

Nos. 14-16, Duncombe Road, Speedwell, Bristol

Archaeological Watching Brief

(NGR ST 63533 74339)

BHER 25534, BRSMG 2015/71



By Sarah Newns

Avon Archaeology Limited

Bristol: August 2017



CONTENTS

ABSTRACT
ACKNOWLEDGEMENTS
NOTES
COPYRIGHT
ABBREVIATIONS

- 1 INTRODUCTION
- 2 GEOLOGICAL, HISTORICAL AND TOPOGRAPHICAL BACKGROUND
- 3 AIMS AND METHODOLOGY
- 4 RESULTS OF THE MONITORING
- 5 DISCUSSION
- 6 CONCLUSIONS
- 7 BIBLIOGRAPHY

Appendix 1: Context Descriptions

FIGURES

- 1 Site location plan
- 2 Boundary of the study area with trench locations.
- 3 Location of Trenches 1 and 2, showing brick-lined mineshaft (104) and deposits (204) and (206).
- 4 Extract from tithe map of the parish of St George, 1845. Source: KnowYourPlace, Bristol City Council. Approximate boundary of study area outlined in red, for indicative purposes only. Not to scale.
- 5 Extract from First Edition Ordnance Survey 25" Scale, Gloucestershire Sheet LXXII.14 Western Division, surveyed 1881, published 1883. Source: KnowYourPlace, Bristol City Council. Approximate boundary of study area outlined in red, for indicative purposes only. Not to scale.
- 6 Extract from Second Edition Ordnance Survey 25" Scale, Gloucestershire Sheet LXXII.14 Western Division, revised 1902, published 1904. Source: KnowYourPlace, Bristol City Council. Approximate boundary of study area outlined in red, for indicative purposes only. Not to scale.
- 7 Extract from Third Edition Ordnance Survey 25" Scale, Gloucestershire Sheet LXXII.14 Western Division, revised 1913, published 1918. Source: KnowYourPlace, Bristol City Council. Approximate boundary of study area outlined in red, for indicative purposes only. Not to scale.
- 8 Extract from Ordnance Survey 1:1,250 scale Town Plan of Bristol, published 1950. Source: KnowYourPlace, Bristol City Council. Approximate boundary of study area outlined in red, for indicative purposes only. Not to scale.



Cover

Top of brick-lined mineshaft (Context 104) at northern edge of site from south-west, showing sheet piling to rear (Trench 1).

PLATES

1. General view of site from west, showing houses fronting Speedwell Road to east of site.
2. Trench 1 during insertion of sheet piles, showing south-facing section, to a depth of 1.2m.
3. Trench 1 during excavation, from south-east, showing Cut [108] with Fill (107) to right of frame, and northern edge of Shaft (104).
4. North-east corner of Trench 1, showing Cut [108] with Fill (107), in south- and west-facing sections.
5. Base of Trench 1, showing Fill (110) and Mudstone (109), from south-west.
6. Base of Trench 2, from north, showing Cut [205], Fill (204), truncating Mudstone (203).
7. South-west corner of base of Trench 2, showing black coal deposit (206) within probable Cut [207].
8. Waterlogging within Context (206) in south-east corner of Trench 2, also showing rough-hewn timber planks and wooden uprights.
9. Reinforced concrete capping in base of Trench 1, from north.



ABSTRACT

Avon Archaeology Limited were commissioned by Mr John Curtis, of Sun Developments Ltd, to undertake a programme of archaeological monitoring and recording (Archaeological Watching Brief) during groundworks associated with the construction of a small development of nine two bedroom, with associated car parking, at Nos. 14-16, Duncombe Road, Bristol, BS15 1EL (NGR ST 63533 74339; planning ref. 16/06909/F). Watching Brief conditions had been recommended due to the discovery, during preliminary groundworks for the present development, of a substantial brick-lined coalmine shaft, of at least 19th century date, measuring 3m in diameter. In addition, deposits within Trench 2 of the watching brief suggested that a further unlined pit or shaft (a possible bell-pit), plotted just to the west of the site on Duncombe Road (BCA 2015), may actually have lain within the bounds of the site, at its south-west corner. It is possible that this pit may have truncated earlier, horizontal waterlogged timber-lined workings at the southern edge of the site.



ACKNOWLEDGEMENTS

Avon Archaeology Limited wishes to acknowledge the assistance given by Mr John Curtis, of Sun Developments Ltd, and the small team of on-site ground staff who were extremely helpful during the course of the archaeological work.

NOTES

Whereas Avon Archaeology Limited have taken all 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.

COPYRIGHT

The copyright to the following text, drawings and photographs is, unless otherwise credited, the property of the author and Avon Archaeology Limited. Full joint copyright passes to the commissioners of the project upon the full settlement of the project account.

All enquiries should be addressed to:

Avon Archaeology Limited
Unit 36
Avondale Business Centre
Woodland Way, Kingswood
Bristol BS15 1AW

Telephone 0117 960 8487.

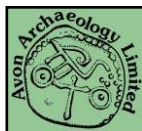
Email: mail@avonarchaeology.co.uk

Online: www.avonarchaeology.co.uk

Plans and maps based on the Ordnance Survey Sheets are reproduced by permission of the Controller of Her Majesty's Stationery Office. © Crown Copyright Reserved. Licence number AL 100005802.

ABBREVIATIONS

AAL	Avon Archaeology Ltd
aOD	Above Ordnance Datum
AAU	Avon Archaeological Unit Ltd
BaRAS	Bristol and Region Archaeological Services
BCA	Bristol Coalmining Archives
BGS	British Geological Survey
BRO	Bristol Record Office
GI	Ground Investigation (Wales) Ltd
WSI	Written Scheme of Investigation



1 INTRODUCTION

Avon Archaeology Limited were commissioned by Mr John Curtis, of Sun Developments Ltd, to undertake a programme of archaeological monitoring and recording (Archaeological Watching Brief) during groundworks related to the construction of nine two bedroom, with associated car parking, at Nos. 14-16, Duncombe Road, Speedwell, Bristol; Planning Ref. No. 16/06909/F. The site centre is located at OS NGR ST 63533 74339, and it lies in the angle between Duncombe and Speedwell Roads, some 4.7km north-east of Bristol city centre. The site historically lies within an area of intensive industrial activity (most notably coal mining and clay extraction) and was itself the location of a known coal mine of at least 19th century date, with other, possibly earlier industrial activity in the vicinity a distinct possibility. The original coal mine ("Belgium Pit") is known to have become disused by 1904, and, in the 1920s/30s, a row of houses were constructed, fronting Duncombe Road. The northern end of this row, which lay within the site boundary, has since been demolished, but the remainder still extends to the south.

The archaeological work involved the monitoring of two targeted areas of known and suspected mining activity, which had to be stabilised prior to the commencement of the new build.

The methodologies for the watching brief had previously been outlined in a WSI produced by Bristol and Region Archaeological Services (BaRAS report no.3324/2015), for and on behalf of the developer and the conditioning local authority, Bristol City Council. The fieldwork was carried out in accordance with the procedures outlined in the WSI, with guidelines for Watching Brief projects issued by The Chartered Institute for Archaeology (CIfA 2014), the guidelines for archaeological projects set out in MoRPHE 2015, and the standard procedures of Avon Archaeology Limited.

The WSI built on the results of a previous watching brief report (BaRAS report no. 3324/2016), undertaken during geotechnical test-pitting on the site, which had recorded a substantial brick-built mine shaft towards the northern boundary of the site, which had been revealed during preliminary groundworks for the development in 2013, as a result of which an investigative survey had been carried out on the site by Ground Investigation (Wales) Ltd (GI 2015). Desk-based surveys to locate the positions of historic pits were also undertaken by both the Coal Authority (CA 2013, ref. 001 and 002, quoted in BCA 2015, 10, 11) and by Bristol Coalmining Archives Ltd (Greenfield 2014). The geotechnical test-pitting suggested that a second pit or shaft was located at the south-west corner of the site.

The present watching brief was carried out during March, 2017. A digital photographic record was made as the work progressed, and a sample of those images is presented here as **Plates 1 to 9**.



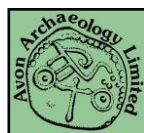
The project archive will be deposited with Bristol City Museum and Art Gallery under the reference BRSMG 2015/71 and a copy of the report will be entered on the Bristol Historic Environment Record (BHER 25534) as well as on the OASIS Online Access to the Index of Archaeological Investigations.

2 GEOLOGICAL, HISTORICAL AND TOPOGRAPHICAL BACKGROUND

The British Geological Survey depicts the solid geology underlying the site as belonging to the South Wales Middle Coal Measures Formation, here described as mudstone, siltstone and sandstone (BGS 2017). On the site, an extremely hard mudstone bedrock deposit was encountered at a depth of some 4m below the current ground surface (83m aOD) which made the insertion of sheet piling somewhat problematic (see **Methodology**, below). Historic borehole data from the shaft on the site shows no less than four coal seams at depths varying between 8 and 117m below the current ground surface (Greenfield 2014, 17). The upper of these is, however, described as “unsaleable” is only 1’ thick, and is, according to the above source, unlikely to have been worked.

The site is roughly rectangular in shape, and measures a maximum of some 35.16m east-west, by 22.33m north-south at its wider end, tapering to the east to a width of some 16m, giving a total area of some 661sq.m. The site is essentially flat, situated at a height of some 86m aOD. It is bounded by Speedwell Road to the north, Duncombe Road to the west, by the boundary with No.12, Duncombe Road to the south and by the eastern edge of a north-south lane off Speedwell Road to the east.

The site is situated some three miles north-east of the city centre, within the Speedwell area of Bristol, which historically lay within the parish of St George, created in the late 18th/early 19th century, from land which had formerly formed part of the royal hunting chase of Kingswood Forest. The area encompassed by the present parish is believed to have fallen within the bounds of the far larger manor and Hundred of Barton Regis, Gloucestershire, recorded in Domesday as the manor of “Bertune” and held by the crown (Morris 1982). The manor passed through several hands including the earls of Gloucester, the Dukes and Earls of Warwick and the Earls of Pembroke, before being purchased by Thomas Chester of Knole in the 16th century (BaRAS 2016, 2; Etheridge 2004, 11). Speedwell later formed a part of St George parish, which itself fell within the bounds of Kingswood Chase, an area known for coal-mining activity from the medieval period onwards (Greenfield 2014, 12). These earlier mines would have utilised coal which outcropped on the surface, mainly for the lime-burning industry, but as demand for coal grew, into the 17th and 18th centuries, later mines would have comprised deeper pits which would have necessitated some form of measures to cope with drainage and to raise the coal to the surface (op.cit., 30).



Reference to the Bristol Sites and Monuments Record (BSMR) suggests that there is no known prehistoric activity within the bounds of the site itself or in the wider area, and that the only known Romano-British activity in the wider area consists of the discovery, in c.1935, of a cobbled surface, believed to form part of the Roman road between Bath and Sea Mills, located in St George's Park, to the south-west of the site (BSMR 1391; NGR ST 62407370).

The underlying geology of the Kingswood/St George area has meant that the abundant resources of both clay and coal have been exploited from at least the 18th century onwards. Two major 19th century brickworks were located within a radius of 900m of the site, one at Whitehall Road to the west, and the second, the Hollybrook Brickworks, only 275m to the north-east, at Clarence Road (BHER2161).

Bristol Coalmining Archives Ltd have prepared an extremely comprehensive report on mining in the area of the site (Greenfield 2014) and on the Belgium Pit itself, over which the site is located. The main points from the report, where relevant to the development and to features/deposits revealed during the watching brief, are reproduced below:

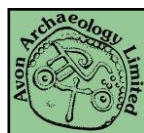
The site is situated within an area of extensive and intensive coal mining activity - from at least the 18th century up until the early 20th century. The last working coalmines in the immediate area, Speedwell, Deep Pit and Hanham all closed in the 1920s/30s (Greenfield 2014, 2).

It is thought that the original pit on the present site dates from the late 18th century, but was deepened and expanded when Handel Cossham took over mining interests in the area in the late 19th century (Greenfield 2014, 4). From the time of Cossham's involvement, the pit, although extensive, had a working life of only twenty years, exploiting four main coal seams, which produced superior quality coal much in demand for both domestic consumption and for locomotives and the local gas works (op.cit., 11 and passim).

No less than seven recorded shafts lie within 150m of the site, and two lie either within the site's borders or immediately adjacent (one of which was recorded during the previous watching brief on the site (see below; Greenfield 2014, 6).

The main seams lie at depths of over 50m, and it is therefore thought unlikely that any surface/opencast or shallow-depth mining would have taken place within the bounds of the site (Greenfield 2014, 11). One seam, the Polecat, outcrops at the surface just to the north of the site, but is of inferior quality coal, classed as "unsaleable". Of the three types of earlier (pre c.1690), shallow (i.e. less than 40m in depth) mining activity, from outcrops, bell-pits or early shallow shafts, the BCA report suggests that such activity is unlikely on the present site, although cannot be conclusively ruled out (op.cit., 30-35).

Map evidence suggests that the pit was in existence by 1790, by which time the increasing



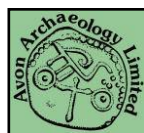
demand for coal made it economically more viable to sink deeper shafts which would have required mechanical lifting gear and measures to ensure drainage. It is thought that the Belgium Pit was originally sunk to a depth of some 124m, to exploit three veins of coal, all existing at depths of over 52m. A further vein, the Toad, also existed to the north of the site, and may also have been worked from this early date (Greenfield 2014, 35).

Between the 1820s and 1840s, many of these deeper 18th century pits were closed as they became financially unviable, faced with increasing competition from coal from South Wales and the Midlands (Greenfield 2014, 30-1). In the 1870s, the Belgium Pit was re-opened as part of Handel Cossham's take-over of the Kingswood coal field, coupled with the discovery of a new coal seam, the Kingswood Great Vein in c.1872, which lay to the south-west of the site at a depth of over 240m (op.cit., 20, 29). The workings in the Great Vein lay largely to the south-west of the site (op.cit. plan pp. 23 and 37). The full extent of the "take" of the Belgium Pit (op.cit. 24) covered a significant area to the south-west, extending up to half a mile to the south, as far as Two Mile Hill, with only two workings beneath the site itself (see Cornwell 2003, 57). From the vertical shaft, two main workings were excavated, one from the base (at 124m), running beneath developed ground to the south, but also heading north to connect with Duncombe Pit, and one from a depth of 84m, which exploited seams to the west (Greenfield 2014, 38).

Associated contemporary structures include a known horse "gin", or horse-powered winding gear for bringing coal to the surface, known from early records (Greenfield 2014, 26). Other later structures are shown on maps from 1st edition OS onwards (see below). The report also suggests that a Newcomen steam engine may have been used to pump water from the mine (op.cit., 30).¹

Seven vertical shafts are recorded by BCA Ltd within a radius of 152m of the site, including two within the boundary of the site. It is also possibly significant that three historic shaft records exist for Belgium Pit (Ground Investigation (Wales) Ltd 2015, 5) showing similar stratigraphy, but slightly differing shaft depths, suggesting that the records related to three distinct shafts within the same colliery. There are also four wells and one pump shaft within the same area, although none within the site perimeter (Greenfield 2014, 40). No drainage adits (known as "levels") are recorded within the site, although one does exist to the north (op.cit., 43).

¹ Waterlogging of the workings is a characteristic feature of mining activity in the area, which was combatted in two ways. The first was by the excavation of underground conduits or "Levels", which drained water away from the workings (Cornwell 2003, 23). Many of these were excavated during the late 17th /18th centuries and at least two are known in the vicinity of the site, at both Lodge Hill and Soundwell (op.cit. 21). A second, later expedient was the use of a steam-powered pumping engine (Newcomen engine), of which an early example is known to have existed at Soundwell Colliery from at least 1739 (op.cit. 23).



The 1840s tithe map (accessed via the Bristolknowyourplace online resource) shows a small square feature at the corner of Speedwell and Duncombe Roads, which may be a mine shaft, but is not labelled, or plotted with reliable accuracy. Interestingly, the eastern boundary of the site is shown as one of two dashed lines, which is how it is shown up until at least the time of the 3rd edition OS map.

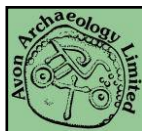
Map regression via the Bristolknowyourplace online resource suggests that, at the time of the 1st edition OS (1885-6), the Belgium Pit occupied much of the triangle of land between what is now Speedwell Road, Duncombe Road and Whitehall Road, and comprised a major spoil heap or heaps, a large rectangular pond, two buildings fronting Speedwell Road, and a circular building, possibly a furnace or kiln, also at the northern edge of the site. The mine shaft is probably represented by the small square feature at the corner of Speedwell and Duncombe Roads, located within a sub-rectangular enclosure. To the east, fronting Speedwell Road, are a couple of large buildings, with, to the west, a series of small rectilinear enclosures, possibly stalls for the storage of coal or for horses. At the corner between Duncombe Lane and Speedwell Road are a couple of parallel lines, interpreted in the Bristol Coalmining Archives Report as a gantry, for the transfer of coal to the railhead at Speedwell Colliery, (Greenfield 2014, 27). A small square building is located just to the south-east of the conveyor. At the south-west corner of the triangle of land is a T-shaped building or buildings fronting Whiteway Road, labelled, "W.M.", probably "weighing machine" (ibid.).

After being re-opened by Cossham, the Belgium Pit was only in existence for a further twenty years, during which time approximately 500 tons of coal were being brought to the surface per day, exploiting the Kingswood Great Vein, which had been discovered in the 1830s (Cornwell 2003, 56, 65). Coal from the Great Vein was of particularly good quality, and used for both house coal and locomotive coal, as well as at both Bristol and Bath gas works (ibid.).

By the early 1900s, the pit is thought to have been used only as an air shaft (Cornwell 2003, 65) and is recorded as "Disused" on the 2nd edition OS map of 1904. By that time, the large pond appears to have been filled in, and two small hollow square structures are depicted to the west of the western arm of the spoil heap, which is by that time depicted as two linear bunds. A Methodist chapel has been erected at the apex of the triangle of land to the east of the site

By the time of the 3rd edition OS, the two bunds of the original spoil heap have further reduced in size and the two small hollow square structures to their west have been incorporated within a larger rectangular structure.

Between 1926 and 1930, the Speedwell area was developed for housing, including the area



of the site itself, on which a row of terraced houses was constructed fronting Duncombe Road, with gardens to the rear (**Figure 8**). In the area of the site, an additional building of unknown function was constructed at the rear (south) end of the plot, with an outhouse along the southern boundary (Googleearthpro 2009). Both these additional buildings and Nos. 14-16, Duncombe Road, were subsequently demolished between May and July 2013, prior to the current development works.

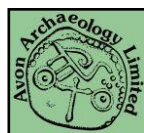
Recent history of the site:

During preliminary groundworks in 2013, undertaken for the present development, excavation revealed a brick-lined shaft, 3m (10') in diameter, which had been backfilled with material thought to represent the remains of the industrial buildings previously standing on the site. The shaft was found to be capped with a concrete capping, reinforced with lengths of rail (Greenfield 2014, 41). It is thought that the shaft represents the main vertical shaft of the Belgium Pit, which had been disused for coal extraction since at least 1904, but may have served as an air shaft for the nearby Speedwell Pit (see above; Greenfield 2014, 39). After its discovery, the material within the shaft was further compressed, and a layer of 75mm of clean stone was used to seal off the shaft.

As a result of this discovery, the site has been subject to further investigative reports, the main ones having been undertaken by Ground Investigation (Wales) Ltd (GI 2015), by Bristol Coalmining Archives Ltd (Greenfield 2014), and by the Coal Authority (CA 2013), all of which have been accessed during the compilation of the present report. The Ground Investigation report (GI 2015) comprised the excavation and recording of five boreholes and six test-pits, located largely within the footprint of the future development. Borehole 4 and Test Pit 1, located at the south-west corner of the site, revealed unusually soft made ground deposits to a depth of over 8m (at 74m aOD), thought to be indicative of the presence of a second mineshaft (GI 2015, figures 1 and 2).

As mentioned above, the site has also been subject to a previous archaeological watching brief, during the geotechnical test-pitting, during which the large brick-lined mine shaft was recorded, together with the deposits suggestive of a further possible pit or shaft in the south-west corner of the site (BaRAS 2015).

In the immediate vicinity of the site, an archaeological watching brief (BHER 22409) was undertaken at Speedwell Technical College, now Bristol Brunel Academy, the site of the former Speedwell Colliery (BSMR 3961; Cotswold Archaeology report no.07094). Speedwell Colliery itself (BSMR 1925M) was a major industrial concern, and outlived both the Belgium Pit and Duncombe Pit to the north. The colliery lay 380m to the west of the Belgium Pit, and was already in operation by the time of the 1840s tithe, at which time it was known as "Starveall Coalworks" (BRO EP/A/32/32). The Speedwell Colliery worked four major coal seams and was operational until 1936. During the watching brief at Speedwell Technical College, undertaken in 2006, a brick-lined mine shaft was recorded, which had been



backfilled with rubble and capped with concrete (Cotswold Archaeology, see above).

A further watching brief and standing building survey was undertaken at the site of the former Hollybrook Brickworks by Avon Archaeological Unit Ltd in 2005 (BHER 2161). The report recorded 19th century brick structures, including a free-standing chimney, as well as working floors and storage areas (Ducker, R. K., AAU 2005).

3 AIMS AND METHODOLOGY

The aim of the watching brief was to record all archaeological features and deposits revealed during the first phase of the construction works.

The construction works were undertaken in two main phases. The first phase involved the preliminary excavation of the two areas in which archaeological features had been recorded or suspected (Trenches 1 and 2; **Figure 3**). Both areas were delimited by vertical sheet piles, 5m in length, which were inserted to depths of over 4m below the present ground surface.

Trench 1, which measured 8m north-south by 8m east-west, was excavated to a depth of some 3.7m below the present ground surface, (at approximately 83m aOD) at which point deposits of natural mudstone were encountered. Excavation was undertaken by a tracked 360° mechanical excavator, using a grading bucket of 1.5m width. After excavation, a reinforced concrete capping, 8m square, was placed over the area of the mineshaft (**Plate 9**).

Trench 2, which measured 6m north-south by 6m east-west, was excavated to a similar depth (some 3m below present ground level, at approximately 83m aOD). At this point the natural mudstone was encountered, and also, more significantly, significant coal deposits and moderate quantities of waterlogged timber. Excavation was halted at this depth, and a reinforced concrete cap was installed, as in Trench 1.

The second phase of construction work was not monitored, as the new build was to be sited on a concrete raft, rather than strip foundations, and excavations merely involved the stripping of the site into recent (2013) made ground deposits to a depth of some 300mm below the present ground surface.

Archaeological monitoring of these two piled areas (Trenches 1 and 2; **Figure 3**) was undertaken by photographic record only, as access was not possible due to the depth of the piles.



4 RESULTS OF THE MONITORING

Trench 1

Stratigraphy (Plate 2)

Excavation of Trench 1 revealed a relatively straightforward sequence of deposits, with a modern tarmac/bedding layer (Contexts 100/101) overlying a mixed grey/black deposit of silty clay with frequent ceramic building material fragments and small stones (Context 102), which in turn overlay the natural yellow clay substrate (Context 103), which was encountered at a minimum depth of approximately 1m below the current ground surface. The natural yellowish grey mudstone was revealed at a minimum depth of 2.7m below the current ground surface (between 83m aOD and 84m aOD (**Plate 5**)).

Archaeological Features/Deposits

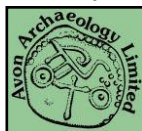
The brick-lined mineshaft revealed in the initial groundworks (see **Cover Photo** and **Plate 3**) was encountered at a depth of some 900mm below the current ground surface (at 85.53m aOD, Ground Investigation 2015, figure 1). The shaft was constructed of red bricks, laid side by side, bonded with a light grey lime mortar. The shaft measured some 3m (10') in diameter and was at least 4m deep. The upper part of the shaft was backfilled by modern demolition rubble (Context 106) to a depth of at least 3m. The shaft itself was located within a steep-sided cut (Context 108), which truncated the yellow clay natural substrate. The lower fill of the shaft (Context 110; **Plate 5**), recorded between 3m and 3.7m below the current ground surface, was composed of demolition rubble (ceramic building material), clay and some coal, within a loose silty matrix.

To the north-east of the mineshaft, the backfill of Cut 108 was visible as a loose black deposit (Context 107), consisting largely of coal fragments, coal dust and mudstone fragments. The cut was visible in both the south-facing and the west-facing sections of the trench (**Plates 3 and 4**). Cut 108 measured over 7m east-west when first visible, at a height of 900mm below the current ground surface, tapering to approximately 3m wide at a height of 3.7m below the current ground surface. **Plate 4** shows that the southern edge of the cut bowed out slightly to the south. As recorded, the cut measured over 1m north-south and was over 1.8m deep. It is likely that it represented the cut for mineshaft 104.

Trench 2

Stratigraphy

Excavation of Trench 2 revealed a similar sequence of deposits to those encountered in Trench 2, with a modern tarmac/bedding layer (Context 200) overlying a mixed grey/black deposit of silty clay with frequent ceramic building material fragments and small stones (Context 201), which in turn overlay the natural yellow clay substrate (Context 202), which



was encountered at a minimum depth of 500mm-600mm below the current ground surface. The natural yellowish grey mudstone (Context 203) was revealed at a minimum depth of approximately 2m below the current ground surface (at approximately 83m aOD; **Plate 6**).

Archaeological Features/Deposits

The possible backfilled mineshaft recorded in the Ground Investigation Ltd excavation (GI 2015) was recorded at a depth of some 2m below the current ground surface (approximately 83m aOD). At this depth, the feature (Fill 204, Cut 205) appeared to be an irregular ovoid shape in plan (**Plate 6**), truncating the natural mudstone substrate (Context 203) and was filled with a soft, mixed dark brown/black silt, with orangey clay smears and coal smears and rare medium/large stones. The feature was waterlogged at this depth, and, in fact, the previous GI test pit at this location (TP 1) had had to be abandoned due to water ingress (GI 2015, 8). The dimensions of the feature were extremely difficult to estimate due to ground conditions (**Plate 6**), but it is thought that it measured, in plan, at the base of the trench, some 2-3m east-west by 2m north-south.

To the north and south of this feature, excavation revealed irregular black coal deposits (Contexts 206 and 208). Context 206, which was visible in the base of the trench and in the north and west-facing sections (**Plate 7**) consisted of a clean black coal-dust deposit, which was waterlogged where it occurred in the base of the trench. Towards the east edge of the trench, excavation of the deposit revealed waterlogged timbers, consisting of both unworked timber uprights and roughly hewn planks (**Plate 8**). Estimated dimensions of these fragments give an approximate maximum length of less than 2m for the timber uprights, and plank fragments of maximum 0.5m long by 0.2m wide. It is likely that Deposit 206 was located within a horizontal cut [Context 207], visible in the north-facing section of Trench 2 (**Plates 7 and 8**), which measured over 6m east-west, by over 1m north-south by over 0.75m high. A further black coal deposit (Context 208) was observed to the north of Cut 205, possibly more ephemeral and irregular, measuring approximately 1.5-2m east-west by 1m north-south and was of unknown depth (**Plate 6**).

5 DISCUSSION

The watching brief reported here was carried out in fulfilment of a pre-existing WSI produced by Bristol and Region Archaeological Services (BaRAS 2015). Archaeological monitoring was undertaken of two targeted areas of known or suspected mining activity, and all archaeological features and deposits were recorded.

No remains relating to the 20th century row of buildings fronting Duncombe Road, or remains of the 19th century buildings relating to the Belgium Pit to were found to survive. It is likely that the site was subject to major truncation during preliminary groundworks in 2013, during which the foundations of the demolished 20th century buildings were removed, and a



substantial amount of levelling material was imported (GI 2015, 8).

Features which *did* survive from the area's mining legacy and were recorded during the present watching brief comprised not only the substantial brick-lined mineshaft at the northern edge of the site, but a further possible bell-pit, in the south-west corner of the site, (in Trench 2), associated with and possibly cutting further possibly earlier mine-workings (Cut 207), which may have been timber-lined. It was not possible to examine the timbers at close quarters, but a superficial visual inspection would suggest that they resemble the 17th century oak timbers recorded at Hanham Colliery (Cornwell 2003, 13). It is likely that the possible bell-pit would have pre-dated the main working period of the Belgium Pit. The association of a bell-pit with earlier, timber-lined workings ("headings") has been recorded by Cornwell at Hanham Road Colliery, where, as here, the earlier workings had been back-filled with small coal.

No evidence for drainage levels (conduits) or industrial machinery of any sort was recorded during the watching brief.

6 CONCLUSIONS

In all, a total of one possible bell-pit, a horizontal timber-lined "heading" and a substantial brick-lined vertical shaft were recorded during the present watching brief. The brick-lined shaft undoubtedly formed part of the Belgium Pit, and is probably the latest mining-related feature on the site. The possible bell-pit is likely to be earlier, possibly late 18th century, and appears to truncate timber-lined mine-workings which may be of earlier date.

No earlier features, or features related to anything other than mining activity were recorded.

7 BIBLIOGRAPHY

BGS

British Geological Survey Online Viewer.

<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>

Bristol and Region Archaeological Services, 2016

Archaeological Watching Brief, Nos.14-16, Duncombe Road, Speedwell, Bristol, Alistair Byford-Bates, BaRAS report no. 3324/2016, unpublished client report, OASIS: bristola1-222398.

CIfA, 2014

Standard and Guidance for an Archaeological Watching Brief. Chartered Institute for



Archaeology.

Coal Mining Authority, 2013

Coal Authority Residential Mining Report ref. 001, 8th July 2013.

Coal Mining Authority, 2013

Coal Authority Substantive Concern ref. 002, 15th October 2013.

Cotswold Archaeology 2007

Phase 1 Development, Speedwell Technology College, Bristol, archaeological watching brief for Skanska Integrated Projects, Cotswold Archaeology unpublished client report no. 07094.

Cornwell, J., 2003

The Bristol Coalfield, Landmark Publishing, Ashbourne.

Ducker, R.K., 2005

Site of the Former Jewson Yard at Clarence Road, Chester Park, Fishponds, Bristol: archaeological standing building recording and watching brief, Avon Archaeological Unit Ltd unpublished client report.

Etheridge, D., 2004

Jewson Site at Fishponds, Bristol. Archaeological Desk-Based Assessment (BSMR 2200), Avon Archaeological Unit Ltd unpublished client report, Bristol.

Greenfield, I., 2014

Coal Mining Risk Assessment Report for Proposed Erection of 13 Apartments, 14-16 Duncombe Road, Speedwell, Bristol BS 15 1EL, Bristol Coalmining Archives Ltd, Bristol.

Ground Investigation (Wales) Ltd, 2015

Duncombe Road, Bristol, Ground Investigation Report, Ground Investigation Report No.1173-02-01.

KnowYourPlace

Bristol City Council Online heritage resource.

www.bristol.gov.uk/knowyourplace

MoRPHE, 2015

Management of Research Projects in the Historic Environment. Historic England.

Morris, J. (ed.), 1982

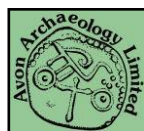
Domesday Book vol. 15: Gloucestershire, Phillimore, Chichester.



Appendix 1: Context Descriptions

Trench 1 (All measurements in Trench 1 are approximate, as trench was not accessed directly for health and safety reasons)

Context	Type	Description	Dimensions
100	Layer	Tarmac surface overlying much of the site.	>0.1m
101	Deposit	Bedding for tarmac (100). Consists of redeposited sandy silt topsoil and scalplings.	>0.2m (see (100))
102	Deposit	Mixed soft black deposit, silty clay matrix containing ceramic building material fragments, small to medium stones and yellow clay smears. Probably corresponds to BaRAS report Context 301. Modern made ground deposit, levelling layer imported on to site in 2013 (GI 2013, 8).	0.5m-0.8m thick
103	Layer	Stiff yellow clay natural substrate, becoming yellowish red/greyish yellow at depth. Corresponds to BaRAS report Contexts 302/401/503.	1.8m
104	Structure	3m (10') diameter brick-built mine shaft, backfilled by Context 106. Corresponds to BaRAS report Context 202.	3m diameter, total depth unknown
105		Not used.	
106	Deposit	Upper fill of mineshaft 104, consisting of mixed modern demolition rubble in a redeposited sandy silt topsoil matrix.	2m thick, <3m diameter
107	Deposit	Mixed black deposit consisting of a matrix of coal fragments, with some small mudstone fragments. Backfill of Cut [108]. Overlain by deposit 102.	>1.8m thick; >7m E-W by >1m N-S
108	Cut	Steep-sided cut in north-east corner of Trench 1, for construction of mineshaft 104. Backfilled by Context 107. Base tapers to east.	>1.8m deep; >7m E-W by >1m N-S
109	Layer	Natural mudstone. Corresponds to BaRAS report Contexts 303/402/504.	Reached at 3m below the current ground surface



110	Deposit	Lower recorded fill of mineshaft 104, consisting of demolition rubble, clay and some coal, within a silty matrix.	>1.7m thick, 3m diameter
------------	---------	---	--------------------------

Trench 2 (All measurements in Trench 2 are approximate, as trench was not accessed directly for health and safety reasons).

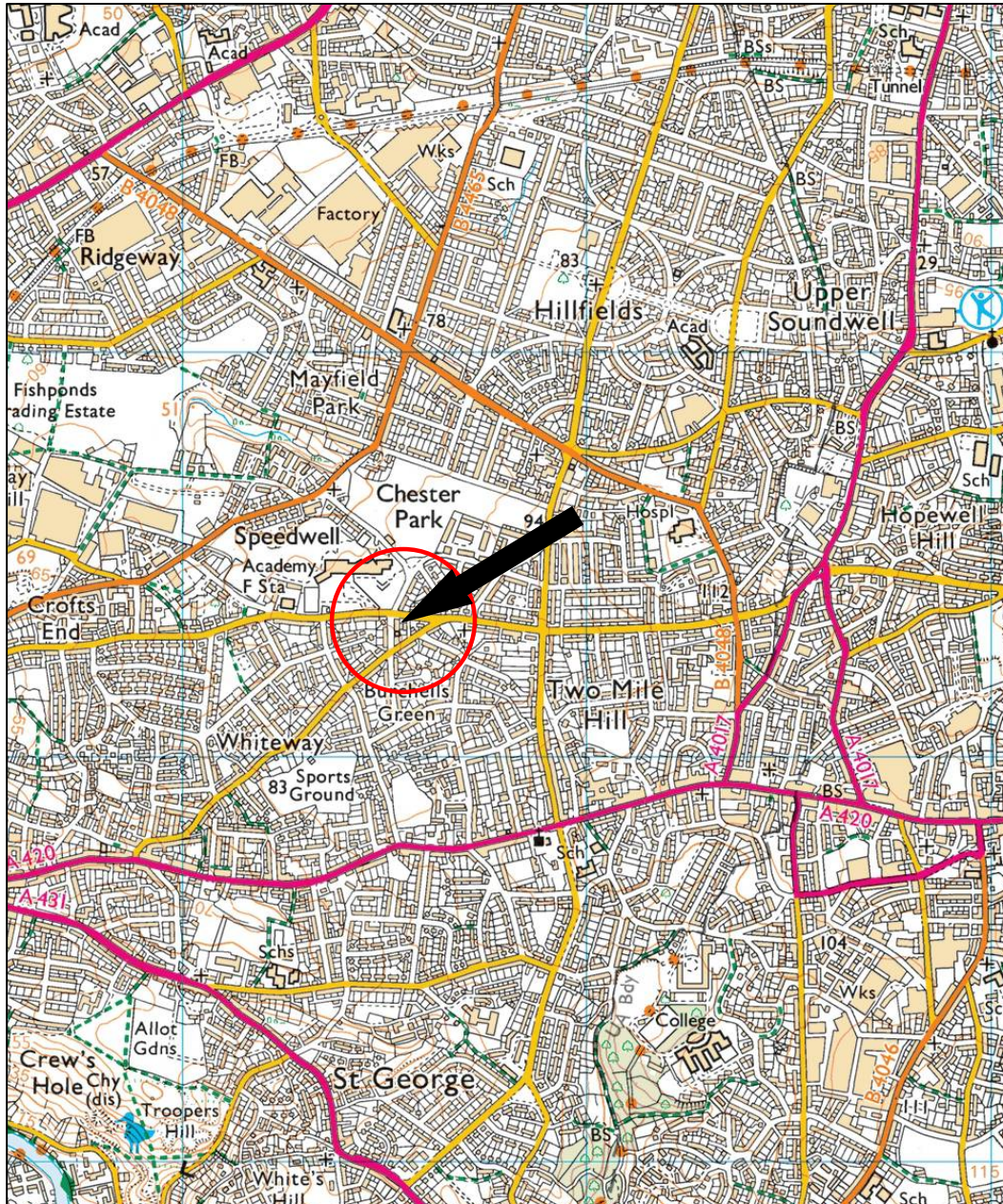
Context	Type	Description	Dimensions
200	Layer	Tarmac surface and bedding for tarmac, overlying much of the site. See 100 and 101 .	>0.3m
201	Deposit	Mixed soft black deposit, silty clay matrix containing ceramic building material fragments, small to medium stones and yellow clay smears. Probably corresponds to BaRAS report Context 301. See also 102 . Modern made ground deposit over much of site.	0.3m-0.75m
202	Layer	Stiff yellow clay natural substrate, becoming yellowish red/greyish yellow at depth. See also 103 . Corresponds to BaRAS report Contexts 302/401/503.	2m thick
203	Layer	Natural mudstone. Corresponds to BaRAS report Contexts 303/402/504.	Reached at 2m below the current ground surface
204	Deposit	Dark brown/black silt deposit with orangey clay smears and coal smears and rare medium/large stones. Fill of Cut [205].	2-3m E-W by 2m N-S, depth >8m (GI 2015, 8).
205	Cut	Probable cut for mineshaft (possible bell pit). Profile not known. Irregular ovoid in plan.	As above
206	Deposit	Very clean black coal (dust) deposit, waterlogged in base of trench. Contained waterlogged timbers, both rough-hewn planks and lengths of unworked timber. Fill of probable horizontal heading, Cut [207].	>6m E-W by >1m N-S by >0.75m thick
207	Cut	Horizontal cut, filled by Context 206 . Truncated interface between clay layer 202 and mudstone 203 .	As above
208	Layer	Ephemeral black coal (dust) deposit, seen in plan only as an irregular smear in base of Trench 2. Possible remnant coal seam.	1.5m-2m E-W by 1m N-S, thickness unknown





Figure 1

Site Location Plan



No defined scale



Figure 2

Boundary of the Study Area with Trench Locations

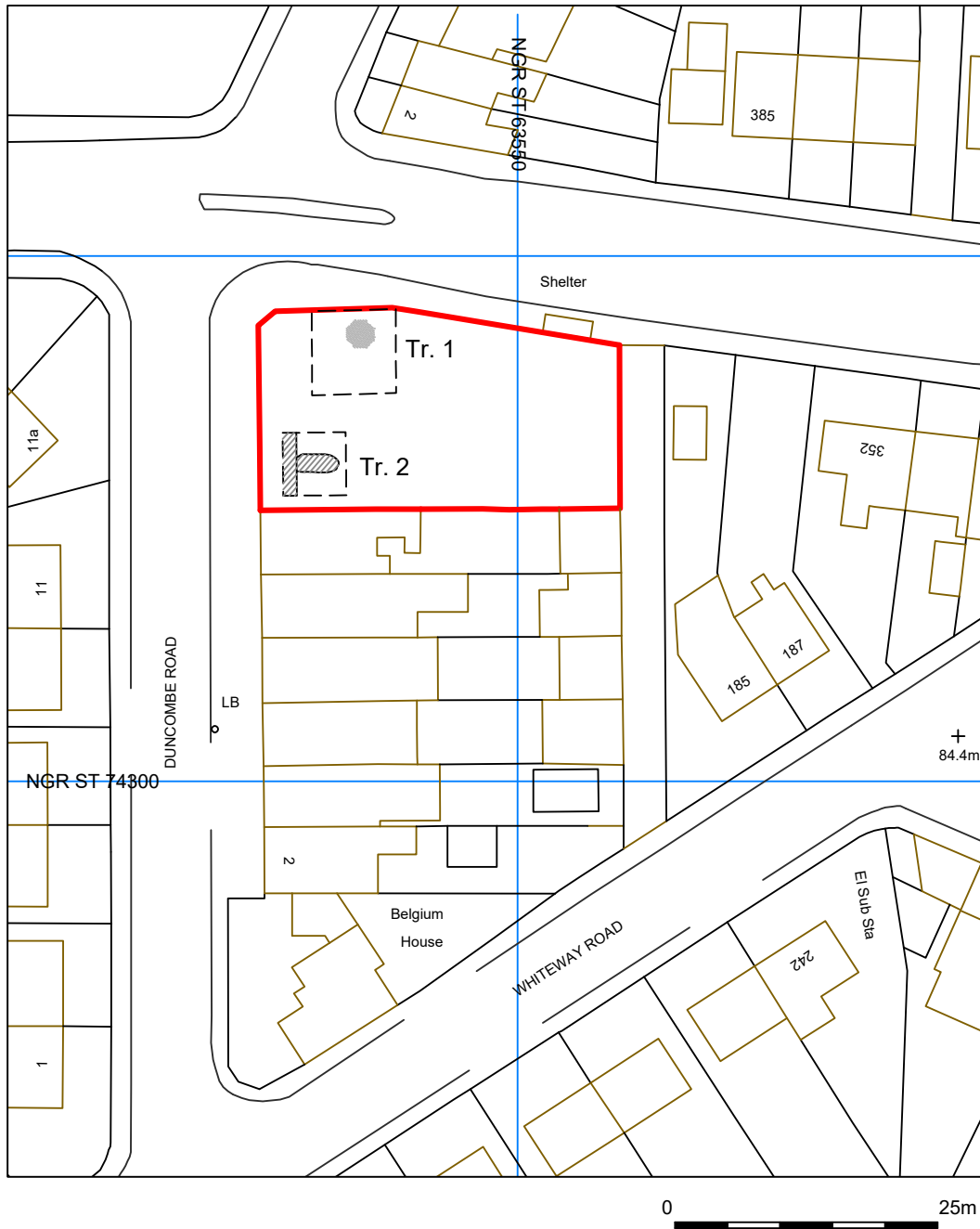


Figure 3

Location of trenches 1 & 2, showing brick lined mine shaft [104] and deposits (204 & (206)

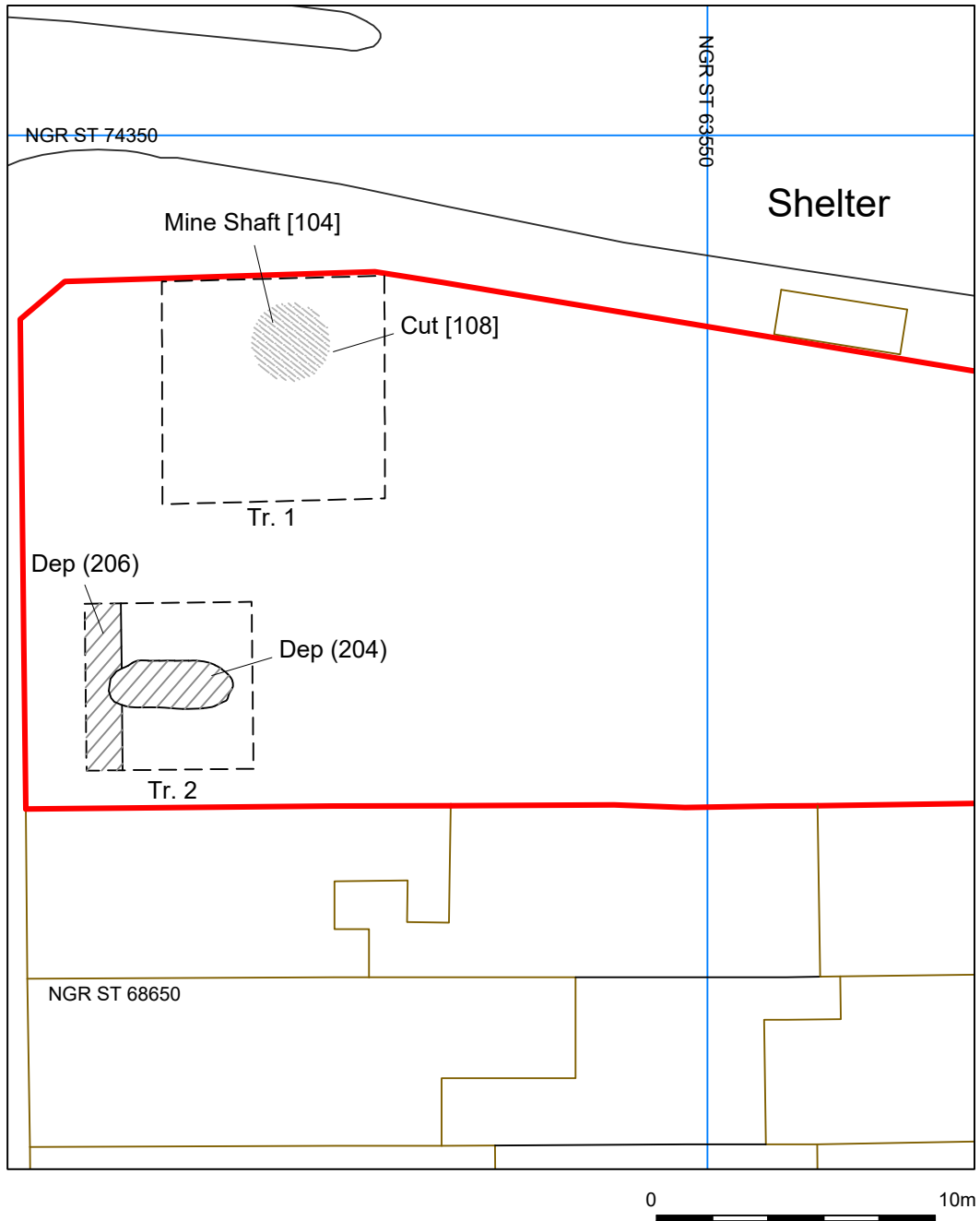


Figure 4

Extract from tithe map of the parish of St George, 1845. Source: KnowYourPlace, Bristol City Council. Approximate boundary of study area outlined in red, for indicative purposes only. Not to scale.

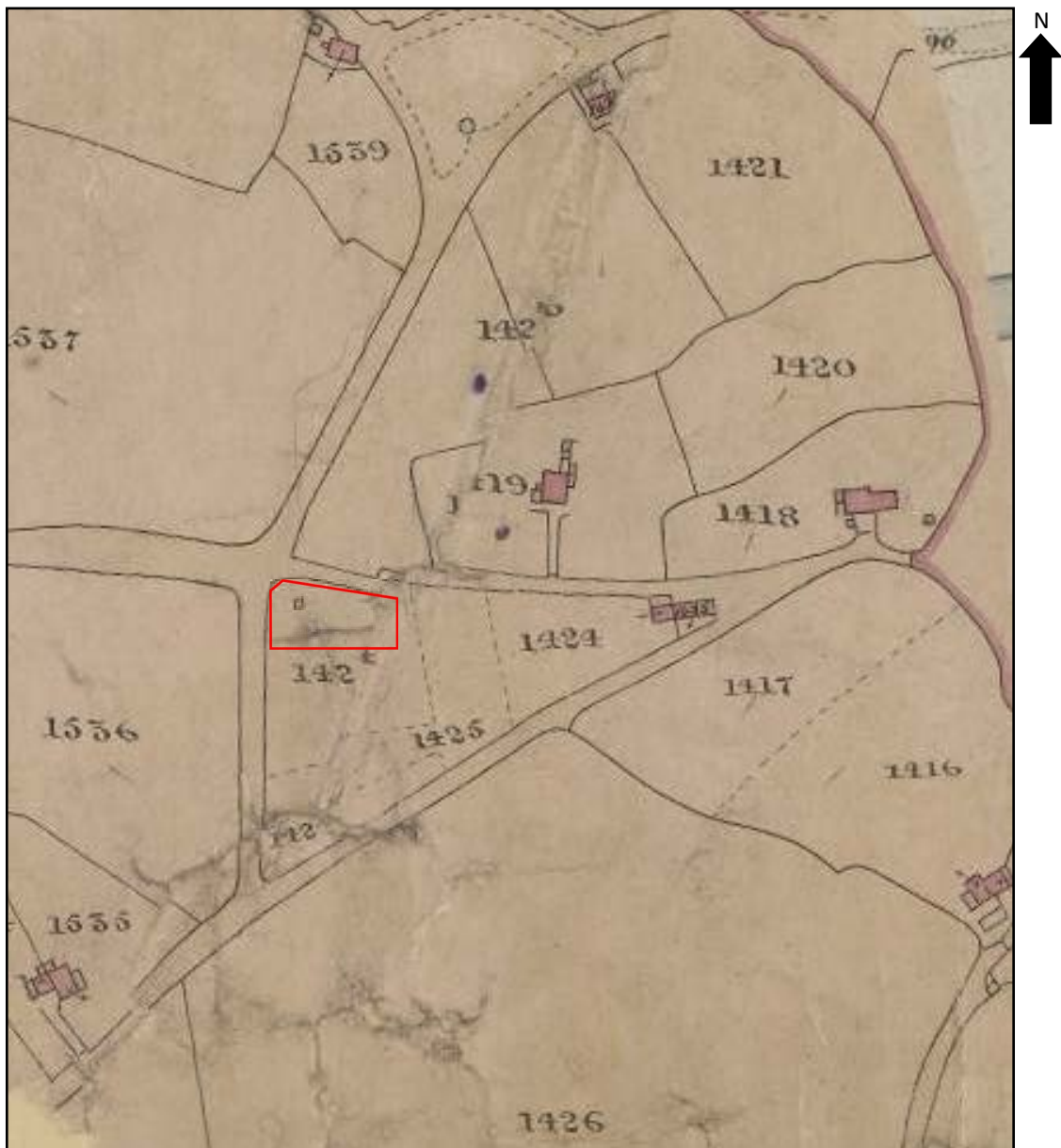


Figure 5

Extract from First Edition Ordnance Survey 25" Scale, Gloucestershire Sheet LXXII.14 Western Division, surveyed 1881, published 1883. Source: KnowYourPlace, Bristol City Council. Approximate boundary of study area outlined in red, for indicative purposes only. Not to scale.

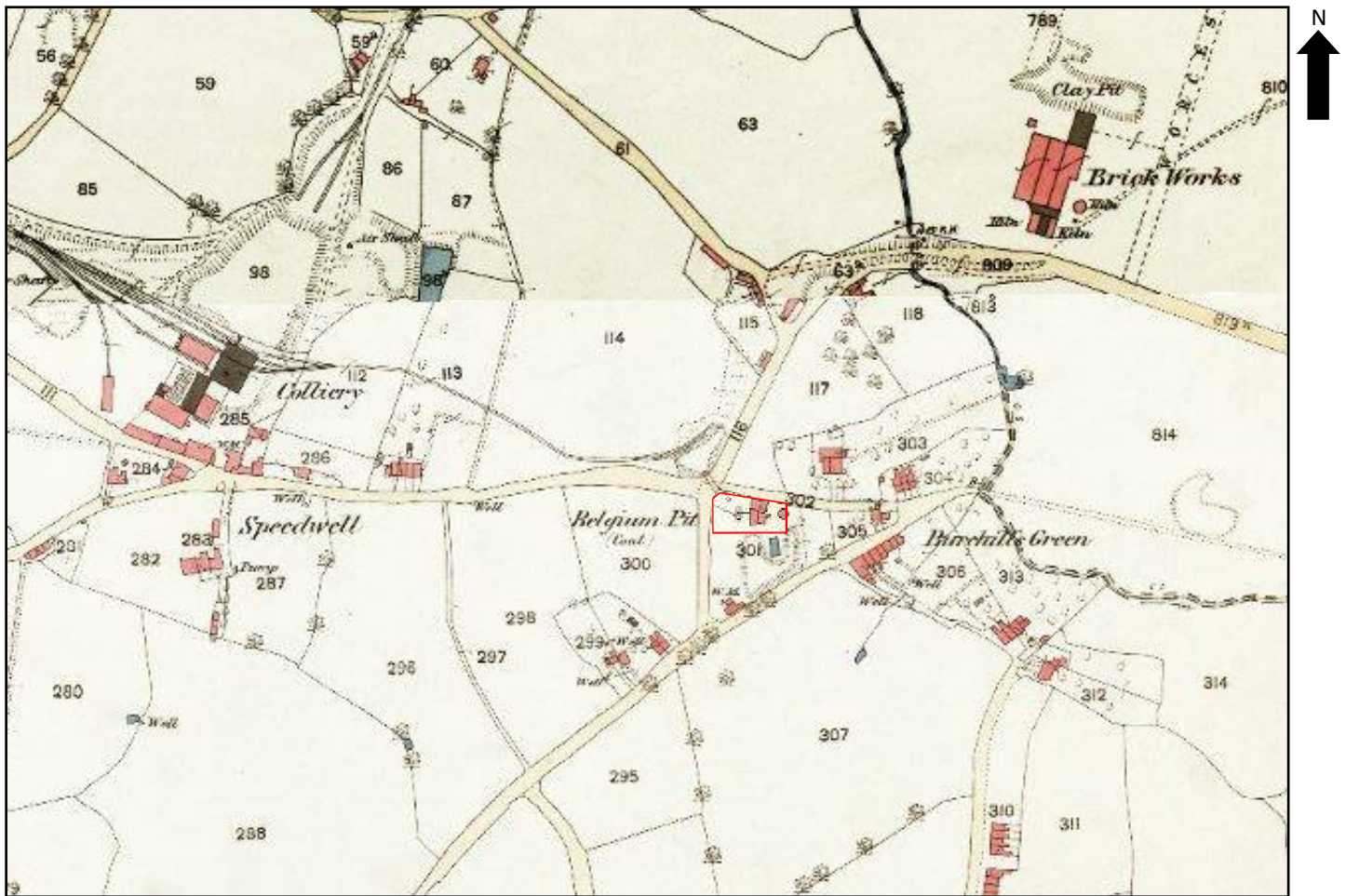


Figure 6

Extract from Second Edition Ordnance Survey 25" Scale, Gloucestershire Sheet LXXII.14 Western Division, revised 1902, published 1904. Source: KnowYourPlace, Bristol City Council. Approximate boundary of study area outlined in red, for indicative purposes only. Not to scale.

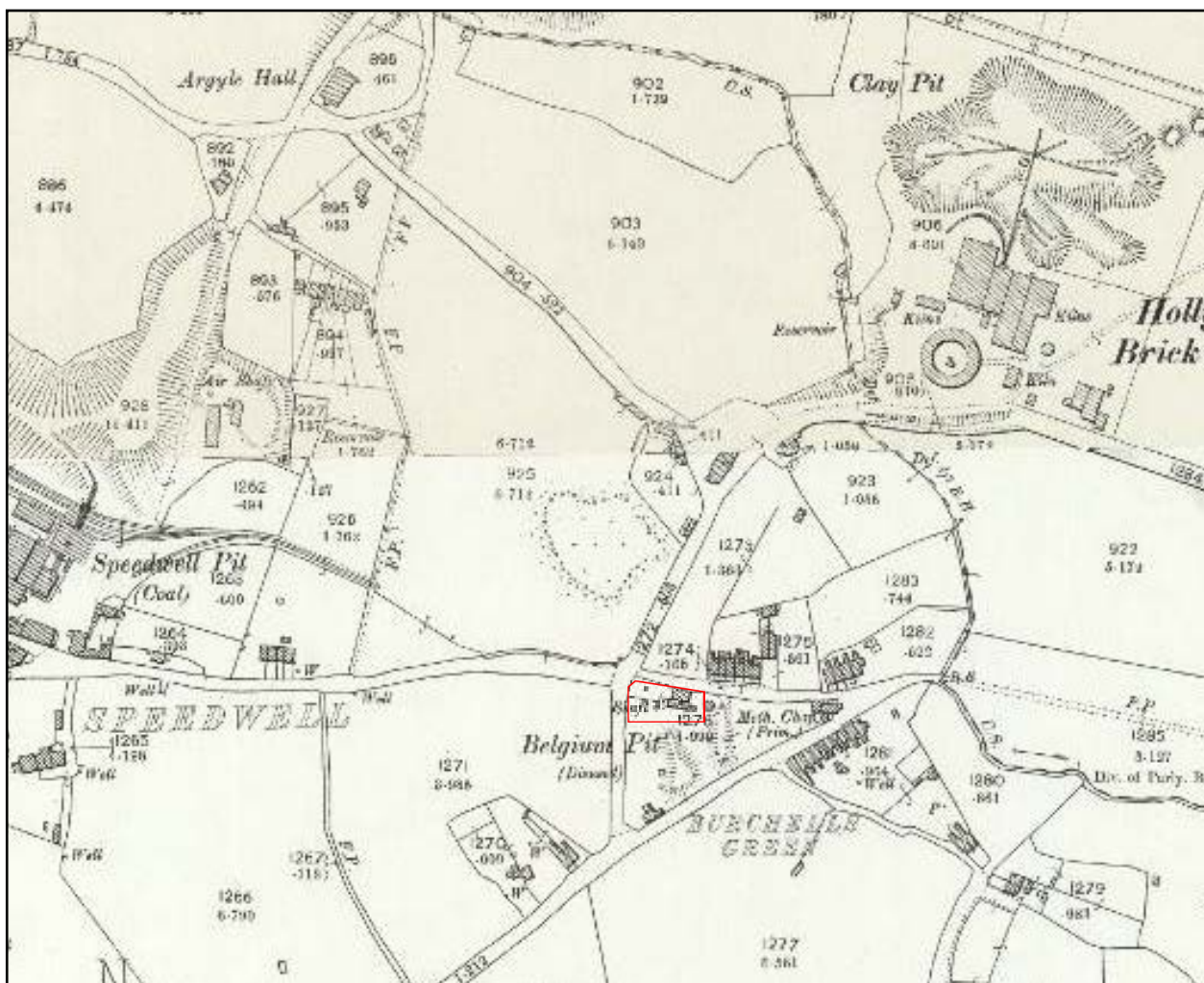


Figure 7

Extract from Third Edition Ordnance Survey 25" Scale, Gloucestershire Sheet LXXII.14 Western Division, revised 1913, published 1918. Source: KnowYourPlace, Bristol City Council. Approximate boundary of study area outlined in red, for indicative purposes only. Not to scale.

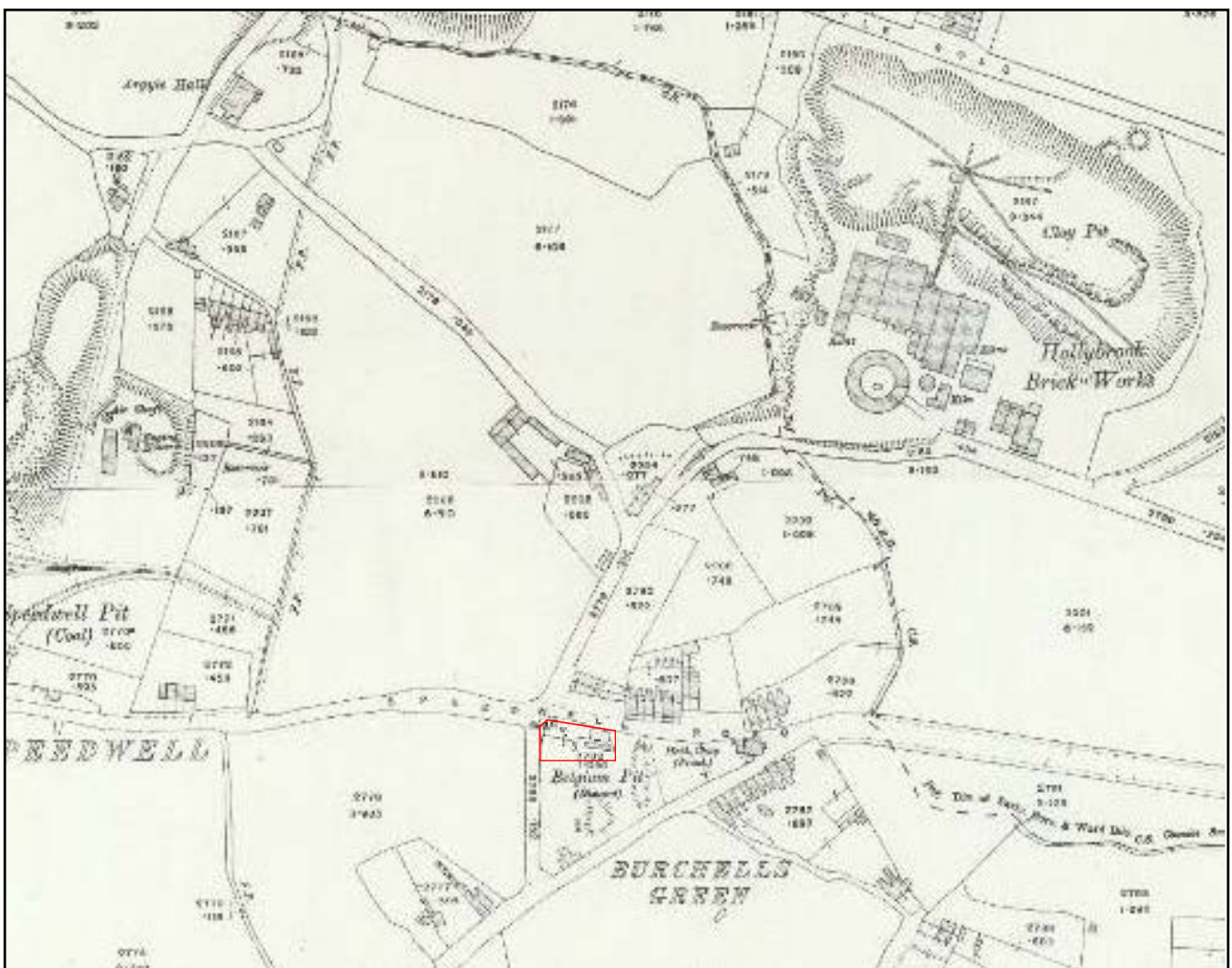
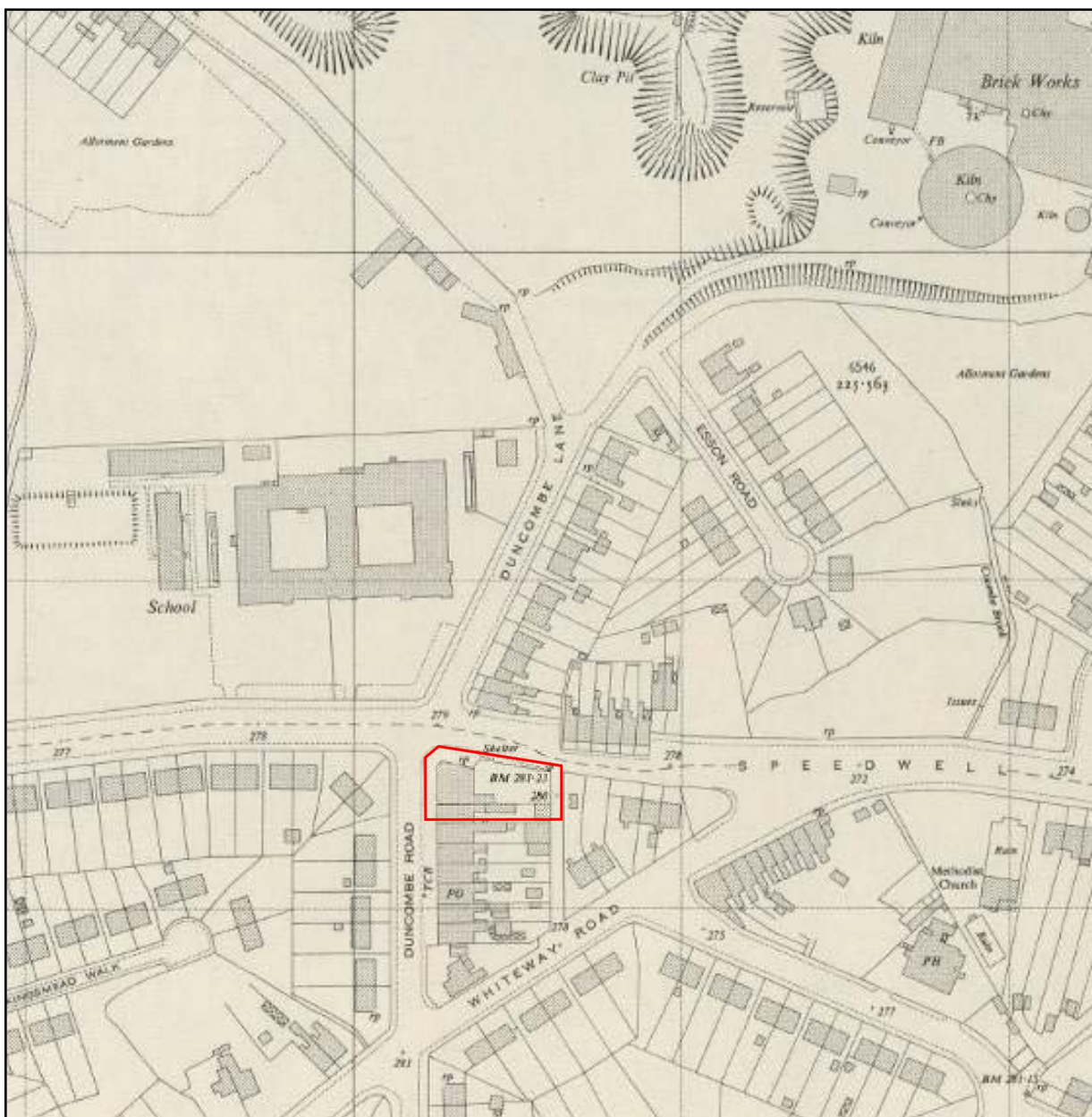


Figure 8

Extract from Ordnance Survey 1:1,250 scale Town Plan of Bristol, published 1950. Source: KnowYourPlace, Bristol City Council. Approximate boundary of study area outlined in red, for indicative purposes only. Not to scale.





Plates



1. General view of site from west, showing houses fronting Speedwell Road to east of site.



2. Trench 1 during insertion of sheet piles, showing south-facing section, to a depth of 1.2m.



3. Trench 1 during excavation, from south-east, showing Cut [108] with Fill (107) to right of frame, and northern edge of Shaft (104).



4. North-east corner of Trench 1, showing Cut [108] with Fill (107), in south- and west-facing sections.



5. Base of Trench 1, showing Fill (110) and Mudstone (109), from south-west.



6. Base of Trench 2, from north, showing Cut [205], Fill (204), truncating Mudstone (203).



7. South-west corner of base of Trench 2, showing black coal deposit (206) within probable Cut [207].



8. Waterlogging within Context (206) in south-east corner of Trench 2, also showing rough-hewn timber planks and wooden uprights.



9. Reinforced concrete capping in base of Trench 1, from north.