#### ARCHAEOLOGICAL MONITORING AND RECORDING REPORT:

# FLOOD ALLEVIATION WORKS: BUGBROOKE BROOKE, NETHER HEYFORD, NORTHAMPTONSHIRE

Planning Reference: N/A
NGR: SP 66387 58462
AAL Site Code: NHBB 17
HER Event UID Number: ENN108933
OASIS Reference Number: allenarc1-311729



Report prepared for J. N. Bentley

By Allen Archaeology Limited Report Number AAL2018060

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# **Document Control**

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## **Executive Summary**

- Allen Archaeology Limited were commissioned to undertake a scheme of archaeological monitoring and recording for J. N. Bentley during flood alleviation works at Bugbrooke Brooke, Nether Heyford, Northamptonshire.
- The site lies in an area of archaeological interest, with significant evidence for Roman activity in the local landscape, focussed on a villa complex immediately to the east of the site. In addition, Nether Heyford has been a settlement from at least the late Saxon period, with two pieces of Anglo-Saxon pottery recovered from close by and there are possible earthworks of medieval or post-medieval date located to the east.
- The monitoring revealed three linear ditches, a pit and a concrete ramp. Material recovered from some of the features revealed they were modern in date, whilst two of the small gullies remained undated but probably represent drainage channels. The representative sections through the former river bank revealed either dredged deposits from the river channel or episodes of flood deposition during flooding events. Small amounts of Roman pottery and ceramic building material were recovered from the topsoil in one area and are likely to originate from the nearby Roman villa site.
- The monitoring and recording has indicated that the development has had a negligible impact upon the local archaeological resource.

#### 1.0 Introduction

- 1.1 Allen Archaeology Limited (AAL) were commissioned to undertake a scheme of archaeological monitoring and recording for J. N. Bentley during flood alleviation works at Bugbrooke Brooke, Nether Heyford, Northamptonshire.
- 1.2 The monitoring, recording and reporting conform to current national guidelines, as set out in the Chartered Institute for Archaeologists 'Standard and guidance for an archaeological watching brief' (CIFA 2014) and the Historic England document 'Management of Research Projects in the Historic Environment' (Historic England 2015) and have been conducted with reference to the updated Research Agenda and Strategy for the Historic Environment of the East Midlands (http://archaeologydataservice.ac.uk/researchframeworks/eastmidlands/wiki/).

### 2.0 Site Location and Description

- 2.1 The site lies to the southeast of Nether Heyford and is focussed on the banks of Bugbrooke Brook. The eastern bank comprises arable land and the western bank is a sports field and semi-improved grassland. The works centred on SP 66387 58462.
- 2.2 The bedrock geology comprises Dyrham Formation siltstone and mudstone, and is overlain by superficial deposits of Alluvium clay, silt, sand and gravel (http://mapapps.bgs.ac.uk/geologyofbritain/home.html). Local boreholes suggest there may be approximately 0.7m of soil and alluvium overlying river terrace gravels.

#### 3.0 Planning Background

- 3.1 The scheme benefits from permitted development rights under The Town and Country Planning (General Permitted Development) (England) Order 2015, specifically Part 13: Water and Sewerage:
  - A. Development for the purposes of their undertaking by statutory undertakers for the supply of water or hydraulic power consisting of—
  - (a) development not above ground level required in connection with the supply of water or for conserving, redistributing or augmenting water resources, or for the conveyance of water treatment sludge;
  - (b) development in, on or under any watercourse and required in connection with the improvement or maintenance of that watercourse;
  - (c) the provision of a building, plant, machinery or apparatus in, on, over or under land for the purpose of survey or investigation;
  - (d) the maintenance, improvement or repair of works for measuring the flow in any watercourse or channel;
  - (e) the installation in a water distribution system of a booster station, valve house, meter or switch-gear house;
  - (f) any works authorised by or required in connection with an order made under section 73 of the Water Resources Act 1991 (power to make ordinary and emergency drought orders)(a);

(g) any other development in, on, over or under operational land other than the provision of a building but including the extension or alteration of a building.

## 4.0 Archaeological and Historical Background

- 4.1 A heritage impact assessment has previously been carried out for the site (FAS 2017), and pertinent points are highlighted here.
- 4.2 Prehistoric activity is restricted to the discovery of a piece of polished axe from a gravel pit in the area; however this is not closely located.
- 4.3 There is significant evidence for Roman activity in the local landscape, focussed on a probable winged-corridor villa complex immediately to the east of the site. First discovered in 1699, mosaics, rooms with plaster floors and coloured borders, painted wall plaster, pottery, tile, coins and a chatelaine have been found here. A geophysical survey in 2004 revealed the extent of the villa and surrounding settlement.
- 4.4 Heyford is recorded in the Domesday Survey of 1086 as 'Heiforde' meaning 'enclosure by the ford', indicating a settlement was present here from at least the late Saxon period. In addition, two pieces of Anglo-Saxon pottery have been recovered close by.
- 4.5 Also to the east of Bugbrooke Brook, earthworks of possible medieval or post-medieval date are noted, together with some artefacts, including coins.
- 4.6 It is believed that a 19<sup>th</sup> century military camp lies to the east of the works area. This is thought to have been associated with the Weedon and Northampton Barracks.
- 4.7 Former Ordnance Survey mapping shows a pit for gravel extraction was created to the east of the watercourse, and that this fell out of use in the 20<sup>th</sup> century.
- 4.8 The course of the brook was modified from 1969–79, straightening the course to the south of the site.

## 5.0 Aims and Objectives

- 5.1 In general the purpose of an archaeological investigation is to determine and understand the nature, function and character of the site in its cultural and environmental setting and to mitigate the effects of the development upon the archaeological resource and to create a permanent record of the features and deposits exposed.
- 5.2 The aims of the investigation included:
  - establishing the date, nature and extent of activity or occupation in the development site;
  - establishing the relationship of any remains found to the surrounding contemporary landscapes;
  - recovering artefacts to assist in the development of type series within the region; and
  - recovering palaeoenvironmental remains to determine local environmental conditions as an intrinsic part of the investigation.

5.3 Evidence was gathered to establish the presence/absence, nature, date, depth, quality of survival and importance of any archaeological deposits across the areas affected by development.

### 6.0 Methodology

- 6.1 The works package entailed the following groundworks:
  - topsoil stripping for a 30m x 30m compound;
  - works to the outfall headwall (including temporary regrading of the slope);
  - cutting of a berm on the right-hand bank of the brook from the bridge to the River Nene.
- 6.2 The compound was situated within an area that has previously been quarried (FAS 2017, Plates 4–7), and works to the outfall headwall only included minimal truncation, so neither required archaeological monitoring. In addition, an access road leading to the compound already existed and did not require any groundworks.
- 6.3 A programme of controlled archaeological investigation and recording was undertaken during the majority of the berm groundworks as they had the potential to impact upon known Roman archaeological remains and other unknown remains. The works comprised the continuous observation of the removal of overburden followed by the investigation and recording of any archaeological features that were revealed to determine their date, extent, level of preservation, form and where possible, function. One experienced field archaeologist was present during the berm groundworks, from the 11<sup>th</sup> to 14<sup>th</sup> and 18<sup>th</sup> to 20<sup>th</sup> December 2017 and 8<sup>th</sup> to 12<sup>th</sup> and 15<sup>th</sup> to 18<sup>th</sup> January 2018.
- 6.4 Topsoil, subsoil and underlying non-archaeological deposits were removed by mechanical excavator with a toothless ditching bucket in spits no greater than 0.1m in depth. The process was repeated until the first archaeologically significant or natural horizon was exposed. All further excavation was then carried out by hand.
- 6.5 It was not anticipated that the complete excavation of features would be necessary, although, where archaeologically relevant, some individual features could be excavated in their entirety. Where significant features or deposits that might merit preservation in situ were exposed, all was to be limited to that necessary to understand the date and context of the features. On this occasion no archaeological deposits warranted either full excavation or preservation in situ.
- 6.6 A full written record of the archaeological deposits was made on standard AAL context recording sheets. Archaeological deposits were drawn to scale, in plan and section (at scale 1:20 or 1:50). Digital photography formed an integral part of the recording strategy, and all photographs will incorporate scales, an identification board and a directional arrow.
- 6.7 Finds of all classes were collected, other than obviously modern material from modern overburden contexts, and were bagged and labelled with the appropriate deposit context number. All finds were processed (cleaned, marked and labelled as appropriate) at the offices of AAL, prior to assessment by approved specialists.
- 6.8 Each deposit or layer was allocated a unique identifier (context number), and accorded a written description, a summary of these are included in Appendix 3. Three-digit numbers within square brackets reflect cut features, e.g. gully [104].

## 7.0 Results

- 7.1 The berm groundworks revealed three linear features and one pit (Figure 2).
- 7.2 Feature [104] (Figure 3), was a shallow gully aligned north to south, probably representing a drainage feature (Plate 1). No finds were recovered from the mid reddish grey silty clay fill, 103.



Plate 1: South-facing section of [104], scale 0.50m

7.3 Sub-circular pit [106] was filled by a black silty clay, 105, containing modern rubbish along with burnt tree roots and wood (Plate 2). Due to its obviously modern nature this feature was not fully excavated (Figure 4).



Plate 2: Northeast-facing section of [106], scales 0.5m and 0.3m

7.4 Linear feature [117] was roughly aligned east to west (Figure 5). It contained two fills, an upper light bluish grey silty clay, 115, and below this a mottled mid reddish grey sandy silt, 116. No

dateable evidence was recovered from either of the fills. This feature was at the level of the river and it was not possible to fully excavate it due to rapid water ingress (Plate 3).



Plate 3: West-facing section of [117], scale 0.5m

7.5 Aligned northwest to southeast, linear feature [120] was clearly modern, with frequent modern pottery sherds within the mid red sandy gravel fill, 119 (Figure 6). This feature was at the level of the river and it was not possible to excavate it (Plate 4).



Plate 4: Plan view of [120] looking northwest, scales 2 x 1m

7.6 As removal of the overburden for the berm was carried out, representative sections were recorded at various places along the river bank to identify layers that were to be removed (Figure 7). The northern part of the area (Sections 1–4) revealed a series of deposits: topsoil, subsoil and natural geology. The topsoil was a firm, mid brown silty clay, 100, approximately 0.52m thick. This sealed a mid reddish brown silty clay, 101, also approximately 0.52m thick. Below this layer was a firm mid yellow slightly silty clay natural, 102. Roman pottery and ceramic

building material recovered from the topsoil, 100, approximately 30m to the northeast of Section 3 (Figure 2), is likely to be associated with the nearby villa.



Plate 5: Northeast-facing section 3, scales 1m and 0.5m

- 7.7 Further to the south (Sections 5–9) there was a change in the natural geology to a mottled orange brown slightly silty clay layer, 112. There were also several other layers below the topsoil within the makeup of the bank within the southern half of the monitored area. These may represent various episodes of river dredging and dumping of dredged material along the bank of the river, or possibly the deposition of material during flooding events.
- 7.8 In between the locations for Sections 6 and 7 within the river bank a large concrete slab/layer was revealed (Figure 2). This sloped down to the edge of the river, parallel with the river bank, but approximately 1m below the top of the bank. The concrete measured 4.25m wide by 0.1 to 0.15m thick. This modern feature may represent an agricultural ramp down to the river (Plate 6).



Plate 6: View across the concrete feature looking northeast, scales are 2x 1m

#### 8.0 Discussion and Conclusions

8.1 The groundworks revealed a fairly consistent stratigraphic sequence across the site, consisting of topsoil overlying either a subsoil or dredged river deposits, with a clay natural below these layers. Roman pottery and ceramic building material were recovered from the topsoil in one location and are likely to be associated with a nearby Roman villa. However, the remaining layers making up the former river bank were archaeologically sterile. Three linear ditches and a pit were uncovered during the groundworks for the berm. These were either modern, with modern pottery or other rubbish present, or remain undated. The linear features are likely to represent small drainage ditches or gullies.

# 9.0 Effectiveness of Methodology

9.1 The archaeological monitoring methodology was suited to the nature and scale of this project. It has indicated that the development has had a limited impact upon the local archaeological resource.

#### 10.0 Acknowledgements

10.1 Allen Archaeology would like to thank J. N. Bentley for this commission. Lesley-Ann Mather at Northamptonshire County Council is thanked for her help during the project.

#### 11.0 References

AAL, 2017, Specification for an archaeological monitoring of flood alleviation works: Bugbrooke Brook, Nether Heyford, Northampton, Allen Archaeology Limited

CIfA, 2014, Standard and guidance for an archaeological watching brief, Reading: Chartered Institute for Archaeologists

Historic England, 2015, Management of Research Projects in the Historic Environment, London: Historic Buildings and Monuments Commission for England

FAS, 2017, Nether Heyford, Northamptonshire Heritage Assessment. FAS Heritage report code FAS2017 690 NHF673

#### **Appendix 1: Roman Pottery**

By Andrew Peachey

Archaeological investigations recovered four sherds (88g) of early Roman pottery from topsoil 100; comprised of wheel-made shell or grog-tempered coarse wares that were probably manufactured in the latter half of the 1<sup>st</sup> century AD, although a Pre-Roman Conquest 1<sup>st</sup> century AD origin cannot be discounted (Table 1).

#### Methodology

The pottery was quantified by sherd count and weight (g), with fabrics examined at x20 magnification in accordance with the *Standard for Pottery Studies in Archaeology* (Barclay *et al* 2016), which complement the guidelines of the Prehistoric Ceramics Research Group (PCRG 1995), Study Group for Roman Pottery (Darling 1994). Roman fabrics were cross-referenced where possible to the National Roman Fabric Reference Collection (Tomber & Dore 1998), or assigned an alpha-numeric code based on this system.

#### **Fabric Descriptions**

ROB SH Medium shell-tempered ware. Pale orange to dark red--brown surfaces, over a mid-dark grey

core. Inclusions comprise common to abundant plate-like shell (0.25-3.5mm), with occasional quartz and degraded limestone (generally <1.5mm, occasionally to 5mm). A hard fabric with a

slightly soapy feel.

SOB GT Grog-tempered ware 1 (wheel-made) (Tomber & Dore 1998, 214). Red-orange to dark red-

brown surfaces over a mid-dark grey core. Inclusions comprise common grog (<1.5mm) and

sparse quartz (<0.5mm).

Pottery date	Sherd Count	Weight (g)
ROB SH	1	14
SOB GT	3	74
Total	4	88

Table 1: Quantification of pottery by period

The ROB SH comprises part of the base of a wheel-made jar or cooking pot, a common early Roman vessel type, often with channel/lid-seated rims, that was produced in local kilns in Northamptonshire and Buckinghamshire and is unlikely to post-date the early/mid 2<sup>nd</sup> century AD, as demonstrated by the range of vessels at Brixworth (Woods 1972, 33-4). Although from a topsoil context, such a chronology is supported by the 'Belgic' SOB GT sherds also recovered, which include a body sherd from a carinated bowl with a plain shoulder cordon and burnished exterior. Comparable bowls are recorded in association with shell-tempered cooking pots in Conquest-period and mid to late 1<sup>st</sup> century AD deposits in central and south Northamptonshire, including at Towcester (Brown and Alexander 1982, 37) and Overstone (Williams 1976, 115), and are likely associated with the initial settlement of the nearby villa or preceding occupation.

#### References

Brown, A. and Alexander, J. 1982 'Excavations at Towcester 1954 – the Grammar School Site,' *Northamptonshire Archaeology* 17, 23–59

Williams, J, 1976 Excavations on a Roman site at Overstone, near Northampton,' *Northamptonshire Archaeology* 11, 100–133

Woods, P, 1972 Brixworth Excavations. Northampton Museums and Art Gallery

#### **Appendix 2: Ceramic Building Material**

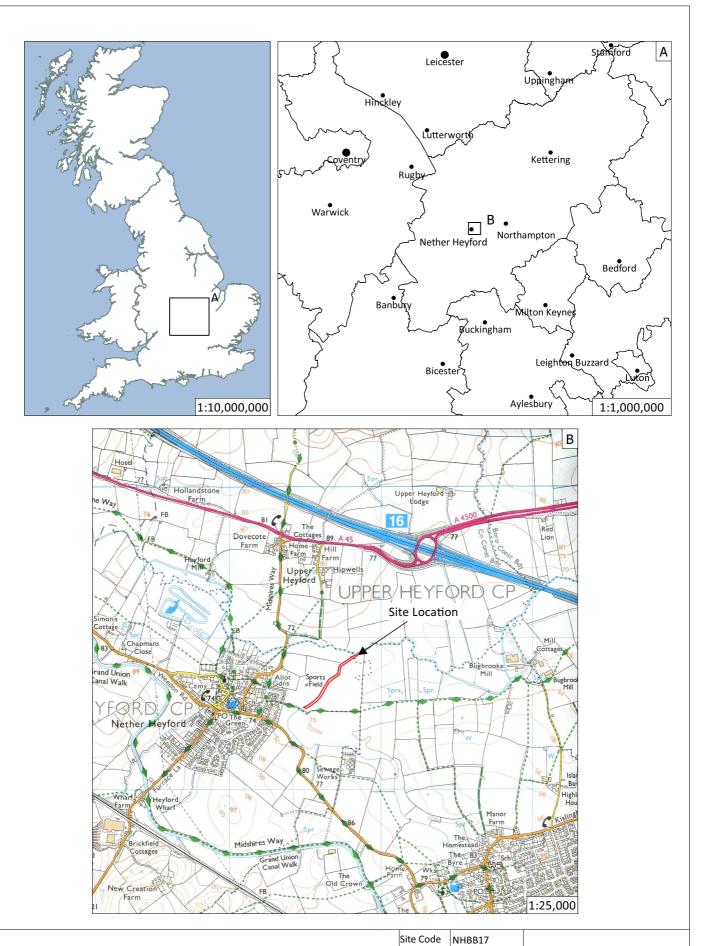
#### By Andrew Peachey

Archaeological investigations recovered six fragments (254g) of Roman ceramic building material in a highly fragmented and abraded condition; contained in topsoil 100 and silt deposit 110). The fragments were manufactured in a well-fired but poorly-levigated orange fabric with inclusions of common fine silty quartz, sparse red ironstone (<2.5mm, occasionally to 5mm) and streaks of iron-free clay. The fragments in topsoil 100 characterise flat tile with a thickness of 15mm, while those in silt deposit 110 exhibit a right-angle lower edge rising to a thicker flange (fractured); characteristics consistent with Roman tegula roof tile. The villa in close proximity to the site is the likely source of such roof tile, though the condition and limited quantity of these fragments suggest they were redeposited and are not in the immediate vicinity of a building or related demolition dump.

# **Appendix 3: Context Summary**

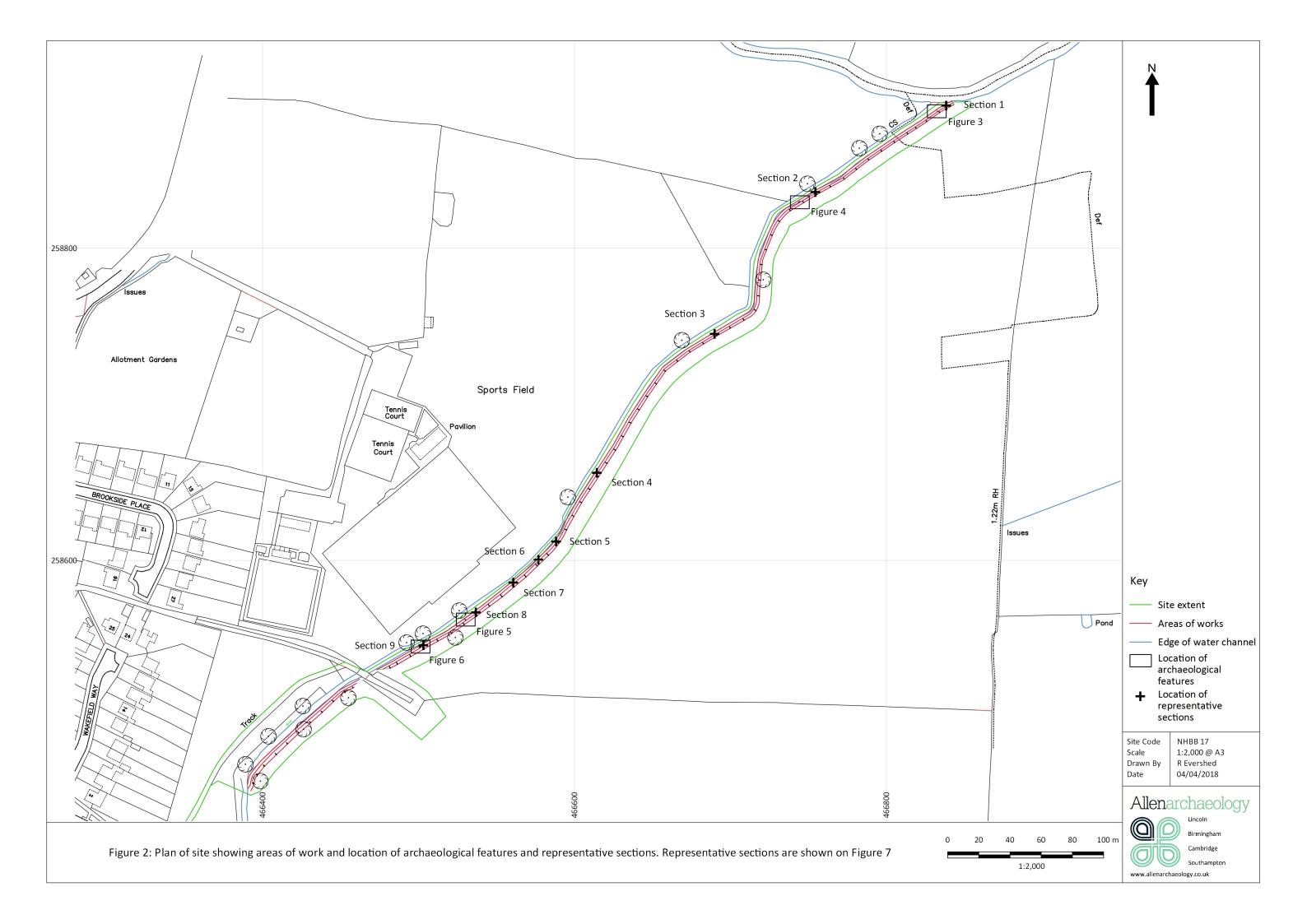
Context	Туре	Description	Length (m)	Width (m)	Thickness/ depth (m)	Interpretation
100	Layer	Firm, mid brown silty clay with moderate rooting inclusions			0.52	Topsoil
101	Layer	Soft, mid reddish brown silty clay			0.52	Subsoil
102	Layer	Firm, mid yellow clay with iron panning inclusions			0.14	Clay Natural
103	Fill	Soft, mid reddish grey silty clay	0.65	0.35	0.11	Gradual accumulation of [104]
104	Cut	Linear, aligned north to south, shallow sides and concave base	0.65	0.35	0.11	Cut of Gully
105	Fill	Loose black silty clay with frequent inclusions of charcoal and tree roots	3.25	0.75	0.23	Deliberate backfill of [106]
106	Cut	Sub-circular, concave sides (not fully excavated)	3.25	0.75	0.23	Cut of Modern pit
107	Layer	Friable, mid grey brown silty clay with occasional charcoal flecks			0.20 - 0.42	Silt Deposit
108	Layer	Solid, light greyish yellow concrete with stone inclusions	4.25	4.0	0.15	Concrete Slab /Layer
109	Layer	Friable, mid bluish grey sand				Alluvial deposit
110	Layer	Friable, mid brown clayey silt with occasional charcoal flecks			0.34	Silt Deposit
111	Layer	Friable, mid greyish brown sandy silt with occasional charcoal flecks and organic material			0.42	Silt Deposit
112	Layer	Firm, mottled orange brown silty clay with frequent iron panning inclusions				Clay Natural
113	Layer	Friable, mid reddish brown sandy silt with occasional charcoal flecks and small gravel inclusions			0.34	Silt Deposit
114	Layer	Friable, mid greyish brown sandy silt with occasional rooting and sandy laminations.			0.4	Silt Deposit
115	Fill	Firm, mottled light bluish grey silty clay with occasional iron panning		0.61	0.15	Natural silting of [117]
116	Fill	Soft, mottled mid reddish grey sandy silt with frequent iron panning		0.21	0.12	Natural silting of [117]
117	Cut	Linear, aligned east to west (not fully excavated)		0.72	0.16	Cut of Ditch
118	Layer	Soft, dark brown clayey silt with occasional stones and rooting				Silt Deposit

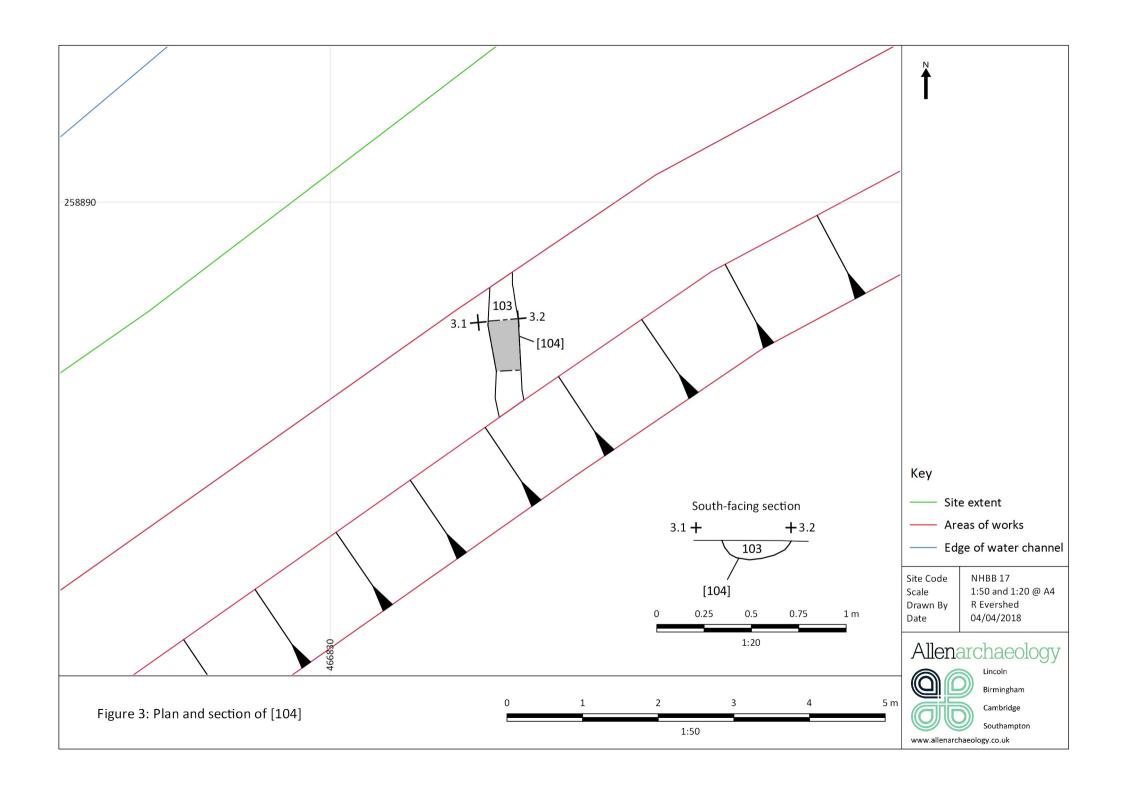
Context	Туре	Description	Length (m)	Width (m)	Thickness/ depth (m)	Interpretation
119	Fill	Compact, mid red sandy gravel with occasional charcoal flecks and stone fragments	1.5m	1.6m		Deliberate backfill of [120]
120	Cut	Linear, aligned northwest to southeast (not excavated)	1.5m	1.6m		Cut of Modern Linear [120]
121	Layer	Soft, mid orange brown sandy silt with occasional rooting.			0.5m	Silt Deposit
122	Layer	Firm, mid bluish grey silty clay with moderate iron panning			0.32m	Alluvial Clay

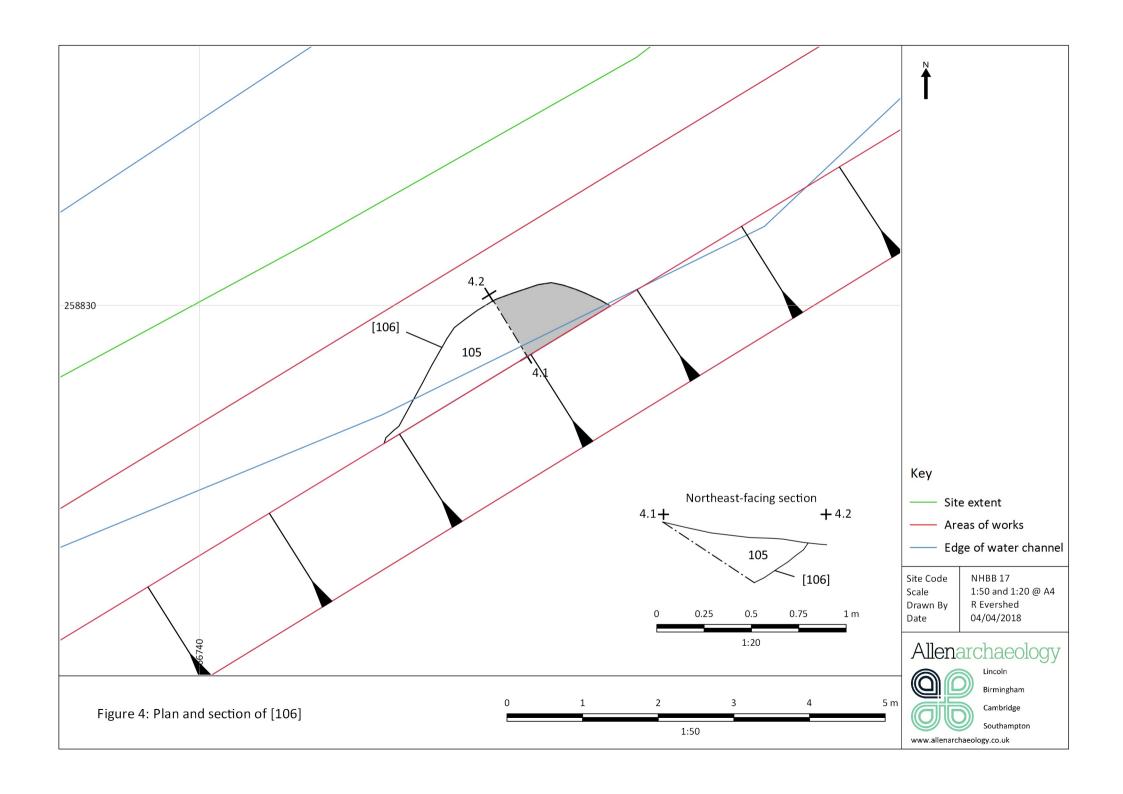


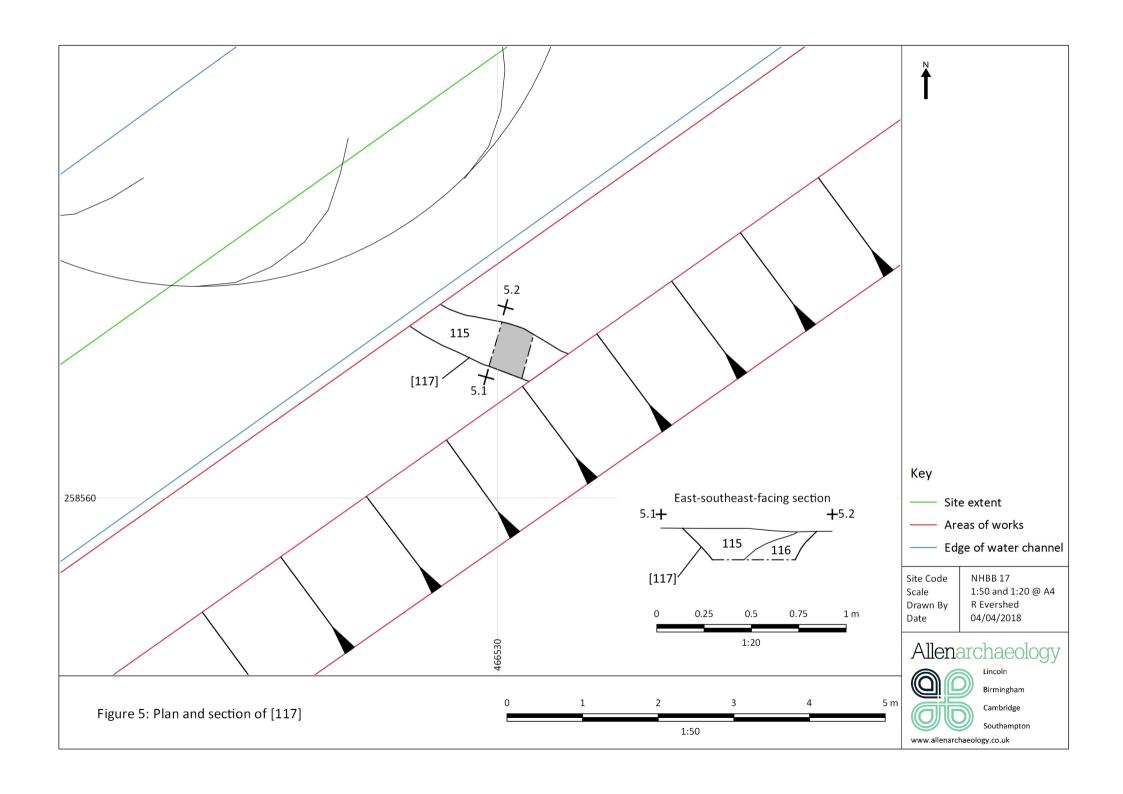


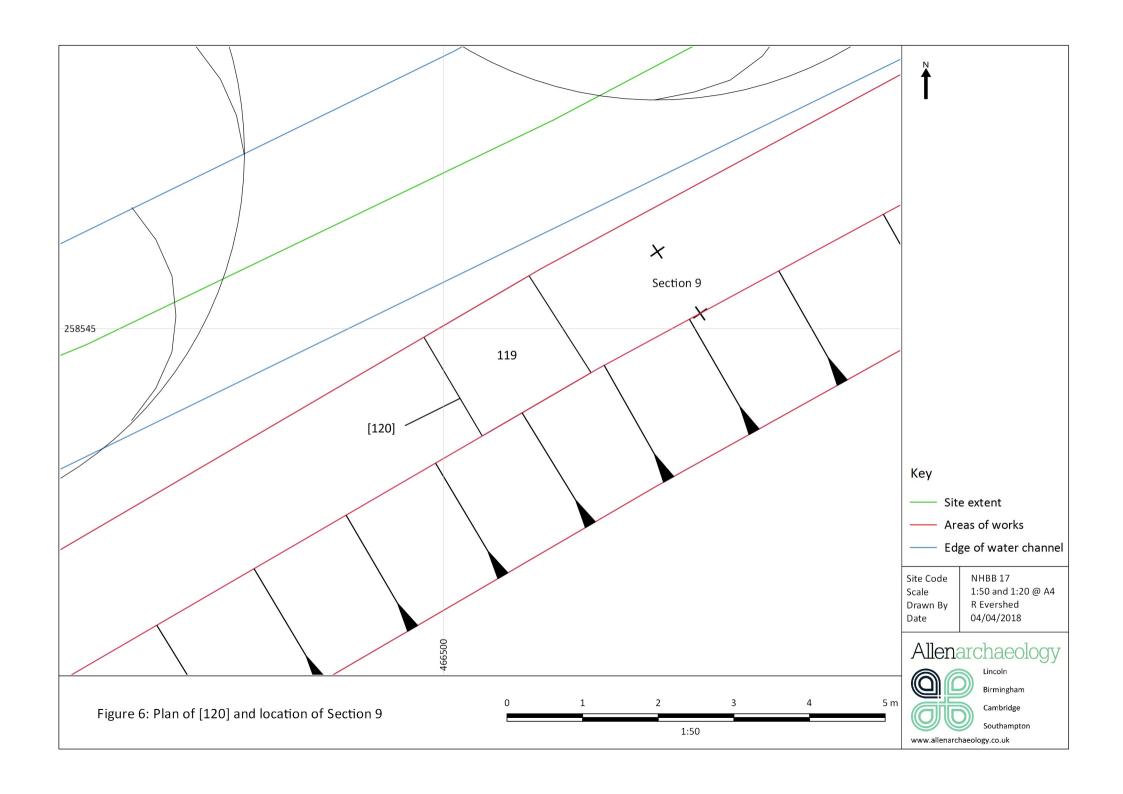
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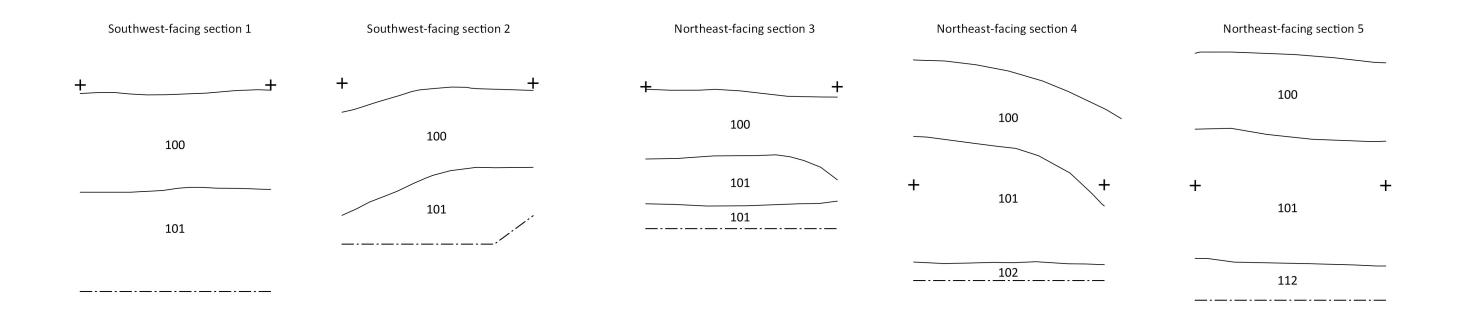


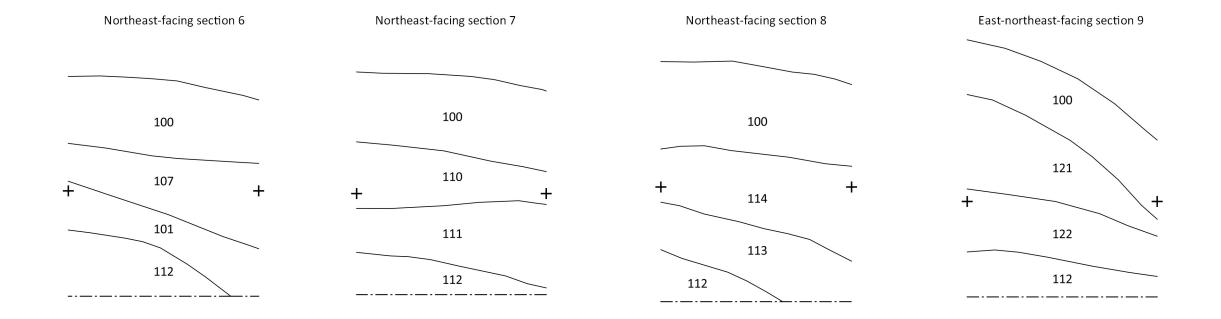












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NHBB 17

Site Code

Scale

Figure 7: Representative sections

0.5 1.5



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