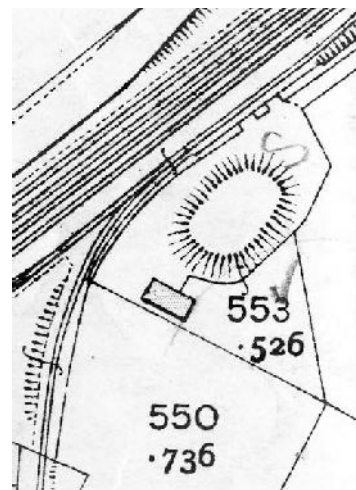


LAND OFF GREEN LANE, PENNINGTON, CUMBRIA

Archaeological Building Recording



Client: HA Sawrey and Son

Planning ref.: SL/2013/0861

NGR: 325984 476141

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February 2014



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Non-Technical Summary

Following the submission of a planning application for the conversion of a redundant building on land off Green Lane, Pennington, Cumbria, an archaeological building recording was requested by South Lakeland District Council as a condition of planning consent. Following approval of a project design Greenlane Archaeology carried out the building recording in January 2014.

The documentary and cartographic sources show that the site was open fields until the middle of the 19th century, and that the building was constructed between 1864 and 1888 as part of the Parkside Mine, although it is not clear what its original use was. This was subsequently taken over by Harrison Ainslie and Co in 1892 and the mine renamed the Lowfield Mine. The building remained in use and evidently survived the closure of the mine in 1914 and sale of the estate in 1916. It was subsequently used by the local cricket club and as a pig sty.

The building recording revealed that much of the original fabric had survived, including a domestic-style fireplace, the original trusses, elements of what are probably the original windows with shutters, and evidence for hearths and other fittings along the south-west wall. Later additions had also clearly been made, including the insertion of a modern window and door.

Three main phases of development were revealed, comprising the original phase of construction, perhaps as a blacksmiths or workshop, and early alteration, involving the insertion of a doorway in the dividing wall, probably in order to convert it into a change house, and subsequent modern alterations.

Acknowledgements

Greenlane Archaeology would like to thank Mr and Mrs Sawrey for commissioning the project and providing the 'as existing' drawings of the building. Additional thanks are due to the staff of the Cumbria Archive Centre in Barrow-in-Furness (CAC(B)) for their help in accessing the records. Further thanks are due to Alan Postlethwaite, Peter Sandbach, Jonathan Wignall, Alan Crocker, and Warren Allison for their comments on the likely original use of the building.

The desk-based assessment and building recording was carried out by Dan Elsworth. The illustrations were produced by Tom Mace, who assisted in writing this report. The report was edited by Jo Dawson, and the project managed by Dan Elsworth.

1. Introduction

1.1 Circumstances of the Project

1.1.1 Following the submission of a planning application (Ref. SL/2013/0861) for the conversion of a redundant building on land off Green Lane, Pennington, Cumbria (NGR 325984 476141), a programme of archaeological investigation comprising an English Heritage Level 2-type building recording (English Heritage 2006) was requested by South Lakeland District Council as a condition (No. 7) of the planning decision notice, following advice from the Cumbria County Council Historic Environment Service (CCCHES). Greenlane Archaeology was appointed by Mr and Mrs Sawrey (hereafter 'the client') to carry out the archaeological building recording and a project design was produced in response. Following its approval the building recording was carried out in January 2014.

1.2 Location, Geology, and Topography

1.2.1 The site is situated in the Morecambe Bay Limestones area on the north side of Morecambe Bay (Countryside Commission 1998, 70). It is located approximately 1km east-north-east of the village of Lindal in Furness and 1.125km south of Pennington to the south of the A590 and railway (Ordnance Survey 2011), set back a short distance to the north of Green Lane, at approximately 70m above sea level (Figure 1).

1.2.2 The solid geology comprises carboniferous limestone (Moseley 1978, plate 1), which is overlain by glacial deposits of boulder clay (Countryside Commission 1998, 71-72). The landscape is generally dominated by outcropping limestone, visible in places as limestone pavement (Countryside Commission 1998, 71), and while most is divided by hedges or stone walls for grazing (*op cit*, 73) much of the area immediately around the site is scarred by the affects of extensive post-medieval and earlier iron mining.

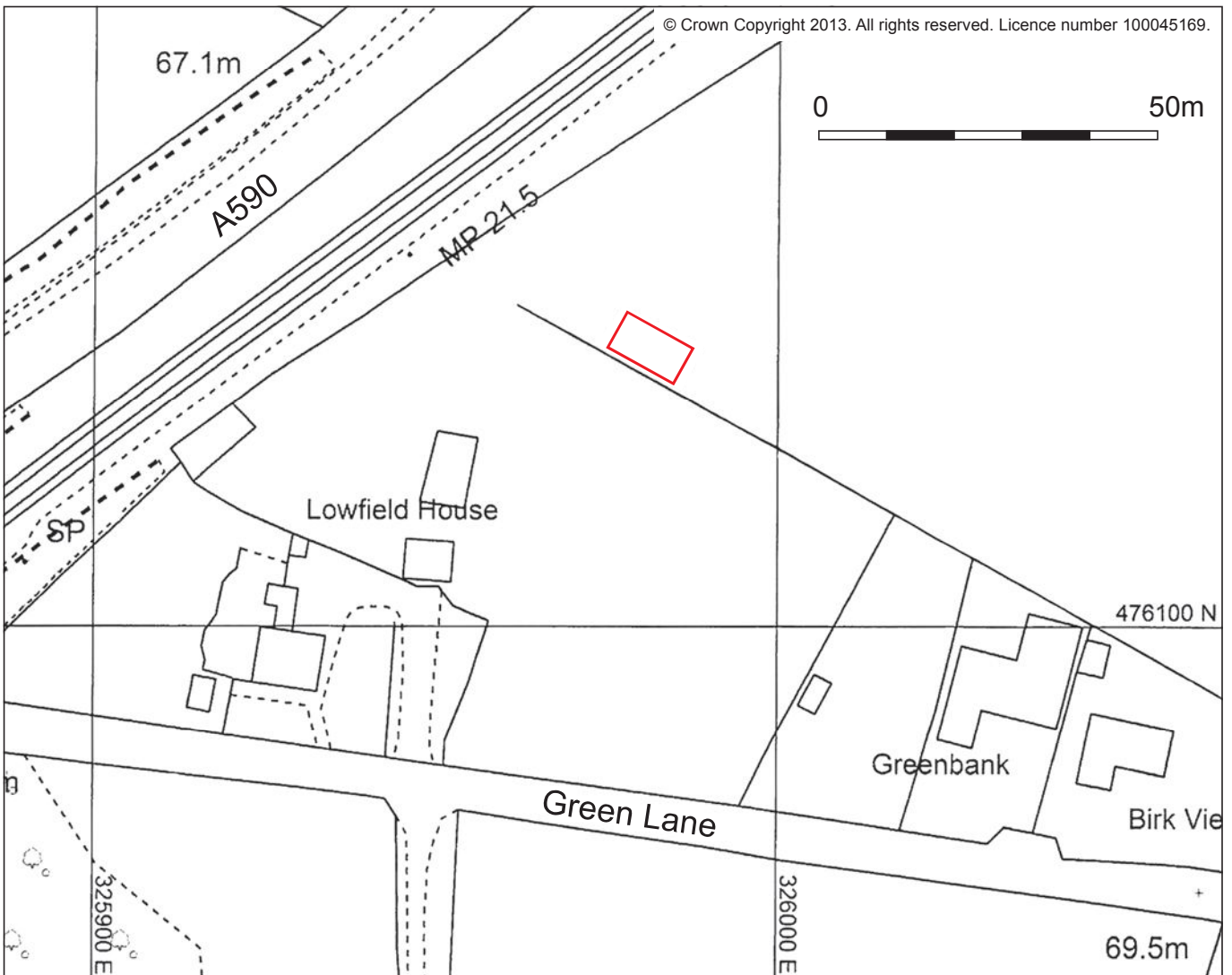
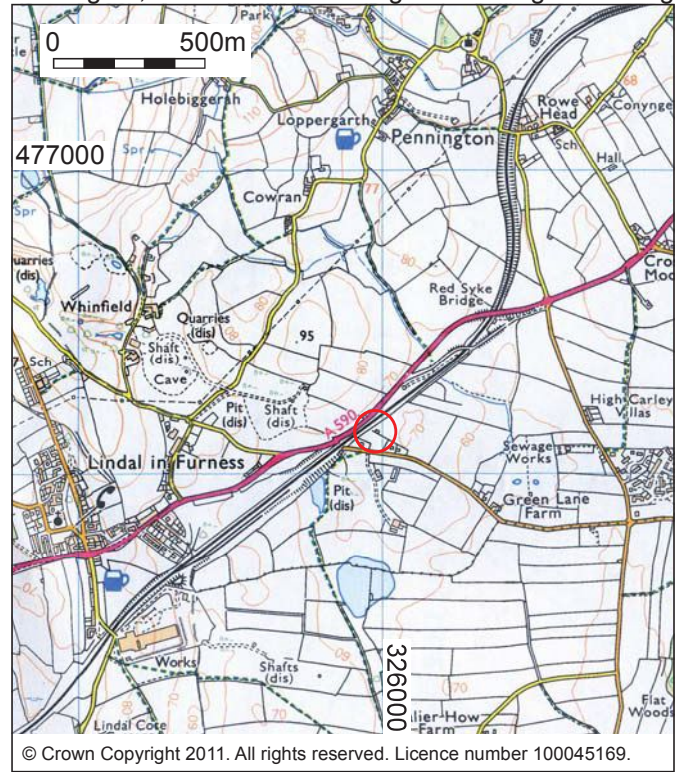
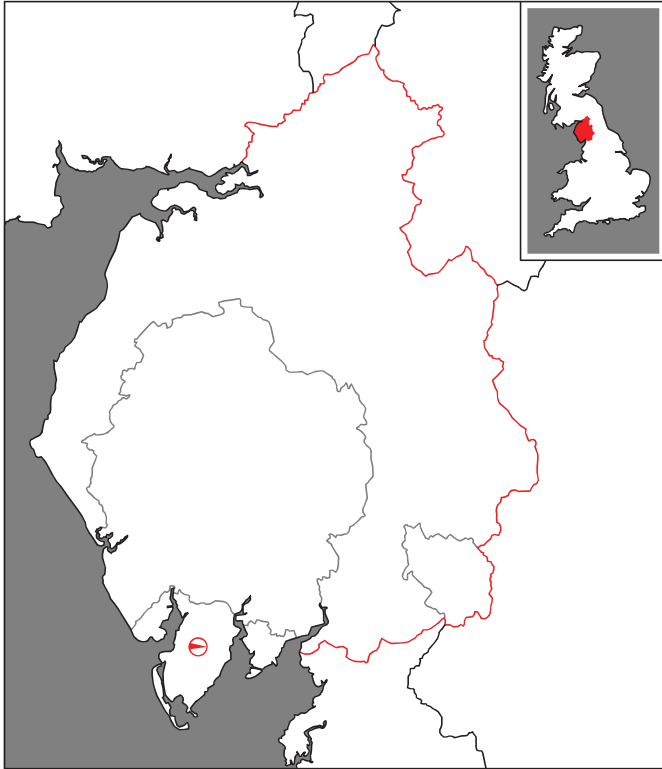


Figure 1: Site location

Client: HA Sawrey and Son

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2. Methodology

2.1 Introduction

2.1.1 The building investigation comprised three separate elements intended to provide a suitable record of the structure, in line with English Heritage standards (English Heritage 2006) and the guidelines of the Institute for Archaeologists (IfA 2008a). A desk-based assessment was carried out in accordance with the project design and IfA guidelines (IfA 2008b) prior to the building recording, and a suitable archive was compiled to provide a permanent record of the project and its results in accordance with English Heritage and IfA guidelines (English Heritage 1991; Brown 2007).

2.2 Desk-Based Assessment

2.2.1 Information was gathered from the following locations:

- **Cumbria Archive Centre, Barrow-in-Furness (CAC(B))**: this was visited in order to examine early maps of the site and other primary sources as well as secondary sources such as trade directories in order to identify information about the development and use of the building;
- **CATMHS archive**: details of an earlier record of the building, made by the Cumbria Amenity Trust Mining History Society, were made available (CATMHS [nd](#)) and are incorporated into the discussion;
- **Greenlane Archaeology library**: additional secondary sources were used to provide information for the site background.

2.3 Building Recording

2.3.1 The building recording was carried out to English Heritage Level-2 type standards (English Heritage 2006), which is a relatively low level of investigation intended to record the form, function and phasing of the building, without incorporating the results of the desk-based assessment in detail. The recording comprised the following elements:

- **Written record**: descriptive records of all parts of the building were made using Greenlane Archaeology *pro forma* record sheets;
- **Photographs**: photographs in both 35mm colour and colour digital format were taken of the main features of the building, its general surroundings, and any features of architectural or archaeological interest. A selection of the colour digital photographs is included in this report, and the remaining photographs are in the project archive;
- **Drawings**: drawings were produced by hand-annotating printed plots of 'as existing' drawings provided by the client and a hand-drawn cross-section was produced from scratch on site. The drawings produced ultimately comprised:
 - i. a floor plan at a scale of 1:100;
 - ii. a cross-section at a scale of 1:50.

2.4 Archive

2.4.1 A comprehensive archive of the project has been produced in accordance with the project design and current IfA and English Heritage guidelines (Brown 2007; English Heritage 1991). The paper and digital archive and a copy of this report will be deposited in the Cumbria Archive Centre in Barrow-in-Furness on completion of the project. A paper and digital copy of the report be provided to the client, and one will be retained by Greenlane Archaeology. In addition a paper and digital copy of the report will also be supplied to the Cumbria Historic Environment Record (HER) in Kendal, via the Historic Environment Officer, and a digital record of the project will be made on the *Online Access to the Index of Archaeological Investigations* (OASIS) scheme.

3. Desk-Based Assessment

3.1 Map and Image Regression

3.1.1 **Introduction:** early maps of the area tend to be relatively lacking in detail and are certainly not specific enough to be useful in understanding the development of the property, which is especially true in this case as the building clearly did not exist until the late 19th century. The earliest useful maps are therefore only from the late 19th century. Regrettably, the Ordnance Survey sheets for the area in the 1930s were not available. As the building relates to a larger mining complex, and is on the southern edge of a map sheet, the adjoining sheet to the south is also shown in the plates below.

3.1.2 **Ordnance Survey, 1850:** the site is undeveloped at this time and only open fields are shown.

3.1.3 **Ordnance Survey, 1890 and 1894:** a rectangular building is located at the site to the north side of Parkside Iron Mines (Plate 1).

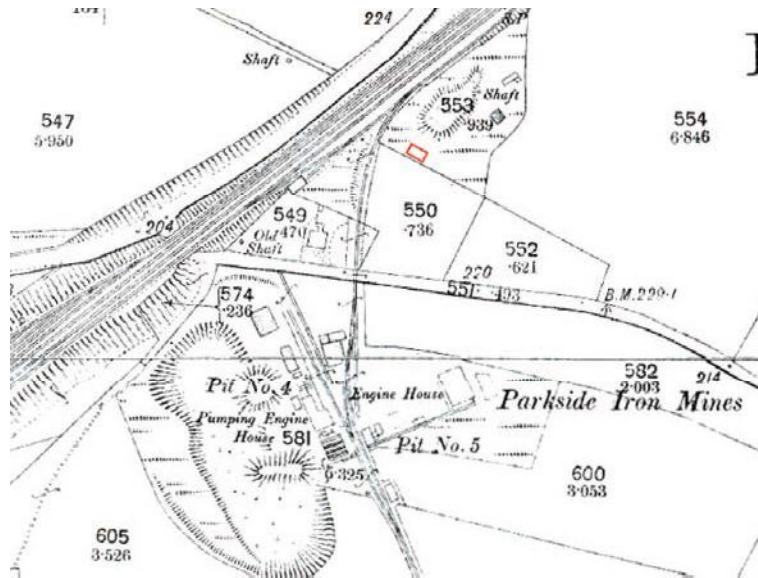


Plate 1: Composite plan of the mines, extracted from the Ordnance Survey maps of 1890 and 1894

3.1.4 **Ordnance Survey, 1913:** the shape of the building at the site is unchanged but now forms part of the Lowfield Mines.



Plate 2: Extract from the Ordnance Survey map of 1913

3.1.5 Ordnance Survey, 1913 (rating valuation): this map is annotated with numbers relating to the 1910 Valuation carried out by the Inland Revenue c1910 (CAC(B) BT/IR 1/25 1910). The site forms part of the plot numbered '327'. The recorded owners and occupiers are listed in *Section 3.2*.

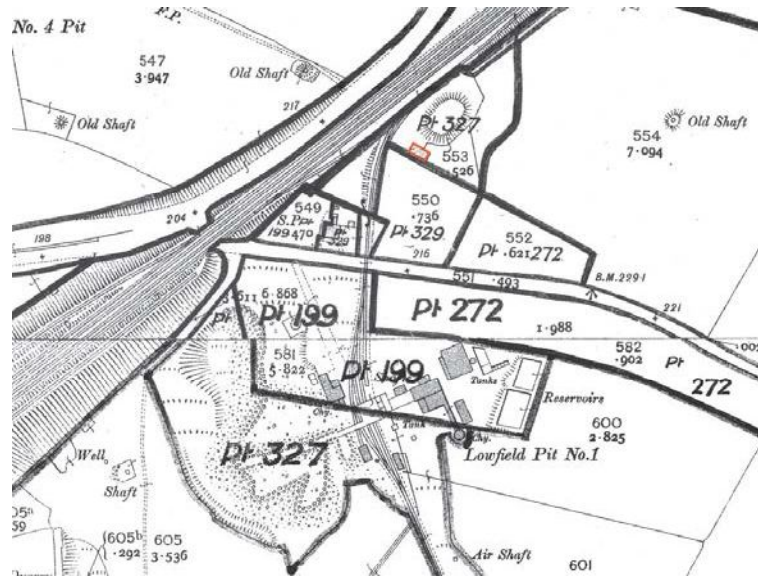


Plate 3: Extract from the Ordnance Survey map of 1913, showing 1910 Valuation plot numbers

3.2 Site History

3.2.1 Owners and Occupiers: earlier maps of the site show that the building did not exist until the late 19th century, by which time it formed part of the Parkside Iron Mines (Plate 1). These mines were established in 1864 by the Parkside Mining Company of Whitehaven (Kelly 1998, 93). The lease on the area, which formed part of the Muncaster royalty, had been held by Harrison Ainslie and Co, but they neglected to renew it prior to 1864 (*ibid*). The Parkside Mining Company renewed the lease again in 1871 and retained it for some time, despite subsistence causing damage to the nearby railway in 1878, until attempts to alleviate the affects of flooding, which had been a constant difficulty, failed in 1889 (*ibid*). The lease was then taken over by Harrison Ainslie and Co in 1892 (*ibid*; McFadzean 1989, 97). The 1910 Valuation by the Inland Revenue records the plot 327 only as 'Iron ore mines' owned and occupied by 'Harrison Ainslie and Co' (CAC(B) BT/IR 1/25 1910), although the site is labelled as part of the 'Lowfield Mines' on the 1913 Ordnance Survey map (Plate 2).

3.2.2 Harrison Ainslie, as they became in 1903, continued to work the mine for several years, until their liquidation in 1914 led to them surrendering the lease and the mine being abandoned (Kelly 1998, 94). The Lowfield estate was subsequently sold in 1916 as sales particulars dated 2nd August include the building within Lot 2, which is described as 'four closes or enclosures of customary hold land known as "Templands" containing 18,092 acres or thereabouts as now in the occupation of Mr S Birch held on an annual tenancy at the rental of £30 per annum' (CAC(B) BDL/Box 4/2/15 1916). The building is shown as a simple rectangle with a boundary attached to the north side as per the Ordnance Survey maps with 'old shafts' to the north-east (*ibid*).

3.2.3 It is not clear what happened after this date, although the building is said to have been used by the local cricket club before they moved to their current site and was also used at one time as a pig sty, but has otherwise been empty for the last 30 years (Anthony Sawrey pers comm.). It is said that while used as a cricket club the fireplace in Room 2 had a pot boiler of some form sat on blocks in front of it, although it is not clear what its purpose was.

3.3 Previous Investigation

3.3.1 The building was recorded by means of photographs and drawings in 1994 as part of the *Furness Iron Mining Relic Survey* carried out by the Cumbria Amenity Trust Mining Heritage Society (CATMHS

nd), at which time it was described as a 'change house' – a building used as a dry area for miners to change clothes in. This survey showed that the building was in a similar condition to its present state, although the wagon doorway in the north-east elevation was partially blocked with brick and had an early plank and batten timber pedestrian door and eight light fixed casement window. Internally more of the original plaster remained on the walls, a timber bench was still set against the north-east wall of Room 2, and low brick walls formed divisions within Room 1, presumably for animal housing.

3.4 Discussion

3.4.1 The site was undeveloped prior to the iron ore mines opening in the area in 1864. A building is shown at the site on the Ordnance Survey map of 1890 at which time it was owned and occupied by the Parkside Mining Company, which demonstrates that it was constructed between 1864 and 1888 (when the Ordnance Survey map was surveyed). When the mines were taken over by Harrison Ainslie and Co in 1892 the building evidently remained in use, although none of the available documentary sources state what its purpose was. It is evident from the previous recording and anecdotal information that it was latterly used for non-mining related purposes, and that features relating to this and other, perhaps earlier phases of alteration, were still evident as late as 1994.

4. Building Recording

4.1 Arrangement and Fabric

4.1.1 The building comprises a rectangular block aligned approximately north-west/south-east (Figure 1). Internally there are two approximately square rooms, described as Room 1 (south-east end) and Room 2 (north-west end; see Figure 2).

4.1.2 The building is principally constructed from limestone, which externally is laid in irregular courses of roughly dressed blocks with neater quoins finished with rilled edges and levelling courses in slate. The roof is finished with grey slate laid in graduated courses and finished with ceramic bonnet ridge tiles and there is a square brick chimney, with several bricks missing, on the north-west side of the centre of the ridge. The doors and windows are a mixture of modern timber and UPVC and potentially original timber casements. Internally there are relatively late concrete floors and some concrete skim on the walls but in general the wall finishes retain much of their original plaster and limewash finish. The internal dividing wall is constructed from machine made but apparently un-frogged bricks 23cm long by 7.5cm thick and 11cm wide.

4.2 External Detail

4.2.1 **North-west elevation:** this comprises the gable end of the building and is essentially plain apart from the ends of the purlins projecting through and a slightly off-centre (to the south-west) doorway, which has a rough timber lintel and ill-fitting UPVC door with two lights, although the remains of what may be part of the original timber door frame are attached to the north-east jamb.



Plate 4: North-west external elevation

4.2.2 **North-east elevation:** there is a window on the north-west side, the original opening of which has been partially blocked with brick to house a modern timber four-light hinged casement. Elements of the original frame remain, with iron pintels, however, as does the badly rotted sill. To the south-east is another window, with the original opening remaining and retaining what is probably the original timber casement with six fixed lights above a pair of hinged shutters, the north-west on early strap hinges held on pintels. To the south-east of this is a wide doorway with a sawn timber lintel, covered by a loose metal fence panel.



Plate 5: North-east external elevation



Plate 6 (left): North-west window, north-east external elevation

Plate 7 (right): South-east window, north-east external elevation

4.2.3 **South-east elevation:** this forms the opposing gable and is essentially plain. There is a vent at the apex formed by a section of stoneware pipe and the remains of a brick structure against the north-east side.



Plate 8: South-east external elevation

4.2.4 ***South-west elevation***: as this is set against a fence and hedge it could not be properly examined, but appeared to be featureless.

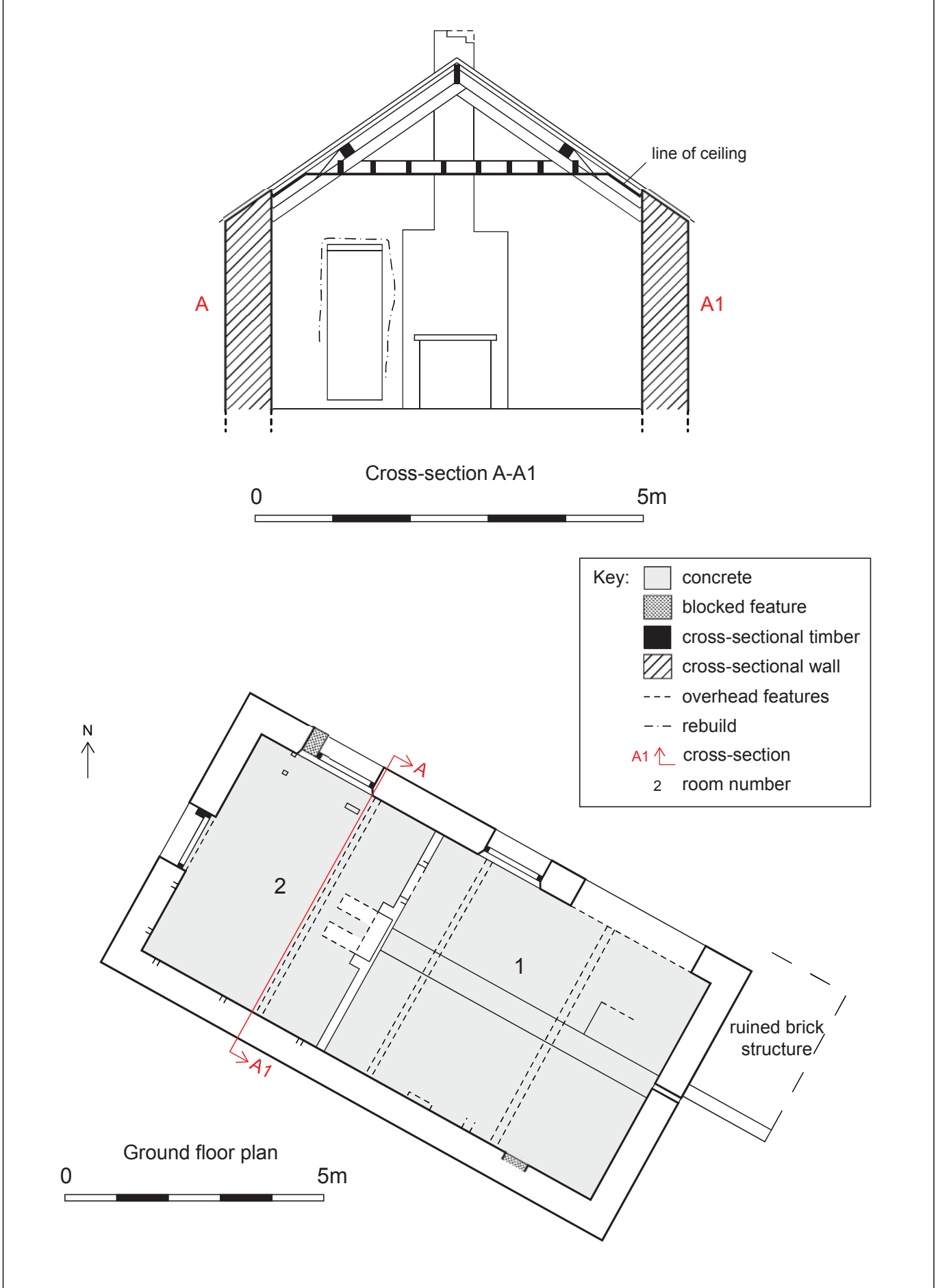


Figure 2: Ground floor plan and cross-section A-A1

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4.3 Internal Detail

4.3.1 **Ground floor Room 1:** this has a concrete floor, with the scar of a small structure on the south-east side and a shallow channel along the middle running north-west/south-east. It is open to the roof, which is supported by two trusses each comprising a just principal rafters and a raised tie beam or collar, the principal overlapping at the apex (Plate 9). There is a single purlin per pitch and a ridge plank and all of the timbers are machine sawn with the collar/tie and principles also finished with a neat stop chamfer decoration. The backs of the slates are visible and are evidently originally finished with lime mortar. The walls are finished with lime wash, although there is a concrete skim over the lower part of all but the north-east. The main outer walls are of stone construction, while the north-west is brick, laid in stretcher bond. There is a plain doorway on the north-east side, with a very thin timber lintel, and it appears to be inserted as there is a rebuild line in the jambs (Plate 10). The north-east elevation has a wide window on the north-west side with a sloping sill, slightly splayed jambs, and a timber lintel. It has a timber casement with six fixed lights over hinged plank shutters (Plate 11). Like the trusses the timber of the casement is finished with stop chamfer decoration. There is a wide doorway to the south-east with a modern timber lintel. The south-east elevation is a plain gable with a vent formed from a stoneware pipe at the top and a drain formed by another at the bottom, meeting the shallow channel in the floor (Plate 12). The south-west elevation has what appears to be an aperture on the south-east side blocked with brick and with a stone lintel. To the north-west is an area of projecting corbelled brick, which presumably originally formed part of a flue. Between these, at lower level, the scar of a possible low wall is evident in the concrete skim (Plate 13).



Plate 9: Truss in Room 1, north-west face



Plate 10 (left): North-west internal elevation, Room 1



Plate 11 (right): North-east internal elevation, Room 1



Plate 12 (left): South-east internal elevation, Room 1



Plate 13 (right): South-west internal elevation, Room 1

4.3.2 Ground floor Room 2: this room is slightly smaller and also has a concrete floor, although seemingly more recent than that in Room 1, with square and rectangular holes set into it on the north-east side presumably for a bench or similar. It is essentially open to the roof as the central part of the lath and plaster ceiling is largely missing, and there is a single truss as per Room 1. The walls are largely finished with the original lime plaster and lime wash, although the south-west has been more recently replastered, and all of the walls are stone apart from the south-east, which is brick, laid in English garden wall bond at a ratio of one row of headers to five rows of stretchers. The north-west elevation has timber blocks built in on the south-west side (corresponding with those in the south-west elevation; see below) and there is a modern electrical trip-switch box to the north-east of these (Plate 14). North-east of this is a doorway with remnants of the original timber beading in the surround and timber lintel remaining but a modern UPVC two-light door (Plate 14). The upper part of the wall is also evidently constructed from an orangey-red brick laid in stretcher bond. The north-east elevation has a large window on the north-west side with splayed jambs with timber beading, which has been partially blocked to house a modern four-light hinged timber casement, although elements of the original sawn timber frame remain (Plate 15). The south-east jamb has a row of numbers scratched into the plaster either side of a vertical line: 2/3, 2/6, 4/3, 4/6. The south-east elevation has a doorway on the north-east side, with no surround or door remaining, and a thin timber lintel, with evident rebuild lines in the jambs suggesting it is inserted although the brick type used is essentially identical to that in the rest of the wall. In the centre of the

elevation there is a projecting chimney breast (Plate 16); the hearth opening has an iron I-beam lintel and the chimney steps in near the top, becoming narrower as it projects through the roof. In front of the fireplace is a low brick platform set into the concrete floor, although more likely where the concrete has been poured in around it. The south-west elevation is essentially plain and covered with rough base coat for modern plaster. There are timber blocks projecting through it in pairs, one denoted by a hole in the wall, which presumably formed fixing points for a fitting in this room such as a workbench (Plate 17).



Plate 14 (left): North-west internal elevation, Room 2



Plate 15 (right): North-east internal elevation, Room 2



Plate 16 (left): Fireplace, south-east internal elevation, Room 2



Plate 17 (right): South-west internal elevation, Room 2

5. Discussion

5.1 Phasing

5.1.1 **Introduction:** although the available mapping of the area is insufficient to closely date when various alterations and additions were made to the building, three main phases of construction and alteration were revealed.

5.1.2 **Phase 1 (1864-1888):** it is apparent from the documentary and cartographic sources that the building must have been constructed between the establishment of the Parkside Mine in 1864 and the surveying in 1888 of the first edition 1:2,500 Ordnance Survey map, published in 1890. The purpose of the building is uncertain based on the available information in the documentary sources, but it seems likely from the evidence within the building itself that it was a workshop of some kind, perhaps a blacksmiths. The aperture and overhanging brickwork in Room 1, as well as the large window with shutters and wide doorway indicate that this room was the main smithy with two hearths against the south-west wall, while Room 2 was perhaps a workshop proper, perhaps with benches against the south-west wall and a more domestic style fireplace on the south-east side. The dividing wall appears to be original, judging by the differences in floor level between the two rooms, which are respected by the two doorways. However, it appears that the two rooms were not directly connected at this stage (see *Section 5.1.4*), so it is possible that these two parts were used for unrelated activities. The style of the smithy is similar in some ways to another recorded at Stank, which is also one of the only surviving buildings at that mine (Greenlane Archaeology 2012), which suggests that such buildings were generally more useful than the others and so were retained.

5.1.3 **Phase 2 (late 19th century):** at an early stage following construction of the building the two rooms were connected by the insertion of doorway through the dividing wall; the alteration to the brickwork then being covered by lime render. The reason for this is uncertain. It has been suggested that the building was used as a change house for the mines at some stage, so it is possible that the doorway was added to facilitate this. By at least the beginning of the 20th century the provision of purpose-built changing facilities was becoming commonplace in mines in many areas (White 1915), although the example at Lowfield, if this is what it was, is a relatively basic example compared to some. If this was the case it would seem likely that the former smithing hearths in Room 1 would have been removed, although these were certainly removed by Phase 3. In addition, the previous recording shows that the larger wagon doorway in the north-east wall had been reduced in size at an early date and this seems likely to correspond to this phase.

5.1.4 **Phase 3 (20th century):** the subsequent use of the building has evidently led to a number of alterations in order to facilitate this. The drain, channel, and concrete skim along the walls of Room 1 probably correspond to its use as a pig sty, and the space was evidently divided into two pens, as shown by the previous recording and the wall scar on the south-west elevation. The new window (and related blocking of the original opening) and doorway and the newer concrete floor in Room 2 are evidently much later and perhaps relate to the building's use by the cricket club or more recent improvements to keep it water tight. It is not clear when the pot boiler, which sat on the brick blocks in front of the fireplace in Room 2, was in use or what for, although it was apparently this phase, but it is conceivable that it was connected to the processing of food for pigs. The brick structure attached to the south-east end, although of uncertain function, was also probably added in this phase as it is not shown on the early maps.

5.2 Conclusion

5.2.1 The building represents a remarkable survival of a mine for which little other evidence now remains. It has also retained several of its original features, although it is not possible to confirm through the evidence of documentary sources what its original purpose was. It seems likely to have acted as a blacksmiths workshop for the original Parkside mine, hence its position away from the main workings, before being converted into a change house, perhaps when the mine was acquired by Harrison Ainslie and Co and became the Lowfield mine. Subsequent to its closure it was utilised for a variety of purposes.

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