A Survey of a World War II Pillbox At Hints Road, Hopwas, Staffs.

Birmingham University Field Archaeology Unit
Project No. 889
February 2002

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by
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1.0 Summary

In 1940 a massive building programme was implemented to fortify Britain against the threat of invasion. Under the instigation of General Ironside a heavily-fortified 'crust' was constructed around the coastline, with a series of static defensive lines (stop-lines) built inland. They were designed to slow and contain the invading army, should they breach the beach defences, until a counter-attack could be mounted. It was during this period of mass fortification that a pillbox was constructed adjacent to the bridge at Hopwas (centred on NGR SK180050). In February 2002 Birmingham University Field Archaeology Unit (BUFAU) was appointed by Miller Homes (West Midlands) Ltd to undertake a survey of the structure. It was wholly constructed from reinforced concrete, and is a good example of a bullet-proof F.W.3 Type 24 pillbox (hexagonal in plan, with the rear wall longer than the others). Internally it had a Y-shaped anti-ricochet wall, and had bracketed shelves below five Bren gun loopholes. It was part of a stop-line between Tamworth and Ashbourne that was established to help defend the industrial heartland of Britain. The structure will be retained as part of the residential redevelopment of the site.

2.0 Introduction

This report describes the results of building recording carried out on a World War II pillbox (SMR 05035 – ST4616) that is also listed on the Defence of Britain national database (S5336). Birmingham University Field Archaeology Unit (BUFAU) undertook the work reported on here in February 2002, on behalf of Miller Homes (West Midlands) Ltd. The site (centred on NGR SK180050) is situated on the western bank of the Tame at Hopwas (Fig. 1).

2.1 Background to the Project

In accordance with the guidelines laid down in Planning Policy Guidance Note 16 (DoE 1990), a recommendation for a programme of archaeological work to accompany a planning application was made by the County Heritage Data Manager. It was a condition of the appeal decision (Ref. APP/I/3415/A/01/1067016) for planning application (Ref. 00/00544/FUL dated June 2000) for residential redevelopment of the site off Hints Road, Hopwas, Staffordshire, that a detailed record of the World War II pillbox was made.

In 1994 the MPP (Monument Protection Programme) undertook an enhancement programme of Britain's modern defensive heritage (Dobinson 1998, 2). Through this it was recognised that this class of monument was disappearing at an alarming rate, and, whilst many enthusiasts had researched areas and monument types, there had not been any large-scale or national survey. Initial documentary research was supplemented by a more field-based approach undertaken by the Defence of Britain Project, which was established in 1995. The aim of the project was to establish a national database drawing together documentary, cartographic, and photographic

evidence with field records (Saunders 1998, 7). This would then be used to monitor and manage these sites at a regional and national level.

The archaeological work complied with a written scheme of investigation defining the scope of the required survey (BUFAU 2002, Appendix I) which was agreed by the local planning authority prior to the commencement of work.

2.2 Objectives

The primary aim of the survey was to record the structure in its current state, prior to it becoming part of a residential development scheme.

2.3 Method

The survey involved a visual inspection of the structure, with the compilation of written notes, and the making of a photographic record of the interior and exterior elevations, with details of original features. It is intended to deposit the paper and photographic archive at The Potteries Museum and Art Gallery, Stoke-on-Trent, Staffordshire.

3.0 General Historical Context

With the onset of World War II somewhere in the region of 18,000 pillboxes were built. The primary defence against invasion was the so-called 'defensive crust' which was constructed around the coastline of Britain. Internally, defended roadblocks (manned by the Home Guard) and anti-tank obstacles were established. Their purpose was to slow down any Panzer Units successful in penetrating the 'crust', in an attempt to curb the speed with which the German tank units could move, as had just been witnessed in their occupation of France. Roadblocks came in a huge variety of forms, but the ubiquitous pillbox often figured in their layout. They were situated at nodal points, pre-empting routes that an invading army would take and steering would-be attackers towards more vulnerable positions. These fortified positions would then slow down the enemy, as they took both time and firepower to destroy, and contain them until a counter-attack could be mounted (Wills 1985, 67). One of the principle lines of defence was the GHQ (General Headquarters) Line, a heavily-fortified concentration of military installations, which was laid out to protect London and the industrial Midlands. Between the GHQ line and the coastal ring other lines of interlinked defensive works, 'stop-lines', were created (Wills 1985, 11).

This building programme was instigated by General Ironside. However, the actual construction of the defences fell under the jurisdiction of the RE (the Royal Engineers). The RE assessed each planned stop-line to find the best locations for the various defensive structures in their repertoire. Road bridges were often chosen for fortification and would be blown up in the event of invasion (Wills 1985, 45). In response to this huge building programme, the F.W.3 (a branch of the Directorate of Fortifications within the War Office concerned with fortification works) issued blueprints for structures that were being reproduced in great numbers. These were then issued to local contractors who were responsible for their actual construction

under the aegis of the RE. Designs were often modified to accommodate what materials were available (or unavailable), and changes were made reflecting the strategic siting of the individual structure (Wills 1984, 15).

Germany's plan to invade Britain, Operation Sea Lion, became more and more unlikely with the launch of Operation Barbarossa against Russia. Defensive initiatives were stepped down and, following the end of the war, many sites were systematically destroyed by the army. Others were bulldozed and backfilled in the early post-war period when the government paid local farmers and landowners to demolish them.

4.0 Description of the Structure (Fig. 2)

The pillbox at Hopwas is situated just above the floodplain of the Tame, with a clear view of the bridge leading to Tamworth (Plate 1) and of the flat, extended floodplain to the south and west of the river (Plate 2). It follows the specifications for a standard bullet-proof F.W.3 Type 24 pillbox (hexagonal in plan, with the rear wall longer than the others). It was constructed from reinforced concrete which was poured between timber shuttering. It had been constructed in four stages:

- Base/concrete raft
- Walls to nearly the top of the loopholes
- Top of the walls
- Roof

The walls were 0.38m (c.1') thick, with a 0.25m (9½") -deep roof. It had two types of loophole, situated 0.9m (c.3ft) above the modern ground surface (Plate 3). The internal height of the structure was 2m (c.6.5'). It had a Y-shaped anti-ricochet wall, also of poured concrete. The rear wall measured 3.8m in length (c.12'), and incorporated the entrance, with rifle loopholes (Plate 4) to either side. The five shorter walls measured between 2m (c.6.5') and 2.35m (nearly 8'), with loopholes for LMGs (Light Machine Guns, in this case the Bren Gun, Plate 5). The remains of the bracketed support shelves (plate 6) upon which the telescopic bipod of the Bren gun would be rested, remained *in situ* below the loopholes.

5.0 Discussion

The pillbox is located at the bottom of a slight ridge overlooking the River Tame, a site with obvious strategic importance. The bridge would most likely have been blown up in the event of invasion, and, with artillery positioned on the hillside overlooking the village, the ridge would have been a good stronghold. A full frontal attack would have been impeded by the position of the river, and the elevated position of the village (above the floodplain) would have made an attack all the more difficult. The invading army would have had to circumnavigate the ridge, most likely being forced westwards. The river itself would have served as a very good anti-tank obstacle, and the pillbox would have commanded a large part of the wide, flat river plain to the south and east. Thus, the enemy would have been forced in to the line of fire of the pillbox.

There was no evidence for the structure having been painted, and camouflage probably took the form of nets, entwined with vegetation, which would have covered the structure and would have been pegged out around it. Post-war housing now occupies the area between the bridge and the pillbox, and it is impossible to tell whether it was originally located within a copse, although this seems likely.

Stop-lines began to be set up in 1940 under General Ironside, Commander-in-Chief of Home Forces, who decided that the best way to deal with the imminent invasion was to create tangible lines of defence. The GHQ Line was set up to defend London and the Midlands, with smaller stop-lines situated between it and the coast. Roadblocks at the entrances to towns and villages were also constructed. This pattern of defence was suspended when General Brooke replaced Ironside, and the rate of construction of pillboxes slowed drastically, eventually being halted in February 1942 when the risk of invasion was seen to have passed (Wills 1985, 14). The pillbox at Hopwas was constructed using timber shuttering, which became a scarce commodity very quickly in the early war years, bricks being eventually used to provide permanent shuttering. The steel used for the reinforcement was also of good quality (iron railings and even bed-springs had to be substituted in some of the later pillboxes), suggesting it was an early Ironside example of the Type 24.

The stop-line that the Hopwas pillbox was a part of stretched from Tamworth, Staffordshire, north as far as Ashbourne, Derbyshire. It followed the Tame, Trent and the Dove valleys and also made use of several canals. Waterways were obvious anti-tank obstacles and were widely used as the basis of stop-lines. The southernmost pillbox of this particular stop-line is on the canalside at Fazeley, to the south of Tamworth (Kerr 1993, 11). The line then follows the Tame northwards, with further pillboxes (including the one at Hopwas) situated along its western bank. In his survey Kerr also noted the circuit of defences around Lichfield airfield (west of the A38) and three pillboxes at the confluence of the Tame and the Trent. He located several more hexagonal pillboxes along the banks of the River Trent and followed the ine around Burton-On-Trent. However, the line extends further north still, as far as Ashbourne, with pillboxes sited along the Dove at Rocester, Ellastone (pers. comm. Ian Sanders) and Mayfield (pers. comm. Eric Burke), and also links up with the Dove-Churnet stop line which moves off westwards. In this way the industrial heartland of Britain was defended.

6.0 Acknowledgements

The project was commissioned by Miller Homes (West Midlands) Ltd. Thanks are due to Phill Brown for monitoring the project on their behalf, and to Jason Kite for his help on site. Thanks are also due to Chris Wardle, Heritage Data Manager of Staffordshire County Council, who monitored the project for the Local Planning Authority, and Graham Matthews, Ian Sanders, and Eric Burke from the Pillbox Study Group for their interest and information. Work on site was carried out by Kirsty Nichol and Erica Macey. Nigel Dodds illustrated the report, which was produced by Kirsty Nichol who also monitored the project for BUFAU. The report was edited by Iain Ferris.

7.0 Bibliography

BUFAU 2002 *A Written Scheme of Investigation for Recording a World War II Pillbox at Hints Road, Hopwas, Staffs.*

Department of the Environment (DoE) 1990 *Planning Policy Guidance Note 16: Planning and Archaeology.*

Dobinson, C. 1998 Twentieth-Century Fortifications in England: the MPP Approach, *In Monuments of War.*

English Heritage (EH) 1998 *Monuments of War.*

Kerr, A.G. 1993 *Tamworth to Burton-Upon-Trent Stop Line.* Loophole No.6.

Saunders, A. 1998 The Defence of Britain Project, *in Monuments of War.*

Wills, H. 1985 *Pillboxes - A Study of UK Defences 1940.*

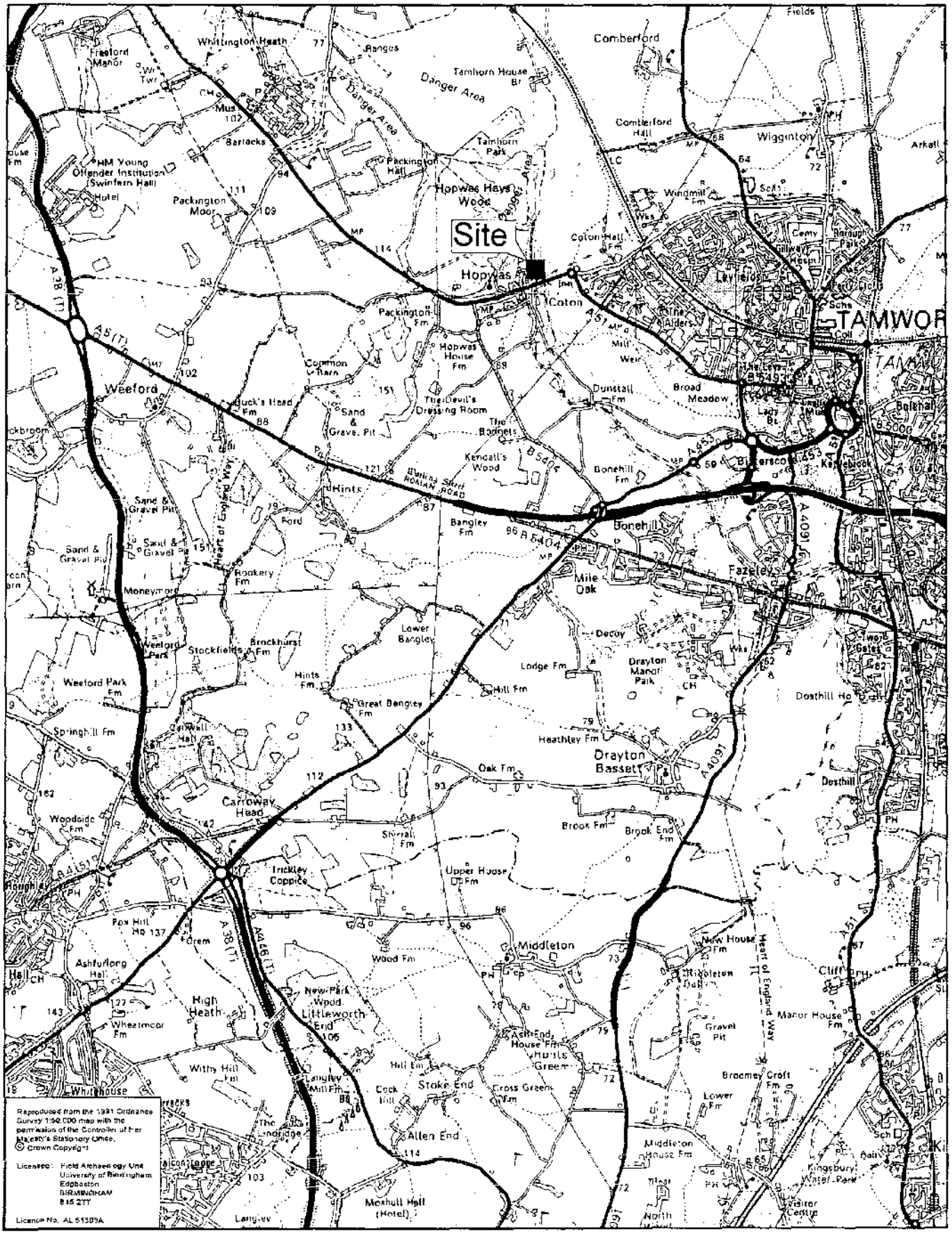
Site
Hopwas
Tamworth
Comberford
Weeford
Hints
Bonehill
Drayton Bassett
Middleton
Littleworth End
Stoke End
Allen End
Reproduced from the 1991 Ordnance Survey 1:50,000 map with the permission of the Controller of Her Majesty's Stationary Office, © Crown Copyright
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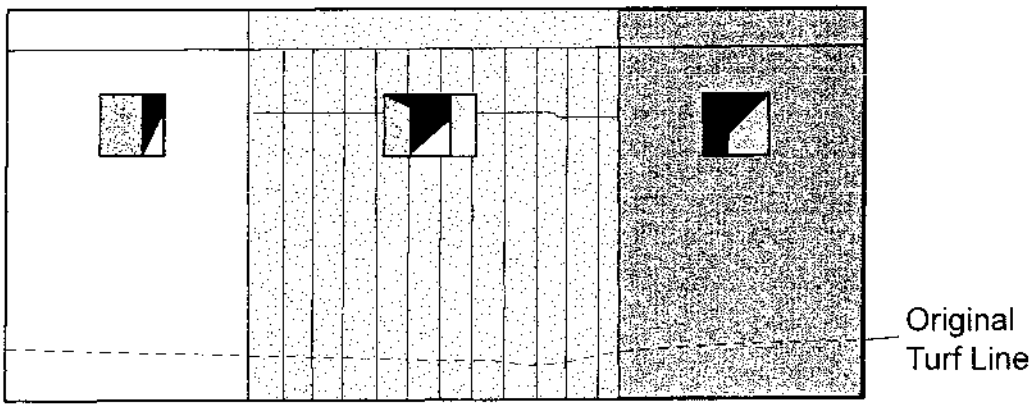
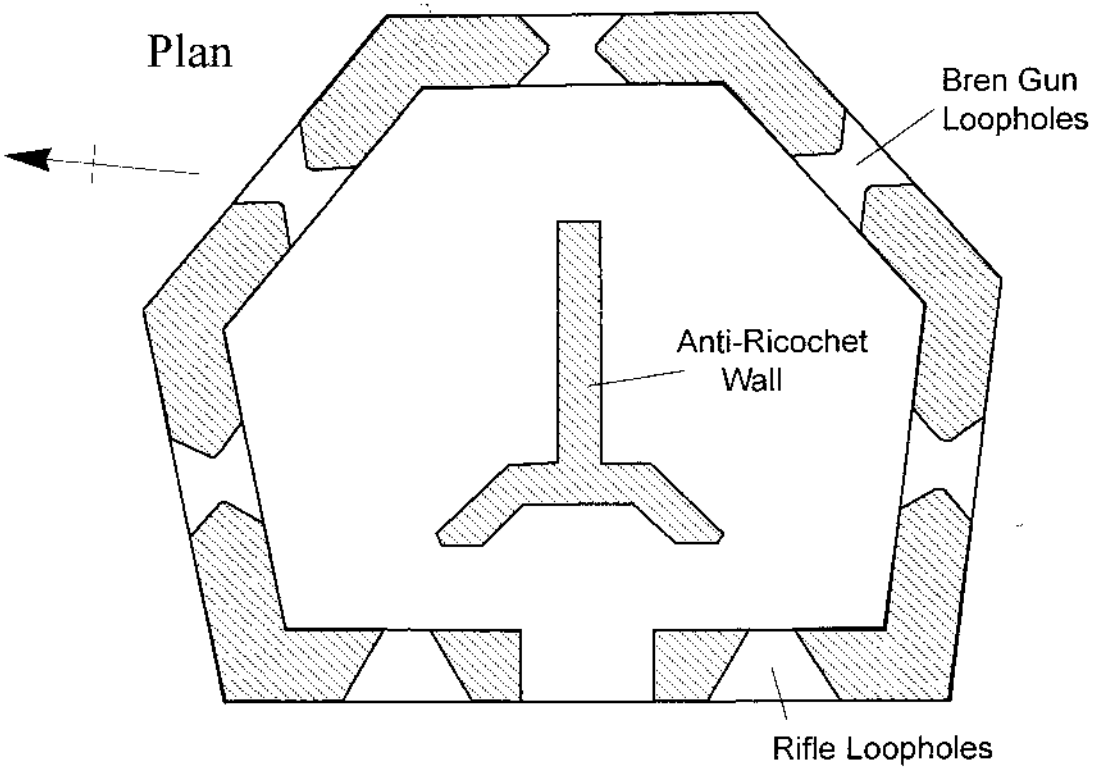
Fig.1

Front Elevation



Plan



Rear Elevation

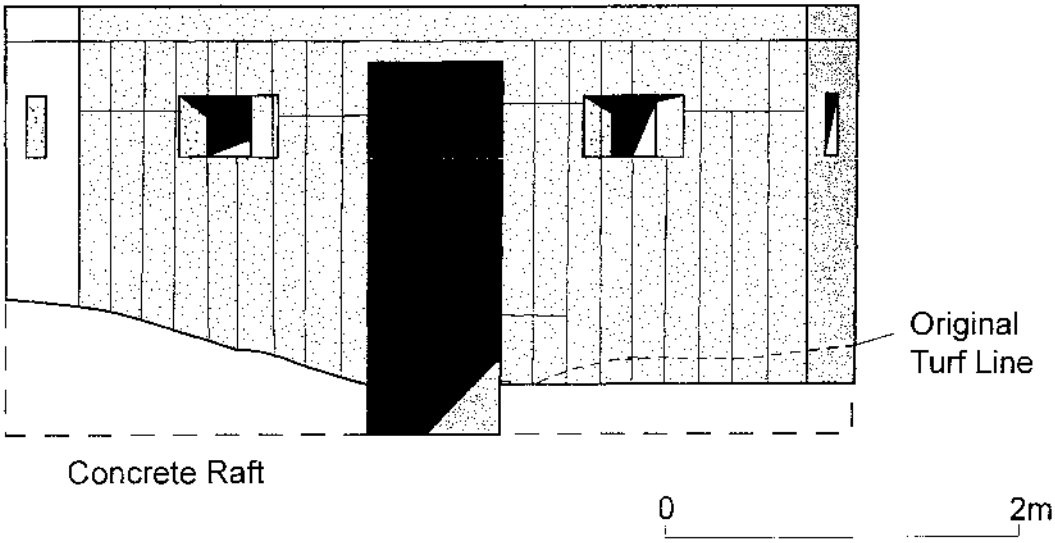


Fig.2

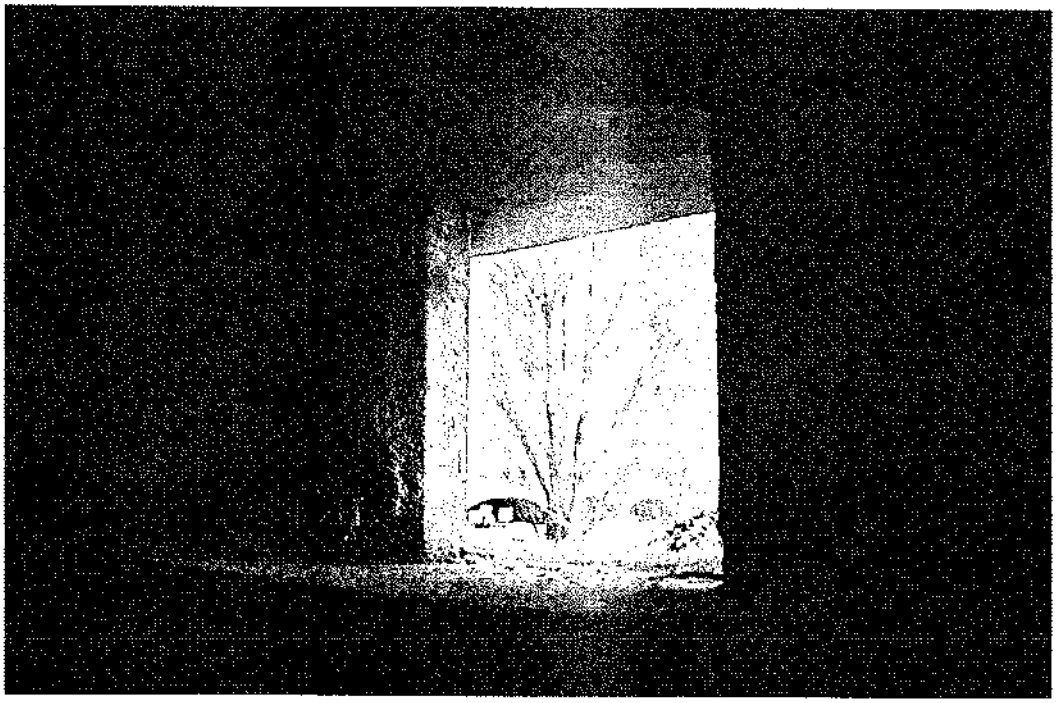


Plate 1 The Pillbox, with a clear view of the bridge

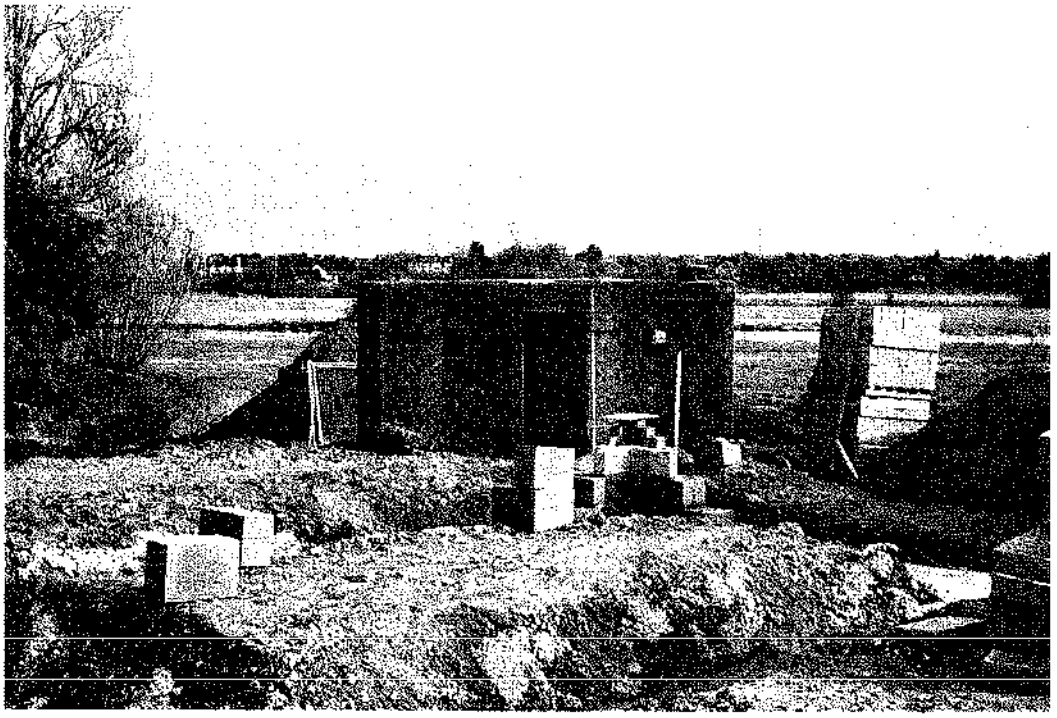


Plate 2 The Pillbox, overlooking the floodplain of the Tame

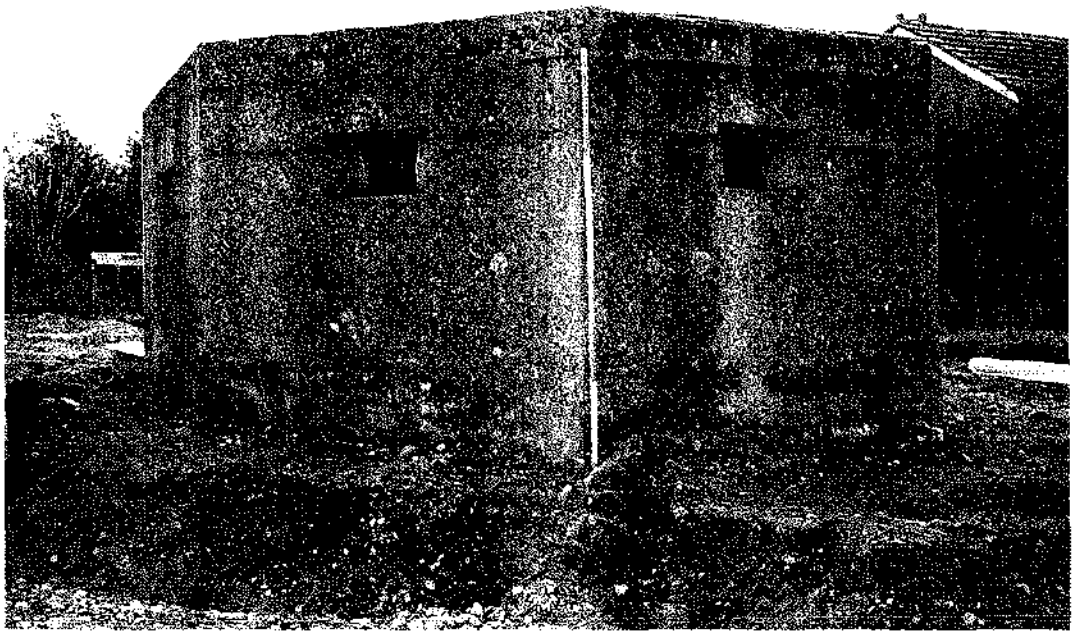


Plate 3 Front elevation

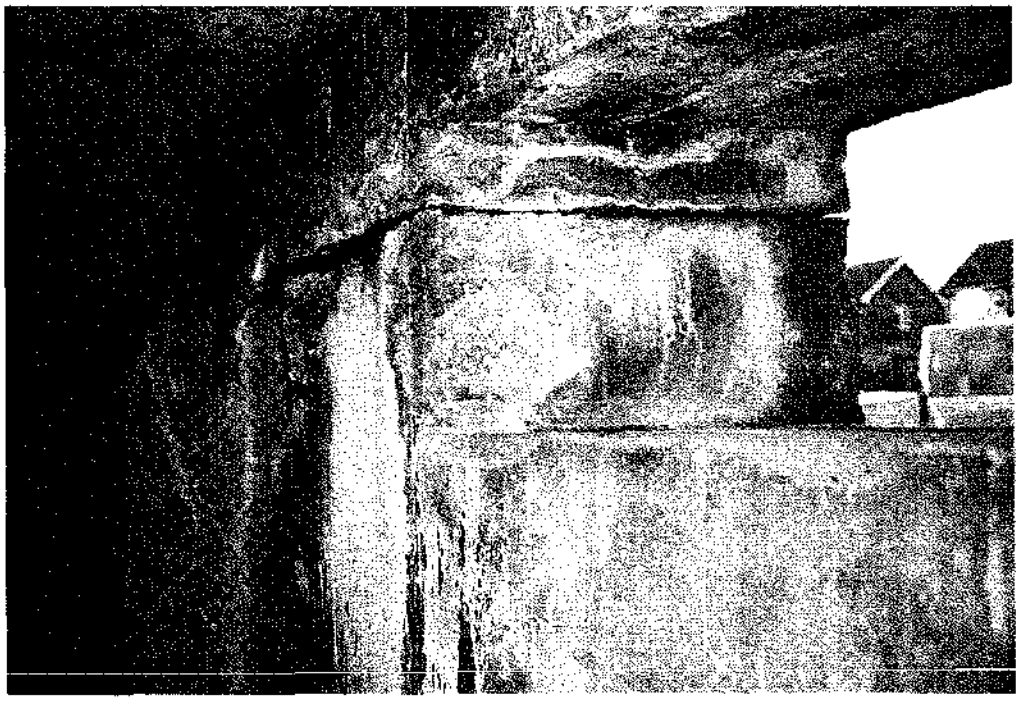
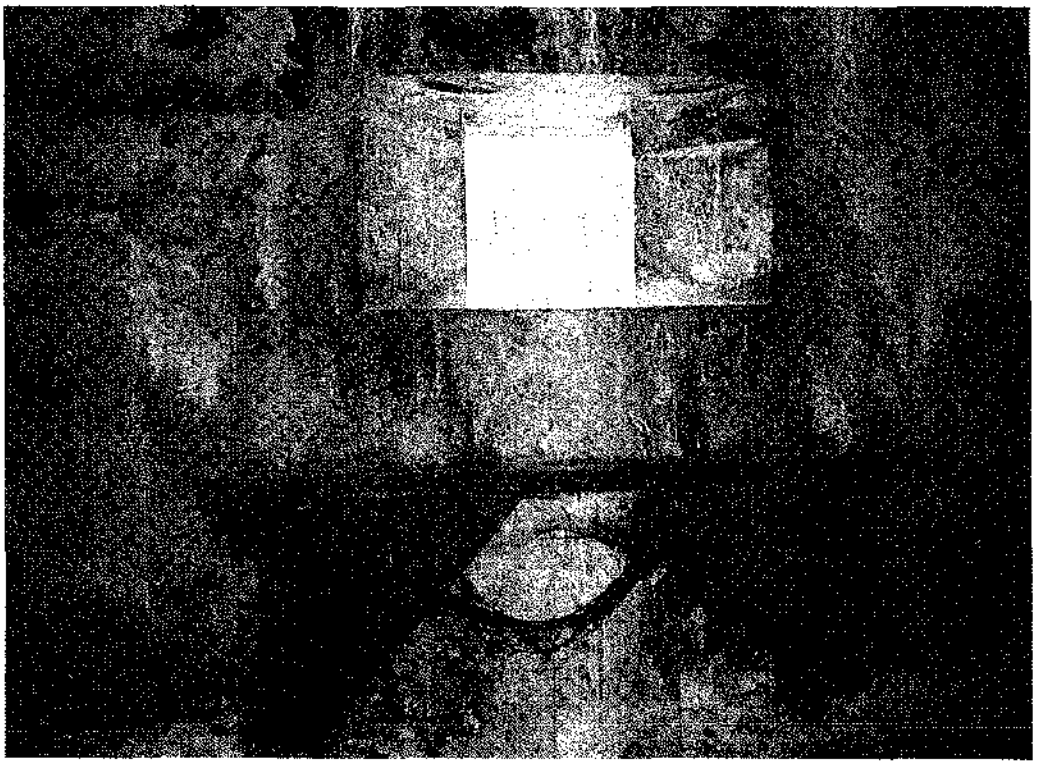


Plate 4 Rifle loophole in the rear elevation



Platc 5 Bren gun loophole in thc front elevation

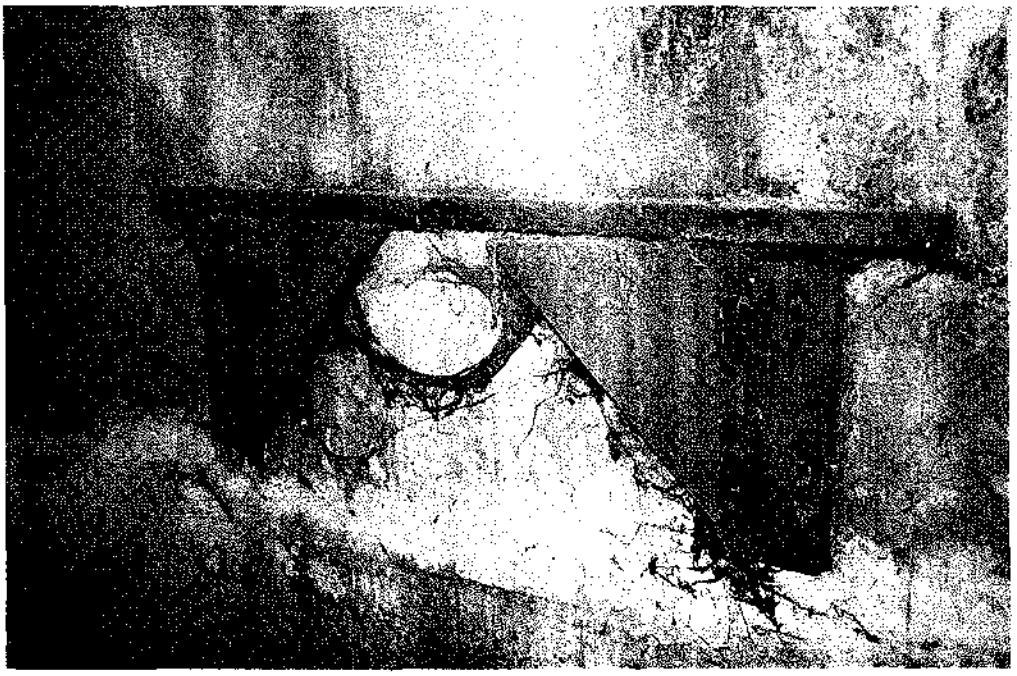


Plate 6 Bracketed support shelf below Bren loophole

APPENDIX I

A written scheme of investigation for recording a World War II Pillbox At Hints Road, Hopwas, Staffs

1 Introduction

It is a condition of the appeal decision (Ref. APP/I/3415/A/01/1067016) for planning application (Ref. 00/00544/FUL dated 14 June 2000) for residential redevelopment of the site in Hints Road, Hopwas, Staffordshire, that a detailed record of the World War II pillbox is made. This written scheme of investigation outlines the scope of the recording work and will be submitted to, and agreed by, the local planning authority prior to the commencement of work.

2 Historical background

With the onset of World War II in 1940, somewhere in the region of 18,000 pillboxes were built. They were situated along coastlines and placed to protect factories and communication routes, forming stop-lines as part of the British defence in depth strategy. The War Office issued blueprints for several types of structure being constructed in vast numbers. However, a diverse range within 'type' occurred due to the materials available (or unavailable), the varied settings of the buildings, and the mixed background and experience of those actually employed in their construction. Many were destroyed immediately after the close of war. This example (centred on NGR SK180050) is sited on the western bank of the Tame overlooking, and defending, Hopwas Bridge. It was part of a stop-line that followed the river valleys of the Tame, Trent and Dove between Tamworth, in the south, and Ashbourne, Derbyshire.

3 Requirements for work

The site is registered on the County Sites and Monuments Record (reference SMR 05035 – ST4616) as a site of archaeological interest, it is also listed on the Defence of Britain national database (S5336). There is no requirement for archaeological work other than the recording of the pillbox.

4 Objective

The aim of the archaeological work is to record the 'type' of pillbox, as defined by the War Office, and to note any deviation from the original specification for the building. Elevations of the structure as well as loopholes and, where necessary, internal features, such as anti-ricochet walls, will be recorded. Also, any surviving evidence for

camouflage will also be noted. This will be achieved through a combination of drawn and photographic survey, supplemented by a basic level of historical background research.

5 Methods statement

The archaeological recording will consist of a visual inspection supplemented by written notes. A full photographic survey will be carried out using 35mm format archivally stable black and white print film, supplemented by colour print photography for inclusion within a short analytical report and selected colour transparencies for presentation use. All photographs will be clearly labelled and numbered, and cross-referenced where applicable to their film and negative numbers. A ground plan will be drawn, together with elevation drawings of walls. All drawings will be at an appropriate scale (probably 1:20 for elevations and 1:50 for plans). All photographs used for illustrative purposes will be clearly labelled on these drawings.

6 Archive and reporting

The archive, which will conform to English Heritage Map 2 guidelines, will be deposited with the Potteries Museum and Art Gallery, Stoke-on-Trent within a reasonable period after completion of the project. Analysis of the form of the building will be presented in a short report summarising the archaeological work. The written report, supplemented by interpretative drawings and photographs, will detail:-

- location, aims and methods of the recording work,
- sources checked as part of the assessment,
- discussion of the building,

The report will be produced within three weeks of the completion of fieldwork. Copies of the report will be forwarded to the client. After an appropriate period reports would also be sent for inclusion on the Defence of Britain Database, and a summary produced for inclusion in *West Midlands Archaeology*.

7 Staffing

The fieldwork and photography will be carried out by suitably qualified/experienced archaeological staff from BUFAU and the Code of Conduct of the Institute of Field Archaeologists will be followed. The project will be managed by Kirsty Nichol an Assistant Project Manager at BUFAU, and Associate Member of the Institute of Field Archaeologists, who has experience of the recording and analysis of World War II monuments. BUFAU is a Registered Archaeological Organisation with the Institute of Field Archaeologists, which seeks to guarantee standards of professional service and competence.

8 Projected timetable

Fieldwork 1-2 days on site with a team of two, followed by the preparation of archive, analysis, preparation of report within 3 weeks of completion of fieldwork. It is intended to begin this work on Tuesday 5th February 2002.