



PROPOSED ANAEROBIC DIGESTER PLANT TO THE WEST OF HAYWOOD INDUSTRIAL ESTATE, WELLINGTON, HEREFORDSHIRE

Desk-Based Assessment and Archaeological Evaluation

commissioned by Paul Dawes

P150608/F

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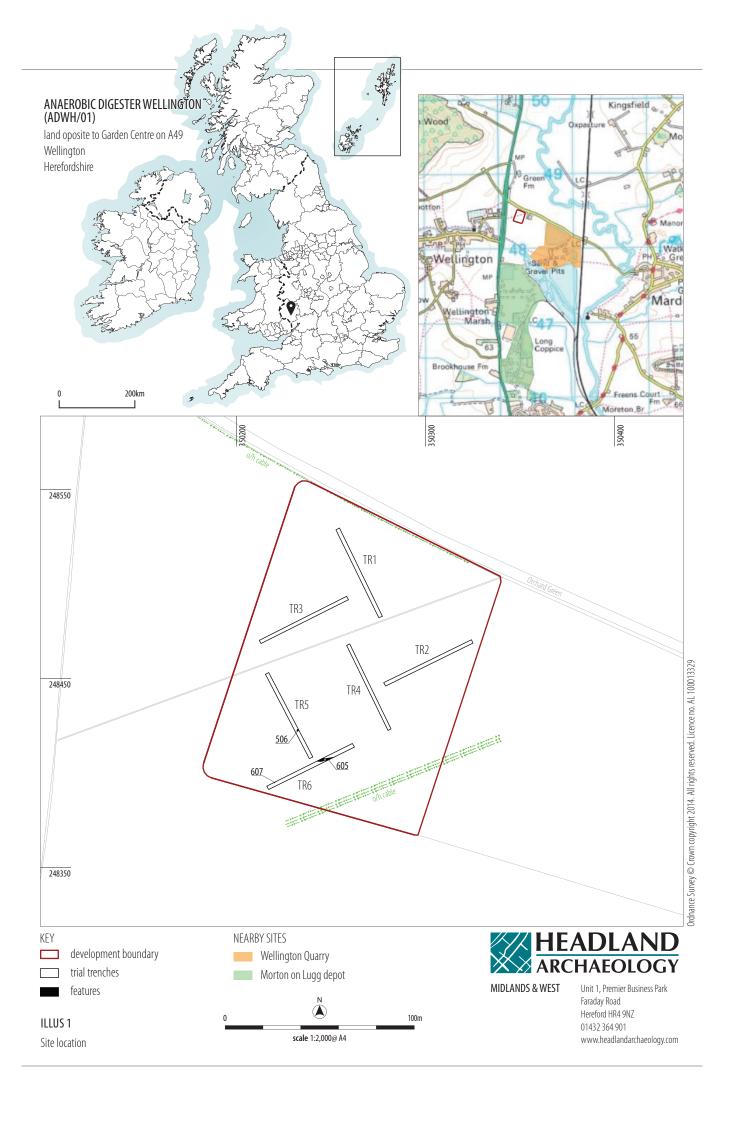


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Desk-Based Assessment and Archaeological Evaluation

An archaeological evaluation was undertaken of a site to the east of Wellington in advance of planning decisions relating to the construction of an anaerobic digester plant. The work comprised a focused desk-based assessment as well as the excavation of six trenches. Only two features of potential archaeological origin were uncovered. These included a small pit or post hole next to a north south orietated ditch. Neither contained finds from which they could be dated. The ditch runs paralell to other boundaries within the site, however, no boundary is mapped at this location as far back as 1887.

1 INTRODUCTION

Paul Dawes, through his agent, Berrys commissioned Headland Archaeology to undertake a desk-based assessment and an archaeological evaluation on an area of land next to Haywood Industrial Estate, Wellington, Herefordshire. The developer has submitted a planning application for an anaerobic digester plant on the site (P150608/5).

The development site (**Illus 1**) is comprised of a 1.8ha area of land located at NGR 350263 248461 (site centre). The site is located on flat ground and is currently agricultural land.

2 AIMS AND OBJECTIVES

In general, the purpose of the desk-based assessment was to identify any cultural heritage assets present within the application area and to provide an indication of archaeological potential. The evaluation would try to provide sufficient evidence to assist in the prediction of the impact of the proposal through establishing the extent, nature and importance of any heritage assets within the affected area (following the National Planning Policy Framework). The results of the evaluation would then be used to describe the significance of heritage assets potentially affected by the development. This will

allow the local planning authority to make an informed assessment of any potential impacts on the historic environment in line with Paragraph 128 of the National Planning Policy Framework.

The resulting archive (finds and records) will be organised and deposited with Herefordshire Museums Service to facilitate access for future research and interpretation for public benefit.

3 METHOD

3.1 DESK-BASED METHODOLOGY

The following data sources have been used in preparation of this report:

- records held by the Herefordshire Archaeological Trust and the Historic Environment Record (accessed May 2015);
- excavation reports for Wellington Quarry excavations (1986– 2002);
- other readily available published sources.

Data was collected from the above sources for the site and its immediate environs (Appendix 1).







ILLUS 2

NE facing section of Trench 5 showing the stratigraphy present on site

ILLUS 3

W facing photograph of ditch [605] in plan

3.2 FIELDWORK METHODOLOGY

The evaluation comprised the excavation of 6 trenches totalling 300 linear metres equalling a 3% sample of the proposed development area. All trenches measured 1.8in width and 50m in length. Trenches were arranged to provide even coverage across the site whilst avoiding areas beneath overhead power lines and a public footpath (Appendix 2).

All trenches were set-out using differential GPS, which also provided absolute heights above OD. Service plans were consulted in advance of excavation and safe digging techniques were observed. All trenches were opened by a 13 tonne tracked excavator equipped with a 1.8m wide ditching bucket under direct archaeological supervision and excavated in controlled spits. Spoil was stored beside the trench; topsoil and subsoil were kept separate by putting topsoil on one side of the trench and subsoil on the other. Trenches were backfilled by replacing excavated materials in their reverse order of excavation; and by tamping down with the excavator as tidily as practicable.

The stratigraphic sequence was recorded in full in each of the trenches, even where no archaeological deposits were identified. All recording followed CIfA Standards and Guidance for conducting archaeological evaluations. All contexts were given unique numbers and recorded on pro forma record cards. Black and white prints were taken with a graduated metric scale clearly visible. Digital images were taken for illustrative purposes.

4 RESULTS

4.1 DESK-BASED ASSESSMENT

Geology

The underlying solid geology within the site is mapped as comprising Raglan mudstone with alluvial silts above it (British Geological Survey website; http://www.bgs.ac.uk). The site is located at the western extremity of the Lugg plain. To the south-east of the site the excavations at Wellington Quarry recorded the sands and gravels overlain by up to 3m of

ILLUS 4

E facing section of ditch [605]

ILLUS 3

SE facing section of possible post-hole [607]

ILLUS 6

SE facing shot of tree throw in plan

Holocene alluvial deposits in places, deposited by the river Lugg and its tributaries which at the village of Wellington just to the east of the site is some 2km wide (Meadows et al 2011).

Prehistoric

The earliest evidence for human activity within the study area is the Mesolithic phase of the multi-period activity at Wellington Quarry (overall number SMR 5522). No distinct flint scatters have been identified, occasional finds of bladelets and bladelet cores have been recovered. Indicating a minimum of short-term occupation in the Mesolithic (SMR 51624).

Other activity from Wellington Quarry includes a Neolithic Ring Ditch as well as occupation evidence dispersed widely across the quarry with a concentration towards the western side of the site (SMR 51625). A Neolithic axe was also found in Wellington Wood approximately half a mile to the west of the site within the study area (SMR 31009).

North-west of the site is a possible Bronze Age barrow cemetery which shows as potential ring ditches in the above crops marks (SMR 7591).

The most significant Iron Age activity within the quarry adjacent to the site comprises a double inhumation burial, other than that there are only two pits a ditch and soil deposit believed to date from this period.

The landscape appears to have been much more intensively exploited during the Roman period with complexes of ditched enclosures, part of a villa, cremations, a corn drier and pits being identified to the south and east of the current proposal site. These were associated with pottery, animal bone and environmental evidence.

By the medieval period the land appears to be mostly agricultural in use. The discovery of the remains of a Saxon timber mill is relatively unusual, but also unlikely to be repeated on the shallower alluvial deposits expected within the proposed development site. Other than that









finds of two medieval ovens a few pits and ditches as well as ridge and furrow cultivation tend to underline the above interpretation. A similar pattern of use extends into the post-medieval period with the discovery of a sheep wash south f the current proposal area.

Most of the work undertaken on the Wellington Quarry site involved relatively deeply buried features and deposits within the alluvial sequence. This meant that there were high levels of preservation in some cases. It was notable that discoveries were being made nearer the surface as they progressed across the site towards the northwest and the proposed development. In the section nearest to this alluvial cover did not exceed 1m over natural gravels and might be expected to be more shallow within the site under consideration.

4.2 RESULTS OF THE ARCHAEOLOGICAL EVALUATION

Geology

The site itself sits along a ridge north of the Wellington Brook and south west of the River Lugg, it has been previously been mapped as being on the edge of Holocene alluvial deposits (Meadows et al 2011; 20). The current phase of trenching has shown that no alluvial deposits are present on the site, possibly due to the slight rise in the landscape away from the brook with land continuing to rise to the north-west towards a hill.

The same geology can be seen across the whole area of the site investigated, with slightly differing depths of deposits from north to south (Illus 2). The whole site sits on natural gravels (eg 104) the top extent of which was observed between 0.8–0.85m below ground level (BGL). There was a thin interfacing deposit between the natural gravels and a possible ground surface (eg 403) comprising a band of mid brownish red silty-gravel where silts from the upper deposits have become mixed into the uppermost gravels through bioturbation.

Below this was the top of a horizon (eg 603) though which the only archaeological features found had been cut. It was a light pinkish brown silty gravel, firm but friable with very frequent small – large sandstone and mudstone inclusions, it was seen at a relatively uniform depth BGL across the site of between 0.45–0.5m and a thickness of approximately 0.4m.

A thin subsoil (eg 202) was present across the site (approximately 0.2m thick and 0.3m BGL). This varied in the northern part of the site where no subsoil was present in the majority of the Trench 2 apart from the last 10m of its SE end where it was 0.1m thick. This light greyish yellow silty clay was firm – friable with very occasional small sub rounded stones.

The topsoil (eg 201) was a mid-greyish brown, friable clay silt with very occasional small sub rounded stones throughout. It was approximately 0.3m BGL apart from in trenches 1 and 2 where there was an increased depth of 0.35m, possibly due to their location at the edges of the field. There was modern plastic present in the topsoil through its full depth from polytunnels that were on the site at one time.

4.3 TRENCHES THAT CONTAINED ARCHAEOLOGICAL FEATURES

Trench 6 was the only trench to contain any archaeological features, in the form of a ditch [605] and a possible small post-hole [607]. A ditch [605], measuring 1.55m wide by 0.35m in depth, was cut from the bottom of the subsoil (602) at 0.45m BGL through the possible buried soil horizon (603) to a depth of 0.8m partly into the natural gravel (604) (Illus 3). It contained a single fill (606) of mid greyish brown friable clay silt with very occasional small sandstone and mudstone inclusions throughout, also present were frequent small charcoal flecks and occasional animal bone. Unfortunately no pottery or other material was present to help determine any dating. The ditch runs east – west with moderately sloping sides and a concave base, there is no perceptible break of slope (Illus 4). It is possible that the depth of the feature exceeds that which is currently visible and the very top has been truncated by the subsoil through an elongated period of agriculture on the site. [605] does not follow the current boundaries, however, it is at 90 degrees to the field boundary forming the western edge of field in which the site was located. So it is possible that this served as a field boundary. The only other archaeological feature [607] was found within the near vicinity of the ditch but this does not assist in ascertaining its exact purpose.

The latter feature, a possible post-hole [607], was circular measuring $0.3 \times 0.3 \,\mathrm{m}$ with a depth of $0.06 \,\mathrm{m}$. It was identified at a depth of $0.45 \,\mathrm{m}$ BGL sitting beneath the subsoil (602) and cut into the possible buried soil horizon of (603) (Illus 5). The proximity of the feature to the subsoil (602) could indicate that it has been truncated by ploughing which could explain its shallow depth. There was only a single fill (608) which was a dark brown-grey friable clay silt with occasional very small stones and frequent small charcoal flecking visible throughout the fill, no finds were present. There were no other post-holes to indicate that this was part of a structure however it is possible that there could be more outside the limits of the excavation of Trench 6.

4.4 NON-ARCHAEOLOGICAL FEATURES

In trenches 5 and 6 there are three tree throws present, two in Trench 5 and one in Trench 6. These appear from the top of the possible buried soil horizon (503 and 603). Each has an irregular shape with mid reddish brown friable clayey-silt fills (**Illus 6**). In tree throw (503) a very small fragment of a clay pipe stem (15 x 7mm) was found on the surface of the feature, it is difficult to confirm whether this is contemporary or not as due to its size it is could have been relocated within the stratigraphic sequence through ploughing and bioturbation. No finds were found in either of the other tree throws.

5 DISCUSSION

The geology on the site is slightly different from that recorded at Wellington Quarry to the south-east, notably in that no alluvium was present. It is likely that the site is located further up a ridge away from the palaeochannels noted at the Wellington Quarry excavations. The natural gravels are a consistent feature in the surrounding area, however, here their depth below ground level is much less than in previously recorded areas. Further south the natural gravels are recorded as being located between 1.20 and 2.40m in depth (Payne

2011), whereas on this site the gravels were located between 0.80 and 0.85m in depth. This increase of at least 0.35m has probably had an impact on the location of the surrounding alluvial deposits. Heavy ploughing has also created a topsoil of a reasonable depth that has in some places merged with the subsoil. This was particularly the case around the edges of the field where the subsoil is completely absent in some places, and the topsoil thicker.

The only two features on site [605] and [607] are cut through deposit (603) from the very base of the subsoil (602). There is a possibility that these features have been truncated by agricultural activity over an extended period of time. The small sub-rounded stones present in the topsoil and subsoil are most likely derived from the heavily disturbed and worn stones present in the underlying deposits. The presence of a subsoil in the southern area of the site has resulted in the protection of the underlying archaeology from more recent ploughing.

6 CONCLUSION

Following this scheme of trial trenching, and despite the high significance of finds on adjacent sites, it has been shown that there is very little in the way of archaeology present on the proposed development site itself. This may be a result of a combination of a lack of alluvium to protect features beneath it and an initial lack of past activity in this area of the site. The deep topsoil is consistent with the use of the site as farmland for a long period of time. The significance of archaeological activity within the proposed development area is low.

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APPENDICES

APPENDIX 1 HERITAGE ASSET

Heritage Asset ID	Designation/type	Description
06552	HER monument	Findspot for Neolithic axe, Dinmore Fruit Farm
06897	HER monument	Roman oven and pottery
07591	HER monument	Ring ditch and possible barrow cemetery Northeast of Wellington
08539	HER monument	Roman, rectilinear enclosure, Wellington Quarry
09231	HER monument	Buried stones, Knap Piece, Wellington
31009	HER monument	Findspot for Neolthic axe, Wellington Wood
33759	HER monument	Roman Road
41553	HER monument	Early Medieval Wood, West Wellington
41935	HER monument	Early Medieval earth work of the parish boundary, Canon Pyon and Wellington
49592	HER monument	Multiple Roman finds from Parish of Wellington recorded via the Portable Antiquities Scheme
51624	HER monument	Occupation Site at Wellington Quarry

Heritage Asset ID	Designation/type	Description
51625	HER monument	Occupation site at Wellington Quarry
51626	HER monument	Bronze Age occupation at Wellington Quarry
51627	HER monument	Iron Age occupation at Wellington Quarry
51628	HER monument	Roman Settlement, Wellington Quarry
51629	HER monument	Early Medieval occupation site at Wellington Quarry
51631	HER monument	Ring ditch, Wellington Quarry
51633	HER monument	Iron Age burials (double inhumation), Wellington Quarry
51635	HER monument	Roman villa, Wellington Quarry
51636	HER monument	Early Medieval watermill Wellington Quarry
51637	HER monument	Early Medieval probable watermill, Wellington Quarry

APPENDIX 2 SITE REGISTERS

Appendix 2.1 Trench register

TR01	Orientation	Length (m)	Width (m)	Av. depth (m)
	NW-SE	50	1.8	0.85
Context	Context description	on		Depth of deposit (mBGL)
101	Topsoil — mid greyish brown, dayey silt, friable, occasional small sub rounded stone			0.0-0.35
102	Subsoil — light greyish brown/yellow, clayey silt, firm-ish but friable, occasional small sub rounded stone			0.30-0.40
103	Possible ground surface — light pinkish brown, silty gravel, firm but friable, very frequent small — large sandstone and mudstone			0.45-0.85
104	Geological subsoil — frequent small — larg	0.85+		
,	No archaeology 02) is not present in mo	ost of the trench, only ir	n last 10m of SE trench	end

TR02	Orientation	Length (m)	Width (m)	Av. Depth (m)	
	NE-SW	50	1.8	0.8	
Context	Context description			Depth of deposit (mBGL)	
201	Topsoil — mid greyish bro sub rounded stone	wn, clayey silt, friabl	e, occasional small	0.0-0.34	
202	Subsoil — light greyish brown/yellow, clayey silt, firm-ish but friable, occasional small sub rounded stone			0.34-0.48	
203	Possible ground surface — light pinkish brown, silty gravel, firm but friable, very frequent small — large sandstone and mudstone			0.48-0.8	
204	Geological subsoil — mid frequent small — large sa	'	, , ,	0.8+	
Summary:	Summary: No archaeology				

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entation	Length (m)	Width (m)	Av. depth (m)
-SW	50	1.8	1
ntext description			Depth of deposit (mBGL)
Topsoil — mid greyish brown, clayey silt, friable, occasional small sub rounded stone			0.0-0.3
Subsoil — light greyish brown/yellow, clayey silt, firm-ish but friable, occasional small sub rounded stone			0.3-0.45
Possible ground surface — light pinkish brown, silty gravel, firm but friable, very frequent small — large sandstone and mudstone			0.45-0.8
ological subsoil — mid br Juent small — large sand	'	, , ,	0.8–1.4
ļ	Jeni Smali — Targe Sano	uent smaii — iarge sandstone and mudstor	uent smaii — large sanostone and muostone

Sondage dug 13m from NE trench end to see if the geological subsoil gravel (304) is a lens

Summary: No archaeology

Summary: No archaeology

Subsoil (403) disappears 10m before the SE trench end

TR04	Orientation	Length (m)	Width (m)	Av. depth (m)
	NW-SE	50	1.8	0.8
Context	Context description	1		Depth of deposit (mBGL)
401	Topsoil — mid greyish sub rounded stone	0.0-0.3		
402	Subsoil — light greyish brown/yellow, clayey silt, firm-ish but friable, occasional small sub rounded stone			0.3-0.5
403	Possible ground surface — light pinkish brown, silty gravel, firm but friable, very frequent small — large sandstone and mudstone			0.5-0.8
404	Geological subsoil — m frequent small — large	1	,,,,,	0.8+

TR05	Orientation	Length (m)	Width (m)	Av. depth (m)
	NW-SE	50	1.8	0.9
Context	Context description			Depth of deposit (mBGL)
501	Topsoil — mid greyish brown, clayey silt, friable, occasional small sub rounded stone			0.0-0.3
502	Subsoil — light greyish brown/yellow, clayey silt, firm-ish but friable, occasional small sub rounded stone			0.3-0.5
503	Possible ground surface — light pinkish brown, silty gravel, firm but friable, very frequent small — large sandstone and mudstone			0.5-0.8
504	Geological subsoil — mid brownish pink/red silty gravel, very frequent small — large sandstone and mudstone			0.8+
505	Tree throw — L:1.25m, W irregular shape. Fill: mid r occasional small-mediun	eddish grey/brown,	clayey silt, friable,	0.38-0.64

Tree throw — L:1.2m, W:0.7m, D0.2m in subsoil (503). Plan: 0.42—0.62 irregular oval shape, moderate N edge and steep S edge, concave base. Fill: mid reddish grey/brown, clayey silt, friable, occasional small mudstone and charcoal flecks, contained clay pipe fragment.

Summary: No archaeology. Two tree throws located 15m from SE trench end 5m apart

TR06	Orientation	Length (m)	Width (m)	Av. depth (m)
	NE-SW	50	1.8	0.8
Context	Context description	on		Depth of deposit (mBGL)
601	Topsoil — mid greyis sub rounded stone	h brown, clayey silt, fria	ble, occasional small	0.0-0.25
602	, ,	sh brown/yellow, claye nall sub rounded stone	y silt, firm-ish but	0.25-0.45
603		ace — light pinkish brov uent small — large sand	, ,	0.45-0.8
604	-	mid brownish pink/red ge sandstone and muds		0.8+
605		+, W:1,55m, D0.35m. L non-perceptible break (ace (603)		0.45-0.8
606		mid greyish brown, clay dstone/mudstone and one	, , , ,	0.45-0.8
607		W:0.3, D:0.06. Circular, le break of slope, cut int		0.45-0.51
608		07] — dark brownish gr ne and frequent charcoa		0.45-0.51

Summary: Linear ditch [605] orientated E-W located 14m from NE trench end Small shallow cut [607] located 4m from SW trench end 1x treethrow



Appendix 2.2 Photographic register

Photo	B&W	Digital	Direction	Description		
01	37	1	_	ID shot		
02	36	2	NE	TR04 sample section		
03	35	3	NW	TR04 post excavation plan		
04	34	4	NW	TR02 example of natural channel		
05	33	5	NW	TR02 example of natural holllow		
06	32	6	SW	TRO2 post excavation plan		
07	31	7	SE	TR02 sample section		
08	30	8	NE	TR01 sample section A		
09	29	9	NW	TR01 post excavation plan		
10	28	10	NE	TR01 sample section B		
11	27	11	SW	TR03 post excavation plan		
12	26	12	NW	TR03 sample section A		
13	25	13	E	TR05 charcoal spread		
14	24	14	NW	TR03 sample section B		
15	23	15	SE	Tree throw (505) plan		
16	22	16	E	Tree throw (505) section		
17	21	17	N	Tree throw (506) section		
18	20	18	NE	Tree throw (506) plan		
19	19	19	-	TR06 tree throw		
20	18	20	SW	TR05 sample section		
21	17	21	W	Ditch [605] section		
22	16	22	W	Ditch [605] plan		
23	15	23	W	Ditch [605] plan		
24	14	24	NW	Shallow cut [607]		
25	13	25	N	Ditch [605] oblique machined sample section		
26	12	26	NW	TR006 sample section		
27	11	27	NW	TR05 post excavation plan		
28	10	28	SW	TR06 post excavation plan		
29	_	29	NW	TR05 post excavation plan (retake)		
30	_	30	SW	TR06 post excavation plan (retake)		



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