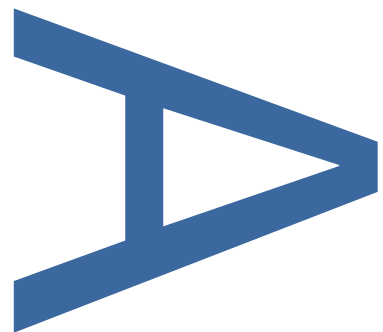
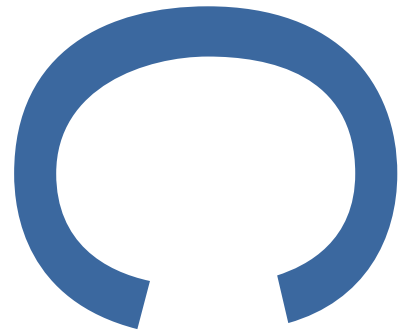


**FORMER RAF STORE,  
SULBY HALL,  
OLD DRIVE,  
SULBY,  
NORTHAMPTONSHIRE,  
NN6 6EZ**

**HISTORIC BUILDING RECORDING**

**PCA REPORT NO: R12936**

**JULY 2017**



**PRE-CONSTRUCT ARCHAEOLOGY**

**Historic Building Recording of a Former RAF Store, Sulby Hall, Old Drive,  
Sulby, Northamptonshire NN6 6EZ**

**Report compiled by** Adam Garwood

**Event No.** ENN108707

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**Client:** Architects LE1

**Central Ordnance Survey National Grid Reference:** SP 65545 82025

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**PCA Report No. R12936**

## DOCUMENT VERIFICATION

### Site Name

Former RAF Store,  
Sulby Hall,  
Old Drive, Sulby,  
Northamptonshire  
NN6 6EZ

### Type of project

Historic Building Recording

#### Quality Control

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## **CONTENTS**

1	INON-TECHNICAL SUMMARY	4
2	INTRODUCTION	5
3	PLANNING BACKGROUND	6
4	METHODOLOGY	7
5	HISTORICAL BACKGROUND	9
6	BUILDING DESCRIPTION	10
7	DISCUSSION	12
8	ACKNOWLEDGEMENTS	14
9	BIBLIOGRAPHY	15

## **APPENDICES**

1	OASIS FORM
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## **FIGURES**

Figure 1: Site Location

Figure 2: Detail Site Location

Figure 3: Ordnance Survey map, 1900

Figure 4: Aerial photograph of RAF Husbands Bosworth taken 1941-3

Figure 5: Husbands Bosworth Airfield and Dispersed Sites Record Plan, 1945

Figure 6: DWG 12409/41 'Gas Clothing and Respirator Store' floor plan (Air Ministry)

Figure 7: Ordnance Survey map, 1950 (LIV. NW)

Figure 8: Ordnance Survey map, 1962-1975

Figure 9: Existing ground floor plan with plate directions

Figure 10: Existing elevations and sections

Figure 11: Proposed Ground Floor Plan

Figure 12: Proposed Elevations and Section

Figure 13: Clothing and respirator stores at RAF Fortune

Figure 14: Parachute Store at RAF Fortune

## **PLATES**

Plate A Eastern elevation looking west (photograph provided by the Client)

Plate B Interior looking north (photograph provided by the Client)

Plate 1 Eastern elevation looking west

Plate 2 Eastern elevation looking south-west

Plate 3 Western elevation looking east

Plate 4 Western elevation looking north-east

Plate 5 Southern gable elevation

Plate 6	Northern gable elevation
Plate 7	Detail of spalled brickwork
Plate 8	Spalled and detaching brickwork (bay 6) looking south
Plate 9	Typical tall window (external), looking west
Plate 10	Upper (hopper) window and plain window stay (internal)
Plate 11	Squat 'double' window to bay 1
Plate 12	Integral metal tie built into brickwork
Plate 13	Batch/building number '25' scribed into top of window lintel
Plate 14	Original opening (part collapsed) to bay 3
Plate 15	Interior (bays 3-9) looking north
Plate 16	Interior (bays 8-3) looking south
Plate 17	Internal dividing wall looking south
Plate 18	Bays 1-2 looking west, showing internal render
Plate 19	Bays 1-2 looking east
Plate 20	Floor slab
Plate 21	Triangulating truss looking north-west
Plate 22	Concrete pad on top of pilaster
Plate 23	Bolted connection between pilaster and truss via L bracket
Plate 24	Brackets supporting softwood purlins
Plate 25	Former parachute shed (now car repair workshop) looking east

## 1 NON-TECHNICAL SUMMARY

- 1.1.1 Pre-Construct Archaeology Limited was commissioned by Architects LE1 on behalf of their client to carry out building recording of a disused agricultural building at Sulby Hall, Old Drive, Sulby, Northamptonshire. The building was formerly a Second World War store associated with RAF Husbands Bosworth. The Historic England Level 2 recording was carried out as a condition of planning consent for the conversion of the building into a dwelling.
- 1.1.2 RAF Husbands Bosworth was built in 1942-3 as a satellite airfield of RAF Market Harborough. In August 1943 14 OTU (Operational Training Unit) commenced flying operations from the station. The unit was a full strength training unit equipped with Vickers Wellington Mk. III/X bombers and a smaller complement of Hawker Hurricane Mk. IIc/IV fighters. On 15<sup>th</sup> June 1944 85 OTU was formed at Husbands Bosworth and Husbands Bosworth was upgraded to an independent station and placed under the direct command of HQ 92 Group. 85 OTU was formed as a three-quarter strength OTU equipped with 30 + 10 Wellington Mk. III/X bombers and four Miles Martinet target tug aircraft. 14 OTU was reduced to a three-quarter strength OTU at the same time. The first crews were posted to 85 OTU for operational training on 27<sup>th</sup> June 1944.
- 1.1.3 The airfield had 3 runways, 4 main aircraft hangars, 36 dispersed sites around the perimeter track with a bomb store to the north. A 1945 plan shows the recorded building as No. 15, 'Gas Clothing and Respirator Store'. It formed part of a complex of RAF storage and utility buildings, which included the Main Stores, Parachute Store (still extant), Main Workshops, RAF Technical Latrines, Bulk Oil Installation, Station Maintenance Blocks, Rubber Store and Towed Target Store and Workshop. The Gas Clothing and Respirator Store was a Temporary Brick (TB) construction built in accordance with Drawing no. 18730/41. The room at the south end of the building was a workshop, next to which was the respirator racks and beyond within the main body of the hut were the gas clothing racks. Every RAF station was required to operate a Gas Defence Scheme, under which procedures for protection, decontamination and cleansing were practiced. These procedures applied to station personnel, aircraft, vehicles and buildings.
- 1.1.4 The 85 OTU was disbanded on 14th June 1945 and the airfield was decommissioned by the R.A.F. in 1946 and from 1948 to 1956 the station camp buildings were used as housing for displaced Polish families. The decommissioned airfield has been home to the Gliding Centre since 1965 and the East Midlands Air Support Unit since 1996.
- 1.1.5 The recorded building is single storey with a rectangular footprint, Fletton brick walls and a concrete slab floor. The roofline is pitched at a slack angle and although now unclad was previously covered with corrugated asbestos cement sheets. The brick walls were rendered externally using a hard cement render and were constructed in a pier and panel design. The piers, as pilasters, project proud of the wall line (by half a brick) externally and internally. The piers support the roof trusses.
- 1.1.6 The mainly tall and narrow window openings have mild steel framed single glazed windows, lying central to each bay and set high in the wall, with plain concrete lintels, just below the eaves lines. The metal framed windows and window openings are original to the building. Two door openings with concrete lintels in the eastern long elevation are also original, while a third doorway in this elevation was open to the eaves without a lintel and appears to be a later enlargement of two original doorways.
- 1.1.7 The building is laid out over 9 relatively equal sized bays. The southern end is partitioned off as a former workshop by an original Fletton brick wall, built in common with the external walls, half a brick thick and in stretcher bond. Internal access into this room was possible via a doorway with a concrete lintel in the centre of the dividing wall. Whilst the building had lost its roof covering and internal ceilings, its roof trusses and softwood purlins remain. The simple triangulated trusses were fabricated from mild steel extrusions, of flat or L-shaped section.

## 2 INTRODUCTION

### 2.1 Background

- 2.1.1 Pre-Construct Archaeology Limited was commissioned by Architects LE1 on behalf of their client to carry out a programme of historic building recording of a disused agricultural building at Sulby Hall, Old Drive, Sulby, Northamptonshire NN6 6EZ (**Figures 1 and 2**). The building was formerly a World War II store associated with RAF Husbands Bosworth. The historic building recording was carried as a condition of planning consent (planning permission PD/2015/0031) for the conversion of the building into a single dwelling (**Figures 11 and 12**). It was carried out prior to conversion in accordance with an archaeological recording brief prepared by Liz Mordue, Archaeological Advisor at Northamptonshire County Council.
- 2.1.2 The survey was undertaken in accordance with a Historic England Level 2 survey, as defined in Historic England, 2016 *Understanding Historic Buildings: A guide to good recording practice* and the Chartered Institute for Archaeologists (CIfA) *Standard Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures* (revised 2014).
- 2.1.3 The aim of the historic building recording was to produce a permanent record of the building and of any architectural features, fittings or historic graffiti, in its present condition and character, prior to the start of the proposed conversion. The results of this recording will form part of an ordered archive and report that will mitigate the impacts of the works through 'preservation by record'.

### 2.2 Site Location and Description

- 2.2.1 The recorded building is located close to the Northamptonshire and Leicestershire border, c.2km to the west of the village of Sibbertoft and c.1.7km north-east of Welford (**Figure 1**). It is situated to the south of the Sibbertoft/Welford Road, which connects Sibbertoft village (to the east) with the A5199 road to Husbands Bosworth (to the west). It lies to the east of Sulby Road and north-west of Sulby Hall Farm at Ordnance Survey National Grid Reference (NGR) SP 65545 82025. The site is not within the Green Belt, an Area of Outstanding Natural Beauty or a Special Landscape Area. It is situated within an agricultural landscape characterised as the Northamptonshire Uplands and lies immediately north of the scheduled medieval settlement of Old Sulby (List entry Number: 1017187) and, more pertinently close to the perimeter and associated dispersed sites of former RAF Husbands Bosworth. The site falls under the administration of Daventry District Council.
- 2.2.2 The building is accessed via the Sulby Road and is sited immediately to the south of a made farm track and an area of hard standing presently occupied by a large modern portal type agricultural barn. The building, latterly used for general storage as part of Airfield Farm, is a detached structure with brick elevations and a simple in-line pitched roof.

### **3 PLANNING BACKGROUND**

#### **3.1 Introduction**

3.1.1 National legislation and guidance relating to the protection of historic buildings and structures within planning regulations is defined by the provisions of the Town and Country Planning Act 1990. In addition, local planning authorities are responsible for the protection of the historic environment within the planning system and policies for the historic environment are included in relevant regional and local plans.

#### **3.2 Legislation and Planning Guidance**

3.2.1 Statutory protection for historically important buildings and structures is derived from the Planning (Listed and Conservation Areas) Act 1990. Guidance on the approach of the planning authorities to development and historic buildings, conservation areas, historic parks and gardens and other elements of the historic environment is provided by the National Planning Policy Framework (NPPF), which was adopted on 27 March 2012.

3.2.2 The requirement for archaeological work is in accordance with NPPF Paragraph 141. The purpose of the work was to complete an appropriate level of historic building recording of the affected structures and their setting. This was to pay specific attention to those elements where demolition/conversion and/or alteration were proposed. The work was to be undertaken to a standard that would allow the future interpretation of the buildings within the context for which they were originally designed as well as later uses. An archive and report will be created as a result of the survey.

3.2.3 Planning permission ref PD/2015/0031 was granted under Class Q of the Town and Country Planning (General Permitted Development), subject to a number of conditions.

3.2.4 An Informative (3) attached to the consent reads:

'The building is considered to be an undesignated asset and should be recorded if possible prior to the loss or alteration of any features of historic interest. It is on the edge of Husbands Bosworth Airfield and appears to be related to the usage of the airfield, apparently as a medical building. There may be documentary evidence for its construction and use. Its significance lies in its role at the airfield and subsequent changes of function and is regarded as an undesignated asset. Conversion of the building will therefore result in the loss or damage to the significance of the asset, but this loss can be mitigated by means of a programme of archaeological works, in this case, building recording. A low level recording scheme which can be carried out by the applicant would be appropriate and further advice can be obtained from the Northamptonshire County Council Archaeology Service'.



## 4 METHODOLOGY

### 4.1 Aims and Objectives

- 4.1.1 The aim of the building recording was to provide a record of the building. It was undertaken to a standard allowing the future understanding and interpretation of the building and its site. An archive and report was to be created as a result of the project.

### 4.2 Documentary Research

- 4.2.1 Documentary research was carried out at The National Archives, Kew and the RAF Museum, Hendon, London Borough of Barnet.

### 4.3 On-Site Recording

- 4.3.1 The building survey was carried out on 23<sup>rd</sup> May 2017 to record the building prior to the commencement of works. A photographic survey comprising high resolution digital images was undertaken and a selection of these photographs have been included in this report as **Plates 1 to 25**. **Figures 2 and 9** show the location and direction of the plates.
- 4.3.2 The recording involved a full photographic record, accompanied by a drawn record and descriptive account. Measured drawings provided by the architect were used as base drawings for the building recording (**Figures 9 and 10**).

### 4.4 Project Archive

- 4.4.1 A full and ordered archive including written, drawn, survey and photographic records will be completed in accordance with guidelines defined in ClfA (2014b); Taylor and Brown (2009) and UKIC and ADS guidelines for the preparation of archaeological archives for long term storage. The archive will be provisionally stored in Pre-Construct Archaeology's Cambridge Office in Pampisford before being transferred to the appropriate archive depository.

### 4.5 Guidance

- 4.5.1 All works were undertaken in accordance with standards set out in:

ClfA (2014) *Standard and guidance for the archaeological investigation and recording of standing buildings or structures*

English Heritage (now Historic England) (2005) *The Presentation of Historic Building Survey in CAD*

Historic England (2016) *Understanding Historic Buildings: A Guide to Good Recording Practice*

## 5 HISTORICAL BACKGROUND

- 5.1.1 The most significant impact on the immediate landscape around the site in the 20<sup>th</sup> century occurred during the Second World War with the construction of the airfield at RAF Husbands Bosworth and its many 'dispersed' satellite sites (compare **Figures 3** and **4**). RAF Husbands Bosworth was built in 1942-3 as a satellite airfield of RAF Market Harborough (**Figures 4** and **5**).
- 5.1.2 Documentary sources suggest that land for an aerodrome at Husbands Bosworth had been ear-marked as early as August 1941. The site obviously satisfied the Air Ministry criteria as a fairly level, well drained plot affording relatively unrestricted flight approaches from the east (into the prevailing wind). The proposed completion date was given as 15<sup>th</sup> March 1943, with George Wimpey and Co. Ltd as the main contractor at an estimated cost of £805,000. The considerable tonnage of gravel used in the construction of the aerodrome was brought to Kilworth Wharf by canal and it is recorded that on occasion the line of boats waiting to unload extended back as far as the Welford Arm junction.
- 5.1.3 At the height of airfield construction in 1942, an airfield opened every three days and on average it took five to seven months to complete, from the initial groundworks to the first plane taking off, with infrastructure, roads, drains, power cables and buildings completed 18 months after the start of works (Osbourne, 2004).
- 5.1.4 A revised completion date was set of October 1943, however, by 1<sup>st</sup> August 1943, the aerodrome started to receive the first personnel from the 14<sup>th</sup> Operational Training Unit (14 OTU), R.A.F. Cottesmore and R.A.F Saltby. On the 10<sup>th</sup> August day-flying started and on the 17<sup>th</sup> August night-flying commenced. The unit was a full strength training unit equipped with Vickers Wellington Mk. III/X bombers and a smaller complement of Hawker Hurricane Mk. IIc/IV fighters.
- 5.1.5 On 15<sup>th</sup> June 1944 85 OTU was formed at Husbands Bosworth, under the command of Group Captain D.J. Eays DFC. On that date Husbands Bosworth was upgraded to an independent station and placed under the direct command of HQ 92 Group. 85 OTU was formed as a three-quarter strength OTU equipped with 30 + 10 Wellington Mk. III/X bombers and four Miles Martinet target tug aircraft. 14 OTU was reduced to a three-quarter strength OTU at the same time. The first crews were posted to 85 OTU for operational training on 27<sup>th</sup> June 1944.
- 5.1.6 The airfield was constructed with 3 runways (**Figure 5**). Runway No.1 was built aligned east-west, and measured 1999 yards in length. Runway No.2 was 1412 yards and aligned north-east/south-west and runway No.3 was aligned approx. north-north-west/south-south-east and was 1408 yards. Thirty-six dispersed sites were strung around the perimeter track and a bomb store was constructed to the north of the site. Four main aircraft hangers were erected, a water treatment works constructed adjacent to Sulby Reservoir and a sewage plant was built about a mile outside the perimeter road, east of Sulby Hall Farm.
- 5.1.7 An aerial photograph of RAF Husbands Bosworth (**Figure 4**) taken c.1941-1943 shows the airfield and dispersed sites, including the site of the former store (recorded building) during construction. Whilst it is not easy to identify the recorded building in this photograph, it forms part of a cluster of WWII buildings, the majority to the north of the trackway to Home Farm, lying adjacent to Sulby Road and the perimeter track.
- 5.1.8 A much clearer depiction of the site is shown on Husbands Bosworth Airfield and Dispersed Sites Record Plan (**Figure 5**) drawn up by the Air Ministry in 1945. The recorded building lies within an area demarcated as part of the Airfield Site and is shown as building No. 15, a 'Gas Clothing and Respirator Store'. It forms part of a complex of RAF storage or utility buildings rather than accommodation units, which were located a greater distance from the airfield. The nearby RAF buildings to the recorded building include the Main Stores (12; on the site of the present modern unit to

the north of the recorded building; **Figure 2**), Parachute Store (14), which still survives (**Figure 2; Plate 25**), Main Workshops (16), RAF Technical Latrines (23), Bulk Oil Installation (31), Station Maintenance Blocks (57-58), Rubber Store (74) and Towed Target Store and Workshop (402).

- 5.1.9 The Gas Clothing and Respirator Store was a Temporary Brick (TB) construction built in accordance with Drawing no. 18730/41. Whilst the archive at the RAF Museum, Hendon in the London Borough of Barnet does not possess a copy of DWG 18730/41, it does have a copy of DWG 12409/41 'Gas Clothing and Respirator Store' for establishments of 640 (40' long), 960 (50' long), 1120 (60' long), 1440 (80' long), 1760 (90' long) and 2080 (100' long) (**Figure 6**). This shows that the room at the southern end of the building was a workshop, next to which was the respirator racks and beyond within the main body of the store were the gas clothing racks.
- 5.1.10 Every RAF station was required to operate a Gas Defence Scheme, under which procedures for protection, decontamination and cleansing were practiced. These procedures applied to station personnel, aircraft, vehicles and buildings. The officer in charge of passive defence (fire and gas) for 85 OTU was Flight Lieutenant W.G. Cragg, HQ 92 Group. A Gas Section was established, which conducted practice gas exercises twice every month between July 1944 and May 1945. Regular audits of the station's anti-gas equipment, including respirators and clothing were undertaken by the Gas Section (TNA AIR 29/687 RAF Operations Record Book HQ No. 85 OTU, June 1944-June 1946).
- 5.1.11 The 85th Operational Training Unit was disbanded on 14th June 1945, exactly one year after its formation. The airfield was decommissioned by the R.A.F. in 1946 and in 1948 the station camp buildings were placed under the control of the National Assistance Board for housing displaced Polish families. In 1950 the Polish camp housed over 500 people, had its own church, school, and recreation room. The former RAF buildings continued in this use through to 1956. After the closure of the aerodrome and release of the land by the government, the truncated Sibbertoft Road was realigned along part of the line of the former No.1 runway. The decommissioned airfield has been home to the Gliding Centre since 1965 and the East Midlands Air Support Unit since 1996.
- 5.1.12 The Northamptonshire HER records the airfield runway, a control tower, now semi derelict, and two airfield buildings. A PoW Camp (MNN17663) of six barrack huts is thought to have been located close to Sulby Hall Farm while a site assessment of land undertaken close to Sulby Lodge Farm in 2015 (Garwood, 2015) uncovered three extant WWII huts, the remains of two blast shelters, an air raid shelter and a complex of concrete and brick foundations of former hut bases associated with W.A.A.F Communal and Sleeping Site No. 1.
- 5.1.13 The site is not shown on the Ordnance Survey map of 1950 (**Figure 7**), possibly a hangover from war time restrictions regarding detailing military sites, and is shown on the later map of 1962-75 (**Figure 8**). At this time many of the airfield buildings were still extant. By 2017 (**Figure 2**) most of these buildings have disappeared.

## 6 BUILDING DESCRIPTION

### 6.1 General Description

6.1.1 The following descriptive text details observations relating to the building and its fabric at the time of the survey. Interpretation of function and phasing is based on the information gathered during the fieldwork and from available documentary sources.

6.1.2 The RAF store presently forms part of a group of three buildings located on each side of a made farm trackway servicing Sulby Hall Farm, to the east. A modern brick and steel framed barn lies immediately north of the subject building and south of the farm track, while another WWII building, presently in use as a car repair workshop (D. D. Dorman & Son), lies to the north (**Figure 2; Plate 25**). This building, just visible on the aerial photograph of the airfield (**Figure 4**) and shown on the Airfield Plan (**Figure 5**) was built as a parachute store (building No. 14), its distinctive raised ridge, purpose built to provide the height to pack and hang the parachutes (see **Figure 14**).

### 6.2 External Descriptions

6.2.1 Latterly used in an agricultural context, the building is orientated on a north to south axis, with its long elevations facing east and west and with gable elevations to the north and south (**Figure 2; Plates 1 to 6**). The building is very regular in form built with a rectangular floor plan (**Figure 9**) and over a single storey, off a concrete floor slab. The roofline is pitched at a slack angle (**Figure 10**) and although now unclad was previously covered with corrugated asbestos cement sheets (**Plate A**).

6.2.2 All elevations are brick built and were rendered externally using a hard cement render, which has mainly become detached. Exposed areas of brickwork reveal walls built using machine made Fletton bricks (220x70x110mm) laid in half lap stretcher bond and in a hard cementitious mortar. The walls are constructed to a pier and panel design, the piers, as pilasters project proud of the wall line (by half a brick) and are visible both externally and internally (**Figures 9 and 10**). Each pier (apart from those central to the gable elevations) support the outer ends of the axial roof trusses, which in turn determine the internal bay divisions (1-9; **Figure 9**). The brickwork of the wall panels (between the piers) is only a half brick in thickness and shows significant damage, from spalled brickwork (**Plates 7 and 8**), across all four external elevations. Additionally, possibly as a consequence of this deterioration, the walls in some areas were seen to be deforming, cracking or cranking over at the top.

6.2.3 The fenestration is relatively consistent in layout and form, mainly comprising tall narrow openings (measuring 73 x 20 inches) with mild steel framed single glazed windows, lying central to each bay and set high in the wall, with their heads, formed by plain concrete lintels, just below the eaves lines (**Figure 10; Plate 9**). A departure from the uniformity in fenestration is present in the southernmost bay (1), east side, which includes a wider squatter window of the same metal-framed design (**Figure 10; Plate 11**) and two of the tall narrow windows, paired together within bay (2) but set on each side of an internal partition wall (**Figures 9 and 10**). All of the casement windows are glazed using small panes (11 x 9 inch), with taller windows using a lower fixed casement of 2x4 lights and an upper casement of 2x2 lights incorporating a top hung ventilator of two lights. The larger window to bay (1) was simply a double width window comprising two of the 4x2 light casements and upper glazing of four lights, the northern two, a top hung ventilator. The glazing bars are T shaped in section and puttied from the exterior. The mild steel frames were tied into the walls by the use of integral metal tongues (**Plate 12**), set into the mortar joints of the surrounding brickwork and then torched into the opening. Window furniture was restricted to the upper ventilators, which used simple metal window stays (**Plate 10**). The openings to all the windows and the original door openings all used concrete lintels. Those above the windows were built flush with the top of the wall and a number were inscribed with number 25 (**Plate 13**), which are probably a batch number and not a building number, as this store was building No. 15. Both the window openings and all the extant metal framed windows are original to the building. This is not the case for the three door openings on the east

side. The southern two openings to bay (2) and bay (3) were both built with the same style of plain concrete lintel used for the windows and were accordingly viewed as original (**Figures 9 and 10; Plate 14**). However the large bay wide opening to bay (7) did not incorporate a lintel, was open to the eaves (**Figures 9 and 10; Plate 15**) and appears to be an enlargement of two former door openings (see **Figure 6**), probably associated with its subsequent farming use.

### 6.3 Internal Descriptions

- 6.3.1 The building is laid out over 9 relatively equal sized bays, measuring on average between 110 and 112 inches (between pilasters; **Figure 9**). The southernmost bay (1) and half of bay (2) are partitioned off, as a former workshop (see DWG 12409/41; **Figure 6**), by an original Fletton brick wall, built in common with the external walls, half a brick thick and in stretcher bond (**Plates 16 to 19**). Internal access into this room was possible via a door opening, which was in the centre of the wall. The doorway has a concrete lintel. Whilst the majority of the internal brickwork was pointed and showed no evidence of an internal plaster finish, and therefore originally bare brickwork, the workshop to the south of the internal wall (bays 1-2) had been rendered, from floor level up to the height of 73 inches, around three of its internal walls. An open 4 inch drain/gulley along the south and east walls is shown as a typical feature on DWG 12409/41 (**Figure 6**).
- 6.3.2 The floor slab was formed in two halves, the join central to and running the full length of the building (**Plates 15 and 16**). An open exploratory geotechnical test pit to inspection the foundations revealed that the slab was 5 inches thick (**Plate 20**).
- 6.3.3 Whilst the building had lost its roof covering (**Plate A**) and internal ceilings (**Plate B**), the roof trusses and the softwood purlins remained. The trusses were simple triangulated trusses fabricated from mild steel extrusions, of flat or L-shaped section of 3 inch scantling, bolted together at the strut junctions (**Figure 10; Plate 21**). These connections were further strengthened by plate gussets or webs. The ends of the trusses were mounted directly onto the pilasters via a higher compressive concrete pad (**Plate 22**). The truss end was bolted through an L-shaped bracket to the concrete pad (**Plate 23**). The trusses were connected longitudinally by a series of softwood purlins, with three purlins to each roof pitch and a central ridge pole. The purlins were held in place by L-shaped cleats mounted on the top of the truss (**Plate 24**), while the ridge pole similarly pinched between two vertical brackets. The purlins were relatively lightweight at 4 x 2 inch scantling, some joined end on using simple splay scarfs. These are unlikely to be original and were probably added when the building was re-roofed using corrugated panels held by modern galvanised twist nails.

## 7 DISCUSSION

- 7.1 The recorded building, generically named as a TBC, a temporary brick construction, was built as a Gas Clothing and Respirator Store between 1942-1943 as part of a small complex of RAF stores and utility buildings which together formed the 'Airfield site' adjacent to the main airfield at RAF Husbands Bosworth (**Figure 5**).
- 7.2 Once it was realised that the war was not going to be concluded quickly, the need for more airfields was accepted. From experience the design of the airfields would have to be different from those built pre-war, as the aircraft were too heavy to take off and land on grass strips and that the airfield structures would have to be more dispersed to avoid maximum damage from minimum bombs. Also the airfields would have to be built, simply, cheaply, uniformly and above all quickly. Technical buildings were grouped together away from those with other functions such as instructional, while living or communal sites were dotted around the airfield, so messes, accommodation and recreational facilities were at a distance from the aircraft (Osbourne, 2004).
- 7.3 An aerial photograph of RAF Husbands Bosworth taken during its construction between 1941-1943 (**Figure 4**) and the RAF Airfield and Dispersed Sites Record Plan (**Figure 5**) show that in addition to the main runway a series of nine dispersed sites were located to the east and south-east of the main airfield perimeter. Dispersed sites, including technical sites, sewage treatment plants and accommodation/sleeping sites were categorised as a site 'selected to reduce concentration and vulnerability by its separation from other military targets or a recognized threat area' and airfields typically comprised a number of these sites purposefully located away from the focus of the airfield, to be safer in the event of an enemy attack.
- 7.4 The recorded building at Sulby was built using brick and timber and to a standardised design which conformed with DWG 12409/41 'Gas Clothing and Respirator Store' for establishments of 1760 (90ft) long (**Figure 6**), and is likely to have been built early on in the hostilities around 1942. The Air Ministry works drawing show that the Gas Clothing and Respirator Stores buildings were typically sub-divided internally with a workshop, distinct from the main store, within the end bays (bays 1-2), with an area reserved for 22 respirator racks (bays 2-3) and for 11 gas clothing racks (bays 4-9; **Figures 6 and 9**).
- 7.5 Clearly it was never the intention that these buildings should continue long after hostilities ceased and this is reflected in the construction of the store, built using the minimum of materials, with insubstantial brick walls off a concrete slab. The temporary brick huts were commonly built with 4.5 inch (half brick) walls laid in stretcher bond, strengthened at 10ft (c.3m) intervals by brick piers carrying the roof trusses and were particularly widespread (Brown et al, 1996). Examples of this simple temporary hut design were widely used in airbases across the country and for a disparate range of uses. A very similar hut, also used as clothing and respirator store, is still extant at RAF East Fortune, east of Edinburgh (**Figure 13**) or in use as part of the main stores at Llandwrog Gwynedd, built 1941. To illustrate the uniformity and extent of standardisation within Air Ministry building stock, the parachute store at RAF East Fortune (**Figure 14**) is almost identical with building (14) at Sulby (**Plate 25**).
- 7.6 Whilst the recorded building is difficult to definitely identify on the aerial photograph (due to scale) a much clearer depiction of the site is shown on Husbands Bosworth Airfield and Dispersed Sites Record Plan (**Figure 5**) drawn up by the Air Ministry in 1945. The subject building is shown as No. 15, Gas Clothing and Respirator Store with nearby buildings including the Main Stores (12), Parachute Store (14; still extant **Plate 25**), Main Workshops (16), Bulk Oil Installation (31), Station Maintenance Blocks (57-58), Rubber Store (74) and Towed Target Store and Workshop (402). This complex of workshops and stores were located close to the airfield where they were more susceptible to the attentions of the Luftwaffe in contrast to accommodation and mess buildings, which were located at a distance to the east.
- 7.7 Following the end of hostilities and the decommissioning of the airfield, the facilities at

RAF Husbands Bosworth, were placed under the control of the National Assistance Board and were re-used for re-housing displaced Polish families, following the ratification of the Polish Resettlement Act of 1947. Many of these sites remained in use by Polish families until 1956-8.

- 7.8 In contrast to the permanent airfield structures, hangers and observation towers, the great majority of the temporary structures comprising these stations were disposed of after the war and whilst many lie in an advanced state of decay, others were re-used in light industry or in agriculture. The former store at Sulby appears to have been adopted by Airfield Farm and put to use as a general purpose agricultural shed. It appears that this building became additional to the farms requirements. It then suffered neglect and due on its insubstantial 'temporary' construction, quickly fell into structural decay.
- 7.9 Whilst in isolation the structural remains of this former RAF store has a low significance in terms of its architecture, it does form part of a much larger group of former airfield buildings attached to RAF Husbands Bosworth and the 85<sup>th</sup> OTU, and as such is historically significant, on a local if not regional level, in terms of the role it played during the Second World War.

## **8 ACKNOWLEDGEMENTS**

- 8.1 Pre-Construct Archaeology Limited would like to thank Architects LE1 for commissioning the project.
- 8.2 The project was managed for Pre-Construct Archaeology Limited by Charlotte Matthews. Guy Thompson carried out the documentary research at The National Archives, Kew and the RAF Museum, Hendon, London Borough of Barnet. Adam Garwood carried out the on site building recording. This report was written by Adam Garwood with a contribution to the Historical Background by Guy Thompson. Hayley Baxter prepared the illustrations



## 9 BIBLIOGRAPHY

### Primary Sources

TNA AIR 29/687 RAF *Operations Record Book HQ No. 85 OTU, June 1944-June 1946*

### Secondary Sources

Air Ministry, 1956 *The Royal Air force Builds for War: A history of design and construction in the RAF 1939-1945* (London: Her Majesty's Stationary Office, 1956)

ALGAO 1997 *Analysis and Recording for the Conservation and Control of Works to Historic Buildings*

Brown, I. Burridge, D Clarke, D & Guy, G, 1996 *20<sup>th</sup> century Defences in Britain, an Introductory Guide* (CBA)

ClfA 2014a *Standard and guidance for the archaeological investigation and recording of standing buildings or structures*

ClfA 2014b *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*

Draper, K 2015 *Building for war: examples of temporary structures designed for wartime use in Britain (1939-1945)*

Garwood, A. 2015 *Land to South of Welford Road, Sulby, Northamptonshire, An Historic Environment Desk-Based and Site Assessment*

Hawkes Architecture, 2015. *Land to the South of Welford Road*. Unpublished Document.

Historic England, 2016 *Understanding Historic Buildings: A guide to good recording practice*

Osbourne, M. 2004 *Defending Britain, Twentieth Century Military structures in the Landscape* (Tempus)

Taylor, J with Brown, G 2009, *Fieldwork Induction Manual: Operations Manual 1*, Pre-Construct Archaeology Limited

### Online Sources

<https://www.husbandsbosworth.info/historical-information/aerodrome-in-wwii>

<http://www.rmweb.co.uk/community/index.php>

## APPENDIX 1: OASIS FORM

OASIS ID: preconst1-287554

### Project details

Project name	Former RAF Store, Sulby, Northamptonshire Building Recording
Short description of the project	Pre-Construct Archaeology Limited was commissioned to carry out a programme of historic building recording targeting a disused agricultural building, formerly a RAF store associated with RAF Husbands Bosworth, prior to its re-use as a single dwelling. The survey has shown that this building was constructed in 1942-3 as a Gas Clothing and Respirator Store, as part of a complex of stores and workshop buildings that formed the 'Airfield site' adjacent to the main airfield at RAF Husbands Bosworth.
Project dates	Start: 23-05-2017 End: 23-05-2017
Previous/future work	No / No
Any associated project reference codes	PD/2015/0031 - Planning Application No.
Type of project	Building Recording
Monument type	STORE Modern
Methods & techniques	"Measured Survey","Rectified photography"
Prompt	Planning condition

### Project location

Country	England
Site location	NORTHAMPTONSHIRE DAVENTRY WELFORD Former RAF Store, Sulby Hall, Old Drive, Sulby, Northamptonshire
Postcode	NN6 6EZ
Site coordinates	SP 65545 82025 52.431893436376 -1.035827189653 52 25 54 N 001 02 08 W Point

### Project creators

Name of Organisation	Pre-Construct Archaeology Limited
Project brief originator	Liz Mordue
Project design originator	Adam Garwood
Project director/manager	Charlotte Matthews
Project supervisor	Adam Garwood
Type of sponsor/funding body	Private Client

### Project archives

Physical Archive Exists?	No
Digital Media available	"Images raster / digital photography", "Text"
Paper Archive Exists?	No

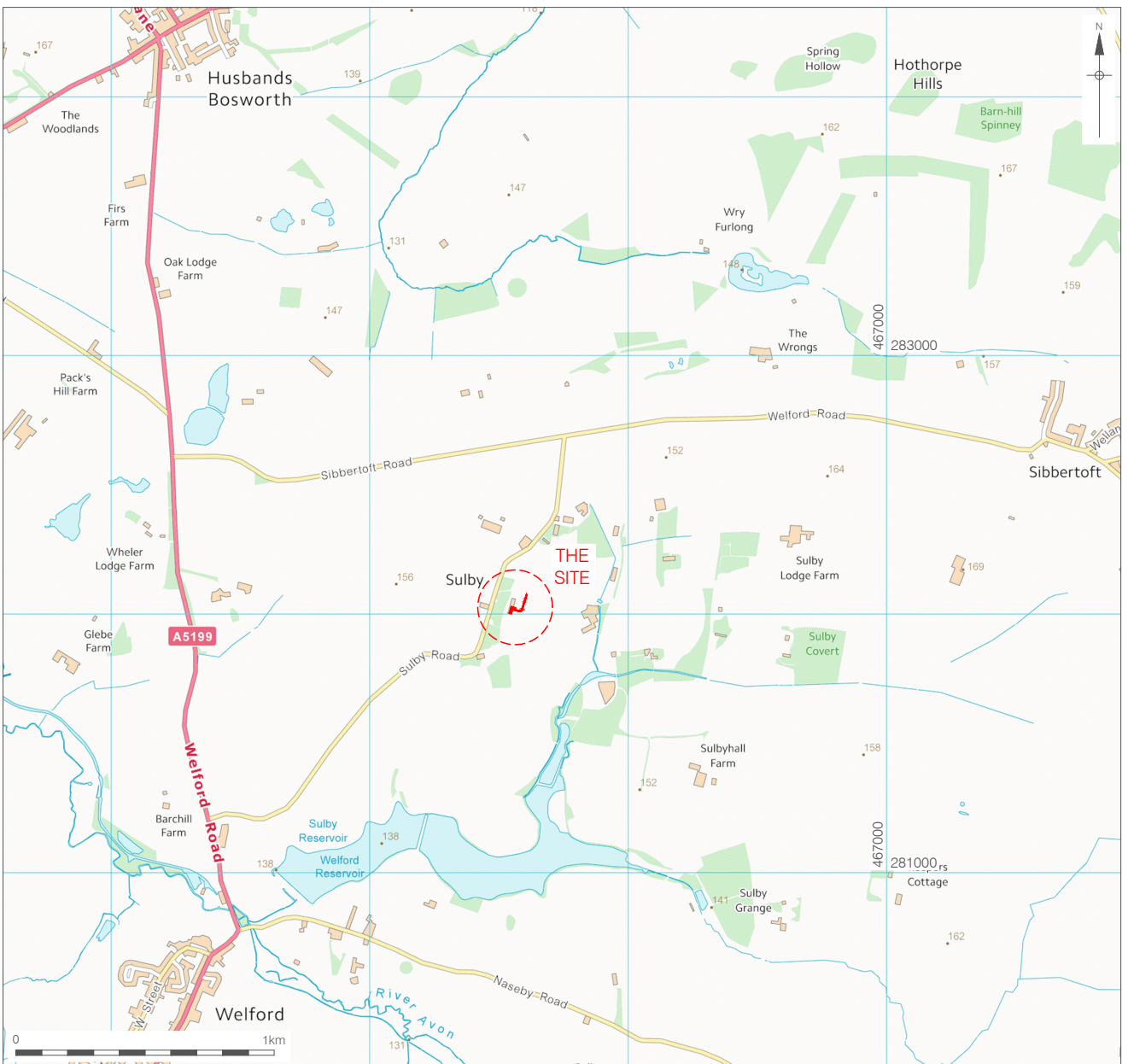
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**Project bibliography 1**

Publication type	Grey literature (unpublished document/manuscript)
Title	Historic Building Recording of a Former RAF Store, Sulby Hall, Old Drive, Sulby, Northamptonshire NN6 6EZ
Author(s)/Editor(s)	Garwood, A
Other bibliographic details	PCA Report No. R127936
Date	2017
Issuer or publisher	Pre-Construct Archaeology Limited
Place of issue or publication	Brockley, London
Description	A4 PDF

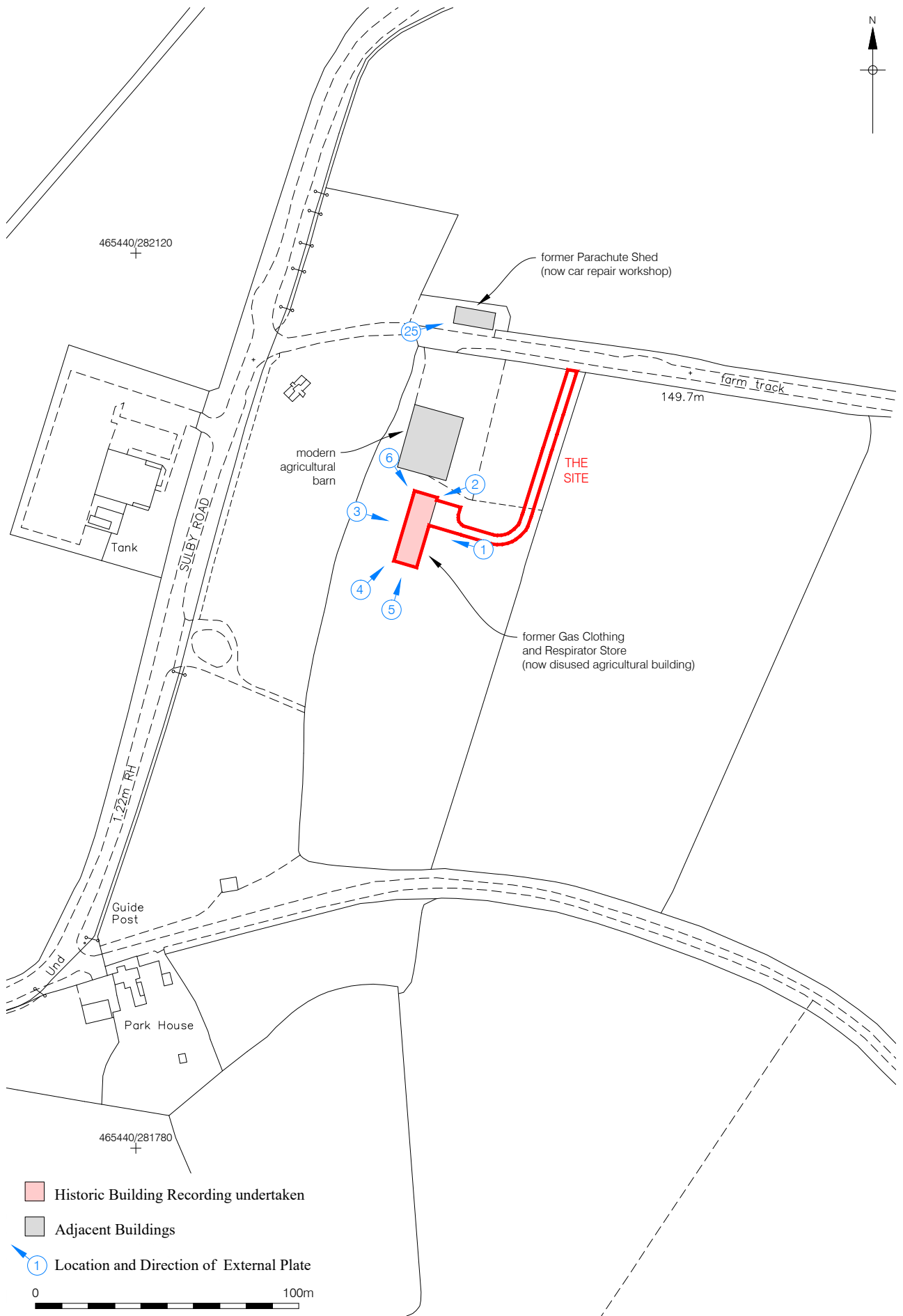
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Entered by	Charlotte Matthews (cmatthews@pre-construct.com)
Entered on	6 July 2017



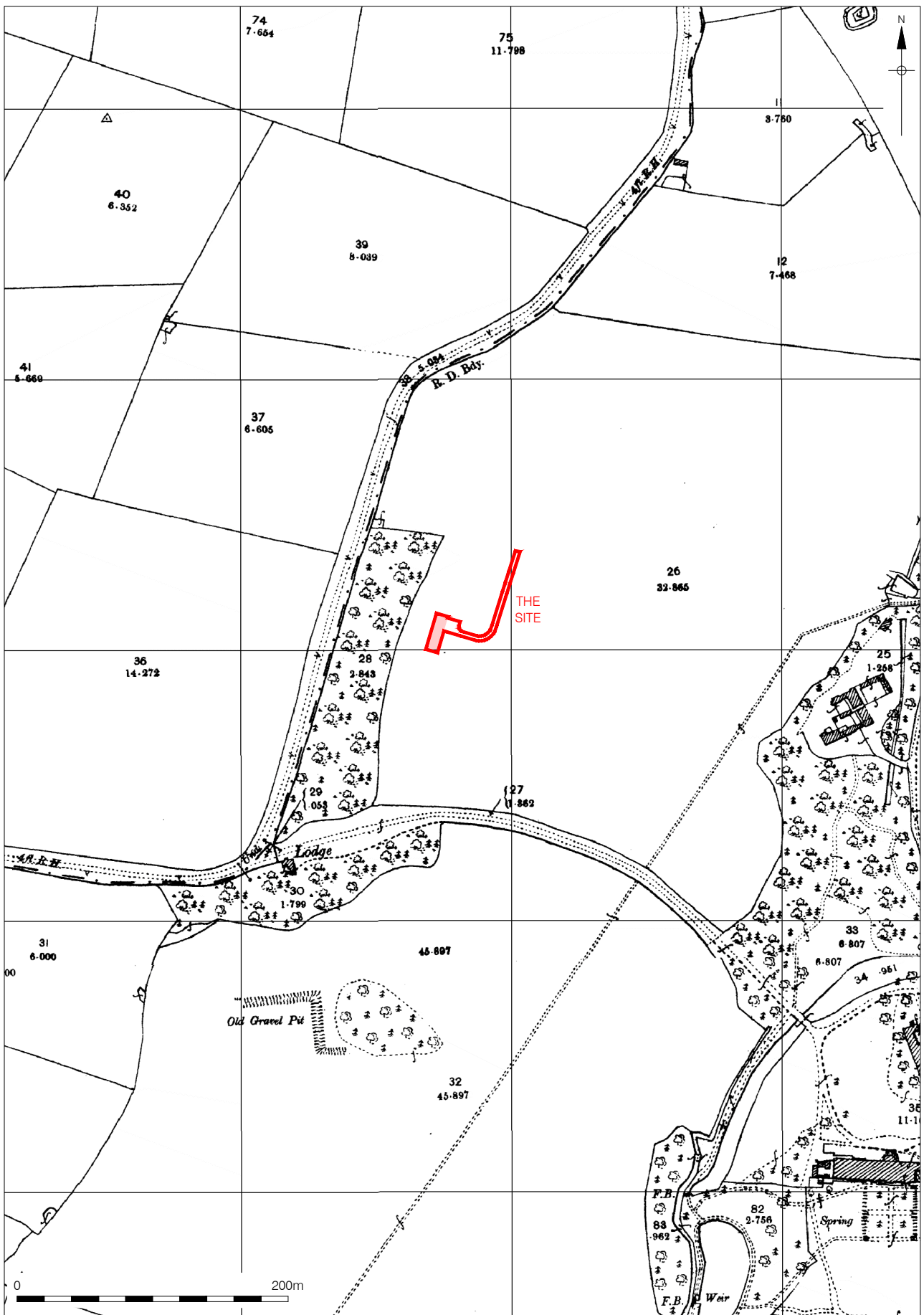
Contains Ordnance Survey data ©Crown copyright and database right 2017  
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 20/06/17 HB

Figure 1  
 Site Location  
 1:2,000,000; 250,000 & 25,000 at A4



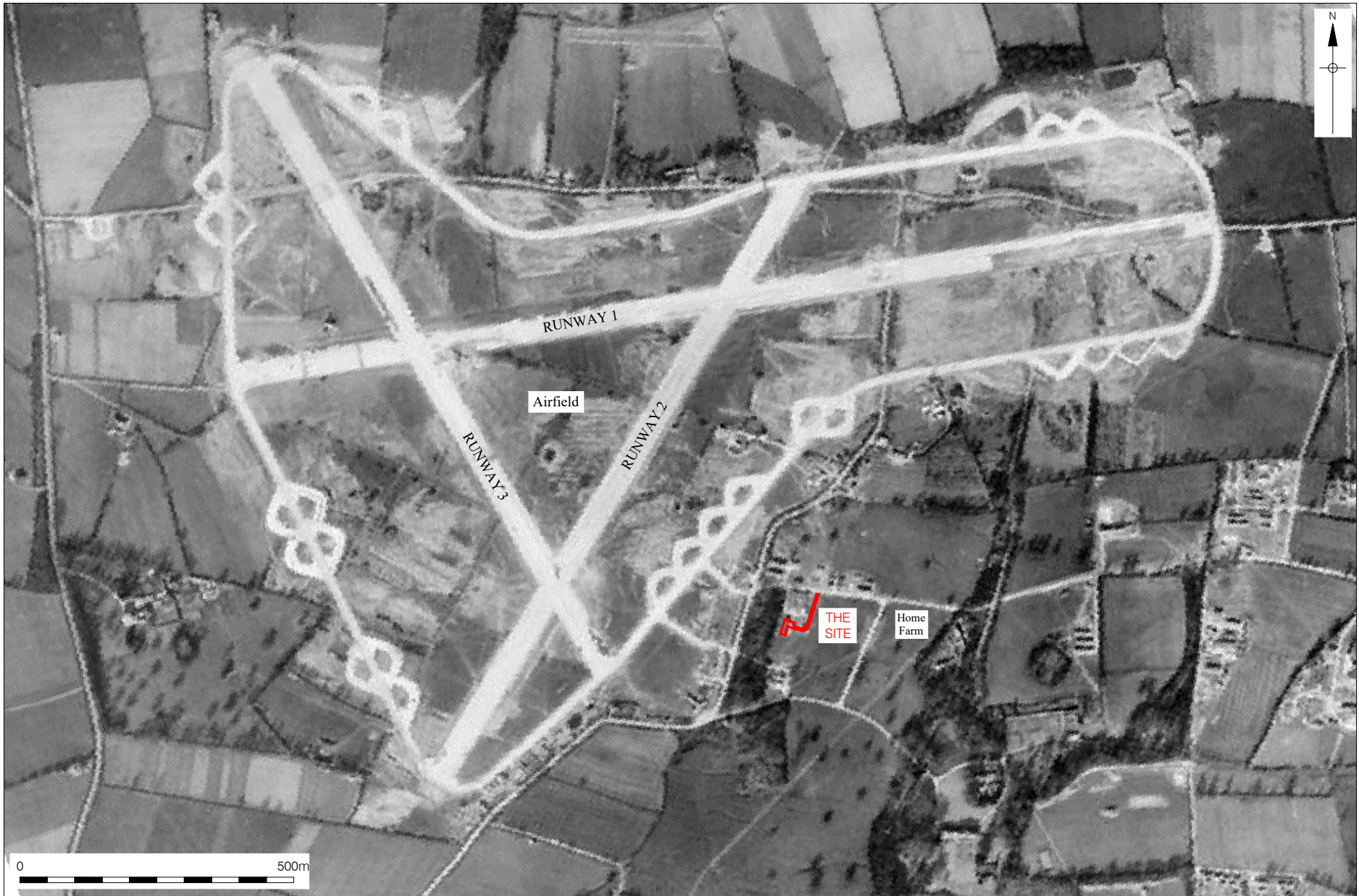
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Figure 2  
 Detailed Site Location  
 1:2,000 at A4



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Figure 3  
Ordnance Survey, 1900  
1:4,000 at A4



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Figure 4  
Aerial Photograph of RAF Husbands Bosworth taken 1941-43  
approx 1:10,000 at A4

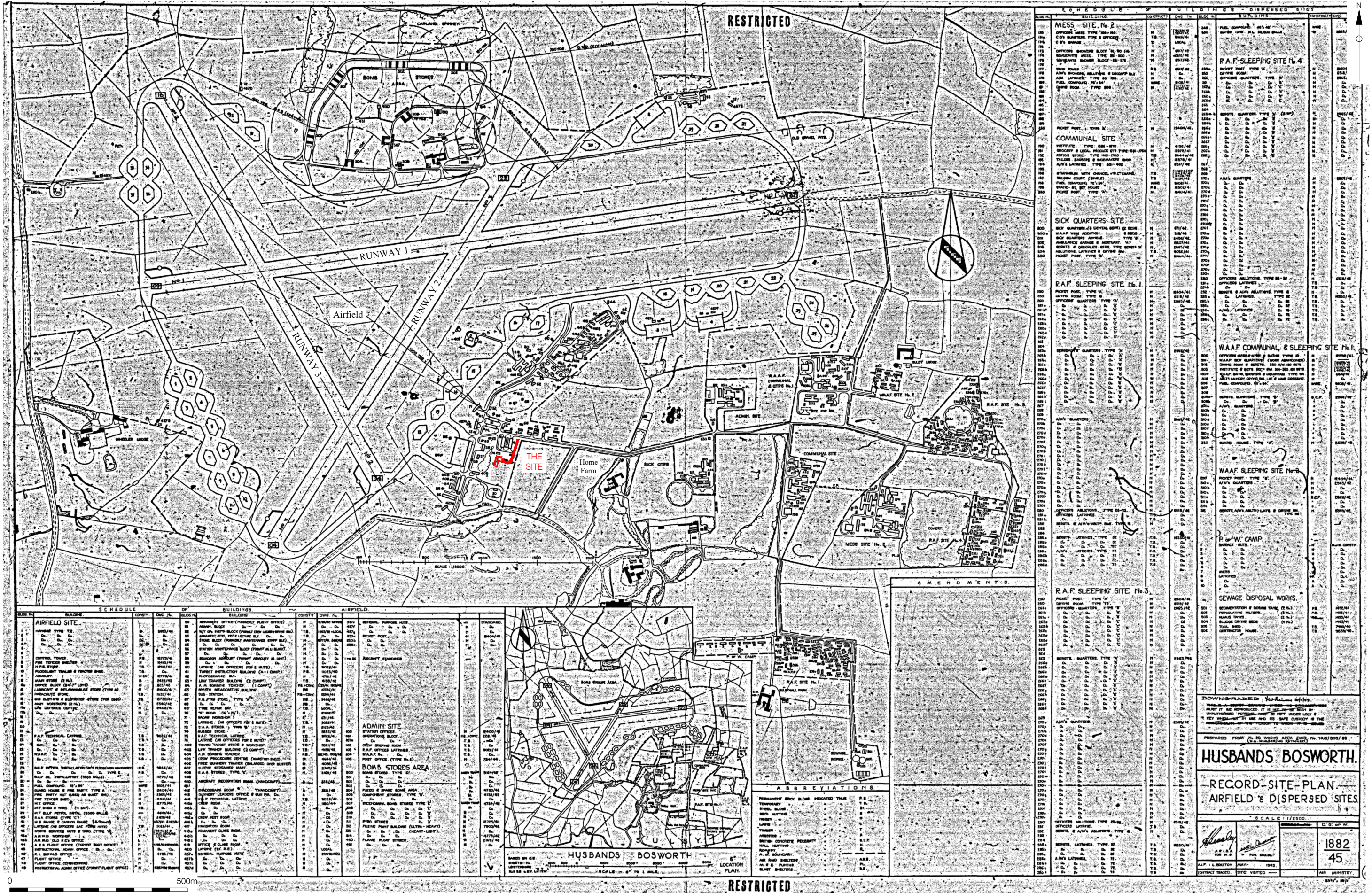
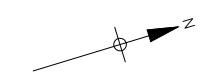
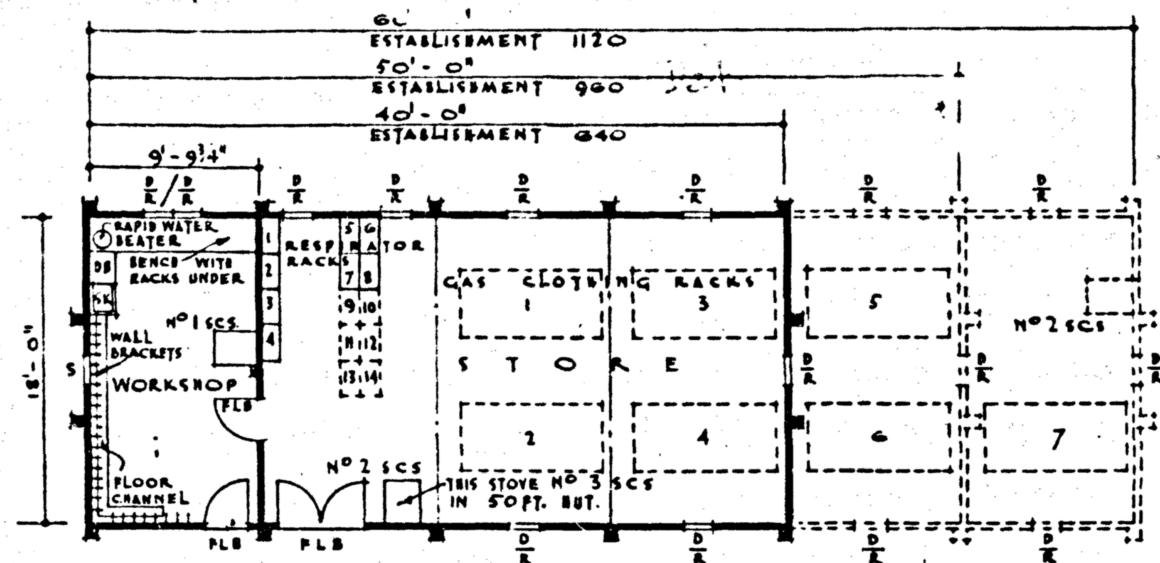


Figure 5  
 Husbands Bosworth Airfield and Dispersed Sites Record Plan, 1945  
 approx 1:10,000 at A3



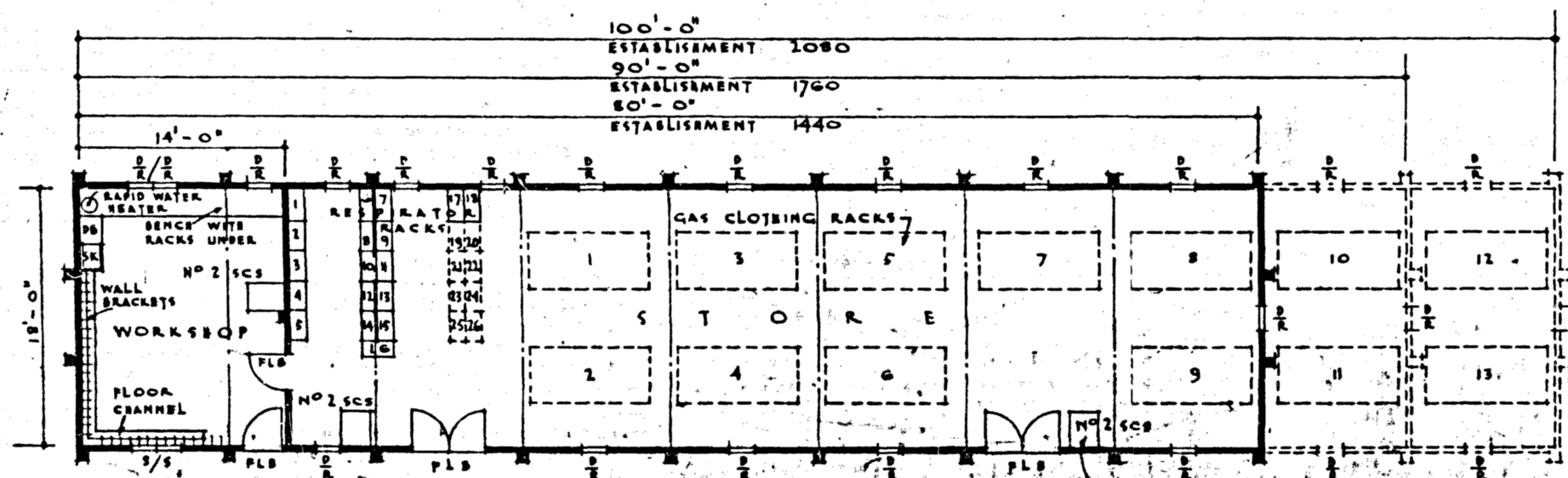


40000



SCHEDULE OF RESPIRATOR & GAS CLOTHING RACKS.

ESTABLISHMENT	GAS CLOTHING RACKS	RESPIRATOR RACKS
640	4	8
960	6	12
1120	7	14
1440	9	18
1760	11	22
2080	13	26



SCHEDULE OF FINISHINGS

ROOM	FLOOR	WALLS	ROOF
STORE	C.F.	F.F.	P.B. OR P.B. ON PERLINS
WORKSHOP	C.F. LAID TO FALL TO CHANNEL. CHANNEL TO FALL TO DRAIN.	F.F. 6'-0" HIGH P.C.B. BEHIND WALL BRACKETS.	DO.

NOTES:  
 FOR ABBREVIATIONS & SCHEDULES OF WINDOWS, SEE A.M. DWG. 10110/41.  
 BUILDINGS TO HAVE 10'-0" HIGH WALLS.  
 GAS CLOTHING RACKS ARE D. OF E. SUPPLY.

TYPE

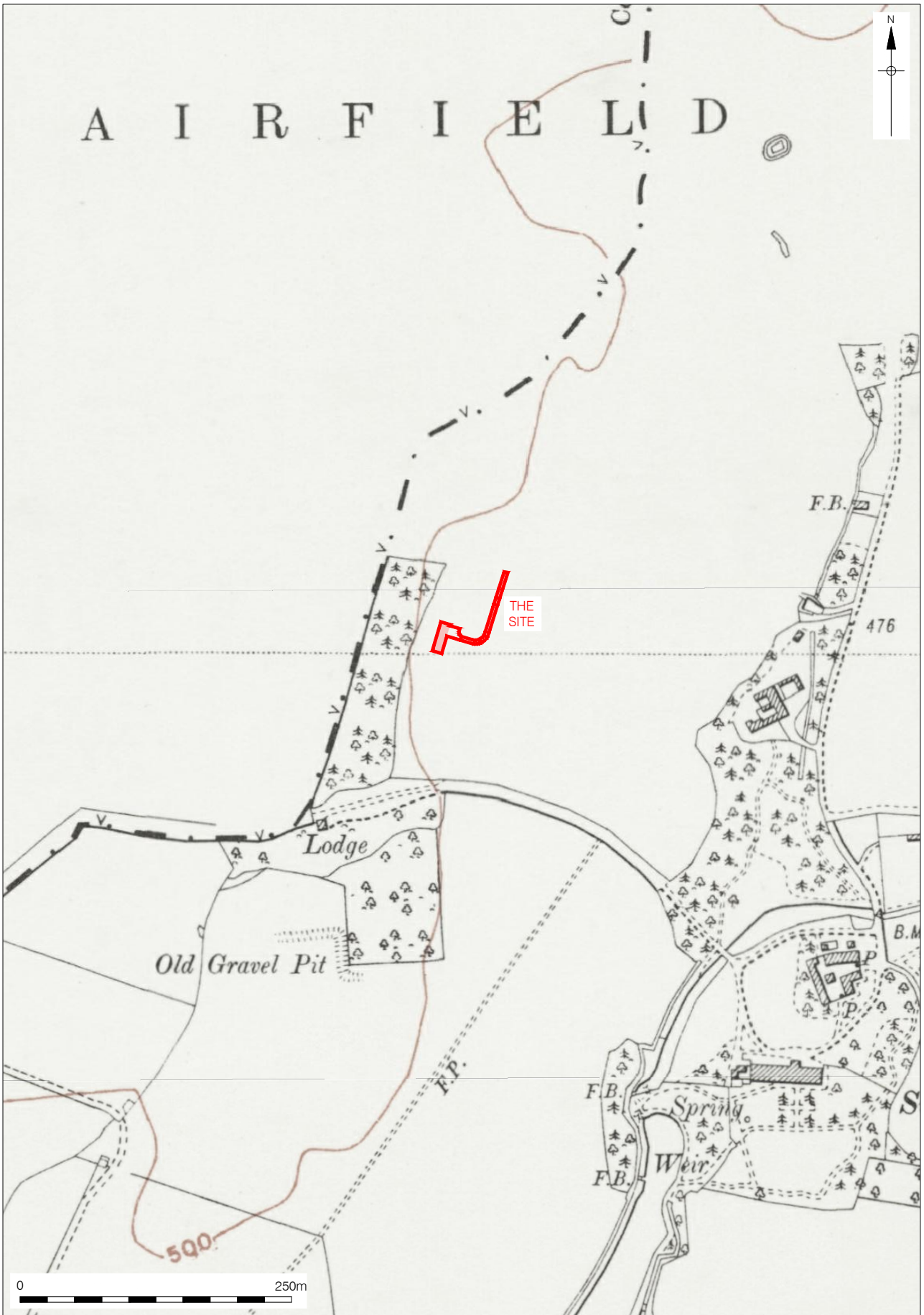
TEMPORARY BRICK CONSTRUCTION

GAS CLOTHING & RESPIRATOR STORE

FOR ESTABLISHMENTS OF: 640, 960, 1120, 1440, 1760 & 2080

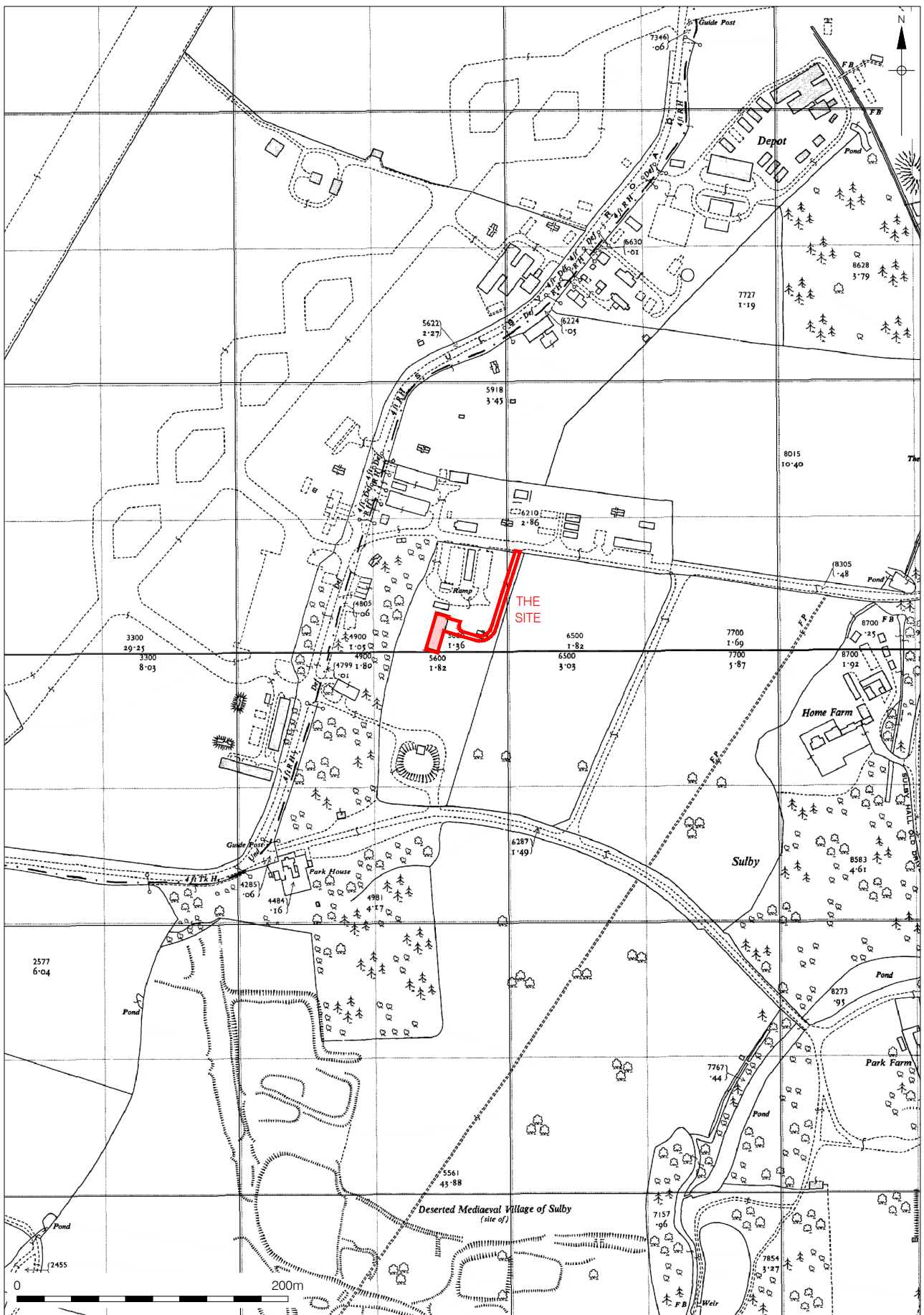
SCALE: ONE INCH TO EIGHT FEET.

<i>F. Lambert</i> FOR W8 K.R.L. G.M.M.	<i>G. J. ...</i> FOR D.G.W.	AIR MINISTRY
		REQD. NO. 12409/41
		D. OF W.



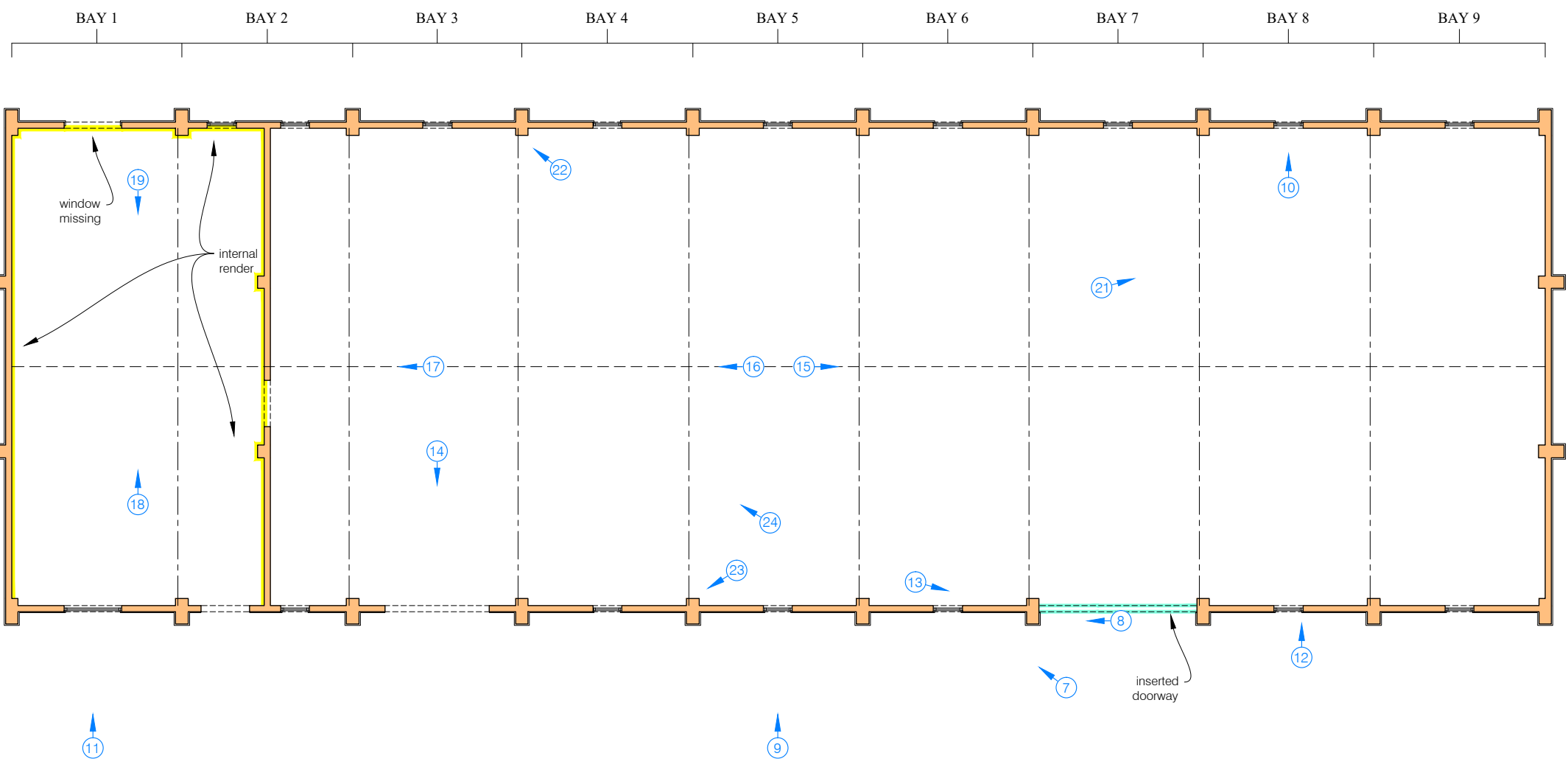
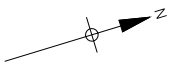
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Figure 7  
Ordnance Survey, 1950  
1:5,000 at A4



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Figure 8  
 Ordnance Survey, 1962-75  
 1:4,000 at A4

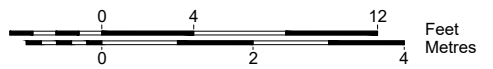


1942-43

Internal Render

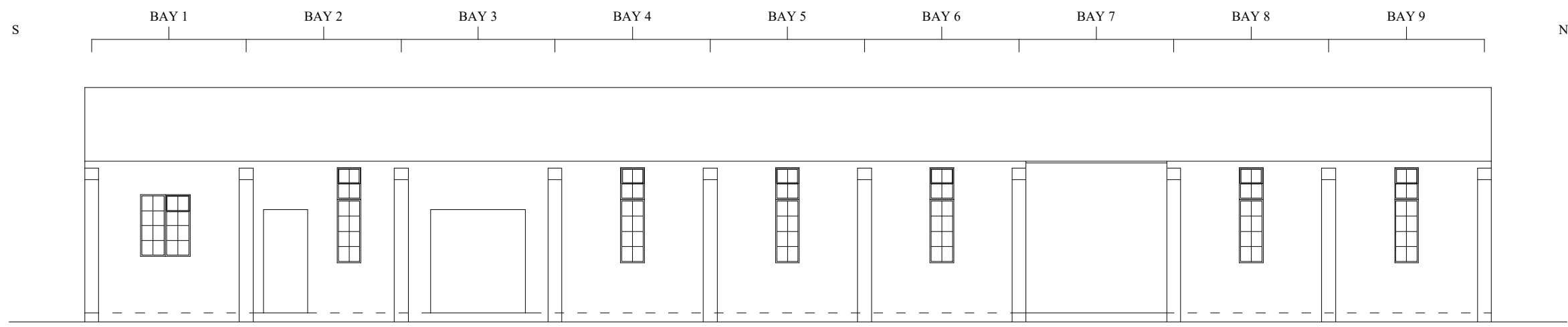
Post 1950

1 Location and Direction of Plate

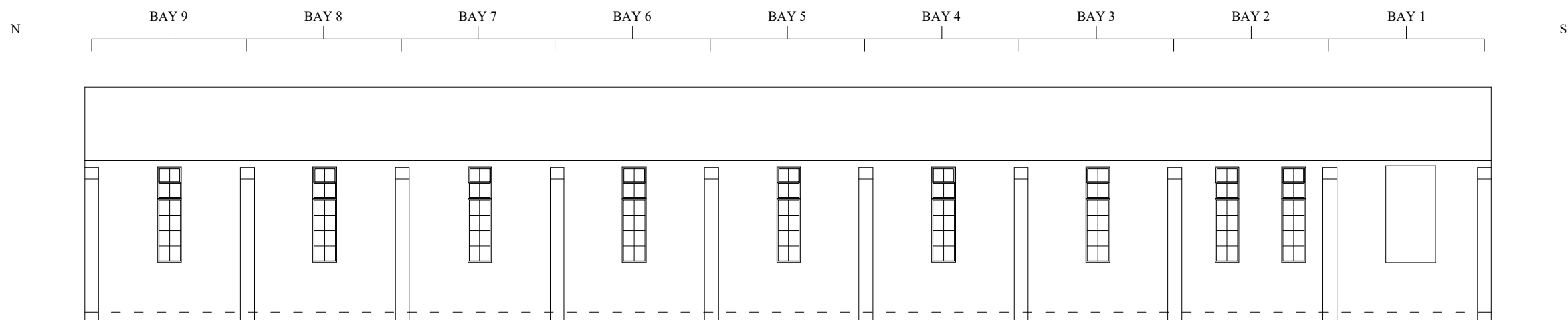


Drawing based on Plan taken from Existing Site Plan & Layout (W66(ex)01a) supplied by architects le1  
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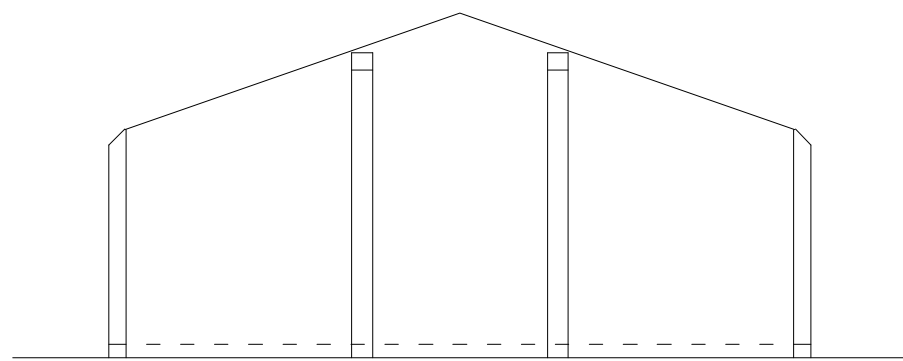
Figure 9  
 Existing Ground Floor Plan with Plate Directions  
 1:100 at A3



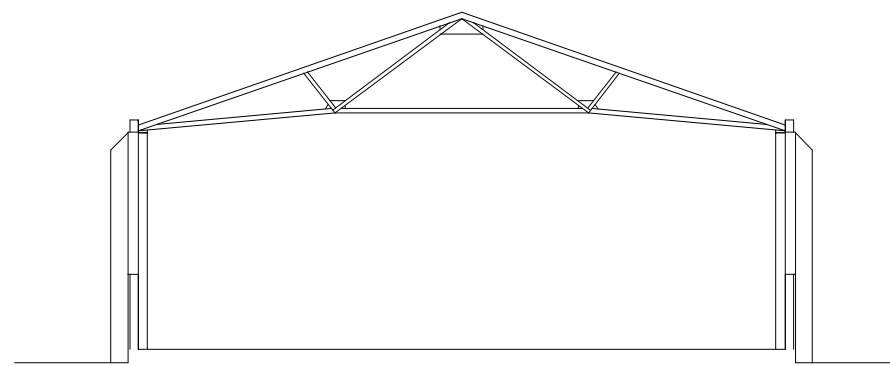
Front (East) Elevation



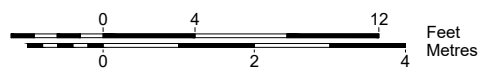
Rear (West) Elevation



Side Elevation

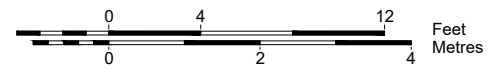
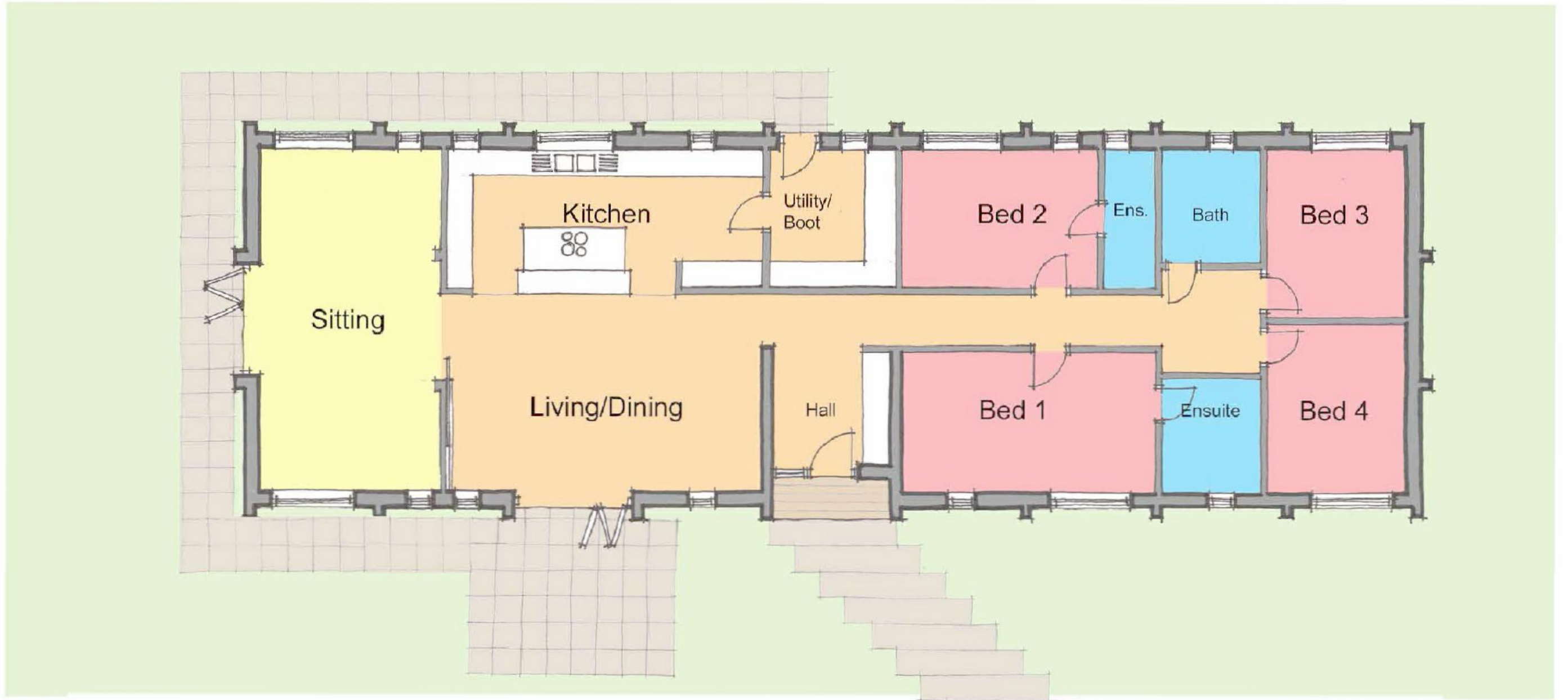
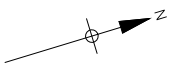


Section



Drawing based on Elevations & Section taken from Existing Site Plan & Layout (W66(ex)01a) supplied by architects le1  
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Figure 10  
 Existing Elevations & Section  
 1:100 at A3



Drawing based on Proposed Floor Plan (dwg no. W66 (SK03a) supplied by architects le1  
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Figure 11  
Proposed Ground Floor Plan  
1:100 at A3

S

N



Front (East) Elevation

N

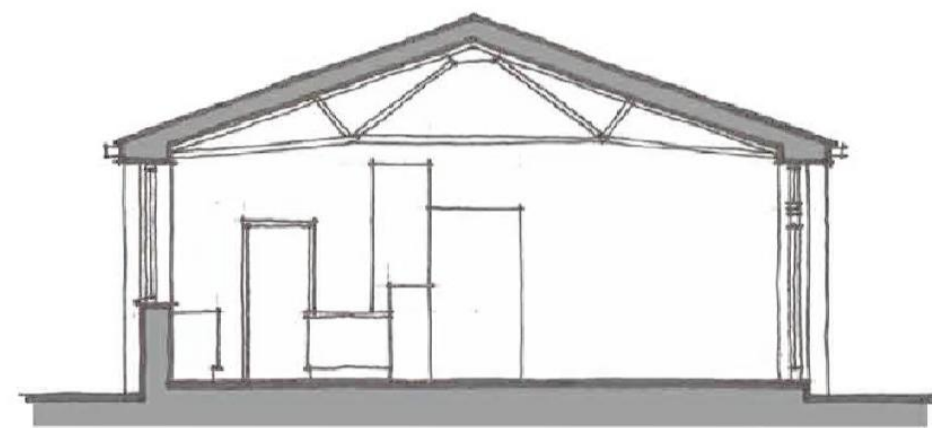
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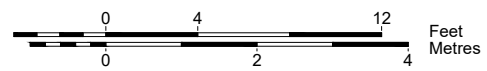
Rear (West) Elevation



Side Elevation



Section



Drawing based on Elevations & Section taken from Existing Site Plan & Layout (W66(ex)04a) supplied by architects le1  
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Figure 13  
Clothing and Respirator Stores  
at RAF Fortune





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Figure 14  
Parachute Store  
at RAF Fortune



Plate A: Eastern elevation looking west (photograph provided by the Client)



Plate B: Interior looking north (photograph provided by the Client)



Plate 1 Eastern elevation looking west



Plate 2 Eastern elevation looking south-west



Plate 3 Western elevation looking east



Plate 4 Western elevation looking north-east



Plate 5 Southern gable elevation



Plate 6 Northern gable elevation



Plate 7 Detail of spalled brickwork



Plate 8 Spalled and detaching brickwork (bay 6) looking south



Plate 9 Typical tall window (external), looking west



Plate 10 Upper (hopper) window and plain window stay (internal)



Plate 11 Squat 'double' window to bay 1





Plate 12 Integral metal tie built into brickwork



Plate 13 Batch/building number '25' scribed into top of window lintel



Plate 14 Original opening (part collapsed) to bay 3



Plate 15 Interior (bays 3-9) looking north



Plate 16 Interior (bays 8-3) looking south



Plate 17 Internal dividing wall looking south



Plate 18 Bays 1-2 looking west, showing internal render



Plate 19 Bays 1-2 looking east



Plate 20 Floor slab



Plate 21 Triangulating truss looking north-west



Plate 22 Concrete pad on top of pilaster



Plate 23 Bolted connection between pilaster and truss via L bracket



Plate 24 Brackets supporting softwood purlins



Plate 25 Former parachute shed (now car repair workshop) looking east

# PCA

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