

Castleshaw Roman Fort: Archaeological Evaluation of the eastern annexe

2023



Overhead photo of Trench 3 showing fort ditch, annexe rampart base and oven (drone photo credit: Joolze Dymond).

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Friends of Castleshaw Roman Forts

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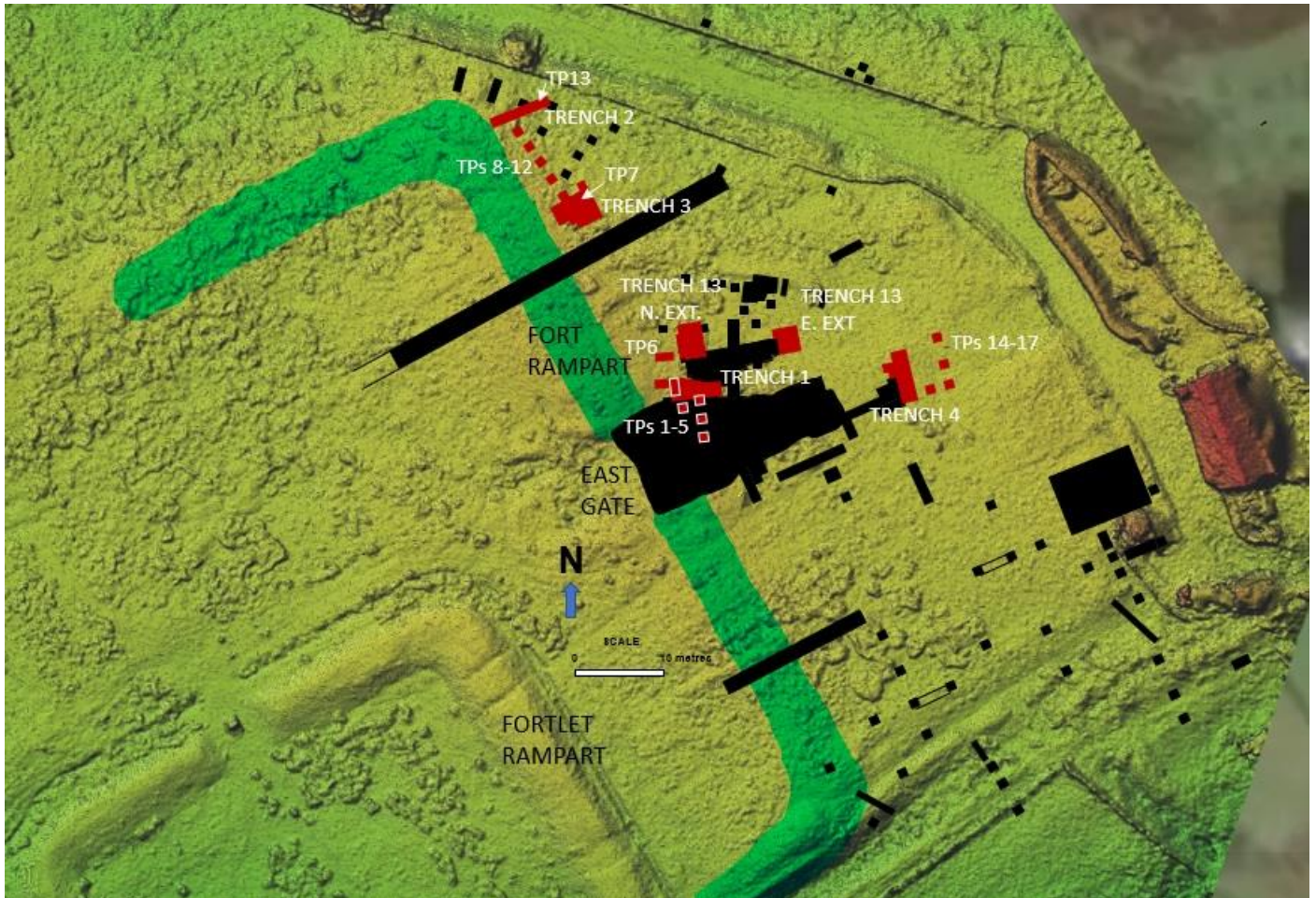


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Summary

Excavation was undertaken by the Friends of Castleshaw Roman Fort volunteers in the northern half of the recently discovered military annexe attached to the east side of the fort. The remains of the turf and timber Agricola period auxiliary fort and the later, early 2nd century AD, fortlet are protected as a Scheduled Monument (Heritage Asset No. 1017837) centred on grid reference SD99830953. 31 volunteers took part in the excavation over a 21 day period during the summer of 2023. 6 trenches and 13 test pits revealed significant new evidence on the function and character of the annexe.



Detail showing location and numbers of 2023 trenches and test pits in the northern half of the annexe. A summary of the trench and test pits results is provided in the 'Overview and Discussion' section towards the end of this report.

The excavations in the northern half of the annexe showed a sequence of events that appeared to comprise an initial phase of timber buildings which were then dismantled and the area given over to intensive use for ovens and hearths accessed by stone platforms. The remains of 3 timber buildings and a possible fourth were revealed, although there is not yet a complete plan for any of the structures. Foundations took the form of post-in-trench construction. One of the buildings appeared to be open sided. A stone platform 10 metres long by 1.5 metres wide gave access to one of the buildings but after demolition the area was given over to cooking activities evidenced by several ovens. The ovens comprised charcoal concentrations in circular shallow depressions with, in some cases, stone aprons provided for access. Frequent pieces of daub and the character of the remains suggest these were simple clay ovens. They appeared to be short-lived as there were several phases of demolition, levelling and new build creating complex stratigraphy. Soil samples found no metallurgical residues or cereal grains, but the ashes from one oven contained calcined animal bone suggesting the cooking of meat. Two heat-reddened clay areas indicated the sites of hearths of unknown function. Frequent pieces of lead waste suggest that lead was being utilised throughout the site.

A section was excavated through the fort ditch 18.5 metres from the north east corner of the fort. It was 'V' shaped, 1.14 metres deep and 2.3 metres wide. A shallower outer ditch was revealed near the corner of

the fort defences. This is the first time that archaeological investigations have been able to locate the ditch on the east side, with previous excavators (Bruton 1908, Thompson 1963 and Salford Archaeology 2014) noting its absence. At right angles to the ditch were remains of the annexe's northern rampart. It was 3.2 wide and 25 cm deep and there appeared to be an associated ditch although this was not conclusively excavated. The fort ditch terminated just beyond the junction with the annexe defences and it is estimated that the ditch is absent along the central two thirds of the fort's eastern defences. Another oven was set into the rear of the annexe rampart. There was evidence for the rampart being slighted when the fort was abandoned in the mid AD 90s.

To date, investigations have shown possible zonal planning for the annexe. To the south of the road exiting the east gate there are very few archaeological remains which suggests this half of the annexe was used perhaps for storage, as a wagon park and for tethering animals. It is a very different story for the north half of the annexe. Here there is a first phase of at least 3 timber buildings followed by re-use for intensive cooking represented by a plethora of ovens and hearths. The annexe can be interpreted as providing a form of 'staging post' with refreshments and perhaps accommodation offered to travellers using the main York to Chester highway, with extra teams of draught animals available to hitch up to wagons for the steep climb up to Standedge immediately east of the fort.

Background

As part of the Castleshaw Roman Forts Hinterland Survey, the Friends of Castleshaw Roman Forts (FoCRF) carried out an archaeological excavation of an area of land east of the defences at Castleshaw Roman Fort (Heritage Asset No. 1017837), centred on grid reference SD99830953. The land is owned by United Utilities and farmed by David Hirst.

In May 2022 Scheduled Monument Consent (Ref: S00242678) was granted to undertake exploratory excavations across land to the east of the Roman fort to target and better understand archaeological remains that had been partly revealed in previous investigations. The permission was until 31st December 2023 which allowed for two summer seasons of excavation.

The 2022 excavations threw more light on the nature and extent of archaeological remains relating to the recently discovered annexe attached to the east side of the fort. Combined with the results from 2019 and 2021, it enabled the following understanding of the annexe:

- 1) There are shallow remnants of a rampart and ditch running from near the south eastern corner of the fort towards Lower Castleshaw settlement and Dirty Lane. These defences are marked by a low earthwork. The eastern and northern extent of the ditch and rampart have not yet been defined, but it is anticipated that Dirty Lane forms the boundary. It is suggested that the defences are for a military annexe attached to the east side of the fort.
- 2) The southern half of the annexe appears to be featureless, other than occasional possible post holes. The area is flat and has suffered from post medieval landscaping so that the road running from the fort's east gate to re-join the main highway has been mostly removed.
- 3) The northern half of the annexe has considerably more archaeological remains; the terrain is more uneven, either reflecting less post medieval disturbance or the difference in Roman activity. A bank of stone ovens was uncovered in 2019 and evidence produced for two and probably more clay ovens. Lead waste hints at industrial processes – their exact purpose at present remains unknown. A range of post holes and possible foundation slots indicate timber buildings, although the form of these has not yet been established. A cobbled trackway angles northwards from the east gate of the fort to a long, narrow stone platform which, based on current evidence, appears to give access to ovens and various industrial processes. The full extent of the platform and the processes and features it served are not currently defined.

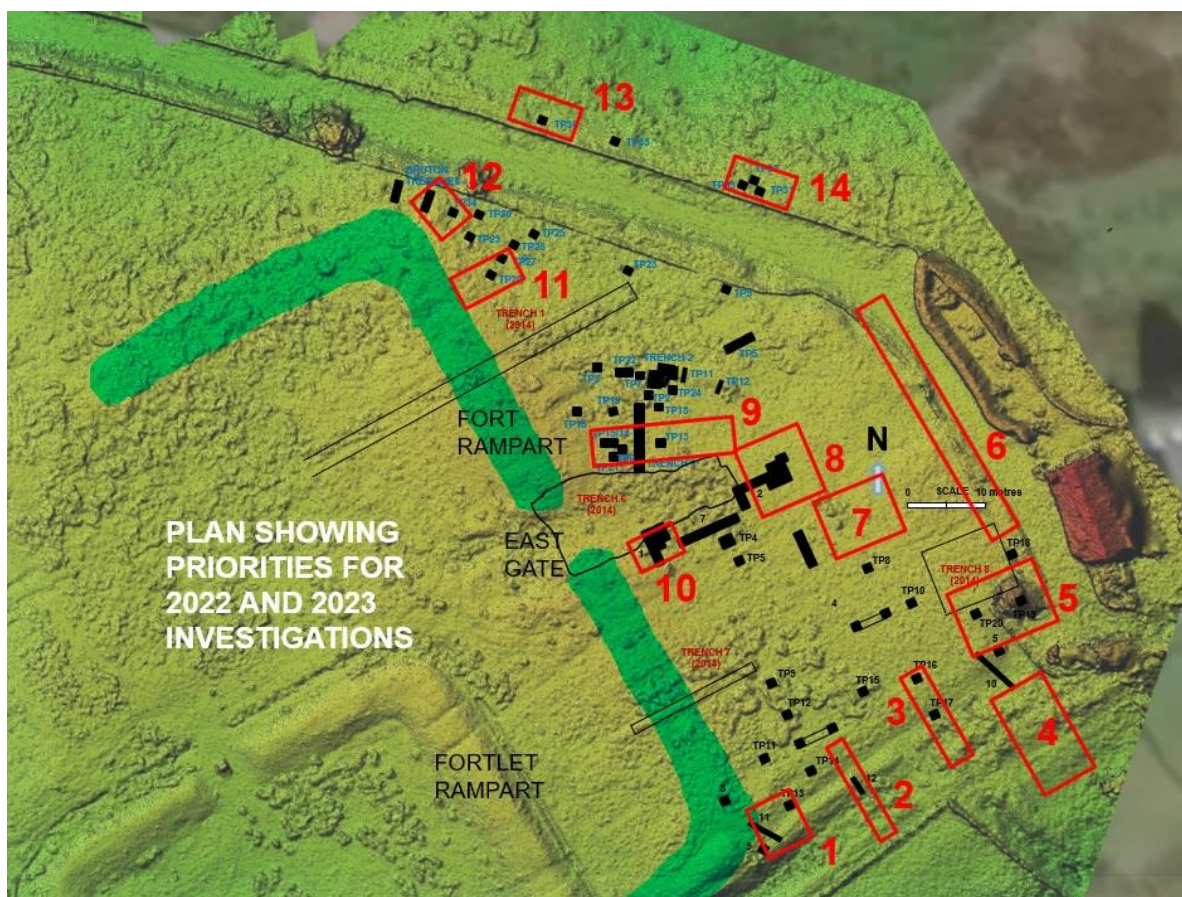


Aerial view of Trench 13, excavated in 2022. Top right is the cobbled area representing a probable track leading from the main highway near the east gate to the long stone platform. A separate stone surface can be seen in the bottom right corner of the trench. On the left, east, side of the trench, the flagstones continue under the section edge (drone photo credit: Joolze Dymond).

The 2022 investigations provided for the first-time evidence of a defended enclosure to the east of the fort defences. Within the enclosure were ovens, a stone platform and timber structures indicated by post holes. Some geophysical anomalies were found to represent areas of natural shale and bedrock cropping close to the surface, whilst a large 'blank' area of low readings represented post medieval landscaping and levelling of the area adjacent to Husted's Farm which has removed Roman remains. This first stage of evaluation enabled the identification of large areas of negative archaeology together with areas of known Roman archaeological interest and potential. The next stage of evaluation, for 2023, was designed to better define the extent and shape of the annexe, its defences, and structures/features within the enclosure along with its relationship with the fort's eastern rampart and ditch. The 2023 excavation report, which details the results, is lodged as a pdf under the 'Documents' section of the Friends of Castleshaw Roman Forts website: www.castleshawarchaeology.co.uk and a copy has been deposited with the Greater Manchester Historic Sites and Monuments Record.

Methodology for the 2023 Investigations

A proposal identifying areas to target in the annexe east of the fort was submitted as part of the Scheduled Monument Consent application. The following plan shows the areas of interest and the rationale for targeting them.



Proposal for archaeological investigations east of the fort defences 2022 (edged in red, black are previously excavated trenches).

- 1 – Determine the location and character of the fort ditch corner terminus and look for its junction with the annexe ditch.
- 2 – Better define and explore the ditch feature revealed in Trench 12 and understand how it relates to the rampart material exposed in Test Pit 14 and extend the trench southwards across the former Drycroft Lane to see if has a Roman road precursor.
- 3 - Excavate a north to south trench to show the full extent/profile of the ditch and rampart suggest in Test Pits 16 and 17.
- 4 – Examine the site of Drycroft Lane to see if there is evidence for an underlying Roman road here, exploring further the possible stone spread at the southern edge of Trench 10, and taking in a linear earthwork on the opposite (south) side of Drycroft Lane.
- 5 – Investigate the extent and character of the stone surfaces/spreads revealed in Test Pits 19 and 20, determine if the Roman road exists here, and look for evidence for the continuation and potential corner of the annexe rampart/ditch.
- 6 – Examine the roadside verge through test pitting to check for annexe defence remains.
- 7 – Investigate an area of high resistivity readings immediately to the west of the former Husted's Farm. These probably represent the hard standing put down outside the 1980s excavation compound; but are there Roman remains concealed underneath?
- 8 – Examine the extent of the post holes and pits revealed in the eastern part of Trench 2 and further define their character and function.
- 9 – Define the extent and character of the possible road surface found at shallow depth partly exposed in Test Pit 21 (2019). Confirm the edge of the 2014 excavation trench and connect this to the clay oven and stone surfaces revealed in Trench 1. Expose the stone surface revealed in Trench 1 and adjacent test pits

(2019) to provide a better understanding of its extent, character, date and function. Re-investigate the stone surface exposed in 2014 adjacent to the rampart beside the east gate and relate this to other features now known in this area.

10 – Extend Trench westwards to define the extent and character of the possible stone platform/surface beside the gateway and the relationship/character of the fort and fortlet roads.

11 – Define the extent and character of the turf and sod deposit seen in Test Pit 26 to determine if it relates to the fort annexe defences.

12 - Define the terminus of the defensive ditch as it rounds the north-east corner of the rampart.

13 - Examine flat area on the north side of Dirty Lane to determine the presence of a possible Roman ditch and other features.

14 - Examine flat area on the north side of Dirty Lane to better define the extent and character of a possible Roman ditch and deposit.

For the 2023 investigations it was decided to prioritise the northern half of the annexe area, focusing on target areas 8, 9, 11 and 12. The objective was to determine the character, extent and function of Roman remains in those areas of archaeological potential identified in previous evaluations

Area 8 would concentrate on examining the potential for more post holes and slots indicative of timber buildings previously identified in Trench 2 in 2021.

The aim in **Area 9** was to expose the full extent of the probable service road noted in Trench 6 in 2014 and Trench 13 in 2022, leading from the east gate exit road to the long stone platform, together with the stone surface adjacent to the fort rampart that was also revealed in 2014. Trenches were to be excavated to locate the eastern terminus of the long stone platform and to gain an understanding of what this was providing access to. Similarly, a trench was also to be dug extending from the north western side of the long stone platform to identify features associated with it, as well as extending investigations of the gully/slot identified in last year's dig running northwards from under the stone platform.

For **Areas 11 and 12**, the intention was to see what happens to the fort ditch as it comes round the north east corner of the defences, to hopefully locate its terminus and gain an understanding of why it is absent on much of the east side. Another aim was to identify the northern defences for the annexe to partner the southern ones discovered in 2022.

The 2023 excavations took place over 21 days:

Mon 1st May and Tues 2nd May

Sat 20th May and Sun 21st May

Sat 3rd June and Sun 4th June

Fri 28th July, Sat 29th July and Sun 30th July

Fri 11th Aug, Sat 12th Aug and Sun 13th Aug

Fri 18th Aug, Sat 19th Aug and Sun 20th Aug

Sat 26th Aug, Sun 27th Aug, Mon 28th Aug

Fri 1st Sept, Sat 2nd Sept, Sun 3rd Sept

Norman Redhead, former Greater Manchester County Archaeologist, led the excavations which were undertaken by a total of 31 volunteers belonging to the Friends of Castleshaw Roman Forts. The investigations were undertaken in relation to research strategies 8, 9 and 10 in the 'Excavation Strategy', which also contains the excavation methodology (Redhead, 2013).

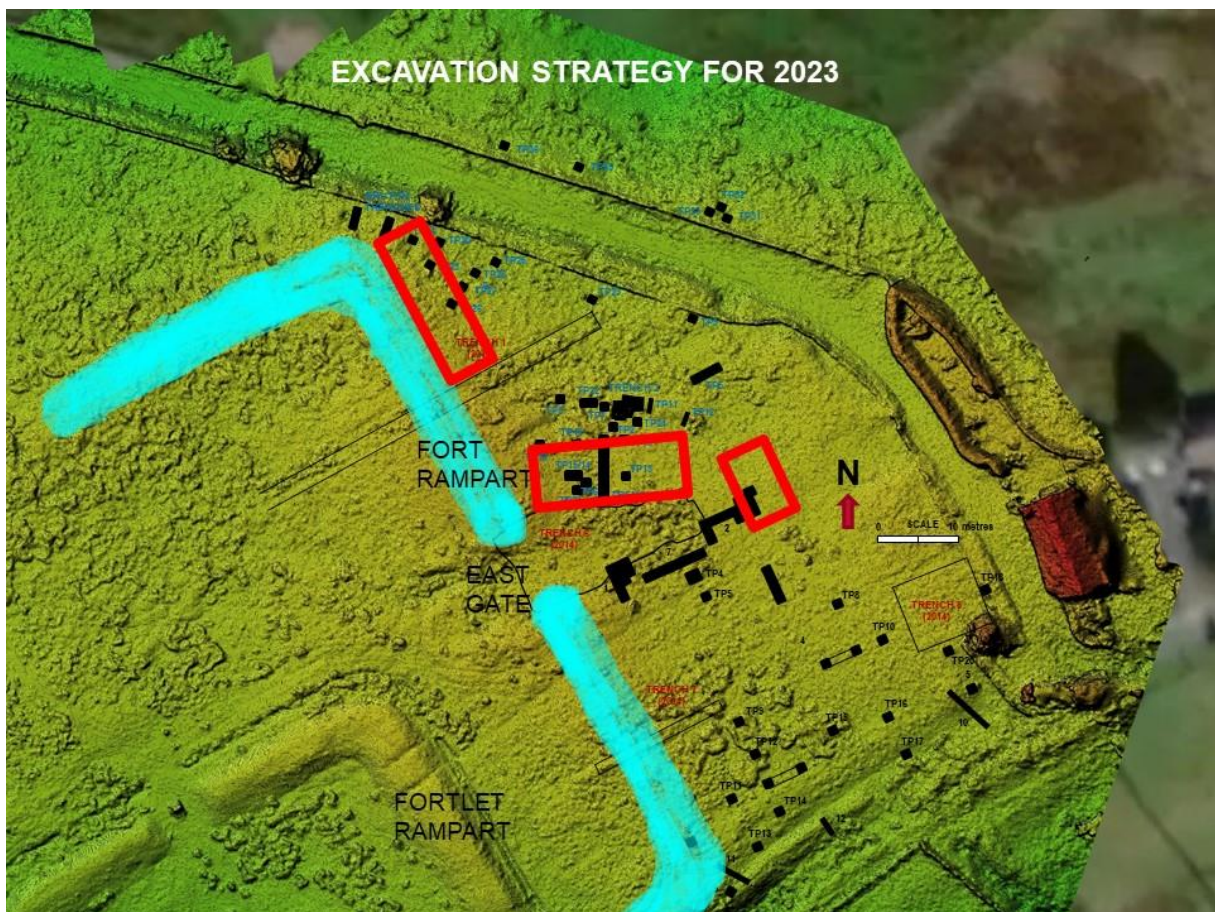
Poor weather in July and August made excavating challenging at times especially when the water table was high, and some time was lost due to this. The volunteers deserve a lot of praise for persevering in these conditions. The wet weather did provide some benefits in that it softened the ground and showed the colours really well, as opposed to hot and dry conditions when the high clay content soil bakes hard and loses its colours.



Battling against the elements in summer 2023.

The excavation team were fortunate to have the services of two drone photographers and the overhead photos within this report were taken either by Joolze Dymond or Nat Townsend. Phil Barratt also took a number of photographs of the site using an extension pole. In May 2021 Chris Wild and Steve Tamburello of Salford Archaeology created contour mapping from their drone photography, which is an invaluable backdrop for trench plans produced in this report.

6 trenches and 13 one metre square test pits were excavated in the northern half of the annexe. The location of these is shown in the summary and the broad areas on the plan below.

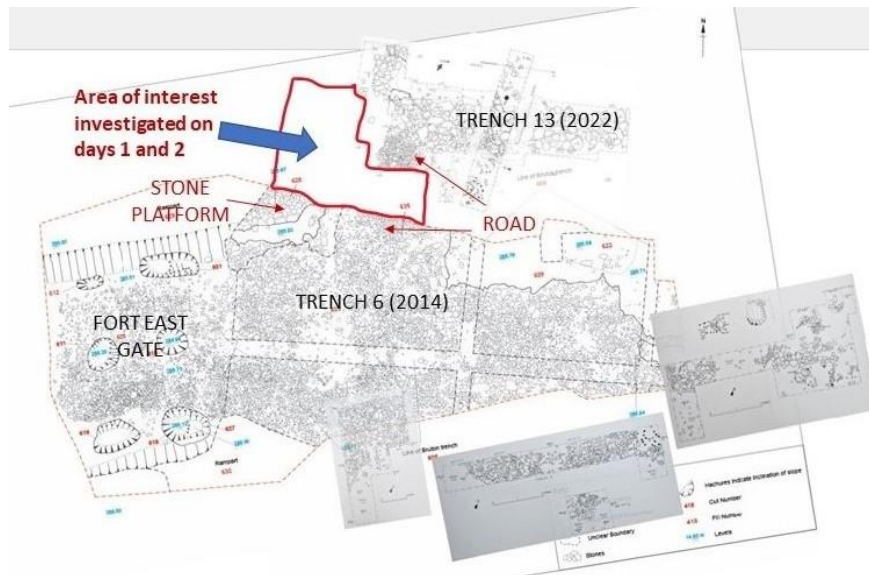


Contour map showing areas that were focused on in the 2023 excavations.

RESULTS

Trench 1 and Test Pits 1 to 6

The focus was to further explore a possible service road that was first noted in the 2014 excavation of the east gate area (Trench 6). Remarkably, there is no ditch on the east side of the fort. The apparent service road branches north as the main road exits the east gate and actually occupies the area where a ditch would be expected in a normal fort. The terminus of the service road was exposed in the south-west corner of last year's Trench 13 and it clearly provided access from the gate to the stone platform in Trench 13. So the intention in 2023 was to fully investigate this short stretch of service road. The opportunity was taken to also investigate the enigmatic stone platform lying against the rampart immediately north of the east gate that was discovered towards the end of the 2014 excavation.



Plan of previous trenches and archaeological remains, with the proposed excavation area (Trench 1) bounded in red.

Initially 4 test pits (each 1 metre square) were dug across the old Trench 6 from 2014 so that we could get our bearings and re-expose the road dug at that time to familiarise ourselves with the character of the archaeology.



Excavation of the 4 test pits in progress, looking east and, below, looking west with the tripod on the eastern fort rampart and the east gate showing as a depression on the left-hand side of the photo.

Test Pit 1

This was located to find the northern edge of 2014 Trench 6 as well as the possible service road revealed at that time. It was successful as can be seen in the image below. The turf level on the north side of the test pit was 277.29 m above Ordnance Datum (AOD) and the stone surface 276.90 m AOD.



TP1. Left: showing the edge of the 2014 trench, with backfill on the right and previously unexcavated deposits on the left side, east at the top. Right: after excavation down to top of road surface, east at the top.

Finds comprised 4 clay pipe stem fragments, 2 dark glazed earthenware sherds (including a rim) and a lump of rusted iron. All post medieval.



TP1 finds.

Test Pit 2

This was positioned 1 metre to the south of TP1. It was half excavated as it became clear that it had picked up the road surface. The turf level on the south side of the test pit was at 277.27 m AOD and the top of the stone surface 276.89 m AOD.

There were no finds.



The road showing in TP2, east at top.

Test Pit 3

This was 1 metre south of TP2 to form a line of 3 test pits running south to north across the 2014 excavation trench. It revealed part of the Roman road surface exiting the east gate. The turf level on the south side of the test pit was at 277.27 m AOD and the top of the stone surface 276.95 m AOD.



Left: exposing the fort exit road surface in TP3, looking east. Right: completed test pit, west at top.

2 finds were recovered from the back fill in TP3: a dark glazed earthenware rim sherd and a blue and white transfer rim sherd, both post medieval.



TP3 finds.

Test Pit 4

This was located 1 metre to the west of and staggered with TP1 and TP2. It picked up the western edge of the service road and part of the gap between it and the stone surface/platform to the north west. The turf level on the west side of the test pit was at 277.32 m AOD and the top of the stone surface 276.86 m AOD.

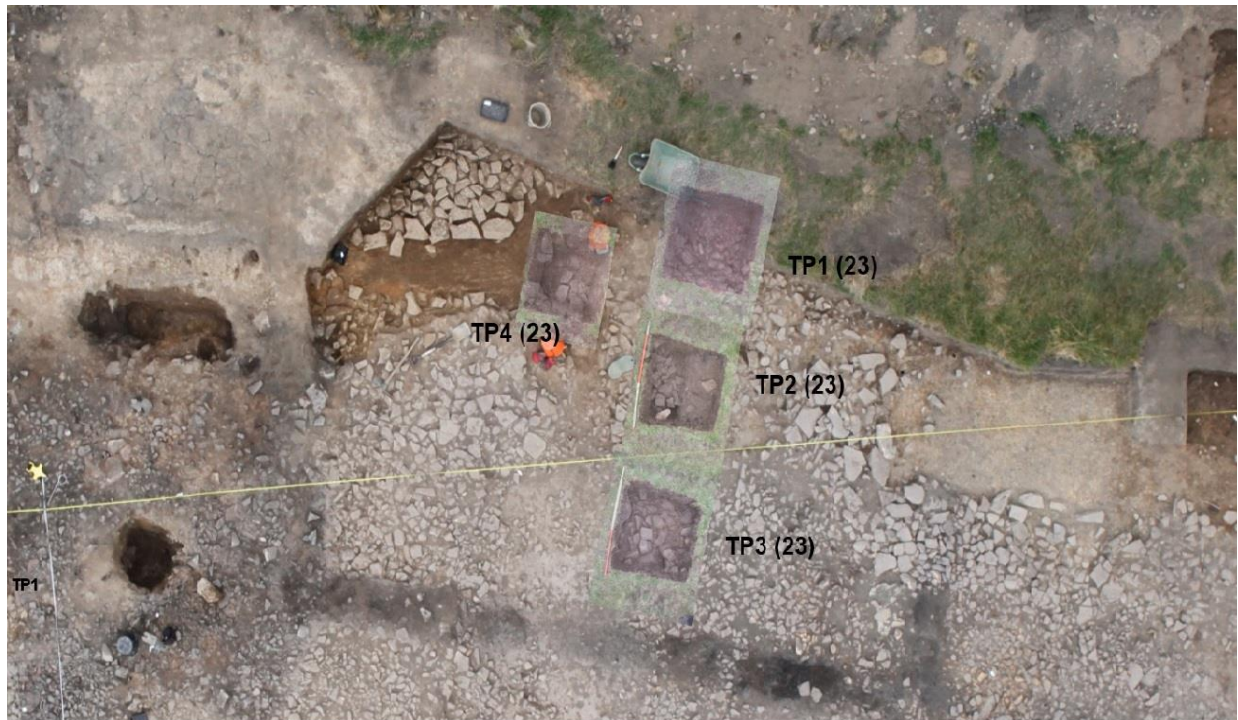


Left: looking north along the line of test pits, with TP3 in the foreground and TP4 top left. Right: TP4 with east at the top.

Finds comprised 1 body sherd of dark glazed and 1 body sherd of dark brown glazed pottery, both post medieval, but there were also 3 pieces of orange red daub which were probably Roman in date and may have come from the wall of an oven hence the oxidised (heated) red colour.



TP4 finds.



The image above shows the 4 test pits from Day 1 overlaid onto the overhead photo of Trench 6 from 2014 (Nash et al, 2014), with north at the top. Based on these results, the team were able to set their stall for excavating new areas of the road and stone platform on Day 2.

Test Pit 5

A 5th test pit was dug north of the stone platform found in the 2014 trench to determine its extent. TP5 was located 1 metre to the north of TP4 but staggered to the west so its alignment with TP4 overlapped by 0.5 m. The stonework was found at a fairly shallow depth and the test pit extended a further 1 m to the north. The tightly packed stonework was of the same character as that found in Trench 6 in 2014 but it looked as though it was dying out on the north side suggesting this marked the extent of the stone platform in this direction. The turf level on the south side of the test pit was at 277.33 m AOD, on the north side 277.31 m AOD and the top of the stone surface 276.90 m AOD.

There were 2 pieces of daub from the topsoil and 2 more from amongst the stones, all of Roman date. From the topsoil also came 1 fragment black glass, 2 clay pipe stems, 1 white glazed sherd, 2 dark glazed earthenware sherds and 1 slipped earthenware sherd, all post medieval.



TP5 looking east, showing the well-preserved gritstone surface with an edge apparent on the north (left) side.



TP5 finds. Left: from topsoil. Right: from amongst stones.

Test Pit 6

This was located 1.7 metres to the north of test pit 5 and 1 metre west of the 2022 Trench 13. It was aimed at examining the potential for more stone surfaces but instead came down onto a possible feature. This appeared to be a linear cut (F4) running on a north west to south east axis and sealed under brown plough soil. Its fill, 012, comprised dark brown silty clay loam with frequent charcoal flecks. There were several flat medium sized randomly placed gritstones on the surface. This fill contrasted with the surrounding yellow clay natural. A section was cut through the feature which was found to have a flat base on natural grey shale and almost vertical sides. It was 22 cm wide and about 40 cm deep. There were no diagnostic finds but given its depth and character it appears to be a Roman feature, perhaps a timber structure foundation trench. The excavated section revealed a flat stone lying on a step on the south west side of the slot. This might have been a padstone for a timber post but the trench was not expanded to explore this further. The turf level at the west side of TP6 was 277.11 m AOD, the top of the fill of F4 was 276.55 m AOD, the top of the possible padstone 276.54 m AOD and the base of F4 was 276.08 m AOD.



Left: TP6 showing F4 pre-excitation with east at top. Right: The section cut through F4, looking west.



Detail of section through F4 in TP6.

At the south east end of F4, the slot appeared to widen out to create a rounded shape suggestive of a post hole, although the fill was identical to 012. Excavation showed a roughly circular shallow post hole, which can be seen above the red section of the photo scale below. It was only 18 cm deep with the base at 276.42 m AOD.

The eastern edge of the post hole, which appeared to be cut through natural clay, had the brown fill continuing under the clay which suggested that this wasn't natural. A slot was excavated across the feature to explain this anomaly and a small animal tunnel was discovered, which accounts for the disturbed, undercut nature of the eastern side of the post hole feature.



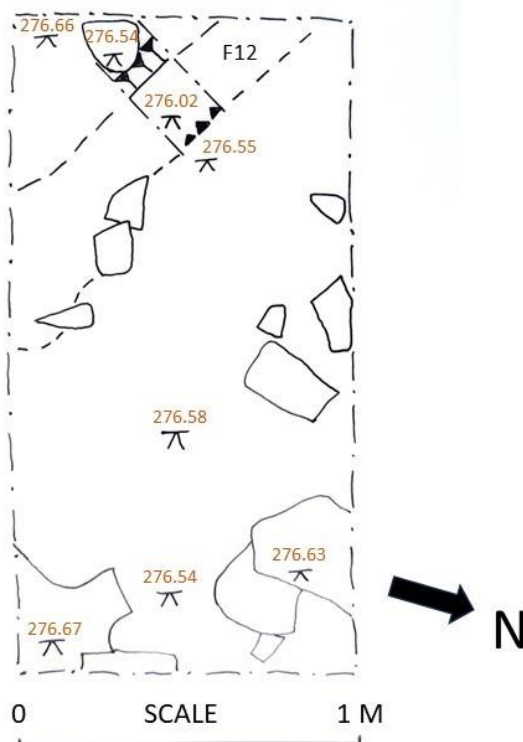
Possible post hole at south eastern end of F4.

TP6 was expanded by 1 m square eastwards to look for other features. There were no further cut features evident, but against the eastern edge were several large flat gritstones. The test pit edge appeared to show that more stones continued. These may be part of a small stone platform partly revealed as F7 in last year's Trench 13 excavation, being a discrete feature located to the north west of the main stone platform.



Left: the 1 metre square eastwards extension of TP6 looking south. Right: looking west with F4 at the top.

The finds from the top and plough soil were all post medieval. These comprised 1 body and 1 base sherd of brown glazed earthenware, 4 body sherds and 1 base sherd of dark glazed earthenware, and 1 clay pipe stem fragment.



Plan of Test Pit 6.



Left: from top and plough soil. Right: from east extension top and plough soil.

Trench 1

Having confirmed the edge of the 2014 Trench 6, the area north of TP1 was opened up to expose more of the service road. This area became Trench 1.



Trench 1: in the foreground is the road surface with gritstone cobbles representing a top layer of 'metalling', but at the top of the photo it is very different with several large, angled stones and a lack of metalling suggesting an intrusive feature cut through the road. Last year's Trench 13, which displayed similar road metalling to the lower half of this photo, is just beyond the section edge at the top of the photo. The trench was extended to the west to pick up the stone platform.



Excavators clean the cobbled service road surface on the left of the photo with the stone platform appearing at the top. The wheelbarrow beyond the trench marks the start of the fort east rampart.



Trench 1 looking east with the stone platform in the foreground and the service road in the top half of the photo running left to right.

Against the eastern edge of Trench 1, was a post setting which appeared to cut through the Roman deposits in this area and plough soil. The post hole (F13) contained some decayed wood fragments, probably from a fence post of post medieval date. Removal of the decayed wood and grey clay loam fill 004 revealed a square post pipe measuring 8 cm across. The post was packed by mixed yellow/cream clay and mid brown silty clay loam (context) 014. The post pit was partly excavated to reveal it was 50 cm in diameter and 38 cm deep. Part of F13 extended beyond the east section edge, whilst the northern edge was bounded by the 2014 Trench 6 excavation edge. The top of F13 was 276.86 m AOD and the base 276.48 m AOD.



The photo above shows the excavated-out post hole which is surrounded by clay packing. To the left is dark humic soil which is the backfill of last year's Trench 13.



F13 after excavation.

Trench 1 was squared off to reveal as much of the stone surfaces as possible.



(photo credit: Phil Barrett)

On the right (west) side of the trench photo above can be seen the stone platform F17 which was discovered in 2014 close to the rampart adjacent to the east gate (Trench 6 context 628). Here the stones (008) were the same mainly medium sized sub-angular gritstones forming a level surface. The west trench

edge was the same as that of TP5. An irregular gap varying from 20 cm to 50 cm wide separated F17 from the stone road. In Trench 1 there was no evidence for kerb stones marking the edge of F17, unlike in Trench 6 in 2014. Perhaps the more regular edge in Trench 6 was because that part of the stone platform was close to the fort gate. There appeared to be Roman deposits between the patches of stone which were selectively tested by excavating slots across them.



Detail of gap between stone platform on left and stones adjacent to the road on the right, looking north. The material between the stones is 009. Some small pieces of burnt daub can be seen in it. The stones on the left appear to be carefully laid in an interlocking pattern. This is reflected on the opposite side of the gap towards the top of the photo. Does this indicate that they once joined up?

The western extent of F17 towards the fort rampart was determined by extending westwards from the north west corner of Trench 1 with a 2 x 1 m trench. The flat medium sized stones continued for 1.1 m before breaking up into a less well laid surface. Just before the western edge of the trench, the stones appeared to die out altogether suggesting that this was the edge. If this is the case then the stone platform is 3.2 m wide. TP5 had established the northern limit of F17 and the north edge of Trench 1 coincided with that of TP 6 so that, with the southern edge exposed in the 2014 Trench 6, it is possible to measure the south to north length of F17 as 4 m. The stone platform was fairly level with its surface being at 276.94 m aOD at the western edge and 276.89 m aOD near its eastern edge – a drop of only 5 cm across the 3.2 m width.



The western extension of Trench 1 across the stone platform F17, showing the stones breaking up and dying away on the right (west) side.

The presumed service road on the left (east) side and middle of the Trench (F3) was similar to that seen in Trench 6 in 2014 and in Trench 13 in 2022. There were remnants of an upper metalling deposit 007 which comprised small to medium rounded gritstones, overlying and mixed with angular medium to large gritstones. A piece of Roman glass was found on the road surface. The east side of the road forms a straggling irregular edge with an area of loose shale and stone occurring against the east side of the trench, to the south of the (later) post hole F13. Within the shale deposit 003 protruded two narrow sub angular large gritstones at right angles to each other. One was 40 cm long and parallel with the road edge whilst the other ran at right angles from the northern end of the other stone and was 32 cm long. The road was broken by a linear area of disturbance that runs east to west from F13 right across to the stone platform F17. The top of the road was around 276.90 m AOD, dropping by c 10 cm either side thus creating a very gentle camber.

The cobble metalling layer 007 was removed to examine what lay beneath. In the south east corner of Trench 1 the metalling and shale deposit were excavated to reveal a large flagstone 50 cm square and also a deposit of small to medium sized gritstone blocks and a layer of burning represented by charcoal and burnt clay/daub. 003 was found to be 5 cm deep with a top height of 276.83 m AOD and the cobbled metalling was just one stone deep. The burnt (red) daub and dense concentration of charcoal were part of a yellow brown silty clay loam layer 011. It contained a roughly circular patch of dense charcoal in the elbow of the two large stones forming a right angle. There was no depth to the charcoal but it could represent an *in situ* burnt piece of the timber. The two stones were not heat affected and do not appear to be part of a hearth. They and the charcoal deposit represent a later phase of activity as they lay over the large flagstone, as did some of the gritstone blocks. 011 was only a maximum of 3 cm deep and came off onto the large flagstone which was associated with a dense concentration of angled small to medium sized gritstones 010.



The stones at right angles to each other set within 003 in the south east corner of Trench 1, north at the top.



F13 post medieval post hole bottom left corner of photo with dense charcoal patch to left of stones and detailed view on right. South at the top.



After removal of 011 the full extent of the flagstone was revealed, surrounded by angled gritstones.

Another large flagstone was revealed under 007 in the central part of the road against Trench 1's southern edge. It was at least as big as the other one but was only partly revealed as it ran under the trench edge. This showed that the flagstone surface and associated angled stones continue westwards (010). The angled gritstones to the north of the flagstone were at various angles, some steeply pitched and ranging in size. They had the appearance of being dumped rather than laid and would be a poor foundation for a road.

It looks as though these stones were infilling a negative feature, perhaps a hollow or pit. Further excavation was not undertaken but would be worthwhile in the future.

The eastern half of the northern edge was extended slightly at a shallow angle to join up with the southern edge of last year's Trench 13 excavation. This allowed the full extent of road F3 to be exposed. By joining the sections excavated in Trench 6 (2014), Trench 13 (2022) and Trench 1 (2024) the length of the road can be calculated as 5 m, with a width of 1.5 m.

A linear gap through the road, running east to west up the middle of Trench 1 was evident. When the cobbles 007 were removed the gap became more pronounced, at up to 30 cm wide, except in the middle of the trench towards the western edge of the road, where the stones continued in a c 70 cm spit. It was apparent that the gritstones foundation 010 of the road was of different character on the north side of the linear gap. Here the stones were more regular in size and shape, being sub angular medium sized gritstones. Although they were mostly at a pitched angle they provided a much more even spread than those on the south side of the gap.



Looking west across Trench 1. The two large flagstones are evident on the left side as is the irregular 'dump' of stones to the left of the photo scale in the middle of the trench. To the right of photo scale can be seen the linear gap separating the stones and note the different character of the stones to the right of the gap.

Several slots were excavated through the gap areas between the stone spreads. For the most part the material 009 between the stones was of similar character comprising a mixed layer of patches of mid grey clay loam, yellow clay with pieces/flecks charcoal. However, a stone free area against the north edge of Trench 1 just west of the road F3 had a different character with much more evidence for burning. A 25 cm wide slot was dug on a west to east axis through this deposit 006 which was 10 cm deep. It was made up of mixed grey, yellow and burnt red clay, soil and charcoal, and a flat stone, coming down on to natural yellow clay. Several pieces of burnt (red) daub came from the east side of the slot. This deposit also produced a piece of unshaped lead. There was no suggestion of a cut feature. The top of 006 was at 276.80 m AOD.



The excavated slot through 006, looking north with a 20 cm scale.

Two possible interpretations come to mind: this is a trample deposit of material derived from nearby heated processes, perhaps clay lined ovens or hearths, or a deliberate spreading out and levelling of deposits prior to laying a (later phase) stone platform.

Removal of the remnants of the clay packing within the post medieval post hole F13 against the eastern edge of Trench 1 provided a section through the potential Roman layers that had been cut by the post hole. In the natural clay sides of the post pit could be seen the edge of a Roman feature F16. This is indicated by the blue arrows in the photo above. The Roman feature is filled with mid to dark grey silty clay loam with frequent charcoal flecks 016 which is in stark contrast to the natural light yellow clay. Excavation of the surface around the post pit showed that the Roman feature was hidden by a deposit of clay and shale (003). There was not time to expose more of the feature but it could be part of building slot.



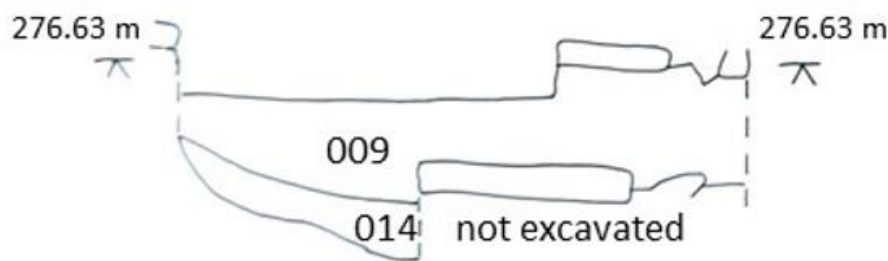
Looking west at the cut of a Roman feature in the west side of post hole F13.

Three metres to the west, in the middle of Trench 1, a slot was dug through the gap between the stone platform F17 and the road F3. This went through a maximum 20 cm depth layer 009 of patches of mid grey clay loam, yellow clay with pieces/flecks charcoal, plus a medium sized flat gritstone. Under 009 on the west side of the slot was 014 dark brown silty clay loam with frequent charcoal flecks. This was removed and found to be 6 cm deep and came off onto sloping natural which showed that this was the fill of a cut feature F14. Beside the flat stone were remains of a small post hole, on its west side at the base of the slope. This was filled with a dark brown grey silty clay loam which was only partially excavated. 014 continued under the stone but was not excavated further. The top of 009 was at 276.79 m AOD, the top of the stone at 276.60 m AOD and the base of 014 at 276.33 m AOD (although this wasn't the base of the

feature which was not excavated). The east side of F14 was not revealed as it ran under the later stone platform (007). Could this be a slot for a timber building with a corner post?



F14 looking north.



F14 south facing

Section through F14.

Another slot was dug across the gap in the stone platform 50 cm to the north. The excavated section was unable to distinguish a clear cut for a building slot on either side. The fills/deposits were similar to those seen in the section dug to the south although without the obvious cut of a feature. However, a feature number F15 was assigned as it is possible the sides of the cut are just beyond the edges of the slot under the adjacent stones. The upper fill 013 was similar to 009 ie. mid grey silty clay loam with frequent small patches of yellow grey clay and frequent charcoal pieces/flecks, small stones, and occasional pieces of burnt (red) clay. Under 013 was 012 which was dark brown silty clay loam with frequent charcoal pieces/flecks and occasional small patches of burnt red clay. This material runs under the stones on either side and clearly predates them; it also ran down at an angle from the west side. 013 and 012 were 15 cm deep with the surface of 013 at 276.80 m AOD. 012 came off onto a flat natural base of compact mid grey clay and shale with frequent small patches of dark orange clay. A small charred circular post, 7 cm diameter, was uncovered against the south side of the slot and was visible in the surface of 013.



F16 look north (left) and from above (right). The charred post is visible on the left.

Between F14 and F16 another section was excavated across the gap in the road. Under 009 was a straight edged cut (F18) into natural clay and filled with 015 (still visible under the 20 cm scale in the photo below), comprising the same mid-grey silty clay loam with charcoal flecks seen in F15. So here it looks like we have the cut of one side of a possible building foundation slot, sealed by the grey-yellow clay layer 009 and partly overlain by the road metalling. The top of 009 here was 276.78 m AOD and the base of the section was 18 cm deep although the fill 015 was only partially excavated.



F18 looking east with the fill 015 under the 20 cm photo scale.



Looking west across Trench 1 showing suggested line of building foundation slots.

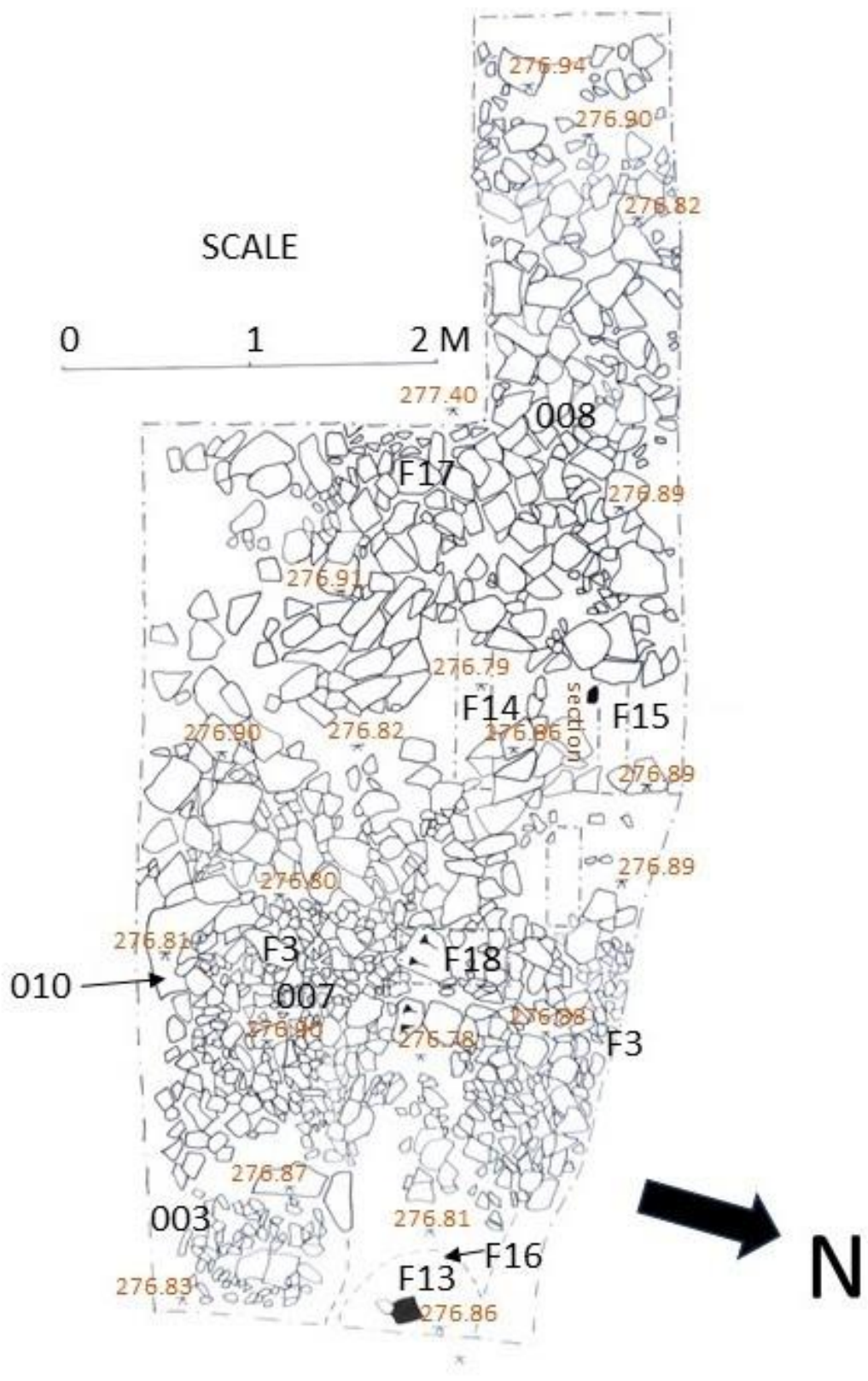
From the top and plough soil across the initial trench and its various extensions came a range of post medieval finds, with just one small piece of orange red daub being of possible Roman origin along with a probable hob nail. The finds were: 10 body, 2 base, 3 rims and 2 handles of black glazed earthenware sherds, 3 body, 1 base and 2 rims of brown glazed earthenware sherds, 1 trail slipped ware rim, 5 clay pipe stem fragments, 1 dark green, 1 black and 3 clear pieces of glass, 2 light blue and white glazed body sherds, and 1 speckled creamware body sherd. A Victorian gold sovereign came from topsoil over the west extension over the stone platform.

Beneath the brown plough soil, several contexts yielded Roman finds. One of the most interesting of these was a piece of Roman glass from the body of a vessel, with a characteristic blue colour with small air bubbles, which came from on top of the stone platform F17 in the northern part of the trench. The other Roman finds were dominated by pieces of daub. Context 003 in the south east corner of Trench 1 yielded 7 pieces, 3 of which were buff coloured and 4 smaller pieces which were oxidised (burnt) red in colour. 4 orange red pieces of daub came from context 006 along with a piece of charcoal and a small piece of unshaped (oxidised) white lead.

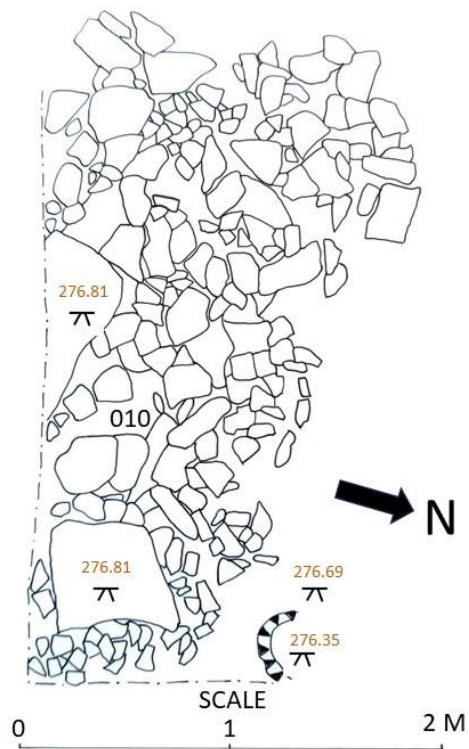
Our interpretation is that we have found evidence in Trench 1 for a timber building in the form of two partially excavated foundation slots, the projected alignment of which is shown above. There was an east to west gap through the road surface and between it and the stone platform to the west, which suggests the timber building was the latest phase. However, the excavated sections across the gap clearly showed the stones overlying the cut features so this is not the case. The timber building may be associated with the large flagstone floor to the south. The photo above shows two of the large flagstones against the left side of the trench. They were sealed under the road metalling so clearly there at least two phases of activity here. If there is a timber building, then it possibly ran alongside the stone surface represented by the flagstones. However, there appears to be an area of disturbance to the north of the flagstones which is evidenced by the pitched stone spread which seems to fill a depression or cut feature. The metalling acted as a levelling deposit of a very uneven surface as well as providing a road access to the stone platform revealed last year in Trench 13.

In Trench 1, the stone platform adjacent to the rampart along with the metalled road appear to be the last phase of activity. They partly overlie a thick deposit of compacted mixed clay which contains lots of charcoal and burnt red clay including daub. This material was also seen around the edge of the long, narrow stone platform seen in last year's excavation. It is suggestive of ovens and hearths nearby. As with last year, we also have evidence for timber structures from an earlier phase in Trench 1 and Test Pit 6.

The flagstone surface, the potential building foundation slots and other potential cut features have only been partially excavated so this area is worthy of further investigation in the future to confirm the suggested chronological sequence, form and function of features.



Plan of Trench 1.



Plan of stone flag layer 010 after removal of cobbles 007 on southern side of Trench 1.



From top and plough soil in the main trench and extensions (above and below images).





From top and plough soil in the main trench and extensions.



1872 gold sovereign from topsoil in northern extension.



Daub from context 003.



Finds from context 006 (left) and 011 (right).



Roman glass from top of stone platform F17.

Contexts

F3 Service road, same as that identified in Trench 13 in 2022 and Trench 6 in 2014.

F13 Post Hole. Cuts 003. Has a post pipe filled with 004 and packed by 005. Post medieval.

F14 Building foundation trench? Filled with 009 and 014. Revealed in section dug across gap between stone platform 008 (628) F17 and road F3. Narrow sided with possible post hole F18 flanked by flat stone on edge.

F15 Possible continuation of F14 but sides not revealed and has a flat base. Filled with 012 and 013. Revealed in section 0.5 m to the east of F14.

F16 Cut feature seen in side of F13 and in section dug across east to west gap in F3. Filled with 016.

F17 Stone platform comprising 008 and continuation of context 628 exposed in Trench 6 in 2014.

F18 Part of cut feature, probably continuation of linear building slot F16. Filled with 015.

003 Above 011, cut by F13. Layer of shale and stones c 5 cm deep, bounded by 2 stones at 90% to each other and cut by F13 north side.

004 wood fragments and loose mid grey loam filling post hole F1.

005 Fill of F1. Packing material for post hole comprising mixed yellow/cream clay and mid brown silty clay loam.

006 Area of burnt material, comprising frequent charcoal flecks and burnt (red) daub pieces in mid to dark brown silty clay loam. Between stones 007 and 008.

007 Overlies flat stones and larger stones 010. Cobbles for road F3 (2022).

008 Stone platform continued from Trench 6 2014 (context 628).

009 Fill of F14. Mixed layer of patches of mid grey clay loam, yellow clay with pieces/flecks charcoal, plus a medium sized flat gritstone. Same as 013.

010 Under 007. Layer of large flat laid flagstones, but also has areas of angled medium sized gritstones roughly laid.

011 Under 003. Area of frequent burnt (red) daub and dense concentration of charcoal. Possible burnt in situ timber. Set in matrix of yellow brown silty clay loam.

012 Fill of F15. Under 013. Dark brown silty clay loam with frequent charcoal flecks and small patches of burnt (red) clay.

013 Fill of F15. Over 012. Mid grey silty clay loam with frequent small patches of yellow grey clay and frequent charcoal pieces/flecks, small stones, and occasional pieces of burnt (red) clay. Same as 009.

014 Dark brown silty clay loam with frequent charcoal flecks. Base fill of F14. Under 009. Same as 012.

015 Fill of F18. Mid to dark grey silty clay loam with frequent charcoal flecks.

016 Fill of F16. Mid to dark grey silty clay loam with frequent charcoal flecks.

Trench 13 northern extension



The location of Trench 13 northern extension with the fort east rampart beyond marked by the level tripod and the east fort gate top left marked by the figures.

The north-eastern part of last year's Trench 13 was re-exposed and then extended to better understand the linear cut feature partly revealed at the northern edge of the trench in 2022 and other potential features hinted at adjacent to the large stone platform. It was hoped that this work would shed light on what the stone platform gave access to as well as the phasing of the archaeology, as it was apparent that the smaller stone platform F4 sealed earlier features including the linear cut F5 which runs under its northern edge, as well as a charcoal filled curving feature against its western edge. The trench measured roughly 4 m by 2.5 m with a gently slope of 15 cm from south to north.



The initial Trench 13 northern extension, looking north, with the main stone platform F2 in the right foreground and a smaller separate platform (2022 F4) on the left side of the trench. The dark square shape in the centre foreground is the backfilled Test Pit 15 which was dug in 2019.

The small stone platform F4 was carefully removed to reveal a feature F12 formed by a roughly circular area of dense charcoal 005 adjacent to a carefully laid flat stone surface 006. The charcoal spread was a maximum 50 cm diameter. 006 comprised a linear spread of flat gritstones of various sizes running northwards from 005. The largest stone was 31 cm long and 20 cm wide. The stones were arranged side by side to create a platform 35 cm wide by 88 cm long; however, one isolated stone on the east side suggested that the platform had been larger in its original form but had been disturbed. The charcoal deposit 005 was bounded on the west and south sides by a c 20 cm strip of hard, baked yellow clay 007. On the east side the charcoal was bounded by 013 a band of grey-orange silty clay loam. 007 and 013 appeared to be the remains of an oven wall enclosing the oven base fills 005 and 024 and part of the stone threshold 006. The surface of 005 and 007 was at 276.64 m AOD with 013 being at 276.59 m AOD.



Oven F12 after removal of overlying stone platform F4. East is at the top.

The charcoal spread 005 was half-sectioned to reveal a shallow depression. It was a maximum of 4 cm deep and lay in a shallow circular depression with a base deposit 024 of mid to light grey clay with frequent mid orange (heated) clay patches and frequent charcoal flecks. The feature would appear to be a clay oven with the adjacent stone surface providing access to the oven entrance. This was probably used for cooking meat and is the second oven to have been found in this area (F11 was found in 2019 near the south side of the main stone platform F2). It is interesting to note that the oven was sealed by the small stone platform F4, so it represents an earlier phase of activity.



Left: overhead view of half sectioned oven F12. Right: oblique view of F12 look north west.

Once a sample had been taken, the oven base was fully excavated and found to overlie another burnt deposit 025, which was made up of frequent small pieces of burnt (red orange) daub and dense charcoal. This material formed an irregular spread c 1 m x 50 cm running south east under 013 beyond the limits of F12 under one of the stones (part of 006) on the north side, although it was bounded on the west by 007. Therefore, this deposit indicated an earlier oven in this area F19, although the form of this feature is uncertain due to the construction of the later oven F12. The base of F19 was at 276.58 mAaOD descending to 276.52 m aOD to the east.

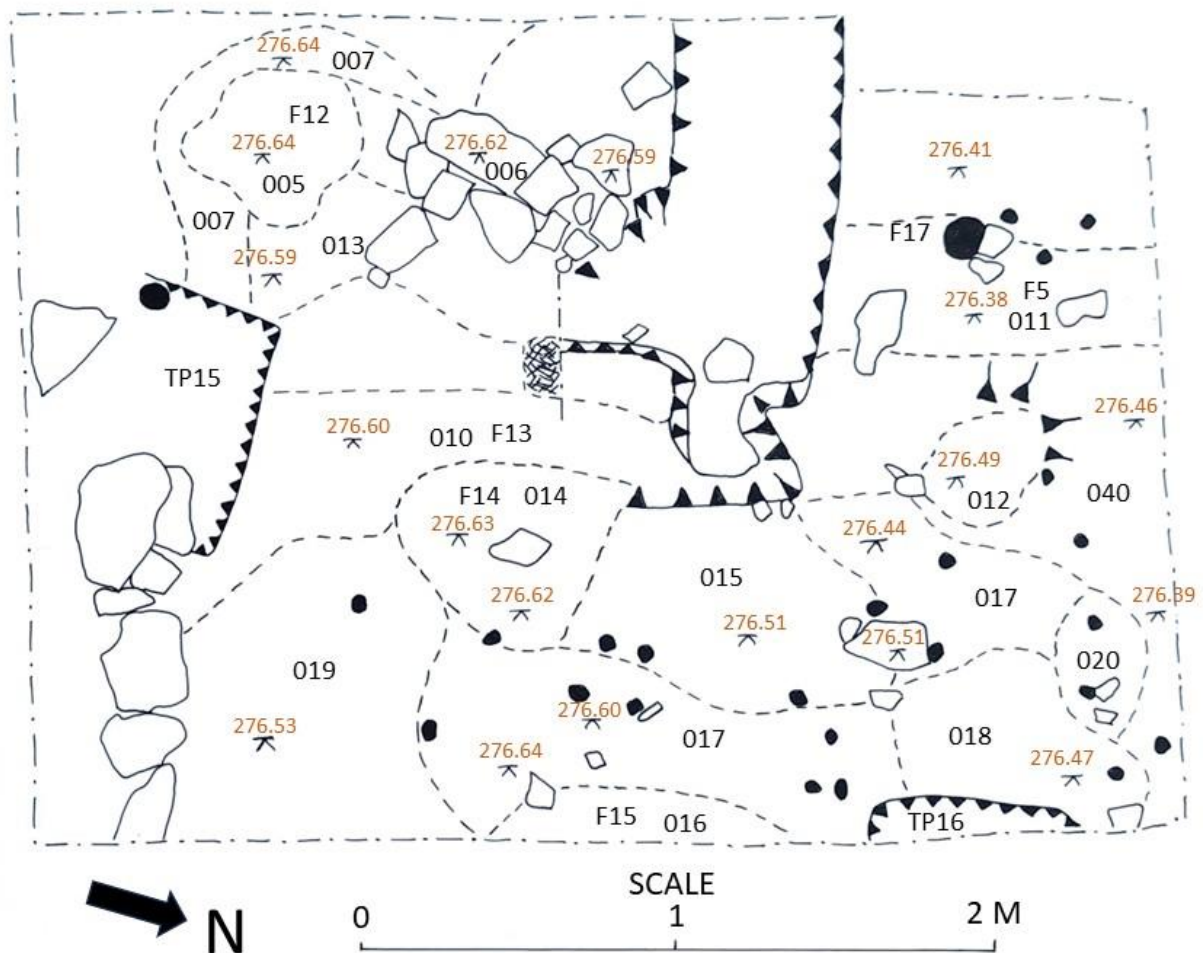


F19 and 025 after removal of 024.

The trench was extended by squaring it off to the east so that a good size area could be revealed to the north of the main stone platform F2. This created a trench 3.5 m x 2.5 m in size. On removal of dark grey topsoil 001 and mid brown plough soil 002 it became apparent that there was considerable archaeological interest. The gully or building slot F5 that had been partly revealed in 2022 could be seen to be running through to the north trench edge, whilst to the east of this were several patches of charcoal and a partially revealed burnt red clay area amongst the predominating yellow clay.



Drone overhead photo of Trench 13 northern extension showing the emerging archaeology. The oven F12 is in the top left (south west) corner and the edge of the main stone platform F2 is along the left hand side. Several discrete areas of charcoal and a burnt red area partially revealed against the bottom trench edge suggest this area was busy with ovens and hearths serviced by the stone platform on the left (drone photo credit: Nat Townsend).



Initial plan of Trench 13 northern extension.

Work began on exploring the linear cut feature F5 in the north west part of the trench.



The gully feature F5 was exposed to show that it was actually a timber building foundation trench with post holes and stake holes being set in the fill 011 which comprised mid grey brown silty clay loam with occasional small stones.



F5 and its post holes being revealed in the north west part of the trench. F17 is on the left and F16 is by the excavator on the right.

Towards the northern edge of the trench within F5 was a rectangular post pipe with curving edges F17. This was 14 cm in length and 8 cm wide and c 80 cm deep. The post had been supported on the north and east sides by two medium sized packing stones, with several small stones rammed in behind them. To the north of the post hole were 3 stake holes 4 cm in diameter forming an unequal triangle with 22 cm being the long axis (on the west side) and the other two distances being 15 cm between the stake holes. The top of the post hole was at 276.41 m AOD.



Left: Post hole F17 set into the fill of F5, with 3 stake holes to the left. Right: The stone packed post hole in the centre has been excavated to reveal its true shape – rectangular with round corners perhaps caused when the post was extracted.

To the south a section was excavated across F5 where it ran under the later stone platform F4. A post pipe, F16, of similar shape and size, was found here, 1 m to the south of F17. This appeared as a part void but also with packing made of mid grey clay 023 rather than stone. Excavation was hampered by a high water table and wet weather but a probe showed that it was c 70 cm deep. F16 was set within the fill of F5 but went much deeper than the base of the building slot - the posts were probably pile-driven into the clay.



Left: F17 as it first appeared. Right: after excavation showing its location within the building foundation slot F5, looking south.

The section demonstrated that the building foundation slot F5 and the post pipe F16 was sealed by a thick layer of mixed yellow clay 017. This clay appears to have been a deposit to seal the former building foundation slots to allow the area to be used for ovens and hearths. The section provided a useful indicator of the sequence of deposits and features in this area. The top deposit was 017 which was a maximum of 11 cm deep and extended across much of the trench. It comprised a mixed deposit of mid grey silty clay loam with 40% mid yellow clay and frequent small stones and charcoal flecks. It was associated with various ovens and a hearth and appears to be a later phase trample layer forming the top of a levelling deposit covering earlier building slots F5 and F9 and earlier ovens. Under 017 was an 8 cm deep deposit 035 of mid yellow clay with occasional small stones and charcoal flecks. This was over 036 which was very different in character, comprising dark grey brown silty clay loam with frequent charcoal flecks/pieces and occasional small pieces of (burnt) red orange clay. This deposit was 6 cm deep where it overlay natural clay on its east side but deepened to 10 cm to the west where it overlay F5 fill 038. It appeared to abut 037 on its west side and was 20 cm wide by 15 cm deep. 037 was a mixed mid grey clay with a small patch of orange clay and occasional small stones. It appeared to be the remnants of the fill of post hole F16 and therefore similar to fill 023. Under 036 and 037 was the main fill of F5 building foundation slot. This was 038 which was a mid grey silty clay with moderate small patches orange clay and frequent small stones and shale. It was 39 cm wide and 23 cm deep. Under 038 was a thin base fill of F5, being a grey silt with occasional charcoal flecks with a maximum of 3 cm depth. This gives dimensions of 39 cm width and 28 cm depth for F5.

This section clearly demonstrates that the building foundation slot F5 represents the first phase of activity. Post hole F16 is inserted into F5 as part of the timber building construction. 037 appears to be the remnant of the adjacent post hole F16 fill. Interestingly 036 seems to abut 037 so it is possible that this represents a deposit within the building indicated by F5 and its return F9. However, given the nature of 036 with its high red clay and charcoal content, it could also be part of one of many oven bases in this area. F5, F16 and 036 are sealed by the clay deposit 035 which seems to be a capping and levelling layer to enable new ovens and hearths to be operated in this area. 017 seems to be the trampled upper level of this capping deposit.



Detail of north facing section through F5.

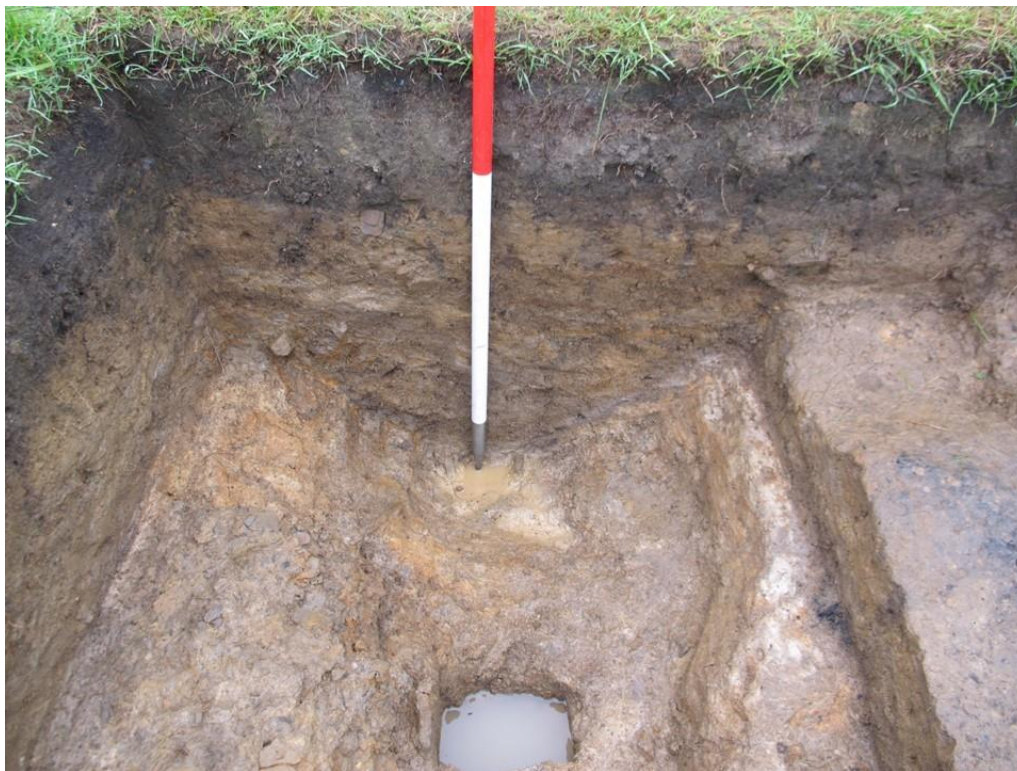


Post excavation overhead view showing post holes F16 on the left and F17 on the right. The building foundation slot F5 has been mostly excavated but with some fill left in (below the white section of the photo scale)

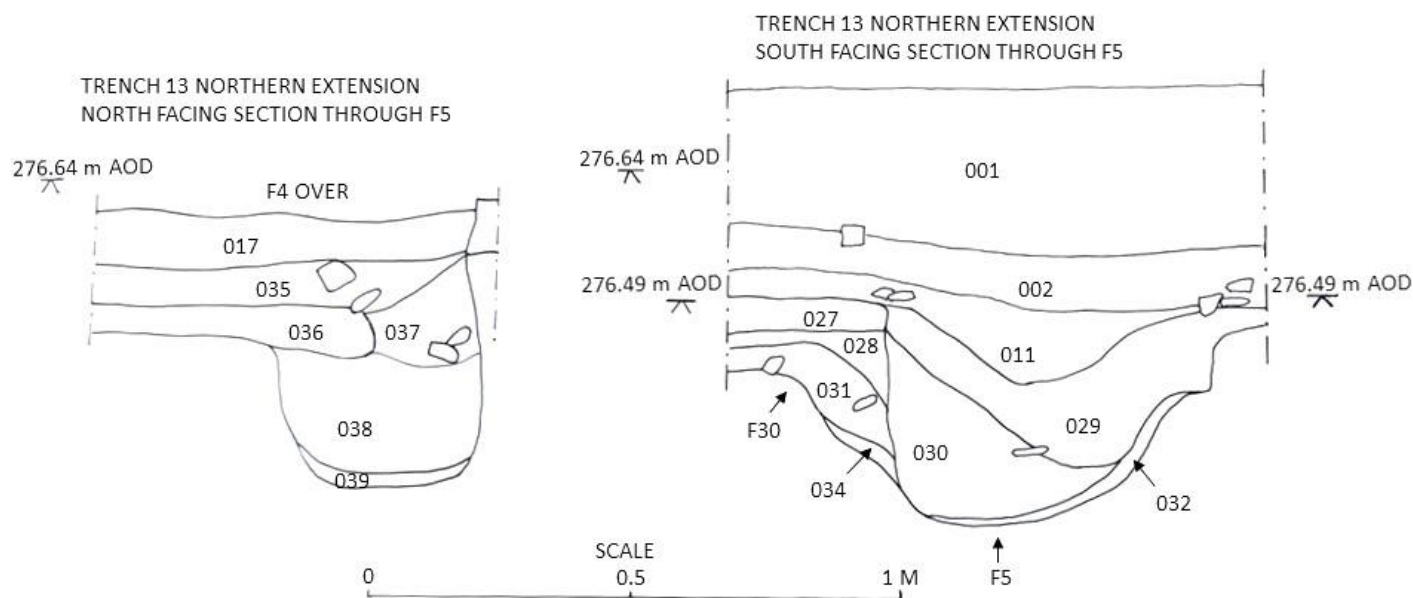
The second section recorded through F5 was at the north edge of the trench. This demonstrated a complex sequence of fills. Under the 30 cm deep topsoil was plough soil 002. However, the plough soil was not the usual mid brown silty clay loam but had a more mid yellow clay content to it – not dissimilar to 017 which was the clay capping layer seen across much of the trench and associated with several ovens. Filling in the top of the building slot was a layer of mid brown silty clay loam 011 which was 75 cm wide and a maximum of 11 cm deep where it filled in a depression over the eastern half of F5. Underneath 011 was layer 029 comprising mid yellow silty clay with frequent patches of mid yellow grey silty clay. As with 011 this was deepest towards the east side of F5. It was 60 cm wide and a maximum of 17 cm deep. It overlay 030 which was mid grey silty clay with occasional small stones and charcoal flecks. This layer was formed mostly on the west side of F5 and was 55 cm wide and a maximum of 25 cm deep. The base layer was a thin 2 cm deep light grey/white silt with frequent charcoal flecks 032. F5 was 38 cm deep over its centre point with the top of 011 being at 276.46 m AOD at this point.

On the west side of F5 there was a sequence of layers that appeared to be cut by the feature. These comprised a compact layer of light cream coloured silty clay 027 (6 cm deep), over a layer of mid to dark

grey silty clay with moderate charcoal flecks 028 (3 cm maximum depth on west side but deepening to 12 cm on the east side), which in turn overlay a compact layer of mid orange silty clay with 40% grey shale and clay and occasional charcoal flecks 031 (4 cm on the west side but deepening to 18 cm on the east side). Finally, 031 overlay a thin basal layer of dark grey silty clay with frequent small stones 034 which was 3 cm deep. These 4 layers went into the trench edge so their width is unknown but they went 30 cm into the excavated area and make up the fills of F30 which is cut by F5. 031 lay over natural light yellow clay and ran along the west side of F5 on a ledge of natural that was cut by the feature. Could these layers represent the fill of an earlier feature cut by the building foundation slot F5?



Looking north at the south facing section through F5.



Sections through building foundation slot F5.

Careful trowelling of the west half of the trench showed a number of features and deposits. Several areas of dense concentrations of charcoal were revealed, along with patterns of stake holes and part of a hearth against the western edge of the excavated area. In the middle of the trench was a deposit 014 of dense charcoal mixed with frequent pieces of burnt (orange red) daub. This was sub-circular in shape and measured 70 cm by 55 cm. The top height was 276.63 m AOD. This was probably another oven base F14 but was not excavated. To the west side ran a linear band of light to mid grey silty clay 010, forming F13, which was around 1.3 m long and 40 cm wide, with a top level of 276.60 m AOD. This feature/deposit ran parallel and to the west of F5 towards the stone platform F2. Partial excavation near the stone platform revealed that this was just a deposit rather than a fill of a feature. To the west of F14 was a sequence of 3 deposits, with 008 being the top one, comprising a thin 3 cm deep layer of mid grey-yellow shale. Under this was a similar depth of mid grey silty clay loam with frequent charcoal and daub fragments 009, which in turn overlay 019 comprising mid grey silty clay loam with frequent charcoal flecks and small patches of yellow clay. These deposits were located adjacent to the south side of the stone platform in an area of concentrated oven/hearth activity and appear to be material deriving from that activity, part rake-out part levelling material. The full extent of these deposits was not determined as they continued under the east edge of the trench. However, they ran c 1 metre westwards to 010 and 80 cm northwards from F2 to 017 and F14/014. The top level of 019 was 276.53 m AOD. 017 to the north of 019 was a linear deposit of mixed mid grey silty clay loam with 40% mid yellow clay and frequent small stones and charcoal flecks. It was 1.5 m long and varied in width from 60 cm in the south to 30 cm in the middle part. The top level was 276.60 m AOD. 017 encompassed and was contemporary with a partly revealed hearth F15 which ran under the east trench edge. F15 had a gently curving western edge and was 90 cm long. It was made up of burnt (oxidised) red clay 016, with a top height of 276.64 m AOD. To the west of 017 deposit 015 was a 95 cm by 60 cm oval deposit of mid yellow-grey silty clay loam with moderate charcoal flecks, at 276.51 m AOD. The southern edge of 015 abutted a medium sized sandstone (14 x 8 cm) and smaller stone which had potential to be stone packing for a post hole. Further investigation showed this not to be the case.



Looking east across deposits and features in the eastern half of Trench 13 northern extension after initial cleaning, showing spreads of charcoal and hearth F15 against the middle part of the top trench edge.

In the north east corner of the trench old Test Pit 16 from 2019 was partly revealed along the eastern trench edge. TP16 had exposed an area of burning and this continued westwards into the trench as 018 comprising dense charcoal in mid grey silty clay loam in an oval shape measuring 75 cm (north to south) by 50 cm (east to west) and with a surface height of 276.47 m AOD. This was not excavated but seems to be related to a nearby oven beyond the trench edge. There were other burnt deposits in this area, separated by 017, the mixed yellow clay deposit that appeared to be both a levelling layer sealing earlier features and a working surface. Just to the west of 018 was a small oval patch of mid orange-grey silty clay loam with

moderate charcoal flecks 020. This was not excavated. To the west of this was a straggling deposit 040 which ran under the north edge of the trench. It was very similar in character to 015 comprising mid yellow-grey silty clay loam with moderate charcoal flecks and was separated from 015 by a band of the mixed yellow clay 017. The surface height of 040 was 276.39 m AOD. To the west of 040, between it and slot F5, was a roughly circular patch of dense charcoal 012 c 30 cm in diameter, with a surface height of 276.49 m AOD. As well as charcoal, 012 comprised mid grey silty clay. It was not excavated except partly on the west side which showed to be very shallow (less than 3 cm deep). It could represent the site of another clay oven although there was no evidence for remnants of an oven wall or stone threshold as seen with F12.

A number of stake holes F20 were apparent after initial trowelling and these were excavated to confirm that they were genuine. They were consistently 4-5 cm diameter and around 10 to 12 cm deep and cut into the mixed clay deposit 017, 019, 015, 018, 020, and 040. The fill of light to mid grey silty clay loam was also consistent across the stake holes. A degree of patterning was evident with two clusters of 4 closely grouped stake holes in 017 to the west of hearth F15, while near the northern edge of the trench there was a line of 5 stake holes. It is possible to create other alignments. Further excavation to the east and north would probably reveal more of the stake holes which would aid interpretation. It is worth noting that they respect the hearth and the charcoal spreads that may be former oven bases. The stake holes therefore might indicate structural supports or wind shelters for these heat-based activities.



Aerial view of Trench 13 northern extension showing the pattern of stake holes F20 in the eastern half of the excavation area (drone photo credit: Joolze Dymond).

An exploratory slot was dug through the mixed yellow clay deposit to the west of hearth F15 to better understand the stratigraphy. This showed that the fire reddened clay indicating hearth F15 was formed on the upper surface of 017 which was found to be 20 cm deep next to the hearth, with a top height here of 276.57 m AOD and a base height of 276.37 m AOD. The slot came down onto a rich charcoal deposit which indicated an earlier phase oven. The slot was extended to the north to reveal more of this underlying feature F29. It comprised a layer of dark grey brown silty clay loam with 20% charcoal pieces and flecks and 10% small pieces of light red orange daub and occasional burnt bone 041, overlying a base structure

of small to medium sized sub angular flat laid gritstones 042 with some being heat reddened. An edge was found on the north side against a heat-hardened yellow and orange clay 043 which might be natural. The other 3 sides of F29 were not exposed, 041 was only partially excavated – enough to show the emerging stone platform 042 beneath. Whilst we cannot be certain of the function of 029, the dense charcoal, pieces of burnt daub and burnt bone strongly suggests the site of another clay oven. The exploratory slot clearly demonstrated that there is a considerable depth and complexity to the stratigraphy here, and that the mixed yellow clay deposit acted as a capping and levelling layer.



Looking east across the possible oven base F29, with the depth of the levelling clay deposit 017 evident and with the red clay of hearth F15 at the rear against the section edge.

A strip alongside the northern edge of the large stone platform F2, exposed in the 2022 excavation, was investigated to expose more of the potential building foundation slot F9 that had been identified in Test Pit 15 and last year running eastwards from TP15.



Excavation of the area adjacent to the edge of the stone platform F2, seen on the right (south side) of the trench.

TP 15 was expanded, 2 sections were dug against F2, and the area in the south west corner of the trench was excavated to look for evidence of the potential timber building foundation slot F9 which would be a return for F5. A section against the east edge of the trench showed the profile of F9 and a post hole F22 set within it. F9 was cut into natural yellow clay which formed a flat base on either side of the post hole F22 which went down through the base of the building foundation slot, similar to the post holes found in F5. F9 was sealed under 30 cm depth of topsoil 001 with no evidence for plough soil here. The fill of F9 comprised a mid to dark grey silty clay loam with 30% lumps of mid yellow clay loam and moderate small to medium gritstones and charcoal flecks 044. There was a 13 cm square lump of charcoal rich silty clay on the north side ledge. The width of F9 was 90 cm at the top stepping down to 70 cm, with almost vertical sides. The top height was 276.63 m aOD and it was 25 cm deep to the natural light yellow clay base on the south side, but a little deeper at 29 cm on the north side. F22 was 45 cm deep and 15 cm wide, filled with a light to mid brown grey silty clay loam with frequent charcoal flecks 045. The post hole was found to be packed with stones around its base with a slightly angled large flat gritstone on the north side against the yellow natural clay. The post hole was 27 cm wide and had a base at 276.06 m AOD.



F9 in east facing section of the trench north edge, with post pipe F22 indicated by blue arrows. The light yellow clay marks the edges of the foundation slot in which the post was set.

A second section was dug across F9 to confirm its alignment. This was located 1 metre west of the section above, adjacent and joining up with the 2019 Test Pit 15. The edges of the lower level of the foundation slot were exposed and found to be 37 cm wide widening to 49 cm near the top. The fill was the same as 044. F9 was overlain by 019 on the north side so that the edges could not be discerned at the upper level and had to be revealed by excavating the section. It could also be seen that burnt deposit 026 belonging to possible oven F19 also overlay the building foundation slot. A cluster of small to medium sub angular stones were revealed against the north edge of the excavated section through F9 and sealed under 019, which was 10 cm deep. These were not excavated further but could represent the base of yet another oven, similar to F29. The south edge of F9 was shown to abut the stone platform edge of F2.

The small post hole (F18) that had been excavated in 2019 in the base of TP15 was found to lie on the edge of F9 and lined up with F16 and F17 so is placed at the corner of the timber building. Just to the north of F18 was another post hole F24 that was key shaped, being 17 cm long and with the circular hole at the west end being 7 cm in diameter. It was part excavated to c 10 cm depth and was filled with a light brown silty clay loam with occasional charcoal flecks 047. A flat stone on edge against F2 was probably a packing stone to support the post that had been in F24. 60cm to the east was a post hole F23 which was rectangular in shape and similar to F24 except without the circular hole at the end. F23 was 7 cm wide and 20 cm long and its fill 048 was the same as that for F24. The fill was not excavated. The top level for F24 and F23 was 276.28 m AOD. With F22 there is a line of 3 post holes set in the south edge of the building foundation slot F9.



Building foundation slot F9 shows in plan in the base of 2019 TP15 and adjacent section.

In the south west corner of the trench another post hole F25 was excavated which was in line with the two rectangular ones forming part of the timber building alongside the stone platform – except this post hole was at right angles to the other two and a slightly different shape. It can be seen to the left of the white part of the photo scale in the image below. It was rectangular with rounded corners and measured 10 cm by 7 cm. The gap between it and F24 was 60 cm. The top level was considerably higher at 276.47 m aOD. There is an alignment of 4 post settings (F22, F23, F24, F25) evenly spaced at 60 cm distances forming a timber wall alongside the stone platform.

The south west part of the trench was investigated to see if F9 continued beyond the extrapolated junction with F5 but the building foundation slot was not apparent. Instead, a shallow, narrow linear feature F26 ran westwards along the same alignment as the south side of F9. It was filled with a light brown silty clay loam 049 and was only 10 cm wide by 3 cm deep. It ran out of the trench on its west side. Post hole F25 was set into and straddled its southern edge. Could F26 have been the site of a sill beam for a timber wall?



Looking east along the southern edge of the trench, showing the alignment of F25 (foreground), F24 and F23. In the far, eastern, edge of the trench post pipe F22 also aligns.

A narrow section was excavated through the western trench edge to confirm that F9 did not extend this far and proved that this was the case as probable natural yellow clay was found at a depth of 276.36 m aOD. However, under F26 could be seen a cut into the natural and a grey shaly fill 050 on the south side of the cut. There was not time to investigate this feature further but it could be part of another building foundation slot which is offset a little from F9. The small post hole F25 is partly set into this potential feature F31.



Left: the slot F25 runs towards the west trench edge on the left of the photo from the white part of the photo scale.
 Right: the top of the photo shows the section dug across the section edge which the natural yellow clay seemingly cut by a feature on the left which has a grey fill.

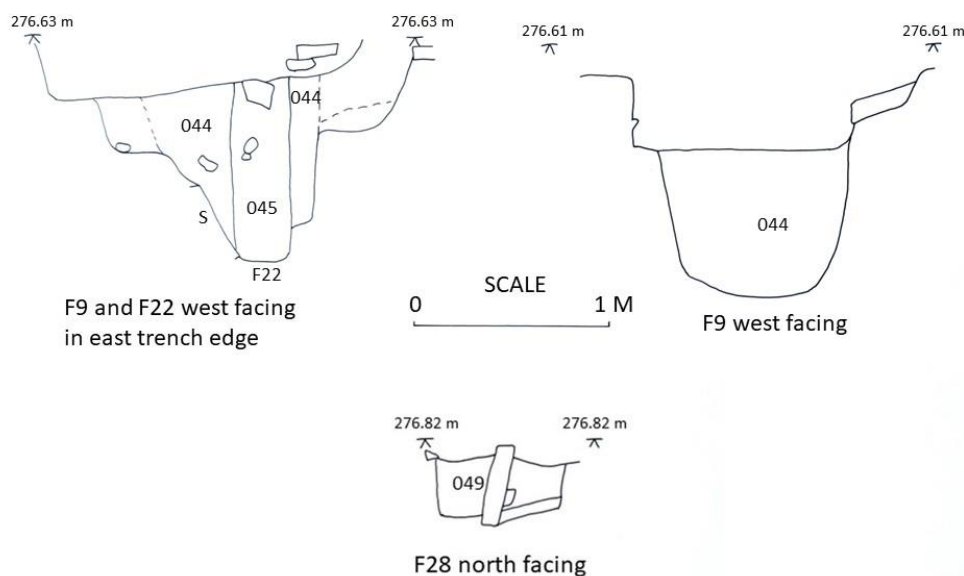
Finally in this trench, in the south west corner, several more post holes were revealed. One of these, F28, was close to the west trench edge and formed a rough circle 30 cm diameter. In the middle, on a south to north axis, was a vertically set, narrow flat stone 22 cm long. The fill 051 was light brown silty clay loam with 30% small patches of light yellow and grey silty clay. The surface of the fill was at 276.56 m AOD. It was half sectioned and found to be 14 cm with vertical sides. On the west side was a slightly angled, nearly horizontal stone on which the post presumably sat, supported on its east side by the vertical stone. 15 cm to the south east of F28 was another potential post hole F27 which was an irregular oval in shape measuring 22 cm by 15 cm and evidenced by an outer fill of bright mid orange clay 052 with an internal circular mid grey silty clay patch 053 of 12 cm diameter representing a possible post pipe. This possible feature was not excavated and had a surface height of 276.53 AOD. A final group of 3 small post holes clustered together as F21 were located 50 cm to the east of F28. The largest of the cluster was 14 cm diameter and circular. It lined up with F16 and F17 so could be part of the timber wall support. It lay 52 cm to the south of F16 and had a similar fill of mid grey clay. This fill was excavated to a depth of 29 cm from a surface level of 276.50 m AOD. However, a wider post hole edge that the post was set into was not apparent at this level either because it was obscured by a mixed grey and yellow clay deposit similar to 017 or because there wasn't one - so it is possible the post hole represents a later phase of activity here. The other two post holes were half the size, one being close to the east edge of the larger one and the other 8 cm to the north of that.



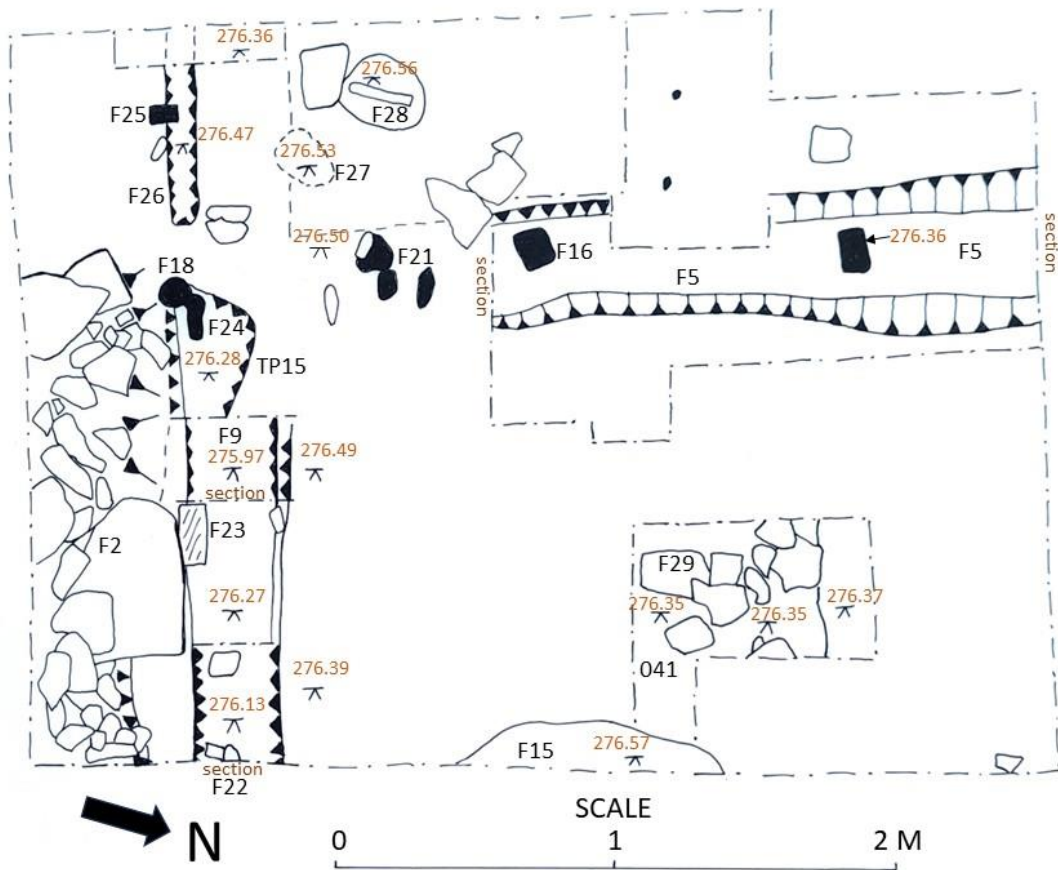
Post hole cluster F21 on the left and post hole F28 is on the right.

The top and plough soils produced post medieval finds: 11 body sherds, 3 rims, and 1 handle of dark glazed earthenware, 1 body sherd and rim of brown glazed earthenware, 1 unglazed earthenware body sherd, 1 rim, 1 base and 1 body sherd of white glazed pottery plus a burnt white glazed handle, 1 yellow glazed base sherd, 3 clay pipe stem fragments, 1 nail, 1 large brick/tile fragment, and 2 pieces of black glass.

There were several Roman finds from stratified contexts, these being dominated by nails with 3 from context 011, 2 from 044, 1 from 019 and 1 from 022. At least 3 of these nails were possible hobnails and 1 was much larger so probably used for construction purposes. 1 large piece of unburnt daub came from 021 and two smaller burnt red pieces from 025.



Sections through features in Trench 13 north extension.



Final plan of Trench 13 northern extension showing main features described in text.

Trench 13 northern extension has revealed fascinating, complex, multi-phased archaeology. We are beginning to understand the sequence of events, with an initial phase of timber buildings which were then dismantled and the area given over to intensive use for ovens and hearths accessed by stone platforms. All of this could have happened within the 15-20 years or so life span of the two phases of fort occupation in the late 1st century AD.



From top and plough soil.



Nails from 011 (left) and 044 (right)



Roman nail from 019 (left) and 022 (right).



Daub from 021 (left) and 025 (right).

Contexts

F5 Building foundation trench sealed by deposits 017 and 035 and contains 011, 027, 028, 029, 030, 031 and 032 in south facing in northern trench edge section and 038 in the north facing section in middle of trench.

F9 Building foundation slot on east to west alignment first seen in Test Pit 15, and further exposed alongside the north side of stone platform F2. It is partnered with F5 which is the south to north return. Filled with 044, 045, 046.

F12 Oven base feature. Comprises 005, 024, 006, 007 and 013.

F13 Contains 010. Potential linear feature but no cut found.

F14 Area of charcoal rich soil thought to represent feature.

F15 Burnt red clay area against east side of trench. Unknown dimension as runs under trench edge. Probable hearth. Made up of 016.

F16 Post hole under 021 and in line with F17 and F18. Filled with 023. Similar shape to F17.

F17 Post hole with stone packing and void for post pipe.

F18 Post hole excavated as part of Test Pit 15. In line with F16 and F17.

F19 Under F12 and contains 025 and 026. Possible earlier oven base under later oven F12.

F20 General feature number for stake holes.

F21 Cluster of three post holes, the larger one in line with F20 and F17.

F22 Post hole evident in east trench edge/section, within building foundation slot F9.

F23 Rectangular post hole straddling edge of F9.

F24 Key hole shaped post hole in F9. Part of line of post holes for post-in-trench timber wall foundation. Occurs in Test Pit 15 next to (north of) F18.

F25 Rectangular post hole straddling edge and cutting into of F26.

F26 Narrow, shallow slot running east west in line with and to the west of F9 and cut by F25. Possible site of sill beam? Only partly revealed as runs under west trench edge.

F27 Possible post hole with orange edge, light grey-yellow silty clay fill. Not excavated. Filled with 052 and 053.

F28 Circular post hole with narrow packing stone on edge across middle of feature and flat stone pad on west side. Half excavated. Filled with 051.

F29 Possible oven base made up of 041 and 042. Sealed by 017 and running under hearth F15.

F30 Possible earlier building foundation slot cut by F5. Contains 027, 028, 031 and 034.

F31 cut by 25. Potential cut feature partly exposed in south west corner of Trench 13 northern extension. Filled with 050.

005 Part of F12. Dense charcoal fill with burnt bone.

006 Part of F12. Flat stones forming level platform access to oven.

007 Part of F12. Curving band of hard (baked) yellow clay enclosing 005 on west and south sides.

008 Over 009. Deposit of mid grey-yellow shale.

009 Under 008. Mid grey silty clay loam with frequent charcoal and daub fragments.

010 Fill of F13. Light to mid grey silty clay.

011 Upper fill of F5. Under 002 and over 027 and 029. Mid grey-brown silty clay.

012 Patch of dense charcoal against east side of F13. Probable oven base.

013 Part of F12. Band of grey-orange silty clay loam forming part of oven wall on east side enclosing 005 and stones 006.

014 Patch of dense charcoal mixed with frequent pieces of burnt daub. Probable oven base.

015 Part of F14. Mid yellow-grey silty clay loam with moderate charcoal flecks.

016 Belongs to F15. Burnt (oxidised) red clay.

017 Deposit sealing F29, F5 and F9 and abutting, contemporary with F15. Over 035. Mixed deposit of mid grey silty clay loam with 40% mid yellow clay and frequent small stones and charcoal flecks.

018 Deposit in south east corner of trench. Dense charcoal in mid grey silty clay loam.

019 Deposit of mid grey silty clay loam with frequent charcoal flecks and small patches of yellow clay.

020 Mid orange-grey silty clay loam with moderate charcoal flecks

021 Yellow clay deposit sealing Post Hole F16.

022 Fill of F5. Same as 011.

023 Fill of F16. Mid grey clay loam.

024 Part of F12, under 005. Base of oven. Light grey clay with frequent patches of (heated) mid orange clay and charcoal flecks.

025 Belongs to F19 and over 026. Under 024. Burnt daub and dense charcoal.

026 Belongs to F19 and under 025. Base deposit of oven. Frequent pieces of charcoal and orange/red burnt clay in matrix of mid grey clay loam. 6 pieces of calcined bone.

027 Fill of F30 cut by F5. Under 011 and over 028. Layer of light cream coloured silty clay.

028 Fill of F30 cut by F5. Under 027, 029 and over 030 and 031. Layer of dark grey silty clay with moderate charcoal flecks.

029 Fill of F5. Under 011 and over 028, 030 and 032. Layer of mid yellow silty clay with frequent patches of mid yellow grey silty clay.

030 Fill of F5. Under 029 and over 031 and 032. Layer of mid grey silty clay with occasional small stones and charcoal flecks.

031 Fill of F30 cut by F5. Under 028 and 030 and over natural. Compact layer of mid orange silty clay with 40% grey shale and clay and occasional charcoal flecks.

032 Fill of F5. Base fill under 030 and 029. Layer of light grey/white silt with frequent charcoal flecks.

033 Fill of F16. Under 011 and over 028. Mid grey silty clay with clumps of grey clay as packing material.

034 Fill of F30 cut by F16. Under 031 and above natural. A thin basal layer of dark grey silty clay with frequent small stones.

035 Deposit under 017 and over 036. Mid yellow clay with occasional small stones and charcoal flecks

036 Deposit under 035 and over 038 and abuts 037. Dark grey brown silty clay loam with frequent charcoal flecks/pieces and occasional small pieces of (burnt) red orange clay

037 Possible remnants of fill of F16, same as 023? Abuts 036. Mixed mid grey clay with a small patch of orange clay and occasional small stones.

038 Main fill of F5. Under 036 and over 039. Mid grey silty clay with moderate small patches orange clay and frequent small stones and shale.

039 Base fill of F5 under 038. Mid grey silt with occasional charcoal flecks.

040. Deposit against north edge of trench. Mid yellow-grey silty clay loam with moderate charcoal flecks.

041 Part of F29 and over 042. Dark grey brown silty clay loam with 20% charcoal pieces and flecks and 10% small pieces of light red orange daub and occasional burnt bone.

042 Part of F29 under 041. Small to medium sized sub angular flat laid gritstones, some heat reddened.

043 Heat hardened yellow and orange clay with moderate small stones which might be natural against north side of F29.

044 Fill of F9. Mid brown grey silty clay loam with 30% lumps of mid yellow clay loam and moderate small to medium gritstones and charcoal flecks.

045 Fill of F22. Light to mid brown grey silty clay loam with frequent charcoal flecks. Fill of post pipe.

046 Fill of F22. Mid to dark grey silty clay loam filling the post hole and gritstones packing its base.

047 Fill of F23. Light brown silty clay loam with occasional charcoal flecks. Not excavated.

048 Fill of F24. Light brown silty clay loam with occasional charcoal flecks.

049 Fill of F26. Light brown silty clay loam.

050 Fill of F31. Mid grey shaly loam. Not excavated.

051 Fill of F28. Light brown silty clay loam with 30% small patches of light yellow and grey silty clay

052 Fill of F27. Outer fill of bright mid orange clay.

053 Fill of F27. Internal circular mid grey silty clay patch.

Trench 13 eastern extension

Last year the 2022 excavations Trench 13 revealed a long, narrow stone platform (F2) just to the north of the road exiting the east gate. There had not been enough time to locate the eastern edge of this feature so in 2023 the excavation team set about extending the trench to follow the feature eastwards to its termination.



Initial stages of extending Trench 13.

The trench started up as 2 test pits of 1 metre square, which were joined up as a 3 x 1 m trench when the stone platform was revealed in one of them. It was further extended to reveal the full width of F2 and adjacent deposits ultimately becoming a 3 x 3 m excavation area.



The trench extension after initial excavation down to the top of Roman levels.

The eastern end of the platform was soon located and the trench was then widened to reveal the full width of F2, which had a rounded terminus, and potential deposits and features nearby. As seen elsewhere, there was evidence for burning on and around the stone platform. A small deposit 025 of shale, clay and burnt material comprising charcoal and occasional pieces of burnt daub and white calcined (burnt) bone, 14 cm in diameter, was located above the stones close to the eastern edge. Normally bone doesn't survive in the acid soil at Castleshaw – but the process of cooking by the Romans altered the structure of the bone making it more resistant to decay.



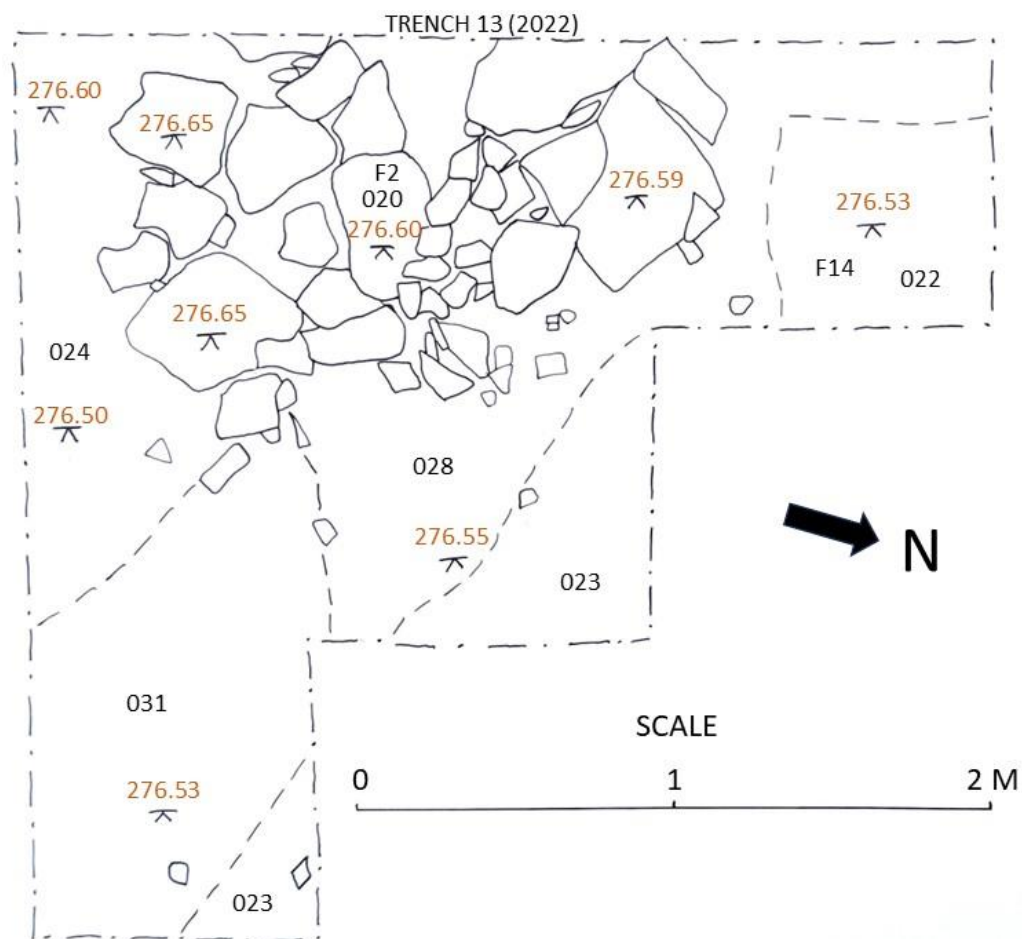
The charcoal and white burnt bone deposit 025 over the edge of the stone platform.

F2 extended 1 m into the trench extension, giving a total length of 10 m for the stone platform. The width was 1.9 m. The surface level was 276.60 m AOD. As with the eastern half of the platform excavated last year, there were some large squarish stone flags measuring up to 48 cm across (020). These were mixed with medium sized sub angular stones, stone free patches of yellow clay and a linear patch measuring 60 cm by 30 cm of closely grouped small to medium sandstones 021. The platform terminus was tongue-shaped and was rather haphazard with no kerbstones evident. When half excavated 021 was shown to be only 1 course deep within a very shallow depression.



Overhead view of F2 showing its terminus – several archaeological deposits are evident nearby. The blue polythene marks the eastern end of Trench 13 dug in 2022 (drone photo credit: Joolze Dymong).

To the south of F2 was a deposit of mid grey-brown silty clay loam with occasional small patches of light cream silty clay 024. This extended from the south west corner of the trench for 2 m and gently sloped from 276.60 m AOD in the west to 276.50 m AOD to the east. It ran under the south edge of the trench so its extent is not known, but on the eastern side it bowed out to wrap round the south eastern edge of F2.



Initial plan of Trench 13 east extension showing terminus of stone platform F2.



Vertical image showing 024 against the southern trench edge beneath the photo scale.

East of F2's terminus was a mixed layer of light to mid brown-yellow silty clay loam with frequent small stones and small patches of grey humic soil 028. This appeared to run up to a strikingly different layer forming an angled edge running south east to north west. This layer 023 comprised dark orange silty clay loam with frequent pieces of decayed orange sandstone and stones. It was only partly revealed so the excavation trench was squared off to reveal more. 023 ran to the east and north edges of the extended trench and its surface was at 276.55 m AOD. It was bounded to the south by a 'dirty' yellow clay deposit 031 which contained 25% small patches of mid and dark grey silty clay, moderate charcoal flecks and occasional small gritstones at a height of 276.53 m AOD. There was a cluster of possible stake holes in the top of 031 towards the east of the trench but these were filled with dark humic soil and determined to be root holes.



The photo scale lies across 023 with the yellow clay deposit 031 above.

A slot was dug through 028 to determine its depth and character. It was found to be a shallow layer only 2 cm deep and came off onto the continuation of yellow clay 031 and an oval patch of burnt (oxidised) red orange clay 029 which formed the site of a hearth F15. It was 62 cm long and 44 cm wide and its surface at 276.49 m AOD. It was at the same level as the yellow clay and clearly contemporary with it. F15 was 70 cm east of and opposite the centre of the stone platform terminus.



Hearth F15 set in yellow clay 031, looking west.

A slot was dug close to the south side of the hearth through the yellow clay to make sure it was not the top of natural. The clay was found to be 7 cm deep and came off onto 027, a layer of light yellow grey silty clay with occasional small to medium gritstones and flecks of charcoal. Sealed under 031 and set within 027 only 8 cm from the south edge of the hearth (but at a lower earlier level) was a complete large Roman nail. The nail was 14 cm long with a 3.5 cm diameter round head. The shaft was broken two thirds of the way down and there was a stone concreted to the mid-point of the shaft due to reaction with the acid soil. The nail was found at a height of 276.41 m AOD.



Left: the blue arrow shows the nail emerging under the yellow clay deposit 031. Right: fully excavated.

In the south east corner of the trench a slot was excavated through 031 and then 027 to determine the depth of the latter deposit. The slot was 40 cm wide and ran along the eastern side of the trench for 1 metre from the corner. The section against the trench edge showed that 031 was 8 cm deep here and 027 was 10 cm deep with light grey compact shale natural occurring underneath at a depth of 276.29 m AOD. But 40 cm from the corner the natural was cut by a steep sided linear feature F16 which held a 12 cm deep fill 030 of mid grey silty clay with 20% small to medium angular gritstones. The base of the feature was at 276.18 m AOD. To the south, right against the corner, the fill became very stony with angular medium sized gritstones packed closely together. There was not enough time to widen the trench but it looked as though this might be another timber building foundation slot, with the concentration of the stones being packing for a post hole. This is an area that would repay further investigation.

A section was excavated through possible hearth F15 represented by a burnt red area. The red clay sat in a shallow bowl in the yellow clay and had a maximum depth of 5 cm with a grey silty deposit revealed underneath which is probably the top of underlying layer 027. The excavated hearth material 029 was sampled. A small amount of charcoal was recovered but the fragments were abraded and in poor condition, preventing any fracturing that might provide a clear surface for identification of wood species. There were no grains or hammerscale/slag residues therefore the hearth was not used for drying grain or baking, nor for iron working – its function is unclear.



Left: slot against corner of Trench 13 eastern extension looking east showing layers 031 and 027 (the latter part excavated). Right: Detail of section showing the cut of feature F16 in the trench corner, and concentration of stones to right of photo scale perhaps for packing a post hole beyond the trench edge.



The south facing section through hearth F15, with 027 showing beneath.

Along the northern side of the trench was linear feature F14, which ran from west of the stone platform terminus for 2.5 m to the eastern trench edge. The fill was 022 which comprised dark brown silty clay loam with frequent flecks of charcoal and occasional burnt daub. The edge of the feature/fill was very clear against the yellow colour of 028 on the south side but the north edge was not determined as it was beyond the north trench edge. The surface level was 276.49 m AOD on the west side and 276.42 m AOD on the east. Several amphora body sherds came from near the fill's surface. They were from a Dressel 20 type globular amphora vessel, probably of late 1st century AD date. These large vessels could be around 60 cm high and would have contained wine, oil or fish sauce (garum). Similar vessels have been found in previous excavations at Castleshaw Roman fort. Two exploratory slots, 30 cm wide, were dug through 022. These showed that the material was about 10 cm deep and came off onto a variety of deposits including grey

shale, light yellow silty clay loam, a patch of charcoal and a cluster of small stones. The apparent complexity of these deposits and lack of time meant that no further investigation was carried out. The function of F14 is not clear as a return for the southern side's shallow cut was not found within the limits of the trench on the north side. It might be that it is a linear depression rather than a foundation slot for building. This feature and associated deposits should be subject to further investigation.

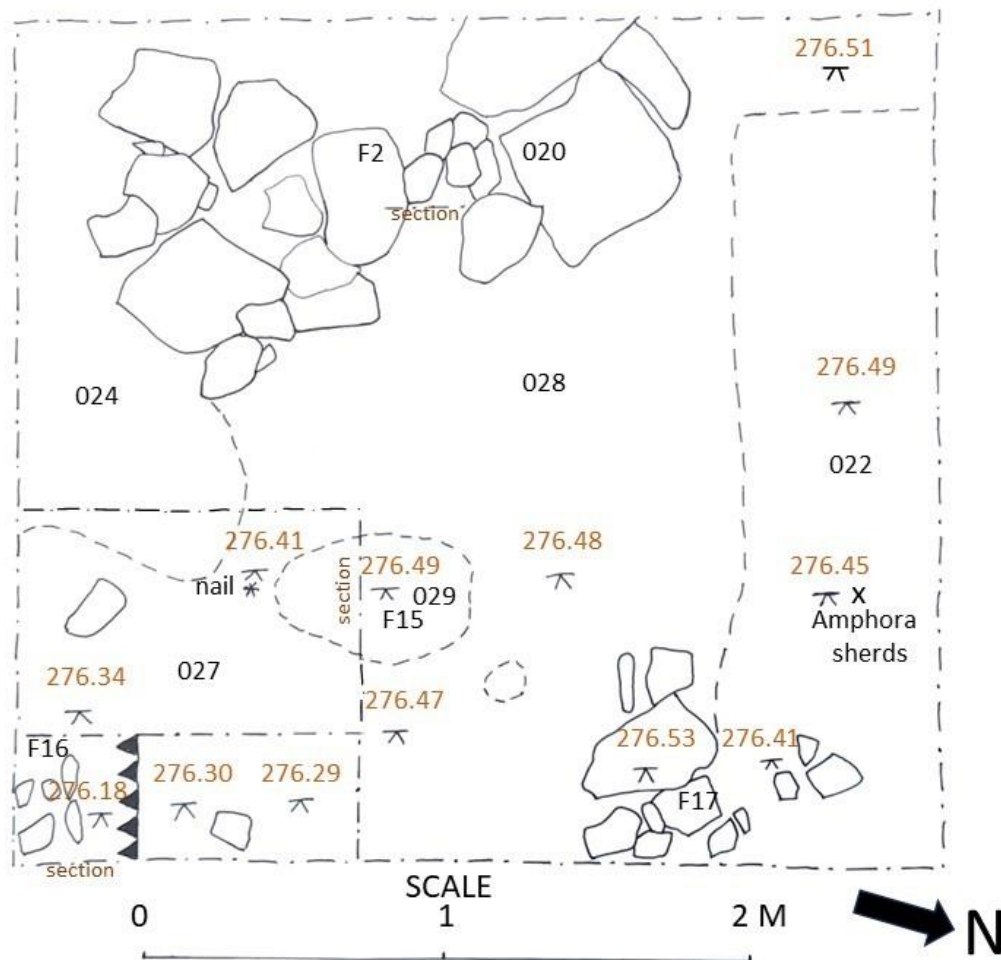
Towards the east end of the trench adjacent to the south side of 022 and running into the east trench edge was a cluster of flat stones F17, made up of a mixture of large and medium sub angular gritstones 031. The largest being 40 cm across. The stones formed a linear pattern 70 cm long and 45 cm wide and appeared to have been deliberately laid. The top height was 276.53 m AOD. A few smaller stones lay in a separate concentration 25 cm to the north. F17 appeared to have a structural function but a wider area would need to be investigated to properly determine its character and function.



Looking east across F14 showing the two exploratory slots and the linear arrangement of stones F17 at the far side.



Excavating the sherds of amphora in fill 022, with detail showing them as found on the right.



Plan of Trench 13 east extension showing slot F16, heart F15, deposit 022 and location of key finds.

From the top and plough soil came the following post medieval finds: 15 body, 6 rim and 2 base of dark glazed earthenware sherds, 4 plain earthenware body sherds, 1 brown glazed earthenware body and 1 rim sherd, 4 trail slipped ware body sherds, 1 cream ware body sherd, 1 transferred printed blue and white body sherd, 1 white glazed body and 1 rim sherd, 1 clay pipe 1 bowl fragment, 1 green and 1 clear glass fragment. There were also 2 pieces of formless oxidised white-coloured, unformed lead of Roman origin. 3 more pieces of lead came from 023 but the most noteworthy Roman finds were 5 body sherds of amphora which were of Dressel 20 type most probably of late 1st century AD date. A large Roman nail was recovered in context 028, as described above. This substantial nail was probably used in the construction of a timber building.

The impression given is that this excavation trench has complex archaeology with the potential to be similar to that encountered in Trench 13 north extension ie. an area of hearths and ovens, levelling deposits, and perhaps earlier building foundations, all accessed via the stone platform which terminates in this trench.



Finds from the top and plough soil.



Roman nail from 027.



Lead from 023.



Amphora sherds from 022.

Contexts:

F2 Stone platform

F14 Shallow linear feature running along north side of trench

F15 Hearth made up of 029. Over 027 and under 023. Oval shaped burnt (oxidised red) clay area.

F16 Slot partially excavated in south east corner of Trench. Sealed by 027 and contains 030.

F17 Stone arrangement near north east corner of trench. Formed by 032.

020 stones forming F2

021 linear patch of smaller stones, possible repair of F2

022 Fill of F14. Dark brown silty clay loam with frequent flecks of charcoal and occasional burnt daub. Contained amphora body sherds on surface of fill.

023 Deposit overlying hearth F15. Dark orange silty clay loam with frequent pieces decayed orange sandstone and stones.

024 Fill of F16. Mid grey-brown silty clay loam with occasional small patches light cream silty clay.

025 Above stone platform F2 at its eastern terminus. Shale, clay and burnt material comprising charcoal and occasional pieces of burnt daub.

026 Above stone platform F2 near eastern terminus. Circular patch of charcoal with a few small pieces of calcined bones. Excavation showed this to be a very shallow deposit.

027 Under F15 and 031 and seals F16. Deposit of light yellow grey silty clay with occasional small to medium gritstones and flecks of charcoal. Contained complete large Roman nail.

028 Partly overlies hearth F15. Mixed layer of light to mid brown-yellow silty clay loam with frequent small stones and small patches of grey humic soil.

029 Burnt red clay forming F15.

030 Fill of F16. Under 027. Mid grey silty clay with 20% small to medium angular gritstones.

031 Under 028 and over 027. Yellow clay with 25% small patches of mid and dark grey silty clay and moderate charcoal flecks.

032 Forms F17. A linear arrangement of medium to large flat-laid gritstones.

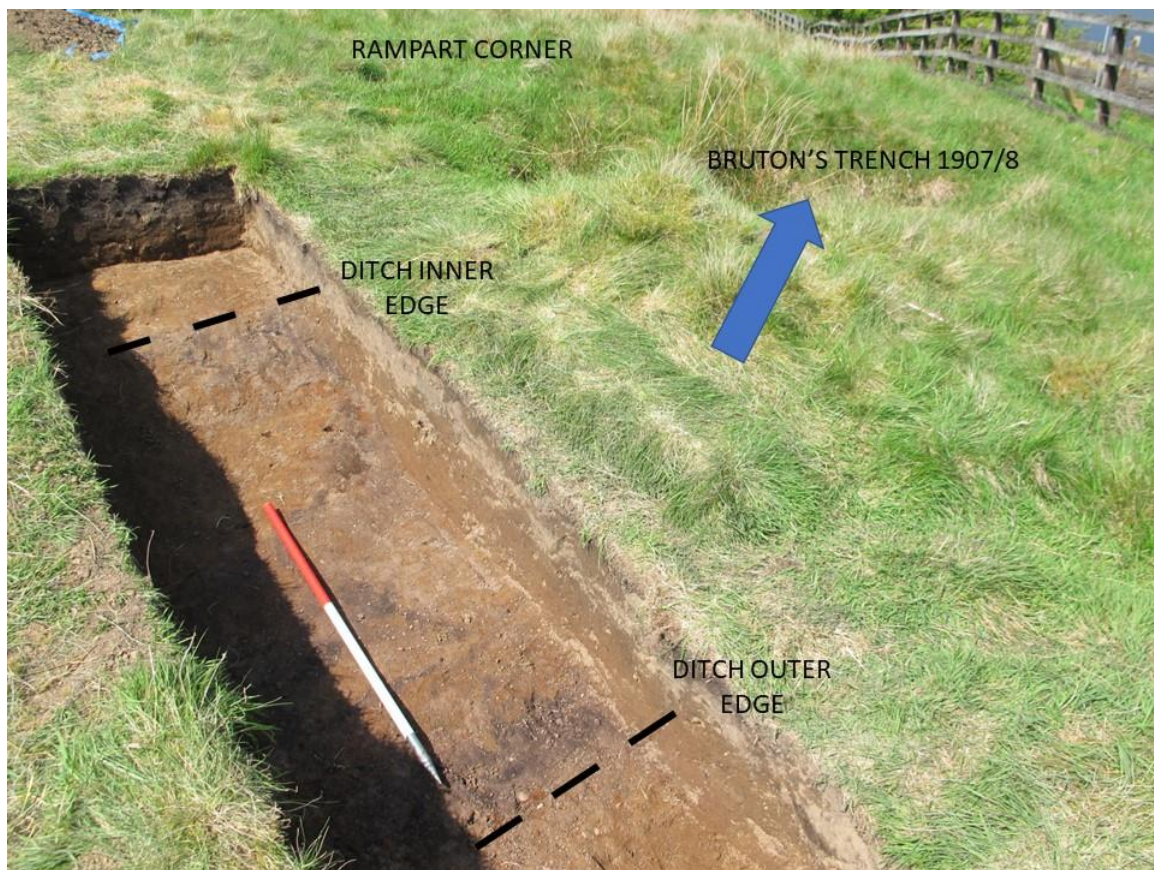
Trench 2

Trench 2 was located across the supposed line of the fort ditch as it comes round the north-east corner. Previous excavations by Bruton in 1907/8, Thompson in 1963 and Salford Archaeology in 2014 showed that the ditch does not exist along much of the length of the east rampart, so this was a key piece of work to determine how far it extends beyond the corner.



Looking north along the line of the east rampart to Trench 2 in the early stages of excavation.

The initial trench was 1 m wide and 4 m long and positioned to be at right angles across the projected fort ditch alignment. In 1907/8 Bruton had dug a trench at the easternmost point of the north ditch. This was still visible as a linear depression 2 m to the north of Trench 2. Following excavation, the east south facing section of Trench 2 was recorded. Under 25 cm of topsoil and mid brown plough soil there was maximum 10 cm deep layer of light grey silty clay loam with occasional charcoal flecks. This was a diffuse layer marking the bottom of plough soil and its interaction with the top of the ditch. Under this was sealed a layer of light to mid grey clay loam 004 which represented the uppermost fill of the ditch. It was similar to those seen in other sections of the fort and fortlet ditches in previous excavations. It represents the remnants of a decayed turf line from when the ditch had filled in/silted up and turf grew over it, before ploughing in the 18th century partly disturbed this top level. 004 extended for 2.5 m giving the probable top width of the ditch. The discovery of this layer was enough, based on previous excavations, to show that the ditch existed here and so was not excavated. 004 sloped gently, dropping 46 cm from the western edge at 275.10 m AOD to the eastern edge at 274.64 m AOD.



The edge of the fort ditch is indicated by the dashed lines. Bruton's trench which was dug across the ditch corner in the early 20th century is indicated by the blue arrow. Looking north west.

Test Pit 13

Having confirmed the ditch location, a Test Pit (13) was excavated to determine if a second ditch existed, as Rosser's 1950 excavations found an outer ditch on the north side of the fort (Thompson, 1967 Fig 5). TP13 was dug 2 m to the east of Trench 2. Under plough soil was a deposit of mid brown grey silty clay loam with 50% small sandstones 007. This was a maximum of 12 cm deep with a top level at 274.56 m AOD. It came off onto a dark yellow clay loam which did not appear to be natural so the test pit was extended to the west to join up with Trench 2 so that its deposits could be better understood.



TP13. West is at the top.

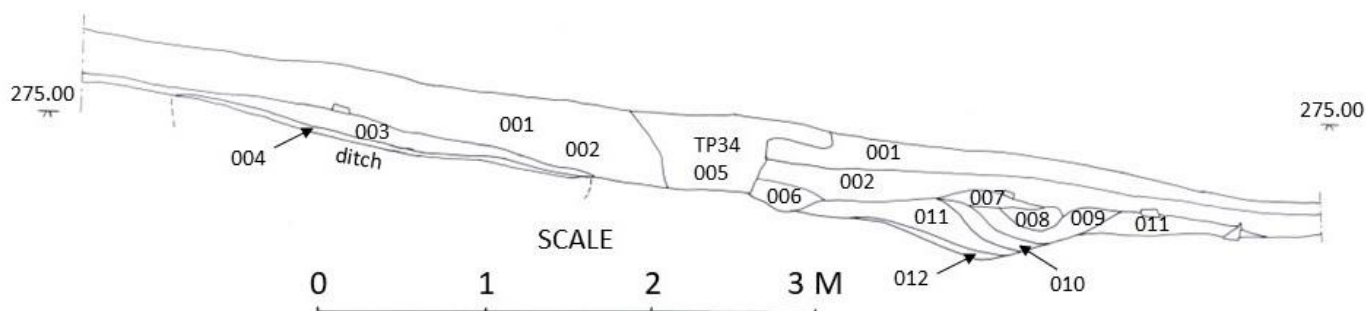
At 1 m west of TP13, the Trench 2 extension exposed the side of the old Test Pit 34, which was dug in 2019. This was evident from the vertical cut of the sides of the test pit along with the fill of mixed dark grey humus and clay soil 005. Trench 2 was also extended 1.5 m further east to make sure it encompassed the line of a possible outer ditch. The final trench excavation and section showed a possible shallow ditch feature F2 centred 2.5 m east of the main ditch F1. The fills of this feature were quite complex. 007 recorded in TP13 appeared to be the top layer and sealed 3 fills: 008, 009, and 010. 008 was the uppermost of these and comprised mid yellow clay loam 34 cm wide and 12 cm deep. It filled a concave shaped depression formed by 009 which was of mid yellow grey clay loam 1 m across and a maximum of 40 cm deep. This crescent shaped deposit in turn overlay 010 which was made up of mid grey silty clay loam 45 cm across and 30 cm deep. The base fill was 011 comprising loose dark yellow clay loam with 20% small sandstones. It extended 1.5 m to the west and overlay a compact layer of mid grey clay loam and shale 012 which was interpreted as natural. 011 picked up again on the other side of the centre of the cut of F2 running for a further 1 m. It had a maximum depth of 40 cm. Finally, 006 was a wedge-shaped deposit of mid brown yellow silty clay loam against the east side and cut by TP34. F2 was only 40 cm deep with a base level of 274.16 m AOD. Its width is estimated as 1.5 m.



South facing section of Trench 2 – stitched together photos.



Looking west across Trench 2, with outer ditch beneath the photo scale.



Trench 2 south facing section.

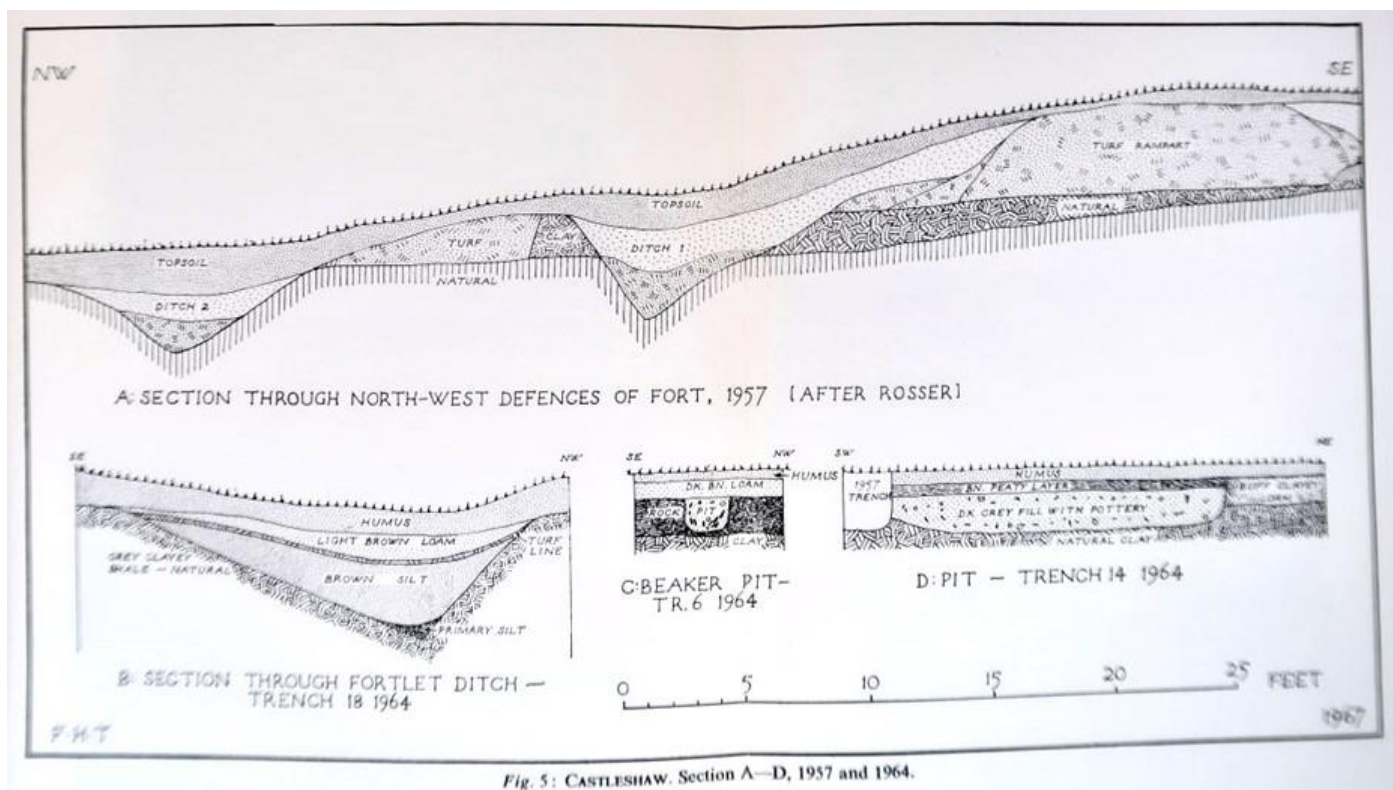


Fig. 5: CASTLESHAW. Section A—D, 1957 and 1964.

Rosser's section through the northern fort defences (top of image). From Thompson 1967.

The finds from the top and plough soil were principally of post medieval date. There were 2 body and 2 base sherds of dark glazed earthenware, 1 plain earthenware rim sherd, 1 rim of blue and white transfer printed ware, 1 base sherd of (burnt) white glazed ware, 1 unformed piece of black molten glass, 1 clay pipe stem/bowl fragment, and 1 small rim sherd of glazed medieval pottery. This had a 'biscuit' like fabric with a core of reduced grey sandwiched by orange coloured fabric. It had a lead glaze on the top of the rim. From the plough soil over the outer ditch and area leading up to the inner ditch came another sherd of medieval pottery. This was a body sherd with a brown lead glaze exterior and a gritty fabric. There was also a rim and a body sherd of a hard over-fired pot with a pitted dark glaze which could also be medieval in origin. 2 body sherds of post medieval dark glazed earthen ware, together with a rim sherd of 19th century dark glazed Buckley Ware and a dark glazed earthenware base with the start of a handle completed this assemblage.

Fills of orange sandy clay and loose grey shale indicated a very shallow and narrow ditch. The fills comprised re-deposited natural materials with no silt evident. Are we looking at a short-lived heavily truncated ditch or ditch terminus? In 1957 Rosser excavated a section through the ditches on the north-west side of the fort. Here the outer ditch was found to be 'V' shaped, 2 metres wide and around 80 cms deep – more substantial than in Trench 2.



From top and plough soil.



Glazed medieval rim sherd from plough soil in Trench 2.



Left: from soil above outer ditch and the area between ditches. Right: detail of early pot sherd (possibly medieval) from plough soil over outer ditch.



Medieval glazed pot sherd from plough soil above outer ditch showing outer and inner appearance.

Contexts

F1 Main fort ditch against fort rampart. Top fill 004. Not excavated.

F2 Possible outer, smaller ditch

001 Topsoil.

002 Brown plough soil.

003 Layer over fort ditch fill 004. Light grey silty clay loam with occasional charcoal flecks.

004 Light to mid grey clay loam forming top of F1. Representing decayed turf layer sealed under plough soil and 003.

005 Mixed dark grey humus and clay soil forming backfill of Test Pit 34 which was dug in 2019.

006 Layer under 002 and above 011. Mid yellow brown yellow clay.

007 Layer under 002 and above fills of possible outer ditch F2. Mid grey clay loam with 50% small sandstones.

008 Layer in upper part of F2, under 002 and 007 and above 009. Mid yellow clay loam.

009 Layer forming fill of F2, lying under 002, 007 and 008, and above 010. Mid yellow grey clay loam.

010 Layer forming fill of F2, under 007 and 009 and above 011. Mid grey silty clay.

011 Layer forming lower and side fill of F2, under 002, 006, 007 and 010, above 012. Loose dark yellow clay loam with frequent small sandstones. Possibly natural.

012 Base of F2, under 011. Mid grey clay loam with 50% shale. Natural.

Test Pits 7, 8, 9, 10, 11 and 12

A series of 1 m square test pits, numbers 8, 9, 10, 11 and 12, were excavated in a line running from the middle of the main inner ditch in Trench 2 to trace the extent of the ditch southwards.



The 5 test pits running from Trench 2.

Each test pit was half excavated to reveal the top of the ditch fill, the same as 004 in Trench 2. Photos of each test pit are shown below. Topsoil and dark brown plough soil was similar in character except for TP12 where the plough soil was a little lighter and the south east side of the ditch revealed.

Test Pit 8

Top of the ditch fill was 55 cm beneath turf level.

Turf level west side	275.47 m AOD
Turf level east side	275.27 m AOD
Top of ditch fill	274.92 m AOD



TP8, south at top.

Test Pit 9

Top of the ditch fill was 56 cm beneath turf level.

Turf level west side	275.58 m AOD
Turf level east side	275.41 m AOD
Top of ditch fill	275.02 m AOD



TP9, south at top.

Test Pit 10

Top of the ditch fill was 58 cm beneath turf level.

Turf level west side	275.72 m AOD
Turf level east side	275.54 m AOD
Top of ditch fill	275.14 m AOD



TP10, south at top.

Test Pit 11

Top of the ditch fill was 51 cm beneath turf level.

Turf level west side	275.85 m AOD
Turf level east side	275.71 m AOD
Top of ditch fill	275.34 m AOD



TP11, south at top.

Test Pit 12

This test pit was different to the other 4 in that a probable edge was discerned on the east where a band of (natural) compact grey shale changed to light to mid yellow brown silty clay loam. This also showed as a band running north to south and giving way to a darker brown silty clay loam, before that in turn changed to the decayed turf upper level on the west side of the test pit. These were interpreted as various fills of the fort ditch, with the east ditch edge cut through natural shale. This showed that the ditch ran at least 16 m along the east side of the fort defences.

Top of the ditch fill was 53 cm beneath turf level.

Turf level west side	275.98 m AOD
Turf level east side	275.89 m AOD
Top of ditch fill	275.44 m AOD
Top of shale deposit	275.45 m AOD



TP12, south at top.

A sixth test pit was excavated in this area, this time offset to the south east and 1 m from TP12.



Aerial view of Trench 2 on the right, with TPs 8 to 12 running right to left from Trench 2, and with TP7 on the far left (drone photo credit Nat Townsend).

Test Pit 7

This was positioned to look for the potential annexe defences running at right angles to the fort ditch. Under a c 10 cm deep layer of dark brown silty clay loam with frequent small stones was a mixed layer of light grey and orange clay. This had the look of the southern rampart of the annexe rampart uncovered in the 2022 excavations forming part of the annexe's southern defences.

Turf level west side	276.05 m AOD
Turf level east side	275.53 m AOD
Top of ditch fill	276.00 m AOD

Finds from the topsoil were all post medieval and comprised 2 body and 1 rim sherds and 1 handle of dark glazed earthenware, 1 white glazed sherd, 1 deep yellow glazed and 1 mottled yellow ware body sherds. From the plough soil came 2 body sherds and 1 rim of dark glazed earthenware, 1 body sherd of white glazed pottery, and two body sherds of a medieval pottery in the form of a grey core and exterior with 1 sherd having a rough, pitted dark green glaze.



TP 7 showing the mixed light grey and orange clay layer which might be remnants of the annexe rampart base.



Left: topsoil finds. Right: plough soil finds.

Trench 3

Based on the encouraging evidence from TP7 and the continuation of the fort ditch in TP12 it was decided to open up Trench 3 which incorporated these two test pits.



Joining up TPs 7 (right) and TP12 (middle of photo behind excavator)

The outside (eastern) edge of ditch F1 was found to continue southwards so Trench3 was widened to become 3 m by 2.5 m. This revealed the continuation of the upper ditch fill 004 southwards. 004 comprised light brown silty clay loam with occasional small to medium gritstones and charcoal flecks. It appeared to be turning slightly in towards the rampart which suggested that the terminus could be nearby. Running up to the ditch on its east side, was 009 a very light grey/white silty clay. A straight edge was visible on its north side but was not evident to the south where it ran under 008 which was made up of light yellow sandy silt loam with frequent small to medium flat sandstones and frequent patches of orange silty clay loam and mid brown silty clay loam. 009 had been partly excavated in the base of TP7 and overlay a mid orange yellow sandy silt 016. 009 was provisionally interpreted as representing the base layer of the truncated annexe rampart whilst 008 could be material derived from slighting of annexe rampart and pushing it southwards. Against the southern edge of the trench emerged a partly revealed spread of flat stones and a large semi-circular patch of charcoal.



Trench 3 as initially excavated, looking south. The outside edge of the ditch is to the right of the lower photo scale and at the top of the photo a deposit of grey silty clay may be the truncated base of the annexe rampart running at right angles eastwards from the fort ditch.



Trench 3 after extension, looking south. The ditch upper fill continues to the right side beyond the part excavated section, whilst at the top a feature runs in to the trench edge.

To determine the inner (western) edge of the fort ditch F1, the trench was extended 1 m westwards towards the fort rampart. The decayed turf horizon 003 (the same as in Trench 2) was revealed across all this area, sealing the ditch fills. Therefore, the western edge of F1 appeared to lay beyond the trench edge. However, when the 6 cm depth of 003 was removed there was evidence for the ditch edge in the north west corner of the trench. Here, a triangular patch of light yellow (possibly natural) clay was revealed beyond a straight edge created by fill 004.



Left: the dark grey layer on the left is the decayed turf horizon 003 which formed over the filled-in fort ditch. The fort rampart is out of picture to the left and the turf line is sloping down to the right into the ditch. Right: after removal of 003 showing the inner ditch edge to the left of the excavator.

Trench 3 was also extended southwards by 1.3 m to fully expose the charcoal and stone feature F3. The trench therefore became 3.5 m by 3.3 m in size. It was apparent that F3 was sealed by 008 which varied in depth but was a maximum of 25 cm. When 008 was removed, the full extent of F3 became apparent. It was

formed of flat-laid medium sandstones 010 forming a rough circle 1.1 m in diameter, connected on its west side to a large roughly circular patch, 80 cm in diameter, of mid grey-brown silty clay loam with a dense concentration of charcoal and occasional small sandstones 011. A harder band of clay 012, c 20 cm wide, enclosed 011. This was heat affected clay which indicated the site of the clay superstructure of the oven. The similarity with features in Trench 13 north extension, especially F12, was striking and indicated that this was another oven base. Surrounding F3 was 013 comprising a mixed deposit of patches of cream silty clay and light orange silty clay. This had the appearance of rampart material and it ran up to and over the southern edge of rampart base material 009. When it was removed, 009 was seen to be only 5 cm from the edge of the oven. Therefore, the oven appears to have been set into the back of the annexe rampart. This would have helped to protect it from the elements and was a common practice in fort construction – indeed both the fort and fortlet at Castleshaw have ovens set into the rampart (Walker Ed, 1989).



Left: southern extension of Trench 3 showing 008 overlying oven F3. Right: F3 after removal of 008.

A 1.5 m length of the ditch was excavated to create an east to west section at right angles. The section showed that the ditch was 1.14 m deep and 2.3 m wide under 003, although the width was not fully exposed on the west side. There was a 'V' shape profile, although the outer face appeared to be a little steeper. At the base was a 40 cm wide and 35 cm slot which would have facilitated clearing out silt, although sometimes this is called an 'ankle breaker' which was also a defensive feature. The stratigraphy was quite straightforward. The decayed turf layer 003 was sealed under 30 cm depth of topsoil 001 then 39 cm maximum depth of mid brown silty clay loam plough soil 002. The modern turf level over the centre of the ditch was at 276.37 m AOD and the top of the old, decayed turf layer 003 was at 275.67 m AOD. The previously described 004 (under 003) was up to 37 cm deep over the ditch centre. This sealed a fill of mixed light yellow and cream silty clay with occasional charcoal flecks 005, at 25 cm deep, which in turn overlay 006 comprising mid grey silty clay, with frequent small gritstones and patches of light yellow silty clay and moderate charcoal flecks. 006 was the main fill of the base of the ditch at 47 cm deep and overlay the shallow (maximum 5 cm deep) primary fill which consisted of a light grey silt with 50% small to medium gritstones and occasional charcoal flecks 007. The upper fills 004 and 005 could be interpreted as former rampart material that has been pushed into the ditch when the rampart was slighted at the end of the fort's life.

The opposite north facing section of the ditch was also recorded. Here the profile was truncated on the west side as there was not enough time to expand the trench further westwards to get the complete profile. The eastern side profile was similar to the south facing section. The north west edge of oven base F3 was

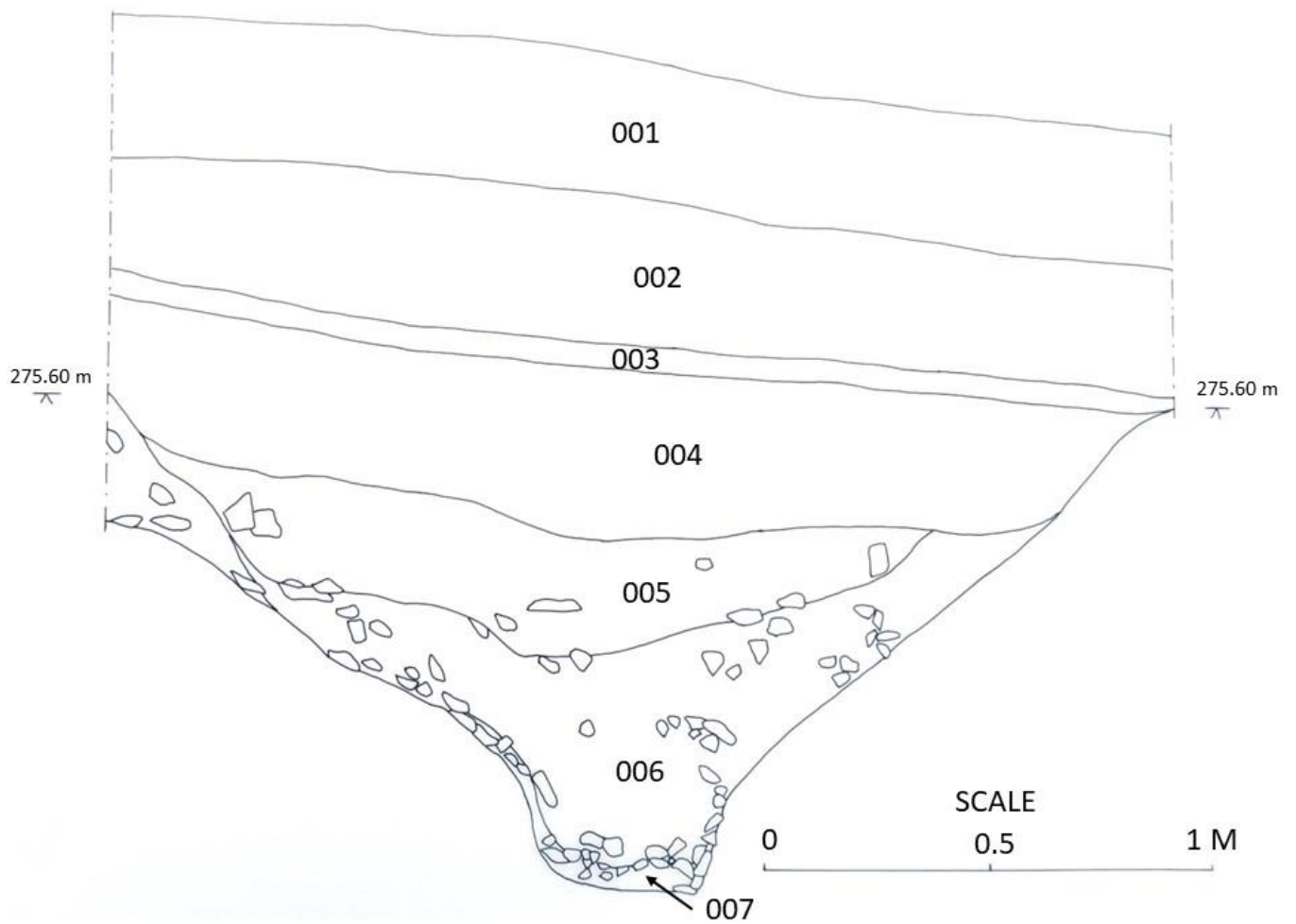
only 5 cm from the edge of the ditch. The fills were similar except that the principal lower fill 006 was deeper, up to 1m, and a lighter grey colour. Although the full ditch profile was not available, the excavated section indicated that the ditch was not narrowing at this point and continued along the same alignment beyond the south edge of Trench 3. It is noteworthy that the 2014 Trench 1 excavation was only a further 2 m south of Trench 3, and it is known that the fort ditch was not visible in that trench (Nash et al, 2014). Therefore, the fort ditch must terminate in the 2 m zone between the two trenches. This should be a priority for confirmation in future investigations. Samples for analysis were taken from the two base fills. 007 produced some charcoal and 4 possible small mortar fragments indicative of building work nearby. Both produced tiny pieces of invertebrate remains.



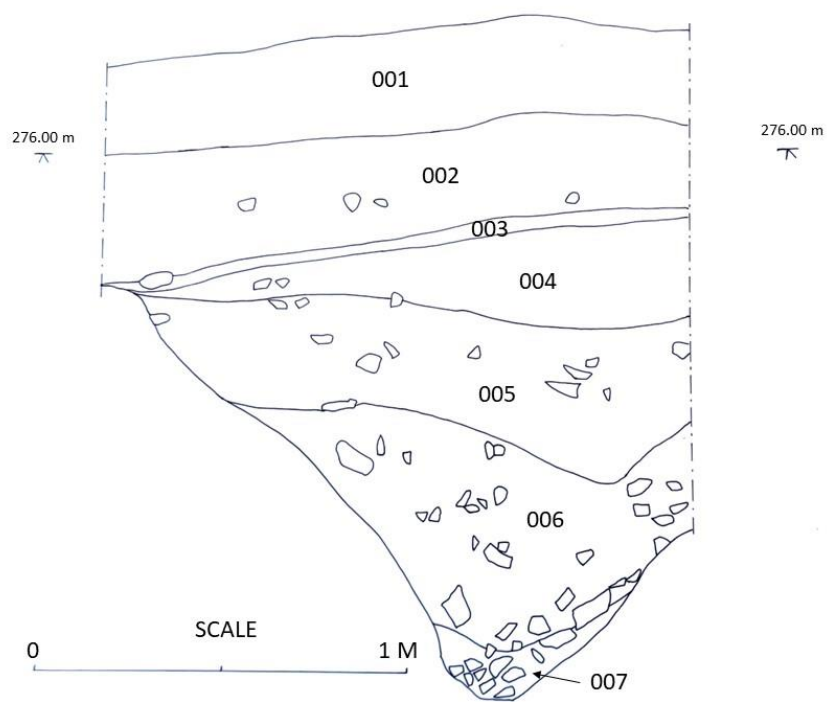
Left: Looking down over the excavated fort ditch with the stepped north facing section at the top. Right: detailed view of south facing section through ditch F1. The old, decayed turf line 003 can be seen at the top of the photo over the stepped-back section.



Left: The opposite southern (north facing) section through the ditch. Right: detailed view of the east side of ditch F1 north facing section after excavating fills back to the true ditch edge, matching the profile of the south facing section. The oven base F3 can be seen close to the ditch edge on the left.



Trench 3 south facing section through fort ditch.



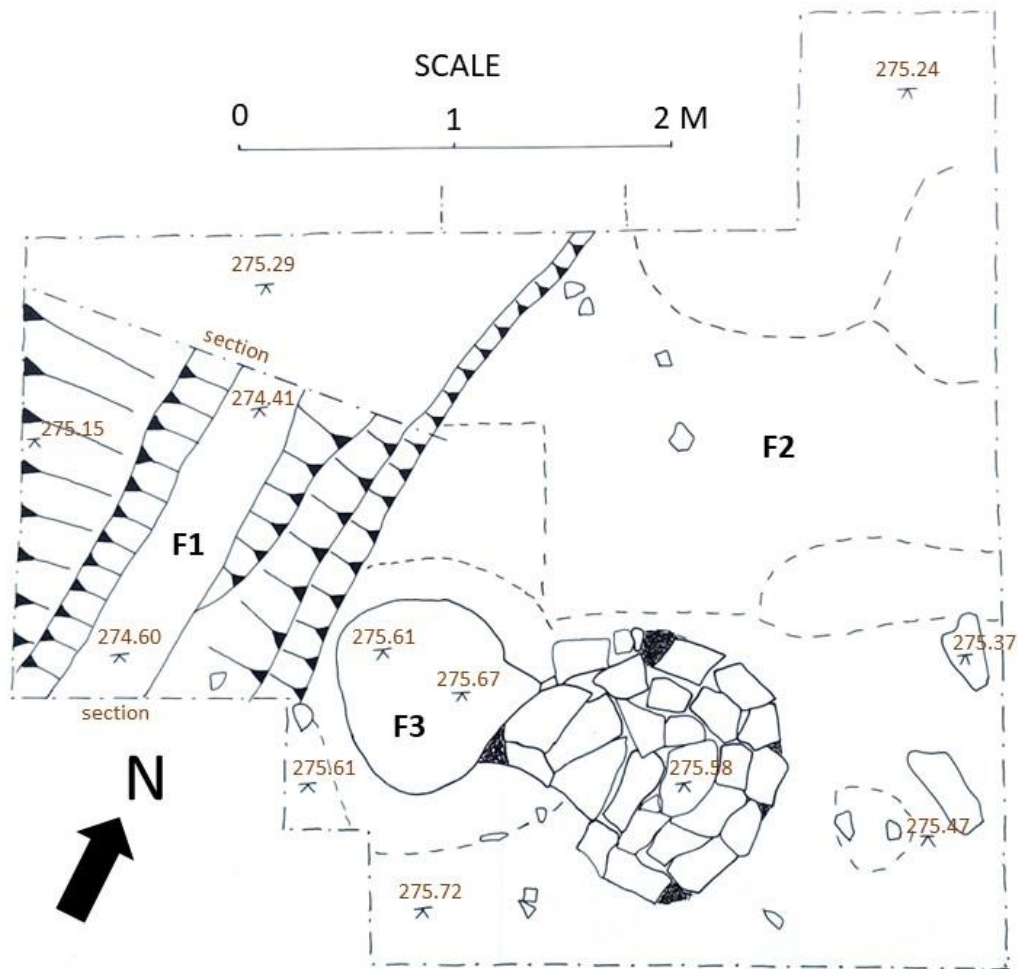
Trench 3 north facing section through fort ditch.



This drone photo shows the excavated fort ditch on the left, the charcoal oven base and associated circular stone platform bottom centre, with the grey of the possible annexe rampart above to the right (drone photo credit: Joolze Dymond).



Looking east across the fort ditch F1.



Plan of Trench 3 showing fort ditch F1, rampart base F2 and oven F3.

A longitudinal section was cut through the oven feature F3. The stone platform was found to lie on top of natural clay and the charcoal oven base formed a shallow hollow. Its fill 011 was a maximum of only 5 cm deep. Analysis of a sample of 011 showed no charred plant remains or metallurgical residues suggesting that, as with the ovens in Trench 13 north extension, it was a clay-built oven used for cooking meats.



Longitudinal half section through F3.

Finally, a slot was dug against the east edge of Trench 3 to examine the annexe rampart depth and make-up material to the south of it, as well as extending to the north to see if there was an accompanying ditch. Over the centre of the rampart was 14 cm depth of topsoil 001, over 12 cm depth of mid brown plough soil 002. Under this, and over 009 was 008 at 15cm depth. 008 appeared to be made up of rampart-like material and was spread across the top of the surviving rampart layers and continued to the north and south of the rampart. It seems to be former rampart material that was dispersed either side of the rampart when it was slighted in the mid AD 90s but then also spread out by plough activity. The light grey silty clay layer 009 was found to be a maximum of 5 cm deep. On both the north and south sides it dropped away to create a cambered profile, giving a width for the rampart of 3.2 m. 009 was found to overlie two deposits. A thin iron pan layer had formed under the grey silty clay which sealed a stony layer comprising light creamy yellow sand silt with 40% small sandstones 015. This deposit only extended for 1 m and was a maximum of 12 cm deep and lay under the centre part of 009.

Under 015 was a wider and deeper deposit of mid orange-yellow sand silt 016 which was 3.1 m wide and up to 18 cm deep. At the base of the section under the middle part of the rampart was 020, a compact mid grey-yellow clay loam. This was possibly natural. It had a shallow cut depression in the centre. This may represent a rampart laying-out marker or the site of a former timber structure. The rampart only survived to a shallow depth of 25 cm which was probably due to a combination of deliberate slighting when the fort was abandoned together with post medieval ploughing damage. The modern turf level over the middle of the rampart was 275.90 m AOD, the top of the surviving rampart 009 was at 275.44 m AOD, and the base on the surface of clay 020 was at 275.20 m AOD.



View of the west facing section showing rampart base F2 with its cambered profile indicated by the blue arrows.



Detailed view of the central part of the annexe rampart, showing the cut/depression in the clay base.

To the south of the rampart were a series of deposits. The top one of these, 008, has been previously described as it sealed the oven F3. Interestingly, in the section was revealed several roughly rectangular randomly spaced patches of humic soil (decayed turf?), the largest being 60 cm long and 8 cm deep. These could represent former sods of turf dug by the Romans to make up the annexe rampart – giving further strength to the interpretation of 008 as slighted rampart material. Under 008 was a 22 cm deep deposit of mixed patches of cream silty clay and light orange silty clay 013. This material wraps around oven F3 and could be contemporary with it, representing an internal projection of the rampart to provide shelter for the oven. Under this was a 16 cm maximum depth layer of light to mid grey silty clay with occasional medium sandstones and moderate patches of white silt. Finally, under 014 was mid grey-yellow silty clay with frequent small sandstones 021. This was probably natural. 013 appeared to run north to partly overlay the grey silty clay rampart layer 009. There was some similarity between 009 and 014, although the latter formed a horizontal layer rather than the camber of 009. It is possible that, along with 013 that seals it, 014 is part of an internal projection of the rampart. The east and south extent of these layers are not known as they run through trench edge, so this would be worth further investigation in the future.



Looking east at the south east corner of Trench 3 showing the deposits to the south of the rampart.

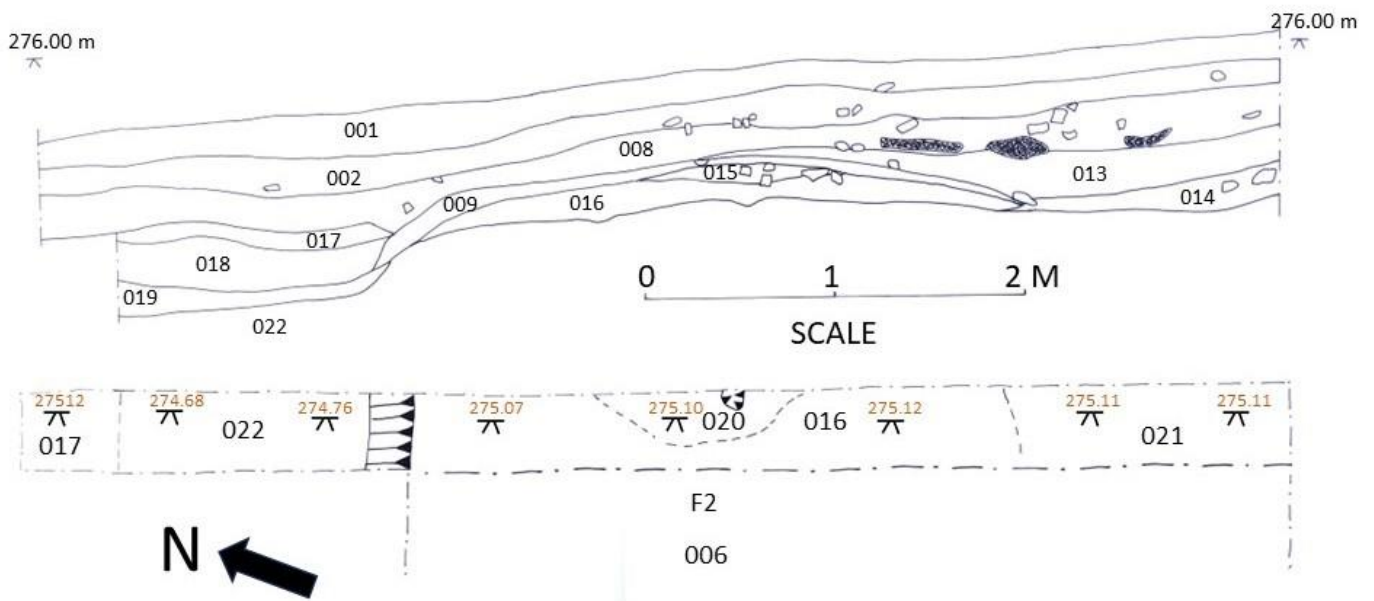
The narrow, 50 cm slot against the east side of Trench 3 was extended northwards by 2 m to determine if there was a ditch on the north side of the rampart, which would mirror the arrangement identified in last year's excavations on the south side of the annexe. Rampart layer 009 was found to thicken and drop away at a steep angle at its northern extremity. This suggested that it might be dropping into the site of a ditch. Time pressure meant that only part of the possible ditch was excavated, with 1.4 m width exposed and the northern edge not yet found. Several fills were encountered. At the top was 017 comprising very light grey/white silty clay mixed with 50% of light orange sand silt. This lay under a continuation of 008 from the south. 017 was 10 cm deep and in character appeared to represent slighted rampart material. It sealed 018 which was made up of mid orange sand silt and was a maximum of 40 cm deep. Under this was mid to dark grey silty clay loam 019 which was up to 16 cm deep and seemed to be thickening to the north side. This appeared to be the base fill as it overlay a compact light to mid grey shale deposit 022 which was interpreted as natural. The base was fairly flat but a 45% cut was apparent under 009 to form the south side of the possible ditch feature F4.

Given the limited space and time available for the excavation of this feature, it is not certain that this is a ditch, although that is the favoured interpretation. The depth of the feature is 48 cm from the top of 017 to the natural base 022. It is recommended that this area is revisited and expanded in a future investigation to confirm the provisional identification as the annexe defensive ditch. The top of 017 was 275.15 m AOD and the base was at 274.67 m AOD.



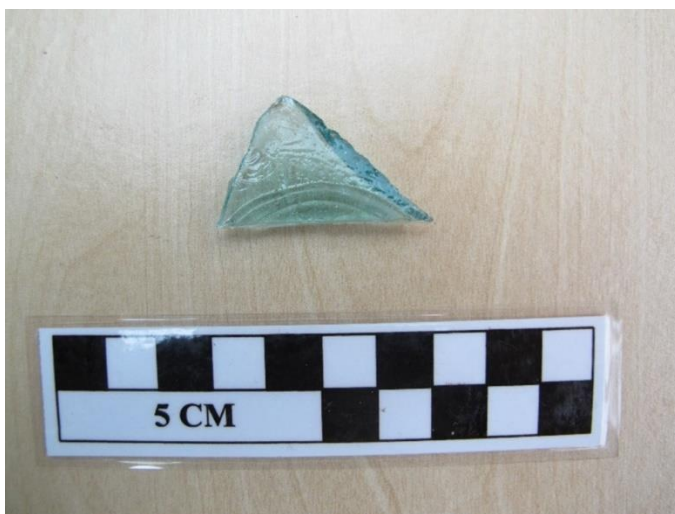
Left: looking south along the section through the potential ditch (foreground) and the rampart (middle). Right: the part excavated possible ditch immediately north of the annexe rampart base.

There were a considerable number of finds from the top and plough soil, all of which were post medieval in date. They comprised 15 body, 1 base, 1 rim and handle sherds of dark glazed earthenware, 3 body sherds of brown glazed earthenware, 1 trail slipped rim sherd, 1 pie crust decoration rim sherd, 3 unglazed earthenware body sherds, 1 each of yellow ware handle, rim and base sherds, 4 blue and white transfer printed body and 3 rim sherds, 5 white glaze base, 2 rim and 5 body sherds, 3 clay pipe stem fragments, and 1 nail. From the eastern extension plough soil came 1 brick fragment, 1 piece of flat green glass, and 1 white glazed base sherd, whilst from under this in context 008 was found a 4 cm long piece of charcoal together with a fragment of brick or tile. The most significant find from Trench 3 came from the upper fort ditch fill 004. This was a piece of Roman decorated glass vessel base.



West facing section through annexe rampart and plan of slot against east side of Trench 3.

The excavations in Trench 3 have made a significant contribution to our understanding of this part of the Castleshaw Roman fort site. Following on from the discovery last season of a rampart and ditch for the southern defences of a military annexe attached to the east side of the fort, we now have a northern counterpart. A heavily truncated rampart base of similar material to the southern rampart has been located in Trench 3 running at right angles to the fort's eastern rampart. It is likely that there is also a ditch but this needs further work to confirm. The fort ditch has been shown to run at least 18.5 m alongside the eastern rampart from the north east corner of the fort defences. This is the first time that archaeologists have been able to locate the ditch on the east side. However, it must terminate before the 2014 Trench 1 where the ditch was absent, so it can only run a maximum of 2 metres further south from Trench 3. The fort ditch therefore runs up to and just past the start of the annexe defences. This would appear to account for the discontinuation of the ditch along the whole of the fort's eastern defences. Trench 3 also found an oven base set into the back of the annexe rampart. Together with the evidence for several ovens/hearths in Trench 13 northern extension, this suggests that during one phase of the fort's short occupation this north western area of the annexe was given over to intensive food preparation/cooking.



Base of Roman glass vessel from upper ditch fill 004.



From top and plough soil.



Left: finds from top and plough soil in trench extension. Right: charcoal and brick fragment from 008.

Contexts:

F1 Fort east ditch filled with 003, 004, 005, 006, 007.

F2 Annexe rampart comprising 008 and 009.

F3 Oven base comprising 010, 011 and 012. Under 008.

F4 Possible annexe defensive ditch, not fully excavated and immediately north of F2. Filled with 017, 018 and 019.

003 Former turf sealing fort ditch F1. Light purple-grey silty clay loam – old turf line representing the original filled ditch profile before ploughing activity.

004 Top fill of F1. Light brown silty clay loam with occasional small to medium gritstones and charcoal flecks.

005 Fill of F1 below 004 and above 006. Mixed light yellow and cream silty clay with occasional charcoal flecks.

006 A lower fill of F1 below 005 and above 007. Mid grey silty clay, with frequent small gritstones and patches of light yellow silty clay and moderate charcoal flecks.

007 Base fill of F1 below 006. Light grey silt with 50% small to medium gritstones and occasional charcoal flecks.

008 Over 009 and 013 and immediately south of F2. Light yellow sand silt loam with frequent small to medium flat sandstones and frequent patches of orange silty clay loam and mid brown silty clay loam. Material derived from slighting of annexe rampart.

009 Under 008 and 013, and part of F2. Very light grey/white silty clay forming a base layer of annexe rampart. Comes off onto 016 and 015.

010 Part of F3 and next to 011, Under 008. Roughly circular platform of stones set into back of annexe rampart F2. Comprises medium to large flat gritstones.

011 Roughly circular deposit part of F3 along with 010 and bounded by 012. Under 008. Mid grey-brown silty clay loam dense concentration of charcoal and occasional small sandstones forming base deposit of oven.

012 Part of F3 along with 010 and 011. Under 008. Ring of hardened yellow clay formed by heat, possible site of oven wall surrounding oven base deposit 011.

013 Under 008, over 009 and 014. Mixed deposit of patches of cream silty clay and light orange silty clay. Slighted rampart material that wraps around F3.

014 Under 013 and over 021. Light grey silty clay with occasional medium sandstones and moderate patches of white silt.

015 Under 008 and over 016, part of F2. Light creamy yellow sand silt with 40% small sandstones sealed under hard thin iron pan layer.

016 Under 015 and over 020, part of F2. Mid orange-yellow sand silt.

017 Under 008 and above 018, fill of F4. Possible upper annexe ditch fill. Very light grey/white silty clay mixed with 50% of light orange sand silt.

018 Under 017 and over 019, fill of F4. Mid orange sand silt.

019 Under 018 and over 022, fill of F4. Mid to dark grey silty clay loam over natural. Base fill of possible annexe defensive ditch.

020 Under 016. Part of F2? Mid grey-yellow clay loam. Possible natural under base of annexe rampart in middle part of rampart section. Has shallow cut depression in centre as possible rampart laying-out marker or indicating former timber structure.

021 Under 014. Mid grey-yellow silty clay with frequent small sandstones. Possible natural gravel.

022 Natural under 019. Compact light to mid grey shale deposit.

Trench 4

In 2021 Trench 2 revealed several post holes, a stone filled pit, and a shallow building slot indicative of a timber building or buildings within the military annexe lying around 25 metres from the east gate of the fort. Trench 4 was established to excavate immediately to the east of Trench 2 to help determine the extent and character of the timber structure/s.

Initially an 'L' shaped trench was opened measuring 3 m long with a 1 m westwards extension at the southern end. As features materialised further extensions were added to make the trench ultimately 5 m long with a varied width from 1 m to 2.7 m. There was a slight overlap with the 2021 Trench 2 so that the eastern edge of the stone filled pit (2021 F4) was exposed in the mid part of the western edge of Trench 4.



Left: looking west across Trench 4 following initial excavation, with Trenches 13 east and north extensions in the background. Right: looking west across the test pits to Trench 4.

To the east of Trench, 4 test pits TP14 15, 16 and 17, each 1 m square, were excavated across a raised area to examine its archaeological potential.

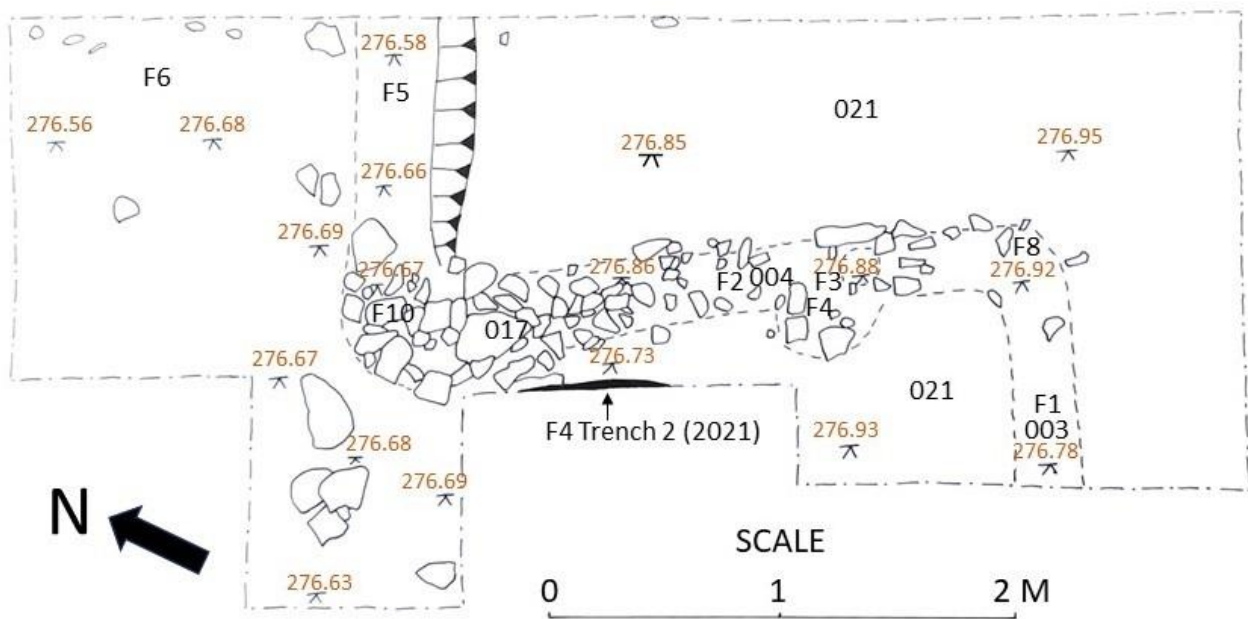


Aerial view over Trench 4 showing the top of the archaeology and its relationship to test pits 14 to 17 above (drone photo credit: Nat Townsend)

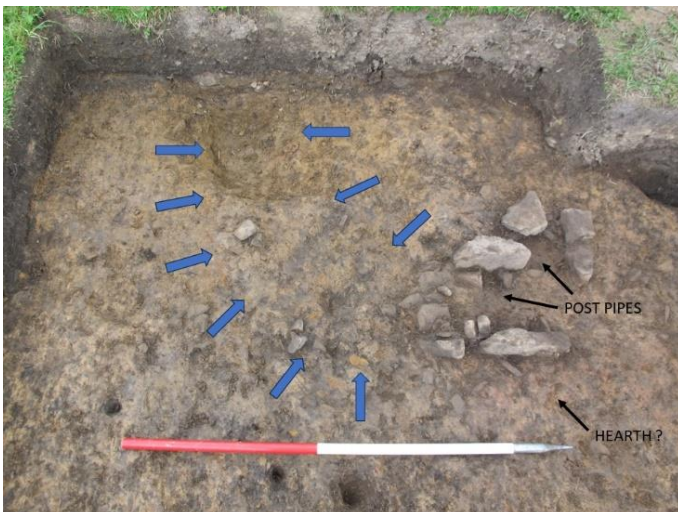
Removal of c 20 cm topsoil 001 and 15 cm mid to dark brown plough soil 002 exposed a dirty mid yellow clay with frequent small patches of dark grey humic soil 021. This spread across most of the trench and was considered to be sub natural as features cut through it. Initial cleaning of the surface of 021 revealed a linear spread of stones running in a roughly south to north direction from about 1 m into the trench on its southern side. The eastern side of the trench was 5 m long and included a 2 m x 1 m extension to the north which had a different deposit to 021, being light cream colour. On further excavation the linear spread of stones was found to be a building foundation slot F2 containing several stone packed post holes. A return for this slot F1 could be seen running westwards from the southern terminus of F2. F1 appeared to be 30-40 cm wide and ran a length of 1 m before meeting the western trench edge. Its fill was relatively stone-free in contrast to F2 and comprised light to mid grey silty clay loam with 30 % small patches of cream coloured silty clay with medium small stones 003. A section was excavated through F2 against the trench edge to show that it formed a 'U' shaped cut 40 cm wide at the top and 15 cm at the base. It was quite shallow at only 18 cm deep with, the top height being 276.92 m AOD and the base 276.74 m AOD. The top of F1 could be seen in plan to be curving and splaying out towards the junction with F2. On further investigation this widening out was due to their being a post hole F8 at the junction. F8 turned out to be one of 5 post settings along the length of F2 but was different in character to the stone packed post holes further to the north where post pipes and stone packing were evident at surface level.



F1 and F2 after initial cleaning, looking north.



Initial plan of Trench 4 showing emerging features.



Left: F1 can be seen partly excavated where it joins the western trench edge at the top of the photo. The corner where it joins F2 is just above the photo scale and indicated by blue arrows, with stone packed post holes forming part of the foundation slot F1 on the right. Right: detail of section through F1.

F8 was quite difficult to see at surface level as its main fill was obscured by a thin spread of slot F1's fill. However, the half section showed it to be filled with loose mid grey silty clay loam with 50% small to medium gritstones 013. Many of the stones were thin and at an angle. There was no evidence of a post pipe. The edges were quite hard to discern as the natural here was formed of compact grey shale and stones under the mixed yellow clay 021. The post hole was 45 cm deep and the sides tapered from a top width of 50 cm to a rounded bottom only 10 cm across which might reflect the size of the original post. The top level was 276.92 cm AOD.



Half section of F8 looking north.

F8 commenced a line of posts set in foundation slot F2. The slot ran south to north for 3 m and its fill was made up of light cream silty clay with frequent small to medium sandstones 004. However, in the northern half of F2 the upper fill was packed with stones, many of which were associated with post settings. The slot was 40 cm across with straight sides and a flat base at 35 cm deep. The top level was 276.80 m AOD. As with F5 in Trench 13 northern extension it was found that the post holes cut through the base of the foundation slot.



Left: The northern half of foundation slot F2 showing the dense stone deposit in the top fill. Right: north facing section through F2 showing its profile.

The next post within F2 going northwards was F3 which was only around 40 cm from F8 (centre to centre). The post hole was indicated by two large vertically set stones on its east and west sides which supported a post hole where the filled-in post pipe was clearly visible. The post pipe was roughly rectangular and measured 16 cm by 21 cm across, and 55 cm deep with a flat bottom at 276.35 m AOD and the surface at 276.90 m AOD. It was filled with mid to dark brown silty clay loam with occasional small stones 005. The stone packing was 006 with one of the vertical stones being 37 cm deep and the one on the opposite of the post pipe 27 cm deep. The latter had a smaller vertical stone under it which was 11 cm deep and slightly offset by 2 cm westwards. On excavation it was found that F3 was placed in the middle of the construction slot F2, but an adjacent post hole F4 was offset and lay against the west side of the construction slot. F4

was located only 6 cm from the north west corner of F3. It was a shallower post hole with its fill 007 being the same as 005. There was a cluster of 3 medium angular gritstones supporting the post at surface level. The post pipe was roughly circular, 22cm diameter and 39 cm deep with a gently curving base and vertical sides (top at 276.90 m AOD, base 276.51m AOD). F4's position is out of alignment with the other post holes set into F2 and may have been used to add extra support for the wall in this area.



F3 (left) and F4 right pre-excitation.

The next post hole set into F2 going northwards was F7. The post pipe was rectangular, 22 cm by 15 cm, and 49 cm deep with vertical sides and a flat base (top at 276.82 m AOD, base 276.33 m AOD). The post pipe fill comprised mid grey silty clay loam 014. There was stone packing 015 in the form of a flat gritstone 30 cm deep laid vertically on edge half way down the post pipe's south side, reciprocated on the opposite side by a 20 cm stone laid at a steep angle. The west side also had a vertical packing stone and at the surface was a large angled gritstone protruding from the top of the post pipe's edge on its east side together with a cluster of medium sized angular gritstones to the north. Only the post pipes were excavated for F3, F4 and F7 as there was enough information to show the shape and size of the original Roman posts as well as the nature of the packing to support them.



Left: showing from left to right (south to north), post holes F3, F4 and F7. Right: detail of F7 after post pipe excavation.

The northern terminus of construction slot F2 terminated where it joined with another potential building slot F5 which ran eastwards from the junction – but there was no evidence for a slot running westwards which might have been expected. The junction was obscured by a dense cluster of medium sized angular

gritstones set in mid grey silty clay loam 018. These were found to be filling a shallow circular pit F10 which was 55 cm wide with gently sloping sides to a flat base 20 cm across. The top of the fill was at 276.67 cm AOD and the feature was a maximum of 25 cm deep. This shallow pit could have been a setting for a post at the angle of the wall as it lies at the intersection of building foundation slots F5 and F2.



Left: looking south to F10 pre excavation with building foundation slots F2 at the top and F5 to the left. Right: F10 after excavation showing the shallow pit or depression. The cluster of stones 017 beyond it obscures post hole F9.

70 cm to the north of post hole F7 was another post hole F9 within slot F2. It was hidden by a concentration of medium to large sized angular gritstones 017 which appear to have been dumped as there was no evidence at this level for a post pipe. Indeed, they could be an extension of the stone spread 018 which filled in F10 making this a later feature than F9. The stones 018 were 21 cm deep and set within the sides of F2, but underneath was a perfectly circular post hole/pipe 21 cm in diameter and 25 cm deep. It was cut into natural compact mid yellow grey shale. The base of the post hole was at 276.24 m AOD and the top of 018 was at 276.70 m AOD.



Overhead view of part of Trench 4 showing slots, post holes and the stone spread 017 covering the site of F9 (arrowed).



F9 post excavation showing the circular post hole set in the foundation slot F2.

At the northern end of Trench 4 the sub-natural mixed yellow clay 021 terminated at a well-defined straight edge with a light yellow grey silty clay material replacing it and running right across the 2 m northern extension of Trench 4 to its northern edge. Adjacent to the edge with 021 was a linear fill 009 which comprised firm light brown yellow silty clay with 30% patches dark grey silty clay loam and frequent charcoal flecks. A 50 cm wide section was excavated through this against the east edge of the trench and 009 was found to be the upper fill of a linear cut feature F5. It was up to 10 cm deep. There were two lower fills: 022, mid brown grey silty clay loam (5 cm deep and providing a cambered profile) and a base fill 023, light cream grey silty clay with moderate small sandstones (10 cm deep).

Feature F5 had sides sloping at c 45% angle to a flat base. The upper width was around 45 cm tapering to 25 cm at the base. Its top height at the section was 276.83 m AOD and the bottom 276.58 m AOD. In plan F5 could be seen to run from the trench east edge 1.5 m westwards, terminating at F10. It therefore appeared to be related to the construction foundation slot F2 and is likely to be another timber building foundation slot.



Looking westwards across the northern extension of Trench 4. The cut of slot F5 against sub-natural yellow clay 021 is visible to the left of the photo scale.



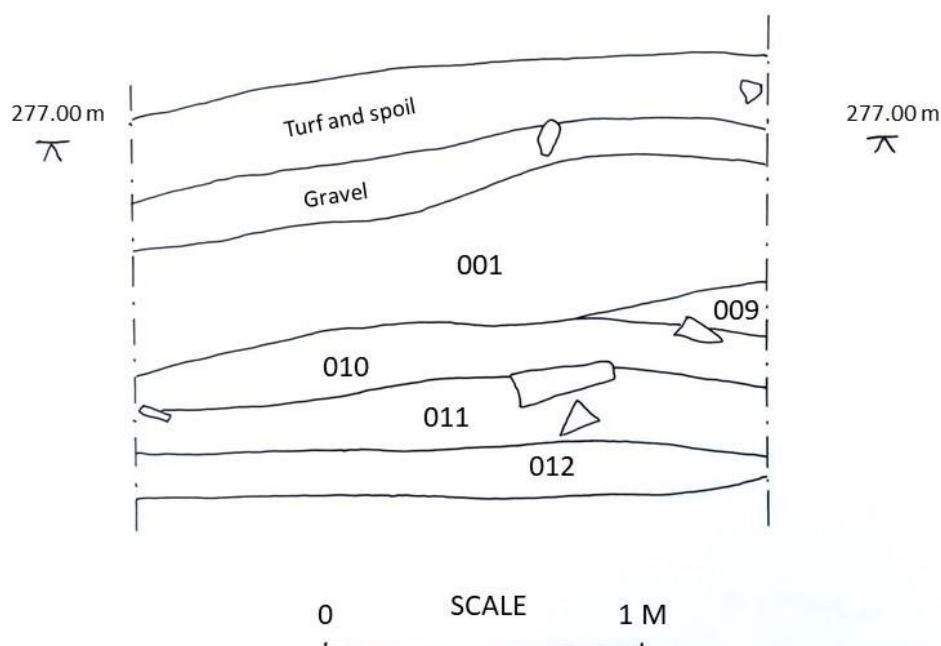
Left: Section through F5 against eastern edge of Trench 4. Right: detail of F5 section

A 1 m long and 50 cm wide slot was excavated against the north east part of Trench 4 to examine the depth and character of the grey silty clay deposit that was cut by F5 and which seemed to fill a depression F6. There were several layers. The upper one was 010 comprising a light cream silty clay with occasional small to medium sandstones and occasional charcoal flecks. This was up to 10 cm deep and its top levels showed it sloped gently from 276.72 m AOD on the south side to 276.63 m AOD against the trench north edge. Under 010 was a maximum 11 cm deep layer of light to mid grey-yellow silty clay loam with c 30% small sandstones and occasional charcoal flecks 011, which in turn overlay an 8 cm deep layer of light to mid yellow silty clay with 40% small stones 012. This was the bottom fill as it overlay compact natural yellow grey shale and stones. The base was fairly flat with a level of 276.45 m AOD.

It is not clear what the function of F6 was. The extent is not known other than the south side where it runs up to natural clay 021 appears to be cut by slot F5. The silty nature of the fills suggest that it may be a pre-Roman natural hollow that silted up. There were no Roman finds from it however the fact that it had a flat base and was c 25 cm deeper than sub-natural 021 means that its function as a floor within a Roman structure cannot be ruled out.



Looking east at the section dug through F6. Building foundation slot F5 is just out of picture to the right.



West facing section through F6 in north east corner of Trench 4.

Trench 4 was extended by 1 m square to the west to see if there was a return building slot for F2 and F1. A final, smaller extension of 50 cm and 50 cm was then dug to link this area up with the 2021 Trench 2 edge, where a stone filled pit (2021 F4) had been partly exposed. This small extension found the northern edge of the pit and revealed more of the stone fill within the previously unexcavated part of the pit on its north side. The pit could be seen to be only 25 cm from the edge of the building foundation slot F2 which suggests it sat within that building, although it was stratigraphically isolated so it is impossible to say if it was contemporary with the building. The small extension revealed a small, 22 cm diameter patch of medium to large gritstones 019 adjacent to the west side of post hole F9. This new feature was thought initially to be another potential post hole F11, but excavation showed that there was no post hole, the stones coming off onto sloping natural shale and with no feature edges being apparent. The top of 019 was at 276.79 m AOD.



The small trench extension shows stones filling the pit F4 partly excavated in 2021, with dark grey backfill of the old excavation visible in the section beyond the stones. A cluster of stones 019 (F11) is just above the middle part of the white section of the photo scale, whilst excavated circular post hole F9 is to the left.

In the 1 m square trench extension excavation showed that there was no return building slot. A section showed that the 'natural' hollow F6 extended across to this area with is silty fill 010 being evident in a south to north section dug across where a return slot might be expected. The base of F6 here was at 276.59 m AOD, with 010 being 20 cm deep.



Looking west to the section dug across the 1 m square trench extension. Natural shale is visible under the white section of the photo scale – this is where 019/F11 was excavated. The stone filled pit partly dug in 2021 lies to the left of the scale. The section shows 010 and demonstrated that there was no building slot here.

One more feature was revealed in Trench 4. This was a patch of heat reddened clay F13 formed of mid to dark red clay 020 which abutted up to post hole F13 in building foundation slot feature F2. 020 had a length of 80 cm and a maximum width of 15 cm, with a height of 276.92 m AOD. On the opposite, west, side of F2 was a smaller patch of similar heat reddened clay (25 cm by 10 cm). It appears that F13 represented the site of a former hearth (similar to hearth F15 in Trench 13 east extension) that had been cut by F2. This demonstrates phasing within Trench 2 with the hearth predating the timber building represented by F1 and F2. A section measuring 1 m by 50 cm was dug between the hearth and the eastern trench edge to examine the depth of the burnt clay and to check the character of sub-natural 021 to confirm that it was natural and did not seal any earlier deposits. The section confirmed that this was the case and that the red clay was only a few centimetres deep.



F13 hearth is visible as a heat reddened area just above the photo scale, cut by slot F2.



The rectangular area excavated through mixed clay deposit 021 and against the edge of hearth F13 (above scale).



A final aerial photo of Trench 4, with F6 on the left backfilled and with the building foundation slots indicated (drone photo credit: Joolze Dymond)

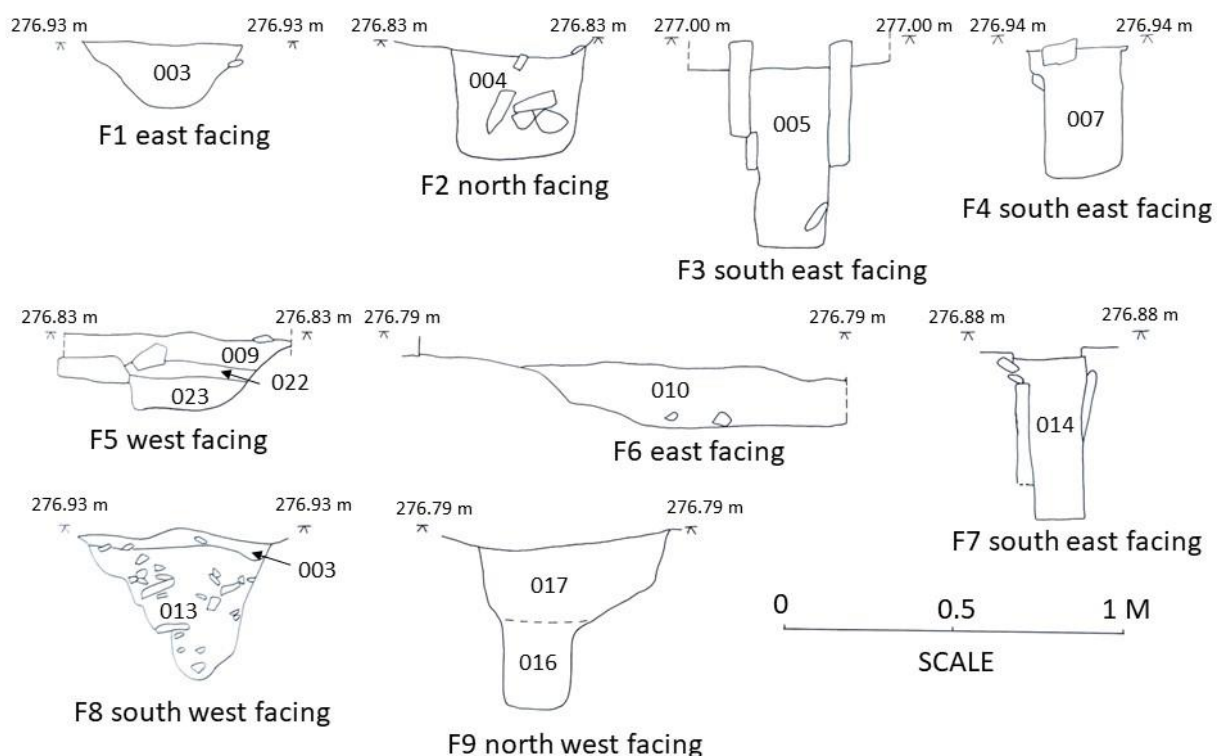
From the top and plough soil over the initial trench excavation came a range of pottery-dominated post medieval finds. There were 15 body, 1 rim, 1 handle and 1 base of dark glazed earthenware sherds, 2 plain earthenware body sherds, 1 light and 1 dark brown glazed earthenware body sherds, 2 transferred printed green and white glazed handle sherds, 2 white glazed body sherds, 1 blue glazed body sherd, 1 yellow

glazed body and 1 base sherd, 1 mottled brown and cream glazed body sherd, 5 clay pipe stems and 1 bowl, and 1 dark brown glass fragment.

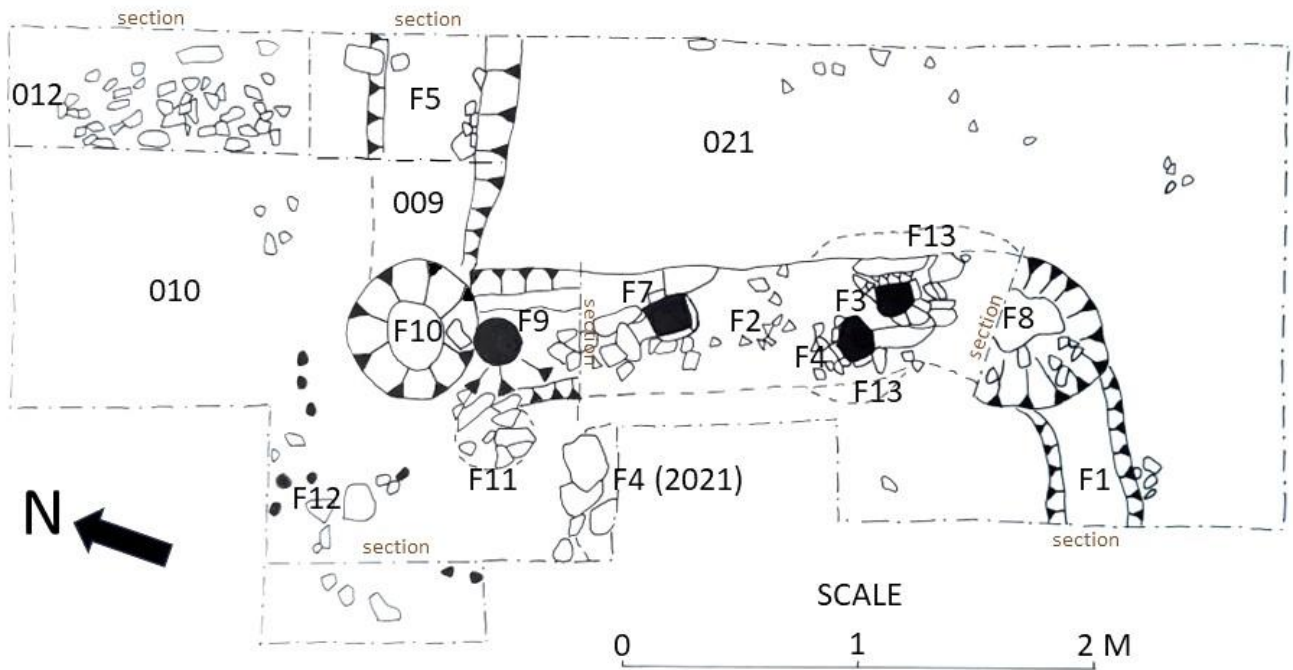
The north western extension top and plough soil produced more post medieval finds. These comprised 3 body sherds of dark glazed earthenware, 1 yellow ware rim, 1 brown glazed stoneware rim, 1 white glazed handle, 2 clay pipe stem fragments and a bowl, 2 pieces of clear and 1 green glass, 2 large brick fragments and 1 tile fragment, 1 stamped metal handle. There was a broken translucent brown flint flake which displayed evidence for a bulb of percussion and retouch. This flake was probably Mesolithic in origin and represents the only prehistoric find of this season's excavation. Several previous excavations on the fort and fortlet sites have yielded unstratified prehistoric flints as 'background noise' suggesting that the tongue of high ground on which the fort was placed was popular with prehistoric hunter gatherers as well, and of course there is the Bronze Age pottery found by Thompson in a pit under the fort workshop in 1963 (Thompson 1967).

The slot excavated against the north east edge of Trench 4 produced 5 sherds of dark glazed earthenware from the top and plough soil. Interestingly, these were all base sherds from different vessels one of which had a crude bubbled dark glaze which might indicate a 16th or 17th century date. A small piece of amber glass came from context 004 (fill of the building foundation slot F2). This could be Roman in origin.

Trench 4 successfully added to our understanding of the timber structures indicated by post holes and a small building foundation slot identified in Trench 2 in 2021. A substantial building slot F2 was revealed, containing 5 post holes and flanked by 2 return slots F1 and F5. The odd thing is that there was no westward return slot at the north end of the building represented by F1 and F2; therefore, it must be concluded that this was an open-ended building measuring c 3 m in length but with the width not yet known, and with the open side being on the north away from the prevailing south westerly wind. Strangely, there is a building slot, F5, on the north side but it runs in the opposite, easterly direction from its junction with F2 leaving us with a dog-legged arrangement. Further investigation is required to better understand this unusual arrangement.



Sections across features in Trench 4.



Final plan of Trench 4.



Finds from the top and plough soil.



From topsoil in the north west extension.



Pottery finds from top/plough soil in slot against the trench north east corner.



Possible Roman amber glass from 004.



Detail of metal object, a possible handle, from topsoil and stamped with Sheffield maker's name and crown motif.



Roman daub from 005.



The prehistoric broken flint flake or blade with detailed view of both sides below.



Contexts:

F1 Filled with 003. Shallow (beam?) slot running east to west through west edge of trench. Part of building foundation along with F2.

F2 Filled with 004. Building foundation slot running south to north at right angle from junction with F1. Part of building foundation along with F2.

F3 Post hole within F2. Filled with 005 and 006.

F4 Post hole adjacent to F3 and on edge of F3. Filled with 007 and 008.

F5 Possible building slot running east from junction with north side of F2. Filled with 009.

F6 Cut or hollow on north side of Trench 4. Cut by F5. Contains 010 and 011.

F7 Rectangular post hole within F2. Filled with 014 and 015.

F8 Post hole at junction of F2 and F1.

F9 Circular post hole under F10 and set within F2 at its northern end. Filled with 016 and hidden by 017.

F10 Shallow circular pit full of stones 018.

F11 Circular patch of stones, looking like post hole fill but turned out to be single layer with no feature underneath. Comprised of 019.

F12 Scatter of stake holes to north-west of junction of F2 and F5.

F13 Possible hearth cut by F2. Formed by 020.

003 Fill of F1. mid grey silty clay loam with 30 % small patches of cream coloured silty clay with medium small stones.

004 Fill of F2. Light cream silty clay with frequent small to medium sandstones.
 005 Post pipe fill of F3. Mid to dark brown silty clay loam with occasional small stones.
 006 Stone packing of F3.
 007 Post pipe fill of F4. Mid to dark brown silty clay loam with occasional small stones.
 008 Stone packing of F4.
 009 Fill of F5. Firm light brown yellow silty clay with 30% patches dark grey silty clay loam and frequent charcoal flecks.
 010 Fill of F6, over 011. Light cream silty clay with occasional small to medium sandstones and occasional charcoal flecks.
 011 Fill of F6, under 010. Light to mid grey-yellow silty clay loam with c 30% small sandstones and occasional charcoal flecks.
 012 Under 011, over natural. mid yellow silty clay with 40% small stones.
 013 Fill of F8. Mid grey silty clay loam with 50% small to medium gritstones.
 014 Fill of F7. Mid grey silty clay loam and includes large gritstone on edge in base of the post hole.
 015 Stone packing of F7.
 016 Fill of post hole F9, under 017. Mid grey silty clay loam.
 017 Dump of medium to large gritstones filling hollow above F9.
 018 Fill of F10 partly obscuring F9. Mid grey silty clay loam with 40% medium gritstones.
 019 Fill of F11. Medium to large gritstones making F11.
 020 Forms hearth F13. Mid to dark red clay of hearth F13.
 021 Mid yellow clay with lots of small patches dark grey humic soil spread across most of southern half of Trench 4. Sub-natural.
 022 Fill of F5, under 009 above 023. Mid brown grey silty clay loam.
 023 Fill of F5, under 022. Light cream grey silty clay with moderate small sandstones.

Test Pits 14 to 17

As stated above, to the east of Trench, 4 test pits TP14 15, 16 and 17, each 1 m square, were excavated across a raised area to examine its archaeological potential.



Location of test pits east of Trench 4 (drone photo credit: Nat Townsend).



Looking west across the test pits to Trench 4, with Trench 13 east extension and north extension beyond.

Test Pit 14

This was located 3 m to the east of the southern edge of Trench 4. Under a shallow turf and topsoil of only 10 cm was a well-preserved solid surface of small to medium size gritstones laid as a yard surface. The mid point of the stone surface was at 277.40 m AOD.



Test Pit 14 with north on right side.

TP14 produced 10 post medieval pottery sherds from the shallow topsoil. These included 2 base, 1 handle and 2 body sherds of dark glazed earthenware, 2 base and 2 body sherds of brown glaze earthenware, and 1 handle of white glazed pottery. There was also 1 fragment of clay pipe bowl. One of the dark glazed earthenware bases had a hard purple fabric and could be 16th century Midland Purple ware.



Post medieval pottery finds from TP14.

Test Pit 15

This was located 1 m to the north of TP14. As with TP14, under a shallow turf and topsoil of only 10 cm was a well-preserved solid surface of small to medium size gritstones laid as a yard surface. The mid point of the stone surface was at 277.28 m AOD.



Test Pit 15 with north on left side.

TP15 produced 8 post medieval pottery sherds from the topsoil: 3 body and 1 base sherds of dark glazed earthenware, 1 base and 1 rim of brown glazed earthenware, 1 white glazed body sherd and 1 yellow glazed body sherd.



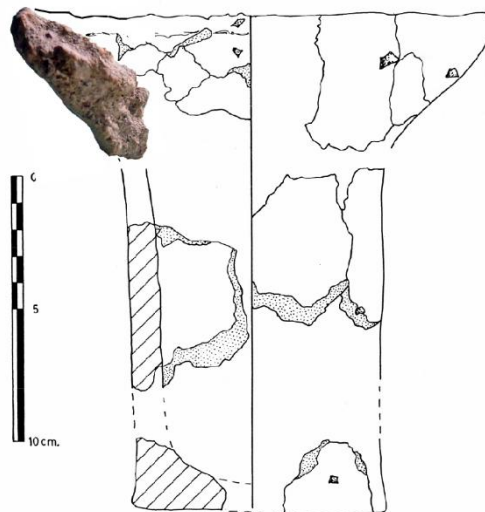
Post medieval pottery finds from TP15.

A most remarkable find also came from the soil above the stones. This was a sherd of what looks like Very Coarse Pottery (VCP), also known as Cheshire Stony VCP. It has numerous stone inclusions of possible limestone within the red coloured fabric. The sherd is curved towards a crude rim. This is similar to the characteristics of Cheshire briquetage, which has a sandy boulder clay fabric with fragments of igneous or sedimentary rocks. This type of pottery was used as salt containers in the Iron Age and into the Roman period. Salt was produced in the 'wich' areas of Cheshire and was a vital commodity, being transported in these containers across the region. Local examples have been excavated in Iron Age contexts at Mellor Old Vicarage site, Stockport, and Great Woollen Hall, Salford (Arrowsmith 2024 and Nevell 1989). If this

analysis is correct then it is a mystery as to why the sherd was lying on top of a post medieval cobbled stone surface.



The possible Very Coarse Pottery sherd which was found on top of the stones in TP15.



Reconstructed profile of VCP container from the excavations at Great Woollen Hall, Salford.

Test Pit 16

This was located 2 m north of TP15 with the 3 test pits being on the same south to north axis. This was of very different character to TPs 14 and 15 in that the stone surface was not encountered. A sondage showed considerable depth of soil, dark grey topsoil and mid to dark brown possible plough soil. It was stopped at 40cm depth at the top of a dark brown silty clay loam with frequent charcoal flecking – a possible Roman deposit. The turf level on the south edge of the test pit was at 277.12 m AOD and the sondage base was at 276.76 m AOD. This is an area that would repay further investigation to form a better understanding of the Roman archaeology potential.



Left: Test Pit 16 with north at the bottom. Right: Sondage in south east corner of TP16, with south at top.

From the topsoil came an assemblage of post medieval pottery and 4 clay pipe stems. The pottery comprised 5 body and base sherds of dark glazed earthenware, 2 body and 3 rim sherds of brown glazed earthenware, 1 yellow brown striped glazed rim sherd, 1 blue and white transfer printed rim sherd, and 1 white glazed base.

The sondage yielded 1 body and 1 base sherd of dark glazed earthenware, 2 unglazed sherds of earthenware, 1 base of decorated glazed blue and cream pottery, 2 small nails and 1 flat shard of green blue glass. The nails could be Roman hobnails and the glass could also be Roman.



Left: from topsoil.



Right: from lower fills in sondage.

Test Pit 17

This test pit was located half way between TP14 and the east edge of Trench 4 on the axis lined up with the southern edge of the trench. It established the edge of the cobbled stone surface which ran roughly on a west to east alignment across the middle of the trench. There was no kerbing. The cobbles were found to be one course deep at c 7 cm. They came off onto a dark grey silty clay loam which appeared to be topsoil. A sondage was excavated in the south east corner of the test pit which revealed that the 'topsoil' was only 10 cm deep and came off onto light cream yellow clay which provisionally was interpreted as natural. The stone surface on the south edge of the test pit was at 277.10 m AOD and 277.22 m AOD at the north edge. The base of the stones in the sondage in the south east corner was at 277.03 m AOD.



Left: Test Pit 17 with north at the top and sondage in south east corner. Right: detailed view of the sondage showing the thin layer of cobbles on top of topsoil, with natural clay at the base.

The topsoil above the stones contained 1 dark glazed earthenware body sherd, 1 brown glazed rim, 1 decorative white and brown glazed rim, 1 white glazed body sherd and 1 clay pipe stem fragment. The soil that ran under the cobbles and that was excavated in the test pit corner yielded 4 sherds of dark glazed earthenware, 1 of which was a base sherd. The most interesting piece of pottery was a large body sherd incorporating the start of a handle. This was formed of a hard, purple fabric with frequent quartz inclusions and was decorated with a lustrous dark brown pitted glaze. It is likely to be Midland Purple Ware of the 15th or 16th century.



Left: from above the cobbles. Right: from the soil beneath the cobbles.



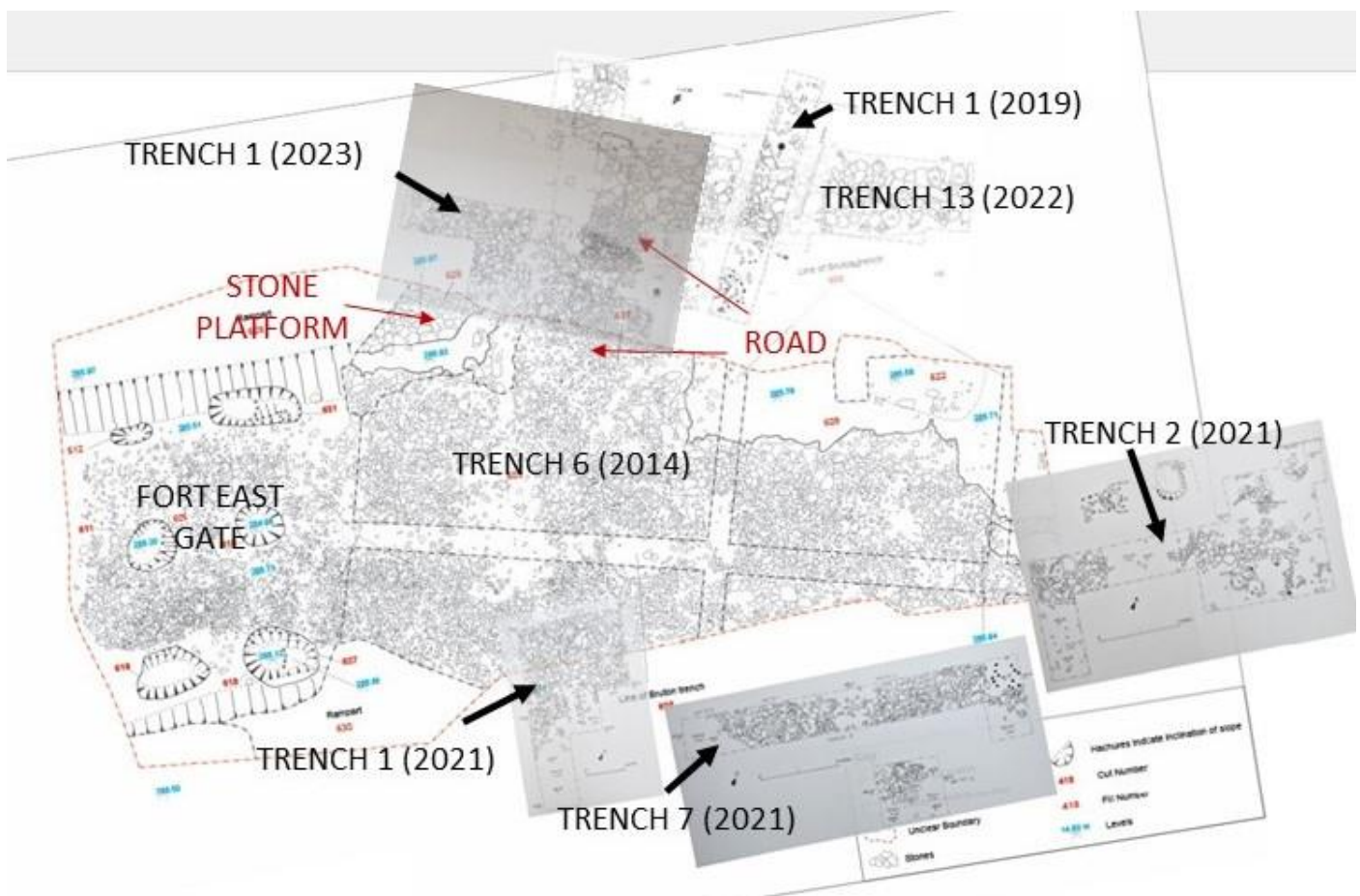
Sherd of possible glazed Midland Purple ware, with start of a handle.

The 4 test pits were very useful in defining the nature and extent of the raised mound to the east of Trench 4. They established that the cobbled area covers a roughly circular area 4.5 metres in diameter, although the eastern extent requires further confirmation. The shallowness of the cobbling suggests it was a yard surface associated with former post medieval Husted's Farm, the site of which lies a short distance to the east. There is a marked change in the stratigraphy between TP17 and TP 16 to the north. The depth and character of the soils revealed in the sondage in TP16 may indicate an underlying negative feature of Roman origin, perhaps a ditch or pit.

Overview and Discussion

The results of the 2023 excavations can be summarised as follows:

Trench 1 joined up previous Trenches 6 (2014) to the south and 13 (2022) to the east. It completed exposure of a cobbled service road, 5 m long by 1.5 m wide, that linked the fort east gate exit road to a large stone platform which gave access to timber buildings and ovens. The road overlay an earlier flagged stone platform adjacent to the gate exit road. Two large flagstones were exposed but there was also an area of pitched rough stonework that may indicate backfilling of an earlier negative feature. The cobbled metalling of the road was only one course deep and served to level the previous rough stone surface. Underlying the service road, two foundation slots were partly revealed forming the south and west sides of a timber building. At the west side of the trench, more of the stone platform against the fort's east rampart (first revealed in the 2014 east gate excavation) was exposed and found to be 4 m long and 3.2 m wide. A piece of Roman glass vessel came from the surface of the platform. Test Pits 1-4 were located to confirm the edges of the 2014 excavation trench, Test Pit 5 identified the surface of the stone platform beside the rampart further north from where it was found in the 2014 Trench. Test Pit 6 was located just to the north of the west side of Trench 1. It established that the stone platform did not run this far and came across a narrow slot that may represent part of timber structure.



Composite plan of trenches of east gateway, roads and stone platforms.

Trench 13 northern extension looked at a substantial area to the north of the stone platform revealed in 2022 (in Trench 13) and found significant and complex remains. In the first phase (late AD 70s) was a post-in-trench constructed timber building, evidenced by two partly excavated foundation slots with deep post settings. Two sides of the building were found, with the southern arm running parallel with the edge of the stone platform. Beyond the corner of the building (not excavated) were several features including a post hole and shallow, narrow beam slot which suggested that another, slighter timber structure lay to immediate west of the main timber building. Several building nails were found in the fills of the building slots. The western building foundation slot was sealed under a separate, smaller stone platform. In the second phase (perhaps AD 80s) the timber buildings were dismantled and the area given over to intense

oven activity. There were at least 4 ovens (5 including one excavated nearby in 2019) and 1 hearth. The former were represented by sub-circular patches of dense charcoal filled shallow depressions, sometimes in association with adjacent stone surfaces to give access. There were also levelling deposits of yellow clay with earlier oven areas being covered to allow re-use of the area for new ones. These were probably simple domed clay ovens but no superstructures survived, although heat hardened clay surrounded a couple of the ovens to suggest the location of the oven walls. These walls were probably made of wattle and clay as frequent pieces of heat reddened daub were recovered from ashy deposits and on the stone platforms. However, it is possible that free standing ceramic ovens could also have been employed. Calcined animal bone fragments from charcoal in one of the oven bases indicated a function of meat roasting. Clusters of stake holes were found in the top clay deposit. These were not closely associated with oven bases so might have been for shelters from the wind. A patch of red clay partly revealed against the eastern trench edge was interpreted as the site of a hearth of unknown function. Soil sample analysis has revealed no metallurgical or plant debris which supports the meat cooking theory. There were at least 3 main phases of activity as the separate stone platform that overlay the western timber building slot also overlay an oven.



Aerial view of excavations in progress on three trenches in late August, with others backfilled (drone photo credit: Joolze Dymond).

Trench 13 eastern extension located the eastern terminus of the long stone platform that was mostly revealed in 2022 Trench 13. A further 1 m length was exposed and a 'tongue' shaped terminus. The total length of the platform was 10 m by 1.5 m. It ran on an east to west axis parallel with the east gate access road which was 5 m to the south. 1 m to the east of the platform terminus was an oval patch of burnt red clay interpreted as the site of a hearth. This was associated with a clay levelling layer which sealed a grey silty clay deposit which yielded a large 14 cm long Roman nail. This deposit in turn sealed a possible building foundation slot which was partly revealed in the south east corner of the trench. On the north side a different deposit contained several large sherds of Dressel 20 amphora which can be dated to the late 1st century AD. Whilst only partly excavated, the archaeology of this trench suggests a similar complexity to Trench 13 northern extension ie. an area of hearths and ovens, levelling deposits, and perhaps earlier building foundations, all accessed via the stone platform which terminates in this trench.

Trench 2 was a 1 m wide trench positioned at right angles across the projected line of the fort's east ditch as it came round the north east corner. Bruton in 1907 had excavated the ditch close to the corner on the north side of the defences. Trench 2 successfully found the ditch which was revealed in plan in the form of a grey purple decayed turf layer sealing the top of the ditch fills. Test Pit 13 was placed to see if there was an outer ditch as one had been found in the 1950s by Rosser on the north side of the fort (measuring 2 m wide and 80 cm deep). This test pit was joined up to become part of the trench when the potential for a ditch was identified. There appeared to be an outer ditch 1.5 m from the inner ditch. Fills of orange sandy clay and loose grey shale indicated a very shallow and narrow ditch. This outer ditch was shallow being only 40 cm deep and 1.5 m wide. This area probably suffered from truncation from ploughing in the 18th and 19th centuries which might explain why it is less substantial than that excavated by Rosser, or it could be shallowing towards its termination. The fills comprised re-deposited natural materials with no silt evident so it could have been short lived. There were no Roman finds but a few medieval sherds helped confirm previous evidence for a medieval origin for Castleshaw hamlet which lies just to the east side of the fort site.



Trench13 northern extension is in the foreground with Trench 3 beyond (drone photo credit: Joolze Dymond).

The excavations in Trench 3 have made a significant contribution to our understanding of this part of the Castleshaw Roman fort site. 5 test pits (8-12) were dug at 2 m intervals in a line south of Trench 2 to chase the line of the inner ditch. All of them came down on to the decayed turf layer to confirm its continuation. Test Pit 7 was located close to the furthest south test pit (12) to pick up the possible annexe rampart material that had been indicated by a test pit in 2019. It came across a mixed light grey silty clay and orange clay deposit similar to that found for the southern annexe rampart in 2021. Trench 3 incorporated TP7 and ran 3.5 m south from TP12. It exposed the fort ditch and a 1.5 m length was excavated. The ditch was 1.14 m deep under 60 cm of top and plough soil and 2.3 m wide. There was 'V' shape profile, although the outer face appeared to be a little steeper. At the base was a 40 cm wide and 35 cm deep slot for clearing out silt and to act as a defensive 'ankle breaker'. From the outer ditch edge running eastwards were the truncated remains of the northern rampart of the annexe. It had a gently convex shape and was 3.2 m wide but only 30 cm deep. A possible defensive ditch was partly excavated to the north but requires further work to confirm its function. Set into the rear of the rampart was an oven formed of flat-laid medium sandstones forming a rough circle 1.1 m in diameter, connected on the west side to a large roughly 80 cm

diameter circular patch of charcoal surrounded by a hard band of clay c 20 cm wide representing the site of the clay oven superstructure. The similarity with features in Trench 13 north extension was striking and indicated that this was another oven base. There was evidence for slighting of the rampart at the end of the fort's occupation around AD 95, with a mixed deposit of grey and orange clay and several random turf sods spreading both behind and in front of the rampart over the probable ditch. The fort ditch has been shown to run at least 18.5 m alongside the eastern rampart from the north east corner of the fort defences. This is the first time that excavators have been able to locate the ditch on the east side. However, it must terminate before the 2014 Trench 1 where the ditch was absent, so it can only run a maximum of 2 metres further south from Trench 3. The fort ditch therefore runs up to and just past the start of the annexe defences for a length of c 20 metres. This would appear to account for the discontinuation of the ditch along the whole of the fort's eastern defences. The only Roman find from Trench 3 was part of the base of a glass vessel from the upper fill of the fort ditch.

Trench 4 was located adjacent to the east side of the 2021 Trench 2 which had exposed several post holes, a pit and shallow beam slot. Trench 4 revealed a substantial building slot which contained 5 post holes, 3 of which exhibited substantial stone packing. It was on a south to north axis and was 3.5 m long. The south end had a corner post hole from which ran a much shallower slot westwards to link with the beam slot excavated in Trench 2. There was no return slot on the northern side for the timber building which meant it was probably an open sided structure. The open side was away from the prevailing winds. However, there was another building slot on the north side but it ran at right angles eastwards from the northern terminus of the post-in-trench. This was also a shallow slot and ran under the east edge of the trench so its length and function are not yet defined. It cut into a shallow flat-based depression to the north that was filled with a grey silty clay. The post-in-trench foundation slot cut through an earlier phase feature in the form of a patch of heat reddened clay indicative of a hearth. Trench 4 confirmed the presence of a timber building within the annexe around 25 metres from the fort's east gate.

Test Pits 14-17 were dug to the east of Trench to investigate a slightly raised area. They found a cobbled surface at shallow depth covering a roughly circular area 4.5 metres in diameter, although the eastern extent requires further confirmation. The shallowness of the cobbling suggests it was a yard surface associated with former post medieval Husted's Farm, the site of which lies a short distance to the east. There is a marked change in the stratigraphy between TP17 and TP 16 to the north. The depth and character of the soils revealed in the sondage in TP16 may indicate an underlying negative feature of Roman origin, perhaps a ditch or pit.

The 2023 excavations in the northern half of the annexe have shown a sequence of events that would appear to comprise an initial phase of timber buildings which were then dismantled and the area given over to intensive use for ovens and hearths accessed by stone platforms. All of this could have happened within the 15 year or so life span of the two phases of fort occupation in the late 1st century AD that were identified in the GMAU 1980s excavations (Walker 1989). Although the fort was only in use from the AD 70s to mid-90s and the fortlet from c AD 105 to the mid- 120s, there was evidence for two phases of timber building for each. It is possible therefore that the timber buildings in the annexe belong to the first phase of fort and the ovens to the second phase. It is also possible that some of the features are of fortlet period date, although the annexe defences clearly align with and are contemporary with that of the fort. One more interesting result is how sparse the Roman finds have been within the annexe. Although we have not actually excavated much in the way of Roman stratigraphy and associated features it is still remarkable how few finds there are in the base of the plough soil where it intersects the top of Roman levels or within the excavated Roman features themselves. This contrasts for instance with the probable fortlet period extra-mural settlement identified in the 1990s evaluation trenching to the south of the fort/fortlet in Daycroft Field.



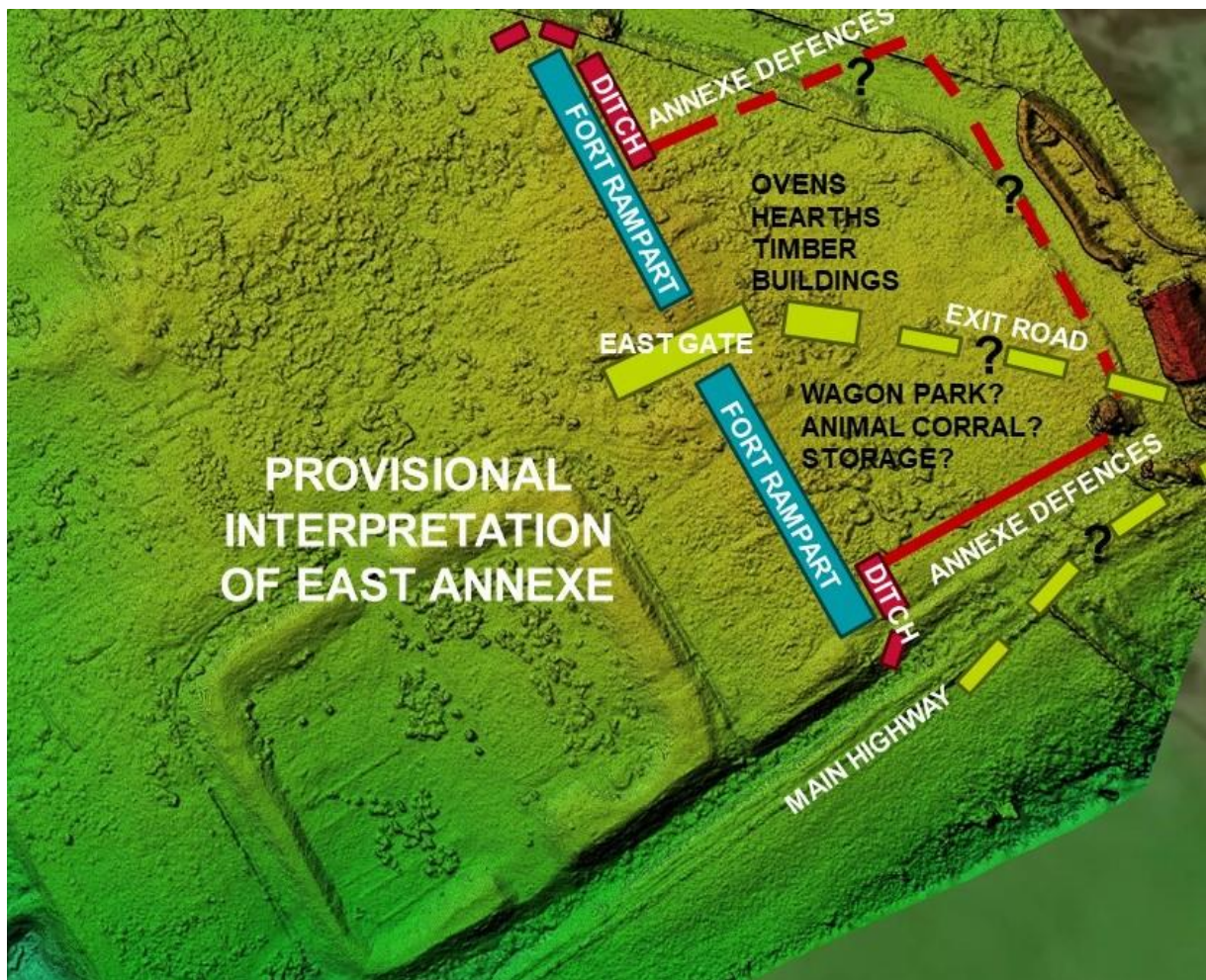
Looking west across the annexe excavation trenches in the foreground with the fortlet ramparts visible beyond (drone photo credit: Joolze Dymond).

To date, investigations have shown possible zonal planning for the annexe. To the south of the road exiting the east gate there have been very few archaeological remains which suggests this half of the annexe was used perhaps for storage, as a wagon park and for tethering animals. It is a very different story for the north half of the annexe. Here there is a first phase of at least 3 timber buildings followed by re-use for intensive cooking represented by a plethora of ovens and hearths. The annexe can be interpreted as possibly providing a form of 'staging post' with refreshments and perhaps accommodation offered to travellers using the main York to Chester highway, with extra teams of draught animals available to hitch up to wagons for the steep climb up to Standedge immediately east of the fort.

It is worth repeating the discussion from the 2022 report as the results from the 2023 excavation reinforce most of those comments:

So why an annexe and not a *vicus*? An annexe was a military enclosure attached to a fort which was dedicated to essential functions not usually undertaken in the fort; this might include the housing of animals, goods in transit, food processing or minor industrial processes. The emerging evidence suggests all of these could be applicable to Castleshaw. Here the fort lies next to the main trans-Pennine highway which would have been busy with travellers who, going eastwards, were faced with a very steep climb up to Standedge. Perhaps draught animals were held in the annexe to be hitched up to wagons before making the ascent. Accommodation, food and drink may have been prepared for travellers and the team looking after the animals. This scenario would accord with the southern half of the annexe being a levelled, blank area which may have been a corral for the animals. The northern half, by contrast, is busy with timber buildings, ovens, and possible industrial processing. Despite the east side of the fort being the flattest, and therefore the most vulnerable side, the rampart is not defended by a ditch – a most unusual and rare situation for Roman forts. This must be due to the presence of the annexe. A *vicus* is a civilian settlement attached to a fort and sometimes defended by a rampart or/and ditch, but it would be unthinkable and unique for there to be no ditch separating the civilians from the fort.

The Agricola fort at Elginhaugh in Scotland was, like Castleshaw, a short-lived site with perhaps a decade of occupation. The site was fully excavated and provides a fascinating and contemporary comparator for Castleshaw. Hanson, in his publication of 2007 describes the excavation and function of what he



Contour map with suggested arrangement of annexe defences and interior.

interpreted as an annexe attached to the fort (Hanson 2007, p 87-100). He pointed out the issue with comparative analysis in that so few annexe interiors have had extensive archaeological investigations, and that defended *vici* may be confused in some instances with annexes. He considered the rampart and ditches surrounding the Elginhaugh annexe to be very slight compared with the fort defences and more to demarcate the annexe as an ancillary enclosure. Similarly, at Castleshaw the bank and ditch that have been discovered on the south and south side of the annexe are much less substantial than the defences of the fort. He also mentions that at Malling and Cargill forts in Scotland the annexe is separated from the fort by only a rampart. It is worth noting that Slack fort near Huddersfield, 8 miles east of Castleshaw and probably built by the same unit, also has a section of rampart with no ditch; this coincides with the location of the bath house. It is not clear if the bath house at Slack sat within a defended enclosure and, to date, no bath house has come to light at Castleshaw fort. At Elginhaugh there were several phases of activity in the annexe even though it was a short-lived site. This was particularly true of the industrial processing areas where there was intensive use. The road was the focus for activity, with hearths, ovens, pits and iron working. Foundation slots for simple, timber strip buildings were found. Activity decreased away from the road and in one largely blank area evidence for a possible rail fence was found which may have served to tether horses. Hanson suggested this area was used as a wagon park and for horse grazing. So, although excavations are still at a relatively early stage within the enclosure attached to the east side of Castleshaw fort, the emerging evidence points strongly to a function as a military annexe.

The 2023 excavations have shown that the fort ditch does exist on the east side but runs for only c 20 metres to a point just beyond the junction with the north annexe defences; if this arrangement is mirrored to the south then around two thirds of the central section of the eastern fort defences are without a ditch. As with Elginhaugh the focus of activity appears to be alongside or near to the road running through the annexe from the east gate. This year's excavation has shown a number of phases and relatively complex stratigraphy within a discrete area of the annexe. There was an initial phase of timber buildings, of currently uncertain form, so we cannot say yet if they were simple strip buildings as at Elginhaugh. The second

phase saw intensive use of ovens, especially simple clay ones for what appears to be meat cooking. All of these were associated with stone platforms to provide access and perhaps to work on, and a number of sub-phases are apparent in the use of the ovens which appear to have had a short life span and were constantly being replaced. All these phases, like at Elginhaugh, probably took place over a short span of years. The interpretation of the two zones within the annexe at Castleshaw has also been supported by this year's findings – clearly the north side of the road was the focus of intensive activity but it is different to Elginhaugh in that it did not straddle both sides of the road. Another difference with Elginhaugh is that at this stage in the investigations there is no evidence for iron working, however a sizeable quantity of waste lead has been found which suggests that lead was being worked in this area.

In terms of the archaeological research strategy for Castleshaw Roman Forts (Redhead 2013), the 2022 and 2023 investigations have contributed to:

Research Objective 8: Understanding how the fort functioned.

Research Objective 9: Understanding the road network.

Research Objective 10: Understanding the immediate hinterland.

The greatest contribution has been towards Objective 8, in relation to emerging evidence for the presence of a military annexe attached to the east side of the fort and its relationship and function in relation to the fort. Objective 9 has seen limited progress due to post medieval disturbance, although some areas of potential Roman road survival can now be dismissed. Objective 10 is all about what is happening immediately beyond the fort defences. The discovery of an annexe on the east side is a major step forward. The 2022 and 2023 excavations have made significant progress on understanding the layout and function of the annexe.

It is suggested that the annexe is of late 1st century date based on its relationship with the fort's eastern defences. The interpretation as a military annexe rather than a civilian settlement (*vicus*) is set out in the discussion above. This means that we still do not know if the fort was in use long enough to establish a civilian settlement as no evidence has yet been found for a *vicus*, although an extra-mural civilian settlement attached to the later fortlet and dated to around AD 120 was postulated for remains excavated on land opposite the southern defences by GMAU in 1996-7 (Redhead 1997). So, based on our current knowledge, the Agricola fort at Castleshaw is in a similar situation at Elginhaugh where there was very little evidence for a civilian presence.

The recently revised Historic Research Framework for the North West of England (Nevell & Redhead eds, 2023) has a section dedicated to research questions under the Roman agenda theme *R3: Military Activity* (Philpott, 2023, 109). Two of the questions have relevance to the current investigations at Castleshaw:

Q11. *How can we identify typologies and the development of military sites and Roman road systems?*

Q14. *What were the date, extent, function and changes over time of extra-mural settlement (vici) in the region?*

As set out above, the discovery of an annexe attached to the east side of the late 1st century AD fort is a significant advancement in our knowledge of the character, form and development of the Castleshaw site. The main highway linking Chester to York fortresses is clearly visible in the Castleshaw valley as it approaches the fort from the west and as it climbs out of the valley to Standedge to the east of the fort. But its alignment near the Agricola fort is uncertain, partly due to it being diverted around the north side of the fortlet in c AD 120, so there is more research to do on this. In this regard, it is worth noting that this year a separate piece of archaeological investigation was undertaken by Phil Barratt and Tim Jeffrey in Daycroft Field opposite the southern fort defences to look for the road. It combined Ground Penetrating Radar, Resistivity and Magnetometer surveys supported by Lidar analysis. The results of this study will be reported separately, but the results were positive in showing the original highway running close to the fort's southern defences. The reference in Q14 to *vici* is interesting as there is a gap in the research agenda relating to military annexes - in terms of their distribution, chronology, form, and relationship to a fort and *vici*. Hanson has identified the paucity of archaeological excavation of annexe sites in Scotland and possible confusion with *vici*; does this also apply to the North West of England?

Recommendations

For the 2024 excavation season the following programme of targeted investigation is proposed.



Contour map with previous annexe excavations shown in black. Recommendations for future investigation are the red bounded areas which are numbered with the rationale set out below.

1. A trench should be dug at right angles across the southern annexe defences, Drycroft Lane and the projected line of the main highway in Daycroft Field. This trench would incorporate and extend test pits previously excavated along this line and would provide a profile across the annexes defences, Drycroft Lane and the Roman highway. The latter has still to be located in this area.
2. A test pit dug in 2021 located part of the annexe defensive ditch here. The rampart and ditch should be fully exposed and recorded through a section.
3. In 2021 a long narrow trench first discovered the southern defences of a military annexe attached to the east side of the fort, in the form of a ditch and the top of the rampart material. Nearby, to the east, a test pit also revealed rampart material. But the rampart has not been fully exposed or properly excavated here, nor is it known how far the rampart runs before turning northwards. This area should be excavated further to reveal the plan form of the rampart and its surviving depth and make up.
4. In 2021 a trench was excavated adjacent to the site of Husteds Cottage. It found a tightly jointed smooth gritstone surface at depth and sealed by a post medieval wall linking to the cottage. Kerb stones were also found at depth, associated with the stone surface. These remains could be part of the Roman road exiting the fort's east gate to rejoin the main highway or might relate to a potential medieval (pre-cottage) building. The trench was not completed and should be re-opened, expanded and completed.

5. The eastern arm of the annexe defences have not yet been located. Test pits should be excavated in this area beside the road to see if there is any surviving evidence for it. The road, former post medieval buildings (Husteds Farm and Cottage) and other modern ground intrusions mean that there had been a lot of disturbance in this area.
6. This is an area that has not been evaluated and therefore of unknown Roman potential. Test Pit 16 from the 2023 investigations suggest there is Roman archaeology in this area which is worthy of further exploration and clarification.
7. On the south side of the east gate a stone platform was partly revealed in 2021, mirroring that on the north side of the gate discovered in 2014 and further defined in 2023. The extent of the stone platform and its relationship to the rampart should be explored through further excavation.
8. This is a large area which has significant archaeology that has informed understanding of the phasing and function of the annexe. This area on the north side of the road exiting the east gate has been shown to have stone platforms giving access to timber buildings, ovens and hearths. Foundation slots and post holes were found this year for possibly 4 separate timber buildings which appear to belong to the first phase of activity in the annexe. However, they have only been partly revealed and there is not yet a complete building plan nor a firm understanding of spatial relationships and phasing. It is proposed to determine through further excavation the plan form, character and function of these structures. The extent of the ovens and hearths in this area is also not yet defined and requires further investigation. Targeted open area trenches combined with test pits would be deployed.
9. In 2019 two stone ovens were revealed in plan when an old, unrecorded, excavation trench (probably by Bruton in 1908) was re-excavated. These ovens are in contrast to the clay ovens revealed in this year's excavations to the south and north west. It is assumed these stone ovens are for baking bread but it would be useful to further excavate the one that has been less damaged by the Bruton's trench to reveal its base and hopefully obtain samples for analysis. To the west a possible third oven was partly revealed in 2018 and it would be useful to confirm if this was an oven forming part of a bank of three.
10. Between this year's Trench 3 and the 2014 Trench 1 (only 2 metres apart) lies the terminus of the fort ditch. It is critical for our understanding of the fort to define this terminus.
11. The northern defences of the annexe were partly exposed in Trench 3 this year, with a good section through the rampart base but with the ditch only partly excavated and not yet confirmed. It is recommended that the alignment and character of the defences should be confirmed through a new trench 5 metres to the east of Trench 3.
12. On the north side of Dirty Lane, just outside the Scheduled area, three 1 m sq test pits dug in 2019 found evidence for a ditch and Roman deposits. Could this ditch be part of the annexe defences? This area should be subject to a larger excavation to better define the previously revealed features.
13. In 2014 Salford Archaeology and the Friends re-excavated an old trench that ran across the fort's eastern defences half way between the east gate and the south east corner. The rampart was revealed in section but no ditch. It is important to find the terminus of the ditch which should be a little south of Trench 7, assuming it mirrors the arrangement to the north.

It is not intended to excavate these areas fully. They are guides for where to target test pits and trenches. Area 8 will be a priority as will the establishment of the extent of the annexe defences and clarification of the road system. Further comparative research is required to better understand the ovens that have been revealed – this will be an ongoing project throughout 2024.

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The volunteer diggers, after backfilling Trench 1 in June and, below, standing around Trench 13 northern extension in August.



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A group of visitors being given a guided tour of the site

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Appendix

Assessment of samples from Castleshaw Roman Fort, Saddleworth, Oldham, Lancashire Emma Tong BA MSc and Dr Hannah Russ FSA MCIfA

Introduction

Seven samples, totalling 9 litres of sediment, were taken during a volunteer led archaeological excavation at Castleshaw Roman Fort, Saddleworth, Oldham, Lancashire. Recent archaeological excavations have uncovered a military annexe against the east side of the fort revealing a number of oven bases represented by charcoal and stone platforms together with oxidised red clay indicating possible hearths. Six samples were taken from the oven bases and possible hearths, and one sample from the fort ditch.

The bulk samples were processed by archaeology.biz for the recovery of charred plant macrofossils, wood charcoal, and any other eco- and artefactual remains in September 2023. The heavy and light fractions/flots were sorted for charred plant material, as well as any other ecofacts and artefacts in October 2023. The identification and assessment of resulting archaeobotanical remains was undertaken in October 2023.

Methods

The samples were processed using the Siraf method of flotation (Williams 1973) using a 1mm mesh to retain heavy fraction and a 250-micron mesh for the light fraction/flot. Once dry, a magnet was run through the heavy residue to recover any magnetic material that may include hammerscale (Dungworth and Wilkes 2007). Magnetic material was quantified by weight only and was scanned by eye to identify any hammerscale that might be present. The heavy fractions were then sieved at 4, 2 and 1mm, with the >4mm fraction sorted in full and the 2-4mm, 2-1mm and <1mm fractions scanned for any artefactual or environmental remains. Light fractions were dried and sorted under a low power light microscope at 10x to 40x magnification, with any artefactual or environmental remains extracted for assessment.

The samples produced seven flots which were analysed under a low power light microscope at 10x to x40 magnification.

The sample residues were assessed in accordance with Historic England guidelines for environmental archaeology (Campbell *et al.* 2011) and the ClfA toolkit for specialist reporting (ClfA 2021), with reference to site information provided by the client and the North West Regional Research Framework (Accessed October 2023).

Results

A range of items were extracted from the heavy fraction during sorting, including charcoal, burnt bone, clinker and mortar (Table 1). No hammerscale was recovered.

Seven bulk environmental samples yielded 7 flots, weighing a total of 16g (Table 2). The flots contained fragments of charcoal and insect remains (Table 2).

Trench	Context	Burnt bone		Charcoal		Clinker		Mortar		Total	
		Count	Weight (g)	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)
3	6										
	7			3	0.14			4?	1.04	14	19.52
	11			50-100	6.5						6.5
13	5			25-50	4.93						4.93
	25			18	1.94			2	0.79	23	4.03
	26	6	6.2	18	0.77	1	0.37			25	7.34
	29									10	9.14
Total		6	6.2	114+	14.28	1	0.37	6?	1.83	72	51.46

Table 1: Summary of all finds from heavy fraction/residues by count and weight (grams).

Trench	Context	Charcoal <2mm		Charcoal >2mm			Invertebrates	
		Count estimate	Weight (g)	Count	Count estimate	Weight (g)	Count	Weight (g)
3	6						3	<0.5
	7						2	<0.5
	11	100+	3.4		50-100	3		
13	5	100+	2.3		50-100	5.7		
	25	100+	0.6	10				
	26	100+	0.7		25-50	0.4		
	29	25-50	<0.5				1	<0.5
Total		425+	7	10	125+	9.1	6	<1.5

Table 2: Summary of flot results by count and weight (grams).

Charcoal

Charcoal was recovered from six samples, in total weighing 30.38g (Table 3). Heavy residues of five samples contained charcoal, in total weighing 14.28g (contexts 5, 7, 11, 25 and 26, Table 3). Five flots contained further charcoal remains, in total weighing 16.1g (contexts 5, 11, 25, 25 and 29), Table 3. Many of the fragments were abraded and in poor condition, preventing any fracturing that might provide a clear surface for identification of wood species. However, wood charcoal from contexts 5, 11 and 25 contained charcoal fragments of suitable size and condition for identification of wood species, and that would be also suitable for submission for radiocarbon dating (roundwood, >50mg, suitable context (in-situ burning)).

Burnt bone

Six fragments of burnt bone were recovered from the heavy fraction from context 26 (Table 1). The bones could not be identified any further than medium/large mammal (dog to horse sized) due to fragmentation, warping from exposure to high temperatures and fragmentation. The thickness of the cortical bone indicated that the bones were not human in origin. One fragment showed evidence of cut marks suggesting that the bones represent food waste, perhaps discarded in the hearth once meat had been consumed.

Mortar

Two certain and four possible fragments of mortar were present in contexts 7 and 25 (Table 1). The mortar was not indicative of date but is broadly indicative of building activity in the area at some point during the Roman period onwards.

Clinker

A single piece of clinker was recovered from context 26 (Table 1). Being a result of high temperature burning, this is expected in features such as an oven bases and/or hearths.

Trench	Context	Heavy Fraction		Flot				
		Charcoal		Charcoal <2mm		Charcoal >2mm		
		Count	Weight (g)	Count estimate	Weight (g)	Count	Count estimate	Weight (g)
3	7	3	0.14					
	11	50-100	6.5					
				100+	3.4		50-100	3
13	5	25-50	4.93					
				100+	2.3		50-100	5.7
	25	18	1.94					
				100+	0.6	10		<0.5
	26	18	0.77					
				100+	0.7		25-50	0.4
	29			25-50	<0.5			
Total		114+	14.28	425+	7	10	125+	9.1

Table 3: Charcoal remains from samples taken from flots and heavy fractions from samples, count and weight. HF = heavy fraction.

Discussion

Very few artefactual remains were recovered from the samples from Castleshaw Roman Fort, none of which provided any dating evidence for the site. The mortar provides evidence for building activity at or in the vicinity of the site at some point between Roman and recent times, while the clinker is a product of high temperature burning that was already evidenced by the charcoal deposits and hearth/oven features on site. An absence of hammerscale indicates that the burning activity was very unlikely associated with iron working.

Three contexts contained wood charcoal fragments that are suitable for wood identification and radiocarbon dating. Wood species identification could provide information for further understanding local environments, habitats and woodland management, while radiocarbon dating would determine the period represented by the hearth/oven features at the site. The animal bone recovered from context 26 indicates that hearths/ovens at the site were used for the discard of bones after meat consumption, and interpretation supported by the presence of cut-marks on one of the bone fragments. No charred plant remains (e.g., cereal grains, legumes or nutshells) that might have provided further evidence for human diet and the function(s) of the hearths/ovens were recovered from any of the samples.

Recommendations

Further work on the wood charcoal remains from samples 5, 11 and 25 could provide information for further understanding local environments, habitats and woodland management, while radiocarbon dating would determine the period represented by the hearth/oven features at the site. If this additional work is not undertaken at this time, it is recommended that the wood charcoal from these three contexts is retained in the site archive for future research/dating potential.

No further work is recommended for the charcoal from contexts 7, 26 and 29, the burnt bone, mortar and clinker. These may be discarded upon completion of the project.

This report and associated data spreadsheet should be retained within the site archive and integrated into any site-wide grey literature or publication reporting.

References

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