



**Land to the rear of Prospect Place,
St Martins Avenue,
Hereford
Herefordshire**

A Report on an Archaeological Evaluation



September 2007

SMR 44999

Hereford Archaeology Series 760

EXCAVATION • RESEARCH • GEOPHYSICS • ARCHITECTURAL SURVEY

**Land to rear of Prospect Place,
St Martin's Avenue,
Hereford
Herefordshire**

A Report on an Archaeological Evaluation

NGR SO 509 394

1. Summary

Following a request for an archaeological evaluation from Herefordshire Archaeology, Herefordshire Council, Archaeological Investigations Ltd was commissioned by Tobin Enterprises Ltd to undertake the work on land to the rear of St Martin's Street, Hereford.

A total of 4 trenches, with a total area of c.43m², were excavated within the site, which was 0.1865 ha in total.

The evaluation of the northern part of the site identified small-scale industrial and/or domestic activity dating to the medieval period.

The result of the evaluation demonstrates a high degree of archaeological preservation and activity of a medieval date across the site. This is concentrated towards the Bishop's Meadow frontage although large features were also discovered towards the south and west of the site.

The evaluation has characterised the archaeological potential of the study area, and has indicated that both cut features and surfaces survive at depths between 1.00m and 1.10m below the modern ground surface.

2. Introduction

An outline planning application was submitted to Herefordshire Council on behalf of Tobin Enterprises (DCCE 2007/2594/F), proposing the construction of 10 flats and 14 parking spaces, on land to the rear of Prospect Place, St Martin's Avenue Hereford, HR2 7RQ (fig.1).

The proposed works were located within an area of archaeological significance (AAI). In line with advice in PPG16, sections 21 and 22 the Planning Authority was advised that a program of archaeological work was required, taking the form of an archaeological evaluation.

The archaeological work took the form of a field evaluation, which Archaeological Investigations Ltd was commissioned to undertake.

The site is located in the historic city of Hereford and to the south of the River Wye. It is situated at NGR SO 50509394 and can be described as being scrub land, with a tarmac car park covering approximately one third of the area (fig.2)

The underlying geology comprises Old Red Sandstone overlain by gravels and alluvial silty clay.

3. Archaeological and Historical background

The site is located on the southern edge of the city of Hereford on the south side of the River Wye to the rear of Prospect Place and St Martin's Street.

St Martin's Street forms the main street of the parish of St Martins. The area was probably sparsely settled in the late Saxon period and was probably enclosed by a set of defences in the late 12th to 13th centuries.

These defences are now known as the Rowe ditch and enclosed an area from opposite Hereford castle to the east to a site just west of the Wye Bridge to the west, turning north approximately where Drybridge House now stands. Previously the defensive feature was called the King's ditch, the name Rowe ditch probably derives from the ditch of the same name in Bartonsham Meadows to the east of Hereford.

The bank was fronted by a ditch which was probably a canalised watercourse. This can be seen on Speede's map of 1610 and Taylor's map of 1757 (figs 3 & 4). Speede's map also shows the position of the old south bridge or drybridge and the continuation of the settlement, to the south, beyond the land enclosed by the Rowe ditch.

The extent of archaeological preservation was unknown as no previous work had been undertaken on the site. However work adjacent and to the south west of the site at Drybridge House uncovered deposits of 13th century date.

A watching brief and excavations carried out at Drybridge House uncovered the line of a ditch through the southern part of the site. This feature was 12 metres wide and four metres deep and contained postholes, organic preservation and leather artefacts. The lower fills contained 13th century pottery (Shoesmith 1982).

Further trial excavations in 1995 revealed a deposit thought to be the clay rampart which sealed a deposit containing 12th and 13th century pottery. This implied that the enclosure bank was 12th to 13th century in date (Shoesmith and Hoverd 1995).

Also on the land adjacent to the site during pre-planning work for the Hereford Flood Alleviation Scheme, trenching identified features of medieval date as well as undated burnt features.

Early maps show that buildings fronted St Martin's Street throughout the later medieval and Post-medieval period. Taylor's map shows garden plots and backplots containing pits and possibly industrial areas are likely to have spread back from built up frontages.

4. Aims and objectives

The aims and objectives of the evaluation were to establish the character, quality, date, significance and extent of any archaeological remains or deposits surviving within the site whilst ensuring that the work reflects ongoing research from previous published volumes and articles about Hereford City's archaeology and history.

The information will assist the local Planning Authority in making an informed judgment on the likely impact upon the archaeological resource by the proposed development.

5. Method

The fieldwork comprised the excavation of four trenches 10m in length and 1.6m in width. All trenches were excavated by mechanical excavator equipped with a toothless grading bucket. All machine excavation was undertaken under constant archaeological supervision to the top of the first significant archaeological horizon. Where archaeological deposits were encountered they were excavated by hand.

The total area excavated was c.43m². The trenches were located within the soft landscaped area of the site (fig. 2).

A system of context records was kept and numbered independently by trench with recording in accordance with Archaeological Investigations Ltd's site manual. Registers for context cards, photographs, drawings and samples were also kept.

All excavated trenches were tied into features shown on the Ordnance Survey 1:2500 mapping and a base line was established in each trench for the purpose of planning.

All trenches and features were tied to a temporary benchmark located on the drain cover within the tarmac portion of the site (50.58 m AOD fig. 2).

Trench plans were produced at 1:50 and selected sections of the trenches were drawn at 1:20. All trenches and archaeological features were photographed, using 35mm B&W negative and colour print films. Individual features were planned at 1: 20.

The stratigraphic sequence and depth of archaeological features was determined by hand excavation, a selection of identified features were sectioned in order to obtain dating evidence, whilst a hand auger was used in areas to establish maximum depths where further excavation was not being carried out.

All finds of pottery, bone and evidence of industrial processes were retained for analysis. A general biological sample (15 litres) was retained from excavated features, in order to be floated for the recovery of carbonised remains.

The code of conduct of the Institute of Field Archaeologists was adhered to.

6. Results

The following section provides an overview of the evaluation results: detailed summaries of the recorded contexts can be found in Appendix 1. Details of the relative heights of the principle deposits and features are expressed as metres Above Ordnance Datum (m AOD).

6.1. Trench 1 (Fig. 5)

This trench was located in the north part of the site and was orientated north to south. It measured 12m x 1.6m in plan and was excavated to a depth of c.1.10m (top-50.02m AOD, base- 48.92m AOD).

The natural substrate, 1019, comprising light brown pink silty clay was identified at a depth of approximately 1.00m below present ground level (*BPGL*) (49.48m AOD) this was cut by a number of features.

At the northern end of the trench was a semi circular shaped linear gully (1014) running north south and bisected by the north perimeter of the trench. The fill of 1014 (1006) contained no datable finds but was cut by a large and shallow, rectangular feature (1011) from which the pottery assemblage generally dated to 13th and 14th century with the exception of one piece dated to the 11th century.

Overlaying 1011 (49.65m AOD) was a yellow and brown clay and pebble surface (1003) which extended approximately half the length of the trench. 1003 was cut by a 0.40m wide 0.20m deep linear feature (1020); no datable evidence was recovered from the fill. A test slot was excavated through 1003 which indicated that this area of the site did however contain c.0.20m (49.32m AOD) of stratified medieval deposits containing pottery and bone artefacts (1004).

Towards the southern end of the trench the clay and pebble surface (1003) is not present, the natural taking on the appearance of a trodden work/activity area cut by a shallow linear feature (1013) which is subsequently cut by an iron and charcoal filled steep sided circular feature (1016). Cut 1016 was sectioned and excavated to a depth of 0.40m (48.92m AOD) and was filled by a dark blackish brown clay (1010) containing a slag and a pottery assemblage dating to the 11th and 12th century.

The features excavated were overlain by a dark brown subsoil and topsoil (1001), approximately 1.00m in depth of which the northern end of the trench was overlaid by a redeposited reddish brown subsoil (1000) 0.35m in depth

6.2. Trench 2 (Fig. 6)

This trench was located on the western edge of the site. It measured 10.0m x 1.60m in plan and was excavated to a depth of c.1.10m (top-50.64m AOD, base- 49.54m AOD).

The natural substrate, 2006, comprising light brown pink silty clay, was identified at a depth of approximately 1.10m *BPGL* (49.54m AOD) this was cut by three features 2002, 2004 and 2005.

Feature 2005 was sectioned and excavated to a depth 1.10m (48.39m AOD) and contained a dark brown silty clay soil (2001) from within which a large amount of animal bones, showing butchery marks, and industrial waste were recovered. The pottery assemblage mostly dated between the 11th and 12th centuries, with the exception of 2 pieces which dated between the 12th and 14th centuries.

Features 2002 and 2003 were not excavated (following discussion with the archaeological advisor for Herefordshire Archaeology) as they appeared to be similar in nature to the other medieval features identified elsewhere on the site.

The fills of features 2002, 2003 and 2005 were subsequently overlain by subsoil and topsoil 2007. The topsoil was cut by a brick/rubble wall footing running east-west (top 0.30m base 0.70m *BPGL*)

6.3. Trench 3 (Fig. 7)

This trench was located towards the centre of the site and orientated north to south. It measured 10.0m x 1.60m in plan and was excavated to a depth of c.1.30m (top- 50.58m AOD, base- 49.28m AOD).

The natural substrate, 3007, comprising light brown pink silty clay was identified at a depth of approximately 1.30m *BPGL* (49.28m AOD), and had been cut by two features 3004 and 3005.

Cut 3004 originally gave the impression of being a linear feature running east-west at the southern end of the trench yet the sample section revealed a large circular steep sided, flat bottomed feature, extending beyond the perimeters of the trench

boundaries. The exposed portion of 3004 measured 1.60m in width with a length of 4.00m and a depth of approximately 0.80m (48.46m AOD). It was filled by 3001 and contained an artefactual assemblage dating from between the 11th and 13th century.

At the northern end of the trench the natural substrate was cut by a large circular feature (3005), with approximately half the feature extending into the trench. The feature was partially excavated to establish its date and the nature and chronology of its fills, as during the original cleaning of the trench, the feature appeared to contain a clay lined feature within the make up of fill 3003. A section was cut across 3005 and revealed that the feature did in fact contain a clay and pebble lined circular feature (3009) within the fill of 3003. The fill of 3009 (3002) consisted of a dark brown silty clay loam containing an artefactual assemblage dating from between the 11th and 14th centuries.

Fills 3001 and 3002 were subsequently overlain by subsoil and topsoil 3008. At the northern extremities of the trench 3008 was cut by a rubble/brick filled footing running east-west (top 0.40m base 0.60m BPGL)

6.4. Trench 4 (Fig. 8)

This trench was located towards the southern extent of the site and was orientated east to west. It measured 10m x 1.60m in plan and was excavated to a depth of c.1.5m (top-51.31m AOD, base- 48.81m AOD).

The natural substrate, 4006, comprising light brown pink silty clay was identified at a depth of approximately 1.10m *BPGL* (49.29m AOD). It had been cut by a circular feature 4004, which extended into the northern section. Feature 4004 was excavated to a depth of 0.40m and was filled by 4002, which contained an artefactual assemblage comprising of 11th century to 14th century pottery. This was then overlain by redeposited natural (4003) which was cut by a semi circular feature 4005 running east-west along the length of the trench. Feature 4005 was excavated to a depth of 0.25m, and was filled by 4001 a dark brown silty loam. 4001 contained pottery dating to the 13th century. Fill 4001 was overlain by subsoil and topsoil 4000.

The topsoil 4000 was cut by a brick-built culvert running east-west central to the excavated trench (top 0.30m and base 0.70m *BPGL*). The culvert was constructed from hand made orange/red bricks (0.21m x 0.07m x 0.10m) bonded with a grey mortar. The brick culvert was intriguingly capped by large fragmented stone roof tiles measuring 0.04m in width.

7. The Finds

The following section will describe the results of the examination of the finds independently by context and type.

7.1. The pottery

K. H. Crooks

7.1.1 Summary

A total of 63 sherds of pottery (643.3g) was recovered from the evaluation excavation at the rear of St Martin's Street. Pottery from the site suggested fairly intense activity between the 11th and early to mid 14th centuries, after which it apparently ceased. No ceramic evidence has so far been discovered for earlier settlement on the site.

In addition a single sherd of 17th or 18th century material was intrusive in the context from which it was retained (2004).

7.1.2 Method

The pottery was washed and examined macroscopically and using a hand lens (x10). It was sorted according to Vince's classification (Vince 1985, 2002). Results were stored on an Access database (Table 1). At present, as a result of the small size of the sample obtained under evaluation conditions, full analysis has not been attempted.

7.1.3 Results

Most of the pottery was sourced to Herefordshire and the surrounding area – the Malverns and Gloucestershire. The exception was two sherds of Brill/Boarstall ware, from the Buckinghamshire-Oxfordshire border.

The majority of the pottery was fabric D2 totalling 17 sherds (288.2g). This material is generally dated to between the 11th and 12th centuries, but is also found in early 13th century contexts. It was probably made at Haresfield in Gloucestershire. It was found in a total of six contexts out of ten containing pottery and mostly comprises cooking pots or jars, but sherds thought to be from spouted tripod pitchers were also found. As well as being stratified in a number of features pottery of this fabric was residual in later contexts (e.g. 1011) where earlier features had been disturbed by those of later medieval date.

Although no Stamford ware (E1b) was found on the site this is not usually present in any quantity in Hereford and its absence could be a result of the limited scale of the excavation.

Of note is a sherd of Malvernian fabric B1, recovered from context 3001, with a rim suggesting the late 12th to early 13th centuries. This had been burnt so heavily post-breakage that it had vitrified.

7.1.4 Discussion

Ceramic evidence so far recovered from the site at St Martin's Street suggests commencement of occupation in the later 11th or early 12th centuries, culminating

after the 14th century, probably with depopulation of suburban areas associated with the worsening climatic conditions and the Black Death.

Only five sherds of Herefordshire fabric A7B were recovered. This pottery was first made in the middle of the 13th century, becoming predominant by the end of that century. A deposit of kiln wasters of this fabric was recently discovered during excavations associated with the construction of the ASDA supermarket some 600m to the southwest and the comparative lack of A7B on the site could suggest an earlier date for the cessation of occupation.

7.2 The ceramic building material

Five fragments of roof tile (243.3g) were recovered from the site at the rear of St Martin's Street. Material was sorted according to Vince's classification and is summarised below.

Table 2: Roof tile from the St Martin's Avenue Site

Cont	Fabric	Wt g	Date	thickness	Decoration/Comment
3001	A5	21.2	13/14c	13mm	Thick green glaze
3001	A5	8.4	13/14c	15mm	Thick green glaze
3001	A7B	9.4	13/15c	12mm	Clear green speckled glaze
4002	A7B	133.1	13/15c	13mm	Olive glaze
4002	A7B	71.2	13/15c	14mm	Olive glaze

The comparative lack of roof tile could relate to the low status of any buildings on the site which may have been workshops. However, it could also reflect a comparatively early date for the cessation of activity on the site, before ceramic roof tile came into common use.

7.2.1 Recommendations

Should further work take place on the site full analysis of pottery and comparison with material from nearby and city sites should be undertaken to assist in giving a picture of distribution of ceramics in the city and its surroundings during the medieval period.

7.3 The slag and anvil residues

A considerable amount of iron slag and anvil residue was recovered from the site at the rear of St Martin's Street.

Residues of smithing and smelting are generally indistinguishable from one another (Crew 1996) - for example 'slag flows' can form inside a smelting furnace or during smithing. While the presence of anvil debris from the site clearly demonstrates that smithing was taking place this does not preclude smelting.

7.3.1 Method

At present iron working by-products have been subject to a brief assessment and the material has not been fully quantified. A sample of the slag recovered from site was

washed and in addition soil sample <4>, from context 1010, taken because of the large amount of anvil debris present, was washed and the residues examined under magnification (x10).

The quantity of slag recovered from the site, suggests intensive activity from the late 11th or 12th centuries onwards. The largest lumps approached 200mm in length (notably from context 2001). Most of the material was non-diagnostic. However, material identified as vitrified furnace lining was found

Table 3: Summary of slag from the St Martin’s Street site

Context	Summary of slag present
1005	Smithing slag lumps
1006	Burnt and vitrified lining. Smithing slag lumps. Glossy flows
1009	Smithing slag lumps
1010	Vitrified furnace lining. Smithing slag lumps and very considerable flake and some spheroidal hammerscale. Mainly dull but some glossy
1011	Smithing slag lumps and vitrified furnace lining. Residual? Feature cuts 1010
1013	Smithing slag lumps
2001	Vitrified lining. One possible hearth base (but v. small). High iron content in this material. One lump of slag has hammerscale stuck in it – probably hearth slag cake. Some glossy flows
3001	Smithing slag lumps and furnace lining
4002	Smithing slag lumps

7.3.2 A note on sample <4>

Both flake and spheroidal hammerscale, both glossy and dull were present but flake predominated. Glossy hammerscale is normally taken to mean a high temperature process such as edging tools (Crew 1996). The spheroidal type is associated with welding (McDonnell & Swiss, 2004).

7.3.3 Discussion

Burnt and vitrified furnace lining found in large quantities, as was the case on the site (40 recorded fragments) might suggest that smelting did indeed take place on or near the site (Crew 1995). Similar by-products have also been found in large quantity to the east of the site, during work on the flood defence scheme.

While smelting often took place near the source of the ore – presumably the Forest of Dean – river transport of ore may well have made smelting in Hereford economically viable. It is noticeable that the site lies near the river. Certainly the scale of the industry, stretching southwards for about 600m from the Wye Bridge was fairly large.

Features thought to have been associated with the metal working process were identified on the site, but excavation was not attempted under evaluation conditions. Further excavation of these features should help to establish the exact process undertaken.

There is considerable evidence for metal working in medieval Hereford. A tentative suggestion, based on evidence so far, is that large scale iron working may have moved outside the centre of the city at approximately the time that the Norman city was laid out.

7.3.4 Recommendations

The site at St Martin's Street is clearly part of a larger industrial complex heading both to the east – with work on the flood defences revealing a substantial layer of slag and furnace debris and to the west as shown by work on the recent ASDA site. The site needs to be tied in with this and a full report on any further material produced.

7.4 Animal Bone (B. Ward)

There were a total of 249 fragments of animal bone and these were mainly well preserved.

The bulk of the assemblage came from context 2001, which appeared to be a domestic and industrial waste pit. The bones from this context were well preserved with practically a whole horse tibia and other whole large bones from sheep and pig. Most of the bones showed clear butchery marks.

Context	Diagnostic	Butchery marks	Quantity
1005	Undiagnostic, small fragments. Bone in good condition.	✓	8
1006	Sheep bone. Other undiagnostic fragments		3
1009	Undiagnostic small fragments.		1
1011	Fragment of pig rib. Other undiagnostic small fragments.		3
1012	Pig toe bone, other small undiagnostic fragments. Bone in good condition		2
T 2 u/s	Mainly small undiagnostic fragments. 1 sheep leg bone. Bone in good condition.	✓	8
2001	Large assemblage of mixed bones from sheep, cow, horse and pig and most of them have butchery marks. 1 sheep rib fragment has a gnaw mark.. 4 sheep calcaneus, sheep vertebrae from neck, ¼ sheep jaw, whole sheep tibia, sheep collarbone. Pig tibia and rib fragment. Horse tibia w. butchery marks. Cow vertebrae and tibia fragment, 1 tooth. ¼ jaw from dog. 3 fragments of burnt bone. All bone in good condition.	✓	154
3001	Sheep tibia, 4 burnt bone fragments, small fragment from animal skull, sheep tooth, small fragment of cat jaw with one tooth. The rest of the assemblage consists of very small undiagnostic fragments. Bone in good condition.	✓	40
3002	1 small burnt bone fragment. 1 chicken bone. The		15

	rest of the assemblage consists of very small undiagnostic fragments. Bone in good condition.		
4001	Small fragment of sheep rib in good condition.		1
4002	Sheep tooth & tibia. Horse tooth. Context mainly consisted of undiagnostic fragments. In good condition	✓	13

Whilst at this stage the quantities of bone from individual contexts is probably too low to enable full analysis and comparison, the evaluation does demonstrate that sufficient quantities of bone would be recovered from the site during excavation for this to form part of any future excavation proposals for the site were this to be required.

7.5 Recorded metal finds (B. Ward)

There were five recorded metal finds from the site only three of which were from secure contexts.

Context	Type of material	Object	Quantity
T 1 u/s	Fe	Stirrup	1
T 1 u/s	Cu al	Pin	1
1010	Fe	Small nail	1
1010	Fe	Tool or possibly spoon	1
3002	Fe	Long screw	1

These need to be appropriately packed prior to museum storage. It is not proposed to undertake further work on these items at this stage.

7.6 Environmental samples (K. Crooks)

There are nine samples registered from the site of which eight were taken for the recovery of environmental remains.

7.6.1 Method

Four of the eight samples were processed to determine the potential of material from the site for future analysis and sampling. In each case the entire sample was processed through a siraf flotation tank, all samples being in the region of 15-20 litres.

The floated fraction was collected in a 0.3mm mesh with the heavy residue being collected in a 1mm mesh in the tank. A York tank was used and emptied between samples.

7.6.2 Results

Sample 1 (1006)

A good quantity of charred grain was identified in the flot, whilst the residue contained frequent flake and spheroidal hammscale as well as burnt and vitrified furnace lining.

Sample 2 (1001)

A moderate amount of grain came from the flot whilst the residue contained moderate-frequent flake and spheroidal hammerscale

Sample 3 (1010)

Very little grain was floated out of this sample although a substantial quantity of lump wood was recovered. The residue contained very frequent hammerscale with a predominance of flake over spheroidal.

Sample 5 (1007)

A good quantity of charred grain was recovered from the flot whilst the residue contained moderate-frequent flake and spheroidal hammerscale (possibly with a slight predominance of the latter).

7.6.3 Recommendations

The other samples should be processed as part of this exercise and the resultant material stored with the archive for analysis at a future stage.

8. Discussion

Archaeological features dating to medieval period were identified in trenches 1, 2, 3, and 4 during the evaluation indicating that the commencement of occupation of the site started in the later 11th or early 12th centuries, culminating after the 14th century.

The pottery recovered from the excavated features and the assemblage of ironworking slag, hearth and /or furnace lining fragments and animal bone suggest the presence of small-scale industrial (ironworking) and domestic activity in the vicinity of the site.

Evidence for modern activity was also identified on the site in the form of brick and rubble wall footings as well as a brick built culvert.

Speede's and Taylor's maps both show development in this area from the 17th century onwards whereas it appears from the results of the evaluation that this development of the St Martins area can be traced back to the 11th century.

9. Conclusion

The results of the evaluation trenches have demonstrated a high degree of archaeological preservation. The level at which archaeological deposits are encountered is generally consistent across the site at a depth of *c.* 1.00m *BPGL*.

It would appear that the proposed methodology was appropriate for satisfying the aims of the project in this case.

10. Site archive

80 Context record sheets
Drawings on 1 sheet of film
35mm photographic record of black and white and colour prints
Site registers of contexts, photographs, drawings and levels
1 correspondence file
This document
Finds and samples as per above schedules

11. Bibliography

- Boucher, A.**, 2000 Causeway Farm, Hereford : *Archaeological desk based study*
HAS 456
- Crew, P.**, 1995, Bloomery Iron smelting slags and other residues: *Historical Metallurgy Society: Datasheet No. 5*
- Crew, P.** 1996, Bloom refining and smithing slags and other residues: *Historical Metallurgy Society: Datasheet No 6*
- English Heritage**, 2001, Centre for Archaeology Guidelines, *Archaeometallurgy*
- Hoverd, T.**, 1998 4a St Martins Street, Hereford : *A report on a borehole survey*
HAS 401
- McDonnell, G & Swiss, A.**, 2004, Ironworking Residues in Dalwood, H., & Evans, R., *Excavations at Deansway, Worcester, 1988-1989: Romano British Small Town to late medieval City*, CBA Research Report 139
- Shoesmith, R.**, 1982 Hereford City Excavations Volume 2 : *Excavations on and close to the defences* CBA Research Report 46
- Shoesmith, R. and Hoverd, T.**, 1995 24-28 St Martins Street, Hereford : *Report on an evaluation at the rear of 24-28 St Martins Street* HAS 258
- Thomas, A.**, 1993 2, St Martins Street, Hereford : *An Interim Report* HAS 166

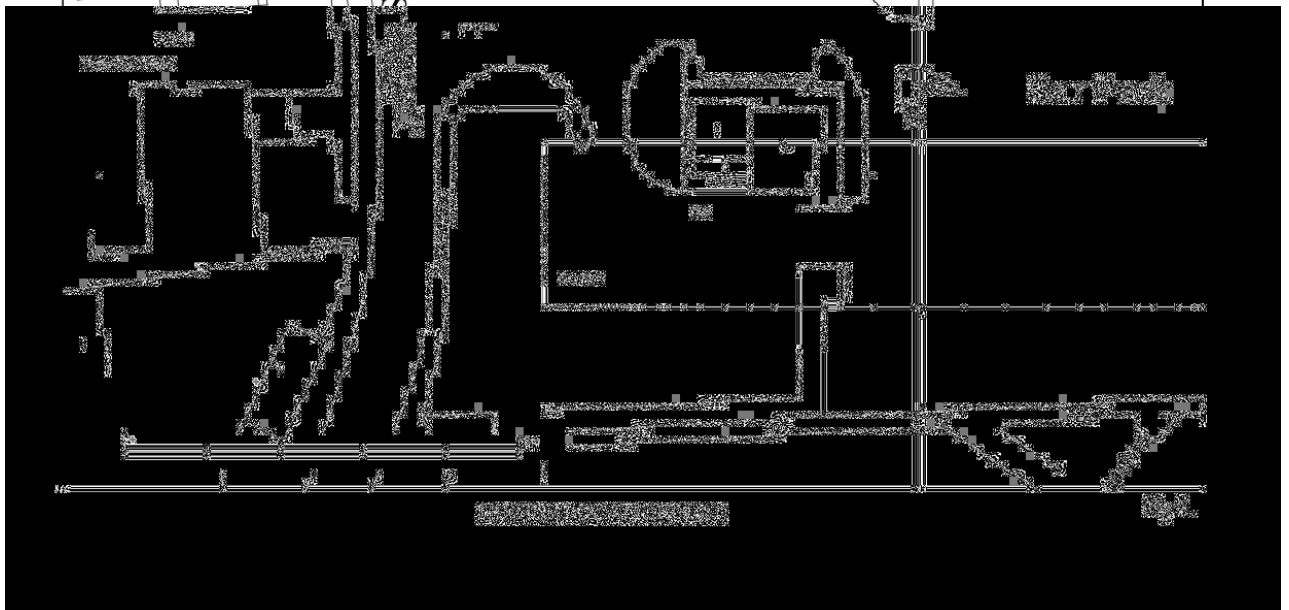
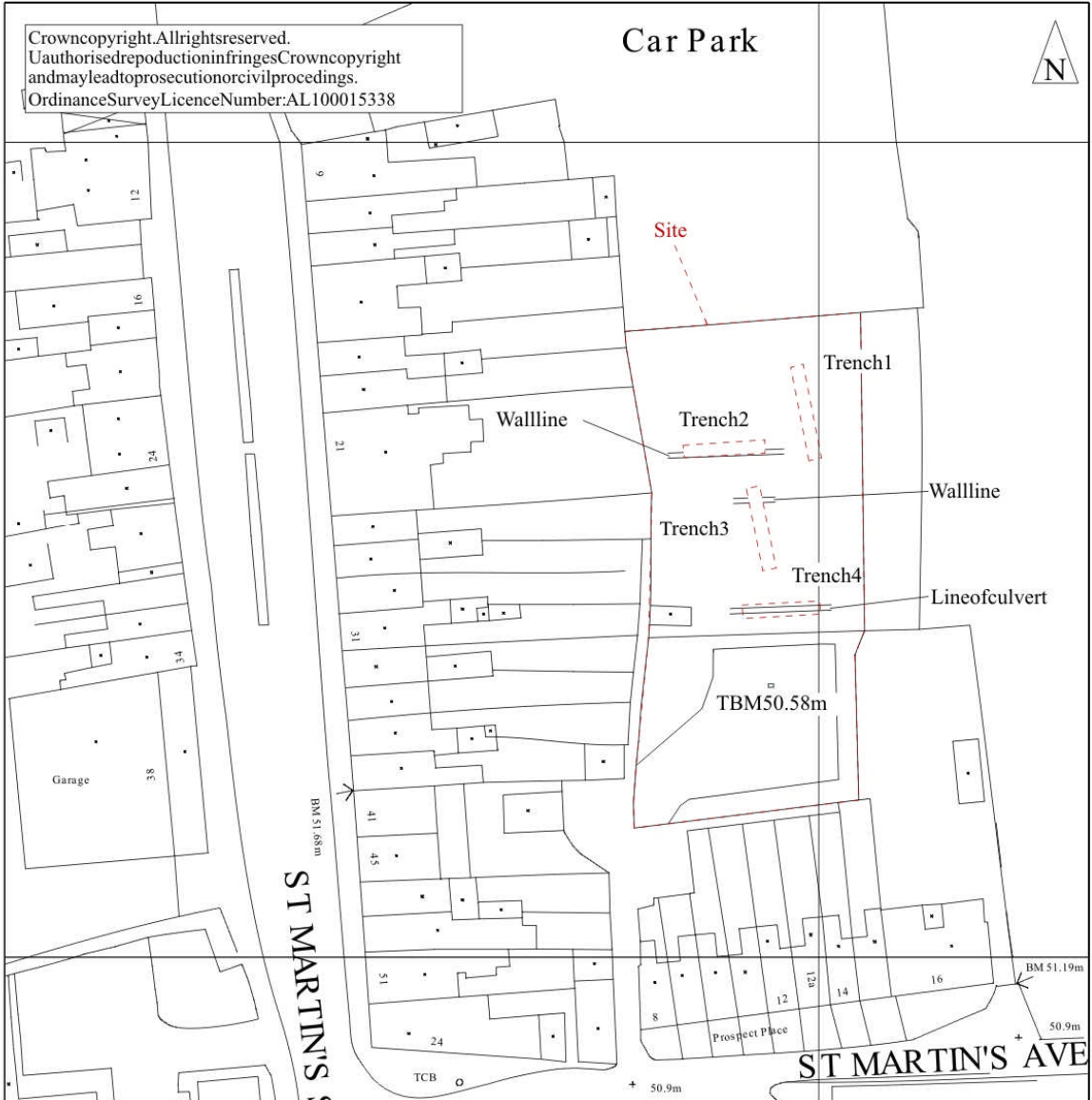




Figure 3 John Speed's map of 1610 showing the approximate location of the site



Figure 4 Taylor's map of 1757 showing the approximate location of the site

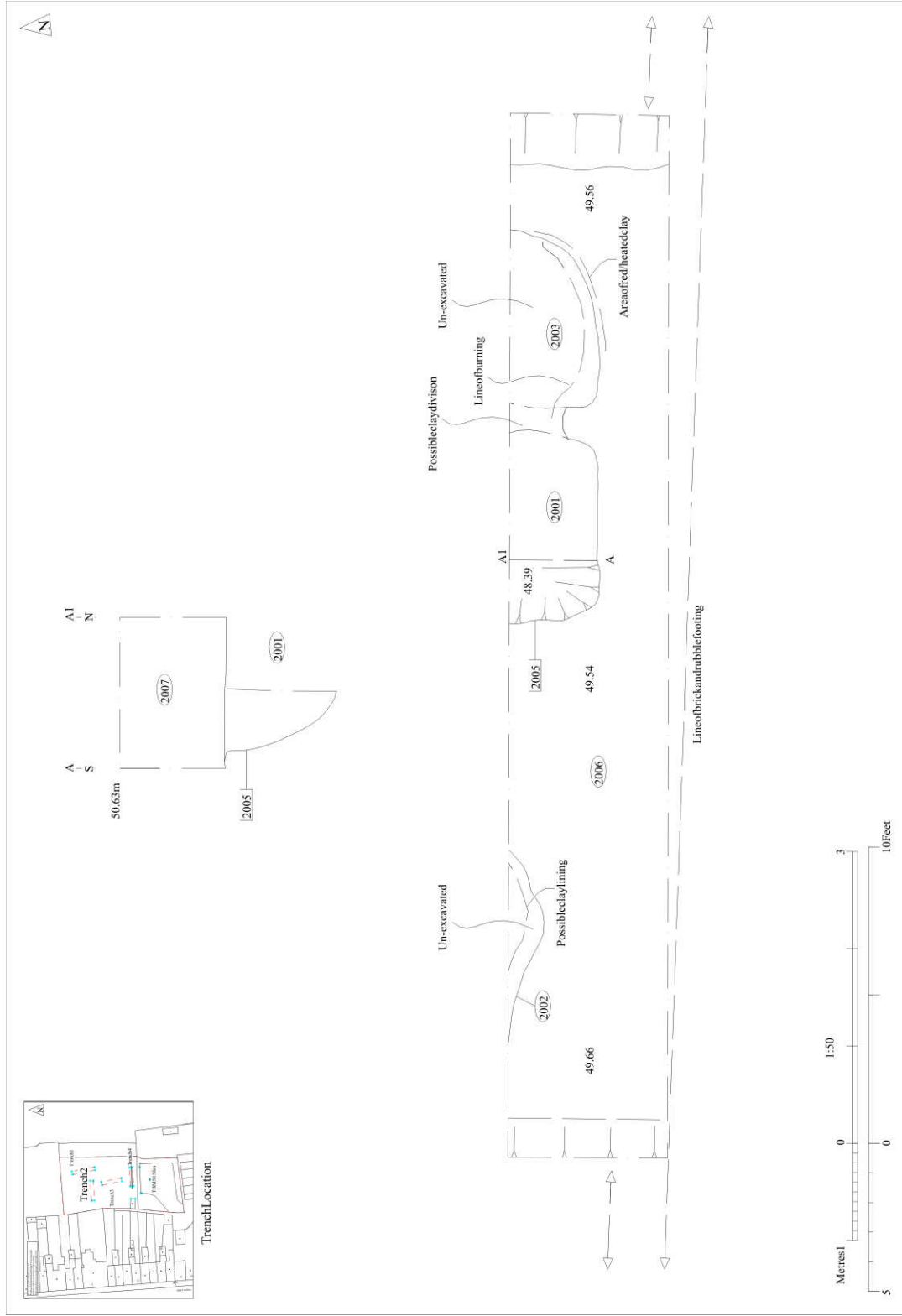


Fig 6.

Trench 2 site plan

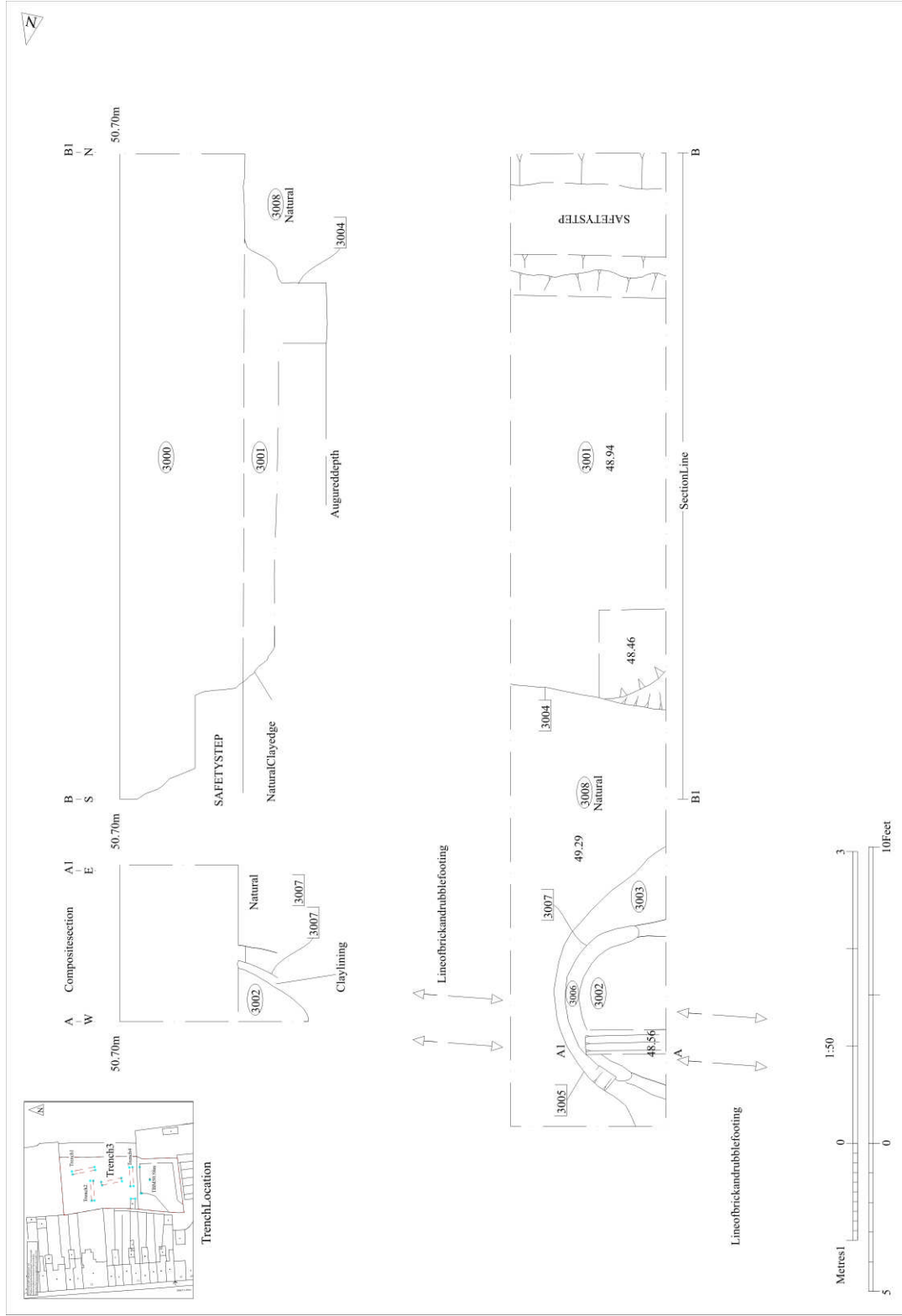


Fig. 7.

Trench 3 site plan and sections

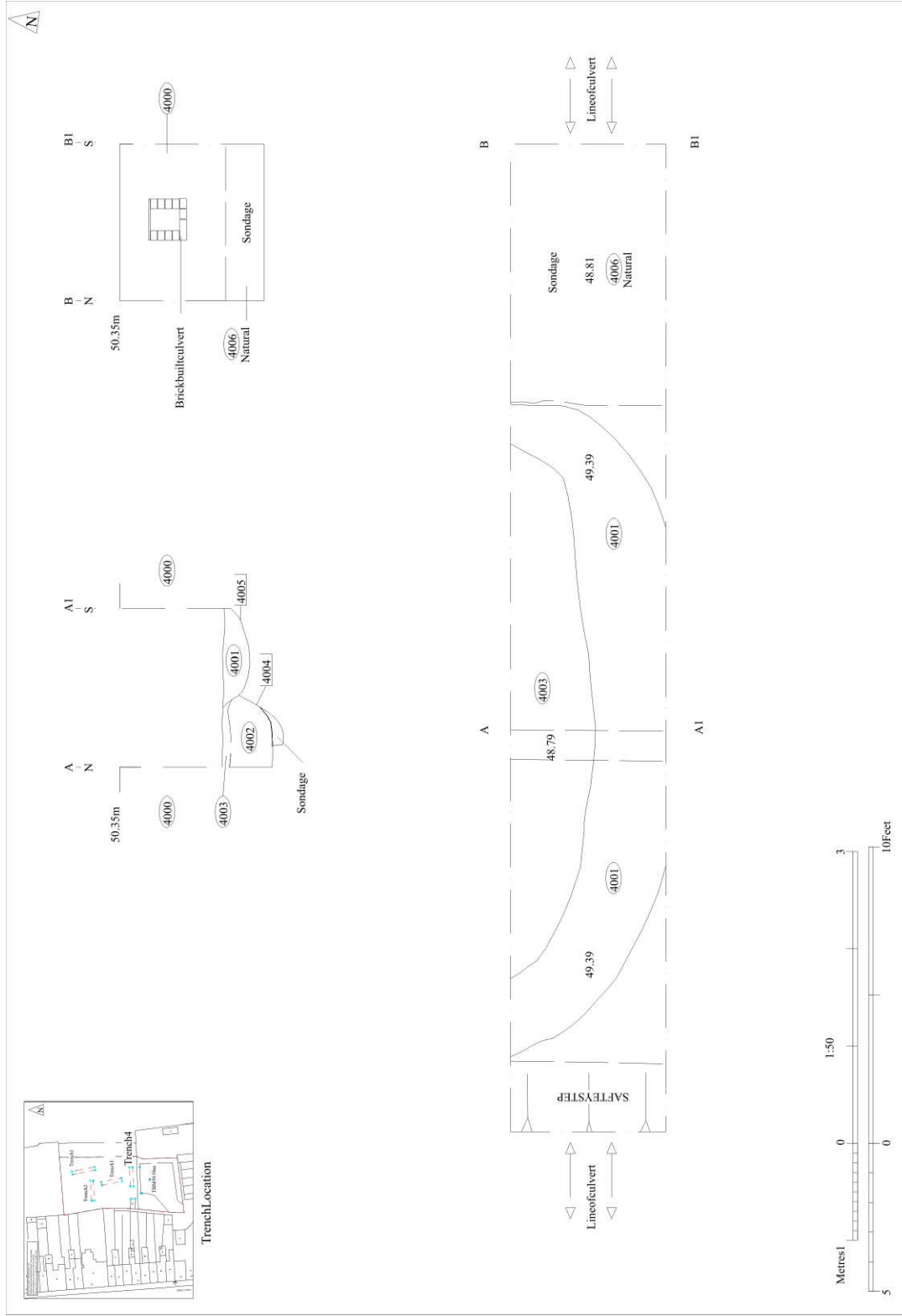


Fig 8.

Trench4 site plan and sections