

Site & Landscape Survey

Interpretation, Design & Display

The Butts, Fowlmere, Cambridgeshire **Topographical Survey**

Report No. MK032/15



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Commissioned by	Synergy on behalf of Ion Science
Oasis	cfaarcha1-234156
Cambridge Event Number	ECB4425
Date issued	February 2016
Version	2
Planning Application No	S/1249/13FL
Grid Ref	TL 4187 4573

This document has been prepared in accordance with CFA Archaeology Ltd standard operating procedures.

The Butts, Fowlmere, Cambridgeshire Topographical Survey

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1. SUMMARY

CFA Archaeology Ltd carried out a Topographical Survey on land south of The Butts Business Centres, Fowlmere, Cambridgeshire. The work was undertaken on the 26th November 2015 commissioned by Synergy on behalf of Ion Science. The site was known to contain the foundations of WWII airfield buildings and these were the subject of the survey. Six features were identified, five of which appear to relate to the military remains. One of these was the northern end of the airmens showers and ablutions block shown on the 1944 RAF plan. As part of this work UK government open Lidar data was analysed and found to have created a good record of base prior to any development.

2. Introduction

2.1 General

- 2.1.1 This report presents the results of an archaeological topographical survey undertaken by CFA Archaeology Ltd (CFA) on the 26th of November 2015 on land south of The Butts Business Centres, Fowlmere, Cambridgeshire (NGR: TL 4187 4573). The work was commissioned by Synergy on behalf of Ion Science.
- 2.1.2 Ion Science has been granted planning permission (Ref: S/1249/13/FL) from South Cambridgeshire Council for a development on a site south of The Butts Business Centre, on the west side of the village of Fowlmere. The terms of the planning consent required a programme of archaeological works including an archaeological evaluation. This evaluation was carried out in May 2015 and following the work Cambridgeshire County Council Historic Environment Team (CCCHET) requested that a topographical survey was be carried out in order to record the remaining WW2 remains on the site before they were removed.
- 2.1.3 The topographical survey was carried out in accordance to a Written Scheme of Investigation (WSI) dated 12 October 2015 covering this programme of works produced by CFA and agreed with CCCHET.

2.2 Project Background

- 2.2.1 The site is approximately 6,700 square metres and is located south of The Butts Business Centres on a flat open area of ground with some remains of concrete bases for WWII RAF and USAF buildings. The area had been recently cleared of trees. The geology is upper chalk
- 2.2.3 The WWII remains were identified by an RPS Historic Environment Assessment in May 2013 and correlate to a 1944 RAF plan as 'a post-and-wire 'Fuel Compound' (185), a 'Recreation Hut' (186), an 'Airmen's Showers & Ablutions' block (187) and a large 'Institute' (192).' RPS concluded that these were built to a pattern with the possible exception of the Recreation Hut.' RAF 19 Squadron (Spitfires) and USAF 399th Fighter Group (P-51 Mustangs) were based at Fowlmere and both had distinguished service.
- 2.2.4 The evaluation identified three WWII structures and a ditch that related to the buildings on the 1944 plan. The remains in Trench 2 appeared to correlate with two USAF buildings orientated N-S: a thin concrete platform possibly reflecting the northern end of building 186, the recreation hut, and a thicker platform appearing to

align with the northern end of building 187, the airman's showers and ablutions block. Other layers in this trench (0205) and (0206) appeared to relate to this building and may have been an internal wall foundation and floor hard standing inside the block. The space in between the two buildings on the RAF plan roughly lined up with a ditch (0207) in Trench 2 which may have provided drainage.

2.3 Objectives

2.3.1 In accordance with the WSI the objectives of the project were to identify and record any surviving remains of upstanding features that might be affected by the development.

3 Working Methods

3.1 General

2.1.1 CFA Archaeology Ltd follows the Chartered Institute for Archaeologists' Code of Conduct, Standards and Guidance.

3.1 The Topographic Survey

- 3.1.1 The site was found to have been partly stripped of turf and vegetation prior to the survey. Machines had tracked over the soft ground and partially spread loose soil over the site. This had both revealed and hidden some of the WW2 structures. In several areas the ditches and undulations present in May 2015 had been filled in. This being the case a decision was made to conduct a comprehensive topographic survey of the site in a regular grid pattern with intervals every 2m to reveal any surviving remains of ditches or other sunken features.
- 3.1.2 The survey used RTK initialised GPS equipment by Trimble accurate up to 8mm horizontally and 12mm vertically. The outlines or extents of identified features were also of recorded with the equipment. This record was supplemented with digital photographs using a professional Nikon D100 Digital SLR. Written descriptions of features were made using CFA moment record sheets.
- 3.1.3 The project archive, comprising CFA record sheets, digital records, and a copy of this report, will be deposited at the County Archaeology Store and will conform to current guidelines in MoRPHE guidelines (Brown 2007, MGC 1994, SMA 1995, Ferguson and Murray 1997, UKIC 1990 and EH 2006) ensuring the proper transfer of ownership. The project report shall include an index to the site archive. The Cambridgeshire Historic Environment Record (CHER) event number (ECB4425), will appear on archived items and all related reports.

4 Survey Results

4.1 General

4.1.1 A contour plan and the locations of features identified are shown on Fig. 1. Specific details of features can be found in Appendix 1. The features have also been superimposed on a hillshaded plan of Lidar data (1m resolution) taken before the site was stripped of turf/vegetation (Fig. 2). Features identified are highlighted in bold and discussed below; no sunken or ditch features were revealed by the topographic survey.

4.2 Features (See Table 1 for detailed description)

4.2.1 Five features date to WW2. These are either verified by the 1944 RAF plan (Fig. 3) or composed of concrete which is of war-time appearance.

Feature 1 represented the brick foundations for the N end of building 187 on the RAF plan (Figs. 4-6). These lay S of evaluation Trench 2 rather than being the deposits identified in the trench. The analysis of the Lidar data has led to a reinterpretation of (0205/6) and (0204) from the Evaluation. This data, which provides a highly accurate location for the RAF buildings, was previously not available during in May 2015 when the evaluation report was issued. Layers (0205/6) can now be seen to relate to hard standing outside and to the N of 187 (the airmen's showers and ablutions block) with the sacks filled with concrete probably representing the edge of the road to the fuel compound (185) to the N. Ditch (0207) appears to run along the W side of this building. A corresponding shallow ditch on the E side was identified during the survey. The foundations for the interior of building 187 were gravel.

Feature 2 (Figs. 7 & 8) was a small length of brick wall found to the north of building 187 which lies close to concrete slab (0204) from the evaluation. Both these features could relate to the BS marked on the 1944 plan, presumably a bomb shelter.

Feature 3 (Figs. 9 & 10) lies to the E of the site and to the N of building 192, the USAF institute. The institute can be seen to lie just outside the site. The remains comprised narrow rectangular slabs of concrete set as right-angles. The feature was partly buried under the post-war landscaping. This corresponds to a BS (?bomb shelter) on the 1944 plan.

Feature 4 (Figs. 11-16) is a group of five squared concrete posts aligned in a rectangle in the centre of the site. Three of the posts were small (Post A, D and E). Post B was a large square block which had been set around a wooden post which had rotted away. Close by were two cast iron fragments from a pig feeder. Post C was similar to Post B but had been damaged by the site clearance. The feature does not correspond to any structures on the RAF plan but it could have been a temporary post and wire compound or similar structure. Though the concrete of the features appears to be war-time (due to its poor quality) it is possible that this structure may post-date WWII. The feeder shows that the site was used for pig rearing probably after the war.

Feature 5 (Fig. 17) was a cracked slab of concrete corresponding to (0210) from the evaluation. It is likely that this concrete relates to hard standing north of building 186 (recreation hut) from the 1944 RAF plan though the Lidar data does not show up the building outline well and perhaps the site here was heavily disturbed after its demolition. The concrete may have spanned the gap between buildings 186 and 187 and the BS (?bomb shelter).

Feature 6 (Fig. 18 & 19) was an area of rubble that had been disturbed (though not created) by site clearance. The rubble comprised blocks of concrete, occasional brick and fragments of worked stone. Decorated encaustic tiles were found amongst the rubble attached to concrete. No structure or foundations were found in this deposit. The rubble appears to be from a 19th century building decorated with tiles. The deposit has probably been dumped from elsewhere as no building is marked in this location on the 1st or 2nd edition OS maps. It is possible that the rubble was spread during the WW2 when this area was developed for the access road and the fuel compound (185) for the base.

5. CONCLUSION

5.1 Only one of the features identified during the topographic survey definitely corresponds a building on the 1944 plan of RAF Fowlmere, the airmens showers and ablutions block. This building was one of three blocks built by the United States Air Force at this end of the base in a different orientation to the other buildings in the base. Three of the other features found during the survey relate to possible bomb shelters and a concrete area of hard-standing near the recreation hut. Concrete posts in the centre of the site may be part of a post and wire compound not depicted on the RAF plan. The area of rubble from a 19th century building may have been brought onto site in preparation for the building of the WW2 camp.

The topographic survey and Lidar have preserved a good record of the WW2 remains across the site and helped re-interpret the results of the evaluation.

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APPENDIX 1: Summary of Features

Feature Number	Feature Type	OS Grid Ref	Description	Date
1	Brick Building	541908.3 245707.1	The mortared brick foundations for the N end of a building measuring 6.9m wide E-W and 7.4m N-S (not full extent). Bricks are light red and crumbly, foundations less than 0.05m high. The building has a projection on the W side c. 1.5m wide. The E and W foundations comprise single lines of bricks, the N wall is of double thickness. Bricks are marked 'LBC PHORPRES'. The N end of the structure has been filled with orange gravel. Against the W wall is a brick pillar foundation. There is a slight ditch 1m wide running along the E wall c. 0.1-2m deep. WW2 building.	WW2
2	Brick Wall	541905.5 245718.0	A short length of heavily mortared brick wall measuring 3.2m long, 0.5m wide and 0.05m high. Bricks light red and crumbly. Remains of truncated WW2 building.	WW2
3	Concrete Foundation	541951.9 245729.0	The concrete foundations for a structure partly hidden by post-war landscaping to the N. Overall dimensions 7.9m W-E, 6.2m N-S and c. 0.15 high. The foundations comprise a series of concrete slabs 0.7m wide which have been set at right angles. WW2 building.	WW2
4	Concrete Posts	541887.5 245716.3	A group of 5 concrete post features in a rectangular arrangement covering an area of c. 7m (E-W) by c. 5m (N-S). Post A is a small concrete block 0.25m by 0.3m. Post B which lies 3m to the W is a concrete block 0.3m by 0.35m which has been set around a wooden post which has rotted. Post C which lies 3m north of Post A is the same as post B (i.e. had a central wooden post) but was damaged by site clearance. Post D lies 6m to the W of Post C and measures 0.7m (E-W) by 0.25m (N-S). Post E lies 5m N of post D and measures 0.4m by 0.4m. All the posts are all aligned except Post C which was damaged by a digger. Near to Post B were two fragments from a cast iron bell-shaped object, a pig feeder. WW2 post and wire compound?	WW2
5	Concrete platform	541889.8 245696.3	An irregular slab of cracked concrete measuring 1.7m by 1.7m of unknown thickness. The feature appears to have been damaged by site clearance. WW2 platform.	WW2
6	Demolition rubble of Summerhouse	541831.2 545699.2	An area of concrete rubble mixed with topsoil with many broken stone blocks and a few encaustic arts and crafts tiles.	19 th century

	Deposit spread over an area measuring	
	8m by 4.5m. Demolition rubble from	
	19 th century building.	

APPENDIX 2: OASIS Form

OASIS ID: cfaarcha1-234156

Project details

Project name The Butts, Fowlmere, Cambridgeshire, Topographical Survey

Short description of the project

CFA Archaeology Ltd carried out a Topographical Survey on land south of The Butts Business Centres, Fowlmere, Cambridgeshire. The work was undertaken on the 26th November 2015 commissioned by Synergy on behalf of Ion Science. The site was known to contain the foundations of WWII airfield buildings and these were the subject of the survey. Six features were identified, five of which appear to relate to the military remains. One of these was the northern end of the airmens showers and ablutions block shown on the 1944 RAF plan. As part of this work UK government open lidar data was analysed and found to

have created a good record of base prior to any development.

Project dates Start: 26-11-2015 End: 26-11-2015

Previous/future work

Yes / Not known

Any associated project reference BBCC2 - Sitecode

codes

Recording project Type of project Monument type RAF BASE Modern

Significant Finds NONE None "Full survey" Investigation type

Prompt Planning agreement (Section 106 or 52)

Project location

Country England

Site location CAMBRIDGESHIRE SOUTH CAMBRIDGESHIRE FOWLMERE Land south of The Butts

Buiseness Centres

Study area 6700 Square metres

Site

coordinates

TL 4187 4573 52.091268737296 0.071078018463 52 05 28 N 000 04 15 E Point

Project creators

Name of Organisation CFA Archaeology Ltd

Project brief originator Local Authority Archaeologist and/or Planning Authority/advisory body

Project design originator CFA Archaeology Ltd

Project director/manager Mark Roberts Project supervisor Tamlin Barton Type of sponsor/funding body Developer

Project archives

Physical Archive Exists?

Digital Archive recipient Cambridgeshire County Archaeology Store

Digital Archive ID BBCC2 **Digital Contents** "Survey"

Digital Media available "Images vector", "Survey", "Text", "Images raster / digital photography"

Paper Archive recipient Cambridgeshire County Archaeology Store

Paper Archive ID BBCC2
Paper Contents "Survey"

Paper Media available "Drawing", "Map", "Report"

Project bibliography 1

Grey literature (unpublished document/manuscript)

Publication type

Title The Butts, Fowlmere, Cambridgeshire, Topographical Survey

Author(s)/Editor(s)

Other bibliographic details

BBCC2

Date

2015

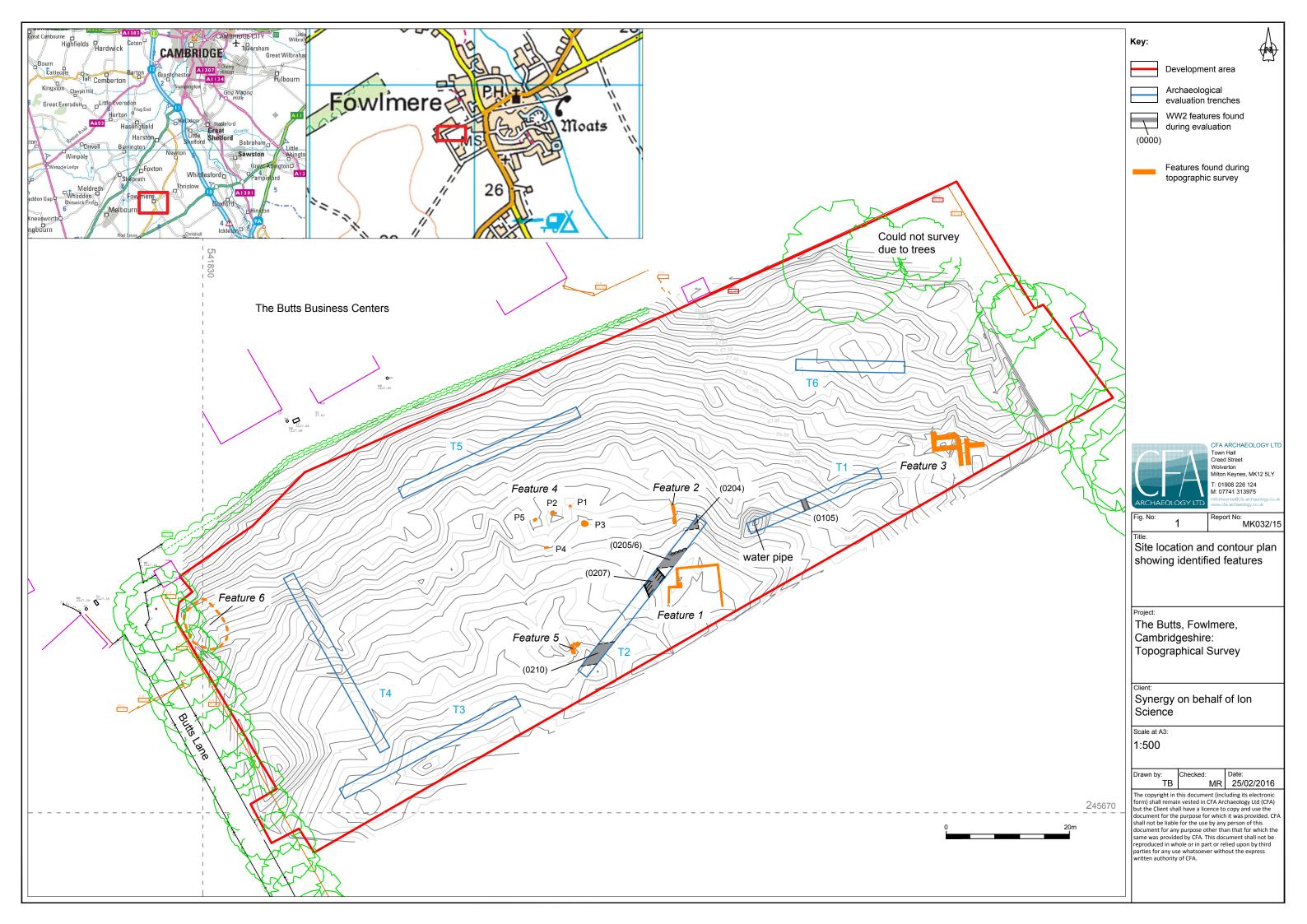
Issuer or publisher

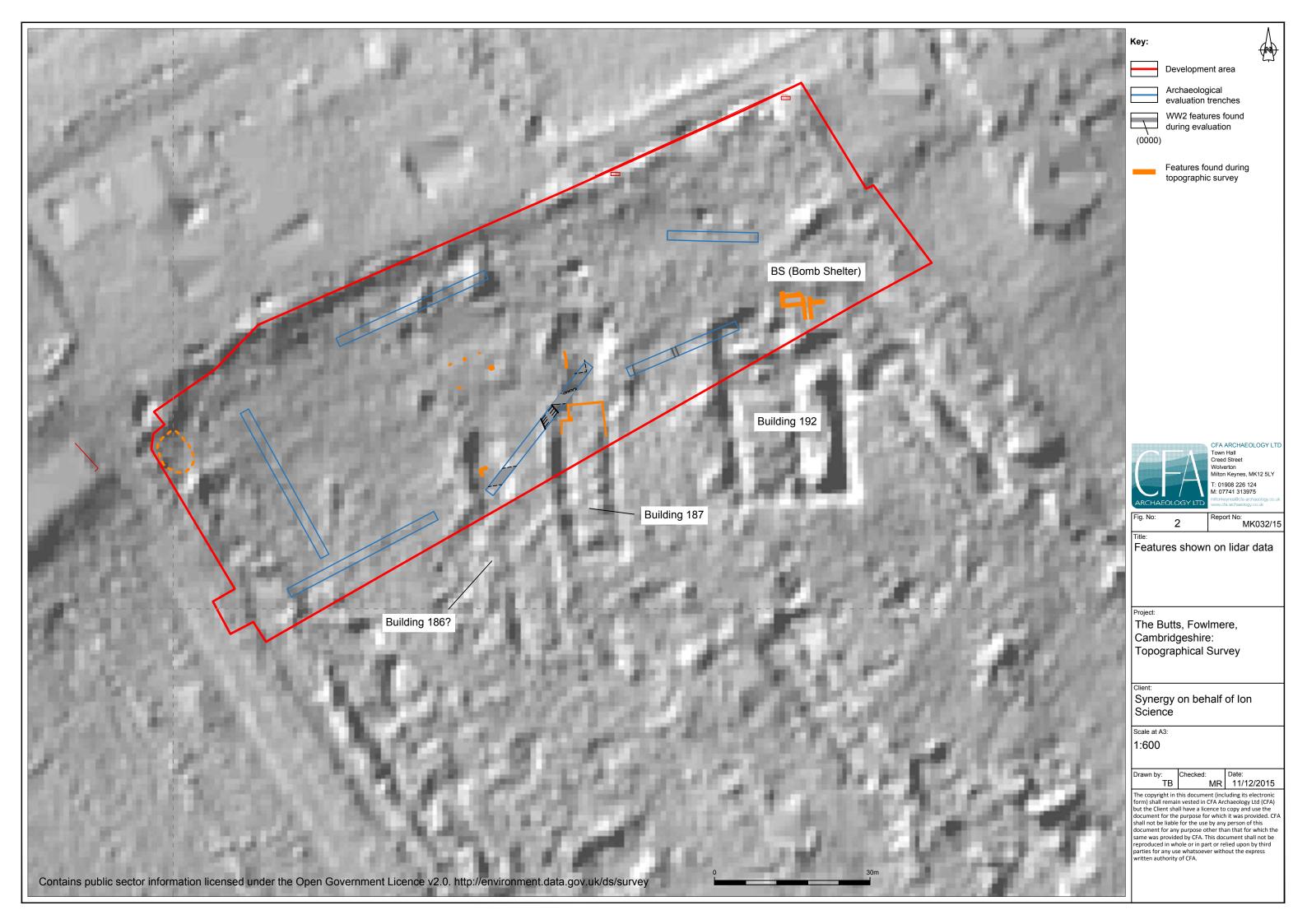
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Place of issue or publication Wolverton

Entered by Tamlin Barton (tbarton@cfa-archaeology.co.uk)

Entered on 25 February 2016







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Fig. 4 - Feature 1, looking south-west



Fig. 5 - Brick pillar, Feature 1, looking north-west



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Fig. 4 - 5

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Fig. 6 - Detail of bricks in east wall of Feature 1



Fig. 7 - Feature 2, looking north



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Fig. 6 - 7

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Fig. 8 - Feature 2, looking west



Fig. 9 - Feature 3, looking north-east



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Fig. 8 - 9



Fig. 10 - Feature 3, looking east



Fig. 11 - Feature 3, concrete block C, looking south-west



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Fig. 10 - 11 Report: Drawn: TB CKD: MR Date: 14/12/15 Client: Synergy on behalf of Ion Science



Fig. 12 - Feature 4, concrete block A, looking south-west



Fig. 13 - Feature 4, concrete block B, looking north



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Fig. 12 - 13 Report: Drawn: TB CKD: MR Date: 14/12/15 Synergy on behalf of Ion Science



Fig. 14 - Feature 4, cast-iron pig feeder near concrete block B, looking south-west



Fig. 15 - Feature 4, concrete block D, looking north-west



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Selected Photos

Fig. 14 - 15 Report: Drawn: TB CKD: MR Date: 14/12/15

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Fig. 16 - Feature 4, concrete block E, looking north-west



Fig. 17 - Feature 5, looking north-east



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Fig. 16 - 17 Report: MK032/15 Drawn: TB CKD: MR Date: 14/12/15

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Fig. 18 - Feature 6, remains of summerhouse, looking north-west



Fig. 19 - Encaustic tiles found in Feature 6 rubble



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