1EW03 – Enabling Works Central

AWH Interim Report of Trial Trench Evaluation at Station 53C Portway Farm Buckinghamshire AC250

Site Code: 1C19PWFTT

Document no.: 1EW03-FUS_IFA-EV-REP-CS06_CL09-000002

MDF ref:

Revision	Date	Author	Checked by	Approved by	Revision Details:
C01	30/10/2020	H. Holderness S. Wilson	S. Roper	D. Bonner	For acceptance

Contents List

Figure List

Table List

1 Executive Summary

1.1.1 An archaeological trial trench evaluation was undertaken on land at Portway Farm, Buckinghamshire (henceforth the 'Site'). The site code allocated for this work was 1C19PWFTT. The evaluation was carried out during September and October 2020.

1.1.2 The Site was located within the Calvert, Steeple Claydon, Twyford & Chetwode Community Forum Area (CFA13). The evaluation was targeted on two land parcels required for the rail alignment formation and associated earthworks, the construction of the Calvert Cutting, Perry Hill Overbridge and Temporary Highway Diversion, West Street Overbridge, Portway Culvert, Calvert Infrastructure Maintenance Depot and main construction compound as outlined in the Project Plan (Document Ref: 1EW03-FUS-EV-REP-CS05-007829) and followed the methodology laid out in the Location Specific Written Scheme of Investigation (Document Ref: 1EW03-FUS-EV-REP- CS06_CL09-000001).

1.1.3 A total of 32 trenches were excavated at the Portway Farm site, comprising 15no. 30x1.8m trenches; 2no. 30x4m trenches; 1no. 60x1.8m trench; 13no. 4mx4m test pits and 1no. irregular area measuring a maximum of 54x50m; 17 of which revealed archaeological features.

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 is located within CFA13 Calvert, Steeple Claydon, Twyford & Chetwode Community Forum Area, in the county of Buckinghamshire. The village of Twyford is situated c. 970m to the west and Steeple Claydon c. 1.7km to the north-east. The Site comprises parts of two fields, enclosing c. 16.18ha centred on NGR 467700, 226170.

2.1.2 The Site is bounded to the west by Main Street, to the north and east by Perry Hill, and to the south by the partially extant route of the disused London Extension of the Great Central Railway. The Site is formed by parts of two agricultural fields, under arable use, divided by a ditched watercourse. This feature lies at approximately 84m above Ordnance Datum (aOD). The land rises to approximately 86m aOD at the western boundary and approximately 89m aOD at the eastern boundary.

3 Methodology

3.1.1 The evaluation was undertaken as outlined in the Project Plan (Document Ref: 1EW03-FUS-EV-REP-CS05-007829) and followed the methodology laid out in the Location Specific Written Scheme of Investigation (Document Ref: 1EW03-FUS-EV-REP- CS06_CL09-000001). A total of 31 trenches were excavated and one irregular area measuring a maximum of 54x50m. Three trenches were moved slightly to avoid SGN assets.

3.1.2 The general aims of the trenching were to:

- confirm the presence/ absence, extent and depth of any surviving Second World

War remains within the Site

- determine the nature, date, condition, state of preservation, complexity and significance of any Second World War remains
- determine the likely range, quality and quantity of artefactual and structural 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 4.2 of the project plan.

3.1.3 The GWSI: HERDS Specific Objectives of the Trial Trench Evaluation were:

- KC45: The conflicts of the 20th century define the history of modern Britain and the world: how can we achieve a greater understanding of the significance of sites associated with conflict to local communities along the route?
- KC47: Test and develop geophysical survey methodologies.

Change Controls

3.1.4 No change controls were implemented but three of the trenches were moved slightly to avoid SGN assets.

4 Factual Summary of Key Archaeological Findings

4.1 Site Geology

4.1.1 The British Geological Survey records the underlying bedrock geology as mudstone of the Peterborough Member, having formed approximately 164 to 166 million years ago in shallow sea environments of the Jurassic Period (BGS 2020).

4.1.2 The Site is largely bereft of mapped superficial geological deposits. A thin band of alluvium (clay, silt, sand & gravel) is mapped along the unnamed watercourse dividing the Site into two parcels. This feature is a tributary of Padbury Brook, the latter running on a broadly northeast/south-west alignment within c. 350m north from the Site. Padbury Brook forms the geological character of the immediate environs of the Site, having formed a small, postglacial river system on the periphery of the glacial till fields exhibited further north, complete with gravel terrace deposits and alluvial beds (BGS 2020).

4.1.3 Features were sealed by topsoil up to 0.2m thick and subsoil up to 0.3m thick.

4.2 Archaeological Results

4.2.1 Archaeological remains were encountered in 17 of the 32 trenches.

4.2.2 Furrows were recorded in trenches 11, 12, 23, 24, 26 and 32. These were anticipated by the LiDAR survey. The furrows in Trenches 11 and 23 produced post-medieval ceramic tile.

4.2.3 Trenches 2, 3, 5, 13, 21, 24, 27, 28, 29, 30 and 32 contained steel rebar, which when pursued were found to be set into wooden blocks. These were interpreted as anchor points for the anticipated elements of Station 53c such as aerial arrays. The rebar appeared to have been cut with subsequent ploughing pushing the ends into the subsoil. A U-shaped clamp was recovered from Trench 26 which may have held the end of the rebar to an above ground element of the transmitter structure.

4.2.4 A pit identified as a soakaway was present in Trench 16. The brick element of the fill was similar to those used in the construction of the extant transmitter building but there was no indication if they were contemporary or if the pit was using locally sourced rubble.

4.2.5 Two shallow gullies were exposed in Trenches 22 and 29. No dating evidence was recovered from them and it is unclear if they relate to Station 53C.

Correlation with Geophysical Survey

4.2.6 The rebar observed in the trenches corresponded with anomalies identified by the geophysical survey. However, other trenches displayed similar anomalies but were subsequently found to be empty of archaeological features.

5 Interim Artefactual Summary

5.1.1 Five pieces of post-medieval ceramic tile were recovered from the furrows in Trench 11 with a single fragment coming from Trench 23.

Table 1 Provisional quantification and dating of artefactual remains from features

Artefact Type	Trench No.	Estimated quantity (count)	Provisional date
Ceramic: Ceramic building material	37,40	6	Uncertain
Ceramic: Fired clay	44,	2	Prehistoric
Ceramic: Pottery	60	1	Roman

5.1.2

6 Interim Palaeo-Environmental Summary

6.1.1 No deposits that required environmental sampling were identified during the evaluation.

7 Provisional Interpretation and Discussion

7.1.1 The trial trench evaluation at Portway Farm only identified limited archaeological evidence, and nothing that firmly pre-dated the medieval period. The presence of furrows is indicative that the site was cultivated in the medieval and/or early post-medieval period, the corresponding ridges having been previously destroyed by ploughing. Extant ridge and furrow

earthworks still survive in fields adjacent to the Site. The presence of ceramic tile from within two of the furrows supports a post-medieval date although it is perfectly possible that the Site had been cultivated for some centuries before.

7.1.2 The only evidence identified that is likely to be associated with Station 53CA were a number of possible metal anchor points which consisted of lengths of rebar attached to large blocks of wood. It may be that these formed part of the wider supporting structure for the wireless transmitter known to have occupied the Site. The lack of additional, more substantial remains is suggestive that much of the structure was intentionally dismantled in the years after the war.

7.1.3 The two gullies identified in Trenches 22 and 29 did not contain any dating evidence and therefore it is not possible to ascribe them a certain period. It is unclear as to whether or not they are associated with Station 53C.

8 Potential Contribution to Specific Objectives

8.1.1 The results of the evaluation demonstrated the Site has potential to contribute to the HERDS objectives outlined in the Project Plan for this Site:

Table 2 Contribution to specific Objectives – Knowledge Creation

Specific Objective (KC)	Potential Contribution	Suggested Methods
KC45: The conflicts of the 20th century define the history of modern Britain and the world: how can we achieve a greater understanding of the significance of sites associated with conflict to local communities along the route?	The Site is the known location of the SOE wireless transmitter Station 53C, constructed in 1944. Although details of the layout and form of the facility are unknown, geophysical surveys undertaken across the Site have highlighted a potential for evidence of buried structural remains. Any evidence encountered relating to this period of use would inform our currently limited understanding of Station 53C and contribute to the wider corpus of international communications and the history of the SOE during the Second World War.	Below-ground archaeological investigation of Station 53C in order to locate and identify associated structures and features as well as their overall layout.
KC47: Test and develop geophysical survey methodologies.	The Site and its environs have been subject to a series of remote sensing and geophysical surveys, which produced varying results including clear concentrations of magnetic disturbance which may represent buried structural remains. The	Investigate changes in soil type or conditions across Site which could have contributed to anomalies in accuracy.

Specific Objective (KC)	Potential Contribution	Suggested Methods
	evaluation has the potential to ground truth these results and help develop non-intrusive archaeological prospection techniques.	

9 Provisional Conclusion

9.1.1 The trial trench evaluation identified limited archaeological remains within the Site. Evidence of medieval or post-medieval cultivation is present in the form of furrows identified within a number of trenches. Surviving ridge and furrow earthworks in adjacent fields indicated that such remains within the Site would not be unexpected. The Site would have formed part of the agricultural hinterland of nearby settlements.

9.1.2 Evidence of activity related to SOE Transmitter Station 53C was widespread across the site but limited in nature, with only the metal anchor points surviving as identifiable elements. The absence of more substantial structures or remains would suggest that the transmitter station underwent intentional demolition after the end of the Second World War. This may be partly due to its association with clandestine SOE operations.

9.1.3 The two undated gullies provide limited additional evidence for activity within the Site, although no further conclusions can be drawn based on the lack of dating evidence.

9.2 Recommended targeted Archaeological Recording

9.2.1 Although evidence relating to Station 53C was identified during the evaluation, further fieldwork potential is limited. Additional work should focus on detailed recording of the surviving transmitter building, which may shed more light on the Second World War activity within the Site.

Appendix 1

Table 3 Summary of results by context with finds and environmental data

Trench No. (UID)	Context No. (Feature ID)	Fill No.	Context Class	Feature/ Monument Type	Period	Sub-Phase	Feature Depth (m)	Artefactual Remains	Environmental Remains	Building Material	Archaeological Science	No.	Weight (g)	Method of Recovery	Comment
002	202003	202004	Cut/fill	Anchor point	WWII		>1.5m	Rebar, wood	None	None	None	1	n/a	n/a	None
003	203003	203004	Cut/fill	Anchor point	WWII		n/a	rebar	None	None	None	1	n/a	n/a	None
005	205003	205004	Cut/fill	Anchor point	WWII	-	1.2m	Rebar, wood	None	None	None	1	n/a	n/a	None
011	211003	211004	Cut/fill	Furrow	P-med	-	0.08m	pegtile	None	None	None	5	n/a	Hand retrieval	None
011	211005	211006	Cut/fill	Furrow	P-med	-	0.08m	None	None	None	None	0	n/a	n/a	None
012	212003	212004	Cut/fill	Furrow	P-med	-	0.09m	None	None	None	None	0	n/a	n/a	None

Trench No. (UID)	Context No. (Feature ID)	Fill No.	Context Class	Feature/ Monument Type	Period	Sub-Phase	Feature Depth (m)	Artefactual Remains	Environmental Remains	Building Material	Archaeological Science	No.	Weight (g)	Method of Recovery	Comment
012	212005	212006	Cut/fill	Furrow	P-med	-	n/a	None	None	None	None	0	n/a	n/a	None
012	212007	212008	Cut/fill	Furrow	P-med	-	n/a	None	None	None	None	0	n/a	n/a	None
012	212009	212010	Cut/fill	Ditch	P-med	-	n/a	None	None	None	None	0	n/a	n/a	None
013	213003	213004	Cut/fill	Anchor point	WWII	-	n/a	rebar	none	None	None	1	n/a	n/a	None
016	216003	216004	Cut/fill	Soakaway	P-med	-	0.38m	CBM	None	None	None	1	n/a	n/a	None
021	221003	221004	Cut/fill	Anchor point	WWII	-	n/a	None	None	None	None	0	n/a	n/a	None
022	222003	222004	Cut/fill	Gully	u/k	-	n/a	None	None	None	None	0	n/a	n/a	None
023	223003	223004	Cut/fill	Furrow	P-med	-	0.08	Pegtile	None	None	None	1	n/a	Hand retrieval	None

Trench No. (UID)	Context No. (Feature ID)	Fill No.	Context Class	Feature/ Monument Type	Period	Sub-Phase	Feature Depth (m)	Artefactual Remains	Environmental Remains	Building Material	Archaeological Science	No.	Weight (g)	Method of Recovery	Comment
023	223005	223006	Cut/fill	Furrow	P-med	-	n/a	None	<1>	None	None	0	n/a	None	None
024	224003	224004	Cut/fill	Anchor point	WWII	-	n/a	None	None	None	None	0	n/a	n/a	None
024	224005	224006	Cut/fill	Furrow	P-med	-	n/a	None	None	None	None	5	78	Hand retrieval	None
026	226003	226004	Cut/fill	Furrow	P-med	-	n/a	None	None	None	None	62	630	Hand retrieval	None
026	226005	226006	Cut/fill	Furrow	P-med	-	0.68	Pottery, bone	<5>	None	None	28	214	Hand retrieval	None
027	227003	227004	Cut/fill	Anchor point	WWII	-	0.12	None	None	None	None	0	n/a	n/a	None
028	228003	228004	Cut/fill	Anchor point	WWII	-	0.14	None	None	None	None	0	n/a	n/a	None

Trench No. (UID)	Context No. (Feature ID)	Fill No.	Context Class	Feature/ Monument Type	Period	Sub-Phase	Feature Depth (m)	Artefactual Remains	Environmental Remains	Building Material	Archaeological Science	No.	Weight (g)	Method of Recovery	Comment

Trench No. (UID)	Context No. (Feature ID)	Fill No.	Context Class	Feature/ Monument Type	Period	Sub-Phase	Feature Depth (m)	Artefactual Remains	Environmental Remains	Building Material	Archaeological Science	No.	Weight (g)	Method of Recovery	Comment

Trench No. (UID)	Context No. (Feature ID)	Fill No.	Context Class	Feature/ Monument Type	Period	Sub-Phase	Feature Depth (m)	Artefactual Remains	Environmental Remains	Building Material	Archaeological Science	No.	Weight (g)	Method of Recovery	Comment

Appendix 2 Figures