

ARCHAEOLOGICAL RECORDING OF A
“PILL-BOX” AT THE FORMER
ARMY MEDALS OFFICE SITE,
WORCESTER RD, DROITWICH,
WORCESTERSHIRE

WSM 38552



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February 2008

19th March 2008
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Summary

A building recording project was undertaken at the former Army Medals Office site, Worcester Road Droitwich prior to repair and display of a Second World War era “pill-box”, following demolition of the last remaining buildings of the Medal Office complex.

The “pill-box” was actually a police post constructed in 1940 as part of the perimeter defences of a temporary office complex built to accommodate elements of the War Department in the event of invasion forcing their removal from London; a programme known as Black Move. As the invasion never materialized the site was occupied by other WD units, principally the Army Medals Office, who retained the site until recently, though the southern end of the original complex was demolished for housing in the 1980s.

The building had previously been recorded as a FW3/26 variant, but it appears that it is actually a locally designed type, with no surviving comparable examples. It is notable for the size and width of its embrasures (the full length of all four walls), which give the potential ground-level attacker a clear view of any defenders in silhouette. The building would offer some protection against air attack, but very limited protection against sustained small arms fire. The walls are of 12” brick construction and the roof of 6” concrete. It is just over 2.5m square (8’4” square) with access via a crawl-way on the southern side. There is no evidence that the building was formerly protected by earth banks, but these were perhaps intended by the designer, as they would have given considerably more protection to the occupants, and reduced the visibility of the structure.

A surviving weapon rack inside the building indicates that the principal defensive weapon was a Thompson M1A1 sub machine gun. The building was served by power or communications cables, and appears to have served as a guard post probably one of several around the base.

The building is generally in good condition, the only major issue being the presence of a tree growing against the south-western corner, which has caused cracking of the internal floors and movement of the blast wall on the southern side of the building. It is recommended that the building is made secure by blocking the entrances with brickwork, the external elevations should be pointed where necessary. The advice of a tree-surgeon should be sought as to the best way to restrict further growth of the tree before major damage is caused. If the tree continues to grow felling would, regrettably, be necessary to protect the building,

but felling itself may cause future maintenance problems as the bole rots away. It is proposed that the building will be enclosed within a securely fenced compound to prevent misuse and vandalism; a descriptive panel will be affixed to the fence explaining the building and the history of the site.

2 Introduction

- 2.1 An archaeological project was undertaken by Mike Napthan Archaeology at the former Army Medals Office site, Worcester Road, Droitwich, Worcestershire. The pill box, WSM 17137 was described as a type FW3/26 at NGR SO89496195. The project was based upon a brief supplied by Mike Glyde of WHEAS (W/07/2002 Jan 16th 2008) A planning application for residential units has been submitted, by Boughton Butler LLP on behalf of Kingerlee Homes (the Clients. The project has been prepared in accordance with the Standard and Guidance for Archaeological Evaluations issued by the Institute of Field Archaeologists (1994) and Archaeological Guidance Paper 4: Archaeological Watching Briefs: (guidelines) issued by English Heritage.
- 2.2 The project design (by Mike Napthan, MIFA: 1st Feb 2008) was prepared in accordance with the relevant Codes of Conduct of the Institute of Field Archaeologists will be adhered to, as will English Heritage guidelines, notably "Understanding Historic buildings a guide to good recording" EH 2006 .

3 Aims

- 3.1 The aims of the building recording were to gather high quality data from the direct observation of the historic structure in order to provide sufficient information to establish the nature of the built resource within a given area or site (including presence or absence, character, extent, date, state of preservation and quality)

These aims were achieved through pursuit of the following specific objectives:

- i) to define and identify the nature of the pill box, and date its construction where possible;
- ii) to attempt to characterize the constructional sequence and recover as much information as possible about the features and fabric surviving . Identify any remedial works desirable.
- iii) to provide graphics and illustrative material to be used in a proposed interpretative display panel.

4 Methodology

- 4.1 Searches were made at the Worcestershire County HER, Worcester Family History Centre, Worcestershire Record Office for documentary sources, published sources, cartographic sources and aerial photographs. Little material directly relevant to the present site was identified, but cartographic sources including the Tithe Awards plan and the Ordnance Survey (Figs 1-5) indicate that the development area was agricultural land until circa 1940, and that the area has suffered extensive residential development in the post-war years. The records of the Defence of Britain project were consulted for examples of similar structures elsewhere.
- 4.2 On inspection of the site it was found that the structure was heavily overgrown with ivy and brambles (Fig 11) and was nearly totally obscured by vegetation, that also

extended within the building, filling the embrasures. Substantial effort was required to clear the structure of growth so that it could be recorded. On removal of the ivy etc, the building was found to be in good condition, excepting some movement caused by the roots of an adjacent tree.

- 4.3 All elevations of the building were drawn, together with roof and floor plans at a common scale of 1:20. Most of the elevations are reproduced in the present report, with the exception of the west facing internal elevation, which was very similar to the other internal elevations (Figs 7-9). The drawn record was augmented by a thorough photographic survey, consisting of 263 digital photographs presented on the enclosed CD ROM.

5 Historical background

- 5.1 The present site was until the 1939-45 war agricultural land in the hands of the Everton family: The land lay close to "Falsam Pits", the nature of these pits is unclear, but it is probable that they were exploratory shafts sunk for the brine industry.
- 5.2 During the Second World War, Worcestershire came under the military control of the Central Midland Area of Western Command. From 1940 onwards Central Midland Area Command was based at Orchard Lea, The Holloway, Droitwich, since demolished. (Wilks 2007, 25) Droitwich, together with Malvern and Evesham, was designated as an anti-tank island in 1942 (Wilks 2007, 33), although it later lost this status and was demoted to that of a defended locality (Wilks 2007, 95). However, both designations meant that in practice Droitwich was part of a large network of defences including Stop Lines and other towns given the status of Anti-Tank Islands such as Worcester, Redditch and Kidderminster. As an essential part of these defences, pillboxes were designed to give cover to small caliber guns and small arms and their immediate crews (CBA, 2005). They were often surrounded by field works and perimeter defences which rarely survive to the present day.
- 5.3 In addition to the Worcester Road pillbox (WSM 17137), a type 24 pillbox was situated at Pulley Lane (WSM 17128). This was built of brick with a reinforced concrete roof and an internal anti-ricochet wall. A prefabricated Stent pillbox exists in the former railway coalyard of Droitwich Station, one of only two of its kind remaining in the county. Near to Chapel Bridge is a small collection of anti-tank cylinders lining the edge of the Droitwich Junction Canal which were intended to be used as part of a block on the A38 road bridge over the canal and the River Salwarpe (Wilks 2007, 67). There is also a brick built air raid shelter at the junction of Primsland Way and the B4090 Worcester Road, now surrounded by a private garden. (WSM 17904).
- 5.4 The locations of around 100 pillboxes have been recorded within the county of Worcestershire, although only 16 are now extant (Wilks 2007, 147). The Worcester Road pillbox is believed to have served as a 'police post' (Wilks 2007, 148), and was previously recorded as a small square variant of the FW3/26, one of only two which survive in the county, the other being a slightly smaller version at Summerfield. The FW3/26 design was based on a simple square plan, each wall being 10 feet (3m) long. A door was situated at one side and the three remaining walls had embrasures for rifles or light machine guns. The walls were constructed to bullet proof standard, approximately 18 inches (46 cm) thick (Ruddy 2003, 16). The type 26s were probably designed by Defence Fortification Works Branch 3 (English Heritage 1999), and had another (prefabricated) variant known as the 'Stent' (Ruddy 2003, 17). These were constructed from components produced by Stent Precast Concrete Limited and were made up of precast concrete slabs slotted into reinforced concrete posts. Overall, the Type 26 is relatively uncommon, there are currently only 199 recorded examples in Britain out of a collective total of 7951 pillboxes recorded. (CBA, 2005). Overall, it is

estimated that some 28,000 pillboxes were constructed during the Second World War, only 21 per cent surviving to the present of which only 1000 are recorded as being in 'Good' condition (CBA, 2005).

- 5.5 The former Medal Office site was acquired in 1940 from Everton family who granted it to the War Department for the duration of hostilities. The site was originally earmarked for occupation by the War Office relocated from London in the case of invasion. In the event it was occupied by the Army Medal Office, and subsequently a number of government departments including latterly the Inland Revenue. In common with many defence sites acquired under the emergency legislation the land was never returned to its original owners. The buildings constructed on the site were all of the Temporary Office Buildings type, constructed of hollow block, concrete block and cast concrete flat roofs. Some buildings had integral strengthened air-raid shelters (Wilkes, 2007, 24). The majority of the buildings were demolished in the early 1980s, leaving only the northern most block intact and the northern most bay of the eastern block to survive until 2007, when they too were demolished. The majority of the original site is now housing. The only surviving 1940s building is the Type FW3/26 pillbox on the northern boundary, the object of the present report

6 Archaeological background

- 6.1 The site lies in an area that has not been subject to previous archaeological investigation. The only site of archaeological importance in the immediate vicinity is the line of the former Roman Road heading northwards from Worcester towards the fort at Metchley (WSM 30529). There have been no archaeological interventions within the proposed development area, though it is believed that the "pillbox" was observed by a volunteer helper for the Defence of Britain project. The cursory nature of the description suggests that he did not have direct access to the site - "*1 concrete and brick pillbox 10' (3.05m) x 10' (3.05m) with entrance tunnel at both ends. Weapons slit on four sides. 5" deep the full length of internal walls* - (Boulby, B, WSM17137). No record of the other wartime buildings on the present site appears to have been made prior to demolition, though a photograph is reproduced in Wilks 2007.

7 Observations

- 7.1 The structure recorded lies on the northern edge of the development site, close against the fence of the former MOD site (Fig 1). The building is square in plan (the main block being 2.53mx2.54m or 8'4" square), with a covered crawl-way on the southern side providing access to a small doorway in the south western corner (see Figs 8, 9 and 11). Subsequent development has obscured the original outlook, but the pill-box is sited to cover lower ground to the south and east. Interestingly most of its view in this direction would have been obscured by the temporary office buildings it was presumably intended to protect. It is too far from the Worcester Road to give any effective fire on an enemy approaching along the road line.
- 7.2 The building is constructed primarily of 12" brickwork with a cast reinforced concrete superstructure and roof. The concrete was cast in situ and the shuttering planks can still be seen in outline. The internal shuttering was of vertical planks 6-8" wide and 2" thick and the external shuttering was horizontal planking of similar dimensions. The embrasures were also cast around planks, the rough casting being later smoothed off with cement based mortar. The roofs and floor have a floated finish. Brickwork is in an adaption of English bond, with a lime and cement based mortar. The roof thicknesses are between 5" and 6" The extent of reinforcing in the concrete is unknown, only part of one rod (1/4" section) being visible. The floor is of 4" concrete, apparently un-reinforced and cast within the brick walls. Depth of the brick foundations is unknown.

- 7.3 There are few surviving traces of the original internal fittings (which are not likely to have been extensive originally). There is the remnants of a small door-frame which is of olive-green painted timber. The door evidently had a lock of the rim-lock type, but this may have been a post-war feature intended to prevent misuse of the structure. A cable clap on the exterior and recess in the west facing embrasure suggests that the building was fitted with electricity or communications cables. Screws in the west facing internal elevation below the embrasure probably relate to a board holding this installation.
- 7.4 The most significant internal feature is a wooden weapon rack located above the embrasure on the northern internal elevation (Fig 10). The rack comprises of three elements; the right hand block being recessed for the butt of the weapon, and the middle block having a hinged flap to secure the weapon stock in position. This flap is lockable with a hasp and staple. The left hand block serves to restrain the muzzle so that the weapon could not be levered free (Fig 10). The dimensions of the weapon rack indicate that it was specifically made for a weapon with a wooden butt and squareish stock, not more than 820mm long, and probably only slightly shorter. These dimensions rule out the most widely issued British WW2 weapons eg the Lee-Enfield, Bren gun, Lewis and Sten guns and the only likely candidate that was in general issue during WW2 (or later) is the Thompson M1A1 submachine gun (813mm long - Owen Ed. 1976, 43). It is unlikely that the weapon would have fitted in its rack whilst fitted with the larger drum magazine, so the probability is that the weapon was stored fitted with the smaller capacity straight magazine. Interestingly there are two circular impressions in the floated cement floor which may indicate that drum magazines were stored on the floor whilst the cement was still wet, but these might equally be the impressions of paint kettles or similar.
- 7.5 The initial impression of the building is that no attempt has been made to reduce its profile, and it is neither sunk beneath general ground level nor protected by soil banked against its walls, though this is probably what the designer intended.. The wall thicknesses are insufficient to give sustained protection against small arms fire, and would appear not to be designed to withstand direct attack with mortars, grenades or light artillery. The roof thickness would protect against shrapnel in the event of air attack, but the occupants would be very vulnerable to blast entering the un-baffled embrasures. The embrasures are designed to give a wide field of view, but would expose the occupants in silhouette to attackers from any direction. The building has been described as a police post, and this is a more appropriate term than "pill-box" with its block-house connotations. As a police post it is however awkward to enter, and a guard observing an intruder would have little chance of pursuit by the time he had crawled out of the doorway.
- 7.5 The design appears to be unique, and certainly is widely at variance from a standard FW3/26 type, which though square has 18" walls and was somewhat larger in plan (usually 10ft square). There do not appear to be any surviving or documented examples of a FW3/26 with full length embrasures to all four walls, and no examples have been traced with the entrance door in one corner. The Worcester Road example is smaller and lighter in construction suggesting a function of observation rather than truly defensible point. Visually it resembles the bottom half of a two storey observation post at Burnshill, Norton Fitzwarren Somerset, and from the available photograph (Defence of Britain project online gazetteer URON12450) it would appear that both structures were of similar size. In the present example there is no sign that there was previously an upper level, and there was clearly no access through the present roof.
- 7.6 The condition of the building is good (Figs 6, and 11) - its location in a securely guarded compound has prevented the usual depredations of vandals, and the only damage it has suffered has been moderate external weathering and some structural movement of the floor slab and blast wall as the result of tree-root action. The tree

roots do not seem to presently threaten the structural stability, though there has been lateral movement of the blast-wall amounting to around 85mm. The blast wall does now lean slightly, but still provides adequate support to the concrete roof of the crawlway. Cracking and lifting of the internal floor slab has occurred, particularly close to the base of the tree at the south-western corner. It is however almost entirely restricted to the area of the crawl-way.

- 7.7 The tree (Tag No: Green Lowther 00382) represents the only substantial threat to the long-term future of the building - it may however be possible to restrict further tree growth by crown pruning or similar tree surgery. Retention of the tree would have landscape benefits, and also has the merit of helping to protect the structure from weathering. The restriction of tree growth would however require regular appropriate management and annual monitoring. The alternative, (which is felling), raises a substantial immediate risk of damage to the building plus a long term issue of potential settlement as the tree-bole rots out.

8 **Maintainence and display**

- 8.1 The maintainence works presently required on the structure to secure its long term protection are as follows:
- 8.1.1 Removal of remaining vegetation and pointing of the brickwork (with an appropriate lime-based very weak cement mortar to ensure porosity and flexibility).
- 8.1.2 Whilst parts of the original concrete floor have lifted it is not recommended that they be replaced, as this would cause unnecessary loss of original fabric and there is no present intention that the building should be used or accessible.
- 8.1.3 Securing of the entry points against illicit use (bricking up of both ends of the crawl-way) with walls of 9" engineering brick is strongly recommended as it will additionally support the crawl-way roof. The blockings should be recessed at least 200mm within the openings, and of dark blue brick to reduce the visual impact. The blocking walls should be secured with stainless screw-in ties rather than toothed into original brickwork.
- 8.1.4 The size of the embrasures is such that they are likely to admit an accumulation of leaf-mould, rubbish and animal waste, which will eventually serve as a seed-bed for self-sown weeds and saplings (as happened in the past). Consideration should be given to filling the interior of the main chamber with inert material discouraging to root growth (such as 20mm gravel) up to the level of the bottom of the embrasures. This may readily be achieved by pouring material through the embrasures. Any later accumulation of debris may then be readily raked out through the embrasures without the need to enter the building. The alternative, (which is permanent blocking of the embrasures), would be both visually distracting and require the insertion of fastenings into the original fabric. Leaving the embrasures open will also provide a habitat for wildlife.
- 8.1.5 The building should be protected from vandalism, misuse and graffiti by a secure metal fence of unclimbable vertical railing design. The fence should be set back from the building at least 4m so that the building can be viewed clearly through the railings. An access gateway will be required for routine maintainence. The enclosed compound should be kept clear of self seeded trees.
- 8.2 The presentation of the building should be augmented with an interpretative panel describing the purpose of the structure and its original setting within the wartime office complex that became the Army Medal Office. The panel should be of vandal and weather-resistant design and fixed to the fencing.

9 **Conclusions**

- 9.1 The Worcester Road structure is an important relic of the Second World War, and stands as the sole memorial to the important role that Droitwich might have served if the government had had to be removed to Worcestershire in the event of invasion.

The secondary role of the site as the Army Medal Office is no less important, and is also worthy of permanent record.

- 9.2 Whilst the massive loss of WW2 fortifications in the last 60 years has now been almost halted very few now survive in Worcestershire, and every surviving structure is therefore of local significance. Few younger people now even know what a “pill-box” is, let alone what they were for, and it is an important educational tool when describing the state of “total war” in Britain in the 1940s.
- 9.3 With a suitable maintenance programme there is no reason why the present structure should not survive into the next century as it is robustly built and vulnerable only to vandalism and vegetation damage, both of which may be readily controlled.

10 **Bibliography**

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Ruddy, A. 2003, *British Anti-Invasion Defences 1940-1945*

Wilks, M 2007, *The Defence Of Worcestershire And The Southern Approaches To Birmingham In World War II*

11 **Acknowledgements**

The project has been greatly assisted by the following: Kingierlee Homes, Haley Inston at Boughton Butler LLP. The project was initiated by Mike Glyde of Worcestershire County Council Planning Advisory Service, site assistance and research was undertaken by Alison Derrick of MNA.

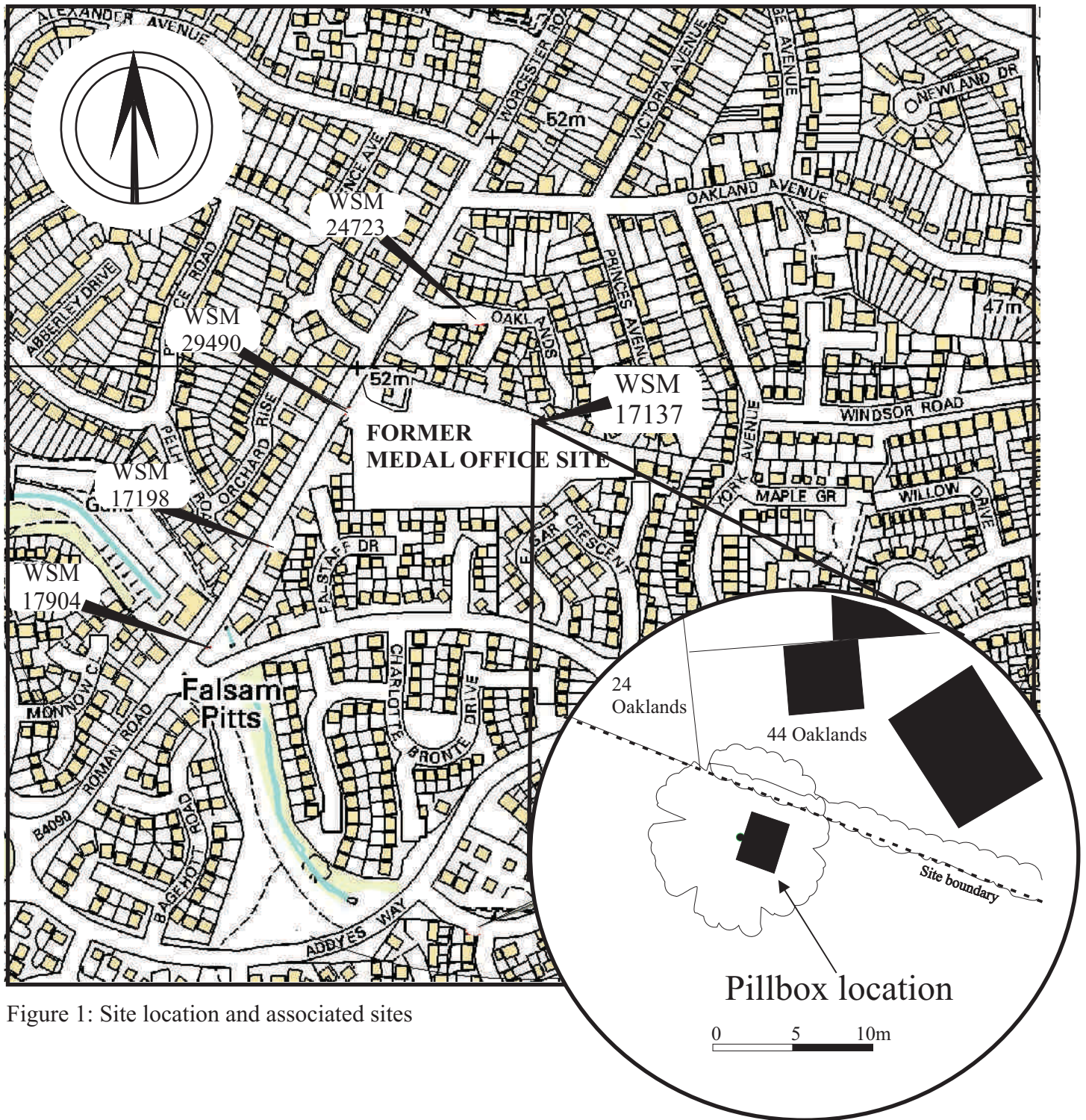
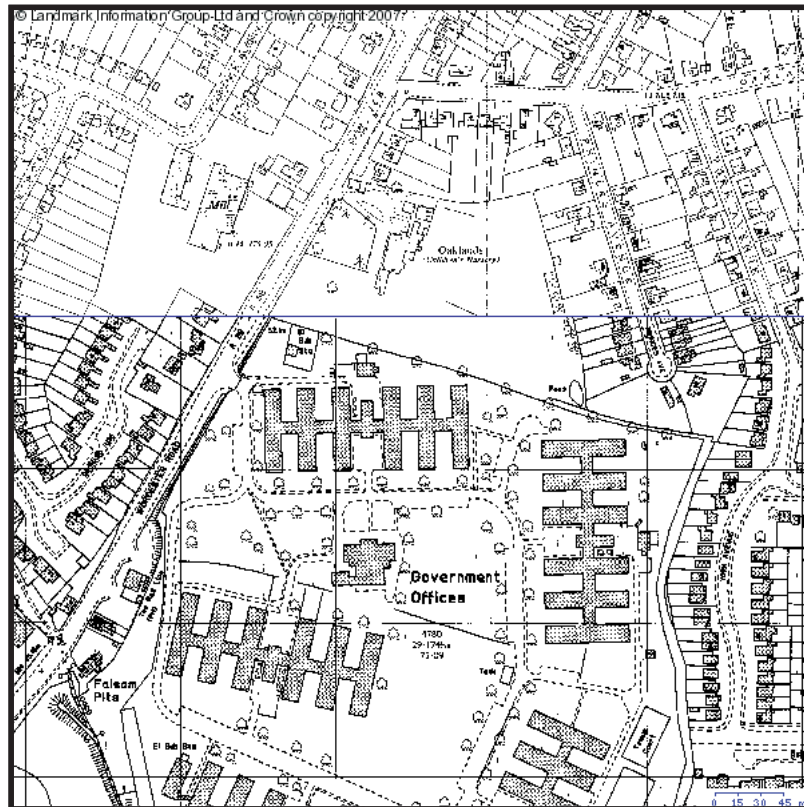
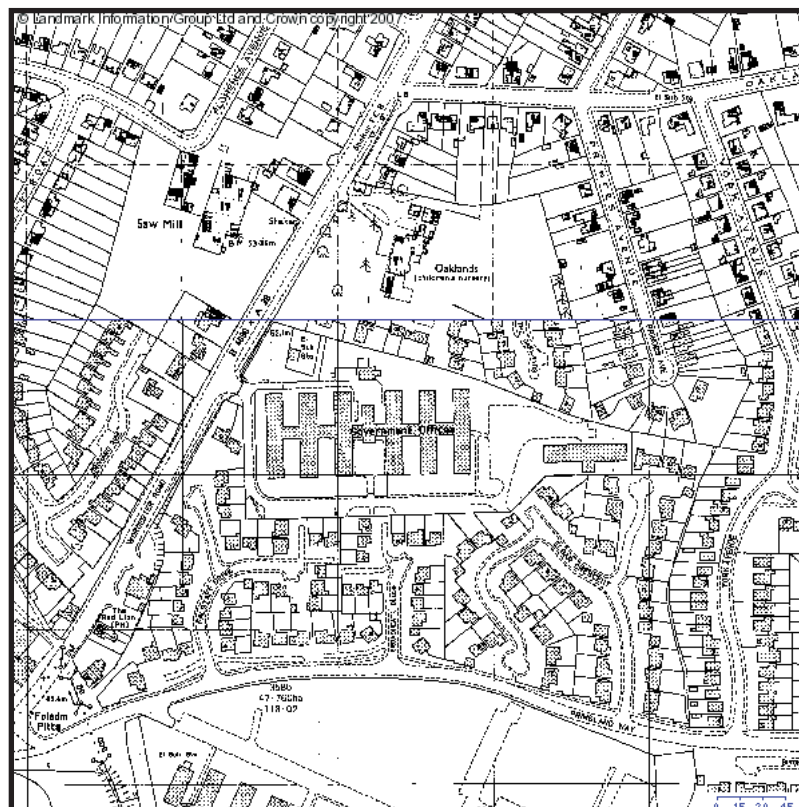


Figure 1: Site location and associated sites

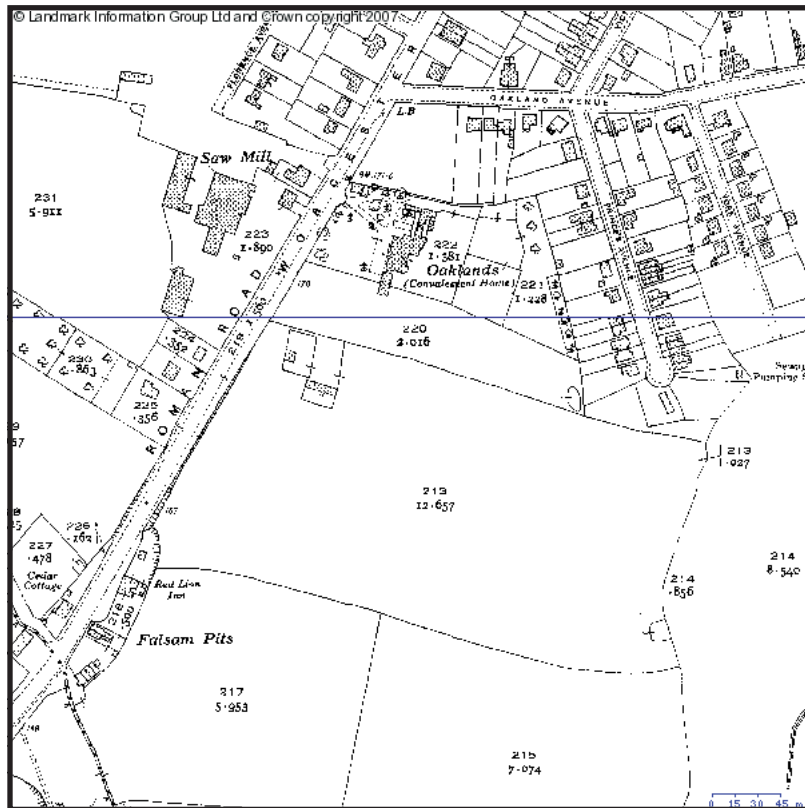


1968-76

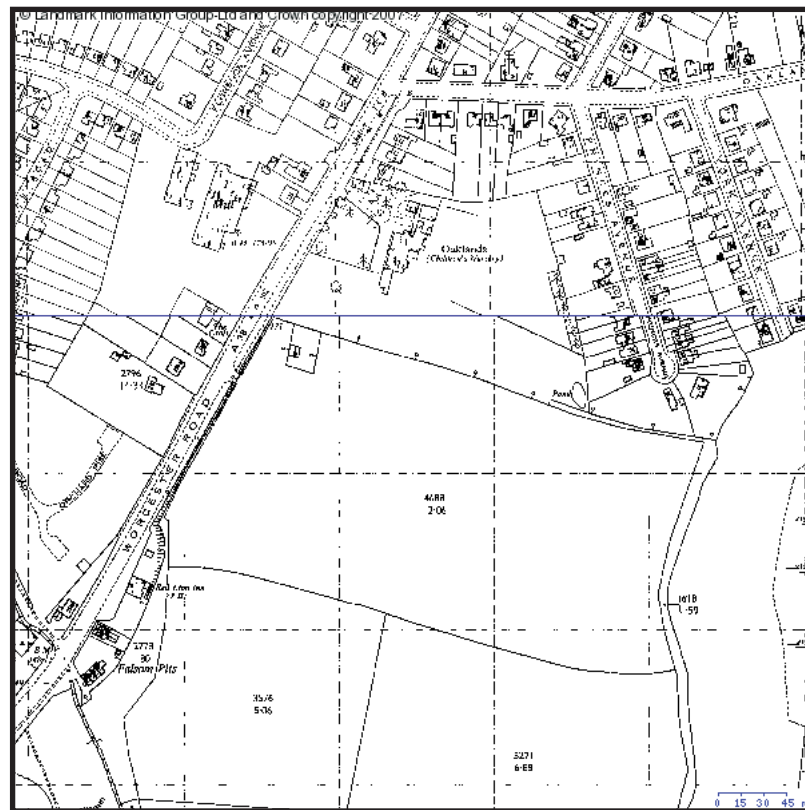


1971-89

Figure 2: Historic map regression

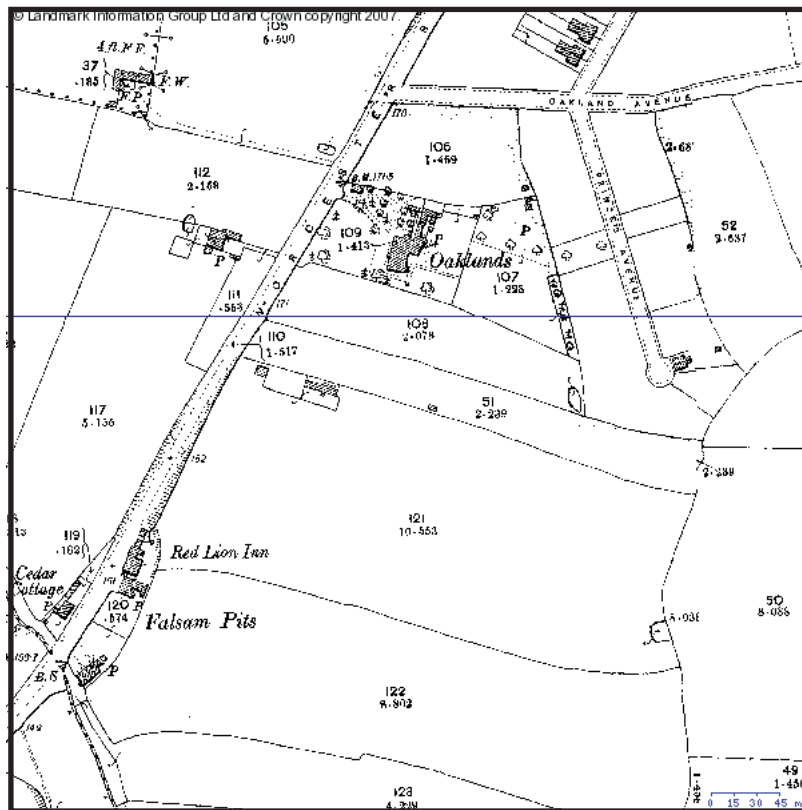


1938

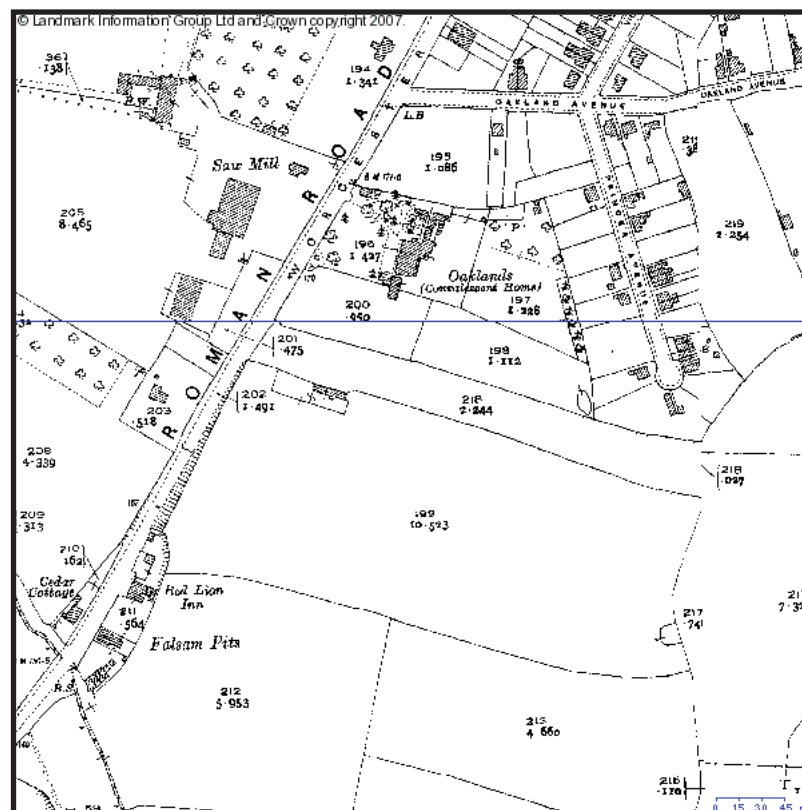


1964-65 Provisional Series

Figure 3: Historic mapping - note that defence sites were omitted from the post-war mapping for reasons of national security

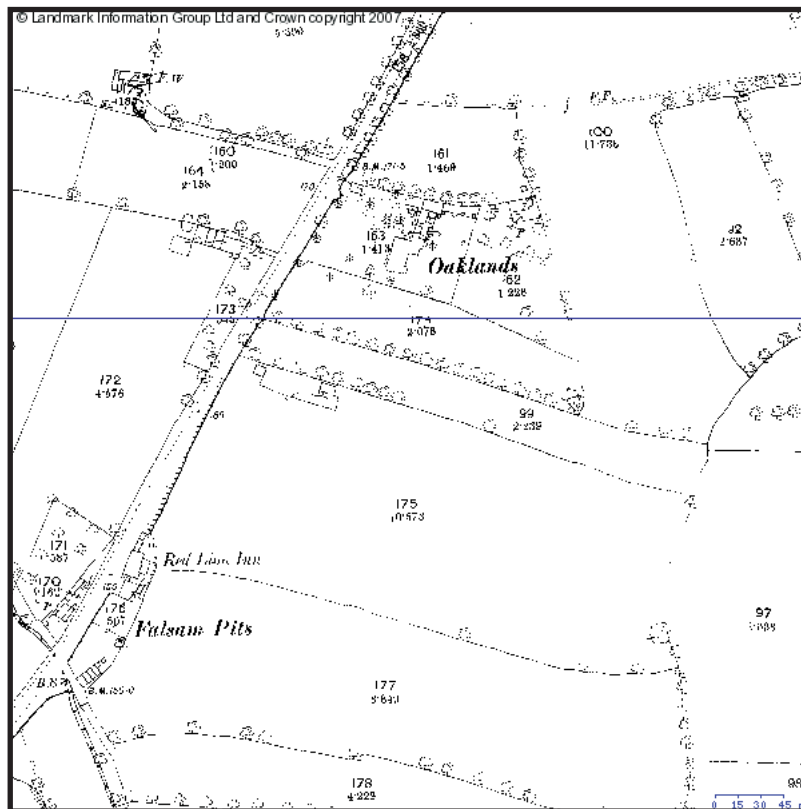


1903



1927-28

Figure 4: Historic maps of the area prior to development of the site



1885

Figure 5: 1st Edition Ordnance Survey mapping - the 1838 Tithe Awards plan also shows similar field boundaries.

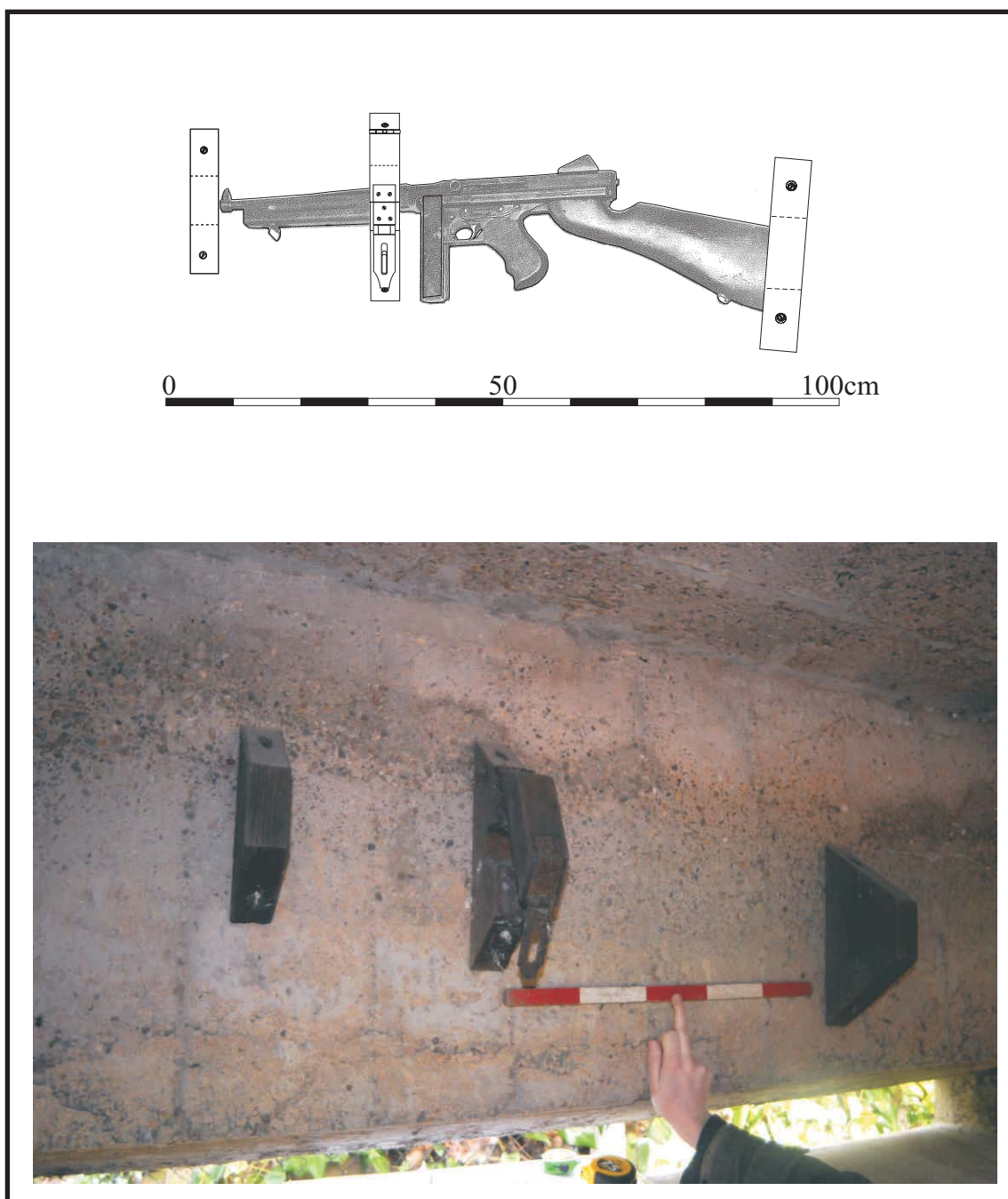


Figure 10: Weapon rack, apparently for Thompson M1A1 sub machine gun. Identity of weapon based on length: rack length 820mm - length of Thompson SMG 813mm



East elevation prior to removal of ivy and undergrowth



South elevation prior to clearance of ivy



Internal view of doorway



Entrance crawlway prior to clearance



View through embrasure



Tree growth

Figure 11: General photographs



Eastern elevation (Scale 0.5m long)



Southern elevation



Western elevation



Overhead view from south-east

Figure 6: External views

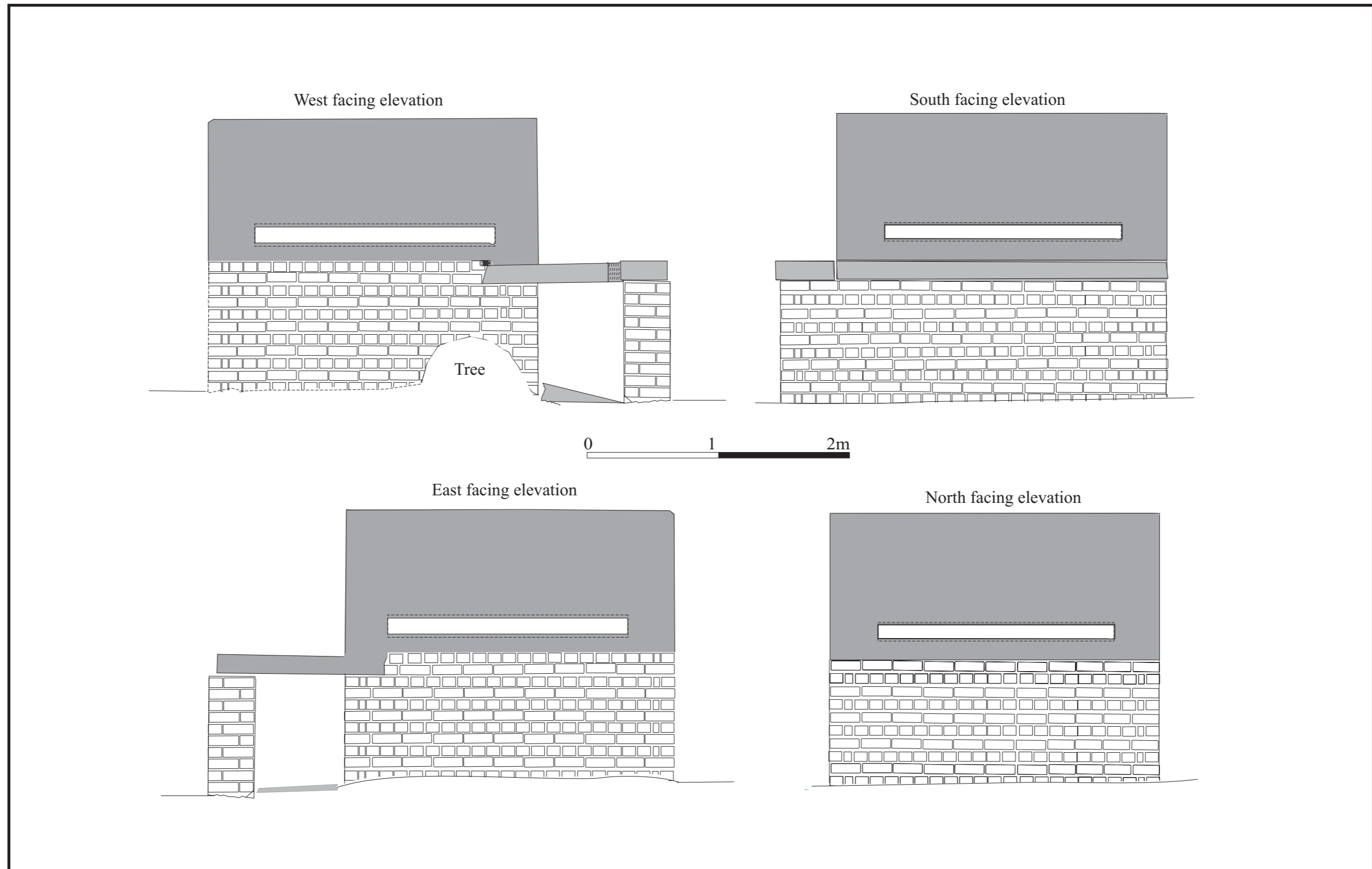


Figure 7: External elevations

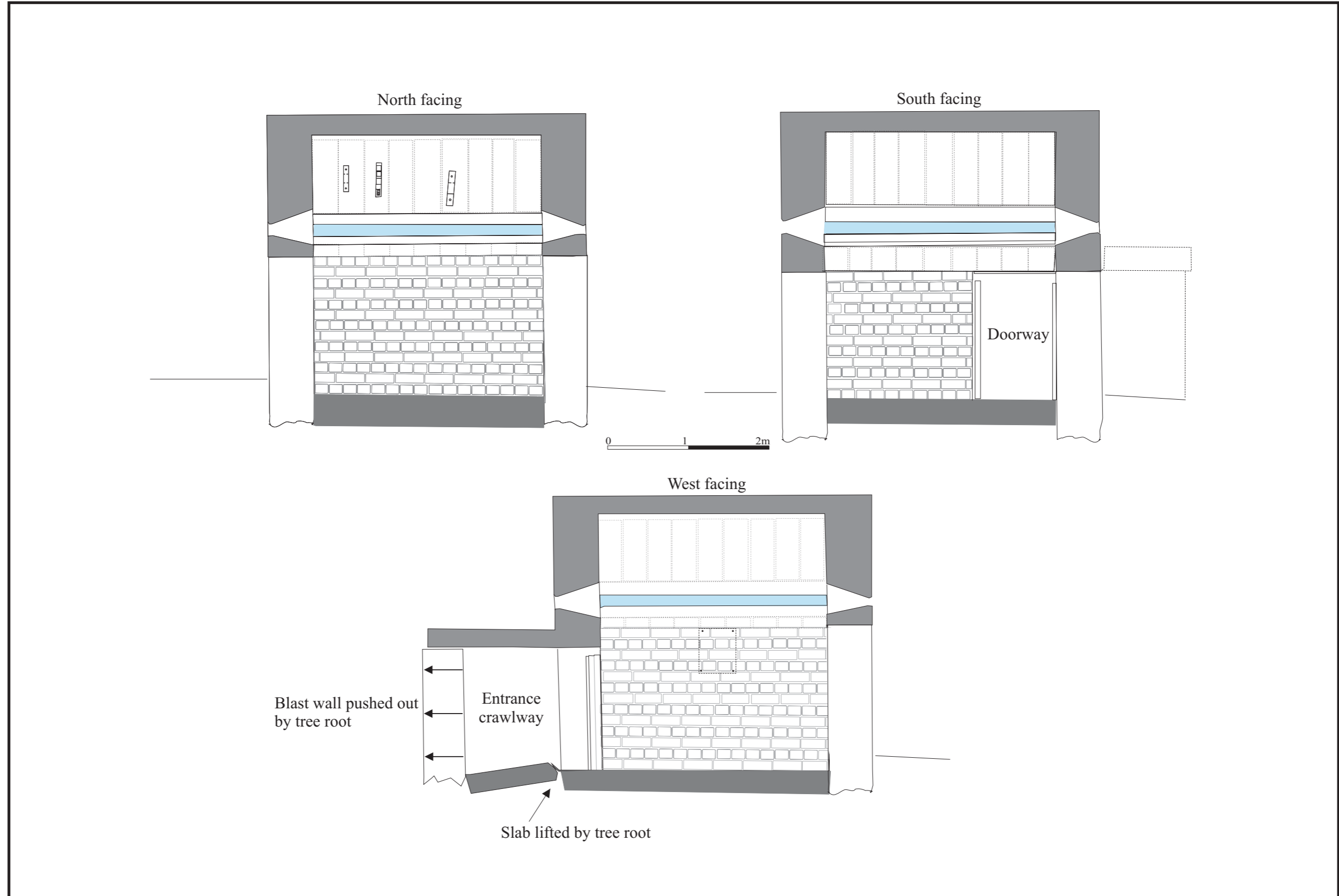


Figure 8: Internal elevations

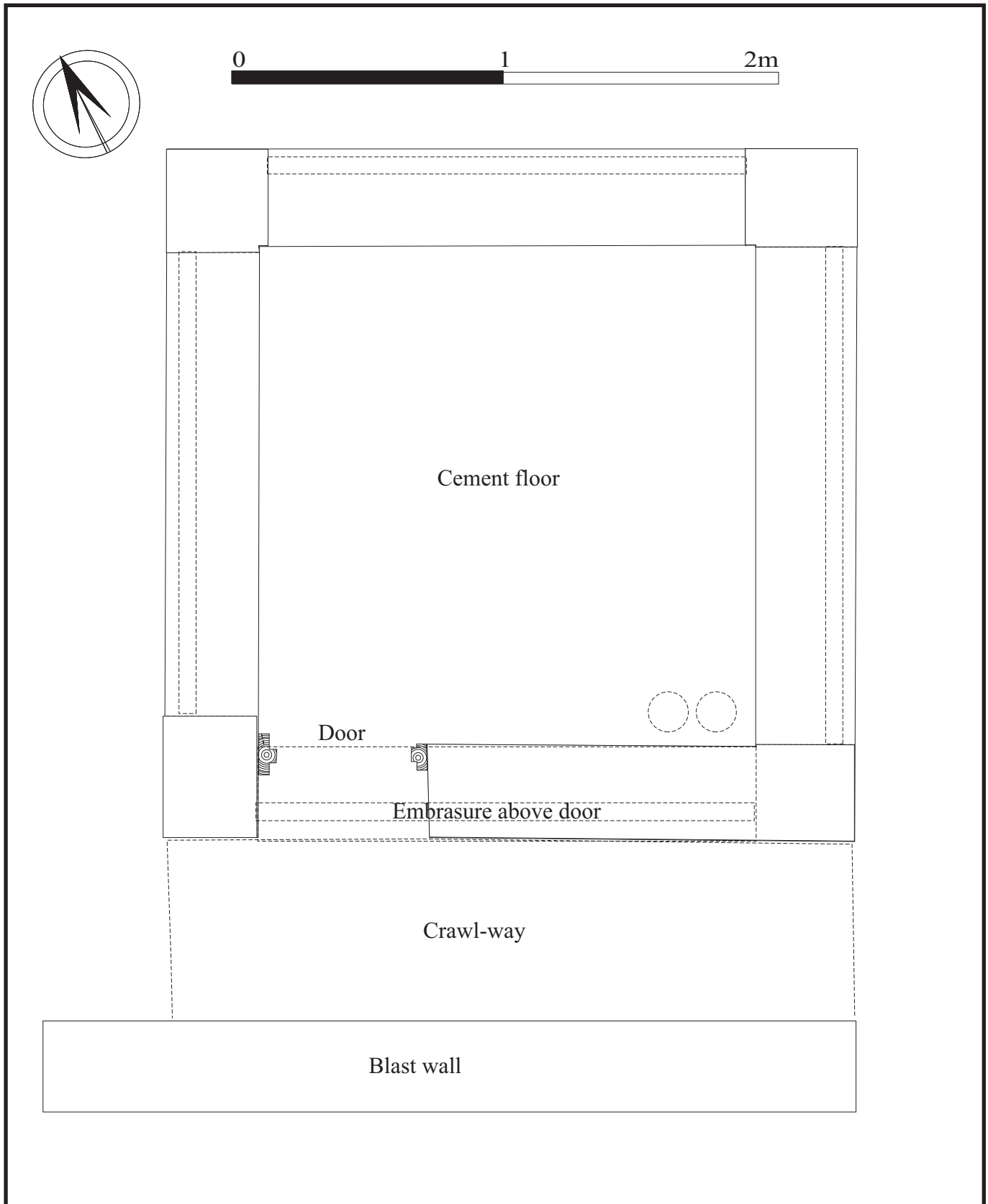


Figure 9: Ground plan