

Archaeological Desk-based Assessment
of
**THE FORMER COLLERY CHIMNEY,
TROOPERS HILL ROAD, ST GEORGE, BRISTOL.**
or
Bristol Park, Bristol City Council.



Report No. 1959/2008
BHER No. 24634

By Jonathan Bryant



Bristol Archaeological Society

Archaeological Desk-based Assessment
of
**THE FORMER COLLIERY CHIMNEY,
TROOPERS HILL ROAD, ST GEORGE, BRISTOL.**

Centre of
N.G.R. ST 62881 72849

Client: Bristol Park, Bristol City Council

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Abbreviations

AD	Anno Domini	m	Metre
AOD	Above Ordnance Datum	NGR	National Grid Reference
BaRAS	Bristol & Region Archaeological Services	NMR	National Monuments Record
BCC	Bristol City Council	OS	Ordnance Survey
BCL	Bristol Central Library		
BCMAG	Bristol City Museum & Art Gallery		
BHER	Bristol Historic Environment Record		
BRO	Bristol Record Office		
c.	Circa		
Km	Kilometre		

Adopted Chronology

Prehistoric Before AD43	Palaeolithic 1,000,000 – 10,000 BC
	Mesolithic c. 10,000 – 3500 BC
	Neolithic c. 3500 – 2000 BC
	Bronze Age c. 2000 – 600 BC
	Iron Age c. 600 BC – AD43
Roman	AD43-410
Anglo Saxon/Early Medieval	AD410-1066
Medieval	AD1066-1540
Post-medieval	AD1540-present

NOTE

Notwithstanding that Bristol and Region Archaeological Services have taken reasonable care to produce a comprehensive summary of the known and recorded archaeological evidence, no responsibility can be accepted for any omissions of fact or opinion, however caused.

October, 2008.

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SUMMARY

A desk-based assessment was carried out for the remains of a former colliery engine house at the bottom of Troopers Hill Road close to the junction with Crews Hole Road, Bristol. The remains comprise a square chimney of two stages and parts of two walls, built from copper-slag blocks and Pennant sandstone. This area has been industrialised since at least the beginning of the 18th century. Coal mining was already taking place in the neighbourhood by 1754, but this mine probably only began in the very early 19th century. Known as Crews Hole Pit or Troopers Hill Pit, it was served by two engine houses, one here and another 200m to the north-east on the opposite side of Troopers Hill Road. Two coal seams were worked, the Millgrit and the Rag. The tithe map showed a gin house next to the engine house. Coal production had ceased by 1845. By the early 20th century the engine house was roofless, and an aerial photograph of c.1930 showed the building in ruin. The 1948 Ordnance Survey plan recorded only the chimney and portions of two walls, which is much as survives today.

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Plate 5 Chimney from north-west

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1. INTRODUCTION

- 1.1 An archaeological desk-based assessment of the former colliery chimney at the bottom of Troopers Hill Road, St George, Bristol was carried out by Bristol and Region Archaeological Services (BaRAS). The work was undertaken on behalf of Bristol Parks, a part of Bristol City Council.
- 1.2 The study involved examination of documentary and printed sources, maps and plans, photographs and other illustrative material. Archaeological evidence recorded in the Bristol Historic Environment Record (BHER) was also examined. The BHER event number 24634 was assigned to this work.
- 1.3 This report was compiled by John Bryant. A copy will be deposited with the National Monuments Record at Swindon.

2. THE SITE

- 2.1 The site is located on the north side of Troopers Hill Road, close to its junction with Crews Hole Road and opposite the lower end of Parfitt's Hill, with the chimney centred on NGR ST 62881 72849 (**Fig. 1**). There are remnants of walling running to north-east and north-west away from the standing chimney. For this report a larger area of approximately 10,000m² (1 hectare) has been examined, bounded to the south and east by Troopers Hill Road and west by Crews Hole Road, and to the north to an undefined point on Troopers Hill.
- 2.2 This site is part of a larger area that is zoned on the Local Plan map as open space, a site of nature conservation interest and a local nature reserve, total area 8.323 hectares. It is wholly within the Avon Valley Conservation Area. The chimney is a Grade II Listed Building, the schedule describing it as an early C19 chimney previously attached by two walls to an engine house and probably associated with a colliery. To the north, 310m away on the summit of Troopers Hill, is the rather better known round chimney, also Grade II, associated with a flue that ran up the hill from a works at Crews Hole. There are no other listed structures within the immediate vicinity. No Scheduled Ancient Monuments are listed in this area of Bristol.
- 2.3 Forming the underlying geology of the site is Pennant sandstone in the Upper Coal Measures of the Carboniferous period. The 1:50,000 geological map shows the Millgrit coal-crop as running close by. This site sits at the bottom of Troopers Hill at a height of about 14m aOD but with the slopes of the hill climbing immediately to the north. Troopers Hill itself has been altered in shape over many years by a combination of extraction (quarries) and deposition (industrial waste).
- 2.4 The visible remains comprise the square chimney stack itself with two short lengths of Pennant rubble walling that soon disappear into the hillside (**Plates 1-5**). Approximately square in plan, the chimney has a NW-SE dimension of about 1.90m (**Fig. 3**). At about 70% of its surviving height the chimney steps in on all faces. Most of the lower stage south-east face continues on as the south-east wall of the building to which the chimney was attached. In contrast, the chimney stands partly forward of the south-west wall of the same building, although the inner faces are continuous. Copper-slag blocks were used for the chimney quoins and elsewhere in the chimney walls, otherwise Pennant sandstone rubble was the main material; occasional red bricks may be seen, with more around the blocked-up opening at the base of the south-west face. Where accessible for measurement, bricks are either 60mm or 65mm in thickness. The walls running away from the chimney are predominantly of Pennant sandstone rubble with only a few slag blocks or red bricks. A whitish mortar with gravel inclusions was used to bond the lower part of the stack, the remainder having been subsequently repointed in another whitish mortar; some repointing in a dark grey mortar has also occurred. Joist holes are visible on the remaining inside face of the south-west wall (**Plate 6**).

3. ARCHAEOLOGICAL EVIDENCE (Fig. 2)

There has been no previous archaeological work on this site. However, the chimney has been noted by the Bristol Historic Environment Record (HER) as monument 3192M and the colliery as 1817M.

An archaeological watching brief was undertaken in 2001-02 on a site to the east of Bull Lane, 150m south of this site (HER 21033). The remains of a post-medieval structure were noted, also evidence of former metalworking in the vicinity. Close by is the The Bull public house (2121M).

A Swede, R. R. Angerstein, visited the Crews Hole area in June 1754 and sketched and described the copper works then in operation there (HER 20822, monument 1848M). Between Crews Hole Road and the river was located a glassworks, active 1745-1787 (1977M).

The well-known chimney at the summit of Troopers Hill, monument 1897M, is thought to date from the 18th century (it is certainly shown on drawings of the 1820s). Plans show a flue zig-zagging up the hillside from Crews Hole Road (**Figs. 7 & 10**).

Surveying for large-scale (1:2500) plans took place in this area in 1880-81 (**Fig. 6**). The OS plan recorded an "Old Quarry", about 30m across, on the north side of Troopers Hill Road, 50m north-east of the present chimney (HER 21063; 2608M). Another quarry of similar size was recorded on the east side of Crews Hole Road and a third, larger example 200m north, on the slopes above the road (21061 & 21059; 2607M & 2606M). A fourth site, further up Troopers Hill Road, is identified as a quarry on OS plans, but may have been a claypit (2328M). Between Crews Hole Road and the river were, from north to south, the Crown Works (brick & tile), a chemical works and the Phoenix Works (chemical), respectively HER 21065, 21067 & 21069 (monuments 2610M, 2609M & 2611M).

A short distance to the south of the study site stands the former United Methodist chapel of 1853, now converted into housing (2122M). Another former chapel, the Wesleyan Methodist of 1860, survives about 300m to the north-west (2125M).

4. HISTORICAL EVIDENCE (Figs. 4-11)

- 4.1 Historically, this site lay in the Manor of St Lawrence in the largely rural parish of SS Philip and Jacob, although the church itself was located in an urban area at the eastern end of the town of Bristol. Most of the parish lay within the Royal forest of Kingswood and a map of the forest in 1610 showed Harris Hill (now Troopers Hill) just above the Avon. Until 1897 this area remained within the County of Gloucestershire. The parish was relatively large and the church at its western extremity, which probably did not matter too much while the forest was thinly populated, but the increasing activities such as coalmining brought more settlement to the eastern end of the parish. This resulted in the decision to divide the parish into two in 1756, the eastern half becoming known as St George after the dedication of the new church.
- 4.2 As already noted, the hill above the site was known as ‘Harris Hill’ in 1610, presumably after its then owner. Sanigar noted that in 1704, when the hill was purchased by Abraham Elton (of the Clevedon Court family), that the name had been changed to “Harris’s alias Truebody’s Hill” (BRO 13423/53). Presumably Truebody had held the land some time between 1610 and 1704, but the vendor in the latter year was one lancelot Dobson, yeoman of Patterdaile, Westmoreland (Sanigar’s notes). By the early 18th century the Crews Hole area had become an important industrial area. Early in that century it was being known by the name of ‘Screw’s Hole’. By at least 1710 a copperworks had been established by the Bristol brass company, with 24 furnaces by 1724 (Day 1973, 207). When the Swede Rheinhold Angerstein visited the Bristol area in 1754 he noted 49 furnaces at the works. He sketched the works (ibid, 34), but it is difficult to relate his illustration with the area as it is today. However, the only engine house that he did show was downstream of the glass cone, i.e. further down the valley and not on this site. Angerstein did record shallower pits, worked by the use of hand windlass, which he says were 168 feet deep (Cornwell 2003, 40). Sir Abraham Elton, grandson of Abraham, sold the hill on to the Brass Company in 1758, at which time it remained Harris’s alias Truebody’s Hill.
- 4.3 Benjamin Donn’s 1769 map labelled ‘Crew’s Hole’ as slightly further west and this particular area as ‘The Cupolas’. Cupola was a term used for a reverberatory furnace at that time. Coal mines were shown by Donn at a number of locations, but not on this site, the nearest being about 1,000m south, on the far bank of the Avon in the vicinity of the Conham Ferry. Isaac Taylor’s 1777 map of Gloucestershire showed the ‘Copper Works’, but again no coal mining activity on or near the site. Until about 1796 the Elton & Tyndall company leased the site; Matthews & Arnold were operating a brass and spelter works at Crews Hole in the early 19th century. That well-known local landmark, the chimney on the summit of Troopers Hill, may have been constructed in the 1790s – it was certainly standing in 1826, when it was recorded in the background of a view of Brislington by the artist Rowbotham.
- 4.4 Industrial activity in the Crews Hole and Conham area throughout the 18th century was intensive, consuming substantial quantities of coal. Numerous pits were operating locally, but there was clearly an advantage in abstracting the fuel even closer to where it was required. Thus shafts were sunk on the edge of Troopers Hill at about the beginning of the 19th century, known as the Crews Hole or Troopers Hill Pit. An engine house was built on the present site, with a second erected 200m away to the north-east, about one third of the way up what is now Troopers Hill Road. While no detailed illustrations of the lower engine house exist, it appears to have been similar to that built up the road, as drawn later by Samuel Loxton (**Fig. 9**). Both structures made good use of the black slag blocks, particularly for quoins, and the chimneys looked very similar, although the upper engine house had its chimney located in the centre of the end wall, unlike the lower building which had a corner chimney. The arched area shown by Loxton at the bottom of the west wall was for the purposes of changing the cylinder of the engine: it is not known if there was a similar feature in the lower engine house. This pit worked the Millgrit Seam (2.5 feet/0.76m thick) at a depth of 122 feet (37m), also the Rag vein at 180 feet (54.9m).

- 4.5 William Maule's 1803 survey of St George (**Fig. 4**) showed a small oval enclosure (parcel 169) with a rectangular structure on its northern edge, although the latter not in the exact spot occupied by today's chimney and therefore possibly only a cottage. However, it should be noted both that his plan is now feint and that it does not have the accuracy of the later title map. The accompanying terrier records the "possessor" as Thomas Jones and the area of ground as 22 square perches. This was the only enclosure on this side of the hill, Troopers Hill itself being listed as belonging to the Brass Company, area 22 acres 1 rood and 19 perches. Maule seems to have depicted the upper engine house, then in the possession of Matthew Flook. The hill was for sale in 1813, when it was named simply as 'Truebody's Hill' (Sanigar). An early 19th century map of Bitton parish held at Bristol City Museum and Art Gallery (M.471), drawn at a scale of 1:31680, showed various buildings in the vicinity but none that could be identified as being on this site. However, the hill above was named as 'Truebody's Hill'. Two early OS maps were also produced at the same scale, neither showing anything on the site, but the earlier version (surveyed 1815) used 'Truebody's Hill' and the later 1826 survey used 'Troopers Hill'. In 1828 the copper works and hill were sold by the Harfords & Bristol Brass Company (Day, op.cit).
- 4.6 The title map of 1842 provided the first detailed cartographic record for this site, at the southern end of 'Trooper's Hill' (**Fig. 5**). There was a square building with walls attached to its north-west and north-east. This would be the building whose remains survive attached to the chimney. Unfortunately, the scale of the map did not allow for depiction of the chimney itself. The structure with the rounded end to the north-west of the roofed building may have contained a horse gin for hoisting within the mine shaft. Approximately 15m to the north-east lay a second roofed structure of similar proportions to the first, but with no attached walls. As far as the title survey went, these structures were included in the main area of parcel 536, recorded in the apportionment as 'Troopers Hill' and in use as pasture, owned and occupied by Dr. Benjamin Somers. Although there is no known closure date for the colliery, it seems to have ceased work by 1845 (Cornwall 2003, 40).
- 4.7 Fireclay was subsequently mined beneath Troopers Hill, although those workings were slightly further west than the present site and the colliery buildings seem not have been involved. Pennant sandstone was quarried out of the hill at various times, while industrial waste was dumped, so that today's hill is not necessarily the same shape that it once was. A lease dated 17th March 1886 concerning the clay works, yards and land at Crews Hole excepted certain areas from clay digging, one of which was a square plot at the corner of the two parish roads (i.e. Crews Hole Road and Troopers Hill Road). This plot, 2 roods (2,024m) in extent, included an 'engine house' (**Fig. 7**).
- 4.8 This area was surveyed at 1:2500 scale by the Ordnance Survey in the early 1880s (**Fig. 6**). Two square structures were shown plus an L-shaped feature, possibly two walls from a third building. Unfortunately, the mapping did not indicate if the structures were roofed. No indication was given of their use and there was no mention of a colliery in the vicinity. The second edition, revised very early into the new century, showed only a single square structure, unshaded on the plan so presumably roofless (**Fig. 8**). This was the building whose ruins today still stand adjacent to the chimney. It measured approximately 6.5m (SW-NE) by 5.5m. Just prior to the First World War the building was still shown on the OS 1:1250 plan. It was not shown on the plan accompanying sale particulars in 1920 (BRO 13423/53), although the upper engine house was depicted, occupied by a Mr. Price (**Fig. 10**). An aerial view of the Tar Works, photographed in c. 1930 (BRO PicBox/1/Avu/142), showed the ruined lower engine house roofless but otherwise intact: there were gables to the north-west and south-east walls and several window openings (**Fig. 11**). By the time of the first OS 1:1250 plan in 1948 only the chimney and short sections of the two abutting walls were shown on the map, as is the case today. The remains, now listed Grade II, have been stabilised and repointed.

5. CONCLUSIONS

- 5.1 This site formerly lay in Kingswood Forest and the ancient parish of SS Philip & Jacob. In 1610 the hill above was named Harris Hill but before 1704 had become known as Truebody's Hill, a name that has since been corrupted to Troopers Hill. The area at the bottom of the hill was industrialised by the early 18th century, with involvement from local families such as the Eltons (of Clevedon Court). Considerable quantities of coal were required by the local copper and brass industries, and the Swede Rheinhold Angerstein, visiting in 1754, recorded coal mining in the immediate area.
- 5.2 Coal mining initially involved pits of limited depth with the product hauled to the surface by windlass. Deeper mines required engine houses both for winding purposes and for pumping water from the workings, sometimes accompanied by chimneys providing draughting for mine ventilation purposes. Two engine houses were erected for the Crews Hole Pit (alias troopers Hill Pit) in probably the very early years of the 19th century. It is unclear whether Maule's map of 1803 recorded an engine house or a cottage on this site, although he certainly seems to show the upper engine house. Similar in build, the two engine houses were not quite identical, their chimneys being positioned differently. The 1842 tithe map recorded what appeared to be a gin house (where a horse or donkey operated winding gear) on the north-west side of the lower engine house, although all trace has long since disappeared. Mining had ceased at this location by 1845.
- 5.3 The engine house may have been derelict by the early 1880s. It was certainly roofless by the early 1900s, at which time the other structures close by had gone. In contrast, the upper engine house, a third of the way up Troopers Hill Road, continued to survive for some years after being converted into living accommodation. An aerial photograph taken about 1930 showed the building on the present site at the bottom of the hill as ruined though retaining all four walls in addition to the chimney. The first edition Ordnance Survey 1:250 plan, surveyed in the late 1940s, recorded only the chimney and portions of two walls. Fortunately there has since been stabilisation of the remains, which are now listed Grade II.

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Sale plan 1920 (Based on OS 1:2500 plan)
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- 13423/53 Items given by the executors of the late Mr. W. T. Sanigar, 1959: notes re Conham, Trooper's Hill, Easton & Crew's Hole
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Electronic Sources

Website produced by The Friends of Troopers Hill (www.troopers-hill.org.uk)

7. ACKNOWLEDGMENTS

Bristol and Region Archaeological Services would like to thank the staff of Bristol Record Office for access to documents.

APPENDIX 1: Policy Statement

This report is the result of work carried out in the light of national and local authority policies.

NATIONAL POLICIES

Statutory protection for archaeology is enshrined in the Ancient Monuments and Archaeological Areas Act (1979), amended by the National Heritage Act, 1983. Nationally important sites are listed in the Schedule of Ancient Monuments (SAM). Scheduled Monument consent is required for any work which would affect a SAM.

ODPM PLANNING POLICY GUIDANCE

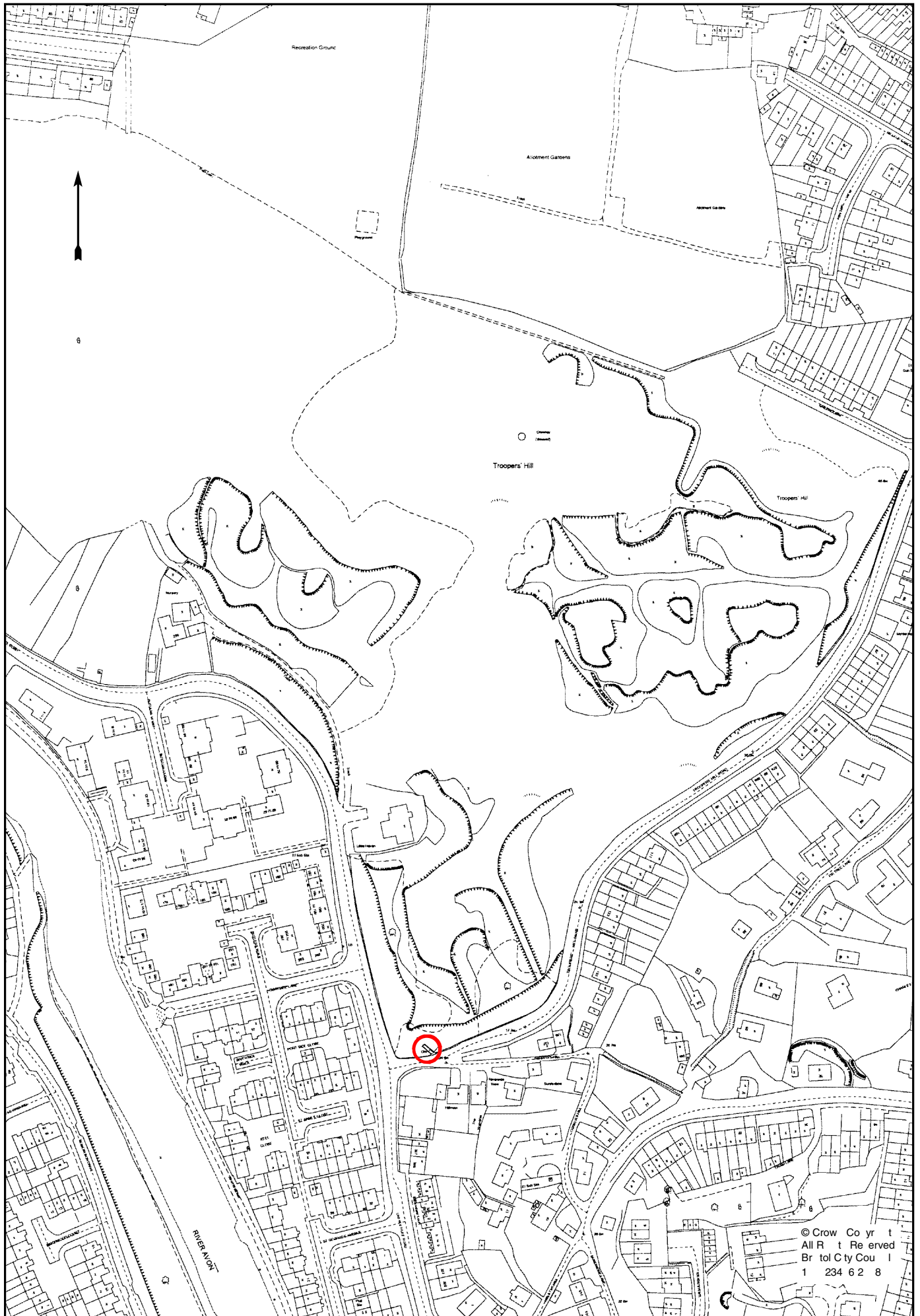
The Planning Policy Guidance of Archaeology and Planning (PPG 16) consolidates advice to planning authorities. The Guidance stresses the non-renewable nature of the archaeological resource, details the role of the County Sites and Monuments Record (SMR), encourages early consultation with county and district archaeological officers and sets out the requirement for developers to provide sufficient information on the archaeological impact of development to enable a reasonable planning decision to be made.

PPG 16 also indicates the circumstances where further work would be necessary and outlines the use of agreements and conditions to protect the archaeological resource.

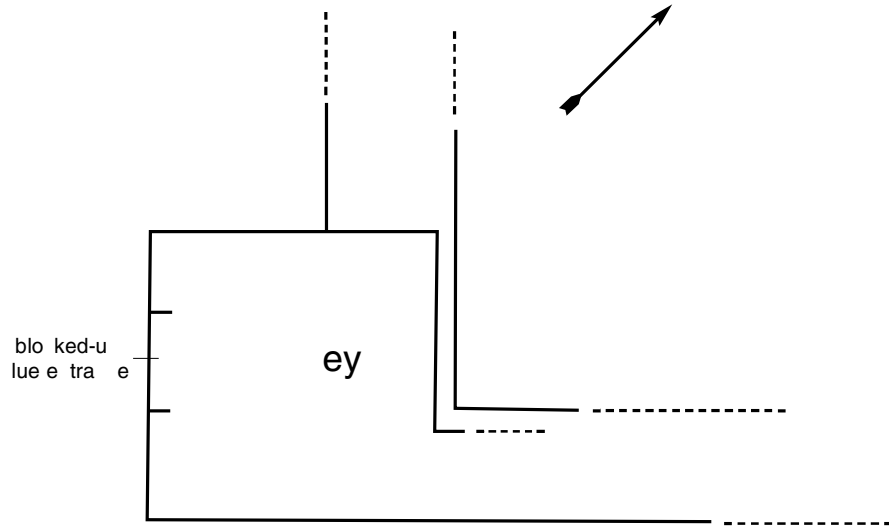
DISTRICT POLICY

Bristol City Council Supplementary Planning Document (2006) states (policy SPD No.7, p4):

- (i) There will be a presumption in favour of preserving any archaeological features or sites of national importance, whether scheduled or not.
- (ii) Development which could adversely affect sites, structures, landscapes or buildings of archaeological interest and their settings will require an assessment of the archaeological resource through a desktop study, and where appropriate a field evaluation. Where there is evidence of archaeological remains, development will not be permitted except where it can be demonstrated that the archaeological features of the site will be satisfactorily preserved in situ, or a suitable strategy has been put forward to mitigate the impact of development proposals upon important archaeological remains and their settings; or, if this is not possible and the sites are not scheduled or of national importance, provision for adequately recording the site prior to destruction is made, preferably by negotiating a planning agreement to ensure that access, time and financial resources are available to allow essential recording and publication to take place.



F .1 Site location and study area boundary, scale 1:25

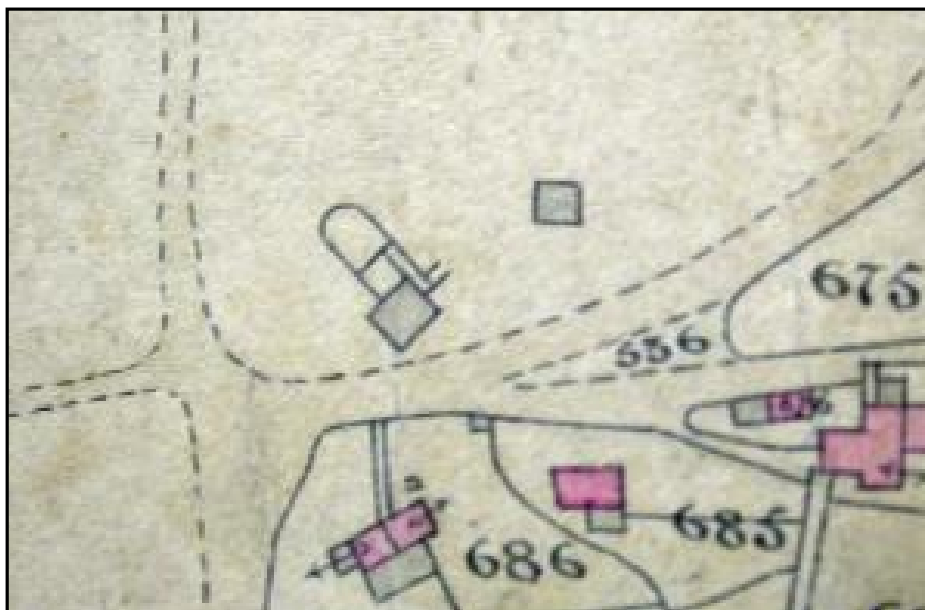


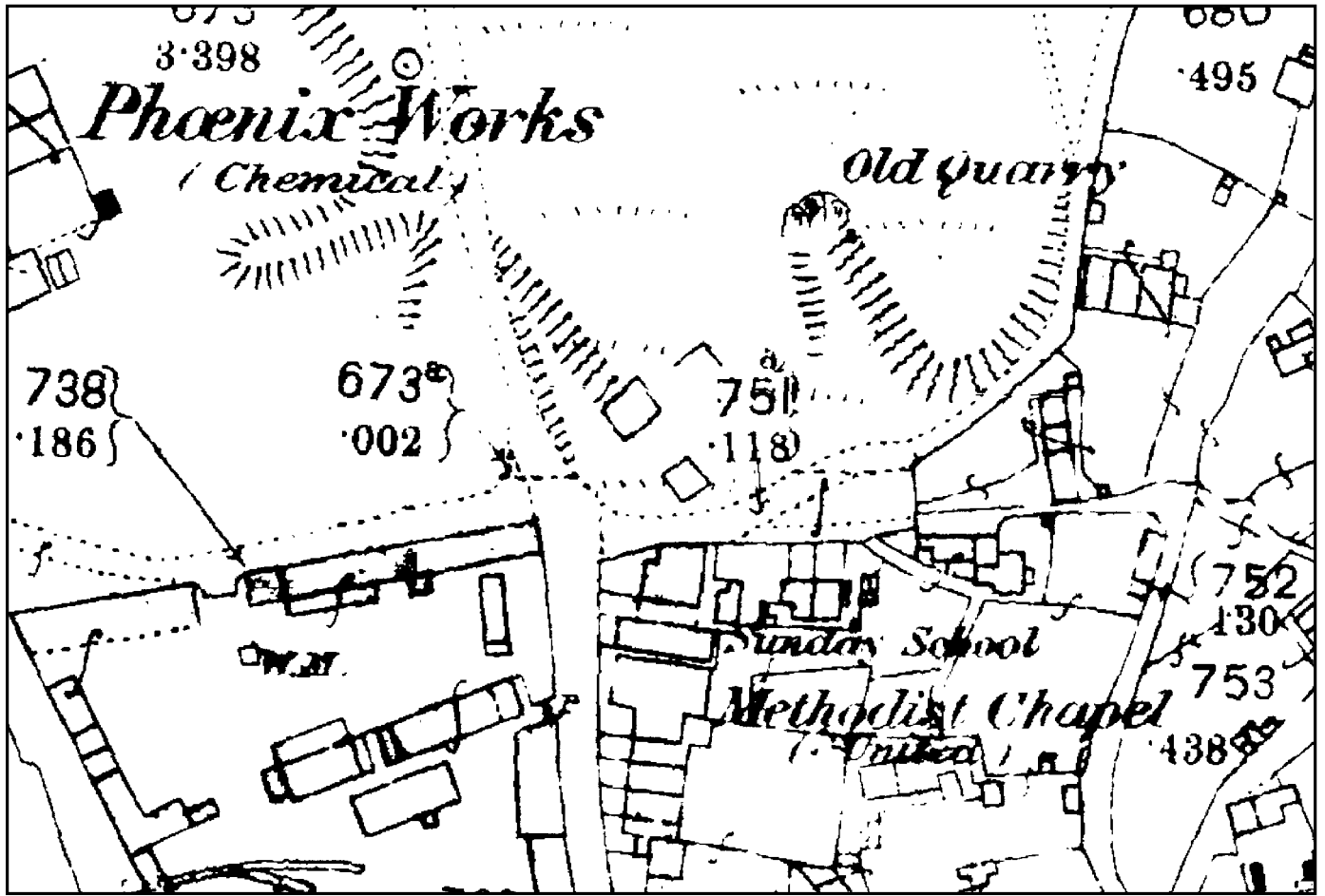
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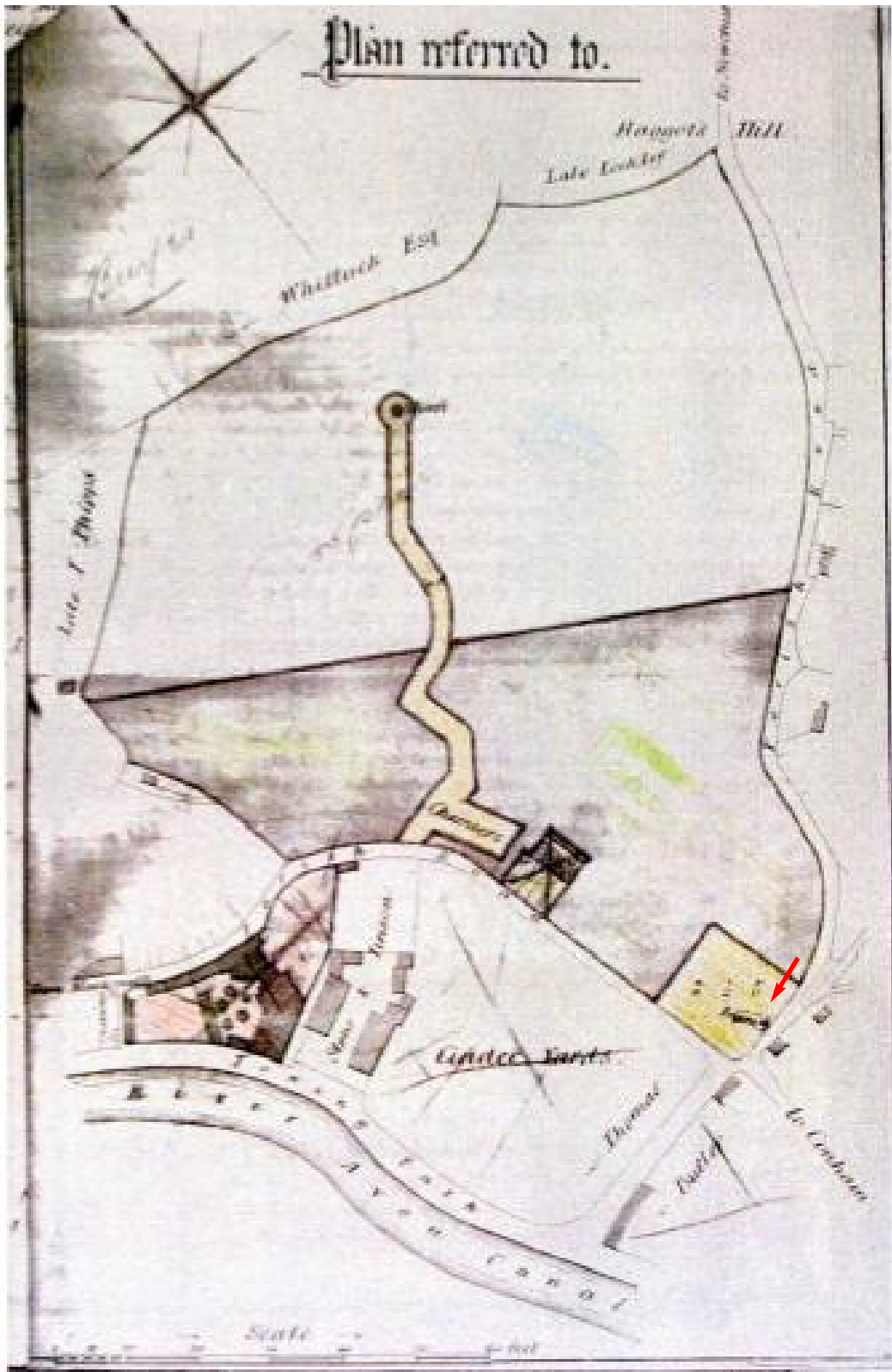
F .3 Outl e la o ey a d v ble wall , 2 8, ale 1:5

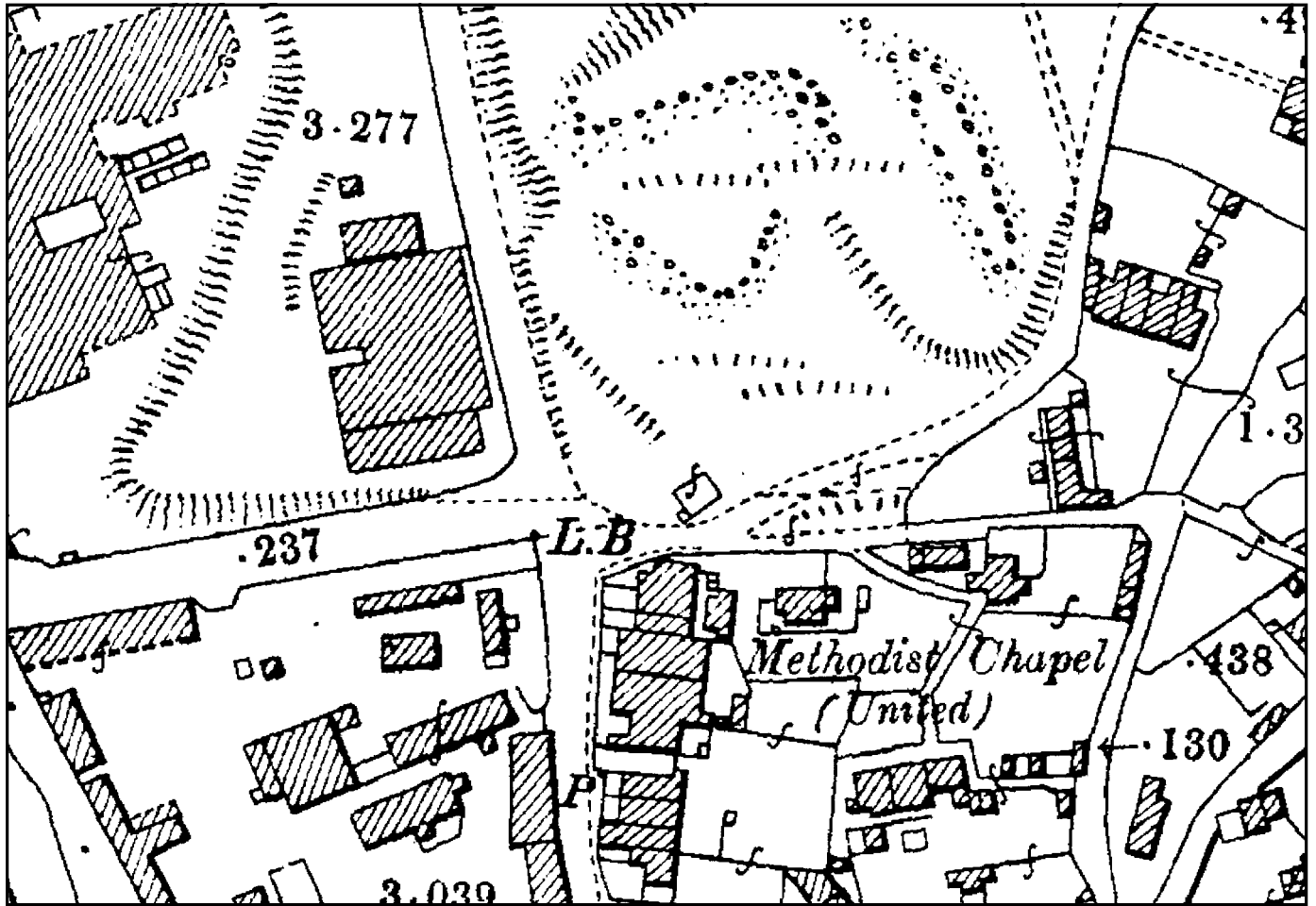


F .4 Maule' 18 3 a

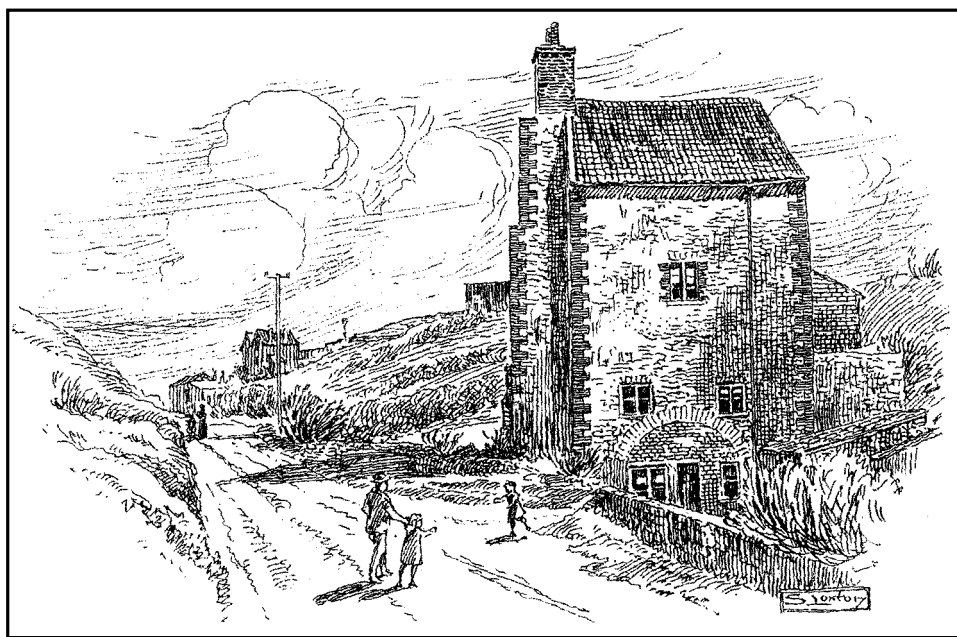








F .8 Ordnance Survey 1:25 scale, 192



F .9 Loxton drawing of the house, 1914





Plate 1 Ceyroea t



Plate 2 Ceyroort-ea t



Plate 3 Ceyroout-we t



Plate 4
Close-up of chimney base



Plate 5
Close-up of chimney base



Plate 6
Close-up of chimney base