Altogether Archaeology
Digging our heritage in the North Pennines

Gueswick Hills, Teesdale:

Interim report on 2024 excavations (GH24)

ALTOGETHER ARCHAEOLOGY

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It includes information from **Rob Young** (professional archaeological supervision), **Stephen Eastmead** (drone), **Rob Pearson** and **Anne Jowett** (surveying), and **Tony Metcalfe** (finds).

Archaeological Services Durham University reported on palaeoenvironmental samples and charcoal species.
Queens University Belfast 14CHRONO carried out the radiocarbon dating.
SWAAG (Swaledale and Arkengarthdale Archaeology Group) allowed use of their magnetometer and expertise in geophysical survey.

Version 2.04 (28 July 2025)

Site location: NZ 0036 2104, 1.5km north-west of the village of Cotherstone, Teesdale, in the parish of Hunderthwaite.

The Lidar Landscapes survey was a project of the North Pennines AONB Partnership http://www.northpennines.org.uk

Drone images and processing of lidar data by **Stephen Eastmead**, https://eastmead.com/

QGIS Free and Open Source Software was used: https: https://qgis.org

Please note: The features described in this report lie on private farm-land with no public access

Cover image: Trench 9: A broken quern incorporated in a paved surface.

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1 INTRODUCTION

1.1 The site

This is a report on excavations carried out over three weeks in summer 2024 by the community group Altogether Archaeology (AA) at a site on the Gueswick Hills (grid reference NZ 0036 2104), which AA has been investigating for several years. It lies on the plateau top of a low hill close to the River Tees, between Cotherstone and Romaldkirk. There is scanty surface indication that this is a significant site, just a small area of uncategorisable "lumps and bumps"; it was only AA's magnetometry survey that demonstrated the extent of the hidden archaeology. Excavation has shown that it is a Middle Iron Age settlement, which continued in occupation into the Romano-British period.

Investigation of the site started with a walkover survey, a magnetometry survey of the hilltop (extended in Spring 2022 and 2023 to 2.4 hectares in total), and a brief evaluation excavation: all taking place in 2019. Subsequently, AA excavated the site for three weeks in each of August 2021, 2022 and 2023. Interim Reports of these excavations, plus the Project Design, are published on the AA website (Eastmead 2022, Green 2019, 2020, 2022a, 2023, 2024a). As extensive background information was included in those reports, it will not be repeated here. Interim papers have also been published describing progress on the project (Green 2022b, 2024b, 2025; Green & Metcalfe 2021; Green, Metcalfe & Young 2024), and a summary of the project up to summer 2024 is given in *The North Pennines from Prehistory to Present* (Frodsham, Green & Finch 2024).

In addition, a brief evaluation excavation was carried out in autumn 2023 on the small hummock at the south-east corner of the plateau (NZ 0051 2096) where evidence of a structure was found, but adverse weather forced curtailment of the dig. In the August 2024 excavations were continued in the main part of the site, and the excavation on the hummock was re-opened and completed.

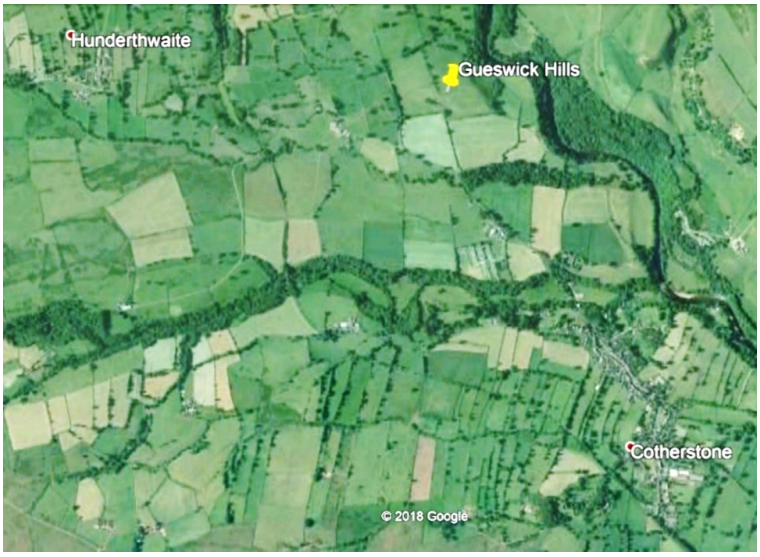

Figure 1.1: Location of the Gueswick Hills site on farmland now used for grazing. Surrounding the nearby villages are medieval field-systems, fossilised in the hedge pattern. The River Tees flows in the deep valley to the east of the site. (Google Earth)

The Gueswick Hills are a line of terminal moraines across Teesdale, marking the position where the Teesdale glacier paused in its retreat up the dale at the end of the last Ice Age (Evans 2017, 2018). For a short period, the hills acted as a dam, causing the formation of a lake. Despite the glacial origin of

the hills, the large terraces on their southern flank have a considerable depth of soil. Excavation in 2020 had to be cancelled due to the pandemic, but members of the TerrACE project team (www.terrace.no) were able to dig test-pits on the terraces below the site in September 2020. This international project is investigating the soils of agricultural terraces in several countries of Europe, using Optically Stimulated Luminescence (OSL), ancient DNA, and other techniques. The team is yet to publish results for this site, so the age and use of the Gueswick terraces are unclear. However, terraces in Northumberland seem to have been in use (though not continuously) from the early Bronze Age through to the Medieval period (Frodsham and Waddington 2004, Brown et al 2023).

1.2 2019 trenches

The evaluation excavation in 2019 had three small trenches:

Trench B1, over an area to the west of the hilltop cairn, found no significant features.

Trench 1, over the line of a probable ditch seen on magnetometry (but not visible on the ground), found a discontinuous flagstone and cobble surface extending across the line of the ditch, buried beneath 0.5m of topsoil. In the topsoil was a stony layer below turf level, covering the whole trench. The fill of the ditch itself was not excavated. Two pot-sherds were found in the soil above the paving. One was late medieval, the other of uncertain date.

Trench 2, was located at the west end of a rectangular feature visible on the ground, and seen on lidar and magnetometry images. This exposed a stony surface in the southern half of the trench, to the north of which was a gravelly deposit which contained three Iron Age (IA) or Romano-British (RB) pot-sherds, a stone spindle whorl, and an iron blade.

Thus, although the summit cairn and rock-art suggested a Bronze Age presence, and the surrounding ridge and furrow suggested occupation in the medieval period, the excavation finds were mainly of the Iron Age or Roman period.

1.3 2021 trenches

The excavation in 2021 had two trenches:

Trench 1 was a re-opening and deepening of the 2019 Trench A1, investigating the ditch seen encircling the hilltop on magnetometry (but with no indication of it on the ground surface). The flagstone and cobble surface 50cm below ground level was re-exposed. Under it, a 1.5m deep ditch was excavated. This had a palisade slot in its base, full of butchered animal bones and stones. Radiocarbon dates for these were Late Iron Age, with radiocarbon dating of the upper ditch fill and pot-sherds from the paving showing the ditch was covered over around the start of the Roman period.

Trench 3 examined an area inside the palisade ditch, extending 2019 Trench 2 to the east and south, opening nearly all of the rectangular feature visible on lidar. This proved not to be a building. There was a wide low stony bank running across the southern half of the trench. Across the centre of the trench was a gravelled area, to the north of which was a band of stones and then an area devoid of structures and with only scanty finds. Most finds in the trench were in its western end, particularly the north-west corner adjacent to 2019 Trench 2. Finds were largely Iron Age or Roman period, including pot-sherds, a spindle whorl, and a blue glass bead decorated with white spirals. A very significant find, just under the turf on the stony bank, was a copper-alloy annular brooch from the post-Roman period.

1.4 2022 trenches

The excavation in 2022 had two trenches:

Trench 4 examined an area inside the palisade ditch, to the north-west of Trench 3. This area appeared "busy" with hints of circular structures on magnetometry. Excavation failed to define any building outlines, but two paved areas were uncovered, each of which incorporated two quernstones, and one of the areas also had a fire-blackened hearthstone. A spread of rubble, presumably from plough-damage, overlaid the paved surfaces and their surrounding cobbled areas. Finds were largely from the Roman era, with both "native" pottery and sherds of Roman-type wares (including mortaria). A spearhead of Roman military type was found in a context which included charcoal radiocarbon dated to the late 2nd century AD. A coin, *c* 300 AD, was also found.

Trench 5 crossed three ditches shown on magnetometry, none of which are apparent on the ground or on lidar images. Firstly (south), a ditch which appears to be an inner sub-rectangular ditch around the settlement area. This was cut 1m deep into the natural, and had fill radiocarbon dated to the 3rd century BC. Secondly (middle), a ditch similar in size (1.5m deep) and profile to the palisade ditch previously excavated in Trench 1 and, according to the magnetometry survey, cut in straight segments to form an outer circuit around the settlement. Its fill had a radiocarbon date of *c* 10 BC, but charcoal in the slot in the base of the ditch dated to *c* 1260 BC: probably due to re-use (as packing material) in the late Iron Age of stones from the Bronze Age occupation of the site. Thirdly (north) a shallow (0.5m) ditch with a stony fill containing little organic material, dated (like the middle ditch) to *c* 10 BC. Environmental samples from the south and middle ditches contained charcoal from a wide range of species (including heather), barley and spelt wheat.

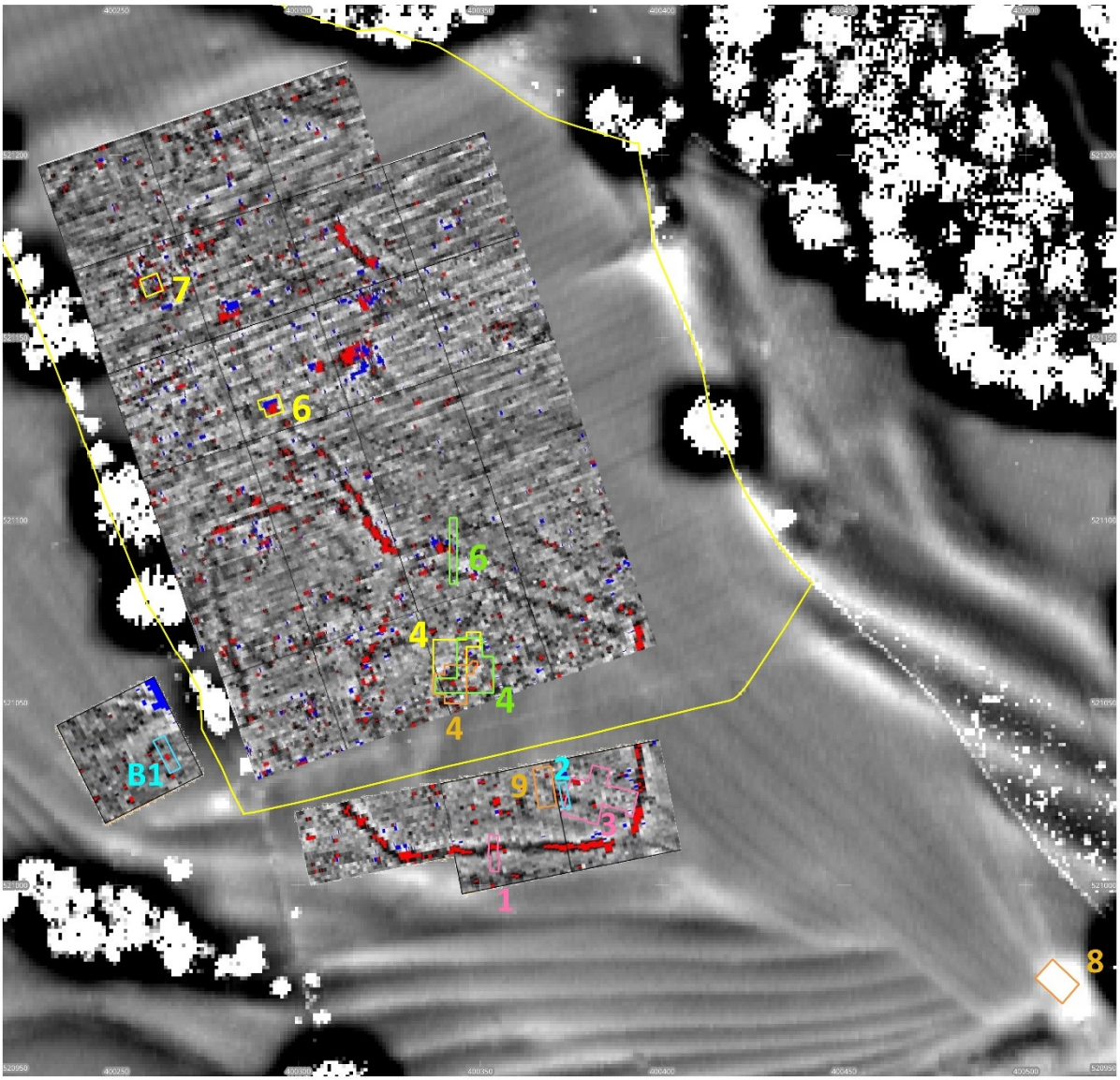

Figure 1.2: Lidar DSM image of site, with 2019 (blue), 2021 (pink), 2022 (green), 2023 (yellow) and 2024 (orange) trench positions shown. The parts of T1 and T8 excavated in 2019 and 2023 are not indicated. Grid annotations are at 50m intervals.

1.5 2023 trenches

Four trenches were excavated, in total 264 square metres. Trench 4 was aligned north-south, Trenches 6 and 7 were aligned on the magnetometry grid, and Trench 8 was aligned north-west to south-east to occupy the summit of the hillock.

Trench 4: This was a partial re-opening of the 2022 Trench 4. The western part of the trench was re-opened and the trench was extended to the west, to examine how far in that direction the paved areas extended, in the hope of defining building plans. In all, an area 15m x 9m was opened, plus a 4m square extension to the north-east, and a 2.5m x 6m extension to the south (total area 166 sq m) As in 2021, a spread of rubble covered any lower contexts. Disappointingly, the paved areas were not found to extend far westwards. That area was found to include some postholes, pits, and a long straight gully. These were excavated and part of the paving (including two quernstones) was lifted.

The deposit underneath contained only “native” type late prehistoric potsherds, with no Roman-period artefacts. Radiocarbon dates for the pits, gullies, and deposit under the paving ranged from c 180 BC to c 200 AD. At the end of the excavation, the southern part of the trench was geo-textiled before closing to allow re-opening in 2024.

Trench 6: This was dug to examine an area of high magnetometry reading on a probable ditch running north from the settlement. An area 5m x 5m was de-turfed, but only the northern half was excavated deeper and then extended 1m westward, giving a 6m x 2.5m excavation (i.e. 15 sq m). As predicted by the magnetometry, a ditch running north-south was found. On excavation, this contained a group of iron-rich stones (the magnetometry hot-spot) and was cut 0.7m deep in the natural. Radiocarbon-dating of charcoal in the lower fill gave a late Iron Age date, *c* 90 BC.

Trench 7: This was to investigate a “busy” area on the magnetometry survey at the northern end of the plateau. An area 5m x 5m was excavated, but there were no significant structures or finds.

Trench 8: Sited on the hillock at the south-east corner of the plateau, this trench covered most of the summit. It was 10m x 7m, but with part of the corners not excavated, so a total of 58 sq m. The trace of a possible rectangular structure was found: bands of stones. There were also several groups of large stones, one over a 60cm square flagstone, some others over small postholes. A pilgrim badge *c* 1500 AD was found under one of the stone groups. Due to adverse weather the trench was geotextiled and back-filled, being re-opened in 2024.

1.6 Aims for the 2024 excavation

Previous years’ excavations have proved that there was an Iron Age / Romano-British presence on the site, with the settlement itself showing evidence (pottery, coin, spearhead, radiocarbon dates) of occupation in the Roman period. The inner ditch had fills dating to the 3rd century BC, whereas the outer (palisade) ditch had fills suggesting it was later in date, around the start of the first century AD.

Thus, occupation at this site was clearly long-lived, covering at least 500 years from the middle Iron Age to the late Roman period, although the dating evidence was too sparse to confirm that this occupation was continuous. Aims for the further examination of the site in 2024 were:

- to enable further clarification of the chronology of the site
- to attempt to locate more structures in the occupation area.
- to examine the lower contexts of the settlement area, by partial re-opening and extending Trench 4. This would give more information about the pre-Roman phase of the settlement.
- To open a new trench on the southern part of the settlement area to expand knowledge of the site (Trench 9).
- to complete the excavation of the possible windmill site (Trench 8) in the hope of gathering further evidence as to the date and structure of features on the mound.
- As usual, to enhance engagement of people (both AA members and local residents) with their historic environment.

1.7 2024 trenches

See the Project Design (Green 2019) for details of excavation methods, access, and health and safety. The trenches were both excavated by hand. Turf, stones, and soil were stacked separately. The site was fully restored at the end of the dig. Recording was by high-definition drone photography and by photogrammetry using a hand-held camera. Photogrammetry enables scale-correct images to be obtained, but definition is not as good as obtained from drone images. In addition, hand drawing was used for recording.

Professional supervision was by Rob Young, who was on site throughout the excavation. Management of the dig was by Martin Green and Tony Metcalfe, with surveying and drone photography by Stephen Eastmead (all members of the AA fieldwork task group).

Context numbers are given in italics in the description of the trenches: see the context tables (Appendix 1) for further details.

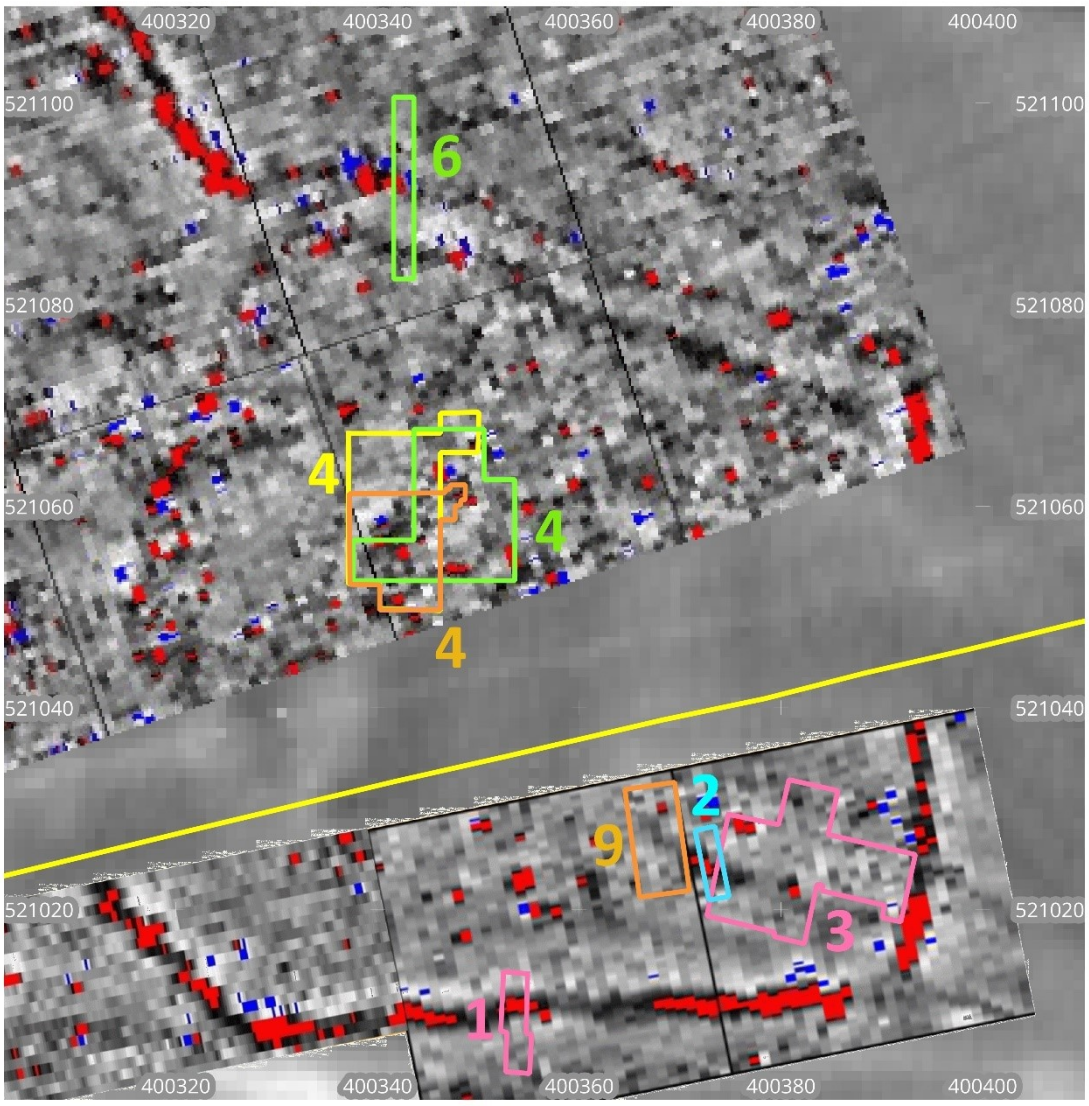

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Figure 1.3: Enlarged image of the central (occupation) area in the previous figure. Colour coding by year as before: 2024 trenches are shown in orange. Trench 8 is beyond the area of this image.

Three trenches were excavated in 2024:

Trench 4: This was a re-opening of the southern half of the 2023 trench. A small extension was excavated from its north-east corner to follow lines of postholes. Altogether an area of 85.5 sq m was opened. All paving in the trench was removed and the lower contexts then excavated down to natural. Two lines of postholes were found.

Trench 8: This was a re-opening of the Trench 8 started in the autumn 2023 excavation. The unexcavated corners of the trench were opened, extending the trench to became a simple rectangular

10m x 7m (70 sq m) trench. The investigation of this was completed by the lifting of remaining groups of stones and excavating a slot down to natural across the trench.

Trench 9: This was a new trench, sited to the west of the 2019 Trench 2, An unexcavated baulk of about 1m was left between the trenches. Trench 2 had uncovered layers of stones which included late Iron Age finds. Trench 9 was initially rectangular, 11m x 4m, but later extended westward to 11m x 5m (55 sq m) orientated roughly north-south. Its north end lay on a level area, but the ground fell away to its south end: into a scoop, a possible site for a roundhouse or other structure. The southern end of the trench extended a few metres across the floor of this scoop. Excavation was not completed; the trench will be re-opened and possibly extended in 2025.

2 EXCAVATION FINDINGS: TRENCH 4

2.1 Trench 4: excavation

The trench was opened in 2022 to examine a "busy" area in the magnetometry survey image, within the circuit of the palisade and inner ditches; so possibly the main settlement area on the site. The magnetometry anomalies include curving features, suggestive of roundhouses, though no complete clear rings. The site has been subjected to post-medieval ploughing, though is now permanent pasture, making interpretation of the magnetometry image difficult.

The 2022 trench was 15m (N-S) x 16m (E-W), but with unexcavated rectangles in the north-west (11m x 6m) and the north-east (5m x 3m). Under the turf was a loam *4000* which, across the whole trench, lay over a stonier loamy context *4003.* Both of these contexts contained finds (presumably due to plough action) dating to the late prehistoric / Roman period. Removal of *4003* revealed two stone-flagged areas (*4002, 4004*), a possible flagged path *4008* leading eastwards from *4004,* a roughly cobbled area *4010* between the flagged areas, and (in the north-east corner of the trench) a semi-compacted surface of small cobbles *4009*.

Flagged surface *4002* included two quernstones (Q1, Q2) and a heat-blackened hearthstone. Flagged surface *4004* included another two quernstones (Q3, Q4). These surfaces and querns were not lifted in 2002, but left in situ. The final drone image of the 2022 Trench 4 is shown in Figure 2.1, with contexts labelled. The outlines of the 2023 and 2024 trenches are marked to show their relationship.

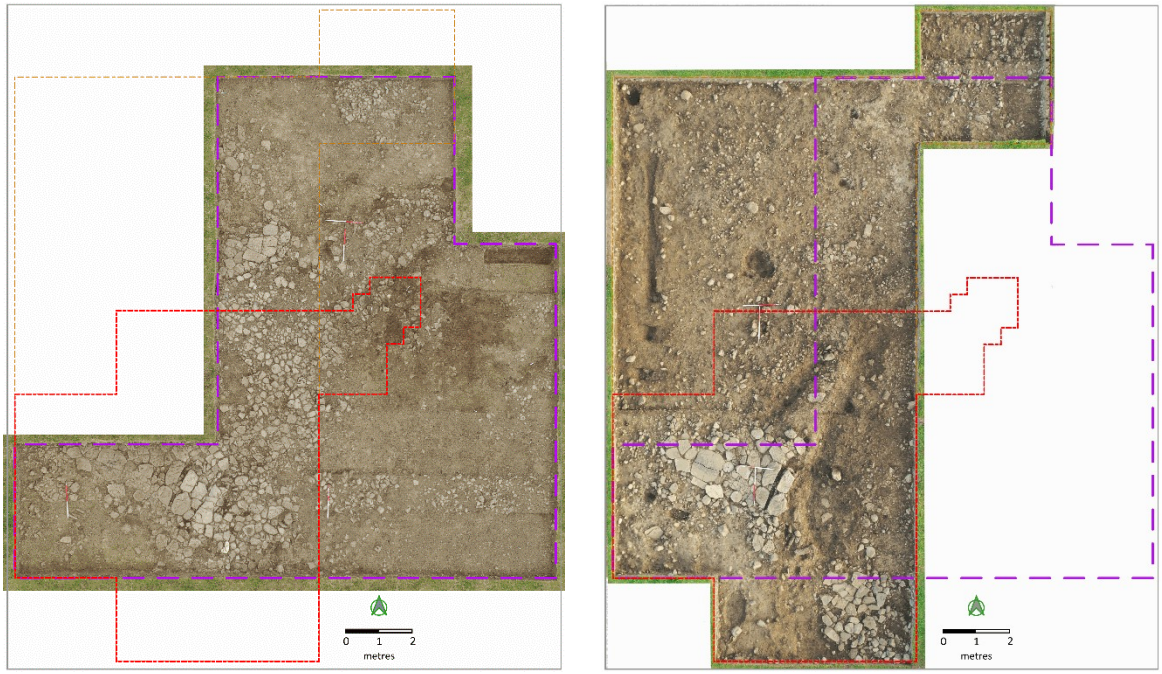

Figure 2.1: Trench 4 at the end of the 2022 excavations.
Figure 2.2: Trench 4 at the end of the 2023 excavations.
The outline of the 2024 trench is shown in red in both figures.

In 2023 the western part of Trench 4 was re-opened and extended westwards to complete a 15m (N-S) x 9m (E-W) rectangle. Subsequently the eastern 6m of the southern side of the trench was extended by 2.5m, and a 4m x 4m extension excavated from the north-east corner of the trench to expose cobbled surface *4009* and determine if it extended further north. The trench at completion in 2023 is shown in Figure 2.2, along with the outlines of the 2022 and 2024 trenches.

Features found in the 2023 excavation are shown in Figure 2.3. At the end of that year's excavation, the paving (including querns) *4002* had not been lifted. Most of the remaining cobbled surface *4010* beside the paved areas had been lifted, apart from its south-eastern section. Underneath was a scoop cut into a clay bank *4039*, with a possible drip gully curving round the rear edge of the scoop. In the scoop was a charcoal rich deposit *4035* overlying an irregular uncompacted cobble surface *4040*. All potsherds from these lower deposits were Iron Age, with nothing datable to the Roman period, and a radiocarbon date of charcoal from the deposit was in the second century BC.

The southern half of the 2023 Trench 4 was re-opened in 2024 to complete the lifting of the paving and querns and to explore further the deposits under the paving and cobbled surface. The rest of the 2023 trench had already been excavated to natural and was therefore not re-opened.

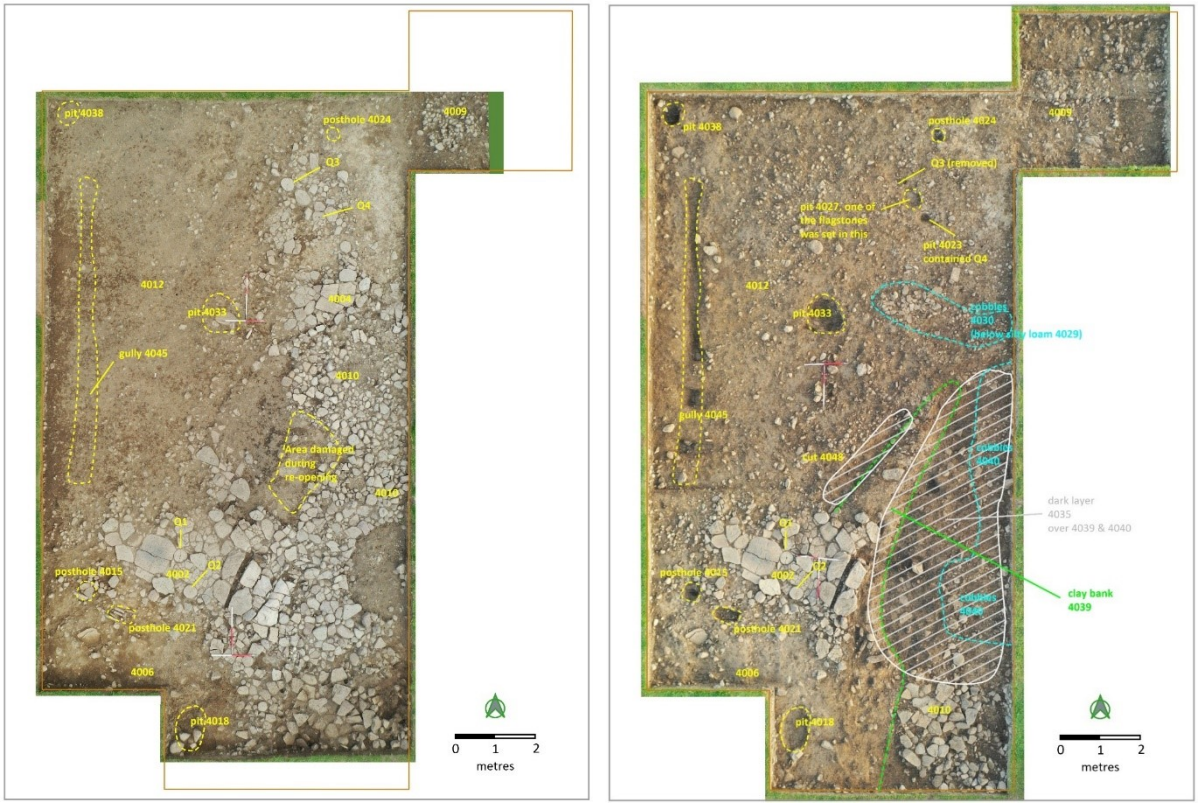

Figure 2.3: Drone images of T4 on Day 14 and Day 23 of the 2023 excavation, with features marked (see the 2023 Interim Report for full details).

Excavation in 2024 commenced with the removal of backfill down to the geotextile which had been laid in 2023 before closure of the trench. This was then removed and the paving *4002* was cleaned and lifted. In this were three querns: Q1, Q2 and Q5 (Q5 had not been previously noted). Q1 was a complete upper stone, Q2 a complete lower stone, and Q5 was half of an upper stone. See Section 5 for an illustrated catalogue of Gueswick querns. Quern positions in Trench 4 are marked in Figure 2.5.

Beneath paving *4002* was a medium brown silty deposit *4050* containing small gravel. Radiocarbon dating of hazel charcoal in a bulk sample taken from *4050* underneath the hearthstone gave a date of 290 calAD (see Appendix 5 for details of radiocarbon dates, including ranges).

Sequential photogrammetry images and drone photographs of the 2024 trenches are given in Appendix 6, showing the progress of the excavation. The context table is in Appendix 1.

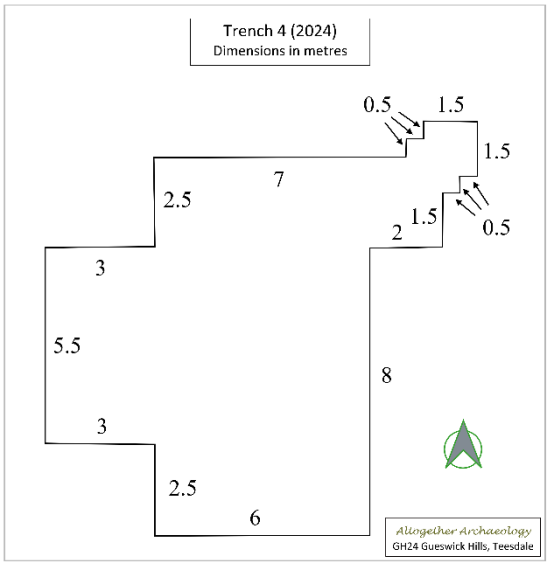

Figure 2.4: Dimensions of the 2024 Trench 4, shown in metres.

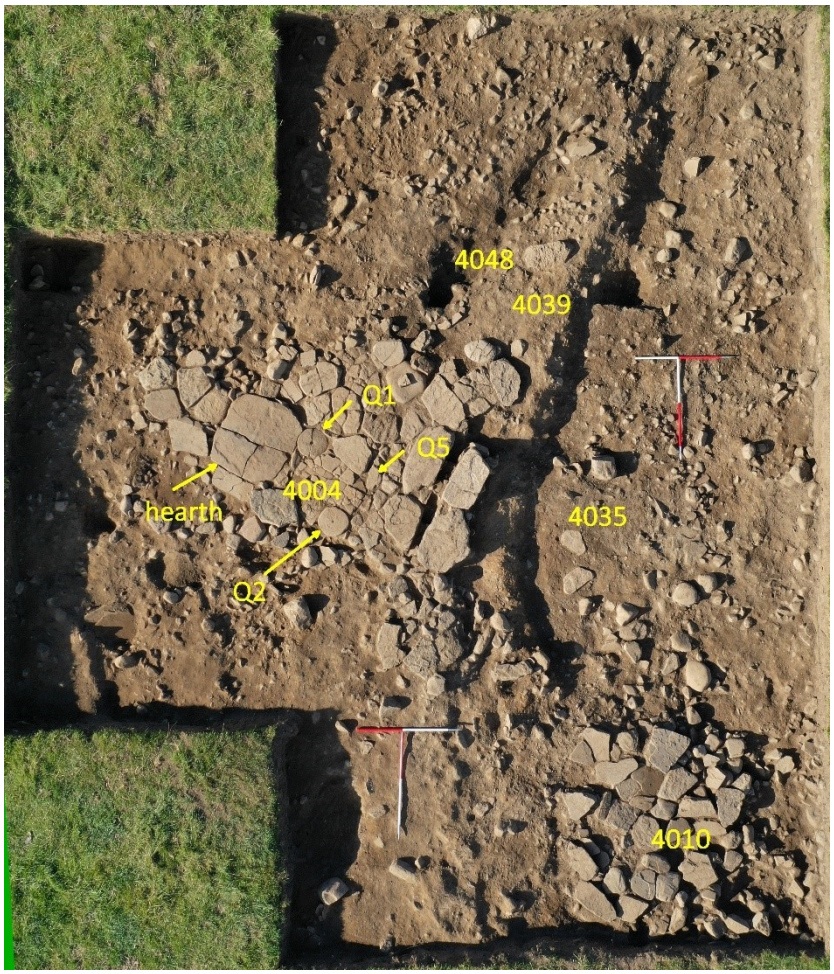

Figure 2.5: Drone photograph of Trench 4 on Day 3 (12 Aug 2024), after removal of backfill and geotextile. The remaining part of *4010* and paving *4002* have not yet been lifted.
High resolution drone and photogrammetry images of the trench are given in Appendix 6 (Section 14.1)

Under a small section of paving, to the north-east of Q2 was a small remnant area, *4051*, of a previous phase of paving. The eastern side of paving *4002* was supported on a low crude supporting wall where it crossed the fill of a shallow pit *4061* and verged on the edge of the scooped edge of the clay bank *4039*. Presumably this indicated that a previous phase of the paving had slumped into these features and so the paving was rebuilt with more support.

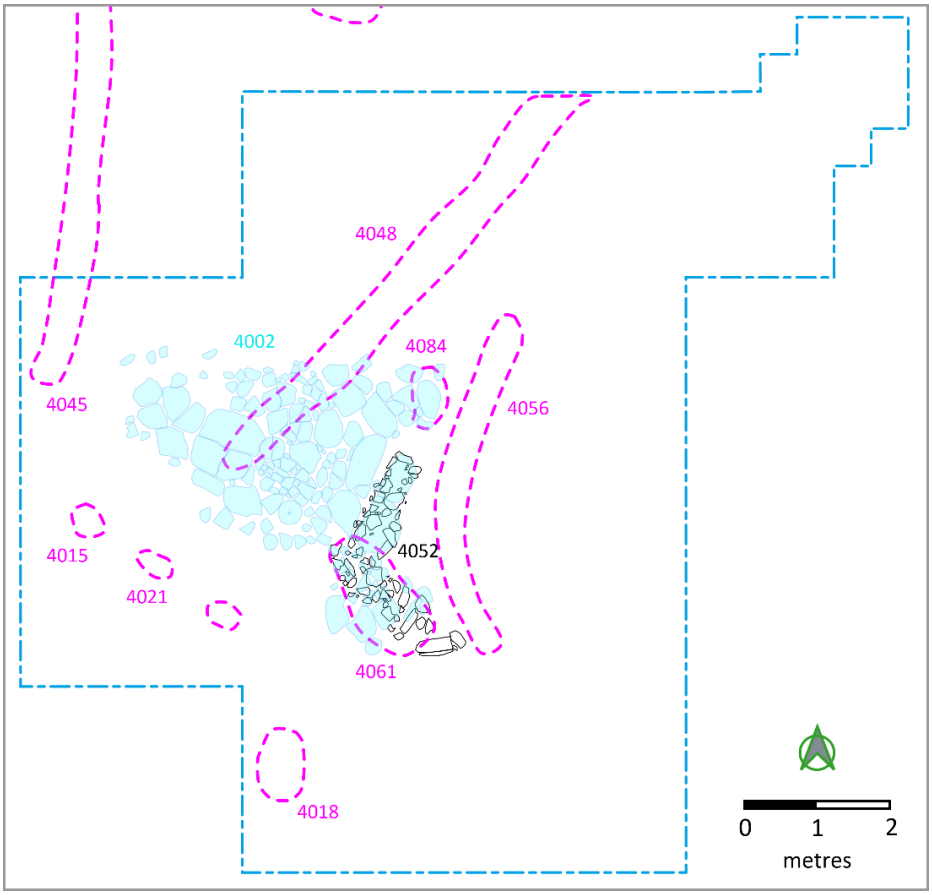

Figure 2.6: Plan of paving (in blue) and underlying structures. Support wall *4052* (in black). Pit *4061* and gully *4048* also underlie the paving. The scoop, with its drip-gully *4056,* is to the east of the paving.

Figure 2.7: Crude support wall *4052* under eastern side of paving *4002*.

Pits *4061* and *4084* were both cut into the clay subsoil of the bank beneath the paving. Both pits were shallow (20cm – 25cm), flat-bottomed and irregular. *4061* (180cm x 100cm) was larger than *4084* (100cm x 40cm). The fill of both pits was similar to the deposit above, *4050*.

Also underlying the paving was the south-west end of straight gully *4048* which ran north-eastward, extending beyond the trench margin. This had been partially excavated in 2023 (though not the section under the paving), a bulk sample (419) of the fill *4047* sent for palaeoenvironmental analysis, and a radiocarbon date of hawthorn charcoal in the sample obtained: 35 calBC. Profiles across the gully showed that its base did not slope downhill to the north-east, so it may have been more a boundary marker than a drain. A radiocarbon date, 40 calBC, was obtained in 2023 from the fill of the gully.

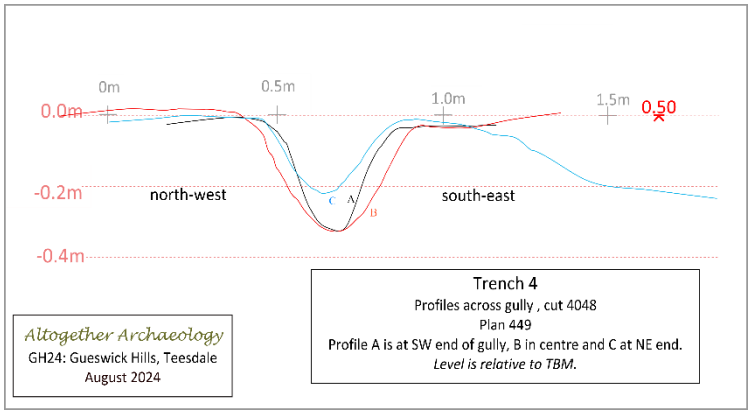

Figure 2.8: Profiles across the gully *4048*. Plans are catalogued in Appendix 9.

Excavation continued with the removal of deposit *4035* in the scoop, along with the patches of crude cobbling *4040* at its base and a small area, *4073*, of cobbles beneath one part of *4040*.

Figure 2.9: Photogrammetry image on Day 8. The curving line of postholes is partially excavated.

At the back of the scoop was curving shallow gully *4056*, only 50cm wide and 5 to 10cm deep at most. It extended for about 5m at the base of the rear slope of the scoop, cut into the underlying clayey material *4039* of the bank. A section was cut through the bank: this showed that the bank was probably natural, its form as a bank was produced by the cut of the gully *4048* to its west and scoop to its east.

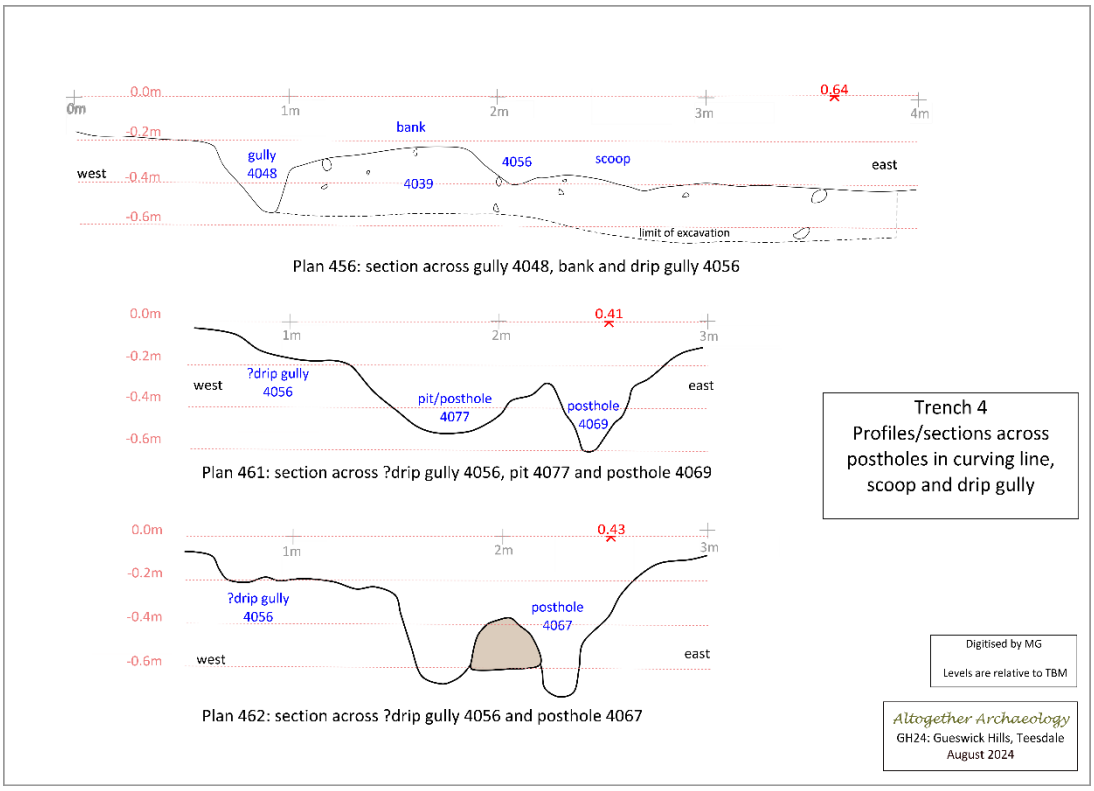

Figure 2.10: Section (upper) through bank and scoop. Profiles (middle and lower) of postholes in curving row.

This is shown in Figure 2.10. which indicates that the scoop is about 20cm deep, cut into the gently sloping natural surface. Also shown are profiles through the curving line of postholes in the base of the scoop, cut into the natural *4039*. These are roughly concentric with, and about 1.5m from, the gully *4056* at the rear edge of the scoop. There is also a pit/posthole *4077* between the gully and the line of postholes, as well as one posthole *4067* which extended towards the gully (see Figure 2.10).

These seven postholes (*4057, 4059, 4063, 4065, 4067, 4069, 4071*) were either round or slot-like (along the line of postholes), with depths ranging from 20cm to 50cm and widths from 25 to 55cm. Most had vertical, or near-vertical sides. The fill was dark and loamy, with frequent charcoal. The trench was extended to the north-east and a further three postholes (*4079, 4081, 4085*) on the curving line were found. These were smaller (only 15cm to 18cm deep). In all, the 10 postholes formed an arc 12m long (thus having an average spacing of 1.3m). In places the postholes appeared to be cut into a shallow gully.

A bulk sample (422) of the fill, *4058*, from posthole *4057*, gave valuable palaeoenvironmental results (full report in Appendix 7). The charcoal was “mainly oak stemwood (fragments up to 45mm), often twisted and distorted with radial cracks possibly because of high burning temperatures.” A range of other charcoals, along with grain (spelt and barley), coal, cinder, weed seeds and nutshells were also found in the fill. A hazel nutshell from the sample was radiocarbon dated to 60 calAD. A bulk sample

was also sent for analysis from the fill *4086* of posthole *4085.* This gave similar palaeoenvironmental results (although the two postholes are 10m apart) including stemwood charcoal of oak and ash.

Two in-situ fragments of vertical oak posts, about 10cm in diameter and 15cm long, were found next to each other in posthole *4081*. with two more pieces of oak post lying horizontally in the posthole, see Figure 2.15. Laboratory examination (Appendix 7) showed that the outer part of the oak posts had been burnt to charcoal. This was radiocarbon dated to 80 calBC. The inner part of the posts did not survive: it had rotted away and been replaced by a grey silty deposit; up to 17 outer rings were preserved as charcoal.

In addition to the curving line of postholes, a straight 10m line of twelve smaller postholes was found (thus having an average spacing of 90cm). It ran north-south, close to the eastern edge of the trench, crossing the curving line of postholes. In general, these postholes (*4088, 4090, 4092, 4094, 4096, 4097x3, 4099, 4101, 4103, 4105*) were smaller, averaging 15cm deep and 25cm wide, and rounder than those in the curving line.

A bulk sample (428) of the fill, *4087*, from posthole *4088* in the straight line gave similar palaeoenvironmental results to the samples described above taken from postholes in the curving row (details in Appendix 7). A hazel nutshell from the sample gave a radiocarbon date of 20 calAD. Pieces of charcoal from two other postholes in the straight line (*4096, 4105*) were both identified as hazel. That from *4096* was radiocarbon dated to 280 calBC.

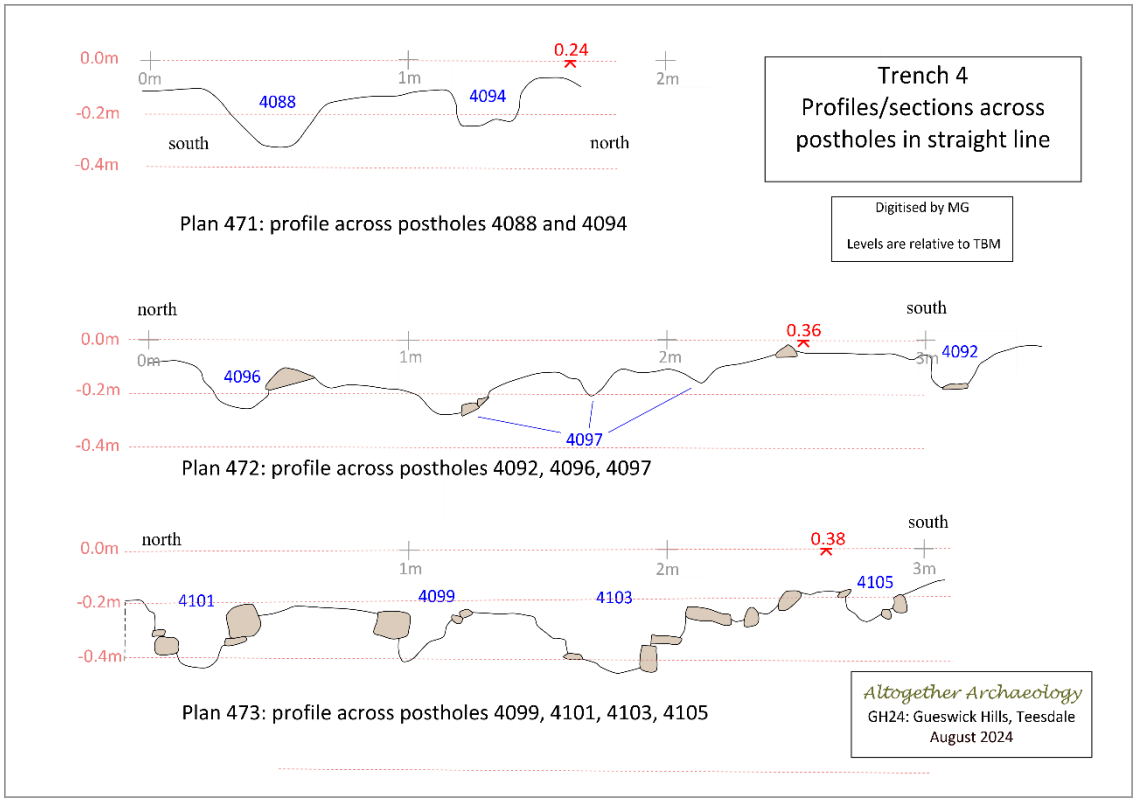

Figure 2.11: Profiles of postholes in straight line.

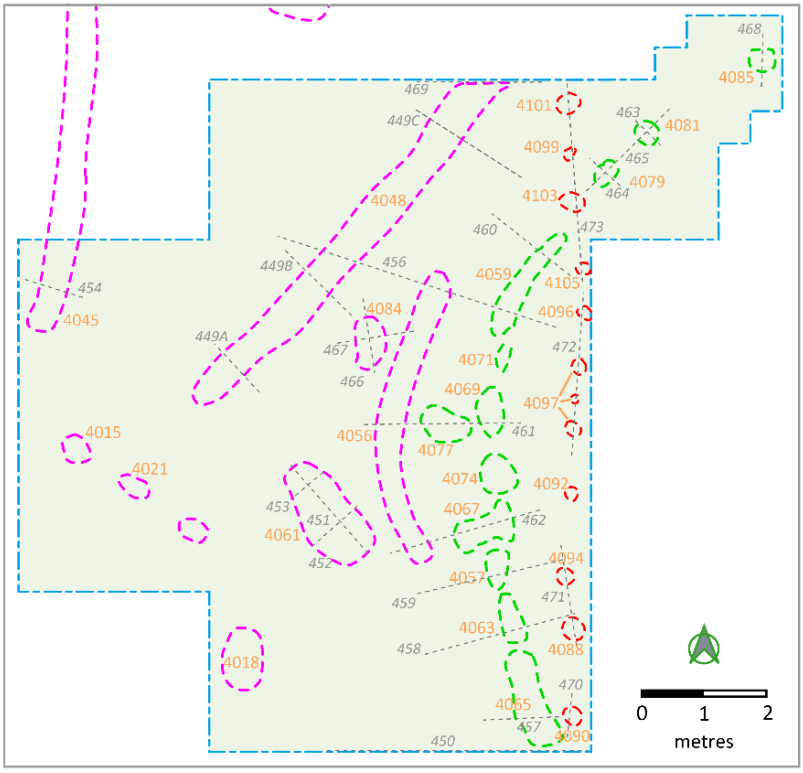

Figure 2.12: Plan of Trench 4 with profile/section drawings shown as black dashed lines (with 3-digit drawing numbers). The posthole lines are drawn in green (curving line) and red (straight line), with other features in purple.

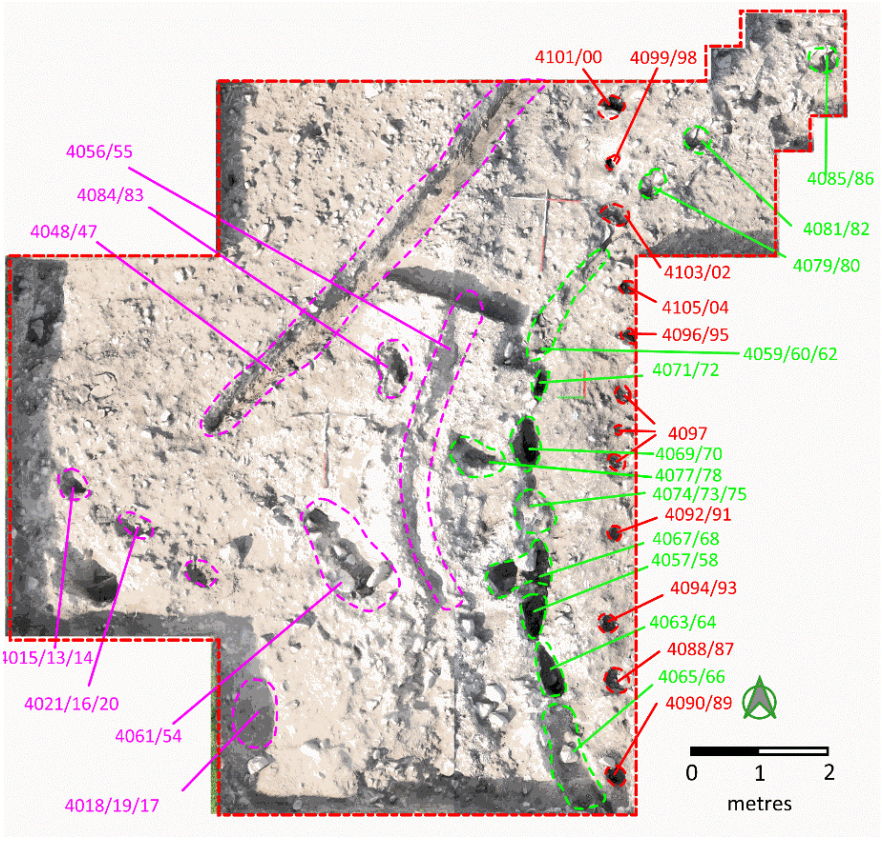

Figure 2.13: Final photogrammetry image. Here both the cut and fill context numbers are given.

Figure 2.14 (left): Posthole *4081*, before its fill *4082* was excavated. One of the vertical oak post remnants can be seen, mostly replaced by grey silt, in the centre of the frame.
Figure 2.15 (right): Posthole *4081* after excavation. The two posts are visible, centres 15cm apart.

Figure 2.16 (left): Postholes in the curving line: *4057* (nearest), *4063, 4065* (furthest).

Figure 2.17 (right): Postholes in the straight line: *Top*: *4099* (left), *4101* (right). *Bottom*: *4090.*

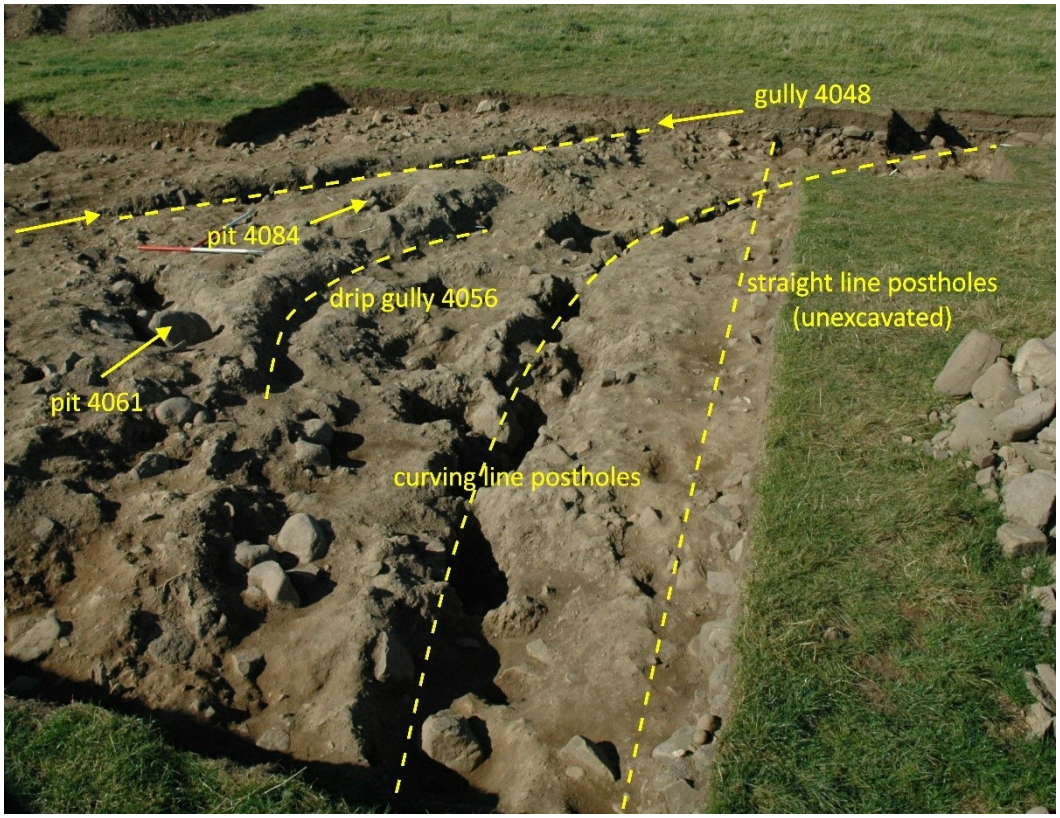

Figure 2.18: Trench 4 looking NNW. The straight line of postholes has not yet been excavated, but some can be seen as damp patches.

2.2 Trench 4: palaeoenvironmental samples and radiocarbon dates

Four palaeoenvironmental samples were analysed from Trench 4 in 2024. Radiocarbon dates were obtained for material from three of these. In addition, two radiocarbon dates were obtained from charcoal recovered from other contexts. Detailed results are given in the laboratory report (Appendix 7) and the Radiocarbon dating table (Appendix 5). In summary:

context	description	median radiocarbon date, rounded to decade	findings
4050	Taken from the deposit underneath the hearthstone in paving 4002	290 calAD	Bulk sample 421 (under hearth slab). Lab analysis: charcoal (hazel, Maloideae, birch, oak). Charred grains (spelt, barley), chaff (spelt, 6-row barley) weed seeds (bromes, heath-grass, cleavers, ribwort plantain, sedges). Small quantity of calcined bone, trace of fired clay. Radiocarbon date from hazel twig.
4058	Fill of posthole 4057 in curving row of postholes	60 calAD	Bulk sample 422. Lab analysis: charcoal (oak stemwood twisted and distorted with radial cracks possibly because of high burning temperatures, branchwood of ash, birch, alder, hazel). Small amounts of coal and cinder. Grains (spelt- and hulled barley). Chaff (spelt, a few barley including 6-row barley). Heather twigs, rhizomes, hazel nutshell. weed seeds (bromes, heath-grass, docks and vetches). Small fragments of calcined bone and fired clay, 1 small black flint). Radiocarbon date from hazelnut shell
4082	Charred oak post in-situ in posthole 4081 in curving row of postholes	80 calBC	Charcoal sample C4082V Species identified in labs as oak.
4086	Fill of posthole 4085 in curving row of postholes	-	Bulk sample 426. Lab analysis: charcoal (ash large branchwood/small stemwood and oak stemwood. birch, hazel). Indeterminate cereal grains, a spelt glume base, 3 hazel nutshell fragments. Weed seeds (heath-grass, ribwort plantain, wild radish, sedge, spike-rush, vetch. A small possible pot fragment, trace of calcined bone and fired clay.
4087	Fill of posthole 4088 in straight row of postholes	20 calAD	Bulk sample 428. Lab analysis: charcoal (hazel, oak and ash stemwood). Coal, cinder, barley grains, spelt glume bases, hazel nutshell, sloe stone, weed seeds (heath-grass, cleavers, redshank, ribwort plantain, sedges, grasses), burnt cracked stones, fired clay/abraded pot fragments, tiny fragments of calcined bone. Radiocarbon date from hazelnut shell
4095	Fill of posthole 4096 in straight row of postholes	290 calBC	Charcoal sample C10 Species identified in labs as hazel

2.3 Trench 4 finds

Full finds analysis will be carried out at the end of the project. An interim photographic gazetteer of the querns found to date is given in Section 5.

The 2023 and 2024 finds were largely as in previous years, with pot as before being of Iron Age wares (pre-Roman in the lower contexts). No finds were made in fills of the postholes. The number of potsherds found was far fewer in 2024 than in previous years, now that excavation is mainly in pre-Roman contexts. This may be because the settlement was relatively aceramic before the Roman period, but of course could be a survival bias due to lower durability of pre-Roman wares.

context	find	
4006	Two IA sherds	Voids and inclusions
4010	RB sherd: cream fabric	Thrown pot with dark slip coating both outer and inner surfaces
4010	Whetstone. SF4329	
4040	Three IA sherd	A rim (20cm diam) hand-built, plus two sherds from another earlier pot
4050	IA sherd and RB sherd (thrown)	Beneath quern beside hearthstone (Q1). IA sherd is crude. RB sherd is slip-coated
4050	RB rim sherd	10cm diam rim. Jug/mug? Slip ware. Fired below 800 C
4076	Iron javelin head. SF4326	Roman type. 2nd/3rd century. Found 20cm to the east of the centre of posthole 4085.
4076	Stone mould. SF4327	For pin?
4076	Mortarium sherd	By javelin head. Piercebridge cream ware.

The javelin head (illustrated below) is Roman-type, from the second or third century. It has been conserved by the Durham labs. Near to it was a sherd of a Piercebridge creamware mortarium.

A Romano-British sherd was found below one of the querns in paving *4002,* confirming that the paving (at least in its latest form) dates from the Roman period. As noted previously, pot from the lower contexts, in this case *4040*, is all pre-Roman.

Figure 2.18: The iron javelin head after conservation, and the mortarium sherd found beside it.

2.4 Trench 4 discussion

The trench is to be partially re-opened and extended in 2025, and previous Interim Reports have discussed the trench, so only a few additional matters of interest will be given here.

The environmental samples once again showed a wide range of species in the charcoal. The grain was mostly spelt wheat (with some barley). Other food crops included hazel nutshells and a sloe stone. Heather was frequently found, probably from the use of peat/turf as fuel. Coal and cinder was also noted once again, both from laboratory analysis and during excavation: this seems to be a frequent finding on this site and has been discussed in previous reports.

Querns (details in Section 5) are fascinating in the variety of their forms and the rock used. An expert report on the querns will be obtained at the end of the project. In Trench 4 (but not definitely as yet in Trench 9), the paving (*4002, 4004*) in which the querns are incorporated was clearly laid down in the Roman period, since Romano-British potsherds have been found beneath them. In addition, the two radiocarbon date ranges for the samples taken from directly under the paving (see below) are Romano-British or borderline Romano-British/Iron Age. This does not mean that the querns were manufactured in the Roman period: they may date from the Iron Age and have had a long period in use before 'decommissioning'.

No building outline has yet been identified, but it is now clear that the site had a long period of occupation: evidence from elsewhere on the site includes the 3rd century BC charcoal in the fill of the inner settlement ditch, the 1st century BC fill of the field ditch north of the settlement and the 1st century BC/AD fills of the palisade trench. The radiocarbon dates obtained so far for Trench 4 are shown in Figure 2.19. They range from 280 calBC (the fill of a posthole in the straight line) to 290 calAD (the deposit directly under the hearth). A long period of occupation seems likely, and the even spread of dates across more than five centuries make it likely that occupation was continuous.

Two dates are from material directly under the paving: 50 cal AD from beneath *4004* and 290 calAD from beneath *4002*. The paving is clearly multiphase: there are multiple layers in places, and the east side of *4004* has need to be propped up by a low crude wall where it has slumped into an underlying pit. Thus 290 calAD can be interpreted as the earliest date of the final replacement of the hearthstone. This is approximately the same as the date of the last Roman-period find on the site: a coin. How long occupation of the settlement continued after this is impossible to say, though the hearthstone did show signs of significant use (fire blackening and cracking). Later human activity on the site is suggested by the find in 2021 of an annular brooch of about AD 500.

Dates of lower contexts are essentially pre-Roman (i.e. before AD 72, though their ranges in some cases extend into the Roman period: see Appendix 5 for full details of the date ranges). The two lines of postholes are very different and cross each other so are unlikely to be contemporary. The straight line of postholes has two radiocarbon dates which don't have overlapping ranges: 280 calBC (hazel branch) and 20 cal AD (a hazel nutshell). The most likely interpretation is that these postholes date from an early phase in the settlement (the inner ditch fill has two dates, both 3rd century BC), with the nutshell intrusive.

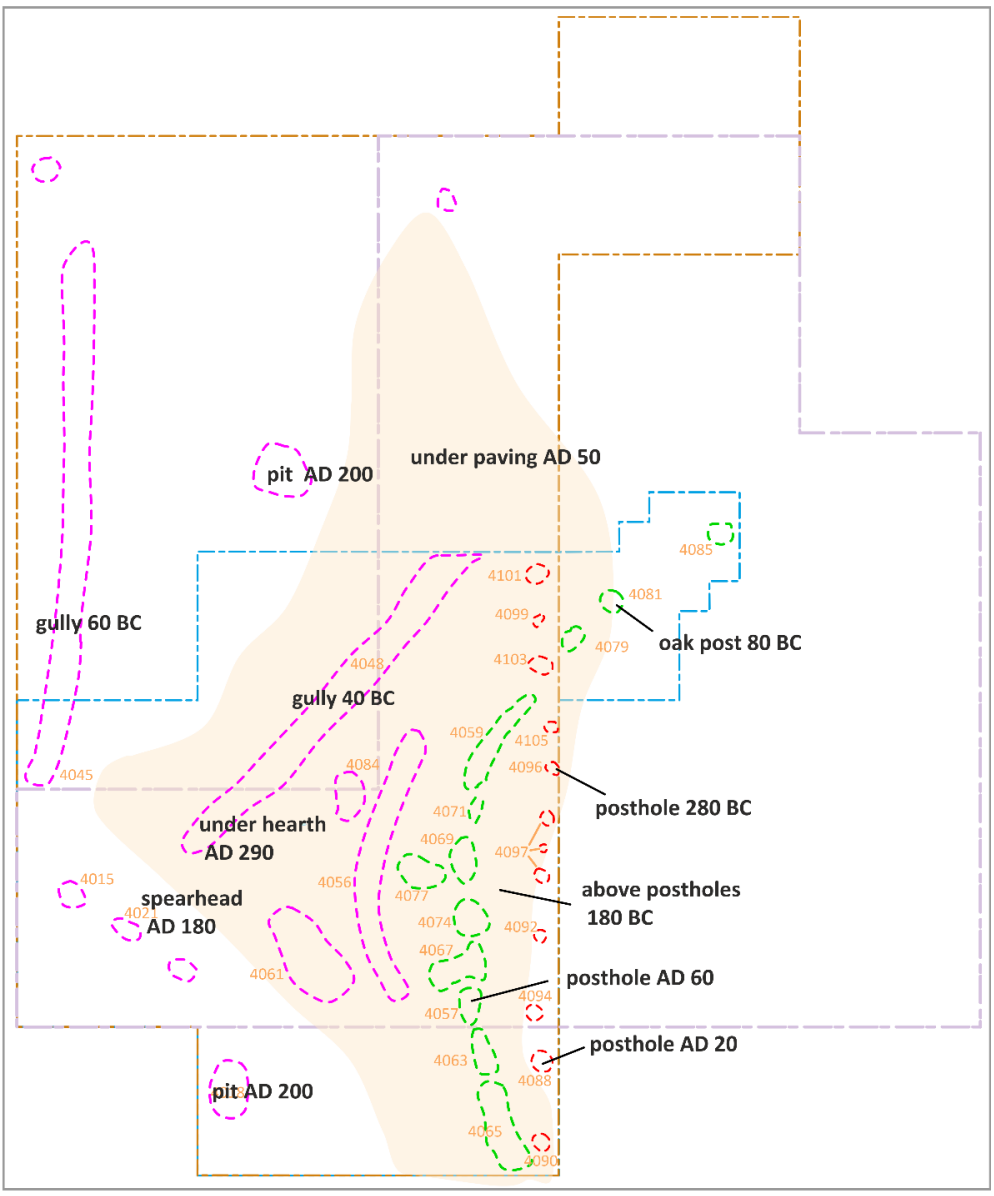

Figure 2.19: Radiocarbon dates obtained in 2024 and earlier years for contexts in Trench 4. These are median probability calibrated dates rounded to the nearest decade. The area of paving/cobbling is coloured buff and outlines of the 2022, 2023 and 2024 trenches are shown.
Details of the relevant date ranges are given in Appendix 5 (and previous Interim Reports)

The curving line of postholes is easier to interpret: oak stemwood charcoal was found in all three of the fills that were examined. One of the postholes still had 10cm diameter oak posts in situ (or at least their outer rings surviving as charcoal). The oak charcoal from another of the postholes was reported as showing evidence of high temperature burning. The radiocarbon date, 80 calBC of the outer layers of the burnt post can be taken as the date at which a substantial structure (possibly a roundhouse, discussed below) was constructed with oak posts. At a later date, it burnt down: either accidentally or as part of a decommissioning process. The nutshell dated to 60 calAD found in another of the postholes may represent the filling of the posthole at the destruction of the building.

Naively this might suggest the building was in use for about 140 years (80 BC to AD 60), however the dates have wide probability ranges. A formal calculation of the probable difference in dates (using the program Oxcal) gives the probability plot shown in Figure 2.20. This suggests a difference in dates of roughly 140 ± 110 years (2σ). The period of use of an Iron Age roundhouse would of course vary with

climate, ground conditions and construction method, but would generally have been well under a century, and some roundhouses may have only been in use for a single generation (Crone et al 2018).

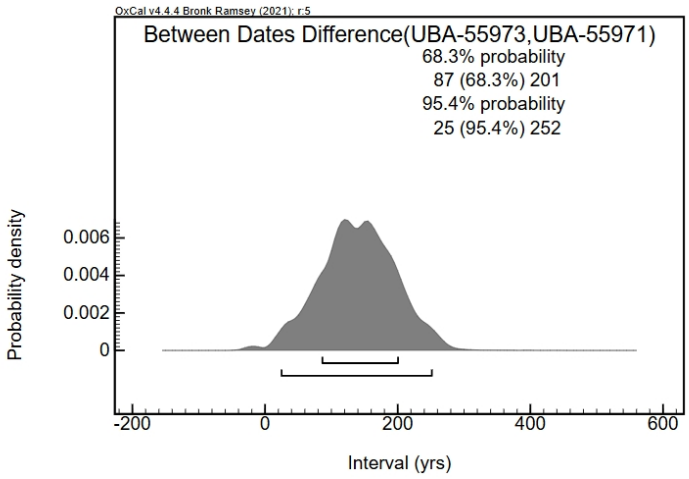

Figure 2.20: Probability plot of the difference in date between the radiocarbon dates of the oak post and of the nutshell, both found in postholes in the curving line.

The curving line of postholes are probably those of a building. The evidence for this, rather than them being e.g. a fence line is as follows.

- Substantial oak posts (10cm diameter) were found in one posthole.
- The postholes are on an arc, rather than the expected straight line for a fence.
- The posthole are, in some cases, slot-like and set in a gully, again not typical of a fence.
- External carbonisation of the in-situ posts suggest that they supported a building which caught fire (either accidentally or part of the decommissioning process). A fence is not likely to burn down!
- The arcing line of postholes are set in a scoop cut into the natural, with a drip gully around the rear of the floor of the scoop: typical of a roundhouse site.

The arc of postholes, if extended into a circle, would have had a diameter of 13m to 17m (the uncertainty is due to the small fraction of the whole circumference uncovered). See Figure 2.21.

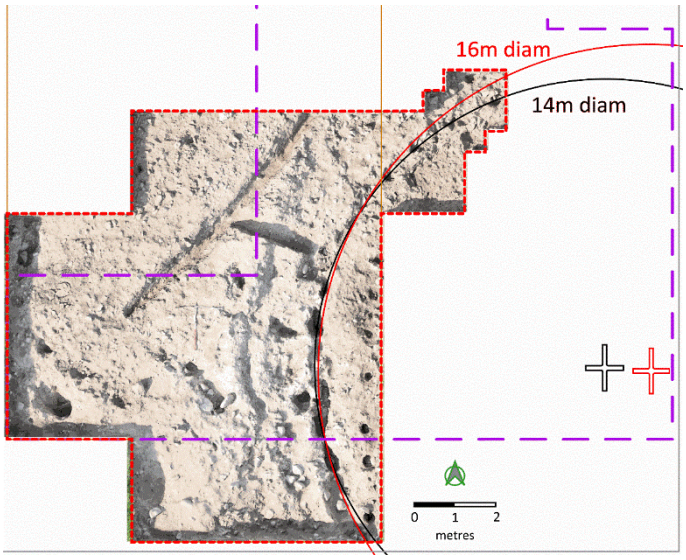

Figure 2.21: Photogrammetry image with possible extrapolation of the posthole arc into a circle.

This is at the upper end of the normal range of diameters for roundhouses; in North-East England roundhouses are normally 5m to 10 m diameter (see Figure 2.22 for an example)

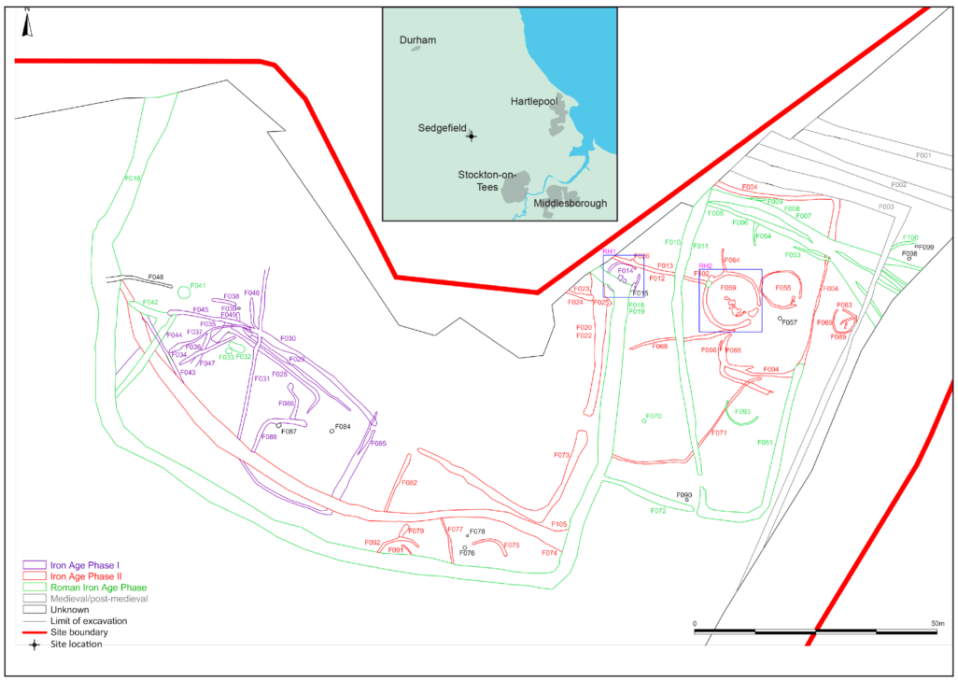

Figure 2.22: Plan of an Iron Age enclosed settlement near Sedgefield (from ARS 2018).

However, larger examples do exist in northern Britain, such as that shown in Figure 2.23. This was a 17m diameter roundhouse at Culduthel, near Inverness. It dated from 0 AD to 200 AD and was probably a metal-working workshop rather than a dwelling as there were few domestic finds. The gully is for the outside wall (not a drip trench), as shown by doorway position. This wall may have been of vertical wooden planks. At this site most roundhouses had entrances facing north-east (Hatherley and Murray 2021)

Figure 2.23 A large roundhouse at Culduthel (from Hatherley and Murray 2021).

3 EXCAVATION FINDINGS: TRENCH 8

3.1 Trench 8: excavation

See Appendix 1 for the context table and Appendix 6 for sequential high-resolution drone and photogrammetry images taken at intervals to record the trench.

This trench was on the hillock at the south-east corner of the plateau, about 150m from Trench 4. The hillock rises about 0.8m above the saddle that connects it to the main part of the summit plateau (OD 213.25m and OD 212.47m). The area was of interest as a small broken millstone had been found lying on the side of the hillock. See Figure 1.2 for the position of Trench 8 relative to the other trenches.

The 2023 Interim Report describes the geophysics findings on the hillock, and gives the results of the brief excavation of the summit area in Autumn 2023. In 2024 the trench was re-opened and extended to include the previously unexcavated corner areas, giving a 10m x 7m rectangular trench orientated approximately north-west to south-east. The trench covered all the summit area, plus (in the corners) the upper part of the sloping sides of the hillock.

In the 2023 excavation, groups of stones (about 20cm diam) had been found, one group overlying a 60cm-square padstone, presumably to support a vertical post. The rings of stones were noted to be arranged in two concentric circles around the padstone, at 1.6m and 3.2m radius. The groups of stones were placed on arcs of the circles, not the whole circumferences, being largely on the west side. There were also bands of smaller stones (5cm to 15cm diam) about 80cm wide, forming a crude incomplete rectangle, suggestive of the foundation of a small structure, about 6m x 3m.

Under one of the groups of stones *F8004* was a copper-alloy pilgrim badge showing the martyrdom of St Edmund. This has now been conserved and confirmed as dating from around 1500, probably purchased on a pilgrimage to Bury St Edmunds, and deliberately deposited under the stones.

Figure 3.1: *left:* **The St Edmund pilgrim badge after conservation at Durham University.** *right:* **the stones forming a ring over the padstone, *F9007.***

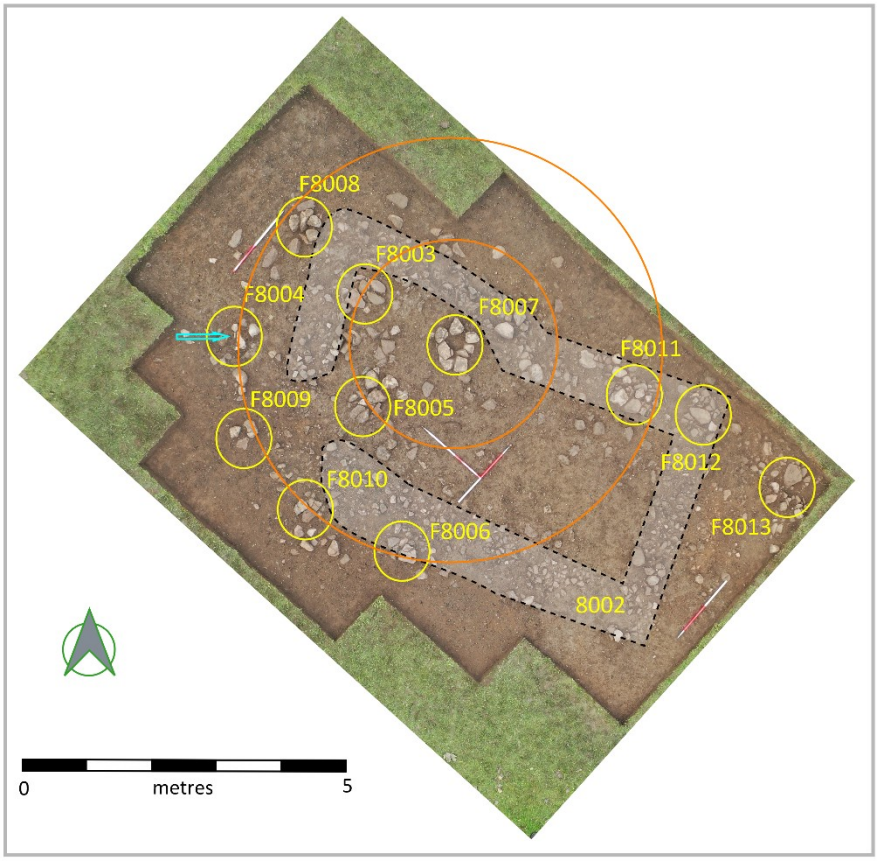

Figure 3.2: Annotated version of drone photograph at end of 2023 excavation. The find-spot of the pilgrim badge is shown (blue arrow). The band of stones is shaded and features (groups of stones) are circled. *Reproduced from 2023 Interim Report.*

The aim of the 2024 excavations were:

- To check if there were any more groups of stones in the previously unexcavated areas.
- To see if the groups of stones lay directly over the natural, or were over post-holes or padstones.
- To clarify the phasing? Were the stone groups later than the bands of stones?
- Similarly, to clarify whether the band of stones *8002* were just single layers of stones lying on the natural.
- To take a palaeoenvironmental sample from the floor area inside the possible building
- To retrieve finds and stratified charcoals, both of which were lacking in the 2023 excavation, so that the structure could be dated and its use determined.

Figure 3.3: Trench 8 after re-opening, cleaning and extending. The groups of stones have been removed, but the padstone is still in place.

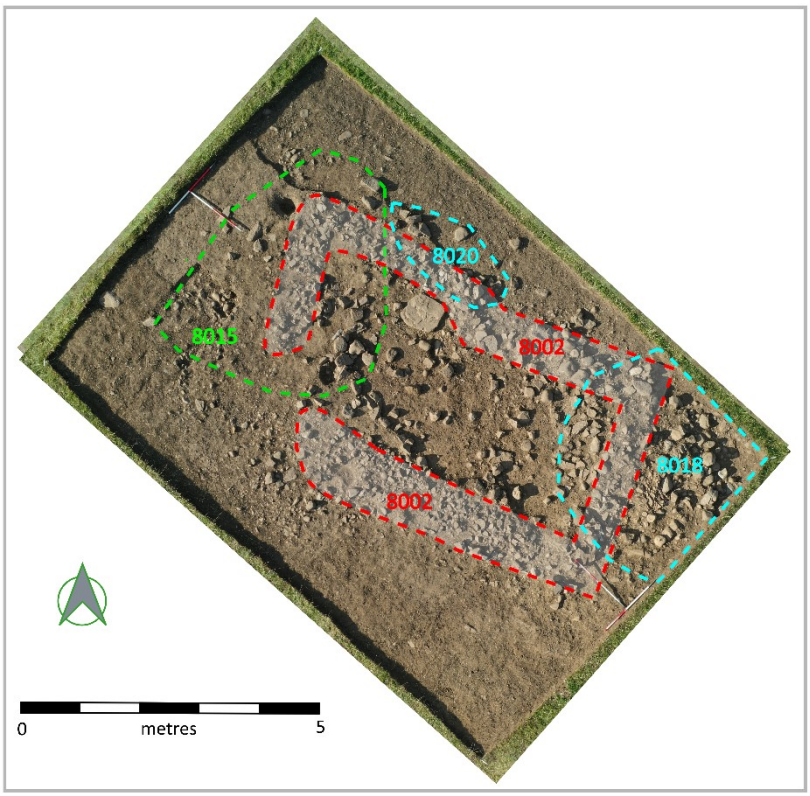

Figure 3.4: Same drone image as previous figure, annotated with areas of stone spreads. Cobble layer *8015* underlies *8002.* Spread of stones *8018* and *8020* overlie *8002.*

Figure 3.5: Trench 8 after removal of padstone, stone groups, and bands of stones. A cut has been dug across the trench to examine any lower contexts.

Figure 3.6: Group of stones *F8011* after sectioning. Beyond it, a cut has been dug across the trench (north-east to south-west).

After cleaning, a section through group of stones *F8011* was excavated. This confirmed that this group of stones lay on top of the band of stones *F8002* so was contemporary or later. A cut dug across the trench found no lower structures: the bands of stones *8002* consisted of only a single layer of stones, lying on the natural. Cleaning down confirmed that a gravelly soil layer *8017* extended throughout the internal area of the rectangular structure. Above it was a thin layer of silty brown soil *8019*. In the gravelly layer were occasional small particle of coal and charcoal, but no finds, apart from a group of unworked pieces of tree branch *8024*. A palaeoenvironmental sample (801) was taken of *8017.*

The padstone with its overlying circle of stones *F8007* was lifted. Under it was a thin gravelly context *8025*, presumably a levelling layer for the padstone, but no posthole. Beside it was about 10 small white stones *8016* in an arc, part of *8002*, with a clear area 20cm diameter internally. The stones were angular pieces of limestone, up to 10cm across. They contrasted with most of the other stones of *8002* which were brown sandstone and more rounded. On excavation, there was no evidence they were part of any structure and there was no underlying posthole. The nature of this feature is unclear. Possibly it a previous post setting, with pieces of limestone set around it, chosen for their angularity.

Figure 3.7: *left:* **Arc *8016* of white pieces of limestone, to the north-west of the padstone. Also visible in drone photograph of trench, Figure 3.3. A post setting?**
right: **Patch of fine gravel *8025* under padstone.**

Figure 3.8: Pieces of unworked tree branch *8024* embedded in gravelly surface *8017.*

The structures (*8002* and stone groups *F8003, F8004, F8005, F8008*) at the western end of the trench lay on top of an irregular uncompacted cobble-rich layer: possibly this was to level up this end of the site. On top of *8002* were spreads of rubble (possible demolition debris, associated with the robbing of the site for stone for field-walls) near the padstone (8020) and in the eastern corner of the trench (*8018*), tumbling done the slope to the edge of the trench.

3.2 Trench 8: palaeoenvironmental sample and radiocarbon date

One palaeoenvironmental sample (801) was analysed from Trench 8 in 2024. A radiocarbon date was obtained for material from this. Detailed results are given in the laboratory report (Appendix 7) and the Radiocarbon dating table (Appendix 5). In summary:

context	description	median radiocarbon date, rounded to decade	findings
8017	Compacted gravelly layer in side structure.	1350 calAD	Bulk sample 801. Lab analysis: charcoal (hazel except one piece elm), hazel nutshell, coal, cinder. No grain. Radiocarbon date from hazel twig.

3.3 Trench 8: discussion

The possibility that this was a medieval windmill was discussed in the previous (2023) Interim report. The hypothesis is that the padstone supported the central post of the windmill, which would have been about 20cm in diameter if the ring of stones surrounding it are undisturbed. The groups of stones would then have settings for diagonal bracing timbers set in two rings around the central post. If the structure was stabilised by horizontal timbers linking the bracing timbers to the central post, then the windmill would have been rigid and not need its timbers to be set into substantial postholes. Windmills of this size weren't fixed structures and could be disassembled for re-siting, or even moved intact to a new site (see Figure 3.9).

Figure 3.9: "Moving the Windmill" unknown painter 1797. An extreme example of moving a windmill in Sussex by ox-power.

The implied diameter of the base (6.4m) is similar to that of excavated examples where the base is formed of two 5m to 6m long timbers laid horizontally in a cross. (ASDU 2013, Boulter 2013). Great Gransden Windmill is probably the oldest surviving windmill in England: it is 17th century, possibly as early as 1612 (OAE 2016). This has horizontal base timbers 6.5m long (see Figure 3.10). Note that there is no central support under the main post since most of the weight of the mill is carried on the diagonal bracing timbers, with the base timbers stopping the trestle from spreading.

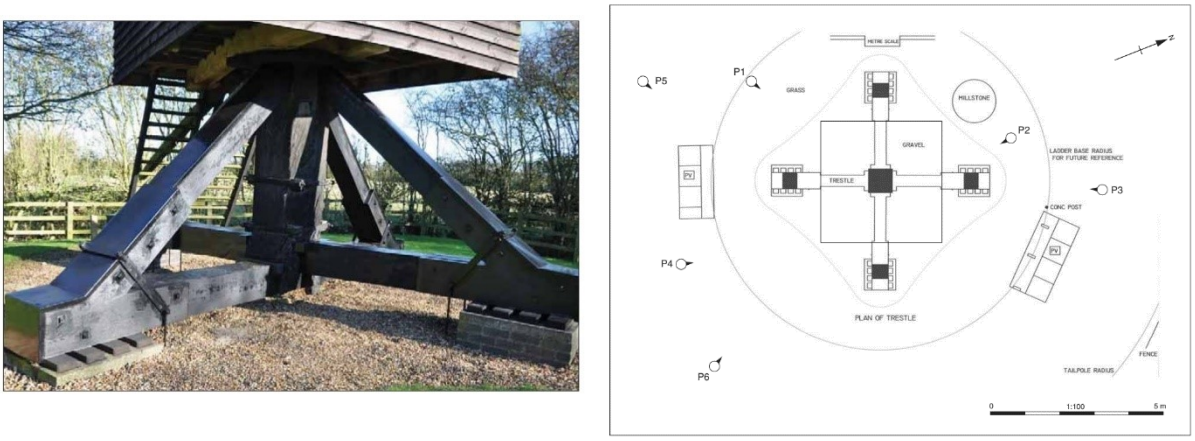

Figure 3.10: Great Gransden mill supporting structures. Reproduced from OAE 2016.

Figure 3.11: Illustrations of medieval windmills that lack horizontal supporting timbers on the ground.

Most contemporary illustrations of windmills show this form of support: two horizontal timbers in a cross. However, some show only the diagonal timbers (Figure 3.11), in keeping with our excavation results.

What new information has the 2024 excavation given?

1) The continuing lack of domestic (or any other) artefacts and of hearths, makes it unlikely that any domestic or industrial structures lay on the hillock. In addition, the lack of foundations or significant postholes make it unlikely that any substantial agricultural building was sited there. Logically, near a windmill, some hard-surfaced areas would have been needed so carts could stand and be unloaded. There would also have been a need for some kind of shelter, if only temporary, to keep rain off sacks of corn awaiting grinding and of flour awaiting collection. The mill itself would have been too small to house these comfortably, and extra weight inside the mill would have made turning the mill more difficult. There would have been paths to access the mill as well. The features seen in the excavation are likely to be such structures, but relating to an earlier windmill on the site (as implied by the radiocarbon date (see below).

2) The paleoenvironmental sample (Section 3.2, Appendix 7) also was almost barren of domestic and agricultural items. The lack of grain might seem surprising for a windmill site, but fresh grain shallowly buried on a well-drained site would not survive long term: it would leave no trace. Preservation needs charring/drying/burning, or by anaerobic preservation in a pit or ditch.

3) The radiocarbon date from charcoal in the sample was 1350 calAD (2σ range: 1300-1400). This is well after the introduction of windmills to England (*c* 1200), but is significantly before the earliest likely date of the pilgrim badge (1450). Thus, it probably relates to an early phase in use of the site, presumably a previous version of the windmill.

4) The setting of small angular pieces of limestone, close to the north side of the padstone, is probably a post-setting belonging to a previous phase (it's unlikely to be a later phase as surely the padstone would have been re-used). As with the padstone, the likely diameter of the post is about 20cm.

5) No beam slots were present so it clearly doesn't have the 'classic' medieval postmill structure, laid on horizontal beams. However, as shown above, illustrations exist of postmills without horizontal beams on the ground. They would probably have been present, but above ground level. As explained, they don't have to be on the ground as their main role is to stop the structure spreading, not support its weight. This is demonstrated by the common pattern of the horizontal beams being supported only at their ends. Having the horizontal beams higher up has the advantage that they can be shorter.

A structure of this type is most likely to be a windmill or (possibly) a beacon. The finding of a millstone adjacent to it makes it very likely that this is indeed a medieval post-windmill. All the bracing struts would not necessarily belong to the same phase; there may only have been 4 or 6 on the outer ring at any one time.

The diameter of the post of only 20cm does seem rather small, but may be an underestimate if the surrounding stones have fallen inwards. Of course, the post doesn't have to be massive as most of the weight is carried on the diagonal supporting timbers. There are no intact surviving medieval windmills and contemporary illustrations won't be scale-correct, so this kind of detail is uncertain.

There is an interesting comparison between roof trusses and the supporting structure of post-mills. The classic form is essentially the same as a kingpost truss, so medieval carpenters would have been familiar with techniques to joint it together; maybe that was why it was favoured. Windmills were usually constructed and owned by the landlord, not the peasants, so the craftsmen that built them would have been accustomed to constructing high-status buildings.

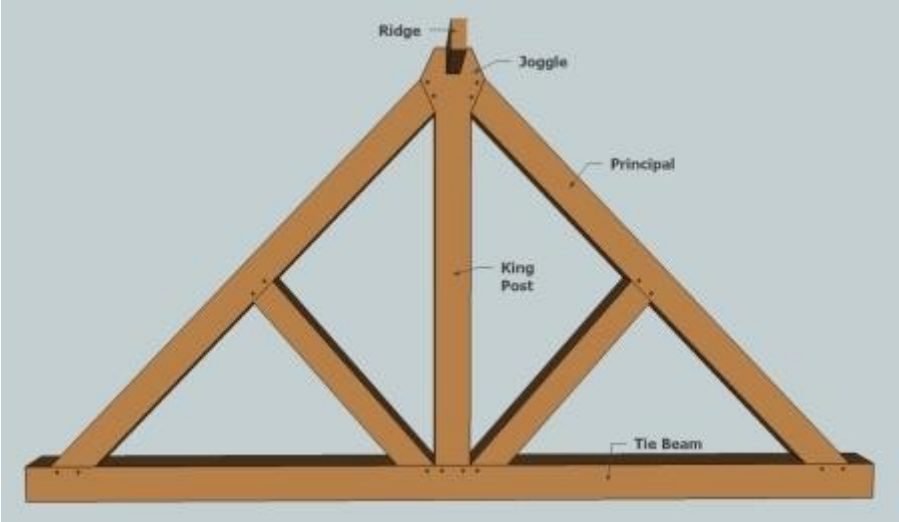

Figure 3.12: King-post roof truss as often used in medieval buildings.

Possibly there is a selection effect that skews our knowledge about the "classic" form of medieval windmill, since those built in the hypothesised Gueswick form are more difficult to recognise in surveys and excavations as they lack the distinctive "cross" of the horizontal timbers.

The copper-alloy pilgrim badge found under the stones of *F8004* was probably deliberately deposited, perhaps to bring good luck for the new structure. It shows signs of wear and one of the archer's heads is broken off. The badge has been conserved. Information from Ben Westwood (Finds Liaison Officer)

This is a copper alloy pilgrim badge, depicting the martyrdom of St Edmund in the 9th century. Edmund stands in the centre bound, and possibly tied to a tree, with archers to either side with bows drawn. St/King Edmund was king of East Anglia c.855-869, killed in battle (possibly...) by Danish archers, part of the 'Great Heathen Army'. They aren't common. In general copper alloy pilgrim badges are less common than lead (alloy), and there's only around 10 or so St. Edmunds like this one on the PAS database. The record for PUBLIC-731EA7 () cites an excavated example from Chaucer House, London and published in detail by Robinson (1989) (https://archaeologydataservice.ac.uk/archives/view/london_arch/contents.cfm?vol=06:03). The same record also asserts that the known examples are so similar that they feel they are made from the same mould (I'm not going to comment on that!). The date generally given is later 15th – mid 16th century (c.1450-1530), and again copper alloy pilgrim badges tend to be on the later side.

Although the badge dates from *c.* 1500, it may have been kept by the owner for many years before deposition, so this phase of the structure could be several decades later than the badge's manufacture.

4 EXCAVATION FINDINGS: TRENCH 9 (ROB YOUNG)

4.1 Trench 9: excavation

See Appendix 1 for the context table and Appendix 6 for sequential high-resolution drone and photogrammetry images taken to record the trench at intervals.

Trench 9 was laid out to examine a section through what appeared to be a 'hut scoop' to the south of Trench 4. Trench 9 was to the west of the area initially examined in 2019, which produced Iron Age pottery and a spindle whorl. An unexcavated baulk, approximately 1m wide, was left between the 2019 and 2024 trenches. Initially an area 11m x 4m was opened, but later extended westwards by 1m, giving a rectangular 11m x 5m trench orientated approximately north-south (see Figure 1.3 for trench location).

Topsoil *9000* was removed across the whole of the trench to a depth of c. 15-20cm. to reveal *9001,* a medium brown silty soil containing rounded and angular cobbles, ranging from 12x8cm to 6x4cm in overall size (Figure 4.1). Spot levels were taken on *9001* (Figure 4.2) and *9001* in turn was removed to reveal *9002* at the south end of the trench. This context consists of large, rounded cobbles (some bigger than 20-25cm) in a dark brown, silty soil, placed at the base of the slope of the 'scoop' in the area where it levels out.

At the north end of the trench *9001* overlay *9003*, what appeared to be a set, bedded, surface, constructed from flat slabs and large rounded cobbles set in a mid-brown soil which also produced many small cinder fragments (Figure 4.3). Spot levels were also taken on *9002* and *9003* (Figure 4.4).

After levelling, *9002* was removed onto *9004*, a layer of smaller rounded cobbles, the majority ranging from 10-12cm to 15-20cm in size set in a dark brown soil matrix. Some larger examples (30-55cm) were also observed (Figure 4.5).

9004 overlay *9008*, an orange/brown soil layer, on the upslope edge of the scoop, but downslope 9004 was removed onto an easily differentiated layer of cobbling c. 10-30cm in size, set in a dark brown soil *9009* (Figure 4.8). Again, on the upslope section of the scoop *9009* appeared to overlay *9008* and after levelling (Figure 4.6) *9009* came down onto *9010* and was bedded into it. *9010* was a dark brown, fine silty soil with much charcoal flecking. It also contained coal, animal teeth and animal bone. (Figures 4.11-4.13). Not all of *9010* was removed in 2024 but it may overlay 9*008;* however, excavation stopped at this point. See Figure 4.25 for a diagram of the stratigraphic relationships of the contexts in this trench.

At the north end of the trench *9001* was removed to reveal *9003*, what appeared to be another well laid surface of slabs set in a mid-brown, silty, soil again containing cinder fragments (Figure 4.3). *9003* was levelled (Figure 4.3) and excavated onto *9005*, an area of large, rounded stones, marking what appeared, again, to be a properly laid surface at the top (northern end) of the trench (Figure 4.5). *9005* was levelled and removed to reveal a smaller spread of slabs *9007* (Figures 4.5-4.8) which was also levelled and which in turn overlay *9011,* another seemingly well-set surface in the north-east corner of the trench, spreading westward. Not all of *9011* was removed in 2024. (Figures 4.7-4.11)

A small pit *9013* was recorded, cut into *9011*. This was sub-circular in shape, c. 50cm in diameter and with shallow sides some 25cm deep. The cut for the pit held *9012*, a mid-brown, silt/sand/loam soil with much stone admixture. This was sampled for environmental/dating purposes (Figures 4.9-4.13). Where *9011* was removed it overlay *9014* a mid-brown soil that in turn appeared to overly *9006*, the scoop edge soil (Figure 4.13). Excavation ceased at this point.

Figure 4.1: Contexts *9001, 9002, 9003*.

Figure 4.2: Unreduced levels on *9001*. Backsight unreduced 1.95m. *9002* and *9003* emerging.

North is at the top of trench images.

High resolution drone and photogrammetry images of the trench are given in Appendix 6 (Section 14.3).

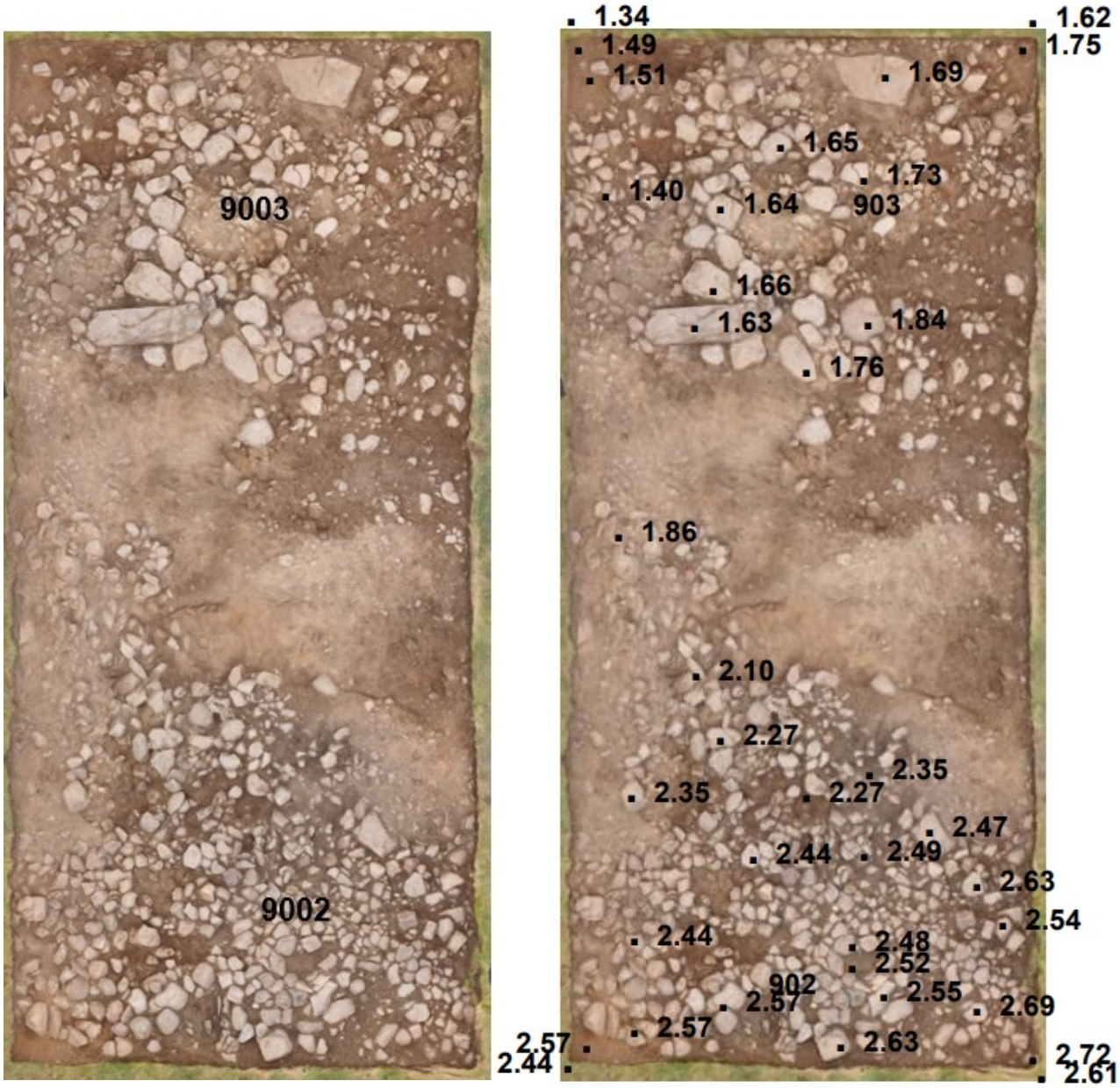

Figure 4.3: ***9002*** **and** ***9003*****.** The trench has been extended westward by 1m since the previous figure.

Figure 4.4: Unreduced levels on ***9002*** **and** ***9003*****. Unreduced backsight: 1.85m.**

High resolution drone and photogrammetry images of the trench are given in Appendix 6 (Section 14.3).

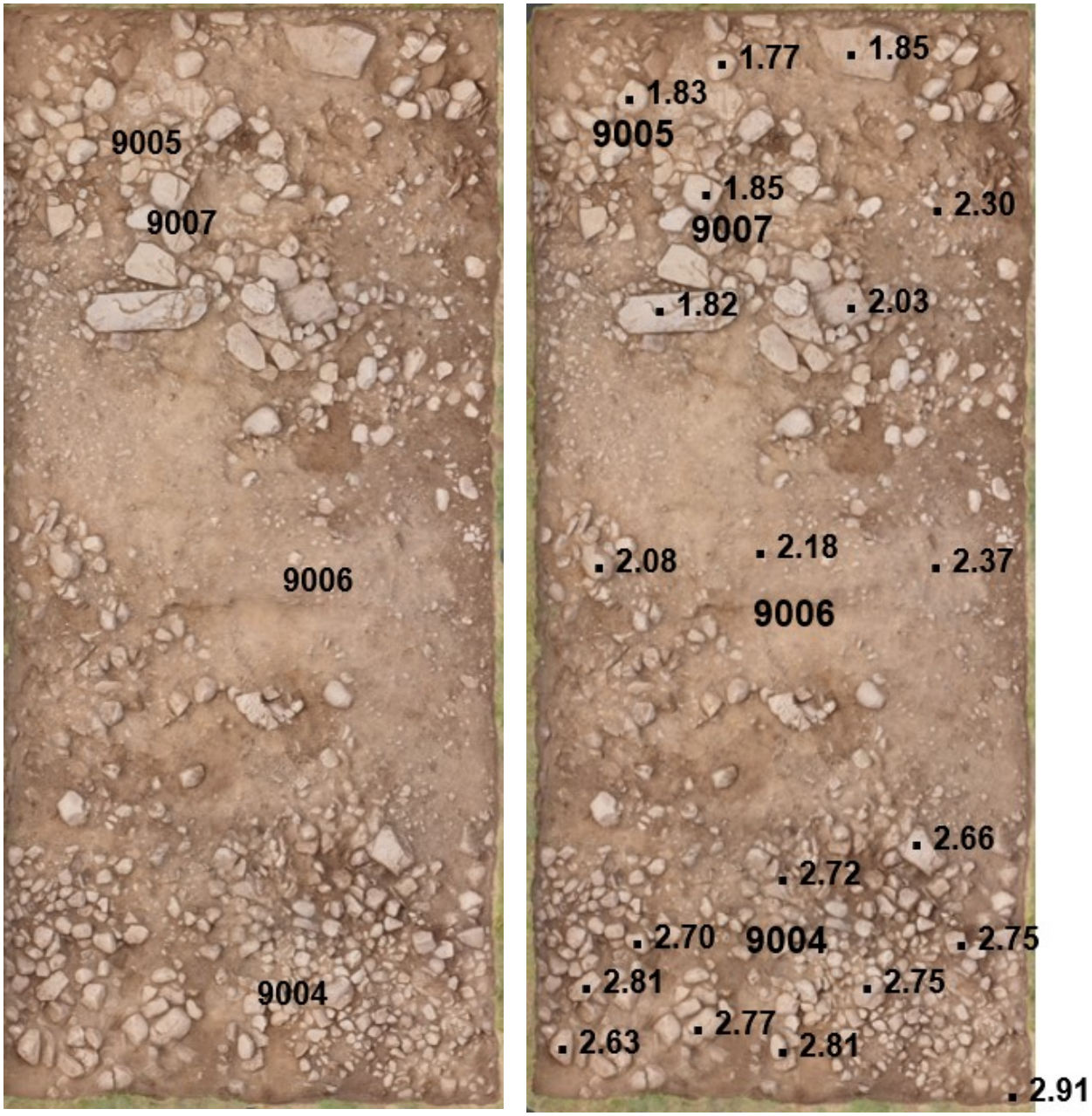

Figure 4.5: ***9004, 9005, 9006*** **and** ***9007*****.**

Figure 4.6: Levels on ***9004, 9005, 9006 and 9007*****. Unreduced backsight: 2.04m.**

High resolution drone and photogrammetry images of the trench are given in Appendix 6 (Section 14.3).

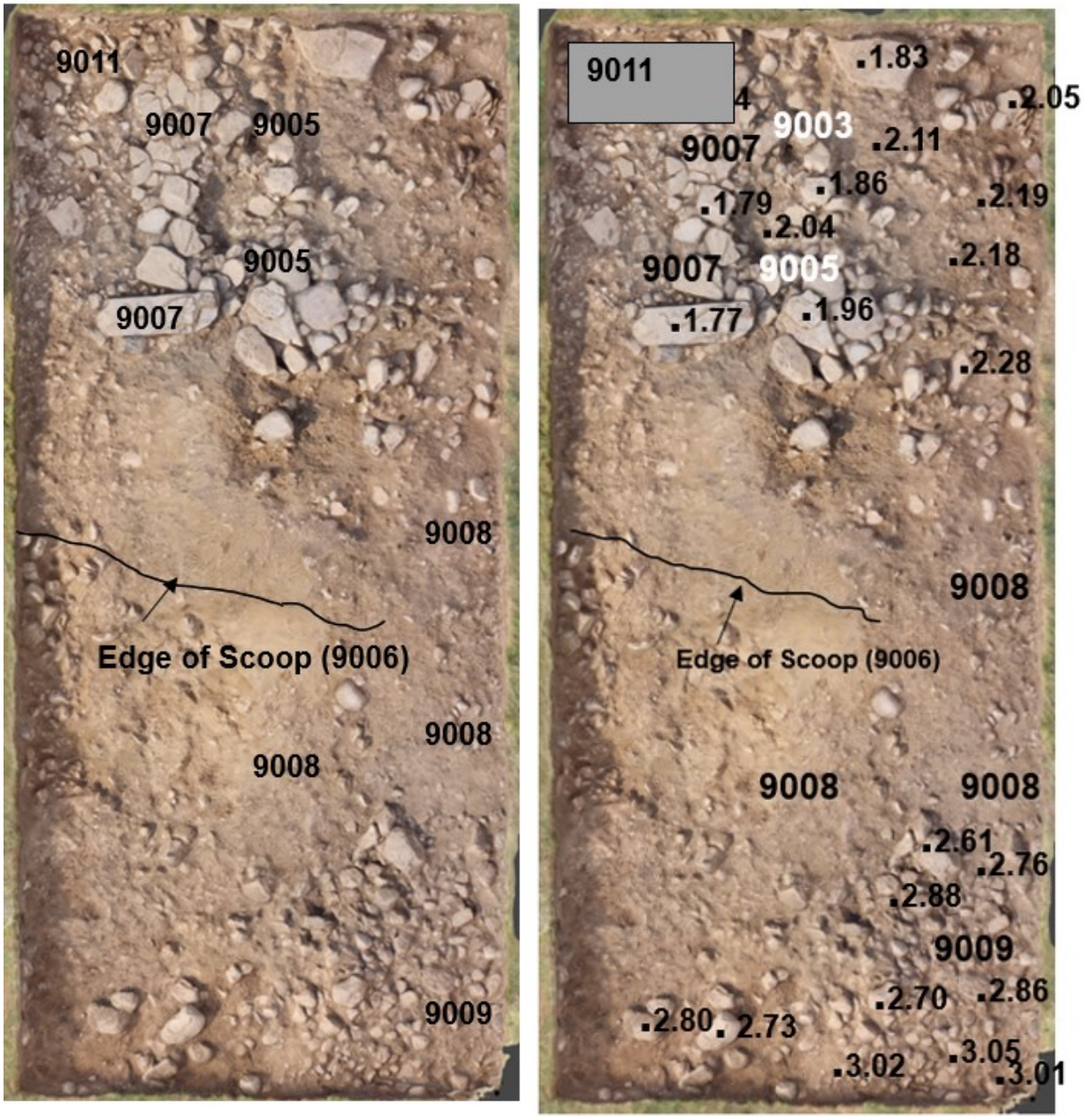

Figure 4.7: ***9005, 9006, 9007, 9008, 9009, 9011.***

Figure 4.8: Unreduced levels on ***9003, 9005, 9007, 9008, 9009*** **and** ***9011*****. Unreduced Backsight: 1.99m.**

High resolution drone and photogrammetry images of the trench are given in Appendix 6 (Section 14.3).

Figure 4.9: ***9006, 9009, 9011, 9012, 9013.***

Figure 4.10: Unreduced levels on emerging *9011, 9006, 9009 9012, 9013*. Unreduced backsight 2.04m.

High resolution drone and photogrammetry images of the trench are given in Appendix 6 (Section 14.3).

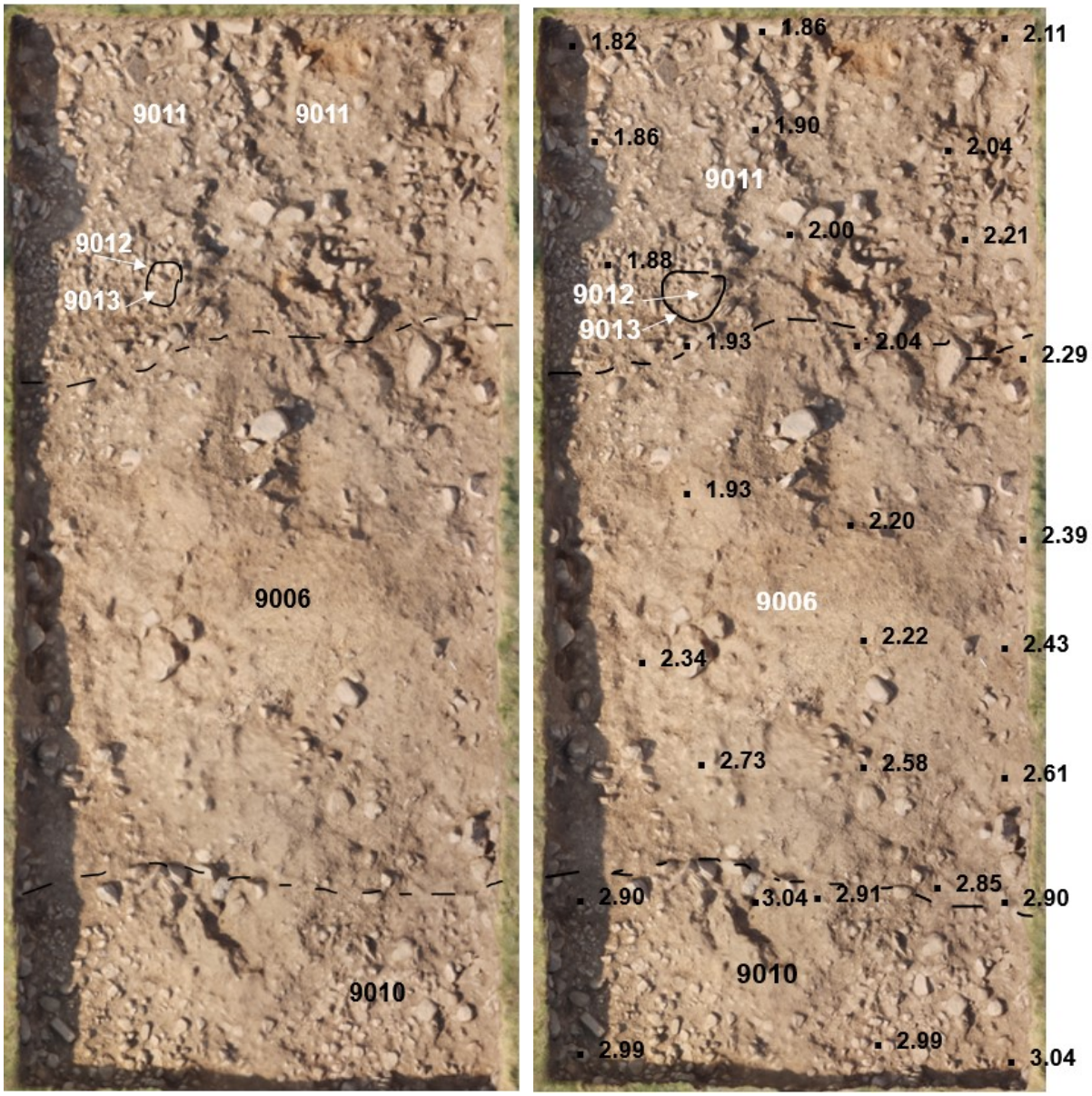

Figure 4.11: ***9006, 9010, 9011, 9012, 9013*****.**

Figure 4.12: Unreduced levels ***9006, 9011, 9010, 9012, 9013*****. Unreduced backsight: 1.97m.**

High resolution drone and photogrammetry images of the trench are given in Appendix 6 (Section 14.3).

Figure 4.13: At end of 2004 season of excavation. Contexts *9011, 9014, 9013, 9006, ?9008, 9010* unlevelled as excavation not complete.

High resolution drone and photogrammetry images of the trench are given in Appendix 6 (Section 14.3).

Figure 4.14: Excavation of *9005*. Looking south.

Figure 4.15: Excavation of *9005* onto *9007*. Looking south.

Figure 4.16: General levelling *9007, 9005, 9003*. Looking west.

Figure 4.17: Context *9004* exposed. Looking north-east.

Figure 4.18: Context *9008* under excavation. Looking north-west.

Figure 4.19: Pit *9012/9013* looking south. Context *9010* is under excavation at south end of trench.

Figure 4.20: Pit (cut *9013* and fill *9012*) being sampled for environmental data.

Figure 4.21: Pit, cut *9013* as excavated at end of 2024 excavation season.

4.2 Trench 9: finds

The querns found in the trench are illustrated in Section 5. Find positions of them were as follows:

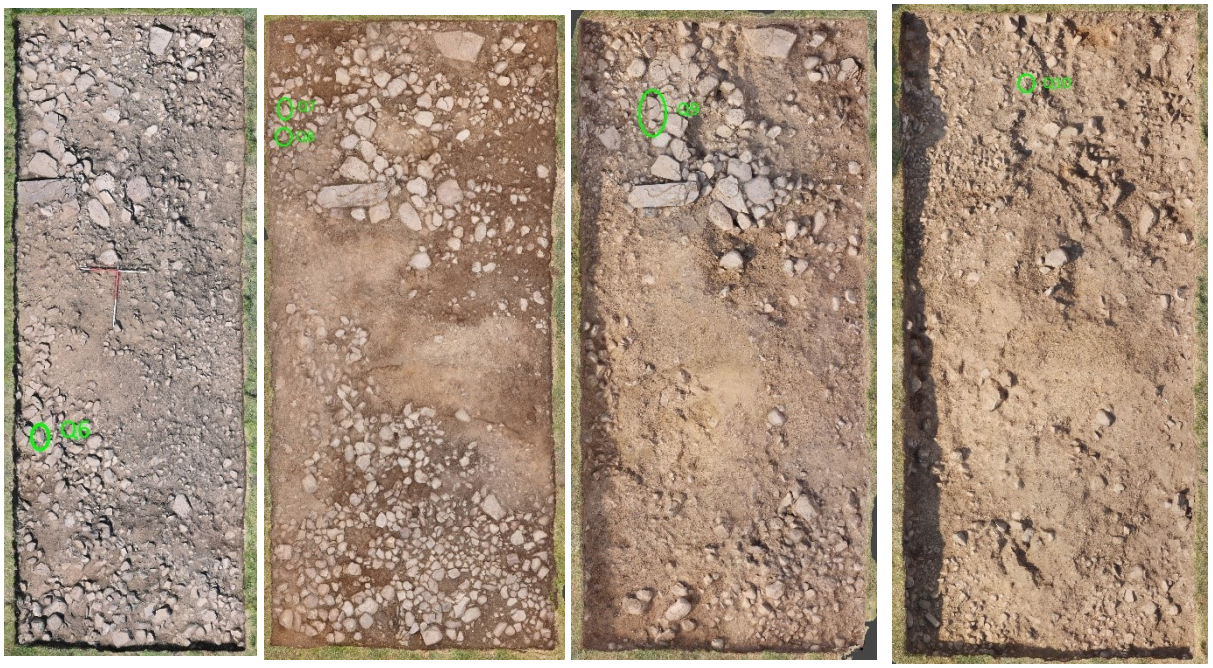

Figure 4.22: Find positions of the querns in Trench 9, from left:
Quern 6 (image of 24 Aug)
Querns 7 and 8 (image of 26 Aug)
Quern 9 (image of 28 Aug)
Quern 10 (image of 30 Aug)

Figure 4.23: Photographs of the querns in situ: (top) Querns 6 and 7, (bottom) Querns 8, 9 and 10.

In addition, Tony Metcalfe has supplied the following information on work carried out so far in relation to pottery and small finds (see table below). Two pieces of potential Iron Age pottery were recovered from the trench topsoil *9000*, while *9001* and *9003* have both produced mortaria fragments (one of which from *9001* may be Piercebridge Cream Ware). *9003* also produced a shale bracelet fragment (Figure 4.24). *9005*, beneath *9003*, also produced 2 fragments of Piercebridge Cream Ware mortaria.

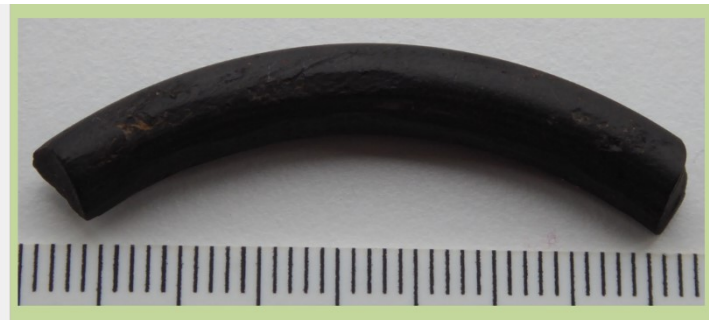

Figure 4.24: Shale bracelet fragment from context *9003.*

Contexts *9004*, *9008* and *9010* all from the lower, southern half, of the trench, in the scoop 'filling', have also produced Iron Age/Romano-British pottery.

GH24 T9 9000	IA pot	Rim 18cm diam
GH24 T9 9000	Early IA pot	
GH24 T9 9001	Romano-British mortarium	Piercebridge cream ware
GH24 T9 9003	Romano-British mortarium	
GH24 T9 9003	Iron /age shale bracelet SF 901	7cm diam, 5.87mm width
GH24 T9 9004	Romano-British pot	local clay, hand built, incised line
GH24 T9 9005	2 pieces of mortaria	Piercebridge cream ware 24cm diam
GH24 T9 9008	IA pot	Rim 22cm diam, lots of voids
GH24 TP 9008	IA pot	low fired - below 800C
GH24 T9 9010	3 pieces pot a)RB Grey Ware b)RB c)RB	a) Rim of thrown pot 7cm diam b) Rim of thrown pot 20cm diam c) Rim of hand-built pot 13cm diam

Thus, several of the contexts produced mortaria sherds (as found in Trench 4) indicating a Roman era date. However, the lowest contexts either yielded no sherds or (in the case of *9008*) Iron Age sherds. This is indicated in Figure 4.25, which also shows the stratigraphy. The diagram also shows which contexts the querns were found in: four out of five were found at the north (upper) end of the trench. The other one was in a spread of rubble in the south (scoop) end.

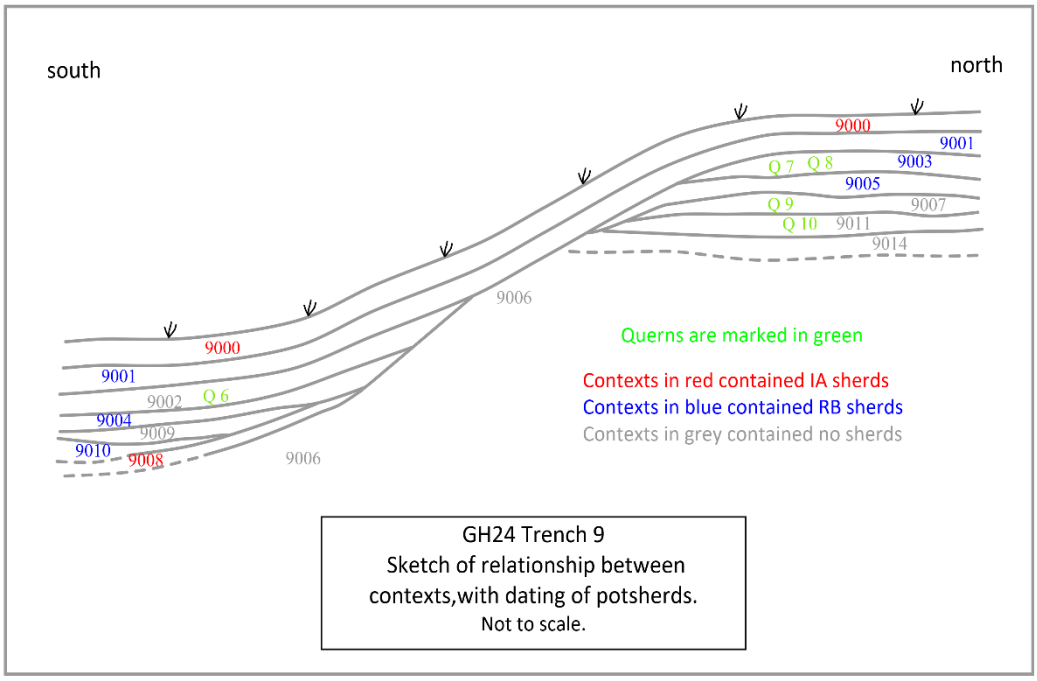

Figure 4.25: The relationship between the contexts, with the querns and the dating of sherds found in each context.

4.3 Trench 9: discussion

As the trench is going to be re-opened, at least partially, in 2025, a detailed discussion isn't appropriate.

The finds are similar to those in Trench 4: with potsherds that are clearly from the Roman era (e.g. mortaria), but with some typical of the pre-Roman Iron Age. In the lowest context, *9008*, all sherds were of this probably (but not necessarily) earlier type.

The upper (north) end of the trench had damage patches of flagstone/cobble paving along with much rubble. There were several rotary querns. Thus, this area was similar to (but probably had sustained more damage from ploughing etc) the paved areas in Trench 4.

The middle (sloping) part of the trench had no paving and less rubble. A comparatively empty band, 2m wide, crossed the trench diagonally north-west to south-east (see e.g. Figure 4.3); this contained no larger stones, just the spread of coarse gravel and small cobbles (few over 10cm) of layer *9001,* over the underlying subsoil of the cut of the slope, *9006*. This may have been a pathway between structures: it possibly continues the line of the gravelled ?track seen in Trench 2 (excavated in 2021). However, in Trench 2 the gravel layer was thicker and there were kerbs (not seen in this trench).

The lower (south) end of the trench was suspected to be the floor of a scoop, possibly the site of a building. It has yet to be excavated fully, so this is still uncertain. No postholes or gullies have been found: they may lie under a deposit, *9010*, which shows much evidence of occupation (charcoal and

butchered animal bones). No flagstone paving was present in this area, but there are spreads of rubble, some of which may be from demolition of structures higher up the slope. No material has been radiocarbon dated from this trench, but it seems likely that, as in Trench 2, the higher contexts are from the Roman Iron Age, with lower deposits, such as *9010,* being from late in the pre-Roman Iron Age.

5 QUERNS – A PICTORIAL CATALOGUE

The querns found at Gueswick now total 11 in number (two of which are uncertain). They have a remarkable variety of shapes, types of stone, and degree of preservation. Once the project has finished, the querns will be reported on as a group by an expert. In the meantime, here is a summary.


Q0. In the palisade trench. An unfinished blank.


Q1 In the paving of Trench 4. Context *4002*. An upper stone. Conical with vertical flange.


Q2 In the paving of Trench 4. Context *4002*. A lower stone. Disc-shaped.


Q3 In the paving of Trench 4. Context *4004*. A lower stone. Hemispherical with a high vertical flange. Coarse-grained rock.


Q4 In the paving of Trench 4. Context *4004*. A lower stone. Hemispherical. Fine-grained rock..


Q5 In the paving of Trench 4. Context *4002*. Half of an upper stone. Conical. Two attempts at hole drilling!

Q6 In rubble in Trench 9. Context *9002*. Disc-shaped. Less than half of an upper stone.

Q7 In rubble in Trench 9. Context *9003*. A quarter of a disc shaped upper stone, with raised rim around hopper.

Q8 In rubble in Trench 9. Context *9003*. Less than a quarter of a domed disc-shaped stone. Not a definite quern.

Q9 In irregular paving Trench 9. Context *9007*. Half of a thin disc-shaped upper stone.

Q10 In irregular paving in Trench 9. Context *9011*. Part of rim of thin disc-shaped stone. Not a definite quern.

6 ACKNOWLEDGEMENTS

AA thanks the farmers, Alison and Stephen Lamb of Doe Park, for their interest and assistance. Anne Jowett, Mike Keenan and Mike Walton, and other members of the Swaledale and Arkengarthdale Archaeology Group, https://swaag.org, gave their time and skill so that we could use SWAAG's magnetometry equipment and expertise. Ben Westwood gave information on the pilgrim badge.

The County Durham Foundation and Tees-Swale: Naturally Connected (a joint programme of the Yorkshire Dales National Park and the North Pennines National Landscape) gave grants towards the excavation costs. CBA Yorkshire, the Royal Archaeological Institute, and the Architectural and Archaeological Society of Durham and Northumberland helped to cover post-excavation costs.

Members of AA who took part in the 2024 excavations, giving their hard work and expertise:-

Margaret Ablett, Bob Abram, Jane Abram, Audrey Battersby, Chris Battersby, Richard Betts, Liz Bregazzi, Steve Brown, Belinda Burke, Lorraine Clay, Bethany Cochrane, Dot Coe, Andy Coupe, Merry Coupe, Oscar Coupe, Steve Cunningham, Anne Deacon, Bella Deacon, Stephen Eastmead, Hilary Fawcett, Greg Finch, Stuart Findlay, Kay Fothergill, David Gray, Martin Green, Colin Hays, Emily Hayes, Jan Hicks, Brian Henderson, Stephen Hutchinson, Karen Heyes, Ron Heyes, Martin Jones,

Anne Jowett, Sue Lee, Barbara Metcalfe, Tony Metcalfe, Alan Newham, Andrew Newton, Sheila Newton, Lesley Parratt, Rob Pearson, James Pease, Jacquie Pennington, Amanda Pinkney, James Pinkney, Joan Raine, Michael Rainsbury, Dave Ranner, Michelle Scott, Vince Scott, Unity Stack, Brian Stirk, Janet Stirk, Luke Sweetan, David Taylor, Elaine Vallack, Rachael Vallis, Peter Waters, Sue Wilson, Rob Young.

A total of 443 days were worked by members. 103 non-members visited the excavation, including 9 accompanied children taking the opportunity that AA offered to “Be an Archaeologist for a Day”.

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8 APPENDIX 1: CONTEXT TABLE FOR ALL TRENCHES

This is the context table for the 2024 trenches (T4, T8, T9). The initial digit of the context is the trench number.

Trench 4 contexts up to and including 4049 were allocated in previous years' excavation of this trench. Contexts from 4050 were allocated in the 2024 excavation.

Trench 8 contexts included those allocated in both years (2023 and 2024) excavation of this trench.

Trench 9 was only excavated in 2024, so all contexts are from that year.

The details given of charcoal and bulk samples are brief summaries, see Appendix 7 for full details of the laboratory analysis including species identifications.

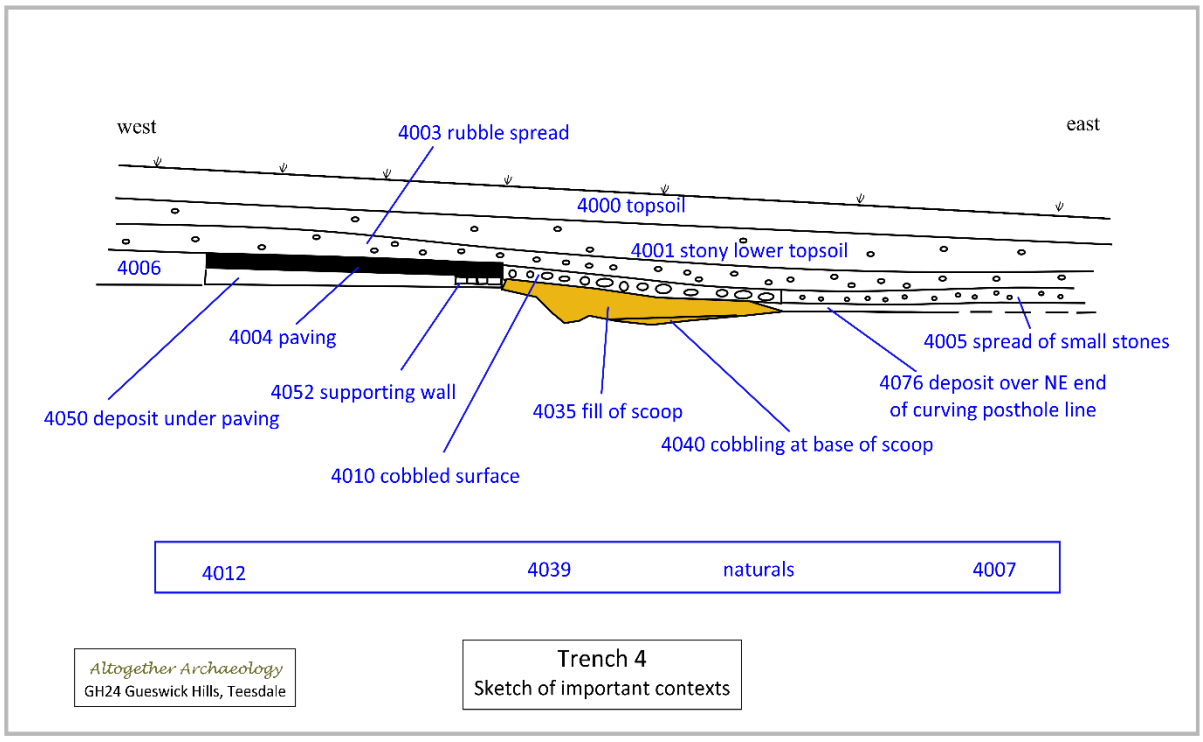
Plans/sections are listed in more detail in Appendix 9, only the plan number is given here.

Small finds are described in more detail in the the text. Only significant ones are listed here for each context.

NB plant species: *maloideae* is e.g. hawthorn or apple, *prunus* is e.g. blackthorn, *salicaceae* is e.g. willow or alder.

For Trench 4, more information regarding contexts and their stratigraphic relationships will be available from the proposed 2025 re-opening and extending of the trench.

A provisional sketch of the relationship between the main contexts of Trench 4 is given here. Note that the natural in different parts of the trench have been given three different context numbers. The lower, pre-Roman, contexts are shaded brown.



Context #	Type	Trench	Is above	Is below	Adjoins	Description
4000	Topsoil	4	4041 4001	-		Topsoil over all of trench. Friable, mid-brown silty/sandy loam with a few small angular stones. Small finds 2022: lead spindle whorl, pottery (modern, Tees Valley, Piercebridge, Catterick, Iron Age coarse ware, mortarium), slag, Fe nails, glass bangle fragments (R-B), whetstone, flint flakes
4001	Deposit	4	4003 4011	4000 4043		Soil beneath *4000* over all trench. Loose, friable matrix similar to topsoil *4000*, but with frequent gravel up to 10mm, mostly angular. Small finds 2022: pottery (modern, Tees Valley, medieval, Piercebridge, Catterick, Iron Age coarse ware, mortarium), slag, cinder, Fe nails, clay pipestem, flint flakes Charcoal samples 2022: C1, C2
4002	Surface	4	4035 4050 4051 4052	4003	4010 4006	Flagstone floor surface in SW part of trench. Includes two quern stones (Q1 and Q2) used as flagstones, and a hearthstone: centrally blackened and fractured. Its S side is a laid cobble surface. See photographs and plans. Small finds 2022: pottery (Romano-British)
4003	Deposit	4	4002 4004 4005 4006 4007 4008 4010 4012 4017 4025 4028 4031 4036 4037 4046	4001 4011		Cobbles (rounded and some angular) over surface *4002* and rest of trench. In matrix of mid-brown friable silt. Stones 8cm to 20cm. Forms uncompacted layer 10cm to 15cm thick. Small finds 2022: lead spindle whorl, whetstone, pottery (Romano-British, Black Burnished, Catterick, mortarium, Iron Age coarse ware), cinder, coal, slag, copper slag, Roman coin (circa 300AD), penannular brooch (1st century AD?), worked flint/chert flakes Charcoal samples 2022: C3, C6, C8, C10, C12, C14, C17
4004	Surface	4	4022 4026 4029 4049	4003	4010 4027	Flagstone surface under *4003* in NW part of trench. Includes two quern stones (Q3 and Q4) used as flagstones. See photographs and plans. Small finds 2022: flint flake Charcoal sample 2022: C19
4005	Deposit	4	4007 4009 4076	4003		Small angular stones, 3cm to 10cm. Underneath the spread of larger cobbles *4003* in the E side of the trench. Appears featureless spread. Three areas of it excavated to show natural *4007* beneath. Small finds 2022: pottery (Iron Age coarse ware, mortarium), coal, slag, cinder

Context #	Type	Trench	Is above	Is below	Adjoins	Description
4006	Deposit	4	4012 4013 4016	4003	4002	Yellow/brown clay/silt. Beneath *4003*. To W of floor surface *4002* in SW part of trench. Not compacted. Includes small medium rounded & and angular stones. Overlies probable natural *4007*. Small finds 2022: pottery (Iron Age coarse ware), glass bangle fragment (R-B), spearhead (circa 180AD), Fe nail Small finds 2024: two sherds Iron Age pot: Charcoal sample 2022: C21a (hazel), radiocarbon dated to **180 calAD**
4007	Natural?	4		4003 4005 4009	4039 4012	Yellow/brown silty clay with sand and some angular (broken) stones and larger rounded stones. East side of trench. Below *4005*. Natural? Equivalent of 4012 Small finds 2022: chert flake
4008	Surface	4	4012	4003		Irregular flagstone surface to E of surface *4004*. Not closely laid. Set in mid-brown silty clay. Possibly a pathway from building floor *4004*. Small finds 2022: corroded copper blob, copper slag?
4009	Deposit	4	4007	4005		Rounded patch of small to medium cobbles at N end of trench. Is in a hollow in the ground surface (seen on lidar image). See photos/plan in 2022 Interim Report. Small finds 2022: none
4010	Surface	4	4035 4047 4053 4076	4003	4002 4004	Well-bedded well-laid cobble surface between flagstone floors *4002* and *4004*. Stones 10cm to 25cm. runs from W edge of 2022 trench eastwards. Small finds 2022: none Small finds 2024: whetstone, RB sherd of thrown cream fabric pot with internal and external slip coating Plan/section 450
4011	Cut	4	4003	4001		Linear cut forming a straight gully in stones *4003*, filled with *4001.* Beam slot? 40cm-62cm wide, Max depth c13cm Plan/section 410

Context #	Type	Trench	Is above	Is below	Adjoins	Description
4012	Natural?	4		4003 4006 4008 4015 4018 4021 4023 4024 4026 4027 4029 4030 4033 4038 4045 4048	4007 4039	Mid yellow-brown gritty clay loam under cobbles *4003* and flagstones 4004 In centre & W side of 2023 trench. 25% small stones. Equivalent to 4007 in the E part of trench. Probably part of natural 4039. Bulk sample 405 (where overlain by Quern 3). Not analysed
4013	Deposit	4	4014 4015	4006		Soil fill of ?posthole cut 4015. Grey-brown, friable, loose. There was a cracked capping slab over it. and upright stones 4014 around it. Bulk sample 401. Not analysed Plan/sections 412, 429
4014	Deposit	4	4015	4013		Upright stones demarcating edges of ?posthole cut 4015. 28x30x7cm and 26x39x7cm Plan/sections 412, 429
4015	Cut	4	4012	4013 4014		Cut for ?posthole. Subrectangular. 2.5m W of Quern 2. Had a broken horizontal stone capping it. Plan/sections 412, 413, 414, 415, 429
4016	Deposit	4	4020 4021	4006		Soil fill of ?posthole cut 4021. Yellow-brown loamy, friable, fine. contained between upright stones 4020. Bulk sample 404. Not analysed Plan/sections 412, 430
4017	Deposit	4	4018 4019	4003		Upper fill of pit cut 4018. Dark brown silty loam. Is over clay layer 4019. About 14cm deep. Bulk sample 403. Lab analysis: charcoal (Salicaceae, hazel, birch, oak), spelt wheat grains & chaff, heath grass, mayweed. Plan/section 411 Charcoal sample 2023: C03 (hazel) radiocarbon dated to **199 calAD**
4018	Cut	4	4012	4017 4019		Cut for sub-rectangular shallow pit. S end of trench, 3m S of Quern 2. Plan/sections 411, 425, 426, 444

Context #	Type	Trench	Is above	Is below	Adjoins	Description
4019	Deposit	4	4018	4017		Discontinuous layer of grey-blue clay in base of cut 4018. Below fill 4017. May be part of natural, may be lowest fill of pit. Bulk sample 402. Not analysed
4020	Deposit		4021	4016		Four upright stones in ?posthole cut 4021. Average 26x20x6cm. Plan/sections 412, 430
4021	Cut		4012	4016 4020		Cut for ?posthole. 1.5m SW of Quern 2. Contains upright stones 4020 and soil fill 4016. Plan/sections 412, 413, 416, 417, 430
4022	Deposit	4	4023	4004		Soil fill under Quern 4, in cut 4023. Mid-brown sandy loam, small gravel inclusions. Bulk sample 406. Not analysed
4023	Cut	4	4012	4022		Cut that contained fill 4022, with Quern 4. Plan/sections 420, 443
4024	Cut	4	4012	4025		Cut of ?posthole to NE of Quern 4 Plan/section 418, 419
4025	Deposit	4	4024	4003		Fill of posthole 4024 to NE of Quern 3 Bulk sample 408. Not analysed Plan/section 418
4026	Cut	4	4012	4004		Cut in which Quern 3 was located Plan/sections 420, 443
4027	Cut	4	4012	4049		Cut holding large slab (part of paving 4004) and packing stones 4028 NW of Quern 4 Plan/sections 420, 443
4028	Deposit	4	4049	4003	4004	Packing stones around slab in cut 4027 Plan/section 420
4029	Deposit	4	4030 4012	4004		Semi-compacted mid brown silty loam with 30% small stones under flags 4004 south of Quern 3. Charcoal rich. Levelling deposit?
4030	Deposit	4	4012	4029		Patchy areas of cobbled surface under 4029. Small rounded cobbles.
4031	Deposit	4	4032 4034	4003		Large stone over fill 4032 and stones 4034 in pit 4033 Plan/sections 421, 422

Context #	Type	Trench	Is above	Is below	Adjoins	Description
4032	Deposit	4	4033 4034	4031		Fill of pit 4033. Dark brown fine silty loam, semi-compacted, very few small stones. Bulk sample 409. Lab analysis: charcoal (birch, heather), charred wheat grains (spelt, possibly one emer), spelt wheat chaff. Plan/section 422 Charcoal sample 2023: C04 (spelt grains) radiocarbon dated to **202 calAD**
4033	Cut	4	4012	4032 4034		Cut of pit in centre of trench under slab 4031. Sub-oval, steep-sided. Plan/sections 422, 427
4034	Deposit	4	4033	4031 4032		Stones set in side of pit 4033. Packing. Plan/section 422
4035	Deposit	4	4039 4040 4055 4064 4066 4068 4078 4087 4089 4098 4100 4102	4002 4010	4053	Dark brown deposit, charcoal rich in places. Lies under 4002 paving and extends eastwards under cobbles 4010, Is over clay bank 4039 and the cobbles 4040 to the east of this. Dark brown silty loam, with charcoal and burnt material. Some orange sandier patches. Not laminated. Bulk samples 413 (inc charcoal), 415, 416, 417. 417 Lab analysis: coal, charcoal (heather, ash, oak, hazel (5/6 year cycle growth pattern suggesting hedge-cutting)), goosefoot & heath grass seeds. Charcoal sample 2023: C10 (hazel) radiocarbon dated to **179 calBC** Charcoal sample 2024: C01 Plan/section 450
4036	Deposit	4	4045	4003	4046	Upright stones in linear cut 4045 at N end of W side of trench. Plan/sections 423, 440, 441
4037	Deposit	4	4044	4003		Upper fill of posthole 4038 in NW corner of trench. Mid/dark brown clay/silt loam, semi-compacted. No stones. Bulk sample 412. Not analysed Plan/sections 424, 428
4038	Cut	4	4012	4044		Cut of posthole in NW corner of trench. Subrectangular, almost vertical side, flat stone-lined base. Plan/sections 424, 428, 442

Context #	Type	Trench	Is above	Is below	Adjoins	Description
4039	Natural	4	?	4035 4040 4048 4050 4053 4056 4057 4059 4061 4063 4065 4067 4069 4071 4074 4076 4077 4079 4081 4084 4085 4088 4090 4092 4094 4096 4097 4099 4101 4103 4105	4007 4012	Material of the clay bank running N-S under paving 4002, with dark layer 4035 in between. Yellow clay with sand & silt. small angular stones. Probably natural, extending over all trench (so equivalent to 4007 and 4012), appearing as a bank between cuts of gully 4048 on bank's W side and ?drip gully/scoop 4056 on its E side. Plan/section 456
4040	Deposit	4	4039 4058 4060 4070 4072 4073 4091 4093 4095 4097 4104	4035		Patches of cobbled surface to E of clay bank 4039, overlain on western edge by dark layer 4035. Plan/section 450, 456 Charcoal sample 2024: C02 Small finds 2024: Three IA potsherds, one a 20cm diam rim of hand-built pot
4041	Deposit	4	4042 4043	4000		Silty fill of posthole 4043, in S-facing section on N trench edge. Orange brown, silty, friable, Small inclusions only, <3mm.
4042	Deposit	4	4043	4041		Stone packing in posthole 4043
4043	Cut	4	4001	4041 4042		Cut of posthole seen in N trench edge near NW trench corner. Top is 20cm below turf and 26cm wide. Cut is 20cm deep. Packing up to 4-7cm. post pipe full <9cm.
4044	Deposit	4	4038	4037		Lower fill of posthole 4038 in NW corner of trench. Yellow-brown sandy silt/clay soil. <20% small gravel. Bulk sample 414. Not analysed. Plan/section 428

Context #	Type	Trench	Is above	Is below	Adjoins	Description
4045	Cut	4	4012	4036 4046		Linear cut running NS, close to W edge of trench. Gully 7m long (and may continue further to S). Steep side, trench-like, with flat base. Contains upright stones 4036 and fill 4046 Plan/sections 423, 440, 441, 445, 446, 447, 454, 455
4046	Deposit	4	4045	4003	4036	Fill of linear cut 4045. Medium brown fine silt/clay/loam. slightly compacted, some small grit & ?charcoal. Sits around upright stones 4036. Bulk sample 418. Lab analysis: charcoal (ash, birch, oak, hazel), spelt wheat glumes, ribwort plantain seed, traces of calcined bone. Charcoal sample 2023: C12 (birch) radiocarbon dated to **56 calBC**
4047	Deposit	4	4048	4010 4050		Dark fill of linear cut 4048 to W of clay bank 4039. Similar in appearance to 4035. Bulk sample 419. Lab analysis: charcoal (heather, alder, maloideae, salicaceae, birch), spelt wheat chaff, sedge nutlet, heath grass caryopsis, trace of calcined bone. Charcoal sample 2023: C15 (hawthorn) radiocarbon dated to **35 calBC** Plan/section 469
4048	Cut	4	4012 4039	4047		Linear cut forming a gully on W side of clay bank 4039. Runs NE-SW. 0.5m wide. 45 degree sides with rounded bottom. Extends beyond N edge of trench. Total length 7m. Straight. Rounded SW end. Plan/section 449, 469
4049	Deposit	4	4027	4004 4028		Fill of cut 4027 below paving slab 50cm NW of Quern 4. Bulk sample 407. Lab analysis: charcoal (all alder branchwood: cleft, probably coppiced) Charcoal sample 2023: C17 (alder) radiocarbon dated to **46 calAD**

Context #	Type	Trench	Is above	Is below	Adjoins	Description
4050	Deposit	4	4039 4047 4054 4083	4002 4051	4052	Deposit beneath paving slabs 4002. Medium brown, silty, friable, some small rounded gravel inclusions. Bulk sample 420 (under east side of paving. Not analysed. Bulk sample 421 (under hearth slab). Lab analysis: charcoal (hazel, Maloideae, birch, oak). Charred grains (spelt, barley), chaff (spelt, 6-row barley) weed seeds (bromes, heath-grass, cleavers, ribwort plantain, sedges). Small quantity of calcined bone, trace of fired clay. Charcoal sample 2024: C13 from bulk sample 421 (hazel 8mm diam) radiocarbon dated to **291 calAD.** Charcoal sample 2024: C14 from bulk sample 421 (heather) Charcoal sample 2024: C15 from bulk sample 421 (spelt grain) Small finds 2024: IA crude sherd and RB slip-coated sherd (both beneath Quern 1), RB sherd 10cm diam slip-ware rim fired below 800C
4051	Deposit	4	4050	4002		Small area of paving NE of Quern 2 under paving 4002.
4052	Deposit	4	4054	4002	4050	Crude wall over pit 4061, and to north of it, under paving 4002. To level paving when fill slumped in pit? Embedded in deposit 4050. See photogrammetry image Day 4. Approx 3m long, with obtuse angle bend in middle. Very crude, stones 10-20cm flat angular. One or two courses.
4053	Deposit	4	4039	4010	4035	Deposit under cobbles 4010 in SE corner of trench. Dark brown, not compact, silt/clay loam. Contains rounded gravel up to 20mm. Charcoal sample 2024: C03
4054	Deposit	4	4061	4052 4050		Fill of pit 4061. Medium brown sandy silty friable soil with some small angular and rounded stones included. Charcoal sample 2024: C04, C12 (at base)
4055	Deposit	4	4056	4035		Fill of gully 4056. Dark brown silty deposit, no inclusions. Charcoal sample 2024: C05 (hazel)
4056	Cutt	4	4039	4055		Curving gully cut into E side of clay bank 4039. Drip gully? At back edge of scooped area extending east. Flat-bottomed with shallow sloping sides 0.5m wide, 5m long.
4057	Cut	4	4039	4058		Oval posthole in curving row. 35cm deep, 30cm wide. Steep sides, flat bottom. Plan/section 459

Context #	Type	Trench	Is above	Is below	Adjoins	Description
4058	Deposit	4	4057	4040		Fill of posthole 4057. Dark brown, friable, silt clay/loam. Few gravel inclusion, many small fragments charcoal. Bulk sample 422 Lab analysis: charcoal (oak stemwood twisted and distorted with radial cracks possibly because of high burning temperatures, branchwood of ash, birch, alder, hazel). Small amounts of coal and cinder. Grains (spelt- and hulled barley). Chaff (spelt, a few barley including 6-row barley). Heather twigs, rhizomes, hazel nutshell. weed seeds (bromes, heath-grass, docks and vetches). Small fragments of calcined bone and fired clay, 1 small black flint). Charcoal sample 2024: C16 from bulk sample 422 (birch) Charcoal sample 2024: C17 from bulk sample 422 (ash) Charcoal sample 2024: C18 from bulk sample 422 (hazelnut) radiocarbon dated to **57 calAD.** Charcoal sample 2024: C19 from bulk sample 422 (spelt grain) Charcoal sample 2024: C20 from bulk sample 422 (oak)
4059	Cut	4	4039	4060 4062		Posthole in curving row. 22cm deep, 25cm wide, sloping sides, narrow bottom. Plan/section 460
4060	Deposit	4	4059 4062	4040		Upper fill of posthole 4059. Dark brown, friable moist silty/clay/loam. Small fragments charcoal included. Charcoal sample 2024: C06
4061	Cut	4	4039	4054		Subrectangular pit on clay bank, under paving 4002. Filled by 4054. 2mx1m. Irregular oval shape, shallow sides, flat irregular bottom. 20cm deep. Plan/section 451, 452 453
4062	Deposit	4	4059	4060		Lower fill of posthole 4059. Mid brown, friable. Numerous small gravel inclusions. Some small fragments of coal.
4063	Cut	4	4039	4064		Oval posthole in curving row. 50cm deep, 30cm wide. Steep sides, narrow flat bottom. Plan/section 458
4064	Deposit	4	4063	4035		Fill of posthole 4063. Dark brown friable loam. Small pieces charcoal.
4065	Cut	4	4039	4066		Oval posthole in curving row. 22cm deep, 55cm wide, shallow sides, curving bottom. Plan/section 457

Context #	Type	Trench	Is above	Is below	Adjoins	Description
4066	Deposit	4	4065	4035		Fill of posthole 4065. Dark brown friable loam.
4067	Cut	4	4039	4068		Oval posthole in curving row. 45cm deep, 45cm wide. Steep sides, u-shaped bottom. Plan/section 462
4068	Deposit	4	4067	4035		Fill of posthole 4067. Dark brown friable loam. Small pieces charcoal.
4069	Cut	4	4039	4070		Oval posthole in curving row. 20cm deep, 25cm wide. V-shaped. Plan/section 461
4070	Deposit	4	4069	4040		Fill of posthole 4069. Dark brown friable loam. Bulk sample 423. Not analysed.
4071	Cut	4	4039	4072		Oval posthole in curving row.
4072	Deposit	4	4071	4040		Fill of posthole 4071. Dark brown friable loam.
4073	Deposit	4	4075	4040		Group of round & flat cobbles under 4040, between postholes 4067 and 4069
4074	Cut	4	4039	4075		Cut holding cobbles 4073 and deposit 4075.
4075	Deposit	4	4074	4073		Loamy deposit under 4073 in cut 4074 Charcoal sample 2024: C07
4076	Deposit	4	4039 4080 4082 4086	4005 4010		Deposit under cobbles 4010 in NE extension of trench. Similar and continuous with 4035. Mid brown silt/sand/loam. Contains coal, charcoal, and angular stones. Small finds 2024: Iron javelin head 2nd/3rd century, stone mould for ?pin, Cream Piercebridge ware mortarium sherd
4077	Cut	4	4039	4078		Pit/posthole to W of posthole 4069. 25cm deep, 65cm wide. Shallow sided U-shaped. Charcoal sample 2024: C08 Plan/section 461
4078	Deposit	4	4077	4035		Fill of pit/posthole 4077.mid/dark brown fine silty with charcoal flecks and small pieces.
4079	Cut	4	4039	4080		Round posthole in curving row, in NE extension of trench. 15cm deep, 25cm wide, irregular profile. Plan/section 464, 465
4080	Deposit	4	4079	4076		Fill of posthole 4079. Dark brown friable loam. Bulk sample 425. Not analysed.

Context #	Type	Trench	Is above	Is below	Adjoins	Description
4081	Cut	4	4039	4082		Round posthole in curving row, to NE of posthole 4079. 18cm deep, 60cm wide, irregular profile, flat bottom. Plan/section 463, 465
4082	Deposit	4	4081	4076		Fill of posthole 4081. Mid-brown, silty/clayey loam. Much charcoal with apparently in-situ vertical remains of the burnt exterior layers of two burnt posts, each 10cm diameter and 15cm long approx, and two similar pieces lying horizontally across the top of the posthole, presumably upper parts of the same burnt post(s). Interior parts of posts replaced by grey silty deposit. Species identified as oak. Bulk sample 424. Not analysed. Charcoal sample 2024: C4082H (oak post) Charcoal sample 2024: C4082V (oak post) radiocarbon dated to **83 calBC**
4083	Deposit	4	4084	4050		Fill of pit 4084. Elongated sub-oval. 1m x 0.4m. 25cm deep . Shallow sloping side, flat bottom. Charcoal sample 2024: C09
4084	Cut	4	4039	4083		Pit on clay bank, to W of posthole 4071. Lying under northern-eastern part of paving 4002. Plan/section 466, 467
4085	Cut	4	4039	4086		Posthole in curving row, to NE of posthole 4081. At NE end of curving row in NE extension. 15cm deep, 25 cm wide. Steep sides, flat bottom (including flat stone). Javelin head was found in context 4076, 20cm to east of the centre of this posthole. Plan/section 468
4086	Deposit	4	4085	4076		Fill of posthole 4085. Dark brown silt/sand/loam. Contains charcoal and medium stones. Bulk sample 426. Lab analysis: charcoal (ash large branchwood/small stemwood and oak stemwood, birch, hazel). Indeterminate cereal grains, a spelt glume base, 3 hazel nutshell fragments. Weed seeds (heath-grass, ribwort plantain, wild radish, sedge, spike-rush, vetch. A small possible pot fragment, trace of calcined bone and fired clay. Charcoal sample 2024: C21 from bulk sample 426 (ash) Charcoal sample 2024: C22 from bulk sample 426 (hazelnut) Charcoal sample 2024: C23 from bulk sample 426 (birch).

Context #	Type	Trench	Is above	Is below	Adjoins	Description
4087	Deposit	4	4088	4035		Fill of posthole 4088. Dark brown silt/sand/loam. Friable. Bulk sample 428. Lab analysis: charcoal (hazel, oak and ash stemwood). Coal, cinder, barley grains, spelt glume bases, hazel nutshell, a sloe stone, weed seeds (heath-grass, cleavers, redshank, ribwort plantain, sedges, grasses), burnt cracked stones, fired clay/abraded pot fragments, tiny fragments of calcined bone. Charcoal sample 2024: C24 from bulk sample 428 (hazelnut) radiocarbon dated to **18 calAD.** Charcoal sample 2024: C25 from bulk sample 428 (hazel) Charcoal sample 2024: C26 from bulk sample 428 (sloe stone) Charcoal sample 2024: C27 from bulk sample 428 (barley grain)
4088	Cut	4	4039	4087		Round posthole in straight row, E of posthole 4063, N of posthole 4090. Diameter 31cm, 15cm deep. Steep sided stones at bottom. Plan/section 471
4089	Deposit	4	4090	4035		Fill of posthole 4090. Dark brown silt/sand/loam. Friable. Contains charcoal and small gravel. Bulk sample 427. Not analysed.
4090	Cut	4	4039	4089		Round posthole in straight row, the southernmost. To E of posthole 4065. 30cm diameter, 20cm deep. Steep sides, u-shaped bottom. Plan/section 490
4091	Deposit	4	4092	4040		Fill of posthole 4092. Dark brown silt/sand/loam.
4092	Cut	4	4039	4091		Circular posthole in straight line. N of posthole 4094. Diameter 20cm, 13cm deep. Plan/section 472
4093	Deposit	4	4094	4040		Fill of posthole 4094. Dark brown silt/sand/loam. Friable. No charcoal or coal.
4094	Cut	4	4039	4093		Circular posthole in straight line. N of posthole 4088. Diameter 25cm, 15cm deep. Steep/vertical sides. Stones at base. Plan/section 471
4095	Deposit	4	4096	4040		Fill of posthole 4096. Dark brown silt/sand/loam. Contains charcoal. Charcoal sample 2024: C10 (hazel branch 14 rings) radiocarbon dated to **285 calBC.**

Context #	Type	Trench	Is above	Is below	Adjoins	Description
4096	Cut	4	4039	4095		Circular posthole in straight line, N of postholes 4097. Diameter 25cm, 18cm deep. Steep sides, flat stony bottom. Plan/section 472
4097	Cut	4	4039	4040		Three possible shallow postholes, forming part of straight line. N of posthole 4092. Contain a few flecks charcoal. North hole: oval, 30cmx20cm, 11cm deep. Middle hole: circular 13cm diam, 8cm deep. Soouth hole: circular, 20cm diam, 8cm deep. Plan/section 472
4098	Deposit	4	4099	4035		Fill of posthole 4099. Dark brown silt/sand/loam. Contains coal fragments.
4099	Cut	4	4039	4098		Circular posthole in straight line. N of posthole 4103. Oval 20cmx 12cm, 20cm deep. Steep-sided, flat bottom. Plan/section 473
4100	Deposit	4	4101	4035		Fill of posthole 4101. Dark brown silt/sand/loam. Contains coal fragments.
4101	Cut	4	4039	4100		Circular posthole in straight line. The northernmost. N of posthole 4099. Oval 35cm x 25cm, 20cm deep. Steep sided, irregular bottom. Plan/section 473
4102	Deposit	4	4103	4035		Fill of posthole 4103. Dark brown silt/sand/loam. Contains coal and charcoal fragments.
4103	Cut		4039	4102		Circular posthole in straight line. N of posthole 4105. At intersection with curving line of postholes. Flat stone in base. Irregular shape 60cm wide, 20cm deep, irregular bottom, steep sided. Plan/section 473
4104	Deposit		4105	4040		Fill of posthole 4105. Dark brown silt/sand/loam. Contains coal and charcoal fragments. Charcoal sample 2024: C11 (hazel).
4105	Cut		4039	4104		Circular posthole in straight line. N of posthole 4096. 20cm diameter, 13cm deep. Vertical sides and flat bottom. Plan/section 473
8000	Topsoil	8	8001			Topsoil. Similar to that in other trenches, though shallower. Dark brown silty loam with a few small stones. 10cm deep approximately.

Context #	Type	Trench	Is above	Is below	Adjoins	Description
8001	deposit	8	8002 8003 8004 8005 8006 8007 8008 8009 8010 8011 8012 8013 8019 8020	8000		Gravel rich layer under topsoil, as in other trenches, but not so well defined.
8002	Deposit	8	8015 8023	8001 8011 8018 8020	8016	Bands 80cm wide of small stones, forming a ?rectangular feature. 5cm – 15cm diam Charcoal sample 2024: C31
8003	Feature	8	8015	8001		Group of approx 8 stones 20cm diam.
8004	Feature	8	8015	8001		Group of approx 10 stones 20cm diam. overlying ill defined shallow ?posthole 15cm deep Small find: copper-alloy St Edmund pilgrim badge
8005	Feature	8	8015	8001		Group of approx 10 20cm diam stones overlying ill-defined shallow ?posthole 10cm deep
8006	Feature	8	8023	8001		Group of 6 20cm diam stones
8007	Feature	8	8025	8001		Ring of 8 20cm diam stones around a circular 20cm void filled with topsoil, overlying a 60cm x 60cm flagstone.
8008	Feature	8	8015	8001		Group of 8 20cm diam stones
8009	Feature	8	8023	8001		Group of 4 20cm diam stones
8010	Feature	8	8023	8001		Group of 5 20cm diam stones
8011	Feature	8	8002	8001		Group of about 10 10-20cm diam stones. Overlies 8002
8012	Feature	8	8018	8001		Group of stones. 15cm – 30cm mixed sizes. May just be part of tumble of stones 8018
8013	Feature	8	8018	8001		Group of stones. 10cm – 30cm mixed sizes. May just be part of tumble of stones 8018
8015	Deposit	8	8023	8002 8003 8004 8005 8008		Cobble rich layer underlying structures (groups of stones and 8002) at west side of trench. Ill-defined and varying in thickness and density of stones. Not compacted. Overlies subsoil.
8016	Deposit	8			8002	Circle of white stones (angular pieces limestone) in circle). Adjacent to N side of padstone. Part of 8002.

Context #	Type	Trench	Is above	Is below	Adjoins	Description
8017	Deposit	8	8023	8019	8024	Gravelly layer forming ill-defined and partially compacted surface inside 8002. Stones 0.5cm – 3cm, angular and rounded. Layer 3cm thick, On subsoil, but no clear distinction. Bulk sample 801. Lab analysis: charcoal (hazel except one piece elm), hazel nutshell, coal, cinder. No grain. Charcoal sample: C28 from bulk sample 801 (hazel) Charcoal sample: C29 from bulk sample 801 (hazel) radiocarbon dated to **1346 calAD** Charcoal sample: C30 from bulk sample 801 (hazelnut)
8018	Deposit	8	8002 8023	8012 8013		Tumble of stones at E corner of trench, extending from over 8002, down slope to trench edge. Stones mostly rounded up to 30cm diameter. Possibly demolition layer when stones for field walls was robbed from structure. Small find: whetstone
8019	Deposit	8	8017	8001		Fine brown silty soil over 8017. Thin layer 2cm.
8020	Deposit	8	8002	8001		Spread of loose cobbles over 2002 to NW of padstone. Similar to 8018: ?demolition debris.
8023	Natural	8		8002 8005 8006 8009 8010 8017 8018 8025		Subsoil. Silty / sand with some clay patches. Orange-brown. Lot of included rounded cobbles. More stones and less clay than subsoil in other trenches.
8024	Deposit	8			8017	Pieces of un-worked tree branch embedded in 8017
8025	Deposit	8	8023	8007		Thin layer 2cm thick of fine (0.5cm – 1.5cm) gravel under padstone 8007, over subsoil.
9000	Topsoil	9	9001			Topsoil over all of trench. Friable, mid-brown silty/sandy loam with a few small angular stones. 15 to 20cm deep. Small find: IA sherd
9001	Deposit	9	9002 9003 9005 9006	9000		Spread of small rounded and angular stones under topsoil 9000, 6 x 4 cm, up to 12cm length. In mid-brown friable silty soil with small gravel. Small find: RB mortaria sherds
9002	Deposit	9	9004 9006	9001		Large rounded cobbles under 9001 at south (lower) end of trench. In dark brown friable silty soil.

Context #	Type	Trench	Is above	Is below	Adjoins	Description
9003	Deposit	9	9005	9001		Flat slabs and large rounded cobbles forming irregular surface at north (upper) end of trench below 9001. Small find: shale bracelet, RB mortarium sherd
9004	Deposit	9	9006 9008 9009	9002		Cobbles under 9002. In dark brown friable silty soil. From 10cm to 20cm, with a few up to 30cm. In scoop, over 9008. Small find: RB sherd
9005	Deposit	9	9006 9007	9001 9003		Rounded stones under 9003 and over 9007. Small find: RB mortaria sherds
9006	Deposit	9		9001 9002 9004 9005 9008		Soil of slope of scoop in middle of trench under 9001. Is overlain by 9004 and 2008 in south (lower) end of trench and by 9014 at north end. However, clear full extent of 2014 is unclear as not fully excavated, so some higher contexts may lie directly on 9006. Friable when dry. Mid-brown silty with small angular and rounded gravel. Some stones up to 12cm.
9007	Deposit	9	9011 9012	9005		Flat slabs at north (upper) end of trench under 9005.
9008	Deposit	9	9006	9004 9009 9010		Orange-brown silty clay beneath 9004 and over 9006. Beneath 9010 in bottom of scoop, though not all of 9010 had been removed by end of excavation, so 9008 doesn't definitely extend over all of south end of trench. Small find: IA sherds
9009	Deposit	9	9008 9010	9004		Bedded rounded cobbles below 9004 cobbles. From 10 to 30cm. In dark brown soil, and overlying a similar soil, 9010
9010	Deposit	9	9008	9009		Dark brown friable sandy silty with small gravel . Many flecks charcoal. Cobbles 9009 bedded into top of layer. Contains coal, animal teeth and bone. Over 9008. Charcoal sample: C32. Not analysed. Small find: RB sherds (including Grey Ware)
9011	Deposit	9	9014	9007 9013		Possible laid cobble surface in NW corner of trench, to east of slabs 9007. Extends to west margin of trench. Under 9007. Overlies 9014.
9012	Deposit	9	9013	9007		Fill of cut 9013. Mid brown silt-sand-loam. Friable. Many stones. One piece cinder. One piece charcoal. Bulk sample 901. Not analysed. Plan/section 901

Context #	Type	Trench	Is above	Is below	Adjoins	Description
9013	Cut	9	9011	9012		Cut containing 9012. Cut into 9011. 3m from N end trench, 1m from W edge. Subcircular 50cm diameter. 25cm deep. Shallow sides. Base is a large rounded stone. NE-SW section drawn. Plan/sections 901
9014	Deposit	9		9011		Soil underlying 9011. Not excavated in 2014. Medium brown silty, friable, with fine gravel. May be same as 9006 lower down trench, or overlie 9006.

9 APPENDIX 2: HARRIS MATRICES

Not done this year in view of proposed re-opening and extending of Trenches 4 and 9

10 APPENDIX 3: SMALL FINDS TABLES

As trenches are to be re-opened in 2025, no comprehensive analysis of small finds is given here. Some aspects of more important finds are discussed in the main text in the descriptions of each trench.

11 APPENDIX 4: PALAEOENVIRONMENTAL AND CHARCOAL SAMPLES 2024

Palaeoenvironmental bulk samples. These are cross-referenced in the context table.

See Appendix 7 for details of the lab analysis for those samples that were sent to the labs. This is also summarised, for each context, in the Context Table (Appendix 1).

Context #	Trench #	Sample #	Sent to labs?	Weight kg	Type	Notes
4050	4	420		5.5	env	Under east side of paving 4002
4050	4	421		9.9	env	Under hearth-stone in 4002 **Sent to labs**
4058	4	422		7.6	env	Fill of ?posthole 4057 **Sent to labs**
4070	4	423		13.2	env	Fill of pit 4069
4082	4	424		9.0	env	Fill of posthole 4081
4080	4	425		9.4	env	Fill of posthole 4079
4086	4	426		10.4	env	Fill of posthole 4085 **Sent to labs**
4089	4	427		10.1	env	Fill of posthole 4090
4087	4	428		6.3	env	Fill of posthole 4088 **Sent to labs**
8017	8	801		8.3	env	Gravelly surface inside structure, ?floor. **Sent to labs**
9012	9	901		3.5	env	Fill of pit 9013

Charcoals - Samples include specimens found/hand-picked and specimens from the palaeoenvironmental samples.

See Appendix 5 for details of radiocarbon dates and Appendix 7 for details of species identification.

Context #	Trench #	Bag or sample##	No. of bits	Weight mg or size mm	Notes	Notes/species
4035	4	C01	3	7x5x3	find	?
4040	4	C02	4	25x11x4	find	? large timber
4053	4	C03	6	10x7x3	find	?
4054	4	C04	4	9x8x3	find	?
4055	4	C05	5	10x3x3 84mg	find	**Species:** hazel
4060	4	C06	5	6x2x2	find	tiny!
4075	4	C07	7	10x5x3	find	?
4076	4	C08	2	10x4x3	find	?
4083	4	C09	4	7x7x4	find	?
4095	4	C10	1	10x10x10 525mg	find	**Species:** hazel branch 14 rings **Radiocarbon date: 285 calBC**
4104	4	C11	3	9x4x4	find	**Species:** hazel
4054 base	4	C12	3	15x15x8	find	?
4082	4	C4082H		53g total	find	**Species:** oak post
4082	4	C4082V		582mg (60.5g total)	find	**Species:** oak post **Radiocarbon date: 83 calBC**
4050	4	C13		95mg	env sample 421	hazel small branch 8mm diam **Radiocarbon date: 291 calAD**
"	4	C14		20	"	heather
"	4	C15		8	"	spelt wheat grain
4058	4	C16		105mg	env sample 422	birch
"	4	C17		70mg	"	ash
"	4	C18		20mg	"	hazelnut **Radiocarbon date: 57 calAD**
"	4	C19		10mg	"	spelt wheat grain
"	4	C20		250mg	"	oak
4086	4	C21		60mg	env sample 426	ash
"	4	C22		17mg	"	hazelnut
"	4	C23		125mg	"	birch
4087	4	C24		64mg	env sample 428	hazelnut **Radiocarbon date: 18 calAD**
"	4	C25		40mg	"	hazel
"	4	C26		43mg	"	sloe stone
"	4	C27		11mg	"	barley grain
8002	8	C31	1	9x9x5	find	
8017	8	C28		61mg	env sample 801	hazel
"		C29		110mg	"	hazel **Radiocarbon date: 1346 calAD**
"		C30		15mg	"	hazelnut
9010	9	C32	5	8x8x3	find	

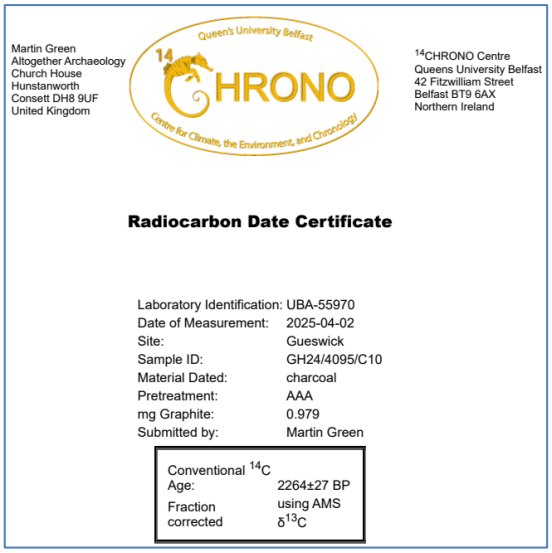
12 APPENDIX 5: GH24 RADIOCARBON DATES

Radiocarbon dates were obtained for six charcoals from the 2024 season. Processing was by the Queens University Belfast 14Chrono Centre. Calibration used the intcal20.14c data set.
See previous Interim Reports for the radiocarbon dates from 2021, 2022 and 2023.

Sample #	GH24/4095/ C10	GH24/4082/ C4082V	GH24/4050/ C13	GH24/4058/ C18	GH24/4087/ C24	GH24/8017/ C29
Type	Hazel	Oak	Hazel	Hazel nutshell	Hazel nutshell	hazel
Laboratory #	UBA-55970	UBA-55971	UBA-55972	UBA-55973	UBA-55974	UBA-55975
Context #	4095	4082	4050	4058	4087	8017
Source of sample	Hand-picked charcoal C10	Hand-picked charcoal C4082V	Env sample 421	Env sample 422	Env sample 428	Env sample 801
Context description	Fill of posthole 4096 in straight line	Oak post in posthole 4081 in curving line	Under hearthstone in paving 4002	Fill of posthole 4057 in curving line	Fill of posthole 4088 in straight line	Possible floor surface on ?windmill site
Radiocarbon Age	2264 ± 27	2072 ± 24	1789 ± 25	1964±24	1995±27	613±24
Calibrated dates (1σ)	390–356 BC 53%	147-139 BC 8%	AD 237-253 32%	AD 23-81 83%	38-12 BC 33%	AD 1305-1327 42%
	279-256 BC 29%	108-43 BC 90%	AD 288-323 68%	AD 98-110 17%	AD 3-32 38%	AD 1345-1365 34%
	246-232 BC 18%	7-3 BC 3%			AD 37-61 28%	AD 1383-1395 24%
Calibrated dates (2σ)	395-350 BC 43%	166-36 BC 92%	AD 214-260 38%	33-15 BC 5%	45 BC – AD 81 96%	AD 1300-1370 77%
	306-298 BC 1%	14 BC – AD 4 8%	AD 277-338 62%	AD 6-122 95%	AD 98-110 4%	AD1377-1400 23%
	296-207 BC 56%					
Median calibrated date	**285 BC**	**83 BC**	**AD 291**	**AD 57**	**AD 18**	**AD 1346**

The percentages given are the relative likelihoods that the true date is within that date range. They do not always add up to exactly 100% due to rounding.

Radiocarbon certificates



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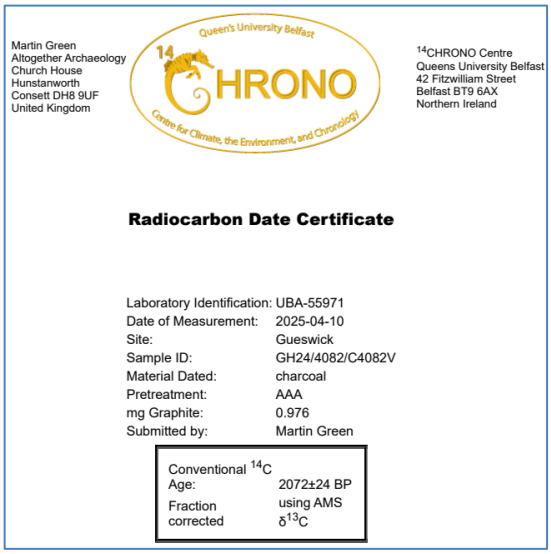
Radiocarbon Date Certificate

Laboratory Identification:	UBA-55970
Date of Measurement:	2025-04-02
Site:	Gueswick
Sample ID:	GH24/4095/C10
Material Dated:	charcoal
Pretreatment:	AAA
mg Graphite:	0.979
Submitted by:	Martin Green

Conventional ^{14}C Age:	2264±27 BP
Fraction corrected	using AMS δ^{13}C



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Radiocarbon Date Certificate

Laboratory Identification:	UBA-55971
Date of Measurement:	2025-04-10
Site:	Gueswick
Sample ID:	GH24/4082/C4082V
Material Dated:	charcoal
Pretreatment:	AAA
mg Graphite:	0.976
Submitted by:	Martin Green

Conventional ^{14}C Age:	2072±24 BP
Fraction corrected	using AMS δ^{13}C

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Radiocarbon Date Certificate

Laboratory Identification:	UBA-55972
Date of Measurement:	2025-04-10
Site:	Gueswick
Sample ID:	GH24/4050/C13
Material Dated:	charcoal
Pretreatment:	AAA
mg Graphite:	0.998
Submitted by:	Martin Green

Conventional ^{14}C Age:	1789±25 BP
Fraction corrected	using AMS δ^{13}C

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Radiocarbon Date Certificate

Laboratory Identification:	UBA-55973
Date of Measurement:	2025-04-10
Site:	Gueswick
Sample ID:	GH24/4058/C18
Material Dated:	charcoal
Pretreatment:	AAA
mg Graphite:	0.995
Submitted by:	Martin Green

Conventional ^{14}C Age:	1964±24 BP
Fraction corrected	using AMS δ^{13}C

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Radiocarbon Date Certificate

Laboratory Identification:	UBA-55974
Date of Measurement:	2025-04-10
Site:	Gueswick
Sample ID:	GH24/4087/C24
Material Dated:	charcoal
Pretreatment:	AAA
mg Graphite:	0.921
Submitted by:	Martin Green

Conventional ^{14}C Age:	1995±27 BP
Fraction corrected	using AMS δ^{13}C

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Radiocarbon Date Certificate

Laboratory Identification:	UBA-55975
Date of Measurement:	2025-04-10
Site:	Gueswick
Sample ID:	GH24/8017/C29
Material Dated:	charcoal
Pretreatment:	AAA
mg Graphite:	0.924
Submitted by:	Martin Green

Conventional ^{14}C Age:	613±24 BP
Fraction corrected δ^{13}C	using AMS

13 APPENDIX 6: SEQUENTIAL PHOTOGRAMMETRY AND DRONE PHOTOGRAPHS OF TRENCHES

Some are shown in the main text, but at larger scale here. Drone photography by Stephen Eastmead. Photogrammetry by Bob Abram and Martin Green.

13.1 Trench 4

Trench 4 Day 3 (Aug 12) drone photo

North is at the top of all images

Trench 4 Day 4 (13 Aug) photogrammetry

Trench 4 Day 7 (16 Aug) drone photo

Trench 4 Day 9 (18 Aug) photogrammetry

Trench 4 Day 11 (20 Aug) photogrammetry

Trench 4 Day 14 (23 Aug) drone photo
After extension of trench to north-east

Trench 4 Day 18 (27 Aug) photogrammetry

I

Trench 4 Day 20 (29 Aug) drone photo

After further extension of trench to north-east.

Excavation of straight line of postholes not yet commenced.

Trench 4 Day 21 (30 Aug) photogrammetry.
Before northern end of straight line of postholes fully excavated.

Trench 4 Day 21 (30 Aug) photogrammetry, east side of trench only.

End of excavation. This area of trench was geotextiled ready for re-opening in future. The rest of trench had already been back-filled.

13.2 Trench 8

Trench 8 Day 7 (16 Aug) drone photo. North-east is at top of all images

Trench 8 Day 8 (17 Aug) drone photo

Trench 8 Day 10 (19 Aug) photogrammetry

Trench 8 Day 14 (23 Aug) drone photo

13.3 Trench 9

T9 Day14 end (23 August) drone photo

T9 Day 17 end (August 26) photogrammetry
After extension of trench westwards by 1m

North is at the top of all images

T9 Day18 end (27 Aug) photogrammetry

T9 Day 20 end (29 Aug) photogrammetry

T9 Day22 end (31 Aug) photogrammetry

14 APPENDIX 7: PALAEOENVIRONMENTAL REPORT (DURHAM UNIVERSITY)

Archaeological Services Durham University. On behalf of Altogether Archaeology

Gueswick Hills, Teesdale, County Durham

Palaeoenvironmental assessment. Report 5208. December 2024

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1. Summary

The project

1.1 This report presents a palaeoenvironmental assessment of five bulk samples and five hand-recovered charcoal samples, taken during the 2024 excavations at Gueswick Hills, Teesdale, County Durham.

1.2 The works were commissioned by Altogether Archaeology and conducted by Archaeological Services Durham University.

Results

1.3 Palaeoenvironmental evidence consistent with Iron Age or Romano-British activity is noted in four contexts [4050], [4058], [4086] and [4087]. This is based on the presence of charred spelt wheat remains, brome caryopses and heathy grassland indicators, all of which are characteristic of these periods in north-eastern England. Possible floor surface [8017] has some charcoal but does not contain diagnostic dating evidence. Hand-recovered charcoal fragments are hazel and oak.

Recommendations

1.4 All the bulk samples have material suitable for radiocarbon dating. None requires further palaeoenvironmental analysis.

1.5 The flots should be retained as part of the physical archive of the site. The residues were discarded following examination.

2. Project background

Location and background

2.1 Archaeological excavations were conducted at Gueswick Hills, Teesdale by Altogether Archaeology. This report presents a palaeoenvironmental assessment of four bulk samples taken from posthole fills and a deposit below a hearthstone, all thought to have an Iron Age or earlier origin. A fifth bulk sample was from a possible floor surface of a structure provisionally interpreted as a small medieval windmill. Identifications were undertaken on five hand-recovered charcoal samples from features also likely to have an Iron Age or earlier date. Palaeoenvironmental evidence consistent with these periods has previously been noted (Archaeological Services 2022; 2023a; 2023b).

Objective

2.2 The objective of the scheme of works was to assess the palaeoenvironmental potential of the samples, identify material suitable for radiocarbon dating, and provide the client with appropriate recommendations.

Dates

2.3 The samples were received by Archaeological Services on 11th October 2024. Assessment and report preparation was conducted between 31st October and 2nd December 2024.

Personnel

2.4 Assessment and report preparation was conducted by Dr Charlotte O'Brien. Bone fragments were examined by Dr Anwen Caffell. Sample processing was by Elena Stefani.

Archive

2.5 The site code is GH24, for Gueswick Hills 2024. The finds, flots and charred plant remains are currently held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University awaiting collection.

3. Methods

3.1 The samples were manually floated and sieved through a 500μm mesh. The flots were examined for waterlogged and charred botanical remains, using a Leica M80 stereomicroscope at up to x60 magnification. Identifications were aided by comparison with modern reference material held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University, and by reference to relevant literature (Cappers *et al.* 2006; Jacomet 2006). Habitat classification follows Preston *et al.* (2002). Plant nomenclature follows Stace (2010). Residues were fully scanned for additional charred plant material, industrial residues, and finds such as small bones (animal, fish and bird), marine shell and snails. This included microscopic examination of the fine fraction where appropriate.

3.2 Selected charcoal fragments were identified to provide material suitable for radiocarbon dating and to determine the nature and condition of the assemblages. The transverse, radial and tangential sections were examined at up to x500 magnification using a Nikon Eclipse microscope. Identifications were assisted by the descriptions of Schweingruber (1990), Gale & Cutler (2000) and Hather (2000), and modern reference material held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University.

3.3 The works were undertaken in accordance with the palaeoenvironmental research aims and objectives outlined in the regional archaeological research framework and resource agendas (Petts &

Gerrard 2006; Hall & Huntley 2007; Huntley 2010), including the updated version: *North-East Regional Research Framework for the Historic Environment* (NERRF 2.0) (https://researchframeworks.org/nerf/accessed 25/11/2024).

4. Results

4.1 The bulk samples produced small to moderate-sized flots, ranging from 75-200ml. Charcoal was the main component of contexts [4050], [4058], [4086] and [4087], with much smaller quantities of coal and cinder (coal ash). The charcoal was generally in good condition and included hazel, Maloideae (hawthorn or apple), birch, oak, ash and alder. These four samples also had varying quantities of grain and chaff of spelt wheat and 6-row hulled barley. Other charred remains were heather twigs, rhizomes, hazel nutshell fragments and small assemblages of weed seeds from arable, ruderal, damp meadow and pasture/grassland habitats. A sloe (blackthorn) fruitstone was recorded in [4087].

4.2 Possible medieval floor surface [8017] contained a small quantity of well-preserved hazel charcoal, alongside a single fragment of elm charcoal. Coal and cinder were again noted in small amounts, but the only charred plant macrofossil was a small hazel nutshell fragment.

4.3 Artefactual evidence was absent from [8017], but the other samples produced small quantities of calcined bone, fired clay and/or a few possible pottery sherds. The white colour of the bone fragments indicated they had been burnt at very high temperatures, but none could be identified with certainty. The largest fragments were from [4050], and included three rib fragments, two of which could be either human or animal, and the third was probably animal.

4.4 The hand-recovered charcoal from [4055], [4095] and [4104] was hazel, while the timber fragments lying horizontally and vertically in the fill of posthole 4081 were all oak stemwood charcoal (fully carbonised). Relatively wide, evenly-spaced growth rings in these oak fragments suggest growth in an open aspect, perhaps reflecting woodland management.

4.5 Detailed palaeoenvironmental results and a provisional date for each bulk sample are presented in Appendix 1. Full descriptions of the hand-recovered charcoal are given in Appendix 2. Material suitable for radiocarbon dating is listed in Appendix 3.

5. Discussion

5.1 Palaeoenvironmental remains consistent with Iron Age or Romano-British activity are noted in four contexts [4050], [4058], [4086] and [4087], although this evidence is more substantial in contexts [4050] and [4058]. This includes the presence of spelt wheat and hulled 6-row barley, which were the principal cereal crops of this time, alongside brome grass, a common weed of spelt cultivation. Charred remains such as heather, heath-grass, ribwort plantain and sedges reflect the exploitation of heathy grassland which characterises these periods in north-eastern England.

5.2 There is nothing diagnostic in terms of dating in floor surface [8017], although the presence of a single fragment of elm is interesting as it occurs relatively infrequently in the charcoal record. Elm wood was commonly used for piles, underground water-pipes and heavy frames for water wheels and windmills (Gale & Cutler 2000). It also makes a good steady burning fuel but only when well-seasoned.

6. Recommendations

6.1 All the bulk samples have material suitable for radiocarbon dating. None requires further palaeoenvironmental analysis.

6.2 The flots should be retained as part of the physical archive of the site. The residues were discarded following examination.

7. **Sources**

Archaeological Services 2022 *Gueswick Hills, Teesdale, County Durham: palaeoenvironmental assessment*. Unpublished report 5725, Archaeological Services Durham University

Archaeological Services 2023a *Gueswick Hills, Teesdale, County Durham: palaeoenvironmental assessment*. Unpublished report 5874, Archaeological Services Durham University

Archaeological Services 2023b *Gueswick Hills, Teesdale, County Durham: palaeoenvironmental assessment*. Unpublished report 6044, Archaeological Services Durham University

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Hall, A R, & Huntley, J P, 2007 *A review of the evidence for macrofossil plant remains from archaeological deposits in northern England*. Research Department Report Series no. 87. London

Hather, J G, 2000 *The identification of the Northern European Woods: a guide for archaeologists and conservators*. London

Huntley, J P, 2010 *A review of wood and charcoal recovered from archaeological excavations in Northern England*. Research Department Report Series no. 68. London

Jacomet, S, 2006 *Identification of cereal remains from archaeological sites*. Basel

Petts, D, & Gerrard, C, 2006 *Shared Visions: The North-East Regional Research Framework for the Historic environment*. Durham

Preston, C D, Pearman, D A, & Dines, T D, 2002 *New Atlas of the British and Irish Flora.* Oxford

Schweingruber, F H, 1990 *Microscopic wood anatomy*. Birmensdorf

Stace, C, 2010 *New Flora of the British Isles*. Cambridge

Appendix 1: Palaeoenvironmental assessment results (bulk samples)

Sample	Context	Feature	Volume processed (l)	Flot volume (ml)	C14 available	Palaeo Rank	Notes (including a proposed date based on the palaeoenvironmental evidence)
421	4050	Deposit below hearthstone	9	90	Y	***	Small flot mainly comprising charred heather twigs and charcoal, both in good condition. Approx. 10ml of >4mm charcoal present - mostly small branchwood of hazel, Maloideae and birch (approx. 7-8mm Ø). Occasional stemwood charcoal of oak and Maloideae. Moderate-sized assemblage of charred plant macrofossils includes a few cereal grains generally in poor condition (spelt-type and barley), frequent chaff fragments (n=40; spelt glumes mainly with a few barley rachis including 6-row barley), a few charred rhizomes and weed seeds of bromes, heath-grass, cleavers, ribwort plantain and sedges. (Finds: small quantity of calcined bone; trace of fired clay). **Iron Age/Romano-British**

Sample	Context	Feature	Volume processed (l)	Flot volume (ml)	C14 available	Palaeo Rank	Notes (including a proposed date based on the palaeoenvironmental evidence)
422	4058	F4057 - posthole	6	175	Y	***	Moderate-sized flot largely comprising charcoal in moderate to good condition. Approx. 90ml of >4mm charcoal. The charcoal is mainly oak stemwood (fragments up to 45mm), often twisted and distorted with radial cracks possibly because of high burning temperatures. Other less frequently recorded charcoal includes branchwood of ash, birch, alder and hazel. Small amounts of coal (fragments up to 14mm) and cinder. Moderate-sized assemblage of charred plant macrofossils is mainly cereal remains including a few grains of spelt-type and hulled barley, and frequent chaff (n=68; spelt glumes mainly with a few barley rachis including 6-row barley). Other charred remains are low numbers of heather twigs, rhizomes, hazel nutshell fragments and weed seeds of bromes, heath-grass, docks and vetches. (Finds: small fragments of calcined bone; trace of fired clay, 1 small black flint). **Iron Age/Romano-British**
426	4086	F4085 - posthole	9	75	Y	**	Small flot mainly comprising charcoal in moderate to good condition. Approx. 10ml of >4mm charcoal – mostly ash large branchwood/small stemwood and oak stemwood. Also a few fragments of birch large branchwood/small stemwood and hazel small branchwood. Some modern roots and earthworm egg cases. There are a few charred heather twigs, rhizomes, 3 indeterminate cereal grains, a single spelt glume base, 3 hazel nutshell fragments and low numbers of weed seeds of heath-grass, ribwort plantain, wild radish, sedge, spike-rush and vetch. (Finds: a small possible pot fragment, trace of calcined bone and fired clay). **Iron Age/Romano-British**
428	4087	F4088 - posthole	5	175	Y	***	Moderate-sized flot largely comprising charcoal in good condition. Approx. 100ml of >4mm charcoal – mainly hazel branchwood/stemwood and oak stemwood in roughly equal quantities, and a few ash stemwood fragments. Small amounts of coal (fragments up to 15mm) and cinder. Small charred plant macrofossil assemblage comprises 3 barley grains, 2 spelt glume bases, 6 hazel nutshell fragments (most quite large), a sloe (blackthorn) fruitstone and low numbers of weed seeds of heath-grass, cleavers, redshank, ribwort plantain, sedges and grasses. (Finds: burnt cracked stones, fired clay/abraded pot fragments, tiny fragments of calcined bone). **Iron Age/Romano-British**
801	8017	Possible floor surface	8	200	Y	**	A large volume of the flot is modern roots. Small quantity of charcoal in good condition (fragments up to 15mm). Approx. 5ml of >4mm charcoal – nearly all of this is hazel large branchwood/small stemwood. Also one fragment of elm with moderate ring curvature and >25 very narrow growth rings, abundant tyloses, good condition but vitrified. Small amount of coal and cinder (fragments up to 18mm). A few earthworm egg cases. The only charred plant macrofossil is a small hazel nutshell fragment. (No finds). **Nothing diagnostic**

[Palaeo rank: *: low; **: medium; ***: high; ****: very high concentration of palaeoenvironmental evidence. Maloideae is hawthorn or apple]

Appendix 2: Palaeoenvironmental assessment results (hand-recovered charcoal samples)

Sample	Context	Feature	Identification	Weight	Notes
C05	4055	Possible roundhouse drip gully	Hazel charcoal	84mg	Large branchwood/small stemwood in good condition with few mineral inclusions, moderate growth ring curvature, 10 evenly-spaced relatively narrow growth rings
C10	4095	F4096 - posthole	Hazel charcoal	525mg	Small branchwood in good condition, strong growth ring curvature, traces of pith present, 14 growth rings of variable width
C11	4104	F4105 - posthole	Hazel charcoal	107mg	Small branchwood in good condition, strong growth ring curvature, 9 growth rings of variable width
4082H	4082	F4081 - posthole	Oak charcoal	53.1g in total	19 fragments of stemwood – moderate to weak ring curvature. Relatively wide, evenly-spaced growth rings. Good condition, radial cracks. The fragments have a similar appearance – could be from the same piece. Fragments up to 55mm long and up to 17 rings.
4082V	4082	F4081 - posthole	Oak charcoal	60.5g in total	11 fragments of stemwood – weak ring curvature. Narrow radially fractured fragments. Evenly-spaced medium-width growth rings. Good condition, radial cracks. The fragments have a similar appearance – could be from the same piece. Fragments up to 80mm long and up to 30 rings.

Appendix 3: Material available for radiocarbon dating

Sample	Context	Single Entity recommen	Weight	Notes	Confidence level for C14 dating
421*	4050	Hazel charcoal	95mg	Small branchwood, good condition, pith to outer ring, 2 wide growth rings, 8mm Ø.	High – good condition, short-lived entity, hazel is representative
421*	4050	Charred heather twig	20mg	Good condition, 6 growth rings, 2mm Ø, bark present, no pith,	High – good condition and heather is representative Could derive from burnt heathland turf
421*	4050	Charred spelt wheat	8mg	Moderate condition. Borderline as to whether it would provide enough carbon for C14 dating	Medium – there are only a few cereal grains, which are generally in poor condition, although frequent spelt chaff fragments present,
422*	4058	Birch charcoal	105 mg	Branchwood, good condition, 5 wide growth rings. More charcoal available for dating if required	Medium - good condition, short-lived entity, there are a few other fragments of birch charcoal present
422*	4058	Ash charcoal	70mg	Branchwood, good condition, 3 wide rings. More charcoal available for	Medium - good condition, short-lived entity, there are a few other fragments of ash charcoal present

Sample	Context	Single Entity recommen	Weight	Notes	Confidence level for C14 dating
422*	4058	Charred hazel nutshell fragment	20mg	Moderate condition	Medium - moderate condition, short-lived (single year) entity, there are a few other fragments of hazel nutshell present
422*	4058	Charred spelt wheat	10mg	Moderate condition. Some surface damage	Medium – there are only a few cereal grains, which are generally in poor condition, although frequent spelt chaff fragments present,
422*	4058	Oak charcoal	250 mg	Stemwood, vitrified, narrow radially fractured fragment, 3 wide growth rings	Low – although oak is the most representative material in the flot, there may be an 'old wood effect' as it is stemwood heartwood
426*	4086	Ash charcoal	60mg	Large branchwood/small stemwood, good condition, a single wide growth ring.	High – good condition, reasonably short-lived entity, ash is representative
426*	4086	Charred hazel nutshell fragment	17mg	Moderate condition	Medium - moderate condition, short-lived (single year) entity, there are two other fragments of hazel nutshell present
426*	4086	Birch charcoal	125 mg	Large branchwood/small stemwood, good condition, 3 wide growth rings.	Medium - good condition, reasonably short-lived entity, there are a few other fragments of birch charcoal present
428*	4087	Charred hazel nutshell fragment	64mg	Moderate condition	High – large and chunky fragment, short-lived (single year) entity, five other nutshell fragments present (most also quite large)
428*	4087	Hazel charcoal	40mg	Small branchwood, good condition, pith to outer ring, 5 growth rings.	High – good condition, short-lived entity, hazel is representative
428*	4087	Charred sloe (blackthorn) fruitstone	43mg	Moderate condition	Medium – large and chunky fragment, short-lived (single year) entity but the only sloe fruitstone present
428*	4087	Charred barley grain	11mg	Moderate condition	Medium - short-lived (single year) entity but only two other barley grains present
801*	8017	Hazel charcoal	61mg	Large branchwood, good condition, 4 rings. More charcoal available for	High – good condition, reasonably short-lived entity, hazel is representative
801*	8017	Hazel charcoal	110 mg	Large branchwood, good condition, 8 rings. More charcoal available for	High – good condition, reasonably short-lived entity, hazel is representative
801*	8017	Charred hazel nutshell fragment	15mg	Moderate condition	Low - short-lived (single year) entity, but small and the only charred plant macrofossil in the sample so a risk of intrusive/residual remains
C05**	4055	Hazel charcoal	84mg	Large branchwood/small stemwood in good condition, 10 evenly-spaced relatively narrow growth rings	Medium – good condition, reasonably short-lived
C10**	4095	Hazel charcoal	525 mg	Small branchwood in good condition, 14 growth rings of variable width	Medium – good condition, reasonably short-lived
C11**	4104	Hazel charcoal	107 mg	Small branchwood in good condition, 9 growth rings of variable width	Medium – good condition, reasonably short-lived entity

Sample	Context	Single Entity recommen	Weight	Notes	Confidence level for C14 dating
4082H**	4082	Oak charcoal	3.8g	Stemwood, moderate ring curvature, good condition, 5 wide evenly-spaced growth rings	Low – there may be an 'old wood effect'. However, if it is the outer layers of a burnt post this effect would not be significant
4082V**	4082	Oak charcoal	582 mg	Stemwood, weak ring curvature, good condition, tyloses present, 6 evenly-spaced growth rings	Low – there may be an 'old wood effect'. However, if it is the outer layers of a burnt post this effect would not be significant

[* bulk soil sample, ** hand-recovered sample

C14 confidence level: low, medium, high or very high suitability for AMS dating based on abundance/frequency, larger fragment size, better condition or whether there are short-lived plant remains]

15 APPENDIX 8: CO-ORDINATES OF TRENCH CORNERS

Trench #	eastings	northing	altitude
T4	400336.5407	521053.1585	219.2354
	400339.5461	521053.1994	219.263
	400339.6744	521050.7417	219.3062
	400345.6438	521050.6938	218.9663
	400345.7022	521058.6289	218.9177
	400347.6643	521058.6927	218.8386
	400347.7136	521060.1155	218.8583
	400348.1797	521060.1835	218.8643
	400348.2052	521060.6684	218.8266
	400348.6668	521060.671	218.7977
	400348.6521	521062.1279	218.8507
	400347.2092	521062.2289	218.862
	400347.1725	521061.7483	218.8844
	400346.6879	521062.1006	219.4459
	400346.678	521061.5199	219.3766
T8	400507.1618	520979.5342	212.4865
	400514.7591	520973.0239	212.2599
	400510.0137	520967.589	211.6255
	400502.6306	520974.4836	213.052
T9	400364.5263	521031.9748	218.8374
	400366.0399	521021.2012	217.7605
	400370.9649	521021.7943	217.5793
	400369.4351	521032.6243	218.541

16 APPENDIX 9: INDEX OF GH24 PLANS AND SECTION DRAWINGS

Plan #	Sheet #	Trench #	Scale	Contexts	Description
449	19	4	1:10	4048 (cut)	Three profiles through gully
450	20	4	1:10	4010 4035 4040	Section: southern edge of T4
451	21	4	1:10	4061 (cut)	N-S Profile across cut
452	21	4	1:10	4061 (cut)	E-W Profile across cut
453	21	4	1:10	4061 (cut)	E-W Profile across cut
454	19	4	1:10	4045 (cut)	Profile across S end of cut
455	19	4	1:20	4045 (cut)	Plan of S end of cut
456	22	4	1:10	4039 (bank) 4040	Profile across bank
457	23	4	1:10	4065 (cut)	E-W Profile across cut
458	23	4	1:10	4063 (cut)	E-W Profile across cut
459	23	4	1:10	4057 (cut)	E-W Profile across cut
460	24	4	1:10	4059 (cut)	E-W Profile across cut
461	24	4	1:10	4069 4077 (cuts)	W-E Profile across cuts
462	24	4	1:10	4067 (cut)	W-E Profile across cut
463	25	4	1:10	4081 (cut)	SE-NW Profile across cut
464	25	4	1:10	4079 (cut)	SE-NW Profile across cut
465	25	4	1:10	4079 4081 (cuts)	NE-SW Profile across cuts
466	26	4	1:10	4084 (cut)	N-S Profile across cut
467	26	4	1:10	4084 (cut)	E-W Profile across cut
468	27	4	1:10	4085 (cut)	SE-NW Profile across cut
469	26	4	1:10	4048 (cut) 4047 (fill)	Section across cut 4048 at N trench edge
470	27	4	1:10	4090 (cut)	N-S Profile across cut
471	27	4	1:10	4088 4094 (cuts)	N-S Profile across cuts
472	28	4	1:10	4092 4096 4097 (cuts)	N-S Profile across cuts
473	28	4	1:10	4099 4101 4103 4105 (cuts)	N-S Profile across cuts
804	22	8	1:10		Profile SW-NE across trench parallel to edge
901		9	1:10	9012 (fill) 9013 (cut)	SW-NE Section across pit