [238] that was approximately 12m x 9m in size. It partially overlay the north side of Structure 10 and some of the large storage pits from the previous phase that were also filled with stone debris (Figs 15 and 17). The layer was up to 0.36m thick and composed of frequent small to very large limestone slabs, some of which were burnt.

There was no obvious function to it, although a corn threshing surface was a possible use which would relate to the storage and processing of cereals that was clearly taking place in these foci. The apparent abandonment of the surrounding settlements however, would deem this function unlikely. The quantity of stonework may relate to the demolition and leveling of what could have been a reasonably large structure, but it would have stood as an isolated feature, with no apparent associated features.

The stone deposit lay on the geological boundary between the sandy limestone of the Horsehay Sand Formation and the substantive overlying bed of dark grey clays/mudstones, suggesting the deposit may relate to ground consolidation over this potentially unstable geology, perhaps where a spring point occurred.

Foci 3

It would seem that by this period the remains of the settlement lay on the very western edge of the site, indicating its centre may have shifted to the west beyond the edge of excavation. The only apparent developments of this phase included two ring ditches, sub-circular Structure 21, which still appeared to be functioning as an enclosure from the time of middle Iron Age, but was recut during this period. The other was a large circular Enclosure 4/Structure 22 that lay close to the north-west corner of the site (Fig 18). Both of these features typify animal enclosures due to their size and the lack of internal features. Pit cluster PG5 including a few storage pits and possible postholes also possibly relate to this period of activity.

A single large pit feature identified during the evaluation (Jones and Chapman 2012, pp11, figs 6, 7 and 19) was located on the southern edge of the mitigation area and contained Iron Age pottery pertaining to the 1st century AD, although the feature was not re-excavated at the mitigation stage. The presence of this feature may suggest

that by the late Iron Age (Pre-conquest) period the settlement had shifted south beyond the main area of excavation, towards the Sawmills site.

Structures 21 and 22

Structure 21 was a large penannular shaped enclosure, established during Period 3 with a west facing entrance and the terminals opening slightly to the west. The recut was a larger V-shaped ditch 0.82m deep and up to 1.95m wide, but with a reduced internal span from 10m to 9m.

Structure 22/Enclosure 4 had an internal 18m diameter. It was notable as one of the largest ring ditches on the site, with Structure 16/Enclosure 2 being the other, designated part of Period 2. Structure 22 had a U-shaped cut between 0.37m to 1.02m wide and 0.10m to 0.40m deep.

Pit [1791]

A couple grain storage pits are associated with this phase, although a more precise number will be determined in the analysis for the full report. The pits were initially utilised for grain storage, but pit [1791] was of particular interest as it later became used for refuse (Fig 18; see Notable Pits (Period 3), p31-32).

Pit cluster 5

Pit cluster PG5 was associated with Period 4 and was located to the north side of Structure 21 in Foci 3. The sealing spread of material over PG5 and a large portion of Structure 21, no doubt indicates the abandonment of the these features, if not the whole of the settlement in this part of the site (For description see Pit Clusters in Period 2, p26).

3.8 Period 5: Medieval ridge and furrow and post-medieval sheep pen

Evidence of medieval ridge and furrow ploughing was identified as plough scars traversing the whole of the open excavation, on a north-east to south-west alignment. These had also been observed on the geophysical survey results.

Located on the north edge of the excavation the remains of a sub-rectangular enclosure were identified as part of a modern sheep pen (Fig 17).

4 THE FINDS

4.1 **Worked flint** by Andy Chapman

A total of 22 pieces of flint was recovered as residual material in features dating to the Iron Age (Table 2). The raw material is dominated by brown to grey-brown vitreous flint, where the colour can be seen, but nine pieces have patinated surfaces, light blue to blue-grey, masking the original colour.

There are three shattered pieces and a burnt flint that could be a result of accidental fracturing and burning at any time rather than necessarily a product of prehistoric flint working.

Of particular interested is a group five blades (22.7% of the assemblage). These vary from a broken bladelet, 11mm long by 13mm wide, to a broken blade 32mm long by 24mm wide. All examples have patinated surfaces, four blue-grey and one white. One example also retains a serrated edge. All had been struck from prepared cores from which similar blades had previously been removed. A roughly fashioned end scraper, 36mm long by 32mm wide, also with a patinated surface may belong to this early group.

The assemblage is, however, dominated by a collection of flakes, 10 (45.5% of the assemblage), of varying sizes, including a number of squat hard-hammer struck flakes. There is a single core, in grey-brown flint, which has been reduced to a disk, 30mm in diameter by 15mm thick, by small flake removals from two directions. This proportion of the assemblage can be only broadly dated to the Neolithic/early Bronze Age, but includes a few heavily patinated flakes that probably belong with the group of early Neolithic flint discussed below. There is also a small thumbnail scraper, 25mm diameter, which probably dates to the late Neolithic/early Bronze Age.

The group of blades, including a serrated blade, are likely to date to the early Neolithic, and suggest the likelihood of some limited short-term occupation at that time. The rest of the assemblage is a mixed group, and probably derive from casual loss at various times, rather than relating to any specific episode of occupation in the late Neolithic/early Bronze Age.

Table 2: Quantification of flint

Type	No	%
core	1	4.5
flake	10	45.5
blade	5	22.7
scraper (end)	1	4.5
scraper (thumbnail)	1	4.5
shattered piece	3	13.6
burnt flint	1	4.5
Total	**22**	

4.2 *The Iron Age pottery* by Andy Chapman

A total of 3417 sherds, weighing 31.58kg, was recovered from 428 contexts and occupies seven archive boxes. The average sherd weight is 9.3g, and the assemblage is generally well preserved, with fresh surfaces and no noticeable leaching of the shell inclusions.

The distribution by context shows that 284 contexts (66.4% of those with pottery) contained no more than 99g, with the proportions steadily decreasing, so that only seven contexts (1.6%) produced groups weighing 500-999g, and only four contexts (0.9%) produced in excess of 1.0kg of pottery (Table 3). The largest single group weighs 3.5kg, comprising much of a single large jar, with the other three large groups weighing between 1.03-1.45kg, also coming from one or more large jars. The average context group weighs 74g. Given the high overall size of the assemblage, it contains much well preserved material that can be described and allocated to form and often date.

Only the selected context groups, as catalogued below, have been allocated to a context/feature type. Over a half of these are from pits, at least three contexts are from roundhouse ring ditches and a further seven groups are from ditches and gullies of unspecified type.

Table 3: Weight of pottery per context

Weight (g)	No of Contexts	%
0-49	284	66.4
50-99	55	12.9
100-199	52	12.1
200-499	26	6.1
500-999	7	1.6
1000+	4	0.9
Contexts	**428**	
Ave/context	**74.01g**	

Methodology

For the purpose of assessment, the entire assemblage has been rapidly scanned, with the larger groups examined in most detail, along with smaller groups that evidently contained sherds with rims, decoration or other diagnostic features. Some vessels have been partially reconstructed and a number of vessels with diagnostic features have been photographed (Figs 19 and 20).

The general character and chronology of the assemblage is summarised below, and context/feature groups of particular interest, which are often also datable, are catalogued to provide a range of spot dates to aid site phasing.

Fabrics

For assessment the assemblage has not been quantified to fabric, but scanning of the material leaves no doubt that the majority of the pottery, to over 90%, contains crushed shell, as it typical of Iron Age pottery from Northamptonshire.

As the assemblage is dominated by sherds from medium to large jars, with thick walls, these almost invariably contain dense large shell fragments, as do some of the smaller and thinner-walled vessels. But there are also vessels, particularly grey globular bowls with smoothed to burnished surfaces, probably dating to the late Iron Age, which contain sparse finely crushed shell. At least one vessel contains grog.

Chronology

Early Iron Age (600-450/400BC)

In the evaluation (Chapman 2012, 23-26, fig 24), a single posthole [705] produced a small group of pottery that could be assigned to the early Iron Age, probably the 6th-5th centuries BC, due to the presence of a grey carinated vessel, with lines of incised zig-zag decoration. No further examples of similar vessels have been noted within the excavated assemblage, although as all sherds have not been fully examined more examples may emerge at full analysis.

At full analysis it will be appropriate to establish the location of this posthole within the fully excavated area, in order to establish whether there were further contemporary features in this vicinity.

It is likely that this activity was an isolated early Iron Age episode that was not related to the origin of the main settlement.

Middle Iron Age (400-100BC)

A single feature, pit [722] contained four vessels with bold fingertip impressions on the shoulder, an early characteristic only rarely seen elsewhere in the assemblage, such as the fine vessel with fingernail/tip impressions on the shoulder (Fig 20, 6) and perhaps a vessel with incised line decoration (Fig 20, 7).

It is possible that pit [722] might date to the early Iron Age, perhaps broadly contemporary with the posthole producing the zigzag decorated sherds, but while zigzag decoration does not continue into the middle Iron Age, vessels with fingertip decoration do appear in the early-middle Iron Age. The context of this feature will need to be considered during full analysis, but it may mark another episode of isolated short-term use, perhaps in the 4th century BC, either before or in the early stages of the development of the main settlement. The absence of longer-necked vessels generally is taken to indicate that any activity in at least the 4th century BC was probably localised and on a small scale.

The bulk of the assemblage is dominated by large, thick-walled storage jars, the characteristic vessel of the middle Iron Age, and it is the presence of these in such quantities that accounts for the substantial weight of the site assemblage (Figs 19 and 20).

The assemblage covers the full range of possibilities: there are many examples that have oxidised, orange to brown surfaces, which tend to be more common in the early-middle Iron Age, but there is also no shortage of examples with dark brown to grey surfaces. A majority are plain (Fig 19, 2) but there are several examples with scored decoration, taking the form of multiple individual curving scored lines running from the shoulder to the base in long curving lines a little off the vertical. The way the curves sweep to the left indicates that they were executed by a right-handed person. There are also some smaller scored ware jars (Fig 20, 9).

The storage jar assemblage on its own suggests a date spanning the floruit of the usage of such jars, the transition from the early to late middle Iron Age, the 3rd and 2nd centuries BC.

In contrast to the large jars, there are also several smaller bowls, with smoothed surfaces and short upright rims (Fig 19, 3 & 4), which may date to the late middle to late Iron Age.

Late Iron Age (100-0BC)

While the settlement was probably at its peak through the 3rd and 2nd centuries BC, a number of pottery groups attest to activity, perhaps on a declining scale, into the 1st century BC. In particular, there are examples of burnished globular jars, some with bead rims (Fig 19, 8) and at least one with grooved decoration (Fig 19, 5).

Late pre-Roman Iron Age

In the evaluation, a single pit [1115] produced an assemblage that included better-finished burnished and oxidised storage jars dated to the early decades of the 1st century AD (Chapman 2012, 23-26, fig 26). The assessment of the excavated assemblage has not produced any comparable material, so it is likely that this feature marks some localised activity following the abandonment of the main settlement complex. It may be appropriate to re-examine this group and its context as part of the full analysis.

Functional traits

The assemblage contains a few vessels that show evidence of how they were used.

The large jar from pit [99] (19, 2), has a distinctive central zone of sooting, which suggests that the base had been set in the ground while hot ashes from the hearth were heaped around the sides to heat the contents, most probably for cooking food or heating water.

Similarly, a small bowl from ring ditch [338] was also soot blackened, along with some encrusted residues, and below this much of the surface had been lost to heat spalling (Fig 19, 3), indicating that it too had stood in hot ashes for a considerable, perhaps repeated, times. There is also some lime scale residue on the inner surface, and another similar vessel from the same ring ditch may have been used in a similar fashion (Fig 19, 4).

There is also a vessel with a complex and rarely seen rim form from pit [1766] (Fig 20, 10). It is suggested that this rim form may be functional, rather than purely decorative, although no specific function can be postulated beyond suggesting that rim shape may be associated with a need to keep the contents covered, which may related to a stage of dairy preparation. The appearance of specifically functional vessel forms in small numbers seems to be more likely to be a feature of late Iron Age assemblages, such as the appearance of vessels with perforated bases.

Selected context groups

Fill (79) of posthole [81] (Foci 1, Four-Post Structure 7) contained the rim from a small barrel shaped jar or large tankard, with simple tapering interned rim, 110mm diameter and a maximum diameter of 140mm, with a perforated lug just below the

rim, with orange surfaces, but grey around the lug (Fig 19, 1). The section shows how the upper body was built up of a series of narrow strips, each 50mm high, obliquely overlapping. Broadly middle Iron Age in date.

Fill (97) of pit [99] (Foci 1, Ring Ditch, Structure 4) contained 3.5kg of pottery comprising much of a large jar, in a coarse shelly fabric, 14-15mm thick, and standing in excess of 300mm high with a rim diameter of *c*350mm (17, 2). The body is plain and gently rounded with a simple upright flat-topped rim, uneven and undulating. The surface is orange for the top 80mm, with a soot-blackened central zone 90mm wide and bright orange below this. The oxidised colour may suggest it is early-middle Iron Age, perhaps 3rd century BC.

Fill (116) of pit/hearth [118] (Foci 1, Structure 3) contained a consistent collection of plain body sherds from at least two large, thick-walled jars, one with a simple upright flat-topped rim. Orange and brown surfaces dominate, but grey surfaces, with one sherd smoothed, also present.

Lower fill (137) of pit [138] (Foci 1) contained a mix of body sherds, largely with oxidised surfaces but including some grey body sherds with well smoothed surfaces, similar to that from fill (116) of pit [118].

Upper fill (169) of pit [172] (Foci 1, Structure 4) contained sherds from a large rounded bowl in a fine fabric, with sparse crushed shell, uniformly grey-black, hard and well finished with a burnished surface. Unfortunately, the rim and base are missing. This would be most characteristic of the late Iron Age, 1st century BC.

The fill (301) of pit [302] (Foci 2) contained sherds from the flat-topped rim and upper body of a large open jar decorated with near vertical scoring. There are also sherds from either a second jar or the lower body of this jar with an uneven scored cross lattice; these sherds have a dark red-brown surface, with grey patches. There is also a fragment from a perforated lug, which is broadly middle Iron Age in date.

Final fill (335) of ring ditch [338] (Foci 2, Ring Ditch, Structure 10) contained much of small thin-walled rounded bowl with an upright rounded rim, 130mm diameter, and smoothed surfaces, similar to the vessel from fill (337) of ring ditch [338], However, in this instance the rim is orange and below this the entire vessel is soot blackened, with much of the surface lost to heat spalling (13, 3).

Primary fill (337) of ring ditch [338] (Foci 2, Ring Ditch, Structure 10) contained sherds from a thin-walled rounded bowl with an upright rounded rim, 150mm diameter, and smoothed/burnished surfaces, grey inside and patchy brown to grey external surface (Fig 19, 4).

Fill (363) of pit [364] (Foci 2, Structure 12) produced a small group but one that contains both scored ware body sherds and rims from three distinct vessels: one with an external chamfer and lip, decorated with incised lines, probably fingernail impressions, across the gently curving top of the rim; a simple upright expanded, almost flat-topped rim and an everted rounded rim. This can be dated broadly to the middle Iron Age, but perhaps early-middle rather than late middle.

The fill (530) of pit [531] (Foci 2) contains an upright, flat-topped rim from a larger jar and also a large perforated lug from the same vessel.

The fill (538) of ditch [539] (Foci 2, Structure 11) contains mainly thick-walled sherds from large jars, but there is an everted rounded rim on a smaller vessel with oblique

closely-spaced fingernail impressions encircling the neck. This is likely to date to the early-middle Iron Age.

A large group from the fill (720) of pit [722], (Foci 3) contains neck or rim sherds from four separate vessels with bold fingertip impressions on the shoulder, not seen elsewhere in this assemblage. Two have a distinct shoulder but no rim, while one does have a slightly elongated neck, 30mm high, with a flat-topped rim. There is also a base sherd with three closely-spaced vertical lines of impressed dots. All of these features are traits of an early-middle Iron Age assemblage of the 4th-3rd centuries BC. There is also a burnished body sherd with finely incised scoring and a grey globular body sherd with a burnished surface.

There are sherds from rounded bowls, uniformly grey with burnished surfaces from the fill (784) of pit [785] and the fill (787) of pit [791] (Foci 3, Pit Group 2), which may date to the late Iron Age, 1st century BC.

Fill (863) of gully [865] associated with a ring ditch; Structure 10 (Foci 2) contained a rim/body sherd from a rounded bowl, with a short upright rounded rim, uniformly dark grey. The burnished body retains a remnant of grooved linear/curvilinear decoration (Fig 19, 5), suggesting a date in the late Iron Age, 1st century BC.

The fill (889) of gully terminal [891] (Foci 3, Structure 13) contained a thick-walled rim sherd from a large jar with orange surfaces and a thickened rounded rim. The sherd also retains part of a horizontal lug, with a small vertical perforation, which is integral with the rim. An early-Iron Age date is suggested.

Fill (1057) of posthole [1058] (Foci 3), contained the rim from a jar, containing grog as well as finely crushed shell, with a rounded shoulder below an upright neck, 22mm long, with a simple rounded rim. There is also a rim from a burnished bowl with pale orange-brown surfaces. The presence of grog suggests that this small group probably dates to the late Iron Age, 1st century BC, rather than the early- middle Iron Age, as might be suggested by the elongated neck.

Fill (1017) of ditch [1018] (Foci 3, Ring Ditch Structure 17) also contains the rim of a thin-walled burnished bowl with pale yellow-brown surfaces.

Fills (1147), (1148), (1149), (1150) and (1152) of pit [1153] (Foci 3), all contained groups of sherds from large thick-walled storage jars with the surface colours ranging from light brown, through orange to grey. A slightly smaller and finer jar from fill (1147) had a weak shoulder and a concave neck. The flat-topped rim is decorated with transverse fingernail impressions and immediately below the shoulder are vertical fingernail/tip impressions (Fig 20, 6). A single sherd from the fill (1115) of pit [1116] also had a decorated shoulder, in this instance with closely-space elongated incisions,17-19mm long, probably knife cut (Fig 20, 7). In both instances this suggests a date in the early-middle Iron Age.

Layer (1247) overlying two pits, contained a rim sherd from a small bowl, with orange surfaces, and a flat-topped rim and triangular stabbed motifs around the weakly defined shoulder.

The final fill (1467) of pit [1473] (Foci 3) contained sherds from thick-walled jar, with one having scored decoration. There is an upright neck, 40mm long, with fingertip impressions along the flat-topped rim, suggesting an early-middle Iron Age date.

The upper fill (1474) of gully [1476] (Foci 3, Ring Ditch, Structure 20) contained sherds from at least two small bowls, with brown to grey brown surfaces, similar to the bowls from fills (335) and (337) of ring ditch [338]

The fill (1514) of gully terminal [1515] (Foci 3, Structure 22) contained a globular bowl, with a grey burnished surface and a bead rim, 170mm diameter (Fig 20, 8). There is also much a small bowl/beaker, with a pale brown exterior decorated with near vertical scoring. The base is 78mm in diameter and the vessel is barrel-shaped, standing 105mm high, with a pronounced shoulder and a short upright rounded rim (Fig 20, 9). The presence of the burnished globular bowl suggests a late Iron Age date, 1st century BC.

The fill (1518) of pit [1519] (Foci 3, Structure 22) contained the rim a small bowl with a grey-black surface, a flat-topped rim and a surviving remnant of an elaborate incised decorative pattern.

The fill (1762) of pit [1766] (Foci 3) contained an unusual rim type: a thickened, T-shaped, inturned rim with a deep external concave groove and bold concave depressions along the top of the flattened rim (Fig 20, 10). It is suggested that this complex form may have a functional origin, which suggests a date in the late Iron Age, 1st century BC. There is a similar rim, but without the external groove, from the fill (1786) of pit [1791].

Context (1945) of pit [1947] (Foci 3) contained a sherd with deep fingertip impressions set just below a pronounced shoulder, probably dating to the early-middle Iron Age.

Context (2124) of pit [2127] (Foci 3) contained a jar with an upright elongated neck, 23mm high, pale brown to pale orange surfaces, probably dating to the early-middle Iron Age.

1

2

3

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Iron Age pottery (1-5) (Scale 10mm) Fig 19

6

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8

9

10

Iron Age pottery (6-10) (Scale 10mm) Fig 20

*4.3 **The querns and grinding stones*** by Andy Chapman

An assemblage of eight broken and incomplete stones, are from saddle querns (Table 4). Five have been fashioned on large worn cobbles of hard dense stone, possibly quartzite, one is quartz-rich sandstone of unknown provenance, one is Millstone Grit and one is fashioned on a block of hard grey-green slate. All of these stones have worn concave surfaces, indicating use for milling/grinding, but most are too fragmentary to indicate the original size of the stone.

There is a fragment from what may have been an exceptional small saddle quern, SF 44, from pit [1473] in Foci 3. The piece is from one edge and is deeply concave, thinning from 40mm at the edge to 12mm thick at the break, only 80mm in from the edge, which was probably along the centre of the stone. The breakage may have been a direct result of how thin the stone had worn at this point. This suggests that the stone might have been only 160mm wide. This fragment might have been at one end of a tapering quern or perhaps it was fashioned to be child-sized.

There are two stones that are at or near the original width. There is a tapering end from a saddle quern in sandstone, SF16 from ditch [578] in Structure 23, Foci 3 (Fig 21, a). The square end is 140mm wide and it has a maximum width of 220mm and is 70mm thick, with a rounded base. A saddle quern fashioned on a cobble of quartzite, SF2 from pit [227], was both burnt and had been shattered during excavation. Although no true edge survived, it provided a near complete section, 210mm wide by 65-75mm thick, with a deeply concave profile. The quern in Millstone Grit, SF9 from posthole [109], is less complete but of similar proportions (Fig 21, b).

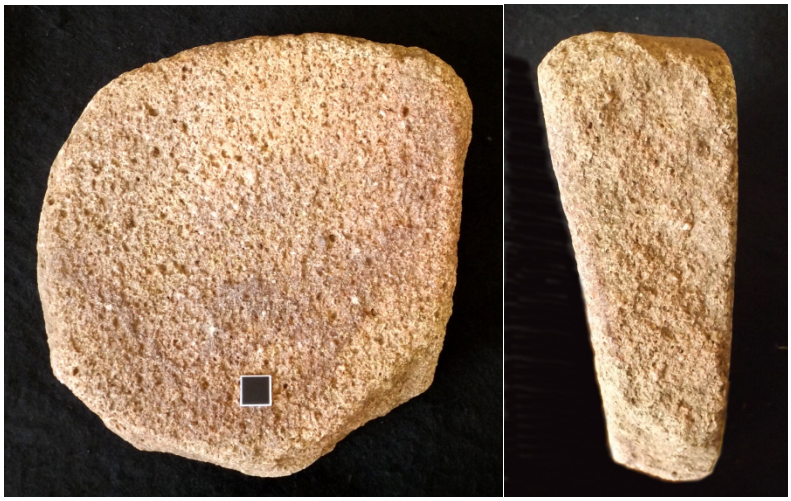
A quern width of *c*220mm is consistent with a length of around 350-400mm, which is nearly the length of a full arm extension on a saddle quern. These dimensions are also consistent with the querns from the neighbouring site at the Sawmills, which produced an assemblage of similarly-sized saddle querns (Chapman 2016, 33-36).

The saddle quern in slate, SF57 from pit [2072] (Foci 3), may also have split longitudinally, 165mm from the edge, where it was only 26mm thick. This would suggest a width of at least 320mm, and therefore a length of perhaps 400-500mm.

The stone from posthole [141] (granary structure G3, Foci 1) is up to 90mm thick with a deeply concave grinding surface, which suggests it may have come from quite a large saddle quern, perhaps 400-500mm long, but as only one corner survives it is impossible to provide any precise indication of its size.

The most complete stones from the adjacent Sawmills site were only around 350-400mm long and quite thin, while in comparison, a near complete stone from Iron Age settlement at DIRFT was 450mm long by 200mm wide and 85mm thick (Chapman and Chapman 2015, 48). It is suggested, therefore, that the saddle querns at Brackmills, Foxhills and the neighbouring Sawmills site were all at or below the average length of saddle querns, with perhaps only one or two examples, as noted above, probably from large and thick stones but, unfortunately too incomplete to be certainly so.


a


b


c

Three partial saddle querns, a) SF16, b) SF9 and c) SF57 (Scale 10mm) Fig 21

Table 4: Quantification and description of saddle querns

Fill/cut (SF No.)	Geology	Dimensions Width x length thickness	Comments
Saddle querns			
108/109 posthole (SF 9)	Millstone Grit	160 x 160mm 40-60mm thick	Corner from sub-rectangular stone, two original sides rounded and smoothed, with re-use
139/141 posthole (SF 12)	Worn cobble (quartzite?)	130 x 170mm 65-90mm thick	Corner from sub-rectangular block, deeply concave grinding surface.
225/227 pit (SF 2)	Worn cobble (quartzite?)	210 x 170 65-75mm thick	Full section across the width of a saddle quern, broken both ends, with a deeply concave grinding surface (13mm in width of 210mm). Burnt, shattered in excavation
575/578 ditch (SF16)	Quartz-rich sandstone	220 x 135mm 60-70mm thick	End of saddle quern, base rounded but uneven, grinding surface shallowly concave.
592/594 pit (SF17)	Worn cobble (quartzite?)	70 x 80mm 60mm thick	Small piece from edge of a saddle quern, with worn shallowly concave surface.
79/81 posthole (SF 1)	Worn cobble (quartzite?)	110 x 120mm 45mm thick	Small fragment probably from a saddle quern.
2065/2072 pit (SF 57)	Slate? (dark grey-green)	165 x 140mm 26-63mm thick	One edge survives, 63mm thick at circumference with deeply concave grinding surface 26mm thick at broken edge.
1467/1473 pit (SF 44)	Worn cobble (quartzite?)	80 x 80mm 12-40mm thick	Small fragment from edge of a very small saddle quern, deeply concave grinding surface, only 12mm thick at probable centre.
Other stone finds			
255/256 posthole (SF 14)	Worn cobble (quartzite?)	135 x 190mm 115mm thick	Fractured, no original edges survive. Upper surface smooth and flat. A grinding stone, not a saddle quern
2 subsoil (SF 13)	N/A	125 x 125mm 105mm thick	Fragment of probable square post-medieval to modern cobble stone, with convex worn surface

Geology

There is a single stone in Millstone Grit, which is not a common geology for saddle querns, as its use is more typically associated with rotary querns of the later middle Iron Age. This is because there is little necessity to import stone for use as saddle querns, although there is another saddle quern in coarse quartz-rich sandstone which is also not of local origin. The lack of need for imported stone is shown by the presence of five saddle querns and a grinding stone fashioned on hard water-worn boulders, perhaps quartzite, likely to be derived from local glacial deposits probably local gravels. There is also a saddle quern in a hard dark grey-green slate. The author has not previously seen a quern from the east midlands in slate. There are no local sources, so this too is either an import or was sourced from glacial deposits. It is possible it derives from Cumbria or Wales.

Discussion

The presence of only saddle querns at Foxhills, repeats what was seen at the neighbouring part of the same settlement, the Sawmills site (Chapman 2016, 33-36). The two sites have produced much evidence for the bulk storage of grain either in pits or above ground in four-post structures, which have been interpreted as probable granaries. If this material formed a central supply that was going out to other settlements, it is most likely that what was transported would have been the grain to be milled as required at the final destination. The querns from the Sawmills and Foxhills were presumably, therefore, largely for producing grain for the inhabitants of this settlement alone.

The two areas have produced a substantial assemblage of saddle querns and not a single rotary quern, which is significant in understanding the chronology of this settlement. The pottery has indicated that the main period of settlement lay in the early-middle Iron Age (perhaps 400-250BC), but at both sites there is also a lesser presence of late Iron Age pottery (1st century BC). This would suggest a low level presence in the late Iron Age after a period of abandonment through the late middle Iron Age (250-100BC). The quern assemblage is in agreement with this interpretation, in comprising only saddle querns and therefore abandoned before the introduction of the rotary quern.

The date of the introduction of the rotary quern to Iron Age society is an issue of some debate. In a recent study of the querns of North Yorkshire the most reliable radiocarbon dating indicated a date between 300-200BC, although thermo-luminescent dating was quoted as opening up the possibility of an earlier date, the 4th or even the 5th century BC (Heslop 2008). However, it seems likely that at Brackley the rotary quern had not appeared by the end of the early-middle Iron Age, indicating a date of arrival no early than 250-200BC.

Further work

No further work is required.

*4.4 **Small finds*** by Tora Hylton

Introduction

The excavations produced a small but intriguing collection of Iron Age finds. In total 30 individually recorded small finds were recovered. With the exception of one Roman copper alloy armlet from subsoil deposits all the finds were recovered by hand from stratified contexts. The majority of finds were recovered from Foci 3 and the range recovered alludes to domestic occupation. The assemblage includes personal items, domestic fittings and a range of interesting bone and antler tools

Condition

The copper alloy is in a stable condition and does not require conservation. The ironwork is in a good state of preservation, although some pieces are partially covered in corrosion products. The iron objects will need to be x-radiographed prior to full reporting. A fragment of a socket/ferrule retains vestiges of ferruginous wood and this may need to be identified. The worked bone/antler objects are in a good condition and require no further work.

Table 5: Small finds quantified by material type

MATERIAL	TOTAL
Copper alloy	7
Iron objects	8
Metal alloy	1
Stone	1
Bone/antler	10
Glass	2
Ceramic	1
Total	30

Summary of material

With the exception of part of an unstratified Roman armlet from subsoil and a dubious fragment of white metal alloy sheeting (?edging/binding strip), the assemblage comprises artefacts of Iron Age date. Although much of the assemblage is comparable with finds from other domestic settlements of a similar date, there are a few objects of interest that will require specialist reporting and further research.

Table 6: below detailing summary of finds recovered by context.

Foci	Context	Feature	Object/SF No
1/2	2	Subsoil	Armlet, copper alloy (SF 15)
Foci 1	226	Pit [227]	Undiagnostic fragment (SF 3)
	230	Pit [231]	Nail, iron (SF 4)
	297	Pit [299]	Decorated strip, copper alloy (SF5)
	324	Ditch [325]	Ceramic object, bead/weight (SF 8)
Foci 2	358	Pit [361]	Hooked fitting, iron (SF 10)
	358	Pit [361]	Annular bead, glass (SF 11)
	606	Gully [607]	Sheet fragment, metal alloy (SF 18)
	759	Ditch [762]	Vessel handle, copper alloy (SF 27)
	863	Gully [865]	Shard, colourless glass (SF 73)
Foci 3	868	Pit [870]	Fragment, bone – poss. unworked (SF 21)
	903	Ditch [904]	Sheet fragment, iron (SF 24)
	969	Pit [971]	Socket/ferrule fragment (SF 28)
	969	Pit [971]	Sharpening stone (SF 27)
	1044	Pit [1045]	Pin, bone (SF 61)
	1059	Post hole [1060]	Object, bone/antler (No SF No33)
	1061	Post hole [1062]	Undiagnostic strip, copper alloy (SF 34)
	1072	Pit [1073]	Spiked rod/bar (SF 35)
	1110	Layer	Weaving comb, bone (SF 36)
	1105	Pit [1106]	Strap fragment, iron (No SF No)
	1279	Pit [1280]	Off cuts, bone (SF 66)
	1786	Pit [1791]	Handle, antler – indentations on surface (SF 62)
	1867	Post hole [1869]	Needle, bone (SF 47)

1894	Post hole [1895]	Segmented ring/brooch, copper alloy (SF 48)
1937	Gully [1940]	Decorated antler tine, poss. handle (SF 58)
2054	Pit [2056]	Armlet, copper alloy (SF 49)
2054	Pit [2056]	Strip, iron (SF 50)
2064	Pit [2072]	Sheet fragment, copper alloy (SF 29)
2124	Pit [2127]	Pointed blade, bone (SF 59)
2124	Pit [2127]	Implement/tool, bone (SF 60)

Copper alloy

Six objects (excluding Roman armlet) manufactured from copper alloy were recovered from Iron Age deposits and they include personal and domestic related artefacts. The former include items of jewellery represented by a segmented brooch/ring and part of an armlet with a similar motif. Other finds include, part of a decorative copper alloy strip and a vessel/container handle made from copper alloy "wire". In addition there are two undiagnostic sheet and strip fragments.

Iron

There are eight iron objects, of that number, four are undiagnostic sheet or strip fragments. The remainder include, a rod/bar terminating in a point, a double-hooked fitting (possibly a cauldron hanger), part of a socket/ferrule still containing fragments of ferruginous wood and a nail.

Bone/antler

Ten objects are manufactured from bone/antler. With the exception of some bone off cuts and a pin with a worn flat head, the assemblage is represented by an interesting range of tools. Finds related to the manufacture of textiles include, an almost complete weaving comb and a needle. Other identifiable tools include, a pointed blade and possibly part of one other. There are two pieces of antler, a sawn antler tine with indentations on the exterior surface, indicating that it was used as a working surface, and a sawn piece of antler beam decorated with a crudely executed ring and dot motif. All the pieces of bone and antler will be reported on by finds specialist Ian Riddler.

Glass

There are two pieces glass, an annular monochrome bead in opaque green glass and an undiagnostic shard of colourless glass (? base shard).

Ceramic

There is one ceramic object which has yet to be identified, a small "barrel-shaped" object (H: 28mm) with a sub-circular cross section (Dia: 33mm) and perforated longitudinally. Further research is required.

Stone

The only stone object worthy of note is a broken pebble fragment that has been utilised as a sharpening stone. One of the broken edges is furnished with a worn V-shaped recess, at the base knife point sharpening grooves are evident.

4.5 Metalworking by Andy Chapman

There is slag from only five contexts. From the fill (97) of pit [99] there is a single large piece, weighing, 520g, from the curving wall, *c*300mm diameter, of an iron smelting furnace or smithing hearth, containing some impressions of the charcoal

fuel. The only other ferrous slag from the site is four small pieces of undiagnostic ferrous slag, weighing 40g, from the fill (116) of pit [118] and a fragment piece, weighing 45g from the fill (122) of ditch [125]. There is also a large piece of light and vesicular fuel ash slag, 80mm long and weighing 55g, from the fill (1739) of posthole [1740], and a small piece, weighing 9g, from the fill (1159) of posthole [1161]. Fuel ash slag can derive from any high temperature burning, and is not necessarily an indicator of metalworking.

While the collection is minimal in quantity, the single large fragment is certainly from the lining of an iron smelting furnace or a smithing hearth, so unless it was brought in from elsewhere for some obscure reason, it does suggest that iron working did take place nearby, despite the absence of the substantial quantities of slag that usually mark the presence of iron working.

4.6 **Fired clay** by Andy Chapman

A total of 1.44kg of fired clay was recovered. The majority of the assemblage comprises small quantities of small irregular abraded lumps of hard fired clay, typically 15-30mm long, with occasional larger pieces.

Two pieces, each weighing 85g, and 65-70mm long, from the fill (508) of pit [511], each has a longitudinal groove, 10mm wide, and one piece has an adjacent smoothed surface. This indicated that they have come from a wattle and daub structure.

Four large lumps, weighing 450g, from the fill (677) of pit [678] are not fully fired, and comprise irregular lumps partially heat reddened and partly raw clay, incorporating large inclusions of shell and small pebbles, up to 20mm long. However, there are no diagnostic features to indicate whether they have come from wattlework or perhaps even loomweights. There is also a comparable group, weighing 370g, from the fill (367) of pit [369]. Smaller pieces, up to 30mm long, from the fill (522) of pit [524], weighing 75g, have a similar fabric and a similar low level of firing.

5 THE FAUNAL AND ENVIRONMENTAL EVIDENCE

5.1 **Animal bone** by Adam Reid

36.5kg of animal bone was recovered by hand collection from 436 contexts during the course of excavation. This material was assessed to determine the level of preservation, the taxa present and to inform the potential for further work.

All material was washed prior to assessment, which was undertaken on a context by context basis in order to provide a rough quantification of identifiable specimens and to determine the presence or absence of the most frequently encountered taxa. The state of preservation of each bone fragment was rated on a scale of 1 to 5, where 1 is equivalent to excellent preservation and 5 very poor (Lyman 1994). Identifications took place with the aid of the MOLA Northampton reference collection and Hillson (1992). Due to the anatomical similarities between the two species, all ovicaprid specimens were grouped as sheep/goat, unless possible to differentiate between the two using Boessneck *et al* (1964) and Payne's (1985) criteria. Specimens that could not be positively identified were attributed, where possible, to categories including Large Mammal (Cattle, Horse, Red Deer), Medium Mammal (Sheep/Goat, Pig, Large Dog), and Small Mammal (Small Dog, Cat, Rabbit).

Preservation and taphonomy

The state of preservation was recorded as being generally poor with few exceptions (Table 7). Context (886) was the only context to be graded as having a "good" state of preservation.

Table 7: Preservation grading by context

Preservation grading	Excellent	Good	Moderate	Poor	Very Poor
No of contexts	-	1	37	368	30

Much of the material demonstrated evidence of weathering and surface abrasion, which would suggest that some specimens may have remained exposed, or partially exposed, for some time prior to burial.

Quantification

The rough quantification indicates that the assemblage is composed mostly of the main domesticate species (cattle, sheep/goat and pig), although horses, dogs and deer appear to have been utilised to a lesser degree (Table 8).

Table 8: Number of contexts with identifiable taxa

	Cattle	Sheep/goat	Pig	Horse	Dog	Cervid
No. of contexts	138	155	41	22	12	4

A quantification of the number of identifiable fragments estimates that it will be possible to provide a NISP (Number of Identified Specimens) of around 1500 for the assemblage, after full analysis (Table 9). No microfaunal, fish or amphibian bones were noted.

Table 9: Rough quantification of identifiable fragments

	Large Mammal	Medium Mammal	Small Mammal	Bird	Total
No. of fragments	769	873	12	2	1656

Table 10: Associated bone groups

Context	Content of ABG
(1047)	Articulated cattle vertebrae
(1689)	Articulated sheep remains, minimum of 2 individuals
(1690)	Articulated sheep remains, minimum of 2 individuals
(1704)	Articulated juvenile sheep remains
(1762)	1 juvenile sheep skeleton, 1 juvenile cattle skeleton

The assessment has suggested that a full analysis is likely to provide information regarding human-animal interactions at the site, including butchery practices and animal husbandry strategies (Table 11). It may also be possible to analyse how these practices changed over time, once a clearer indication of the phasing of the site has been achieved.

Table 11: Number of specimens with the potential for further analysis

	Toothwear	Fusion	Butchery	Metrical
Number of specimens	59	142	122	180

5.2 **Charred plant remains** by Kath Hunter

Charred plant remains including charcoal

Following an excavation carried out by Museum of London Archaeology (MOLA) 75 samples were selected for the assessment of plant remains including charcoal. The samples had been processed using a flotation technique recovering the flots to 500 µm. The residues were sorted in-house by MOLA with charcoal and other plant remains from the greater than 2mm extracted. These extracted remains and a proportion of the flots were then rapidly assessed by the author using an MTL stereo microscope. The results from this assessment are recorded in Table 18 (Appendix 1). Due to the large amount of modern root fragments incorporated with many of the flots the figure recorded for their volume may not be accurate.

The assessment of the charcoal was carried out using low power microscopy. As such it has only been possible to identify the presence of ring porous or diffuse vessel patterns. Where possible the author has attempted to identify whether the charcoal represents roundwood, heartwood, twig or root. The act of trying to identify the above characteristics in abraded charcoal is by necessity destructive. Therefore, where only a few pieces of charcoal have been recovered, these have not been broken as this could hinder future identification at the analysis stage. The frequency of potentially identifiable charcoal that is over 2mm in all dimensions is recorded in table 18 (Appendix 1) within brackets e.g. (*). The frequency of all charred remains has been recorded using the following criteria:

* 1-5 items

** 6-10 items

*** 11-50 items

****50-100+ items

Where identification of other plant macrofossils has taken place, the nomenclature follows Stace (2010). The term “seed” may include achene, fruit, nutlet etc.

The criteria used to select samples for further analysis of archaeobotanical remains is based on a scheme developed by Wendy Carruthers (Carruthers pers. comm). This allows various factors to be taken into account when assessing samples. The priority categories used in this assessment are as follows:

A= high potential on archaeobotanical grounds (i.e. rare or interesting plant taxa or exceptional preservation) or due to the scarcity of information from this type of deposit (e.g. Neolithic contexts).

B= good potential due to reasonable preservation and/or frequent identifiable charred plant remains, i.e. the assemblage can provide a useful amount of information.

C= some charred material but present in low concentrations or very poorly preserved. The samples will only be worth including if part of a group, or if the context is especially important or particular information is required.

D= no charred material or so few to have been fully identified and recorded. Any information recovered from C and D samples can be included in the final report if necessary.

Results

Whilst charred remains were found in all of the samples, they were often sparse and poorly preserved. There were no samples where the number of identifiable remains numbered more than 100 items. Many of the flots contained abundant modern root fragments and shells of the awl snail (Ceciliodies acicula) a burrowing mollusc. This highlights the risk for contamination in the deposits.

The most commonly identifiable charred remains were wheat (*Triticum* sp.) and hulled barley (*Hordeum* sp.) grains. A few oat grains were also noted but in the absence of diagnostic floret bases, it is not possible to indicate if the remains might be cultivated or weed species. There are a few examples of more or less rounded wheat grains that might be of a bread wheat type (cf. *Triticum aestivum*). But again, no corresponding chaff was noted to confirm this. Much of the remaining wheat grains are longer and narrower which can be found with both spelt and bread wheat (Jones 1978). There are a few examples of wheat glume bases including two examples of spelt wheat (Triticum spelta) (samples 38 and 82). This is free threshing wheat common in much of Britain in the Iron Age period. There is also a significant amount of unidentifiable cereal grain fragments (cereal nfi). It is notable that there are also relatively few weed seeds in this assemblage. Particularly lacking are species commonly associated with crop processing waste. A single fragment of a large legume (sample 11) may indicate the presence of field bean (Vicia faba) or pea (Pisum sativum).

Recommendations

Charcoal

Following the basic assessment of the charcoal only sample 48, context (1149) has more than 100 fragments of charcoal 2mm in all dimensions and may have the potential for further analysis. Consultation with the relevant specialist is recommended to ascertain if other samples would be useful to help to interpret the use of the features; the activities being carried out on the site and the tree species being utilised.

CPR

The relative paucity of charred plant remains in most of the samples mean that only the analysis of seven samples is recommended (Table 12 below). Whilst none of the samples assessed are particularly rich in identifiable plant remains, these samples provide evidence of some of the crops being utilized during the sites occupation. Fuller analysis of these samples may provide further evidence of identifiable chaff and associated weed seeds. The results will provide evidence of plant use in the Iron Age in the local area.

Table 12: samples recommended for full analysis of charred plant remains (excluding charcoal).

Sample	Context		
14	20	upper fill of posthole [22]	B/C
24	363	fill of pit [364]	B/C
36	456	fill of posthole [457]	B/C
38	367	fill of pit [369]	B/C
79	1739	fill of posthole [1740]	B/C
82	1687	fill of pit [1691]	B/C
95	1789	fill of pit [1791]	B/C

6 POTENTIAL AND RECOMMENDATIONS FOR FUTURE WORK

Information from the site will contribute to the wider understanding of the middle Iron Age within the county of Northamptonshire and possibly more regionally. There were too few features from the early and later Iron Age elements to be of any great significance.

Further analysis of the written record, stratigraphic relationships and finds evidence will assist in improving understanding of the sequencing and development of the site. The remodelling and changing function of the settlement means that more detailed analysis is needed to fully understand stratigraphic relationships and phasing. It is considered that further in-depth stratigraphic and finds analysis may be able to improve the phasing, allowing a clearer picture as to which features functioned contemporarily.

Rural agricultural sites dating to the middle Iron Age were becoming increasingly enclosed during this period, although this site appears to have remained an unenclosed and aggregated group. Comparative analysis with other sites both locally and regionally will be undertaken. This is particularly true of the known sites recently investigated around the north-east edge of Brackley.

6.1 The Flint

Twenty-two worked flints were recovered as residual material. No further work is needed with this assemblage. The report will be included in the final publication.

6.2 The Iron Age pottery

A moderate assemblage of pottery was recovered, comprising 3417 pottery sherds (31.58kg) from 428 contexts. Middle Iron Age pottery made up the majority of the assemblage, but only seven contexts produced groups weighing over 500g and four contexts producing in excess of 1.0kg of pottery.

The assemblage will need to be fully quantified to fabric types. It may also be possible to quantify to vessel type, at least broadly in terms of size, to provide an estimate of proportion of large jars as opposed to smaller vessels.

Further work would therefore incorporate a full phasing and grouping of the assemblage into the analysis. This would help to further understand the phases and development of the site throughout the Iron Age period.

The distribution of the pottery needs to be considered in order to aid the definition of the site chronology, in order to test the idea the site developed progressively from south to north.

Discussing the pottery in relation to local contemporary assemblages and those from surrounding regions would further help in placing the site within the wider landscape. The decorated vessels should form a component for further study of the assemblage.

Vessels providing near complete profiles will be drawn, and also illustrated photographically.

6.3 The querns and grinding stones

Eight broken saddle querns were found and three querns were photographed. No further work is needed with this assemblage. The report will be included in the final publication.

6.4 Small finds

Analysis of finds has been completed but further work regarding phasing and spatial distribution will be advantageous to determine the possible function of areas or structures that were being used for instance; domestic use, craft work, agricultural processing or metal working.

Proposals for further analysis and reporting:

X-radiograph iron objects.

Complete small finds catalogue to include details observed on x-rays.

Liaise with Ian Riddler regarding specialist reporting on the bone and antler artefacts and possibly liaise with specialist regarding some of the copper alloy finds.

A small number of copper alloy (decorative strip, brooch/ring, handle) and the ceramic object require further research.

Look at stratigraphic and spatial distribution of the finds.

6.5 Metalworking

A small quantity of slag from iron working was retrieved, comprising 0.67kg from five contexts. Of interest there was a fragment which is certainly from the lining of a furnace or a smithing hearth. Distribution of the material to try and pinpoint production will be carried out.

No further work is recommended on the assemblage itself.

6.6 Fired clay

A small quantity of 1.44kg of fired clay was recovered across the settlement. A distribution plot of fired clay will be undertaken to gauge whether it relates to any of the hearths or possible kiln/oven activity.

No further work is recommended on the assemblage itself.

6.7 Animal bone

A moderate assemblage (36.5kg) of animal bone was recovered hand collection from 436 contexts. Sheep/goat (155) and cattle (138) were the most popular taxa and five contexts included possible associated bone groups.

A full analysis of the assemblage would also most likely provide information regarding human-animal interactions, including butchery practices, animal husbandry strategies and possibly how these practices changed over time. The animal bone assemblage should be able to add to the corpus of known Iron Age rural sites, in spite of its poor state of preservation.

It was possible to identify five contexts that contain possible associated bone groups (ABGs), which will warrant further investigation when full analysis takes place (Table 10).

6.8 Charcoal and charred plant remains

Seventy-five environmental samples were assessed. Most samples produced sparse and poorly preserved charred remains, but evidence of cereals was also found which included wheat, oats and barley. Seven samples were recommended for further analysis. Only one sample produced more than 100 fragments charcoal and is likely to have potential for further analysis. Other samples may be worth further work after consultation with the relevant specialist.

6.9 Radiocarbon dating

It is recommended that two samples are taken for radiocarbon dating (Table 13). Pits [722] and [1153] produced significant pottery assemblages (see Chapman above) which C14 dates will hopefully produce a close date range. Understanding and dating Iron Age pottery assemblages is a regional research aim.

Table 13: Potential sample materials for radiocarbon analysis

Sample no.	Fill	cut	Feature	Contents
-	720	722	Pit	Significant ?early-middle Iron Age pottery assemblage. Finger tip decoration, incised decoration and zig-zag decoration. Animal bone can be used for C14 date
48	1149	1153	pit	Significant early-middle Iron Age pottery assemblage including transverse fingernail/tip decoration. Animal bone or charcoal can be used for C14 date

7 REVIEW OF RESEARCH OBJECTIVES

Section 2.2 recoded the research agenda for the site, taken from the regional frameworks (Knight *et al* 2012). It identifies specific areas of interest and objectives that should be considered a focus of all excavations that take place within the East Midlands. This site has the potential to assist in meeting some of the Iron Age research objectives and of particular relevance to this site are the following agenda items:

1 Late Iron Age settlements
2 Field systems and major linear boundaries
3 Ritual and structured deposition and religion
4 Agricultural economy and landscape
5 Development of middle Iron Age settlements
6 Status of middle Iron Age settlements

7.1 Late Iron Age settlements

The late Iron Age activity on the site was very limited, mainly to the western edge of the site (SL3), but it included a recut of the penannular enclosure, Structure 21, which appeared still to be functioning as a landscape unit, suggesting some continuity with the middle Iron Age settlement. There was also a newly established ring ditch that was possibly an enclosure, (Enclosure 4/Structure 22), lying close to the north-west corner and a spread of a few storage pits. Further examination of the floral and faunal distribution may be able to define these areas more clearly.

The construction of a large and thick stone layer or spread [238] in Foci 2 was the final activity in the late Iron Age was suggested to be a threshing surface, but the apparent abandonment of the surrounding settlements would deem this function unlikely. The quantity of stonework may relate to the demolition and leveling of what could have been a reasonably large structure, but no apparent associated features were evident. The comparison with known threshing surfaces on other late Iron Age sites could help confirm or eliminate this interpretation as processing area for grain.

It would seem that the site had been in decline in late middle Iron Age and by the 1st century BC of the late Iron Age it was in the process of being abandoned and the pattern of the foci shifting beyond the existing boundary of the site to where the centre(s) of late Iron Age activity had become established. The evidence for this may been seen in the crop mark pattern in the landscape surrounding Foxhills area (Fig 6), which displays some prominent sub-rectangular enclosures, possibly relating to late Iron Age activity although none are visible close to the site.

7.2 Field systems and major linear boundaries

No field systems or major linear boundaries were evident on the site, which appeared to be an open aggregated settlement of three foci delineated only by the cohesion of the structural remains, a few possible enclosures and associated features, with apparent narrow areas of unoccupied ground between them.

The fragmented cropmarks in the surrounding landscape do display evidence of linear boundaries that may represent parts of field systems, although these features do not necessarily relate to the period of the middle Iron Age and they lie some distance from the Foxhills site. Further resrarch looking specifically at the change and

shift of land use on site from the middle Iron Age into the late Iron in comparison to other transitional sites should be undertaken.

7.3 Ritual and structured deposition and religion

There was no obvious evidence of ritual deposits or religious structures, but further analysis of the deposition of the artefacts and any groupings may reveal the possibility of ritual placement. Saddle querns were distributed across the site, but three were recovered from the postholes of three separate, but adjacent four-post granary structures G3, G4 and G7, although they were probably just utilized as post-packing (See four and six-post structures, p31). An exceptional example of possible ritual deposition from the middle Iron Age site on the Long Dole site at Crick was the recovery of a complete saddle quern from the surface of a pit at the centre of ring ditch that was part of a possible ritual complex (Chapman 2015, 48).

7.4 Agricultural economy and landscape

Foxhills was quite clearly a rural agricultural settlement that was closely associated with the adjacent middle Iron Age at Sawmills site (Muldowney 2016), displaying a similar development of structures and features, which may represent another foci accompanying the three foci in the Foxhills site. The Sawmills site had a similar appearance, characterised mainly by a ring ditches for possible roundhouses, roughly circular enclosures, a large number of square four and six-post-built storage structures and numerous granary storage pits. The Radstone evaluation (OAS 2010) to the north-west and the Northampton Road site (Luke *et al* 2015) to the south were similarly developed sites dating from the 5th century to the 1st century BC, also with an emphasis on the storage and processing of grain.

The large number of grain storage pits and above-ground storage granaries present on the various sites in this area, strongly suggest the settlements were representative of an agricultural economy predominately based on grain storage and processing. The presence of so many storage pits would indicate there was suitable arable land nearby. The environmental evidence of charred plant remains recovered from pits and postholes across the sites suggest wheat, barley and oat were the typical cereals being grown and processed, although there was evidence of legumes also being grown, but a closer examination of the remains may give additional emphasise to the agricultural economy and the use of the landscape.

Saddle querns were the predominant processing artrefacts recovered from features across the sites with eight fragments retrieved from both Foxhills and Sawmills sites, with a complete beehive rotary quern also recovered from the Radstone Road site. These querns were in use during the middle Iron Age and probably not any later than the 1st century BC. A reaping-hook was also retrieved the Sawmills site that attested to harvesting being undertaken by a least some of the occupants of the farms.

Livestock was represented by cattle and sheep remains and to a lesser extent pig and horse, denoting that animal husbandry was also being undertaken, with the possible land along the water meadows valley being utilised as grazing pasture. No doubt many of the ring diches and enclosures located in around the farm settlements were used as pens and paddocks for confining the livestock. The quantification of the faunal remains could help define the proportion of time and effort used between the arable farming and the animal husbandry.

The livestock were not only used as a food source, but were the raw materials for much craft production on these sites, demonstrated by the recovery of associated artefacts such as a weaving comb and a bone bobbin recovered from the Northampton Road site, used for the manufacture and repair of textiles. Other common animal derived products, such as worked antler, bone needles and awls were possibly used for leather working. The presence of deer antlers indicates that hunting activity was also employed, probably in woodland on the periphery of the farm landscape. The comparison of craft products from other sites may confirm if this was typical of the quantity and quality of middle Iron Age settlements.

7.5 Development of middle Iron Age settlements

When comparing Foxhills in association with the neighbouring Sawmills, Northampton Road and Radstone Road sites with the categories of settlement development of settlements in middle Iron Age defined by the East Midlands Research Agenda (Knight *et al* 2012), there was clearly no evidence they were close to or in the vicinity of a period hillfort. The closest county bound hillfort lies at Rainsborough *c*8km to the south-east and Hunsbury and Borough Hill *c*21km to the north.

Within the three lower order categories of open settlements, enclosed settlements and agglomerated sites, Foxhills and the associated excavations at Sawmills (Muldowney 2016), Northampton Road (Luke *et al* 2015) and Radstone Road (OAS 2010) fit neatly with last of the recognised classifications. The agglomerated settlements are identified similar to open settlements comprising timber roundhouses with ancillary structures, which include four and six-post raised granaries and pits, unenclosed by ditches, but as a number of these small farms grouped together covering a much larger area (Kidd 2004). Together with the Sawmills site, four such foci can be seen to develop into this arrangement from the early-middle Iron Age (400-250 BC) to the 1st century BC. Three of the foci proliferated though out this period, although one of the foci did appear to be abandoned in the middle-late Iron Age. By the late Iron Age all the foci appeared to be in decline or abandoned.

The combined area of Foxhills and Sawmills settlements would cover *c*3ha, but if the area extended between the Northampton Road site to the south of Foxhills and the Radstone Road site to the north-west, which lay c1km apart the area the settlements would be up to 30 to 40ha in extent.

Sites that display comparative dispositions to the Foxhills and Sawmills extended settlements can be observed at the DIRFT development at Crick (Masefield *et al* 2015), which covered several sites, which revealed a landscape that was heavily occupied through the Iron Age and displaying the middle Iron Age settlement aggregation of roundhouses and circular enclosures.

Also on a similar scale to the Foxhills/Sawmills site was Iron Age aggregated settlement at Manor Farm at Humberstone, Leicester (Thomas 2011) comprising loosely grouped ring ditches, enclosures and a scatter of pits laid out in a linear plan west to east spanning the A46/A47 link road and extending to the Elms Farm excavation (Charles *et al* 2000) where there was a more dense group of features.

The Iron Age settlement at Gravelly Guy site (Lambrick and Allen 2004) at Stanton Harcourt in Oxfordshire is comparative in that it included a large quantity of storage pits, laying in an close arrangement, flowing around and largely respecting the ring ditched enclosures, much in the same way as they can be seen in settlement Foci 3 on the Foxhills site.

7.6 Status of middle Iron Age settlements

Foxhills forms part of a large aggregated settlement and is typical of those found elsewhere, including Crick (Chapman 2015; Masefield *et al* 2015). It was occupied by extended family groups, probably producing what they needed themselves from cultivation and animal husbandry, from which by-products (wool, leather and bone) would utilised to manufacture tools and craft products.

Such artefacts recovered from the site include a number of copper alloy and iron objects, worked bone and antler finds that were mostly from the early to middle Iron Age features. These finds represented aspects of the personal, domestic and working lives of the Iron Age people occupying the settlement, which included jewellery items in the form of a segmented brooch or ring, an armlet fragment and a glass bead. More functional items comprised a container handle made from copper alloy "wire", a possibly iron cauldron hanger hook and a sharpening stone. Craft working was most likely occurring also, with the recovery of weaving comb and needle implements, including other craft made tools comprising a pointed bone blade and a decorated antler handle.

These artefacts show the settlement foci to be typical domestic and working environments of this period. It is interesting to note that the majority of the artefacts were found in Foci 3, within a radius of 15m to 20m of Ring Ditch Structure 20, a possible roundhouse and the probable centre of the of domestic and working activities.

Such products as the pottery was no doubt produced locally and building products would be acquired from surrounding land. The small quantity of slag present on the site would suggest some metal working was undertaken, but again this was more than likely for the occupants own requirements. There is no evidence of high status metal objects or even well-made pottery and all the objects were utilitarian. The animal bone recovered had few wild or exotic species and comprised mainly cattle and sheep/goat.

The element that places the Foxhills/Sawmills site above the ordinary is the abundant storage for cereal grain, with around 160 grain storage pits and over 80 squared four and six-post structures above ground granaries, suggesting the quantity of grain being stored would exceed the requirements for the occupants of each foci. If this was the case then there would have been an estimable surplus of grain, but whether it was a commodity for the use of the farm inhabitants or for the benefit wider community under some central authority, suggesting there was broader organisation of these settlements. A portion of grain would have been processed on site, certainly for the local needs, which was evident from the 16 saddle querns retrieved from the two sites, but was the surplus grain was also likely dealt with in the same manner and transported for trade as flour or as seed.

Similar to the heavily pitted site at Gravelly Guy, Foxhills/Sawmills and the other nearby sites were divided into specialised areas, with grain storage and processing in some foci or in parts of wider farm complex and other areas for example employed in animal husbandry, metalworking, weaving and other domestic products. Further analysis of the artefact and waste material distribution may provide a greater understanding of the function of not only the settlement as a whole, but of discrete areas within it, such as the individual enclosures and roundhouses.

8 REPORTING, PUBLICATION AND ARCHIVE

8.1 Reporting and publication

A full site report will be prepared by MOLA Northampton. This will be submitted to the Historic Environment Record and deposited with the Archaeological Data Service (ADS). Provision will be made for publication as a monograph for wider dissemination as part of the Archeopress monograph series.

The proposed structure of the report is as follows:

1 INTRODUCTION

2 BACKGROUND

2.1 Location and topography
2.2 Geology
2.3 Historical and archaeological background

3 OBJECTIVES, METHODOLOGY AND SUMMARY OF SITE CHRONOLOGY

3.1 Objectives and methodology
3.2 Summary of site chronology

4 EARLIER PREHISTORIC ACTIVITY

4.1 The worked flint by Andy Chapman

5 THE LATE IRON AGE SETTLEMENT

5.1 Roundhouses and ancillary features
5.2 Enclosures
5.3 Storage pits and four and six-post structures
5.4 Other features

6 THE FINDS

6.1 The Iron Age pottery by Andy Chapman
6.2 Iron Age querns by Andy Chapman
6.3 Other Iron Age artefacts by Tora Hylton
6.4 Bone and antler artefacts by Ian Riddler

7 ENVIRONMENTAL REMAINS
7.1 Faunal and environmental evidence by Rebecca Gordon
7.2 Charred plant remains by Kath Hunter
7.3 Wood species by TBC

Each section will be accompanied by appropriate illustrations. The introductory sections will include figures showing the location of the site and its topographic and geological context. Within the narrative text illustrations will include overall phase plans, detailed drawings of individual features or feature groups, photographs and finds illustrations. The discussion will include figures showing the archaeological context of the works in relation to other archaeological investigations discussed in the text and other figures as necessary.

8.2 Archive

A microfilm copy of the site archive and the site narrative will be made to RCHME standards and submitted to the National Archaeological Record. The archive will comprise all written, drawn and photographic records, and all material finds and processed sample residues recovered from the trial trench evaluation and excavation phases. All records and finds generated by the excavation will be compiled in a structured archive in accordance with the guidelines of Appendix 3 in the English Heritage procedural documents, *Management of Archaeological Projects* (EH 1991b) and *MoRPHE* (EH 2006). Site details will be entered onto the OASIS online database.

8.3 Quantification of site records

Table 14: Site records

Type	Quantity-excavation
Plans	112 sheets
Sections	41 sheets
6 Registers	100 sheets +plan sheets
Contexts (+ TT logs)	2143 sheets
Monochrome negatives	26 holders/26 sheets
Digital photograph contact sheets	26 sheets

8.4 Quantification of the finds and palaeoenvironmental evidence

Table 15: Finds

Material	Quantity
Iron Age pottery	3417 pottery sherds (31.58kg)
Slag	669g
Worked flint	22 pieces
Querns	Eight saddle querns fragments
Animal bone	36.5kg
Flots, charcoal	75 samples
Miscellaneous	16 metal objects, 10 pieces of worked bone/antler, 2 glass objects, a piece of worked stone and a ceramic object

9 RESOURCES AND PROGRAMMING

9.1 Work completed

All work on the consolidation of the site achieve, artefactual and ecofactual processing, basic site phasing, the assessment evaluation of finds and ecofacts, preparation of assessment reports and updated project design have been completed.

9.2 Future works

In order to fulfil the potential of the archaeological features and the artefactual and ecofactual assemblages set out in Chapter 6, a programme of future works will be undertaken. This will maximise the potential of the archaeological resource to fulfil the research objectives set out in Chapter 7, and will lead to the production of a final report that will form the basis of the publication.

There has been exchange of information with Albion and it would be advantageous if this continued. Unfortunately work has gone too far to produce a joint publication with Albion.

Foxhills and Sawmills will be combined and this should merit either a large journal article or small monograph publication.

Table 16: Task list

	Tasks	Personnel
1.	Report introduction and background	Stephen Morris
2.	Report structural site narrative	Stephen Morris
3.	Documentary research	Stephen Morris
4.	Iron Age pottery analysis and report	Andy Chapman
5.	Charred plant remains analysis and report	Kath Hunter, To be confirmed
6.	Animal bone	Rebecca Gordon
7.	Other finds	Andy Chapman and Ian Riddler
8.	Illustrations	To be confirmed
9.	Integration of specialist reports	Stephen Morris and Rob Atkins
10.	Report digest and discussion	Stephen Morris and Rob Atkins
11.	Editing/proof reading	To be confirmed
12.	Preparation of research archive	To be confirmed

9.3 Programme

The programme will commence once the Assessment Report and Updated Project Design has been approved by the County Archaeological Advisor to Northamptonshire County Council.

Table 17: Post-excavation analysis programme

Task / month	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

11										

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Appendix 1: *Table 18; Assessment of extracted remains and a proportion of the flots*

							Charred									Mineralised
Area/trench	sample no.	context	Feature	sample volume/litre	Flot volume /ml	% scanned	Grain	cereal NFI	chaff	legume	seed	fruit/nut	ACL	other	Charcoal	Cists/frags
	1	31	fill of drip gully [32]	40	25		*	**							(*)**	
	2	79	fill of posthole [81]	30	14		**	**			*				**	
	3	87	gully terminal[88]	40	48		**	**							(*)***	
	4	97	pit[99] at gully terminal [101]	40	5			*							(**)	
	5	116	fill of pit [118]	40	50		*	*				*			(*)****	
	6	122	darker area of fill of ditch [125]	40	6						*				***	
	7	124	bottom fill of ditch [125]	20	3			*							*	
	8	159	top layer of ditch [161]	40	20										(*)*	
	9	169	upper fill of pit inside structure 120	40	10		*								(*)*	
	10	219	fill of pit [220] in structure 120	20	20			*							(*)**	
	11	260	fill of gully terminus [261]	40	30		*			*					(*)***	
	12	244	primary fill of pit [245]	10	2		*	*							(*)**	
	14	20	upper fill of posthole [22]	20	20		**	**							**	
	15	303	fill of gully terminus [304]	40	15			*							(*)**	
	16	313	fill of gully terminus [314]	20	28										**	
	17	324	fill of gully terminus [325]	40	7										(*)***	
	18	332	fill of gully terminus [333]	40	15										(*)**	
	20	148	fill of posthole [150]	10	20		*								(*)***	
	21	338	fill of gully terminal [338]	40	30		*	*			*				(**)****	
	23	45	fill of posthole [47]	10	15		**	**							(**)***	
	24	363	fill of pit [364]	40	25		**		*		*				(*)***	*
	27	14	fill of posthole [16]	10	2			*							(*)	
	28	226	lower fill of pit [227]	20	40		*				*		*		(*)**	
	30	245	fill of posthole [247] structure 263	30	20		**								(*)***	
	31	277	upper fill of pit [273] in structure 280	10	###		**	**							(**)****	
	36	456	fill of posthole [457]	10	30		***								(*)****	
	38	367	fill of pit [369]	40	34		**		*						**	
	39	498	fill of gully terminus [499] structure 627	40	20										(*)**	
	40	508	fill of pit [511]	40	15										*	
	41	613	fill of pit [614]	20	>2										(**)**	
	43	863	layer in ditch [865]	40	8			*							***	
	44	889	upper fill of gully terminus [891]	40	15										(*)**	
	47	1157	fill of pit [1158]	40	20		**	*			*				(*)**	
	48	1149	fill of cess pit [1153]	30	###		*	**							(****)****	

	49	1295	fill of pit [1301]	10	45		**	*							(*)*	
	51	925	fill of posthole [927] structure 928	20	15		*								(**)****	
	53	977	fill of post hole [978] structure 983	10	20										(*)****	
	54	1147	fill of cess pit [153]	20	30										(**)	
	55	1150	fill of cess pit [1153]	40	32		*	**							(**)****	
	56	1152	bottom fill of cess pit [1153]	20	10			*							(***)****	
	57	1220	fill of post hole [1466]	20	50		**	*							(*)****	
	60	1472	base fill of pit [1473]	40	15			*							(*)***	
	62	1474	upper fill of gully [1476]	40	20		**	**							**	
	65	1231	fill of posthole [1232] structure 1241	20	20		**	**							(**)***	
	66	1165	fill of posthole [1167] structure 1170	10	20		**	**							(**)***	
	69	1553	fill of gully [1554]	40	20				*						*	
	70	1557	fill of gully terminus [1558]	30	15										(***)****	
	71	1312	fill of posthole [1313] structure 1359	40	10		**	**							***	
	72	1616	fill of posthole 1617 structure1618	10	2		***	*							(*)***	
	73	1726	fill of posthole [1727] structure 1731	40	15		*	*							(**)****	
	76	1604	fill of posthole [1606] structure1618	10	5		**	**								
	77	1342	fill of posthole [1343] structure 1352	10	10		*								(*)**	
	79	1739	fill of posthole[1740]	10	20		***	**							(*)**	
	80	1786	fill of pit [1791]	40	10		*						*		(***)***	
	82	1687	fill of pit [1691]	40	15		*	**	*		*				(*)**	
	83	1640	fill of posthole [1641] structure1767	10	20		*	*							**	
	84	1828	fill of posthole1829 structure1741	10	8		****	**			*				(**)**	
	85	1688	fill of pit 1691	40	22		*	*							(***)***	
	86	1690	fill of pit 1691	40	5		*								(*)**	
	87	1831	fill of pit[1832]	40	34										(*)**	
	88	1884	fill of posthole[1885]	10	20		*								*	
	89	1939	base fill of terminal[1940]	30	20		*				*				(**)**	
	90	1958	fill of pit [1960]	40	50		**						*		(**)****	
	91	2030	fill of pit [2035]	40			*	*	*						(*)****	
	92	1785	fill of pit [1791]	40	40		*	*								
	94	1787	fill of pit [1791]	40	60		**							*	***	
	95	1789	fill of pit [1791]	40	45		***		*		*				(*)****	
	96	2027	upper fill of pit [2035]	40	30		*	**							(**)****	
	97	2028	fill of pit [2035]	40	15						*				(**)***	
	98	1921	upper fill of pit[1923]	20	20		*	*	*		*				(*)***	
	99	2073	fill of pit [2074]	40	30										(*)***	
	100	1847	fill of posthole[1849] structure1860	30	25			*					*	*	(*)***	
	101	1865	fill of posthole 1866	40	15		*	*							(**)***	
	102	1482	lower fill of posthole [1483]	40	20			*			*				(*)**	
	103	2125	fill of pit[2127]	30	30		*	*							(**)****	

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