



WYAS  
**Archaeological  
Services**

**Bradford Road**

**Wrenthorpe**

**West Yorkshire**

Archaeological Trial Trenching

Report no. 2866

May 2016

**Client:** Taylor Wimpey Yorkshire



# **Bradford Road Wrenthorpe West Yorkshire**

## **Archaeological Trial Trenching**

### *Summary*

*An archaeological evaluation at Bradford Road, Wrenthorpe revealed mainly modern deposits and interventions, most of which correlate with the anomalies identified by the geophysical survey. One 'V'-shaped ditch in Trench 4, which was not identified on the geophysical survey, produced no dating evidence, although its profile suggests an earlier origin.*



## Report Information

Client: Taylor Wimpey Yorkshire  
 Address: Sandpiper House, Peel Avenue, Calder Park, Wakefield, West Yorkshire, WF2 7UA  
 Report Type: Archaeological Trial Trenching  
 Location: Wrenthorpe  
 County: West Yorkshire  
 Grid Reference: SE 31660 23450  
 Period(s) of activity represented: Modern  
 Report Number: 2866  
 Project Number: 6269  
 Site Code: BRW 16  
 OASIS No.: archaeol11-253288  
 Planning Application No.: N/A  
 Museum Accession No.: TBC  
 Date of fieldwork: April 2016  
 Date of report: May 2016  
 Project Management: Jane Richardson PhD MCIfA FSA  
 Fieldwork supervisor: Rosie Scales BA  
 Fieldwork: Rosie Scales, Tim Cobbold  
 Report: Rosie Scales  
 Illustrations: Rosie Scales  
 Photography: Site staff  
 Specialists: Diane Alldritt (environmental remains)  
 Chris Cumberbatch (pottery and CBM)

Authorisation for distribution: \_\_\_\_\_



© Archaeological Services WYAS 2016  
 Nepshaw Lane South, Morley, Leeds LS27 7JQ  
 Telephone: 0113 383 7500.  
 Email: admin@aswyas.com



## Contents

Report information .....	ii
Contents.....	iii
List of Figures .....	iv
List of Plates.....	iv
List of Tables .....	iv
<b>1 Introduction.....</b>	<b>1</b>
Site location, topography and land use .....	1
Soils and geology.....	1
<b>2 Archaeological and Historical Background.....</b>	<b>1</b>
<b>3 Aims and Objectives .....</b>	<b>2</b>
<b>4 Methodology .....</b>	<b>2</b>
<b>5 Results .....</b>	<b>4</b>
Trench 1 .....	4
Trench 2 .....	4
Trench 3 .....	4
Trench 4 .....	4
Trench 5 .....	4
Trench 6 .....	5
Trench 7 .....	5
Trench 8 .....	5
Trench 9 .....	5
Trench 10 .....	5
<b>6 Artefact Record.....</b>	<b>6</b>
Pottery.....	6
Clay pipe.....	6
<b>7 Environmental Record .....</b>	<b>6</b>
Carbonised plant macrofossils and charcoal.....	6
<b>8 Discussion and Conclusions .....</b>	<b>7</b>

Figures

Plates

### Appendices

Appendix 1: Written Scheme of Investigation

Appendix 2: Inventory of primary archive

Appendix 3: Concordance of contexts yielding artefacts or environmental remains

Appendix 4: Trench tables

### Bibliography

### **List of Figures**

- 1 Site location
- 2 Trench location
- 3 Trench 4 plan and sections
- 4 Trench 5 plan and section
- 5 Trench 6 plan and section
- 6 Trench 8 plan and section
- 7 Blank trench sample sections

### **List of Plates**

- 1 General view of Trench 1, looking north
- 2 Southeast-facing section of 402, looking northwest
- 3 General view of Trench 5, looking west
- 4 North-facing section of Trench 6 showing subsoil deposits, looking south

### **List of Tables**

- 1 Trench rationale
- 2 Pottery and CBM by context
- 3 Trench 1
- 4 Trench 2
- 5 Trench 3
- 6 Trench 4
- 7 Trench 5
- 8 Trench 6
- 9 Trench 7
- 10 Trench 8
- 11 Trench 9
- 12 Trench 10

## **1 Introduction**

Archaeological Services WYAS (ASWYAS) was commissioned by Taylor Wimpey Yorkshire to conduct an archaeological evaluation by trial trenching on land to the north of Bradford Road, Wrenthorpe. The work was undertaken in accordance with a specification for archaeological trial trenching prepared by the West Yorkshire Archaeology Advisory Service (Appendix 1) and also adhered to ASWYAS' (2011) own policies and those of Historic England (2008) and the Chartered Institute for Archaeologists (2014).

### **Site location and topography and land-use**

The proposed development area (PDA) is centred at grid reference SE 31660 23450 (Fig. 1) and covers approximately 2ha. It is situated in open fields just north of Bradford Road, a residential area lies to the east of the site, whilst a modern office park lies to the north. The site rises steeply to the north, and is covered in overgrown weeds and grasses.

### **Soils and geology**

The geology of the PDA consists of Pennine middle coal measures formation (British Geological Survey 2016). The superficial deposits of the site have not been recorded due to its urban location.

## **2 Archaeological and Historical Background**

Recent archaeological excavations in the vicinity revealed evidence of Late Iron Age and Romano British occupation at the WY Police Training Centre at Carr Gate *c.* 1km to the west (PRN 12402). Two circular enclosures which were occupied by farmsteads between the 2nd century BC and 2nd century AD were excavated on land to the east of Ruskin Avenue (*c.* 500m east of the site). The course of Roman road 721 is thought to lie close to the line of Bradford Road although the geophysical survey did not detect any evidence of its presence within the site.

During the medieval and early modern periods, the site lay in an area known as the Outwood. This was a large area of managed woodland which, from the late medieval period, supported several small-scale industries. These included quarrying, charcoal burning, wood working, coal mining (possibly) and pottery manufacture. The latter is best known and several sites were investigated archaeologically from the 1960s onwards and were in operation between the late 15th and 18th centuries.

The First Edition Six Inch to the Mile Ordnance Survey map identifies a dwelling on the site of the present No. 330 Bradford road as "Old Warren House" This name may refer specifically to a rabbit warren or more generally the right of warren or hunting within the Outwood. Rabbit warrens provided a source of meat and fur for clothing. Whilst present in medieval England, the construction of warrens peaked in the 18th century. Archaeological evidence of a warren could include the footings of walls and traps for both rabbits and the vermin which preyed on them.

A geophysical survey of the site identified a number of magnetic anomalies which may represent archaeological features (Whittingham 2014). These include a possible south-east to north-west linear anomaly in the western part of the site, possible north-east to south-west ridge and furrow ploughing and number of areas of enhanced magnetic responses which could represent industrial activity. These anomalies, along with the general archaeological potential of the area, required further evaluation by trial trenching.

### **3 Aims and Objectives**

The aim of the archaeological evaluation by trial trenching was to investigate the presence or absence of archaeological features and deposits and to determine the nature, extent, depth, and date of any remains. The trenches were spread across the site, targeting geophysical anomalies as well as apparently blank areas.

Any archaeology uncovered, along with the results of the geophysical survey, will determine the level of risk that the archaeological resource may present to construction and inform the design of further archaeological mitigation where appropriate.

### **4 Methodology**

All excavations were undertaken in accordance with the relevant standards (CifA 2014; Historic England 2008). The evaluation involved the excavation of ten trial trenches (see Table 1, Fig. 2). The locations of the trial trenches were agreed with David Hunter of the West Yorkshire Archaeology Advisory Service (WYAAS). The general strategy was to target potential archaeological features and to provide a spread of trial trenches across the PDA. The trenches were set out using a dGPS with an accuracy of  $\pm 10\text{mm}$ . All trenches were also CAT scanned prior to excavation and scanned at regular intervals during excavation.

The trial trenches were excavated with modern surfaces and recent overburden removed down to the first significant archaeological horizon or undisturbed natural in successive level spits of a maximum 0.2m thickness, by the use of an appropriate machine using a wide toothless ditching blade. Any machine work was carried out under direct archaeological supervision and the machine halted if significant archaeological deposits were encountered. The resultant surfaces and trench sections were then inspected for the presence of archaeological remains or deposits. Any further excavation or cleaning was then undertaken by hand. After planning, all archaeological features were manually sample excavated in an archaeologically controlled and stratigraphic manner, in order to meet the aims and objectives.

A full drawn and photographic record of all material revealed during the course of the work was made. The excavation limits were surveyed using electronic survey equipment with larger scale hand drawn plans of features, at 1:50, being created. Sections of discrete features were drawn at 1:10. All sections, plans and elevations include spot-heights related to

Ordnance Datum in metres as correct to two decimal places. The location of all archaeological features and deposits were fixed in relation to nearby permanent structures and roads and to the National Grid. The photographic archive comprises monochrome negative photographs at a minimum format of 35mm, augmented by digital photographs taken using cameras with a resolution of at least 10 megapixels.

All excavated archaeological contexts were fully recorded by detailed written records, giving details of location, composition, shape, dimensions, relationships, finds, samples, and cross-references to other elements of the record and other relevant contexts, in accordance with best practice. All contexts, and any samples from them were given unique numbers. An inventory of the archive is provided in Appendix 2 and a concordance of contexts is given in Appendix 3.

A soil-sampling programme was undertaken during the course of the investigation for the identification and recovery of carbonised and waterlogged remains, vertebrate remains, molluscs and small artefactual material. Metallurgical debris is a possibility on this site and samples were processed accordingly (including scanning both flots and retents with a magnet for hammerscale).

The rationale for each trench is presented below (Table 1).

Table 1. Trench rationale

<b>Trench No.</b>	<b>Dimensions (m)</b>	<b>Reason for Trench</b>
1	50 x 2	To evaluate a blank area with a strong magnetic background
2	25 x 2	To evaluate a blank area with a strong magnetic background
3	25 x 2	To evaluate a blank area and linear trend
4	50 x 2	To evaluate both a strong response and discrete magnetic anomalies
5	50 x 2	To evaluate discrete magnetic anomalies and an area of strong response
6	50 x 2	To evaluate an linear trend and other anomalies
7	50 x 2	To evaluate an linear trend and other anomalies
8	50 x 2	To evaluate an linear trend and other anomalies
9	25 x 2	To evaluate an unsurveyed area
10	25 x 2	To evaluate an unsurveyed area
	25 x 2	To evaluate an unsurveyed area



## 5 Results

A description of each trench is given below, with more detailed information of measurements and descriptions given in Appendix 4. Trenches containing features and/or deposits are illustrated in Figs 3 to 6, with sample sections for blank trenches provided in Fig. 7.

### Trench 1

Trench 1 was shortened by 3m from the east due to a neighbouring property utilising some of the field for their garden (Plate 1). No archaeological features were noted within Trench 1, although an area of modern disturbance (102), 6.8m from the western end of the trench and 11m wide, was uncovered. No subsoil was present within the trench, so 0.5m of dark black brown clay sand topsoil (100) sat directly on top of a pale brown yellow clay natural (101). The eastern end of Trench 1 formed an 'L' shape with the northern end of Trench 2.

### Trench 2

Trench 2 was moved 7m to the east due to a neighbouring property's garden. Here 0.47m of dark black brown clay sand topsoil (200) was observed above a pale brown blue orange clay natural (201). No archaeological deposits were observed within the trench.

### Trench 3

No archaeological features were observed in Trench 3, although natural deposits of coal were observed. The natural (301), a pale brown blue orange clay was revealed at 0.3m below the surface. Above this was a deposit of mid-brown black sandy clay topsoil (300). The southern end of Trench 3 formed a 'T' shape with Trench 4.

### Trench 4

Trench 4 exposed the remains of a ditch and a pit. The ditch (402) was a 'V'-shaped cut, running southwest to northeast, filled with pale blue brown sandy clay (403; Plate 2, Fig. 3). It measured 0.38m deep and 0.82m wide, but contained no finds. Pit 404 was a shallow 'U' shape, measuring 1.1m wide and 0.16m deep, and containing a mid-brown sandy clay deposit (405), and early modern pottery. Both of these features were cut into a pale brown blue orange clay natural (401), and overlain by dark grey black sandy clay topsoil (400).

The trench deviated slightly due to a modern sewer and manhole, 6m from the western end of the trench.

### Trench 5

Trench 5 (Plate 3; Fig. 4) was excavated to a depth of 0.4m and revealed a pale orange brown clay natural (501), and dark grey black clay sand topsoil (500). A plough furrow, 502, was exposed, running north-south. It had a shallow 'U'-shaped profile, and was filled with a mid-grey brown silty clay (503).

The trench deviated slightly due to a modern sewer and manhole 4m from the east end of the trench.

### **Trench 6**

The natural deposits (602) in Trench 6 were exposed 0.55m below the ground surface (Fig. 5). They consisted of a mid-yellow clay with orange and grey mottling. A very dark brown sandy clay subsoil (601) was present only in the west end of the trench. These deposits were overlain by a dark brown sandy clay topsoil (600). A possible linear feature was investigated towards the west of the trench (Plate 4), but upon excavation no discernible edges could be observed and it may represent subsoil accumulating in a naturally occurring dip.

### **Trench 7**

Trench 7 was excavated to a depth of 0.5m deep and exposed a clay natural (702) varying in colour from yellow with grey mottling, to bright orange, to grey with black and yellow mottling. Similar to Trench 6, subsoil (701) was present only in the middle and west of the trench. A possible linear feature was investigated but appeared to be a deeper deposit of subsoil with no discernible cut. A dark brown black sandy clay topsoil (700) was present.

### **Trench 8**

A possible linear, 803, was revealed in Trench 8 (Fig. 6). It ran northwest to southeast, with the northeast edge of the feature gently sloping, leading to a flat base. The southwest edge of the feature could not be located – the feature was excavated to a width of 4.9m before being boxed – perhaps showing that it was similar to the subsoil deposits found in Trenches 6 and 7. Cut 803 was filled with deposit 804, an orange and grey mottled clay deposit containing a clay pipe stem and a fragment of ceramic building material. The natural (802) in the trench was located at a depth of 0.6m, and was a mixture of pale orange brown clay, bright orange brown clay sand and a mid-blue grey clay. The subsoil (801) was mid-grey brown sandy clay, and was only present within the northwest of the trench. Overlaying both the subsoil (where present) and natural was a dark grey black sandy clay topsoil (800).

### **Trench 9**

Trench 9 was excavated to a depth of 0.55m and revealed a yellow orange mottled clay natural (902). Subsoil (901) was patchy and only present in a few places along the trench. Where present it was a light orange brown sandy clay. The topsoil (900) was a dark brown sandy clay. No archaeological deposits were observed within the trench.

### **Trench 10**

Trench 10 was excavated to a depth of 0.5m. No subsoil was present within the trench. A mid-grey black brown clay sand topsoil (1000) was sitting on top of a mid-orange blue grey clay natural (1001). The trench contained no archaeology.

## 6 Artefact Record

### Pottery by Chris Cumberpatch

The pottery assemblage consists of three sherds of pottery and a fragment of ceramic building material from two contexts. The data are summarised in Table 2.

All of the pottery was recovered from a single fill (405) of Pit 404, while the fragment of brick came from deposit 804.

The earliest sherd was part of the base of a bowl or pancheon in a fine buff fabric with a clear glaze internally. It was probably contemporary with the sherd of Late Blackware although a slightly earlier, late 17th-century date, cannot be ruled out. Both sherds were earlier than the third, a small fragment of transfer printed Whiteware with additional decoration in the form of underglaze painted detail which was of mid to late 19th-century date.

The presence of the sherds is consistent with what is known of the history of Wrenthorpe.

Table 2. Pottery and CBM by context

Trench	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
4	405	Late Blackware	1	10	1	BS	Bottle/flask?	Brown glaze ext	C18 <sup>th</sup>	
4	405	TP Whiteware	1	2	1	BS	Hollow ware	Green printed rural scene w/ red painted detail	M – LC19 <sup>th</sup>	
4	405	Yellow Glazed Coarseware	1	15	1	Base	Bowl/ pancheon	Clear glaze int on a buff fabric	LC17 <sup>th</sup> – C18 <sup>th</sup>	Light buff fabric w/ occ white rock fragments
8	804	Ceramic building material	1	5	1	Flake	Brick	U/Dec	Recent?	
		<b>Total</b>	<b>4</b>	<b>32</b>	<b>4</b>					

### Clay pipe

A very short piece of clay pipe stem was recovered from fill 804 of a possible feature or natural dip in the ground (803). It is not diagnostic but should be retained with the site archive.

## 7 Environmental Record

### Carbonised plant macrofossils and charcoal by Diane Alldritt

A bulk environmental sample was processed by ASWYAS using a Siraf-style water flotation system (French 1971). The flot was dried before examination under a low power binocular microscope typically at x10 magnification.

The single flot (from fill 403 of Ditch 402) contains very few remains with <2.5ml of crushed charred material present, although none were identifiable. Modern roots are present in low amounts along with occasional fungal spores. No charcoal, other carbonised material or hammer scale was recovered from the sample retent, which was subsequently discarded. No further analysis is warranted, but the flot should be retained with the site archive.

## **8 Discussion and Conclusions**

The majority of the trenches did not contain any archaeological remains and only modern services and deposits were evident, probably the main cause of the geophysical anomalies observed. Indeed, the sewers and manholes in Trenches 4 and 5 seem to correlate to the areas of 'very strong response'. The linear anomalies identified by the geophysical survey running through Trenches 6, 7 and 8 are situated at the base of a hill, and are probably caused by soil run-off and their subsequent build up downslope. Plough scars were not commonly found, with only one investigated in Trench 5. Ditch 402 is the feature most likely to be of archaeological significance, although no dating evidence was found to confirm this.

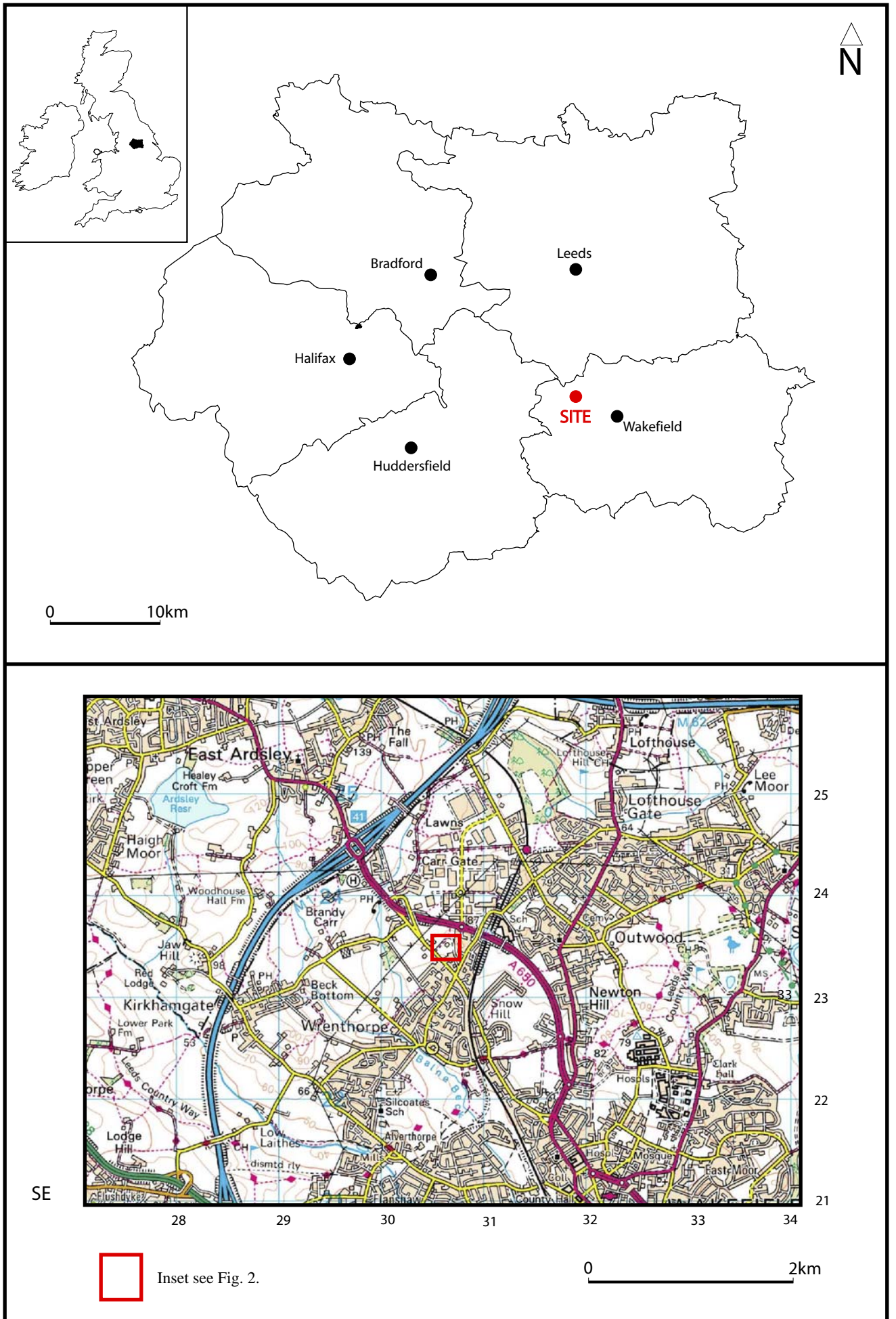








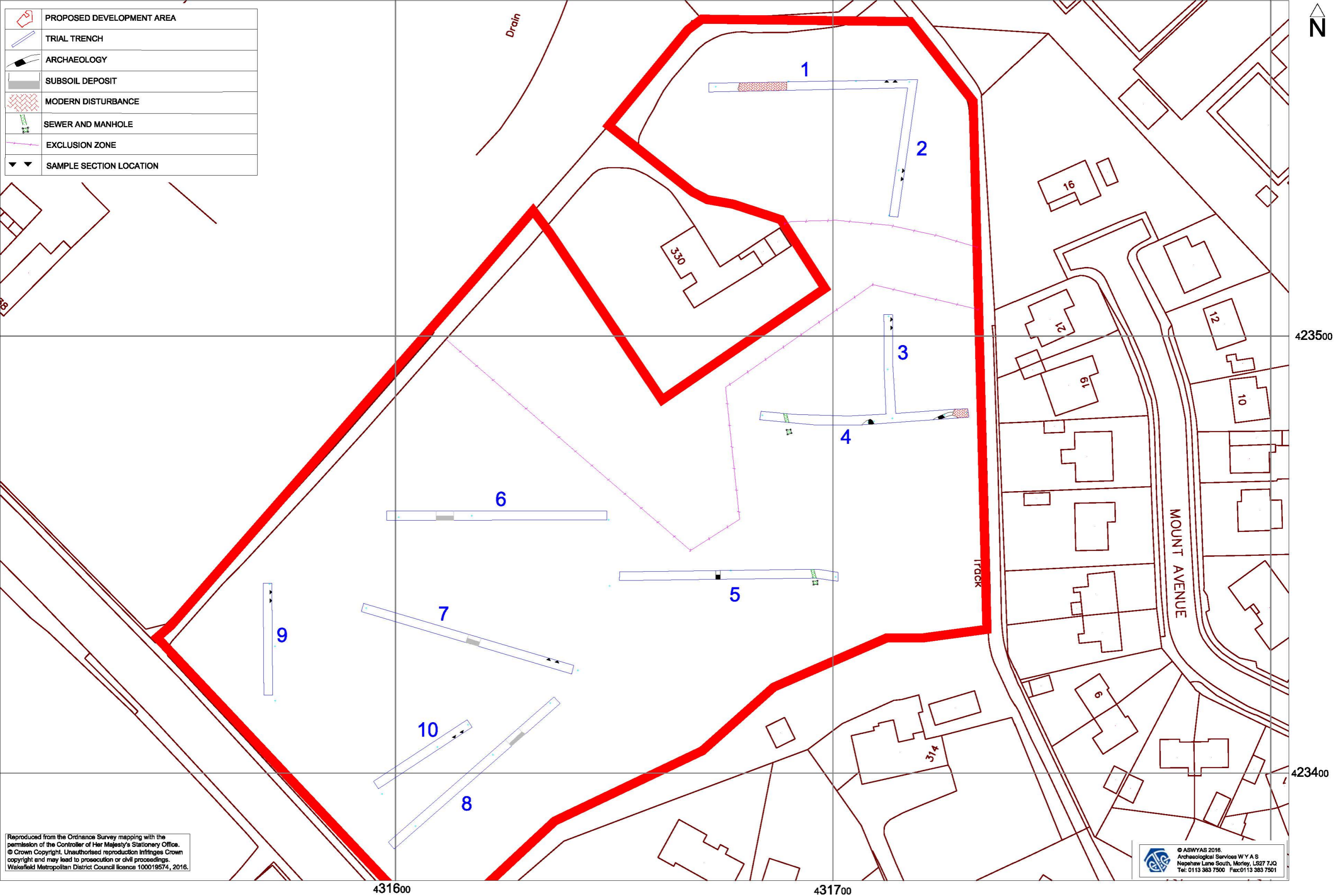


Fig. 1. Site location

	PROPOSED DEVELOPMENT AREA
	TRIAL TRENCH
	ARCHAEOLOGY
	SUBSOIL DEPOSIT
	MODERN DISTURBANCE
	SEWER AND MANHOLE
	EXCLUSION ZONE
	SAMPLE SECTION LOCATION



Reproduced from the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationery Office. © Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Wakefield Metropolitan District Council licence 100019574, 2016.

© ASWYAS 2016.  
 Archaeological Services W Y A S  
 Nepehaw Lane South, Morley, LS27 7JQ  
 Tel: 0113 383 7500 Fax: 0113 383 7501

Fig 2. Trench location (1:750 @ A3)

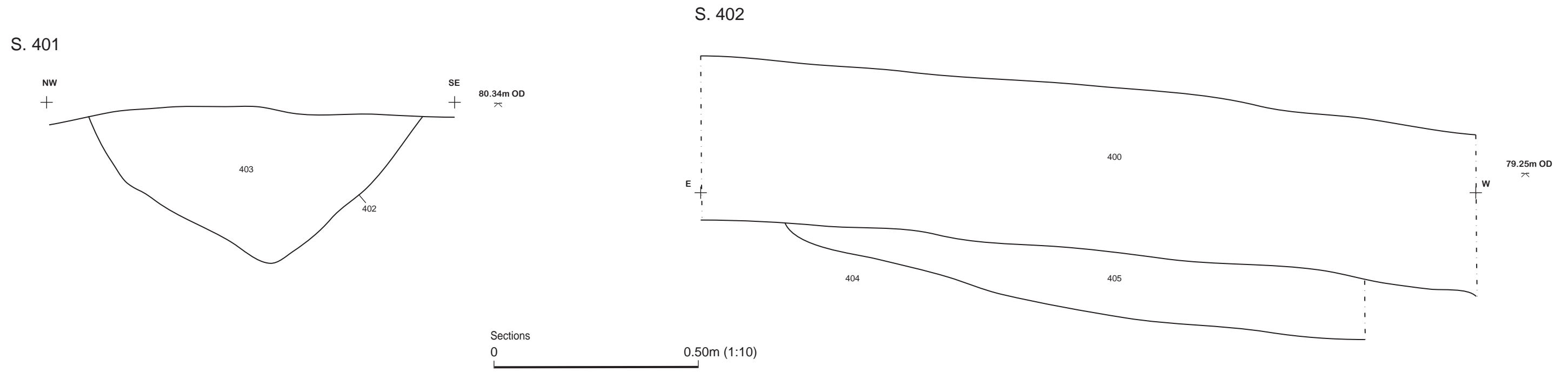
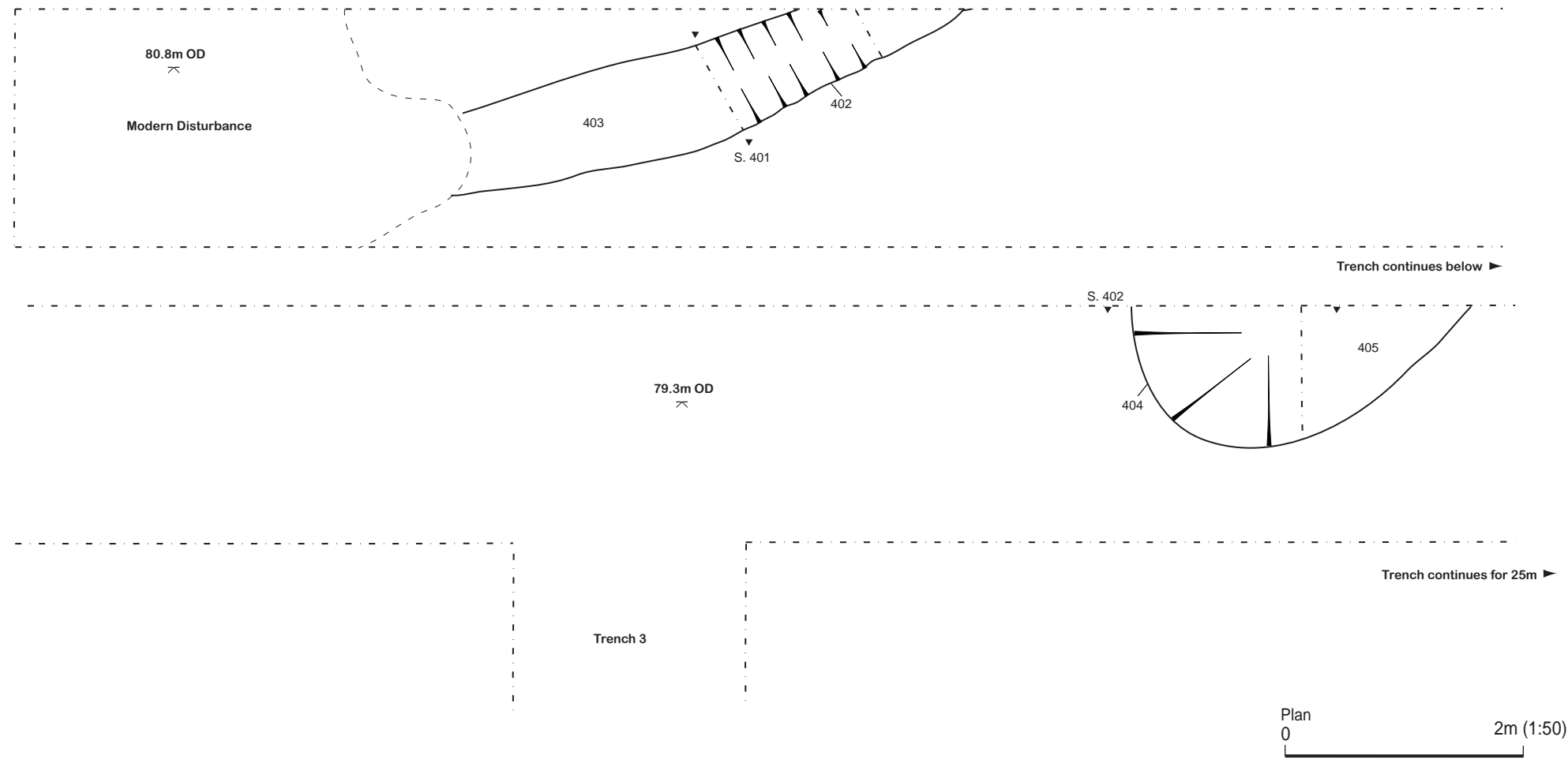
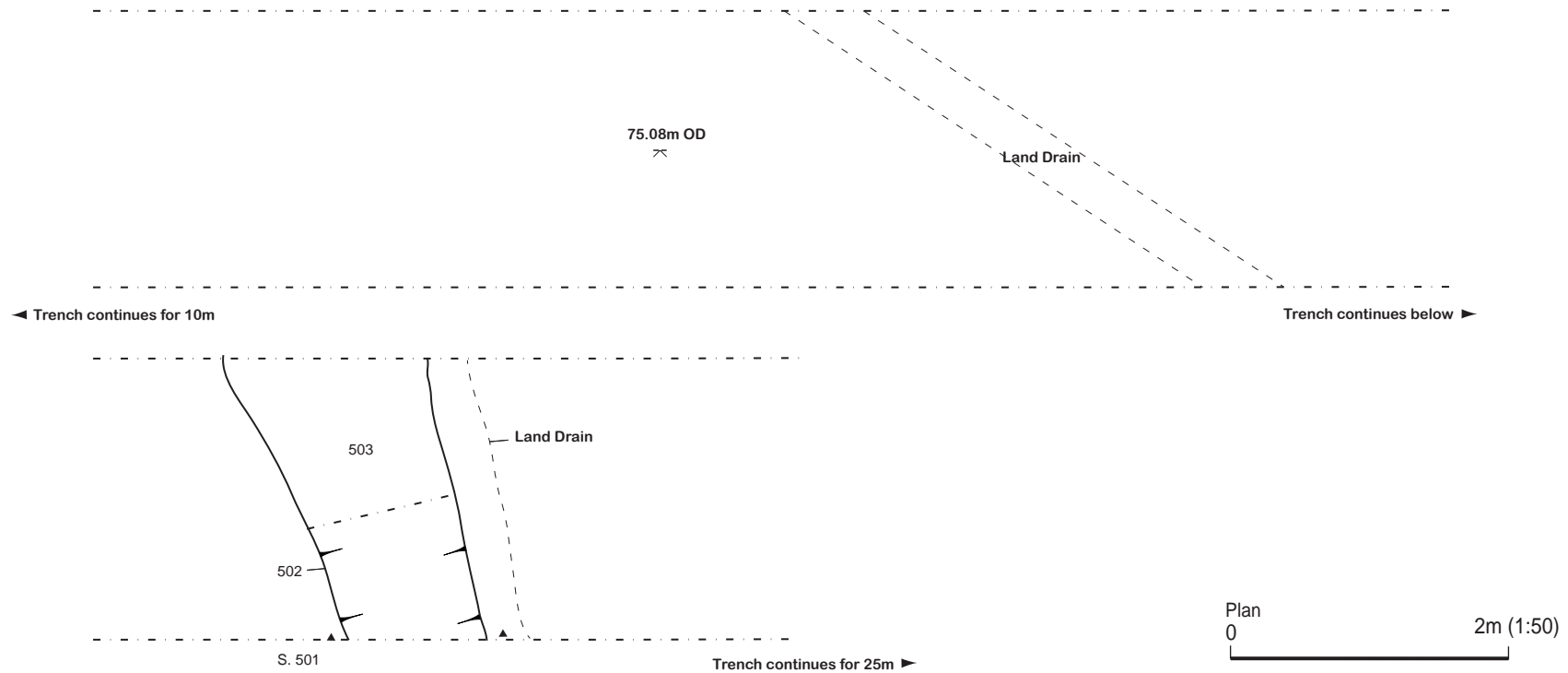


Fig. 3. Trench 4 plan and sections



S. 501

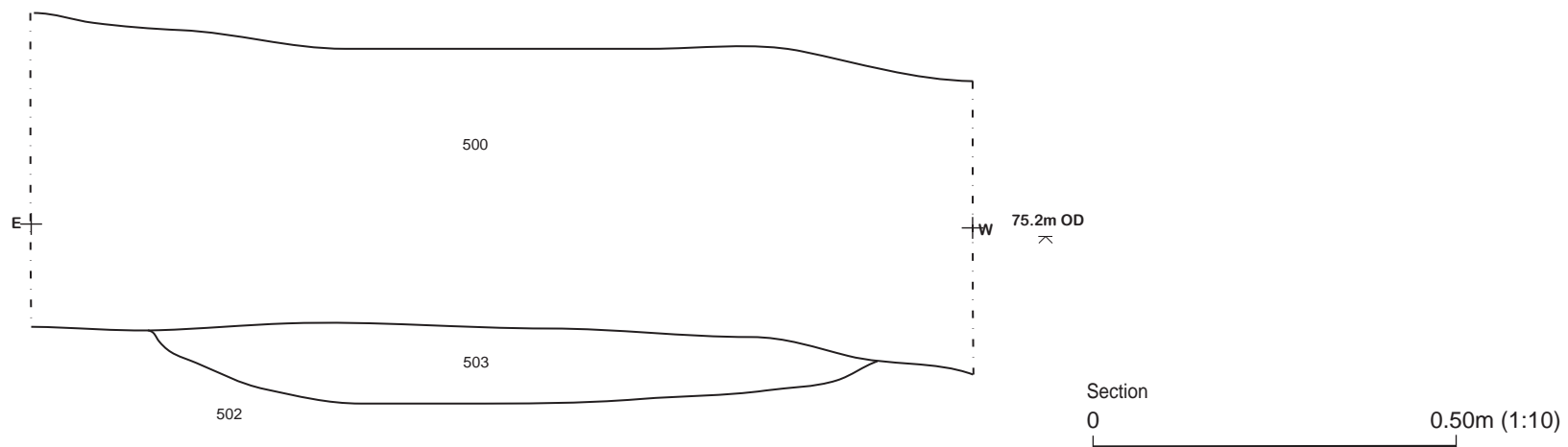


Fig. 4. Trench 5 plan and section



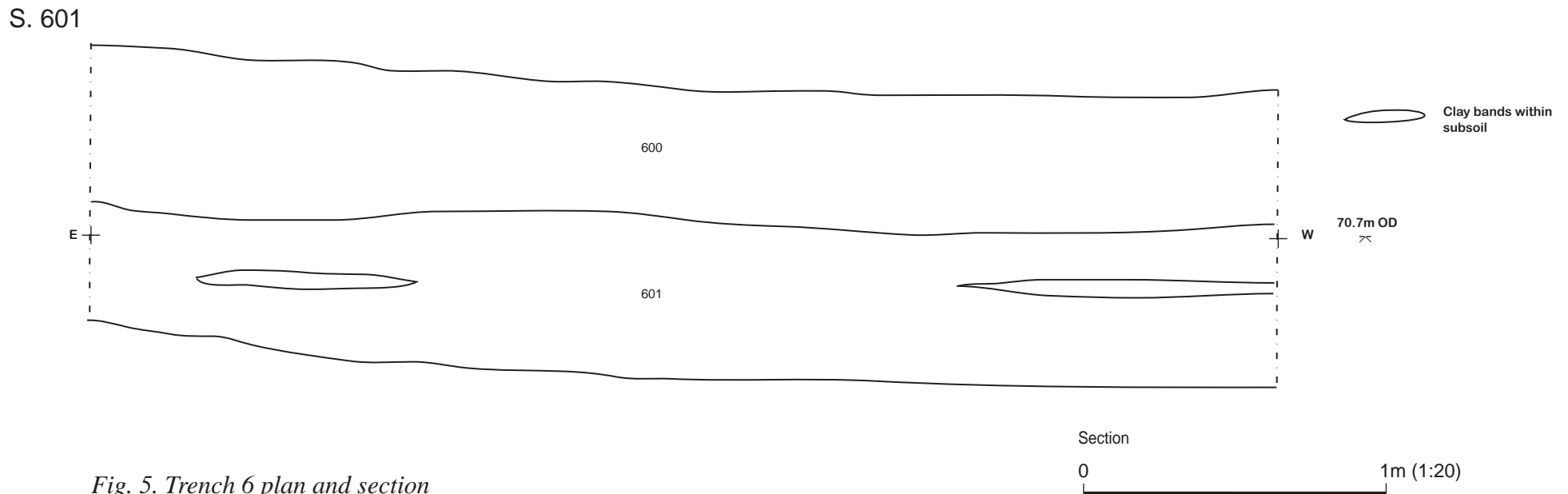
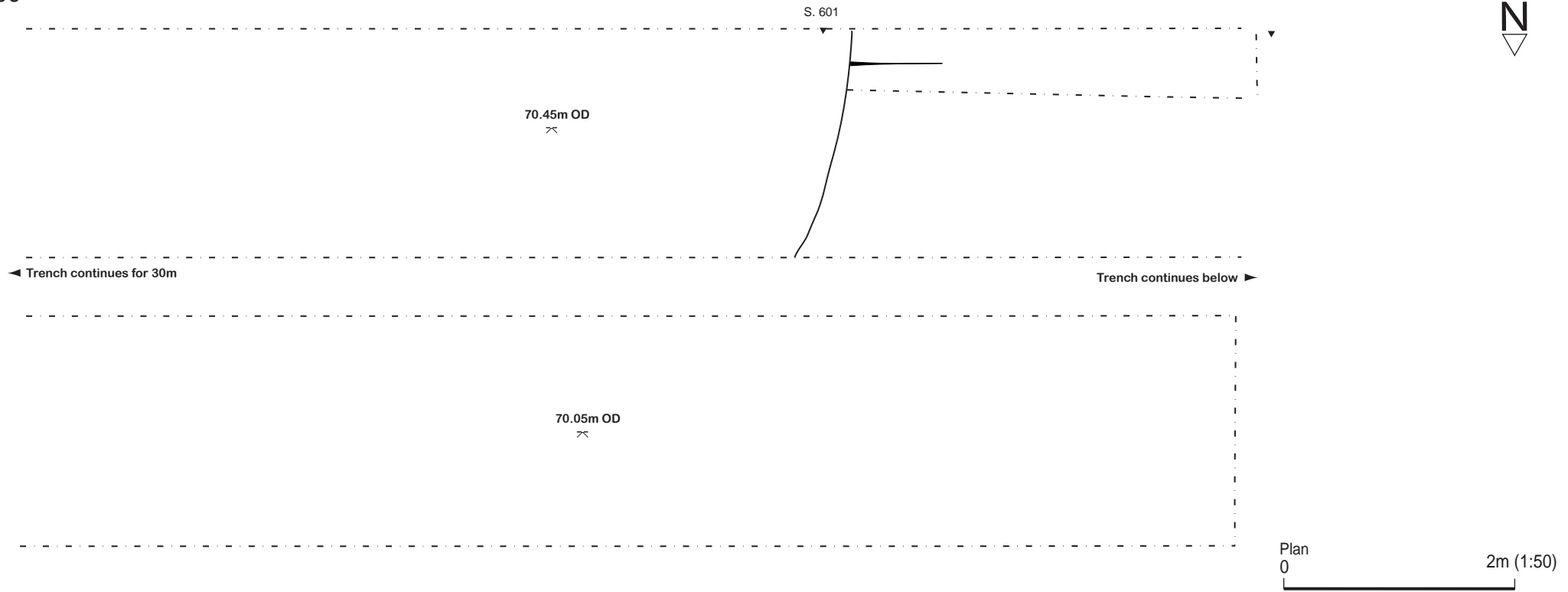


Fig. 5. Trench 6 plan and section

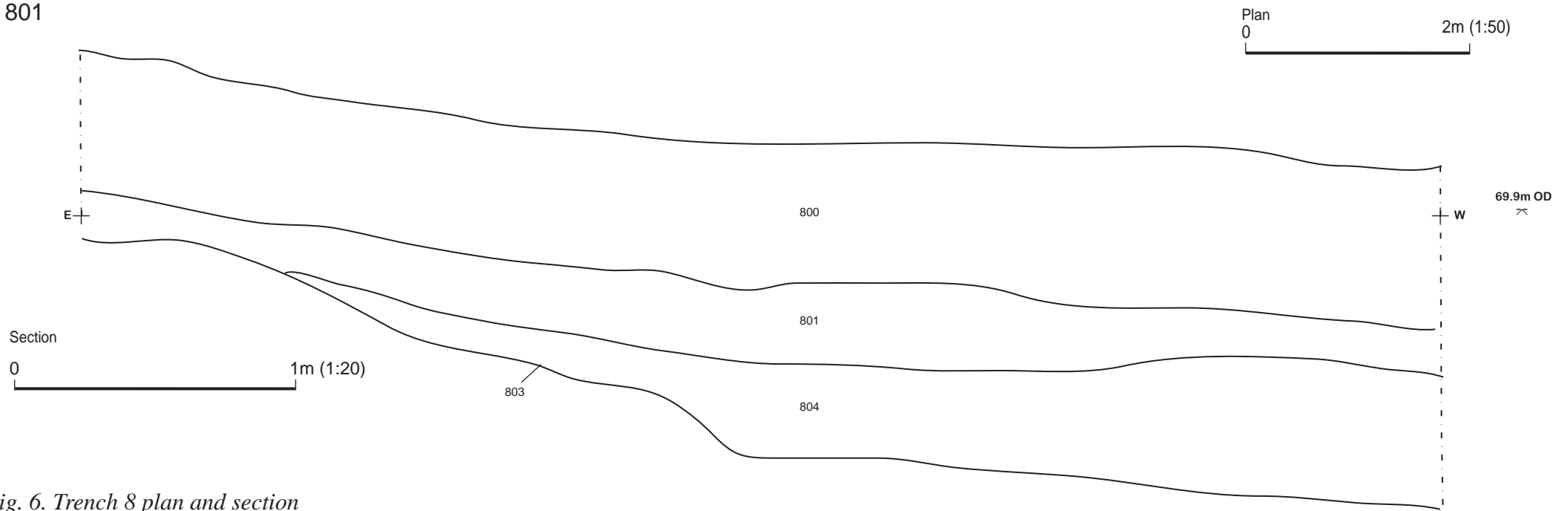
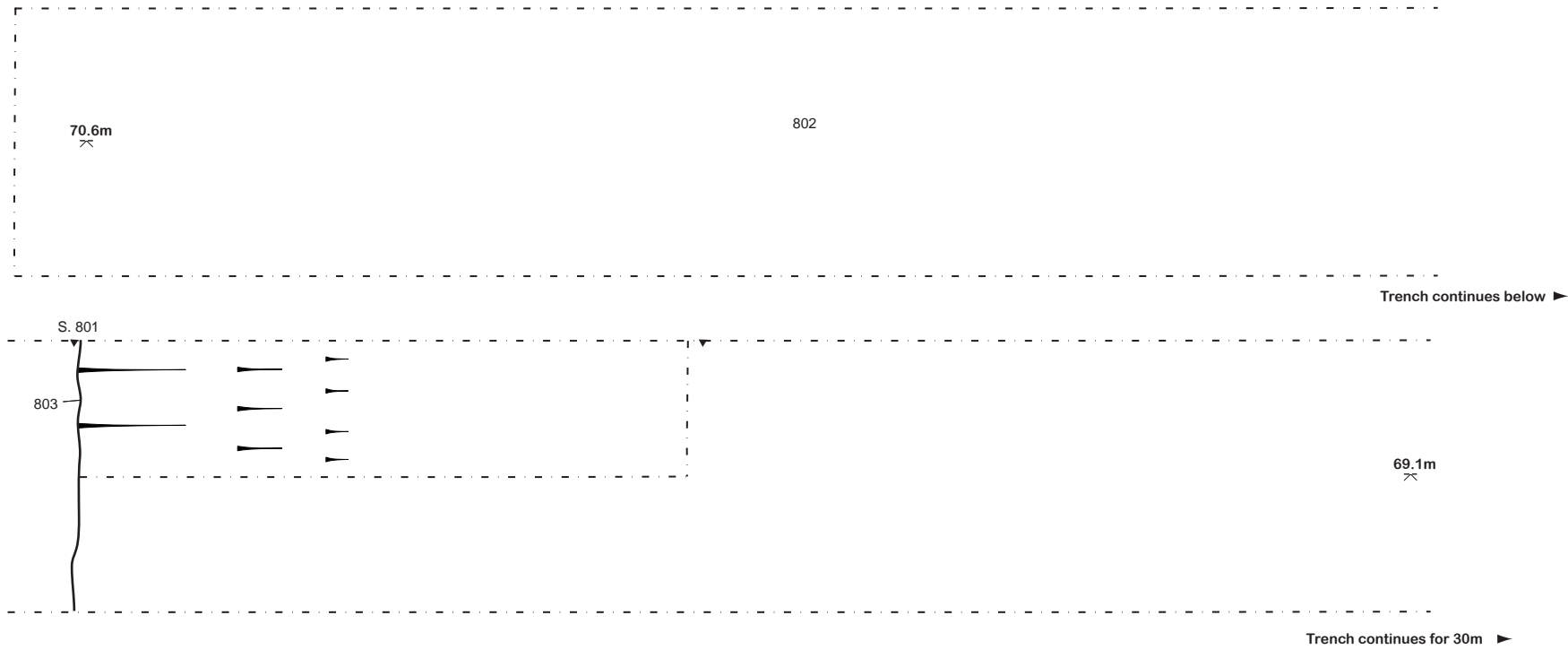


Fig. 6. Trench 8 plan and section

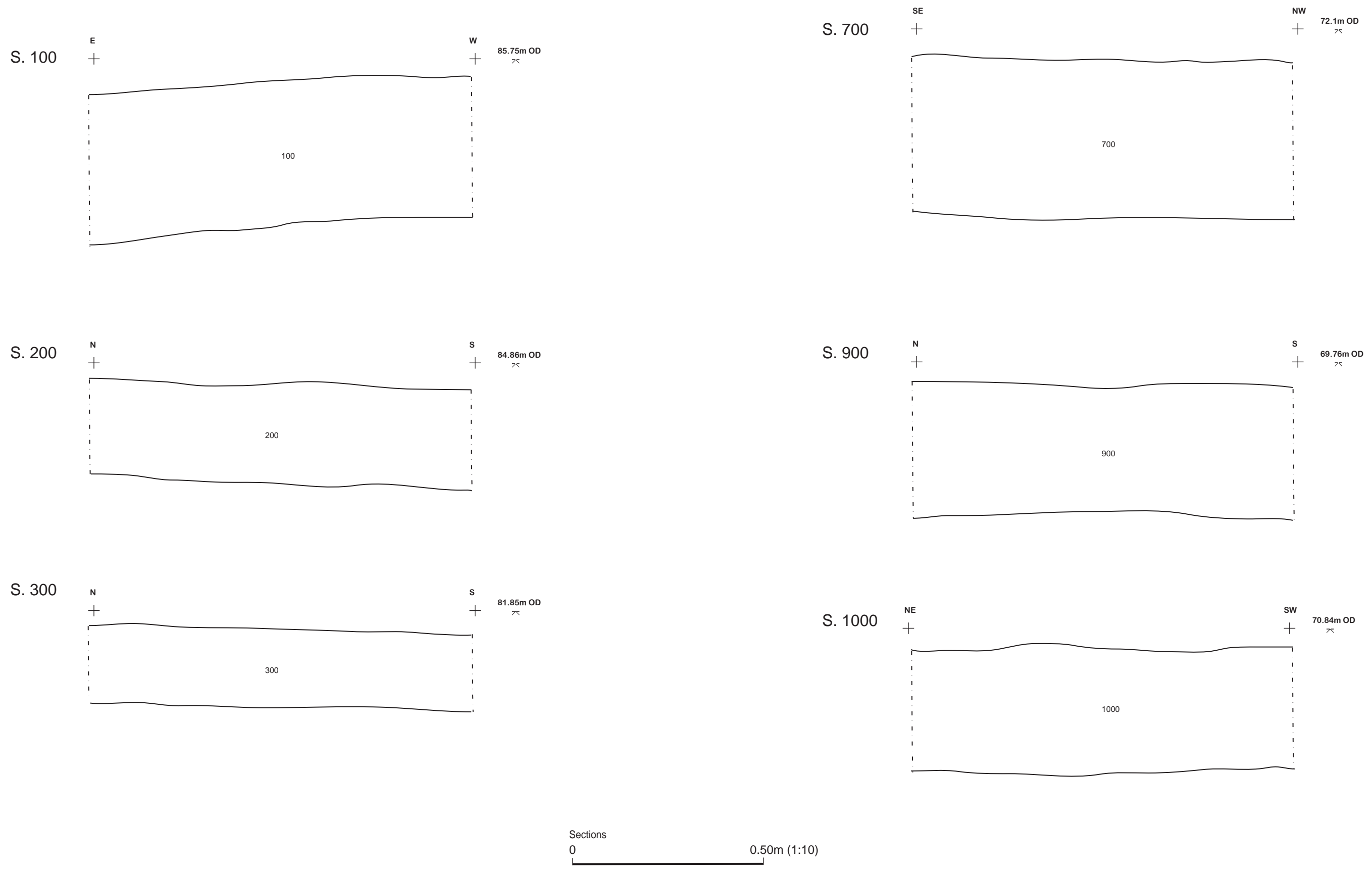


Fig. 7. Blank trench sample sections



*Plate 1. General view of Trench 1, looking north*



*Plate 2. Southeast-facing section of 402, looking northwest*



*Plate 3. General view of Trench 5, looking west*



*Plate 4. North-facing section of Trench 6, showing subsoil deposits, looking south*

## **Appendix 1: Written Scheme of Investigation**

**WEST YORKSHIRE ARCHAEOLOGY ADVISORY SERVICE (WYAAS):  
SPECIFICATION FOR GEOPHYSICAL SURVEY AND TRIAL TRENCHING TO  
EVALUATE AND RECORD ARCHAEOLOGICAL REMAINS IN ADVANCE OF  
DEVELOPMENT AT BRADFORD ROAD, WRENTHORPE (SE 31660 23450)**

**Specification prepared for Archaeological Services West Yorkshire  
Archaeology Service on behalf of Wakefield Metropolitan Council (Planning  
Application reference 14/01266)**

## **1.0 Summary**

1.1 A limited amount of archaeological work consisting of archaeological trial trenching is proposed to help establish the below ground archaeological survival at the above site and to record it if encountered. Any significant additional work that may be necessary will be covered by a supplementary specification.

1.2 This specification has been written by the West Yorkshire Archaeology Advisory Service (WYAAS), the holders of the West Yorkshire Historic Environment Record. Depending upon the results obtained, additional archaeological work may need to be carried out.

NOTE: The requirements detailed in paragraphs 6.3, 6.4, 6.5, 6.6 and 9.1 are to be met by the archaeological contractor **prior** to the commencement of fieldwork by completing and returning the attached form to the WY Archaeology Advisory Service.

## **2.0 Site Location & Description**

**Grid** Reference (centred): SE 31660 23450

2.1 The site is located c. 3.5 km to the north-west of Wakefield in open fields to the north-west of Wrenthorpe. The site lies to the north of Bradford Road with residential properties on its eastern boundary and a modern office park to the north.

The underlying geology comprises the Pennine Middle Coal Measures Formation and has an area of c. 2ha.

A large culvert has been identified crossing the western part of the site on a north to south alignment.

The site is located in the historic township of Wrenthorpe.

## **3.0 Planning Background**

3.1 Planning permission (14/01266/FUL) has been granted for a residential development of 80 dwellings on the site in question. A condition (Condition 15) requiring an archaeological scheme of works has been placed on the permission.

3.2 The applicant's agent commissioned a geophysical survey of the site which was carried out by Phase Site Investigations in 2014. The survey covered an area of 1.3ha.

Although some possible archaeological features were detected by this survey the ground conditions precluded a definitive interpretation of these features.

3.3 The Planning Authority have been advised by the West Yorkshire Archaeology Advisory Service that there is reason to believe that important archaeological remains may be affected by the proposed development. This specification is for a post-determination archaeological evaluation. Depending upon the results obtained, additional archaeological work governed by separate specifications of work, may be required.

3.4 This specification has been prepared by the West Yorkshire Archaeology Advisory Service at the request of Mr Kevin Moon West Yorkshire Joint Services, Nepshaw Lane South, Morley Leeds, LS27 7JQ tel.: 0113 393 9747 in order fully evaluate the site's archaeological potential.

#### 4.0 **Archaeological Interest**

4.1 The proposed development site lies within an area likely to contain significant archaeological deposits dating from the Bronze Age to the mid-18<sup>th</sup> century.

4.2 Recent archaeological excavations in the vicinity has revealed evidence of late Iron Age and Romano British occupation at the WY Police Training Centre at Carr Gate c. 1km to the west (PRN 12402). Two circular enclosures which were occupied by farmsteads between the 2<sup>nd</sup> century BC and 2<sup>nd</sup> century AD were excavated on land to the east of Ruskin Avenue (c. 500m east of the site). The course of Roman road 721 is thought to lie close to the line of Bradford Road although the geophysical survey did not detect any evidence of its presence within the site.

4.3 During the medieval and early modern periods the site lay in an area known as the Outwood. This was a large area of managed woodland which, from the late medieval period, supported several small scale industries. These included quarrying, charcoal burning, wood working, coal mining (possibly) and pottery manufacture. The latter is best known and several sites were investigated archaeologically from the 1960s onwards and shown to be in operation between the late 15<sup>th</sup> and 18<sup>th</sup> centuries.

The First Edition Six Inches to the Mile Ordnance Survey map identifies a dwelling on the site of the present No. 330 Bradford road as "Old Warren House" This name may refer specifically to a rabbit warren or more generally the right of warren or hunting within the Outwood. Rabbit warrens provided a source of meat and fur for clothing. Whilst present in medieval England the construction of warrens peaked in the 18<sup>th</sup> century. Archaeological evidence of a warren could include the footings of walls and traps for both rabbits and the vermin which preyed on them.

4.4 The geophysical survey has identified a number of magnetic anomalies which may represent archaeological features. These include a possible south-east to north-west linear anomaly in the western part of the site, possible north-east to south-west ridge and furrow ploughing and number of areas of enhanced magnetic responses which could represent past, possibly industrial, activity. These anomalies, along with the general archaeological potential of the site require evaluation by trial trenching.

## 5. Aim of the Specified Work

5.1 The aim of the evaluation is to gather sufficient information to establish the extent, condition, character and date (as far as circumstances permit) of any archaeological features and deposits within the proposed development area, and to record at an appropriate level, archaeological features encountered in the excavation trenches.

5.2 It is conceivable that a larger, more open area excavation may be identified as being warranted, or alternatively a wider watching brief may be required during ground-works for the development, possibly with provision for rapid salvaging recording. All possibilities will be considered depending upon the results of this exercise and it would be anticipated that if further significant fieldwork is required, then the contractor would draft the specification and agree it with the WYAAS. It is a primary aim of the specified work that all aspects should be placed in the public domain by depositing the results with the WY Historic Environment Record (Registry of Deeds, Newstead Road, Wakefield WF1 2DE)

## 6. General Instructions

### 6.1 Health and Safety

6.1.1 The archaeologist on site will naturally operate with due regard for Health and Safety regulations. This work may require the preparation of a Risk Assessment of the site, in accordance with the Health and Safety at Work Regulations. The WYAAS and its officers cannot be held responsible for any accidents or injuries that may occur to outside contractors while attempting to conform to this specification. Any Health and Safety issues which may hinder compliance with this specification should be discussed with WYAAS at the earliest possible opportunity (see section 13.2).

### 6.2 Location of Services, etc.

6.2.1 The archaeological contractors will be responsible for locating any drainage pipes, service pipes, cables *etc.* which may cross any of the trench lines, and for taking the necessary measures to avoid disturbing such services.

### 6.3 Confirmation of Adherence to Specification

6.3.1 Prior to the commencement of *any work*, the archaeological contractor must confirm adherence to this specification in writing to the WYAAS, or state (with reasons) any proposals to vary the specification. Should the contractor wish to vary the specification, then written confirmation of the agreement of the West Yorkshire Archaeology Advisory Service to any variations is required prior to work commencing. Unauthorised variations are made at the sole risk of the contractor. **Modifications presented in the form of a re-written specification/project design will not be considered by the WYAAS.** Any technical queries arising from the specification detailed below should be addressed to the WYAAS *without delay*.

### 6.4 Confirmation of Timetable and Contractors' Qualifications

6.4.1 Prior to the commencement of *any work*, the archaeological contractor **must** provide WYAAS **in writing** with:

- a projected timetable for the site work;



- details of the staff structure and numbers;
- names and CVs of key project members (the project manager, site supervisor, any proposed specialists, sub-contractors *etc.*),

6.4.2 All project staff provided by the archaeological contractor must be suitably qualified and experienced for their roles. The timetable should be adequate to allow the work to be undertaken to the appropriate professional standard, subject to the ultimate judgement of WYAAS.

## 6.5 Notification

6.5.1 WYAAS should be provided with **as much notice as possible in writing** (and certainly not less than one week) of the intention to start work. A copy of the archaeological contractor's risk assessment of the site should accompany the notification.

6.5.2 Mr David Evans, Wakefield Museums' archaeology curator, should be notified of the date of commencement of fieldwork. Contact Mr David Evans Wakefield M.D.C. Museum and Arts, Pontefract Museum, 5 Salter Row, Pontefract, WF8 1BA. Tel.: 01924 305352 ([davidevans@wakefield.gov.uk](mailto:davidevans@wakefield.gov.uk)).

6.5.3 Historic England's Regional Science Adviser, Dr Andy Hammon, should also be notified of the intention to commence fieldwork. (Tel.: 01904 601983; email: [andy.hammon@historicengland.gov.uk](mailto:andy.hammon@historicengland.gov.uk)).

## 6.6 Documentary Research

6.6.1 Prior to the commencement of *fieldwork*, the HER should be visited by either the project manager or the site supervisor, in order to gain an overview of the archaeological/historical background of the site and environs. In addition to providing a knowledge base for the work in hand, the results of this assessment may be incorporated into the contractor's report where they are considered to contribute to that report, but any extraneous material should be omitted. Please note that the HER makes a charge for consultations of a commercial nature. The results of this exercise should be used to inform the whole project. A formal desk-based report is not required and the results of this stage of work should be incorporated in the final report.

Please note the Historic Environment Record makes a charge for commercial enquires.

## 7.0 Trenching Methodology

### 7.1 Trench Size and Placement (Figure 1)

7.1.1 The work will involve the excavation of 6 50m x 2m trenches and 4 25m x 2m trenches, which can be machine-opened. The contractor should also allow for a contingency amount of 200 square metres. The use of the contingency will depend upon the results obtained in the initial trial trenching. The use of the contingency will be at the decision of the WYAAS, whose decision will be issued in writing, if necessary in retrospect after site discussions. Proposed trench locations are shown on Figure 1.

Trench No	Dimensions (m)	Area (m <sup>2</sup> )	Reason for Trench
1	50 x 2	100	To evaluate a blank area with strong magnetic background
2	25 x 2	50	To evaluate a blank area with strong magnetic background
3	25 x 2	50	To evaluate a blank area and linear trend
4	50 x 2	100	To evaluate both a strong response and discrete magnetic anomalies
5	50 x 2	100	To evaluate discrete magnetic anomalies and area of strong response
6	50 x 2	100	To evaluate and linear trend & other anomalies
7	50 x 2	100	To evaluate and linear trend & other anomalies
8	50 x 2	100	To evaluate and linear trend & other anomalies
9	25 x 2	50	To evaluate blank/ un-surveyed area
10	25 x 2	50	To evaluate blank/ un-surveyed area

Total site area: c.**20,000m<sup>2</sup>**

Total area of trenching: **800m<sup>2</sup>**

Contingency trenching: **200m<sup>2</sup>**

## 7.2 Method of Excavation

8.2.1 The trial trenches may be opened and the topsoil and recent overburden removed down to the first significant archaeological horizon in successive level spits of a **maximum** 0.2m. thickness, by the use of an appropriate machine using a wide toothless ditching blade. **Under no circumstances should the machine be used to cut arbitrary trenches down to natural deposits.** Any machine work must be carried out under direct archaeological supervision and the machine halted if significant archaeological deposits are encountered. The top of the first significant archaeological horizon may be exposed by the machine, but must then be cleaned by hand and inspected for features and then dug by hand.

7.2.2 All archaeological remains will be hand excavated in an archaeologically controlled and stratigraphic manner sufficient to meet the aims and objectives of the project. The **complete** stratigraphic sequence, down to naturally occurring deposits will be excavated and the work will investigate and record **all** inter-relationships between features. It is likely that 19<sup>th</sup>-century structures will be present in many areas of the site. These will be recorded in full and then removed in order to investigate the remainder of the sequence down to natural deposits. The contractor should make provision for the use of shoring/stepping to accomplish this if necessary. All trenches are to be the stated dimensions at their base. The following strategy will be employed:

- Linear boundary features: a minimum sample of 20% of each linear boundary feature such as ditches and trackways. Each section should be at least 1m wide and, where possible, sections will be located and recorded adjacent to the trench edge. All intersections will be investigated to determine the relationship(s) between the component features. All termini will be investigated.

- Other linear and discrete features: all stake-holes, post-holes, pits, ring ditches, kilns, and other structural/funerary/industrial features will be 50% excavated in the first instance, recorded in section, and then fully excavated. All intersections will be investigated to determine the relationship(s) between the component features. Where possible, sections will be located and recorded adjacent to the trench edge.
- Built structures: walls, floors etc will be excavated sufficient to establish their form, phasing, construction techniques. All intersections will be investigated to determine the relationship(s) between the component features.

7.2.3 All artefacts are to be retained for processing and analysis except for unstratified 20<sup>th</sup>-century material, which may be noted and discarded. Finds will be stored in secure, appropriate conditions following the guidelines in First Aid for Finds (3<sup>rd</sup> edition).

### **7.3 Method of Recording**

7.3.1 The trenches are to be recorded according to the normal principles of stratigraphic excavation. The stratigraphy of each area is to be recorded, even when no archaeological deposits have been identified.

7.3.2 Section drawings (at a minimum scale of 1:20) must include heights A.O.D. Plans (at a minimum scale of 1:50) must include O.D. spot heights for all principal strata and any features. At least one section of each trench edge, showing a representative and complete sequence of deposits from the modern ground surface to the natural geology, will be drawn.

7.3.3 The actual areas of excavation and all archaeological (and possibly archaeological) features should be accurately located on a site plan and recorded by photographs, scale drawings and written descriptions sufficient to permit the preparation of a detailed archive and report on the material. The trench locations, as excavated, will be accurately surveyed, tied into the O.S. National Grid and located on an up-to-date 1:1250 O.S. map base.

7.3.4 Except where otherwise requested, black and white photography using orthodox monochrome chemical development should be used. Film should be no faster than ISO400. Slower films should be used where possible as their smaller grain size yields higher definition images. Technical Pan (ISO 25), Pan-F (ISO50), FP4 (ISO125) and HP5 (ISO400) are recommended. The use of dye-based films such as Ilford XP2 and Kodak T40CN is unacceptable due to poor archiving qualities. Black and white photography should be supplemented by colour photography; this should be in transparency format (i.e. slides or digital photography as an acceptable alternative, see paragraph 8.3.5 below).

7.3.5 Digital photography: as an alternative to colour transparency photography, good quality digital photography may be supplied, using cameras with a minimum resolution of 10 megapixels. Digital photography should follow the guidance given by Historic England in Digital Image Capture and File Storage: Guidelines for Best Practice, July 2015. Note that conventional black and white print photography is still required and constitutes the permanent record. Digital images will only be acceptable as an

alternative to colour slide photography if each image is supplied in both JPEG and TIFF versions. The latter as an uncompressed 8-bits per channel TIFF version 6 file of not less than 25Mbs (See section 2.3 of the Historic England guidance). The contractor must include metadata embedded in the TIFF file. The metadata must include the following: the commonly used name for the site being photographed, the relevant centred OS grid coordinates for the site to at least six figures, the relevant township name, the date of photograph, the subject of the photograph, the direction of shot and the name of the organisation taking the photograph. **Any digital images are to be supplied to WYAAS on gold CDs by the archaeological contractor accompanying the hard copy of the report.**

#### 7.4 Use of Metal Detectors

8.4.1 Spoil heaps are to be scanned for non-ferrous metal artefacts using a metal detector capable of making this discrimination, operated by an experienced metal detector user (if necessary, operating under the supervision of the contracting archaeologist). Modern artefacts are to be noted but not retained (19<sup>th</sup>-century material and earlier should be retained.)

7.4.2 If a non-professional archaeologist is to be used to carry out the metal-detecting, a formal agreement of their position as a sub-contractor working under direction must be agreed in advance of their use on site. This formal agreement will apply whether they are paid or not. To avoid financial claims under the Treasure Act a suggested wording for this formal agreement with the metal detectorist is: "In the process of working on the archaeological investigation at [*location of site*] between the dates of [*insert dates*], [*name of person contributing to project*] is working under direction or permission of [*name of archaeological organisation*] and hereby waives all rights to rewards for objects discovered that could otherwise be payable under the Treasure Act 1996."

#### 7.5 Environmental Sampling Strategy

8.5.1 Bulk samples must be taken from **all** securely stratified deposits using a strategy which combines systematic and judgement sampling, but which also follows the methodologies outlined in the English Heritage (2011) 'Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (Second Edition)' guidance

7.5.2 Samples for specialist environmental analysis and scientific dating (soil profiles, archaeomagnetic dating, dendrochronology etc.) should be taken if suitable material is encountered during the excavation. The Historic England Science Advisor should be consulted (Dr Andy Hammon, (Tel.: 01904 601983; email: andy.hammon@historicengland.gov.uk)) and provision should be made for an appropriate specialist(s) to visit the site, take samples and discuss the sampling strategy, if necessary.

#### 7.6 Conservation Strategy

8.6.1 A conservation strategy must be developed in collaboration with a recognised laboratory. All finds must be assessed in order to recover information that will contribute to an understanding of their deterioration and hence preservation potential, as well as identifying potential for further investigation. Furthermore, all finds must be stabilised and packaged in accordance with the requirements of the receiving

museum. As a guiding principle, only artefacts of a “displayable” quality would warrant full conservation, but metalwork and coinage from stratified contexts would be expected to be x-rayed if necessary, and conservation costs should also be included as a contingency.

## **7.7 Human Remains**

8.7.1 Any human remains that are discovered must initially be left *in-situ*, covered and protected. WYAAS will be notified at the earliest opportunity. If removal is necessary the remains must be excavated archaeologically in accordance with the *Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England* published by English Heritage (2005), a valid Ministry of Justice licence, if appropriate, and any local environmental health regulations.

## **7.8 Treasure Act**

8.8.1 The terms of the Treasure Act 1996, as amended, must be followed with regard to any finds that might fall within its purview. Any finds must be removed to a safe place and reported to the local coroner as required by the procedures as laid down in the “Code of Practice”. Where removal cannot be effected on the same working day as the discovery, suitable security measures must be taken to protect the finds from theft.

## **7.9. Unexpectedly Significant or Complex Discoveries**

8.9.1 Should there be unexpectedly significant or complex discoveries made that warrant, in the professional judgement of the archaeologist on site, more detailed recording than is appropriate within the terms of this specification, then the archaeological contractor should urgently contact the WYAAS with the relevant information to enable them to resolve the matter with the developer.

## **8. Access/Monitoring Arrangements**

8.1.1 The representative of the WYAAS will be afforded access to the site at any reasonable time. It is usual practice that the visit is arranged in advance, but this is not always feasible. The WYAAS’ representative will be provided with a site tour and an overview of the site by the senior archaeologist present and should be afforded the opportunity to view all trenches, any finds made that are still on site, and any records not in immediate use. It is anticipated that the records of an exemplar context that has previously been fully recorded will be examined. Any observed deficiencies during the site visit are to be made good to the satisfaction of the WYAAS’ representative, by the next agreed site meeting. Access is also to be afforded at any reasonable time to Historic England’s Regional Archaeological Science Advisor.

8.1.2 Please note that WYAAS now make a charge for site monitoring visits. An invoice will be raised on the archaeological contractor. One monitoring visit will be charged for this project. Please contact us for the current charge.

8.1.3 Photographs taken by the WYAAS during the course of monitoring visits may be used in the service’s social media feeds to further our programme to inform the public of current archaeological work in the county.

## **9. Excavation Archives Deposition.**

**9.1** Before commencing any fieldwork, the archaeological contractor must contact the relevant District museum archaeological curator to determine the museum's requirements for the deposition of an excavation archive. In this case the contact is Mr David Evans Wakefield M.D.C. Museum and Arts, Pontefract Museum, 5 Salter Row, Pontefract, WF8 1BA. telephone 01924 305352; Museums Curatorial and Collections Officer: ([davidevans@wakefield.gov.uk](mailto:davidevans@wakefield.gov.uk)). Agreement for deposition should be confirmed in writing by the archaeological contractor; this correspondence is to be copied to the WYAAS.

**9.2** It is the policy of Wakefield Museums to accept complete excavation archives, including primary site records and research archives and finds, from all excavations carried out in the District that it serves.

**9.3** It is the responsibility of the archaeological contractor to endeavour to obtain consent of the landowner, in writing, to the deposition of finds with Wakefield Museums.

**9.4** It is the responsibility of the archaeological contractor to meet Wakefield Museums' requirements with regard to the preparation of excavation archives for deposition.

## **10. Post-Excavation Analysis and Reporting**

### **10.1 Requirement for Further Fieldwork**

10.1.1 It is anticipated that upon (or approaching) completion of fieldwork a meeting with WYAAS will be arranged by the archaeological contractor, either at the WYAAS offices or on site, to discuss the results and agree what, if any, additional work may be warranted. The developer should also be invited to attend this meeting. The meeting may take the form of a telephone discussion at WYAAS' discretion. Following the meeting the archaeological contractor will either produce a report (if no further archaeological work is warranted), or draft a specification (if further work is required) to be submitted to WYAAS for written approval prior to the commencement of any further work.

10.1.2 If further fieldwork is required, the results of the evaluation will be integrated into an overall report encompassing all stages of work. However, if a different contractor is employed by the developer to undertake subsequent works, then a full, formal evaluation report (see paragraph 10.3 below) should be prepared and accepted by WYAAS before further fieldwork commences.

### **10.2 Finds and Samples**

10.2.1 On completion of the fieldwork, any samples taken shall be processed and any finds shall be cleaned, identified, assessed/analysed, dated (if possible), marked (if appropriate) and properly packed and stored in accordance with the requirements of national guidelines.

10.2.2 Samples should be processed for the recovery of artefactual material, animal/fish/human bones, industrial residues (including hammerscale), shell, molluscs, charcoal and mineralised plant remains as a minimum. 'Specialist' samples

(e.g. monoliths, cores, plant/invertebrate macrofossils) should be processed separately as appropriate.

10.2.3 Material suitable for scientific dating (e.g. charcoal) should be identified to species and assessed for suitability by an environmental specialist prior to submission to a dating laboratory. Any human remains submitted for C14 dating should also have carbon ( $\delta^{13}\text{C}$ ) and nitrogen isotope analysis carried out by the radiocarbon laboratory.

10.2.4 All finds and biological material must be analysed by a qualified and experienced specialist.

10.2.5 Following identification, finds of 20<sup>th</sup>-century date should be noted, quantified and summarily described, but can then be discarded if appropriate. All finds which are of 19<sup>th</sup> century or earlier date should be retained and archived.

### 10.3 Field Archive

10.3.1 A fully indexed field archive shall be compiled consisting of all primary written documents, plans, sections, photographic negatives and a complete set of labelled photographic prints/slides. Standards for archive compilation and transfer should conform to those outlined in *Archaeological Archives – a guide to best practice in creation, compilation, transfer and curation* (Archaeological Archives Forum, 2007). The contractor should also take account of any additional requirements imposed by the recipient museum (see section 9.1 above). An index to the field archive is to be deposited with the West Yorkshire Archaeology Advisory Service (preferably as an appendix in the report).

10.3.2 Prints may be executed digitally from scanned versions of the film negatives, and may be manipulated to improve print quality (but **not** in a manner which alters detail or perspective). **All digital prints, including those in the report, must be made on paper and with inks which are certified against fading or other deterioration for a period of 75 years or more when used in combination. If digital printing is employed, the contractor must supply details of the paper/inks used in writing to the WY Archaeology Advisory Service, with supporting documentation indicating their archival stability/durability.** Written confirmation that the materials are acceptable must have been received from the WYAAS prior to the commencement of work on site.

10.3.3 The original archive is to accompany the deposition of any finds, providing the landowner agrees to the deposition of finds in a publicly accessible archive (see para. 8.4 above). In the absence of this agreement the field archive (less finds) is to be deposited with the West Yorkshire Archaeology Advisory Service.

### 10.4 Report Format and Content

10.4.1 A report should be produced, which should include background information on the need for the project, a description of the methodology employed, and a full description and interpretation of results produced. It is not envisaged that the report is likely to be published, but it should be produced with sufficient care and attention to detail to be of academic use to future researchers.

10.4.2 Location plans should be produced at a scale which enables easy site identification and which depicts the full extent of the site investigated (a scale of 1:50,000 is not regarded as appropriate unless accompanied by a more detailed plan or plans). Site plans should be at an appropriate scale showing trench layout (as dug), features located and, where possible, predicted archaeological deposits. Upon completion of each evaluation trench all sections containing archaeological features will be drawn. Section drawings (at a minimum scale of 1:20) must include heights O.D. Plans (at a minimum scale of 1:50) must include O.D. spot heights for all principal strata and any features. Where no archaeological deposits are encountered at least one long section of each trench will be drawn.

10.4.3 Artefact analysis is to include the production of a descriptive catalogue, quantification by context and discussion/interpretation if warranted, with finds critical for dating and interpretation illustrated.

10.4.4 Environmental analysis is to include identification of the remains, quantification by context, discussion/interpretation if warranted, and a description of the processing methodology. Radiocarbon results must be presented in full (laboratory sample number, conventional radiocarbon age, delta C13 value, calibration programme). Copies of the laboratory-issued dating certificates must be included as an appendix to the report.

10.4.5 Details of the style and format of the report are to be determined by the archaeological contractor, but should include a full bibliography, a quantified index to the site archive, and as an appendix, a copy of this specification.

## 10.5 Summary for Publication

10.5.1 The attached summary sheet should be completed and submitted to the WYAAS for inclusion in the summary of archaeological work in West Yorkshire to be published on WYAAS' website.

## 10.6 Publicity

If the project is to be publicised in any way (including media releases, publications etc.), then it is expected that the WYAAS will be given the opportunity to consider whether it wishes its collaborative role to be acknowledged, and if so, the form of words used will be at the WYAAS' discretion. See also 8.1.3 above.

## 11. Report Submission and Deposition with the HER

11.1 **A hard copy of the report (including a digital copy on gold disk) is to be supplied directly to the WYAAS within a period of two months following completion of fieldwork**, unless specialist reports are awaited. In the latter case a revised date should be agreed with the WYAAS. Completion of this project and advice from WYAAS on an appropriate mitigation strategy are dependant upon receipt by WYAAS of a satisfactory report which has been prepared in accordance with this specification. Any comments made by WYAAS in response to the submission of an unsatisfactory report will be taken into account and will result in the reissue of a suitably edited report to all parties, within a timescale which has been agreed with WYAAS.



11.2 The report will be supplied on the understanding that it will be added to the West Yorkshire Historic Environment Record where it will be publicly accessible once deposited unless confidentiality is explicitly requested, in which case it will become publicly accessible six months after deposition.

11.3 Copyright - Please note that by depositing this report, the contractor gives permission for the material presented within the document to be used by the WYAAS, in perpetuity, although the Contractor retains the right to be identified as the author of all project documentation and reports as specified in the *Copyright, Designs and Patents Act 1988* (chapter IV, section 79). The permission will allow the WYAAS to reproduce material, including for commercial use by third parties, with the copyright owner suitably acknowledged.

11.4 A copy of the final report (in .pdf format) shall also be supplied to Historic England's Regional Science Advisor ([Andy.Hammon@HistoricEngland.org.uk](mailto:Andy.Hammon@HistoricEngland.org.uk)).

11.5 The West Yorkshire HER supports the Online Access to Index of Archaeological Investigations (OASIS) project. The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large-scale developer funded fieldwork. The archaeological contractor must therefore complete the online OASIS form at <http://ads.ahds.ac.uk/project/oasis/>. Contractors are advised to contact the West Yorkshire HER officer prior to completing the form. Once a report has become a public document by submission to or incorporation into the HER, the West Yorkshire HER may place the information on a web-site. Please ensure that you and your client agree to this procedure in writing as part of the process of submitting the report to the case officer at the West Yorkshire HER.

## 12. General Considerations

### 12.1 Authorised Alterations to Specification by Contractor

12.1.1 It should be noted that this specification is based upon records available in the West Yorkshire Historic Environment Record and on a brief examination of the site by the WYAAS. Archaeological contractors submitting tenders should carry out an inspection of the site prior to submission. If, on first visiting the site or at any time during the course of the recording exercise, it appears in the archaeologist's professional judgement that

- i) a part or the whole of the site is not amenable to recording as detailed above, and/or
- ii) an alternative approach may be more appropriate or likely to produce more informative results, and/or

then it is expected that the archaeologist will contact WYAAS as a matter of urgency. If contractors have not yet been appointed, any variations which the WYAAS considers to be justifiable on archaeological grounds will be incorporated into a revised specification, which will then be re-issued to the developer for redistribution to the tendering contractors. If an appointment has already been made and site work is ongoing, WYAAS will resolve the matter in liaison with the developer and the Local Planning Authority.

## **12.2 Unauthorised Alterations to Specification by Contractor**

12.2.1 It is the archaeological contractor's responsibility to ensure that they have obtained WYAAS' consent in writing to any variation of the specification prior to the commencement of on-site work or (where applicable) prior to the finalisation of the tender. Unauthorised variations may result in WYAAS being unable to recommend determination of the planning application to the Local Planning Officer based on the archaeological information available and are therefore made solely at the risk of the contractor.

## **12.3 Technical Queries**

Similarly, any technical queries arising from the specification detailed above, should be addressed to WYAAS without delay.

## **12.4 Valid Period of Specification**

This specification is valid for a period of one year from date of issue. After that time it may need to be revised to take into account new discoveries, changes in policy or the introduction of new working practices or techniques.

**West Yorkshire Archaeology Advisory Service  
David Hunter**

**January 2016**

**Historic Environment Record  
West Yorkshire Archaeology Advisory Service  
Registry of Deeds  
Newstead Road  
Wakefield  
WF1 2DE**

**Telephone: (01924) 306 798  
Fax: (01924) 306810  
E-mail: David.Hunter@wyjs.org.uk**

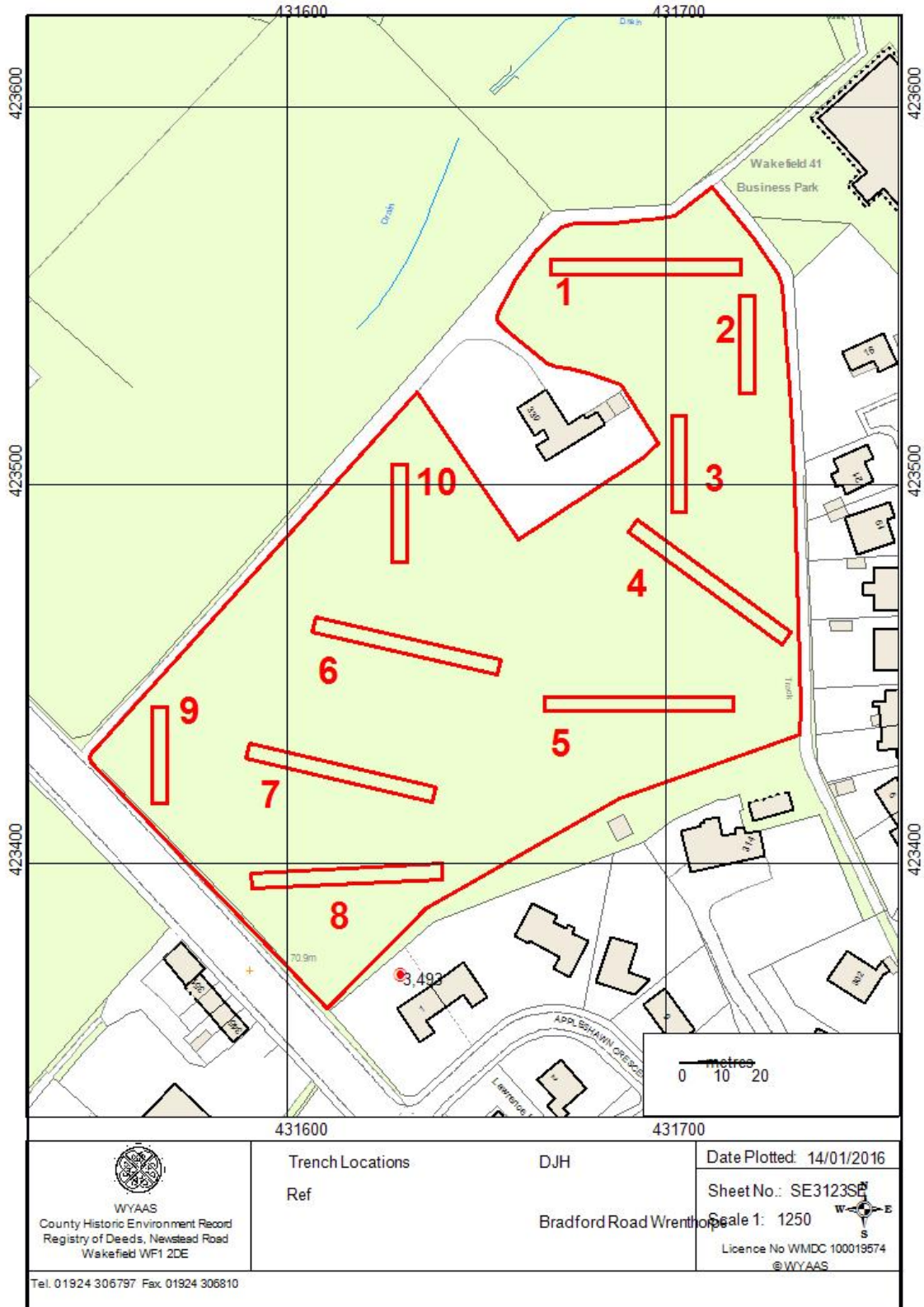


Figure 1 Trench Locations

**Appendix 2: Inventory of primary archive**

Phase	File/Box No	Description	Quantity
Evaluation	File no.1	WSI	1
		Risk Assessment	1
		Trench Record Sheets	10
		Context Card (nos. 402 – 405 and 801 – 804)	7
		Permatrace Sheets	4
		Photograph record sheet	2
		Daily site recording form	2
		Finds and Samples Record	1

### Appendix 3: Concordance of contexts yielding artefacts or environmental remains

Context	Trench	Group	Description	Artefacts and environmental samples
100	1	-	Topsoil	
101	1	-	Natural	
102	1	-	Modern disturbance	
200	2	-	Topsoil	
201	2	-	Natural	
300	3	-	Topsoil	
301	3	-	Natural	
400	4	-	Topsoil	
401	4	-	Natural	
402	4	-	Cut of ditch	
403	4	-	Fill of 402	Sample 40
404	4	-	Cut of pit	
405	4	-	Fill of 404	Modern pottery
500	5	-	Topsoil	
501	5	-	Natural	
502	5	-	Cut of plough furrow	
503	5	-	Fill of 502	
600	6	-	Topsoil	
601	6	-	Subsoil	
602	6	-	Natural	
700	7	-	Topsoil	
701	7	-	Subsoil	
702	7	-	Natural	
800	8	-	Topsoil	
801	8	-	Subsoil	
802	8	-	Natural	
803	8	-	Cut of linear?	
804	8	-	Fill of 803	Clay pipe, CBM
900	9	-	Topsoil	
901	9	-	Subsoil	
902	9	-	Natural	
1000	10	-	Topsoil	
1001	10	-	Natural	

**Appendix 4: Trench tables**

Table 3. Trench 1

<b>General Description</b>		<b>Orientation</b>		E-W	
Trench contained no archaeology		<b>Average Depth (m)</b>		0.5	
		<b>Width (m)</b>		2.00	
		<b>Length (m)</b>		47.00	
<b>Contexts</b>					
<b>Context</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Description</b>
100	Layer	-	-	0.4	Topsoil
101	Layer	-	-	-	Natural
102	Deposit	11	2 (exc)		Modern Disturbance – an area containing modern pottery, firm, mid red clay; suggesting burning. Two disused cables ran through this material.

Table 4. Trench 2

<b>General Description</b>		<b>Orientation</b>		N-S	
Trench contained no archaeology		<b>Average Depth (m)</b>		0.45	
		<b>Width (m)</b>		2.00	
		<b>Length (m)</b>		25.00	
<b>Contexts</b>					
<b>Context</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Description</b>
200	Layer	-	-	0.45	Topsoil
201	Layer	-	-	-	Natural

Table 5. Trench 3

<b>General Description</b>				<b>Orientation</b>	N-S
Trench contained no archaeology				<b>Average Depth (m)</b>	0.42
				<b>Width (m)</b>	2.00
				<b>Length (m)</b>	25.00
<b>Contexts</b>					
<b>Context</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Description</b>
300	Layer	-	-	0.30	Topsoil
301	Layer	-	-	-	Natural

Table 6. Trench 4

<b>General Description</b>				<b>Orientation</b>	E-W
Trench contained one SW-NE ditch and one pit				<b>Average Depth (m)</b>	0.5
				<b>Width (m)</b>	2.00
				<b>Length (m)</b>	50.00
<b>Contexts</b>					
<b>Context</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Description</b>
400	Layer	-	-	0.45	Topsoil
401	Layer	-	-	-	Natural
402	Cut	2.00 (exc)	0.82	0.38	V-shaped ditch, steep sloping sides and a pointed base
403	Fill of 402	2.00 (exc)	0.82	0.38	Pale blue brown sandy clay, moderate small – medium sub-angular sandstone
404	Cut	1.75 (exc)	1.1 (exc)	0.16	Sub-circular pit, shallow sloping sides, rounded base
405	Fill of 404	1.75 (exc)	1.1 (exc)	0.16	Mid brown sandy clay, moderate small sub-angular sandstone

Table 7. Trench 5

<b>General Description</b>		<b>Orientation</b>		E-W		
Trench contained one plough furrow aligned n-s		<b>Average Depth (m)</b>		0.45		
		<b>Width (m)</b>		2.00		
		<b>Length (m)</b>		50.00		
<b>Contexts</b>						
<b>Context</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Description</b>	
500	Layer	-	-	0.45	Topsoil	
501	Layer	-	-	-	Natural	
502	Cut	2.00 (exc)	1.00	0.10	U-shaped furrow, shallow sloping sides, rounded base	
503	Fill of 502	2.00 (exc)	1.00	0.10	Mid-grey-brown silty clay, occasional small stone	

Table 8. Trench 6

<b>General Description</b>		<b>Orientation</b>		E-W		
Trench contained no archaeology		<b>Average Depth (m)</b>		0.55		
		<b>Width (m)</b>		2.00		
		<b>Length (m)</b>		50.00		
<b>Contexts</b>						
<b>Context</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Description</b>	
600	Layer	-	-	0.40	Topsoil	
601	Layer	-	-	-	Natural	
602	Layer	-	-	0.5m	Subsoil – found only within the W end of the trench	



Table 9. Trench 7

<b>General Description</b>				<b>Orientation</b>	SE-NW
Trench contained no archaeology				<b>Average Depth (m)</b>	0.5
				<b>Width (m)</b>	2.00
				<b>Length (m)</b>	50.00
<b>Contexts</b>					
<b>Context</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Description</b>
700	Layer	-	-	0.4	Topsoil
701	Layer	-	-	-	Natural
702	Layer	-	-	0.4	Subsoil – found only within the NW of the trench

Table 10. Trench 8

<b>General Description</b>				<b>Orientation</b>	NE-SW
Trench contained no archaeology				<b>Average Depth (m)</b>	0.68
				<b>Width (m)</b>	2.00
				<b>Length (m)</b>	50.00
<b>Contexts</b>					
<b>Context</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Description</b>
800	Layer	-	-	0.5	Topsoil
801	Layer	-	-	-	Subsoil – present only within the middle of the trench
802	Layer	-	-	-	Natural
803	Cut	2.00 (exc)		0.5	One edge of a possible cut, although more likely to be a natural 'dip' in the ground that has been filled
804	Deposit	2.00 (exc)		0.5	Mid orange-grey-brown clay with frequent sub-angular stone

Table 11. Trench 9

<b>General Description</b>				<b>Orientation</b>	N-S
Trench contained no archaeology				<b>Average Depth (m)</b>	0.55
				<b>Width (m)</b>	2.00
				<b>Length (m)</b>	25.00
<b>Contexts</b>					
<b>Context</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Description</b>
900	Layer	-	-	0.35	Topsoil
901	Layer	-	-	0.15	Subsoil
902	Layer	-	-	-	Natural

Table 12. Trench 10

<b>General Description</b>				<b>Orientation</b>	NE-SW
Trench contained no archaeology				<b>Average Depth (m)</b>	0.50
				<b>Width (m)</b>	2.00
				<b>Length (m)</b>	25.00
<b>Contexts</b>					
<b>Context</b>	<b>Type</b>	<b>Length (m)</b>	<b>Width (m)</b>	<b>Depth (m)</b>	<b>Description</b>
1000	Layer	-	-	0.50	Topsoil
1001	Layer	-	-	-	Natural

## **Bibliography**

ASWYAS, 2011, Archaeological Recording Manual, ASWYAS (unpubl.)

British Geological Survey, 2016, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>  
(viewed May 2016)

CIfA, 2014, *Standard and Guidance for Archaeological Field Evaluation*. Chartered Institute for Archaeologists

French, D. H., 1971, 'An Experiment in Water Sieving', *Anatolian Studies* 21, 59-64

Historic England, 2008, *Management of Research Projects in the Historic Environment. Archaeological Excavation (PPN3)*

Whittingham, M., 2014, Bradford Road, Wrenthorpe, Archaeological Geophysical Survey, Phase Site Investigations