

Archaeological Watching Brief at Land adjacent to Ironbridge Power Station Shropshire

Worcestershire Archaeology
for RPS Group

July 2019



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IRONBRIDGE POWER STATION IRONBRIDGE SHROPSHIRE

Archaeological Watching Brief Report



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SITE INFORMATION

Site name: Land adjacent to Ironbridge Power Station
Local planning authority: Shropshire County Council
Planning reference: n/a
Central NGR: SJ 64664 03791
Commissioning client: RPS Group
Client project reference: Ironbridge Minerals JER 1546
WA project number: P5652
WA report number: 2725
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An archaeological watching brief at Ironbridge Power Station, Shropshire

By Graham Arnold

Illustrations by Carolyn Hunt

Summary

An archaeological watching brief on geotechnical trial holes was undertaken at land adjacent to Ironbridge Power Station, Shropshire (NGR SJ 64664 03791). It was commissioned by Susanna Parker, RPS group, on behalf of Ironbridge Power Station in advance of proposed extension of sand and gravel extraction and re-development of the site.

Sixteen geotechnical trial pits were monitored over five fields. All recorded deposits were related to natural processes and no finds or archaeological features were recovered from any of the pits. Sands, gravels and weathered mudstone were recorded.

Report

1 Introduction

1.1 Background to the project

An archaeological watching brief was undertaken by Worcestershire Archaeology (WA) in July 2019 at land adjacent to Ironbridge Power Station, Shropshire (NGR SJ 64664 03791). This comprised observation of sixteen Trial pits, across five fields adjacent to Ironbridge Power Station, in order to establish the geological make up of the land. The project was commissioned by RPS group, in advance of a proposed land sale for extension of sand and gravel extraction and re-development of the site. The archaeological advisor to the local planning authority considered that the development had the potential to impact upon possible heritage assets, due to its location on gravel terraces above the river.

A Written Scheme of Investigation was prepared by Worcestershire Archaeology (WA2019). The watching brief conforms to the industry guidelines and standards set out by the Chartered Institute for Archaeologists in the *Standard and guidance: for an archaeological watching brief* (CIfA 2014).

1.2 Site location, topography and geology

The site comprises five fields, covering an area of hectares located south of the River Severn to the west of Ironbridge and to the south of Buildwas. To the west is the A4169 Much Wenlock Road whilst to the east is a sand and gravel works and the former Ironbridge B power station. At present three of the central fields are under arable cereal crop, with the western field set to pasture and the southern field as set aside and tree planting.

The site is on undulating and sloping ground, at approximately 101m AOD dropping down to around 62m AOD. The underlying geology comprises bedrock of the Coalbrookdale Mudstone formation overlain by superficial deposits of Glacio-fluvial Devensian sands and gravels (BGS 2018) and is situated on the Severn River terraces and glacial moraines.

2 Archaeological and historical background

2.1 Introduction

Prior to fieldwork commencing, a search of the Shropshire HER was undertaken. A summary of the results of this research are presented below.

A Bronze sword and socketed axe were found near a large piece of oak timber in 1795 during work on the Buildwas Bridge (described below) 400 m north of the site. A Neolithic stone axe (00316) was found at Abbey Arms Farm just north of the bridge during alterations to a farm building.

Buildwas Abbey (0311), a scheduled monument and Grade 1 listed building, a fine example of an early 12th Century Sagnac Monastery is situated on the southern banks of the River Severn about 300m north-west of the site. The abbey is noted for the architectural unity of its buildings, its well-preserved water management systems and its dramatic history. The abbey complex includes Abbey House and Dovecote (04427), fishponds (02466) a watermill (08231) and a weir (02949). The abbey was dissolved in 1536.

A tithe barn (00298) which was recorded on Mill Farm a short distance from Buildwas Abbey was knocked down before 1975. Buildwas Bridge (00313), some 300m north of the site abbey is an iron arch bridge designed by Thomas Telford and was built re-using some masonry from the medieval bridge which was destroyed by floods in 1795. A single cast iron mid 19th Century railway bridge of 1863 crosses the river 1km east of the site.

Buildwas station on the former Severn Valley Railway opened in 1862 and 1963. The site of the station was entirely removed by the construction of Ironbridge B power station described below. A series of small limestone quarries (07255) are recorded running along Benthall Edge.

Ironbridge A electric power station (06710) 300m north-east of the site opened in 1932 and was completed in 1939 with a final capacity of 200,000 KW. The main buildings were steel-framed with a filling of brickwork. The station was partially closed in 1976 and fully closed in 1978 and the majority of the buildings were demolished in the early 1980s.

The replacement Ironbridge B power station immediately east of the site operated between 1969 and 2015.

3 Project aims

The aims of the watching brief were to observe and record archaeological deposits, and to determine their extent, state of preservation, date and type, as far as reasonably possible within the constraints of the geotechnical investigations.

Project methodology

Fieldwork was undertaken between 16 and 19 July 2019. Sixteen trial pits were excavated across the site. The location of the trial holes is indicated in Figure 2.

Deposits considered not to be significant were removed under archaeological supervision using a JCB 3CX type wheeled excavator. Archaeological recording of the deposits took place at a depth of 0.50m. Clean surfaces were inspected and the spoil was investigated to retrieve artefactual material and environmental samples, as well as to determine their nature. Deposits were recorded according to standard Worcestershire Archaeology practice (WA 2012). Machine excavation then continued to a depth of at least 2.00m for geotechnical sampling until the pit became unstable or reached solid ground. On completion of excavation, trenches were reinstated by replacing the excavated material.

Observation of excavated trial holes was undertaken during machine excavation. The exposed surfaces were sufficiently clean to observe well-differentiated archaeological deposits. Access to deep trenches was not made for safety reasons.

All fieldwork records were checked and cross-referenced. Analysis was undertaken through structural evidence, allied to the information derived from other sources.

4 Archaeological results

The trenches and features recorded are shown in Figure 2. Photographs of the works are provided in Plates 1 – 8. The ground level of each Trial Hole is given in the tables, also recorded in m AOD. Plates 1-8 show the site ground conditions and examples of the stratigraphy on site. The results of the structural analysis are presented below.

4.1 Geotechnical test pit table

Maximum dimensions of trial holes: Length: 3.00m Width: 0.60m Depth: 2.00- 4.50m

Test Pit	Dimensions (m)/ Coordinate	Max depth (m)	Topsoil depth (m)	Subsoil depth (m)	Natural	Comments
1	3.0 x 0.6 <i>E: 364530</i> <i>N: 304052</i>	3.00	0.30	0.15	Sand and gravels	No archaeology North Arable field
2	3.0 x 0.6 <i>E: 364625</i> <i>N: 304038</i>	3.00	0.30	0.50	Sand	No archaeology, gravelly silty sand subsoil North Arable field
3	3.0 x 0.6 <i>E: 364541</i> <i>N: 303951</i>	3.00	0.15	0.15	Soft red sand becoming firmer and more gravelly with depth	No archaeology North Arable field
4	3.0 x 0.6 <i>E: 364632</i> <i>N: 303958</i>	3.00	0.30	0.20	Sand and gravels	No archaeology North Arable field
5	3.0 x 0.6 <i>E: 364747</i> <i>N: 303944</i>	4.50	0.28	0.12	Sand and gravels	No archaeology. Layer of mid brown silty clay from 3m – 4.5m North Arable field
6	3.0 x 0.6 <i>E: 364396</i> <i>N: 303860</i>	3.00	0.25	0.10	Sand	No archaeology Western Pasture field
7	3.0 x 0.6 <i>E: 364558</i> <i>N: 303829</i>	1.70	0.40	-	Sand	No archaeology Collapse at 1.70m Southeast arable field

Test Pit	Dimensions (m)/ Coordinate	Max depth (m)	Topsoil depth (m)	Subsoil depth (m)	Natural	Comments
8	3.0 x 0.6 <i>E: 364645</i> <i>N: 303858</i>	2.20	0.40	-	sand and gravels	No archaeology Collapse at 2.20m Southeast arable field
9	3.0 x 0.6 <i>E: 364738</i> <i>N: 303863</i>	3.00	0.25	-	sand and gravels	No archaeology Collapse at 3.00m Southeast arable field
10	3.0 x 0.6 <i>E: 364842</i> <i>N: 303873</i>	2.00	0.25	0.15	sand	No archaeology Collapse at 2.00m Southeast arable field
11	3.0 x 0.6 <i>E: 364353</i> <i>N: 303727</i>	3.00	0.30	-	Sand and gravel	No archaeology Collapse at 2.9m Western pasture field
12	3.0 x 0.6 <i>E: 364537</i> <i>N: 303731</i>	2.10	0.35		Sand and gravels	No archaeology Collapse at 2.10m Southwest arable field
13	3.0 x 0.6 <i>E: 364656</i> <i>N: 303706</i>	4.40	0.20	0.20	Silty clay and mudstone	No archaeology Silty clay becoming weathered mudstone
14	3.0 x 0.6 <i>E: 364832</i> <i>N: 303719</i>	3.80	0.25	0.15	Sand and gravel with Siltstone gravel mineral at 3.80m	No archaeology Stopped at hard ground SE arable field
101	3.0 x 0.6 <i>E: 364718</i> <i>N:303608</i>	3.10	0.25	-	Silty clay becoming Weathered Mudstone	No archaeology Stopped at hard ground Bat Barn in Southern Set-aside field
102	3.0 x 0.6 <i>E: 364722</i> <i>N:303603</i>	2.90	0.30	-	Silty clay becoming Weathered Mudstone	No archaeology Stopped at hard ground Bat Barn in Southern Set-aside field

Table 1: Test pit descriptions

5 Artefactual evidence

Recovery of artefacts was undertaken according to standard Worcestershire Archaeology practice (WA 2012). In the event, no artefacts were identified which were considered to be suitable for analysis.

6 Environmental evidence

Environmental sampling was approached using standard Worcestershire Archaeology practice (WA 2012). In the event, no deposits were excavated which were considered to be suitable for environmental analysis.

7 Discussion and conclusions

The methods adopted allow a high degree of confidence that the aims of the project have been achieved. Conditions were suitable in all of the trial holes to identify the presence or absence of archaeological features. No significant archaeology was present; only naturally occurring deposits in all of the trenches and no finds recovered.

8 Project personnel

The fieldwork was led by Graham Arnold.

The project was managed by Tom Rogers. The report was produced and collated by Graham Arnold. Specialist contributions and individual sections of the report are attributed to the relevant authors throughout the text.

9 Acknowledgements

Worcestershire Archaeology would like to thank the following: Susanna Parker, (RPS group) for commissioning the work and set up as well as Ross Laidlaw and Kristian James Geotechnical engineers (RPS group) for their help during the fieldwork..

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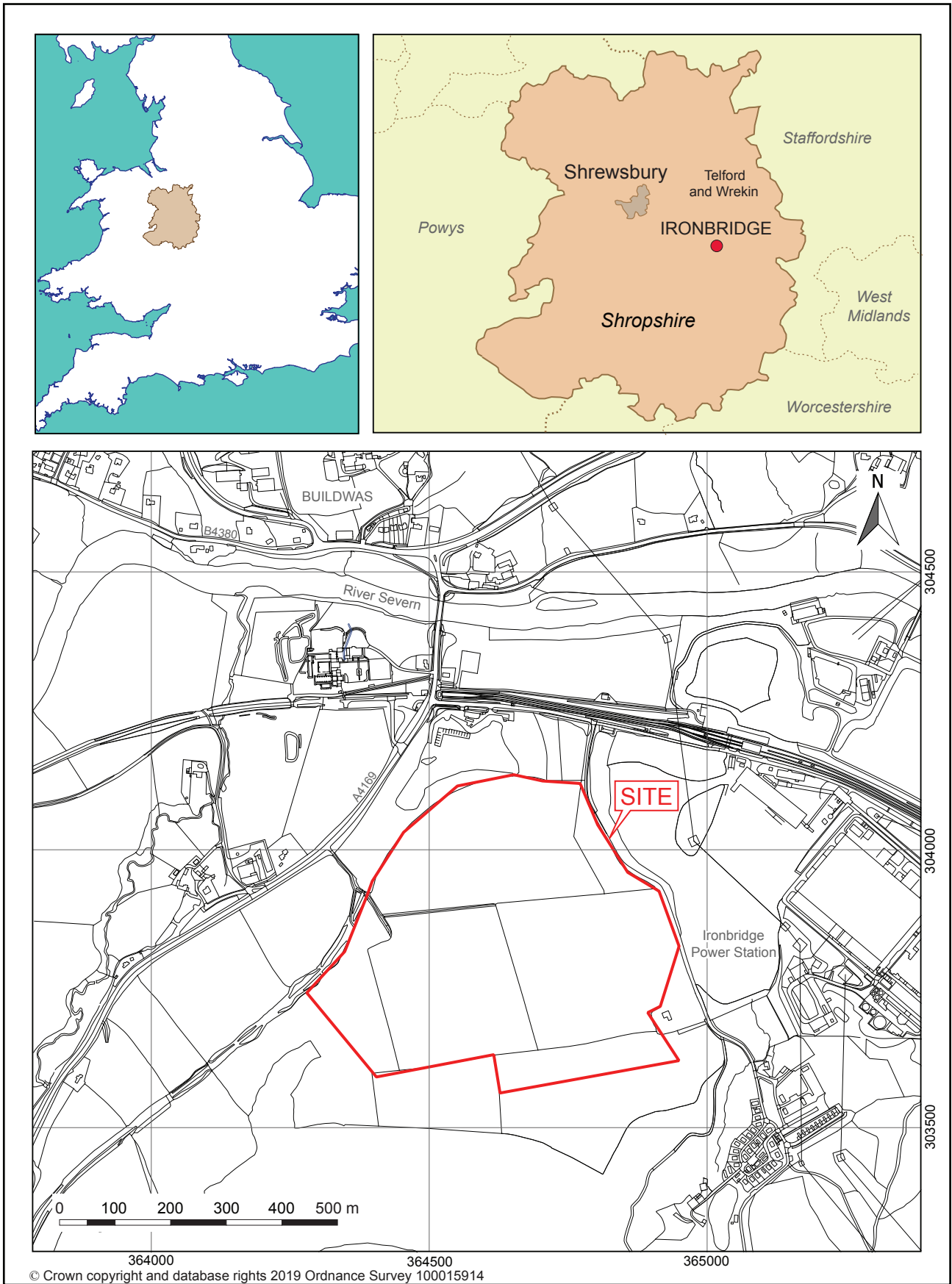
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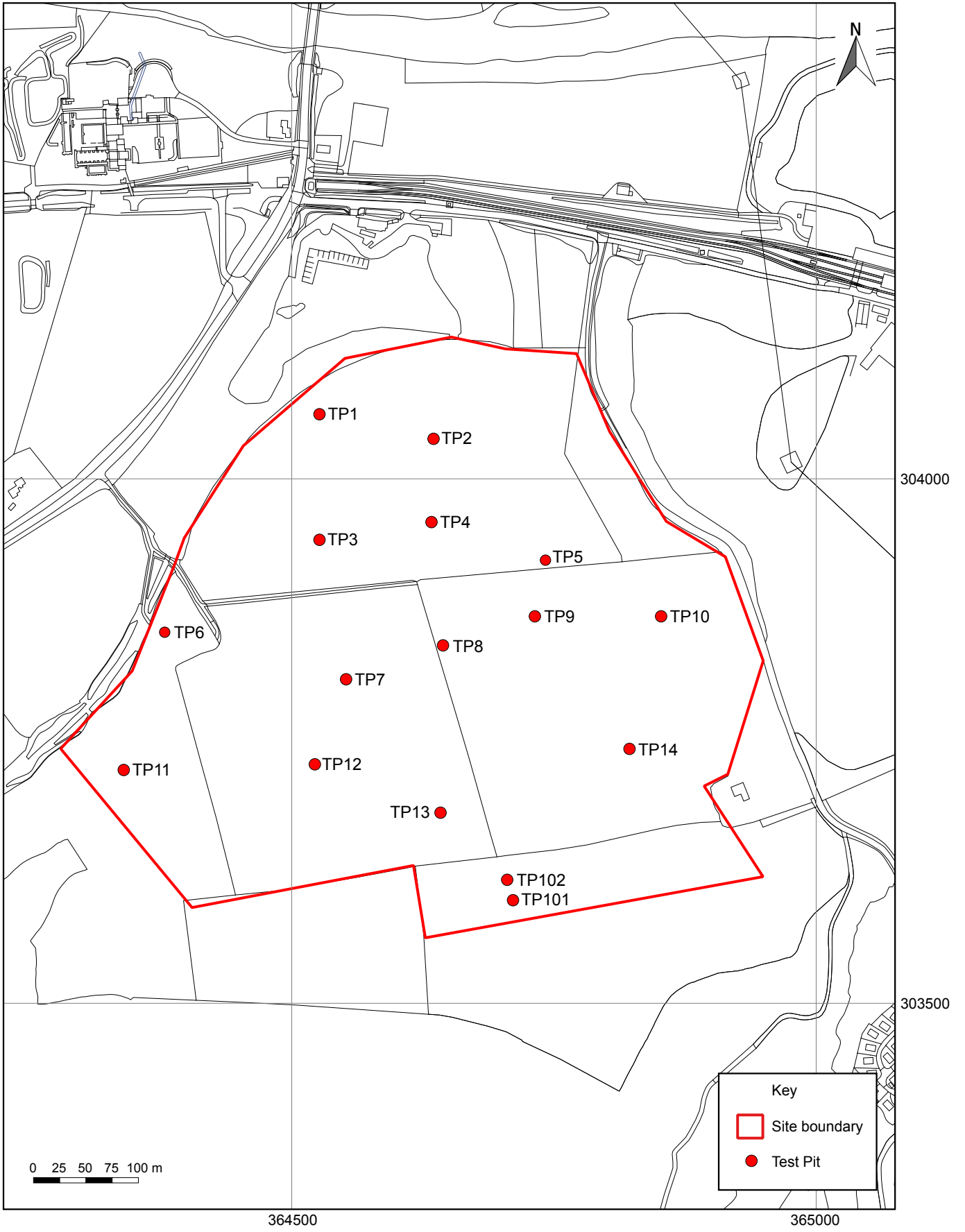
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Worcestershire County Council

Figures



Location of the site

Figure 1



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Location of the Test Pits

Figure 2

Plates



Plate 1: Opening Trial Hole in arable wheat field. View northwest.



Plate 2: View of typical geotechnical pit soil stratigraphy and spoil on side of trench. 1m and 0.5m scales.



Plate 3: Plan view of Trial pit at 0.50m depth showing brownish red sand spoil



Plate 4: View of Ironbridge power station from Southeast Arable field, looking southeast.



Plate 5: Example of trial pit soil profile in Western pasture field. 1m and 0.5m scales



Plate 6: Western pasture field looking south showing the undulating nature of the land.



Plate 7: Set aside field for bat barn location with view East towards Ironbridge power station.



Plate 8: Soil profile for bat barn Trial hole TP101. 1m and 0.5m scales.

Appendix 1: Summary of project archive

TYPE	DETAILS*
Artefacts and Environmental	none
Paper	none
Digital	digital photography , Text

*OASIS terminology