

NYCC HER	
SNY	19364
ENY	464
CNY	1882
Parish	1015
Rec'd	07/03/2001

Archaeological Investigations at Marne Barracks, Catterick Garrison, North Yorksh

Phase 1 - Assessment report

by:

Archaeological Services
University of Durham

on behalf of:

**GVA Grimley and
Ministry of Defence**

**ASUD Report 703
January 2001**

*Archaeological Services
University of Durham*
South Road
Durham DH1 3LE
Tel: 0191 374 3641
Fax: 0191 374 1100
archaeological.services@durham.ac.uk
www.durham.ac.uk/archaeologicalservices

Archaeological Investigations at Marne Barracks, Catterick Garrison, North Yorkshire

Phase 1 - Assessment report

January 2001

by:

Archaeological Services University of Durham, South Road, Durham DH1 3LE.

for:

GVA Grimley, 3 Brindleyplace, Birmingham B1 2JB.

on behalf of:

Ministry of Defence

Contents

Summary	1
1. Introduction	2
1.1 Project background	2
1.2 The study area	2
1.3 Archaeological background	2
1.4 Academic Advisory Panel	3
2. Aims and objectives	3
3. Scheme of works	4
4. Methods statement	4
4.1 Desktop assessment	4
4.2 Walkover reconnaissance	5
4.3 Gradiometer survey	5
4.4 Topographic survey	6
4.5 Geotechnical test pits	7
4.6 Auger survey	7
4.7 Mapping	8
5. Results of investigations	8
5.1 Desktop assessment	8
5.2 Walkover reconnaissance	26
5.3 Gradiometer survey	27
5.4 Topographic survey	31
5.5 Auger survey	36
6. The archaeological resource	37
6.1 Prehistory	37
6.2 Roman	38
6.3 Post-Roman/Anglian to Conquest	40
6.4 Post-Conquest	41
6.5 Post-medieval	42
6.6 Modern	42
7. Potential impact on archaeological resource	43
8. Conclusions and recommendations	45
8.1 Summary of archaeological resource	46
8.2 Castle Hills management proposals	47
8.3 Phase 2: Evaluation	47

8.4 Possible programme of further works	48
9. Acknowledgements	49
10. Personnel	49
11. References	50

Figure 1 Location map showing previous and present investigations
Figure 2 Aerial photographic and cartographic evidence
Figure 3 Landscaping, geotechnical and augering information
Figure 4 Geomagnetic survey of the airfield
Figure 5 Geophysical interpretation
Figure 6 Archaeological interpretation
Figure 7 Hachure plan of Castle Hills
Figure 8 Contour map of Castle Hills
Figure 9 Relief map of Castle Hills
Figure 10 The archaeological resource
Figure 11 Areas of high, medium and low archaeological potential
Figure 12 Proposed landuse framework
Figure 13 Spatial strategy for further work

Plate 1 Oran House	18
Plate 2 Larders at Oran House	19
Plate 3 Barn and stables at Oran House	19
Plate 4 AP dated 26-6-1930	21
Plate 5 View from Castle Hills to Oran House	32
Plate 6 Motte ditch showing use as track	33
Plate 7 Pillbox at Castle Hills	35
Plate 8 Gun emplacement at Castle Hills	35

Appendix I SAM and Listed Buildings entries	53
Appendix II Aerial photograph catalogue	54
Appendix III Maps held in the CRO	55
Appendix IV Borehole descriptions	56
Appendix V Locations of previous Marne finds	59

Summary

In 1999 the Ministry of Defence (MoD), through the Defence Estates (DE), commissioned GVA Grimley to prepare an Establishment Development Plan (EDP) for Marne Barracks, Catterick Garrison, to guide the long-term expansion and redevelopment of the Barracks over the period 2000-2015 (GVA Grimley 2000).

The first phase of these investigations, as outlined in the EDP and ASUD's Technical Proposal (ASUD 2000), is reported on in this document. The Phase 1 works have included: a comprehensive desktop assessment of the archaeological resource both at Marne and in the broader Catterick area; a geomagnetic survey of 41ha of airfield; a topographic study of Castle Hills Scheduled Ancient Monument and its surroundings; and an auger survey of the northern part of the base. The information gathered during these investigations has been collated and discussed. An appraisal of the archaeological resource at Marne has been provided, both by archaeological period and by reference to the proposed development zones identified in the EDP.

Many of the features identified during the works have the potential to be of national or regional significance. A proposed programme for further investigations is provided (Phase 2: Evaluation).

1. Introduction

1.1 Project background

In 1999 the Ministry of Defence (MoD), through the Defence Estates (DE), commissioned GVA Grimley to prepare an Establishment Development Plan (EDP) for Marne Barracks, Catterick Garrison, to guide the long-term expansion and redevelopment of the Barracks over the period 2000-2015 (GVA Grimley 2000).

A key recommendation of the resulting EDP was the need to undertake a programme of non-intrusive and intrusive archaeological investigations at the Barracks. The results of these investigations will assist in the development of design solutions and confirm that the proposals contained in the EDP are acceptable, given the varied nature and potential national importance of the archaeological resource at the Barracks.

The first phase of these investigations, as outlined in the EDP and ASUD's Technical Proposal (ASUD 2000), is reported on in this document.

1.2 The study area (Figure 1)

Marne Barracks, formerly RAF Catterick, is situated immediately south of Catterick Village in North Yorkshire and is bounded to the west by the A1 and to the east by the River Swale (NGR centre: SE 247 970). The Royal Flying Corps first moved onto the site in September 1914 and it remained in use by the RAF until Land Command took over in 1994. The site occupies approximately 158 hectares and contains 122 buildings and 84 Service Family Quarters.

With the exception of Castle Hills, the land is predominantly level with a mean elevation of *c.*53m AOD. The solid geology of the area comprises Carboniferous Millstone Grit and Permian Magnesian Limestone, which is variously overlain by Boulder Clay, river gravels or alluvium, with a limited area of glacial sands and gravels immediately west of Castle Hills.

1.3 Archaeological background

Archaeological investigations in and around Catterick over recent decades have identified numerous sites of national importance. Much work in recent years has concentrated on the Roman town of *Cataractonium* and its hinterland; however, there have also been significant discoveries of sites from the Neolithic period onwards. The construction and subsequent modification of the A1 Catterick by-pass, together with extensive quarrying activities, have been the main stimuli for archaeological investigations in the area; recent works prior to proposed extensions to Scorton Quarry and Pallett Hill Quarry, and prior to quarrying within Catterick Racecourse, have revealed many significant prehistoric, Roman and later features.

With specific regard to Marne Barracks, the site is bounded on the west by the nationally important but unscheduled remains of the Roman roadside settlement at Bainsesse Farm (currently of unknown extent) and on the east by the scheduled Norman motte and bailey castle known as Castle Hills. It is believed that Castle Hills may also include the remains of an Anglian royal vill and cemetery, and possibly earlier native British features. Previous investigations at the Barracks have revealed the presence of Roman buildings, a pottery kiln, Anglian burials, a *Grubenhau*,

numerous pits and part of a Romano-British field system. These investigations and others are described in more detail below (Section 5.1.1). The extents of the settlements, field systems and cemeteries are all currently unknown.

The archaeological resource at Marne Barracks has the potential to elucidate the settlement history and political development of the area, particularly for the period covering the end of Roman influence to the Norman Conquest.

1.4 Academic Advisory Panel

An overview panel of leading experts in relevant fields of archaeology was established in order to advise the project team on the extent of modern academic knowledge and its significance for interpreting the likely extent and nature of the archaeological resource identified.

The panel comprises: Prof Rosemary Cramp, one of the foremost experts on religious and secular settlement in Anglian archaeology in the north of England; Dr Richard Hingley, an expert on Roman villas and rural settlement; Dr Sam Lucy, a specialist in Anglo-Saxon burial archaeology in England, particularly in Yorkshire; and Dr Peter Wilson, one of the foremost experts on the Roman and Anglian archaeology of the Catterick area, and director of excavations at Catterick in advance of the most recent A1 upgrading in the early 1990's.

2. Aims and objectives

The overall aims of the desktop assessment and surveys were to produce a critical assessment of the available evidence and development information, and to formulate and recommend appropriate evaluation and mitigation strategies which would realise the potential of the site. The investigations are designed to provide added value to existing knowledge.

Key objectives to be met in the assessment and survey stage included:

- Characterisation of the pattern of landscaping across the site, including areas of truncation and accumulation
- Identification of locations or circumstances where contiguous area excavations could be undertaken, at evaluation and/or mitigation stages, to provide added value information
- Identification of circumstances where appropriate non-destructive investigation elsewhere on site could provide new information to offset the loss of resource due to development
- Formulation of a strategy for dealing with linear services corridors, including area heating systems, foul and surface water drainage, electricity, telecommunications, etc
- Setting out a spatial strategy for further investigations in plan form
- Identifying issues or constraints in dealing with the archaeological resource within a design and build or prime contractor environment

3. Scheme of works

The following tasks have been undertaken during this phase of the works:

- Extensive desktop study of all existing documentary, photographic, cartographic, archival and administrative records
- Walkover reconnaissance of the site
- Gradiometer survey of the airfield within the perimeter road
- Topographic survey of Castle Hills and its immediate surroundings
- Limited programme of hand-augering
- Use of CAD to store and present information
- Preparation and dissemination of a synthetic report

The observation and recording of geotechnical trial pits has not been possible due to the postponement of such engineering excavations.

4. Methods statement

4.1 Desktop assessment

The desktop assessment has been carried out in accordance with the IFA *Standard and Guidance for archaeological desk-based assessment* (1999).

The assessment took the form of a study of all known documentary, photographic, cartographic, archival and administrative records relevant to the site and its immediate environs. The assessment collated and reviewed the many sources of information relevant to the Barracks, including:

- MoD estate records relating to land use history
- RAF photographs and records
- Catterick Garrison Conservation Panel records
- Richmondshire Museum
- Local amateur archaeologists
- Former RAF Catterick personnel
- Excavation archives
- Published papers and articles
- Other archaeological project archives
- Defence of Britain Project staff
- North Yorkshire Sites and Monument Record
- National Monuments Record
- County Records Office
- Historic maps, including all Ordnance Survey editions
- Written local histories, including the Victoria County History
- Place name evidence
- Aerial photographs held at the Universities of Durham and Newcastle

- Archaeological Services University of Durham - local information room
- University of Durham - libraries

Attempts have also been made to contact and interview people who might remember the early development of the airbase.

Archaeological finds from Marne Barracks, their provenance and current locations are listed (Appendix V) and their archaeological significance discussed.

4.2 Walkover reconnaissance

A walkover reconnaissance of the Barracks site has been undertaken in order to identify any features of potential archaeological interest, particularly in the area of the Castle Hills earthworks. Such features include parchmarks, ridge and furrow remains and other earthworks. The reconnaissance has also enabled identification of areas of landscaping, truncation or overburden. The results of the reconnaissance have been integrated throughout the report.

4.3 Gradiometer survey

All ASUD geophysical work is carried out in accordance with English Heritage (1995) Research and Professional Services Guideline No.1, *Geophysical survey in archaeological field evaluation* by qualified, experienced members of ASUD staff using state-of-the-art field instruments and software.

A fluxgate gradiometer survey has been carried out over the undeveloped, grassed area of the airfield, comprising c.41 hectares (Figure 1).

4.3.1 Technique selection

Some geophysical survey techniques are more suitable than others in particular situations, depending on a variety of site-specific factors including the nature of likely targets; depth of likely targets; ground conditions; proximity of buildings, fences or services, as well as the local geology and drift. Previous surveys and excavations on this airfield (undertaken by this author in 1994 for GeoQuest Associates) indicated that cut features, such as ditches and pits, could be detected and mapped using a geomagnetic technique. It was likely that other types of features (such as trackways and wall foundations) and fired structures (such as kilns and hearths) might also be present on the airfield and, given the shallowness of the targets and the non-igneous geological environment, a geomagnetic technique was considered appropriate for detecting each of these types of feature.

4.3.2 Field methods

A 100m survey grid was established across the airfield using a Wild T1000 total station survey instrument and SDR33 datalogger. This grid was then tied in to known, mapped Ordnance Survey points using the total station. The 100m grid was subsequently sub-divided into 20m grid squares using tapes.

Measurements of vertical geomagnetic field gradient were determined using a Geoscan FM36 fluxgate gradiometer fitted with an ST1 sample trigger to enable automatic logging of the data. A zig-zag traverse scheme was employed and data logged in 20m grid units. The instrument sensitivity was set to 0.1nT, the sample

interval to 0.5m and the traverse interval 1.0m, thus providing 800 sample measurements per 20m grid unit.

4.3.3 Data processing

Data were downloaded on-site into a RM NoteBook computer for processing and storage and subsequently transferred to a desktop computer for processing, interpretation and archiving. InSite v.3 software was used to interpolate the data to form one array of regularly-spaced values at 0.5 x 0.5m intervals and to produce a continuous tone greyscale image of the raw data (Figure 4, and inside back cover). The greyscale is presented by importing the image directly into a digital plan of the airfield, using total station data. A palette bar relating the greyscale intensities to anomaly values in nanoTesla is included with the image.

This greyscale image represents some 1,640,000 data points, and over 500 km of legwork by the instrument operator.

The following basic processing steps have been applied to the data:

- | | |
|----------|---|
| DeSpike | replaces isolated spikes in the data with the mean of near-neighbours. Such spikes typically arise due to the presence of near-surface ferrous litter |
| DeStripe | reduces apparent striping artefact in magnetometer data collected along zig-zag traverses |
| DeDrift | corrects for a linear drift in instrument calibration with time |
| DeShear | corrects for apparent shear in geomagnetic anomalies surveyed by zig-zag traversing |
| Match | adjusts for differences in mean data level between adjacent grids |
| Merge | interpolates and combines grid data, using a bilinear function, to form one array of regularly-spaced data at 0.5 x 0.5m intervals |

Colour-coded geophysical and archaeological interpretation plans are provided (Figures 5 & 6), together with a full discussion of the results and their implications with regard to the future development of the Barracks. Modern services etc. have been clearly distinguished.

4.4 Topographic survey

The topographic survey has been undertaken over the Castle Hills SAM and its surrounding area, covering c. 15 hectares depending upon accessibility and visibility (Figures 1, 7, 8 & 9). This task was carried out in late November 2000, when much of the undergrowth had died down and the leaves were off the trees, in order to enable identification of topographical details of potential significance which might otherwise have been obscured.

Two methodologies were proposed, one conforming and one non-conforming to the specification. The non-conforming specification was designed to provide a firmer basis for achieving the objectives of the project.

Conforming: The survey to be carried out using a Wild T1000 total station survey instrument with SDR33 datalogger. Contours to be drawn at 0.25m intervals from measurements taken at 10m intervals on slopes and 20m intervals on flatter areas. The survey output to include a contour plan produced using *Surfer* mapping software. The data also to be presented in the form of a hachure plan. The survey to contain annotation and a brief descriptive text.

Non-conforming: A closer sampling interval to be employed where the topography is more varied, in order to map potential features of archaeological interest more precisely. More detailed mapping of surviving river terraces to be undertaken as appropriate. Data points to be chosen in order to illustrate archaeological and significant topographical features. The contour data to be used as a base for a more detailed hachure survey. The position of archaeological earthworks to be recorded, and the hachure plan to provide an accurate interpretative representation of the features. The plan to be annotated and a textual description provided. Where complex earthworks are noted, these may be recorded as areas where further work may be required. The contour data also to be presented as a digital terrain/relief model.

4.5 Geotechnical test pits

No geotechnical trial pits have been excavated for engineering purposes during Phase 1 of the archaeological investigations, and so none have been observed or recorded.

4.6 Auger survey

An application for a 'Permit to Dig' was submitted to the Works Service Manager, indicating our intention to auger and describing the area of the survey and our field methods. The permit was issued on 6th November 2000 (Serial no. 78 1938). A U-Scan cable avoidance instrument was used to locate services and mains prior to augering. It was originally hoped that the augering would be undertaken at the same time as the geotechnical test-pitting, in order that both parties could observe the stratigraphy revealed in each other's investigations. However, geotechnical test-pitting was postponed until later in 2001. The area of the survey is shown on Figure 1. Two methodologies were proposed for the augering, one conforming and one non-conforming to the specification. The non-conforming specification was designed to provide a firmer basis for achieving the objectives of the project.

Conforming: Augering to take place on areas such as greens and verges in order to determine landscape processes and the depths of different deposits. A narrow gauge hand-auger to be used, thus enabling deposits to be inspected, rather than probes. Depths of overburden, topsoil and other deposits to be recorded. Particular attention to be paid to the area around the Catholic Church in order to ascertain the depth of overburden over any surviving Roman structures.

Non-conforming: Given the extensive nature of proposed re-development over some parts of the site which are already built upon (particularly Area 2 on 'Figure 4, Land Use Framework'), a more intensive auger survey was recommended, over and above that which is suggested in 'Chapter 2 Terms of Reference, Scheme of Works'. We

proposed that the auger survey be undertaken over three days. This more detailed programme of augering is to enable a deposit model to be created, thus providing more readily accessible information regarding sub-surface stratigraphy.

4.7 Mapping

A CAD system has been used to store and display data generated by the above works. This will make a visual understanding of all the collated material more attainable. Composite maps will be produced that show all available archaeological information in relation to existing potential development areas as identified in the EDP. Depth of deposits will be modelled where appropriate. Maps have been produced which show all the known archaeological information for each period. Subsequently, areas of highest, significant and lesser archaeological potential, based on all available evidence, will be identified and mapped.

5. Results of investigations

5.1 Desktop assessment

5.1.1 Previous archaeological work in the Catterick area

This section will outline the considerable extent of previous research that has been undertaken with regard to the archaeology and history of the Catterick area, and the site of Marne Barracks in particular, with reference to historical texts, place-name evidence, chance discoveries and formal archaeological interventions. The locations of previous investigations are shown in Figure 1.

Excellent reviews and discussions of both early Anglian and Roman Catterick, as well as notes on the historical background to research in the area, are provided by Wilson (1984, forthcoming and Wilson *et al.* 1996) and interested parties are directed to those papers. Much of the following information regarding the historical background is based on Wilson's 1984 and 1996 papers.

The Roman town at Catterick is referred to in the *Itinerary of Antoninus* as *Cataractonium*, and this remains the name by which the site is known today. Considerable discussion has taken place as to the etymology of the name (e.g. Speight 1897, Rivet & Smith 1979, Wilson *et al.* 1996) but it is generally accepted that the name derives from the *cataracta*, or rapids, on the Swale. If this is the case, then to which cataracts does the name refer? Traditionally they are held to be those upstream at Richmond but recent reconnaissance of the Swale by Pete Wilson and Rosemary Cramp (Wilson *et al.* 1996) has suggested that they could equally be those just to the north of Castle Hills, within the present study area.

References to *Catraeth* in a classic Welsh bardic poem *Y Gododdin*, by Aneirin, may be the earliest post-Roman records relating to Catterick. The poem is an elegy for 300 British warriors led by Urien of Rheged who were killed in a battle at *Catraeth* in c.600. This important battle, won by the Angles, enabled them to gain a stronghold in the north-east of England. Although the association of Catterick with *Catraeth* is now widely accepted, the location of the battle ascribed to *Catraeth* is not (Alcock 1983). It is possible that the 'ramparts of the stronghold' described by Aneirin are in fact the earthworks at Castle Hills rather than the walls around *Cataractonium*. Indeed, as Wilson points out (1996), it would be much more practicable for an early medieval

band of warriors to defend 350m of ramparts at Castle Hills than 1.1km around the former Roman town. Evidence from sites such as Yeavinger in Northumberland demonstrates the adoption and adaptation of such native British sites by the Angles (Alcock 1987).

The first definite post-Roman reference to Catterick is by Bede who indicates that by the 7th century Catterick was one of the royal villas of Northumbria (Colgrave & Mynors 1969) and that Paulinus conducted a mass baptism in the River Swale which flowed by the *vicus* of *Cataracta*, c.627. Bede mentions Catterick again in c.666 when he describes a village as being 'nearby Catterick', implying that Catterick was an important focus (Wilson *et al.* 1996).

Catterick was still an important northern royal residence in the 8th century as Simeon of Durham records that two royal weddings took place there. In the annal for 762 he writes 'King Aethelwold married Queen Aethelthryth at Catterick on 1st November' and for 792 'King Ethelred married Queen Aelfaed, daughter of Offa, king of the Mercians, at Catterick on 29th September' (Whitelock 1955). Simeon makes mention of Catterick again, when in 769 he records that 'Catterick was burned by the tyrant Earnred' (*ibid.*).

At the time of the Domesday Survey, reported in 1086, Catterick was recorded as one of the two largest manors in Richmondshire (Page 1968).

The earliest recorded discovery of artefacts in the area dates to 1625 when a large bronze Roman cauldron was found (Gibson 1722). Numerous types of artefact have been reported since then, on both north and south sides of the River Swale. The earliest recorded excavation on the Roman town site was undertaken in 1851 by Sir William Lawson (Speight 1897) who excavated along the east, south and west walls, and estimated that the site covered about four hectares.

The proposed construction of the A1 Catterick by-pass in 1938 provided the stimulus for much excavation on the town site, beginning in 1939 and then resuming in 1952 after the war (Hildyard & Wade 1950 and 1951, Hildyard 1957). These excavations, together with aerial photographic evidence, demonstrated that the settlement had indeed been a town for some of its existence rather than remaining as a fort and *vicus*. John Wachter became the excavation director in 1959, once the plans for the by-pass were finalised, and conducted major excavations in the heart of the town site (Site 433), along the route of the new road (Wachter 1971). These excavations demonstrated the development of the site from an Agricolan fort to a prosperous small 4th century town. Excavations on the north side of the Swale by Wachter and others demonstrated the presence of a possible temple and civilian settlement there also in the 3rd and 4th centuries (Wachter 1973, Breckon 1971 and Thubron 1973). More recently, geophysical surveys and excavations were undertaken north of the Swale (Sites 240 and 251) in 1981-2 by the Ancient Monuments Laboratory (AML 1981) and the DoE Central Excavation Unit, prior to A1 improvements (Wilson 1984). An Anglian sunken-featured building, or *Grubenhäuser*, has also been excavated in this area, at CEU Site 434 (Wilson *et al.* 1996). The function of these structures is still not clear. In some cases the evidence indicates use as dwellings, but typically they appear to have been used for storage or as workshops, such as for weaving. Almost invariably, the last phase of use of these structures seems to be for rubbish disposal (Powlesland

1998). Nevertheless, their presence together with contemporary ditches, gullies and postholes is taken to be indicative of occupation.

In 1995 archaeological excavations were carried out at the southern end of Catterick Racecourse by West Yorkshire Archaeology Service prior to sand and gravel extraction. Although the remains of an Iron Age settlement were suspected to be present (based on aerial photographs), the excavations also revealed evidence for a huge late Neolithic/early Bronze Age kerbed burial cairn and pits, a possible Roman amphitheatre and an Anglian cemetery (Moloney 1996). A similar, early Iron Age settlement was identified in Pallett Hill Quarry, just to the south, in the 1980s (Brewster & Finney, in preparation). Trial excavations in parts of the racecourse and the southern part of Pallett Hill Quarry had previously been undertaken by the EH Central Archaeology Unit, Sites 273 and 425, revealing Roman and Anglian features including a *Grubenhaus* (Wilson *et al.* 1996).

Another huge Neolithic ritual monument, a cursus, had previously been identified to the north of the Swale. The cursus comprises two parallel ditches running across the landscape for some 2km, forming a ceremonial avenue. Although there is currently no evidence for Neolithic occupation, the cursus and huge burial mound indicate the significance of the area for Neolithic people.

Proposals for extensions to Scorton Quarry in 1997 at Hollowbanks Farm led to numerous archaeological investigations at the site by GeoQuest Associates, Wessex Archaeology and Northern Archaeological Associates (unpublished archive reports for Tilcon North Ltd). These works also provided evidence for activities spanning the Neolithic-Anglian periods in the form of pit alignments, ring ditches, rectangular enclosures and another Anglian cemetery.

Limited archaeological investigations have also been undertaken within Catterick Village. In 1995 geophysical survey (GeoQuest Associates 1995), topographic survey and trial excavations (YAT 1995) took place on land between Leeming Lane and Slessor Road. This work furnished evidence for Roman (mid-late 3rd century) rubbish disposal and medieval/post-medieval agricultural features.

In December 1996, an archaeological evaluation was carried out on the site of Richardson's Coal Depot in Leeming Lane (LUAU 1997), during which undated gullies and postholes were excavated. Further excavation at the site revealed a *Grubenhaus*, various linear boundaries and a rectangular post-built structure. All of the features are provisionally dated to the Anglian period (NAA 1997).

Various excavations, watching briefs and salvage recording works were undertaken by David and Shirley Thubron in the Catterick and Richmond area between 1968 and 1994. In 1998 North Yorkshire County Council arranged for the resulting archives to be summarised and assessed with a view to their long-term management. Many of the archives relate to work done by the Thubrons with the Richmond Excavation Group and concern *Cataractonium*. This material is being incorporated into a substantial monograph on Roman Catterick to be published shortly (Wilson forthcoming). The sites investigated include the Cadbury's Smash Factory, Catterick Bridge (this is also CEU Site 240), Yorkshire Water Depot and part of the course of a water pipeline. The sites variously revealed areas of Roman settlement, Dere Street and occasional

burials. The locations of the archives and finds are detailed in the NAA report (NAA 1998).

5.1.2 Previous archaeological work around Bainesse and Marne Barracks

Many discoveries and small excavations have also been undertaken south of *Cataractonium* along the line of Dere Street, particularly around Bainesse Farm. In 1822 Whitaker reported archaeological finds spreading over a mile in this area (Whitaker 1822). A group of Anglian burials as well as wall remains and Roman pottery were reported during the A1 Catterick by-pass development to the north of Bainesse (Willmot 1959). The western edge of Dere Street was investigated at Bainesse Farm in 1975 (Thubron 1976). Further work was undertaken in this area (Site 46) in 1981-2 by North Yorkshire County Council (Turnbull 1981), followed by an AML geophysical survey and then more excavation by the DoE Central Excavation Unit prior to A1 improvements (Wilson 1984). To the east of the A1, the excavation of a single building plot revealed eight phases of occupation or use. The last phase of use was represented by seven graves, at least two of which were certainly Anglo-Saxon. These graves were within c.50m of Willmot's Anglian burials (*ibid.*). The remains of a Roman field system were also investigated in this area. To the west of the A1, evidence for small-scale metal-working was identified, as well as a strip-building, an oven or corn-drier, parts of a field system and two more burials. Most of the burials from this investigation were found to the south-east of the former 'Catterick South' roundabout. Ten graves were identified, eight of which may have been within an enclosed cemetery.

More recently the (then) EH Central Archaeology Service undertook an evaluation of the proposed A1 motorway route in this area, involving 21 separate areas of investigation using fieldwalking, geophysics and trial trenching, Sites 504-524 (Wilson 1994, Wilson *et al.* 1996). The assessment demonstrated that the roadside settlement at Bainesse Farm extended up to 650m south of the farm. Site 524 lies just within the western limit of Marne Barracks and Site 522 to the immediate south. Although the 1857 OS map indicates the presence of Anglo-Saxon burials, fieldwalking at Site 522 and a trench in the extreme south-west of Site 524 did not produce any evidence for a cemetery. The northernmost trench at Site 524 revealed two Roman ditches, possible pits and a Roman pottery kiln, the first from Roman Catterick. Pottery found in the kiln dates to the late 3rd/early 4th centuries (Wilson 1994).

The first mention of any 'archaeological' investigations on the Marne Barracks site appears to be that made by the Duke of Northumberland's surveyor, Henry MacLauchlan, writing in the *Archaeological Journal* in 1849. He describes a 'camp' known as Castle Hills, which has the form of an irregular pentagon with a tumulus on the north side. He notes that '*The south rampart appears to have been thrown down to fill in the ditch, where the entrance probably was, and where an excavation was made by the Earl of Tyrconnel, and some Roman remains found*' (MacLauchlan 1849, 348). The finds in fact included both Roman and later material, and were presented to the British Museum by Lord Tyrconnel (Accession no. 1847.1.15.1-7). The Roman material comprises a jet bead, a copper alloy Fowler type A2 brooch, an iron bolt head, four sherds of undiagnostic Roman grey ware, a samian 18/31R or 31R base and a rim sherd from a bead-and-flange rim mortarium. The samian and mortarium are probably of 2nd century date (pers comm P Wilson). Given the form of the earthwork

MacLauchlan considered it to be post-Roman in date, '*probably formed by either the Saxons or the Danes*' (MacLauchlan 1849, 348). Indeed, the Castle Hills earthwork is generally taken to be a Norman motte and bailey castle and, although it may have earlier origins, the man-made earthworks are not believed to have existed during the Roman period. The Roman artefacts recovered by Lord Tyrconnel from the assumed southern entrance to the bailey are likely to have been derived from earth that was scraped up from over a considerable area in order to create the motte (pers comm Pete Wilson).

The author is not aware of any further archaeological interventions on the Marne Barracks site until 1939 when workmen digging foundation trenches for a new ammunition store discovered building remains and a skeleton associated with a large Anglian cruciform brooch (Hildyard 1955). The discovery is recorded as being '*50 yards behind the aeroplane hangars...and some 500 yards east of the farm of Bainesse*' (*ibid.*, 241). The initial discovery and subsequent rescue excavation by Hildyard revealed evidence for a total of three rooms, pottery from the end of the 3rd century and first half of the 4th century and three skeletons. The rooms may have been part of a block of secondary buildings associated with a possible villa. Whilst on site Hildyard was told that there had recently been a considerable amount of spoil dumped over the site in order to level the area. This may well have been gravel and other material taken from the Swale and used as aggregate prior to much of the building work in the 1930s. Hildyard was also told that two more skeletons had been found during earlier excavations for cables to the south.

A further archaeological intervention was carried out in almost the same spot in 1966 (Cramp, in Wilson *et al.* 1996). Flight Lieutenant Alderson, the Education Officer at RAF Catterick, informed the Archaeology Department at Durham University that a burial with grave goods had been discovered c. 1.40m below the ground surface whilst digging the footing for a signpost immediately west of the Catholic Chapel. Although the police originally removed the body and grave goods, these were later returned for study. The attitude of the skeleton and the grave goods (including 24 amber and paste beads, 2 pairs of copper alloy sleeve clasps and a copper alloy swastika brooch) all indicated an Anglian date for the burial. Permission was subsequently granted for a small trench to be excavated by Professor Rosemary Cramp in order to see if the burial was part of a larger cemetery. Although no further burials were encountered, more Anglian metalwork finds were recovered from disturbed ground, almost certainly indicating the former presence of other burials. The finds from this work are held in the Old Fulling Mill Museum of Archaeology at the University of Durham. Part of one room of a Roman building was also excavated, believed to be part of the same building group partially excavated by Hildyard in 1939. The direct and indirect evidence for numerous Anglian burials in the vicinity indicates the presence of a cemetery here.

The next archaeological investigations on the Barracks site were not undertaken until 1994 as part of the CAS evaluation of the proposed A1 motorway route in this area, mentioned above (Wilson 1994, Wilson *et al.* 1996). Site 524 lies just within the western limit of Marne Barracks and Site 522 to the immediate south. The northernmost trench at Site 524 revealed two Roman ditches, possible pits and a Roman pottery kiln, the first from Roman Catterick. Pottery found in the kiln dates to the late 3rd/early 4th centuries (Wilson 1994).

Further investigations were undertaken at the base that year prior to the proposed construction of a large hardstanding area and a REME workshop (GeoQuest Associates 1994). The area of the workshop was found to contain part of a Romano-British field system and an Anglian *Grubenhau*s. The finds from both of the 1994 excavations are held at Wathgill Camp, where some of the artefacts are kept on display.

In 2000 four trial trenches were excavated by Northern Archaeological Associates on the site of a proposed sports hall, the P & RTC facility. The trenches revealed that the site had been disturbed or subject to dumping in the recent past and no significant archaeological deposits were identified (NAA 2000).

5.1.3 History and development of RAF Catterick

As part of this desktop assessment ASUD commissioned Paul Francis, an acknowledged expert on military airfields, to undertake a study of the history and development of the former airbase: 'RAF Catterick - Historic Aerodrome Survey' (Francis 2001). The report is a companion volume to this report.

The study is based on an examination of contemporary site plans preserved at the RAF Museum, Hendon, and the Public Records Office, Kew. Additional information has been gained from site visits, the G4 Estate archives and the County Records Office, Northallerton.

The report assesses the nature, quality and significance of the surviving structures at the base and includes information on operational history, aerodrome development, civil engineering, communications, roads, runway, technical and domestic accommodation and airfield defence. Comparisons are made with other sites in the UK in order to establish rarity, and buildings are evaluated against the criteria and other considerations in selecting Listed Buildings, published in sections 6.10 and 6.11 of PPG 15 (Planning Policy Guidance note 15, Planning and the Historic Environment). A comprehensive gazetteer of surviving structures is provided, supplemented by drawings, photographs and appendices.

Additional sources of information regarding the history of RAF Catterick are provided in

A Short History of Royal Air Force Catterick (Witherow 1981) and *Action Stations 4, Military airfields of Yorkshire* (Halpenny 1981).

Summaries of the main themes in Francis' study are provided here.

Historical Summary 1916-1994

On 15 September 1916, 76 Squadron, a 6th Brigade home defence squadron for the Yorkshire area (Northern Command) formed at Cramlington. On 10 October 1916, its headquarters moved to the Ripon Racecourse buildings and three aerodromes were made available. 'A' Flight used Copmanthorpe, 'B' Flight were based at Helperby and 'C' Flight made use of Catterick. The squadron served in this area without seeing action and moved during March 1919 to Tadcaster where it disbanded on 13 June. Meanwhile, 115 Squadron, RFC formed at Catterick on 1 December 1917, equipped with the Sopwith Pup but stayed only until April 1918.

On 15 July 1918, 46 Training Squadron from Doncaster merged with 52 Training Squadron at Cramlington, to form 49 Training Depot Station (TDS), Catterick. A TDS was the main RFC/RAF instructional flying unit and functioned as a finishing school for qualified pilots specialising in a particular function, in Catterick's case day bombing. 49 TDS disbanded on 10 March 1919.

26 (Army Co-operation) Squadron re-formed at Catterick on 11 October 1927 with Atlas and then Audax aircraft. This unit became the station's longest operational squadron (until the RAF Regiment arrived in 1946) and apart from the station headquarters, was the only resident until 41 Squadron arrived in 1937 with Hawker Demons.

In September 1939, Catterick became a 13 Group RAF Fighter Command, Sector Station. This was the start of a number of fighter units coming here for short periods. These include 609 Squadron (Spitfire Mk. 1) and a detached flight belonging to 64 Squadron (firstly as a night-fighter unit with Blenheim Mk. 1Fs but later converting to Spitfire Mk. 1s as a day-fighter flight). 219 Squadron reformed at Catterick on 4 October 1939 with training aircraft before becoming operational, and 54 Squadron with Spitfire Mk. 1s arrived in May 1940. One notable day's success against enemy aircraft came on 11 August 1940 when two Junkers Ju.88s were shot down by the Spitfires of 41 Squadron.

From September 1940 until February 1944, squadrons continued to arrive, stay a short while and then leave. They were re-forming, re-equipping or simply here for a rest. Included (among others) are squadrons 504 (Hurricane Mk. 1), 600 (converting to the Beaufighter) and 256 (re-forming as a night fighter unit with Boulton Paul Defiants). Notable formations included 313 Squadron on 10 May 1941 (the third Czechoslovakian fighter unit) and Norway's first two fighter squadrons in the RAF (331 Squadron on 21 July 1941 and 332 Squadron on 16 January 1942). The final wartime operational unit at Catterick, 222 Squadron (with Spitfire L.F9s) arrived and left during February 1944.

In January 1945, the station transferred to RAF Flying Training Command, to become an Aircrew Allocation Centre in February.

Being close to the training areas around Catterick Garrison, the station was ideal as the RAF Regiment Depot. In July 1946, the regiment arrived from Belton Park, Grantham and stayed until June 1994, the RAF station finally closed on 1 July 1994.

Aerodrome Development

It is unlikely that there were any permanent aerodrome structures before 1917; accommodation at this time was probably in the form of tents. The earliest known building plans (aeroplane shed drawings 452/17 and 618/17) relating to structures at Catterick aerodrome are dated 1917, these are identified on the record site plan.

The Catterick aeroplane shed design is similar to others built at the earliest RFC aerodromes (such as Farnborough, Montrose and Netheravon) but the Catterick sheds are unusual in that steel stanchions and steel roof trusses have been used instead of timber. Timber 60ft (18.29m) span side-opening sheds of this pattern originate from 1913 and were in production until early 1917. They were largely replaced from late

1916 with the invention of the end-opening shed that had an increase in span to 80ft (24.38m).

Six side-opening aeroplane sheds were built but only two were occupied by the 6th Brigade home defence flight, while the other four were probably erected for the two training squadrons and acquired by the TDS when it opened. An 80ft span end-opening aeroplane repair section shed was also erected for the repair of the school's aircraft while another shed (at 100ft [30.48m] span) was uncompleted due to the Armistice in November 1918.

The plan-forms of the original technical and domestic buildings are similar to RFC/RAF standard TDS designs of 1917/18 and are therefore more likely to be associated with the TDS rather than for home defence. Some of these, including the women's hostel, were uncompleted by November 1918.

The Air Ministry owned the buildings but not the land and, as Catterick was going to be retained as a post-war RAF aerodrome, steps were taken during 1924/1925 to acquire the land. The post WW1 development of the station buildings was more or less a continuous process starting in 1925 and finishing in 1944.

The proposed re-formation of 26 (Army Co-operation) Squadron at Catterick, set in motion two separate building contracts for the modernisation of the station. The first took place during 1925/26 and involved the construction of buildings of standard Air Ministry design which were similar to others built elsewhere such as Bicester and Upper Heyford. New buildings included the guardhouse (95), fire party house (?), Warrant Officer's (86) and NCOs & airmen's married quarters (87-89). Also included is the sick quarters (41) and W/T transmitting station (47). Almost simultaneously as the construction of these buildings was in progress, came the second contract of April 1926. This involved either the reconditioning (minor alterations) or remodelling (extending) of existing WW1 buildings. Some were to be immediately demolished while those classified as surplus were retained for a short while (between 1927 and 1935 aeroplane shed 6 and the aeroplane repair section shed 99 were removed). New structures under this contract were erected between 1926 and 1928. This included a reservoir (97), watch office (68) and a ration store (27).

The chief inhabitants at Catterick continued to be a station headquarters and 26 (Army Co-operation) Squadron, while the next major building phase (1931 to 1934) took place. This included the erection of the first two-storey barrack blocks (76 & 77), the new two-storey station offices and a squash court.

In 1933, Germany's re-arming commenced and in a few years an air force of major proportions was developed and equipped. In an attempt to achieve parity with Germany's increasing air strength, the British Government introduced a number of schemes for the expansion of the RAF. These followed on from each other in quick succession between the years 1934 and 1939. The next sequence of modernisation at Catterick was therefore, phased under the schemes that were passed by the Cabinet ('A', 'C', 'F', 'L' & 'M').

Under Scheme 'A' (adopted in July 1934), steelwork was erected for two new aeroplane sheds of a new design known as the type 'C' aircraft shed (which encroached onto the grass landing ground).

Scheme 'C' (February 1935) involved a major rebuilding programme. The steelwork of the type 'C' sheds was clothed in brick and annexes were erected along the side-walls. Aeroplane shed 67 was reduced to half its length to make way for an armoury (64), one vehicle shed was demolished for a new main workshop (61) and another was removed and replaced with a more modern version. Two more two-storey barrack blocks (74 & 75) were added (now making a total of four) while other new buildings included a parachute store (174), two petrol tanker sheds (98 & 177) and a works & bricks store & yard (152). It was also proposed to build a new combined officers' mess and quarters (31) and an operation room (124), but construction of these two buildings may have been delayed. A watch office with tower (54) was also built to replace the original that was now 'blind' (the new hangars blocked its view of the landing ground).

Scheme 'F' had little impact on Catterick and mainly involved the construction of new RAF stations.

Scheme 'L' (27 April 1938) was approved as a result of the German move into Austria, followed by Scheme 'M' (which succeeded it on 7 November 1938) because of the Munich crisis. This was the final pre-war phase of reconstruction. Gas weapons were thought to be a major threat and steps were taken to provide a means of warning, protection and decontamination. The decontamination annexe (41a) to the sick quarters was one of the first buildings erected under this scheme. Later, came the decontamination centre (for un-wounded) (166). The other main projects included, two new barrack blocks (154 & 160) with an 'H'-shaped plan-form and underground refuges (air-raid shelters), a combined dining room & institute (158) (also with air-raid shelters) and a central heating station (149) to provide a hot water service for heating the new buildings.

Almost simultaneously with the construction of these buildings, came a major development on the aerodrome. This coincided with the outbreak of WW2 and the station becoming a Sector airfield under 13 Group Fighter Command. Land further west was requisitioned to provide aircraft dispersal areas and a hard-surface perimeter track and runway (an early example) were also laid. Oran House now occupied a central position surrounded by a clutch of fighter pens for single-engined aircraft. Pens for twin-engined types such as the Blenheim were built along the northern perimeter track. A whole host of associated structures were also erected around the perimeter, including pillboxes, sleeping shelters, flight offices, drying rooms and groups of Army defence huts. Castle Hills became the main defence strong-point and would have been supported by at least three other satellite defence positions.

Conclusion

Catterick aerodrome is very similar to the Imperial War Museum site at Duxford, where the range of buildings reflects the different periods of military expansion covering the First World War to the present day. The architectural planning and elevational styles of the various groups of buildings reflect the changing political

climate over this period. For this reason, the buildings and aerodrome at Catterick are an important part of the military history of the local area.

5.1.4 North Yorkshire Sites and Monuments Record (SMR)

The Sites and Monuments Record database at North Yorkshire County Council Heritage Unit, Northallerton, was examined in order to identify features of archaeological or historic interest recorded in the study area. The SMR database holds three main planar records relating to the assessment area and three records relating to investigations which were undertaken immediately west, south and south-west of the airfield, respectively.

Summaries of these entries are listed below.

- | <i>SMR no.</i> | <i>NGR</i> |
|---|----------------|
| 13515.00000 | SE 24530 97250 |
| RAF Catterick | |
| ?Villa. During groundwork prior to the construction of an ammunition store in 1939, walls of a Roman building together with later burials were discovered. Villa (<i>sic</i>) dated to 3 rd /4 th century and was burnt down. Burials part of Anglian reuse of the site and are probably part of a more extensive cemetery. | |
| 13516.00000 | SE 24670 97130 |
| RAF Catterick | |
| Enclosures. Geophysical survey and excavation in 1994 revealed numerous, inter-cutting Roman ditches indicating multi-phase, sustained use of land. Large sub-circular pit likely to be sunken-featured building. | |
| 13517.00000 | SE 24480 97020 |
| RAF Catterick | |
| Unclassified. Geophysical survey and trial trenching in 1994 revealed nothing of note, but some previous disturbance was evident. | |
| 13514.00000 | SE 24100 97200 |
| Bainesse Farm | |
| Roman roadside settlement partially excavated in 1981 by the Central Excavation Unit. Strip-buildings perpendicular to Dere Street, originally timber then stone. Field system to rear. A number of burials recorded. | |
| 13529.00000 | SE 25100 95900 |
| CAS 522 | |
| Sherds. Fieldwalking in 1994 produced some post-medieval pottery and some tile. | |
| 13539.00000 | SE 24740 96260 |
| CAS 505 | |
| Sherds. Fieldwalking in 1993 produced Roman to post-medieval pottery and some tile, slag, mortar and stone. Nothing was found in the trial trench. This area may have been part of the field system of the Roman settlement to the north. | |

5.1.5 Scheduled Ancient Monuments (SAM)

There is one entry in the *County List of Scheduled Monuments, North Yorkshire* (English Heritage 1996) for the parish of Catterick:

SAM County no. 299 Castle Hills medieval motte and bailey castle

The entry dates to 6th January 1984 and notes that: the motte is considerably eaten away but the bailey and ditch are well preserved; numerous slit trenches occupy the motte and east flank of the bailey; the site is part of a battle training area; there are three small concrete buildings at the south end of the bailey; site partially overgrown; rabbits very active; soil has been dumped on the inner and outer bank of the moat on the west side to discourage vehicles. The full scheduling entry is provided in Appendix I.

5.1.6 Listed buildings

A search of the *List of Buildings of Special Architectural or Historic Interest, District of Richmondshire, North Yorkshire* (Department of the Environment 1987) revealed that there are currently four entries, comprising eight buildings, in the assessment area, all within the Oran House building group on the south side of the airfield. Summaries of the entries are provided below and the full entries are provided in Appendix I.

SE 29 NE 5/47 Oran House (Plate 1)
Grade II

House, now 3 dwellings. c.1830 with slightly later additions. Brick in English garden wall bond with ashlar dressings, Westmorland slate roof. Jacobethan style. 2 storeys with attics, 6 bays, the 3 to the right set back, the 3 to the left gabled.



Plate 1: Oran House from south-east

SE 29 NE 5/48

Pair of outbuildings c.5m north of Oran House (Plate 2)

Grade II

2 attached outbuildings, probably former larders. Early 19th century, altered during World War II. Coursed watershot rubble with brick patching, Welsh slate roofs, probably replacing Westmorland slate. Single storey, 3:1:3 bays. Irregular 7-sided building to left, irregular hexagon to right, linked by narrow bay.



Plate 2: Larders at Oran House



Plate 3: Barn and stables at Oran House

SE 29 NE 5/49 Former Laundry, c.10 north-west of Oran House
Grade II
Disused laundry. Early 19th century. Coursed watershot rubble, pantile roof. Single storey, 3 windows. Included for group value.

SE 29 NE 5/50 Barn with stables and Oran Cottages 1, 2 and 4 (Plate 3)
Grade II
Threshing barn with stables, attached cart-shed now Oran Cottage no. 4, and 2 attached unoccupied cottages, Oran Cottages nos. 1 and 2. 18th century barn, early 19th century cart-shed and cottages.

As part of English Heritage's Thematic Listing Programme, a *Survey of Military Aviation Sites and Structures* has recently been completed (English Heritage 2000). This report originally recommended Grade II listing status for 12 former RAF buildings at Marne Barracks as follows:

Building 3	1920s bomb store
Buildings 25, 60, 67 and 80	First World War hangars, conforming to a 1913 design
Building 68	Watch Office, 1927 design
Building 54	Watch Office with Tower, 'fort-type', design 1934
Buildings 58 and 59	C-type hangars, standard type of post-1934 expansion scheme
Building 31	Officers' Mess and Quarters, post-1934 expansion design
Building 46	Station Headquarters, built early 1930s to 1927 type design
Building 124	Operations Block, bomb-blast protected, 1936 design

Following recent discussions between English Heritage and MoD representatives, and examinations of early Air Ministry drawings, it appears that the hangars are not actually of First World War date, but rather of First World War design, and as such no longer merit protection through listing (pers comm J Lake/EH, N Cheesman/MoD). It was also established that Building 3 was no longer of listable quality, following a site visit.

The listing of Buildings 68, 54, 31, 46 and 124 will still be recommended by EH to the Secretary of State in a report to be submitted in 2001.

5.1.7 Aerial photographs (APs)

The aerial photographic collections at the National Monuments Record (NMR) in Swindon, the Heritage Unit at County Hall, and Archaeological Services, University of Durham, have all been examined. In addition, information provided in a recent study of APs for the area has been examined (*RCHME: Catterick Project 1997, Cropmarks in the A1 corridor between Catterick and Brompton-on-Swale*). This study was undertaken by the Royal Commission on the Historic Monuments of England at the request of English Heritage, and included photography held by the Cambridge University Committee for Aerial Photography (CUCAP).

Additional aerial photographs from miscellaneous publications and sources have been examined and one particularly useful AP from 1930 has been supplied by a former firefighter at RAF Catterick, Mr Jim Davie (Plate 4).

A search of both the vertical and specialist (oblique) collections at the NMR identified 177 vertical and 7 oblique photographs for a 2x2 km area centred on SE 250 970. Full details of these, and all other prints examined, are provided in Appendix II. Laser copies of 32 of the NMR APs spanning the years 1940-1980 have been obtained and will be kept with the project archive.



Plate 4: AP dated 26/6/1930 (courtesy of Jim Davie)

The NMR photographs for the archive are:

Vertical collection

Sortie no.	Cam. Pos.	Start frame	End frame
4D/4/2	V	2167	2174
540/755	RP	3148	3151
540/755	RS	4085	4088
OS/71418	V	203	205
OS/80120	V	24	27
106G/LA/236	FP	1082	1083
4D/UK687	VD	6	9
78C/UK1433	V	94	94

Specialist collection

NGR Index no.	Accession no.	Frame no.
SE2597/1	CCC 9004	7506
SE2597/2	CCC 9090	F12

Numerous features of interest have been identified on these aerial photographs. The information is illustrated in Figure 2 and summarised here.

1930 Oblique AP dated 26-6-1930 showing northern part of airbase. Numerous buildings are present on the AP. Some are temporary buildings while some, of World War I origin, are still in use today. For example buildings 19, 20 and 21, which were originally built as a Regimental Institute (home defence), dining room & cookhouse, and Institute (TDS) respectively. These buildings are now the C of E church, Community Centre and Squadron Office 8 Regiment, respectively.

Another oblique AP from the 1930s (reproduced in Witherow 1981) shows a similar view of the northern part of the airbase, with an additional row of houses (Married Quarters) along the east side of Leeming Lane.

1931 Oblique view of Castle Hills, shows trees only on the bailey rampart and ditch and along the former river course to the immediate east. An arcuate earthen bank aligned north-west/south-east, with ridge and furrow remains parallel to and east of it, is evident in the field to the north of the motte. There is a break in the bank immediately north of the motte. Ridge and furrow remains are also evident in the fields to the west and south-west of the motte. Those in the field to the south-west are aligned perpendicular to, and north of, an east-west bank and ditch, which heads west from the southern end of the bailey.

1933 Oblique view of Castle Hills, shows features as above, with additional ridge and furrow earthworks evident south of and parallel to the east-west aligned bank and ditch west of the bailey.

1940 Series of vertical APs taken in October, showing the airfield perimeter road and a runway which is some 110m short of the present runway at the eastern end. The road and asphalt-covered concrete runway had been built during the summer of 1940, following a particularly severe winter during which the airfield

had become a quagmire (Francis 2001). Numerous fighter pens are also evident. The former track running north-north-west from Oran House across the airfield and several former field boundaries can be seen on the airfield. The nature of these features on the APs suggests that they had been grubbed-out shortly before the APs were taken. Ridge and furrow remains are also evident on these APs, within the perimeter road at SE 525 695. These remains have also been detected by the geophysical survey of the airfield.

- 1941 Vertical APs showing features as above (1940), with an additional former field boundary evident in the southern part of the airfield.
- 1942 One vertical AP showing another possible former field boundary in the southern part of the airfield. A dark anomaly on the AP, also in the southern corner of the airfield, corresponds to an area of infilling when this part was levelled (based on Air Ministry drawing CK664, 1937).
- 1945 The runway has now been extended to its present length. This had in fact been carried out in the autumn of 1942. Some parchmarks appear to correspond to the area proposed for levelling on a 1935 Air Ministry drawing, CK425. Various football and rugby pitches are evident on the northern part of the airfield.
- 1952 Two rows of three buildings are evident in the area now occupied by the new P & RTC facility, built 2000. These buildings were Uni-Seco huts, erected in 1949 (Francis 2001). Runway lights, running tracks and cricket squares can be seen on the airfield.
- 1971 The A1 Catterick by-pass can be seen on these APs. Sports facilities are also evident on the airfield.
- 1980 A former river terrace is evident on these APs, also the edge of the levelled area north of the runway (discussed below). This may be apparent due to a build-up of topsoil against the terrace on the downslope side, an area of spoil deposition during the levelling works. These features have also been identified in the geophysical survey.
- 1998 This AP shows the barracks and airfield much as it is today, with the large hardstanding area in front of hangars 58 and 59, and the REME workshop.

The comprehensive RCHME 1997 study of APs for the area did not identify any cropmarks of probable archaeological interest within the present study area. A concentration of cropmarks was however identified centred on SE 2415 9700, on the west side of the A1 at Bainsesse Farm. These cropmarks comprise linear ditches forming a perpendicular pattern, interpreted as the remains of enclosures or plots abutting the west side of Dere Street. Several other features within this area were identified as possible wells to the rear of the plots. Some 150m further west, the remains of other perpendicular ditches were interpreted as the fragmentary remains of a field system (RCHME 1997, 22).

Although cropmarks or parchmarks, reflecting archaeological features such as enclosure ditches and field systems etc, have not been identified on the airfield itself,

it is known from previous excavations that these are precisely the types of features that do exist beneath the surface in some parts of the airfield (eg GeoQuest Associates 1994). It seems likely that the remains of similar features will be present in other parts of the airfield.

5.1.8 Cartographic evidence

The following maps and plans have been consulted at the County Records Office, Northallerton:

1739 An Exact Plan of the Lands belonging to Roger Strickland

1781 Plan of an Estate belonging to Simon Strickland

1822 A Plan of Catterick Township

1842 Tithe plan

1857, 1913, 1919, 1930 Ordnance Survey editions

The information provided on each map, and changes evident from one map to the next, are outlined below in chronological order starting with the earliest. This information is also shown in Figure 2. Copies of maps are provided in Appendix III.

1739 An Exact Plan of the Lands belonging to Roger Strickland Esq. Lying at Catterick in the County of York

The most striking feature of this map is the absence of a north-west/south-east road along the former course of Dere Street Roman road, now also the course of the A1 (T). The line of the Roman road is clearly seen as a straight boundary, with fields laid out perpendicular to it on both sides. The main north-south road at this time turned abruptly to the north east, to Oran hamlet, and then north-west and then north through Catterick Village. This road traversed what is now the airfield and is evident both in the geophysical survey image and on aerial photographs. The surrounding land had already been enclosed by this time and the study area comprised a series of north-east/south-west fields.

1781 Plan of an Estate belonging to Simon Strickland Esq. Lying at Catterick in the County of York

This map provides the same information as the 1739 plan, with the exception of two minor alterations to field boundaries in the area of the airfield.

1822 A Plan of Catterick Township

This map provides the same information as the 1781 plan, with the exception of two more minor alterations to field boundaries in the area of the airfield.

1842 Tithe plan (Plan of the Township of Catterick in the Parish of Catterick in the North Riding of the County of York, authorised by Charles Howard, the Assistant Tithe Commissioner)

The most significant change between this map and the 1822 one is the addition of 'Leeming Lane' road along the former course of Dere Street (the existing A1 at this location). The road is shown to turn north to Catterick Village, away from the former Roman road, at a point just east of Bainesse. The former main road across the present airfield now becomes a subsidiary road, unbounded on its western side. Five minor field boundaries have also now been removed to create larger fields in the area of the Barracks and airfield.

1857 1st edition Ordnance Survey map

The majority of the field boundaries in the study area have now been removed. The land to the east of the 'Old Road' (north from Oran) now forms one large field, while the land to the west now comprises only two fields. This is the earliest map to depict and name Castle Hills. A possible Anglo-Saxon cemetery is indicated on the map, next to the A1 south of Oran.

1913 edition Ordnance Survey map 25"

The old road from Oran is now a bridle path, and one large field encloses all the land on each side of that path. The map indicates '*Human Remains, Roman Coins etc. found A.D. 1887*' at Bainesse, as well as labelling the remains of the Roman road (Dere Street) and the '*Supposed site of Norman Castle*' at Castle Hills.

1919 edition Ordnance Survey map 6"

The bridle path is now an unfenced track across open land. Otherwise the map is essentially the same as the 1913 edition. There is no indication at all of the presence of the Royal Flying Corps, which moved onto the site in September 1914.

1930 edition Ordnance Survey map 25"

This map shows the whole area of the airbase as one large open tract of land with no buildings, boundaries or runway, simply the bridleway. In reality, a number of permanent buildings had been erected on the site by now, mainly between 1923-1927.

5.1.9 Geotechnical and landscaping information

Very little geotechnical or other sub-surface information seems to exist for the study area, and most of what does exist is related to recently developed areas.

One exception is a reference by Hildyard to the dumping of soil near his rescue excavation in 1939. During the digging of foundations for an ammunition store at RAF Catterick in June 1939 (believed to be in the area of Buildings 43, 100 or 124) workmen came across the remains of a building and some burials. While Hildyard was excavating and recording these remains he was told that 'a great deal of soil had recently been dumped upon the site bringing it level with the surrounding area' (Hildyard 1955, 242). It is not clear exactly where this dumping took place, the thickness of redeposited material or where it had come from, although it is likely that it was taken from the River Swale and used as aggregate prior to the building works in the 1930s.

The geotechnical information that has been retrieved for this study comprises borehole and test pit data collected prior to the construction of the REME workshop, and test pit data collected prior to the recent construction of the P & RTC facility. The locations of the works are shown in Figure 3.

The REME workshop data was collected by HJT Solmek (now WSP) in January 1994 and comprises four borehole logs and eight test pit logs from an area immediately east of the 'cut' part of the 1938 levelling works. The data indicated variable conditions across the area of the proposed workshop, with relatively dense sands and gravels in the western part and up to 2m of predominantly granular made ground overlying loose granular soils in the eastern part (Solmek 1994). The present study has not identified any records relating to the creation of this made ground.