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## Exeter Skypark, RGF Site Clearance

Photographic record of  
Exeter Airport's  
Historic Runways, Taxiways and Aprons

Planning Application Ref: 06/3300/MOUT  
Ref: 100861.01  
December 2013



## **Exeter Skypark, RGF Site Clearance**

### **Photographic record of Exeter Airport's Historic Runways, Taxiways and Aprons**

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# Exeter Skypark RGF Site Clearance

## Photographic record of Exeter Airport's Historic Runways, Taxiways and Aprons

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# Exeter Skypark RGF Site Clearance

## Photographic record of Exeter Airport's Historic Runways, Taxiways and Aprons

### 1 INTRODUCTION

#### 1.1 Project background

- 1.1.1 Wessex Archaeology was commissioned by St Modwen Developments Ltd (the Client), to carry out a programme of photographic recording of areas of surviving historic hard standing, including taxiways and runways at the Exeter Skypark (Exeter Airport), Clyst Honiton Devon, centred on National Grid Reference (NGR) 299617 94227 (**Figure 1**).
- 1.1.2 Planning permission (Reference 06/3300/MOUT), with conditions, has been granted by East Devon District Council (EDDC), the local planning authority (LPA), for the Skypark Office/Industrial development.
- 1.1.3 As part of the pre-commencement works it is necessary to remove large areas of hard standing that compromise runways, taxiways and aprons associated with the use of the Site as Exeter International Airport and historically most significantly, during WWII.
- 1.1.4 Following consultation by the LPA in regard of the remediation works with Stephen Read, of the Devon County Council Historic Environment Team (HET), the archaeological advisor acting on behalf of the LPA it was recommended that:

*"The proposed remediation works will involve the removal of part of Exeter Airport's historic runways, taxiways and aprons. These features along with the remains of buildings and defensive structures were constructed during WWII when the airfield was used by the RAF and USAAF during the Battle of Britain and in support of D-Day and should be regarded as heritage assets of regional significance. Exeter Airport lies in an area of archaeological potential with regard to known prehistoric activity in the vicinity and wider landscape.*

*I would therefore advise that these remediation works were undertaken with an archaeologist in attendance to (i) make a rapid written and photographic record of the historic runways etc prior to their removal, and (ii) monitor the removal of the fabric of the runways etc to allow for the identification, investigation and recording of any earlier archaeological deposits or features exposed by the removal of the makeup of the runways or any other associated groundworks.*

*The groundwork contractors should also be made aware of the historic sensitivity of WWII structures and features adjacent to the proposed remediation works to prevent accidental damage and to ensure these are not affected without appropriate archaeological mitigation in place"*



- 1.1.5 The archaeological work was carried out in accordance with a Written Scheme of Investigation (WSI) (Wessex Archaeology 2013) which was agreed advance of the work by the HET.

## **1.2 Site location and description**

- 1.2.1 The Site is located to the north of Exeter International Airport and to the east of Clyst Honiton. The London Road borders the Site immediately to the north and beyond the perimeter of the airport. The Site comprises areas of hard standing that form part of the airports runways, taxiways and aprons of the WWII airfield. Much of this area is not used by the modern airport and features such as runways and aircraft pens have become overgrown or destroyed. Built structures, including shelters and pill boxes are extant but are also overgrown. These built features form part of future mitigation and are not recorded in detail here.

## **2 AIMS**

### **2.1 Introduction**

- 2.1.1 The principal aim of the work was to undertake a photographic record of the historic runways, taxiways and aprons etc that will be affected by the redevelopment works prior to their removal and to compile a written record of the results. The photographic record and reporting was, in principle, compliant with a Level 1 basic visual record as described in Understanding Historic Buildings: A Guide to Good Recording Practice (English Heritage 2006). In this instance, it is felt appropriate to raise the record level to a Level 1-2 which, allows a more detailed description of the surviving features, and places them in a historic context
- 2.1.2 A further aim of the monitoring was to ensure that no damage occurs to a number of designated heritage assets which are integral to the WWII history of the airport. In particular, the Fighter Pen on the west side of the Site and the Hamilton Picket Fort on the east side of the Site.
- 2.1.3 To disseminate the results of the monitoring through the deposition of an ordered archive and by the production of a post-excavation report, and if appropriate, by the production of a suitable publication.

## **3 METHODS**

- 3.1.1 The photographic survey of the area was carried out on 14<sup>th</sup> November 2013.
- 3.1.2 Where possible areas of surviving hard standing and perimeter track were photographed using a digital camera. The direction and number of each shot was transferred to a plan of the site and individual entries made onto Wessex Archaeology photographic pro-forma sheets. The information recorded on the sheets included, as a minimum, the unique image number and direction of view. This information was checked against existing historical mapping for comparison.

## **4 ARCHAEOLOGICAL BACKGROUND**

### **4.1 Introduction**

- 4.1.1 The archaeological and historical background to the Site and surrounding area has been presented in detail within an Archaeological Desk-based Assessment (AOL Archaeology



2006) for the Skypark development, which is contained within the Archaeology and Cultural Heritage section (13) of the Environmental Statement (Halcrow 2006) for the Skypark development. As this report deals specifically with the surviving World War Two areas of hard standing, it is deemed appropriate that a brief historic background relating to the air field WWII history is provided. This summary of the historic background is taken from Paul Francis' detailed Historic Airport Survey for Devon County Council & East Devon District Council of 1999.

- 4.1.2 The Exeter Corporation was one of the first Municipal authorities (January 1932) to identify a suitable site for the location of a Municipal Airport. After a Public Inquiry, a start was made on preparing the landing ground and the Air Ministry duly granted a Licence on 31<sup>st</sup> May 1937.
- 4.1.3 The airfield was taken over by the National Air Communications in 1939, and transferred to the RAF in 1940, seeing both experimental and operational service. A large number of wartime features survive within the area of the airfield, including hangars, aircraft dispersal areas, fighter pens, Hamilton Picket Fort, sheds and pillboxes.
- 4.1.4 The hard surface runways and six dispersed single engine fighter pens were constructed not before June 1940 (Francis 1999). These were joined together by a 45.7m wide perimeter road and constructed by John Laing & Son Ltd. Later on, two twin-engined fighter aircraft pens were added to the west.
- 4.1.5 On 30<sup>th</sup> July 1941 camouflaging of the runways took place (Francis 1999). Black irregular lines to give the impression of hedges formed the main theme and black patches along the edge of runways were designed to break up the straight lines.
- 4.1.6 There is some reference, within the gazetteer provided by the Francis Report, to suggest that the runways were extended in 1942. The gazetteer indicates that several 'unknown' features were demolished for runway extension 'circa 1942'. How far, and exactly where the runways were extended is not known.
- 4.1.7 By the spring of 1944, it had been decided to use Exeter as a temporary American station to provide an aerodrome for the transportation to France of the US airborne troops stationed in Devon. It was at this time that work began along the north perimeter track on the construction of 'loop' type hard standings built to provide marshalling areas for C47 Dakotas.
- 4.1.8 After the war the airport gradually returned to civilian use, with the main focus to the south.

## **5 RESULTS**

### **5.1 Introduction**

- 5.1.1 The plan layout of the runways and perimeter features at Exeter Airport form a characteristic triangular pattern, with the main runways and perimeter road leading to reinforced fighter pens and transport marshalling areas. The present development occupies the northern half of the original runways together with the north-west and north-east perimeter road and associated features. For clarity, the various areas of hard standing, including runways, have been given unique identifiers but, where these areas of hard standing have been identified as relating to WWII features, reference has been made



to the gazetteer numbering for identified WWII airfield features in the Historic Airport Survey report by Paul Francis.

- 5.1.2 The Air Ministry had conducted air-raid trials at Netheravon in 1938 with regard to the protection of fighter aircraft. As a result, an aircraft dispersal scheme was introduced in 1939, where fighter aircraft were to be parked around the boundary of their airfield for their own protection (Francis 1999). It was found that blast was the main factor from which aircraft in the open should be protected. Another important factor was the pattern of dispersal, straight lines should be avoided. Irregularity and blast protection together formed the principal of aircraft dispersal.
- 5.1.3 Crucial to the dispersed nature of the aircraft, was the layout and functioning of the perimeter road and hard standing areas that circled the centre of the airfield. At Exeter, this WWII plan layout has been re-created in Paul Francis' survey report and is reproduced here as **Figure 2**. Also shown on this figure are the various fighter pen locations around the west side of the airfield and, in particular, the hard standings and taxi ways as well as the perimeter road. Gazetteer entry numbers for twin pens housing single engine fighter pens number 71, 81, 85, 90 and 92 and the two twin engine fighter pens, each housing two aircraft number 66 and 67 (**Figure 2**).
- 5.1.4 The north-west south-east section of runway is 'A', the north-east south-west section of runway is 'B' (see **Figure 1**).
- 5.1.5 The north end of runway A (north-west to south-east) was being used for part storage of pipes and concrete (**Plate 1**). A view from the south-east end of the runway, and looking across the crossing with runway B showed a textured tarmac surface. This was becoming broken in places (**Plate 2**). It was not possible to see what the sub strata was at this point but it is assumed to be hardcore.
- 5.1.6 Runway B (north-east south-west) has obviously been unused for some time and the textured tarmac surface has become broken with weeds growing through (**Plate 3**).
- 5.1.7 The tarmac perimeter road to the north-east has been used in modern times and still has a painted centre line (**Plate 4**). Where the marshalling areas have been added to the inside edge of the north-east perimeter road they have become overgrown with weeds but appeared to have been formed with poured concrete as they are made from flat panels.
- 5.1.8 The west perimeter track meanders down the west side of the runways, presumably this effect was intended to increase the irregularity in plan so that blast from bombs would not be allowed to travel in straight lines. This area is where the single engined fighter pens were located and each of these was accessed by a single curved metalled track which led directly off the tarmac perimeter road. The aircraft, once inside the pen was turned by hand. At the north-west end of the perimeter track is fighter pen 92 (**Plates 5-6**). This was accessed by a metalled track with a hardcore base.
- 5.1.9 Other tracks along the perimeter road led to buildings located down this side of the airfield. Similar in nature, they too were curved in plan and able to take aircraft. **Plate 7** shows a view of the access track which originally led to a blister hangar (gazetteer number 88).





- 5.1.10 Fighter pen 90 was overgrown and the metalled surface was covered with weeds and moss. However, it was possible to see that the pen was set on a hardcore base. The tarmac perimeter road at this location was breaking up (**Plate 8**).
- 5.1.11 At the very south-west extent of the site, the perimeter road was overgrown and covered in scrub (**Plate 9**). It is in this area that the additional twin-engined fighter pens were built. Fighter pen 67 remained relatively unspoilt, whereas, fighter pen 66 had been damaged. It is likely, due to the increase in weight, that the twin engined fighter pens were constructed with a hardcore base and a tarmac surface. This surface was still visible within pen 67 (**Plate 10**).

## 6 CONCLUSION

- 6.1.1 The rapid photographic survey of the WWII hard standings and perimeter road around Exeter has shown that they were built to an accepted pattern typical of airfields preparing for anticipated threats from the air. The record has shown that the perimeter road, used for taxiing aircraft to and from the runways was constructed from a hard core base with a tarmac surface. Access tracks to features such as buildings and fighter pens appear to have been based on a hard core base and rammed metalled surface.
- 6.1.2 Variations to this would be the two added twin fighter pens to the west. These also had tarmac surfaces due to the increase in weight. The later looped marshalling areas, constructed later in the war for transport aircraft to assist in the D-Day assault, were formed from poured concrete as the weight of the transport aircraft was even greater.
- 6.1.3 Associated structures and buildings which survive around the air field will probably be the subject of further archaeological mitigation in the future.

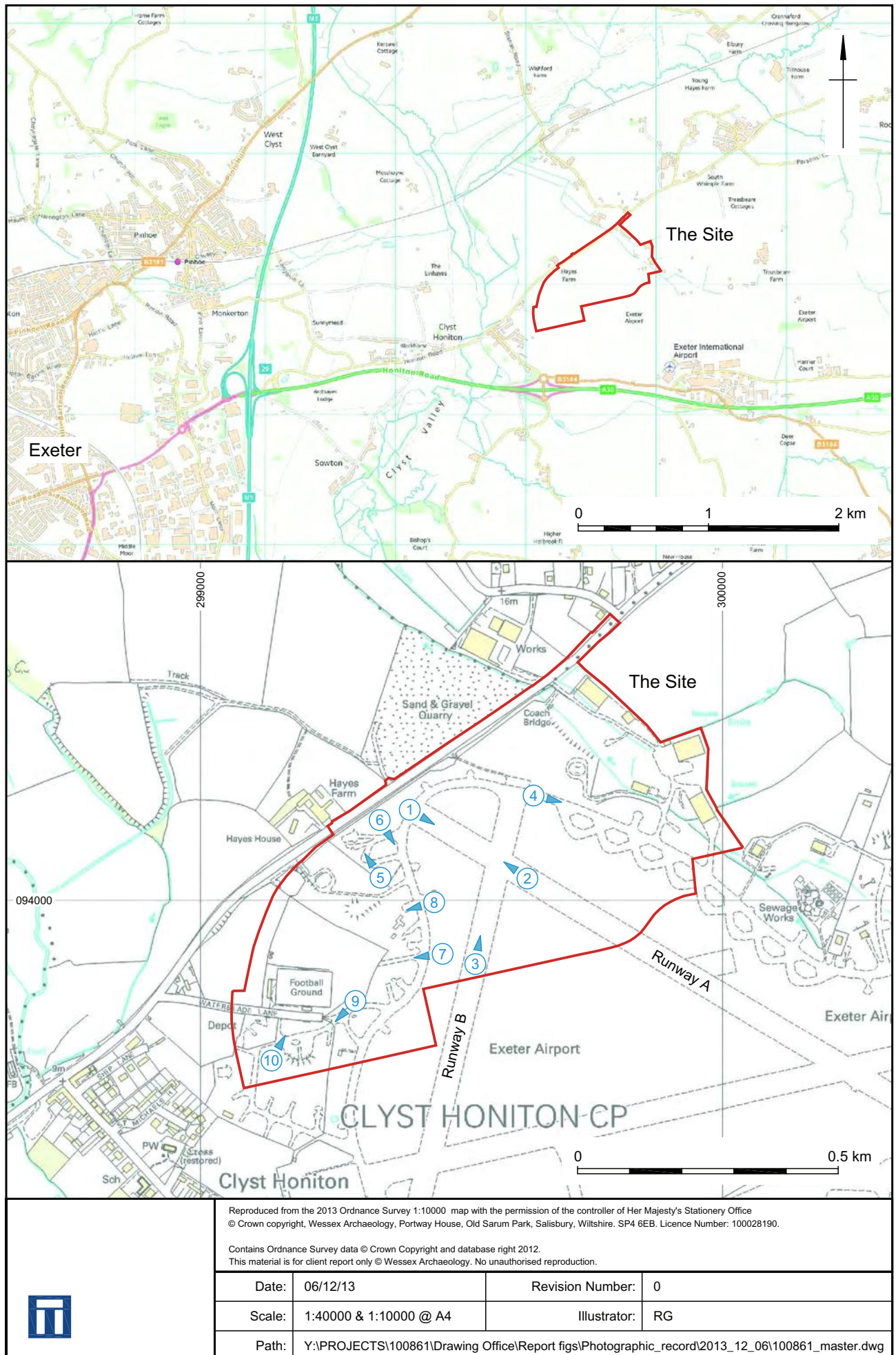
## 7 REFERENCES

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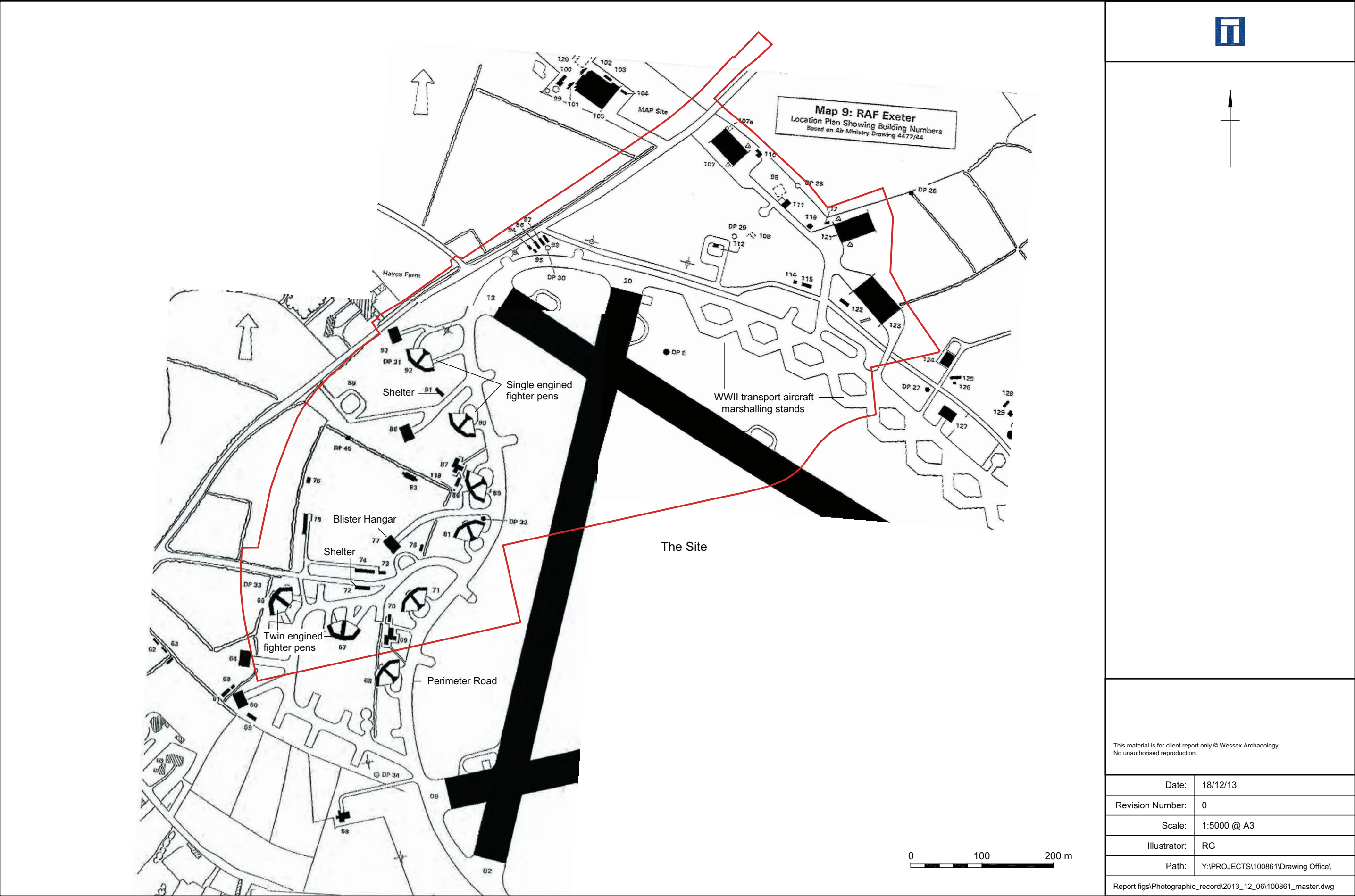
Wessex Archaeology 2013. Exeter Sky park RGF Site Clearance Written Scheme of Investigation for Photographic Recording and Programme of Archaeological Monitoring. Unpublished client report



Site location, showing the direction and number of plate

Figure 1





Plan of RAF Exeter in 1944 taken from Historic Airport Survey 1999

Figure 2



Plate 1: Runway A looking south-east



Plate 2: Runway A looking north-west


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Plate 3: Runway B looking north-east



Plate 4: North-east perimeter road with late WWII transport marshalling loops to right of image


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Plate 5: Fighter pen 92 shelter and remaining hard standing



Plate 6: North-west metallised track to fighter pen 92 looking south


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Plate 7: View looking south-west along access track to former blister hangar site.  
Shelter 91 to right of image



Plate 8: Surviving tarmac surface of perimeter road and hardcore base of fighter pen 90



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Plate 9: View west along perimeter road looking west toward twin-engined fighter pen 67



Plate 10: View looking north from fighter pen 67 toward sleeping shelter 72.

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