TYPE T2 AIRCRAFT HANGER AT WOODHOUSE FARM AND OTHER WWII STRUCTURES RIVENHALL AIRFIELD ESSEX

HISTORIC BUILDING RECORD





December 2010

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HISTORIC BUILDING RECORD

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TYPE T2 AIRCRAFT HANGER AT WOODHOUSE FARM

AND OTHER WWII STRUCTURES

RIVENHALL AIRFIELD

ESSEX

HISTORIC BUILDING RECORD

Client: Golder Associates (UK) Limited on behalf of Gent Fairhead & Co Limited

ECC FAU Project No.: 2260

NGR: TL 8241 2046 OASIS No.: 90056

Date of Fieldwork: July 2010

1.0 INTRODUCTION

A historic building survey was undertaken by Essex County Council Field Archaeology Unit (ECC FAU) on a WWII type T2 aircraft hanger and contemporary structures at Woodhouse Farm, Rivenhall Airfield, which was active as a US Army Air Force (USAAF) base between 1943 and 1944 and in the last year of the war was operated by the RAF. Many WWII structures survive across the airfield, including several temporary brick and corrugated steel structures in the development area, the most prominent being the type T2 aircraft hanger. The T2 hanger became the standard temporary hanger on airfields and two were built at Rivenhall, located either side of the runway with service buildings close by. After the war, the site was used by GEC Marconi.

The survey was commissioned by Golder Associates (UK) Ltd as planning agents on behalf of Gent Fairhead & Co Limited (GFC) to satisfy the requirements of condition 11 associated with the planning permission for the Integrated Waste Management Facility (ESS/37/08/BTE) namely:

11. No airfield buildings and/or structures shall be demolished until the Level 3 survey in accordance with the 2006 English Heritage Guidance entitled "Understanding Historic Buildings: A Guide to Good Recording Practice" of the airfield buildings and/or structures has been completed.

Reason: To ensure that any historical interest has been adequately investigated and recorded prior to the development taking place and to comply with MLP policy MLP13 and WLP policy W10E.

The timing of the survey across the airfield was largely driven by landownership agreements related to the removal of former airfield structures near to Sheepcotes Farm (outside the planning application boundary for ESS/37/08/BTE) which were included within the overall Level 3 survey of the former WWII airfield. A second T2 hanger was recorded near Sheepcotes Farm ("the Sheepcotes Hanger"). It is not within the planning permission area of ESS/37/08/BTE and is not to be demolished as part of the permitted scheme. Separately, it has planning permission for a Type B8 issued by Braintree District Council.

The survey was undertaken following consultation by Golder Associates (UK) Ltd with the Essex CC Historic Environment Management team (ECC HEM), who provide specialist advice to the local planning authority, according to the detailed specification set out in the brief issued by the ECC HEM (2010).

Copies of the report (once approved by Essex County Council planning officers) will be supplied to the ECC HEM and to the Essex Historic Environment Record (EHER) at County Hall, Chelmsford. The archive will be stored with Braintree Museum. An OASIS online record has been created at http://ads.ahds.ac.uk/oasis/index.cfm.

2.0 BACKGROUND

2.1 Site location and description

Rivenhall Airfield stands to the very north of Rivenhall parish, north-east of the centre of Silver End (fig. 1) and 6½km south-east of Braintree. A large part of the airfield has

already been removed and excavated for sand and gravel as part of the Bradwell Quarry workings and the rest is either farm or woodland.

Several WWII structures stand within the development area to the south-west of Woodhouse Farm (fig. 1), including the large type T2 hangers, temporary brick stores and offices and a blast shelter. All were designed as temporary structures for use in wartime and considering this are in fairly good condition. However most of the smaller structures are badly overgrown. Other structures, located within surrounding woodland are no longer standing, leaving little trace apart from concrete bases and piles of rubble. Woodhouse Farm is a Grade II Listed Building (LBS116446), which will be redeveloped (as part of a proposed Education Centre linked to the eRCF operations) following a detailed application for and receipt of listed building consent from the Local Planning Authority according to Section 7 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (c. 9). The adjacent outbuilding, known as 'The Bakehouse', is also a Grade II Listed Building (LBS116447) in an extremely dilapidated condition. A simple iron 'rocking' hand water pump, located on the southern side of this outbuilding, is also Grade II listed. The Woodhouse Farm complex is also within the development area (fig. 1).

A second type T2 hanger stands on the western edge of the airfield near Sheepcotes Farm, along with Nissen huts, temporary brick structures and several later Marconi-era huts (fig. 1). All of these (except the Sheepcotes hanger) were scheduled for demolition under agreed works not associated with this planning permission ESS/37/08/BTE and all were therefore included in this survey.

2.2 Planning background

By way of planning history, in January 1997, the Essex CC (ECC) Environment Committee agreed the locational criteria for 'major waste management sites' in Essex and Southend. It was intended that these strategically located sites would provide the facilities necessary to comply with the strategy for non-landfill waste in the medium to long term. The committee agreed that the Waste Planning Authority should carry out a site selection process inviting suggestions from landowners, the waste industry and District Councils.

During the public consultation into the Essex Waste Plan process, and the public invitation for waste management sites by the ECC (7 February 1997), Gent Fairhead Environmental Services Ltd (GFES) made three comprehensive submissions to the ECC for inclusion of part of the Rivenhall Airfield Site in the Waste Plan, namely:

- July 1996 Response to Essex Waste Plan Consultation Draft May 1996;
- April 1997 Response to Invitation (7 February 1997) from Essex CC with regard to Essex Waste Plan Proposals for Major Waste Management Facilities; and
- February 1998 Response to Essex Waste Plan Second Consultation Draft December 1997.

The Essex and Southend Waste Local Plan Inquiry were held from 26 October 1999 to 5 January 2000 and the Inspector reported in July 2000. Site WM1 on Rivenhall Airfield was approved for inclusion in the Waste Plan as a preferred location for waste management.

There is a current planning permission on the Rivenhall Airfield. Gent Fairhead Aggregates Limited (GFA), a subsidiary of GFC, was granted planning permission by the ECC (Number ESS/07/98/BTE) on 24 May 1999 for the extraction of 7 million tonnes of sand and gravel from the 65.7 hectare extension (known as 'Site R') of the Bradwell Quarry, and the low-level restoration utilising replaced overburden. The sand and gravel workings commenced on the airfield in 2002 by Blackwater Aggregates. Subsequent modifications to the planning permission have amended the original restoration scheme to include a mixture of shallow sloping agricultural fields, steeper woodland side slopes and a large surface water collection lagoon (New Field Lagoon).

Planning permission for waste-related activities was originally secured on the Rivenhall Airfield site in February 2009 for a 'Recycling and Composting Facility' ('the RCF') (ESS/38/06/BTE). This permission was for the following: an enclosed recycling and enclosed composting facility for the treatment of 510,000 tonnes per annum residual waste comprising both municipal and commercial & industrial wastes; associated engineering works; extension to existing access road and provision of offices; biogas generators, storage tanks, vehicle parking; and visitor/education centre.

In March 2010, following a subsequent planning application and Public Inquiry, the Secretary of State recommended that planning permission be granted subject to conditions for an Integrated Waste Management Facility (ESS/37/08/BTE) to treat 853,000 tonnes per annum of municipal and commercial waste by the following: Anaerobic Digestion Plant treating mixed organic waste, producing biogas converted to electricity through biogas generators; Materials Recovery Facility for mixed dry recyclable waste to recover materials e.g. paper, plastic, metals; Mechanical Biological Treatment facility for the treatment of residual municipal and residual commercial and industrial wastes to produce a solid recovered fuel; De-inking and Pulping Paper Recycling Facility to reclaim paper; Combined Heat and Power Plant (CHP) utilising solid recovered fuel to produce electricity, heat and steam; extraction of minerals to enable buildings to be partially sunken below ground level within the resulting void; visitor/education centre; extension to existing access road; provision of offices and vehicle parking; and associated engineering works and storage tanks.

As the area of the Integrated Waste Management Facility contains several WWII structures, including one of two T2 hangers, the Essex County Council Historic Environment Management team (ECC HEM) recommended a programme of historic building recording be undertaken prior to demolition, under condition 11 of planning permission (ESS/37/08/BTE).

Prior to undertaking the survey works across the site, the extent and scope of survey works across the former WWII airfield was agreed with Essex County Council's Historic Environment Management team (ECC HER).

2.3 Historical background

Most of the information on the history of the airfield is taken from B. A. Stait's valuable history of the airfield published in 1984 and a plan of the airfield from the 1940s that provides information on building function. Other sources, the Essex Historic Environment Record and Essex Records Office, were also consulted and are referenced in the following text where appropriate.

With the entry of the USA into World War II, an intensive programme of airfield construction began to accommodate the US Army Air Force (USAAF) and the "vast

quantities" (Stait) of new planes that were being constructed in American factories. Some 500 airfields were constructed in Britain during the largest civil engineering project ever made (Stait 1984). Most of these were located in East Anglia, on flat countryside away from large areas of populations and comparatively close to the Ruhr Valley, which, as the centre of German industry, was a prime target.

Within a few months during 1942 and 1943, fifteen airfields were built in Essex, all of which were in the north part of the county (Earls Colne, Gosfield, Ridgewell, Rivenhall, Stebbing, etc). Ridgewell air base was bombed before it was operational. Rivenhall was finished in 1943. An average airfield took up 500 acres.

The layout of Rivenhall was typical of the period, with three runways (one of 2,000 yards, the other two 1,400), a perimeter track and 50 loop dispersals for the aircraft. It housed two type T2 hangers and several Nissen huts and temporary brick structures for various purposes: workshops, stores, sick quarters, mess halls, cinema, firing range, armoury, petrol storage and a control tower. The airfield comprised two main areas centering upon the hangers at Sheepcotes and Woodhouse Farms. The main technical area was located on the south-east perimeter, living areas located to the south of the site and bomb dumps to the north, close to Bradwell hamlet.

The airfield started off as a USAAF fighter base (363rd Fighter Group), but after a few weeks was used for medium range bombers (397th Bomber Group) and lastly for RAF secret operations squadrons from October 1944. During its short lifetime of less than two years, it accommodated P-51 Mustangs, Marauders, Stirling bombers and Horsa gliders and took part in numerous air actions, including the Invasion of Europe and the airborne crossing of the Rhine (Stait 1984).

After the war, the base was used as a camp for displaced persons, mainly Poles from German prison camps ('the Polish Camp') and in the 1950s Essex County Council set up a Wayfarer's Hostel for itinerant travellers ('Wayfarer's Camp'). From 1956 and throughout the Cold War period, the airfield was used by GEC-Marconi in developing and testing communications and radar systems resulting in several new buildings on the site and the reuse of many wartime structures, including both hangers. Marconi is

believed to have left the site in the 1980s. The Woodhouse Farm hanger is still in use by a local farmer to store grain.

3.0 OBJECTIVES

The purpose of the survey was to make a descriptive record of the Woodhouse Farm hanger to English Heritage Level 3 standard (English Heritage 2006), addressing materials and method of construction, plan form, function and internal layout, fixtures and fittings and any evidence of original internal layout, plus a photographic record. Accompanying wartime structures within the development area were recorded to Level 1 standard, as was the second hanger at Sheepcotes Farm and the building group around it.

4.0 DESCRIPTION OF WORKS

External and internal descriptions were made of the Woodhouse Farm hanger to English Heritage Level 3 standards and plans and cross-sections produced. Building descriptions to a lower Level 1 standard were made of the surrounding WW II structures and the second group of buildings close to Sheepcotes Farm to the west. Where possible, scale plans were made of the secondary structures, which are included in the archive.

Reference numbers to standard building types are provided in the text, taken from drawing numbers included on the 1940s plan of the airfield. They are adaptable temporary structures commonly found on airfields that could have singular or several functions.

A series of digital photographs were taken externally and internally of the structures and 35mm black and white print film used for general external shots. A wide-angled lens was used for some of the internal work.

For the purposes of the report, each structure has been given its own number in reference to the block plans of the two sites shown as figures 2a and 2b. A representative selection of photographs is reproduced at the back of the report as plates 1-30. The remainder can be found in the archive.

5.0 WOODHOUSE FARM STRUCTURES (Buildings 1-6, fig. 2a)

As military buildings, the airfield structures were built to a standard type and form and there are six such structures surviving within the development area.

The woods to the south and east of hanger 1 contain the remains of several temporary brick buildings, none of which are still standing. Two other WWII buildings stand outside the development area in the woods between Woodhouse Farm and the hanger (fig. 2a). Other WWII structures to the south and south-east of the development area are still in use and some buildings have clearly been removed, leaving only their concrete bases. The control tower to the north of the hanger was located during an archaeological evaluation in 2006 (Ennis 2006).

5.1 Type T2 Hanger (1)

The type T2 aircraft hanger (ref. 8254/4) was the standard temporary hanger of WW II, used for garaging and maintaining aircraft. As necessity dictated, they are massive low-lying structures with large doorways either end (fig. 3, plate 1) to disperse planes quickly onto the runways (fig. 2a). According to the 1940s inventory, both hangers at Rivenhall are of the 'home standard T2' (3653/42) upgraded version that was made from commercial rather than cranked sheeting (Buchan Innes 1995).

The building is constructed of the standard 23 bays built on a steel lattice portal frame and clad in corrugated steel sheeting, which is embedded at the base in concrete and lined on the inside in Fletton brick. Dimensions are 121 feet wide and 240 feet long (37 x 73m) with an overall height of 12m and a clear door height of 7.6m (MOD 1995). Many type T2 hangers are still in use across the country despite being built as temporary structures.

5.1.1 External description

Externally the hanger has changed very little since its construction but has suffered from corrosion. The most obvious post-war modifications are the raised roof towards the north-east end and some corrugated tin sheds attached to the south-east elevation (plates 1 & 3). Apart from the south-west end and the higher roof section, the exterior is treated with a black paint, but would originally have been camouflaged.

The gable ends to north-east and south-west contain the wide hanger doors and broad low pitched (8°) roof (fig. 4, plates 1 & 2). The guide racks either end of the doors have disappeared, so the doors cannot now be moved as far as they should (fig. 4). There are six wheel-mounted doors (plate 4) that ran on three iron roller tracks set into concrete bases either side (fig. 3). Each 6m-wide door component comprises nine corrugated tin sections braced with 4" angle iron (shown best in plate 3). A smaller doorway was fitted in the middle section for day-to-day personnel access (fig. 3).

The long north-west elevation (plate 1) is largely featureless apart from a small doorway positioned at the north corner (fig. 3). Some panels have been replaced on the opposite south-east side and post-war tin sheds added (plate 3). There is a small doorway close to the south corner.

5.1.2 Internal description

As one would expect, the interior is open plan with any necessary features or internal structures located away from the planes on the outer walls. A number of interesting features remain, some of which appear wartime in date while others date from early Marconi use, or possibly both.

Views from either end (plates 5 & 6) show the construction of the hanger quite clearly. 3.6m Sections of steel lattice framing are bolted together to form the wall and roof frames connected by standard eaves and ridge units (MOD 1995), onto which the walls and roofs are attached long angle iron sheeting rails, rafters, purlins and vertical wind bracing. The large internal space is lit by two rows of roof lights either side of the ridge and utilitarian steel lamps suspended from the steel frame. Each column sits on a small concrete pad beneath the concrete floor (fig. 4).

Located in the north corner are a green Marconi store and office and three-tiered wooden racks (labelled G-K) built between the wall frames that would have extended to the centre of the building (plate 5, fig. 3). In the eastern corner is a washing area (fig. 3) consisting of a tap, mounted soap dish and the steel frame to a former sink overlooked by a 1940s-style lamp (plate 7).

Electricity was supplied to the hanger from a sub-station located in bays 9-11 along the north-west wall (fig. 3, plate 8). Most of the various switch and fuse boxes are modern (and are likely to have been installed by Marconi) but those with the 'English Electric' sunburst design (plate 9) could potentially date from the war era, as they are also found in WWII buildings on the Sheepcotes Farm site. Health and safety notices around the sub-station deal with factory regulations (1944 Act) and reviving persons from electric shock (plate 10) and are likely to be from the Marconi era.

Beside the sub-station is the Emergency Telephone booth (plate 11), a simple boarded structure with a semi-glazed door that is also perhaps war-era. The telephone and any other fixtures and fittings have been removed. There are some health and safety notices attached to the exterior- one of which describes penalties for spying, unauthorised use of uniforms, etc), which could apply to both wartime or post-war Marconi usage. With so much available space such features can survive quite easily. Along the wall to the northeast is a c.3m-high viewing platform bounded by safety rails (plate 12). The pipework in plate 12 is modern and associated with grain storage.

More permanent fixtures and fittings include the personnel doors on each of the four sides, two of which form part of the hanger door sections. In keeping with the overall utilitarian/temporary nature of the structure, the doors are made of corrugated steel sheets fitted with brass door knobs and locks (plate 13).

5.2 NFE Store (2) and Floodlight Trailer and Tractor Shed (3)

These are typical 'temporary brick style' buildings (drawing number 12411/41) standing to the north-west of the hanger (fig. 2a). They have thin walls made from a single skin of Fletton bricks joined by buttresses and rendered-over in cement for greater strength. Each have angled iron roof frames, concrete floors, Crittalls iron-framed vented windows and pitched asbestos roofs (plate 14).

The NFE (Night Flying Equipment) store was used for storing floodlights, beacons and flares, etc (Buchan Innes 1995). Three large doorways face the north-east for quick access onto the concrete roadway (plate 14 left & 15). The interior is three bays wide with a single (boarded) doorway on the north-west side and black-out boards over the windows (plate 16).

The Floodlight Trailer and Tractor Shed (plate 14, right) has dense undergrowth covering its tractor/trailer doorways at either end, the south-western one of which was blocked in the post-war period. The interior (plate 17) is three bays long and contains no features of interest.

5.3 Squadron Offices and Flight Offices (4)

The Squadron and Flight Offices (drawing ref.1451/52) are located in undergrowth far to the north-east of the hanger, close to Woodside Farm (fig. 2a). As a temporary rectangular brick structure it shares common characteristics with buildings 2 and 3 in terms of construction and fixtures and fittings, but as offices the décor is to a higher specification than the storage buildings.

The entrance is at the south-east end (plate 18) that leads trough a long corridor with the offices either side, the doors of which are stencilled to indicate the officer's rank or other function (flight stores, etc). In rare cases names are added too (plate 19). Almost each room is decorated with umber and white walls, green-painted Crittalls casement windows and fitted with a concrete base for a heating stove (plate 20). The general structural condition of this building is poor due to root damage and settlement of the buildings foundations over time.

5.4 Blast shelter (5)

The blast shelter (no drawing ref.) afforded some protection from bomb blast for the occupants of the nearby offices, though with its open roof would not survive a direct hit (Buchan Innes 1995). It is a cruciform-plan brick structure surrounded by an overgrown earth mound with entrance points to north and south (plate 21), completely overgrown. There were several others located around the airfield.

5.5 Building 6

It would appear that this structure replaced a square-plan gas chamber included on the 1940s plan of the airfield. The present structure is similar in character to the other temporary brick structures and was either built later in the war (when it was clear that gas was not being used by the Germans), or the post-war occupation of the site by Marconi, to a similar type. The exterior is almost completely hidden by overgrowth and the interior comprises a small lobby and store and plastered main room, now filled with timber. Its original function is unknown.

6.0 OTHER WWII STRUCTURES AT SHEEPCOTES FARM (Buildings 7-11, fig. 2b)

During the survey, the opportunity was taken to make a low-level record of the airfield structures to the south-east of Sheepcotes Farm due to the fact that all but the hanger were scheduled for imminent demolition. Apart from the second T2 hanger, this side of the airfield is characterised by Nissen huts rather than temporary brick buildings. In addition, this was one of the main Marconi sites and there were many weatherboarded post-war structures present that were not included in the survey but do feature on some of the photographs.

The area is overgrown and the buildings have been subject to vandalism and graffiti. Again, the WW II buildings are of common and recognisable forms.

6.1 Type T2 hanger (7)

This hanger (plate 22) is the same 23-bay 'home standard T2' (upgraded version) type as hanger 1 at Woodhouse Farm and stands in a similar position close to the dispersal loops and runway for most effective use (fig.2b). It is in better general condition than its counterpart, though it too is missing the door frame extensions (HER 14183). Inside, the southern half was later divided up into workshops by Marconi (plate 23).

6.2 Armoury and Maintenance Unit (with Oil Bowser) (8)

Building 8 (plate 24, left) is a type 12777/41 standard 24ft by 126ft long Nissen hut. Typical in form, it is built of twenty-one 6ft corrugated steel sections bolted to an iron frame with buttressed brick end-walls. Steel-framed Crittalls windows remain at the two

ends but the windows on the long sides were replaced with wooden casements in the Marconi era and a toilet block added to the north end. Cast-iron English Electric switch boxes with the same Sunburst design as hanger 1 are prevalent. Plate 25 shows the interior at the time of the survey.

6.3 Maintenance Unit Block (9)

The exact function of this building is uncertain, but during the Marconi era it was the canteen. It is the same type and design as building 8 but with a different arrangement of standard window and door units (plate 26). In the post-war era, the eating area formed most of the floor plan, with kitchen to the south and toilets to the north. An orange-painted telephone booth is located at the north end of the canteen (plate 27).

6.4 General purpose hut (10)

The general purpose hut is one of several of type 2963/10 design that was augmented in the post-war period by a corrugated iron shed, which is now collapsing (plate 28). The 2963/10 design was a narrower 16 ft span Nissen form which produced a more rounded rather than semi-circular profile. This example is 6 bays long. The Crittalls windows remain intact and the lighting fixtures inside may be also be original, but the interior has been adapted by Marconi for alternative use (plate 29).

6.5 Latrines/sub-station (11)

The only other WW II structure is a small temporary brick type latrine alongside the general purpose hut (plate 30). Its design (9026/41) was clearly adaptable as this structure was changed to become a small sub-station that contains 'wartime-era' fuse boxes and other electrics.

7.0 DISCUSSION

The Type T2 (23) hanger was an important element of WWII airfield infrastructure and two examples stand at Rivenhall Airfield. Their wide doors were designed as separate sections that could be drawn fully back when the aircraft were needed. However, the hanger has been subject to change over time, and has clearly been modified by raising part of the roof and adding sheds along the south-east. Internally, there are likely

wartime fixtures and fittings that remain such as the electrics, lighting, washing and telephone areas, although it is possible that some of these features may potentially post date the war and could have been installed by Marconi.

Several temporary brick structures, recorded on the airfield plan used in the survey, also stand within the development area, though many more have disappeared over time. Like the hangers they were light utility structures found on airfields across the country and are therefore ubiquitous. They were designed with an adaptability to perform different functions; in this case vehicle sheds and storage facilities. The common pattern was thin rendered brick walls and either a corrugated steel or asbestos roof carried on a simple but strong angled iron frame. None of these buildings were designed to take a direct hit during a bombing raid, but given their basic construction could be replaced relatively easily. All had steel Crittalls windows from the nearby factory at Silver End. A variation on the temporary building design was the squadron offices whose importance in the functioning of the airfield is illustrated by a stronger construction using lateral strengthening to the trusses, and the relatively higher standard of internal decor. The blast shelter nearby would not have taken a direct hit but it and its surrounding earth mound would have helped absorb the bomb blast. Several were located close to personnel areas.

Apart from the second T2 hanger, the character of the other buildings close to Sheepcotes Farm, which was under more immediate threat, is that of another common WWII structure, the Nissen hut. Again these were easily-assembled versatile buildings that were adaptable for different functions. Two types were recorded here, but there are other forms. Like the other buildings their historic fabric remains significantly unaltered, though internal fixtures and fittings indicative of their original functions have been largely removed over time.

8.0 CONCLUSIONS

The WWII structures at Rivenhall Airfield form part of an interesting group of buildings. Many of their contemporary structures are no longer standing, which is perhaps not surprising since they were designed as temporary structures, to be built quickly and last

the length of the war. It is fortunate that plans of the airfield survive from the 1940s so that the function, complexity and extent of the wartime buildings can be appreciated. The surviving structures form only a small part of the buildings that once stood here, particularly around Woodhouse Farm. A considerable number of other wartime structures still survive outside the two areas recorded and whilst some are not in current use, others are still actively used by local businesses and farmers.

The findings of this report and surveys carried out across the former WWII Rivenhall Airfield satisfy the requirements of condition 11 associated with the planning permission for the Integrated Waste Management Facility (ESS/37/08/BTE) namely:

11. No airfield buildings and/or structures shall be demolished until the Level 3 survey in accordance with the 2006 English Heritage Guidance entitled "Understanding Historic Buildings: A Guide to Good Recording Practice" of the airfield buildings and/or structures has been completed.

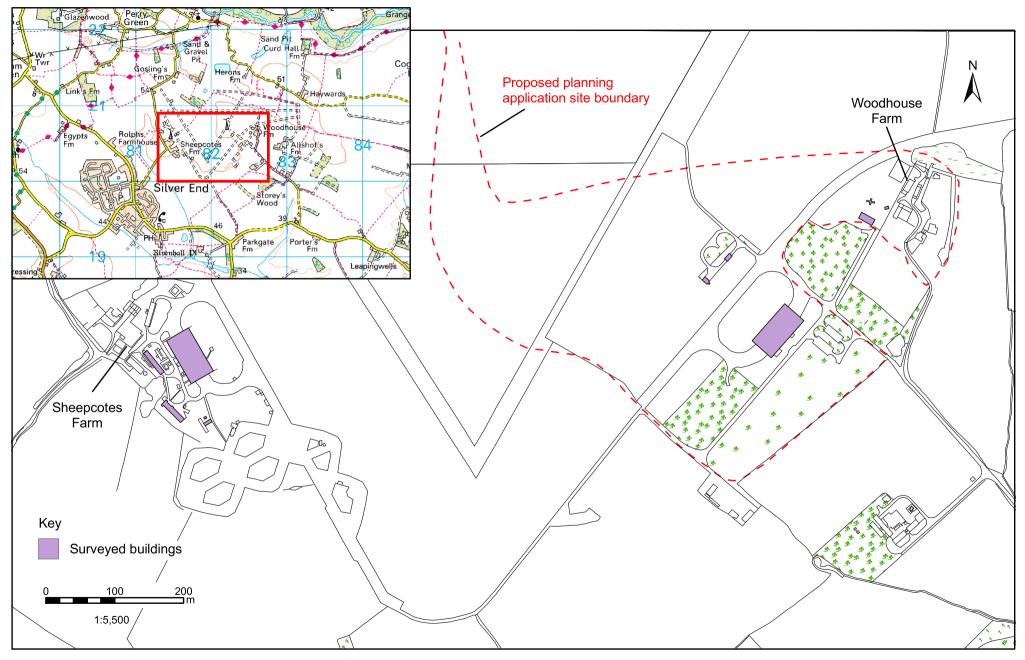
Reason: To ensure that any historical interest has been adequately investigated and recorded prior to the development taking place and to comply with MLP policy MLP13 and WLP policy W10E.

ACKNOWLEDGEMENTS

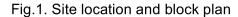
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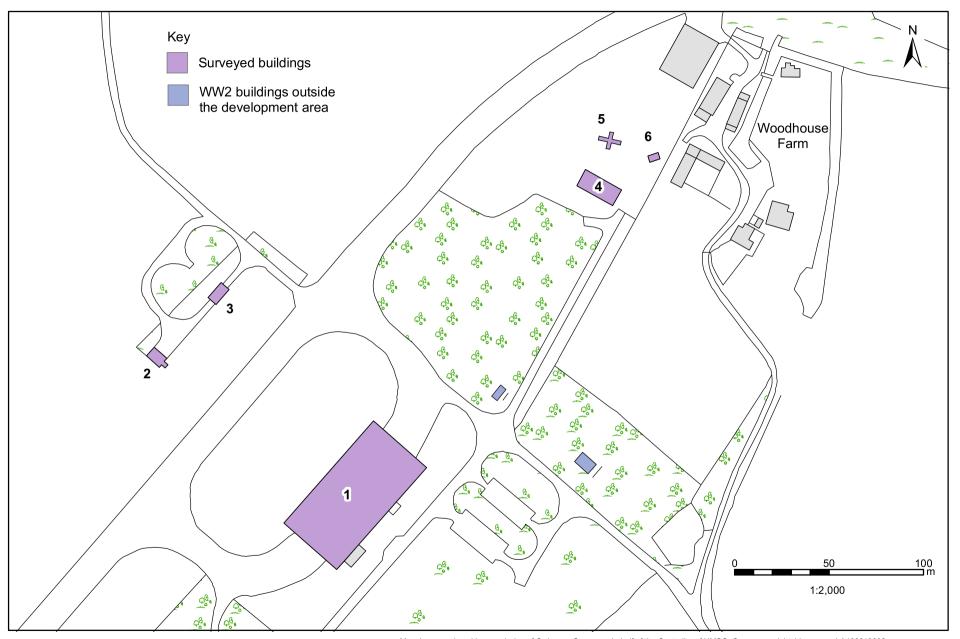
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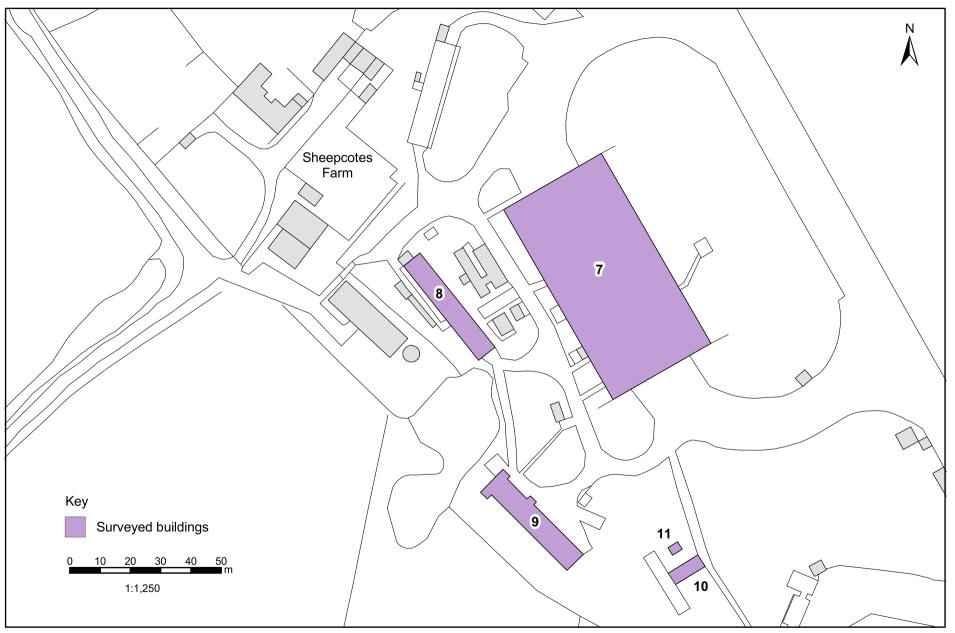




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Fig.2a. Surviving wartime structures at Woodhouse Farm





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Fig.2b. Surviving wartime structures at Sheepcotes Farm



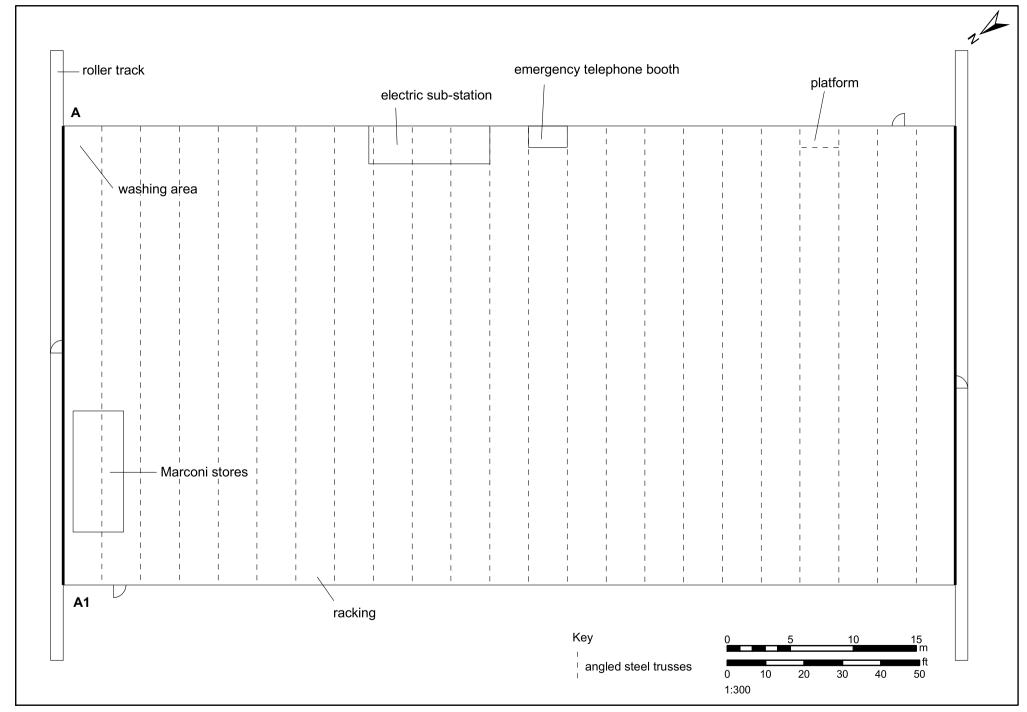


Fig.3. Floor plan of T2 hanger



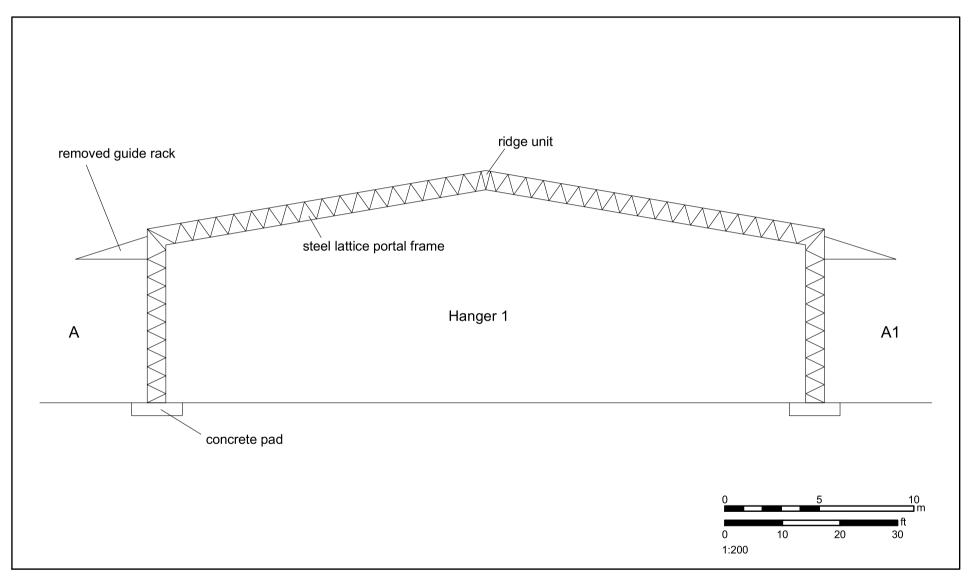


Fig.4. Section A - A1 of T2 hanger





Plate 1 Hanger 1 viewed to south



Plate 2 North-east hanger doors



Plate 3 Hanger 1 viewed to north



Plate 4 Roller-track door mechanism



Plate 5 Interior of hanger 1 viewed to north-east



Plate 6 Interior of hanger 1 viewed to south-west



Plate 7 Washing area



Plate 8 Electricity sub-station/switch box



Plate 9 1940s Fuse boxes



Plate 10 Health and Safety notice



Plate 11 Emergency telephone booth



Plate 12 Platform on south-east wall of hanger

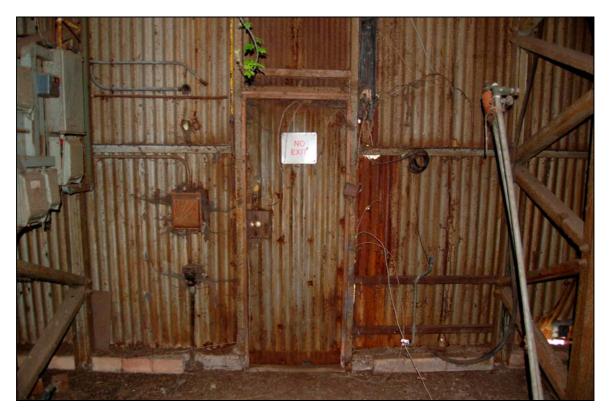


Plate 13 Personnel door on south-east wall



Plate 14 Buildings 2 and 3 viewed to north-west

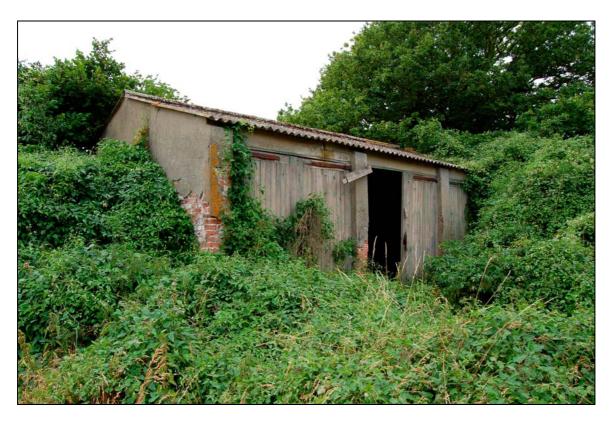


Plate 15 NFE Store 2 viewed to west



Plate 16 Interior of NFE Store viewed to west

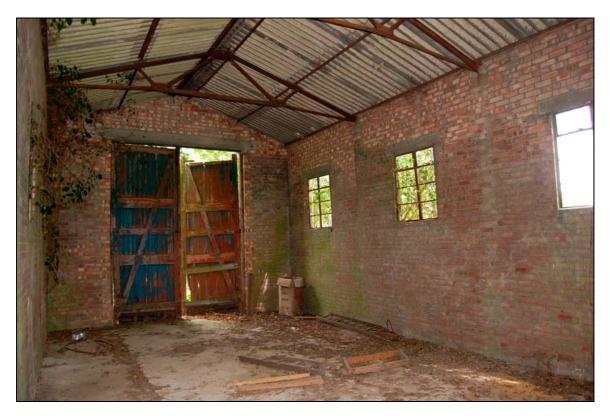


Plate 17 Interior of Floodlight Trailer and Tractor Shed 3

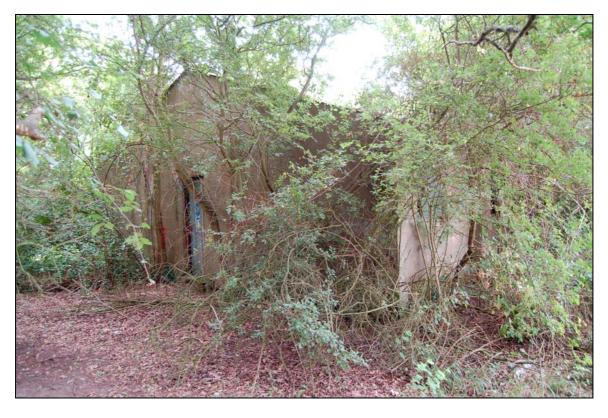


Plate 18 Entrance to Squadron Offices and Flight Offices 4 viewed to west



Plate 19 Adjutant's office



Plate 20 Typical room inside Squadron Offices and Flight Offices 4

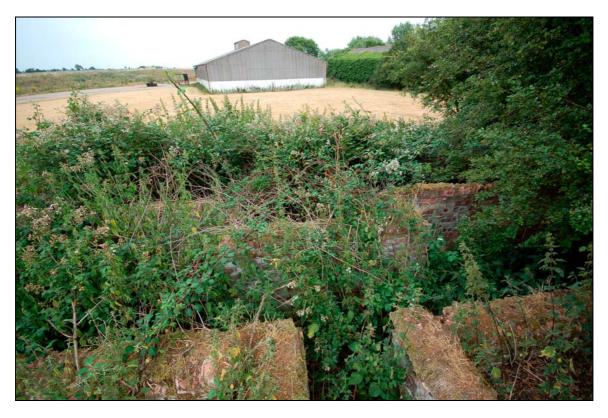


Plate 21 Blast shelter 5 viewed to north



Plate 22 Hanger 7 viewed to north



Plate 23 Interior of hanger 7 viewed to south-east



Plate 24 Armoury and Maintenance Unit 8 to left of Marconi structures, viewed to north



Plate 25 Interior of Armoury and Maintenance Unit viewed to north-west



Plate 26 Maintenance Unit Block 9 viewed to south



Plate 27 Interior of Maintenance Unit Block viewed to north-west



Plate 28 General Purpose Hut 10 viewed to south-west



Plate 29 Interior of General Purpose Hut viewed to south-west



Plate 30 Latrines/sub-station 11 viewed to south-west in front of General Purpose Hut

Appendix 1: Contents of Archive

Site name: Type T2 Aircraft Hanger at Woodside Farm and Associated WW II Structures at

Rivenhall Airfield, Essex

Project no.: 2260

Index to the Archive:

Document wallet containing:

- 1. Introduction
- 1.1 Client/archive report
- 1.2 Unbound version of report
- 1.3 CD containing digital photographs & copy of report, pdf-formatted
- 2. Site Archive
- 2.1 Photographic record (digital and black & white prints) & register
- 2.2 Site notes & annotated drawings

Appendix 2: EHER Summary Sheet

Site NamelAddress: Type T2 Aircraft Hanger at Woodside Farm and Other WW II Structures at Rivenhall Airfield, Essex Parish: Rivenhall **District:** Braintree **NGR:** TL 8241 2046 OASIS record No.: 90056 **Type of Work:** Building recording (levels Site Director/Team: Andrew Letch ECC FAU 1 & 3) Date of Work: July 2010 Size of Area Investigated: N/A **Curating Museum:** Braintree Funding Source: Client Further Work Anticipated? No Related LBS No. 116446 & 116447- Woodside Farm & bakehouse/brewhouse

Final Report: Summary in EAH

Periods Represented: 1940s

SUMMARY OF FIELDWORK RESULTS:

A building survey was undertaken by ECC FAU on a type T2 aircraft hanger and contemporary WW II structures at Woodhouse Farm, Rivenhall Airfield, prior to redevelopment of the site as a recycling and composting facility. Other airfield structures near to Sheepcotes Farm were also recorded as they too were under threat of demolition. A second T2 hanger was recorded at Sheepcotes Farm and is to be retained for its potential for future use of the site.

The Woodside Farm hanger was recorded to English Heritage level 3 standard and the other buildings to level 1.

In addition to the hanger at Woodside Farm, a low-level record was made of several temporary brick structures, a blast shelter and the squadron offices. Apart from the second T2 hanger, the buildings close to Sheepcotes Farm were mainly Nissen huts.

Type T2 hangers were common to airfield during the war and many are still in use on MOD bases. Temporary brick structures were also common features, fulfilling a variety of functions, and so too was the ubiquitous Nissen hut. Many other wartime structures are no longer standing and these form a good, if basic record of the character and function of two important areas of the WW II airfield.

Previous Summaries/Reports: none	
Author of Summary: Andrew Letch	Date of Summary: 20th December 2010