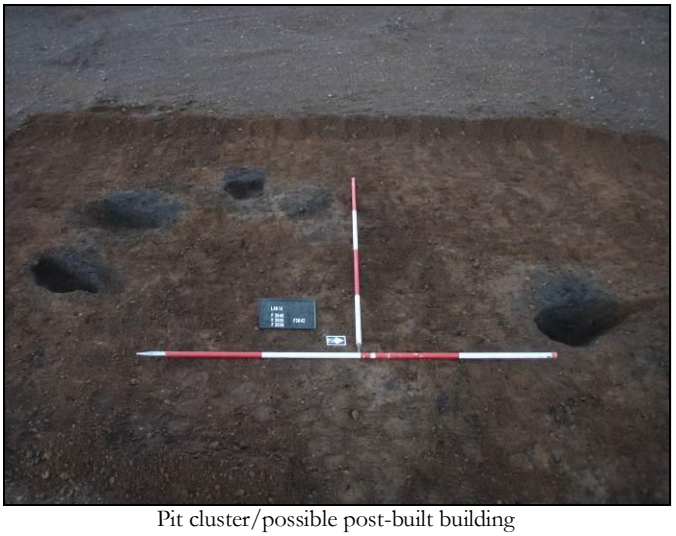
Lanton Quarry, Northumberland

Phase 7 Archaeological Excavation



Pit cluster/possible post-built building

ARS Ltd Report 2015/83
June 2015

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Archaeological Research Services Ltd

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Executive Summary

A seventh phase of archaeological excavation following a strip, map and sample methodology was conducted by Archaeological Research Services Ltd. at Lanton Quarry, Milfield, Northumberland on behalf of Lafarge Tarmac Ltd. The fieldwork took place over a five week period in September and October 2014 on a site of approximately 2.8 hectares. The investigation took the form of a strip, map and sample, in which the topsoil was mechanically removed under archaeological supervision before a sampling strategy was agreed and excavations were undertaken on the features exposed.

The archaeological remains excavated as part of the Phase 7 works included:

- *Four pit clusters including a number of pits which produced Neolithic pottery.*
- *Thirteen isolated pits and postholes that produced pottery and/or lithics.*
- *135 additional isolated pits and postholes.*

Approximately 58 sherds of Early Neolithic pottery from at least 17 different vessels were recovered from several pits including Carinated Bowl and some possible Grooved Ware. A total of three lithic blades were also recovered.

Analysis of the botanical macrofossils obtained through flotation from this phase of excavation suggests a more firmly agricultural form of subsistence, with less evidence of wild gathered foods than other phases. This suggests a difference in subsistence, although the associated pottery indicates a similar Neolithic date. The quantity of cereal grain was also unusually high compared to previously excavated areas which may indicate that these contexts were slightly different in age from previous Neolithic contexts, or perhaps that there was spatial variation in amounts of wild and cultivated foods being processed at the site.

The archaeological features and ceramic finds from Phase 7 of the excavations at Lanton Quarry add important new information to the wider story of prehistory in the Milfield Basin and also the wider region. A full discussion of their wider significance will be produced as part of the final site narrative.

1. Introduction

1.1 This report describes Phase 7 of an archaeological strip, map and sample investigation undertaken at Lanton Quarry, Northumberland in 2014 by Archaeological Research Services Ltd on behalf of Lafarge Tarmac Ltd. In October and November 2014 Phase 7 was stripped of topsoil, revealing the archaeological deposits beneath, cut into the sand and gravel surface. Excavation and sampling of the 2.8 hectare area took place over a five week period.

2. Location, Land Use and Geology

2.1 Lanton Quarry lies in the Milfield Basin to the north-east of the Cheviot massif, approximately 3km north of Wooler (Figure 1).

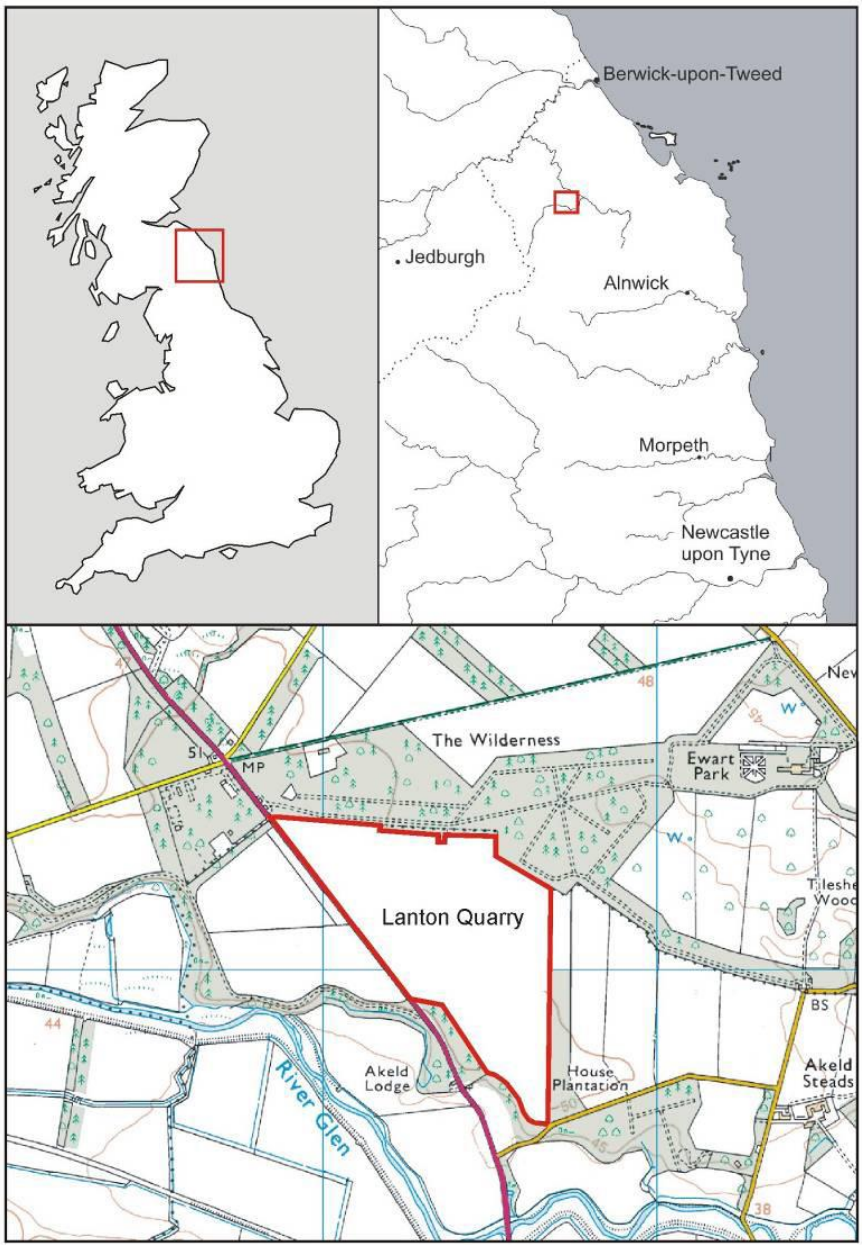

Figure 1. Site location.
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2.2 The Milfield plain is an area of low-lying ground which contains a complex sedimentary sequence, with glaciodeltaic and glaciofluvial sand and gravel deposits fanning out from the valley of the River Glen to form a series of terraces (Passmore *et al.* 2002). Inset below the gravel terraces is an in-filled glacial lake, Lake Ewart, which forms an extensive alluvial floodplain. Eight hundred metres to the north-east of the site lies the present channel of the River Till, and beyond that the land rises to the Fell Sandstone escarpment that borders the basin on its eastern side. Three kilometres to the south, the igneous rocks of the Cheviot Hills rise abruptly from the plain above the River Glen, where the summits of Humbleton Hill, Harehope Hill and the double peak of Yeavering Bell form prominent landmarks. To the west, the northern foothills of the Cheviots run parallel to the Fell Sandstone ridge, leaving only a 2 km wide corridor at the northern end of the plain through which the River Till meanders. The archaeology of Lanton Quarry is situated on a terrace of glaciofluvial sand and gravel deposits, situated for the most part at *c.*45 m aOD and covered by a ploughsoil of argillic brown earth origin (Payton 1992).

3. Archaeological and Historical Background

3.1 Numerous and extensive archaeological remains are known from the vicinity of the quarry site, dating from all periods with significant remains from the Mesolithic, Neolithic, Bronze Age, Iron Age and Anglo-Saxon periods.

3.2 The Phase 1 excavations at Lanton quarry, which took place between August and December 2006, uncovered multi-period remains. These remains included evidence for Neolithic settlement including four trapezoidal structures, three triangular structures and associated hearths and pits, together with an assemblage of Carinated Bowl pottery, charred cereal grain and hazelnut shell; two Bronze Age roundhouses probably in association with two rectangular structures; and an Anglo-Saxon settlement in the southern-most part of the quarry including two rectangular and two square post-built buildings, seven sunken feature buildings and associated pits and postholes with an important assemblage of associated pottery, metalwork, loom weights, glass beads and quernstones.

3.3 The Phase 2 excavations took place between December 2008 and February 2009. Multi-period remains uncovered during the excavation included Early Neolithic 'midden pits' that contained Carinated Bowl ceramics, a probable Bronze Age circular post-built house similar in form to others found during the Phase 1 work at this site and on the nearby Cheviot Quarry site, three probable Bronze Age rectangular and triangular post-built structures also similar in form to those found during Phase 1, three irregular post-built structures of uncertain date, similar in form to the Early Neolithic structures, and a late Iron Age burial within a corbelled stone cist. A second nearby feature was probably also an Iron Age burial cist but this had been more deeply truncated by ploughing and so no human remains were found in the base of this feature.

3.4 The Phase 3 excavations took place between May and June 2010. Remains uncovered during the excavation included Neolithic domestic midden pits, two hearth pits and two pits containing Neolithic Grooved Ware pottery. Eleven chipped stone artefacts were also found dating from the Neolithic or Bronze Age.

3.5 Phase 4 of the excavations at Lanton Quarry took place in June 2011. Features

excavated during this phase included a Neolithic pit containing sherds of a Carinated Bowl, a square structure defined by four linear gullies with a pit feature in the centre, thought to be an Iron Age shrine next to the Iron Age burial cist, a modern animal burial, a large pit feature with a stony fill, a linear feature and thirteen other isolated pits and postholes. The Neolithic pottery discovered in a shallow pit feature fits into the wider assemblage of such material that has already been recovered from the site. The square feature is thought to be the remains of an Iron Age shrine. Similar features have been found in southern England where there are now around 30 examples.

3.6 Phase 5 of the excavations at Lanton Quarry took place in October 2012. Features excavated during this phase included thirteen pit and posthole features containing broken Neolithic pottery, stone tools and charred plant foods dating to the Neolithic, four possible post-built buildings, a Middle Bronze Age pit containing a well-preserved basal section of a large pottery vessel, a severely truncated, shallow linear ditch feature of uncertain date and thirty nine isolated, undated pits and posthole features.

3.7 Phase 6 of the excavations at Lanton Quarry took place during August 2013 over a 3 week period. The features excavated during this phase included ten pits and postholes containing pottery and flint of Neolithic date, including one pit cluster; twenty-six linears, many of which were inter-cutting and may represent a Neolithic field system and 39 additional isolated pit and posthole features.

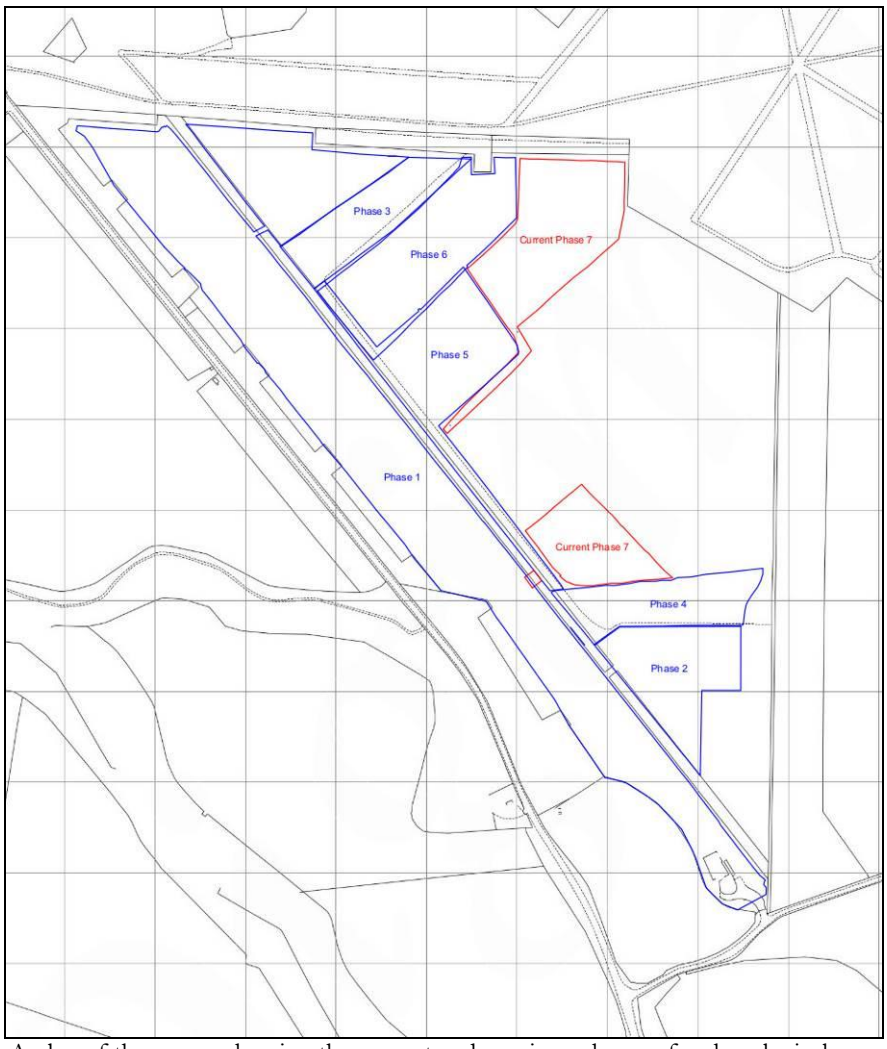


Figure 2. A plan of the quarry showing the current and previous phases of archaeological excavation.

4. Method Statement

4.1 Following the initial topsoil strip, the excavation was carried out over a five week period in October and November 2014 by stripping back the topsoil in spits with a 360° tracked excavator equipped with a toothless ditching bucket. This exposed the underlying sand and gravel deposits into which archaeological features were cut. The entire process was monitored and as the machine stripped the ground, features were cleaned with a hoe and trowel before being marked with wooden pegs and assigned context and feature numbers.

4.2 Each of the features identified during the stripping process was subject to sample excavation and recording. This involved the sectioning of deposits to determine their form and dimensions, and the collection of artefacts and samples suitable for radiocarbon dating and environmental analysis. All excavation was undertaken with trowels and small hand tools. Deposits containing artefacts, or with potential for containing organic material, were subject to flotation through a 500µm sieve. All features were photographed using colour print film, black and white print film, and digital format. All sections and plans were drawn at either 1: 10 or 1: 20 scale as appropriate. The section lines were surveyed to provide an Ordnance Survey datum for each feature. Features that produced pottery and flints or those which were rich in organic material were 100% excavated to maximise finds recovery.

4.3 All the deposits and cuts were described in the field on pro-forma context sheets. The sheets contain prompts for the recording of sediment composition, compaction and colour, the dimensions of the deposit, its relationship to other deposits and features, artefact content, environmental samples, drawing and photographic records and an interpretative discussion to ensure consistency across all records. All features were described in accordance with MoLAS conventions. Drawings were produced on drawing film. Registers of all contexts, samples, finds, levels, and drawings were also made. Artefacts were bagged individually and assigned an individual find number, with the site code and the deposit from which they were recovered clearly indicated. Ceramic finds were wrapped in acid-free paper and bubble-wrap before being placed in labelled bags or boxes as appropriate. Any single entity charred material samples suitable for radiocarbon dating were wrapped in aluminium foil before being placed in labelled bags.

4.4 Flotation of sediments to recover organic materials was undertaken on site. The fill of every feature which contained material culture or was organic-rich was floated through a minimum mesh size of 500µm to maximise the recovery of small finds and organic material. Material from the sieve was air dried and then placed in a sealed bag marked with its context and environmental sample number. All environmental samples were recorded in a separate register.

5. Results

5.1 This section describes the results of the excavation. In summary the features discovered on site included:

- Four pit clusters including a number of pits which produced Neolithic pottery.
- Thirteen isolated pits and postholes that produced pottery and/or lithics.
- 135 additional isolated pits and postholes.

5.2 All features on the site were truncated as a result of past agricultural practices and due to this, many features had a very shallow depth and it should be considered that

originally they would have been significantly deeper. No archaeological features survived within the topsoil, and only those features that were cut into the natural glaciofluvial sand and gravel deposits remained. The features and deposits are discussed individually, but grouped under headings according to their type and association with other features.

5.3 The Phase 7 excavations comprised two separate areas of excavation, one of which measured 1.8 hectares and the other which measured 1 hectare.

Topsoil. The topsoil (001) at Lanton Quarry consisted of a dark-brown sandy soil containing coarse to medium gravel inclusions and was loosely compacted.

Glaciofluvial Deposits. The soils of the Milfield Basin are underlain by thick glaciofluvial deposits from the Devensian glacial episode (BGS 2013). A mixed deposit of gravel and coarse sand (002) was evident across the area, interspersed by bands of finer, fluvially deposited sand. The archaeological features tended to be more prevalent on the sandy substrate with noticeably fewer archaeological remains on the coarser gravel substrate.

Figure 3. Site plan of Phase 7, Area A, showing feature distribution.

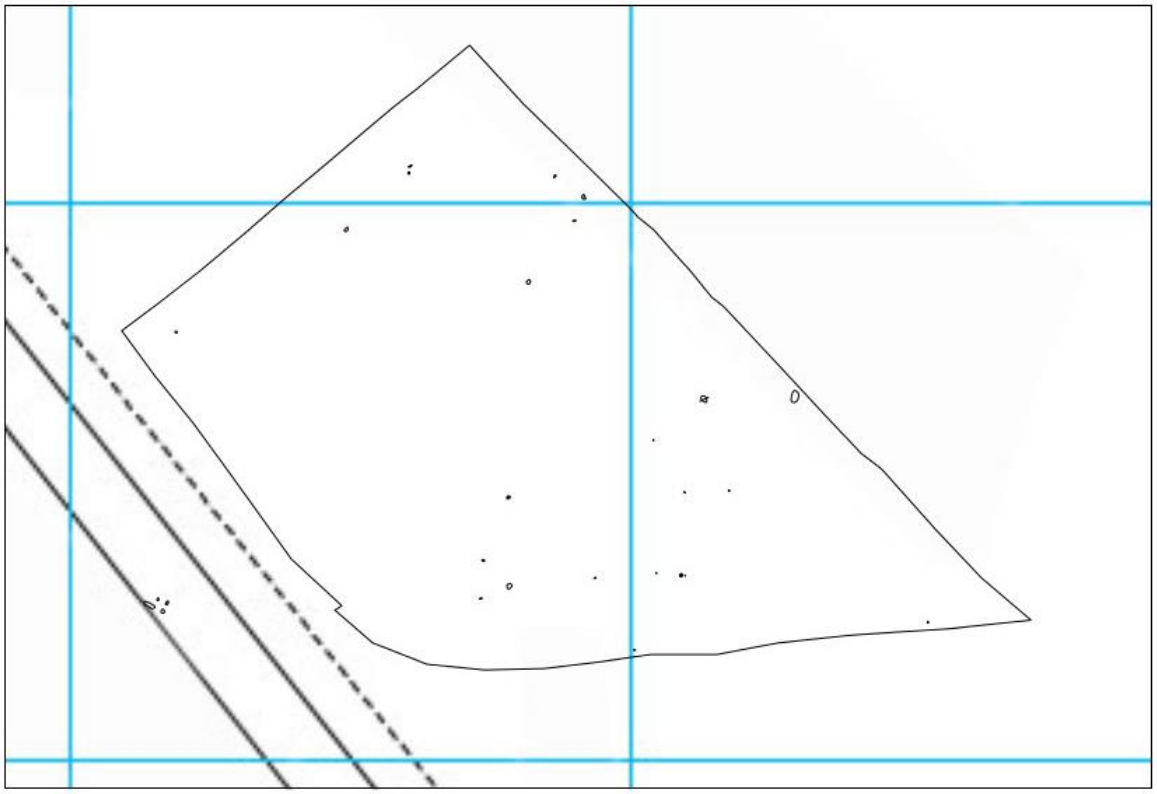


Figure 4. Site plan showing Phase 7, Area B, showing feature distribution.

6. Stratigraphic Report

6.1 Pit Clusters

6.1.1 Four pit clusters were discovered and excavated during the Phase 7 excavations at Lanton Quarry. One of these clusters comprised four pits while the remaining two clusters comprised two pits each.

6.1.2 *Pit Cluster 1/possible Post-Built Building*

This feature was located towards the centre of the main stripped area and included four pits or postholes: F3636, F3638, F3640 and F3642. This arrangement is similar to those excavated during previous phases at the quarry and could represent either a pit cluster or a rectangular structure, seen mostly during Phase 1 (Stafford, 2007). Feature 3636 was a small/medium sized ovoid pit or posthole with a charcoal-rich dark grey silty sand fill. The feature had sloping sides and a rounded base. No finds were recovered from the fill of the feature. Feature 3638 was a small/medium ovoid pit or posthole with a charcoal-rich dark grey silty sand fill, a rounded base and sloping sides. Feature 3638 did not produce any artefacts. Feature 3640 was a small ovoid pit or posthole with steeply sloping sides and a flat base. The fill of Feature 3640 was a very dark yellow brown silty sand and did not produce any artefacts. Feature 3642 was the only feature within this cluster that produced any finds. The feature was a small pit or posthole with steeply sloping sides and a curved base. The fill was a dark yellow brown silty sand and it produced a single Carinated Bowl rim sherd from a small cup, placing this feature and therefore those associated with it within the Early Neolithic period.

Figure 5: Pit Cluster 1 or possible PBB, looking west. Scale = 2 x 2m.

Feature No.	Context numbers	Description	Max. dimensions (mm)	Max. depth (mm)	Colour of fill	Composition	Pottery?	Plant remains?

F3636	3636, 3637	Ovoid pit/posthole	620 x 400	170	Dark grey	Silty sand	No	Yes
F3638	3638, 3639	Ovoid pit/posthole	800 x 520	170	Dark grey	Silty sand	No	Yes
F3640	3640, 3641	Small pit/posthole	300 x 480	70	Dark yellow brown	Silty sand	No	No
F3642	3642, 3643	Small pit/posthole	440 x 550	240	Dark yellow brown	Silty sand	Yes	Yes

Table 1. Features within Pit Cluster 1/possible PBB.

6.1.3 *Pit Cluster 2*

Pit Cluster 2 was located towards the eastern side of the main stripped area and comprised two pits. Feature 3500 was a small/medium ovoid pit with almost vertical sides and a rounded base. The fill was a very dark yellow brown silty sand and produced 18 sherds of Neolithic pottery, including Carinated Bowl. Feature 3510 was a small/medium circular pit with a dark grey silty sand fill, a flat base and vertical sides. The fill of the feature was very charcoal rich and produced a single piece of charred hazelnut shell. The cuts of both features displayed evidence of having been heat affected.

Figure 6: Pit Cluster 2, looking north. Scale = 1m.

Feature No.	**Context numbers**	**Description**	**Max. dimensions (mm)**	**Max. depth (mm)**	**Colour of fill**	**Composition**	**Pottery?**	**Plant remains ?**
F3500	3500, 3501	Ovoid pit	620 x 400	170	Dark grey	Silty sand	Yes	Yes
F3510	3510, 3511	Ovoid pit	800 x 520	170	Dark grey	Silty sand	Yes	Yes

Table 2. Features within Pit Cluster 2.

6.1.4 *Pit Cluster 3*

Pit Cluster 3 was located towards the central area of the main strip, to the east of Pit Cluster 1. It comprised two pits, F3626 and F3628, neither of which contained any artefacts. Feature

3626 was a small/medium ovoid pit with almost vertical sides and a rounded base. The fill was a dark yellow brown although it was darker towards the base where the concentration of charcoal was higher. Feature 3628 was a small/medium ovoid pit with steeply sloping sides and a concave base. The fill was a dark grey silty sand with small pebble inclusions and charcoal flecks.

Feature No.	Context numbers	Description	Max. dimensions (mm)	Max. depth (mm)	Colour of fill	Composition	Pottery?	Plant remains?
F3626	3626, 3627	Ovoid pit	600 x 470	500	Dark yellow brown	Silty sand	No	Yes
F3628	3628, 3629	Ovoid pit	800 x 520	170	Dark grey	Silty sand	No	Yes

Table 3. Features within Pit Cluster 3.

6.1.5 *Pit Cluster 4*

Pit Cluster 4 was located to the far east of the main stripped area and comprised two pit features, F3592 and F3588. Both features had dark fills and were of similar size and shape although F3588 was the smaller of the two and F3592 was the shallower. The cuts of each pit displayed evidence of having been heat affected although the fill of F3592 contained more charcoal and was generally darker. Feature 3592 produced two lithics: one chert blade and one broken micro blade. Both have been dated to the Mesolithic or Neolithic period.

Figure 7. Pit Cluster 4, looking north. Scale = 1m.

Feature No.	Context numbers	Description	Max. dimensions (mm)	Max. depth (mm)	Colour of fill	Composition	Pottery?	Plant remains?
F3588	3588, 3589	Shallow pit	400 x 400	500	Dark grey/brown	Sand	No	No
F3592	3592, 3593	Shallow pit	600 x 520	90	Dark grey/black	Sand	No	Yes

Table 4. Features within Pit Cluster 4

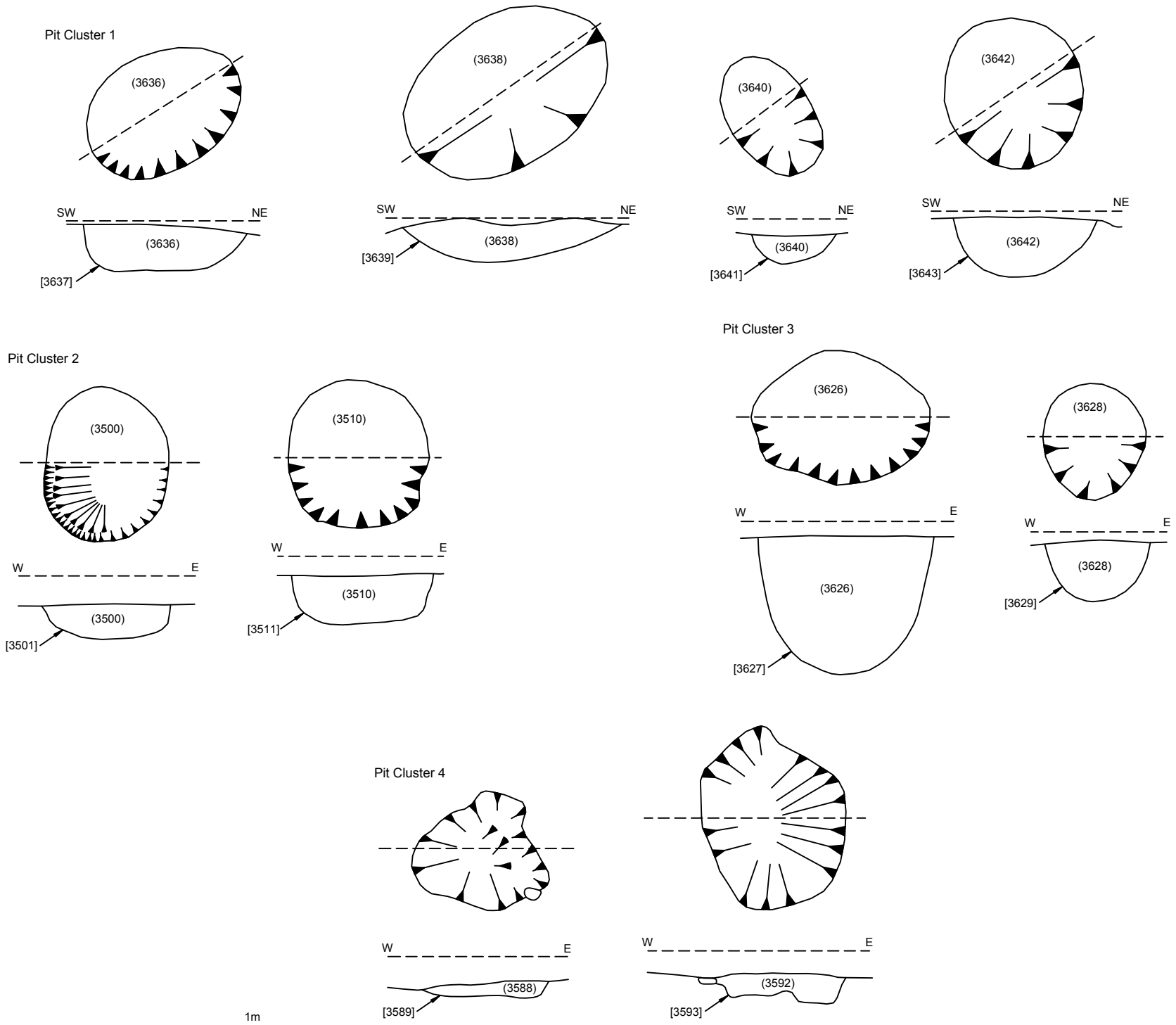


Figure 8:

Pit Cluster plans and sections

Scale = 1:20

Key:

N

6.2 Isolated pit and posthole features containing pottery

6.2.1 A total of eleven pottery producing isolated pit and posthole features were excavated across the site, aside from those within the pit clusters which are described above. These features were mainly concentrated towards the central section of the main stripped area, in the east in particular, although some occurred elsewhere.

6.2.2 Features 3610, 3694 and 3708 were all quite similar in that they were roughly circular and had dark, charcoal-rich fills. These features are very common at Lanton Quarry and have been encountered during every phase of excavation that has been carried out.

6.2.3 Features 3526, 3546, 3604, 3716, 3744 and 3872 were all possible natural features owing to their irregular shapes and pale, sandy fills. The appearance of pottery within the fills of these features could be attributed to extensive ploughing of the site which could have dragged sherds of pottery from man-made features to these natural features. Feature 3604 was originally thought to be part of a post-built building although excavation and sampling has revealed that it, and the associated features, are more likely part of an animal burrow owing to their uneven shapes and loamy fills. The pottery found within this feature would therefore have been deposited through bioturbation.

Figure 9. F3610 which produced crumbs of Neolithic Carinated Bowl.

Figure 10. F3694 which produced sherds a single rim sherd from a Carinated Bowl.

Figure 11. F3708 which produced two conjoining sherds from a substantial pottery vessel.

Figure 12. F3546 was a natural feature, most probably a tree throw, which produced a small sherd of pottery.

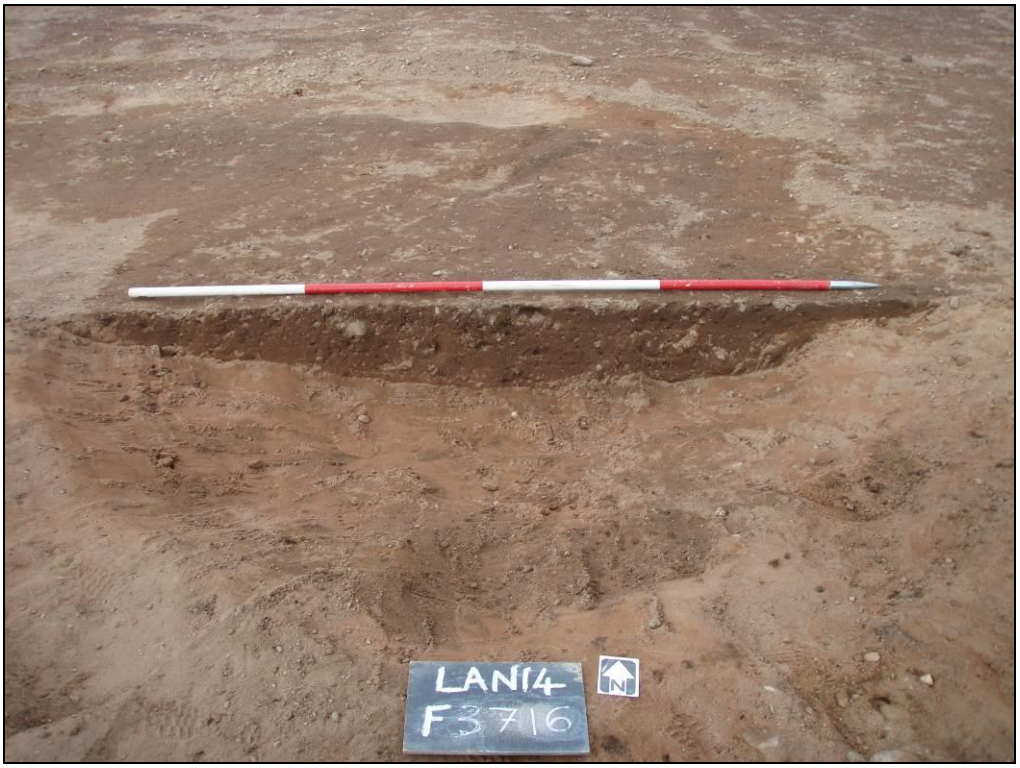
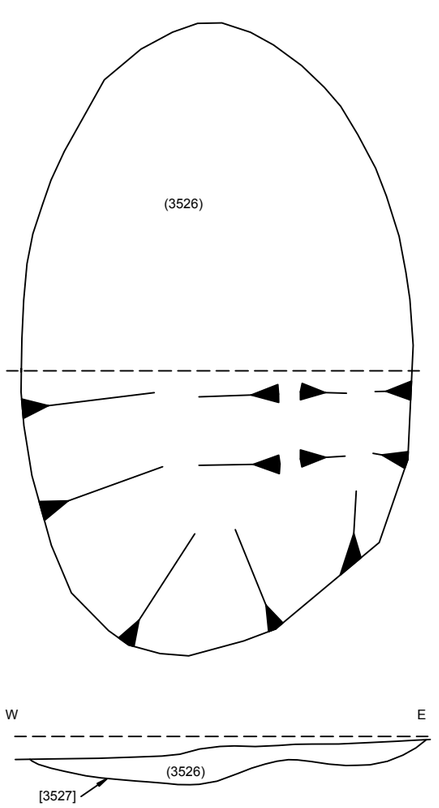


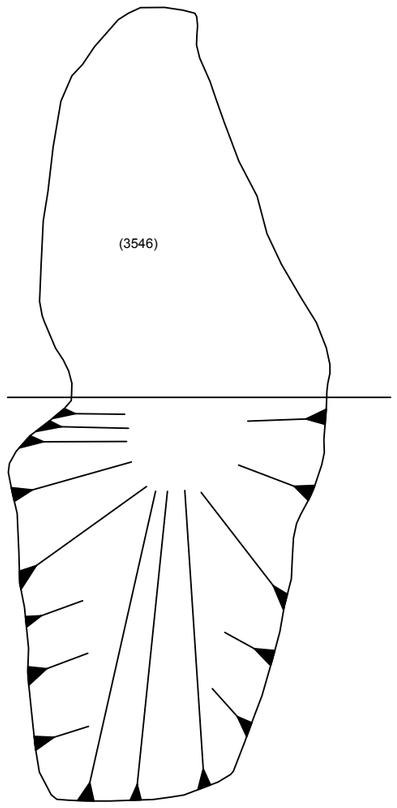
Figure 13. F3716 was a large shallow scoop that produced a very small sherd of pottery. This was most probably a natural feature.

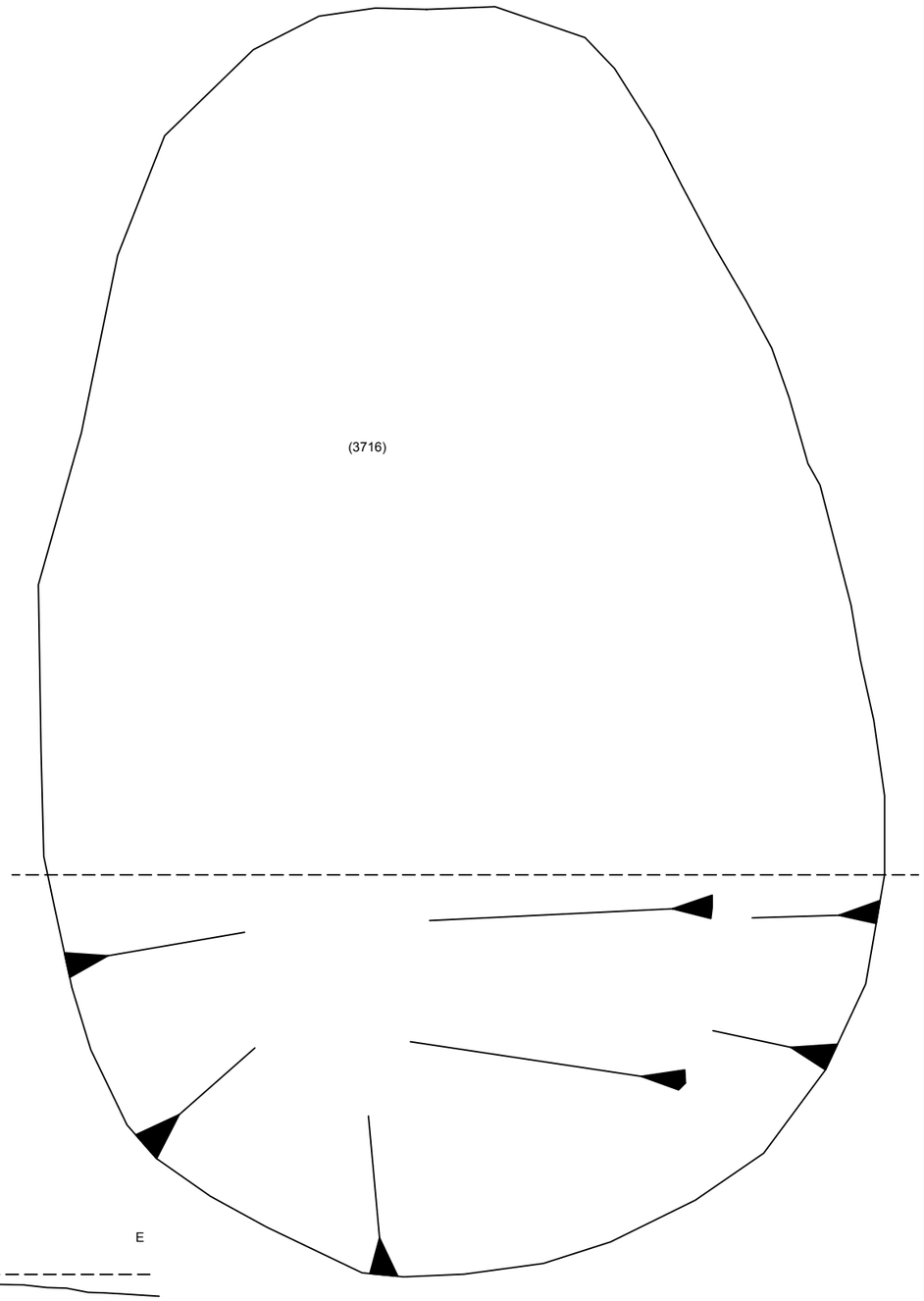
Feature No.	Context numbers	Description	Max. dimensions (mm)	Max. depth (mm)	Colour of fill	Composition	Plant remains?
F3526	3526, 3527	Shallow scoop	1200 x 1800	90	Brown	Sandy loam	No

F3546	3546, 3547	Ovoid pit	2300 x 900	500	Mid grey	Sandy silt	No
F3604	3604, 3605	Small posthole/burrow	160 x 190	90	Dark brown	Sandy loam	No
F3610	3610, 3611	Ovoid pit	430 x 490	120	Very dark yellow brown	Silty clay	Yes
F3694	3694, 3695	Small ovoid pit	390 x 430	180	Black/brown	Fine sand	Yes
F3708	3708, 3709	Small circular pit	220 x 220	40	Dark grey/brown	Silty sand	No
F3716	3716, 3717	Large ovoid pit	2450 x 3100	260	Pale brown/orange	Sand	No
F3744	3744, 3745	Elongated ovoid pit	2200 x 700	220	Brown/orang e	Sandy silt	Yes
F3872	3872, 3873	Ovoid pit	1200 x 2300	650	Mid brown/grey	Sandy loam	No
F3924	3924, 3925	Ovoid pit	220 x 460	70	Light grey/brown	Silty sand	No

Table 5**.** Isolated pit and posthole features containing pottery.







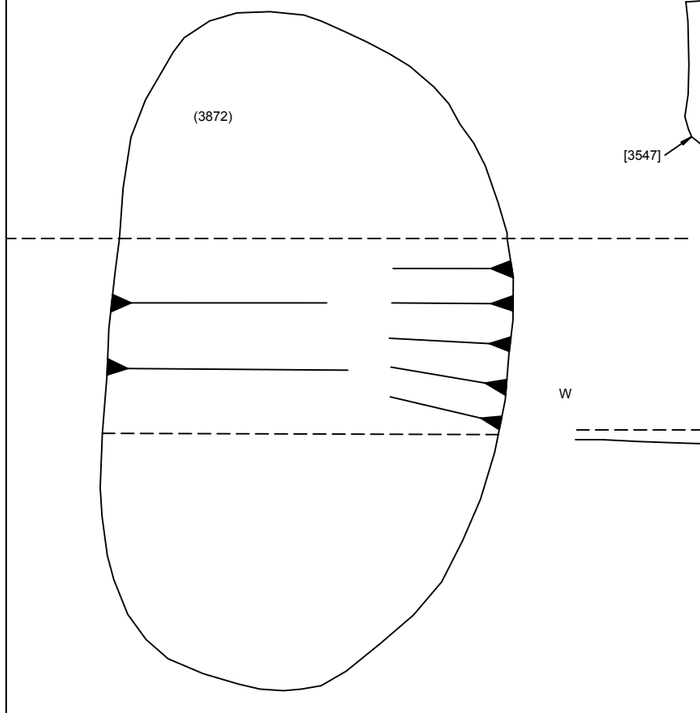


Figure 14:

Large, pottery producing features.

Scale 1:20

Key:

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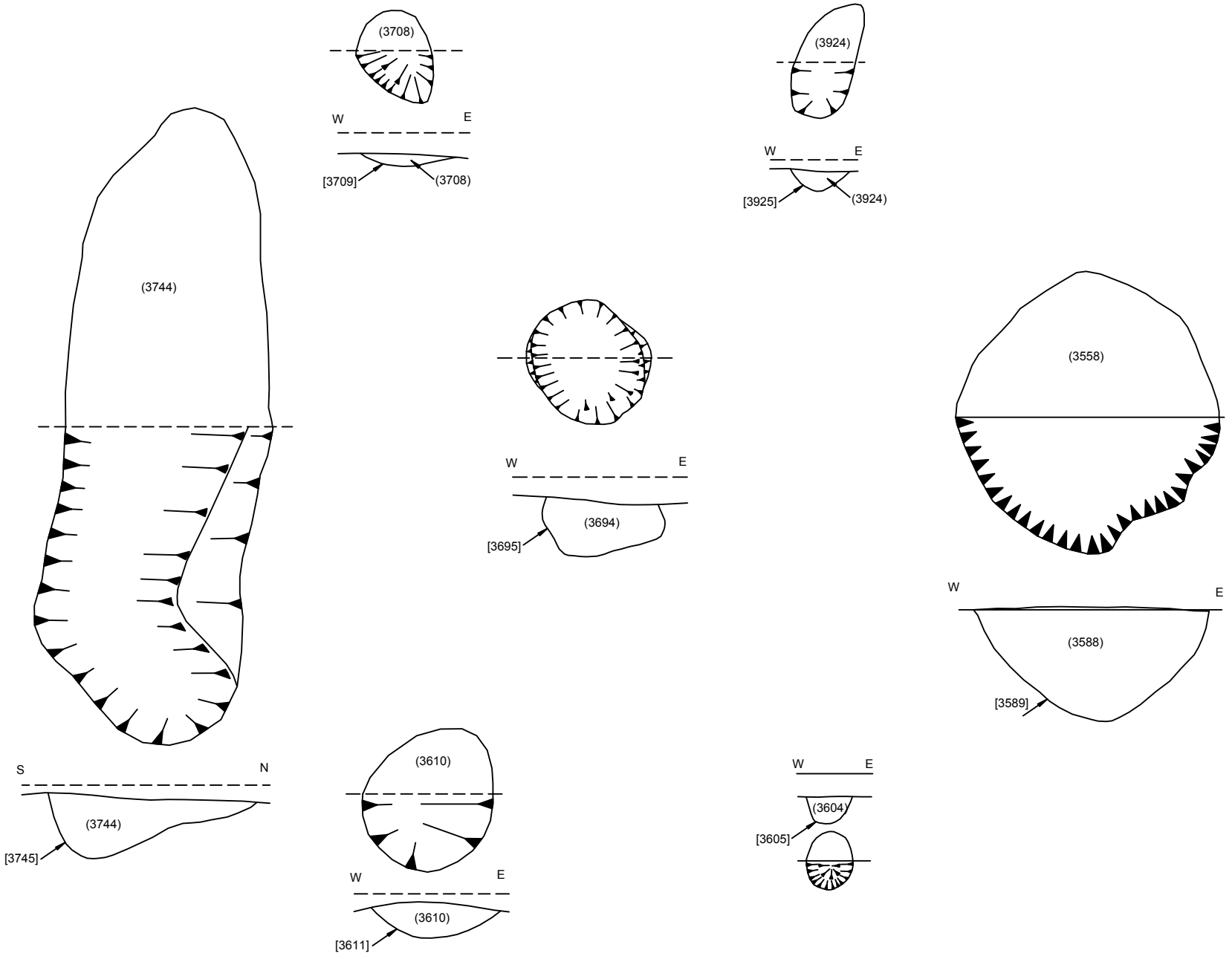


Figure 15:

Smaller, pottery producing features.

Scale = 1:20

Key:

N

6.3 Isolated pit and posthole features containing lithics

6.3.1 Two features that were excavated during the Phase 7 excavations at Lanton Quarry produced lithics. These were F3626, which was also part of Pit Cluster 3 and produced one lithic, and F3592 which produced two lithics. Feature 3592 was a roughly circular shallow pit with a dark grey/black fill, straight sides and a flat base. F3592 was located towards the eastern extent of the main stripped area, in the vicinity of the majority of the pottery-producing features.

Figure 16. F3626 which produced a pitchstone blade.

Figure 17. F3592 which produced a broken pitchstone micro blade.

Feature No.	Context numbers	Description	Max. dimensions (mm)	Max. depth (mm)	Colour of fill	Composition	Plant remains?
F3626	3626, 3627	Ovoid pit	600 x 470	500	Dark yellow brown	Silty sand	Yes
F3592	3592, 3593	Circular shallow pit	600 x 520	90	Dark grey/black	Sand	No

Table 6. Isolated pits and postholes containing lithics.

6.4 Other isolated pits and postholes

6.4.1 A total of 135 additional isolated pits and postholes were excavated across the site. Of these, the majority are thought to be natural features owing to their pale, sandy fills and the lack of any finds or dating evidence. Many of the features are thought to be tree throws and the pockets of charcoal within them could attest to a forest fire that took place in the vicinity sometime in the distant past.

6.4.2 Features 3528, 3598, 3600, 3602, 3604, 3606, 3608 and 3920 were initially thought to represent a post-built building but complete excavation proved most of the features to be undercut and, in some cases, connecting below ground. In addition, none of the features produced any dating evidence or reliable palaeoenvironmental material. The dark, loamy fill of the features indicates that they were part of an animal burrow complex.

Feature No.	Context numbers	Description	Max. dimensions (mm)	Max. depth (mm)	Colour of fill	Composition
F3374	3374, 3375	Natural feature/tree throw	400 x 460	120	Light grey	Sandy silt

F3452	3452, 3453	Natural feature/tree throw	240 x 270	60	Grey yellow brown	Silty sand
F3454	3454, 3455	Natural feature	950 x 730	180	Very dark grey brown	Sand
F3460	3460, 3461	Natural feature	580 x 600	280	Very pale brown	Silty sand
F3464	3464, 3465	Small shallow pit	400 x 400	130	Black	Sandy silt
F3466	3466, 3467	Possible truncated posthole	150 x 150	40	Very dark grey	Sand
F3468	3468, 3469	Posthole	200 x 220	140	Grey/orange	Sand
F3470	3470, 3471	Possible truncated posthole	120 x 140	30	Very dark grey	Silty sand
F3472	3472, 3473	Pit	460 x 430	80	Grey	Sand
F3474	3474, 3475	Natural feature/tree throw	220 x 270	70	Pale brown/orange	Sand
F3476	3476, 3477	Natural feature/tree throw	340 x 450	100	Very pale brown	Sand
F3478	3478, 3479	Natural feature/tree throw	770 x 770	240	Pale brown	Sand
F3480	3480, 3481	Natural feature/tree throw	270 x 440	230	Medium brown	Sandy silt
F3484	3484, 3485	Natural feature/tree throw	1000 x 360	50	Dark grey	Sandy silt
F3486	3486, 3487	Natural feature/tree throw	800 x 340	140	Dark grey	Sandy silt
F3488	3488, 3489	Natural feature/tree throw	320 x 260	160	Dark grey	Sandy silt
F3490	3490, 3491	Natural feature/tree throw	280 x 240	90	Dark grey	Sandy silt
F3492	3492, 3493	Natural feature/tree throw	200 x 180	60	Dark grey	Sandy silt
F3494	3494, 3495	Natural feature/tree throw	960 x 920	360	Grey	Sandy silt
F3496	3496, 3497	Natural feature/tree throw	1980 x 780	30	Grey/light orange	Sandy silt
F3498	3498, 3499	Small pit	360 x 200	50	Dark orange/brown	Silty sand
F3504	3504, 3505	Natural feature/tree throw	300 x 300	80	Light grey	Sandy silt
F3506	3506, 3507	Natural feature/tree throw	400 x 230	100	Light grey	Sandy silt
F3508	3508, 3509	Natural feature/tree throw	440 x 400	80	Dark grey	Sandy silt
F3512	3512, 3513	Natural feature/tree throw	350 x 270	90	Grey	Sandy silt
F3518	3518, 3519	Natural feature/tree throw	390 x 550	70	Grey	Sandy silt
F3520	3520, 3521	Natural feature/tree throw	700 x 800	180	Black	Sandy silt
F3522	3522, 3523	Natural feature/tree throw	2300 x 1890	210	Grey	Sandy silt
F3528	3528, 3529	Posthole/animal burrow	220 x 220	60	Dark brown	Sandy loam
F3530	3530, 3531	Natural feature/tree throw	860 x 3100	230	Grey	Sandy silt
F3532	3532, 3533	Natural feature/tree throw	750 x 470	190	Grey	Sandy silt
F3536	3536, 3537	Natural feature/tree throw	350 x 350	70	Dark grey	Silty sand

F3540	3540, 3541	Posthole/animal burrow	170 x 260	60	Dark orange brown	Sand
F3542	3542, 3543	Natural feature/tree throw	600 x 620	170	Grey	Sandy silt
F3548	3548, 3549	Natural feature/tree throw	1400 x 3400	450	Grey	Sandy silt
F3550	3550, 3551	Natural feature/tree throw	170 x 280	130	Grey	Sandy silt
F3552	3552, 3553	Natural feature/tree throw	200 x 180	60	Grey	Sandy silt
F3572	3572, 3573	Natural feature/tree throw	350 x 350	110	Pale brown	Sand
F3576	3576, 3577	Natural feature/tree throw	890 x 880	150	Dark yellow red	Sand
F3578	3578, 3579	Natural feature/tree throw	1580 x 620	370	Dark yellow brown	Sand
F3580	3580, 3581	Natural feature/tree throw	350 x 290	50	Dark yellow orange	Sand
F3584	3584, 3585	Shallow pit	550 x 600	80	Black	Sandy silt
F3586	3586, 3587	Natural feature/tree throw	250 x 350	90	Grey yellow	Silty sand
F3590	3590, 3591	Small shallow pit	310 x 300	60	Dark grey	Silty sand
F3598	3598, 3599	Posthole/animal burrow	160 x 180	90	Dark brown	Sandy loam
F3600	3600, 3601	Posthole/animal burrow	370 x 230	200	Dark brown	Sandy loam
F3602	2602, 3603	Posthole/animal burrow	200 x 200	220	Dark brown/grey	Sandy silty loam
F3606	3606, 3607	Posthole/animal burrow	200 x 130	60	Dark brown	Sandy silt
F3608	3608, 3609	Posthole/animal burrow	280 x 150	120	Dark brown	Sandy loam
F3612	3612, 3613	Pit/natural feature	350 x 270	70	Yellow grey brown	Silty sand
F3614	3614, 3615	Shallow pit	540 x 600	60	Dark yellow brown	Silty sand
F3630	3630, 3631	Natural feature/tree throw	770 x 460	190	Light brown	Silty sand
F3648	3648, 3649	Small pit	720 x 250	60	Dark grey	Silty sand
F3658	3658, 3659	Shallow pit	480 x 360	90	Dark grey	Sand
F3668	3668, 3669	Natural feature/tree throw	1010 x 450	190	Black	Sand
F3670	3670, 3671	Small pit	260 x 350	30	Dark grey	Sandy silt
F3672	3672, 3673	Possible remnant surface	2000 x 1300	70	Dark grey	Sand
F3674	3674, 3675	Natural feature/tree throw	560 x 600	100	Light grey brown	Silty sand
F3684	3684, 3685	Small shallow pit	200 x 300	50	Black	Sand
F3696	3696, 3697	Medium posthole	360 x 400	260	Dark grey brown	Silty sand
F3698	3698, 3699	Posthole	370 x 370	210	Dark grey	Silty sand
F3710	3710, 3711	Small pit	240 x 260	80	Dark grey	Silty sand
F3722	3722, 3723	Natural feature/tree throw	720 x 190	80	Dark black/brown	Sand
F3728	3728, 3729	Posthole/animal burrow	220 x 210	150	Dark yellow brown	Silty sand
F3730	3730, 3731	Irregular pit	600 x 630	250	Dark brown/grey	Silty sand
F3732	3732, 3733	Posthole	400 x 650	390	Dark brown/grey	Sandy silt

F3734	3734, 3735	Shallow pit	350 x 450	90	Very dark yellow brown	Silty sand
F3738	3738, 3739	Postholes/animal burrow	620 x 300	200	Dark grey	Silty sand
F3740	3740, 3741	Small pit	440 x 310	110	Dark red	Sand
F3742	3742, 3743	Truncated posthole	450 x 280	250	Dark brown/grey	Sandy silt
F3746	3746, 3747	Animal burrow	500 x 820	210	Mid brown	Silty sand
F3752	3752, 3753	Shallow pit	440 x 1200	140	Dark brown/black	Silty sand
F3756	3756, 3757	Natural feature/tree throw	1520 x 1400	480	Dark brown	Sandy silt
F3758	3758, 3759	Pit	200 x 250	50	Dark grey	Silty sand
F3760	3760, 3761	Natural feature/tree throw	400 x 1450	140	Yellow/grey mottled	Sand
F3764	3764, 3765	Pit	400 x 220	200	Dark grey	Silty sand
F3768	3768, 3769	Pit	420 x 300	140	Dark grey	Silty sand
F3770	3770, 3771	Pit	280 x 440	200	Dark grey/black	Sandy silt
F3774	3774, 3775	Natural feature/tree throw	470 x 630	270	Yellow/grey	Sand
F3778	3778, 3779	Small pit	330 x 310	120	Black/dark grey	Sand
F3782	3782, 3783	Natural feature/tree throw	550 x 310	80	Brown/grey	Sand
F3796	3796, 3797	Truncated pit	420 x 200	50	Dark grey	Silty sand
F3800	3800, 3801	Natural feature/tree throw	400 x 420	150	Mid grey	Sandy silt
F3802	3802, 3803	Natural feature/tree throw	700 x 1100	200	Mid grey	Sandy silt
F3806	3806, 3807	Natural feature/tree throw	830 x 600	120	Light brown	Sand
F3810	3810, 3811	Natural feature/tree throw	480 x 400	120	Pale brown	Sand
F3812	3812, 3813	Pit	600 x 510	220	Dark brown	Sand
F3814	3814, 3815	Natural feature/tree throw	370 x 310	150	Dark brown	Sand
F3816	3816, 3817	Small burnt patch	530 x 310	60	Black	Sandy silt
F3818	3818, 3819	Natural feature/tree throw	650 x 1200	300	Pale brown	Sand
F3820	3820, 3821	Small pit	210 x 430	90	Grey	Sandy silt
F3822	3822, 3823	Natural feature/tree throw	400 x 930	210	Grey	Sandy silt
F3824	3824, 3825	Small pit	480 x 300	240	Black	Sandy silt
F3826	3826, 3827	Natural feature/tree throw	350 x 410	120	Grey	Sandy silt
F3828	3828, 3829	Natural feature/tree throw	600 x 900	130	Grey	Sandy silt
F3830	3830, 3831	Natural feature/tree throw	500 x 2500	280	Yellow	Sand
F3832	3832, 3833	Natural feature/tree throw	300 x 400	80	Grey	Sandy silt
F3834	3834, 3835	Natural feature/tree throw	1160 x 1000	220	Pale brown/orange	Sand
F3836	3836, 3837	Natural feature/ tree throw	670 x 750	130	Pale brown	Sand
F3838	3838, 3839	Natural feature/tree throw	730 x 400	250	Pale brown	Sand
F3840	3840, 3841	Natural feature/tree throw	500 x 2150	270	Pale brown	Sand

F3842	3842, 3843	Natural feature/tree throw	530 x 1200	200	Pale brown	Sand
F3844	3844, 3845	Natural feature/tree throw	400 x 700	120	Pale brown	Sand
F3853	3846, 3957	Pit	790 x 700	410	Dark grey/brown	Sand
F3854	3854, 3855	Pit	570 x 820	200	Dark brown	Sandy silt
F3858	3858, 3859	Small pit	130 x 130	50	Black	Sand
F3860	3860, 3861	Pit	520 x 690	250	Yellow brown	Sandy silt
F3862	3862, 3863	Small pit	230 x 230	70	Dark brown/black	Sand
F3864	3864, 3865	Truncated pit	360 x 250	20	Dark orange brown	Sand
F3866	3866, 3867	Natural feature/tree throw	140 x 350	80	Dark brown/black	Sand
F3868	3868, 3869	Natural feature/tree throw	200 x 300	70	Black/grey	Silty clay
F3874	3874, 3875	Small pit	350 x 120	60	Black	Silty sand
F3876	3876, 3877	Shallow pit	640 x 640	170	Dark brown/black	Loamy sand
F3878	3878, 3879	Natural feature/tree throw	200 x 240	30	Black	Silty sand
F3880	3880, 3881	Small pit	220 x 260	80	Black	Silty sand
F3882	3882, 3882	Shallow pit	340 x 380	100	Light brown	Sandy clay
F3884	3884, 3885	Small pit	200 x 170	40	Black	Silty clay
F3886	3886, 3887	Natural feature/tree throw	1680 x 1600	150	Dark brown/black	Silty sand
F3888	3888, 3889	Small pit	540 x 180	100	Black	Silty clay
F3890	3890, 3891	Natural feature/tree throw	750 x 900	130	Dark orange black	Sand
F3892	3892, 3893	Natural feature/tree throw	230 x 230	30	Black	Sandy silt
F3894	3894, 3895	Pit	120 x 330	110	Black	Sandy silt
F3896	3896, 3897	Shallow pit/tree throw	210 x 210	190	Dark brown	Silty sand
F3898	3898, 3899	Pit	520 x 130	100	Black	Silty sand
F3900	3900, 3901	Posthole	220 x 430	240	Dark yellow brown	Silty sand
F3904	3904, 3905	Shallow pit	740 x 420	80	Dark grey	Silty clay
F3906	3906, 3907	Posthole	420 x 320	420	Light grey/brown	Sandy silt
F3916	3916, 3917	Natural feature/tree throw	500 x 300	100	Dark yellow brown	Silty clay
F3920	3920, 3921	Posthole/animal burrow	160 x 150	230	Dark brown	Sandy loam
F3922	3922, 3923	Posthole/animal burrow	270 x 140	250	Dark brown	Sandy loam
F3928	3928, 3929	Posthole	300 x 390	300	Dark orange grey	Sand
F3932	3932, 3933	Small shallow pit	370 x 370	100	Dark brown	Sand
F3934	3934, 3935	Posthole	280 x 260	280	Dark grey	Silty sand
F3936	3936, 3937	Shallow pit	340 x 340	150	Dark grey	Silty sand
F3938	3938, 3939	Pit	320 x 340	60	Grey brown	Silty sand
F3940	3940, 3941	Posthole	230 x 230	350	Dark yellow brown	Sand
F3942	3942, 3943	Posthole	210 x 210	100	Dark yellow brown	Sand
F3944	3944, 3945	Shallow pit	680 x 460	100	Dark grey	Sand

Table 7. Other isolated pits and postholes.

Figure 18:

Isolated features.

Scale = 1:20

Key:

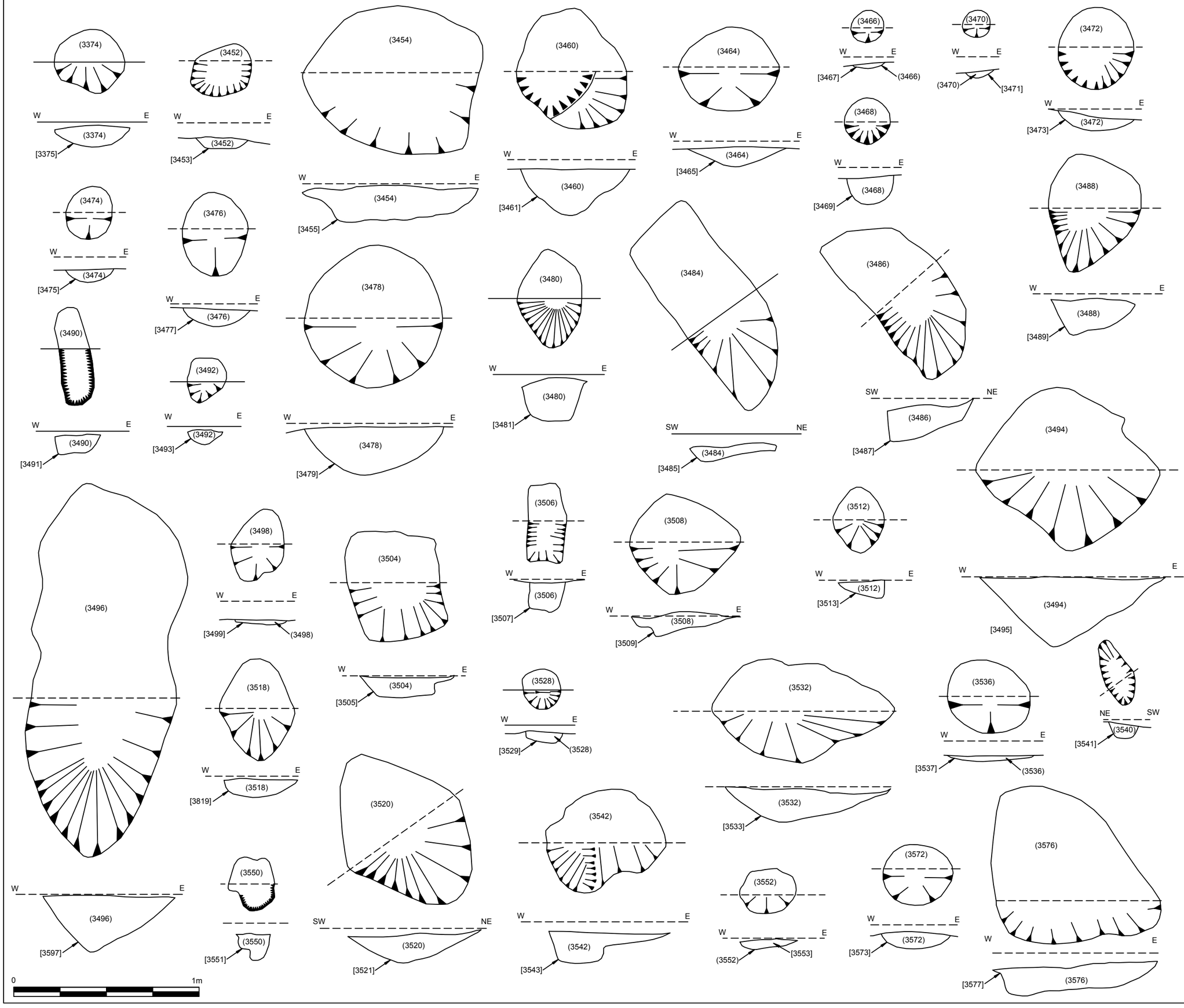


Figure 19:

Isolated features.

Scale = 1:20

Key:

N

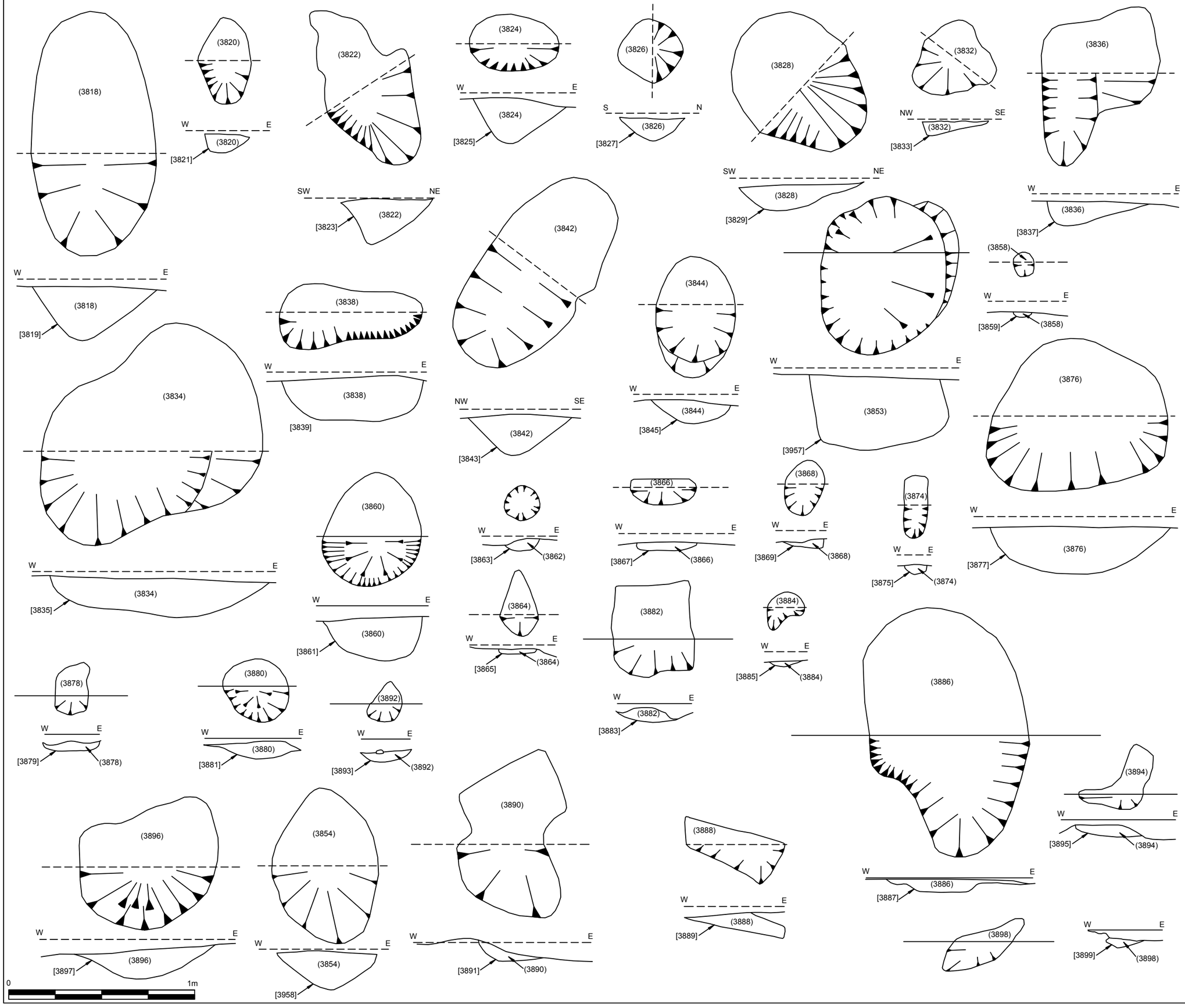
0 1m

Figure 20:

Isolated features.

Scale = 1:20

Key:



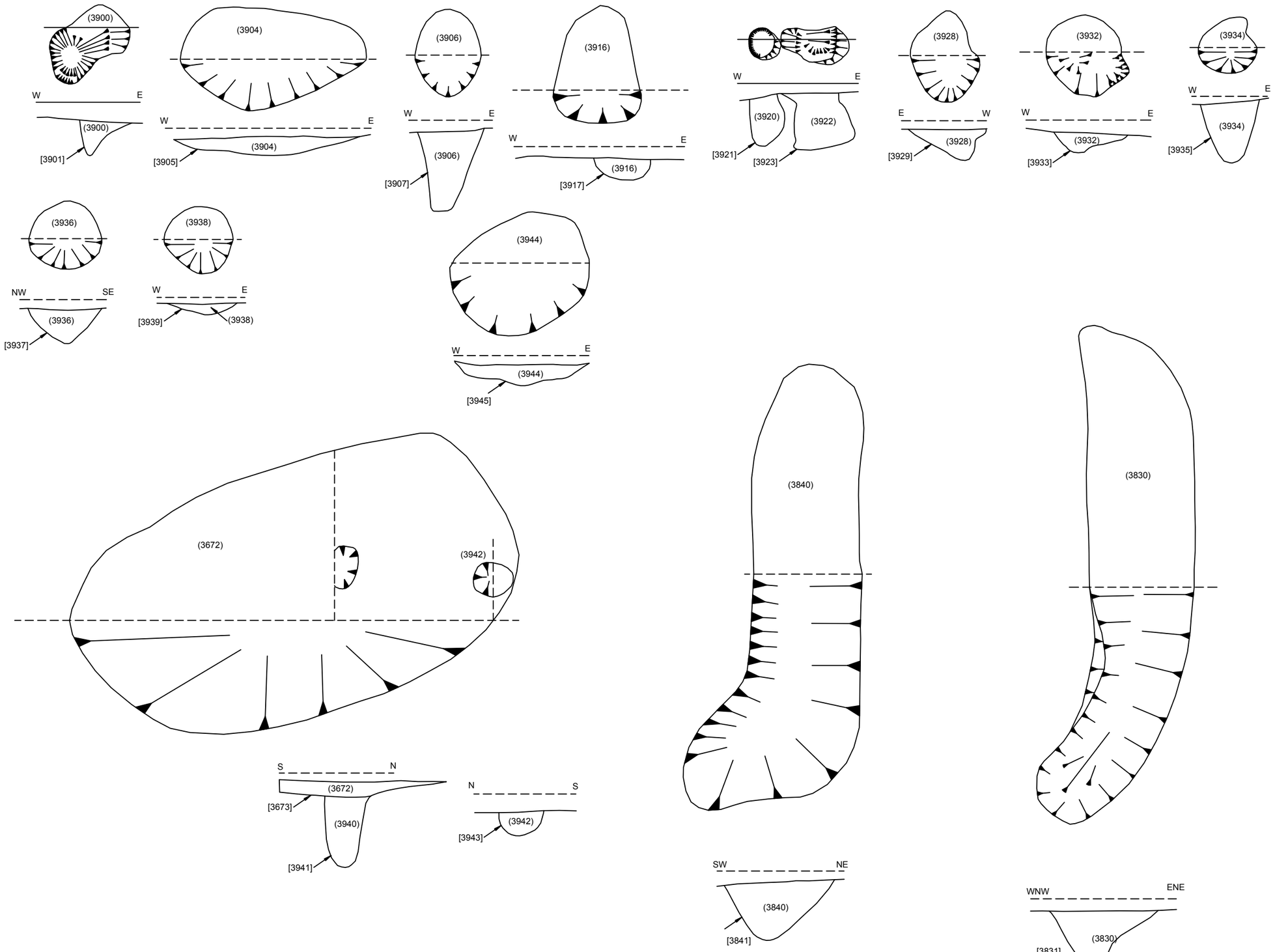


Figure 21:

Isolated features.

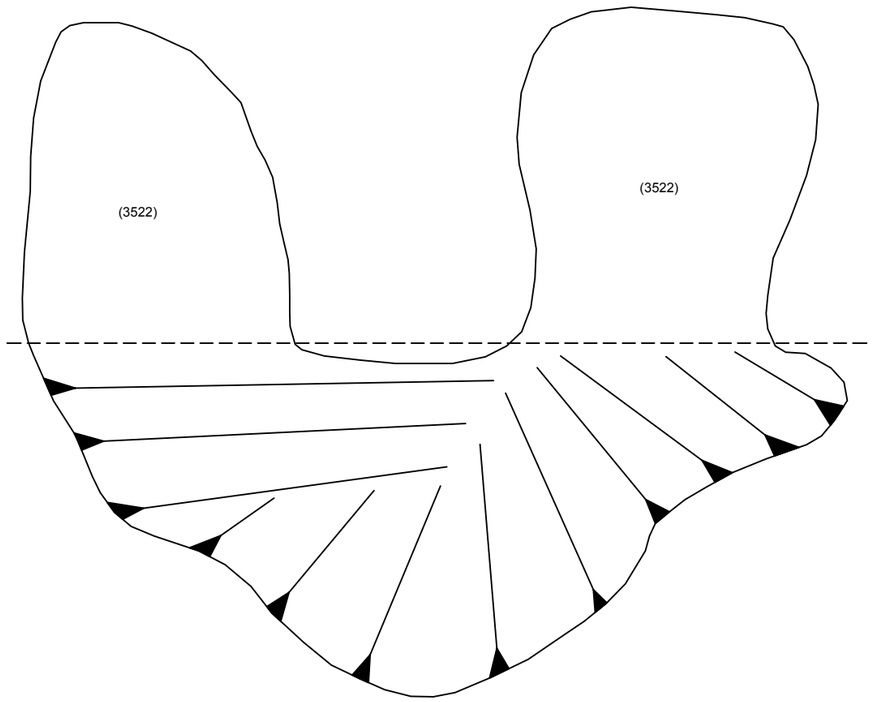
Scale = 1:20

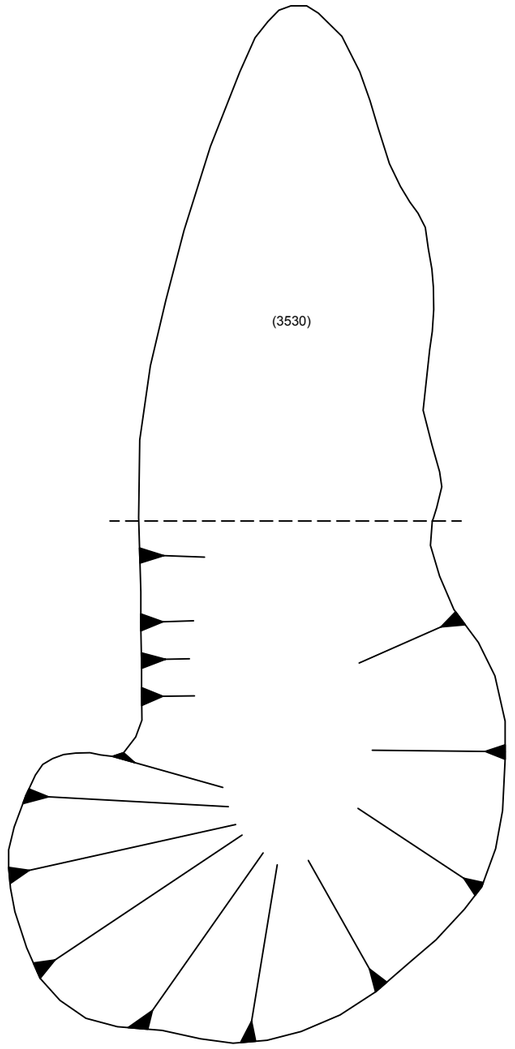
Key:

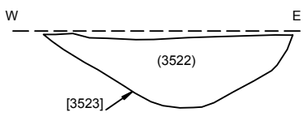
Figure 22:

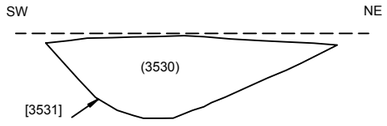
Isolated features.

Scale = 1:20









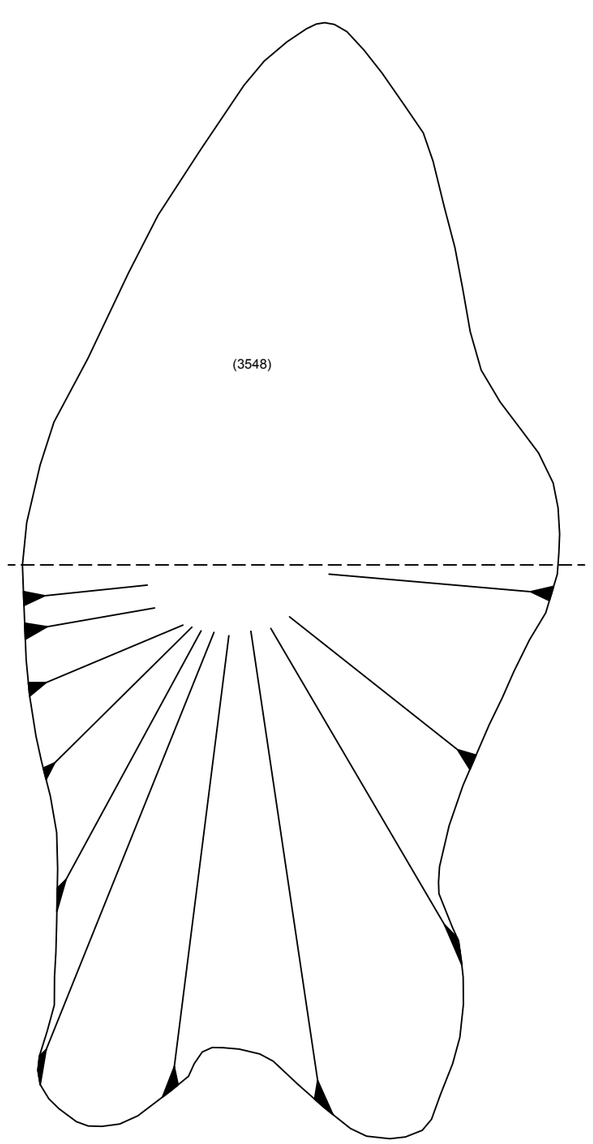
Key:

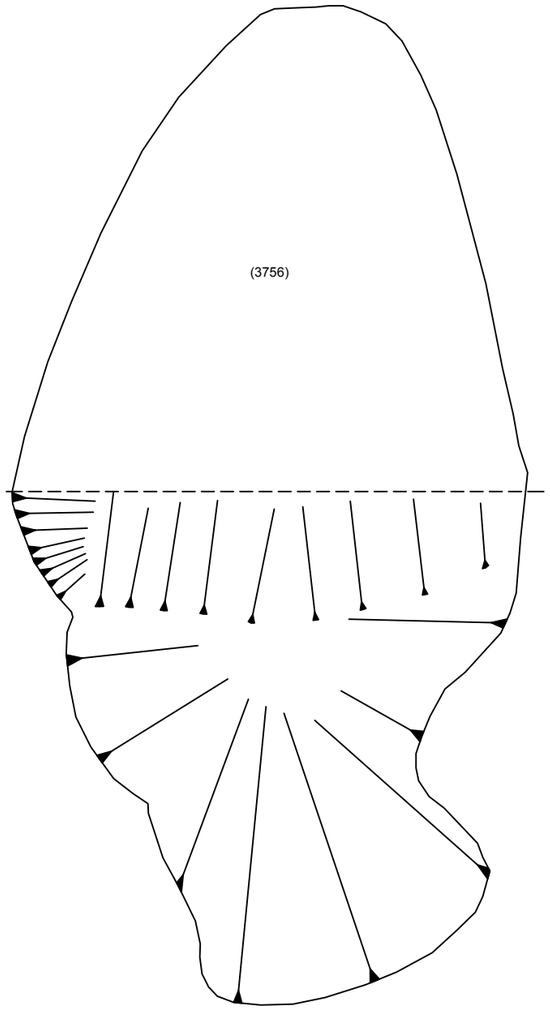
N

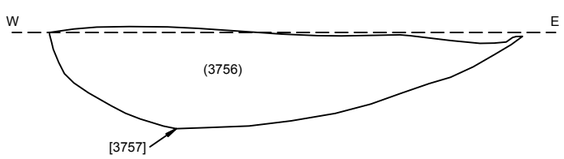
Figure 23:

Isolated features.

Scale = 1:20







Key:

6.5 Linear ditches

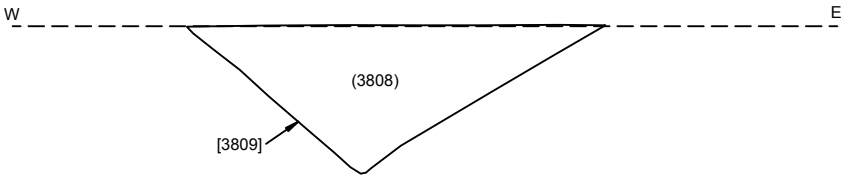
6.5.1 A single linear feature was discovered during the excavations at Lanton Quarry. The feature ran from north to south along the far north eastern extent of the stripped area before turning towards the south east where it appeared to follow the line of the existing field boundary. The linear had a maximum width of 1m and a depth of 38cm. The base had quite a defined 'V' shaped profile and the fill was a black silty sand with a high concentration of roots. The high root content and the fact that the linear ran along the same route as the modern field boundary would indicate that it represented a previous field boundary, presumably a hedge line. There were no finds recovered from the fill of the feature.

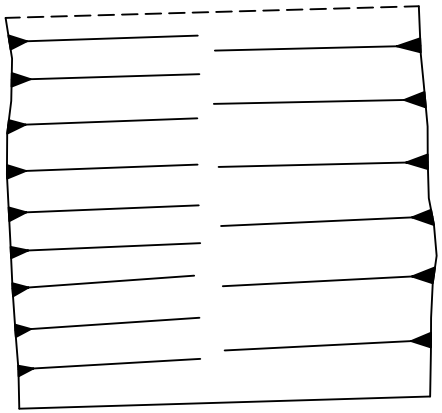
Figure 24. F3808 with a slot excavated through it. Scale = 1m.

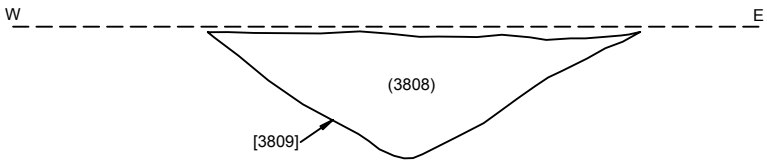
Figure 25. Linear F3808, looking north, showing it running almost parallel with the modern boundary before turning towards the southeast in the foreground. Scale = 2m.

Feature No.	Context numbers	Description	Max. width (mm)	Max. depth (mm)	Colour of fill	Composition
F3808	3808, 3809	N-S Linear	1000	380	Black/brown	Silty sand

Table 8. Linear features.







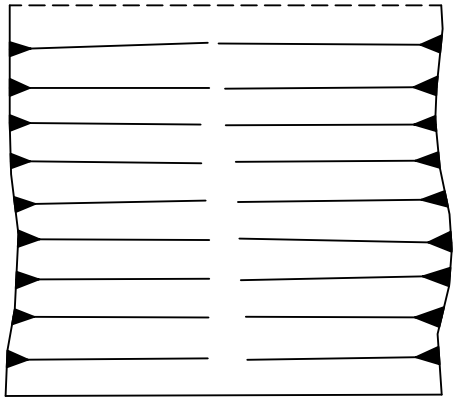


Figure 26:

Linear F3808 plans and sections.

Scale = 1:20

Key:

6.6 Animal burials

6.6.1 A total of five animal burials were encountered during the Phase 7 excavations. These were found in features 3855, 3918, 3686, 3688 and 3948. Each burial contained the skeleton of a sheep. Measurements of the long bones of the sheep suggest that they were post-medieval, improved, local sheep. This is consistent with sheep burials that have been found before on the site. These sheep burials are discussed in more detail in section 8.1 below.

Figure 27. F3688 with a sheep burial.

Figure 28. F3918 with a sheep burial.

Feature No.	Context numbers	Description	Max. dimensions (mm)	Max. depth (mm)	Colour of fill	Composition
F3686	3686, 3687	Sheep burial	870 x 500	100	Dark orange/brown	Sand
F3688	3688, 3689	Sheep burial	840 x 520	150	Dark yellow brown	Silty sand
F3855	3855, 3856	Sheep burial	600 x 340	170	Dark brown	Coarse sand
F3918	3918, 3919	Sheep burial	600 x 940	140	Dark grey/brown	Silty sand
F3948	3948, 3949	Sheep burial	500 x 560	150	Dark brown	Sandy loam

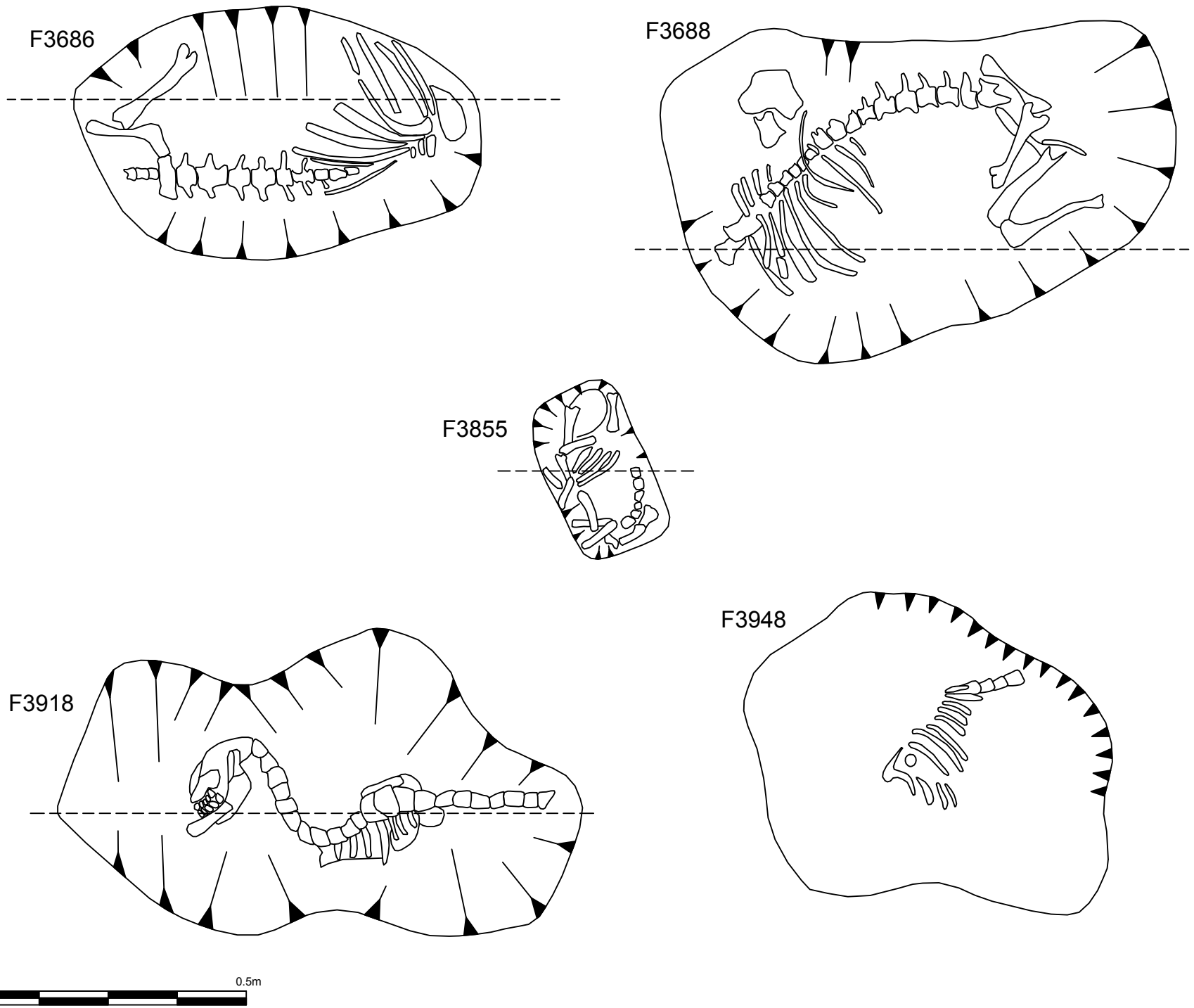


Figure 29:

Sheep burials.

Scale = 1:10

Key:

N

7. Overall Discussion

7.1 The excavations and post-excavation assessment from Phase 7 have provided additional information to further our understanding of the Neolithic archaeology of the quarry, but also for the region as a whole. The results of this phase of excavation at Lanton Quarry fit within the larger programme of excavation, assessment and analysis which is still ongoing. The Phase 7 excavations revealed 14 pit and posthole features containing Neolithic pottery and lithics.

7.2 The Neolithic archaeology, comprising 'domestic pits' and postholes, fits within the pattern of features revealed elsewhere in the quarry and also the distribution of Neolithic flints from fieldwalking across the field surface (Cockburn *et al*. 2009; Stafford and Johnson 2007). Neolithic Pit Cluster 1 identified during the Phase 7 excavations was in a rough triangular arrangement, similar to other Neolithic pit clusters excavated during earlier phases at Lanton Quarry and at other sites within Northumberland (Passmore and Waddington 2012, 154; fig 5.7).

7.3 One hundred and thirty five isolated, undated pit features and postholes with no associated material culture were also recorded. However, nothing more is known about these features. It is possible that they could date to almost any period and they had no certain identifiable associations with any of the other features on the site. It is also most probable that a number of these features are natural and that they were created by trees and other vegetation that once grew on the site.

8. Specialist Reports

8.1 Faunal Remains Assessment

Milena Grzybowska

8.1.1 *Material*

Skeletons of four sheep were recovered from pits F3686, F3688, F3855 and F3918.

8.1.2 *Methods*

The analysis follows 'Animal Bones and Archaeology: Guidelines for Best Practice', consultation draft issued by English Heritage (Baker and Worley, 2013).
Ageing was attempted based on stage of bone fusion (Zeder 2002) and wear stage of mandibular dentition (Grant 1982; absolute age after Greenfield et al 2008). Sex assessment of mature individuals was attempted on the basis of morphological traits.
The state of preservation was scored using a four stage system (excellent, good, moderate and poor). Butchery marks, root etching and pathological changes were noted when present and the measurements of skeletally mature specimens followed Von den Driesch (1976).

8.1.3 *Results*

Feature 3686

The feature F3686 contained a partially preserved (40%) skeleton of a sheep, that included thoracic, lumbar and coccygeal vertebrae, sacrum, ribs, incomplete left pelvis, right femur and a portion of right scapula and a small fragment of right zygomatic bone. The surface preservation were classified as moderate with frequent root etching. In the absence of the teeth the estimation of age of the individual could only be attempted on the basis of the fusion stage of the present bones (Zeder 2002). The sheep was at least 30-48 months old. No butchery marks nor pathological changes were identified on any of the bones.

Feature 3688

Feature F3688 contained an incomplete remains (40%) of a sheep burial. The surface preservation was graded moderate to poor. The elements present included left lower third molar and fragments of: frontal, parietal, occipital, zygomatic bones, left mandible, vertebrae, ribs, right humerus, radius and ulna, sacrum, pelvis, femora, right tibia and phalanges. Dental wear and stage of fusion of bones suggested the individual was between 2-3 years old (MWS:28-32 - Grant 1982, 30-48 months old - Zeder 2002). Sex was established – ewe – on the basis of the morphology of the pelvis. No butchery marks nor pathological changes to the bone were noted.

Measurements (mm) Driesch 1976	**F3686 Femur**	**F3688 Femur**	**F3688 Tibia**
BP	54.92	(52.80)	(48.65)
Bd	46.60	(44.63)	(31.65)
L	194.0	(191.0)	-
GLC	187.0	(186.0)	-
GL	-	-	(219.0)
SD	21.10	(20.15)	(18.81)

Table 10. Measurements of long bones (brackets indicate measurements on the bone with still visible fusion lines).

Feature 3855

The feature F3855 contained a nearly complete skeleton (80%) of a sheep. Surface preservation was good and fragmentation moderate. The elements present included incomplete: mandible, maxilla, upper and lower cheek teeth, temporal, occipital and frontal bones, vertebrae including axis and atlas, scapulae, humeri, radii, ulnae, femora, tibiae, metapodia, tarsal bones, and small fragments of ribs and ilium. The age of the individual was estimated at 6-22 months (MWS:14-22, Grant 1982) which was corroborated by the skeletal age of 6-12 months (Zeder 2002). Unfused epiphyses of the long bones precluded metric analysis. No butchery marks nor pathological changes were observed on any of the bones.

Feature 3918

The animal remains that derived from feature F3918 were of good to poor state of surface preservation and exhibited a severe degree of fragmentation. The remains comprised of an incomplete skeleton (30%) of a sheep. The elements present comprised of lower and upper cheek teeth and fragments of left and right mandible, occipital and temporal bones, vertebrae including atlas, ribs, right scapula, and a shaft of right humerus. The individual was

5-12 months old (MWS:12, Grant 1982). Incompleteness and fragmentation precluded any metric analysis. No butchery marks or pathological changes to the bone were observed.

8.1.4 *Discussion and recommendations*

The measurements of the long bones of the two individuals F3686, F3688 indicated that the animals represent post-medieval, improved local sheep. Similar proportions of the long bones of the remaining skeletons suggested same provenance.

No further analysis is recommended for the animal remains assemblage .

8.2 Analysis of the prehistoric ceramic assemblage

Dr Clive Waddington

8.2.1 *Introduction*

The corpus of ceramic material recovered from the Phase 7 excavation at Lanton Quarry during 2014 comprised an assemblage of Early Neolithic pottery numbering approximately 54 sherds in total (excluding crumbs and tiny sherds), with a combined weight of just over 0.98kg. It represents a minimum of 17 vessels that can be classified as Early Neolithic Carinated Bowl and Plain Wares, based upon consideration of profile, fabric and depositional context as well as slightly less reliable indicators such as colour and wall thickness, although one of these vessels 115, could possibly be related to a later Neolithic fabric type. They were all recovered from pit features scattered across the Phase 7 excavation area, although most of the pits were concentrated towards the north, showing a clustering of Early Neolithic activity.

The assemblage complements the previous assemblages recovered from Lanton Quarry and relates to the evidence for Neolithic occupation across the wider site. It also compares with assemblages recovered from nearby sites such as those from Cheviot Quarry (Johnson and Waddington 2008) and Thirlings (Miket *et al.* 2008). In this respect it forms a significant addition to the local and regional Neolithic pottery sequence.

8.2.2 *Method Statement*

The sherds were gently finger-washed in cold water and then left to air dry. Once they had dried the remaining soil was gently brushed off with a sable shaving brush. The sherds were laid out according to context and then by fabric group and individual vessels. The pottery was examined macroscopically with the aid of a x10 hand lens. No microscopic analysis was undertaken. Joining sherds were refitted using HMG adhesive.

8.2.3 *Catalogue*

A catalogue describing each identified vessel by ceramic type is presented below.

Carinated Bowl and Related Plain Wares

Vessel Number	Small Find Number	Context Number	Description	Weight (grams)
104		3500	Three body sherds from a substantial pot. Fabric is hard with dark grey core and inner surface and	55.37

			pale brown outer surface. It contains angular crushed stone inclusions which regularly erupt on the outer surface. Inclusions appear to be sandstone and occasional limestone. Inner surface well burnished and grass wiped, outer surface also burnished but less so. A typical Carinated Bowl fabric and form for this region. Wall thickness 9-16 mm.	
105		3500	Six sherds and five crumbs from a substantial Carinated Bowl with everted rim and which may be fully rolled over in places unless the two rims are from different vessels. The carination is situated quite high on the vessel and a curving sherd reflects a typical round-based vessel. It has a hard evenly fired fabric, dark grey-brown in colour throughout. Highly burnished on inner and outer surfaces, grass wiped with occasional eruptions of crushed stone inclusions sandstone, limestone, quartz) which can be up to 4.5 mm across. Wall thickness 7-11 mm.	163.52
106		3500	Five sherds from a rounded bowl or cup with an upright rim. Four of the sherds are rim sherds. Made from a hard fabric and highly burnished on inner and outer surfaces. Medium brown inner surface and core and pale brown outer surface. Wall averages 8 mm thick.	86.37
107		3500	Four small rim and one body sherd from a small Carinated Bowl with rolled over rim. Insufficient surviving to know whether it had a carination. Hard, well-fired fabric with angular crushed stone inclusions, wall 6-8 mm thick. Dark grey throughout.	16.75
108		3510	One rim and two small body sherds from plain vessel with everted rim. Conspicuous outer surface with angular crushed stone inclusions erupting but with smoothed inner surface with pale brown to reddish (oxidised?) outer surface. Wall thickness 8-9 mm.	24.92
109		3510	Six small sherds from a large thick-walled vessel with dark brown inner surface and core and pale brown-red outer surface with angular crushed stone inclusions. Wall thickness 12-15 mm.	117.48
110		3558	Two body sherds from a sizeable round-bellied vessel with hard well-fired fabric. Orange-brown coloured throughout, indicating oxidisation during firing, except where scorched black on outer and inner surfaces. Fabric contains angular crushed stone inclusions up to 8 mm across. Wall thickness 8 – 10 mm. Smooth burnished outer surface and a slightly rougher burnished inner surface.	79.84
111		3558	Single small sherd from a thin-walled plain vessel made from a hard dark grey fabric, highly burnished on its outer surface. Contains crushed stone inclusions up to 3 mm across. Wall thickness averages 6 mm.	5.0
112		3642	Single small rim sherd from a small cup with slightly rolled rim, no shoulder and deep belly. Hard well-fired and well-burnished fabric with brown core and surfaces, lighter on inside. Contains crushed stone inclusions up to 5 mm	14.59

			across. Wall thickness 5-6 mm.	
113		3694	Three small sherds, two of which conjoin, from a fairly finely made thin-walled Carinated Bowl with perforated lug on its outer surface for suspension. The lug is positioned on the carination as with the other examples from Lanton Quarry. Fabric is hard, evenly fired and dark grey-brown and contains crushed stone inclusions up to 3 mm across. Wall thickness averages 4 mm.	18.92
114		3694	Two sherds from a large thick-walled Carinated Bowl vessel with out-turned rim and high shoulder. Hard fabric containing crushed stone inclusions up to 6 mm across which can erupt on inner and outer surfaces. Wall averages 11 mm thick. Traces of carbonised residue immediately below outer rim indicating contents of vessel over-ran the sides and became burnt on.	42.41
115		3694	Single rim sherd from a Carinated Bowl with upright, out-turned flattened rim. Pale brown hard fabric with roughly smoothed inner and outer surfaces. Fabric contains crushed stone inclusions up to 6 mm across which erupt on inner and outer surface. Wall thickness 6-8 mm.	28.39
116		3708	Two conjoining sherds from a substantial sized vessel with carbonised residue encrusted on inner surface. Fabric is hard with brown outer surface and core and containing crushed stone inclusions up to 9 mm across which erupt on outer surface. Wall thickness 7-9 mm.	39.3
117		3716	Four tiny sherds from a plain pot with burnished inner and outer surface. Contains small crushed stone inclusions averaging 2 mm across. Wall thickness 8 mm.	7.31
118		3744	Five sherds from plain vessel with slightly bevelled out-turned rim and slack high shoulder for a bowl. Burnt carbonised residue encrusted on inner surface with some of contents having over-spilled and become burnt below rim on outer surface. Fabric is hard, brown although much of the black is burnt residue. Contains crushed stone inclusions up to 3 mm across. Burnished on inner and outer surfaces. Wall thickness averages 8 mm.	60.46
119		3872	None sherds, including four rim sherds two of which conjoin, and three sherds from a sharp, well-defined, carination, together with several crumbs. Vessel has a flattened, fully everted rim. Hard well-fired fabric with well burnished brown outer surface, possibly a slip, and dark grey core and inner surface. Contains crushed stone inclusions 6 mm across that erupt on inner surface. Wall thickness averages 8 mm.	88.58
120		3924	Two rim sherds and three crumbs from a Carinated Bowl with rolled over flat-topped rim. Hard well-fired fabric with dark grey-brown core and surfaces. Contains crushed stone inclusions up to 6 mm across. Wall thickness 8-9 mm.	19.31
Unattributable small sherds and				

crumbs				
		3510	Unattributable small sherds and crumbs of various sizes related to vessels 108 and 109 or possibly another vessel all of typical Carinated Bowl fabric.	106.16
		3526	Crumbs consistent typical Carinated Bowl fabric.	5.15
		3546	Crumbs consistent typical Carinated Bowl fabric.	0.7
		3610	Crumbs consistent typical Carinated Bowl fabric.	2.45

Table 11. Carinated Bowl and related plainwares.

8.2.4 *Fabric*

With the exception of the more oxidised and softer fabric of vessels 108 and 109, the rest of the assemblage has the typical hard and largely well fired fabric containing angular crushed stone temper which can be of just one stone type or several, the most common being sandstone, limestone and quartz, all of which is available within a few miles radius of the site. The inclusions are generally well sorted with typically between 2 – 6 mm across and are fairly evenly distributed throughout the fabric. The common practice of treating the external and sometimes internal surface by means of burnishing often masks the presence of the inclusions across the surface of the vessels although in some cases surfaces are less well smoothed and inclusions erupt at the surface.

Surface colouration can vary considerably, even within a single vessel, as is usual with ceramics fired under a bonfire or pit clamp and repeatedly exposed to smoke discolouration, heat and differential oxygen supply. On the whole they tend to be dark grey, dark brown, grey and occasionally buff brown or a red-brown or with an orangey-brown surface. On the whole, the pottery is well fired and of high quality with a fairly even and uniform colouration throughout indicative of good control of the firing process. Vessels 114, 116 and 118 have carbonised residue surviving on the inner, and occasionally outer, surfaces.

8.2.5 *Form*

The term Carinated Bowl is used here generically to describe the full range of Early Neolithic shouldered, S-profiled and bag-shaped bowls and plain wares that comprise the tradition as defined by Sheridan (2007) and as described in the ceramic reports for the previous phases of the site. The term Plain Wares covers the ceramics of the same tradition and of the same fabric which includes cups and bowls without shoulders or S-profiles.

The assemblage of Carinated Bowl material is typical of the Northumberland tradition displaying a series of everted, outwardly flared or rolled rims together with carinated, upright, globular and flared body forms, demonstrating an absence of decoration and executed in a well-fired fabric with a highly-burnished, or at least well-smoothed, external and sometimes internal surface. Examples of un-shouldered simple vertical rimmed bowls or cups can also be identified. In this regard the corpus aligns well with the material recovered from the previous phases at Lanton Quarry and similar assemblages elsewhere in the Milfield Basin, such as those from Cheviot Quarry (Waddington in Johnson and Waddington 2008), Coupland (Passmore and Waddington 2009) and Thirlings (Miket *et al.* 2008).

Overall vessel forms tend to be simple or inflected and neutral in character. Body shapes are mostly shallow and hemispherical in shape, although several examples of flat sections of wall also exist which may indicate the further presence of upright carinated forms. Alternatively the flat wall sections may indicate the presence of closed, slack-shouldered vessels with an

elongated upper body and vertical rim similar to those recovered from the Coupland site (Passmore and Waddington 2009). Shoulders can be slack and rounded in shape or sharply defined.

The majority of rims tend to be outwardly angled and flared, although in many cases they are rather short and thick in profile and may either be pinched, flat or rounded at the edge.

The small size of sherds within this assemblage mean that none of the vessels are adequately represented to allow vessel reconstruction and the rim sections are so small that no reliable vessel diameters could be posited.

8.2.6 *Numbers*

A total of 58 sherds was recovered which represents a minimum of 17 vessels. The most productive contexts were pit fills [3500] where at least four vessels were represented, 3694 which produced at least three vessels and [3510, 3558] which both produced at least two vessels.

8.2.7 *Discussion*

The Early Neolithic material includes traditional Carinated Bowl and plain ware forms typical of other Early Neolithic settlement and pit sites across the sand and gravel terraces of the Milfield Basin. The surfaces tend to have been well burnished and are entirely devoid of decoration. Three of the vessels have charred organic residue adhering to their surface indicating their use in the cooking process. One of the vessels, 113, has a well-preserved perforated lug indicating that the bowl was suspended which also implies a method for cooking or processing materials. The wide range and large number of vessels present are consistent with the storing, processing, cooking and consumption of food, and perhaps other processing activities, and can therefore be viewed as reflecting domestic occupation across the site.

8.3 Lithic Assessment

Dr Clive Waddington

8.3.1 *Factual Data*

Quantity

A total of 3 chipped lithic artefacts were recovered from the excavations at Lanton Quarry in 2014.

Provenance

Table 1 below lists the feature numbers/contexts from which the material was recovered.

Context No	Find No	Context Type	No Lithics	Lithic Types Present	Other asstns.	Period
3592		Pit fill	1	Chert blade		Meso or Neo
3592		Pit fill	1	Broken pitchstone micro blade		Meso or Neo
3626		Pit fill	1	Pitchstone blade		Meso or Neo

Total			3			

Table 12. Lithic counts by context.

Dating

Together the lithics are all part of a parallel-sided blade-based manufacturing tradition that employs consistent blade forms irrespective of what raw material is used. One of the pieces is from a micro blade hinting at perhaps a Mesolithic component. None of the features that produced the lithics produced any ceramic material. Even if these blades were originally of Mesolithic origin it is possible that they may have been incorporated into Neolithic ditch fills as residual material from the topsoil as the fieldwalking across this site prior to extraction has shown a significant spread of Mesolithic material in the soil across the entire site.

Condition

None of the pieces show fresh breaks and therefore the broken pieces have been broken in antiquity prior to discard.

Primary Sources and Documentation
There are no primary sources or documentation that might enhance the study of this collection.

Means of Collecting the Data

The lithics were excavated from the ground using hand tools (trowels and small tools) and from sieves with a 1cm^2 mesh. Each lithic was washed in tap water and gently cleaned with a toothbrush before being left to air dry. Each lithic was placed in an individual plastic bag that was labelled with a unique small find number and the context number.

For the assessment, the lithics were un-bagged and laid out on tables and grouped by context. Lithic counts were recorded and a preliminary examination made of all pieces. The lithics were then re-bagged and packed, by context, into a sturdy plastic storage box.

8.3.2 *Statement of Potential*

Value of the Data

This assemblage of material is very small on its own but combined with the lithic material from earlier excavations on this site it has the potential to advance the regional research agenda and understand more, specifically, about Neolithic lithic production, use and significance in the region. These three blades indicate the use of local as well as imported material, although a few examples of pitchstone artefacts have previously been found at Lanton Quarry.

Integration of Study with Other Research

The study of this assemblage could be enhanced through acquisition of radiocarbion dates on material from the same context to assist with dating the flint sequence in the region, and by comparison with the dates, styles and circumstances of discard with Neolithic assemblages from previous excavations at Lanton Quarry (see previous Phase reports), the nearby sites of Cheviot Quarry (Johnson and Waddington 2008), Thirlings (Miket *et al.*

2008), Bolam Lake (Waddington and Davies 2002) and elsewhere (e.g. Harding 1981; Miket 1976; 1981; 1985; Passmore and Waddington 2012).

8.3.3 *Archive Requirements*

Storage and Curation

The lithics are currently contained in sealed and labelled plastic bags. Each lithic is individually bagged and those lithics from the same context all bagged again in a context specific larger bag. These bags are stored in a sturdy plastic storage box.

Retention and Discard Policy

It is recommended that all of this collection is kept for future study.

9. Plant Macrofossil and Charcoal Analysis

Elise McLellan

9.1 Summary

9.1.1 This report presents the results of plant macrofossil and wood charcoal analysis from the 2014 season of excavation at Lanton Quarry. Environmental samples were taken from pit fill contexts which either yielded pottery or other small finds, had especially dark fills or formed part of a possible post-built building. The pottery from these contexts indicates they date to the Neolithic period. Material suitable for radiocarbon dating to confirm this age will be assessed in this analysis.

9.1.2 Palaeoenvironmental material was present in all but two contexts. Two possible postholes (3600 and 302) yielded only modern seed material. Of the 31 contexts which yielded palaeoenvironmental material, most included material suitable for radiocarbon dating in the form of roundwood, cereal grain, and wood charcoal from short-lived tree species. All flots contained some modern seeds and root material indicating mixing of sediments, however the amount of modern material varied considerably from context to context. Cereal was the most abundant of the plant macrofossil remains, identified grains were mainly emmer wheat and barley although three oat grains and one possible rye grain were also identified. Vetch seeds were also present, along with several ruderal weed taxa. All identified charcoal and plant macrofossils are provided in Tables 14, 15, and 16.

9.2 Plant Macrofossils

9.2.1 *Method*

Environmental samples were floated and allowed to air dry prior to analysis. All flots were scanned using a low power binocular microscope (x40). The soil at the site is free-draining, therefore only carbonized material will have been preserved. All uncharred plant remains were therefore discarded from analysis, although their presence and abundance was noted as an indicator of sediment mixing. In all cases 100% of the flot was scanned. Identification was undertaken using modern reference material held by ARS Ltd in addition to print resources (Cappers et al, 2006). Plant taxonomic nomenclature follows Stace (1997).

9.2.2 *Results*

The most common plant macrofossil remains were cereal grains, which were present in 11 contexts. These contexts were all characterized as dark fills of pit features, some contexts also contained pottery and lithics. A total of 89 cereal grains were present, most contexts contained low (<15) quantities of cereal grain. Context (3626) was a clear outlier, containing 32 cereal grains. Of the identifiable grains, the most common was *Triticum* cf. *dicoccum* (emmer wheat), followed by *Hordeum* sp. (barley). Three *Avena* sp. (oat) grains were identified, each from a separate context, and one possible *Secale cereale* (rye) grain. Oat grains may represent accidental charring of wild grains, in which case context 3638, which contained only a single oat grain, does not contain environmental evidence of cultivated species.

Small amounts of non-cereal plant macrofossils were recovered, the most archaeologically significant are 6 *Vicia* sp. (vetch) seeds and three possible *Brassica* sp. (cabbage/mustard) seeds. One vetch seed was identified as *Vicia ervilia* (bitter vetch). The vetch seeds almost certainly represent cultivated species, while the *Brassica* sp. seeds may represent either wild species or cultivars such as cabbage, turnip, and mustard. Several archaeological weed seeds were also identified: one *Persicaria* sp. (knotweed), one possible *Aethusa* cynapium (fool's parsley) seed and three other indeterminate weed seeds. Five Poaceae sp. caryopses were identified, and may represent accidental charring of wild grass seeds. Two hazelnut shell fragments were identified from context (3510), the only definite evidence of wild gathered foods identified in this phase.

9.3 Charcoal analysis

9.3.1 *Method*

Where available, ten fragments of charcoal per sample were identified to provide a representative sub-sample of the species present. Charcoal was examined using a high power binocular microscope at up to x400 magnification. Charcoal was identified using keys and plates from Shoch *et al.* 2004.

9.3.2 *Results*

Charcoal was the most abundant paleoenvironmental remain recovered, and identifiable charcoal was present in 29 of 31 flots. Analysis yielded a wide variety of tree species, although *Corylus* (hazel), Maloideae (apple/hawthorn), *Prunus* (cherry/blackthorn), and *Quercus* (oak) were the most common. This wide variety was observed within and between contexts. Additional analysis would not provide additional material for carbon dating, as no unidentified fragments were roundwood and a short-lived species fragment was identified from all possible contexts. It is therefore not recommended that additional charcoal identification is undertaken. The range of tree species present at the site appears to be well represented by the current sample.

9.3.3 *Dating Potential*

The most appropriate material recovered for dating from these contexts was cereal grain, present in 11 contexts. Only one roundwood fragment was identified, however unlike previous phases of excavation at Lanton which contained largely *Quercus* (oak) charcoal, charcoal from short-lived tree species was common. Cereal grain is the preferable material,

however where it is unavailable most contexts may be dated using wood charcoal from short-lived species.

9.4 Discussion

9.4.1 The palaeoenvironmental record of this phase of excavation at Lanton Quarry is dominated by cereal grain cultivation, with large amounts of emmer wheat and barley remains. Oat was a later introduction, and individual identified oat grains may represent wild plants growing as agricultural weeds. Barley, emmer wheat and oats have all been identified in previously analysed contexts from Lanton Quarry (Archaeological Services, 2008). The single possible rye grain was only tentatively identified and does not constitute sufficient evidence for rye cultivation. Vetch was cultivated, and it is possible that vegetables from the cabbage and turnip family (*Brassica*) were cultivated as well. Unlike previous phases of excavation (eg. Cockburn, 2012; Strafford, 2013), very little hazelnut shell was found. This phase of excavation suggests a more firmly agricultural form of subsistence, with less evidence of wild gathered foods than other phases. This suggest a difference in subsistence, although the associated pottery indicates a similar Neolithic date. The quantity of cereal grain from these contexts is also unusually high compared to previously excavated areas. This may indicate these contexts are slightly different in age from previous Neolithic contexts, or perhaps that there was spatial variation in amounts of wild and cultivated foods being processed at the site.

9.4.2 All charred plant macrofossils were found in pits which either yielded material culture in the form of pottery and lithic, or were included in a cluster of pits where such material culture was found. Cereal grain, plant macrofossils and charcoal were all most abundant in pits which were included in pit clusters or possible post built buildings. Several of these pits (3500, 3510, 3588, 3592) displayed evidence of heat-affected cuts, which along with the large number of charred plant remains indicates that these pits may have been used for food preparation. Charred macrofossils from the heat-affected pits includes hazelnut shell and cereal grain, indicating these pits may have been used for hazelnut roasting or drying of grain.

Context	**3636**	**3638**	**3640**	**3642**	**3500**	**3510**	**3626**	**3628**	**3592**	**3588**
Pit Cluster	**Pit Cluster 1**				**Pit Cluster 2**		**Pit Cluster 3**		**Pit Cluster 4**	
Material for Radiocarbon Dating	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Modern seeds										
Modern roots										
Charcoal (total no. of fragments)	**50+**	**50+**	**9**	**50+**	**50+**	**39**	**50+**	**50+**	**20**	**4**
Quercus (oak)		1	2		1				2	4
Corylus (hazel)	5	6	1	4	1	7	5	4	2	
Betula (birch)			1					1	3	
Populus/Salix (poplar/aspen/willow)	2	2		2		3	1		1	
Maloideae (hawthorn/apple)	1		2	1	4					
Prunus (cherry/blackthorn)			2	1	1		1		1	
Ulmus (elm)									1	
Alnus (alder)	1	1					1			
Indeterminate	1		1	2	2		2	5		
Charred remains (cultivars and wild food sources)										
Triticum dicoccum (emmer wheat) grain	4				1	5	7	3	1	
Hordeum spp. (barley species) grain	3				3	3	2		1	

Avena sativa (oat) grain		1				1	1			
Cerealia indeterminate	5			2	4	5	22	1	1	
Corylus avellana (hazel) nutshell						2				
Brassica spp. seed							3			
Vicia (vetch) spp. seed					1		4			
Charred remains (weeds)										
Poaceae (wild grass) indeterminate seed			1				5			
Persicaria spp. seed								1		
Indeterminate weed seed						1				

Table 13. Results of charcoal and plant macrofossil analysis of pit clusters or possible post built building

Context	**3610**	**3694**	**3708**	**3526**	**3546**	**3716**	**3744**	**3872**
Feature Type	**Pits with pottery**			**Possibly natural features with pottery**				
Material for Radiocarbon Dating	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Modern seeds							Yes	Yes
Modern roots							Yes	Yes
Charcoal (total no. of fragments)	**21**	**24**	**0**	**1**	**19**	**5**	**14**	**10**
Quercus (oak)					5		3	6
Corylus (hazel)	7	4		1			3	
Betula (birch)		1						
Populus/Salix (poplar/aspen/willow)	1	2				1		4
Maloideae (hawthorn/apple)	1	2			1		3	
Prunus (cherry/blackthorn)	1							
Ulmus (elm)								
Alnus (alder)					2			
Tilia (lime)		1						
Fraxinus (ash)					1			
Indeterminate wood					1			
Indeterminate bark						4	1	
Charred remains (cultivars and wild food sources)								
Triticum dicoccum (emmer wheat) grain	1	1						
Hordeum spp. (barley species) grain		1					3	
Possible *Secale cereale* (rye) grain	1							
Cerealia indeterminate	1						4	
Vicia (vetch) spp. seed							1	
Charred remains (weeds)								
Carex spp. (sedge) seed					2			
Indeterminate root					1			
Indeterminate weed seed							2	
Vitrified fuel waste							3	

Table 14. Results of charcoal and plant macrofossil analysis for isolated pits containing pottery.

Context	**3520**	**3584**	**3604**	**3730**	**3732**	**3756**	**3810**	**3816**	**3824**	**3836**	**3838**	**3862**
Material for Radiocarbon Dating	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	No	No	No
Modern seeds												
Modern roots												
Charcoal (total no. of fragments)	**2**	**5**	**2**	**3**	**9**	**32**	**2**	**31**	**6**	**1**	**3**	**6**
Quercus (oak)				2	7	10	2	6	6	1		6
Corylus (hazel)	2	4		1								
Betula (birch)		1					1					
Populus/Salix (poplar/aspen					2							

/willow)												
Pinus sylvestris (pine)								3				
Indeterminate			2					1			3	
Charred remains (cultivars and wild food sources) none												
Charred remains (weeds) none												

Table 15. Results of charcoal and plant macrofossil analysis of isolated pits yielding no material culture.

10. Publicity, Confidentiality and Copyright

10.1 Any publicity will be handled by the client.

10.2 Archaeological Research Services Ltd will retain the copyright of all documentary and photographic material under the Copyright, Designs and Patent Act (1988).

11. Archive Requirements

11.1 *Storage and Curation*

11.1.1 The lithics are currently contained in sealed and labelled plastic bags. Each lithic is individually bagged and those lithics from the same context are all bagged again in a context specific larger bag. These bags are stored in a sturdy plastic storage box.

11.1.2 The pottery is stored in acid-free paper wrapped in bubble-wrap and sealed in labelled plastic bags. With the exception of those fragments that have been re-fitted and glued together, each sherd is individually bagged and those sherds from the same context all bagged again in a context specific larger bag. These bags are stored in a sturdy plastic storage box.

11.1.3 The environmental flots and CPR are kept in sample and context-specific labelled bags. These bags are stored in a sturdy plastic box.

11.2 *Retention and Discard Policy*

11.2.1 With the exception of the animal bone, it is recommended that all of this collection is kept for future study.

12. Statement of Indemnity

12.1 All statements and opinions contained within this report arising from the works undertaken are offered in good faith and compiled according to professional standards. No responsibility can be accepted by the author/s of the report for any errors of fact or opinion resulting from data supplied by any third party, or for loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in any such report(s), howsoever such facts and opinions may have been derived.

13. Acknowledgements

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Appendix I. Site Records

Context Register

Context No.	Description
3458	Fill of pit
3459	Cut of pit (3458)
3460	Fill of pit
3461	Cut of pit (3460)
3462	Fill of pit
3463	Cut of pit (3462)
3464	Fill of pit
3465	Cut of pit (3464)
3466	Fill of posthole
3467	Cut of posthole (3466)
3468	Fill of posthole
3469	Cut of posthole (3468)
3470	Fill of posthole
3471	Cut of posthole (3470)
3472	Fill of pit
3473	Cut of pit (3472)
3474	Fill of posthole
3475	Cut of posthole (3474)
3476	Fill of posthole
3477	Cut of posthole (3476)
3478	Fill of pit
3479	Cut of pit (3478)
3480	Fill of posthole
3481	Cut of posthole (3480)
3482	Fill of pit
3483	Cut of pit (3482)
3484	Fill of pit
3485	Cut of pit (3484)
3486	Fill of pit
3487	Cut of pit (3486)
3488	Fill of posthole
3489	Cut of posthole (3488)
3490	Fill of pit
3491	Cut of pit (3490)
3492	Fill of posthole
3493	Cut of posthole (3492)
3494	Fill of pit
3495	Cut of pit (3494)
3496	Fill of linear
3497	Cut of linear (3496)
3498	Fill of posthole
3499	Cut of posthole (3498)
3500	Fill of pit
3501	Cut of pit (3500)
3502	Fill of pit
3503	Cut of pit (3502)
3504	Fill of pit
3505	Cut of pit (3506)
3506	Fill of pit
3507	Cut of pit (3506)
3508	Fill of pit
3509	Cut of (3508)
3510	Fill of pit/posthole
3511	Cut of pit/posthole (3510)
3512	Fill of posthole
3513	Cut of posthole (3512)
3514	Fill of pit
3515	Cut of pit (3514)
3516	Fill of pit
3517	Cut of pit (3516)
3518	Fill of pit

3519	Cut of pit (3518)
3520	Fill of pit
3521	Cut of pit (3520)
3522	Fill of pit
3523	Cut of pit (3522)
3526	Fill of pit
3527	Cut of pit (3526)
3528	Fill of posthole
3529	Cut of posthole (3528)
3530	Fill of linear
3531	Cut of linear (3530)
3532	Fill of pit
3533	Cut of pit (3532)
3534	Fill of pit
3535	Cut of pit (3534)
3536	Fill of posthole
3537	Cut of posthole (3536)
3540	Fill of posthole
3541	Cut of posthole (3540)
3542	Fill of pit
3543	Cut of pit (3542)
3544	Fill of linear/pit
3545	Cut of linear/pit (3544)
3546	Fill of linear
3547	Cut of linear (3546)
3548	Fill of linear (coming off 3594)
3549	Cut of linear (3548)
3550	Fill of posthole
3551	Cut of posthole (3550)
3552	Fill of posthole
3553	Cut of posthole (3552)
3554	Fill of pit
3555	Cut of pit (3554)
3558	Fill of pit
3559	Cut of pit (3558)
3564	Fill of posthole
3565	Cut of posthole (3564)
3566	Fill of linear
3567	Cut of linear (3566)
3572	Fill of posthole
3573	Cut of posthole (3572)
3574	Fill of curvilinear
3575	Cut of curvilinear (3574)
3576	Fill of pit
3577	Cut of pit (3576)
3578	Fill of curvilinear
3579	Cut of curvilinear (3578)
3580	Fill of curvilinear
3581	Cut of curvilinear (3580)
3582	Fill of posthole
3583	Cut of posthole (3582)
3584	Fill of pit
3585	Cut of pit (3584)
3586	Fill of pit
3587	Cut of pit (3586)
3588	Fill of posthole
3589	Cut of pit (3588)
3590	Fill of pit
3591	Cut of pit (3590)
3592	Fill of pit
3593	Cut of pit (3592)
3594	Fill of linear
3595	Cut of linear (3594)
3598	Fill of posthole
3599	Cut of (3598)

3600	Fill of posthole
3601	Cut of posthole (3600)
3602	Fill of posthole
3603	Cut of posthole (3602)
3604	Fill of posthole
3605	Cut of posthole (3604)
3606	Fill of posthole
3607	Cut of posthole (3606)
3608	Fill of posthole
3609	Cut of posthole (3608)
3610	Fill of posthole
3611	Cut of posthole (3610)
3612	Fill of posthole
3613	Cut of posthole (3612)
3614	Fill of posthole
3615	Cut of posthole (3614)
3616	Fill of pit
3617	Cut of pit (3616)
3626	Fill of posthole
3627	Cut of posthole (3626)
3628	Fill of posthole
3629	Cut of posthole (3628)
3630	Fill of pit
3631	Cut of pit (3630)
3636	Fill of posthole
3637	Cut of posthole (3636)
3638	Fill of posthole
3639	Cut of posthole (3638)
3640	Fill of posthole
3641	Cut of posthole (3640)
3642	Fill of posthole
3643	Cut of posthole (3642)
3648	Fill of posthole
3649	Cut of posthole (3648)
3658	Fill of elongated burnt patch
3659	Cut of elongated burnt patch (3658)
3660	Fill of posthole
3661	Cut of posthole (3660)
3666	Fill of pit
3667	Cut of pit (3666)
3668	Fill of linear
3669	Cut of linear (3668)
3670	Fill of posthole
3671	Cut of posthole (3670)
3672	Fill of pit
3673	Cut of pit (3672)
3674	Fill of posthole
3675	Cut of posthole (3674)
3684	Fill of posthole
3685	Cut of posthole (3676)
3686	Animal burial
3687	Cut of animal burial (3686)
3688	Sheep burial
3689	Cut of sheep burial (3688)
3694	Fill of posthole
3695	Cut of posthole (3694)
3696	Fill of posthole
3697	Cut of posthole (3696)
3698	Fill of posthole
3699	Cut of posthole (3698)
3704	Fill of posthole
3705	Cut of posthole (3704)
3708	Fill of pit
3709	Cut of pit (3708)
3710	Fill of posthole

3711	Cut of posthole (3710)
3716	Fill of pit
3717	Cut of pit (3716)
3722	Fill of posthole
3723	Cut of posthole (3722)
3728	Fill of posthole
3729	Cut of posthole (3728)
3730	Fill of pit
3731	Cut of pit (3730)
3732	Fill of posthole
3733	Cut of posthole (3732)
3734	Fill of pit
3735	Cut of pit (3734)
3738	Fill of pit
3739	Cut of pit (3738)
3740	Fill of pit
3741	Cut of pit (3740)
3742	Fill of posthole
3743	Cut of posthole (3742)
3744	Fill of pit
3745	Cut of pit (3744)
3746	Fill of pit
3747	Cut of pit (3746)
3752	Fill of pit
3753	Cut of pit (3752)
3754	Fill of pit
3755	Cut of pit (3754)
3756	Fill of pit
3757	Cut of pit (3756)
3758	Fill of posthole
3759	Cut of posthole (3758)
3760	Fill of pit
3761	Cut of pit (3760)
3764	Fill of pit
3765	Cut of pit (3764)
3768	Fill of pit
3769	Cut of pit (3768)
3770	Fill of pit
3771	Cut of pit (3770)
3774	Fill of pit
3775	Cut of pit (3774)
3776	Fill of linear
3777	Cut of linear (3776)
3778	Fill of pit
3779	Cut of pit (3778)
3780	Fill of linear
3781	Cut of linear (3780)
3782	Fill of pit
3783	Cut of pit (3782)
3794	Fill of pit
3795	Cut of pit (3794)
3796	Fill of posthole
3797	Cut of posthole (3796)
3798	Fill of pit
3799	Cut of pit (3798)
3800	Fill of pit
3801	Cut of pit (3800)
3802	Fill of pit
3803	Cut of pit (3802)
3806	Fill of pit
3807	Cut of pit (3806)
3808	Fill of linear
3809	Cut of linear (3808)
3810	Fill of pit
3811	Cut of pit (3810)

3812	Fill of pit
3813	Cut of pit (3812)
3814	Fill of pit
3815	Cut of pit (3814)
3816	Fill of pit
3817	Cut of pit (3816)
3818	Fill of pit
3819	Cut of pit (3818)
3820	Fill of pit
3821	Cut of pit (3820)
3822	Fill of pit
3823	Cut of pit (3822)
3824	Fill of pit
3825	Cut of pit (3824)
3826	Fill of pit
3827	Cut of pit (3826)
3828	Fill of pit
3829	Cut of pit (3828)
3830	Fill of pit
3831	Cut of pit (3830)
3832	Fill of pit
3833	Cut of pit (3832)
3834	Fill of pit
3835	Cut of pit (3834)
3836	Fill of linear
3837	Cut of linear (3836)
3838	Fill of pit
3839	Cut of pit (3838)
3840	Fill of pit
3841	Cut of pit (3840)
3842	Fill of pit
3843	Cut of pit (3842)
3844	Fill of pit (adjacent to 3594)
3845	Cut of pit (3844)
3846	Fill of stake hole
3847	Fill of stake hole
3848	Fill of stake hole
3849	Fill of stake hole
3850	Fill of stake hole
3851	Fill of stake hole
3852	Fill of stake hole
3853	Fill of pit
3854	Fill of pit
3855	Fill of pit
3856	Fill of curvilinear
3857	Fill of linear
3858	Fill of scoop
3859	Cut of scoop (3858)
3860	Fill of pit
3861	Cut of pit (3860)
3862	Fill of pit
3863	Cut of pit (3862)
3864	Fill of cut
3865	Cut of pit (3864)
3868	Fill of pit
3869	Cut of pit (3868)
3872	Fill of pit
3873	Cut of pit (3872)
3874	Fill of pit
3875	Cut of pit (3874)
3876	Fill of pit
3877	Cut of pit (3876)
3878	Fill of pit
3879	Cut of pit (3878)
3880	Fill of pit

3881	Cut of pit (3880)
3882	Fill of pit
3883	Cut of pit (3882)
3884	Fill of pit
3885	Cut of pit (3884)
3886	Fill of pit
3887	Cut of pit (3886)
3888	Fill of pit
3889	Cut of pit (3888)
3890	Fill of pit
3891	Cut of pit (3890)
3892	Fill of pit
3893	Cut of pit (3892)
3894	Fill of pit
3895	Cut of pit (3894)
3896	Fill of pit
3897	Cut of pit (3896)
3898	Fill of plough scar
3899	Cut of plough scar (3898)
3900	Fill of pit
3901	Cut of pit (3900)
3904	Fill of pit
3905	Cut of pit (3904)
3906	Fill of posthole
3907	Cut of posthole (3906)
3910	Fill of posthole
3911	Cut of posthole (3910)
3914	Secondary fill of F3886
3916	Fill of pit
3917	Cut of pit (3916)
3918	Sheep burial
3919	Cut of sheep burial pit (3918)
3920	Fill of posthole
3921	Cut of posthole (3920)
3922	Fill of posthole
3923	Cut of posthole (3922)
3924	Fill of pit
3925	Cut of pit (3924)
3928	Fill of pit
3929	Cut of pit (3928)
3932	Animal burrow
3933	Cut of animal burrow (3932)
3934	Fill of pit
3935	Cut of pit (3934)
3936	Fill of pit
3937	Cut of pit (3936)
3938	Fill of pit
3939	Cut of pit (3938)
3940	Fill of posthole
3941	Cut of posthole (3940)
3942	Fill of posthole
3943	Cut of posthole (3942)
3944	Fill of pit
3945	Cut of pit (3944)
3946	Fill of linear
3947	Cut of linear (3946)
3948	Sheep burial
3949	Cut of sheep burial (3948)
3950	Cut of stake hole (3846)
3951	Cut of stake hole (3847)
3952	Cut of stake hole (3848)
3953	Cut of stake hole (3849)
3954	Cut of stake hole (3850)
3955	Cut of stake hole (3851)
3956	Cut of stake hole (3852)

3957	Cut of pit (3853)
3958	Cut of pit (3854)
3959	Cut of pit (3855)
3960	Cut of curvilinear (3856)
3961	Cut of linear (3857)

Environmental Sample Register

Sample no.	Context number	Sample volume (l)	Percentage	Description
427	3546		100%	Fill of pit feature
442	3584			Fill of pit feature
443	3592		100%	Charcoal-rich fill of pit
444	3588		100%	Fill of shallow pit/scoop
450	3872		100%	Fill/layer of sand with pottery
451	3636			Fill of pit feature
452	3638			Fill of pit feature
453	3640			Fill of pit feature
454	3642			Fill of pit feature
455	3628			Dark fill of pit with charcoal
456	3626			Dark fill of pit with charcoal
457	3510			Dark fill of pit with charcoal
458	3610			Dark fill of pit with charcoal
460	3500		100%	Fill of pit feature
461	3604	1	100%	Fill of possible posthole in PBB
462	3602		100%	Fill of possible posthole in PBB
465	3600	2	100%	Fill of possible posthole in PBB
466	3694	30	100%	Charcoal-rich fill of pit
467	3732		50%	
469	3730		50%	
470	3744		100%	Fill of feature, containing pottery