

1EW03 – Enabling Works Central AWHe C10024 Interim Report of Trial Trench Evaluation at Pipers Wood Cottages, Little Missenden Vent Shaft and Auto- Transformer Station (ATS), Buckinghamshire (AC100/11) Site Code: 1C18PIPTT

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1 Executive Summary

- 1.1.1 An archaeological trial trench evaluation was undertaken on land at Pipers Wood Cottages, Little Missenden Vent Shaft and ATS, Buckinghamshire (henceforth the Site). The site code allocated for this work was 1C18PIPTT. The evaluation was carried out during March 2020.
- 1.1.2 The Site was located c.500m east of Little Missenden. The evaluation was targeted on the land parcel required for the rail alignment, a ventilation shaft and auto-transformer station (ATS) and associated works as outlined in the Project Plan (Document Ref: 1EW03-FUS-EV-REP-CS02_CLo4-002514) and followed the methodology laid out in the Location Specific Written Scheme of Investigation (Document Ref: 1EW03-FUS-EV-REP-C001-002520).
- 1.1.3 A total of 22 trenches were excavated; none of which revealed archaeological features and two trenches contained tree throws.
- 1.1.4 The key findings are summarised in this Interim Report in order to inform subsequent decision making for any further archaeological works at the Site.

2 Site Location

- 2.1.1 The Site lies within Buckinghamshire in the parish of Little Missenden on a south facing slope overlooking the River Misbourne, c.500m east of Little Missenden (NGR SU 93397 98940; Figure 1). The Site is bounded to the south-west by the A413, to the north-west by Keepers Lane and to the east by a road leading to Weedon Hill.
- 2.1.2 The Site comprised the south-western part of two fields, predominantly pastoral, encompassing approximately 5.24 ha (Site GIS ID No: C10024).
- 2.1.3 The Site lies within Community Forum Area CFS09, Central Chilterns and within Archaeological Character Area 2 which is the 'Land around Lime Farm and Kennel Farm and passing between Keeper's Wood and Bray's Wood'.

3 Methodology

- 3.1.1 The evaluation was undertaken as outlined in the Project Plan (Document Ref: 1EW03-FUS-EV-REP-CS02_CLo4-002514) and followed the methodology laid out in the Location Specific Written Scheme of Investigation (Document Ref: 1EW03-FUS-EV-REP-C001-002520). A total of 22 trenches were excavated, no trenches were descope and no contingency was used (Figure 2).
- 3.1.2 The general aims of the trenching were to:
- confirm the presence/ absence, extent and depth of any surviving archaeological remains within the Site
 - determine the nature, date, condition, state of preservation including any preservation bias, complexity and significance of any archaeological remains

- determine the likely range, quality and quantity of artefactual and environmental evidence present
- suggest measures, if appropriate and feasible, for further archaeological investigation to mitigate identified significant impacts
- contribute to the delivery of GWSI: HERDS Specific Objectives as specified in Section 3.2 of the project plan.

3.1.3 The site-specific aims of the trial trenching were:

- KC36: How were medieval and later woodlands managed and exploited and what evidence do they preserve for earlier land use?
- KC40: Identify patterns of change within medieval rural settlement from the 11th to mid-14th century
- KC49: Ground truth and develop multispectral and LiDAR prospection techniques

Change Controls

3.1.4 The relocation of 10 of the 22 trenches from their original locations was implemented through change control:

- Trench 01 was moved c.2m east to avoid the exclusion zone of an underground LV cable (Change Control Doc No. FCCF110 1EW03_FUS_IFA-EV-FRM-CS02_CL04-000003)
- Trench 05 was moved c.7m south to give clearance to the ancient woodland (Change Control Doc. No. FCCF101 1EW03-FUS_IFA-EV-FRM-CS02_CL04-000002)
- Trench 06 was moved c.8m south to give clearance to the ancient woodland (Change Control Doc. No. FCCF101 1EW03-FUS_IFA-EV-FRM-CS02_CL04-000002)
- The eastern edge of Trench 09 was rotated north c.3m to avoid a hedgerow (Change Control Doc No. FCCF110 1EW03_FUS_IFA-EV-FRM-CS02_CL04-000003)
- The eastern edge of Trench 11 was rotated south c.3m to avoid an active water monitoring borehole (Change Control Doc No. FCCF110 1EW03_FUS_IFA-EV-FRM-CS02_CL04-000003)
- The western edge of Trench 12 was rotated south c.4m to avoid an active water monitoring borehole (Change Control Doc No. FCCF110 1EW03_FUS_IFA-EV-FRM-CS02_CL04-000003)
- Trench 15 was moved c.3m south and c.6m west to avoid the PROW (Change Control Doc No. FCCF110 1EW03_FUS_IFA-EV-FRM-CS02_CL04-000003)

- Trench 18 was moved c.2m east to avoid the Site compound. (Change Control Doc No. FCCF110 1EW03_FUS_IFA-EV-FRM-CS02_CL04-000003)
- Trench 21 was moved c.8m northwest to give clearance to the ancient woodland (Change Control Doc. No. FCCF100 1EW03-FUS_IFA-EV-FRM-CS02_CL04-000001)
- The southern end of Trench 22 was moved c.11m west to give clearance to the ancient woodland. (Change Control Doc. No. FCCF100 1EW03-FUS_IFA-EV-FRM-CS02_CL04-000001)
- Trial pits for artefact collection from the topsoil were undertaken in adjusted Trenches 9, 11, 12, 15 and 18 (Change Control Doc. No. FCCF89 1EW03-FUS-EV-FRM-CS02_CL04-000003).

4 Factual Summary of Key Archaeological Findings

4.1 Site Geology

- 4.1.1 The natural geology is mapped as Pit Chalk Formation with no superficial deposits recorded, however colluvium may be present on the lower valley slopes (BGS 2020).
- 4.1.2 Features were sealed by topsoil up to 0.2m thick, and isolated colluvial deposits up to 1.0m thick were recorded in Trenches 09, 10, 11, 16, 17 and 18 in the south of Site.

4.2 Archaeological Results

- 4.2.1 No archaeological features were uncovered during the trial trench evaluation at Pipers Wood Cottages. Two tree throws were identified in Trenches 14 and 16 to the east of the centre of Site, neither of which contained artefactual material or palaeo-environmental material suitable for sampling.
- 4.2.2 Neither of the tree throws correlated with the results of the previous geophysical survey. None of the anomalies highlighted during the geophysical survey were identified during the trial trench evaluation, and were possibly the result of variations within the natural geology.

5 Interim Artefactual Summary

- 5.1.1 No artefacts were recovered from the tree throws found within Trenches 14 and 16.
- 5.1.2 A small assemblage of ceramic material was recovered from the topsoil test pits consisting of 204 pieces weighing 6,220g. The assemblage comprised ceramic building material; tile and brick fragments (>99%) and a single piece of pottery (>1%) all of which is very fragmented and abraded.
- 5.1.3 All material was recovered by hand as part of the topsoil test pitting process. Materials have been recorded by test pit, with weights and numbers (Table 1).

- 5.1.4 Several different forms of fabric were present throughout the assemblage. Most of the material appears to date to the post medieval period, with occasional fragments of modern and medieval date. Among the assemblage was one frogged brick, one brick with an '...OULTON' makers mark and a small fragment of tile with a peg hole.

Artefact Type	Trench No.	Test Pit No.	Estimated quantity (count)	Estimated weight (g)	Provisional date
CERAMIC: Tile	1	2	2	20	Post Medieval
CERAMIC:	1	3	2	198	Uncertain
CERAMIC: Tile	2	5	7	120	Post Medieval
CERAMIC: Brick / Tile	2	6	4	1094	Modern
CERAMIC: Tile	3	17	2	56	Post Medieval
CERAMIC: Tile	4	21	3	108	Post Medieval
CERAMIC: Tile	5	22	2	94	Post Medieval
CERAMIC: Tile	5	24	1	40	Post Medieval
CERAMIC: Tile	6	26	1	736	Post Medieval
CERAMIC: Brick / Tile	7	28	2	80	Post Medieval
CERAMIC: Tile	7	30	3	121	Post Medieval
CERAMIC: Brick / Tile	8	10	3	202	Post Medieval
CERAMIC: Tile	8	12	4	112	Post Medieval
CERAMIC: Brick / Tile	9	7	8	692	Post Medieval
CERAMIC: Tile	9	9	7	197	Post Medieval
CERAMIC: Brick / Tile	10	14	6	636	Modern
CERAMIC: Tile	10	15	5	183	Post Medieval
CERAMIC: Tile	11	38	6	211	Post Medieval
CERAMIC: Brick / Tile	11	39	4	161	Post Medieval
CERAMIC: Brick / Tile	12	34	4	94	Post Medieval
CERAMIC: Tile	13	32	3	58	Post Medieval
CERAMIC: Brick / Tile	14	43	8	112	Post Medieval
CERAMIC: Tile	14	44	6	84	Post Medieval
POTTERY: Pot	15	42	1	7	Medieval
CERAMIC:	15	42	1	93	Medieval
CERAMIC: Brick / Tile	16	52	5	89	Post Medieval
CERAMIC: Tile	16	54	3	204	Post Medieval
CERAMIC: Brick / Tile	17	47	9	100	Post Medieval
CERAMIC: Tile	17	48	3	147	Post Medieval
CERAMIC: Tile	18	50	81	8	Post Medieval
CERAMIC: Tile	18	51	5	68	Post Medieval
CERAMIC: Tile	19	63	1	41	Post Medieval
CERAMIC: Brick / Tile	19	64	2	54	Post Medieval
Total:			204	6220	

Table 1 Provisional quantification and dating

6 Interim Palaeo-Environmental Summary

- 6.1.1 No deposits suitable for palaeo-environmental sampling were encountered during the trial trench evaluation.

7 Provisional Interpretation and Discussion

- 7.1.1 No archaeological remains were revealed during the trial trench evaluation, with only two undated tree throws revealed to the east of the centre of Site in Trenches 14 and 16 (Figure 2). Previously available data suggested the Site had been in agricultural use since at least the medieval period with no evidence to suggest any earlier features within the Site boundary. The results of the trial trench evaluation did not uncover evidence of agricultural use, nor evidence of occupation or exploitation of the Site from any period.
- 7.1.2 The two tree throws could represent the remnants of a wider expanse of ancient woodland within the surrounding landscape of which Keeper's Wood to the north-east of Site is also likely a remnant.

8 Potential Contribution to Specific Objectives

- 8.1.1 The results of the evaluation demonstrated the Site has little potential to contribute to the HERDS objectives outlined in the Project Plan for this Site, or to other Knowledge Creation (KC) objectives.

Table 2 Contribution to specific Objectives – Knowledge Creation

Specific Objective (KC)	Potential Contribution	Suggested Methods
KC36: How were medieval and later woodlands managed and exploited and what evidence do they preserve for earlier land use?	Tree-throws could provide evidence of the former extent of the woodland	The predominantly negative results of the Trial Trenching could be incorporated into a larger study assessing the current and former extent of woodlands.
KC40: Identify patterns of change within medieval rural settlement from the 11th to mid-14th century	Sparse evidence of medieval activity on Site could suggest the Site was part of an agricultural hinterland at that time.	NA
KC49: Ground truth and develop multispectral and LiDAR prospection techniques	Lack of evidence for anomalies during excavation suggests refinements of prospecting techniques is required	Comparison of geophysical survey with observed soil horizons.

Table 3 Specific Objectives - Community

Specific Objective (CE)	Potential Contribution	Suggested Methods
N/A	N/A	N/A

9 Provisional Conclusion

- 9.1.1 The results of the trial trench evaluation found no archaeological remains other than topsoil finds. The ancient woodland to the north-east could once have extended into Site, however this extent could not be dated. The two small pieces of medieval ceramic could suggest the Site was part of an agricultural hinterland at that time, however both pieces were found within Trench 15 and could represent a localised deposition of waste in the vicinity. The density of fragmentary post-medieval ceramic material across Site supports the suggestion the area was in agricultural use during the post-medieval period. This material was likely deposited through manuring practices.

9.2 Recommended no further work, no archaeological features or deposits identified

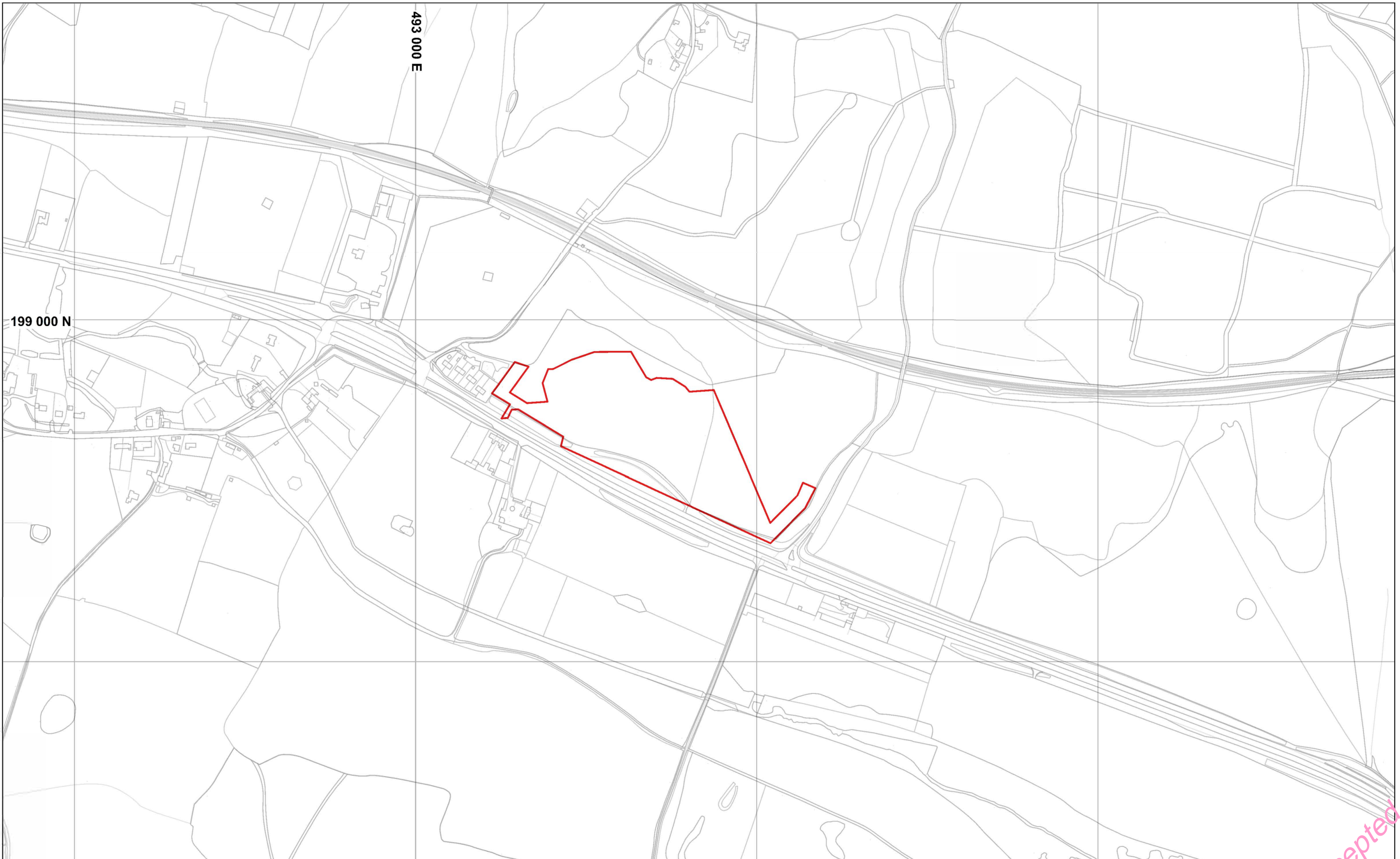
- 9.2.1 The trial trench evaluation at Pipers Wood Cottages has revealed no archaeological features or deposits. The area is not considered high potential for the presence of archaeological remains, with no known heritage assets in the Site. The potential anomalies of archaeological origin identified through geophysical survey have not been able to be located through the trial trench evaluation, and were possibly the results of variation within the natural geology.
- 9.2.2 No further work is recommended at this Site. Formal confirmation will be agreed with the Employer, following stakeholder consultation, through a Decision Record Notice.

Appendix 1

Table 4 Summary of results by context with finds and environmental data

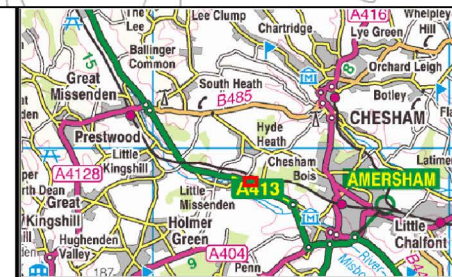
Trench No. (UID)	Context No. (Feature ID)	Context Class	Feature/ Monument Type	Period	Sub-Phase	Feature Depth (m)	Artefactual Remains	Environmental Remains	Building Material	Archaeological Science	Number of Items	Weight	Method of Recovery	Comment
014	701403		Tree throw	u/d	None	0.09	None	None	None	None	0	0	n/a	None
014	701404		Fill of tree throw	u/d	None	0.09	None	None	None	None	0	0	n/a	None
016	701603		Tree throw	u/d	None	0.44	None	None	None	None	0	0	n/a	None
016	701604		Fill of tree throw	u/d	None	0.44	None	None	None	None	0	0	n/a	None

Appendix 2 Figures



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Legend
 Site extent

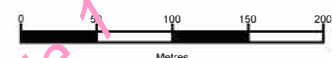


High Speed Two,
Pipers Wood Cottages
Figure 1. Site location

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- Legend**
- Site extent
 - Excavated evaluation trench

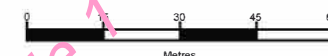


High Speed Two,
Pipers Wood Cottages
Figure 2. Overview of excavated
evaluation trenches

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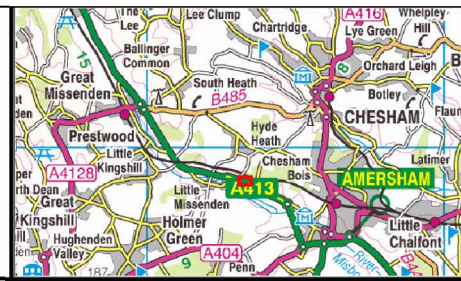
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- Legend**
- Site extent
 - Excavated evaluation trench
 - Test pit



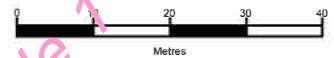

High Speed Two,
Pipers Wood Cottages

Figure 3. Overview of archaeological
features and test pits, 1 of 2

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- Legend**
- Site extent
 - Excavated evaluation trench
 - Tree throw
 - Test pit



High Speed Two,
Pipers Wood Cottages

Figure 4. Overview of archaeological
features and test pits, 2 of 2

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