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Summary

Wessex Archaeology was commissioned by AECOM, on behalf of Severn Trent Water Ltd, to undertake an archaeological evaluation of a 3.95-hectare parcel of land at Peter's Lane, Staffordshire, centred on 407812 308204. The work was undertaken in advance of planned extension work to the existing sewage treatment works.

A total of 27 trenches were excavated, of which 12 contained archaeological remains. The remains were dispersed across the whole of the site; there was no obvious clustering of features that would indicate an area of concentrated activity.

Three pits and a north–south aligned boundary ditch were potentially the earliest features uncovered. Environmental evidence suggests a possible association between them, and the ditch was not shown on 19th-century or later mapping, suggesting it was post-medieval or earlier in date. A small number of artefacts recovered from the ditch and one of the pits indicate that the features were early in date: prehistoric to Romano-British. However, the size and condition of the assemblage suggests it may be residual and therefore does not provide a definitive date for the features. The pits contained significant amounts of burnt stone and wood charcoal, the composition of which is similar to those found in association with burnt mounds, although no evidence of such was found during the evaluation.

Ditches of varying profiles, sizes and alignments formed the most common type of feature. Around half of the ditches overlay or align with mapped boundaries. A very small number of finds were recovered from the features, of which one, a post-medieval pottery sherd, was datable. The construction date of these boundaries is therefore uncertain, although they are shown on the 1836–1845 St Michael: Burntwood township tithe map, indicating they belonged to a pre-1856 Enclosure Act field system and therefore potentially medieval in date.

The environmental evidence from the pits and early ditch is potentially significant and informs on the local resource exploitation, although in what period is unknown.

The evaluation has met its aims, although its contribution to its objectives is limited due to the lack of datable finds.

Acknowledgements

Wessex Archaeology would like to thank AECOM for commissioning the archaeological evaluation. Wessex Archaeology is also grateful for the advice of Shane Kelleher, Archaeological Officer for Staffordshire County Council, who monitored the project for the local planning authority.



Burntwood Sewage Treatment Works, Peter's Lane, Lichfield, Staffordshire

Archaeological Evaluation

1 INTRODUCTION

1.1 Project and planning background

- 1.1.1 Wessex Archaeology was commissioned by AECOM, on behalf of Severn Trent Water Ltd, to undertake an archaeological evaluation of a 3.95 ha parcel of land located approximately 1 km south-east of Burntwood and 860m east of the village of Hammerwich, Staffordshire, centred on 407812 308204 (Fig. 1).
- 1.1.2 The proposed development comprises an extension to the existing sewage treatment works to accommodate the construction and operation of an additional wastewater process stream. New structures include secondary and tertiary wastewater treatment plants, sludge holding and treatment facilities, and a network of connecting access paths and new pipes.
- 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 (AECOM 2022a). The Archaeological Officer for Staffordshire County Council approved the WSI, on behalf of the Local Planning Authority (LPA), prior to fieldwork commencing.
- 1.1.4 The evaluation comprising 27 trial trenches (4% sample of development area) was undertaken between 27 March and 4 April 2023.

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, and to interpret them within their 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 evaluation area is located within a wider agricultural landscape with fields surrounding on its north, east and western sides. Burntwood Sewage Treatment Works are adjacent to the southern edge of the site. The Crane Brook runs approximately 130 m south-west on a north-west to south-east trajectory.
- 1.3.2 The area lies at a height of 114 m OD towards the south-western extent of the site, sloping up to 116 m OD at its north-eastern extent.
- 1.3.3 The bedrock geology is recorded as Helsby Sandstone Formation – Sandstone, pebbly (gravelly), overlain by superficial deposits of Devensian till – Diamicton (BGS 2023).



2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

- 2.1.1 The following is a summary of the historical and archaeological background of the site, based on the background provided by the WSI (AECOM 2022a). Staffordshire HER reference numbers have been used where appropriate.

2.2 Previous investigations related to the proposed development

Geophysical Survey (2022)

- 2.2.1 A geophysical survey (AECOM 2022b) identified a number of linear anomalies and several magnetic spikes on the site. These were interpreted as probable post-medieval field boundaries and associated agricultural activity, as well as magnetic debris or buried ferrous metal. A 10 m wide, circular anomaly of possible archaeological origin was also identified in the west of the site.

2.3 Archaeological and historical context

Prehistoric

- 2.3.1 The site was likely to have been heavily wooded throughout the prehistoric period, with some woodland clearance and a move to pastoral agricultural in the Late Bronze Age and Early Iron Age. Archaeological evidence of prehistoric activity in the vicinity of the site comprises a number of findspots, including a Bronze Age arrowhead (HER ref. MST15516) found 400 m north-west of the site and an undated flint flake (HER ref. MST14928) recovered 300 m east.
- 2.3.2 A very worn, potentially Iron Age coin was found 370 m south-west of the site (MST11836).

Roman

- 2.3.3 South Staffordshire was occupied by the Romans from the mid-1st century with the settlement of *Letocetum* located approximately 2.5 km south-east of the site, at the current town of Wall. Several important trading routes were located to the south of the site including Watling Street, which linked the south-east and London to Wroxeter in the north-west.
- 2.3.4 There are a number of Roman findspots in the wider vicinity of the site. A Roman silver denarius dated to 42 BC (HER ref. MST15633) was recovered 680 m north-west of the site, and a second denarius –dated to 120 BC – was found 200 m east of the site (HER ref. 15899). A Roman brooch was recorded 500 m north of the site (HER ref. MST14787).

Medieval

- 2.3.5 Throughout the medieval period, the land surrounding the village of Hammerwich formed part of the royal park of Cannock Chase. There have been several finds of this period made by fieldwalking and metal detector surveys.
- 2.3.6 Approximately 730 m south-west of the site, a 13th-century silver coin (HER ref. MST16671) was found, while in fields 470 m south-west of the site a silver halfpenny (HER ref. MST16670) was recovered. A silver penny (HER ref. MST17072) dating to either Edward I (1272-1307) or Edward II (1307-1327) was recorded 900 m north of the site.
- 2.3.7 A small lead container, known as an ampulla (HER ref. MST15506), was recorded 620 m north-west of the site.



Post-medieval

- 2.3.8 Industrialisation during the 18th and 19th centuries contributed to the expansion of Burntwood. During the 19th century, railways and canals were opened to export coal to the rest of the country, but the area remained predominantly agricultural. An 1856 Act of Parliament meant that many of the medieval agricultural fields in the parish of Hammerwich were enclosed at this time. Across the area, small farmhouses were constructed to manage these fields, with many continuing to survive into the modern era. Cartographic evidence shows the local area to have changed very little throughout the 19th and 20th centuries. The 1836–1845 Burntwood tithe map shows it to be agricultural, with divided parliamentary enclosures across the parish.
- 2.3.9 The 1888 1:2,500 OS map shows the area to have changed very little since 1845. The site lay within the boundary of four separate agricultural fields. The boundaries of these fields were also shown on the Burntwood tithe map..
- 2.3.10 LiDAR data (Environment Agency 2023) shows several linear anomalies 40 m south of the site boundary, running on a north-west to south-east alignment. These are potentially agricultural features dating to the post-medieval period, with one of the linear features aligning with a 19th-century field boundary shown on the 1888 OS mapping.
- 2.3.11 Several post-medieval finds have been recorded in the vicinity of the site, including a copper alloy belt buckle 700 m north-west (HER ref. MST15508), a post-medieval pin (HER ref. MST11843) 980 m east, and a copper alloy finger ring (HER ref. MST11837) found 970 m east of the site.

Modern

- 2.3.12 The 1903 1:10,560 OS plan shows the area to have remained the same since the mid-19th century. The site still lies within the boundary of the same four fields. The 1924 1:10,560 OS map shows the Lichfield Sewage Treatment Works, which had expanded by 1938 (1:2,500 OS map).

3 AIMS AND OBJECTIVES

3.1 General aims

- 3.1.1 The general aims of the evaluation, as stated in the WSI (AECOM 2022a) and in compliance with the ClfA *Standard and guidance for archaeological field evaluation* (ClfA 2014a), were to confirm the presence or absence of surviving archaeological remains within the developable areas of the site.

3.2 General objectives

- 3.2.1 In order to achieve the above aims, the general objectives of the evaluation were to:
- confirm the presence or absence of surviving archaeological remains within the developable areas of the site;
 - determine the location, nature, extent, date, condition, state of preservation, significance and complexity of any archaeological remains;
 - determine the likely range, quality and quantity of artefactual and environmental evidence present;



- inform a strategy for the recording, preservation and/or management of the identified archaeological remains; and
- interpret the archaeology of the site within its local, regional, and national archaeological context.

3.3 Site-specific objectives

3.3.1 Following consideration of the archaeological potential of the site and the regional research framework set out in The Archaeology of the West Midlands; a framework for research (Watt 2011), the site-specific objectives defined in the WSI (AECOM 2022a) were to:

- generate a greater understanding of prehistoric settlement within the West Midlands; and
- inform the archaeology record and strengthen the resource assessment included in the research framework.

4 METHODS

4.1 Introduction

4.1.1 All works were undertaken in accordance with the detailed methods set out in the WSI (AECOM 2022a) and in general compliance with the standards outlined in ClfA guidance (ClfA 2014a). The methods are summarised below.

4.2 Fieldwork methods

General

- 4.2.1 The trench locations were set out using a Global Navigation Satellite System (GNSS), in the approximate positions proposed in the WSI, although trenches 10 and 20 had to be moved due to services (Fig. 1).
- 4.2.2 Twenty-seven trial trenches, each measuring 30 m in length and 2 m wide, were excavated in level spits using a 360° excavator equipped with a toothless bucket, under the constant supervision and instruction of the monitoring archaeologist. A 4 x 3.5 m extension was added on the western side of the southern end of trench 3, while two extensions (7 x 3.5 m and 4 x 4 m) were added either side of the western end of trench 4. Machine excavation proceeded until either the archaeological horizon or the natural geology was exposed.
- 4.2.3 Where necessary, the base of the trench/surface of archaeological deposits were cleaned by hand. A sample of archaeological features and deposits was hand-excavated, sufficient to address the aims of the evaluation.
- 4.2.4 Spoil from machine stripping and hand-excavated archaeological deposits was visually scanned for the purposes of finds retrieval.
- 4.2.5 Trenches completed to the satisfaction of the client and the Archaeological Officer for Staffordshire County Council 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

- 4.2.6 All exposed archaeological deposits and features were recorded using Wessex Archaeology's pro-forma recording system. A complete record of excavated features and deposits was made, including plans and sections drawn to appropriate scales (generally 1:20 or 1:50 for plans and 1:10 for sections) and tied to the Ordnance Survey (OS) National Grid.
- 4.2.7 A Leica GNSS connected to Leica's SmartNet service surveyed the location of archaeological features. All survey data is recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSTN15 and OSGM15, with a three-dimensional accuracy of at least 50 mm.
- 4.2.8 A full photographic record was made using digital cameras equipped with an image sensor of not less than 16 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 Finds and environmental strategies

- 4.3.1 Strategies for the recovery, processing and assessment of the environmental samples were in line with those detailed in the WSI (AECOM 2022a). The treatment of environmental remains was in general accordance with: *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials* (ClfA 2014b), *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (English Heritage 2011), and ClfA's *Toolkit for Specialist Reporting* (Type 2: Appraisal).

4.4 Monitoring

- 4.4.1 The Archaeological Officer for Staffordshire County Council monitored the evaluation on behalf of the LPA. Any variations to the WSI, if required to better address the project aims, were agreed in advance with the client and the Archaeological Officer for Staffordshire County Council.

5 STRATIGRAPHIC EVIDENCE

5.1 Introduction

- 5.1.1 Twelve of the 27 excavated trial trenches (44%) contained archaeological features and deposits, indicating archaeological remains are present across the site (Fig. 1).
- 5.1.2 The features comprising ditches, gullies, furrows, and pits represent one main period of activity: post-medieval to 19th century, although several features remain of uncertain date.
- 5.1.3 A small amount of finds comprising flint flakes, pottery, a fragment of iron and a scrap of glass were recovered from environmental samples taken from a number of the features.
- 5.1.4 The following section presents the results, with archaeological features and deposits discussed by period.
- 5.1.5 Detailed descriptions of individual contexts are provided in the trench summary tables (Appendix 1). Figure 2 shows all archaeological features recorded within the trenches, together with the preceding geophysical survey results (AECOM 2022b), while figure 3 shows the archaeological features with the 1884 First Edition OS map.



5.2 Soil sequence and natural deposits

- 5.2.1 The natural substrate was encountered in all trenches and comprised light yellow brown and mid- orange/red gravelly sand (Figs 5–8). The top of the geology was reached at 0.25–0.63 m below ground level (BGL). Where the naturally lain sand was encountered at a deeper depth there was a build-up of subsoil, suggesting a build-up of soil over time within low lying areas of the site. Trenches in which this occurred (trenches 3, 7, 15, 17, 23 and 25) were located across the northern and southern parts of the evaluation area. All features cut into the natural substrate.
- 5.2.2 A curvilinear natural feature, probably a tree-throw, (2306 and 2380; 0.75 m wide x 0.38 m deep) was present in trench 23 and filled with mid-grey brown sand.
- 5.2.3 Subsoil comprising mid-yellow/reddish brown silty sand (trenches 3, 7, 15, 17 and 23) and mid-brown silty clay (trench 25) was encountered in six trenches. The top of the layer was recorded at 0.29–0.43 m BGL and measured 0.11–26 m thick.
- 5.2.4 The ground surface across all trenches comprised mid-grey brown silty sand topsoil (Fig. 5).

5.3 Potentially pre-19th century

- 5.3.1 Intercutting ditches 905 and 907 (1.1–1.35 m x 0.25–0.43 m deep; Fig. 4, section 2) and gully 909 (0.55–0.14 m deep) were aligned north–south and each contained one fill of silty sand. The features are probably part of a field boundary, potentially belonging to an earlier field system than that shown on 19th-century mapping. The ditch correlates well with a linear anomaly identified in the geophysical survey (AECOM 2022b). The same anomaly extended into trench 27, where ditch 2703 (1.4 x 0.39 m deep) was found in a comparative location. An environmental sample taken from the fill of ditch 2703 was rich in wood charcoal and contained occasional fragments of hazel nutshell, as well as a small flint flake of possible early prehistoric date. No bulk samples were obtained from ditches 905 or 907.
- 5.3.2 Three sub-oval pits (204; Fig. 4, section 3, 206, 209; 1–2.15 x 0.5–1.4 x 0.15–0.25 m deep) containing burnt stone and charcoal (cover plate) were uncovered in trench 2, in the east of the site. Environmental samples taken from the pits were similar in composition to ditch 2703, containing frequent wood charcoal fragments, along with hazel nutshell from pit 206 and two abraded scraps of possible Late Iron Age or Romano-British pottery. The date of the pits is uncertain; the size and condition of the pottery sherds mean they cannot be used to confidently date the features. However, the fills suggest they were used as fire pits, or as refuse pits for the redeposited fuel waste of a burnt mound (see 7.5.2).

5.4 19th century (AD 1800–1900)

- 5.4.1 Ditches (0.8–2.40 m x 0.14–0.55 m deep) in trenches 3 (304 and 306; Fig. 6), 12 (1205 and 1207; Fig. 4, section 1), 17 (1704), 19 (1903 and 1905; Fig. 7), 25 (2504) and 26 (2603) correlate well with field boundaries shown on the 1884 First Edition 1:2500 OS map and 1836–1845 St Michael: Burntwood township tithe map (Staffordshire Past Track 2023). Evidence of re-cutting was shown on ditches in trenches 3 (304 and 306), 12 (1205 and 1207) and 19 (1903 and 1905). The ditches were shallower to the south (trenches 19, 25 and 26), possibly indicating a greater truncation by later activity in this part of the site. The ditches were filled with one to three fills of stony, silty sand, from which a residual possible early prehistoric flint flake, a sherd of post-medieval pottery, and a fragment of iron nail or tack were recovered in ditch 2603.
- 5.4.2 Environmental samples were taken from five of the ditches; the results showed that the ditch fills had been bioturbated and contained, abundant fragments of clinker/cinder or coal.



5.5 Uncertain date

- 5.5.1 Ditch 704 (trench 7; 1.78 m x 0.23 m deep) was aligned east–west and filled with sand.
- 5.5.2 Drainage gully 903 (trench 9; 0.38 m x 0.27 m deep) was aligned north-west to south-east and contained a single fill of silty sand.
- 5.5.3 Parallel gullies 2203 and 2304 (Fig. 8) (trenches 22 and 23; 0.43–0.75 m x 0.17–0.38 m deep) were aligned north-east to south-west and were spaced around 60 m apart. Each gully contained a single fill of sand and were likely used for drainage.

6 FINDS EVIDENCE

- 6.1.1 No finds were recovered during the normal course of hand-excavation, but seven items (7 g) were extracted from the environmental sample residues. These include two small flint flakes (each weighing <1 g) from ditches 2603 and 2703 in trenches 26 and 27 respectively. Both flakes are thin and finely worked and, as such, would not be out of place in an early prehistoric (Mesolithic or Neolithic) assemblage. However, this date range is not demonstrable for these pieces, and other finds from ditch 2603 (a single sherd (3 g) of post-medieval internally glazed redware pottery and the shank (1 g) of a small iron nail or tack) suggest that the flake is residual.
- 6.1.2 Two tiny, surfaceless scraps of pottery (1 g) from pit 209 in trench 2 cannot be dated with confidence but their fine, grog-tempered fabric suggests they may belong within the Late Iron Age or Romano-British periods (c.50 BC–AD 410). The only other find consists of a scrap (<1 g) of pale blue/green glass, probably of post-medieval date, from the surface of the natural (1202) in trench 2.

6.2 Conclusion

- 6.2.1 The fine, well-preserved flint flakes highlight the possibility of earlier prehistoric activity in the vicinity but overall, the tiny finds assemblage has limited potential for further research.

7 ENVIRONMENTAL EVIDENCE

7.1 Introduction

- 7.1.1 Nine bulk sediment samples were taken from a range of undated and post-medieval to 19th-century features such as pits, ditches, and a furrow. The samples were processed for the recovery and assessment of environmental evidence.

7.2 Aims

- 7.2.1 The aim of this assessment was to determine the nature and significance of the environmental remains preserved at the site and their potential to address the project aims. This assessment has been undertaken in accordance with Historic England's guidelines outlined in *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation* (English Heritage 2011).

7.3 Methods

- 7.3.1 The size of the bulk sediment samples varied between 7 and 30 litres, with an average volume of approximately 17 litres. The samples were processed by standard flotation methods on a Siraf-type flotation tank. The flot was retained on a 0.25 mm mesh and the residues were retained on 4 mm and 1 mm meshes. The sample taken from waterlogged sediment was subsampled down prior to processing, with approximately 7 litres of

unprocessed sediment retained for potential further work at a later stage (e.g., analysis of wood, insect remains). This sample was also processed by standard flotation methods and the flot was retained on a 0.25 mm mesh. The coarse fractions of all residues (>4 mm) were sorted by eye for artefactual and environmental remains and discarded. The environmental material extracted from the residues was added to the flots. The fine residue fractions and the flots were scanned and sorted using a Leica MS5 stereomicroscope at magnifications of up to x40.

- 7.3.2 The presence of recent material within the flots was noted where present, including modern roots, modern seeds, earthworm eggs, soil fungal sclerotia, and shells of the burrowing blind snail (*Ceciliooides acicula*), which was introduced in Britain in the medieval period. The volume of wood charcoal (>2 mm) in the flots was estimated. Plant remains were identified through comparison with modern reference material held by Wessex Archaeology and relevant literature (Cappers *et al.* 2006). Nomenclature follows Stace (1997).
- 7.3.3 Remains were recorded semi-quantitatively on an abundance scale: C = <5 ('Trace'), B = 5–10 ('Rare'), A = 10–30 ('Occasional'), A* = 30–100 ('Common'), A** = 100–500 ('Abundant'), A*** = >500 ('Very abundant/Exceptional').

7.4 Results

- 7.4.1 The results are presented in Appendix 2. The flots from the bulk sediment samples were of varying volumes. Indicators of bioturbation were present, highlighting the potential of contamination from later intrusive material. Bioturbation proxies present included modern roots, modern seeds, modern crop chaff, earthworm eggs and soil fungal sclerotia (e.g., *Cenococcum geophilum*).
- 7.4.2 Environmental evidence primarily comprised wood charcoal and a small number of charred plant remains. One sample from ditch 1206 contained uncharred plant remains likely preserved in a waterlogged (anoxic) burial environment. A small number of terrestrial molluscs were also noted in the sample from pit 206.

Post-medieval to 19th century

- 7.4.3 The samples from ditches 304, 1205, 1207, and 1704 and 2603, which are former field boundaries, produced small to moderately sized flots. These flots contain abundant bioturbation indicators, small volumes of mineral-stained wood charcoal (generally 2 ml or less) and were sterile in charred plant remains, with the exception of the flot from ditch 1207, which contains a single monocotyledon stem.
- 7.4.4 The flot from ditch 1206 contains a small assemblage of waterlogged plant remains, including degraded vegetative material such as small woody fragments, and some seeds. The taxa observed comprise mainly brambles (*Rubus* sp.), with some elder (*Sambucus* sp.), violet (*Viola* sp.), species of the goosefoot family (Chenopodiaceae), species of the mint family (Lamiaceae), rushes (*Juncus* sp.) and docks (*Rumex* sp.). Fragments of insects, insect eggs such as earthworm eggs and beetle elytra are also present.
- 7.4.5 All of the samples assigned to this phase of activity contained highly fragmented clinker/cinder and coal.

Uncertain date

- 7.4.6 Three pits (204, 206, 209) and ditch 2703 of uncertain date were sampled. The flots were notably larger than those from the post-medieval to 19th century features and were very rich in moderately well-preserved but mineral-stained wood charcoal. Fragments of hazel

(*Corylus avellana*) nutshell were identified in the flots from pit 206 and ditch 2703. These samples contained fewer indicators of bioturbation and no clinker/cinder or coal was noted.

7.5 Conclusions

- 7.5.1 The samples from the post-medieval to 19th century features did not produce any environmental evidence of significance. The samples from undated pits 204, 206, and 209 and ditch 2703 produced potentially significant environmental evidence.
- 7.5.2 It is possible that the pits (and potentially ditch 2703) contain dumps of re-deposited fuel waste from a burnt mound. Several lines of evidence suggest that these features could be associated with a burnt mound. These include the location of the site within an area with a high concentration of burnt mounds, its proximity to a stream, the abundance of burnt stones and wood charcoal, the lack of datable artefacts, and paucity of plant remains which are commonly associated with settlement activities (e.g., cereal processing waste). Should these features not be associated with burnt mound activity, it is worth noting that they do not appear to be charcoal production pits because the concentration of burnt stone is too high compared to known examples. The pit features are also not typical of ovens. Other explanations of their use could be unknown industrial/craft-based activities, which may be suggested by the lack of evidence for domestic activity.
- 7.5.3 Numerous burnt mounds have been identified in the midlands, with many excavated in this region in recent years (Simmonds and Gorniak 2019; Douglas 2022; Daniel 2023; Jackson-Slater 2023). Burnt mounds comprise deposits of abundant burnt stone and wood charcoal and are often located in the vicinity of a water source. Previous excavations of burnt mounds have shown that these features are rarely identified in association with settlements and have yielded few associated artefacts (Brown *et al.* 2016). Pits containing re-deposited fuel waste (e.g., charcoal, burnt cracked stone) are often identified in association with burnt mounds and closely comparable features were identified at Field Farm, East Midlands Gateway Logistics Park (Daniel 2023).
- 7.5.4 The recovery of hazel nutshell potentially reflects the exploitation of local woodland resources for fuel for the burnt mounds or the exploitation of local food resources. Burnt mounds tend to date to the Bronze Age; however, while these charred plant remains could be consistent with a Bronze Age date, they are unfortunately not indicative of any particular time period.
- 7.5.5 Fluctuating water-levels are indicated by the mineral-staining on the wood charcoal from all samples, and the waterlogging of, likely recent, vegetative material from ditch 1206.

8 CONCLUSIONS

8.1 Discussion

- 8.1.1 Three pits and a north–south aligned boundary ditch were potentially the earliest features uncovered. A very small number of artefacts comprising a flint flake and pottery were recovered from the ditch and one of the pits. The assemblage indicate that the features were prehistoric to Romano-British in date, however, the size and condition of assemblage suggests it may be residual and therefore does not provide a definitive date for the features. Environmental evidence suggests there is a possible association between the pits and ditch, and the alignment of the ditch indicates that it is earlier in date than the 19th-century field boundaries. Additionally, no cinder/clinker or coal were present in the samples, which were present in the 19th-century features. The environmental remains had a lack of plant remains that are usually associated with settlement activity, and along with an abundance of burnt



stones and wood charcoal it could mean an association with a burnt mound. No burnt mound layers or deposits were found during the evaluation although and this is not definitive proof of such a feature being present in the vicinity.

- 8.1.2 Previous evidence of archaeological activity within and immediately around the site comprise a number of findspots. The pits and ditch potentially show there is some early activity occurring in the area; the presence of a possible ring ditch to the west of the site (AECOM 2022b) suggests it may be settlement activity, however, this is a limited contribution to the local knowledge, due to the lack of dating.
- 8.1.3 Most of the archaeological features uncovered comprised ditches and nine of those aligned with former mapped boundaries. Environmental remains recovered from the ditches contained high amounts of coal, clinker and/or cinder and did not produce any environmental evidence of significance. The ditches are shown on 19th-century mapping however, their construction date is uncertain as few finds were recovered, and boundaries can last for long periods within the landscape. A sherd of post-medieval redware pottery was recovered from one of the ditches and the boundaries are shown on the 1836–1845 Burntwood tithe map (Staffordshire Past Track 2023), indicating that they belong to a pre-1856 Enclosure Act field system, and potentially medieval in date.
- 8.1.4 A ditch and three gullies remain undated due to the lack of datable material. It is probable that the gullies were associated with modern drainage.
- 8.1.5 There was little correlation with the geophysical survey results (AECOM 2022b); potential anomalies that were identified were not seen in the trenches and ditches that were uncovered during the trench evaluation were not shown in the survey. It is unclear why there is such a discrepancy. The north–south aligned ditch, which was recorded in trenches 9 and 27 and was probably a pre-Enclosure Act field boundary, was identified in the survey, however, as a linear of unknown origin.

8.2 Conclusion

- 8.2.1 The trial trench evaluation has met the majority of its aims: the investigation has determined that there are sparse archaeological remains dispersed across the site. The location, nature, extent, condition and significance of the remains have been determined, however, the lack of datable artefacts has meant that the dates of some of these remains are still elusive. The archaeological features have been placed within the wider historical and archaeological context and the range, quality and quantity of the environmental evidence has been assessed.
- 8.2.2 There is limited scope for adding to the understanding of prehistoric settlement in the West Midlands and inform the archaeological record due to the lack of datable material recovered.

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. Potteries Museum and Art Galleries has agreed in principle to accept the archive on completion of the project. Deposition of any finds with the museum will only be carried out with the full written agreement of the landowner to transfer title of all finds to the museum.

9.2 Preparation of the archive

Physical archive

- 9.2.1 The archive, which includes paper records, graphics, artefacts and ecofacts, will be prepared following the standard conditions for the acceptance of excavated archaeological material by Potteries Museum and Art Galleries, and in general following nationally recommended guidelines (Brown 2011; ClfA 2014c; SMA 1995).
- 9.2.2 All archive elements are marked with the **site code 271860**, and a full index will be prepared. The physical archive currently comprises the following:
- One cardboard box or airtight plastic box of artefacts and ecofacts, ordered by material type
 - One file of paper records

Digital archive

- 9.2.3 The digital archive generated by the project, which comprises born-digital data (e.g., site records, survey data, databases and spreadsheets, photographs and reports), will be deposited with a Trusted Digital Repository, in this instance the Archaeology Data Service (ADS), to ensure its long-term curation. Digital data will be prepared following ADS guidelines (ADS 2013 and online guidance) and accompanied by metadata.

9.3 Selection strategy

- 9.3.1 It is widely accepted that not all the records and materials (artefacts and ecofacts) collected or created during the course of an archaeological project require preservation in perpetuity. These records and materials will be subject to selection in order to establish what will be retained for long-term curation, with the aim of ensuring that all elements selected to be retained are appropriate to establish the significance of the project and support future research, outreach, engagement, display and learning activities, i.e., the retained archive should fulfil the requirements of both future researchers and the receiving Museum.
- 9.3.2 The selection strategy, which details the project-specific selection process, is underpinned by national guidelines on selection and retention (Brown 2011, section 4) and generic selection policies (SMA 1993; Wessex Archaeology's internal selection policy) and follows ClfA's *Toolkit for Selecting Archaeological Archives*. It should be agreed by all stakeholders (Wessex Archaeology's internal specialists, external specialists, local authority, museum) and fully documented in the project archive.
- 9.3.3 In this instance, given the relatively low level of finds recovery, the selection process has been deferred until after the fieldwork stage was completed. Project-specific proposals for selection are presented below. These proposals are based on recommendations by Wessex Archaeology's internal specialists and will be updated in line with any further comment by other stakeholders (museum, local authority). The selection strategy will be fully documented in the project archive.
- 9.3.4 Any material not selected for retention may be used for teaching or reference collections by Wessex Archaeology.

Finds

- 9.3.5 The finds assemblage has limited potential for further research. Only the flints warrant long-term curation.



Palaeoenvironmental material

- 9.3.6 The material should be retained as part of the archive until further sampling has been undertaken when recommendations for analysis and deposition will be made.
- 9.3.7 Should no additional excavation work be undertaken, the samples from undated pits 204, 206, and 209 and ditch 2703 should be retained in the site archive. The samples from post-medieval to 19th century AD ditches 304, 1205, 1207, 1704 and furrow 2603 can be discarded, as they have little further significance.

Documentary records

- 9.3.8 Paper records comprise site registers (other pro-forma site records are digital), drawings and reports (written scheme of investigation, client report). All will be retained and deposited with the project archive.

Digital data

- 9.3.9 The digital data comprise site records (tablet-recorded on site) in spreadsheet format; finds records in spreadsheet format; survey data; photographs; reports. All will be deposited, although site photographs will be subject to selection to eliminate poor quality and duplicated images, and any others not considered directly relevant to the archaeology of the site.

9.4 Security copy

- 9.4.1 In line with current best practice (e.g., 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.

9.5 OASIS

- 9.5.1 An OASIS (online access to the index of archaeological investigations) record (<http://oasis.ac.uk>) has been initiated, with key fields completed (Appendix 3). A .pdf version of the final report will be submitted following approval by the Archaeological Officer for Staffordshire County Council on behalf of the LPA. 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 (ADS) 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*.

10.2 Third party data copyright

- 10.2.1 This document and the project archive may contain material that is non-Wessex Archaeology copyright (e.g., Ordnance Survey, British Geological Survey, Crown



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APPENDICES

Appendix 1: Trench summaries

Trench No 1		Length 30 m	Width 2 m	Depth 0.32 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
101		Topsoil	Mid-grey brown silty sand. Soft, coarse and granular. Frequent rooting (crop). Occasional small to medium sub-rounded stones.	0.00–0.25
102		Natural	Mid-pinkish red sand with occasional grey patches. Firm, fine and granular. Rare very fine rooting. Frequent small to large sub-rounded and sub-angular stones.	0.25–0.32+

Trench No 2		Length 30 m	Width 2 m	Depth 0.42 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
201		Topsoil	Mid-grey brown silty sand. Soft, coarse and granular. Frequent rooting (crop). Occasional small to medium sub-rounded stones.	0.00–0.36
202		Natural	Mixed light yellow sand with grey patches and 'burnt' reddish sand. Firm, fine and granular. Frequent small to large sub-rounded stones. Rare very fine rooting.	0.36–0.42+
203	204	Deliberate backfill	Black loose, silty (30%) sand and charcoal with very frequent pebbles, 4-5 cm size, most of them burnt.	
204	203, 210	Pit	Sub-oval pit with shallow, irregular sides and a flat base. Length: 1.80 m. Width: 0.50 m. Depth: 0.25 m.	0.36–0.61
205	206	Deliberate backfill	Black silty (30%) loose sand and charcoal with quite frequent pebbles, 3-4 cm in size, most of them burnt.	
206	205	Pit	Irregular pit with moderate, irregular sides and a flat base. Length: 1.00 m. Width: >0.70 m. Depth: 0.15 m.	0.36–0.51
207	209	Deliberate backfill	Slightly creamy white fine sand.	
208	209	Deliberate backfill	Black silty sand and charcoal with frequent burnt pebbles.	
209	207, 208	Pit	Sub-oval pit with irregular, irregular sides and a flat base. Length: 2.15 m. Width: 1.40 m. Depth: 0.25 m.	0.36–0.61
210	204	Primary fill	Creamy white fine sand.	



Trench No 3		Length 30 m	Width 2 m	Depth 0.50 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
301		Topsoil	Mid-brownish grey, loose, silty sand with moderate (10%) small to medium sub-rounded stones. poorly sorted.	0.00–0.39
302		Subsoil	Mid-yellow, loose, silty sand with moderate (10%) small to medium sub-rounded stones, poorly sorted.	0.39–0.50
303		Natural	Mid-brownish yellow, loose, silty sand with moderate (10%) small to medium sub-rounded stones, poorly sorted.	0.50+
304	305	Ditch	Linear ditch aligned NE-SW with steep, straight sides and a flat base. Length: >1.20 m. Width: 2.40 m. Depth: 0.55 m.	0.50–1.05
305	304	Secondary fill	Mid-grey brown moderately compacted silty sand with (10%) moderate small to medium sub-rounded stones, poorly sorted.	
306	307	Ditch	Linear ditch aligned NE-SW with shallow, straight sides and a flat base. Length: >1.00 m. Width: 0.80 m. Depth: 0.22 m.	0.50–0.72
307	306	Secondary fill	Light yellowish grey loose silty sand with (10%) moderate small to medium sub-rounded stones, poorly sorted.	

Trench No 4		Length 30 m	Width 2 m	Depth 0.48 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
401		Topsoil	Mid-grey brown, soft, silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.33
402		Natural	Mid-pinkish red, firm and fine sand with occasional small to medium sub-rounded stones and rare very fine rooting.	0.33–0.48+

Trench No 5		Length 30 m	Width 2 m	Depth 0.43 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
501		Topsoil	Mid-grey brown, soft, coarse, silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.36
502		Natural	Mid-brown yellow, firm, fine sand with rare very fine rooting and frequent small to large sub-angular and sub-rounded stones.	0.36–0.43+



Trench No 6		Length 30 m	Width 2 m	Depth 0.46 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
601		Topsoil	Mid-grey brown, soft, coarse, silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.33
602		Natural	Light to mid-reddish yellow, firm, fine sand with patches of a pinkish red slightly clayey sand and rare very fine rooting and occasional small to large sub-rounded stones.	0.33–0.46+

Trench No 7		Length 30 m	Width 2 m	Depth 0.58 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
701		Topsoil	Mid-grey, soft, coarse silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.39
702		Subsoil	Mid-reddish brown, firm sand with rare very fine rooting and rare small to large sub-rounded stones.	0.39–0.50
703		Natural	Mid-yellow, firm, fine sand with frequent small to large sub-rounded stones.	0.50–0.58+
704	705	Ditch	Linear ditch aligned E-W with moderate, concave sides and an irregular/undulating base. Length: >2.20 m. Width: 1.78 m. Depth: 0.23 m.	0.50–0.73
705	704	Secondary fill	Light to mid-yellow brown sand with occasional small to medium sub-rounded stones and occasional fine rooting.	

Trench No 8		Length 30 m	Width 2 m	Depth 0.50 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
801		Topsoil	Mid-grey brown, soft, coarse silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.39
802		Natural	Mid-reddish pink, firm, slightly sticky clayey sand (clay is especially concentrated at the east end of trench) with rare very fine rooting and occasional small to medium sub-rounded stones.	0.39–0.50+



Trench No 9		Length 30 m	Width 2 m	Depth 0.45 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
901		Topsoil	Mid-grey brown, coarse, soft silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.36
902		Natural	Light to mid-brown, firm, fine yellow sand with rare very fine rooting and occasional small to large sub-rounded stones.	0.36–0.45+
903	904	Gully	Linear gully aligned NW-SE with moderate, straight sides and a V-shaped base. Length: >3.00 m. Width: 0.38 m. Depth: 0.27 m.	0.36–0.63
904	903	Secondary fill	Mid-yellowish brown silty sand.	
905	906	Gully	Linear gully aligned N-S with moderate, concave sides and a concave base. Length: >2.00 m. Width: 1.10 m. Depth: 0.25 m.	0.36–0.61
906	905	Secondary fill	Mid-yellowish brown silty sand with scarce (3%) small rounded stones 3-5 cm.	
907	908	Ditch	Linear ditch aligned N-S with moderate, concave sides and a concave base. Length: >2.00 m. Width: 1.35 m. Depth: 0.43 m.	0.36–0.79
908	907	Secondary fill	Dark yellowish brown silty sand with moderate (7%) rounded stones, 2-6 cm in size.	
909	910	Gully	Linear gully aligned N-S with shallow, concave sides and a concave base. Length: >2.00 m. Width: 0.55 m. Depth: 0.14 m.	0.36–0.50
910	909	Secondary fill	Mid-yellowish brown silty sand with scarce (3%) rounded stones, 2-4 cm in size.	

Trench No 10		Length 30 m	Width 2 m	Depth 0.41 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
1001		Topsoil	Mid-grey brown, soft, coarse silty sand with frequent rooting (crop) and occasional small sub-rounded stones.	0.00–0.32
1002		Natural	Mid-brownish pink red, firm, fine sand with rare very fine rooting.	0.32–0.41+



Trench No 11		Length 30 m	Width 2 m	Depth 0.50 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
1101		Topsoil	Mid-grey brown, coarse, soft slightly silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.40
1102		Natural	Light to mid-yellow, soft, fine sand with frequent small to medium sub-rounded stones and occasional medium to large sub-angular sandstone fragments. Becomes more pinkish red to the north end of trench.	0.40–0.50+

Trench No 12		Length 30 m	Width 2 m	Depth 0.41 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
1201		Topsoil	Mid-grey brown, soft, coarse silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.31
1202		Natural	Pinkish red, firm, fine slightly clayey sand with frequent small to large sub-rounded stones at the north-west end of the trench. It turned brownish yellow at the south-east end.	0.31–0.41+
1204	1207	Secondary fill	Mid-grey brown loose silty sand with (10%) moderate small to medium sub-rounded stones, poorly sorted.	
1205	1206	Ditch	Linear ditch aligned NE-SW with steep, straight sides and a flat base. Length: >1.00 m. Width: >1.20 m. Depth: 0.46 m.	0.31–0.77
1206	1205	Secondary fill	Mid-grey brown loose silt with moderate (10%) small to medium sub-rounded stones, poorly sorted.	
1207	1204	Ditch	Linear ditch aligned NE-SW with steep, straight sides and a flat base. Length: >1.00 m. Width: 0.65 m. Depth: 0.31 m.	0.31–0.62

Trench No 13		Length 30 m	Width 2 m	Depth 0.49 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
1301		Topsoil	Mid-grey brown, coarse, soft silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.38
1302		Natural	Mid-yellow brown, firm, fine sand with rare very fine rooting and frequent small to large sub-angular and sub-rounded stones.	0.38–0.49+



Trench No 14		Length 30 m	Width 2 m	Depth 0.51 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
1401		Topsoil	Mid-grey brown, soft, coarse silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.40
1402		Natural	Mid-red brown, firm, fine sand with rare very fine rooting and frequent small to medium sub-rounded and sub-angular stones.	0.40–0.51+

Trench No 15		Length 30 m	Width 2 m	Depth 0.52 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
1501		Topsoil	Mid-grey brown, soft, coarse silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.29
1502		Subsoil	Mid-yellow brown sand with occasional fine rooting and occasional small to medium sub-rounded stones. Likely an interface between topsoil and natural.	0.29–0.41
1503		Natural	Light to mid-yellow brown, firm sand with frequent small to medium sub-rounded stones and occasional medium to large sub-angular sandstone fragments.	0.41–0.52+

Trench No 16		Length 30 m	Width 2 m	Depth 0.44 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
1601		Topsoil	Mid-grey brown, soft, coarse silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.34
1602		Natural	Mid-reddish pink, firm, fine sand with frequent very large sandstone slabs - possibly outcrops of natural bedrock and occasional small to medium sub-rounded stones.	0.34–0.44+



Trench No 17		Length 30 m	Width 2 m	Depth 0.65 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
1701		Topsoil	Mid-grey, soft, coarse silty clay with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.29
1702		Subsoil	Mid-reddish brown, soft sand with occasional fine rooting and occasional small sub-rounded stones. Likely interface between topsoil and natural. Thickest at the north end of trench.	0.29–0.55
1703		Natural	Mid-pinkish red, firm sand with frequent small to medium sub-rounded stones and frequent medium to large sub-angular sandstone fragments.	0.55–0.65+
1704	1703	Ditch	Linear ditch aligned NE-SW with steep, straight sides and a V-shaped base. Length: 1.00 m. Width: 1.70 m. Depth: 0.54 m.	0.55–1.09
1705	1704	Secondary fill	Mid-grey brown moderately compacted silty sand with moderate (10%) small to medium sub-rounded stones, poorly sorted.	

Trench No 18		Length 30 m	Width 2 m	Depth 0.41 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
1801		Topsoil	Mid-grey brown, soft, coarse silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.29
1802		Natural	Mid-reddish brown, firm, fine sand with frequent small to medium sub-rounded stones and frequent very fine rooting. Becomes a bright yellow sand at west end of trench.	0.29–0.41+



Trench No 19		Length 30 m	Width 2 m	Depth 0.45 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
1901		Topsoil	Mid-grey brown, coarse silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.37
1902		Natural	Light to mid-reddish pink, firm, fine sand with pale yellow mottling, frequent very fine rooting and occasional small to large sub-rounded stones.	0.37–0.45+
1903	1904	Ditch	Linear ditch aligned NE-SW with moderate, concave sides and a flat base. Length: >5.00 m. Width: 1.15 m. Depth: 0.25 m.	0.37-0.62
1904	1903	Secondary fill	Dark grey brown friable, silty sand with occasional pebbles, 3-4 cm in size.	
1905	1906	Ditch	Linear ditch aligned NE-SW with moderate, straight sides and a flat base. Length: >5.00 m. Width: 1.33 m. Depth: 0.25 m.	0.37-0.62
1906	1905	Secondary fill	Mid- to light brown soft to slightly friable silty sand with pebbles, bigger and more frequent towards side of the fill.	

Trench No 20		Length 30 m	Width 2 m	Depth 0.43 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
2001		Topsoil	Mid-grey brown, soft, fine silty sand with frequent rooting and occasional small to large sub-rounded stones.	0.00–0.36
2002		Natural	Pinkish red sandy gravel at north-west end of trench before turning to a mid-brown yellow, firm, fine sand at the south-east. Highly frequent small to large sub-rounded stones, especially concentrated in the north-west end of the trench.	0.36–0.43+

Trench No 21		Length 30 m	Width 2 m	Depth 0.43 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
2101		Topsoil	Mid-grey brown, soft, coarse silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.35
2102		Natural	Mid-red brown, firm, fine sand with occasional mid-yellow mottling with occasional small to medium sub-rounded and sub-angular stones.	0.35–0.43+



Trench No 22		Length 30 m	Width 2 m	Depth 0.46 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
2201		Topsoil	Mid-grey brown, soft, coarse silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.36
2202		Natural	Mid-reddish brown, firm, fine sand with rare very fine rooting and occasional small to medium sub-rounded stones.	0.36–0.46+
2203	2204	Gully	Linear gully aligned SW-NE with moderate, concave sides and a concave base. Length: >3.63 m. Width: 0.43 m. Depth: 0.17 m.	0.36–0.53
2204	2203	Secondary fill	Light brown sand with sparse, small, sub-rounded pebbles and rare, medium, sub-rounded pebbles.	

Trench No 23		Length 30 m	Width 2 m	Depth 0.55 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
2301		Topsoil	Mid-grey brown silty sand, soft, coarse with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.33
2302		Subsoil	Mid-, slightly reddish, brown, firm, slightly clayey sand with occasional small to medium sub-rounded stones.	0.33–0.51
2303		Natural	Very mixed. Mid-pinkish red sand at the north end. Light to mid-yellow sand in the south end. Frequent small to medium sub-rounded and sub-angular stones mainly concentrated in the south. Firm.	0.51–0.55+
2304	2305	Gully	Linear gully aligned NE-SW with moderate, concave sides and a concave base. Length: >3.85 m. Width: 0.75 m. Depth: 0.13 m.	0.51–0.60
2305	2304	Secondary fill	Mid-grey sand with rare small rounded stones and rare very fine rooting.	
2306	2307	Natural feature	Curvilinear natural feature with steep, straight sides and an irregular/undulating base. Length: >2.50 m. Width: 0.75 m. Depth: 0.38 m.	0.51–0.88
2307	2306	Secondary fill	Mid-grey brown silty sand with rare (1-3%), coarse, sub-rounded gravels 40-60 mm in size, poorly sorted.	
2308	2309	Natural feature	Irregular natural feature with shallow, straight sides and a flat base.	0.51–0.64
2309	2308	Secondary fill	Mid-brown sand with sparse, medium sub-rounded pebbles.	



Trench No 24		Length 30 m	Width 2 m	Depth 0.44 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
2401		Topsoil	Mid-grey brown, soft, coarse silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.35
2402		Natural	Light grey yellow to mid-yellow, firm, fine sand with highly frequent small to large sub-rounded stones and rare very fine rooting.	0.35–0.44+

Trench No 25		Length 30 m	Width 2 m	Depth 0.67 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
2501		Topsoil	Mid-grey brown, soft, coarse silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.43
2502		Natural	Very mixed light yellow to burnt orange with patches of light grey, firm, fine sand with rare very fine rooting and frequent small to medium sub-rounded and sub-angular stones.	0.63–0.67+
2503		Subsoil	Mid-brown pink silty clay with sparse sub-rounded medium and large pebbles. Clear boundaries. Extends about 9 m from north end.	0.43–0.63
2504	2505, 2506, 2507	Ditch	Linear ditch with irregular sides and a flat base. Depth: 0.31 m.	0.63–0.94
2505	2504	Secondary fill	Black sand with rare large sub-rounded pebbles and sparse sub-rounded medium pebbles.	
2506	2504	Secondary fill	Dark brown sand with medium and small sub-rounded pebbles, sparse degraded sub-angular stone.	
2507	2504	Primary fill	Mid-pink silty clay with sparse medium sub-rounded pebbles.	



Trench No 26		Length 30 m	Width 2 m	Depth 0.45 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
2601		Topsoil	Mid-grey brown, soft, coarse silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.37
2602		Natural	Mid-yellow brown, firm, fine sand with occasional pinkish red mottling and frequent small to large sub-rounded stones, rare very fine rooting and large spreads of grey material throughout.	0.37–0.45+
2603	2604	Ditch	Linear ditch aligned NW-SE with shallow, concave sides and a concave base. Length: >2.80 m. Width: 1.18 m. Depth: 0.14 m.	0.37–0.51
2604	2603	Secondary fill	Dark brown grey silty sand with sparse (3-8%) medium to coarse, sub-rounded gravels, 20-60 mm in size, poorly sorted.	0.37–0.51

Trench No 27		Length 30 m	Width 2 m	Depth 0.45 m
Context Number	Fill Of/Filled With	Interpretative Category	Description	Depth (m) BGL
2701		Topsoil	Mid-grey brown, soft, coarse silty sand with frequent rooting (crop) and occasional small to medium sub-rounded stones.	0.00–0.34
2702		Natural	Very mixed light yellow to 'burnt' orange, firm, fine sand with grey sandy spreads and frequent small to large sub-angular and sub-rounded stones.	0.34–0.45+
2703	2704	Ditch	Linear ditch aligned N-S with steep, straight sides and a V-shaped base. Length: >2.00 m. Width: 1.40 m. Depth: 0.39 m.	0.34–0.71
2704	2703	Secondary fill	Mid-grey brown sandy sand with uncommon coarse gravel and cobble inclusions.	



Appendix 2: Assessment of the environmental evidence

Area	Phase	Feature Type	Feature	Context	Sample Code	Sample vol. (l)	Flot vol. (ml)	Bioturbation proxies	Charred plant remains	Waterlogged plant remains	Charcoal >2mm (ml)	Charcoal notes	Other	Preservation
Tr2	Uncertain	Pit	204	203	278890_201	17	900	2%, A	-	-	700	Mineral-staining	-	-
Tr2	Uncertain	Pit	206	205	278890_202	8	175	10%, A	C - <i>Corylus avellana</i> nutshell fragments	-	100	Mineral-staining	Moll-t (C)	Poor
Tr3	PM - 19th C	Ditch	304	305	278890_301	16	20	50% (incl. modern crop chaff), A**, E, F	-	-	1	Mineral-staining	Clinker/cinder (A**), Coal (A*)	-
Tr2	Uncertain	Pit	209	208	278890_203	16	550	5%, A*	-	-	450	Mineral-staining	-	-
Tr12	PM - 19th C	Ditch	1207	1204	278890_1201	17	20	90% (incl. modern crop chaff), A*, F	C - monocot stem	-	2	Mineral-staining	Clinker/cinder (A**), Coal (A*)	Poor
Tr12	PM - 19th C	Ditch	1205	1206	278890_1202	7	60	5%, F	-	Vegetative parts: A*** - Fairly degraded vegetative material and small woody fragments: A** - Mainly <i>Rubus</i> sp., also <i>Sambucus</i> sp., <i>Viola</i> sp., Chenopodiaceae, Lamiaceae, <i>Juncus</i> sp., <i>Rumex</i> sp. Insects/invertebrates: A** - Indet insect parts and ?eggs/cocoons, beetle elytra, earthworm eggs	2	Mineral-staining	Clinker/cinder (A)	Heterogeneous
Tr17	PM - 19th C	Ditch	1704	1705	278890_1701	17	100	90%, A**, E, I	-	-	<1	Mineral-staining	Clinker/cinder (A*), Coal (A*)	-
Tr26	PM - 19th C	Furrow	2603	2604	278890_2601	31	150	80% (incl. modern crop chaff), A**, F	-	-	1	Mineral-staining	Clinker/cinder (A**), Coal (A*)	-



Area	Phase	Feature Type	Feature	Context	Sample Code	Sample vol. (l)	Flot vol. (ml)	Bioturbation proxies	Charred plant remains	Waterlogged plant remains	Charcoal >2mm (ml)	Charcoal notes	Other	Preservation
Tr27	Uncertain	Ditch	2703	2704	278890_2701	30	500	15%, A**, E	C - <i>Corylus avellana</i> nutshell fragments	-	250	Mineral-staining	-	Poor, some mineral-staining and fairly fragmented nutshell

Scale of abundance: C = <5, B = 5–10, A = 10–30, A* = 30–100, A** = 100–500, A*** = >500; Bioturbation proxies: Roots (%), Uncharred seeds (scale of abundance), F = mycorrhizal fungi sclerotia, E = earthworm eggs, I = insects; Moll-t = terrestrial molluscs.



Appendix 3: OASIS summary

OASIS ID (UID): wessexar1-515325

Project Name: Evaluation at Burntwood Sewage Treatment Works, Peter's Lane, Lichfield, Staffordshire

Activity type: Evaluation

Project Identifier(s): 278890

Reason for Investigation: Planning: Pre application

Organisation Responsible for work: Wessex Archaeology

Project Dates: 27-Mar-2023 - 04-Apr-2023

HER: Staffordshire Historic Environment Record

HER Identifiers: [no data]

Project Methodology: A total of 27 trial trenches, each measuring 30 m in length and 2 m wide, were excavated in level spits using a 360° excavator equipped with a toothless bucket, under the constant supervision and instruction of the monitoring archaeologist. A 4 x 3.5 m extension was added on the western side of the southern end of trench 3, while two extensions (7 x 3.5 m and 4 x 4 m) were added either side of the western end of trench 4. The trench locations were set out using a Global Navigation Satellite System (GNSS), in the approximate positions proposed in the WSI, although trenches 10 and 20 had to be slightly moved because of located services.

Project Results: A total of 27 trenches were excavated, of which 12 contained archaeological remains. The remains were present across the whole of the site; there was no obvious clustering of features that would indicate an area of concentrated activity. There was a good survival of archaeological remains. Three pits and a north–south aligned boundary ditch were potentially the earliest features uncovered. Environmental evidence suggests a possible association between them, and the ditch was not shown on 19th-century or later mapping, suggesting it was post-medieval or earlier in date. A small number of artefacts recovered from the ditch and one of the pits indicate that the features were early in date: prehistoric to Romano-British. However, the size and condition of the assemblage suggests it may be residual and therefore does not provide a definitive date for the features. The pits contained significant amounts of burnt stone and wood charcoal, the composition of which is similar to those found in association with burnt mounds, although no evidence of such was found during the evaluation. Ditches of varying profiles, sizes and alignments formed the most common type of feature. Around half of the ditches overlay or align with mapped boundaries. A very small number of finds were recovered from the features, of which one, a post-medieval pottery sherd, was datable. The construction date of these boundaries is therefore uncertain, although they are shown on the 1836–1845 St Michael: Burntwood township tithe map and therefore were pre-Enclosure Act and possibly medieval in date.

Keywords:

Subject/Period: Fire Pit: UNCERTAIN

FISH Thesaurus of Monument Types

Subject/Period: Boundary Ditch: POST MEDIEVAL

FISH Thesaurus of Monument Types

Archive:

Physical Archive, Documentary Archive - to be deposited with The Potteries Museum and Art Gallery;

Digital Archive - to be deposited with Archaeology Data Service Archive;

Reports in OASIS:

Jackson-Slater, C., (2023). *Burntwood Sewage Treatment Works, Peter's Lane, Lichfield, Staffordshire: Archaeological evaluation*. Sheffield: Wessex Archaeology. 278890.02.