



# Newburgh Works Bradwell

Archaeological Evaluation (Phase 2)



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## Summary

Wessex Archaeology was commissioned by ECUS Ltd to undertake the archaeological evaluation of a 2.6 ha parcel of land located in Bradwell, Hope Valley, Derbyshire. At the time of the evaluation, the land was occupied by industrial units of the Newburgh Engineering Co., with the trenching occurring within existing buildings.

Fourteen trial trenches were excavated, although it was not possible to penetrate beneath the modern overburden in four. All of the remaining ten trenches proved archaeologically blank, although the horizon of likely archaeological preservation had been destroyed by truncation in three. The potential archaeological horizon seemed best preserved in the west and south of the site. An undated peat-like deposit was noted in one trench; loose dark sandy deposits, of likely industrial origin, were encountered in the central part of the site, where they had probably been used to level up the site's natural descent to the east.

The results of the trenching correlate well with an earlier evaluation programme: neither encountered any archaeological remains and both reported better preservation of the likely archaeological horizon in the west and south of the site. The results of the trenching also correlate with a borehole survey, with both investigations encountering thick natural deposits of mixed rocky clays and gravels underlying the site.

The archive resulting from the evaluation is currently held at the offices of Wessex Archaeology in Sheffield. A bound copy of this report (with PDF/A on CD) will be submitted to the Derbyshire HER and Peak District National Park Authority HBSMR and the OASIS record completed, including an upload of the project report.

## Acknowledgements

Wessex Archaeology would like to thank ECUS Ltd for commissioning the archaeological evaluation, in particular Dr Alex Cassels. Wessex Archaeology is also grateful for the advice of Natalie Ward, Senior Conservation Archaeologist, who monitored the project for the Peak District National Park Authority, and to Metropolitan Demolition Ltd for their cooperation and help on site.

The fieldwork was directed by Emma Carter, with the assistance of Max Higgins, Tom Holt, Jonathan Landless, Jenni Milochis, Ben Radford, Andy Swann and Chris Warburton. This report was written by Patrick Daniel and edited by Andrew Norton. The project was managed by Andrew Norton on behalf of Wessex Archaeology.



# Newburgh Works, Netherside, Bradwell

## Archaeological Evaluation (Phase 2)

### 1 INTRODUCTION

#### 1.1 Project and planning background

- 1.1.1 Wessex Archaeology was commissioned by ECUS Ltd to undertake the archaeological evaluation of a 2.6 ha parcel of land located in Bradwell, Hope Valley, Derbyshire, S33 9JS, centred on NGR 417408 381398 (hereafter 'the Site') (Fig. 1).
- 1.1.2 The proposed development comprises demolition of existing industrial units, and the construction of 55 dwellings with associated landscaping and drainage/access works etc. The archaeological evaluation was undertaken to meet Conditions 5 and 6 of the planning decision notice (NP/DDD/0815/0779) granted to the Peak District National Park Authority (PDNPA). Natalie Ward, Senior Conservation Archaeologist at the PDNPA, stated that an evaluation was required to define the character, extent and significance of any archaeological remains within the Site, and produced a brief for such works (PDNPA 2016).
- 1.1.3 All works were undertaken in accordance with a written scheme of investigation (WSI) which detailed the aims, methodologies and standards to be employed in order to undertake the evaluation (ECUS Ltd 2016). Natalie Ward, Senior Conservation Archaeologist, approved the WSI, on behalf of the PDNPA, prior to fieldwork commencing.
- 1.1.4 The evaluation comprised the excavation of 14 trial trenches and was undertaken 03–28 April 2018. It marked the second phase of trenching on the Site, the earlier also having been undertaken by Wessex Archaeology (2016, and details below).

#### 1.2 Scope of the report

- 1.2.1 The purpose of this report is to provide a detailed description of the results of the evaluation, to interpret the results within a local, regional or wider archaeological context and assess whether the aims of the evaluation have been met.
- 1.2.2 The presented results will provide further information on the archaeological resource that may be impacted by the proposed development and facilitate an informed decision with regard to the requirement for, and methods of, any further archaeological mitigation.

#### 1.3 Location, topography and geology

- 1.3.1 The Site is on land to the east of Netherside, Bradwell, Hope Valley, Derbyshire. At the time of the evaluation, the land was occupied by industrial units of the Newburgh Engineering Co., with the trenching occurring within existing buildings (cover; Pl. 1).
- 1.3.2 The Site is bounded to the west by Netherside (the main street through Bradwell) and to the north and south by residential properties. The meandering course of Bradwell Brook, which flows northwards towards its confluence with the River Noe, forms the eastern margin of the Site. Beyond the brook to the east lie grazing fields.



- 1.3.3 The Site occupies land that descends to the east. Ground level at the western limit of the Site (Netherside) lies at approximately 181.50 m aOD (above Ordnance Datum). From there the ground drops at first relatively steeply, and then more gently to the eastern Site limit, which lies at approximately 175 m aOD.
- 1.3.4 The underlying geology is mapped as mudstone, siltstone and sandstone of the Bowland Shale Formation, overlaid with superficial deposits of clay, silt and gravel alluvium (British Geological Survey online viewer).

## **2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND**

### **2.1 Introduction**

- 2.1.1 The WSI presented a 'historic and archaeological baseline' (ECUS Ltd 2016), which is summarised below.

### **2.2 Archaeological and historical context**

- 2.2.1 The development site has been identified as an area of archaeological potential. The Site itself contains the approximate location of a findspot of two Neolithic polished stone axes. Further Neolithic artefacts were found during the course of the excavation of the nearby Grey Ditch monument (Guilbert 2013), The Grey Ditch is a Scheduled Monument (1017662), and lies approximately 150 m to the north-east, where it follows an east–west course. The monument comprises a linear bank and ditch and has been interpreted as an early medieval boundary marker. As a SAM the Grey Ditch is a statutorily protected heritage asset and is of high significance. There is the potential for related remains to survive at the site of the proposed development. A small part of the western part of the development Site (Newburgh Hall and the old Police Station) lies within the Bradwell Conservation Area (ECUS Ltd 2016, 1–2).
- 2.2.2 Historic mapping shows the Site as undeveloped fields until the 1950s, with the Newburgh Engineering Works having been built by the time of the 1964 25" Ordnance Survey map.

### **2.3 Previous investigations related to the proposed development**

#### *Archaeological evaluation (2016)*

- 2.3.1 Ten trenches were dug on the Site in 2016 (Wessex Archaeology 2016), with no archaeological remains encountered. Within the northern and eastern parts of the Site, i.e., towards the channel of the Bradwell Brook, the natural substrate was found to be buried to a depth of up to 1.6 m below ground level (BGL) by redeposited natural and made ground. This was thought to be a product of the levelling of the natural slope prior to the construction of the engineering works. The natural surface was, overall, less deeply buried in the west and south of the Site (c. 0.6 m BGL). A buried topsoil was found in these areas, sealed by aggregate hardcore and concrete.
- 2.3.2 The Site was evaluated in two phases so that the works could be synchronised with the staggered decommissioning of different parts of the Newburgh facilities.

## **3 AIMS AND OBJECTIVES**

### **3.1 General aims**

- 3.1.1 The principal aim of the evaluation, as stated in the WSI, was to gain information about the archaeological resource within the Site (including its presence or absence, character,





extent, date, integrity, state of preservation and quality), in order to make an assessment of its merit in the appropriate context (ECUS Ltd 2016).

3.1.2 The specific aims of the evaluation were to:

- to identify and record any archaeological deposits, structures or built fabric within the identified areas of interest;
- to determine the extent, condition, character, significance and date of any encountered or exposed archaeological remains;
- to accurately record the location and stratigraphy of areas excavated during groundworks;
- to recover artefacts disturbed by the Site works;
- to recover samples from sealed waterlogged contexts for environmental processing;
- to prepare a comprehensive record and report of archaeological observations during the Site work; and
- to identify mitigation strategies to ensure the recording, preservation or management of archaeological remains within the Site.

3.1.3 The objectives of the project were:

- to preserve through record any archaeological remains impacted by the proposed works;
- to identify the extent and nature of previous phases of groundworks at the site associated with the construction of Newburgh Engineering;

3.1.4 and

- to contribute to the understanding of the pre-industrial landscape at Bradwell with particular focus on its role within the wider context of known prehistoric to early medieval activity.

## **4 METHODS**

### **4.1 Introduction**

4.1.1 All works were undertaken in accordance with the detailed methods set out within the WSI (ECUS Ltd 2016) and in general compliance with the standards outlined in ClfA guidance (ClfA 2014a). The methods employed are summarised below.

### **4.2 Fieldwork methods**

#### *Trench setting out and excavation*

4.2.1 Due to the location of the Site within a built-up area (and with all but one of the proposed trenches located in standing buildings), it was not possible to use a dGPS to set out the trenches. Instead, they set out with reference to points on the extant buildings using surveyors' tapes. In the event, the presence of thick concrete machine bases meant that





the as-dug positions of many of the trenches differed from that proposed in the WSI. The trench numbering scheme continued that used for the 2016 phase 1 works.

- 4.2.2 Trenches 12, 13 and 25 could not be dug due to the proximity of electrical services.
- 4.2.3 The positions of the excavated trenches are shown on Fig. 1.
- 4.2.4 Fourteen trial trenches were excavated. Five measured 12 m x 2 m; the remainder were slightly smaller. The trenches were dug by a 360° mechanical excavator under the constant supervision and instruction of the monitoring archaeologist.
- 4.2.5 Due to ground conditions, a pneumatic breaker and toothed bucket were used to open the trenches, with a toothless bucket used to remove softer underlying material. Machine excavation generally proceeded until natural geology was exposed, although three trenches could not be excavated to the level of the natural as it was not possible to penetrate the overlying concrete.
- 4.2.6 Spoil derived from machine stripping was visually scanned for the purposes of finds retrieval, although no artefacts were observed.
- 4.2.7 Trenches completed to the satisfaction of the client and Natalie Ward were backfilled using excavated materials in the order in which they were excavated, and left level on completion. No other reinstatement or surface treatment was undertaken.

#### *Recording*

- 4.2.8 All exposed deposits were recorded using Wessex Archaeology's *pro forma* recording system. A complete drawn record of excavated trenches was made including both plans and sections drawn to appropriate scales and tied to the Ordnance Survey (OS) National Grid.
- 4.2.9 Three temporary benchmarks were set out on the Site using a Leica GNSS connected to the SmartNet system. An optical level was then used to record the Ordnance Datum (OD: Newlyn) heights of the tops and bases of the excavated trenches, with levels added to plans.
- 4.2.10 A full photographic record was made using digital cameras equipped with an image sensor of not less than 10 megapixels. Digital images have been subject to managed quality control and curation processes, which has embedded appropriate metadata within the image and will ensure long term accessibility of the image set.

### **4.3 Artefactual and environmental strategies**

- 4.3.1 Appropriate strategies for the recovery, processing and assessment of artefacts and environmental samples were in place as detailed in the WSI (ECUS Ltd 2016), although in the event no artefacts or samples were collected.

### **4.4 Monitoring**

- 4.4.1 Natalie Ward monitored the evaluation on behalf of the PDNPA. Any variations to the WSI, if required to better address the project aims, were agreed in advance with both the client and Natalie Ward.



## 5 ARCHAEOLOGICAL RESULTS

### 5.1 Introduction

- 5.1.1 No archaeological remains were observed in any of the trial trenches (Fig. 1). A detailed summary of the deposits encountered in each trench is presented in Appendix 1.
- 5.1.2 Concrete overlying aggregate hardcore were the uppermost deposits in all of the trenches. The deposits which underlay the concrete and hardcore varied across the Site. The natural geological horizon was reached in ten trenches.
- 5.1.3 All but one of the trenches were located within standing buildings. For the purpose of this report, these buildings have been numbered 1–5 (Fig. 1). As there is an apparent correlation between the nature of the deposits and the building within which they were located, the following section is structured according to building number.

### 5.2 Building 1: trenches 12, 13 and 25

- 5.2.1 These trenches could not be dug due to the proximity of live electrical services

### 5.3 Building 2: trenches 14–18

- 5.3.1 Within these trenches, the basal natural deposit presented as a heterogeneous dark orange/brown gravelly clay with frequent large rock fragments (Pl. 2). Following consultation with the Wessex Archaeology geoarchaeological team, this has been interpreted as probable solifluction head material (Richard Payne pers. comm.), an interpretation that is supported by a pre-existing borehole survey (ARP Geotechnical Ltd 2015). This material was typically encountered at c. 1.2 m BGL in each trench in building 2 (ie, c. 175 m aOD). Exploratory sondages within four of the five trenches established that this material was over 2.13 m thick, ie, it continued for more than 3.3 m BGL. The basal natural deposit was overlaid with an orangey brown sandy silty clay of probable alluvial/colluvial origin in all of the trenches in building 2 (Pl. 2). In all trenches save trench 14, a c. 0.2 m thick dark sandy clay buried soil was recorded sealing the subsoil (Pl. 3). The buried soil had a clear lower boundary, and as such was probably anthropogenic in origin (Richard Payne pers. comm.).

### 5.4 Building 3: trenches 19, 21 and 22

- 5.4.1 Within building 3, the basal natural presented as a yellowish grey gravelly sandy clay with frequent large rock fragments (Pl. 4). This too would appear to be a solifluction deposit; it was 'cleaner' than that seen in building 2. The material lay at c. 2 m BGL (c. 174.60 m aOD) and was more than 1 m thick. In all of the trenches this was overlain with a loose/friable mottled black and brown sandy deposit, occasionally containing scraps of rusted metal, which is thought to be an industrial by-product (Pl. 4 and 5). This material was sealed by first hardcore and then concrete. Within building 3, therefore, there was no evidence of the subsoil–buried soil sequence observed across building 2.

### 5.5 Building 4: trenches 20, 23 and 24

- 5.5.1 The level of the natural geological substrate could not be reached in building 4 due to the nature of the overlying material, which proved impenetrable to the deployed machinery. The ground surface in all trenches was reinforced concrete, with a further concrete surface encountered at c. 1 m BGL in two of the trenches and 0.32 m BGL in the third. The level of the lower concrete in the two deeper trenches (c. 174.95 m aOD) corresponds with that of the exterior yard immediately to the east of building 4. Overall, the results from building 4 suggest that it is a later extension to the main building range,



and that it has been constructed on a raft to compensate for the Site's descending slope to the east.

## **5.6 Building 5: trenches 27 and 28**

5.6.1 Within trenches 27 and 28 the natural substrate presented as a brown stony, silty sandy head deposit. This was encountered at 175.58 m aOD in trench 27 and 175.43 m aOD in trench 28 (1.85 m BGL and 0.55 m BGL respectively), with the difference accounted for by a platform creating a large step in the ground surface within the building footprint. A dark peaty layer was encountered at 1.25–1.85 m BGL in trench 27, and may represent a former channel of the Bradwell Brook (PI. 6). This deposit was overlain by a 0.6 m-thick accumulation resembling the industrial levelling material recorded in trenches 19 and 21. Within trench 28 the natural head deposit was directly sealed by the hardcore preparation for the concrete layer that formed the ground surface at the time of excavation.

## **5.7 Trench 26**

5.7.1 Trench 26 was dug in open ground to the south of building 2 and to the west of building 5. The basal natural substrate comprised a rocky greenish grey clay the upper surface of which was encountered at 1.35 m BGL (176.10 m aOD). An exploratory sondage established this material was at least 1.4 m thick (PI. 7). It was sealed by a 0.2 m thick deposit of mid-orange clay of probable alluvial/colluvial origin similar to that seen in building 2. This was sealed in turn by a 0.6 m thick deposit of dark dirty clay containing modern detritus including plastics. This material was sealed by first hardcore and then concrete.

## **6 ARTEFACTUAL EVIDENCE**

6.1.1 No artefacts were recorded during the evaluation.

## **7 ENVIRONMENTAL EVIDENCE**

7.1.1 Due to the nature of the deposits encountered in the trenches, no environmental samples were collected.

## **8 CONCLUSIONS**

### **8.1 General**

8.1.1 The evaluation has been generally successful in meeting its aims and objectives, within the constraints imposed by the Site. Although the Site proved to be archaeologically sterile, the nature of the deposits exposed in the trenches and the depths BGL at which they were encountered casts some light on events on the Site prior to the construction of the current buildings.

8.1.2 The horizon at archaeological remains might have been expected (either cutting or interleaved within the orange subsoil of alluvial/colluvial origin) was encountered in six or perhaps seven of the trenches (14–18; 26–27). That no archaeological remains were present at these locations would appear to reflect original circumstances. These trenches were located in the more western and southern parts of the Site.

8.1.3 Within three of the trenches (21, 22 and 28), the natural solifluction/head deposits were directly overlain by modern material, with no interleaved subsoil, suggesting that these parts of the Site have been affected by truncation, with negative consequences for any



archaeological remains that might once have been present. These trenches lay on a broadly north–south alignment in the central part of the Site.

- 8.1.4 It was not possible to penetrate beneath the modern overburden in four of the trenches (19–20; 23–24), and so the potential archaeological component of these trenches remains unknown.
- 8.1.5 The trenches with intact subsoil horizons were predominantly located in building 2; the trenches that encountered black ‘industrial’-type residues were predominantly located in building 3. This correlation may reflect different strategies used to level out the Site’s downward slope to the east, with the ground surface left relatively undisturbed in the western part of the Site and a degree of cut and fill to the east, where the black ‘industrial’-type residues were found.
- 8.1.6 A 0.6 m-thick dark brown peaty layer was encountered throughout trench 27, at a depth of c. 1.25 m BGL. No dating evidence was recovered. It may represent a former channel of the Bradwell Brook, although given the truncation and levelling noted nearby (trenches 21, 22 and 28) it could represent redeposited material.
- 8.1.7 The results of the phase 2 evaluation correlate well with those from the phase 1 works. No archaeological remains were encountered during the phase 1 works, when a better preservation of the likely archaeological horizon in the west and south of the Site was also noted.
- 8.1.8 The results of the phase 2 evaluation are also supported by a borehole survey undertaken in 2015 (ARP Geotechnical Ltd 2015). This typically encountered medium dense grey brown or orange clays and gravels across the Site at approximately 1.4–2.2 m BGL, and found them to be generally at least 2–3 m thick. This supports the interpretation that these are indeed natural deposits, despite their heterogeneous and occasionally ‘dirty’ appearance in the various trenches in which they were encountered.

## **9 ARCHIVE STORAGE AND CURATION**

### **9.1 Museum**

- 9.1.1 The archive resulting from the evaluation is currently held at the offices of Wessex Archaeology in Sheffield. A mid-project review has been submitted to the local collecting museum (Buxton Museum), and in the absence of an artefactual or environmental archive, it is not anticipated that the Museum will require deposition of the site paperwork archive, as per section 2.3.5 of that establishment’s collecting policy (Buxton Museum and Art Gallery 2016).
- 9.1.2 A bound copy of this report (with PDF/A on CD) will be submitted to the Derbyshire HER and Peak District National Park Authority HBSMR and the OASIS record completed, including an upload of the project report.

### **9.2 Archive/security copy**

- 9.2.1 The archive, which includes paper records, graphics, artefacts, ecofacts and digital data, will be prepared following nationally recommended guidelines (SMA 1995; ClfA 2014b; Brown 2011; ADS 2013).
- 9.2.2 All archive elements are marked with the site code, and a full index will be prepared. The physical archive currently comprises the following:



- 1 file/document case of paper records and A3/A4 graphics.

9.2.3 In line with current best practice (eg, Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

### **9.3 OASIS**

9.3.1 An OASIS online record (<http://oasis.ac.uk/pages/wiki/Main>) has been initiated, with key fields and a .pdf version of the final report submitted. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service ArchSearch catalogue.

## **10 COPYRIGHT**

### **10.1 Archive and report copyright**

10.1.1 The full copyright of the written/illustrative/digital archive relating to the project will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act 1988* with all rights reserved. The client will be licenced to use each report for the purposes that it was produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use conforms to the *Copyright and Related Rights Regulations 2003*. In some instances, certain regional museums may require absolute transfer of copyright, rather than a licence; this should be dealt with on a case-by-case basis.

10.1.2 Information relating to the project will be deposited with the Historic Environment Record (HER) where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research or development control within the planning process.

### **10.2 Third party data copyright**

10.2.1 This document and the project archive may contain material that is non-Wessex Archaeology copyright (eg, Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of the *Copyright, Designs and Patents Act 1988* with regard to multiple copying and electronic dissemination of such material.



## REFERENCES

- ADS 2013 *Caring for Digital Data in Archaeology: a guide to good practice*. Archaeology Data Service and Digital Antiquity Guides to Good Practice
- ARP Geotechnical Ltd 2015 *Borehole survey report: Newburg Engineering, Bradwell*. Unpubl rep.
- British Geological Survey online viewer <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> (accessed 26 April 2018)
- Brown, D H 2011 *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (revised edition). Archaeological Archives Forum
- Buxton Museum and Art Galley 2016 *Procedures for the Deposition of Archaeological Archives from Derbyshire at Buxton Museum and Art Gallery*
- CIfA 2014a *Standard and Guidance for Archaeological Field Evaluation*. Reading, Chartered Institute for Archaeologists
- CIfA 2014b *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*. Reading, Chartered Institute for Archaeologists
- ECUS Ltd 2016 *Newburgh Works, Netherside, Bradwell: Written Scheme of Investigation for Archaeological Evaluation*. Unpubl rep ref 8260\_Bradwell\_WSI\_1\_1
- Guilbert, G 2013 Before Grey Ditch: Mesolithic And Later Prehistoric Artefacts And Settlement Features Excavated In 1992 At Blake Acre Bradwell, *Derbyshire Archaeol J* 133, 1–113
- PDNPA 2016 *Brief for an archaeological evaluation at Newburgh Engineering Co Ltd, Newburgh Works, Netherside, Bradwell* (issued 03/05/2016)
- SMA 1995 *Towards an Accessible Archaeological Archive*. Society of Museum Archaeologists
- Wessex Archaeology 2016 *Newburgh Works, Netherside, Bradwell, Derbyshire: Archaeological Evaluation Report*. Unpubl rep ref 113870.01





## APPENDICES

### Appendix 1 Trench summaries

<b>Trench 14</b>	<b>6.5 x 2.0m</b>		<b>GL = 177.02 m aOD</b>
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth bgl (m)</b>
14001	Layer	Concrete.	0.00–0.24
14002	Layer	Made ground. Dark greyish brown grit, sub-angular rubble	0.24–0.56
14003	Layer	Dark brownish black sandy clay (20/80). Sparse poorly sorted sub-angular rubble <60mm. Interface horizon	0.56–0.71
14004	Layer	Mid orange brown clay. 3% sub-angular gravel <30mm. Colluvial/alluvial subsoil	0.71–0.90
14005	Layer	Natural.	0.90–1.08
14006	Layer	Greyish black sandy clay with large stones. Natural.	2.9 +

<b>Trench 15</b>	<b>8.4x2.0m</b>		<b>GL = 177.02 m aOD</b>
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth bgl (m)</b>
15001	Layer	Concrete.	0.16
15002	Layer	Made ground.	0.16–0.66
15003	Layer	Dark greyish clay with orange flecks. Buried soil	0.66–0.92
15004	Layer	Mid orange brown sandy clay containing 5%small sub-angular stones. Colluvial/alluvial subsoil.	0.92–1.17
15005	Layer	Dark brownish black clay. Colluvial/alluvial subsoil.	1.17+
15006	Layer	Dark greyish black silty clay with 20%poorly sorted large sub-regular pebbles. Natural.	1.17–3.3+

<b>Trench 16</b>	<b>12x2.0m</b>		<b>GL = 176.99 m aOD</b>
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth bgl (m)</b>
16001	Layer	Concrete.	0.00–0.18
16002	Layer	Made ground. Dark greyish brown grit containing sub-angular rubble.	0.18–0.64
16003	Layer	Dark greyish black sandy clay (10/80) containing 2% charcoal and sparse sub-angular rubble <60mm. Buried soil.	0.64–0.88
16004	Layer	Mid orange brown. 1% charcoal and 3% sub-angular gravel <20mm. Colluvial/alluvial subsoil.	0.88–0.95
16005	Layer	Mid orange brown with 2% sparse charcoal and 2% sub-angular gravel. Colluvial/alluvial subsoil.	0.97
16006	Layer	Dark orange brown. 10% MOD sub-angular gravel <20mm, 2% sub-angular gravel <80mm. Natural.	1.26

<b>Trench 17</b>	<b>12 m x 2.0 m</b>		<b>GL = 176.99 m aOD</b>
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth bgl (m)</b>
17001	Layer	Concrete	0.00–0.30
17002	Layer	Made ground. Light greyish yellow fine sand containing grit and sub-angular rubble.	0.30–0.43
17003	Layer	Dark greyish black sandy clay (20/80) with 3% sparse poorly sorted angular gravel <20mm. Buried soil	0.43–0.63
17004	Layer	Mid orange brown with grey mottling silty clay (30/70)	0.63–1.04





		containing 2% sparse angular gravel <20mm and 4% sparse charcoal. Colluvial/alluvial subsoil.	
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<b>Trench 18</b>	<b>12 m x 2 m</b>		<b>GL = 177.00 m aOD</b>
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth bgl (m)</b>
18001	Layer	Concrete	0.00–0.30
18002	Layer	Made ground. Light greyish yellow fine sand containing grit and sub-angular rubble.	0.30–0.55
18003	Layer	Dark greyish black sandy clay (20/80) containing 2% sparse poorly sorted sub-angular gravel <20mm and 2% sparse charcoal. Buried soil.	0.55–0.85
18004	Layer	Mid orange brown with 2% sparse angular gravel and 4% sparse charcoal. Colluvial/alluvial subsoil.	0.85–1.2
18005	Layer	Dark 'ashy' black fine sand and soot. Colluvial/alluvial subsoil. Natural	1.2–2.0
18006	Layer	Friable mid-greyish orange clay with large stones. Natural	2.0–3.0

<b>Trench 19</b>	<b>12 m x 2 m</b>		<b>GL = 176.63 m aOD</b>
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth bgl (m)</b>
19001	Layer	Concrete	0.00–0.40
19002	Layer	Levelling layer, rubble hard core.	0.40–0.60
19003	Layer	Mixed made ground/industrial/demolition waste layer. Loose and friable black and dark reddish brown fine sand with rusted iron object inclusions.	0.60–1.25+

<b>Trench 20</b>	<b>3.6 m x 1.8 m</b>		<b>GL = 175.90 m aOD</b>
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth bgl (m)</b>
20001	Layer	Concrete	0.00–0.09
20002	Layer	Levelling layer, rubble hard core.	0.9–0.14
20003	Layer	Mid greyish brown sand containing 10% large angular stones.	0.14–0.79
20004	Layer	Dark grey silty sand with 3% angular stones.	0.79–0.90
20005	Layer	Concrete	0.90+

<b>Trench 21</b>	<b>12 m x 2 m</b>		<b>GL = 176.63 m aOD</b>
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth bgl (m)</b>
21001	Layer	Concrete	0.00–0.24
21002	Layer	Levelling layer, rubble hard core.	0.24–0.28
21003	Layer	Black and mid brown sand. Very loose. Industrial deposit/made ground.	0.28–2.0
21004	Layer	Natural	2.0–2.50

<b>Trench 22</b>	<b>6 m x 2 m</b>		<b>GL = 176.63 m aOD</b>
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth bgl (m)</b>
22001	Layer	Concrete	0.00–0.18
22002	Layer	Made ground. Light yellowish-grey.	0.18–0.41
22003	Layer	Dark greyish black sandy loam with very abundant angular cobbles <120mm (calcite). Industrial deposit/made ground.	0.41–0.98



22004	Layer	Mid orange brown clay with 10% charcoal flecking.	0.98–1.21
22005		Light greyish black fine sandy loam. Industrial deposit/made ground.	1.21–2.21
22006		Natural. Mid greyish orange sandy clay with large compact sub-regular cobbles.	2.30–2.8+

<b>Trench 23</b>	<b>6.5 m x 2 m</b>		<b>GL = 175.90 m aOD</b>
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth bgl (m)</b>
23001	Layer	Concrete	0.00–0.13
23002	Layer	Levelling layer, rubble hard core.	0.13–0.22
23003	Layer	Mid greyish brown sand with 15% large angular stones.	0.22–1.02
23004	Layer	Concrete surface.	1.02+

<b>Trench 24</b>	<b>1.8 m x 1.3 m</b>		<b>GL = 175.90 m aOD</b>
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth bgl (m)</b>
24001	Layer	Concrete	0.00–0.14
24002	Layer	Levelling layer, rubble hard core.	0.14–0.25
24003	Layer	Light red sand.	0.25–0.32
24004	Layer	Concrete	0.32+

<b>Trench 26</b>	<b>9 m x 1.6 m</b>		<b>GL = 177.45 m aOD</b>
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth bgl (m)</b>
26001	Layer	Concrete	0.00–0.28
26002	Layer	Levelling layer, rubble hard core.	0.28–0.55
26003	Layer	Made ground. Silty clay with occasional brown mottling and regular CBM fragments, general waste, rope, old cables etc.	0.55–1.15
26004	Layer	Mid-orange clay. Colluvial/alluvial subsoil	1.15–1.35
26005	Layer	Rubbly rock fragments in greenish grey clay. Natural	1.35–2.75+

<b>Trench 27</b>	<b>7 m x 1.7 m</b>		<b>GL = 177.43 m aOD</b>
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth bgl (m)</b>
27001	Layer	Concrete	0.00–0.30
27002	Layer	Levelling layer, rubble hard core.	0.30–0.60
27003	Layer	Made ground. Dark brown black silty sand with stones, CBM, ceramic drain and general waste. Made ground/ Industrial deposit/made ground.	0.60–1.25
27004	Layer	Dark brown silty sand with small stones and CBM fragments. Peat/former channel?	1.25–1.85
27005	Layer	Mid brown silty sandy clay with sub-angular stones. Natural.	1.85–2.25
27006	Layer	Broken limestone between 0.05 and 0.10cm in size. Natural.	2.25–2.40+

<b>Trench 28</b>	<b>10 m x 1.6 m</b>		<b>GL = 175.98 m aOD</b>
<b>Context</b>	<b>Type</b>	<b>Description</b>	<b>Depth bgl (m)</b>
28001	Layer	Concrete	0.00–0.25
28002	Layer	Levelling layer, rubble hard core.	0.25–0.55
28003	Layer	Dark brown sandy silt with broken stones and small pebbles. Natural	0.55–1.65+



## Appendix 2 OASIS form

OASIS ID: wessexar1-257747

### Project details

Project name	Newburgh Works, Bradwell, Derbyshire
Short description of the project	Wessex Archaeology was commissioned to undertake the archaeological evaluation of a 2.6 ha parcel of land located in Bradwell, Hope Valley, Derbyshire. At the time of the evaluation, the land was occupied by industrial units of the Newburgh Engineering Co., with the trenching occurring around and within existing buildings. The trenching occurred in two phases, in 2016 and 2018, with a total of 24 trenches excavated. No archaeological artefacts, deposits or features were encountered. The horizon of likely archaeological preservation was found to have been destroyed by truncation in some of the trenches. The potential archaeological horizon seemed best preserved in the west and south of the Site, where a colluvial/alluvial subsoil sealed by a buried soil was found. An undated peat-like deposit was noted in one trench; loose dark sandy deposits, of likely industrial origin, were encountered in the central part of the Site, where they had probably been used to level up the natural slope (down to the Bradwell Brook to the east) prior to the construction of the engineering works. The archive resulting from the evaluation is currently held at the offices of Wessex Archaeology in Sheffield. A bound copy of this report (with PDF/A on CD) will be submitted to the Derbyshire HER and Peak District National Park Authority HBSMR and the OASIS record completed, including an upload of the project report.
Project dates	Start: 04-07-2016 End: 28-04-2018
Previous/future work	No / Not known
Any associated project reference codes	NP/DDD/0815/0779 - Planning Application No.
Any associated project reference codes	113870 - Contracting Unit No.
Any associated project reference codes	T22103 - Contracting Unit No.
Type of project	Field evaluation
Site status	Conservation Area
Site status	National Park
Current Land use	Industry and Commerce 1 - Industrial
Monument type	NONE None
Significant Finds	NONE None
Methods & techniques	""Targeted Trenches""
Development type	Housing estate



Prompt	Planning condition
Position in the planning process	Pre-application

### Project location

Country	England
Site location	DERBYSHIRE DERBYSHIRE DALES BRADWELL Newburgh Works, Netherside, Bradwell
Postcode	S33 9NT
Study area	2.6 Hectares
Site coordinates	SK 17408 81398 53.328941216088 -1.738590058588 53 19 44 N 001 44 18 W Point
Height OD / Depth	Min: 174.6m Max: 176.1m

### Project creators

Name of Organisation	Wessex Archaeology
Project brief originator	Peak District National Park Authority
Project design originator	Ecus
Project director/manager	Andrew Norton
Project supervisor	Martina Tenzer
Project supervisor	Emma Carter
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Camstead Ltd.

### Project archives

Physical Archive Exists?	No
Digital Archive recipient	No museum deposit
Digital Contents	"other"
Digital Media available	"Images raster / digital photography", "Survey"
Paper Archive recipient	No museum deposit
Paper Contents	"Stratigraphic"
Paper Media available	"Context sheet", "Diary", "Photograph", "Report"



### Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Newburgh Works, Netherside, Bradwell, Derbyshire
Author(s)/Editor(s)	Martina Tenzer
Other bibliographic details	113870
Date	2016
Issuer or publisher	Wessex Archaeology
Place of issue or publication	Sheffield
Description	A4 comb bound laser printed report

### Project bibliography 2

Publication type	Grey literature (unpublished document/manuscript)
Title	Newburgh Works, Netherside, Bradwell: Archaeological Evaluation (Phase 2)
Author(s)/Editor(s)	Daniel, P.
Other bibliographic details	T22103.1
Date	2018
Issuer or publisher	Wessex Archaeology
Place of issue or publication	Sheffield
Description	c. 25-page A4 comb-bound report with colour plates and figures.

Entered by Jess Irwin (j.irwin@wessexarch.co.uk)



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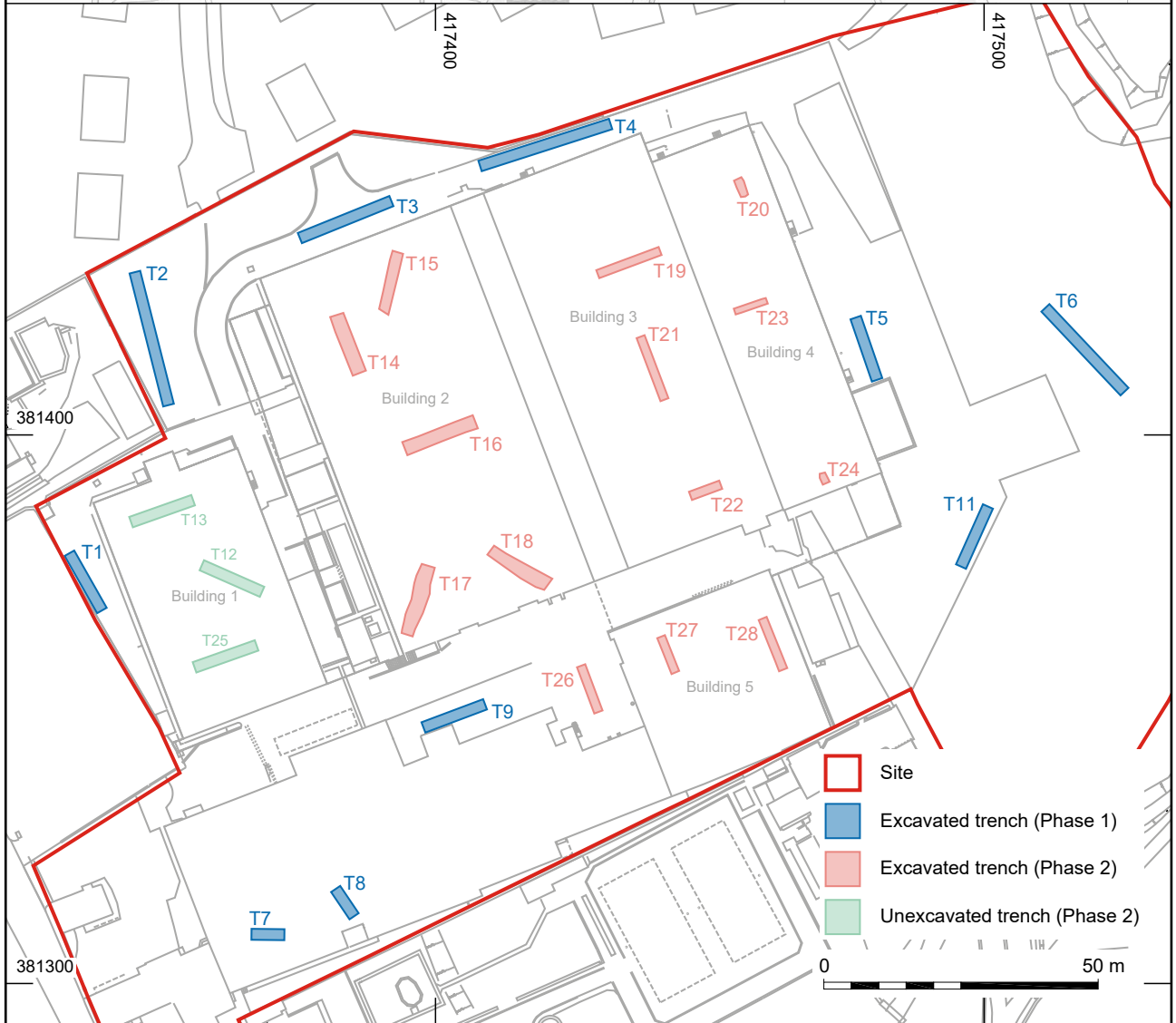
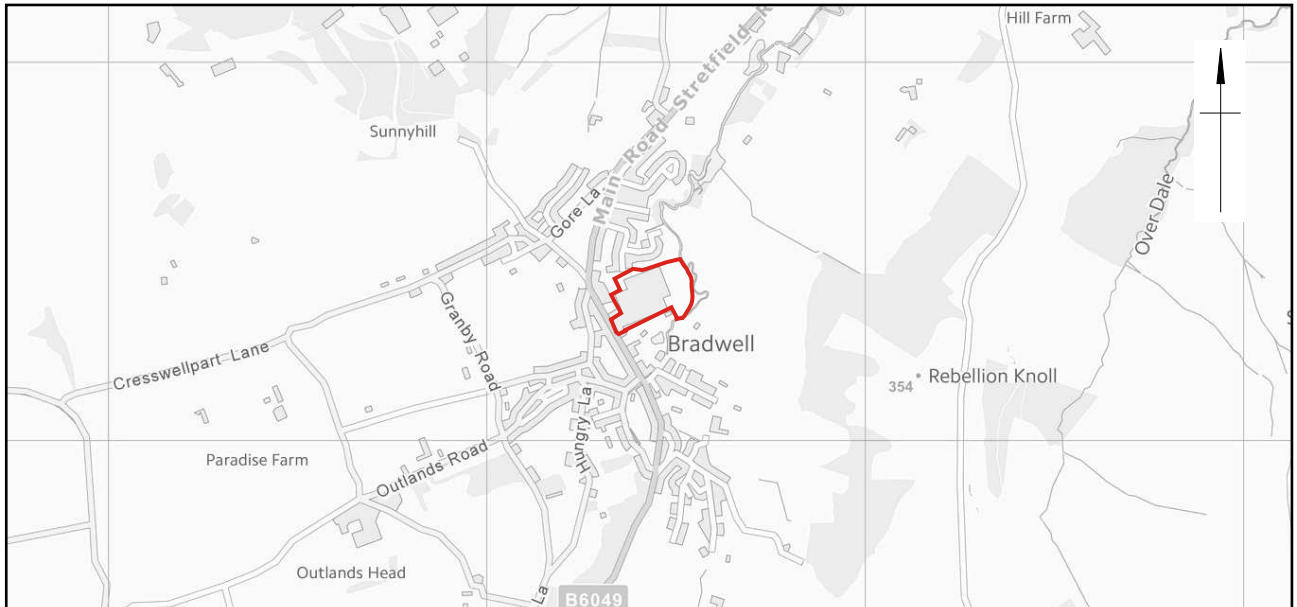
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Site location and layout of excavated trenches (phases 1 and 2)

Figure 1





Plate 1: General site shot, looking north-east



Plate 2: Trench 16, looking north-west


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Plate 3: Trench 17, north-west facing section



Plate 4: Trench 21, looking north-west


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Plate 5: Backfilling 'industrial' deposits into trench 21, looking south



Plate 6: Trench 27, north-east facing section



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Plate 7: Trench 26, north-east facing section

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