EXCAVATIONS AT ALDBOROUGH (ISURIUM BRIGANTUM) 2018 INTERIM REPORT



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Contents

Summary	2
Introduction	2
Methodology	8
Results	10
Phasing	13
Discussion	19
Acknowledgements	20
Bibliography	21
Appendix I	22
Appendix 2	22

Summary

Excavation was carried out in the north east corner of the Roman town of Isurium Brigantum between $3 - 27^{th}$ March 2018 as part of the Aldborough Roman Town Project (University of Cambridge). A 7m x 3m trench was located in order to investigate a large building. First discovered during the 1924 excavations of Barber et al., the extent of the building was fully revealed as part our magnetometer recent survey, showing it to extend to c. 60m x 8m. The excavation was carried out to investigate the nature and date of the building, its chronological relationship to the town wall, and to test whether there was intra-mural road passing immediately to the north of it.

Introduction

Following the completion of our survey of the Roman town of Isurium Brigantum (Aldborough) and its immediate environs using magnetometry and Ground Penetrating Radar survey (Ferraby and Millett forthcoming), we have begun a phase of research designed to evaluate the phasing and chronology suggested on the basis of that study. The first stage of this work seeks to provide a better understanding of the origins and early development of the site. Ours strategy has been to re-open past excavation trenches to provide new information with minimum disturbance to the site. Following initial work on a building uncovered in the 1840s in the south-west quarter of the town in 2016 (Ferraby and Millett 2016), we opened a trench on the verge north of St Andrew's Church in 2017. This reexamined structures first investigated in 1770 and published by Gough's edition of Camden's Britannia in 1789. This confirmed the plan of this part of the forum and provided dating evidence for it. It also confirmed the presence of earlier deposits beneath, with structural remains of the Flavian period (Ferraby and Millett 2017). The evidence for this period can be linked with other finds from the northern part of the town, and will provide the basis for a clearer understanding of the nature and development of the site in the first century AD, and its relationship to the fort at Roecliffe.



Figure 1: Location of trenches in 2017 and 2018

The third target for this phase of our research was in the north-eastern part of the walled town (see Figure 1). In 1924 Barber, Ridley and Dimmock dug a series of trenches investigating a Roman road to the north of the town, the north gate, and the northern defences (Barber et al. 1925). During this work, they discovered a portion of wall which they called 'Masonry T' (see Figure 2):

"With the aforementioned intention of discovering the back and of working up to the inner face of the Northern Curtain Wall, trenches were opened further west on the same alignment as Masonry at S. Here again masonry was encountered (Large Building T) being the north west and north east angles of a large building and its containing wall 30' \times 4' \times 3"" (Barber et al. 1925:18)

The text of the 1925 report is relatively limited, with no conclusions offered as to its function or date of 'Masonry T', simply a description of the structural remains with very little mention of the finds. However, the plans and sections of 'Masonry T' are very detailed and carefully drawn: they have also been shown by our excavation to be accurate (see *Figure 3*). These drawings include detailed notes about aspects of construction, for example that the two N-S walls of Masonry T were not bonded into the E-W wall. The elevation drawings in particular are very detailed, for example the wall courses have been accurately drawn, notes made of materials and possible floor levels, and relative depths to other masonry noted.

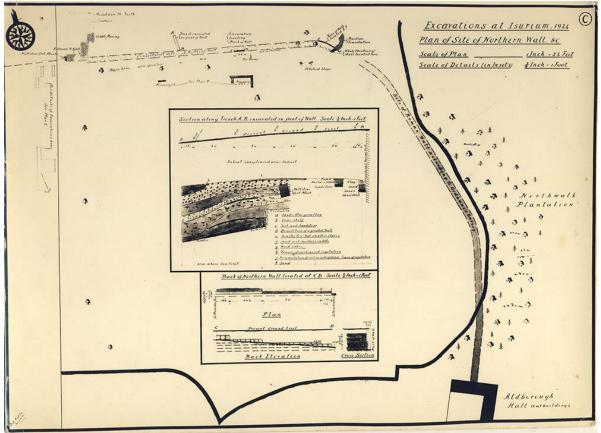


Figure 2: 1924 plan of interventions around the North gate and town wall (from Barber et al. 1925)

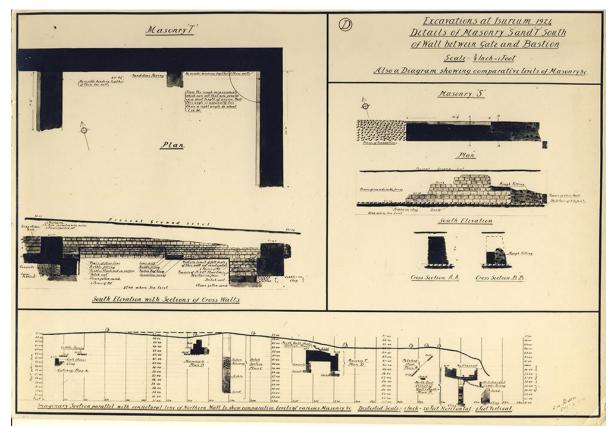


Figure 3: 1924 plans and sections of the excavation of 'Masonry T' and 'S' (from Barber et al. 1925)

The 1924 excavations were never fully published, the most complete record being the unpublished 1925 report. However, in 1938 Myres, Steer and Chitty carried out further excavations along the northern stretch of the town wall as part of their work to establish its course and chronology. Their publication in 1959 summarised the results of the 1924 campaign, and plotted Barber et al.'s trenches alongside their own (see Figure 4). Accordingly, we see 'Masonry' T represented as 'Site C' and 'Masonry S' as 'Site D'. Myres et al. did not however discuss the 1924 excavations very fully, except where they had done work on the same structures (as for instance at the North Gate).

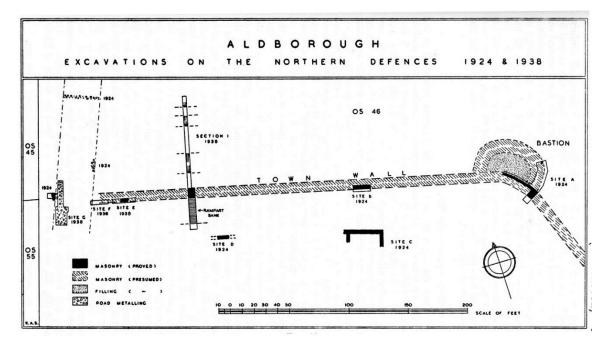


Figure 4: Myres et al. plan of the north eastern section of the town wall and 'Masonry T' (from Myres et al. 1959:51)

Our magnetometer survey over this area revealed that 'Masonry T' formed the northern end of a building measuring c. 8m x 60m (see Ferraby and Millett 2012; Ferraby and Millett forthcoming). This was one of 3 such buildings (the two others to the west of it, towards the north gate). These buildings are of particular interest, both because of their scale and plans, which are difficult to parallel, and as they lie at a slight angle to the street grid of the Roman town, the northern limit of which lies just to the south, suggesting that they may have originated in an earlier phase. This hypothesis was tested in our excavation. Parallels with buildings on other sites led to the tentative suggestion that they might be *horrea* or warehouses.

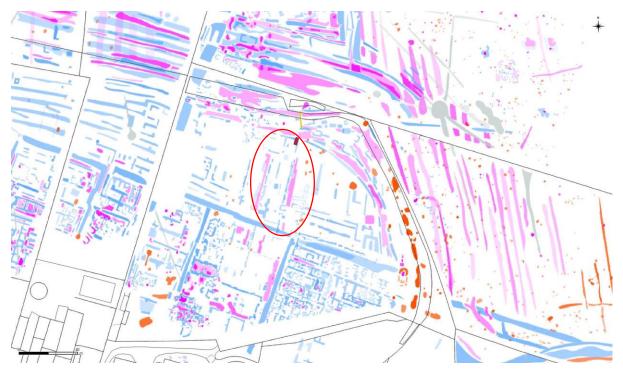


Figure 5: Magnetometer interpretation of NE corner of the town, showing the large building (in red circle) north of the street grid and the location of the 2018 trench (red). (Magnetometer interpretation shows negative features as blue, positive as pink, dipolar as orange).

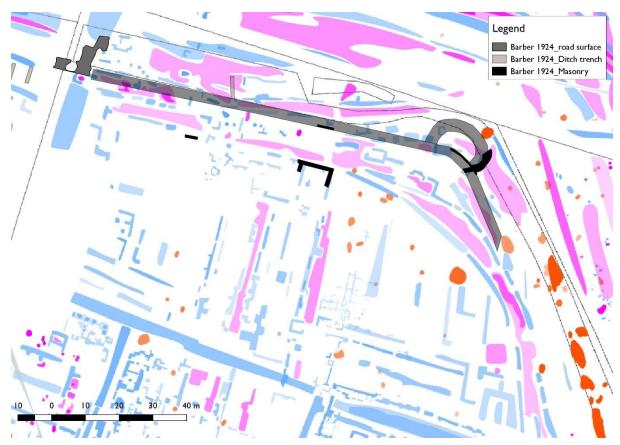


Figure 6: Magnetometer interpretation overlain with georeferenced features from the 1924 plans (bestfit)

There were therefore a series of key issues which the excavation would address:

- I. the date of the building
- 2. the date of the earliest activity in the area
- 3. the relationship of the building to the town wall
- 4. the function of the building
- 5. the presence of an inter-vallum road/track running north of the building

Our trench – reopening part of the 1924 trench and extending a little beyond it - was located to address these issues. By emptying part of the 1924 trench we hoped to be able to access the earliest deposits which are generally the least accessible, and by extending the trench a little to the north, we planned to assess the sequence externally. A previously unexcavated area inside the building was sampled in order to establish a better understanding of its chronology and use.

Methodology

The trench (initially $5m \times 2m$) was de-turfed and dug entirely by hand (see Figure 7). It extended to $7m \times 3m$ once the wall had been located. The spoil from each context was piled separately and metal detected (Figure 8). The trench was backfilled using a mini-digger. The weather conditions were far from ideal, with snow, frost and heavy rain during the first 2 weeks of the excavation.

Drawings were made by hand, and features were additionally recorded with GPS. The excavated trench was recorded using photogrammetry by Dominic Powlesland (Landscape Research Centre), georeferenced using targets whose locations had been recorded with the GPS (see *Figure 9*). Dominic Powlesland also took photographs using a drone in order to create a larger 3D surface model of the NE corner of the town.

Finds were collected by hand and environmental samples were collected for flotation. In addition 4 tins were taken from sections to look at the micromorphology of selected deposits.



Figure 7: Donna and Gigi Signorelli removing topsoil, looking south.



Figure 8: Dave Haldenby and Chris Hannard metal detecting the spoil (looking east)



Figure 9: Gigi Signorelli and Dominic Powlesland carry out the photogrammetric survey

Results

The trench was located to overlay NE corner of 'Masonry T' based on the best fit from the georeferenced 1924 plans and our magnetometer survey plot. In the event, our trench located the E-W wall (context 5), but narrowly missed the eastern N-S wall, which must have lain c 0.3m behind the section.

The 1924 plans proved to be very precise and detailed, each feature accurately planned and depths correctly recorded. A nice detail included discovering a pile of loose sandstone blocks on top of the wall which had been piled there during their excavation, and which could be seen on one of the photographs (see Figure 10). Their sondage to investigate the lower deposits was also re-excavated, and the floor they recorded could be matched by exact stones. Emptying the 1924 backfill (contexts 3 and 10) we found large quantities of bone and pottery which was obviously not systematically kept at the time.



Figure 10: Left, a 1924 photograph of the trench with Masonry T (looking NW), and right, photograph from 2018 (looking N). The nearest section of wall in the 1924 one is shown in ours, with the stones still piled on top.

After the 1924 trench fill had been removed, a sample area of the remaining stratigraphy from inside the building was excavated down to the level of the surviving floor make-up. An area 1.7×1.4 m was further excavated to natural, below the base of the 1924 trench floor, and extending the 1924 sondage in order to examine the earliest phases of activity in the area. This was cut through an area of floor make-up, avoiding surviving sandstone tiles from the *in situ* flooring of the building. Outside the building to the north, only the eastern half of the trench was dug. This area was taken down to the road surface.

For the final photogrammetry model see Figure 11 or visit https://sketchfab.com/models/c2e503732d6a46328ae808f06c6e21ea?utm_source=email&utm_ _medium=email&utm_campaign=model-shared to view in 3D.

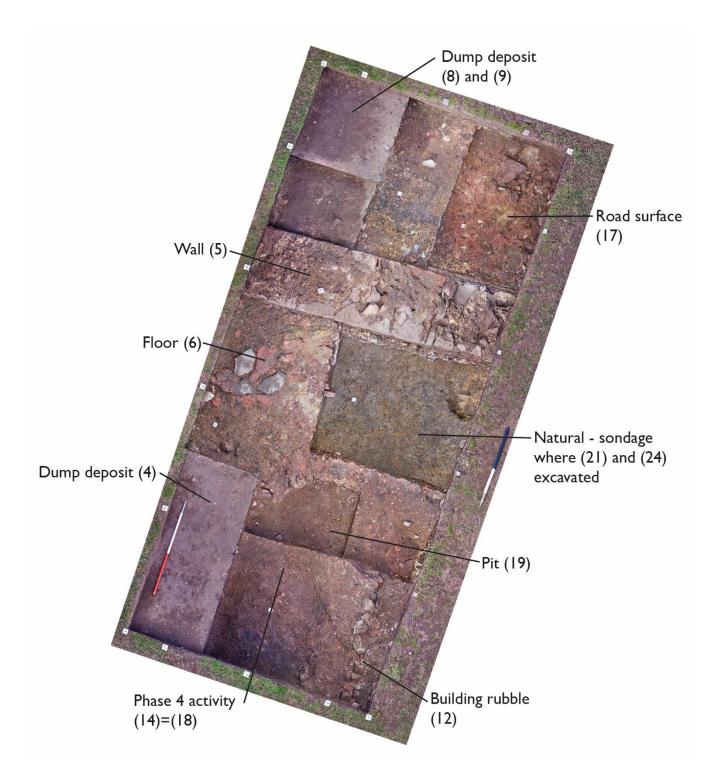


Figure 11: Photogrammetric model of the trench by Dominic Powlesland, with main contexts labelled (north to top).

ALDBOROUGH 2018: MATRIX

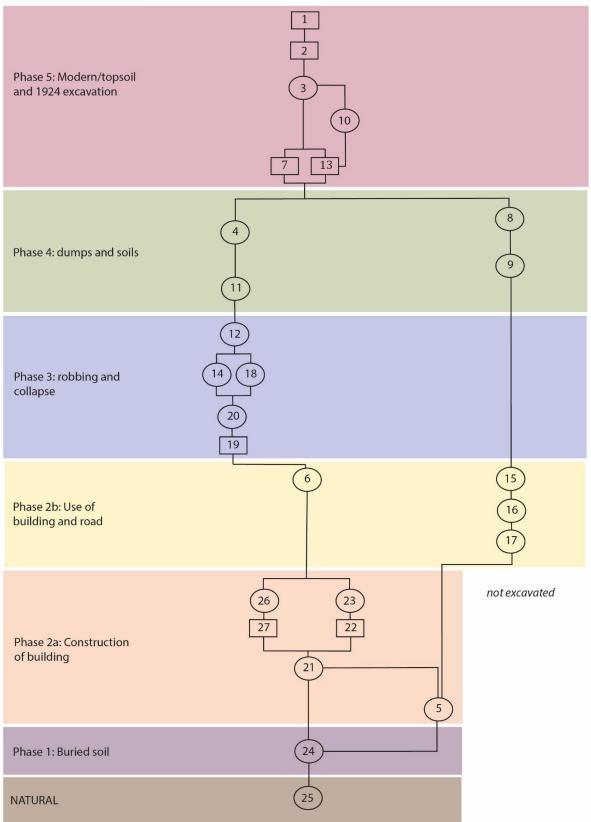


Figure 12: Trench matrix

PHASING THE 2018 TRENCH

(see Figures 11 and 12)



Figure 13: Excavated trench, looking north.

Phase I:

A buried soil (24) approximately 30cm deep lay above the natural. This had been cut by the foundation trench for the wall (5), and was overlain by make-up deposits for the building's floor (6). The buried soil incorporated Roman sherds dated to c AD 120, including stratified material that confirms activity on this part of the site during the Flavian period. Activity through the whole period down to the third century is also amply attested by residual pottery from later contexts. There was also Residual Ceramic Building Material from contexts associated with the Period 2a construction, including pieces derived from a hypocaust. The circumstances of the excavation meant that only a very small area of the buried soil was examined, so the absence of structural features is impossible to assess.

Phase 2a:

The initial construction of the building is identifiable from the excavation. A foundation trench for wall (5) is cut through the buried soil (24). The wall construction seems to be very similar to that of the *forum* wall excavated in 2017. A foundation trench has been cut to the width of the wall, with large river cobbles and blue clay compacted to provide a footing.

Long, crisply cut Sherwood sandstone blocks have been laid on top, with mortar poured on. Later compression led to mortar oozing-out against the sides of the foundation trench (see *Figures 13 and 14*). Above the foundation level, the wall has been built with skill and precision. The block size alters between rows. Some of the stone blocks have working marks on, showing use of chisel and punch. Wall-plaster (some painted) was discovered in later contexts as were fragments of backing plaster with impressions of reeds, probably from a ceiling. These finds are most likely derived from the Period 2a building suggesting that it was plastered. External to the wall, blue clay (known to be dug recently at a source a mile to the east, formerly the Aldborough Brick and Tile Works clay pit) was found pressed against the foundations, most likely to counter damp in the building.

The spoil from this trench, and other material was spread inside the building to form a levelling or make-up (21) onto which the floor was laid. Between the buried soil and this deposit, staining from timbers was noted, as well as a patch of ash and charcoal (see *Figure 15*). These are likely to be associated with the construction of the stone building.

Cutting (21) were two postholes (22 and 27). These may be either associated with the construction of the building, or associated with the primary floor. The surviving surface (6) is almost certainly not the primary floor, which has probably been robbed.

Pottery from context 21 dates the construction to the period AD 250–300, disproving our initial hypothesis that the building dated to an early phase in the town's development.



Figure 14: The top of context 24 showing burnt areas. Note the deeper area in the NE corner is the 1924 sondage (facing west).

Phase 2b:

Inside the building is part of a floor (6) (*Figure 15*). This surface, varying from areas of crushed sandstone, to sandstone slabs and CBM tiles, is likely to be a preparation or a secondary re-flooring. Several large sandstone flags were recovered during the excavation, likely to be original floor flags. These had been taken up and largely robbed out, and the resultant surface trampled and pocked with later activity. Pottery from this context dates to around the end of the third century.



Figure 15: Wall (5) and Floor (6), with the cutting to investigate the earlier phases to the right. Looking NNE

Outside the building, to the north of wall (5), we see evidence of a series of surfaces abutting the building (*Figure 16*). The geophysics in this area suggested the presence of a possible road running just inside the town wall east of the North Gate. This excavated surface abutting the north of the building seems to represent this road. Our excavation did not continue below the surface (17), which was formed of crushed red and yellow sandstone and red sandstone tiles. Against the wall, sandstone lumps had been rammed together. Although this surface was uneven, it seems convincing as a road surface. This sandstone surface is at the level of an offset on the north elevation of the wall (5), suggesting that this surface was contemporaneous with the construction of the building.

Above the road surface (17), a cobble and clay layer (16) lay against the wall, overlapping a higher offset in the wall. This is likely to represent levelling against the building. On top of this the interface (15) between the later soil (9) was highly disturbed by animal burrowing. Pottery from contexts 15 and 16 dates to the end of the third century.



Figure 16: Exterior surfaces abutting the wall on the northern elevation. On the left, the road surface (17), to the right the sandstone and blue clay (16) with burrows also visible.

Phase 3:

This is a phase of secondary use, robbing and demolition. A pit (19) was cut into the floor, perhaps when a floor flagstone was ripped up, or during subsequent re-use. Its fill was rich in finds, including an iron knife tang and handle. After the floor was robbed out, there also was a phase of activity in the building which resulted the deposition of a layer (14 = 18) c. 0.20m thick, of sandy silt that was rich in finds, including butchered bone fragments, pottery, a copper alloy ring and tweezers. Overlying this was rubble from the collapse or demolition of the walls (12) (*Figure 17*), within which finds were discovered so destruction may have occurred gradually, with the area seeing continued activity or dumping. Pottery from these contexts is mostly later third century in date and is presumably residual.

Phase 4:

After the building went out of use and had been partially demolished, the inside and outside areas were filled with deep deposits of dumped material which has suffered from considerable subsequent bioturbation. Inside the building there was a thin context (11) above the rubble overlain by single substantial context (4) (*Figure 17*), whereas outside there appeared to be two distinct contexts (8 and 9), which had both been heavily affected by burrowing. The presence of large quantities of butchered animal bone and pottery suggests that both represent substantial and deliberate dumping, containing much residual pottery of

late third century date. The latest pottery (with the exception of intrusive medieval sherds) provides a *terminus post quem* of the later 4th century for this deposition. The sheer depth of these layers suggests that material was purposefully brought in to build-up the level. The difference in deposits between outside and inside the building may suggest two phases of levelling: the first outside the north wall, the second extending over the whole area. We cannot know for certain the original depth of these deposits, as they have been truncated by medieval ploughing. The trench was located in the bottom of a furrow, and the ploughing is further evidenced by the plough marks on the edge of the wall. However, even with this disturbance, these deposits are still *c*. 0.70 m deep, representing a huge amount of dumped material. An explanation of this may be that this was generated when the outer defensive ditches were dug in the late 4th century and was used to raise the level against the back of the town wall to strengthen the defences. This would explain the present surface topography of this area with a substantial rise in the level all along the rear of the Roman town wall.



Figure 17: The bulk shows the depth of the layer of dumping (4), with (11) and the ridge of rubble (12) visible in the foreground

Phase 5:

Beneath the turf, around 0.15m of topsoil was excavated. This seems a normal development of topsoil in a pasture field with rich, bioturbated soils. The 1924 trench was revealed as a neat cut running E-W approximately 1.5m to the south of the north wall. The western edge of their N-S trench excavating the eastern wall of the building was also discovered, but this was less distinct and less crisply finished, likewise the northern extent, which sloped down to northern side of the wall. The backfill of the 1924 trench was rich in finds, including a

large volume of animal bone (presumably from the equivalent Phase 4 dump layers) and pottery.



Figure 18: Location of the trench in the broader landscape, with the defences visible as earthworks. Photograph: Dominic Powlesland.

Discussion

This reinvestigation of 'Masonry T' has provided important information about this area of the Roman town, but will also contribute to the understanding of the development and role of Aldborough in the wider region. Full discussion must await reports on finds and soil samples, but some preliminary conclusions can be drawn. First, it may be noted that the excavation has confirmed our interpretation of the magnetometer survey and shown how when this is related to information from the 1924 and 1930s excavations, it can significantly enhance our understanding of the results of these excavations.

Turning to the objectives of the excavation:

I. We have confirmed that there is activity from the Flavian period onwards in this area. However, no evidence was found for any timber structures at this location although the significance of this is difficult to assess given the small area examined. Analysis of the buried soil should provide a fuller understanding of this early phase.

2. Sufficient pottery was recovered to show that the stone building was constructed in the period c. AD 250–300.

3. The size, plan-type and location of the building support the idea that it was an *horreum*, or warehouse, but the excavation provided nothing to substantiate this conclusion. The absence of evidence for *suspensurae* (a raised internal floor) probably rules out its use for the warehousing of grain.

4. We have confirmed the existence of a road between the building and the town wall which presumably served the warehouses. The geophysical survey indicates that this road continues round the NE corner of the town, and probably connected the North and East Gates.

5. The building seems to have gone out of use and been partially demolished in the second half of the fourth century. This was followed by a hitherto unnoticed extension and strengthening of the bank behind the city wall which post-dates the use of the building and is probably connected with the excavation of the outermost defensive ditch recorded in our geophysical survey.

Acknowledgements

We are most grateful to Janet, Richard and Tom Sanderson for allowing us to work on their land, especially during the busy lambing period, and for being so kind during our stay. The excavation was funded by Jan and Chris Martins, for whose continued support we are extremely thankful.

Our thanks also to Andrew Lawson-Tancred for the use of the estate office for processing finds, and for his continued generosity towards the project.

We are indebted to our excavation team who worked in very difficult circumstances, through snow and wind: Donna and Gigi Signorelli of LS Archaeology who worked tirelessly and cheerfully throughout; and Hanneke Reijnierse-Salisbury, whose cheerful enthusiasm and energetic assistance was very much appreciated. Dominic Powlesland again worked technological wonders with the photogrammetry, providing a 3D record of the trench and surrounding landscape. Our thanks also to Jason Lucas for assisting with survey.

Our crack team of volunteers from Friends of Roman Aldborough, cheerfully processed finds for us, and whose assistance continues to be invaluable. Last but not least, our appreciation for the hospitality and kindness shown by Mrs Valerie Armitage, who looked after us throughout the excavation.

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Appendix I: Project Team

Excavation: Rose Ferraby, Donna and Gigi Signorelli, Martin Millett and Hanneke Reijnierse-Salisbury Survey Assistance: Jason Lucas Photogrammetry and drone survey: Dominic Powlesland

Appendix 2: Report archive

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