Buildings 007 and Buildings 112 RAF Northolt Hillingdon Greater London

Historic Building Recording and Investigation

oxfordarchaeology

December 2007

Client: Defence Estates

DEFENCE ESTATES

Issue No: 1
OA Job No: 3557
NGR: TQ 101 857

Historic Building Recording

Client Name:	Defence Estates
Document Title:	Buildings 007 and 112, RAF Northolt
Document Type:	Historic Building Recording and Investigation
Issue Number:	1
National Grid Reference:	TQ101857
OA Job Number:	3557
Site code:	RAH07
Invoice code:	RAFRAHBS
Archive location:	Museum of London
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Date:	December 2007
Document file location:	Server 1/buildings/projects ongoing/RAF Northolt/report.doc
Graphics file location:	-

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Buildings 007 and 112, RAF Northolt

HISTORIC BUILDING RECORDING AND INVESTIGATION

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Buildings 007 and 112, RAF Northolt

ARCHAEOLOGICAL BUILDING RECORDING

SUMMARY

Oxford Archaeology (OA) have been commissioned to undertake a programme of building recording at RAF Northolt. The recording is to take place prior to demolition and/or redevelopment of the site as part of Project MoDEL (Ministry of Defence Estate London).

Project MoDEL is the rationalisation of MoD Estates across London which will see the disposal of surplus sites and the centralisation of various centres within the RAF Northolt base. This work means that much of RAF Northolt is to be redeveloped with much demolition of existing buildings and the creation of new purpose built facilities.

This report is concerned with Building 007, originally the central heating station for the airfield, and Building 112, originally constructed for use as a decontamination facility. Both buildings are of a standard design and are similar to many constructed at airfields throughout Britain in the inter-war period. These buildings are unlisted, but due to their historic interest, and that of RAF Northolt generally, they have been recorded at Level II prior to their removal in the redevelopment of parts of the airfield.

Although architecturally these buildings are of limited conventional interest, they are significant for being part of this airfield. RAF Northolt played a significant role during World War II. Both Building 007 and 112 had very specific functions and their form can be seen to follow this accordingly. Through their study, our understanding of how early military airfields functioned is enhanced.

The overall aim of the project is to create for posterity an archive record of the buildings concentrating on their construction, history, development and use. The work aims to record, interpret, understand and explain the buildings. The other main objective is to deposit this record (both the report summarising the building and the primary archive itself) in publicly accessible repositories.

1 INTRODUCTION

1.1.1 Oxford Archaeology (OA) have been commissioned to undertake a programme of building recording at RAF Northolt, located approximately 15 miles north west of central London in the London Borough of Hillingdon (see Figure 1). The recording is to take place prior to demolition and/or redevelopment of the buildings as part of Project MoDEL (Ministry of Defence Estate London). This project will see the disposal of surplus sites and the centralisation of various centres within the RAF base at Northolt. The result of this will be a radical redevelopment of the site which will include large amounts of new build and the demolition of several existing buildings. A number of these buildings are of historical value and as such a planning condition has been imposed on the redevelopment which requires an agreed scheme of archaeological recording to take place prior to any works.

1.1.2 Buildings 007 and 122 have been classed a low priority meaning the level of recording was limited to ground plan surveys accompanied by digital and SLR photography and descriptive text.

2 AIMS AND OBJECTIVES

2.1.1 The overall aim of the project is to create for posterity an archive record of the buildings concentrating on their construction, history, development and use. The work aims to record, interpret, understand and explain the buildings. The other main objective is to deposit this record (both the report summarising the building and the primary archive itself) in publicly accessible repositories.

3 METHODOLOGY

3.1.1 The recording of Buildings 007 and 112 has been undertaken at 'low' level as detailed in the project Brief. This broadly corresponds to English Heritage Level II (*Understanding Historic Buildings,* 2006). The structures were recorded in their current form before the start of works and this consisted of three principal methods: a photographic record, a drawn record, and a written record.

3.1.2 The ***photographic record*** was undertaken using 35mm film (black and white prints) and with a digital camera. It included general shots of the building (external and internal) and specific details. Photographic record sheets were used to indicate the location and direction of each shot and any further detail. Automatic flash lighting was used to illuminate dark interiors.

3.1.3 The ***drawn record*** comprised producing a measured plan of the building at 1:100. Descriptive annotation was added to the drawings to indicate construction, structural breaks, evidence relating to the structure's use and other features of historical interest. The recording followed IFA Standards and Guidelines using conventions outlined in *Understanding Historic Buildings: a Descriptive Specification* (RCHME 1996).

3.1.4 The ***written record*** complemented the photographic and drawn records and added descriptive and interpretative detail. The site recording of Buildings 007 and 112 was undertaken on the 7th and 9th of February 2007.

3.1.5 A limited programme of historical research has also been undertaken using the principal secondary sources (see Bibliography).

4 HISTORICAL BACKGROUND

4.1 RAF Northolt

4.1.1 Northolt is the oldest RAF station to be continually operational, being in use for over 91 years. Before the airbase was developed, the area surrounding Northolt was rural. The development of aviation contributed heavily to the use of Northolt as an airbase, the first significant event being the first powered flight in North Carolina on the 17th December 1903. This was followed by Louis Blériot crossing the English Channel by powered flight on 25th July 1909. By 1910 the pioneers of aviation were using the open spaces close to Ruislip.

4.1.2 Northolt Aerodrome itself was originally established during the First World War as one of a number of new training aerodromes constructed to cope with the large number of new volunteer pilots and it was officially opened in 1915. The airfield was designated a Home Defence night landing ground and No 18 Squadron of the Royal Flying Corps was formed at the base. At the end of the war many airfields were closed but Northolt survived with the status of a training depot station and it also served the function of a test flying ground. No buildings survive from this early phase of the airfield.

4.1.3 In the years immediately after the end of the Great War the airfield served both a civilian function in providing facilities for private companies and individuals and a military function. In the 1920s a number of squadrons were formed at Northolt, some of which rapidly moved to other aerodromes but others such as No 41 Squadron which remained for many years.

4.1.4 General Sir Hugh Trenchard - first Chief of Air Staff - oversaw the establishment, development and expansion of the RAF principally from 1923 when parliament approved his plans. Northolt was among the first of Trenchard's new (or expanded) airfields upon which work began having received Treasury sanction in March 1924.

4.1.5 The airfield expanded and developed in 1925 when new permanent buildings were added including the Barracks, the Operations Block and the Station Headquarters. Air Estimates state that by March 1928 £92,500 had been spent on hangarage, a watch office, accommodation, and operations Block.

4.1.6 The second half of the 1930s was a period of rapid growth and change for the RAF as attempts were made to match the even faster expansion of the Luftwaffe in Germany. One of the changes which had a direct impact on Northolt, and which

provides a sign of the preparations for war was the decision in May 1936 to transfer Northolt to No 11 Group Fighter Command, whose headquarters were at nearby RAF Uxbridge. It is as having formed part of this group that gives Northolt one of its principal historical significance's due to its role in the Battle of Britain.

4.1.7 The airfield development programme of this period included a recognition that paved runways rather than grass were essential due to the increase in use, larger planes, and particularly to ensure continued operation in wet weather. This decision proved of critical importance during the Second World War (particularly the Battle of Britain) and in 1938 Northolt was one of eight fighter stations to be provided with two hard runways of 800 yards by 50 yards. Northolt's other preparations for war included the laying out of a perimeter track, new hangars and standard H-blocks for accommodation and a system of camouflage which included the painting of houses onto hangars. Hedgerows were also painted onto the ground.

4.1.8 The airfield was also of note during this period for being the first base of the new and hugely important Hawker Hurricane which was introduced in 1937 with 111 Squadron.

4.1.9 After the outbreak of war in September 1939 Heston became a satellite of RAF Northolt and a dummy airfield with wooden aircraft to fool enemy bombers was laid out at a nearby golf course.

4.1.10 The first phase of the war has become known as the Phoney War due to the lack of significant combat. The various (and frequently changing) squadrons based at Northolt saw little meaningful action until the summer of 1940 when Fighter Command had to provide air defence during the evacuation of the British Expeditionary Force from Dunkirk. Many patrols were flown from Northolt.

4.1.11 Following the capitulation of France in June of 1940, German air raids on channel shipping as well as coastal towns increased. August saw the start of the onslaught of the Battle of Britain. Throughout August and the early part of September the Luftwaffe launched near daily raids on airfields, radar stations and other establishments in the south-east corner of England. In response, fighter squadrons based at Northolt were scrambled each day to engage and repel the enemy. The aim of the Luftwaffe was to effectively destroy the RAF and achieve air supremacy allowing the sea-borne invasion of England. At this time, 11 Group was in the front line of the Battle of Britain, and its airfields took the main brunt of the Luftwaffe attacks. The Luftwaffe losses however were consistently greater than those of the RAF and during September there was something of a change in tactics by the Germans. Bombing raids on London itself signified the start of the blitz. By the end of October attacks on airfields had virtually ceased, the Battle of Britain had been won and bombing raids now concentrated heavily on London and civilian targets. Fighter squadrons from Northolt (and the other airfields) remained in action to repel these raids.

4.1.12 No 303 Squadron had been formed in August 1940 comprising Polish Officers, pilots and ground staff and this squadron, which was based at Northolt, saw action towards the end of the Battle of Britain and the blitz.

4.1.13 Northolt itself was the only 11 Group airfield to escape enemy attack during this stage of the war and partly due to this (and its consequently good condition) it received a number of prestigious visitors including King George VI, Churchill and high ranking officers. The location of the station immediately adjacent to the Western Avenue (A40) would also have been very convenient for such visits. The first time RAF Northolt was attacked was 4 October 1940 by which time the main Battle of Britain was largely over (Brooks, 2000).

4.1.14 Northolt was by now a sector or controlling station in Sector Z and during the first half of 1941, fighters based at Northolt undertook many operations over enemy territory and escorted many bombers on raids.

4.1.15 Northolt remained a fighter base until 1944 but then its runways were lengthened to allow it to act as a base for transport aircraft, a function for which its location was ideal, and this was where its principal future lay.

4.1.16 In December 1945 Northolt (along with Croydon), was designated as London's airport for European and domestic flights. By 1952 it was the busiest airfield in Europe, handling an annual total of 50,000 air movements. It reverted back to military use in 1954 when Heathrow Airport was opened.

4.1.17 Northolt continued to expand throughout the 1960's to 1980's and in 1990 became host to the largest and most varied single Squadron in the RAF. Today it plays a major role in providing VIP air transport and is home to a large and diverse number of units including the Royal Squadron.

4.1.18 Although parts of the airfield have seen post-war redevelopment, English Heritage's thematic listing survey states that after Biggin Hill in Kent, Northolt is 'the 11 Group Sector station to have retained most of its original built fabric'.

4.1.19 Historical background on the two types of building (central heating stations and decontamination centres) are included below in the relevant sections on each building.

5 BUILDING 007 - CENTRAL HEATING STATION

5.1 Historical background

5.1.1 In the project briefing documents a date of 1940 is given as the construction of Building 007 but this is likely to be a rough indication of date and it is more likely to be a pre-war structure having been constructed in the RAF's Expansion period of the mid to late 1930s. As with all significant RAF stations Northolt would (almost certainly) have been provided with a boiler house in the expansion prior to the war and Building 007 is very similar to other airfield heating stations constructed

between 1935 and 1939. *British Airfield Buildings Volume 2* shows several of these including stations at RAF Oakington and RAF Colerne. Airfield buildings of this period (and military buildings generally) were very frequently of a standardised type. These boiler houses would have provided heating to the other airfield buildings via ducted underground pipes.

5.2 Description: introduction

5.2.1 Building 007 is located at the northern corner of the site (see Figure 2). It is a relatively large structure comprised of the main boiler house together with several projections and later extensions which are shown at Figure 3. The main boiler house consists of a rectangular-plan building approximately 16m × 14m with an impressive double-height interior and the truncated lower part of a former tower (possibly a water tower) projecting from the south-east side. The truncated lower section of the former chimney survives adjacent to the water tower but within the main footprint of the building. There are also three other extensions to the building including a primary projection to the north-west which was probably the coal store. The brick bonding for the main building is a varying Flemish bond while the extensions are generally of a stretcher bond with the interior walling in rendered reinforced concrete. One of these extensions has been used as a respirator testing facility. It is worth noting that this building was within the 'domestic' area of the site.

5.3 External description: main power house

5.3.1 The structure of the main power house is constructed with dark pink/red bricks measuring 215 mm × 10 mm × 65 mm. It has a flat concrete roof which is obscured from the outside view by a tall parapet of approximately 22 brick courses. The exterior of the building generally has a plain utilitarian appearance reflecting its function but prior to the reduction in height of the tower it would have had a distinctive form with a plain art-deco style.

5.3.2 The **south west facing elevation** (Plate 1) has a row of three clerestory windows, each with two four-pane tilting casements and white painted metal frames with concrete lintels and sills. The south-eastern half of the elevation at ground floor level is now covered by Extension 2 while to the north-west of this is a double door (timber slatted doors with a reset sandstone lintel). There is a light fitting above the mortar repairs over the doorway. An isolator electric box with timber supports is found to the south east of the door. There is a patch of brickwork repair to the south east of the doorway which seems to be associated with the footprint of a possible earlier structure such as a lean-to. This may have been connected to Extension 2 which was a secondary addition. There are two large down-pipes with hoppers at either end of the elevation which provide drainage for the flat roof.

5.3.3 **The north west facing elevation** (Plate 2) is substantially obscured by Extension 1 which is located across the lower part of the elevation. There are four clerestory

openings in the main elevation of which the three to the south west have ventilation shutters. The remaining opening has a metal frame window the same as those in the south west elevation. Three down-pipes can be seen running from the join of the extension to above the parapet and coping.

5.3.4 Three clerestory windows as seen in the south west facing elevation are also present on the **north east facing elevation** (Plate 3), as are the two down-pipes and three smaller pipes. The pipe to the southern corner has been replaced in order to accommodate the roof drainage pipe from Extension 1. To the south eastern end is a semi-circular fixing where a corrugated iron Nissen type hut would have been fixed. It is approximately 4.7 metres wide and a metal shelf can still be seen attached to the main wall. There is no door into the main build from this structure, and no sign of its footprint.

5.3.5 The **south east facing elevation** (Plate 4) is somewhat dominated by the square-plan 'tower' which projects from it towards the eastern end. This has now been much reduced in scale so that it projects only slightly above the main roof but it would originally have been approximately twice its current height. A aerial photograph survives in *The Battle of Britain Then and Now* (p. 247) dated May 1942 showing the whole airfield and although the view is very small it is possible to see Building 007 together with the tall tower. However, this surviving 'tower' would not have been the chimney. It would probably have been a water tower while the chimney itself, which would have been a similar height as the tower, would have been adjacent to the tower and had its base inside the building. Evidence of the chimney is discussed below in the internal description. As referred to above *British Airfield Buildings* (Innes) shows several similar examples of heating stations at other airfields and the same arrangement of coupled tower and chimney (slightly taller than the tower) can be found at RAF Kirkbride, RAF Upwood and RAF Oakington.

5.3.6 There are two clerestory widows to the south west side of the tower as seen in the other elevations. In the wall above the windows are metal fixings and below each window is a patch of paler brick in-fill. At ground level there are another three patches of in-fill with small concrete lintels above. These patches probably indicate where fittings associated with the building's original function were housed. Three small roof drainage pipes can be seen protruding from the level of the roof just below the parapet as seen in the other elevations. Extension 3 is built into the corner where the tower and main build meet.

5.4 Internal description: main power house

5.4.1 The interior of the main building divides into two main rooms each of which is the full width of the building and is double height up to the flat concrete roof. The larger room (A) occupies the three south-western bays of the building (Plate 5), while the smaller room (B) is a single bay wide and faces north-east (Plate 6).

5.4.2 The larger room would presumably have housed the main boiler and other plant and at the eastern corner is a separate square plan structure which is the base of the truncated chimney. This is immediately adjacent to the tower which projects from the footprint of the building and as discussed above both structures would originally have been approximately twice the height of the main building. A low former opening in the north-west face of the chimney has been blocked but this is where smoke would have been carried from the boiler into the chimney. The plant has all now been removed from the hall and it is now only used for very basic storage. The walls are all of white-painted brick (English bond) other than a rendered band along the south-east wall and several former openings which have been in-filled with brick but not painted over. At least some of these openings would presumably have had pipes passing through the walls. The interior of the building is plain and non-decorative, reflecting the utilitarian nature of the structure and evidence of the former use of the building survives in small truncated iron brackets in the wall and the partial imprint in the floor from former plant. There are two blocked doorways in the north-west wall which would have linked through to Extension 1 (possible coal store). One of these former openings has been blocked recently so that it is bare brick while the other has been painted over.

5.4.3 The floor is covered with square brown tiles measuring 15cm × 15 cm, except in areas where equipment would have stood which is exposed concrete (Plate 7). The ceiling is a painted concrete slab on the surface of which is the imprint of the former shuttering boards. The ceiling is strengthened by two deep concrete beams (Plate 8). There is tile skirting around the base of all the walls.

5.4.4 One minor feature of interest in the smaller room is a device for opening the high window in the north-east elevation. This consists of a long vertical rod fixed to the casement and with a screw and handle fixed to the wall at the base (Plate 9). There is a vertical plank door between the rooms with attractive long hinges. This room has cream-coloured glazed bricks (English bond) forming the lower 17 courses around each of its walls.

5.5 Tower

5.5.1 The tower (Plate 10) projects from the main building's south-eastern elevation. It presumably held a large water tank at a height enough to generate pressure for use in the heating system. As referred to above it would probably originally have been twice its current height and it would have been adjacent to a chimney immediately within the footprint of the building. The tower is not bonded into the main building but it must be primary.

5.5.2 When it retained its full height the tower would have made the building more visually impressive and it is the one part of the building which has some limited architectural pretension. This is partly shown by the tall panels to each of the external elevations which would have been windows but have now been blocked. These start approximately 13 brick courses above door height and stretch all the

way to the top but they would have continued up in the tall primary tower (see Plate 11). The simple architectural detailing is also shown in stepped bricks to the jambs of the doorway in the south-east elevation (Plate 12), and a small concrete porch over the same opening.

5.5.3 The brick bond is the same as the main build and there are some repair patches, especially beneath the rendered insert panels. The render is a sandy colour and is inset approximately 1 brick width. They have tile and mortar sills and there are vents located at the top and bottom.

5.5.4 The doorway into the tower is recessed with stepped brick jambs and has a large cantilevered concrete lintel. It has a timber door frame and the door itself is slatted on the front and back.

5.6 Extension 1

5.6.1 This is single storeyed and is approximately half the height of the main build (see Plate 13). It may originally have been a coal store but has more recently been used as a respirator test facility. It has three rooms, C, D, and E, as shown on Figure 3. Like the main the main build it also has a flat concrete roof behind a brick parapet but the lower two-thirds of the elevations are rendered. The brickwork above the render is all stretcher bond but there is a distinct difference in the colour of the bricks which form the parapet (c.8 courses) to those which face the main wall (c.10 courses). This may be due to a slightly different brick type (e.g. non-load bearing) being used for the parapet as compared to the main wall or the lower part may have been cleaned and re-pointed. There are no fixings to suggest the presence of a structure. Within the parapet at each intersection with the main build are lead lined drain holes with metal down-pipes. The bricks measure 21.8 cm × 6.5 cm and arris to arris measures 29.2 cm. Although the brick bonding is different to that of the main building, the structures are keyed together and they are almost certainly both primary. The aerial photograph dated 1942 referred to above in *The Battle of Britain Then and Now* appears to show this extension.

5.6.2 The north-west elevation of Extension 1 has two doorways immediately above each of which is a window with concrete lintels and a tile and mortar sill. The first window has a metal frame with two rotating casements and is probably original while the other is a wire encased single pane with an inset fan. Both windows have single electric lights above them. The door into Room E has a wooden frame with an additional metal architrave which has partially lifted away from the doorway. This door is standard size but consists of two opening halves. The door into room C, which was locked at the time of investigation, again has a wooden frame with metal architrave, but is set deeper within the reveal with the fittings hidden. The lock is modern.

5.6.3 The south-west face of the elevation is plain but the north-east face has a large window.

5.6.4 The interior consists of three rooms (C, D, and E) divided by breeze-block walls. Rooms C and D were used as a respirator facility and they each have blocked doorways which would originally have provided access into the main build from the outside. The floors are concrete and there are fixings for central heating pipes and radiators. Rooms C and D can be seen at Plates 14 to 16, Room E can be seen at Plate 17.

5.6.5 From this extension there are two walls projecting to the north east which form an external enclosure/storage area (Plate 18). These walls are both of reinforced concrete and red brick construction and are rendered the same as the extension. This enclosure would have originally been accessed through a door in the north east elevation of Room E, but this has been blocked and a window inserted.

5.7 Extension 2

5.7.1 This is a smaller single storey extension projecting from the southern half of the south-west elevation (Plate 19). It has a shallow pitch, corrugated metal-covered roof and has red-brick (stretcher bond) walls. The bricks measure 21.5 cm × 6.2 cm × 10.5 cm and arris to arris they measures 28.1 cm. The brickwork is bonded into the main building and there are several vents located to all sides of this extension. A light switch is present next to the door which was locked at the time of investigation.

5.8 Extension 3

5.8.1 This is a small red brick lean-to WC with a pitched roof in the corner where the tower joins the main building (Plate 20). The bricks are a mixture of pale and dark pink with a stretcher bond and smooth cream mortar. The door has a wooden frame and lintel which joins the roof timbers. The door is slatted with rear supports. There are 2 windows with casement bottom openings, tile and mortar sills, wooden frames, and mottled glass. Beside the windows is a down-pipe and beside the door, the roof overhangs and is supported on a metal pole. This extension is probably c1960's in date.

6 BUILDING 112 - DECONTAMINATION CENTRE

6.1 Historical background

6.1.1 Although the use of poisonous gas as a weapon of war had been outlawed by the Geneva Gas Protocol in 1925 the British government continued to make preparations for gas attacks at strategic sites such as airfields. Therefore specialised decontamination buildings were established at airfields to deal with the immediate aftermath of a gas attack. The buildings were designed to allow people to change out of their clothes as quickly as possible as well as washing thoroughly and changing into new clothes. The buildings also allowed the contaminated clothes to be disposed of and first aid treatment to be undertaken. The decontamination centres from the early expansion period (mid 1930s) were substantial structures

with blast banks, thick walls, reinforced concrete beams and a hipped roof enclosing a water tower. By 1939 new structures with much lighter construction were being erected at airfields and their appear to have been a wide range of very similar types. Some of these are detailed in *British Military Airfield Architecture* (186-192) and *British Airfield Buildings* (115-118). Building 112 at Northolt is very similar to these constructions, one such building being located at RAF Shawbury. It is again worth noting that this building was located within the 'domestic' area of the airfield.

6.1.2 Therefore, although the project briefing notes date Building 112 at Northolt to 1932 we can be confident that it was actually constructed around 1939 or 1940.

6.1.3 Gas attacks never took place and these buildings were never used for their originally intended purpose. However other forms of decontamination such as de-lousing were undertaken in some of the buildings.

6.1.4 The decontamination centres would have had reception and undressing areas at one end, bleaching rooms with showers towards the central part of the building and dressing rooms at the other end. These were clearly designed to allow an efficient flow of people from one end of the building to the other. External clothes bins would have been present into which contaminated clothes from the inside could be passed. These clothes would then have been boiled in large copper containers.

6.1.5 Much of the information detailed above is derived from *British Military Airfield Architecture* by Paul Francis.

6.2 Description: introduction

6.2.1 Building 112 is located at the northern most corner of the site (see Figure 2). It was constructed as RAF Northolt's gas decontamination centre but it was never used for this purpose. Its recent use has been as a fire training facility and a storage area for a go-kart club. It is a brick built linear building with a rectangular plan measuring 20.5m x 6.3m (see Figure 4). It is largely single storied, but with a raised central section to accommodate a water tank. The exterior walls have been rendered and painted a cream colour. It has a flat roof and the exterior is partially dominated by the tall chimney from the boilers at the east end and a lower air intake shaft towards the centre

6.3 External description

6.3.1 The **north west facing elevation** (shown at Plate 21) retains a doorway in the southern half with support rails to either side. Patients would have entered the building through this doorway and possibly through another (former) doorway in the northern half of this elevation. The northern half is now a plain rendered wall but there appears to have been a blocked former doorway in this location and it would be usual for this type of building to have two doorways in this elevation, one for wounded personnel and one for unwounded. At the centre of this elevation is a

recess and what appears to have been hatches for disposing (from inside) of contaminated clothing. There are short piers either side of this recess and bins would have formerly been located between the piers, into which the clothing would have dropped.

6.3.2 The **south west facing elevation** is entirely plain, without any windows or any other openings, and its form is only articulated by the raised central section indicating the water tank (Plate 22).

6.3.3 The **south east facing elevation** (shown at Plate 23) is again plain and without any openings. It is painted a darker grey colour than the other elevations and its only feature is the tall chimney from the boilers which projects slightly from the face of the wall.

6.3.4 The **north east facing elevation** (shown at Plate 24) has a plain doorway at the east end through which decontaminated personnel would have exited the building. To the west of this is a concrete pipe (c.65 cm diameter) which passes through the wall at ground level and projects c.1.7 m beyond the face of the wall. Much of the rest of this elevation is obscured by vegetation but towards the west end are further hatches through which contaminated clothes would have been passed into bins.

6.4 Internal description

6.4.1 The interior of the building divides into a series of small rooms which provide some indication of how casualties were intended to be 'processed' through the building. It is clear that casualties would have entered through the two doorways at the north-west end of the building into Room 1 and they would have gradually moved through the building undergoing a series of treatments before exiting towards the south-east end.

6.4.2 The main interior walls show a variant of Flemish bond (as seen also in building 007), while the dividing walls are of a stretcher bond. Most of the interior walls are covered in a cementous grey render. There are some failings and changes but the render is mostly recent, probably connected to the interior fit-out of the training facility. The ceiling consists of long lengths of concrete slabs 210 mm wide but there are also some areas of plasterboard. The flooring is exposed concrete with small pebbular inclusions, however some rooms have different mixes suggesting that the floor was laid in stages. Electrical fitting and fixtures are mostly 1950-60's and these run along pipes that are attached to the ceiling. There are some ventilation pipes at ceiling level and two small protruding walls to the north east facing elevation with exterior metal hatches above. The primary interior doors are large measuring 112 cm wide with small glass panes and swivel catches.

6.4.3 At the south east end of the building a tall air-intake shaft (Plate 25) which would have supplied fresh air to the facility in the event of an incident. The small chimney on the south west side of the facility was associated with a boiler room which would have provided hot water and heating to the building.

6.4.4 **Room 1** is at the north-west end of the building and it would have formed the reception and undressing areas. It would have been entered through the surviving doorway in the north-west elevation and (probably) through another former doorway in the same elevation. Contaminated clothes would have been deposited through the two metal hatches in the north and west walls into bins located outside (Plate 27). This would have been the only contaminated part of the building and there is an airlock at the south-east corner of the room which leads through to the decontaminated areas. As shown at Plate 26 this room is completely rendered on the interior and various fixtures and fittings survive including a wall heater and vents.

6.4.5 **Room 1a** is located in the eastern corner of Room 1 as shown at Plate 26. The pipe-work and floor base suggest that this room originally contained a shower unit. It appears that this was associated with the decontamination areas. The door is recent and is missing panes of glass.

6.4.6 **Room 2** is a large room which is rendered on all elevations with some exposed brickwork of about seven courses at high level (Plate 28). The brickwork is stretcher bond. There are high level extraction vents and pipe-work, a wall heater, and a wooden serving hatch which connects to Room 3. The doorway is too large for a modern door so extra wood panels have been inserted either side of the jambs (Plate 29). This room seems to have served as the bleaching area. The remaining rooms of the building would have comprised of various dressing and waiting areas, a boiler room, and an air conditioning plant. These have since been significantly altered to serve as the fire training facility.

6.4.7 **Room 3** may originally have been a bleach store or a shower room but it is now a kitchen area with associated cupboard fittings which are raised off the floor on wooden plinths (Plate 30). The doorway has areas of recent rebuild in concrete blocks to the side. This area is not rendered. The serving hatch which connects to room 2 appears to cut into the wall rendering so it probably post-war alteration. The hatch opening has a concrete sill, lintel and jambs. A doorway connects to Room 7.

6.4.8 **Room 4** is a small enclosed area with a metal ladder allowing access to the roof space above (Plate 31). There is a small ground level opening to the adjacent 'training course'. The room is rendered as elsewhere with a timber ply opening to the roof space.

6.4.9 **Room 5** seems to have been a large cupboard (Plate 32). It has a high level horizontal plywood division to reduce the height of the training passage below. The door has been cut through with another ground level entrance to the training passage.

6.4.10 **Room 6** is a corridor leading from the rear entrance to Room 2 (Plate 33). The walling is on one side brick in a stretcher bond which is painted cream and not

rendered. The wall connecting to the training passage has a concrete block base with plywood frame. There is a wall heater to the brick side of the corridor.

6.4.11 **Room 7** has exposed floor joists and is divided by an exposed frame with an inserted door (Plate 34). There is a small corner brick pilaster with a flue above which was probably connected to the heating or cooking facilities. The main door is wide with a concrete lintel and wooden frame. The main door is wide with a concrete lintel and wooden frame. There is a rough opening at ground level in the brickwork separating Rooms 7 and 8 with a concrete lintel and evidence of re-mortaring. This is part of the re-fit as a training centre.

6.4.12 **Room 8** is completely blocked with a large wooden platform that has been constructed for fire training purposes (Plate 35). This has made it difficult to record. There are metal fixtures on the ceiling and an isolator box on the wall. There is a corner area directly below the tallest chimney which is partly blocked by a wooden frame leading to a plywood shaft which slopes down and out into the buildings rear entrance. Above this feature the plaster board has been ripped open to reveal the corner flue. The wall dividing Rooms 7 & 8 is stretcher bond but all the external walling is the variant Flemish bond painted white.

6.4.13 **Training Area -** The corridor has been divided in two by a concrete block and plywood wall. This section is raised off the ground by steps and the flooring is timber with two access hatches for crawling into the space underneath. there is a concrete pipe leading to the outside along with various other hatches which lead back into the building.

6.4.14 The exterior wall bond is Flemish and is part of the original build. The lower levels are mostly breeze block. Three steps lead down to the rear entrance hallway with large doors as seen before. The bond is again Flemish.

6.4.15 Some of the fixtures such as door handles and other fittings seen inside Building 112 appear to be original. Examples of these can be seen at Plates 36 & 37.

7 CONCLUSION

7.1.1 This report has recorded, investigated and explained the significance of buildings 007 and 112 at RAF Northolt. It also creates for posterity an archive of the buildings, concentrating on their construction, history, development and use.

7.1.2 Buildings 007 and 112 at RAF Northolt are both relatively small, unassuming buildings of limited conventional architectural merit. They are significant however within their context at Northolt due to the overall survival of buildings at Northolt and the role this airfield played in the Battle of Britain. The Battle of Britain is clearly recognised as among the most significant phases of the Second World War and as a consequence of huge importance in the 20th-century history of Britain.

7.1.3 The buildings themselves have plain utilitarian characters representative of this phase of airfield architecture, and in keeping with most airfield buildings built during this period. They are both located within the 'domestic' area of the site, their forms reflecting their functions.

7.1.4 A comprehensive thematic survey of airfields has been undertaken by English Heritage and the most important buildings and sites have been given statutory protection. The thematic survey highlights the historic interest of RAF Northolt but shows that English Heritage do not consider it to be one of the 21 'key' airfields of the greatest historical significance.

Nick Croxson
Oxford Archaeology
December 2007

APPENDIX I BIBLIOGRAPHY

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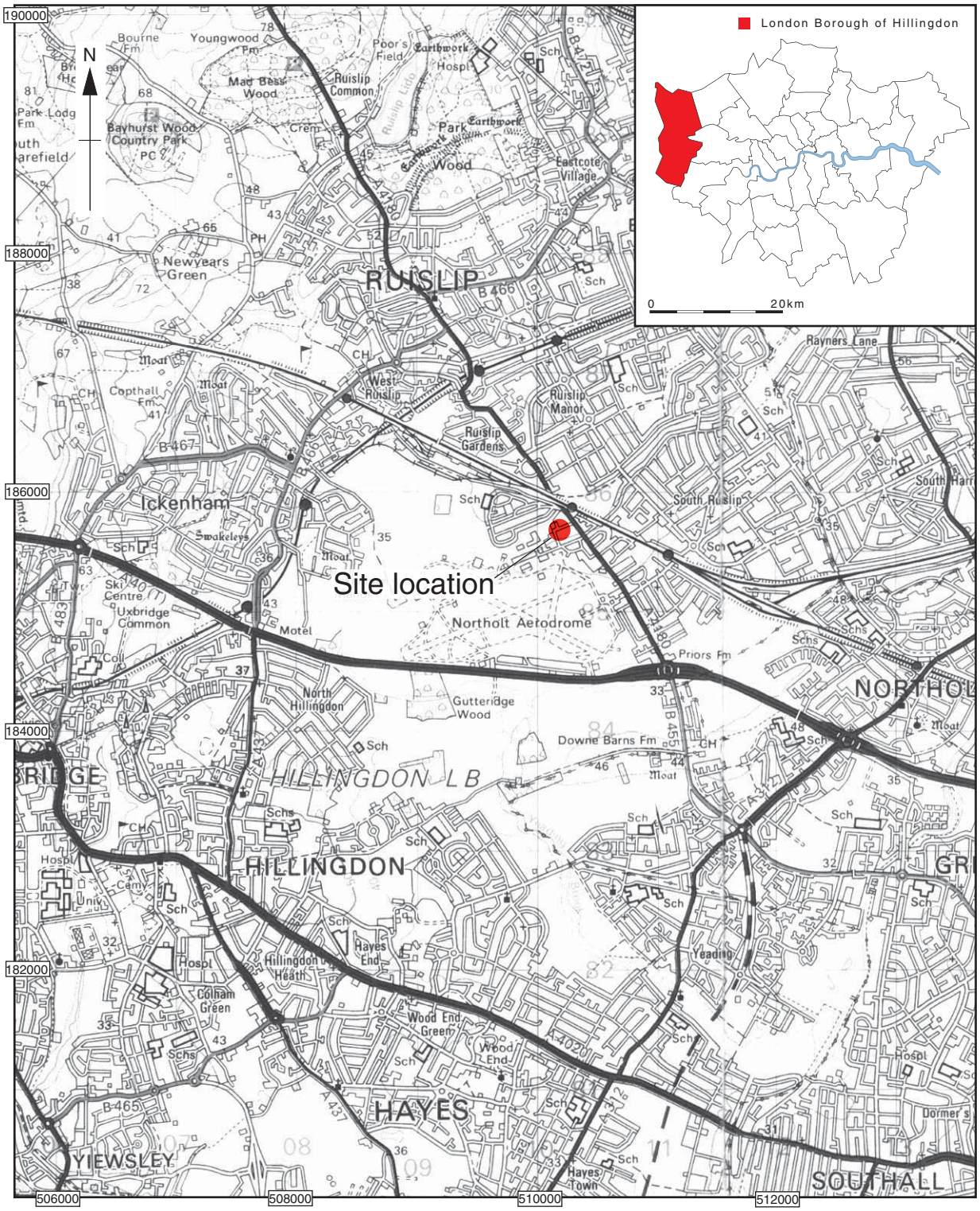
Ramsey W (ed), 1980, *The Battle of Britain Then and Now*, After the Battle

APPENDIX II SUMMARY OF SITE DETAILS

Site name: RAF Northolt
Site code: RAH07
Grid reference: TQ101857
Type of evaluation: Historic Building Recording and Investigation
Date and duration of project: Site work was undertaken on the 7th & 9th of February 2007
Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES. It will be deposited at an appropriate museum or other agreed body.



Scale 1:50,000

Figure 1: Site location

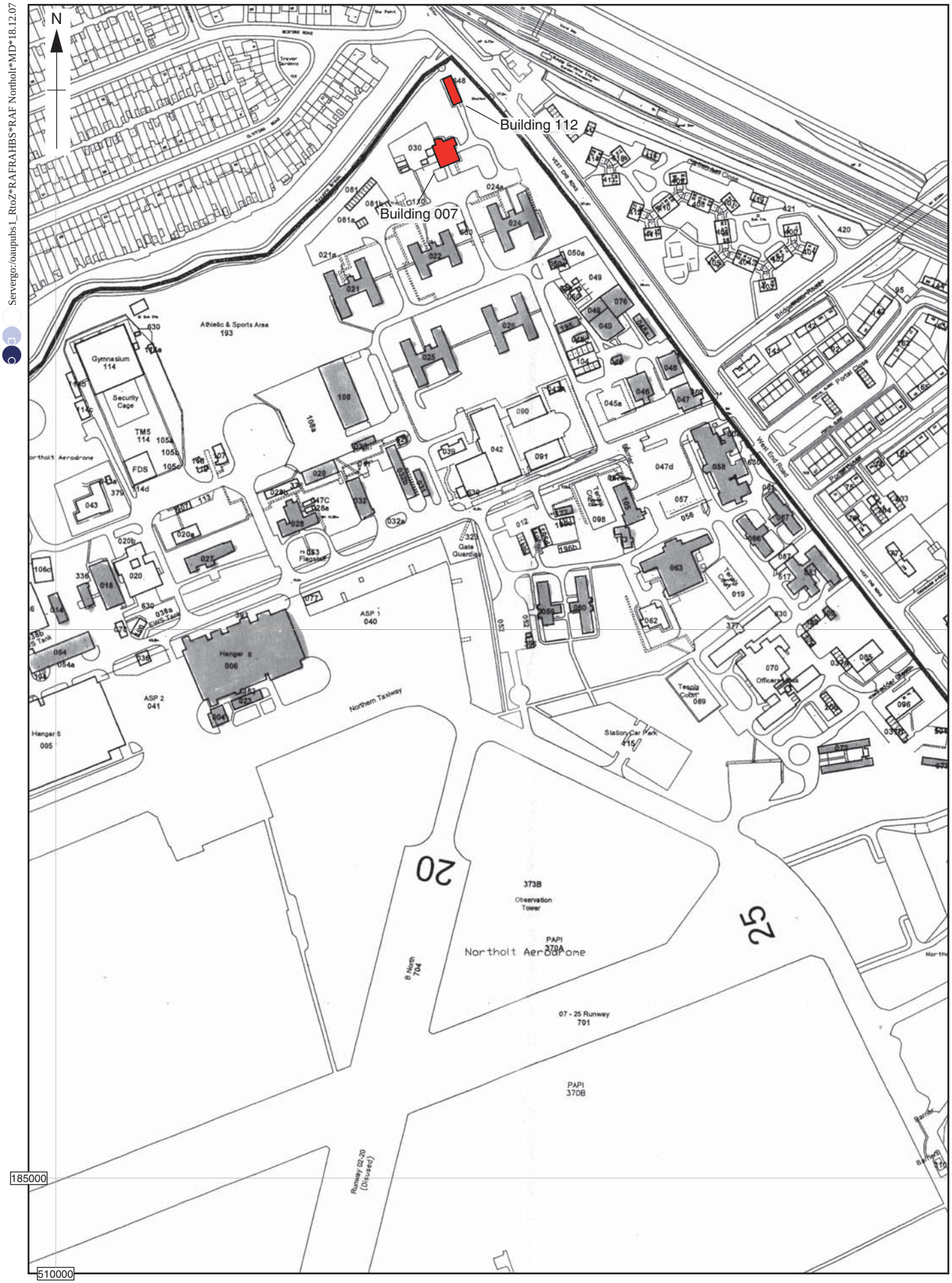


Figure 2: Plan of RAF Northolt, showing location of buildings 007 and 112

Scale 1:3,500

Data provided by *Defence Estates*
Coordinates approximate

Figure 3: Ground plan of building 007, RAF Northolt

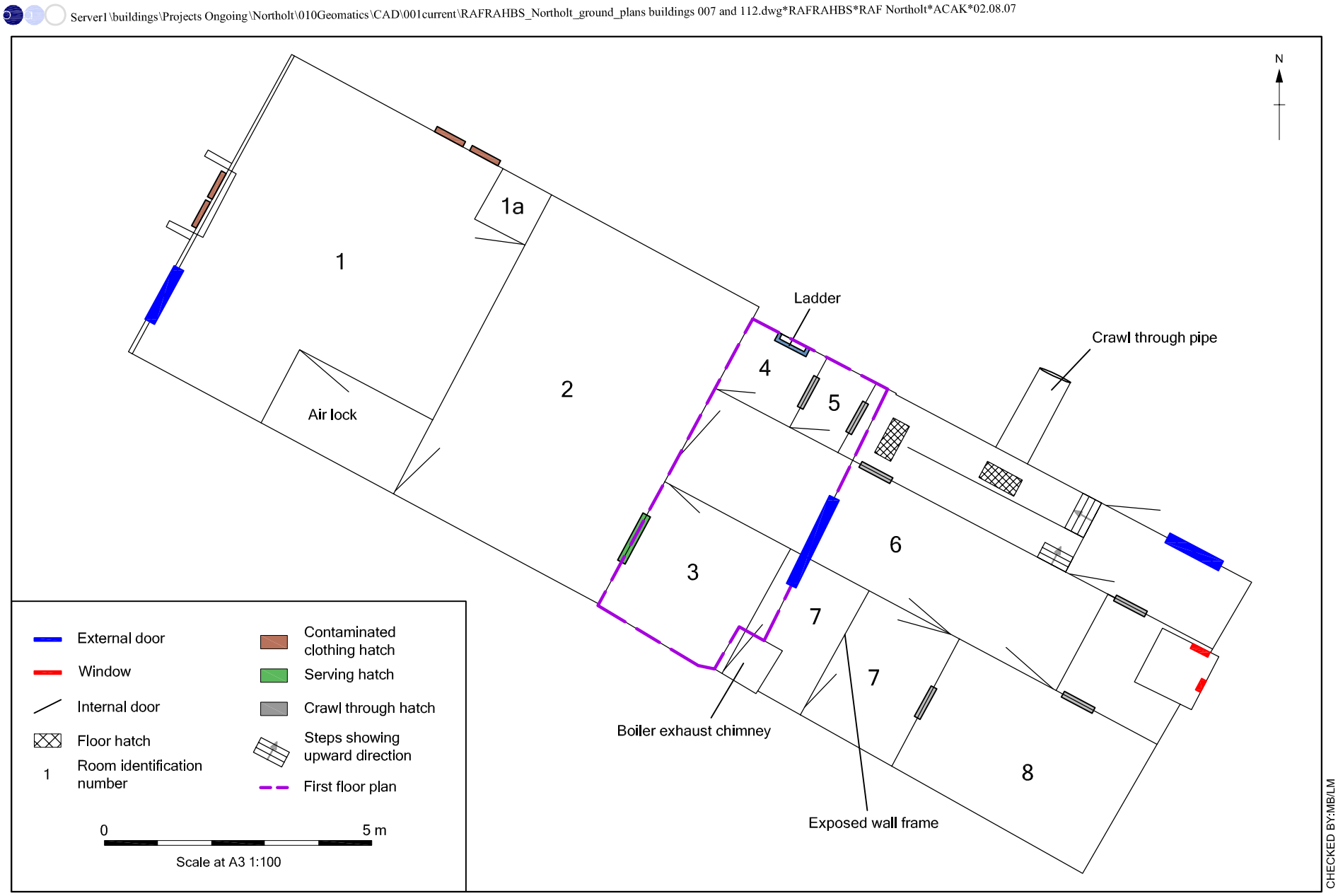


Figure 4: Ground plan of building 112, RAF Northolt

Plate 1: Building 007 - South West Facing Elevation

Plate 2: Building 007 - North West Facing Elevation

Plate 3: Building 007 - North East Facing Elevation

Plate 4: Building 007 - South East Facing Elevation

Plate 5: Building 007 - Room A (Main Build Interior)

Plate 6: Building 007 - Room B (Store)

Plate 7: Building 007 - Interior Floor

Plate 8: Building 007 - Main Build Interior Showing Concrete Beams

Plate 9: Building 007 - Original Window Fixtures

Plate 10: Building 007 - Tower

Plate 11: Building 007 - Tower Interior

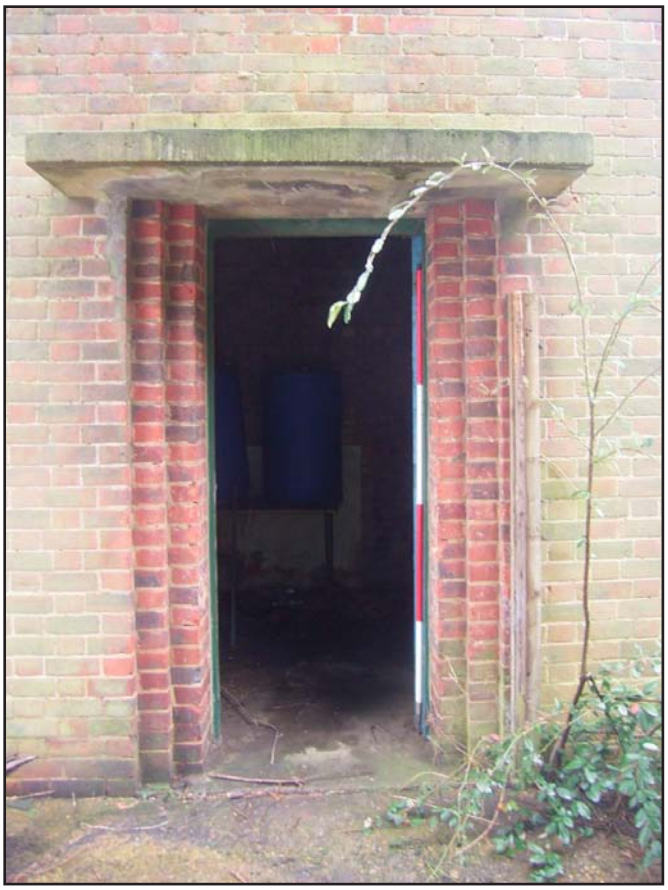


Plate 12: Building 007 - Tower Doorway

Plate 13: Building 007 - Extension 1 Exterior

Plate 14: Building 007 - Room C (Respirator Facility)

Plate 15: Building 007 - Room C (Respirator Facility)

Plate 16: Building 007 - Room D (Respirator Facility)

Plate 17: Building 007 - Room E

Plate 18: Building 007 - External Storage Area

Plate 19: Building 007 - Extension 2 Exterior

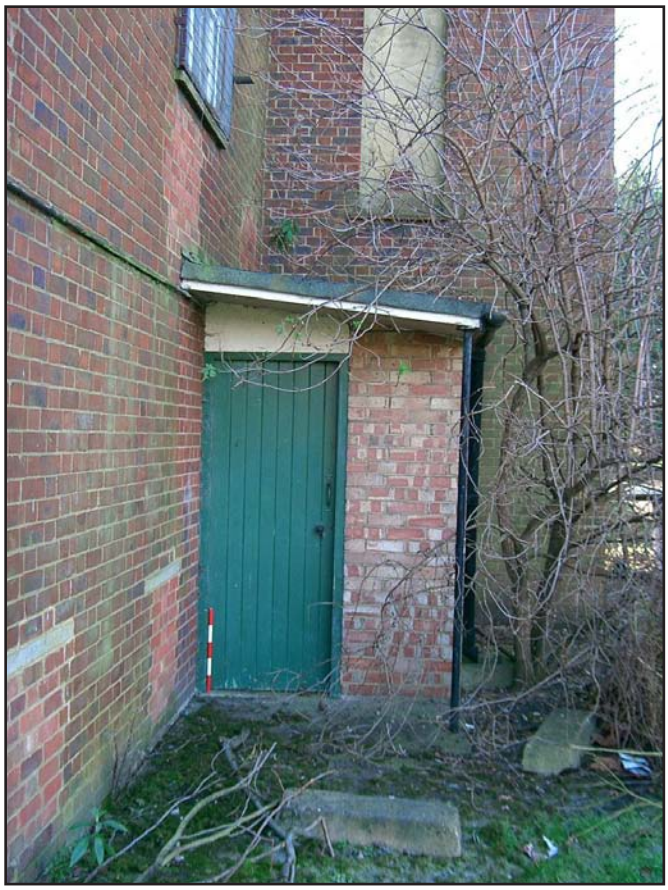


Plate 20: Building 007 - Extension 3 Exterior

Plate 21: Building 112 - North West Facing Elevation

Plate 22: Building 112 - South West Facing Elevation

Plate 23: Building 112 - South East Facing Elevation

Plate 24: Building 112 - North East Facing Elevation

Plate 25: Building 112 - Air-Intake Shaft

Plate 26: Building 112 - Room 1 & 1a

Plate 27: Building 112 - Contaminated Clothing Hatches

Plate 28: Building 112 - Room 2 Looking Through To Airlock in Room 1

Plate 29: Building 112 - Room 2 Looking Through to Room 6 (Corridor)

Plate 30: Building 112 - Room 3

Plate 31: Building 112 - Room 4

Plate 32: Building 112 - Room 5

Plate 33: Building 112 - Room 6

Plate 34: Building 112 - Room 7

Plate 35: Building 112 - Room 8

Plate 36: Building 112 - Original Fixtures

Plate 37: Building 112 - Original Fixtures

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