
RAF CULMHEAD

Second Edition
Airfield Research Publishing for:
Somerset County Council
Taunton Deane Borough Council
Blackdown Hills AONB

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1 Introduction

The surviving features on the airfield and domestic sites of the former RAF station at Culmhead (known as Churchstanton until December 1943) are now regarded as an important part of our national heritage. This detailed survey will, by assessing the nature, extent and quality of the surviving structures, provide important information to help in Planning and Countryside Management decisions. The survey was carried out by Paul Francis of Airfield Research Publishing and the report edited by Chris Webster of Somerset County Council.

This survey report has been commissioned by the following organisations:

- Somerset County Council
- The Blackdown Hills Project
- Taunton Deane Borough Council

The survey project was managed by the Archaeology Section of Somerset County Council.

In the years since this report was first produced several changes have taken place at Culmhead. Some of the buildings on the technical site and a significant area at the south west of the airfield have been protected as Scheduled Monuments (from 2/10/2001) but many of the unprotected buildings have been demolished. The report has been updated with this information where appropriate (correct to 2001) by Chris Webster.

1.1 Survey Methodology

The report has encompassed all aspects of the airfield complex including: civil engineering; communications; technical facilities; ground defences; perimeter track; roads; runways and domestic buildings.

A comprehensive gazetteer of all surviving structures has been compiled. All were visited and most were photographed as part of a rapid survey carried out between the 23–28 February 1997. The list has been added to the Somerset County Sites and Monuments Record (now Historic Environment Record).

Buildings constructed during WW2 on RAF stations were built to standard Air Ministry type designs and each one had a unique drawing number. For example, the control tower at Culmhead is 343/43. The pair of numbers after the slash indicates the year in which it was drawn — in this case 1943.

The exact position of buildings on an RAF station are shown on an Air Ministry site plan and the site plan for Culmhead is drawing number 4997/45, also included is a schedule of buildings and this indicates that building 16 is the control tower. Figures 6, 7, 8 and 9 are based on drawing 4997/45 and the numbers shown are the Air Ministry building numbers. A number of structures such as blast shelters, gunpits, pillboxes and static water tanks were not given Air Ministry building numbers. As an aid to identification, these structures have been given a 500 series number.

In this report, all surviving buildings and structures have been given a survey number, for example, the Control tower is No. 35. Figures 45, 46, 47 and 55 show all surviving buildings and structures as seen in February 1997. These are identified by their survey numbers.

1.2 Acknowledgements

Denis Corley (Airfield Research Group) Colin Dobinson (Council for British Archaeology) John Hellis (The Defence of Britain Project) Gerry Sellick (CSOS), Bob Woodman (CSOS)

2 Glossary of terms

Airfield a defined area of land used for take-off and landing of aircraft.

Bitumen a mixture of hydrocarbons found naturally in combination with a mineral aggregate (natural asphalt) or, more commonly, produced as a by-product with the distillation of petroleum.

Circus a raid by a small number of bombers accompanied by a very strong fighter escort designed to draw enemy fighters into battle.

Concrete hurters pillars of concrete positioned in front of motor transport vehicle shed door openings. These were used for keeping doors open with the use of a metal hook fixed to the doors and an eye-bolt attached to the concrete hurter.

Dispersed area an area on a military installation designed primarily for the dispersal of parked aircraft whereby such aircraft will be less vulnerable in the event of an enemy air-raid.

Perimeter track a track skirting the airfield, to allow traffic to circulate freely and gain access to any part of the airfield without causing congestion or interference — normally achieved by the operation of a one-way system.

Permanent brick walls with a minimum thickness of 13.5 inches. The angled defended walls at Culmhead for example, are laid in a double “English Bond” course and are 18 inches thick.

Ramrod a strongly escorted bomber raid with the primary object of destroying the target.

Rhubarb low level fighter attacks on targets of convenience such as gunsites and locomotives.

Roadstead an escorted raid on shipping, usually at low level.

Rodeo a fighter sweep over the Continent without bombers

Runway an “all-weather” surface prepared for the take-off and landing of aircraft.

Satellite a landing ground, for subsidiary or alternative use, dependant upon a neighbouring airfield for administration.

Taunton Stop Line a defensive line of pillboxes and other defences running between Burnham-on-Sea in the north and Seaton in the south.

Temporary brick two types were used on airfields. The most common type of construction — also known as half brick hutting and 4.5 inch brick buildings, consisted of bricks laid in “Stretcher Bond” only. This is a wall consisting of single bricks laid with the length of the brick placed along the length of wall and 4.5 inches wide. Walls of this type were often cement rendered on the external face. Brick piers were normally at ten feet centres to add strength to the wall and to support steel roof trusses.

Important technical buildings were often built with 9 inch walls and this thickness is of the minimum width to support flat reinforced concrete roofs. On airfields, bricks were laid with both stretcher and headers producing a wall in “English Bond”.

WAAF the Women’s Auxiliary Air Force who undertook many duties on airfields in WW2.

3 Background

From the summer of 1940, during the Battle of Britain, RAF Fighter Command was under immense pressure, so that towards the end of the battle, only three squadrons of day fighters were available for the defence of Devon and Cornwall. This was despite the location of vital strategic targets such as the naval base at Plymouth, and the area lay right in the path of enemy raiders flying from northern France and heading for targets in South Wales. Even if more fighters were available however, the airfields to house them were not, and it was obviously essential to find new sites as a matter of urgency.

Since so much of the West Country was unsuitable being either the Somerset Levels or steep wooded valleys, the location for a new airfield was not easy. An early choice was a fairly level area of high ground at the east end of the Blackdown Hills, lying in Somerset but close to the Devon border. At the south end of the site lay Trickey Warren Farm and to the south-west of this is the village of Churchstanton from which the new airfield was to take its first official

name. Taunton is six miles to the north, and the nearest point on the south coast at Seaton is only sixteen miles distant. RAF Churchstanton with a height above sea level of 894 feet, became the second highest airfield in the country. The highest airfield at 969 feet above sea level was Davidstow Moor in Cornwall.

Before July 1940, this area of land had already been listed by the Air Ministry as an emergency landing ground and full requisition soon took place for the development of the site as a satellite airfield in 10 Group (that part of RAF Fighter Command covering the south-west of England). The 520 acres of land covering the airfield including Trickey Warren Farm was owned by the Phillips family of Burnworthy Manor.

At this time it was intended to use the new base as a forward airfield for the Fighter Sector centred at Colerne near Bath. In November a contract for the construction of three tarmac runways had been awarded to LJ Speight and Partners Ltd. Work commenced almost immediately and although delayed by poor weather that winter, it was well advanced by the following June. In the meantime the site had been relocated to serve as a satellite station for the Sector airfield at Exeter, the principal fighter station in the area and with which it was closely associated throughout its operational career. The airfield boundary followed existing public roads and field boundaries. Trickey Warren Farm and surrounding land was requisitioned, and a closing order served on Trickey Warren Lane. This lane became the centre line for a practice bombing range contained within the surrounding fields.

By the time that the station officially opened on 1 August 1941 the decision had been made to equip it as an operational fighter station in its own right and not as a satellite.

4 Construction and layout

4.1 Runways

Designed from the beginning on the three grass strip principle with each strip 200 yards wide and approximately 60 degrees to each other. Hard surface runways were to be built along the centre of the strips and connected together by a hard surface perimeter track with a width of 50 feet. The chosen runway lengths were over and above of those recommended in March 1941 for a typical night fighter station.

Runway 04–22 — 1410 yards by 50 yards

Runway 10–23 — 1320 yards by 50 yards

Runway 15–33 — 1130 yards by 50 yards

For reasons of light wear and tear by fighter aircraft, local conditions and the availability of local hardcore from Triscombe quarry, three tarmac runways were specified instead of the universal practice of concrete. This included an eight-inch thickness of graded broken-stone hardcore on top of a consolidated sub-grade followed by binding and rolling with eight- and ten-ton steam rollers. Tarmac was then laid in two coats and consisted of:

- An undercoat of a two-inch compacted thickness consisting of 1.5-inch to 0.375-inch graded stone. This was followed by fine toppings rolled into the top interstices to give a resultant top thickness of 0.5-inch after final rolling.
- A final sealing coat was obtained by a sealing coat of hot tar with a binding of between 0.125 to 0.250-inch gauge chippings.

Out of a total of 444 RAF airfields with hard runways only 111 had runways constructed of tarmac. This figure excludes the 30 airfields built for the Ministry of Aircraft Production and Royal Naval Air Stations.

Drains to take rain water away from the runways were provided along all three runways with catchpits positioned at intervals. Cast-iron drain covers (patent 24761/39) over the catchpits were manufactured by the firm of Dudley and Dowell of Cradley Heath (Figure 3). No airfield lighting was provided.

4.2 Buildings

The construction of the airfield accommodation at Churchstanton was in two phases, the first started in the winter 1940/41 and encompassed the original planning for a satellite airfield. This involved the construction of temporary brick structures using bricks from the Wellington brick works. This included a few specialist buildings such as a fighter satellite watch office and decontamination facilities. At this stage only essential buildings and structures were built on the airfield site with the majority of them being erected on the dispersed sites. Many were in the form of a new Ministry of Supply prefabricated building known as the “Laing hut” (Figure 30 on page 36). These were supplied by the Air Ministry to various airfields from January 1941 when production started at Elstree, Herts.

Almost simultaneously, building for the upgrading of the airfield to a fighter station in its own right commenced including many new structures to the latest standard of temporary brick buildings. At least one of these, the new watch

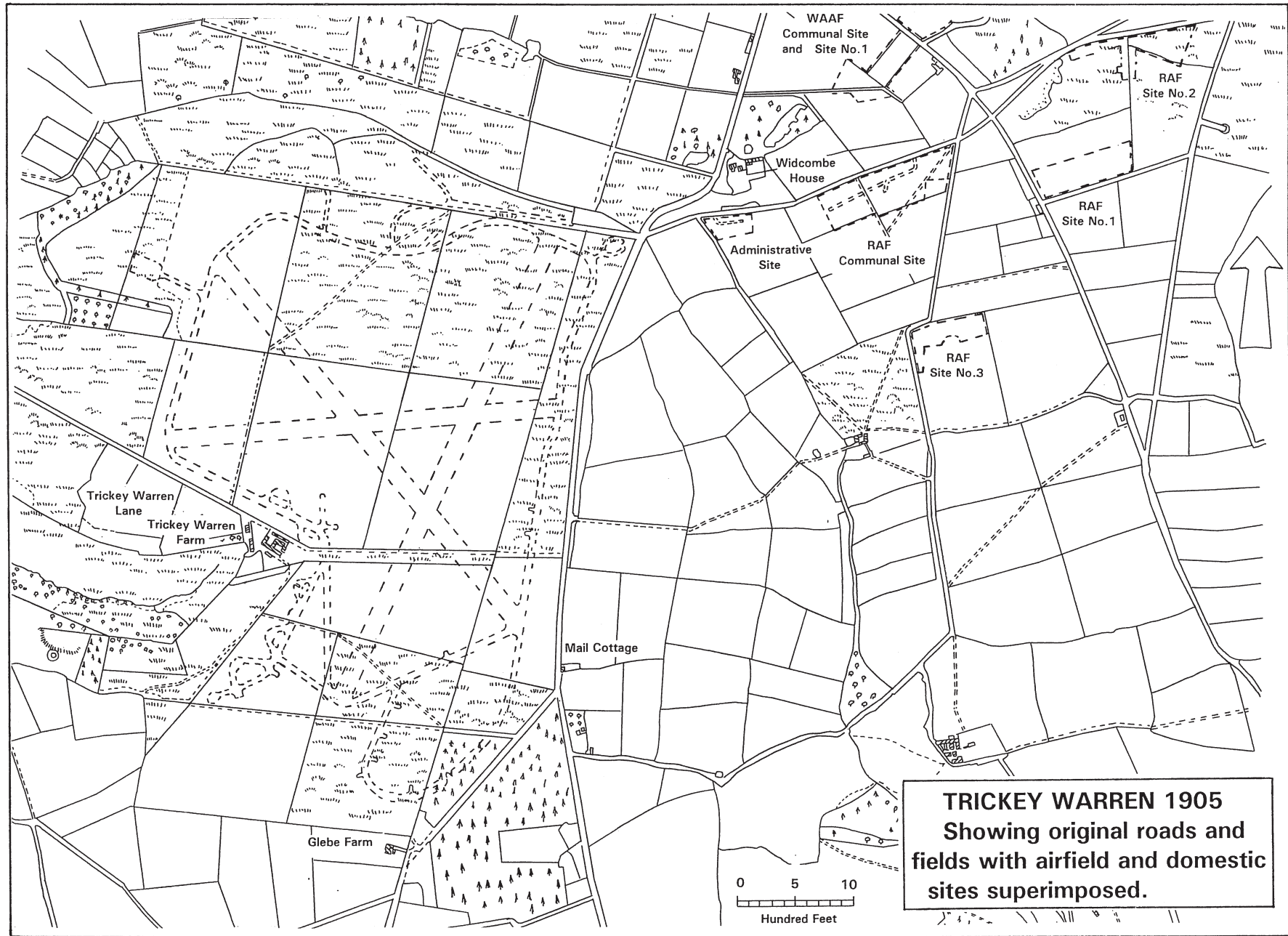


Figure 1: Trickey Warren on the 1905 Ordnance Survey maps with the airfield and domestic sites superimposed.

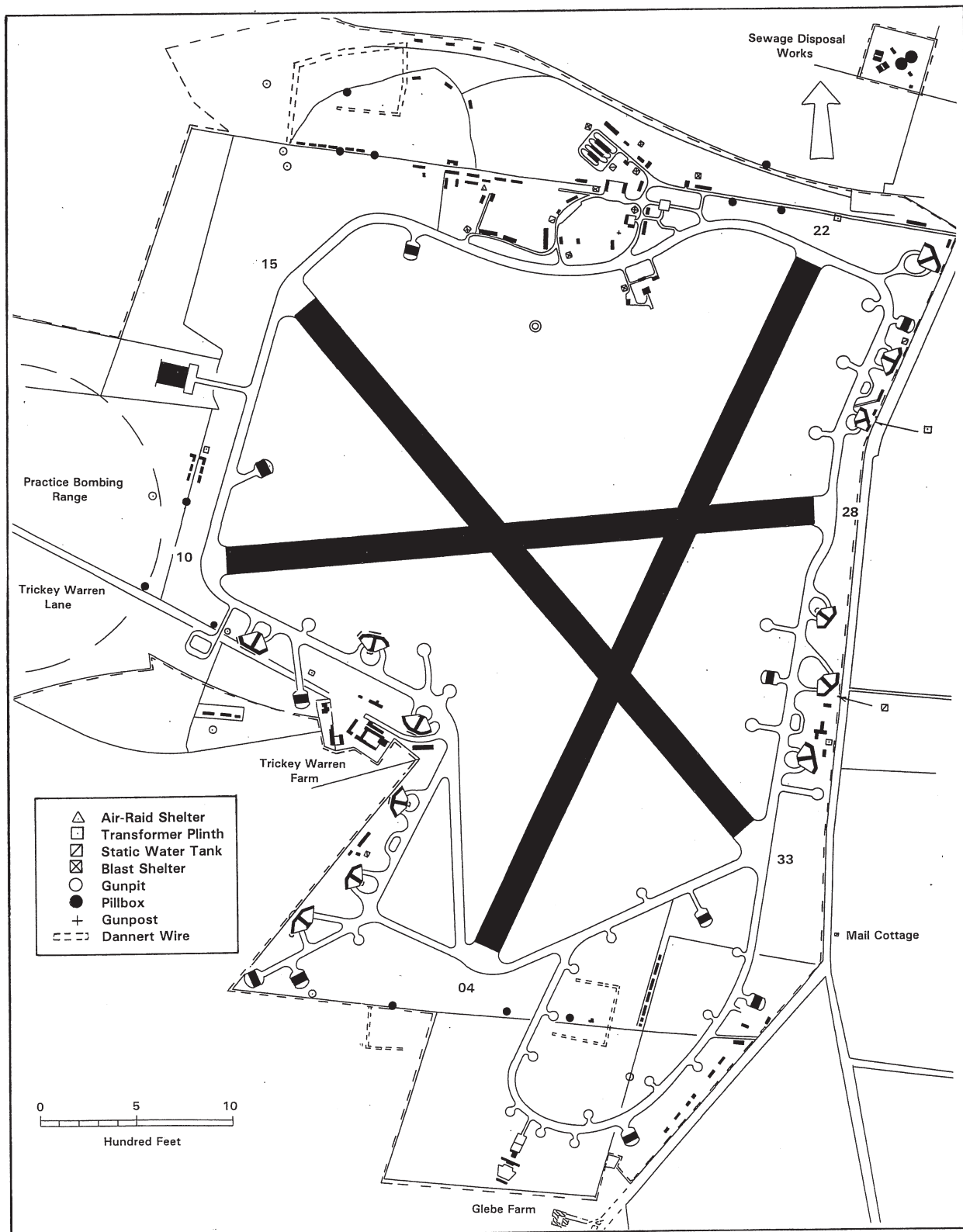


Figure 2: Overall plan of Culmhead Airfield in 1945. Based on Air Ministry plan 4997/45



Figure 3: Cast-iron runway drain cover

office replaced the earlier satellite example and firmly established RAF Churchstanton as an operational fighter station. Although an operations block was not built, a station intelligence and briefing room was provided for briefing and debriefing of pilots before and after a mission. Fighter operations were planned from the Sector operations block at Exeter.

The planning and layout of Churchstanton in its final form as a fighter station of the early part of the war was typical of the period with technical buildings located on the airfield site. In anticipation of concentrated bombing, a policy of dispersed layout was introduced so that domestic accommodation was separated from the airfield. These were provided within six dispersed sites located in the local area to the north-east. All domestic sites were located close to public roads to keep lengthy Air Ministry connecting roads to a minimum. Huts were erected without symmetry or pattern and where possible as an aid to concealment, they were positioned close to hedge lines. From 1 March 1941, Nissen-type hutting was made available and eventually these were used as an alternative to both temporary brick and Laing hutting. Many were erected on the dispersed sites to supplement the existing Laing huts. Two new sites were added in late 1941 for WAAFs and eventually accommodation was provided for over 1400 personnel consisting of 1,136 RAF and 301 WAAFs.

A further two sites were added to the six already established but these were located at some distance further north towards Taunton. Both used existing houses with one functioning as a sick quarters, while the other became a large officers' mess.

A water supply taken from the natural springs of the river Culm was piped to a large static water tank and pumping station located on the administrative site. A booster pump house on the main communal site, pumped water from here to another static tank and finally to a high level water tower. In addition, static water tanks were provided close to groups of buildings for fire-fighting purposes. Raw sewage was pumped from the domestic sites and airfield to a specially built sewage farm for processing.

4.3 Aircraft Hardstandings and Fighter Pens

At the southern end of the inner perimeter track was an aircraft dispersal area in the form of an outer loop, this was designed to prevent congestion on the inner (main) perimeter track and contained 15 small hardstandings. A number of larger hardstandings were also provided around the inner perimeter track. Eventually eleven Blister type hangars were dispersed around the inner and outer perimeter tracks but one of these was probably removed c1943 to be replaced by a 14-bay T2 type hangar.

Twelve of the larger Type "B" fighter pens were built here, each designed to house two aircraft of a size similar to that of the Bristol Blenheim. To minimise the effects of an enemy attack from the air, fighter pens were positioned in four groups of three pens. One group accommodated one flight of six aircraft, therefore, a total of 24 aircraft under scramble conditions could be protected inside the pens at once. Two flights were located on the east side of the airfield and two flights on the west side.

To counter the effects of bomb blast, the pens were based on the Type "B" fighter pen with blast walls and this was achieved by two different methods. The fighter pens built along the south-western perimeter track were similar in

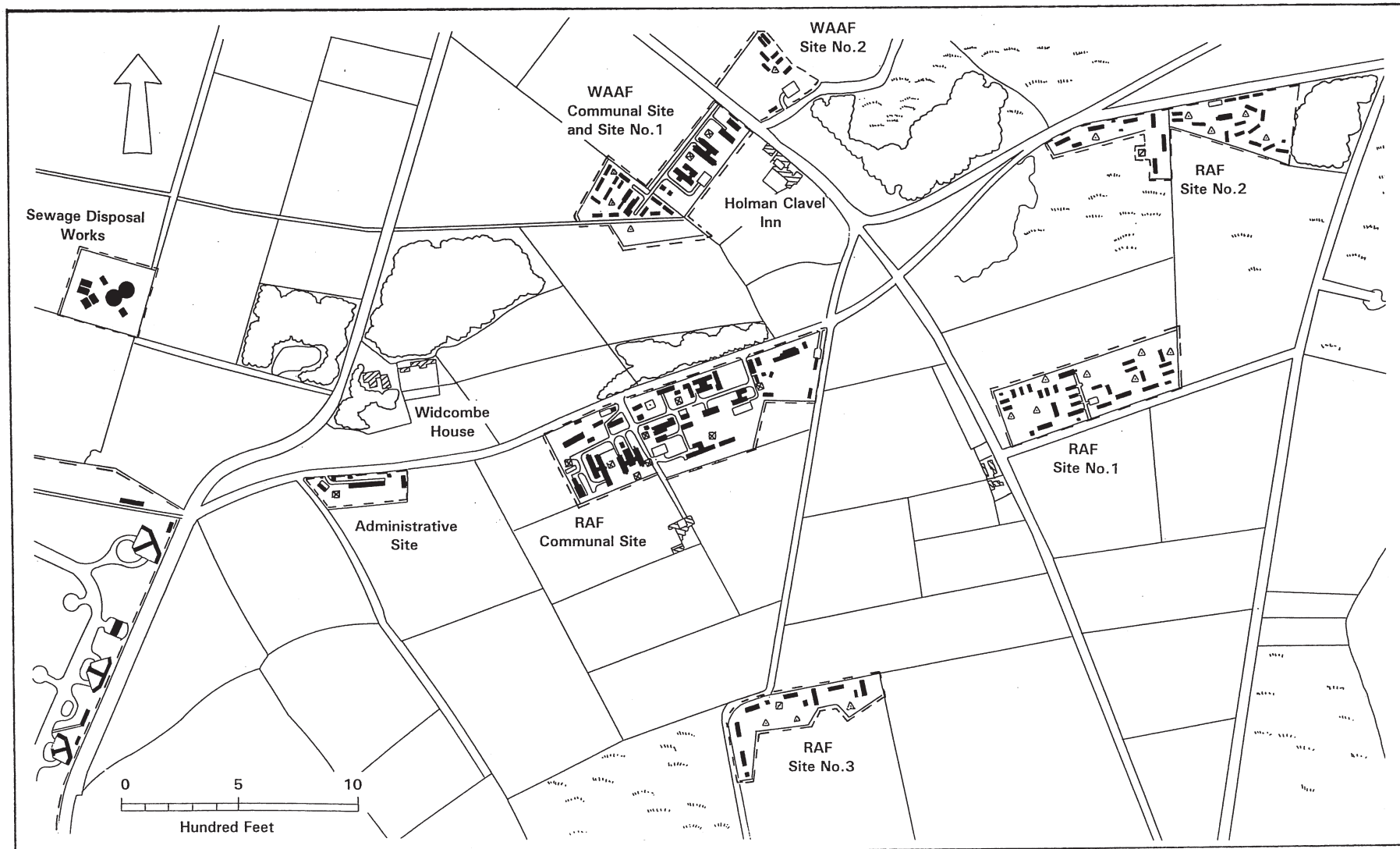


Figure 4: Plan of Culmhead Domestic Sites based on Air Ministry plan 4997/45.

construction to the standard design with earthwork traverses, while those along the eastern perimeter track had sandbag walls. Furthermore, the south-western set were very well defended with permanent brick loopholed walls offering protection against attacking ground forces. The airfield defences of RAF Churchstanton were extensive as the site was located in a largely undefended area and the “wrong side” of the Taunton Stop Line. The airfield would have presented an attractive target for capture by German paratroopers for use as a forward airfield for operations against the military targets at Bristol, Exeter and Taunton. The fighter pens along the south-western side were therefore, defended from attack from both within the airfield boundary and in the direction of the Blackdown Hills. At least two pens belonging to the other groups along the eastern perimeter track were also defended but these were designed only to contain the enemy forces within the airfield boundary and prevent them from dispersing into the local area.

In all cases the plan-form of the pens followed that of the standard design with three traversed arms and dwarf brick walls forming the standard shape of the type “B” fighter pen. Normally a precast concrete shelter was located at the rear of the central arm but, the pens on the east side with sandbag walls had a brick-built air-raid shelter within the front of the central arm. At the front of this on two of the pens was the defended position consisting of a loopholed wall.

4.4 Additional Airfield Defences

The airfield defences at Churchstanton were numerous and in addition to the walls around the fighter pens, other defences included brick-lined gun pits; surface anti-aircraft machine-gun positions; trench lines; clutches of pillboxes; lines of Dannert wire and even steel poles erected at random to prevent enemy gliders from landing. A number of brick-lined gunpits mainly positioned on the approach to the runways were located around the perimeter of the airfield with some also built as detached units outside the airfield boundary. These were semi-sunk and probably fitted with a 20 mm Oerlikon heavy machine-gun capable of being used against ground forces or aircraft. The brick walls and earth bank offered some protection to the gunner. Surface anti-aircraft machine-gun positions may have been enclosed by sandbag walls instead of brick walls and earth banks and were simply designed to be used only against low-flying enemy aircraft. These were located on the main technical site and consisted of a 20mm Oerlikon or similar weapon attached to a permanently fixed standard mounting.

Also within the airfield boundary and in conjunction with the gunpits were four clutches of pillboxes. Each group contained three pillboxes and the layout of these are either three in a line positioned along a hedgerow of a field boundary or in the form of a triangle. Those that survive today are of an unusual seven-sided design. In conjunction with groups of pillboxes, large areas were originally surrounded by lines of Dannert wire. One such enclosure in the shape of a “U” was erected in the immediate area around the defence coordination point forming the Battle Headquarters. Accommodation firstly in the form of Laing huts and later by Nissen hutting, was provided for personnel engaged in airfield defence. These were positioned on the airfield boundaries and therefore close to the defensive positions which the personnel served. Both zig-zag and curved-shaped trench lines were dug close to the group of defence unit barrack blocks 206–208. Other trench systems are known to have been constructed close to the fighter pens such as that found behind number 226.

In the event of an air-raid, fighter pens had their own shelters and on the technical site a few underground air-raid shelters were also provided but, the main protection against air-raids on this site was a large number of open blast shelters. These served the dual purpose of blast shelter and a brick-lined trench system for semi-trained airmen armed with a rifle and the No. 56 grenade. This form of protection was also used on the RAF communal site, but the other dispersed domestic sites forming the living accommodation and normally used at night had instead, either surface or underground air-raid shelters.

5 Operational History

Exeter Airport had been badly damaged in a succession of air raids in the spring of 1941. Accordingly, on 9 June, in anticipation of further moonlight raids, half the aircraft of 307 and 504 Squadrons at Exeter were dispersed at Churchstanton. Thus the Defiants and Hurricanes of these two units became the first aircraft to make use of the new but incomplete airfield.

On the day after the official opening, (1 August 1941) the Hurricanes of 316 Squadron were flown in by their Polish pilots to become the station’s first operational fighters. At this stage, construction of the runways was still in progress, and the site was not even connected to the mains water supply. On the 3 August, a taxing aircraft had the misfortune of colliding with a steamroller engaged in finishing off the runways. None of this prevented the Poles from flying operations and at 10.30 hrs. on the next day, Hurricanes Z2585 and Z2702 took off on Churchstanton’s first operation — a convoy patrol lasting 1.5 hours.

At this date, daylight air-raids by enemy aircraft were diminishing and as a result, patrols from Churchstanton were instead carried out for the protection of shipping conveyors. There were also occasional “scrambles” to intercept unidentified aircraft, but the main activity was the escorting bombers in hitting targets in north-west France. On 6 August 1941 for example, 316 Squadron sent a force of eight Hurricanes to cover the return of two of the RAF’s new Flying Fortresses from a raid on the German battleships then lurking at Brest.

Although Churchstanton would normally house only one fighter squadron during its first year of operations, a second Polish Hurricane unit was also based here for the first month. This was 302 Squadron, which immediately joined in with the convoy patrols and bomber escorts sometimes making use of the advanced bases at Bolt Head, Ibsley and Portreath. On 26 August, 12 Hurricanes of 302 Squadron joined a similar number from 317 Squadron at Exeter and flew an offensive wing patrol over the Cherbourg peninsula.

Tragedy struck on 24 August 1941, when Hurricane Z2913 “WX-D” of 302 Squadron crashed, killing the pilot. The aircraft was returning after carrying out a convoy patrol and it was seen to pass very low over the Merry Harriers Inn with obvious engine trouble. It then crashed into a field beyond and burst into flames, whereupon and with great courage, two local people, Charles Smith and William Harris extricated the pilot, only to find that he was dead.

In early September, 302 Squadron was redeployed to Warmwell, and for the next twelve months Churchstanton housed one unit at a time. Apart from flying its own patrols, this often joined forces with the fighters based at Exeter and Harrowbeer to form a three squadron wing.

By the autumn of 1941 the Hurricane IIA was no match for the enemy fighters then being encountered over France and in mid October, 316 Squadron converted to the Spitfire VB. Operations with this aircraft began on 1 November and on the 8 November they flew from Redhill to join the 11 Group Wing to take part in “Circus 110” over Lille. These were hazardous operations and in the course of the raid the Commanding Officer, was lost and two other Churchstanton Spitfires were badly shot up. Quite undaunted, the squadron persevered and on 12 December moved up to Northolt to defend the capital.

316 Squadron was replaced by 306, which became the third Polish unit to be based here being fresh from a rest period in the north-west of England. The continued presence of enemy battleships at Brest was a major preoccupation and two large bomber raids were mounted against them during December under the code name “Operation Veracity”. For both of these 306 Squadron operated as part of the Exeter wing, using Bolt Head as a temporary base to maximise their range. On the 18 December, the first raid took place and 306 Squadron claimed two Me. 109’s for no loss. On the second Veracity raid, however, which took place on 30 December, one Spitfire was lost, although the squadron was able to claim four Messerschmidts destroyed.

At first light on 12 February 1942, the 10 Group fighter airfields at Exeter and Warmwell were both bombed, and when 306 Squadron was scrambled to intercept the raiders, it had not yet been established that these raids were in connection with the attempt to escape of the Scharnhorst and Gneisenau. The two ships had not only left their lair at Brest undetected but by 8 am were already level with the coast of east Sussex in their audacious dash up the English Channel en route for Germany.

Most of the fighter stations in 10 Group were engaged, directly or otherwise, in attacks on enemy shipping and on 15 March for example, the 306 Squadron Spitfires joined forces with their Polish compatriots of 317 Squadron at Exeter to take part in “Roadstead 17”. This involved escorting a party of five Hudsons making a raid on enemy vessels off the Ile du Batz.

Many operations of this kind were carried out during the summer months, typical examples, on the 16 April, had 306 Squadron flying from Tangmere with 302 (Harrowbeer) and 308 (Exeter) for “Ramrod 20” to Le Havre and a “Rodeo” to Gravelines.

Meanwhile, in the spring of 1942, a new and little known experimental unit had been transferred to Churchstanton in order to relieve congestion at Exeter. This was a research flight, which had been detached from the Royal Aircraft Establishment at Farnborough at the outbreak of war to carry out secret trials in the West Country in association with the Washington Singer Laboratories in Exeter. By March, the flight had made its home at Churchstanton and brought about half a dozen aircraft with it — at least one Wellington, two Hurricanes (including AF979), some Battles and it is believed, a Bristol Blenheim.

One of the flight’s principal tasks when flying their variety of types of aircraft was to carry out “impact flights” flying into cables suspended from barrage balloons. Experiments were first conducted on cables with a strength of 3.25 tons as used by British barrage balloons and it was assumed that the German cables would of a similar strength. On the discovery that the Germans used a 1-ton cable, the experiments had to be repeated using this cable. Countermeasures to barrage balloon cables were developed, including various types of strengthened wing leading edge and, of course, cable cutters. These extremely hazardous trials took place on an area of marshy meadowland at Pawlett Hams, north of Bridgwater. This area had the advantage of being surrounded on three sides by the meandering River Parrett, just before it enters the Bristol Channel.

The aircraft were frequently damaged, and some were even destroyed, on 23 March 1942 for example, after hitting

the cables at Pawlett, Wellington P9210 broke up in the air, the pilot did however escape by parachute. On 18 September, a Hurricane's radiator was holed in the impact, with the result that the engine seized and a crash landing had to be made. On another occasion, in April 1943, two Hurricanes made a joint sortie into a "Projected Salvo" fired from a site at Watchet, and were both damaged in the process.

In conjunction with the impact testing, the flight also played an important part in the development of other systems involving the use of cables, such as the Long Aerial Mine. This was towed by a bomber with the aim of blowing up a fighter in pursuit. Other work done included the dropping of wind armed bombs, various parachute designs, and the testing of bombs fused by photo electric cells and proximity pistols. Experimental cable cutting was also carried out at Haldon Racecourse, where a catapult device had been specially set up for the purpose. By 1943, however, enemy barrage balloon cables were posing only a very limited hazard to Allied bombers and accordingly, the amount of experimental work was reduced. So on 12 March 1944, the detached flight closed down and the flight then transferred to RAE Farnborough.

Meanwhile on 3 May 1942, another change had taken place with the departure at 13.00 hrs. of 306 Squadron which left for Kirton-in-Lindsey in Lincolnshire. For a period of four weeks their place was taken by another RAF Spitfire unit, 154 Squadron. On 8 June the Czech Spitfires of 313 Squadron arrived for a twelve month period, making them one of the stations longest residents.

On 17 August 1942, 313 joined their compatriot squadrons from Exeter (310) and Harrowbeer (312) in making a sweep to Cherbourg alongside two USAAF B17s. This mission was a diversion for the first bombing raid mounted by the USAAF against the marshalling yards at Rouen. USAAF fighter aircraft also made their first appearance at this time and on 9 September, the first P38 Lightning to be seen at Churchstanton landed here from its base at Ibsley.

Offensive operations were increasingly flown from advanced bases and between 26 to 29 September 1942 the squadron was detached to Portreath to take part in "Operation Crucible" — a USAAF B17 raid on Brest. Their place was taken by 12 Group Spitfires from Kingscliffe. 10 Group Spitfires were now required to fly from 11 Group bases. Following a mission from West Malling on 8 October, 313 Squadron was set to the American fighter base at Debden in Essex. Here they joined the rest of the Exeter wing to carry out a diversionary sweep off the Dutch coast in support of "Circus 24" — a USAAF raid on Lille.

With the completion of two sets of aircraft fighter pens to house two fighter squadrons, a second unit arrived at Churchstanton on 10 October 1942. On 15 October, 312 and 313 Squadrons took part on a joint mission to escort six Hurricane fighter bombers in an attack on enemy shipping off the Brittany coast. Offensive sweeps continued, and on 28 October, 312 in addition to escorting a force of Hurricane fighter bombers, attacked and damaged a locomotive.

From November 1942, escort duties were undertaken in support of both RAF and USAAF bombers. Typically raids took place on targets in Brest, Lorient, St. Malo and St. Nazaire. Again many missions were conducted from 11 Group airfields for example, in December, two raids took place from the Tangmere Sector to shepherd B24s back from Abbeville and Romilly. On 26 January they escorted a force of twelve Venturas of 21 Squadron on a raid to Morlaix for 10 Group "Ramrod 49".

"Tip and Run" raiders were now becoming an increasingly frequent menace on the south coast and the Czech Spitfires were amongst those scrambled to intercept them. Most of these took place at low level but on 19 February 1943, a 313 Squadron Spitfire while over Newton Abbot, intercepted three FW 190s at 23,000 feet. One week later, eight FW 190s made an attack on Exmouth and were encountered by chance by a flight of 313 Squadron. The Spitfires were returning to base and were low on fuel, but succeeded in directing two 266 Squadron Typhoons to the intruders that resulted in two Focke Wulfs being shot down.

To keep track of the movement of enemy shipping and to select targets for attack, the Churchstanton squadrons played a regular part in the continuous shipping reconnaissance campaign off the Brittany coast and the Channel Islands. On 30 March, 312 joined 504 (Ibsley) and 602 Squadrons (Perranporth), on a sweep from Ushant to Barfleur. Bombing raids were mounted. On 4 April, while using Portreath as an advanced base, the Czech wing escorted twelve Venturas of 21 Squadron to Brest.

As well as British and American bomber formations, the Spitfires regularly escorted Westland Whirlwinds making fighter bomber raids. A typical example took place on 10 April, during the 10 Group raid "Circus 22" when the target was the airfield at Brest/Guipavas. Another operation on 3 May, involved an armed shipping reconnaissance when 313 joined 310 Squadron from Exeter and escorted six Whirlwinds of 263 Squadron (Warmwell) on a sweep off Guernsey and the Ile du Batz.

June 1943 saw a total changeover of the units based at Churchstanton. First of all, on the 24th, 14 Harrows arrived from Skeabrae with 234 Squadron, whose Spitfire Vs flew in to replace 312 Squadron. They were followed four days later by 66 Squadron from Orkney to replace 313, and finally, on 30 June, 504 Squadron moved across from Ibsley. The latter unit was sent here because 234 had been selected for service overseas and was already making preparations that included the acquisition of nine Spitfires in tropical camouflage. They departed on 9 July, the pilots for Honiley and the ground crews for the transit camp at West Kirkby. Their final destination was a closely kept secret and in the event, the

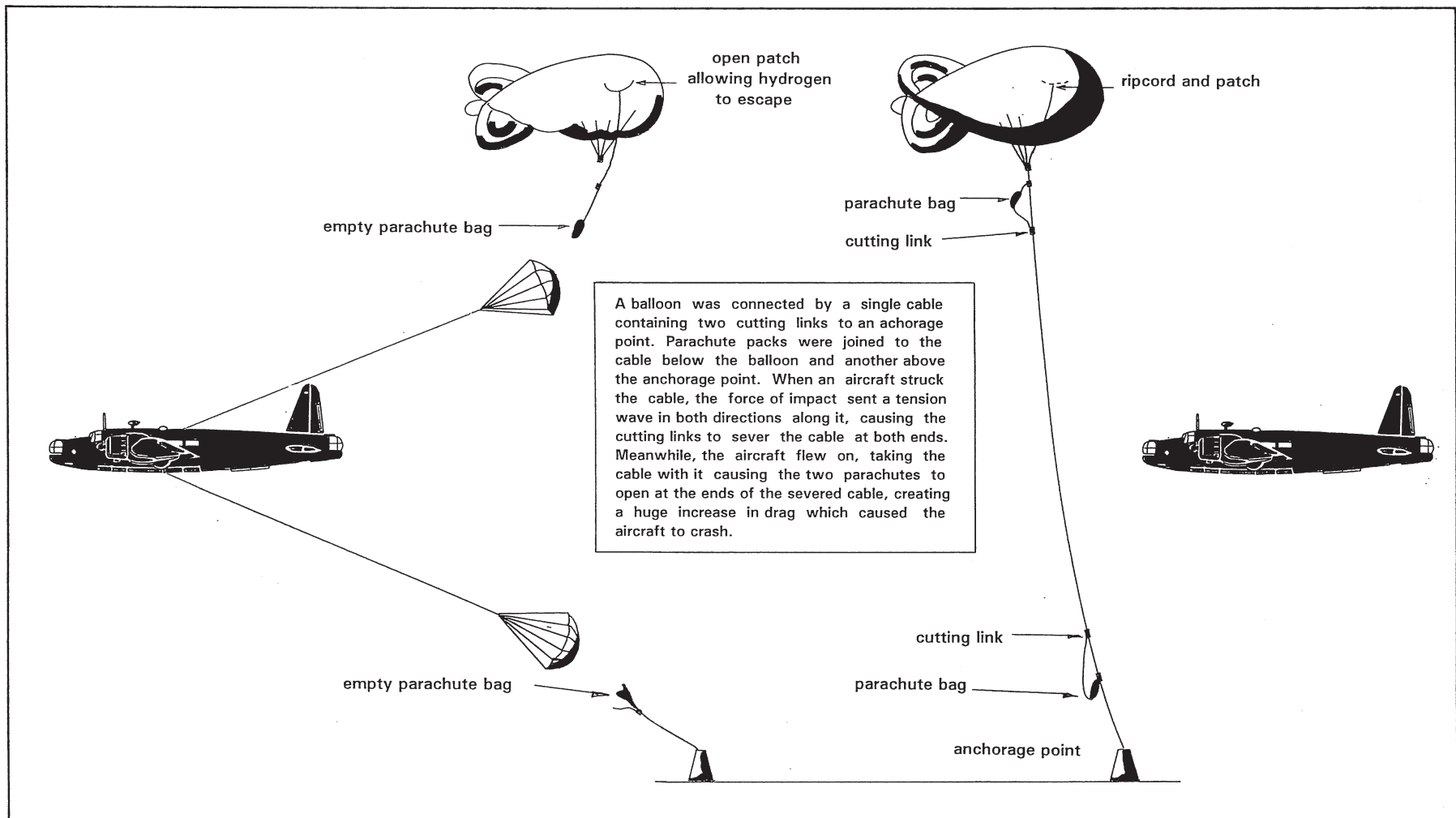


Figure 5: The Double Parachute Link system developed by the RAE at Pawlett Hams.

move never actually took place.

Meanwhile, during the summer of 1943, 66 and 504 Squadrons were engaged in bomber escort duties. On the 25 July for example, they operated from Coltishall escorting Mitchells to Amsterdam in the morning, and Bostons to Schipol airfield in the afternoon. Other raids were flown from Martlesham Heath to support USAAF B26 raids and from Churchstanton, the Spitfires guided Bostons to Rennes and Whirlwinds to Brest/Guipavas airfield.

In mid August, both squadrons moved to Redhill in preparation for “Starkey” — the major deception operation aimed at drawing the enemy into battle as if a genuine Allied invasion was taking place. For over a month the airfield at Churchstanton was consequently deserted, disturbed only by the occasional diversion, as on 19 August when twelve USAAF P47s flew in.

Regular flying began again in mid September, when 131 and 165 Squadrons moved in from Redhill and Kenley. The latter unit had just received Spitfire IXs and soon, 131 became similarly re-equipped with this greatly superior aircraft. As before, anti-shipping sweeps and reconnaissances alternated with bomber escorts. Regular “Ramrods” were flown by the wing in support of raids on targets such as the airfields at Brest/Poulmic and Morlaix. Raids on airfields further east were also supported from advanced bases in 11 Group, and on 1 December, flying from Ford, the squadrons escorted a formation of 54 B26s to Cambrai/Niergenies.

Unfortunately, as time had gone on, the “Churchstanton” address had been regularly confused with other RAF stations having similar names, notably at Church Fenton and Church Broughton. In mid-December 1943 therefore, the station was redesignated “Culmhead”, after the house of that name lying a mile north of the airfield.

On the 31 December the newly named Culmhead wing, led by 131 Squadron gave “withdrawal cover” to a large force of B17s and B24s bombing Bordeaux. In the course of this 165 Squadron “bounced” five rocket carrying enemy fighters as they were about to attack and destroyed four at no loss to themselves.

The lack of range was always a problem for the Spitfire so during “Rodeo 61” on 5 January 1944, the aircraft had to use 45 gallon underwing tanks to escort B17s returning from France. Increasingly, in the early weeks of the year, the wing used bases such as Kenley and Ford for their Ramrod operations.

On 10 February they moved eastwards to Colerne and again left Culmhead vacant for a few weeks. On 10 March, to cover the major landing exercises by US forces in south-east Devon, 165 Squadron returned for just one day, but otherwise the airfield lay deserted until 7 April, when 610 Squadron arrived. This unit was newly equipped with the high speed Spitfire XIV, and as well as carrying out shipping searches they escorted Typhoons making attacks on E-boats and other enemy vessels.

Meanwhile, taking the place of the RAE Flight, which had recently been disbanded, 286 and 587 Squadrons moved their headquarters here in April. The former unit, which provided target practice facilities for anti-aircraft brigades in the 10 Group area, soon moved on to Colerne. 587 Squadron remained until October and acted as a centre from which detachments of Martinets and Hurricanes were sent out to various airfields to fly cooperation sorties with a variety of army artillery units in the West Country.

In April, the Fleet Air Arm arrived for a four week stay when 24 Fighter Wing flew in, consisting of 887 and 894 Squadrons, equipped with Seafires. Like their RAF predecessors they flew shipping reconnaissance patrols along the French coast, also providing escorts for Typhoons. One of these on 3 May was “Roadstead 102”, when the large fighter bombers succeeded in beaching an enemy destroyer. On 15 May, the Seafires returned to Northern Ireland and in due course embarked on HMS Indefatigable and sailed to the Far East.

The departure of the Navy heralded the last series of fighter squadron changes at Culmhead and on 16 May, as 610 Squadron left for Bolt Head and Harrowbeer, 616 Squadron moved in from Fairwood Common. The new unit was one of those equipped with the high altitude Spitfire VIIIs and was joined a week later by the similarly equipped 131 Squadron and 126 Squadron which had the Spitfire IXs. As the date for the invasion was now drawing near, all three units started an extensive series of “Rhubarb” attacks on railway targets at places such as Dinan, Guignamp, Lamballe and Rennes.

On D-Day itself, 131 flew the first fighter sweep (Rodeo 156) attacking locomotives, staff cars and military vehicles and was later followed by 616 Squadron on a similar offensive. A very hectic period followed with patrols over the beachhead, attacks on airfields, “Rhubarbs” and shipping reconnaissances, whilst on 18 June, 126 and 616 Squadrons escorted a force of Coastal Command Beaufighters on “Roadstead 143”. The Spitfires themselves were now equipped to act as fighter bombers and on 23 June, 126 Squadron, flying from Bolt Head, mounted “Ramrod 144”, an attack on radar stations on the French coast. Ten days later this squadron moved on to Harrowbeer. Help was still needed from time to time by 11 Group and Culmhead again responded by sending Spitfires to Ford on 12 July to escort a daylight raid by Lancasters.

It was in July 1944 that Culmhead was the scene of an event of enormous historical importance — the delivery to 616 Squadron of the very first jet propelled aircraft to enter service with any of the Allied air forces. On 13 July, two of the early Gloster Meteor Is (EE216 and EE217) flew in, and were soon to be joined by EE218 and EE219. Their unfamiliar whine and howl was soon causing speculation in this quiet country area, where everything was done to

conceal their presence. The new jets only flew training sorties whilst based at Culmhead however, and stayed here for just one week before moving to Manston for operations.

By now 131 Squadron had become the last operational fighter unit on the station and in August it flew the last of the "Rodeo" missions from Culmhead. While using Tangmere, Ford or Manston, as advanced bases the squadron was mainly used to escort forces of Halifaxes and Lancasters on daylight raids. By the end of August 1944 the battle lines on the Continent were advancing eastwards and accordingly 131 Squadron was transferred to Friston in Sussex bringing an end to Culmhead's operational career as a base for fighter aircraft.

For several weeks the airfield was used as a temporary base for Fleet Air Arm aircraft, this time 790 Squadron. The new unit provided flying facilities for the Fighter Direction School, which trained naval fighter controllers. For this task, the squadron used a mixed fleet of naval fighters and twin-engined "hacks". At the end of September both 790 and 587 Squadrons moved out and for many weeks the airfield once more lay vacant.

Following the heavy losses taken by the Allied forces in the Arnhem operations in September, priority was given to rebuilding the strength of the glider pilot units and the three Glider Training Schools were placed under considerable pressure. At one of these, 3 GTS at Stoke Orchard and its Northleach satellite, progress was being severely hampered by the unserviceability of the grass airfield surface at both sites. Zeals was first chosen as an alternative and served for a few weeks until its grass surface too, had become unavailable whereupon it was decided to find a spare airfield with runways. Culmhead was duly re-opened when the airfield administration was transferred to No 23 Group, Flying Training Command on 9 December 1944.

On 13 December 1944, a large detachment of Miles Master and Hotspur gliders flew in, and for training purposes were organised into Two Day Tug, Two Day Glider and one Night Tug /Glider flights. A month later, Exeter was made available as a replacement headquarters station for the school and by the end of January, the whole of 3 GTS was transferred there. Culmhead was now to become merely a satellite once again, but was chosen as the home of the newly reformed Glider Instructors School. This operated as part of 3 GTS and was responsible for the appearance at Culmhead of a small fleet of seven Albemarles and a similar number of Horsa gliders together with a detachment of Master tugs and Hotspurs.

3 GTS now had the problem of manning a fair sized station with a very limited number of personnel, but despite the difficulties its instructors set about the final task of training staff pilots to man the Glider Training Schools. The airborne forces operations in connection with the Allied crossing of the Rhine in March 1945 were soon to be the last in Europe in which gliders were used in force. As the schools were also involved in preparing for similar campaigns in the Far East, there was no let up in the training requirements. Work was still under way as VE-Day came and went and flying continued here until July 1945, when the whole school was transferred to Wellesbourne Mountford, and Culmhead airfield was relegated to Care and Maintenance.

This was not quite the end, as in August 1945, the airfield was used as a outbased storage site by 67 Maintenance Unit, to hold some of the vast quantities of equipment and vehicles which had now become redundant and awaiting disposal. Twelve months on this role had been completed here and in August 1946, RAF Culmhead was finally closed.

At some time after its RAF use the site was taken over by the Home Office and housed the Composite Signals Organisation, an outstation of the Government Communications Organisation (GCHQ). Large buildings were built in the centre of the airfield and aerial masts erected across the site. The site was closed in 1999, the buildings put up for sale and the masts removed. Photography of these structures was prohibited during the 1997 survey and they are not included in the report.

6 Gazetteer of surviving structures

Each entry shows the survey number followed by the Ministry building number as shown on Figures 6–9. Buildings which were not numbered have been given a number starting from 500. Numbers of the form 1234/41 etc are drawing numbers of individual structures.

6.1 Technical Site (Airfield)

1–5. 536–540: Transformer Plinths

Step-up transformers were sited around the airfield and dispersed sites to maintain a constant voltage. These were fed from the tailless distribution units located in the intake sub-station (Building 6).

Construction: an unrendered 9 inch brick enclosure, with blastwall protection to the entrance, housed the electrical transformer and switchgear.

536 (1) NGR: 2124 1536

537 (2) NGR: 2116 1566

538 (3) NGR: 2017 1538 (Figure 10)

539 (4) NGR: 2036 1457

540 (5) NGR: 2029 1495

Comments: most are in good condition and some still have the remains of the distribution units inside the enclosure. Nearly all have had the blast wall knocked over.

6. 239: Sleeping Shelter 11049/41 (Shell Store)

Looking very much like a sleeping shelter, this building was later used for the storage of aircraft cannon ammunition. Normally, fighter stations (like Exeter) had one brick sleeping shelter to accommodate 33 men of each flight. This was for pilots and ground crew assigned on night scramble duties and were located out on dispersal, close to the aircraft fighter pens so that during an emergency, pilots did not have far to run to get to their aircraft.

At Culmhead, only one of the original two buildings survives and was used for the storage of aircraft ammunition. Inside and painted on an end wall are clear instructions for the storage of 20mm air firing belts of 30, with one side of the store having left-hand belts and the other for right-hand.

Construction: cement rendered 9-inch brick supporting a reinforced concrete roof.

239 (6) NGR: 2123 1537 (Figure 11)

Comments: very interesting to see the instructions for the storage of aircraft ammunition.

Current Status: appears to have been destroyed on aerial photographs taken in 2001.

7–9. 178, 198 and 201: Latrine 9026/41

This design is the larger of the two standard latrine blocks of drawing number 9026/41. Three examples were built at Culmhead for airmen, WAAFs and officers working in an adjacent flight office. Construction: cement rendered 4.5-inch brick walls with external piers at ten feet centres forming three bays. The roof comprises standard 18 feet span steel trusses carrying corrugated asbestos sheeting.

178 (7) NGR: 2125 1544

198 (8) NGR: 2039 1464 (Figure 12)

201 (9) NGR: 2041 1489

Comments: building 178 now has a corrugated iron roof and like building 201 has had a large opening inserted into an end wall. Building 198 is the only one still with its original entrance porch.

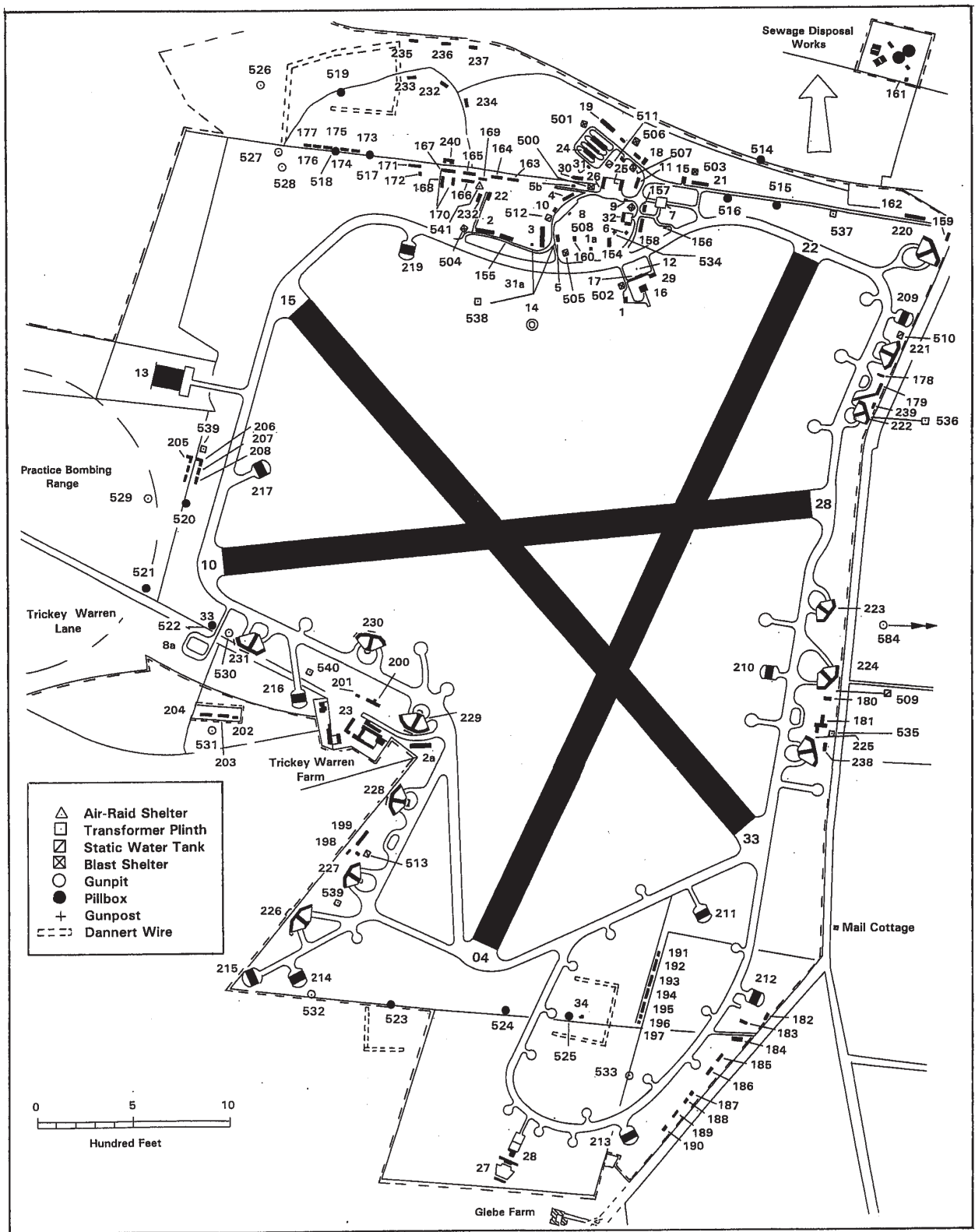


Figure 6: Culmhead Airfield site plan (1945). Based on Air Ministry plan 4997/45 and showing Air Ministry building numbers.

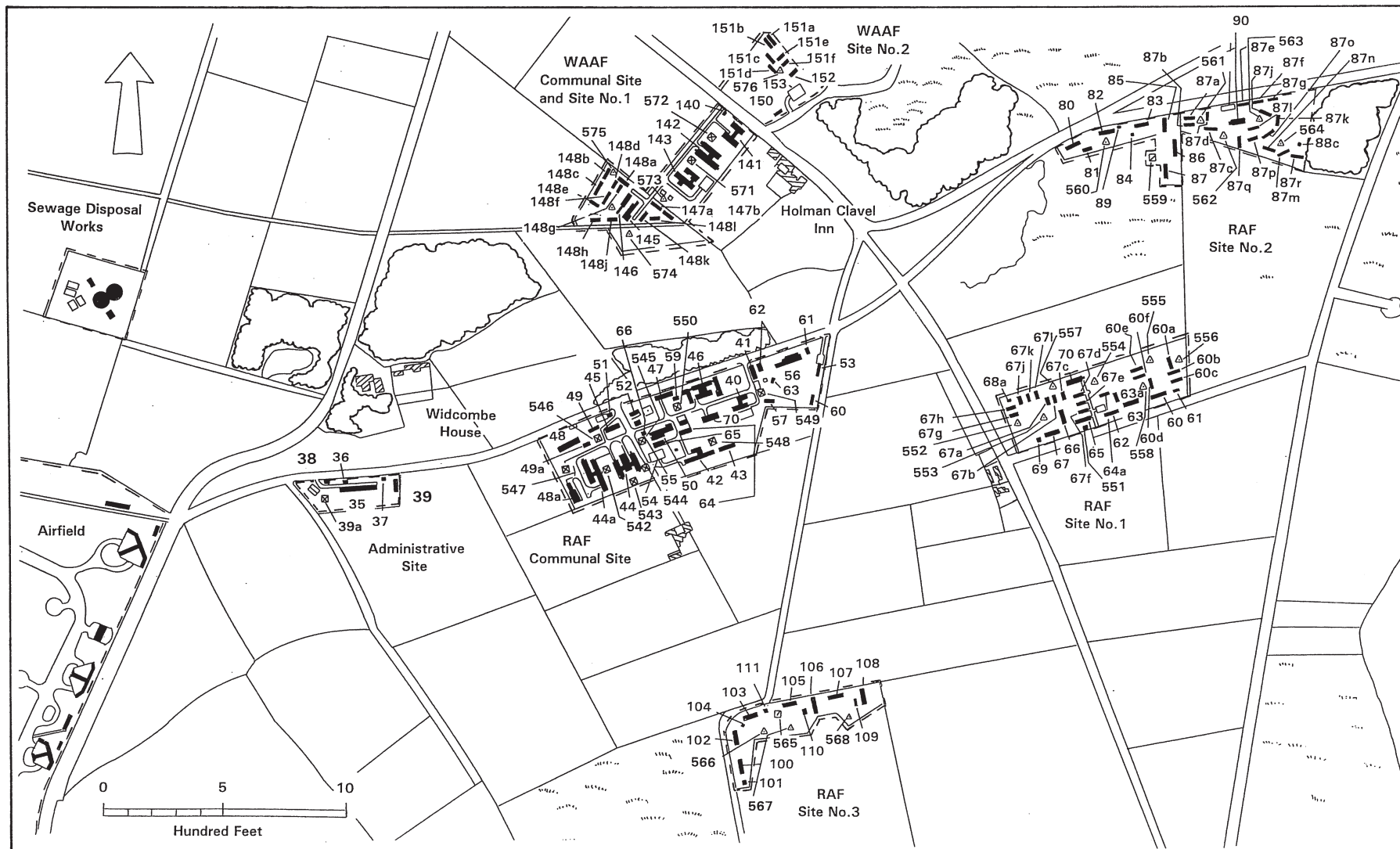


Figure 7: Culmhead Airfield domestic sites plan (1945). Based on Air Ministry plan 4997/45 and showing Air Ministry building numbers.

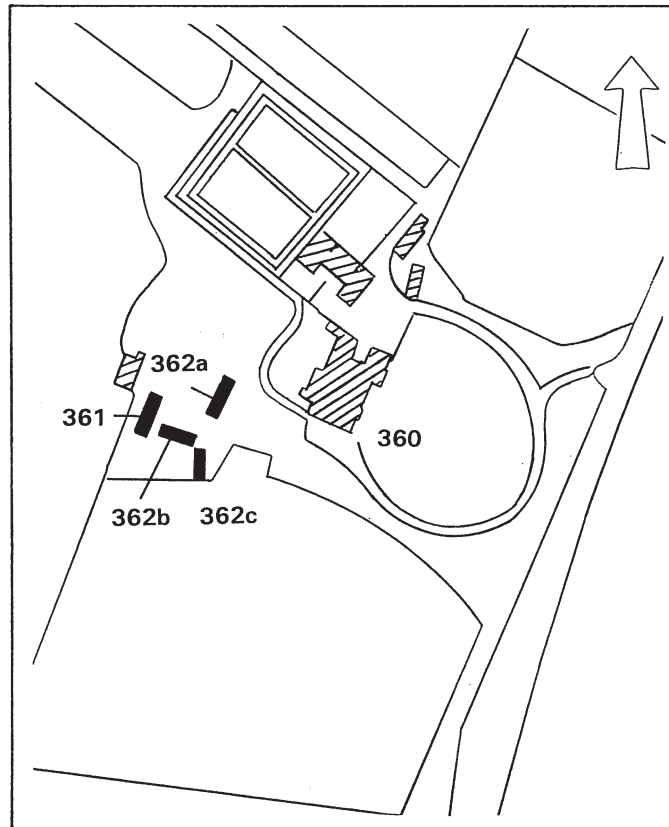


Figure 8: Canonsgrove House (Officers' mess and quarters). Showing Air Ministry building numbers.

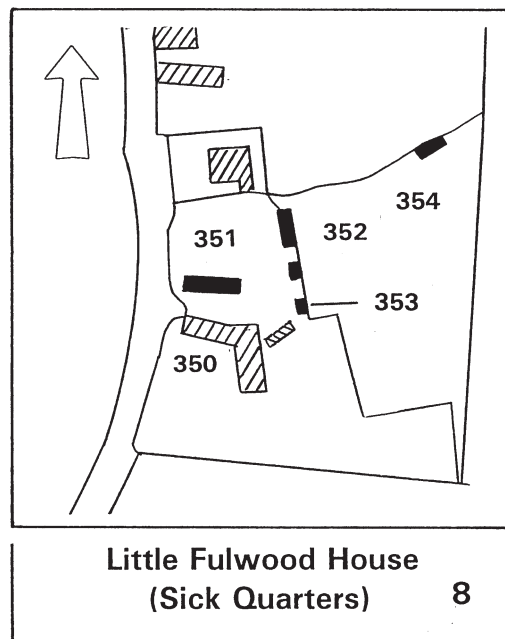


Figure 9: Little Fulwood House (Sick quarters). Showing Air Ministry building numbers.



Figure 10: Transformer plinth 538 (3).



Figure 11: Shell store (sleeping shelter) 239 (6).



Figure 12: Latrine block to drawing 9026/41. 198 (8).



Figure 13: Pillbox. Note steel shutter fixed to large loophole. 518 (14)



Figure 14: Pillbox and Quadrant Post 521 (16).

10. Small Latrine

This is a small detached brick-built chemical closet type latrine that was associated with the wing command station intelligence building.

Construction: temporary brick with a flat reinforced concrete roof.

- (10) NGR: 2131 1566

Comments: the wing command intelligence building is now demolished and all that remains is the latrine.

11–17. 515–519, 522 and 523: Pillboxes

Culmhead is unusual in having a number of seven-sided pillboxes. These, along with at least one other type, (now demolished) were built in the standard airfield defensive arrangement of four clutches of three pillboxes. Small loopholes for rifles are located on most side walls with one side having a large opening for a heavy machine-gun. The machine gun opening was located on a different wall on all the pillboxes within a group and in some cases steel shutters to reduce the size of the opening are still in position.

Construction: external half-brick wall shuttering with concrete walls behind supporting a reinforced concrete roof.

514 (-) NGR: 2105 1576 (Not found in 1997 as just outside airfield perimeter)

515 (11) NGR: 2106 1568

516 (12) NGR: 2099 1569

517 (13) NGR: 2043 1577

518 (14) NGR: 2037 1578 (Figure 13)

519 (15) NGR: 2037 1586

521 (16) NGR: 2016 1501 (Figure 14)

523 (17) NGR: 2048 1439

Comments: because of their rarity, steps should be taken to ensure that the six remaining pillboxes are retained. At the very least a measured survey should be carried out of buildings 517 to 519 as it is thought that this is the only complete group surviving (519 has partially collapsed). The relationship between this clutch and the gunpits 526 to 528 could also be further studied.

Current Status: all the surviving pillboxes have been protected by Scheduling.

18–26 500–508: Blast Shelters 2360/41

Provision in the form of open blast shelters was made from 1941 on RAF stations for personnel caught in the open during an air-raid. They were designed so that taking shelter could be deferred to the last minute and to avoid waste of time in shelters, the structure was therefore built above ground. This enabled personnel running for shelter to enter either through the entrances provided or to jump over the walls and crouch down inside. In addition to the permanent brick walls, further protection against blast was given by earthwork traverses. They also could be used by airmen in the defence of the technical area by using the shelter as a trench system. The largest examples (of which there are nine located on the technical site at Culmhead) were designed to offer protection for up to 50 personnel (see Figure 15). Similar but smaller designs could accommodate up to 10 and 20 personnel.

Construction: permanent brick walls and earthwork traverses with two entrances. No roof.

500 (18) NGR: 2078 1571

501 (19) NGR: 2076 1581

502 (20) NGR: 2081 1556

503 (21) NGR: 2095 1573 (Figure 16)

504 (22) NGR: 2059 1563

505 (23) NGR: 2073 1560

506 (24) NGR: 2087 1579

507 (25) NGR: 2085 1574

508 (26) NGR: 2085 1568

Comments: all nine blast shelters are extant. Brick walls are in excellent condition but in most cases the earthwork traverses have been eroded away.

Current Status: many (including 20, 22, 23 and 26) appear to have been destroyed on aerial photographs taken in 2001.

27. 158: Old Gas Clothing and Respirator Store

Specialist clothing including gas capes, rubber boots, gloves and respirators were stored here ready for use in the event of an attack on the airfield with gas weapons.

Construction: cement rendered 4.5 inch walls with piers at ten feet centres supporting steel trusses carrying asbestos cement sheeting.

158 (27) NGR: 2086 1565 (Figure 17)

Comments: now in very poor condition with all doors and windows missing, the original roof has been replaced, but now even this has a large section missing.

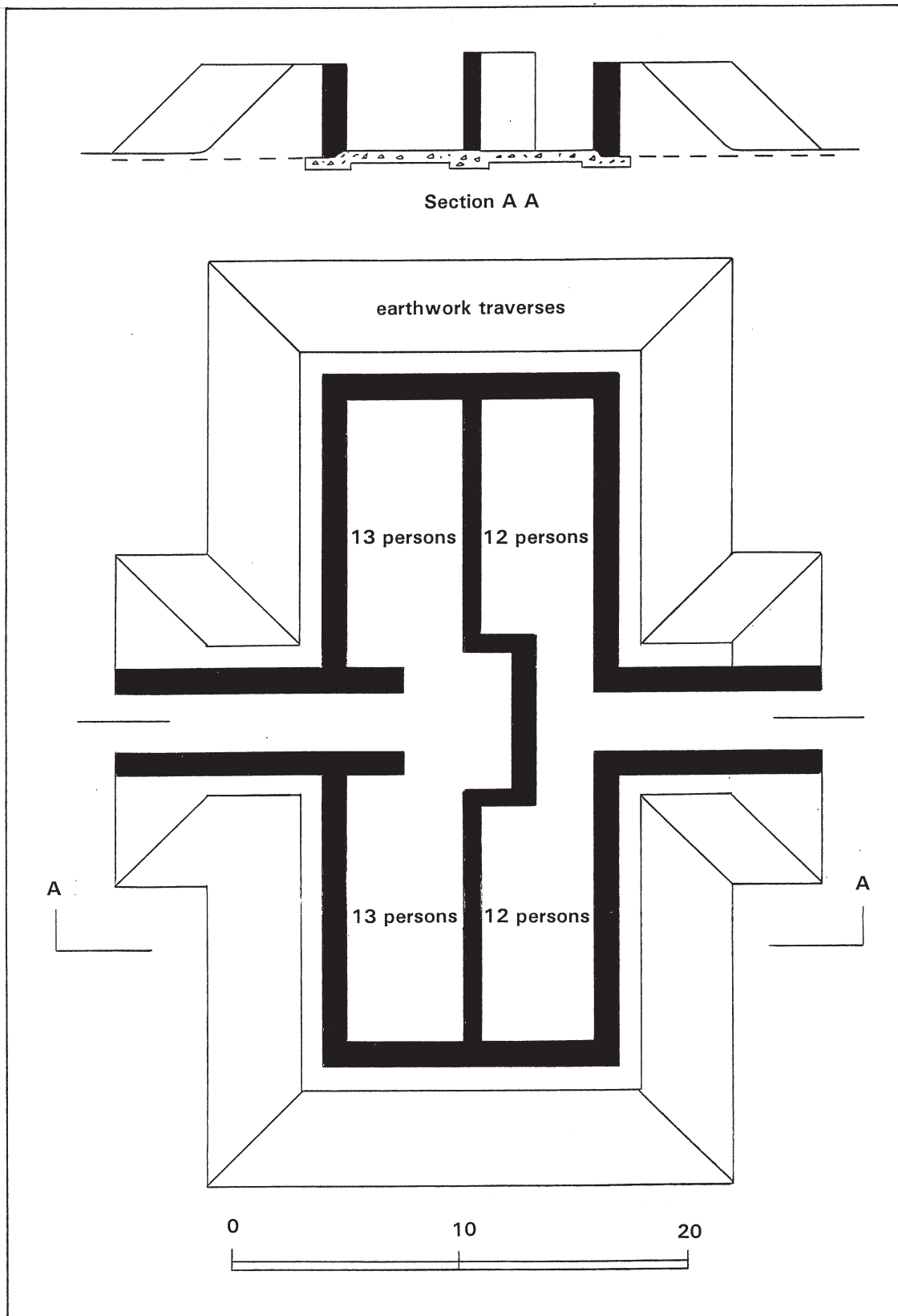


Figure 15: Blast Shelter for 50 persons 2360/41.



Figure 16: Blast shelter to drawing 2360/41. 503 (21)



Figure 17: Old Gas Clothing and Respirator Store 158 (27)



Figure 18: Main inlet electrical sub-station to drawing 12648/40. 6 (28)



Figure 19: Transformer inside Main Inlet Electrical Sub-Station 6 (28)

28–29. 6 and 6a: Main Inlet Electrical Sub-Station 12648/40 and 13455/40

The intake sub-station was sited on the technical area (the main load centre) and positioned with reference to the route of the electrical supply company's incoming cable. The interior fittings including the high voltage switchgear was supplied by the Air Ministry. Here the main in-coming electrical supply of 13,000 volts was transformed to medium voltage and distributed on a 3,300 volts ring main. On a typical fighter satellite airfield only one transformer was provided but this was later duplicated when the station became a parent fighter airfield.

The medium voltage switchgear and equipment in the sub-station consisted of:

- main switches to control the supply from the main transformers
- changeover switch for connecting the distribution circuits to either the outside or stand-by supplies.
- eight tailless distribution units required to feed the dispersed step-up transformers located around the airfield and dispersed sites.

The building housing the electrical apparatus has three rooms comprising one transformer chamber and switch rooms.

Construction: cement rendered 9-inch brick walls supporting a reinforced concrete roof. The entrances to all three compartments are protected by 22 inch thick blast walls.

6 (28) NGR: 2083 1564 Figures 18 and 19

When the airfield became a fighter station in its own right, a duplicate transformer and distribution unit with three outlets was provided in a dispersed brick enclosure. Construction: unrendered 9-inch brick walled enclosure.

6a (29) NGR: 2077 1562

Comments: both the building and enclosure are in good condition. Very interesting to see the transformers and distribution units extant.

Current Status: both appear to have been destroyed on aerial photographs taken in 2001.

30. 154: Building

The original function of this building is unknown but, was used post war by the Callender Cable Construction Company Ltd.

Construction: cement rendered 9-inch brick walls supporting a reinforced concrete roof. The building is sub-divided into several rooms and has been extended on the east elevation.

154 (30) NGR: 2082 1563

Comments: the building is in quite good condition with window frames and some doors extant, most of the cement rendering has fallen away from the brickwork.

Current Status: appears to have been destroyed on aerial photographs taken in 2001.



Figure 20: Gunpost 534 (31)



Figure 21: Battery Charging Room (Old Watch Office) 1a (32)

31. 534: Gunpost

Protection against air-raids on the technical sites was provided by several light anti-aircraft gunposts. This was either in the form of two barrelled Brownings or Oerlikon type machine-guns. The gun-mounting is the only fixture that survives today and consists of a standard webbed tubular steel gun fixture (similar to those fitted inside the gunpits) bolted to a cross-shaped precast concrete stand. Protection for the gunner may have been in the form of a sandbag enclosure but there is no evidence of this to be seen today.

Construction: precast concrete stand with tubular steel post for mounting the weapon on.

534 (31) NGR: 2082 1565 approx. (Figure 20).

Comments: this was the only gunpost position found but I am told there is at least one other within the technical area. A measured survey could easily be carried out and the location of any other gunposts should be identified.

32. 1a: Battery Charging Room (Old Watch Office 14483/40)

Built as one of the original brick-built structures at Churchstanton, this was the watch office and its design is typical for that of an early satellite fighter station. The layout was very simple with a blast wall protected entrance leading to a gas-proof door. This gave access to a single room functioning as the watch office. Although the building only had one



Figure 22: Interior view of Old Watch Office showing steel door of Pyro Cupboard. 1a (32)

room, a chemical closet was located between a side elevation and blastwall. Inside the watch office, in one corner, is a pyrotechnic cupboard, which today still retains its gas-proof steel door.

The building was used for air traffic control purposes until a new control tower was built in 1943. The structure then had a change of use and became a battery charging room.

Construction: unrendered 9-inch brick supporting a reinforced concrete roof.

1a (32) NGR: 2075 1561 Figures 21 and 22

Comments: the building survives in good condition and even has its original steel window frames. Out of 37 known examples built during WW2, twelve buildings are extant. Of these only eight (of which Culmhead is one) are in their original form without any further wartime extensions.

Current Status: protected by Scheduling.

33. 160: Speech Broadcasting Building

The broadcasting system was first introduced on RAF stations in the early part of 1940. Its purpose was to enable operational instructions to be passed clearly, rapidly and simultaneously to personnel stationed out on the aircraft dispersal points and those on the main technical area. Essentially, the system comprised microphones placed at the main operational centres, such as the battle headquarters and control tower. These microphones were connected to the speech broadcasting building which housed the amplifying equipment and from here cables ran out to loudspeaker units located around the fighter pens and defence barrack buildings (but only those connected to the ring main).

The speech broadcasting building was situated at a central point on the technical site. The amplifying equipment was permanently connected to the AC mains with both normal and stand-by circuits at medium voltage. To prolong their lives amplifier valves were not fully energised until the switches at the microphone points in the battle headquarters or control tower were energised. The main apparatus in the broadcasting building comprised an amplifier rack located in a temperature controlled room.

Construction: solid 9-inch brick walls supporting a reinforced concrete roof.

160 (33) NGR: 2075 1563

Comments: now only a shell as no fittings survive.

Current Status: appears to have been destroyed on aerial photographs taken in 2001.

34. 8: Aviation Petrol Installation 9565/41

One aviation petrol installation was provided on the main technical site and another (8a) of a later design was dispersed out on the airfield. Both installations comprised four 12,000 gallon tanks (9 feet diameter and 33 feet long) positioned in pairs at a distance of 50 feet from the centre and either side of a pump house. Three concrete hardstandings were provided along a service road, two of these located adjacent to the buried tanks. These were for the use of petrol



Figure 23: Aviation Petrol Installation – Pump House 8 (32)

company tankers to park and off-load their contents. This was achieved through a five-point steel manifold with 4-inch diameter pipes connecting with the pair of tanks. The third (and central) hardstanding located adjacent to the pump house was for the use of the RAF tanker. A hose from a steel standpost located at the centre of the pump house blast wall (on the front elevation) was connected so that the tanker could be filled up with fuel. Having completed this task the tanker driver then drove out to the aircraft awaiting out on dispersal to off load.

Construction: cement rendered 13.5-inch walls with flat reinforced concrete roof. This was a single ten feet square room fitted originally with a 100 gallons per minute pump and motor unit, starter unit, filters and stop valves.

8 (34) NGR: 2075 1567 (Figure 23)

Comments: while the pipes do not survive, evidence can be found where the 4-inch diameter suction (lower) and delivery (higher) pipes entered and left the pump house. It is not known whether the petrol tanks are extant or not.

Current Status: appears to have been destroyed on aerial photographs taken in 2001.

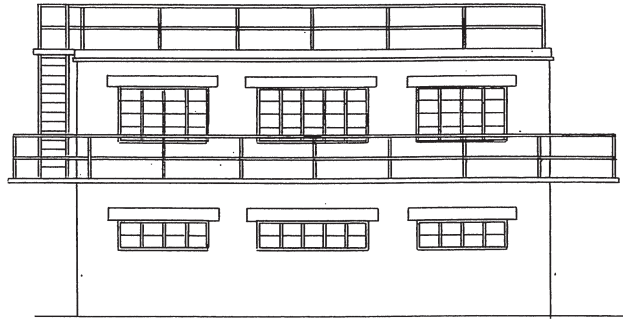
35. 16: Watch Office (Control Tower) 12779/41 and 343/43

In August 1941 a standard type of two-storey RAF watch office was designed for all new stations then under construction (Figure 33). During this period of the war these were mainly OTU stations and bomber satellite airfields. Both new and existing satellite fighter airfields under scramble conditions were not included at this stage and had to make do with their own fighter satellite design. The previous practice at satellite bomber and satellite fighter stations that were upgraded to parent status, was to adapt and extend the existing building. This practice even continued as the airfield expanded and developed with the construction of hard runways and the fitting of airfield lighting. But as local air traffic control became more regulated, it became necessary to have a standard watch office building on all types of RAF station and therefore, new and some existing airfields (such as Culmhead) were now to be equipped with the standard building design. It was at this stage (1943) that the term “watch office” was dropped and replaced by “control tower”. The watch office and control rooms of the original design (12779/41) featured large windows but this practice was revised during 1943 with the result that a new drawing (343/43) was prepared illustrating smaller frames to both of these rooms. Consequently, buildings constructed to 12779/41 had their large windows removed and replaced with smaller frames. The gap between the two sizes was made good with 9-inch brick instead of 13.5-inch and evidence of this work can often be seen inside these two rooms. All new buildings built after March 1943 (such as Culmhead) were simply built to drawing 343/43 and never had the large window frames.

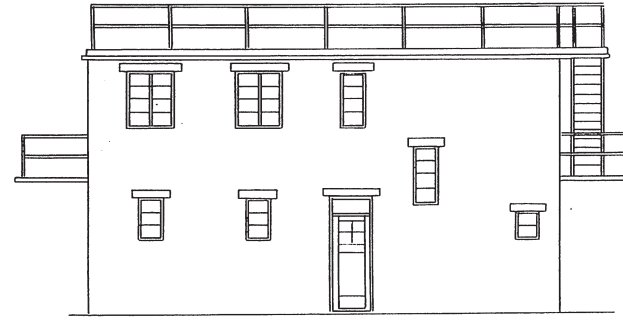
Construction: two-storey almost square-shaped in plan-form, mainly constructed in 9-inch brick except for the front elevation which is of 13.5-inch brick. The flat roof and first floor were built of “Seigwart” type hollow concrete beams.

The following rooms were all on the ground floor:

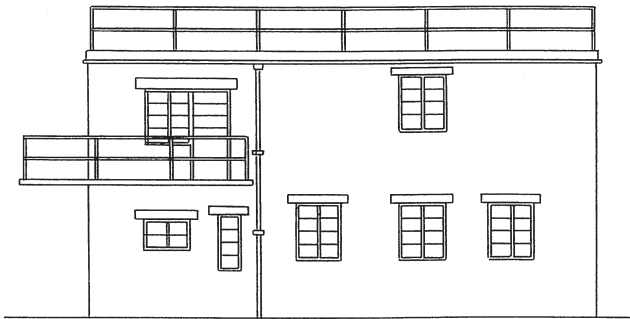
- Meteorological office with teleprinter room
- Latrines
- Duty Pilot’s rest room



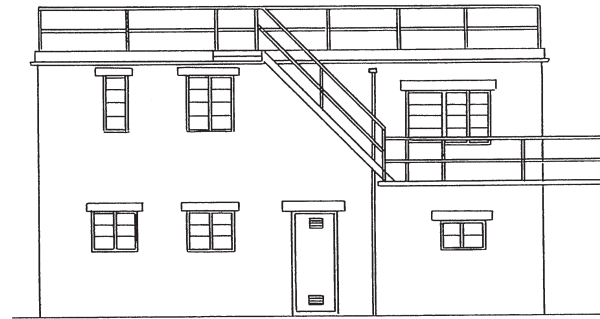
Front Elevation



Rear Elevation



Side Elevation



Side Elevation

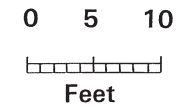


Figure 24: Watch Office (Control Tower). Drawings 12779/41 and 343/43.



Figure 25: Watch Office (Control Tower) to drawing 343/43. 16 (35)



Figure 26: Control Tower Obstruction Lighting Fitting

- Switch room (access from outside only)
- watch office

and on the first floor:

- signals office
- controller's rest room
- control room with telephone exchange

16 (35) NGR: 2082 1553 25

Comments: a total of 164 buildings of this type were built on 164 airfields. Today only 68 are extant including examples at Dunkeswell, Upottery and Westonzoyland. Preservation of the building at Culmhead would be possible and the following observations have been noted:

- The greatest problem to be overcome will be making good, the damage to the roof and first floor. Large holes have been cut through exposing the hollow Seigwart reinforced concrete beams and rain has resulted in serious corrosion of the steel reinforcing rods.



Figure 27: Signals Mast Fixing Block

- The basic exterior fabric remains sound although much of the cement rendering has fallen off.
- All original steel windows are extant and much of the tubular railings remain but, these are not fixed to the concrete roof and balcony. The steel stair connecting the balcony to the roof is extant but the treads have corroded away.
- It is interesting to see the obstruction light fitting still attached to its post, but now lying on the ground (Figure 26).
- The original interior paint colour scheme is still evident with green to dado height with cream above.
- No evidence was found inside the watch office and control rooms of earlier larger window frames suggesting that the building was constructed after 1943 to drawing number 343/43.

Current Status: protected by Scheduling.

36. Signals Mast Fixing Block

This is a concrete block for supporting a signals mast. The signals mast is a vertical mast for displaying a system of signals to advise pilots on the ground of the current operating conditions on the airfield.

Construction: dome-shaped concrete block with a central steel ring for supporting the mast.

- (36) NGR: 2082 1552 (Figure 27)

Comments: apart from the control tower obstruction light this is the only structure associated with air traffic control that survives at Culmhead, there is no evidence today of the airfield code letters "UC" or the signals square.

37. 17: Floodlight Tractor and Trailer Shed 12411/41

No permanent electric airfield lighting was installed at Culmhead, but runway electric lighting did take the form of a portable system. Although it is unclear exactly what type was used here, the following were in universal use during WW2:

- A portable floodlight could be parked on a special hardstanding on the left-hand side of the runway in use and plugged into electrical sockets. The equipment essentially consisted of a box containing the light assembly supported on a girder frame containing a tricycle undercarriage. The output of the lamp was one million candles.
- Alternatively on the same hardstanding, a self-powered Chance Light could have been used instead, which consisted of a lighthouse fixed to a four-wheeled trailer.



Figure 28: Floodlight Tractor and Trailer Shed to drawing 12411/41. 17 (37)



Figure 29: Night Flying Equipment Store to drawing 12411/41. 29 (38)

What ever system was in operation the equipment when not in use was stored in the floodlight tractor and trailer shed.

Construction: cement rendered 4.5-inch walls to a height of 13 ft 6 in with external piers to form four bays. Garage type building with timber double doors at either end. The roof consists of 18 ft span steel trusses supporting corrugated asbestos cement sheeting.

17 (37) NGR: 2084 1557 (Figure 28)

Comments: today this building is in poor condition, a structural failure of a side wall has occurred and part of the roof sheeting is missing.

Current Status: appears to have been destroyed on aerial photographs taken in 2001.

38. 29: Night Flying Equipment (NFE) Store 12411/41

Other night flying equipment could have included glim lamps, gooseneck flares and illuminated landing tee and these were kept in the NFE store.

Construction: cement rendered 4.5-inch brick walls with external piers forming three, ten feet wide garage type bays. One bay was provided for a illuminated landing tee, another for the glim lamp trolley and the final bay housed a goose flare trolley. The roof comprises steel trusses carrying corrugated asbestos cement sheeting.

29 (38) NGR: 2086 1557 (Figure 29)

Comments: the NFE store is in good condition with original roof still in place. Now used as a farm store.
Current Status: appears to survive on aerial photographs taken in 2001.

39. 155: Agricultural and Implement Store

During the war and despite being an active airfield, some of the land was still farmed by the Phillips family. This building was built to house farm machinery.

Construction: cement rendered 4.5-inch walls with external brick piers. The roof comprises steel trusses carrying corrugated asbestos sheeting.

155 (39) NGR: 2065 1562

Comments: building now in very poor condition with a large section demolished.
Current Status: appears to have been destroyed on aerial photographs taken in 2001.

40. 541: Underground Air-Raid Shelter

By 1939 a policy of providing personnel shelters on RAF stations had been formulated with the provision of Air-Raid Precautions (ARP) type underground or semi-underground shelters. These were either of precast concrete, steel or permanent brick and concrete. The shelters originally conformed to the national scheme standard of offering protection for 50 personnel. Where shelters were provided above ground overhead protection consisted of an earth covering 2 ft 6 ins. deep. Typically, a single entrance was provided at one end only and at the opposite end was an emergency escape hatch.

Construction: this example is completely underground and is thought to have permanent reinforced brick walls supporting reinforced concrete roof. The shelter is an estimated five feet wide and 30 feet long.

541 (40) NGR: 2063 1569

Comments: unable to view the interior, it might therefore be useful to carry out a measured survey.

41. 22: Link Trainer Building 10040/41

The Link Trainer was an American synthetic training device for the teaching of instrument flying. They were used on operational stations as a way of maintaining pilots of a high standard.

The trainer comprised a fuselage approximately ten feet long and constructed of a timber framework clad with plywood. The fuselage was fixed to motors and powerful bellows which enabled it to simulate basic flying movements similar to pitching, banking and the turning of a real aircraft. The cockpit resembled a typical single-engined aircraft of the period, with the usual six basic instruments plus a compass, radio, rudder pedals and control column.

Connections led from the trainer to an instructor's desk where a three-wheeled trolley called a "tracking crab" (automatic recorder) reacted to time and rate of movement of the "aircraft". One of the wheels, known as an idler wheel also functioned as an ink pen and traced an accurate course onto a map of the countryside over which the "pilot" was supposed to be flying. The instructor's desk also had a duplicate set of instruments which enabled him to assess the pilot's flying ability.

Construction: cement rendered 4.5-inch walls with external piers supporting standard 18 feet span steel trusses. Roof cladding was of corrugated asbestos sheeting.

22 (41) NGR: 2065 1568

Comments: the building is now only a ruin, completely devoid of roof and with large sections of both end walls removed.
Current Status: appears to have been destroyed on aerial photographs taken in 2001.

42. 4: Lubricant and Inflammable Store 15799/40

This building is divided up into a number of compartments for the storage lubricants such as engine oils and inflammable liquids such as paint. Inflammables were stored in small compartments on the end elevations while doorways along the side elevations gave access to separate lubricant stores.

Construction: cement rendered 4.5-inch walls with external piers at ten feet centres supporting standard steel trusses.

4 (42) NGR: 2075 1570

Comments: the walls are in good condition but the whole of the roof cladding is missing.
Current Status: appears to have been destroyed on aerial photographs taken in 2001.



Figure 30: Technical Latrine block to drawing 9026/41. 5b (44).



Figure 31: Parachute Store to drawing 11137/41. 30 (46).

43–45. 5a, 5b, 31: Technical Latrines 9026/41

This design is the smaller version of the two types of latrine blocks found on drawing number 9026/41. It is also the most common version found on RAF stations, typically they were called either RAF or WAAF technical latrines when used by ground crew (technical trades such as engines, riggers or instruments etc) who were working in workshops, stores or on actual aircraft. Alternatively they were simply referred to as either RAF latrines or WAAF latrines when located on domestic sites. Normally buildings were divided into two sections, one for officers and the other for other ranks.

Construction: cement rendered 4.5-inch brick

5a (43) (RAF) NGR: 2077 1571 (Figure 30)

5b (44) (RAF) NGR: 2079 1582

31 (45) (WAAF) NGR: 2079 1575

Comments: all are in good condition.

Current Status: 44 appears to have been destroyed on aerial photographs taken in 2001 but the others appear to survive.



Figure 32: MT Vehicle Shed and Yard to drawing 12775/41. 25 (27)

46. 30: Parachute Store 11137/41

All air crew were issued with parachutes that after several flights tended to get damp and therefore had to be dried out and re-packed. The parachute store is a specially designed building for the drying out, inspection, packing and storage of parachutes. The building was laid out in open-plan form with the wet parachutes hung from pulleys fixed to the highest point in the building. Running parallel and close to the side wall containing windows would have been a long table for the inspection and packing of parachutes. Against the opposite side wall (without windows) were storage racks where the packed parachutes were kept until being re-issued. Heating was by a coal-fired stoves for a consistent temperature and to help keep drying time to a minimum.

Construction: cement rendered (inside and outside) 4.5-inch brick walls with external piers at ten feet centres to form five bays. The roof consists of steel trusses with a central raised section containing lantern lights.

30 (46) NGR: 2076 1573 (Figure 31)

Comments: the building is in good condition complete with window glazing and has been extended with a temporary arrangement of breeze blocks and a single pitch roof. In this form it is still in use by the farmer.

Current Status: appears to survive on aerial photographs taken in 2001.

47. 25: MT Vehicle Shed and Yard 12775/41

It was wartime RAF policy to park motor transport vehicles in the open and it was only for maintenance, driver's rest rooms and keeping vehicle records that buildings were provided. Normally, a single four-bay MT vehicle shed was built at one end of a concrete manoeuvring yard and on one side of this was a vehicle washing platform. Opposite the vehicle shed would have been a six bay, 24 feet span Nissen hut housing the rest rooms (one for airmen and another for WAAFs), office, store, latrines and an oil and paint store. At Culmhead instead of a vehicle pit inside one of the garage bays, a detached vehicle inspection ramp was built instead (because of the high water table).

Construction: cement rendered 4.5-inch walls with piers at 10 and 13 feet centres. Standard 28 feet span steel trusses are clad with corrugated asbestos cement sheeting. Four lock-up garage type bays were provided with double timber doors opening out to concrete hurters where a steel latch could keep them in the open position.

25 (47) NGR: 2083 1571 (Figure 32)

Comments: the Nissen hut has been removed but, the vehicle shed and inspection ramp survive in good condition.

Current Status: appears to survive on aerial photographs taken in 2001.

48. 19: Gas Clothing Store 12409/41

Used in addition to the original building (158), this one also stored special clothing for use during an air-raid with gas type weapons.

Construction: cement rendered 4.5-inch brick with external piers at ten feet centres supporting standard steel trusses. Roof cladding is corrugated asbestos sheeting.

19 (48) NGR: 2082 1580

Comments: this building appears to be in good condition, but is partially hidden by breeze block walls running along the side elevations.

Current Status: appears to survive on aerial photographs taken in 2001.

49. 20: Gas Chamber 12411/41

This was for the training of airmen in the correct use of respirators within a gas contaminated environment.

Construction: cement rendered 4.5-inch brick walls with piers at ten feet centres. Rooms included air-lock entry to the gas chamber and a store for the lachrymatory generator. The roof consists of a simple single pitch arrangement clad with corrugated asbestos cement sheets.

20 (49) NGR: 2084 1578

Comments: now derelict but still in good condition.

Current Status: appears to survive on aerial photographs taken in 2001.

50–53. 526, 529, 530 and 532: Gunpits

At least eight brick-lined gunpits were part of the defences of Culmhead, these are located either around the airfield perimeter or within the surrounding area. For reasons of concealment they were often positioned close to field boundaries within hedge lines. Protection to the gun crew from bomb blast was given by brick walls and earthwork traverses. The plan-form is key-hole-shaped with the weapon mounted in the centre of the circular section thus allowing a 360 degree field of fire. Boxes of ammunition were stored in a special underground store and a smaller example for the ammunition box feeding the weapon is located within a side wall.

Note: it is possible that the gunpits were positioned on the approach to the runways as in the absence of camouflage, the runways could easily be used by enemy bombers to guide them to their targets.

Construction: solid 9-inch brick and earthwork traverses.

526 (50) NGR: 2027 1587

529 (51) NGR: 2008 1526

530 (52) NGR: 2018 1501 (Figures 33 and 34)

532 (53) NGR: 2036 1441

Comments: all those found are in good condition and are part of the impressive defence facilities at Culmhead. There may well be others on the approach to the runways within the surrounding area. The problem is that they are difficult to find as often they are filled with rubbish or earth and grassed over.

Current Status: most appear to survive on aerial photographs taken in 2001; 52 and 53 have been protected by Scheduling.

54–58 226–231: Aircraft Fighter Pen Type “B” FCW 4513

Six dispersed standard Fighter Command Works aircraft fighter pens were built along the western perimeter track. The pens were all of the larger type to house two twin-engined aircraft each one in its own bay. The layout consisted of three arms outlined with brick dwarf walls retaining earthwork traverses to surround both aircraft. This offered some protection from bomb blast which was thought to be the biggest threat to aircraft dispersed out on the airfield. At the rear of the shelter is a precast concrete Stanton type air-raid shelter for 25 men with access from either bay. At the rear of the pen and almost opposite an entrance is an emergency exit. At Culmhead, the emergency exit also gave access to a defended brick wall. Three designs of defended walls were used here:

- a straight wall with six loopholes
- a straight wall with an additional angled wall at each end having a total of seven loopholes

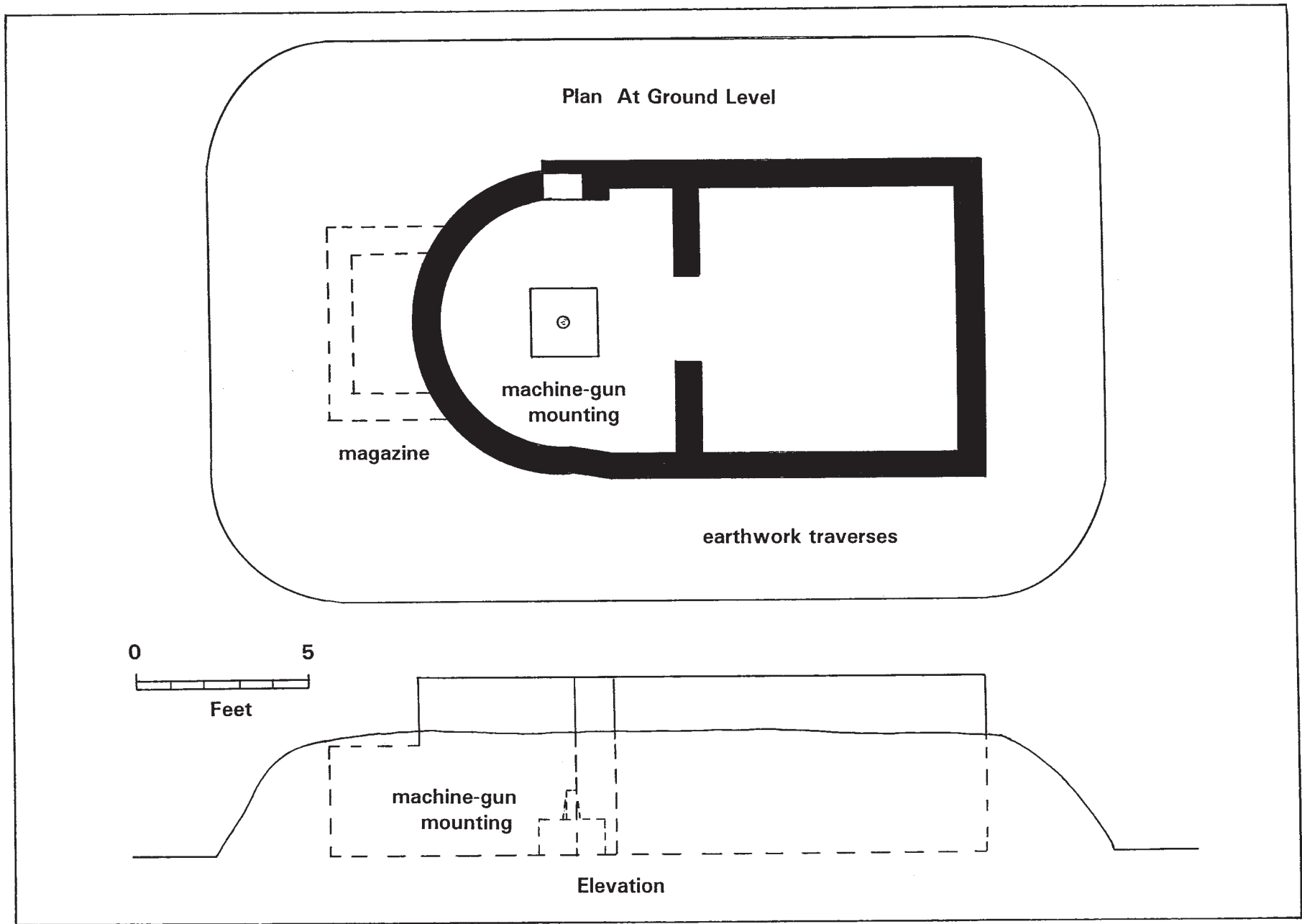


Figure 33: Gunpit. Based on measured survey of gunpit 630.



Figure 34: Gunpit showing gun mounting point. 530 (52)

- a “U”-shaped wall with a maximum of six loopholes.

A different defensive layout was established for all pens and the arrangement depended on the position of the pen in relation to the local topography. They are as follows:

- Pen 226 – an angled wall is positioned in a detached position at the rear of the pen and outside the Air Ministry boundary (see Figures 35, 37 and 38). This was to repel an attack originating in the direction of the Blackdown Hills. Also associated with this wall is what is thought to be a communication trench and two small pits. Another “U”-shaped wall is positioned on the airfield side against the end of a traversed wall to provide cover from the south.

226 (54) fighter pen NGR: 2031 1455

angled wall NGR: 2029 1455 (Figures 37 and 38)

“U”-shaped wall NGR: 2032 1452

- Pen 227 – this pen only has one defended wall, a “U”-shaped example that is built at the end of the central traverse wall facing the landing area. This was to confront an attack coming from the direction of the airfield.

227 (55) fighter pen NGR: 2039 1462

“U”-shaped wall NGR: 2041 1460

- Pen 228 – one detached angled defended wall located at the rear of the pen is facing the Blackdown Hills. A “U”-shaped wall is also built on the end of the central traverse wall to overlook the airfield.

228 (56) fighter pen NGR: 2046 1474

angled wall NGR: 2045 1474

“U”-shaped wall NGR: 2048 1473 (Figure 39)

- Pen 229 – one angled type defended wall is facing Trickey Warren Lane and farm. The brickwork is built as part of the emergency exit of the fighter pen air-raid shelter. Also a “U”-shaped wall is positioned against the central traverse wall to face the airfield.

229 (57) fighter pen NGR: 2049 1484

angled wall NGR: 2048 1483 Figure 40

“U”-shaped wall NGR: 2050 1485

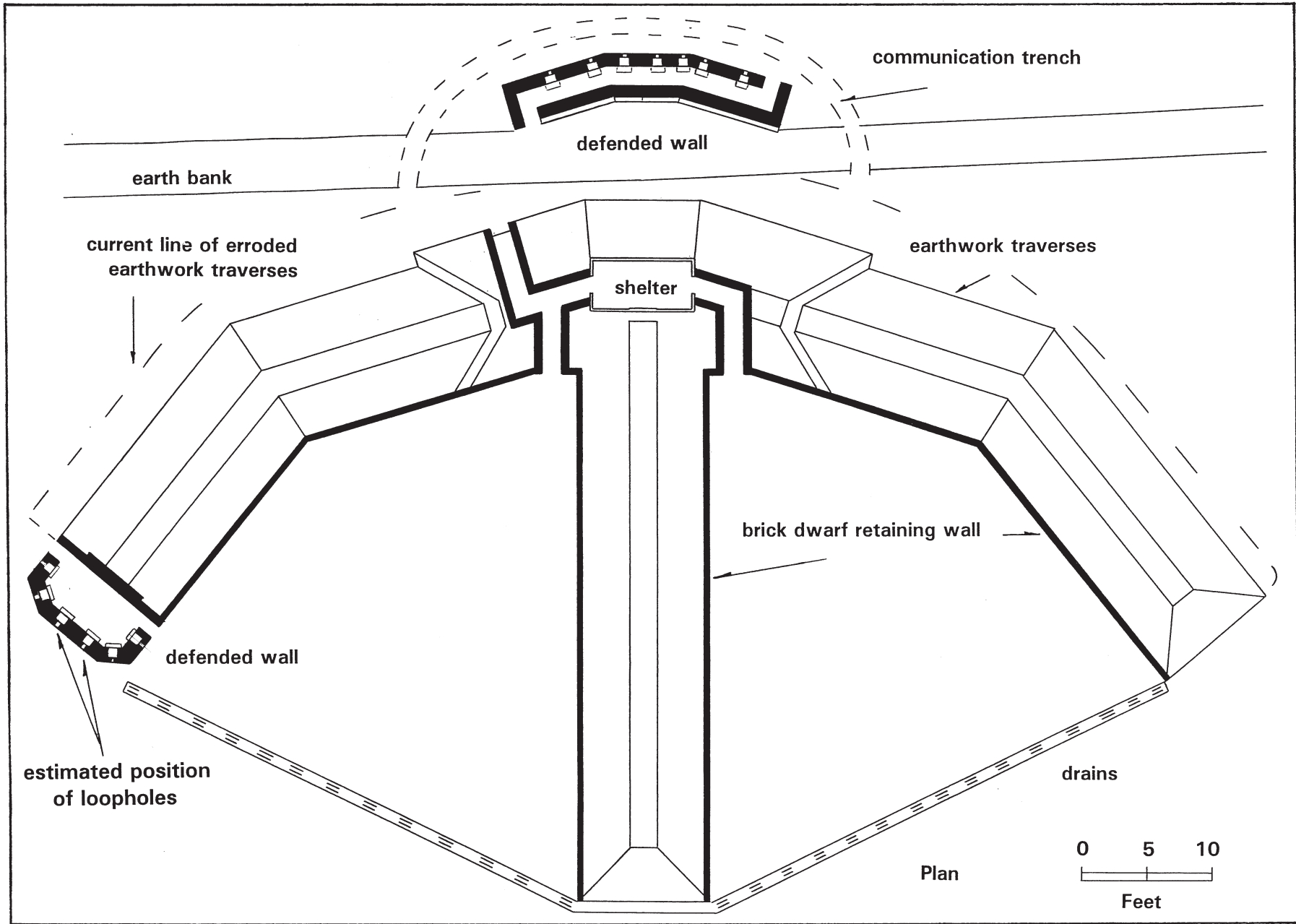


Figure 35: Dispersal pens for fighter aircraft type "B"FCW 4513. Plan showing defence positions of pen 226.



Figure 36: Aircraft Fighter Pen to drawing FCW 4513. 229 (57)



Figure 37: Angled Defended Wall at the rear of Pen 226 (54)



Figure 38: Angled Defended Wall at the rear of Pen 226 (54)



Figure 39: "U"-shaped Defended Wall at the front of pen 228 (56)



Figure 40: Angled Defended Wall at the rear of Pen 229 (57) and exit from air-raid shelter



Figure 41: Flight Office 199 (59)

- Pen 230 – this pen, now demolished, was the only one of the group not facing the airfield. Its defences consisted of a detached angled wall which was located with a view in the direction of the main technical area, a detached straight wall positioned against a traverse wall to face west and a “U”-shaped wall built against the end of the central traverse wall to face Trickey Warren Farm.

230 fighter pen NGR: 2044 1498

angled wall NGR: 2044 1499

straight wall NGR: 2041 1499

“U”-shaped wall NGR: 2043 1496

- Pen 231 – this example like Pen 230 is very well defended with three walls. One detached angled type wall is located at the rear of the pen with its access point from the emergency exit. Another one consists of a straight wall built against an earthwork traverse, faced the aviation fuel installation. A “U”-shaped wall was also built against the end of the central traverse wall to face the airfield. In addition, this pen is also associated with a gunpost and pillbox.

231 (58) fighter pen NGR: 2023 1496

angled wall NGR: 2022 1495

straight wall NGR: 2020 1497

“U”-shaped wall NGR: 2023 1498

Comments: In all cases the earth traverse walls have been eroded, although enough of the original shape has been retained to recognise its original shape. The dwarf brick wall and the concrete drains are extant and are all in good condition. The angled and straight defended walls are also in excellent condition but, the “U”-shaped walls have lost some courses of brickwork including the loopholes. The Stanton air-raid shelters are all in excellent condition.

Fighter pens are now rare structures in Britain and the five surviving at Culmhead are particularly interesting and special and are important to the defence of Britain’s heritage.

With this in mind the following points are recommended:

- On rarity alone, the preservation of the pens must be the way forward. Steps should therefore be taken to ensure that no further soil erosion takes place. The eroded earthwork traverses could easily be repaired and landscaped to their original height and shape.
- It is essential that full measured surveys be carried out as soon as possible on all fighter pens, trenches and defended walls. This would allow a wider understanding of the airfield defences at Culmhead.

Current Status: all the defended fighter pens have been included in the area protected as a Scheduled Monument.

59–60. 199–200: Flight Offices

Each of the four flights would have had their own office accommodation located close to the three fighter pens to which they operated from. The building was subdivided into separate offices for flight officers and flight clerks.

Construction: cement rendered 4.5-inch brick walls with piers at ten feet centres. The roof consists of 18 feet span standard steel trusses carrying corrugated asbestos cement sheeting.

199 (59) NGR: 2042 1467 (Figure 41)

200 (60) NGR: 2044 1487

Comments: two out of the original four survive at Culmhead and both of these are associated with the surviving fighter pens on the western perimeter track. Both are in good condition.

Current Status: both surviving examples are included in the area protected as a Scheduled Monument.

61. 2a: Squadron Offices and Station Offices 13875/41?

Two squadron offices and station offices were built at Culmhead; one was on the main technical site and the other may have been built close to Trickey Warren Farm.

Construction: identified on the Air Ministry plan as being built of temporary brick construction, the building is in fact a 30 feet span Nissen hut. Construction therefore consists of Nissen T-shaped (in section), arched steel ribs spaced at six feet centres. The whole structure is clad with an inner and a outer layer of corrugated iron sheeting. The end walls are built of 4.5-inch brick walls with brick piers.

2a (61) NGR: 2049 1480

Comments: It is unlikely that a 30 feet span Nissen hut was used as a squadron office but is more likely to have been an annexe to the main stores located at Trickey Warren Farm. There may have been another building (in temporary brick construction) built adjacent to the surviving Nissen hut which functioned as the squadron offices and station offices.

Current Status: Scheduled Monument consent was given to demolish this building in 2004 following a photographic survey. Examination of the structure showed that the recent corrugated iron covering was not original but had been crudely constructed from flat sheets bought second-hand. The concrete base remains in place.

62. Nissen Hut

This is a small 16 feet span Nissen hut, the function of which is unknown as it does not appear on the Air Ministry site plan. It is likely to be either a small arms ammunition or pyrotechnic store.

(62) NGR: 2040 1464

Comments: now only the temporary brick end walls survive in position but all the steel Nissen ribs survive lying on the concrete floor.

Current Status: included within the area protected as a Scheduled Monument.

63. 214: Blister Hangar 12512/41

The Blister hangar was invented by the architects and consulting engineers Norman and Dawbarn and William C Inman of Miskins and Sons. The Blister hangar is a small arched-shaped dispersal shed for the storage and maintenance of small aircraft. There were three main types: a standard hangar of timber construction; an Over type of light welded-steel construction (used at Culmhead); and an Extra Over type also of light welded-steel construction.

Construction: consists of a series of all-welded steel rib sections bolted together to form an arch at 7 ft 6-inch centres. These are joined by steel ties and purlins of timber or steel carrying corrugated iron sheeting. Span 65 feet, length 45 feet and maximum height 20 feet.

214 (63) NGR: 2033 1443 (Figure 42)

Comments: still in good condition and is now used as a barn.

Current Status: included in the area protected as a Scheduled Monument.



Figure 42: Blister Hanger to drawing 12512/41. 214 (63)



Figure 43: Aircraft Machine-Gun Test Butt to drawing 16461/41. 28 (64)

64. 28: Aircraft Machine-Gun Test Butt 16461/41

For the testing and synchronising of aircraft guns, a four-point aircraft machine-gun (cannon) test butt was provided with its own aircraft hardstanding. Built back-to-back with the 25 yard machine-gun range.

Construction: permanent brick

28 (64) NGR: 2070 1414 Figure 43

Comments: in good condition

65. 27: Machine-Gun Range 1471/41

A two-point 25 yard rifle and machine-gun range provided airmen with firing practice for airfield defence duties.

Construction: permanent and temporary brick.

27 (65) NGR: 2068 1413

Comments: now in poor condition.

66. 31a Building (WAAF Technical Latrine)

This is a 13.5-inch brick structure of unknown function built without windows, supporting a flat reinforced concrete roof. This and the demolished building No. 5 are identified on the Air Ministry site plan as Technical Latrines. It is doubtful however, if this is correct as the building is too heavily built for this function.

31a 66 NGR: 2068 1561

67. 513 Static Water Tank

For fire fighting purposes, it was normal practice to provide a static water tank at every dispersed fighter pen group. Construction: reinforced concrete walls with sloping sides.

513 67 NGR: 2041 1464

Comments: this structure is part of an interesting group of buildings and structures belonging to the south-west fighter pen group.

Current Status: included in the area protected as a Scheduled Monument.

6.2 Dispersed anti-aircraft machine-gun site

There were probably several dispersed anti-aircraft gun sites in the local area. This example which is not shown on the Air Ministry site plan, originally consisted of three Nissen huts and a single gunpit. Only the gunpit survives today.

68. 584 Gunpit

Construction: solid 9-inch brick walled structure with earthwork traverses. This example is similar to those found on the airfield.

584 68 NGR: 2150 1499

Comments: the gunpit survives in good condition but filled with rubbish so the existence of a machine-gun fitting could not be confirmed.

6.3 Sewage disposal site

69. 161: Tool Shed

Various tools such as spades and rakes for removing sludge and the general cleaning of humus, septic and percolating tanks were stored in a tool shed.

Construction: cement rendered 4.5-inch brick walls without piers. The single-pitch roof is clad with corrugated asbestos sheeting.

101 (69) NGR: 2128 1587 (Figure 48)

Comments: the building is in good condition but is disused.

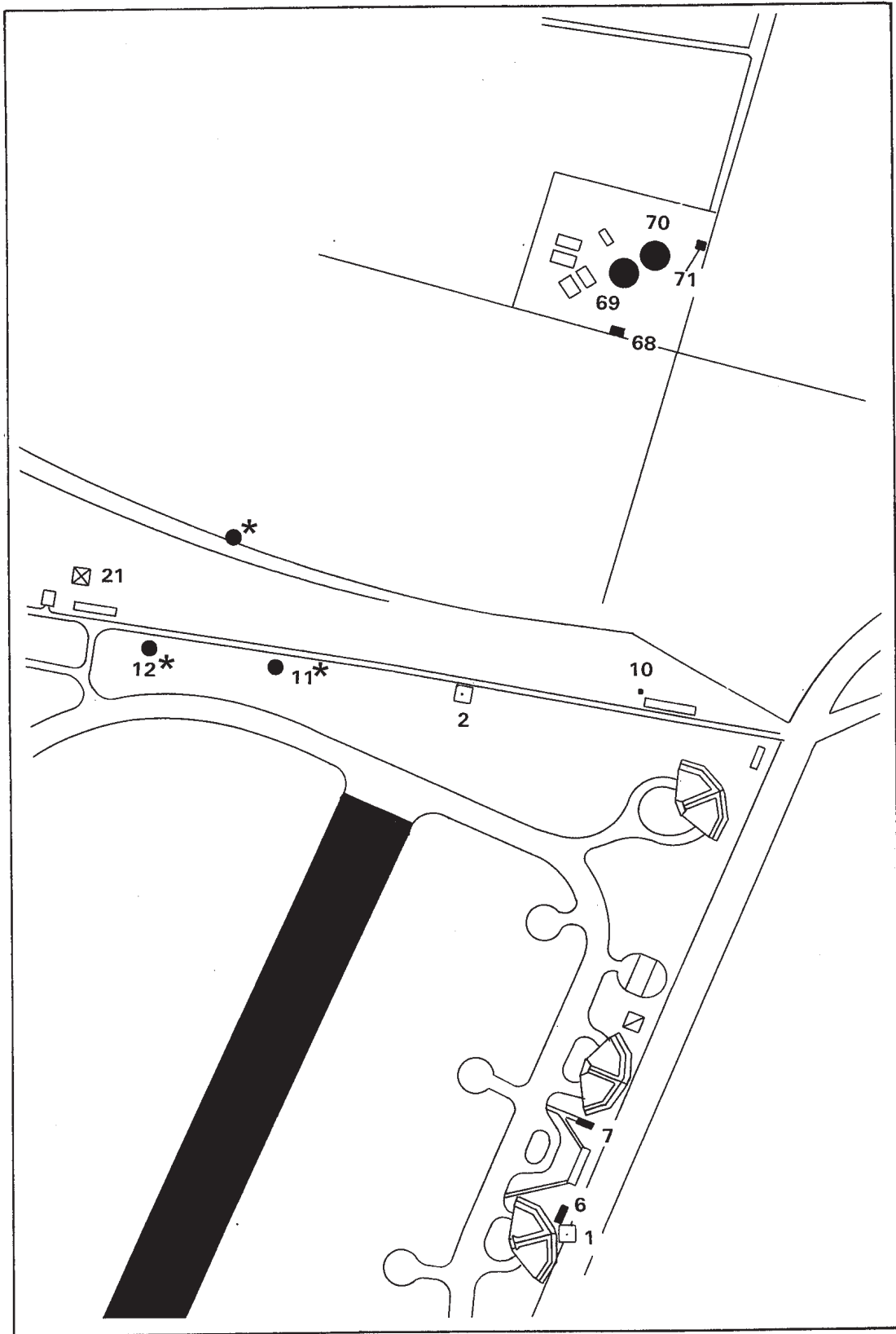


Figure 44: Plan showing surviving buildings (February 1997) on the north-east of the airfield and sewage disposal site. * indicates Scheduled structure.

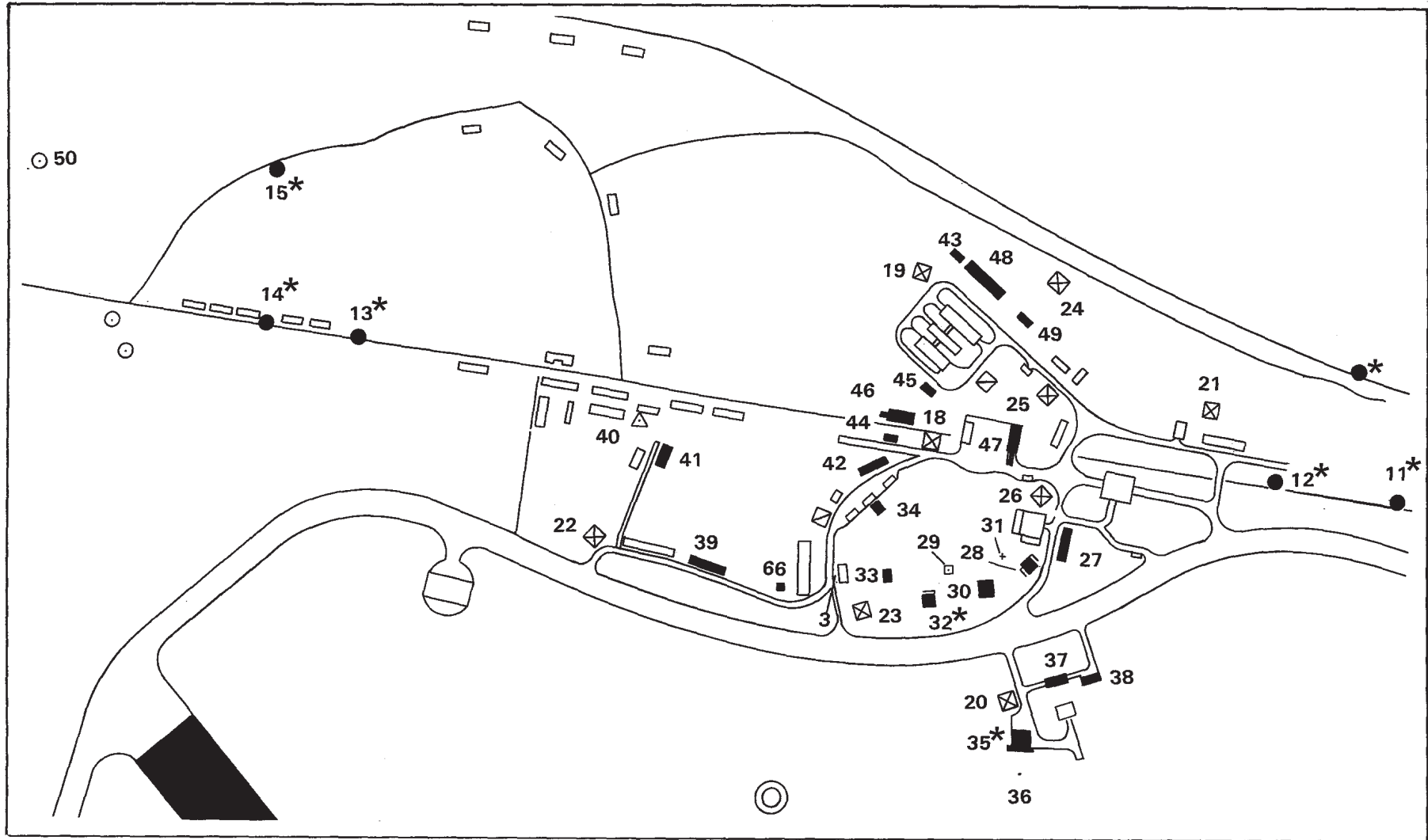


Figure 45: Plan showing surviving buildings (February 1997) on the Technical Site.* indicates Scheduled structure.

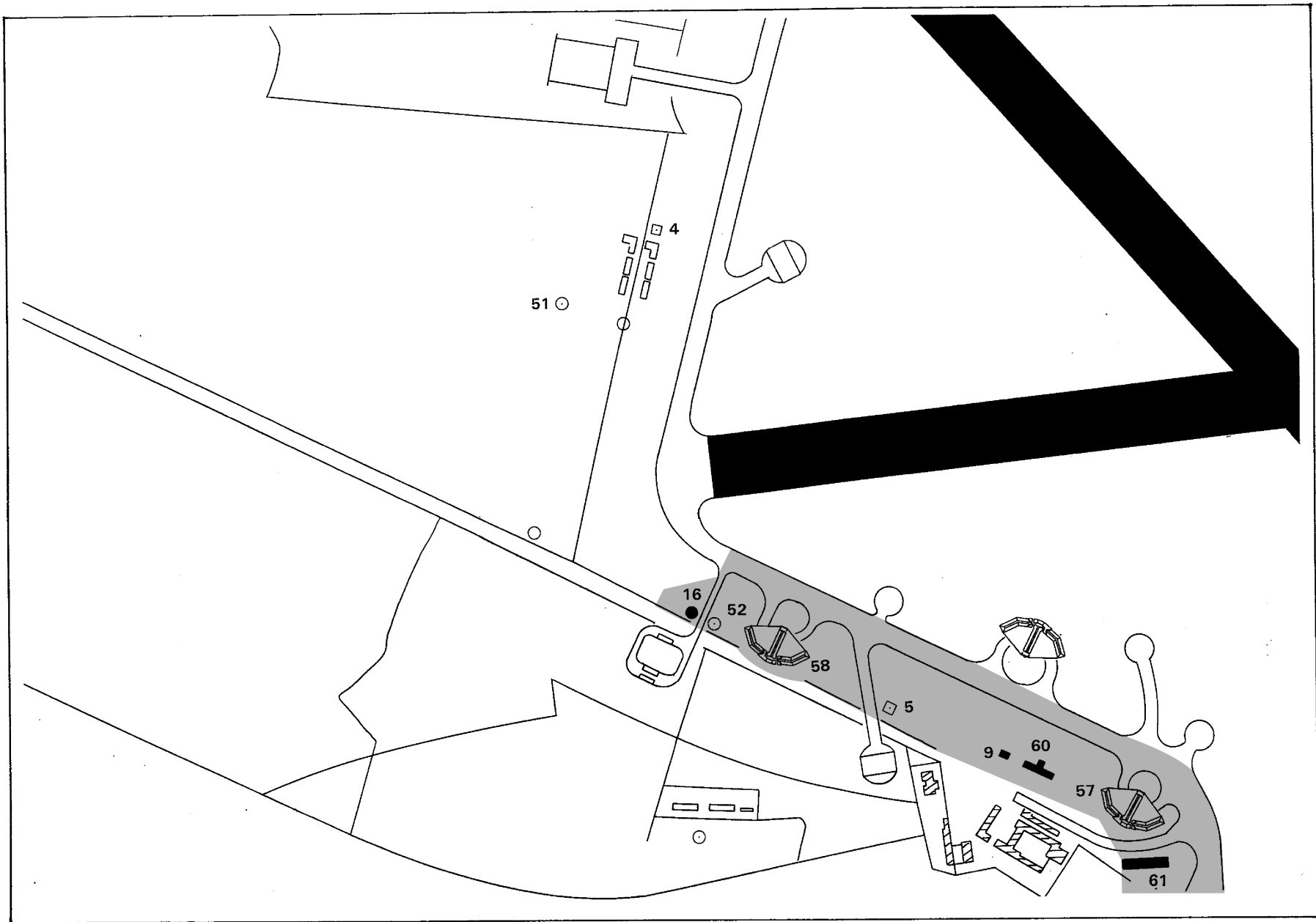


Figure 46: Plan showing surviving buildings (February 1997) around Trickey Warren Farm. Shading indicates Scheduled area.

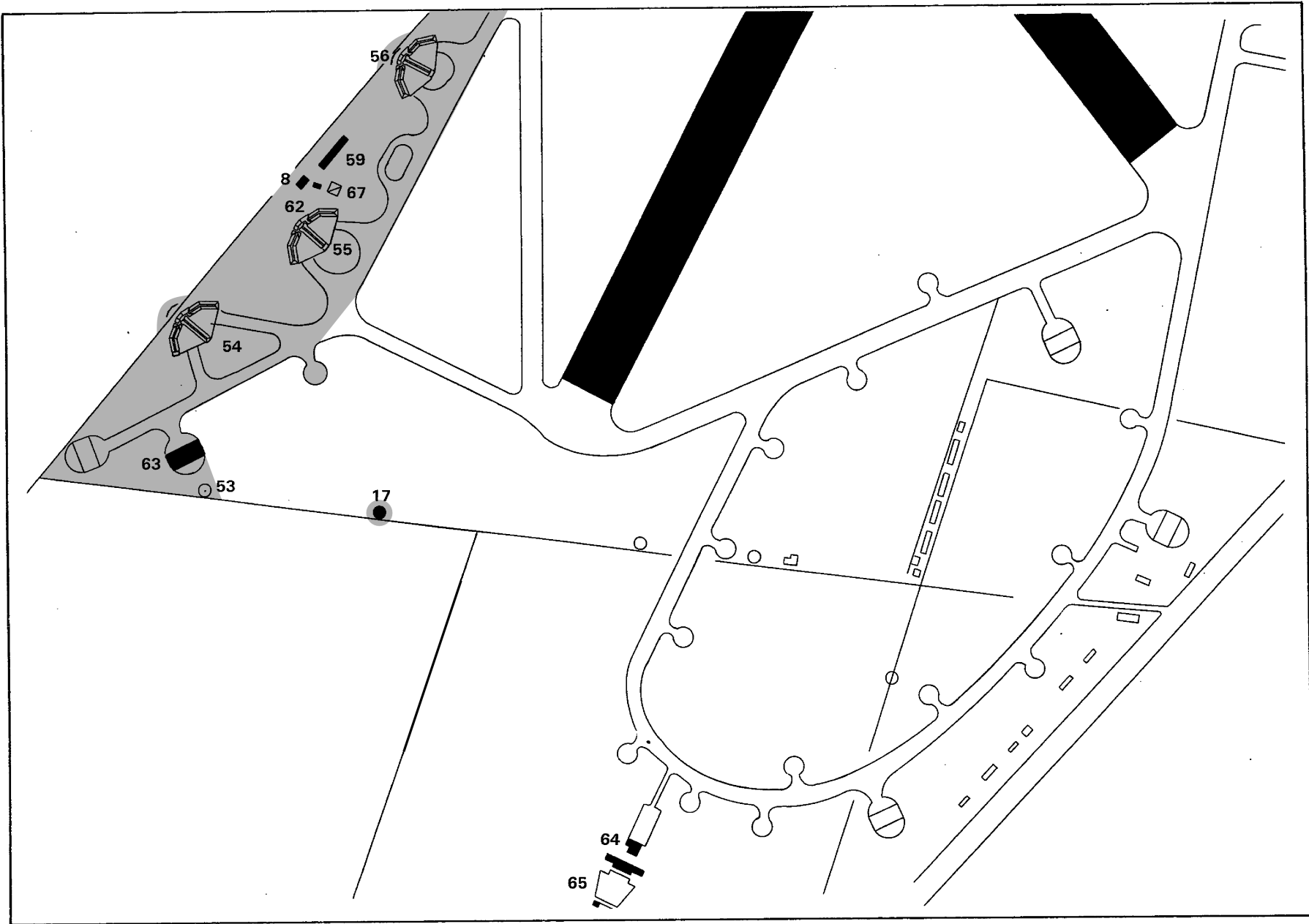


Figure 47: Plan showing surviving buildings (February 1997) at the southern end of the airfield. Shading indicates Scheduled area.



Figure 48: Tool shed on the Sewage Disposal Site 161 (69)



Figure 49: Septic Tank and Destructor House on the Sewage Disposal Site.

70–71. 161: Septic (Sedimentation) and Percolating Tanks

Two circular brick-lined tanks were built at the Sewage Disposal site. One of these may have been a septic tank where the solid organic matter in the sewage was allowed to be partly “digested” and liquefied by the action of bacteria. After decomposition had taken place, the liquid was passed to the other tank for the next stage. This was called a percolating filter tank where further bacterial purification of the effluent could take place. The effluent was distributed into the tank which flowed through layers of porous material (graded gravel) which acted as a filter. A jelly-like film formed around this material and provided the breeding ground for bacteria used in the purification process. The bacteria simply fed on the organic sewage matter and purified it. As a very even distribution of the liquid was essential to the success of the purification, a rotating spray distributor was used. Upstream of the percolating tanks are humus tanks from where the “clean” effluent was probably distributed into the river Culm. Construction: two 9-inch brick-lined circular-walled open structures approximately four feet deep.

161 (70) NGR: 2128 1591 (Figure 49)

161 (71) NGR: 2130 1591

Comments: the brick tanks survive in good condition although the walls of both tanks have been breached. The concrete support for the rotating spray is extant. The brick-lined humus tanks are thought to survive but are now filled in and grassed over.

72. 161: Destructor House

This is a small building containing a refuse bin, coal store and an incinerator (destructor) for the burning of combustible waste.

Construction: cement rendered 4.5-inch brick walls without piers. The single-pitch roof is clad with corrugated asbestos cement sheeting.

161 (72) NGR: 2131 1593 (Figure 49)

Comments: the building is in good condition and includes the exhaust stack but, unfortunately the incinerator does not survive.

6.4 Administration site

The administration site contained the station offices and it was here that the day-to-day administration and running of the station was carried out.

73. 39b: Main Static Water Tank and Pump House

Water from the natural springs of the river Culm was pumped to the main static water tank located on the administration site. From here the water was pumped up to another static water tank and a high level water tank on the RAF communal site.

Construction: the tank consists of a large permanent brick open structure with a temporary single-pitch roof of corrugated asbestos sheeting. The pump house is also of permanent brick construction but has a reinforced concrete roof.

39b (73) NGR: 2154 1568

Comments: both structures are in excellent condition, the pump house for example, retains its original doors. There is a Water Company water main pipe exposed above ground that runs along the adjacent lane but, it is thought this has nothing to do with the static water tank.

74. 39a: Blast Shelter

This is a standard brick-built open blast shelter similar to those built on the technical site.

39a (74) NGR: 2158 1566

Comments: still in excellent condition.

6.5 RAF communal site

The layout of the dispersed domestic site at Culmhead which included separate RAF and WAAF communal sites, is typical of an RAF station planned in 1940/41. Contractors engaged in airfield maintenance lived in huts on the RAF communal site and the site also contained important buildings for the running of the station in an emergency such as a stand-by-set house and high level water tank. The majority of buildings however, were communal and these included dining rooms (for 399 airmen) and institutes for 755 airmen and 112 Corporals, Sergeants' mess for 88 and two officers' messes. Other buildings included a tailor's, barber's and shoemaker's shops, a post office, and a medical inspection block.

75. 44: Officers' Mess and Cinema 15804/40

This building was originally the airmen's dining room, cookhouse and cinema and consisted of a central cookhouse joined on either side by a servery connecting with two dining rooms. One dining room featured a projection room extension on an end elevation so that this room could become a cinema. When the station expanded, the function changed to that of an officers' mess as the original one could only cater for 24 officers.

Construction: cement rendered 4.5-inch brick walls with external brick piers at ten feet centres. The roof consists of a standard arrangement with steel trusses carrying corrugated asbestos cement sheeting.

44 (75) NGR: 2194 1571

Comments: still in good condition but only one block of the original three survives.

76. 50: Decontamination Centre Type KM 13843/40

The use of gas in war was outlawed by the Geneva Gas Protocol of 1925 (both Britain and Germany were signatories), but not its production and development. As a result the British Government decided to develop gas weapons and methods of protection against their use. This included the construction of specialised buildings, so that in the event of such an attack, personnel who became gas casualties could receive first-aid treatment and get decontaminated. The decontamination building was designed to deal with most types of gasses developed during the First World War: lachrymatory agents; respiratory agents and blister agents.

It was possible to protect oneself from many of the gases by wearing a respirators. Some had distinctive odours which gave sufficient warning of their presence to allow personnel to take cover inside a building or shelter. However, mustard gas has only a faint smell of garlic and its symptoms are not always apparent until some time after the attack. In liquid or vapour form, mustard gas can be absorbed by the skin without being detected. By the time irritation is noticed, the agent has penetrated the surface of the skin and started to cause serious damage. Therefore, special warning posts with metal plates coated with detection paint that changed colour when exposed to mustard gas, were placed at intervals along pathways connecting with buildings.

The procedure was to get out of all contaminated clothing, dispose of it, wash thoroughly, and change into fresh clothing as soon as possible. If this could be achieved within 20 minutes of the initial contamination, serious injury could be avoided.

The type "KM" decontamination centre is thought (the original drawing does not survive) to have had two sections, one for un-wounded men and the other for wounded. On the front elevation were two entrance porches, the pathway through both of these sloped down to a foot bath of bleach solution. The right-hand porch for wounded personnel, (conventional and gas wounds) led into an undressing area and then an air-lock gave access to the first-aid treatment room. From here it was also possible to get treatment for gas wounds by going into the adjacent bleaching room. Alternatively, another air-lock was provided to exit the building. The other entrance porch on the front elevation for un-wounded personnel also led to an undressing area where all clothing was discarded out of the building through metal letter-type boxes. From here an air-lock led to the bleaching room. Here were a number of showers were arranged into two groups with a space between them so that a person could wet himself under one, move into the space to soap himself and then wash off the soap in the next shower cubicle. As the antidote to mustard gas was bleach, a specially prepared paste would be rubbed into the affected area and then wiped off after two minutes. The next room was the dressing area and from here an air-lock was used to exit the building.

In a gas contaminated environment, it was possible to raise the internal air pressure to seal the building and prevent gas entering which enabled the building to be used if gas was present outside. All doors had rubber seals and the undressing rooms had pressure stabilisers on an outside wall to release the pressure when required. The boiler and AC plant rooms were located at the rear of the building.

Construction: cement rendered 13.5-inch brick walls supporting "Seigwart" type hollow reinforced concrete beams.



Figure 50: Commanding Officer's Quarters to drawing 9023/41 on RAF Communal Site. 53 (77)

50 (76) NGR: 2198 1575

Comments: unfortunately, a part of this building has been removed leaving a building of little interest.

77. 53: Commanding Officer's Quarters 9023/41

The station commanding officer was accommodated in a detached building built close to the hedge line in an effort to conceal it. The original Air Ministry drawing does not survive so exact details are unknown. Construction: cement rendered 4.5-inch brick with external piers at ten feet centres forming six bays. The roof comprises of standard 18 feet span steel trusses supporting corrugated asbestos cement sheeting.

53 (77) NGR: 2218 1573 Figure 50

Comments: this building is in excellent condition and retains its original window frames.

78. 56: Gymnasium 14604/41

The gymnasium and squash racquets court were all part of the station recreational facilities. On most stations the gymnasium with the addition of two extensions could become a multi-functional building. A chancel extension added to an end elevation converted the gym into a church with the congregation seated in the gym facing the alter and chancel. Also a projection room was often added to the opposite end elevation to that of the chancel to convert the building into a cinema. But it is thought that neither of these additions were carried out at Culmhead and instead the building remained in its original form.

An annexe on a side elevation contains the main entrance which gives access to the gymnasium hall. On either side of the entrance were changing rooms, stores to house gym equipment and a latrine. Typical fittings included climbing ropes, rope ladders and three-section wall bars.

Construction: cement rendered 4.5-inch brick with external piers at ten feet centres to form nine bays. The roof comprises 28 feet span steel trusses clad with corrugated asbestos cement sheeting.

56 (78) NGR: 2214 1585

Comments: the gymnasium is still in good condition, no evidence was found of the chancel extension.

79. 67: High Level Water Tank 20/41 ?

This is a Braithwaite type steel water tank mounted on steel staging. The exact identification is unknown as the drawing number is not identified on the Air Ministry site plan but its design is very similar to drawing 20/41. This water tower has a 30,000 gallon plate steel, double compartment water tank mounted on a 40 feet high staging. This was originally associated with a static water tank and a booster pump house (both provided for fire-fighting purposes) but, these are now demolished.

67 (79) NGR: 2201 1573

Comments: appears to be in excellent condition and may even be still used for the storage of water.

80. 549: Blast Shelter 2360/41

Only one out of the original nine blast shelters built on this site survive today. The surviving example is similar to those found on the technical site. For further details see Nos. 19–28 on page 24 .

549 (80) NGR: 2201 1580

Comments: its current status is unknown as it was only viewed from a distance.

6.6 RAF Site No. 1

This was a quarters site for all ranks and consisted mainly of Laing huts (Figure 30) used for sleeping, Also here were brick-built latrines and semi-underground air-raid shelters.

81–87. 552–558: Air-Raid Shelters

All seven air-raid shelters originally built on this site survive today. Most of these are either semi-underground or completely underground and constructed of brick and reinforced concrete.

552 (81) NGR: 2244 1577

553 (82) NGR: 2247 1578

554 (83) NGR: 2253 1573

555 (84) NGR: 2261 1576

556 (85) NGR: 2264 1575

557 (86) NGR: 2249 1582

558 (87) NGR: 2261 1582

Comments: its difficult to make a judgement as to the condition of these as they either semi-underground or completely underground and access is not possible. But this is an interesting collection of early and now rare WW2 underground shelters. The later and most common Air Ministry design of air-raid shelter for RAF stations was completely different to those at Culmhead. These were surface shelters and consisted of a precast concrete arched design known as the “Stanton Shelter” having earthwork traverses.

88. 61a : Officers’ Ablutions and Latrine Block 16330/41

This is thought to be building 61a but it is unclear if this is the case or not.

Construction: cement rendered 4.5-inch brick with external piers. The roof is a simple single-pitch type with corrugated asbestos cement sheeting.

61a (88) NGR: 2262 1584 (Figure 51)

Comments: now in poor condition.

89. 69: Picket Post 1597/40

Picket posts were placed at the entrances to all of the dispersed sites to control traffic entering and leaving the site. This example was the first wartime design.

Construction: the building is very similar in appearance to the officers’ ablution and latrine block. Cement rendered 4.5-inch brick with external piers with a single-pitch roof clad with corrugated asbestos cement sheeting.

69. (89) NGR: 2247 1575

Comments: now in poor condition.



Figure 51: Officers' Ablution and Latrine Block to drawing 16330/41 on RAF Site 1. 61a (88)

6.7 RAF Site No. 2

This was a quarters site for all ranks and consisted mainly of 16 feet span Nissen huts and temporary brick latrines and ablutions. No buildings are extant on this site.

90–94. 560–564: Air-Raid Shelters

All air-raid shelters survive here and most of these are surface shelters.

560 (90) NGR: 2254 1611

561 (91) NGR: 2266 1615

562 (92) NGR: 2270 1613

563 (93) NGR: 2273 1615

564 (94) NGR: 2277 1612

There is also a brick-built tank house extant but the building that it was attached has been demolished.

6.8 RAF Site No. 3

This was the final and smallest of the RAF quarters site for all ranks and consisted mainly of Laing type sleeping huts, temporary brick latrines and air-raid shelters.

95. 111: Picket Post 12404/41

This design of picket post replaced 1597/40 (in 1941) and is the most common type built on RAF stations.

Construction: cement rendered 4.5-inch brick walls with external brick piers at ten feet centres forming 1.5 bays. The roof comprises standard 18 feet span steel trusses supporting corrugated asbestos cement sheeting.

111 (95) NGR: 2212 1541

Comments: still in good condition.

96. 109: Latrine Block

This is the standard Air Ministry design of latrine block and is similar to those built on the airfield.

109 (96) NGR: 2224 1542

Comments: now in poor condition.



Figure 52: Latrines, Ablutions and Drying Room to drawing 16339/41 on WAAF Communal and Site No 1. 146 (101)

97–99. 566–568: Air-Raid Shelters

Three air-raid shelters survive on this site and are similar to those found on Site No. 1.

566 (97) NGR: 2212 1539

567 (98) NGR: 2216 1539

568 (99) NGR: 2223 1541

Comments: all appear to be in good condition.

6.9 WAAF Communal and Site No. 1

This was a combined WAAF communal and quarters site for all ranks, with a mixture of communal type buildings such as a combined dining room (for 300 airwomen) and Sergeants' mess (for 10). Other buildings included an institute for 300 and an officers' mess for 10. Buildings functioning as sleeping quarters for all ranks were mainly 16 feet span Nissen huts.

100–101. 145–146: WAAF Decontamination, Bath, Shower and First-Aid Block. Latrines, Ablutions and Drying Room Blocks Type "8a" 16339/41

This is a pair of multi-functional abluition type blocks arranged side-by-side with one block having a large boiler and a 700 gallon water tank tower providing hot water to both buildings.

By clever design, in the event of an enemy air-raid with gas weapons, the shower and bath block could easily be used as a decontamination centre. Although there were no air locks (as there was no plant room) foot baths with a bleach solution were provided at all entrances. During a gas attack, wounded women would go to the first-aid entrance where they would strip and be showered down by a flexible hose before treatment of first-aid could begin. From here they would make their way to the main shower cubicle area and go through the routine of showering, scrubbing with bleach soap and showering again. Un-wounded women would simply enter through another lobby before going on to the undressing area. Dirty clothes were discarded into metal bins ready for boiling. The women then used the showers in the correct sequence before moving to the dressing area. Stores for clean clothes, bleach, towels and respirators were also provided. Alternatively, during normal times women could make use of the baths located along a corridor (see Figure 53).

The other block contained the latrines, ablutions for 30 women, an ironing room and a drying room.

Construction: cement rendered 4.5 ins. brick with external piers at ten feet centres. Standard 14 feet, 18 feet and 28 feet steel trusses support a roof cladding of corrugated asbestos cement sheeting.

145 (100) NGR: 2194 1603

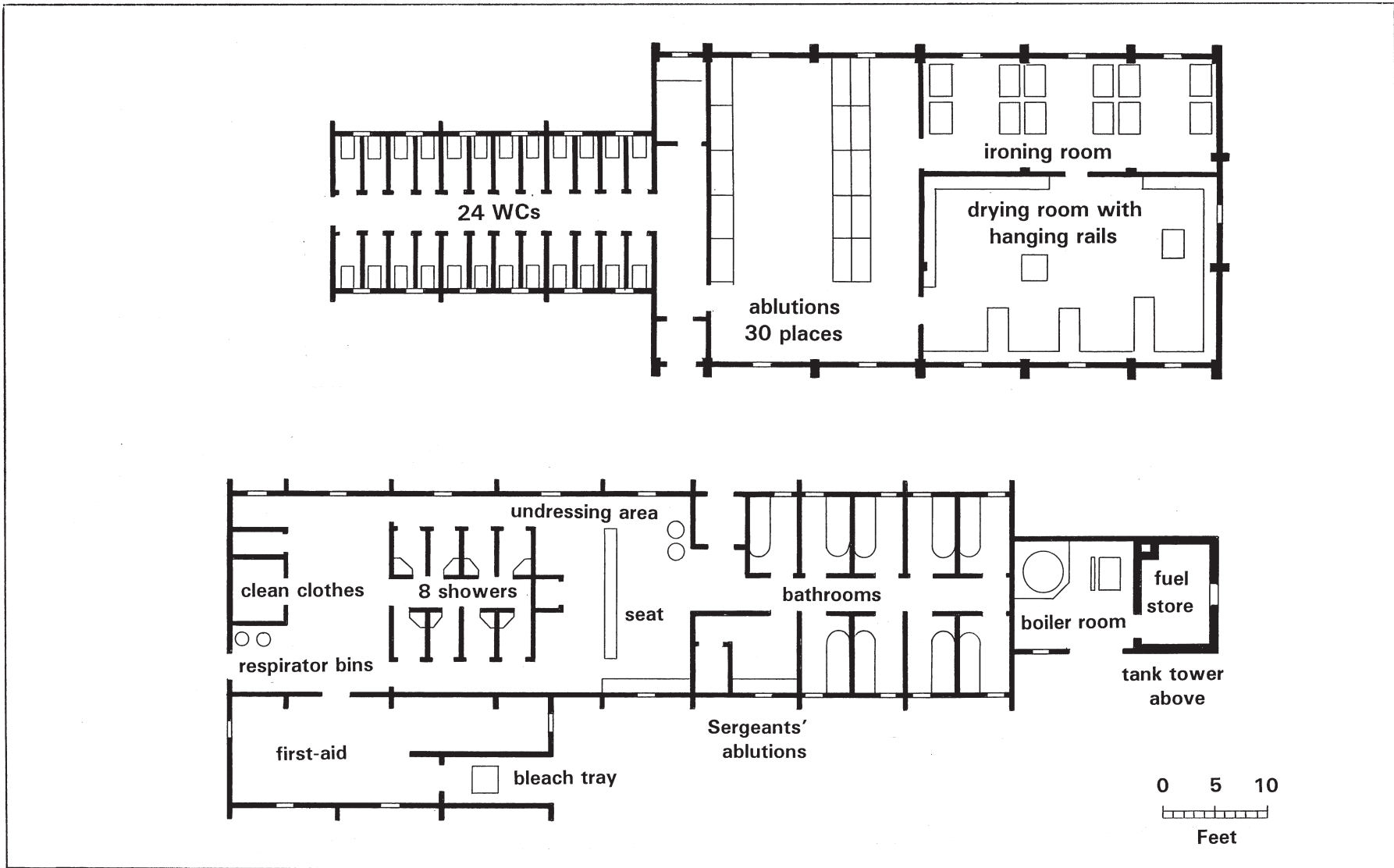


Figure 53: WAAF decontamination, bath, first aid and abluion blocks, type 8a. From drawing 16339/41.

146 (101) NGR: 2193 1604 (Figure 52)

Comments: both buildings are in good condition.

102–104. 573–575: Air-Raid Shelters

These appear to be of a similar type to those built on the other domestic sites but on this site they are in the form of surface shelters.

573 (102) NGR: 2198 1605

574 (103) NGR: 2193 1600

575 (104) NGR: 2192 1607

Comments: all three appear to be in excellent condition.

6.10 WAAF Site No. 2

This was a small WAAF quarters site consisting mainly of 16 feet span Nissen huts. Nothing appears to survive on this site.

6.11 Sick Quarters (Little Fulwood House)

An existing house called Little Fulwood was requisitioned and converted into an officers' mess. Two 16 feet span Nissen huts were erected in the grounds for use as sleeping quarters for WAAF and RAF orderlies and a single 24 feet span Nissen hut was used as the WAAF sick quarters. No Air Ministry buildings survive on this site, but Little Fulwood House is extant. Written in pencil close to the entrance to the house is the following statement: "Any person found entering without permission (including WAAFs) will be welcome". This is now the only evidence of the site's former use.

Little Fulwood House NGR: 2104 2030

6.12 Dispersed site (Canonsgrove House)

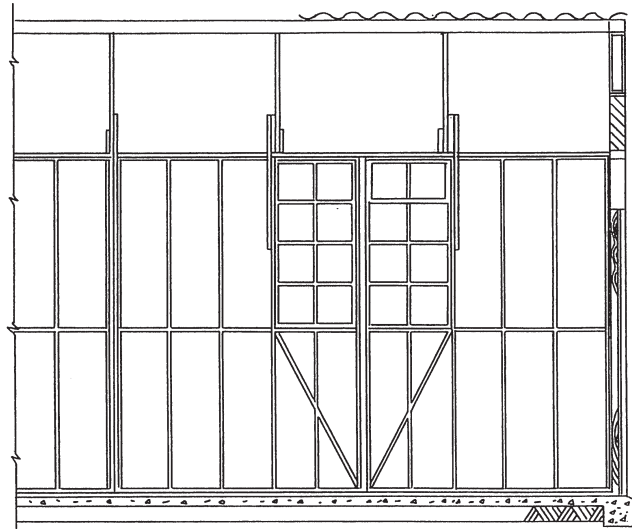
A large house known as "Canonsgrove" was requisitioned and converted into an officers' mess. Out buildings including a barn were also converted into servants quarters. A temporary brick bath house and three Nissen huts were erected in the grounds which functioned as officers' quarters. All Air Ministry buildings have now been removed, but the original house is extant.

Canonsgrove House NGR: 2111 2119

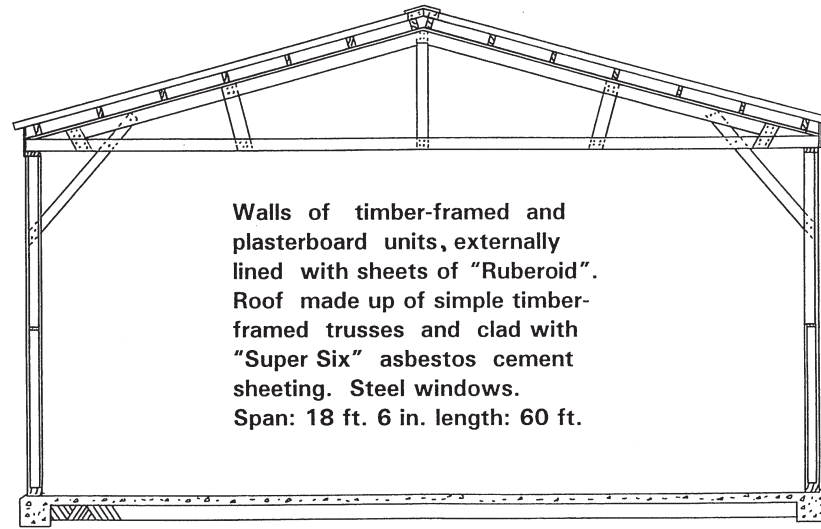
7 Conclusions

The scattered layout of temporary buildings and structures which comprise the greater part of the fabric at Culmhead are a difficult proposition for preservation. Most of them are in an advanced state of decay and others survive in varying states of completeness, typically being used in recent years for farming purposes.

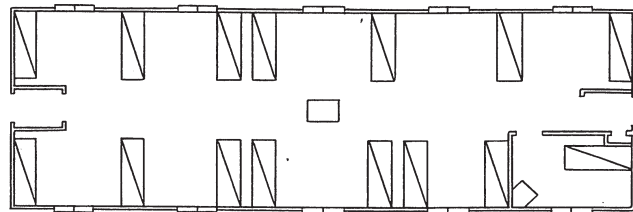
Whilst in principle we should aim to preserve some examples of WWII airfield fabric, there is a difficult question of balance to be achieved. Many of the buildings are poorly preserved and are of standard types that are well known on other sites. Against this must be set the remarkable completeness of the site in total. What makes the airfield buildings and structures at Culmhead so special, apart from the obvious individual ones such as the old watch office and the control tower, it is also the extent and quality of the fighter pens and airfield defences that survive here. We also need to consider the runways and perimeter track. These are rare and complete examples of early tarmac runways and this should be taken into account in any future planning proposals.



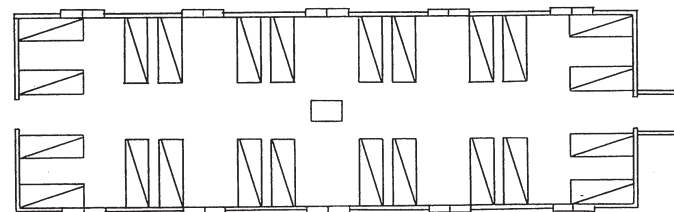
Longitudinal Section



Cross Section



Type "A" Sergeants' Quarters
(Quarters for 1 WO & 14 Sergeants)



Airmen's Barrack Block
(Quarters for 24 Airmen)

Figure 54: Laing portable huts. From drawings 11950/40 and 13903/40.

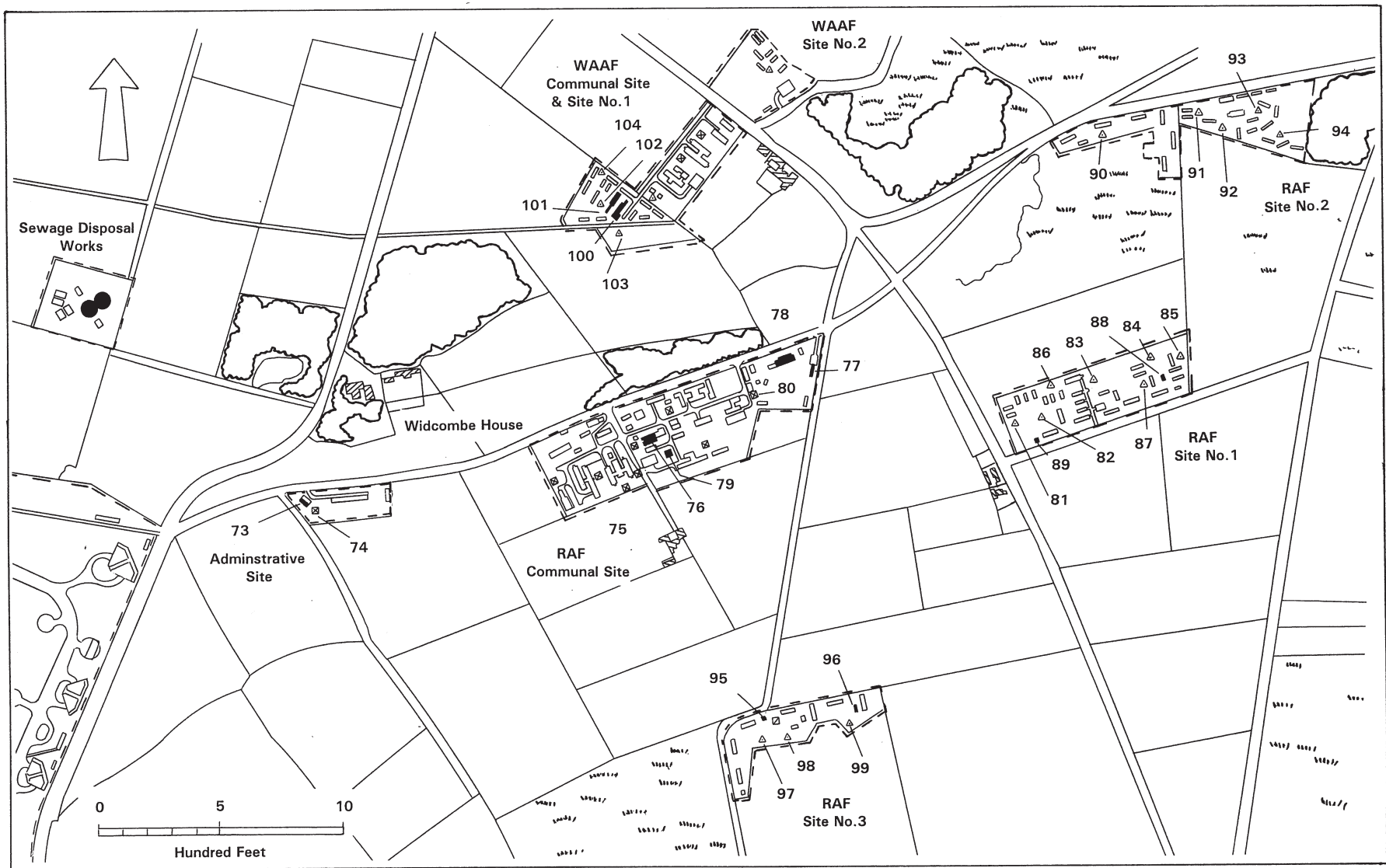


Figure 55: Plan showing surviving buildings (February 1997) on the Domestic Sites.

7.1 Technical Sites

There are two main groups of buildings and structures that stand out as being special:

- The main technical area to the north (including the sewage disposal works)
- The dispersed flight groups built around Trickey Warren Farm in the south west corner

The buildings and structures on the main technical site are largely in poor condition and represent only about half of the total number built, but this is quite high when compared to other airfield sites. The bulk of the buildings demolished are the airfield defence accommodation (Laing) huts and it is the temporary and permanent brick structures that survive. Of interest on this site is the completeness of the airfield defences, the air traffic control group and the sewage disposal works.

The south-western area of the airfield was seen in 1941 as being vulnerable to attack and this is reflected in the planning and extent of the defences that were built on this part of the airfield. Today, completeness is an important aspect of this group. Only one pen and two Blister hangars have been removed but five pens, flight offices, gun pits, latrine blocks, a static water tank and defended walls with their associated trenches and pillboxes are all extant. Therefore this area of the airfield is important to the history of the defence of Britain.

7.2 Domestic Sites

The extent and quality of the dispersed communal and living quarters sites is poor, the majority of buildings having been removed, make them of little interest. But there is one aspect of a few of the sites that is important and this is the completeness of the air-raid shelters. The best are found on RAF site No.1 and RAF site No.3 where both surface, and underground shelters survive and RAF site No. 2 where surface shelters survive.

As far as it is known there are no Air Ministry drawings of airfield air-raid shelters held at the RAF Museum, Hendon (the museum has several thousand AM drawings) and as underground air-raid shelters are now a rare feature elsewhere, it would be advisable to carry out a measured survey of these surviving structures.

8 Schedule of buildings at RAF Culmhead

Information based on Air Ministry Plan 4997/45 and corrected to March 1997.

Columns

Bno The Air Ministry Building Number

C Condition: D = demolished (the concrete base and other below ground evidence may survive), E = extant at time of survey (1997), X = demolished since survey as seen on aerial photos taken in 2001, U = unknown

SNo Survey number

Function Use of the building as given by the Air Ministry Schedules

Construction Construction technique

Drawing The Air Ministry drawing number for this type of structure

NGR The national grid reference (all are in square ST)

PRN The Primary Record Number in the Somerset Historic Environment Record. An asterisk indicates that the site is protected as part of a Scheduled Monument

Technical Site (Airfield)

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
1	E	35	Control Tower (Watch Office)	temporary brick	12779/41	2082 1553	44726*
1a	E	32	Battery Charging (Old Watch Office)	temporary brick		2075 1561	44725*
2	D	-	Squadron Offices and Station HQ	temporary brick	13875/41	2061 1563	-
2a	E	61	Squadron Offices and Station HQ	temporary brick	13875/41	2049 1480	44841*
3	D	-	Armoury	temporary brick	1718/42	2070 1562	-
4	X	42	Lubricant and Flammable Store	temporary brick	15799/40	2075 1570	44832
5	D	-	Technical Latrine (RAF)	temporary brick	9026/41	2072 1562	-
5a	E	43	Technical Latrine (RAF)	temporary brick	9026/41	2077 1571	44824
5b	X	44	Technical Latrine (RAF)	temporary brick	9026/41	2079 1582	44822
5c	D	-	Technical Latrine (RAF)	temporary brick	9026/41		-
6	X	28	Main Inlet Electrical Sub-Station	temporary brick	12648/40, 13495/40	2083 1564	44819
6a	X	29	Inlet Electrical Sub-Station	temporary brick	unknown	2077 1562	44810
7	E	-	Fuel Compound	concrete platform	9108/41	2089 1568	-
7a	-	-	Fuel Compound	concrete platform	9108/41		-
8	X	34	Aviation Petrol Installation (48,000 gallons)	temporary brick and underground tanks	9565/41	2075 1567	44823
8a	D	-	Aviation Petrol Installation (48,000 gallons)	temporary brick and underground tanks	9565/41	2014 1499	-
9	U	-	MT Petrol Installation (5,000 gallons)		underground tanks	2084 1569	-
10	E	-	Bulk Oil Installation (3,500 gallons)	oil tank	15932/40	2073 1568	-
10a	E	-	Bulk Oil Installation (3,500 gallons)	underground	15932/40	2083 1576	-
11	D	-	W/T Transmitter Building	temporary brick	unknown	2085 1574	-
12	D	-	Sleeve Streamer Mast	timber	5749/36	2084 1558	-
13	D	-	Hangar Type T2 (14 bays)	steel	3669/42	2006 1554	-
14	E	-	Compass Platform (60 ft dia.)	concrete	10936/41	2068 1550	-
15	D	-	Fire Tender House	24 ft Nissen hut	12410/41	2093 1571	-
16	D	-	Fire Tender Shelter	24 ft Nissen hut	12410/41	2085 1555	-
17	X	37	Floodlight Trailer and Tractor Shed	temporary brick	12411/41	2084 1557	44814
18	D	-	Gas Defence Centre	16 ft Nissen hut	12408/41	2087 1574	-
19	E	48	Gas Clothing Store	temporary brick	12409/41	2082 1580	44826
20	E	49	Gas Chamber	temporary brick	12411/41	2084 1578	44825
21	D	-	Guard and Fire Party House	24 ft Nissen hut	12404/41	2095 1571	-
22	X	41	Link Trainer (2 compartments)	temporary brick	10040/41	2065 1568	44851

Technical Site (Airfield)

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
23	E		Main Stores (Trickey Warren Farm)	existing building	unknown	2043 1483	
24	D	-	Main Workshop	Nissen hut	12774/41	2080 1577	-
25	E	47	Motor Transport Sheds (4 bays – 2 lock up and 2 repair)	temporary brick	12775/41	2083 1571	44724 -
26	D	-	Motor Transport Office	Nissen hut	12775/41	2081 1572	
27	E	65	Machine Gun Range (2 points: 25 yards)	permanent brick	147/41	2068 1413	44818
28	E	64	Machine Gun Test Butt (cannon)	permanent brick	16461/41	2069 1415	44817
29	X	38	Night Flying Equipment Store	temporary brick	12411/41	2086 1557	44815
30	E	46	Parachute Store	temporary brick	11137/41	2076 1573	44854
31	E	45	Technical Latrine (WAAF)	temporary brick	9026/41	2079 1575	44853
31a	D	-	Technical Latrine (WAAF)	temporary brick	9026/41	2068 1561	-
32	D	-	Work Services	Nissen hut	12405/41	2084 1567	-
33	U	-	Quadrant Post for Bombing Range	pillbox	Nil	2016 1501	-
34	D	-	Battle Headquarters	concrete	11008/41	2076 1437	44550
154	X	30	Unknown	temporary brick	unknown	2082 1563	44809
155	X	39	Agricultural and Implement Store	temporary brick	unknown	2065 1562	44849
156	U	-	MT Petrol Installation (1,000 gallons)			2091 1565	-
158	E	27	Old Gas Clothing and Respirator Store	temporary brick		2086 1565	44820
159	D	-	Guard House	Nissen hut	12404/41	2135 1562	-
160	X	33	Speech Broadcasting Building	temporary brick	unknown	2075 1563	44813
161	E	72	Tool Shed (Sewage Disposal Works)	temporary brick	unknown	2128 1587	44549
162	D	-	Wing Command Station Intelligence and Briefing Room	timber hut	unknown	2132 1566	-
163	D	-	Defence Unit Barrack Block	Laing hut	11950/40	2077 1573	-
164	D	-	Defence Unit Barrack Block	Laing hut	11950/40	2065 1573	-
165	D	-	Defence Unit Barrack Block	Laing hut	11950/40	2060 1574	-
166	D	-	Defence Unit Barrack Block	Laing hut	11950/40	2060 1573	-
167	D	-	Defence Unit Barrack Block	Laing hut	11950/40	2051 1575	-
168	D	-	Defence Unit Barrack Block	Laing hut	11950/40	2050 1574	-
169	D	-	Defence Unit Latrines	temporary brick	9026/41	2062 1573	-
170	D	-	Defence Unit Latrines	temporary brick	9026/41	2052 1574	-
171	D	-	Defence Unit Officers' Quarters	Laing hut	11950/40	2047 1576	-
172	D	-	Defence Unit Officers' Latrines	temporary brick	9026/41	2047 1575	-
173	D	-	Defence Unit Barrack Block	Nissen hut	9541/41	2041 1578	-
174	D	-	Defence Unit Barrack Block	Nissen hut	9541/41	2039 1578	-
175	D	-	Defence Unit Barrack Block	Nissen hut	9541/41	2035 1579	-
176	D	-	Defence Unit Barrack Block	Nissen hut	9541/41	2033 1579	-
177	D	-	Defence Unit Barrack Block	Nissen hut	9541/41	2031 1579	-
178	E	7	Latrine	temporary brick	9026/41	2125 1544	44835
179	D	-	Flight Office	temporary brick	unknown	2125 1542	-
180	D	-	Latrine	temporary brick	9026/41	2114 1488	-
181	D	-	unknown	unknown	unknown	2114 1485	-
182	D	-	Unknown	Nissen hut	unknown	2105 1436	-
183	D	-	Workshop	Nissen hut	unknown	2102 1435	-
184	D	-	Aileron Store	temporary brick	unknown	2102 1433	-
185	D	-	Store	Nissen hut	unknown	2101 1431	-
186	D	-	Store	Nissen hut	unknown	2099 1429	-
187	D	-	Pyrotechnic Store	Nissen (half)	12725/41	2094 1423	-
188	D	-	Latrine	temporary brick	9026/41	2093 1422	-
189	D	-	Office	Nissen hut	unknown	2091 1420	-
190	D	-	Latrine (WAAF)	temporary brick	9026/41	2089 1418	-
191	D	-	Latrine	temporary brick	9026/41	2088 1449	-
192	D	-	Defence Unit Barrack Block	Laing hut	11950/40	2088 1447	-
193	D	-	Defence Unit Barrack Block	Laing hut	11950/40	2087 1445	-
194	D	-	Defence Unit Barrack Block	Laing hut	11950/40	2086 1442	-
195	D	-	Defence Unit Barrack Block	Laing hut	11950/40	2085 1439	-
196	D	-	Latrine	temporary brick	9026/41	2085 1437	-
197	D	-	Picket Post	temporary brick	12404/41	2085 1436	-
198	E	8	Latrine	temporary brick	9026/41	2039 1464	44808*

Technical Site (Airfield)

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
198a	E	62	unknown	16 ft Nissen hut	unknown	2045 1465	44719*
199	E	59	Flight Office	temporary brick	unknown	2042 1467	44720*
200	E	60	Flight Office	temporary brick	unknown	2044 1487	44721*
201	E	9	Latrine	temporary brick	9026/41	2041 1489	44840*
202	D	-	Latrine	temporary brick	9026/41	2020 1486	-
203	D	-	Defence Unit Barrack Block	Laing hut	11950/40	2018 1487	-
204	D	-	Defence Unit Barrack Block	Laing hut	11950/40	2016 1487	-
205	D	-	Latrine	temporary brick	9026/41	2021 1531	-
206	D	-	Defence Unit Barrack Block	Nissen hut	9541/41	2015 1531	-
207	D	-	Defence Unit Barrack Block	Nissen hut	9541/41	2015 1530	-
208	D	-	Defence Unit Barrack Block	Nissen hut	9541/41	2015 1528	-
209	D	-	Blister Hangar	steel	12532/41	2128 1554	-
210	D	-	Blister Hangar	steel	12532/41	2106 1493	-
211	D	-	Blister Hangar	steel	12532/41	2093 1453	-
212	D	-	Blister Hangar	steel	12532/41	2104 1439	-
213	D	-	Blister Hangar	steel	12532/41	2082 1416	-
214	E	63	Blister Hangar	steel	12532/41	2034 1443	12999*
215	D	-	Blister Hangar	steel	12532/41	2025 1445	-*
216	D	-	Blister Hangar	steel	12532/41	2029 1490	-
217	D	-	Blister Hangar	steel	12532/41	2025 1533	-
218	D	-	Blister Hangar	replaced by T2 hangar	12532/41	2010 1553	-
219	D	-	Blister Hangar	steel	12532/41	2045 1564	-
220	D	-	Aircraft Fighter Pen	sandbag walls	unknown	2132 1561	-
221	D	-	Aircraft Fighter Pen	sandbag walls	unknown	2126 1547	-
222	D	-	Aircraft Fighter Pen	sandbag walls	unknown	2122 1535	-
222	D	-	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2119 1535	-
223	D	-	Aircraft Fighter Pen	sandbag walls	unknown	2114 1503	-
223	D	-	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2113 1504	-
224	D	-	Aircraft Fighter Pen	sandbag walls	unknown	2115 1492	-
225	D	-	Aircraft Fighter Pen	sandbag walls	unknown	2112 1489	-
226	E	54	Aircraft Fighter Pen	earth and turf walls	FCW 4513	2031 1455	44717*
226	E	54	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2029 1455	44717*
226	E	54	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2029 1452	44717*
227	E	55	Aircraft Fighter Pen	earth and turf walls	FCW 4513	2039 1462	44718*
227	E	55	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2041 1460	44718
228	E	56	Aircraft Fighter Pen	earth and turf walls	FCW 4513	2046 1474	44727*
228	E	56	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2045 1475	44727*
228	E	56	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2048 1473	44727*
229	E	57	Aircraft Fighter Pen	earth and turf walls	FCW 4513	2049 1484	44728*
229	E	57	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2048 1483	44728*
229	E	57	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2050 1485	44728*
230	D	-	Aircraft Fighter Pen	earth and turf walls	FCW 4513	2044 1498	-
230	D	-	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2043 1496	-
230	D	-	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2041 1499	-
230	D	-	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2044 1499	-
231	E	58	Aircraft Fighter Pen	earth and turf walls	FCW 4513	2023 1496	44723*
231	E	58	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2022 1495	44723*
231	E	58	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2020 1497	44723*
231	E	58	Aircraft Fighter Pen Defended Wall	permanent brick	unknown	2023 1498	44723*
232	D	-	Small Arms Ammunition Store	Nissen hut	12725/41	2053 1588	-
233	D	-	Small Arms Ammunition Store	Nissen hut	12725/41	2049 1589	-
234	D	-	Small Arms Ammunition Store	Nissen hut	12725/41	2057 1585	-
235	D	-	Small Arms Ammunition Store	Nissen hut	12725/41	2049 1599	-
236	D	-	Small Arms Ammunition Store	Nissen hut	12725/41	2053 1596	-
237	D	-	Small Arms Ammunition Store	Nissen hut	12725/41	2058 1595	-
238	D	-	Sleeping Shelter (Shell Store)	temporary brick	unknown	2114 1480	-
239	X	6	Sleeping Shelter (Shell Store)	temporary brick	unknown	2123 1537	44833
240	D	-	Field Kitchen	unknown	unknown	2051 1576	-
500	E	18	Blast Shelter for 50	permanent brick	2360/41	2078 1571	44855

Technical Site (Airfield)

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
501	E	19	Blast Shelter for 50	permanent brick	2360/41	2076 1581	44828
502	X	20	Blast Shelter for 50	permanent brick	2360/41	2081 1556	44831
503	E	21	Blast Shelter for 50	permanent brick	2360/41	2095 1573	44816
504	E	22	Blast Shelter for 50	permanent brick	2360/41	2059 1563	44850
505	X	23	Blast Shelter for 50	permanent brick	2360/41	2073 1560	44811
506	E	24	Blast Shelter for 50	permanent brick	2360/41	2087 1579	44827
507	E	25	Blast Shelter for 50	permanent brick	2360/41	2085 1574	44829
508	X	26	Blast Shelter for 50	permanent brick	2360/41	2085 1568	44830
1b	D	-	Airfield Code Letters	concrete	unknown	2082 1551	-
1c	D	-	Signals Square	tarmac	unknown	2082 1551	-
509	D	-	Static Water Tank (emergency water supply)	concrete	unknown	2011 1491	-
510	D	-	Static Water Tank (emergency water supply)	concrete	unknown	2128 1549	-
511	U	-	Static Water Tank (emergency water supply)	concrete	unknown	2081 1575	-
512	U	-	Static Water Tank (emergency water supply)	concrete	unknown	2071 1567	-
513	E	-	Static Water Tank (emergency water supply)	concrete	unknown	2041 1464	-*
514	E	-	Pillbox	concrete and temporary brick	unknown	2105 1576	44562*
515	E	12	Pillbox	concrete and temporary brick	unknown	2106 1568	44561*
516	E	16	Pillbox	concrete and temporary brick	unknown	2099 1569	44560*
517	E	13	Pillbox	concrete and temporary brick	unknown	2043 1577	44558*
518	E	14	Pillbox	concrete and temporary brick	unknown	2037 1578	44557*
519	E	15	Pillbox	concrete and temporary brick	unknown	2037 1586	44559*
520	D	-	Pillbox	concrete and temporary brick	unknown	2014 1526	44555
521	D	-	Pillbox	concrete and temporary brick	unknown	2006 1506	44554
522	E	16	Pillbox	concrete and temporary brick	unknown	2016 1501	44349*
523	E	-	Pillbox	concrete and temporary brick	unknown	2048 1439	44553*
524	D	-	Pillbox	concrete and temporary brick	unknown	2066 1438	44551
525	D	-	Pillbox	concrete and temporary brick	unknown	2072 1437	44552
526	E	50	Gunpit	temporary brick	unknown	2027 1587	35933
527	D	-	Gunpit	temporary brick	unknown	2028 1578	-
528	U	-	Gunpit	temporary brick	unknown	2029 1574	-
529	E	51	Gunpit	temporary brick	unknown	2008 1526	44821
530	E	52	Gunpit	temporary brick	unknown	2018 1501	35932*
531	U	-	Gunpit	temporary brick	unknown	2016 1485	-
532	E	-	Gunpit	temporary brick	unknown	2036 1441	12998*
533	D	-	Gunpit	temporary brick	unknown	2083 1427	-
534	E	31	Gunpost	steel post	unknown	2082 1565	-
535	D	-	Transformer Plinth	temporary brick	unknown	2115 1483	-
536	E	1	Transformer Plinth	temporary brick	unknown	2124 1536	44834
537	E	2	Transformer Plinth	temporary brick	unknown	2116 1566	44837
538	E	-	Transformer Plinth	temporary brick	unknown	2017 1538	44810
539	E	3	Transformer Plinth	temporary brick	unknown	2036 1457	35931*
540	E	5	Transformer Plinth	temporary brick	unknown	2029 1495	44839*

Technical Site (Airfield)

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
541	E	40	Underground Air-Raid Shelter	concrete and temporary brick	unknown	2063 1569	44852

Administrative Site

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
35	D	-	Station Offices	temporary brick		2162 1568	-
36	D	-	Latrine (RAF)	temporary brick	9026/41	2159 1569	-
37	D	-	Latrine (WAAF)	temporary brick	9026/41	2163 1569	-
38	D	-	Picket Post	16 ft Nissen hut	12404/41	2157 1568	-
39	D	-	Cine Camera Workshop	unknown	unknown	2165 1568	-
39a	E	-	Blast Shelter	permanent brick	2360/41	2158 1566	-
39b	E	73	Main Static Water Tank and Pump House	permanent brick	unknown	2154 1568	44844

RAF Communal Site

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
40	D	-	Officers' Mess (for 24)	temporary brick	15801/40	2208 1579	-
41	D	-	Officers' Bath House and Latrine	temporary brick	15801/40	2209 1584	-
42	D	-	Sergeants' Mess (for 88)	temporary brick	15803/40	2203 1572	-
43	D	-	Sergeants' Showers, Ablutions and Latrines	temporary brick	15802/40	2207 1573	-
44	D	-	Officers' Mess and Cinema (formerly Dining Room)	temporary brick	15804/40	2194 1571	-
44a	D	-	Airmen's Dining Room (for 301-399)	24 ft Nissen hut	12910/24	2190 1569	-
45	D	-	Ration Store	temporary brick	15804/40	2192 1576	-
46	D	-	Institute (for 112 Corporals and 755 airmen)	temporary brick	15805/40	2203 1580	-
47	D	-	Grocery and Local Produce Store	temporary brick	15805/40	2198 1580	-
48	D	-	Airmen's Showers and Ablutions	temporary brick	15802/40	2186 1573	-
48a	D	-	Airmen's Showers and Ablutions (for 301-400)	temporary brick	9164/41	2187 1567	-
49	D	-	Latrine (WAAF)	temporary brick	15803/40	2190 1576	-
49a	D	-	Latrine (RAF) (301-400)	temporary brick	14397/41	2188 1573	-
50	E	76	Decontamination Centre (KM)	permanent brick	13843/40	2198 1575	-
51	D	-	Post Office (formerly Picket Post)	temporary brick	15797/40	2192 1578	-
52	D	-	Stand-by-Set House	temporary brick	12613/40	2195 1578	-
53	E	177	Commanding Officer's Quarters	temporary brick	9023/41	2218 1573	44843
54	D	-	Fuel Compound	concrete	9106/41	2198 1572	-
55	D	-	Tailors and Barbers' Shop	24 ft Nissen hut	12878/41	2196 1575	-
56	E	78	Gymnasium	temporary brick	14604/41	2214 1585	-
57	D	-	Squash Racquets Court	temporary brick	16589/41	2212 1579	-
58a	D	-	Cycle Shed	unknown	unknown	unknown	-
58b	D	-	Cycle Shed	unknown	unknown	unknown	-
58c	D	-	Cycle Shed	unknown	unknown	unknown	-
59	D	-	Manager's Quarters	temporary brick	unknown	2201 1580	-
60	D	-	Surveyor's Hut	16 ft Nissen hut	unknown	2218 1580	-
61	D	-	Booster Pump House	temporary brick	unknown	2217 1586	-
62	D	-	AMWD Building	temporary brick and Nissen hut	unknown	2211 1584	-
63	D	-	Contractor's Hut	Timber Hut	unknown	2212 1583	-
64	D	-	Medical Inspection Block	temporary brick	6153/41	2202 1576	-
65	D	-	Ambulance Garage and Mortuary	24 ft Nissen hut	unknown	2199 1574	-
66	D	-	Transformer Plinth	temporary brick	unknown	2196 1575	-
67	D	-	High Level Water Tank	steel		2201 1573	-
68	D	-	Latrine Bucket Tip	unknown	unknown	unknown	-
69	D	-	Static Water Tank (emergency water)	concrete	unknown	2196 1577	-
70	D	-	Education Block	temporary brick	9887/42	2204 1577	-
542	D	-	Blast Shelter	permanent brick	2360/41	2192 1571	-

RAF Communal Site

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
543	D	-	Blast Shelter	permanent brick	2360/41	2195 1569	-
544	D	-	Blast Shelter	permanent brick	2360/41	2197 1571	-
545	D	-	Blast Shelter	permanent brick	2360/41	2196 1574	-
546	D	-	Blast Shelter	permanent brick	2360/41	2190 1574	-
547	D	-	Blast Shelter	permanent brick	2360/41	2186 1569	-
548	D	-	Blast Shelter	permanent brick	2360/41	2205 1574	-
549	E	-	Blast Shelter	permanent brick	2360/41	2211 1580	-
550	D	-	Blast Shelter	permanent brick	2360/41	2201 1579	-

RAF Site No. 1 Quarters

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
60	D	-	Officers' and Servant's Quarters	Laing hut	13903/40	2262 1580	-
60a	D	-	Officers' and Servant's Qtrs Type A	Nissen hut	14420/41	2263 1584	-
60b	D	-	Officers' and Servant's Qtrs Type A	Nissen hut	14420/41	2264 1583	-
60c	D	-	Officers' and Servant's Qtrs Type C	Nissen hut	14420/41	2264 1582	-
60d	D	-	Officers' and Servant's Qtrs Type B	Nissen hut	14420/41	2261 1582	-
60e	D	-	Officers' and Servant's Qtrs Type C	Nissen hut	14420/41	2259 1584	-
61	D	-	Officers' Latrine	temporary brick	15797/40	2265 1581	-
61a	E	-	Officers' Ablutions and Latrines (17-24)	temporary brick	16330/41	2262 1584	-
62	D	-	Sergeants' Quarters	Laing hut	13903/40	2252 1577	-
62a	D	-	Sergeants' Quarters Type "B"	Nissen hut	14420/41	2254 1581	-
63	D	-	Sergeants' Quarters	Laing hut	13903/40	2258 1579	-
63a	D	-	Sergeants' Quarters Type "B"	Nissen hut	14420/41	2256 1580	-
64	D	-	Sergeants' Latrines and Drying Room	temporary brick	15797/40	2259 1581	-
64a	D	-	Sergeants' Latrines (for 16)	temporary brick	16330/41	2255 1580	-
65	D	-	Airmen's Barrack Block	Laing hut	13903/40	2252 1577	-
66	D	-	Airmen's Barrack Block	Laing hut	13903/40	2250 1578	-
67	D	-	Airmen's Barrack Block	Laing hut	13903/40	2248 1576	-
67a	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2248 1579	-
67b	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2249 1579	-
67c	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2250 1580	-
67d	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2252 1580	-
67e	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2252 1579	-
67f	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2252 1578	-
67g	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2243 1577	-
67h	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2243 1578	-
67j	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2246 1581	-
67k	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2245 1580	-
67l	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2244 1580	-
68	D	-	Airmen's Latrine and Drying Room	temporary brick	15797/40	2251 1579	-
68a	D	-	Airmen's Latrine	temporary brick	16330/41	2242 1580	-
69	E	89	Picket Post	temporary brick	15797/40	2247 1575	-
			Fuel Compound	concrete platform	9108/41	2254 1579	-
			Drying Room	unknown			-
551	D	-	Static Water Tank	concrete	unknown	2252 1576	-
552	E	81	Air-Raid Shelter	concrete and brick	unknown	2244 1577	-
553	E	82	Air-Raid Shelter	concrete and brick	unknown	2247 1578	-
554	E	83	Air-Raid Shelter	concrete and brick	unknown	2253 1573	-
555	E	84	Air-Raid Shelter	concrete and brick	unknown	2261 1576	-
556	E	85	Air-Raid Shelter	concrete and brick	unknown	2264 1575	-
557	E	86	Air-Raid Shelter	concrete and brick	unknown	2249 1582	-
558	E	87	Air-Raid Shelter	concrete and brick	unknown	2261 1582	-

RAF Site No. 2 Quarters

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
80	D	-	Officers' Quarters	Laing hut	13903/40	2250 1611	-

RAF Site No. 2 Quarters

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
81	D	-	Officers' Latrine	temporary brick	15797/40	2252 1610	-
82	D	-	Sergeants' Quarters	Laing hut	13903/40	2254 1613	-
83	D	-	Sergeants' Quarters	Laing hut	13903/40	2258 1614	-
84	D	-	Sergeants' Latrine and Drying Room	temporary brick	15797/40	2257 1612	-
85	D	-	Airmen's Barrack Block	Laing hut	13903/40	2262 1614	-
86	D	-	Airmen's Barrack Block	Laing hut	13903/40	2263 1610	-
87	D	-	Airmen's Barrack Block	Laing hut	13903/40	2262 1607	-
87a	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2265 1615	-
87b	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2265 1614	-
87c	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2268 1614	-
87d	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2267 1615	-
87e	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2272 1617	-
87f	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2274 1617	-
87h	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2277 1615	-
87j	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2276 1616	-
87k	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2277 1615	-
87l	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2273 1614	-
87m	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2277 1611	-
87n	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2275 1612	-
87o	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2275 1613	-
87p	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2273 1613	-
87q	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2272 1612	-
87r	D	-	Airmen's Barrack Block	Nissen hut	14420/41	2279 1610	-
88	D	-	Airmen's Latrine and Drying Room	temporary brick	15797/40	2262 1610	-
88a	D	-	Airmen's Latrine	temporary brick	16330/41	2272 1616	-
88b	D	-	Airmen's Latrine	temporary brick	16330/41	2278 1618	-
88c	D	-	Airmen's Latrine	temporary brick	16330/41	2279 1611	-
89	D	-	Picket Post	temporary brick	16330/41	2256 1614	-
90	D	-	Sergeants' and Airmen's Ablutions and Drying Room		16315/41	2271 1615	-
			Fuel Compound	concrete platform	unknown	2270 1616	-
559	D	-	Static Water Tank	concrete and brick	unknown	2261 1618	-
560	E	91	Air-Raid Shelter	concrete and brick	unknown	2254 1611	-
561	E	92	Air-Raid Shelter	concrete and brick	unknown	2266 1615	-
562	E	93	Air-Raid Shelter	concrete and brick	unknown	2270 1613	-
563	E	94	Air-Raid Shelter	concrete and brick	unknown	2273 1615	-
564	E	95	Air-Raid Shelter	concrete and brick	unknown	2277 1612	-

RAF Site No. 3 Quarters

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
100	D	-	Officers' Quarters	Laing hut	13904/40	2209 1535	-
101	D	-	Officers' Latrines	temporary brick	15797/40	2209 1534	-
102	D	-	Sergeants' Quarters	Laing hut	13903/40	2208 1538	-
103	D	-	Sergeants' Quarters	Laing hut	13903/41	2210 1540	-
104	D	-	Sergeants' Latrines and Drying Room	temporary brick	15797/40	2210 1539	-
105	D	-	Airmen's Barrack Block	Laing hut	13903/41	2215 1542	-
106	D	-	Airmen's Barrack Block	Laing hut	13903/41	2219 1542	-
107	D	-	Airmen's Barrack Block	Laing hut	13903/41	2221 1543	-
108	D	-	Airmen's Barrack Block	Laing hut	13903/41	2225 1543	-
109	E	96	Airmen's Latrines and Drying Room	temporary brick	15797/40	2224 1542	-
110	D	-	Airmen's Latrines and Drying Room	temporary brick	15797/40	2218 1541	-
111	E	95	Picket Post	temporary brick	12404/41	2212 1541	44842
			Fuel Compound	concrete platform	unknown	2213 1540	-
565	E		Static Water Tank (emergency water supply)	concrete and brick	unknown	2214 1540	-
566	E	97	Air-Raid Shelter	concrete and brick	unknown	2212 1539	-
567	E	98	Air-Raid Shelter	concrete and brick	unknown	2216 1539	-
568	E	99	Air-Raid Shelter	concrete and brick	unknown	2222 1541	-

WAAF Communal Site and Site No. 1

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
140	D	-	Picket Post Type "B"	16 ft Nissen hut	1 2404/41	2205 1614	-
141	D	-	Officers' Mess and Quarters (for 10)	unknown	12598/40	2207 1612	-
142	D	-	Dining Room and Sergeants' Mess (for 251-300 and 10 Sergeants)		12641/41	2204 1610	-
143	D	-	Institute (for 201-300)		12568/41	2201 1607	-
144	D	-	Sick Quarters (built to DPC level only)			2202 1604	-
145	E	100	Sergeants' and Airwomen's Baths and De-contamination Centre Type 8a	temporary brick	16339/41	2194 1603	44845
146	E	101	Sergeants' and Airwomen's Latrines and Ablutions (Type 8a)	temporary brick	16339/41	2193 1604	44847
147a	D	-	Sergeants' Quarters Type "B"	Nissen hut	14420/41	2197 1604	-
147b	D	-	Sergeants' Quarters Type "B"	Nissen hut	14420/41	2199 1603	-
148a	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2193 1606	-
148b	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2191 1608	-
148c	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2190 1606	-
148d	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2192 1606	-
148e	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2190 1605	-
148f	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2191 1605	-
148g	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	unknown	-
148h	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2190 1602	-
148j	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2192 1602	-
148k	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2196 1602	-
148l	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2197 1602	-
149	D	-	Mechanical and Electrical Plinth	temporary brick	unknown	2201 1603	-
			Fuel Compound	concrete platform	unknown	2203 1606	-
569	D	-	Static water Tank	concrete	unknown	2204 1606	-
570	D	-	Blast Shelter for 50	permanent brick	unknown	2205 1612	-
571	D	-	Blast Shelter for 50	permanent brick	unknown	2202 1609	-
572	D	-	Air-Raid Shelter	concrete and brick	unknown	2190 1604	-
573	E	102	Air-Raid Shelter	concrete and brick	unknown	2198 1605	44846
574	E	103	Air-Raid Shelter	concrete and brick	unknown	2193 1600	44846
575	E	104	Air-Raid Shelter	concrete and brick	unknown	2192 1607	-

WAAF Site No. 2

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
150	D	-	Picket Post Type "B"	16 ft Nissen	12404/41	2214 1616	-
151a	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2212 1623	-
151b	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2211 1622	-
151c	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2211 1619	-
151d	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2212 1621	-
151e	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2213 1621	-
151f	D	-	Airwomen's Barrack Block	Nissen hut	14420/41	2214 1621	-
152	D	-	Sergeants' and Airwomen's Ablutions, Latrines and Drying Room Type 8a	temporary brick	16339/41	2215 1620	-
153	D	-	Fuel Compound	concrete platform		2212 1620	-
576	D	-	Air-Raid Shelter	concrete and brick		2213 1620	-

Sick Quarters Site (Little Fulwood House)

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
350	E	-	Officers Mess (Little Fulwood House)	existing house	18/1310/42	2104 2030	-
351	D	-	WAAF Sick Quarters	24 ft Nissen hut	16351/42	2104 2032	-
352	D	-	RAF Orderlies Sleeping Accom.	16 ft Nissen hut		2107 2034	-
353	D	-	WAAF Orderlies Sleeping Accom.	Nissen (half)		2107 2031	-
354	D	-	Sewage Disposal Works			2112 2036	-

Dispersed Site (Canonsgrove House)

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
360	E		Officers' Mess (Canonsgrove House)	existing house	18/796/42	2111 2119	-
361	D	-	Officers' Bath House (for 20–35)	temporary brick	12897/41	2104 2118	-
362a	D	-	Officers' Quarters Type "C"	Nissen hut	14420/41	2107 2118	-
362b	D	-	Officers' Quarters Type "C"	Nissen hut	14420/41	2105 2117	-
362c	D	-	Batman's Quarters (converted hay loft) Batman and Mess Staff Quarters	existing barn	18/796/42	2106 2117	-

Dispersed Anti-aircraft Gun Site

BNo	C	SNo	Function	Construction	Drawing	NGR	PRN
581	D	-	Dining Room, Kitchen and Ablutions	16 ft Nissen hut	9541/41?	2154 1488	-
582	D	-	Airmen's Barrack Block	16 ft Nissen hut	9541/41?	2152 1488	-
583	D	-	unknown function	16 ft Nissen hut		2150 1488	-
584	E		Gunpost	temporary brick		2150 1499	-

9 Primary Sources

Airfield site plans from the RAF Museum, Hendon

4997/45 Culmhead: Record Site Plan

Airfield building drawings from the RAF Museum, Hendon

KBC 103/40 Type Sleeping Shelter

11950/40 The Laing Portable Hut

13903/40 Type: Laing's Portable Huts – Officers', Sergeants' and Airmen's Quarters. WAAF Sergeants' and Airwomen's Quarters

16589/40 Type Squash Racquets Court

17658/40 Watch Office Type Fighter Satellite

7161/41 Dispersal Pens for Fighter Aircraft GA and Details Type "B" (All Earthwork Traverses)

9122/41 24ft. span Nissen Type Hutting

11008/41 Battle Headquarters Type Design

11137/41 Type Parachute Store

12404/41 Guard House and Fire Party, Guardhouse Type "B", Picket Post Types "A" and "B"

12408/41 Type Gas Defence Centre

12410/41 Type Fire Tender House and Fire Tender Shelter

12411/41 Type Gas Chamber and Practice Bomb Store, Floodlight Trailer and Tractor Shed, Gas Chamber and Night Flying Equipment Store

12774/41 Type Main Workshops

12775/41 Type Motor Transport Shed and Office

12779/41 Type Watch Office

16339/41 WAAF Decontamination, Bath, Ablution, Latrine and Laundry Blocks in Types 6–8 for 200–300 Personnel Including Sergeants

3669/42 Type T2 Transportable Shed

343/43 Type Control Tower

Official records at the Public Records Office

AIR 14/125 Bomber Command – Measures to Counter Damage to Friendly Aircraft

AIR 14/343 Bomber Command – Balloon Damage Reports and Experiments 1943

AIR 14/1489 Bomber Command – Cable Cutters, 1940–1943

AIR 25/182 Fighter Command – 10 Group ORB
AIR 27/1661 302 Squadron ORB
AIR 27/1702 316 Squadron ORB
AIR 27/2127 616 Squadron ORB
AIR 28/159 RAF Churchstanton ORB
AIR 28/160 RAF Culmhead ORB
AIR 28/261 RAF Exeter ORB
AIR 29/525 3 Glider Training School
AIR 29/768 Royal Aircraft Establishment, Farnborough
AVIA 13/632 RAE Protection Against Wire Barrages
AVIA 15/213 RAE Research Department, Exeter – Progress Reports 1940–1942
AVIA 15/214 RAE Research Department, Exeter – Progress Reports 1942–1943
AVIA 15/296 RAE Research Department, Exeter – Research and Development Programme.