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MAP Archaeological Practice

Land off Westerton Road and Haigh Moor Road
West Ardsley
West Yorkshire

Archaeological Evaluation by Trial Trenching
17/08262

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Archaeological Evaluation by Trial Trenching

Summary

An Archaeological Evaluation by Trial Trenching was carried out by MAP Archaeological Practice Ltd., on land off Westerton Road and Haigh Moor Road, West Ardsley, West Yorkshire, prior to the commencement of a residential development with associated infrastructure.

The site lies in a previously undeveloped area with archaeological features dating to the prehistoric to the Medieval period recorded within the vicinity.

The Evaluation by Trial Trenching, which followed a Desk Based Assessment and Geophysical Survey, revealed a single shallow gully which produced no dating evidence, although environmental data suggests post-Medieval or modern origin. No features relating to former mining practices in the area were identified.

1. Introduction

- 1.1 This report sets out the results of an Archaeological Evaluation by Trial Trenching, carried out by MAP Archaeological Practice Ltd. on land off Westerton Road and Haigh Moor Road, West Ardsley, West Yorkshire in November 2021.
- 1.2 Outline planning permission has been granted, by Leeds City Council, for residential development on the site (planning reference 17/08262). Condition 18 attached to the permission states that;
- No development shall take place until the applicant or their agents or successors in title, has secured the implementation of a programme of archaeological recording. This recording must be carried out by an appropriately qualified and experienced archaeological consultant or organisation, in accordance with a written scheme of investigation which has been submitted to, and approved in writing by, the local planning authority*
- 1.3 In accordance with the recommendations of the National Planning Policy Framework (2021) on 'Archaeology and Planning' a staged scheme of archaeological work is proposed. The results of the Trial Trenching, which follows a Desk Based Assessment and Geophysical Survey, will be summarised and an appropriate mitigation strategy will be formulated if necessary.
- 1.4 The work was carried out in accordance a Written Scheme of Investigation which was prepared by West Yorkshire Advisory Service (WYAAS, appendix 7).

- 1.5 MAP adhered to the general principles of both the ClfA (2019) '*Code of Conduct*' and '*Standard and Guidance for Archaeological Field Evaluation*' (2020) throughout the project.
- 1.6 All maps within this report have been produced from the Ordnance Survey with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright, Licence No. AL 50453A.
- 1.7 All work was funded by Redrow Homes.

2. Site Description

- 2.1 The site is located in an area known as West Ardsley, south-west of Leeds city centre and south-east of Morley. The area includes the hamlets of Tingley, Woodkirk and, Upper Green.
- 2.2 The Site is bisected by Baghill Beck which runs on a roughly north-east, south-west orientation. The majority of the beck is lined by areas of woodland. The beck and woodland is bounded to the east and west by agricultural land which is divided by areas of further woodland and mature hedgerows. The site as a whole is bounded by housing and private gardens, with the exception of a small area to the west which is bounded by Baghill Road, and a small part of the northern boundary which is bounded by Westerton Road.

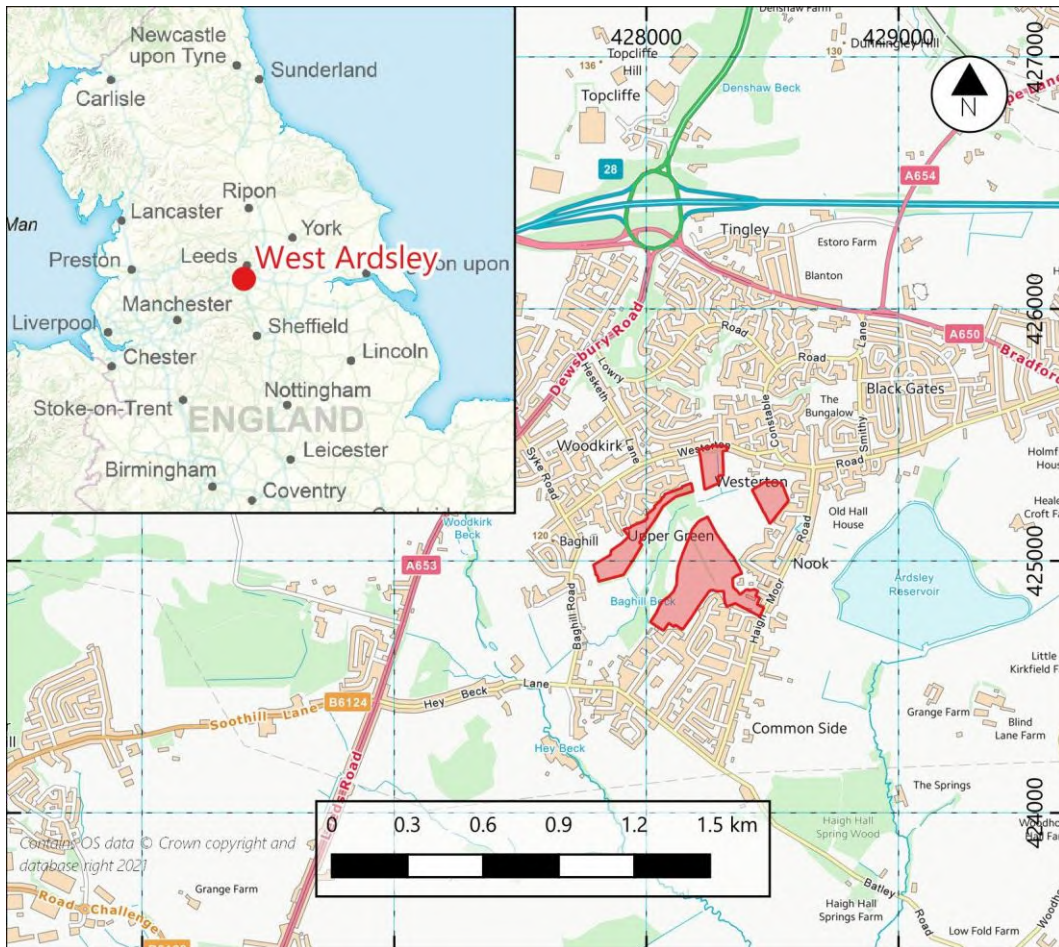


Figure 1. Site Location

2.3 The Proposed Development Area lies in an area of Pennine Middle Coal Measures Formation and Haigh Moor Rock, both of which are predominantly sandstone. The part of the site occupied by Baghill beck lies on the Pennine Middle Coal Measures Formation whilst the Haigh Moor Rock surrounds the beck (BGS. 2022).

3. Archaeological and Historical Background

3.1 Little is known about the prehistoric periods in the area. The NMR records a find spot of an Early Bronze Age (51181) perforated stone axe hammer which

was found in a ploughed field, close to the M62, to the north of the Proposed Development Area, in 1956.

- 3.2 A possible Roman marching camp has been identified south-east of the Proposed Development Area (1187867). During excavation in 1995 the eastern and western ditches of the camp were excavated. The ditches had a 'V' shape profile and were 3.5m wide by 1.35m deep. A single sherd of pottery dating from the 2nd-4th centuries AD was recovered from the ditches. The ditches showed evidence of a series of postholes, 1.25m apart. The postholes are thought to represent the remains of either a timber-laced defence or revetted bank.
- 3.3 At the time of invasion by William The Conqueror, in 1066, the area was part of the Manor of Wakefield. In 1088 William gifted the manor to one of his loyal supporters, Earl de Warenne whose family held the manor until the 14th century when the manor was passed to the Crown and later to the Savile family.
- 3.4 A Desk Based Assessment was carried out in by Savills in 2019. The assessment concluded that the archaeological potential of the site was moderate, owing to the presence of cropmarks in the adjacent field to the east. A Geophysical Survey was recommended.
- 3.5 A coal mining colliery was present in West Ardley during the 19th century. The colliery was one of the first to introduce a mechanised system, in 1861, which used compressed air to cut coal, thus reducing labour costs in the colliery. (Newman 2016) Open cast mining has taken place within the site boundary, in a field which has been excluded from the evaluation. Early

Ordnance Survey mapping shows small quarries present in the northern half of the site.

4. Aims and Objectives

- 4.1 The aim of the Archaeological Trial Trenching was to determine the presence/absence, nature, date, quality of survival and importance of archaeological deposits to enable an assessment of the potential and significance of the archaeology to be made.

5. Methodology

5.1 Excavation

- 5.1.1 Fifty-eight were proposed, eight of which were not excavated due to access issues on site. Of the excavated trenches trial trenches were excavated, thirty-six measured 50m x 2m and fourteen measured 25m x 2m. The trenches were positioned across the site to investigate geophysical anomalies but also areas which appear void of archaeology in the results of the survey.
- 5.1.2 All trial trenches and associated spoil were scanned both visually and with a metal detector to aid finds retrieval.
- 5.1.3 Topsoil was removed by a tracked excavator fitted with a toothless bucket, operating under close archaeological supervision. Machining ceased at the top of either archaeological or naturally formed deposits, depending upon which was located first. The exposed surfaces were cleaned appropriately, and any subsequent excavation was carried out by hand.

5.1.4 All work was carried out in line with both the Chartered Institute of Field Archaeologists Code of Conduct (2019) and Standard and Guidance for Archaeological Field Evaluation (CIfA 2020). Metal detecting was carried out in line with Historic England’s ‘Our Portable Past- Guidance for Good Practice (2018)

5.2 On-site Recording

5.2.1 All fifty trenches were recorded on MAP’s *pro forma* trench sheets. The photographic record comprised fifty-four black and white 35mm film photographs and one hundred and thirty-nine digital photographs taken in jpeg and RAW. The photographic record included film registers, shot number, location of shot, direction of shot and brief description (Appendix 1).

6. Results.

6.1 The total depths and elevations of all forty-four trial trenches are displayed in the below table.

<i>Trench</i>	<i>Elevation</i>	<i>Depth of Excavation</i>	<i>Depth of Topsoil</i>
Tr.1	West- 111.46m AOD	0.37m-	0.21m-
	East- 111.53m AOD	0.51m	0.23m
Tr.2	West-110.45m AOD	0.57m-	0.20m-
	East-110.06m AOD	0.58m	0.23m
Tr.3	North – 109.39m AOD	0.33m-	0.28m-
	South – 110.67 AOD	0.41m	0.34m
Tr.4	West- 111.11m AOD	0.34m-	0.32m-
	East- 110.64m AOD	0.40m	0.34m

Tr. 5	North- 109.09m AOD South- 110.67m AOD	0.32m- 0.33m	0.25m- 0.29m
Tr. 6	North- 111.23m AOD South- 111.76m AOD	0.32m- 0.34m	0.25m- 0.32m
Tr. 7	North-East-110.21 m AOD South-West- 110.46 m AOD	0.33m- 0.44m	0.28m- 0.31m
Tr.8	East- 111.46 m AOD West- 112.06 m AOD	0.30m- 0.32m	0.34m- 0.27m
Tr.9	North- 111.46m AOD South- 109.94 m AOD	0.38m- 0.85m	0.20m- 0.22m
Tr.10	East-110.56 m AOD West- 108.99 m AOD	0.43m- 74m	0.43m- 0.74m
Tr.11	North- 111.35 m AOD South- 110.43 m AOD	0.31m- 0.50m	0.19m- 0.32m
Tr.12	East- 110.07 m AOD West- 110.64 m AOD	0.32m- 0.37m	0.23m- 0.25m
Tr.13	West- 110.74 m AOD East- 110.56 m AOD	0.26m- 0.34m	0.20m- 0.21m
Tr.14	North-East- 113.53m AOD South-West- 112.49 m AOD	0.34m- 0.43m	0.28m- 0.33m
Tr.15	North-West- 112.59 m AOD South-East- 114.32 m AOD	0.34m- 0.43m	0.28m- 0.33m
Tr.16	North- 112.49 m AOD South- 112.14 m AOD	0.35m- 0.50m	0.27m- 0.28m
Tr.17	North-East- 113.45 m AOD South-West- 112.25 m AOD	0.36m- 0.38m	0.18m- 0.22m
Tr.18	West- 113.91 m AOD East-115.63 m AOD	0.32m- 0.42m	0.32m
Tr.19	North- 113.28 m AOD South- 114.87m AOD	0.31m- 0.33m	0.28m- 0.31m
Tr.20	North-West- 115.04 m AOD South-East- 119.45 m AOD	0.34m- 0.46m	0.17m- 0.21m
Tr.21	North- 116.20m AOD South- 118.11 m AOD	0.30m- 0.35m	0.28m- 0.32m
Tr.22	North- 120.10m AOD South-120.93m AOD	0.30m- 0.35m	0.21m- 0.30m
Tr.23	North-East- 120.33m AOD	0.33m-	0.28m-

	South-West- 117.45m AOD	0.35m	0.31m
Tr.24	North-West- 109.83m AOD	0.36m-	0.30m-
	South-East- 112.83m AOD	0.43m	0.33m
Tr.25	North- 109.79 m AOD	0.29m-	0.24m-
	South- 111.92 m AOD	0.33m	0.28m
Tr.26	North- 111.46m AOD	0.32m-	0.28m-
	South- 113.41m AOD	0.36m	0.30m
Tr.27	North- East- 112.94m AOD	0.38m-	0.33m-
	South-West- 110.90m AOD	0.40m	0.35m
Tr.28	East- 115.45m AOD	0.27m-	0.27m-
	West- 113.32m AOD	0.29m	0.29m
Tr. 29	West- 111.47m AOD	0.31m-	0.27m-
	East- 115.89 m AOD	0.35m	0.30m
Tr.30	North-East-115.34m AOD	0.32m-	0.28m-
	South-West- 112.74m AOD	0.40m	0.35m
Tr.31	South-East- 110.49m AOD	0.35m-	0.31m-
	North-West- 108.89 m AOD	0.40m	0.34m
Tr.32	North- 107.80m AOD	0.40m	0.38m
	South- 108.58 m AOD		
Tr.33	North- 109.74 m AOD	0.33m	0.25m-
	South- 109.99m AOD		0.29m
Tr.34	East-111.96m AOD	0.36m-	0.24m-
	West- 109.00m AOD	0.37m	0.32m
Tr.35	North- 111.04m AOD	0.38m-	0.32m-
	South- 112.23m AOD	0.39m	0.33m
Tr.36	North- 111.65 m AOD	0.41m	0.32m-
	South- 112.03m AOD		0.34m
Tr.37	North-West- 112.25 m AOD	0.29m-	0.25m-
	South-East- 112.96m AOD	0.33m	0.29m
Tr.38	North- 115.62m AOD	0.45m-	0.39m-
	South- 114.53m AOD	0.65m	0.46m
Tr.39	Not excavated		
Tr.40	Not excavated		
Tr.41	Not excavated		
Tr.43	Not excavated		
Tr.44	Not excavated		
Tr.45	Not excavated		

Tr.46	Not excavated		
Tr.47	East-114.57m AOD	0.46m-	0.28m-
	West- 114.49m AOD	0.48m	0.32m
Tr.48	South-East-113.26m AOD	0.30m-	0.18m-
	North-West-115.69m AOD	0.37m	0.20m
Tr.49	East-113.17m AOD	0.33m-	0.24m-
	West-113.08m AOD	0.54m	0.39m
Tr.50	South-West-111.87m AOD	0.29m-	0.22m-
	North-East-113.76m AOD	0.38m	0.23m
Tr.51	West-111.94m AOD	0.31m-	0.19m-
	East-113.51m AOD	0.38m	0.23m
Tr.52	North-114.03m AOD	0.37m-	0.23m-
	South-113.64m AOD	0.63m	0.28m
Tr.53	West-111.26m AOD	0.44m-	0.19m-
	East-112.73m AOD	0.46m	0.29m
Tr.54	West-114.60m AOD	0.34m-	0.20m-
	East-116.34m AOD	0.43m	0.22m
Tr.55	North-West-116.21m AOD	0.38m-	0.23m
	South-East-119.40m AOD	0.46m	
Tr.56	South-East-118.25m AOD	0.33m-	0.19m-
	North-West-114.94m AOD	0.46m	0.20m
Tr.57	North-117.05m AOD	0.29m-	0.17m-
	South-119.99m AOD	0.30m	0.18m
Tr.58	North-East-119.77m AOD	0.31m-	0.17m-
	South-West-120.86m AOD	0.35m	0.18m

6.2 Trench 14 contained a single north to south aligned gully, identified in the results of the Geophysical Survey. The 'U' shaped gully, which measured 0.04m wide and 0.33m deep, contained a single light grey-brown silty clay fill which contained no obvious archaeological material. A sample taken of the fill contained degraded charcoal mixed with coal and clinker fragments. A small slither of oak charcoal was also present.

6.3 A north to south aligned gully was also identified within Trench 15 and was probably a continuation of the feature in Trench 14. The feature measured 1.03m wide and was 0.25m deep. The single fill of the gully, a mid grey-brown silty clay contained no obvious archaeological material. A sample taken of the fill contained degraded charcoal mixed with coal and clinker fragments. A small slither of alder charcoal was also present.

6.4 No archaeological finds, features or deposits were present within the remainder of the trenches and natural deposits were identified throughout. It is likely that anomalies highlighted in the results of the Geophysical Survey were caused by changes in the underlying geology, for example several bands of sand and stone were identified in otherwise clay strata. No features relating to any former quarrying activity within the site boundary were identified.

7. Conclusion

7.1 The archaeological evaluation has illustrated an absence of significant archaeological finds and features on land off Westerton Road and Haigh Moor Road, West Ardsley.

7.2 The gully identified in trenches 14 and 15 is likely to represent a minor post-Medieval or modern field boundary or other agricultural division. Early Ordnance Survey mapping does not depict a feature in the location of the gully which may have been temporary in nature.

7.3 The results confirm an absence of significant archaeological potential for the site and judging by the negative results of the evaluation, it is unlikely

that any work within the development area would encounter or disturb any further archaeological features, finds or deposits.

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APPENDIX 1

Land off Haigh Moor Road and Westerton Road, West Ardsley

Site Code: 05.27.21

Context Index

Context No.	Type	Fill of	Description
1401	Deposit		Topsoil
1402	Deposit		Subsoil
1403	Fill	1404	Light grey brown silty clay
1404	Cut		Cut of Gully
1501	Deposit		Topsoil
1502	Deposit		Subsoil
1503	Fill	1504	Mid grey brown silty clay
1504	Cut		Cut of Gully

APPENDIX 2

Land off Haigh Moor Road and Westerton Road, West Ardsley

Site Code: 05.27.21

Drawing Index

Drawing No.	Context No.	Scale	Description
001	1504	1:10	North facing section of gully
002	1504	1:20	Plan of gully
003	1404	1:10	North facing section of gully
004	1404	1:20	Plan of gully

APPENDIX 3

Land off Haigh Moor Road and Westerton Road, West Ardsley

Site Code: 05.27.21

Photographic Index

Digital B&W

Frame No.	Frame No.	Context No.	Scale	Description
IMG_0001	-			General view of site
IMG_0002	-			General view of site
IMG_0003	-			General view of site
IMG_0004	-	Trench 54	1m	Trench 54 facing north-west
IMG_0005	3 (1)	Trench 54	1m	Trench 54 facing north-west
IMG_0006	-	Trench 54	1m	Trench 54 facing north-west
IMG_0007	-	Trench 54	1m	Trench 54 facing south-east
IMG_0008	4 (1)	Trench 53	1m	Trench 53 facing west
IMG_0009	-	Trench 53	1m	Trench 53 facing east
IMG_0010	5 (1)	Trench 55	1m	Trench 55 facing south-east
IMG_0011	-	Trench 55	1m	Trench 55 facing north-west
IMG_0012	6 (1)	Trench 56	1m	Trench 56 facing north
IMG_0013	-	Trench 56	1m	Trench 56 facing north
IMG_0014	-	Trench 56	1m	Trench 56 facing south
IMG_0015	7 (1)	Trench 57	1m	Trench 57 facing north-east
IMG_0016	-	Trench 57	1m	Trench 57 facing south-west
IMG_0017	8(1)		1m	General view of site
IMG_0018	-		1m	General view of site
IMG_0019	9 (1)	Trench 46	1m	Trench 46 facing east
IMG_0020	-	Trench 46	1m	Trench 46 facing west
IMG_0021	10 (1)	Trench 47	1m	Trench 47 facing north-west
IMG_0022	-	Trench 47	1m	Trench 47 facing south-east
IMG_0023	11 (1)	Trench 48	1m	Trench 48 facing west
IMG_0024	-	Trench 48	1m	Trench 48 facing east
IMG_0025	12 (1)	Trench 50	1m	Trench 50 facing east
IMG_0026	-	Trench 50	1m	Trench 50 facing west
IMG_0027	-		1m	General view of site
IMG_0028	13 (1)	Trench 49	1m	Trench 49 facing south-west
IMG_0029	-	Trench 49	1m	Trench 49 facing north-east
IMG_0030	-	Trench 51	1m	Trench 51 facing north
IMG_0031	14 (1)	Trench 51	1m	Trench 51 facing north
IMG_0032	-	Trench 51	1m	Trench 51 facing south
IMG_0033	15 (1)	Trench 52	1m	Trench 52 facing west
IMG_0034	-	Trench 52	1m	Trench 52 facing east
IMG_0035	-		1m	General view of site

IMG_0036	-		1m	General view of site
IMG_0037	-		1m	General view of site
IMG_0038	16 (1)	Trench 6	1m	Trench 6 facing north
IMG_0039	-	Trench 6	1m	Trench 6 facing north
IMG_0040	17 (1)	Trench 8	1m	Trench 8 facing east
IMG_0041	-	Trench 8	1m	Trench 8 facing west
IMG_0042	18 (1)	Trench 11	1m	Trench 11 facing south
IMG_0043	-	Trench 11	1m	Trench 11 facing north
IMG_0044	19 (1)	Trench 12	1m	Trench 12 facing east
IMG_0045	-	Trench 12	1m	Trench 12 facing west
IMG_0046	20 (1)	Trench 13	1m	Trench 13 facing east
IMG_0047	-	Trench 13	1m	Trench 13 facing west
IMG_0048	-	Trench 9	1m	Trench 9 facing north
IMG_0049	21 (1)	Trench 9	1m	Trench 9 facing south
IMG_0050	22 (1)	Trench 10	1m	Trench 10 facing west
IMG_0051	-	Trench 10	1m	Trench 10 facing east
IMG_0052	23 (1)	Trench 4	1m	Trench 4 facing east
IMG_0053	-	Trench 4	1m	Trench 4 facing west
IMG_0054	-		1m	General view of site
IMG_0055	-		1m	General view of site
IMG_0056	-		1m	General view of site
IMG_0057	-		1m	General view of site
IMG_0058	24 (1)	Trench 7	1m	Trench 7 facing south-west
IMG_0059	-	Trench 7	1m	Trench 7 facing north-east
IMG_0060	25 (1)	Trench 5	1m	Trench 5 facing north-east
IMG_0061	-	Trench 5	1m	Trench 5 facing south-west
IMG_0062	26 (1)	Trench 3	1m	Trench 3 facing north
IMG_0063	-	Trench 3	1m	Trench 3 facing south
IMG_0064	27 (1)	Trench 1	1m	Trench 1 facing east
IMG_0065	-	Trench 1	1m	Trench 1 facing west
IMG_0066	28 (1)	Trench 2	1m	Trench 2 facing east
IMG_0067	-	Trench 2	1m	Trench 2 facing west
IMG_0068	11 (2)	Trench 14	1m	Trench 14 facing north-east
IMG_0069	-	Trench 14	1m	Trench 14 facing south-west
IMG_0070	12 (2)	Trench 15	1m	Trench 15 facing south-east
IMG_0071	-	Trench 15	1m	Trench 15 facing north-west
IMG_0072	13 (2)	Trench 16	1m	Trench 16 facing south-west
IMG_0073	-	Trench 16	1m	Trench 16 facing north-east
IMG_0074	14 (2)	Trench 17	1m	Trench 17 facing north-east
IMG_0075	-	Trench 17	1m	Trench 17 facing south-west
IMG_0076	15 (2)	Trench 18	1m	Trench 18 facing east
IMG_0077	-	Trench 18	1m	Trench 18 facing west
IMG_0078	16 (2)	Trench 19	1m	Trench 19 facing south
IMG_0079	-	Trench 19	1m	Trench 19 facing north
IMG_0080	17 (2)	Trench 20	1m	Trench 20 facing south-east
IMG_0081	-	Trench 20	1m	Trench 20 facing north-west
IMG_0082	18 (2)	Trench 21	1m	Trench 21 facing north
IMG_0083	-	Trench 21	1m	Trench 21 facing south

IMG_0084	19 (2)	Trench 23	1m	Trench 23 (NE) facing south-west
IMG_0085	-	Trench 23	1m	Trench 23 (SW) facing south-west
IMG_0086	20 (2)	Trench 23	1m	Trench 23(SW) facing north-east
IMG_0087	-	Trench 23	1m	Trench 23 (NE) facing north-east
IMG_0088	21 (2)	Trench 22	1m	Trench 22 facing north
IMG_0089	-	Trench 22	1m	Trench 22 facing south
IMG_0090	22 (2)	1504	1m	North facing section of gully 1504
IMG_0091	-	1504	1m	North facing section of gully 1504
IMG_0092	23 (2)	1404	1m	North facing section of gully 1404
DSCN4436	29 (1)	Trench 24	1m	Trench 24 facing south-east
DSCN4437	-	Trench 24	1m	Trench 24 facing north-west
DSCN4438	-	Trench 26	1m	Trench 26 facing south
DSCN4439	-	Trench 26	1m	Trench 26 facing south
DSCN4440	30 (1)	Trench 26	1m	Trench 26 facing north
DSCN4441	-	Trench 25	1m	Trench 25 facing south
DSCN4442	31 (1)	Trench 25	1m	Trench 25 facing south
DSCN4443	-	Trench 25	1m	Trench 25 facing north
DSCN4444	-	Trench 27	1m	Trench 27 facing south-west
DSCN4445	-	-	-	General view of site
DSCN4446	-	-	-	General view of site
DSCN4447	32 (1)	Trench 27	1m	Trench 27 facing north-east
DSCN4448	-	Trench 27	1m	Trench 27 facing north-east
DSCN4449	35 (1)	Trench 28	1m	Trench 28 facing west
DSCN4450	-	Trench 28	1m	Trench 28 facing west
DSCN4451	-	Trench 28	1m	Trench 28 facing east
DSCN4452	36 (1)	Trench 29	1m	Trench 29 facing east
DSCN4453	-	Trench 29	1m	Trench 29 facing east
DSCN4454	-	Trench 29	1m	Trench 29 facing west
DSCN4455	2 (2)	Trench 30	1m	Trench 30 facing north-east
DSCN4456	-	Trench 30	1m	Trench 30 facing south-west
DSCN4457	-	Trench 31	1m	Trench 31 facing south-east
DSCN4458	-	Trench 31	1m	Trench 31 facing south-east
DSCN4459	3 (2)	Trench 31	1m	Trench 31 facing north-west
DSCN4460	-	Trench 32	1m	Trench 32 facing north
DSCN4461	-	Trench 32	1m	Trench 32 facing south
DSCN4462	4 (2)	Trench 32	1m	Trench 32 facing south
DSCN4463	-	Trench 33	1m	Trench 33 facing south
DSCN4464	5 (2)	Trench 33	1m	Trench 33 facing north
DSCN4465	6 (2)	Trench 34	1m	Trench 34 facing west
DSCN4466	-	Trench 34	1m	Trench 34 facing east
DSCN4467	-	Trench 34	1m	Trench 34 facing east
DSCN4468	-	Trench 35	1m	Trench 35 facing south
DSCN4469	7 (2)	Trench 35	1m	Trench 35 facing north
DSCN4470	-	Trench 36	1m	Trench 36 facing south
DSCN4471	8 (2)	Trench 36	1m	Trench 36 facing north
DSCN4472	-	Trench 37	1m	Trench 37 facing south-east
DSCN4473	9 (2)	Trench 37	1m	Trench 37 facing north-west

DSCN4474	-	Trench 37	1m	Trench 37 facing south-east
DSCN4475	10 (2)	Trench 38	1m	Trench 38 facing north
DSCN4476	-	Trench 38	1m	Trench 38 facing north

APPENDIX 4

Land off Haigh Moor Road and Westerton Road, West Ardsley

Site Code: 05.29.21 Environmental Index

Sample No.	Context No.	Cut	Description	Type
1	1503	1504	Mid grey brown silty clay. Single fill of gully	Bulk
2	1403	1404	Light grey brown silty clay. Single fill of gully	Bulk

Appendix 5

West Ardsley MAP 05-27-21

Carbonised Plant Macrofossils and Charcoal

Diane Alldritt

1: Introduction

Two environmental sample flots taken during archaeological excavation work on land in West Ardsley (MAP 05-27-21) were examined for carbonised plant macrofossils and charcoal. The samples were taken from two shallow undated gully features possibly field boundaries. The main components of both samples were coal and clinker with only a trace quantity of charcoal recorded suggesting the features were probably Post Medieval or modern in origin.

2: Methodology

The bulk environmental samples were processed by MAP Archaeological Practice Ltd. using a Siraf style water flotation system (French 1971). The samples were both 40litres in volume. The flots were dried before examination under a low power binocular microscope typically at x10 magnification. All identified plant remains including charcoal were removed and bagged separately by type.

Wood charcoal was examined using a high powered Vickers M10 metallurgical microscope at magnifications up to x200. The reference photographs of Schweingruber (1990) were consulted for charcoal identification. Plant nomenclature

utilised in the text follows Stace (1997) for all vascular plants apart from cereals, which follow Zohary and Hopf (2000).

3: Results

The environmental samples contained trace quantities of carbonised remains <2.5ml in volume consisting of very small and degraded charcoal fragments <0.5cm to 0.5cm in size in amongst moderate amounts of coal and clinker. Modern remains were present at <2.5ml in volume mainly consisting of modern roots indicating a small amount of bioturbation was taking place.

Results are given in table 1 and discussed below.

4: Discussion

Both gully fills (1403) and (1503) produced trace finds of degraded charcoal mixed through with coal and clinker fragments. Fill (1403) contained a sliver of *Quercus* (oak) charcoal, whilst (1503) had a fragment of *Alnus* (alder). The charcoal was probably general background residual detritus bioturbated or plough mixed through the deposits with the presence of clinker and coal indicating the fills were probably Post Medieval in origin.

5: Conclusion

The environmental samples were mostly found to consist of coal and clinker indicating the gully features were probably Post Medieval / modern field boundaries or other agricultural divisions. Both (1403) and (1503) produced trace quantities of charcoal likely to be residual mixed material of low significance.

Further excavation work at the site has a low potential to produce carbonised remains.

References

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

Schweingruber, F. H. 1990 *Anatomy of European Woods*. Paul Haupt Publishers Berne and Stuttgart.

Stace, C. 1997 *New Flora of the British Isles*. 2nd Edition Cambridge University Press.

Zohary, D. and Hopf, M. 2000 *Domestication of Plants in the Old World*. 3rd Edition Oxford University Press.



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IMG_0003



IMG_0004



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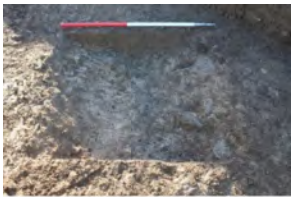
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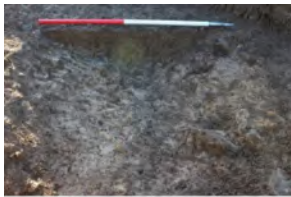
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DSCN4436



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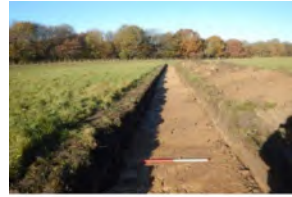
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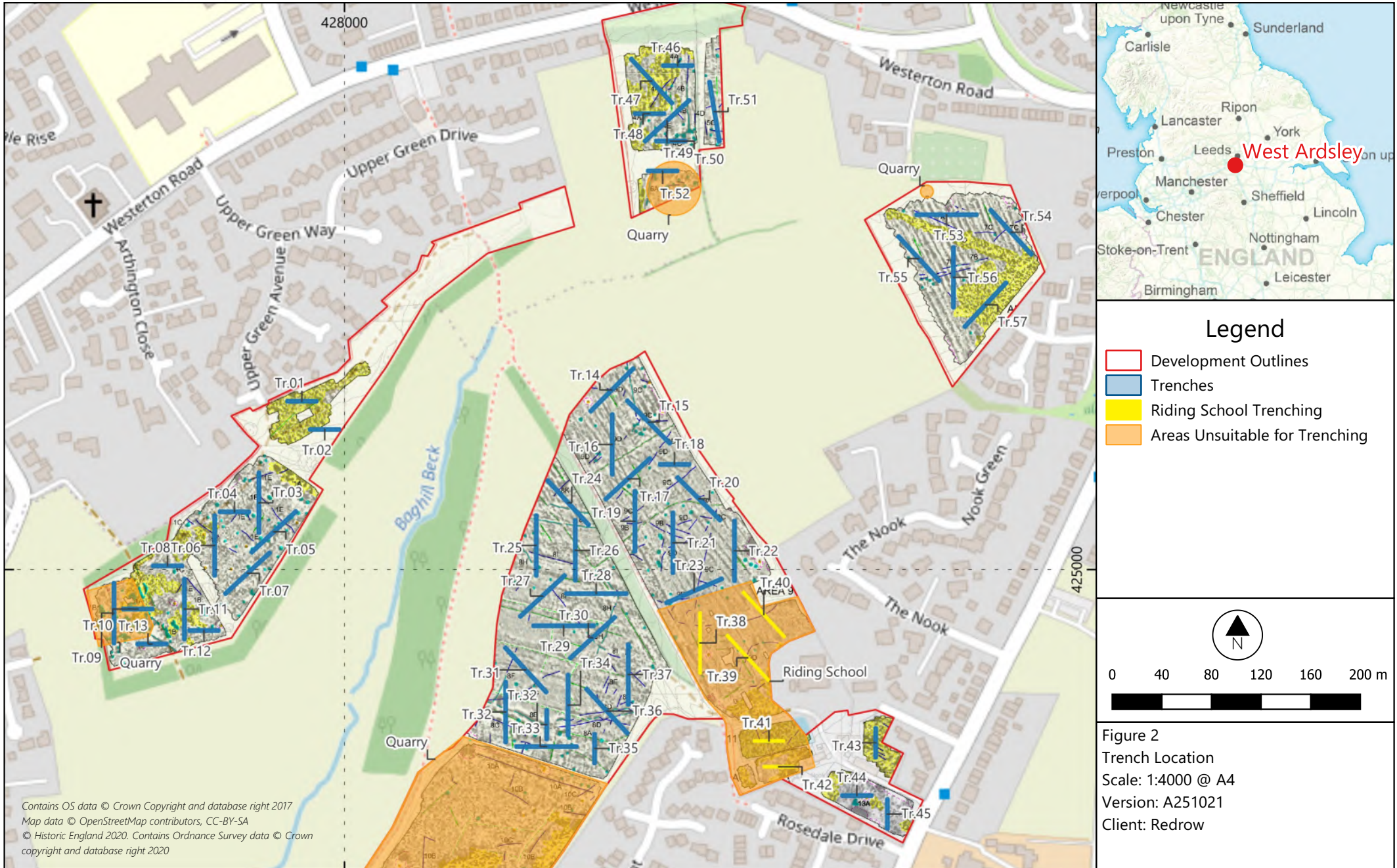


Figure 2
Trench Location
Scale: 1:4000 @ A4
Version: A251021
Client: Redrow

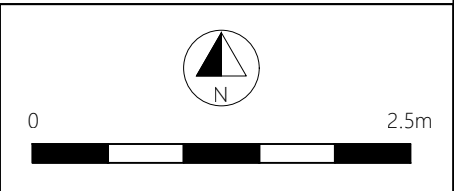
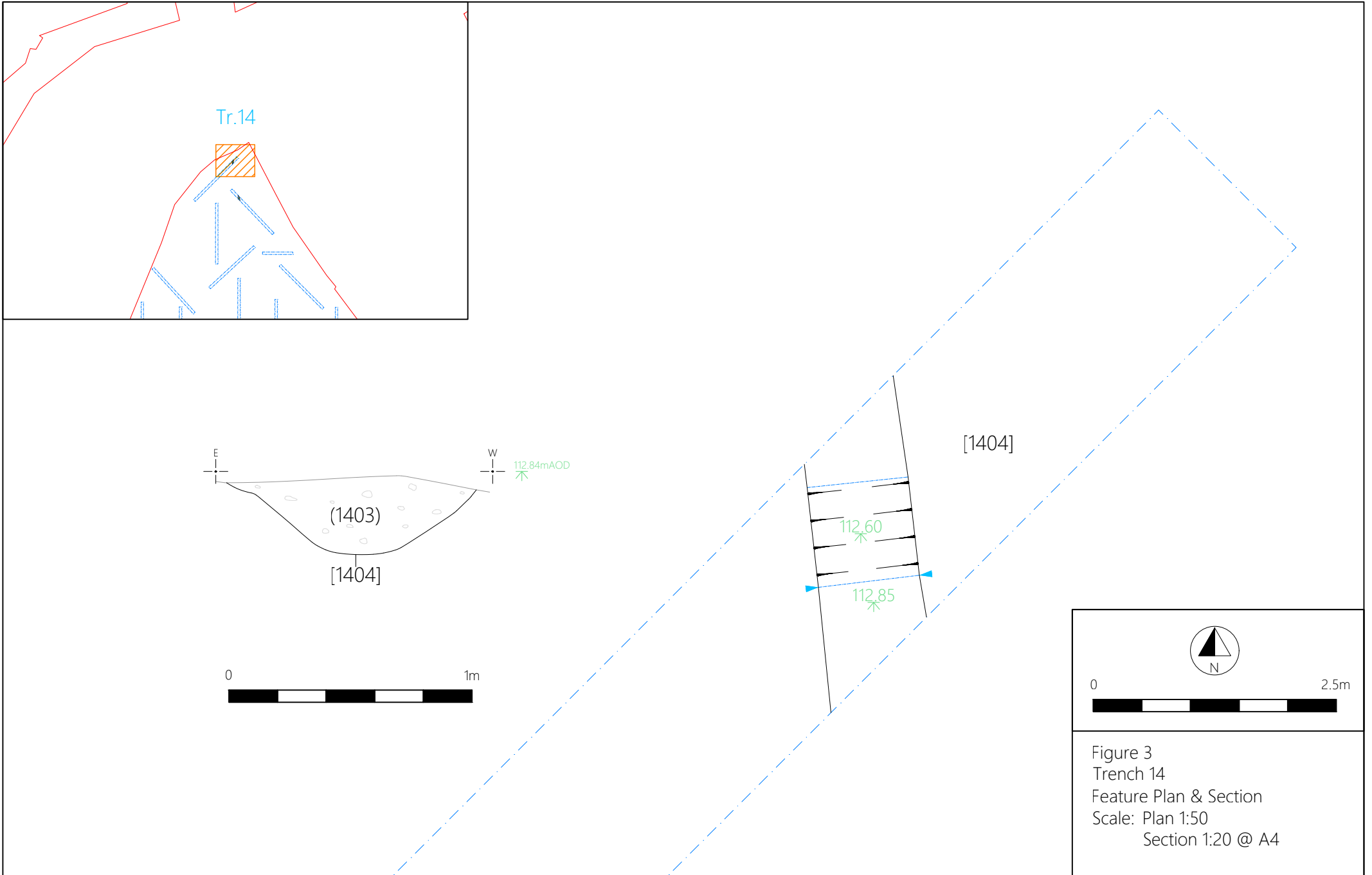


Figure 3
Trench 14
Feature Plan & Section
Scale: Plan 1:50
Section 1:20 @ A4

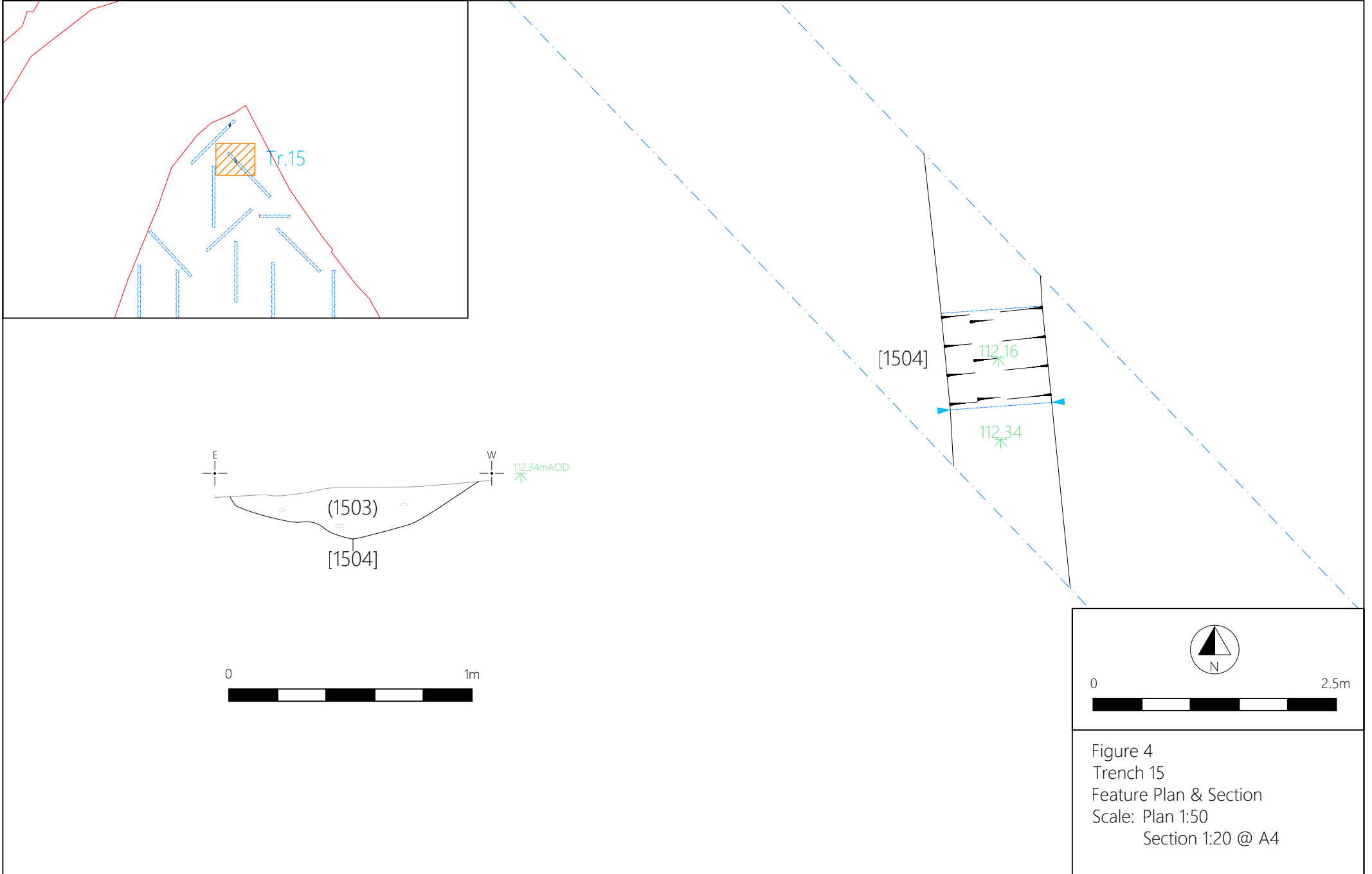




Plate 1. General View of Site



Plate 2. General View of Site.



Plate 3. General View of Site



Plate 4. Trench 1 Facing West



Plate 5. Trench 5 Facing South-West



Plate 6. Trench 9 Facing South



Plate 7. Trench 14 Facing North-East



Plate 8. North Facing Section of Gully Cut [1404]



Plate 9. Trench 15 Facing South-East



Plate 10. North Facing Section of Gully Cut [1504]



Plate 11. Trench 20 Facing South-East



Plate 12. Trench 26 Facing South



Plate 13. Trench 32 Facing South



Plate 14. Trench 37 Facing South-East



Plate 15. Trench 46 Facing East



Plate 16. Trench 50 Facing West



Plate 17. Trench 54 Facing North-West



Plate 18. Trench 57 Facing South-West

**WEST YORKSHIRE ARCHAEOLOGY ADVISORY SERVICE:
SPECIFICATION FOR A POST DETERMINATION ARCHAEOLOGICAL
EVALUATION BY TRIAL TRENCHING ON LAND OFF HAIGH MOOR ROAD AND
WESTERTON ROAD, WEST ARDSLEY, LEEDS, WEST YORKSHIRE**

SE 28248 25175

Specification prepared on behalf of Leeds City Council at the request of Sophie Coy of MAP Archaeological Practice Ltd. in response to an outline planning consent (17/08262/T condition 18).

1. Summary

- 1.1 A post determination archaeological evaluation consisting of archaeological trial trenching informed by an earlier geophysical survey is proposed to help establish the presence, context and significance of any archaeological remains at the above site. Any significant additional archaeological work arising from the results of the evaluation will be covered by a further specification.
- 1.2 This specification has been prepared by the West Yorkshire Archaeology Advisory Service, the holders of the WY Historic Environment Record.
- 1.3 **Please note that a hard copy of the final report must be submitted to the West Yorkshire Historic Environment Record to enable the results of fieldwork to be made publically accessible as required by the National Planning Policy Framework. The WYAAS will not recommend that any archaeological condition is discharged until all analysis and final reporting have been received and approved on behalf of the planning authority.**

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

2. Site Location & Description Grid Reference: centred SE 28248 25175

- 2.1 The site comprises several parcels of agricultural and scrub land in a roughly triangular area demarcated by Haigh Moor Road and Westerton Road and above and on the sides of a south-west aligned valley containing Baghill Beck and Haigh Woods. The site is located at a height of between 120m and 100m AOD and has a gross area of 135415m². It lies on the Pennine Lower Coal Measures. The drift geology is not recorded.
- 2.2 The site is located in the historic township of West Ardsley.
- 2.3 Due to known and mapped historic quarries and tree cover a reduced footprint is available for archaeological evaluation. Plot boundaries do not confirm well to mapped boundaries and the area covered by geophysics. The contractor should take particular care in laying out trenches given these discrepancies.

3. Background

- 3.1 The West Yorkshire Archaeology Advisory Service recommended that the site should be fully evaluated by archaeological trial trenching prior to determining the application. This did not take place but a desk based assessment and geophysical survey have been carried out. In both cases the archaeological potential of the development site have been judged low. However, it remains necessary to test this conclusion with a physical evaluation comprising a number of archaeological evaluation trenches.
- 3.2 This specification has been prepared by the WYAAS at the request of **Sophie Coy of MAP Archaeological Practice Ltd.** acting on behalf of the applicant, to detail what work is required for the initial evaluation and to allow an archaeological contractor to provide a quotation.

4. Archaeological Interest

- 4.1 The application site comprises an area of previously undeveloped agricultural land in an area with known archaeological potential dating from the Early Bronze Age period, through later Prehistoric and Roman periods to the medieval period.
- 4.2 This potential is represented by:
- Crop mark evidence of later Prehistoric and Romano-British field systems and settlement sites to the west (West Yorkshire Historic Environment Record PRNs 4541, 4542, 4543, 4544).
 - The route of the modern A650 is thought to follow an earlier Prehistoric route way and the line of Roman Road 721 (PRNS 9961, 3485). Therefore it is not unreasonable to expect contemporary settlements in its vicinity.
 - The site of Tingley Hall, 600m to the north, is thought to be the location of an early medieval moot or meeting place, an identification given weight by the discovery of early medieval artefacts including copper alloy tweezers and a brooch in 2014 (PRN 13874).
- 4.3 A portion of the site is located on south and south-west facing ground above a water course and would have been attractive to communities from the all these periods.
- 4.4 The geophysical survey carried out by Phase Site Investigations shows portions of the site to have a very noisy magnetic background (Areas 1, 3, 6, parts of 7 and 10) making interpretation of these areas difficult to interpret and potentially indicating the presence of historic quarries or dumping arising from these or other industrial activities. Traces of ploughing is also dominant in many areas making the identification of archaeological anomalies difficult.
- 4.5 The scale of the evaluation has thus been curtailed by these factors.
- 4.6 For an understanding of relevant archaeological research priorities relating to the prehistoric, Roman and later periods in West Yorkshire please see the relevant research agendas available as PDF documents to download from the WYAAS website:

<http://www.wyjs.org./archaeologyuk-advisory/>

5. Aim of the Evaluation

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

5.2 It is conceivable that a larger, more open area excavation may be identified as being warranted, or alternatively a wider watching brief may be required during ground-works for the development, possibly with provision for rapid salvaging recording. All possibilities will be considered depending upon the results of this exercise and it would be anticipated that if further significant fieldwork is required, then the contractor would draft the specification and agree it in advance of implementation with the WYAAS. It is a primary aim of the specified work that all aspects should be placed in the public domain by depositing the results with the WY Historic Environment Record (c/o WYJS, Nephshaw Lane South, Morley, Leeds LS27).

6. General Instructions

Health and Safety

6.1 The archaeologist on site will naturally operate with due regard for Health and Safety regulations. Where archaeological work is carried out at the same time as the work of other contractors, regard should also be taken of any reasonable additional constraints that these contractors may impose. This work requires the preparation of a Risk Assessment in accordance with the Health and Safety at Work Regulations. The West Yorkshire Archaeology Advisory Service and its officers cannot be held responsible for any accidents or injuries that may occur to outside contractors while attempting to conform to this specification.

6.2 Location of Services, etc.

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

6.3 Confirmation of Adherence to Specification

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

6.4 Confirmation of Timetable and Contractors' Qualifications

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

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

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

6.5 Notification

6.5.1 The project will be monitored as necessary and practicable by the WYAAS, in its role as “curator” of the region’s archaeology. The WYAAS should receive as much notice as possible, and certainly one week, of the intention to start fieldwork. This notification is to be supplied in writing, and copied to the relevant District Museum (see para. 9.1 below).

6.5.2 Dr Andy Hammon, Historic England’s science advisor should be notified that the excavation is commencing (email andy.hammon@HistoricEngland.org.uk Tel.: 07747 486255).

6.5.3 Katherine Baxter, Leeds Museum Discovery Centre, Carlisle Road, Hunslet, Leeds, LS10 1LB (Tel.: 0113 2305492; email: katherine.baxter@leeds.gov.uk) should be notified in writing of the commencement of fieldwork at the same time as West Yorkshire Archaeology Advisory Service.

6.6 Documentary Research

6.6.1 Prior to the commencement of fieldwork, the site supervisor must review the information held by the HER on the site and its environs and information in MAP Archaeological Practices desk based assessment (available from the HER).

6.6.2 In addition to providing a knowledge base for the work in hand, the results of this assessment may be incorporated into the contractor’s report where they are considered to materially contribute to that report, but any extraneous material should be omitted.

6.6.3 The relevant WY research agendas, covering later prehistoric, Romano-British and medieval periods, should also be consulted. These are available from the WYAAS web site.

6.6.4 Currently, at the time of writing, the HER is shut to external visitors due to the Covid-19 situation. The contractor should check with David Hunter (contact details at the end of this document) if the HER is open, if not any available information will be provided digitally.

6.6.5 Please note that the WY HER makes a charge for consultations of a commercial nature. The results of this exercise should be used to inform the whole project. Please note, however, that a formal desk-based report is not required and the results of this stage of work should be incorporated in the final report.

7. Fieldwork Methodology

7.1 Trench Size and Placement (Fig. 1)

7.1.1 The evaluation will comprise the excavation of 44 trenches measuring 50m x 2m and 21 trenches measuring 25m x 2m (See figure 1 and available as georeferenced file on request). These have been placed with reference to the known cropmarks from aerial photographs and the geophysical survey carried out by Phase Site Investigations. The trenches can be opened by machine.

7.1.2 The contractor should also allow for a contingency area of 1550m². The use of the contingency will depend upon the results obtained in the initial trial trenching. The use of the contingency will be at the decision of the WYAAS, whose decision will be issued in writing, if necessary in retrospect after site discussions.

Gross site area: c. **135415m²**

Area of trial trenching: **5450m²**

Contingency trenching: **1550 m²**

7.2 Method of Excavation

7.2.1.1 The trial trenches may be opened and the topsoil and recent overburden removed down to the first significant archaeological horizon in successive level spits of a maximum 0.1m. thickness, by the use of an appropriate machine using a wide toothless ditching blade. Under no circumstances should the machine be used to cut arbitrary trenches down to natural deposits. Any machine work must be carried out under direct archaeological supervision and the machine halted if significant archaeological deposits are encountered. The top of the first significant archaeological horizon may be exposed by the machine, but must then be cleaned by hand and inspected for features and then dug by hand.

7.2.1.2 All archaeological remains will be hand excavated in an archaeologically controlled and stratigraphic manner sufficient to meet the aims and objectives of the project. The complete stratigraphic sequence, down to naturally occurring deposits will be excavated and the work will investigate and record all inter-relationships between features. It is likely that 19th-century structures will be present in many areas of the site. These will be recorded in full and then removed in order to investigate the remainder of the sequence down to natural deposits. The contractor should make provision for the use of shoring/stepping to accomplish

this if necessary. All trenches are to be the stated dimensions at their base. The following strategy will be employed:

- Linear boundary features: a minimum sample of 20% of each linear boundary feature such as ditches and trackways. Each section should be at least 1m wide and, where possible, sections will be located and recorded adjacent to the trench edge. All intersections will be investigated to determine the relationship(s) between the component features. All termini will be investigated.
- Other linear and discrete features: all stake-holes, post-holes, pits, ring ditches, kilns, and other structural/funerary/industrial features will be 50% excavated in the first instance, recorded in section, and then fully excavated. All intersections will be investigated to determine the relationship(s) between the component features. Where possible, sections will be located and recorded adjacent to the trench edge.
- Built structures: walls, floors etc. will be excavated sufficient to establish their form, phasing, construction techniques. All intersections will be investigated to determine the relationship(s) between the component features. To assist in the dating of features it is essential that care should be taken to excavate and record any datable artefacts in their correct stratigraphic position.

7.2.1.3 All artefacts are to be retained for processing and analysis except for unstratified 20th-century and 21st century material, which may be noted and discarded. Finds will be stored in secure, appropriate conditions following the guidelines in First Aid for Finds (3rd edition). All trenches must be the stated dimensions at their base.

7.2.1.4 Care should be taken to record artefacts in their correct stratigraphic position, when present to facilitate accurate dating of deposits and features. The stratigraphic position and “security” (residuality or intrusiveness?) of any artefacts should be recorded on context sheets and discussed in the report.

7.3 Method of Recording

7.3.1.1 The trenches are to be recorded according to the normal principles of stratigraphic excavation. The stratigraphy of each trial trench is to be recorded even where no archaeological deposits have been identified. Where no archaeological features are present representative sections or soil profile must be recorded and illustrated in the report.

7.3.1.2 The actual areas of trenching and any features of possible archaeological interest noted within the trenches should be accurately located on a site plan with levels at top and base of features and recorded by photographs, summary scale drawings and written descriptions sufficient to permit the preparation of a report on the material. The site grid is to be accurately tied into the

National Grid and located on the largest scale map available of the area (either 1:2500 or 1:1250).

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

7.3.1.4 Digital photography may be employed as an alternative to the use of colour transparencies. Good quality digital photography may be supplied, using cameras with a minimum resolution of 10 megapixels; RAW format may be used to capture images but these must be archived as described below. Digital photography should follow the guidance given by Historic England in Digital Image Capture and File Storage: Guidelines for Best Practice, July 2015. Digital images will only be acceptable as an alternative to colour slide photography if each image is supplied as both a JPEG and a TIFF versions. The latter as uncompressed 8-bits per channel TIFF version 6 file of not less than 25Mbs (See section 2.3 of the Historic England guidance). The contractor must include metadata embedded in the TIFF file. The metadata must include the following: the commonly used name for the site being photographed, the relevant centred OS grid coordinates for the site to at least six figures, the relevant township name (**West Ardsley**) the date of photograph, the subject of the photograph, the direction of shot and the name of the organisation taking the photograph. Any digital images are to be supplied to WYAAS on gold "archive quality" CDs the archaeological contractor accompanying the hard copy of the report.

7.4 General Use of Metal Detectors on Site

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

7.4.1.2 The make and model of the instrument used should be given in the methodology section of the contractors report and metal detected finds identified in the relevant finds section of this document.

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

7.5 Environmental Sampling Strategy

- 7.5.1.1 Bulk samples must be taken from all securely stratified deposits using a strategy which combines systematic and judgement sampling, but which also follows the methodologies outlined in the English Heritage (2011) 'Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (Second Edition)' guidance.
- 7.5.1.2 All samples will be processed and retents scanned with a magnet to recover micro-slugs. A statement on the environmental potential of the excavated deposits will be a distinct part of the environmental report.
- 7.5.1.3 Samples for scientific dating (radiocarbon dating, archaeomagnetic dating, dendrochronology, optically stimulated luminescence etc.) should be taken if suitable material is encountered during the excavation. The Historic England Science Advisor should be consulted (email andy.hammon@HistoricEngland.org.uk) and provision should be made for an appropriate specialist(s) to visit the site, take samples and discuss the sampling strategy, if necessary.

7.6 Conservation Strategy

- 7.6.1.1 A conservation strategy must be developed in collaboration with a recognised laboratory. All finds must be assessed in order to recover information that will contribute to an understanding of their deterioration and hence preservation potential, as well as identifying potential for further investigation. Furthermore, all finds must be stabilised and packaged in accordance with the requirements of the receiving museum. As a guiding principle only artefacts of a "displayable" quality would warrant full conservation, but metalwork and coinage from stratified contexts would be expected to be X-rayed if necessary, and conservation costs should also be included as a contingency.
- 7.6.1.2 The report should include a discussion of geology, soils and drainage with specific reference to the potential for the site to contain water-logged remains or localised anoxic conditions and have specific reference to the nature and degree of preservation of

different classes of artefacts and ecofacts that have been recovered and that may be anticipated across the rest of the site.

7.7 Human Remains

7.7.1.1 Any human remains (inhumations, cremation and ritualised or selected deposits) that are discovered must initially be left in-situ, covered and protected. WYAAS will be notified at the earliest opportunity. If removal is necessary the remains must be excavated archaeologically in accordance with the ClfA Technical Paper 14 “Excavation and Post-Excavation Treatment of Cremated and Inhumed Remains (Mckinley and Roberts 1994). The treatment of human remains will be in accordance with Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England (Advisory Panel on the Archaeology of Burials in England 2017), a valid Ministry of Justice licence and any local environmental health regulations.

7.8 Treasure Act

7.8.1.1 The terms of the Treasure Act 1996, as amended, and the Treasure (Designation) Order 2002 must be followed with regard to any finds that might fall within its purview. Any finds must be removed to a safe place and reported to the local coroner as required by the procedures as laid down in the “Code of Practice”. Where removal cannot be effected on the same working day as the discovery, suitable security measures must be taken to protect the finds from theft.

8. Monitoring

8.1.1.1 The representative of the WYAAS will be afforded access to the site at any reasonable time. Access is also to be afforded at any reasonable time to Historic England’s Science Adviser. Both WYAAS and HE staff will comply with any additional necessary health and safety requirements (as of spring 2020).

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

8.1.1.3 Please note that WYAAS now make a charge for site monitoring visits. An invoice will be raised on the archaeological contractor. Up

to three (3) monitoring visits will be charged for this project. Please contact us for the current fee.

- 8.1.1.4 During fieldwork monitoring visits WYAAS officers will take digital photographs which may be published on the Advisory Service's social media feeds as part of an ongoing strategy to enable public access to information about current fieldwork in the county.

9. Archive Deposition

- 9.1.1.1 Before commencing any fieldwork, the archaeological contractor must contact the relevant District museum archaeological curator to determine the museum's requirements for the deposition of an excavation archive. In this case the contact is Katherine Baxter, Leeds Museum Discovery Centre Carlisle Road, Hunslet, Leeds, LS10 1LB (Tel.: 0113 2305492; email: katherine.baxter@leeds.gov.uk). Deposition should be confirmed in writing by the archaeological contractor; this correspondence is to be copied to the WYAAS.
- 9.1.1.2 It is the policy of Leeds Museums to accept complete excavation archives, including primary site records and research archives and finds, from all excavations carried out in the District that it serves.
- 9.1.1.3 It is the responsibility of the archaeological contractor to endeavour to obtain consent of the landowner, in writing, to the deposition of finds with Leeds Museums. It is the responsibility of the archaeological contractor to meet Leeds Museums' requirements with regard to the preparation of excavation archives for deposition.

9.2 Unexpectedly Significant or Complex Discoveries

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

10. Requirement for Further Fieldwork

- 10.1 It is anticipated that upon (or approaching) completion of fieldwork a meeting with WYAAS will be arranged by the archaeological contractor, either at the WYAAS offices or on site, to discuss the results and agree what, if any, additional work may be warranted. The developer should also be invited to attend this meeting. The meeting may take the form of a telephone discussion at WYAAS' discretion. Following the meeting the archaeological contractor will either produce a report (if no further archaeological work is warranted), or draft a specification (if further work is required) to be submitted to WYAAS for written approval prior to the commencement of any further work.
- 10.2 If further fieldwork is required, the results of the evaluation will be integrated into an overall report encompassing all stages of work. However, if a different contractor is employed by the developer to undertake subsequent

works, then a full, formal evaluation report (see section 11 below) should be prepared and accepted by WYAAS before further fieldwork commences.

11. Post-Excavation Analysis and Reporting

11.1 Finds and Samples

- 11.1.1.1 On completion of the fieldwork, any samples taken shall be processed and any finds shall be cleaned, identified, assessed/analysed, dated (if possible), marked (if appropriate) and properly packed and stored in accordance with the requirements of national guidelines.
- 11.1.1.2 Samples should be processed for the recovery of artefactual material, animal/fish/human bones, industrial residues, shell, molluscs, charcoal and mineralised plant remains as a minimum. 'Specialist' samples (e.g. monoliths, cores, plant/invertebrate macrofossils) should be processed separately as appropriate.
- 11.1.1.3 Material suitable for scientific dating (e.g. charcoal) should be identified to species and assessed for suitability by an environmental specialist prior to submission to a dating laboratory. Any human remains submitted for C14 dating should also have carbon ($\delta 13C$) and nitrogen isotope analysis carried out by the radiocarbon laboratory.
- 11.1.1.4 All finds and biological material must be analysed by a qualified and experienced specialist.
- 11.1.1.5 Following identification, finds of 20th and 21st-century date should be noted, quantified and summarily described, but can then be discarded if appropriate. All finds which are of 19th century or earlier date should be retained and archived.
- 11.1.1.6 Any samples taken shall be processed and any finds shall be cleaned, identified, assessed, dated (if possible), marked (if appropriate) and properly packed and stored in accordance with the requirements of national guidelines and reporting on ceramic artefacts and pottery should follow the guidance given in 'A Standard for Pottery Studies in Archaeology' (2016) and endorsed by the Prehistoric Ceramics Research Group; the Study Group for Roman Pottery & the Medieval Pottery Research Group. A fully indexed field archive shall be compiled consisting of all primary written documents, plans, sections, photographic negatives and a complete set of labelled photographic prints. An index to the field archive is to be deposited with the WYAAS (preferably as an appendix in the report).
- 11.1.1.7 The original archive is to accompany the deposition of any finds, providing the landowner agrees to the deposition of finds, in a publicly accessible archive (see para. 9.1 above). In the absence of this agreement the field archive (less finds) is to be deposited with the WYAAS.

11.2 Field Archive

- 11.2.1.1 A fully indexed field archive shall be compiled consisting of all primary written documents, plans, sections, photographic negatives and a complete set of labelled photographic prints/slides. Standards for archive compilation and transfer should conform to those outlined in Archaeological Archives – a guide to best practice in creation, compilation, transfer and curation (Archaeological Archives Forum, 2011). An index to the field archive is to be deposited with the West Yorkshire Archaeology Advisory Service (preferably as an appendix in the report).
- 11.2.1.2 Prints may be executed digitally from scanned versions of the film negatives, and may be manipulated to improve print quality (but not in a manner which alters detail or perspective). **All digital prints, including those presented in the report, must be made on paper and with inks which are certified against fading or other deterioration for a period of 75 years or more when used in combination. If digital printing is employed, the contractor must supply details of the paper/inks used in writing to the WY Archaeology Advisory Service, with supporting documentation indicating their archival stability/durability.** Written confirmation that the materials are acceptable must have been received from the WYAAS prior to the commencement of work on site.
- 11.2.1.3 The archaeological contractor, their specialists and the district museum curator should develop an archive material selection plan based on the significance of the material excavated and its ability to answer the project's and other more general research questions. This process should include the views of the district museum's archaeological curator, WYAAS and relevant and experienced specialists. The archive selection plan should be explicitly detailed in the archaeological report.
- 11.2.1.4 The original archive is to accompany the deposition of any finds, providing the landowner agrees to the deposition of finds in a publicly accessible archive (see para. 9.3 above). In the absence of this agreement the field archive (less finds) is to be deposited with the West Yorkshire Archaeology Advisory Service.

12. Report Format and Content

12.1 Archaeological Evaluation Report

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

- 12.1.1.2 Location plans should be produced at a scale which enables easy site identification and which depicts the full extent of the site investigated (a scale of 1:50,000 is not regarded as appropriate unless accompanied by a more detailed plan or plans). Site plans should be at an appropriate scale showing trench layout (as dug), features located and, where possible, predicted archaeological deposits. Upon completion of each evaluation trench all sections containing archaeological features will be drawn. Section drawings (at a minimum scale of 1:20) must include heights O.D. Plans (at a minimum scale of 1:50) must include O.D. spot heights for all principal strata and any features. Where no archaeological deposits are encountered at least one long section of each trench will be drawn.
- 12.1.1.3 Artefact analysis is to include the production of a descriptive catalogue, quantification by context and discussion/interpretation if warranted, with finds critical for dating and interpretation illustrated.
- 12.1.1.4 Environmental analysis is to include identification of the remains, quantification by context, discussion/interpretation if warranted, and a description of the processing methodology. Radiocarbon results must be presented in full (laboratory sample number, conventional radiocarbon age, delta C13 value, calibration programme). Copies of the laboratory-issued dating certificates must be included as an appendix to the report.
- 12.1.1.5 Details of the style and format of the report are to be determined by the archaeological contractor, but should include a full bibliography, a quantified index to the site archive, and as an appendix, a copy of this specification.

13. Publicity

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

13.2 Consideration of Appropriate Mitigation Strategy

- 13.2.1 The report should not give a judgement on whether preservation or further investigation is considered appropriate, but should provide an interpretation of results, placing them in a local and regional, and if appropriate, national context. However, a client may wish to separately commission the contractor's view as to an appropriate treatment of the resource identified.

14. Report Submission and Deposition with the WY HER

- 14.1.1 A hard copy of this report (plus a digital copy on "archive" quality gold disk in ISO 10005-1 compliant (PDF/A) format) will be submitted directly to the WY Archaeology Advisory Service in a timely manner to**

allow further work, if necessary, to be scheduled unless specialist reports are awaited. In the latter case a revised date should be agreed with the WYAAS. Completion of this project and advice from WYAAS on an appropriate mitigation strategy are dependent upon receipt by WYAAS of a satisfactory report which has been prepared in accordance with this specification. Any comments made by WYAAS in response to the submission of an unsatisfactory report will be taken into account and will result in the reissue of a suitably edited report to all parties, within a timescale which has been agreed with WYAAS.

- 14.1.2 The report will be supplied on the understanding that it will be added to the West Yorkshire Historic Environment Record where it will be publicly accessible once deposited with the WYAAS unless confidentiality is explicitly requested, in which case it will become publicly accessible six months after deposition.
- 14.1.3 A copy of the final report (in .pdf format) shall also be supplied to Historic England's Science Advisor (andy.hammon@HistoricEngland.org.uk).
- 14.1.4 Copyright - Please note that by depositing this report, the contractor gives permission for the material presented within the document to be used by the WYAAS, in perpetuity, although The Contractor retains the right to be identified as the author of all project documentation and reports as specified in the Copyright, Designs and Patents Act 1988 (chapter IV, section 79). The permission will allow the WYAAS to reproduce material, including for commercial use by third parties, with the copyright owner suitably acknowledged.
- 14.1.5 The West Yorkshire HER supports the Online Access to Index of Archaeological Investigations (OASIS) project. The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large-scale developer funded fieldwork. The archaeological contractor must therefore complete the online OASIS form at <http://ads.ahds.ac.uk/project/oasis/>. Contractors are advised to contact the West Yorkshire HER officer prior to completing the form. Once a report has become a public document by submission to or incorporation into the HER, the West Yorkshire HER may place the information on a web-site. Please ensure that you and your client agree to this procedure in writing as part of the process of submitting the report to the case officer at the West Yorkshire HER.
- 14.1.6 A note or longer article should also be supplied to the next volume of the annual Council for British Archaeology's Yorkshire Forum publication (please contact the editor or CBA's website for more information associate.editor@cba-yorkshire.org.uk).

15. General Considerations

15.1 Authorised Alterations to Specification by Contractor

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

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

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

15.2 **Unauthorised Alterations to Specification by Contractor**

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

15.3 **Technical Queries**

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

15.4 **Valid Period of Specification**

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

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Figure 1 Site and Trench Locations