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1. INTRODUCTION

1.1 This archaeological assessment of the site of Woodhorn Colliery was commissioned by Northumberland County Council, prior to development works on the site, and is in line with government advice contained in Planning Policy Guidance: Archaeology and Planning (PPG16).

1.2 Woodhorn Colliery is an important monument of the Northumberland and national coal industry, retaining a range of surviving Scheduled and listed buildings and structures, currently in museum and public display use. Whereas these buildings are understood to assessment level, other buildings and structures demolished during and after the working life of the colliery, and are of particular importance to the client. The location, interpretation, and importance of these non-standing structures, and the potential for survival as indicated by information on the character of the demolition and site clearance, is presented in the assessment.

1.3 Sources consulted for the working history of the colliery were the MPP Step 1 and 3 Reports, the English Heritage Scheduling documentation for the site, published works on the Northumberland Coalfield and on coal mining nationally, including Tuck's *Collieries of Northumberland* and the five-volume *History of the British Coal Industry*, all relevant OS map editions, Geological Survey 1" mapping (solid and drift editions), Northumberland SMR, and archival information at Northumberland Record Office (including the Mining Institute collection), Woodhorn Colliery Museum, and the Environmental Projects Team, NCC for details of site clearance during the 1980s. The Coal Authority were also consulted, but the records held by them which would have been of concern to this project duplicated information held by the Environmental Projects Team.

2. BACKGROUND

2.1 Woodhorn Colliery (grid ref. NZ 2890 8840), lies near Ashington, on the Northumberland coalfield. This coalfield occupies southeast Northumberland, its western boundary running from the coast near Warkworth, southwest to the Tyne near Ovingham and the Derwent near Shotley Bridge. To the south the coal seams continue uninterrupted into the Durham coalfield; to the east, they continue beneath the North Sea, the practical limit of the coal field being the limit of economic working from onshore collieries. The Coal Measures consist of alternating sandstones, shales, clays and coal seams, dipping gently overall to the southeast; a total of 24 coal seams have been worked (Tuck 1993, 9). Geological mapping (1", sheet 10; surveyed 1882, resurveyed 1924-6, published 1934, and reprinted 1966) indicates that the colliery site is covered by Boulder Clay drift; Upper Coal Measures were exposed to the northeast and southwest, but no outcropping coal seams were mapped in the immediate area.

2.2 Early coal mining in the region worked shallow seams on the hills around ports and estuaries, avoiding most drainage and transport problems. From the 17th century, waggonways were used to extend the workable coalfield to other areas where downhill access to a harbour could be created. In the later 18th century emphasis shifted to deep long-lived collieries, necessitating the use of steam pumping and winding engines (Gould and Cranstone 1992). The increase in the demand for coal in the 19th century as a result of industrial growth at home and expansion of overseas markets forced further developments in equipment and working practice, including the invention and introduction of the mechanical ventilating fan, the vertical winding engine and later the horizontal engine, the use of gunpowder for coal getting and complex screens for the sorting of coal. The timing of the introduction of these developments varied from colliery to colliery, but by the end of the period collieries of the Northeast region had a largely standard layout: two or more shafts (a second shaft to provide an escape route following an accident in the first was a legal requirement following the accident at Hartley Colliery in 1862), winders for the shafts, fan house(s), screens, boilers, large pond(s) to supply the boilers, a magazine, stables for the pit ponies (whose numbers grew following 1840 Coal Mines Act which banned the employment underground of females and children younger than ten), various workshops, and a large spoil tip. During the second half of the 19th century an integrated system of railways and sidings was also added to this layout, completing the typical Northeast colliery. Woodhorn Colliery, although not established until 1894, quickly attained this common regional composition. Further developments in the 20th century saw the introduction of compressed air, electricity, underground mechanisation, underground haulage and the building of pithead baths, especially following the Mines Industry Act of 1926. Coal production in the county hit its peak in 1913 when 227,000 miners were employed. Following this date the industry went into decline, with brief upturns during wartime and following nationalisation in 1947 followed by renewed closures. Woodhorn closed in

1986, and by the late 1990s the only working colliery in the coalfield was, and is, at Ellington.

3. HISTORY

3.1 PERIOD 1: 1894-98

3.1.1 None of the historical sources consulted give any indication of mining within, or adjacent to, the study area before 1894, and the absence of outcropping seams on the Geological Survey map argues against any mining having taken place. However, pre-19th century mining is not always recorded in any surviving documents, and the waggonway system of the immediate area (if any) is not known to have been studied. The possibility of unrecorded pre-1894 mining within the study area therefore cannot be totally excluded.

3.1.2 Woodhorn Colliery was one of five collieries owned by the Ashington Coal Company. The company had been active in Northumberland since 1866 and went on to dominate mining in south-east Northumberland, developing into one of the largest coal producers in the country. Enclosed fields previously occupied the site chosen by the Company at Woodhorn (see Figure 1). Shaft sinking began at the Woodhorn site in May 1894, drawing coal in February 1898. By 1895, the No.1 Winder (with boilers to the rear), No.1 Heapstead (extended by 1923) and No.2 Heapstead (also extended by 1923) were in place. There were also the Blacksmiths' and Joiners' Shops (extended to the south, 1908), various other workshops, a pond to the north-east for supplying the boilers, a spoil heap to the north, a magazine to the north-west and a stretch of railway approaching the colliery from the south-west (see Figure 2). All of the buildings were constructed of yellow Ashington brick, made from the clay drawn from the shafts. The composition of the colliery by 1895 was typical of others in the region in the process of sinking shafts but yet to produce coal.

3.2 PERIOD 2: 1899-1923

3.2.1 By 1923 Woodhorn Colliery had developed into a well-integrated colliery, typical of the Northeast region of the late-19th century to early 20th century. The No.2 Winder would have been added early in the period, prior to coal extraction in 1901, as were the Jack Engine House (c.1900, possibly incorporating fabric from the earlier, smaller engine house), the Central Fan House (1900), Cage Repair Shop (c.1900), No.1 and No.2 Heapsteads and the Stables (c.1900). By the end of the period extensions had been added to the Blacksmiths' and Joiners' Shops, No.1 and No.2 Heapsteads, additional boilers constructed to the rear of No.1 Winder and a stores building between the No.1 and No.2 Winders. Other new buildings included the Electricians' and Fitters' Workshops, the Offices (1910) and the Screens. A second pond was also dug and the existing one extended, so as to provide the additional boilers with water. A network of railways connecting the various buildings, and the rapidly expanding spoil tip and railway sidings, completed the integrated layout of the colliery by the end of the period (see Figure 3).

3.3 PERIOD 3: 1924-65

3.3.1 The colliery during this period, unlike many other collieries in the region, underwent relatively little development. The large block of pithead baths, canteen and medical centre were opened in March 1930, providing 1,152 clean clothes lockers, 1,152 pit clothes lockers and 64 bath cubicles. Other new buildings constructed included the Powder Distribution Station, Lamp Room, Pugmill, the East Fan House and Crab Engine and Compressor; the latter two were constructed on the sites of two buildings of the preceding period. A number of buildings were extended, including the Offices, Screens and No.1 Winder, and the No.1 Heapstead was altered. A number of alterations were also made to the network of railways, some stretches being removed and new stretches added, particularly to the west of the Baths (note that the apparent lack of railways interconnecting the various buildings may be due to omissions of the surveyors, rather than due to their removal or absence, see Figure 4). No plans which identify the extent of the spoil tip could be located for this period, and so no suggestions are made as to its development.

3.4 PERIOD 4: 1966-2000

3.4.1 By the mid 1960s, the colliery was struggling because of thin coal seams and the availability of cheap alternative fuel, such as oil and natural gas. From 1966, coal was no longer brought to the surface at Woodhorn but went by underground conveyor to Ashington Colliery. The screening plant was demolished and the two steam powered winding engines were replaced by a less powerful electric winder. Throughout the 1970s coal production was confined to the lower, thinner seams and with this production and manpower steadily dropped, until production finally ended on 28th February 1981. The winding engines and shafts remained in use, as they were vital to the operations of Ashington Colliery, but these too closed in October 1986. Clearance and reclamation began on parts of the site during this winding-down period, and continued after final closure; details are contained in the next section. By the late 1980s many of the buildings and structures were demolished, including the Baths, Powder Distribution Station, Lamp Room, Rescue Station, Stores, Boilers, Electricians' and Fitters' Workshops, No.1 Heapstead and the Pugmill. The spoil tip and ponds were landscaped and most of the network of railways and railway sidings either lifted or covered with the overburden of landscaping (see Figure 5). It was decided that many of the remaining, older buildings would be preserved as part of a mining museum. The museum opened in 1989 and continues in operation today.

4. CLEARANCE & DEMOLITION

4.1 THE ASHINGTON RECLAMATION SCHEME

4.1.1 The Ashington Reclamation Scheme was introduced in 1974. The aims of the scheme included the reclamation of one square mile of dereliction associated with the former Ashington and Woodhorn collieries. It was intended to provide new woodland, farmland and parkland, an amenity lake, a museum/crafts centre, hotel and business park. The reclamation of the former Woodhorn Colliery embraced the pithead complex, spoil heaps and associated despoiled land and involved a number of phases of demolition and landscaping between 1974 and 1985. For the purposes of reclamation the site was divided up into zones, identified in contemporary documents as areas A to H, S4 and Pit Heap (see Figure 6).

4.1.2 The bills for the reclamation of each zone provide information on the precise reclamation strategy for each area, and therefore for the prospects of modern below-ground survival. While the details differ, the overall picture is consistently that all foundations and hard surfacings were to be broken up, and therefore that the prospects for meaningful stratigraphic survival within these areas is poor.

4.2 DETAILS OF ASHINGTON RECLAMATION SCHEME BILLS

4.2.1 **AREA A**
- Break up the foundations of former colliery buildings.
- Spread of topsoil to an average depth of 150mm.

4.2.2 **AREA B**
- Break up the foundations of former colliery buildings.
- Spread of subsoil to an average depth of 150mm.
- Spread of topsoil to an average depth of 150mm.

4.2.3 **AREA C**
- Break up the foundations of former colliery buildings and hard surfacing.
- Spread of topsoil to an average depth of 150mm.

4.2.4 **AREA D**
- Break up the foundations of former colliery buildings and hard surfacing.
- Spread of subsoil to an average depth of 150mm.
- Spread of topsoil to an average depth of 150mm.

4.2.5 **AREA E**
- Break up the foundations of former colliery buildings, road surfacing, car park area, footpath and concrete bases etc.
- Spread of topsoil to an average depth of 150mm.

4.2.6 **AREA F**

- Break up the foundations of former colliery buildings, road surfacing, car park area, footpath and concrete bases etc.
- Excavate in any material to an average depth of 1.5m not exceeding 2.0m. Store in dumps.
- Material removed from Area A, B, C, D and E placed to form base of mounds.
- Spread of topsoil to an average depth of 150mm.

4.2.7 **AREA G**

- Material removed from Area A, B, C, D and E placed to form base of mounds.
- Spread of topsoil to an average depth of 150mm.

4.2.8 **AREA H**

- Excavate in any material to an average depth of 1.2m not exceeding 1.5m. Store in dumps.
- Dumps of material removed from Area A and B.
- Spread of subsoil to an average depth of 150mm.
- Spread of topsoil to an average depth of 150mm.

4.2.9 **AREA S4** (also referred to as Land Adjacent to Woodhorn Colliery)

- Strip subsoil 600mm thick.
- Rip up all concrete foundations and dispose of by burying to a depth of at least 1.0m below the proposed level.

4.2.10 **PIT HEAP** (also referred to as Land Adjacent to Woodhorn Colliery)

- Excavate into the colliery shale and all other waste heap material whatsoever of the Woodhorn heaps, load, transport and fill to levels forming the required contours over site.
- Rip up all concrete foundations and dispose of by burying to a depth of at least 1.0m below the proposed level.

5. THE SITE IN 2000

5.1 Surviving buildings

5.1.1 **Building:** 1.1 **Name:** Office

Description:

Built 1912. Two-storey gabled brick building with Welsh slate roof with single storey brick wings to the east and west, also with Welsh slate roofs. The two-storey element has in its north elevation three wooden-framed sash windows with a large wooden casement window in the gable. The south elevation includes a central doorway with fanlight, flanked by pairs of small wooden-framed sash windows. A date stone of 1912 is set above the door. In the gable is a large wooden-framed sash window flanked by pairs of small wooden-framed sash windows. The north elevation of the east wing includes four wooden-framed sash windows and two doorways. The south elevation includes three tall narrow wooden-framed sash windows and two doorways. The east elevation includes a wooden-framed sash window. The west wing includes two wooden-framed sash windows and a doorways in its north elevation. The south elevation includes three tall narrow wooden-framed sash windows and a doorway.

Present Use:

Museum offices

Status:

None

Importance:

The Monuments Protection Programme review of the Coal Industry undertaken for English Heritage graded Woodhorn as of major national importance in both twentieth century and pre-twentieth century categories (1 of 21 collieries for the former and 1 of 9 for the latter). The importance of the Office lies in its contribution to the understanding and layout of this nationally important monument.

5.1.2 **Building:** 1.2 **Name:** Cage Repair Shop

Description:

Constructed c.1900 of yellow Ashington brick with a Welsh slate hipped roof. Three bays of pier and panel construction rising to stepped-and-cogged eaves cornice with large round-headed metal casement windows. The wing that once projected from the western half of the north elevation has left this part of the elevation with substantially cleaner brickwork.

Present Use:

Now used to display miners' banners and history of the Northumberland Miners' Union, plus some disaster memorabilia (e.g. glasses).

Status:

Listed Building Grade II

Importance:

The Monuments Protection Programme review of the Coal Industry undertaken for English Heritage graded Woodhorn as of major national

importance in both twentieth century and pre-twentieth century categories (1 of 21 collieries for the former and 1 of 9 for the latter). The importance of the Cage Repair Shop lies in its contribution to the understanding and layout of this nationally important monument. Its architectural and historical significance is also reflected by its inclusion in the Listed Buildings register.

5.1.3 **Building:** 3 **Name:** Blacksmiths' and Joiners' Shops

Description:

Built in 1894 of Yellow Ashington brick with a Welsh slate roof and extended to the south in 1908. The east elevation of one storey and 16 bays accommodates four large round arched openings, two segmental-headed doorways, one pair of boarded doors under a timber lintel, and round-arched windows, some with metal-framed casements. Similar windows to the rear, some partly blocked, and banded lateral stack.

Present Use:

The south end of the building, originally the joiners' shop, is used for museum storage. The north end of the building is used to store banners, paintings etc.

Status:

Listed Building Grade II

Importance:

Combined with the Stables, these buildings reflect the important role of underground ponies and surface horse-haulage at mines (70,000 ponies were working underground in Britain in 1913). The importance of the Blacksmiths' and Joiners' Shops lies in its contribution to the understanding and layout of this nationally important monument. Its architectural and historical significance is also reflected by its inclusion in the Listed Buildings register.

5.1.4 **Building:** 1.4 **Name:** Stables

Description:

Constructed in 1894 of Yellow Ashington brick with Welsh slate roof. The south elevation of one storey and three bays accommodates three doorways, two with stable doors and four small windows. All openings have timber lintels. Small left end stack. The timber partitions still survive within. At the west end is a forge with stepped brick hood.

Present Use:

The east end of building is used to display blacksmithing equipment and the north, housing the forge, continues to be used by a local blacksmith.

Status:

Listed Building Grade II

Importance:

Combined with the Blacksmiths' and Joiners Shops, these buildings reflect the important role of underground ponies and surface horse-haulage at mines (70,000 ponies were working underground in 1913). The importance of the Stables lies in its contribution to the understanding and layout of this nationally important monument. Its architectural and historical significance is also reflected by its inclusion in the Listed Buildings register.

5.1.5 **Building:** 1.5 **Name:** Locomotive Shed

Description:

Salvaged from Vane Tempest Colliery in County Durham in the early 1990s.

Present Use:

Locomotive shed

Status:

None

Importance:

Not a historic feature of Woodhorn Colliery, but a now-rare survival of a colliery locomotive shed, once a normal feature of any colliery surface layout.

5.6 **Building:** 6 **Name:** No.1 Winding House

Description:

Constructed c.1894 of Yellow Ashington brick with a Welsh slate roof. Rectangular three-storey winding house with single-storey extension to west. Three-bay side wall and two-bay rear of pier-and-panel construction rising to stepped-and-cogged eaves cornice, accommodating large round-headed metal-framed casement windows; one rear window replaced by later doorway to external platform. Hipped roof with gabled wooden dormer for winding ropes and raised louvre on ridge. The steam winder was replaced in 1975 by an electric winder, which itself was scrapped in 1995/6.

Present Use:

The ground floor presently houses a 70 seater cafeteria, a museum shop and improved public conveniences including a toilet for disabled persons. The first floor houses an exhibition space, which is used for temporary exhibitions. The second floor is used as a multi-purpose room – hired out to groups for training, meeting etc.

Status:

Listed Building Grade II*

Importance:

Despite the loss of its winder, the building forms a nationally rare and important survival of a colliery winding house, and is a crucial element in the understanding and interpretation of Woodhorn Colliery. Its architectural and historical significance is also reflected by its Listed Building status.

5.7 **Building:** 7 **Name:** No.2 Winding House

Description:

Constructed between 1898 and 1901 of Yellow Ashington brick with a later roof of late 20th century synthetic sheeting. Rectangular three-storey building with three-bay side walls and two-bay rear of pier-and-panel construction, each elevation accommodating round-headed metal-framed casement windows, rising to stepped-and-cogged eaves and cornice. Hipped roof with flat-topped dormer and half-dormer for winding cables, and raised louvre on ridge. Steam winder replaced in 1975 by electric winder, which still remains.

Present Use:

The winding house and electric winder were restored in 1992 back to working order for public display.

Status:
Scheduled
Listed Building Grade II*
Appears in the Buildings at Risk register as in 'very bad' condition
Importance:
The *in situ* survival of colliery winding engines is now very rare, and the building with its machinery forms a nationally rare and important survival of a colliery winding house, and is a crucial element in the understanding and interpretation of Woodhorn Colliery. Its architectural and historical significance is also reflected by its inclusion in the Listed Buildings register.

5.8 **Building:** 8 **Name:** No.1 Headgear
Description:
The headgear stood over the downcast shaft and supported the pulley wheels that in turn supported the cables used for haulage in the shaft. The No.1 Headgear is an unenclosed frame structure of steel girders supporting two pulley wheels.
Present Use:
Repaired and painted in 1992 for public display.
Status:
Scheduled
Listed Building Grade II*
Importance:
Intact colliery headgear is now very rare, and Buildings 8 and 11 form a rare illustration of the similarities and differences between downcast and upcast shafts of similar date; these structures are therefore of considerable national importance, and are crucial to the understanding and significance of Woodhorn Colliery. Its architectural and historical significance is also reflected by its inclusion in the Listed Buildings register.

5.9 **Building:** 9 **Name:** Pick Sharpeners' Shop & Jack Engine House
Description:
Building of Yellow Ashington brick with metal-sheet roof. Rectangular, single-storey building of four bays of pier-and-panel construction, accommodating round-headed metal-framed casement windows, rising to stepped-and-cogged eaves cornices. The building is of two major phases. The eastern portion of the building was constructed c.1894, to house the Jack Engine used in shaft sinking. This building was then extended c.1900 to accommodate the pick sharpeners' shop. The original Jack Engine, which provided auxiliary power to the main winders, survives within the Engine House. The engine was built by Long Brothers of Wakefield. It had steam supplied at a pressure of 80lb per square inch, a cylinder of 16" diameter and 26" stroke and a drum of 10m diameter.
Present Use:
The building was renovated in 1992. The half of the building housing the Jack Engine is open to the public, and the remainder is office accommodation.

Status:
Scheduled
Listed Building Grade II*
Importance:
The MPP Step 3 report refers to the *in situ* steam winding engine, the twin cylinder Long Brothers' engine, as being one of only ten in the country. Its importance also lies in its contribution to the interest of the site, to the 'group value' of the ensemble and the understanding of the surface working of the mine. Its architectural and historical significance is also reflected by its inclusion in the Listed Buildings register.

5.10 **Building:** 10 **Name:** Central Fan House
Description:
Dated 1900 above west door. Single-storey building of yellow Ashington brick with square ventilation tower at east end flanked by fan chambers on east and south. Welsh slate roof with concrete capping to fan chambers. The building is of three bays of pier-and-panel construction rising to stepped-and-cogged eaves cornice. The north elevation includes a round-headed window accommodating metal framed casements at either end. To the west is a flat-topped tower with stepped-and-cogged frieze, and beyond this a fan chamber with small-boarded door. The south elevation shows similar fenestration and fan chamber with curved roof adjoining tower. The Cappel Fan is reportedly in working order. The Cappel type came into use in the last decade of the 19th century and tended to replace the earlier types such as the Guibal which had larger diameters and revolved at lower speed.
Present Use:
The building is kept locked and is not in use at this time.
Status:
Scheduled
Listed Building Grade II*.
Appears on English Heritage's Buildings at Risk register.
Importance:
This Cappel fan house is a unique survival. "This structure, its function and its accessibility provide an opportunity to understand pit ventilation in a way that is probably unrivalled at any other site in the UK" (PLB Consulting Ltd. 2000, 13). The importance of the Central Fan House also lies in its contribution to the understanding and layout of this nationally important monument. Its architectural and historical significance is also reflected by its inclusion in the Listed Buildings register.

5.11 **Building:** 11 **Name:** No.2 Heapstead and Headgear
Description:
The headgear consists of a steel girder frame supporting two pulley wheels and stands over the upcast shaft, and so is enclosed to control the circulation of air. The enclosing structure, or heapstead, is constructed of brick, the lowest 7m being of yellow Ashington brick and the upper section being of red brick. The headgear above the brick and below the pulleys is enclosed in a steel box. The east face has four narrow windows at ground floor level. Attached to the south

face is a red brick, flat roofed structure with double doors. This building served as a cover for fully laden coal railtrucks waiting to be transported to the railway sidings. The west face has a window and a doorway in the upper red brick section. The doorway is accessed by an iron staircase. There are two single-storey, red brick buildings attached to the west face. The northern one, built in 1949, is 7m long with a single railtrack running its entire length. The northern face has a double doorway and a window in the top section. The guide rails for the cages in the shaft, and the narrow gauge railways from the pithead, are in their original setting within the heapstead.

Present Use:

Museum display

Status:

Scheduled

Listed Building Grade II*

Importance:

Intact colliery headgear is now very rare, and buildings 8 and 11 form a rare illustration of the similarities and differences between downcast and upcast shafts of similar date; these structures are therefore of considerable national importance, and are crucial to the understanding and significance of Woodhorn Colliery. Its architectural and historical significance is also reflected by its inclusion in the Listed Buildings register.

5.12 **Building:** 12 **Name:** East Fan House

Description:

Constructed 1942. The fan house is of the Guibal type. The Guibal type is an earlier fan type than the Cappel, though at Woodhorn the Cappel was installed before the Guibal. It comprises a fan housing and attached engine house. The circular fan housing of the fan is visible as a semi-circle above ground level. The circular housing is flanked on either side by red brick pillars, which have blocked doorways at either ends. The circular housing of the fan has a evasee on its western end. Attached to the western end of the fan housing is a section of the air inlet passage which is above ground. The engine house is attached to the north side of the fan housing. It is a single storied brick structure with a sloping flat roof. The east and west faces have two recessed panels of brickwork each with a rectangular window in the southern panel. The northern face has three panels. The east and west panels have sliding double doors. The building contains two electric motors supplied by Bruce Peebles and Company Ltd. of Edinburgh. The fan is said to survive, but was not inspected at time of visit. The Guibal fan house was constructed on the site of an earlier fan house destroyed on 20th December 1941 by a jettisoned bomb.

Present Use:

The building is kept locked and is not in use at this time.

Status:

Lies within Woodhorn Colliery Scheduled Ancient Monument.

Importance:

Guibal fans were developed by the Belgian Theophile Guibal and were introduced to British mines in 1859. By 1876 there were 200 Guibal fans at work in Britain's coalfield. The Woodhorn Guibal type fan house is a late

example, but a rare and nationally important survival. The importance of the East Fan House also lies in its contribution to the understanding and layout of this nationally important monument.

5.13 **Building:** 13 **Name:** Crab Engine House

Description:

Two-storey pier and panel brick structure with single storey pier and panel extension to the east. The western portion of the building has a gabled Welsh slate roof. The south elevation includes metal-framed casement windows at ground and first floor level and a door at western end. The eastern portion of the building has a flat concrete roof. The south elevation includes a row of six large metal casement windows. The east elevation includes a door with window above.

Present Use:

The engine is in the western portion of the building, whilst the eastern portion is used for museum storage.

Status:

None

Importance:

The *in situ* crab engine and its house form a nationally-rare survival, and in conjunction with the other structures around the shafts form an unusually complete survival of a typical shafthead layout.

5.14 **Building:** 14 **Name:** Transformer House

Description:

c.1980. A large single storey brick building. The south elevation includes four large boarded up openings, probably windows. Surmounting the flat concrete roof are two louvered vents.

Present Use:

Used as a store by local equestrian club.

Status:

None

Importance:

The transformer house was added when the colliery was already being run down, and its importance is uncertain on current information.

5.2 The remainder of the site (Figure 7)

Since the assessment has indicated that most former buidlings and structures were either within the footprint of the existing Listed Buildings and Scheduled area, or within areas where their remains are likely to have been destroyed by reclamation, the gazetteer is kept very simple.

5.2.2 **Area:** 2.1

Location:

The area forms a rectangle, encompassing the Blacksmiths' and Joiners' Shops, the Cage Repair Shop (aka The Banner Hall), the Stables and the Locomotive Store.

Description:

The area immediately around the surviving buildings is given over to flagged pathways and grassed areas.

Historical Data:

The Cage Repair Shop was originally 'L-shaped' in plan. A smaller square building was located at the inside angle of this building (see Figures 3 and 4). A further building was also located immediately to the west of the southern end of the Blacksmiths' and Joiners' Shops.

Reclamation Data:

No evidence has been located for any reclamation scheme affecting this area, and it is therefore likely that archaeological deposits, including foundations of demolished buildings, will be well-preserved.

5.2.3 **Area:** 2.2

Location:

The area encompasses the No.1 and No.2 Winding Houses, the No.1 Headgear, the Pick Sharpeners' Shop and Jack Engine House, the Central Fan House, the No.2 Heapstead and Headgear, and the East Fan House and the Crab Engine House, but excludes an area immediately northwest of the latter two buildings, which fell within the area of Reclamation Area B

Description:

The area currently forms the core of the museum site, where museum exhibits and information is displayed.

Historical Data:

The area represents the typical shafthead layout. Several structures are no longer present, including the Stores that were located between the two winding houses and several other smaller buildings immediately to the north of the Stores and to the south of the Crab Engine House.

Reclamation Data:

No evidence has been located for any reclamation scheme affecting this area, and it is therefore likely that archaeological deposits, including foundations of demolished buildings, will be well-preserved.

5.2.4 **Area:** 2.3

Location:

An irregular curving area to the west of the main colliery complex.

Description:
The area presently has grass and tree coverage.
Historical Data:
The area was once the site of numerous rail lines and railway sidings serving the colliery.
Reclamation Data:
No evidence has been located for any reclamation scheme affecting this area, and it is therefore likely that archaeological deposits will be well-preserved. However, these deposits are likely to consist largely of formation and bedding for railway lines, of lesser archaeological value than Areas 2.1 and 2.2.

5.2.5 **Area:** 2.4
Location:
The area forms a long strip running roughly parallel to the southern boundary of the study area.
Description:
Rail lines supplying the ALCAN aluminium works largely occupy the area.
Historical Data:
The site of colliery rail lines.
Reclamation Data:
No evidence has been located for any reclamation scheme affecting this area, and it is therefore likely that archaeological deposits will be well-preserved in this area. However, these deposits are likely to consist largely of formation and bedding for railway lines, of lesser archaeological value than Areas 2.1 and 2.2.

5.2.6 **Area:** 2.5
Location:
The area forms a sub-rectangle in the southeast corner of the study area.
Description:
The area is currently under grass and is used by a local equestrian club.
Historical Data:
The area does not seem to have been utilised in an intensive way during the life of the colliery. Rail lines and railway sidings once occupied the southern portion of the area and the Pug Mill was located at its centre.
Reclamation Data:
No evidence has been located for any reclamation scheme affecting this area, and it is therefore likely that archaeological deposits will be well-preserved. However, these deposits are likely to consist largely of formation and bedding for railway lines, and foundations of the Pug Mill, of lesser archaeological value than Areas 2.1 and 2.2.

5.2.7 **Area:** 2.6
Location:
The area encompasses the whole north and northwest sides of the study area, areas immediately around the two core sites of surviving buildings (2.1 and 2.2), and an area to the south of these and around the Office (Building 1).

Description:
The spoil heaps to the north are planted with trees. A light railway runs from the Locomotive Store to the northwest of the study area. An access road approaches the Offices from the east, in front of which is a large car park. The vast majority of the remainder of the site is under grass.

Historical Data:
The northern and western portions of the area were once occupied by rail lines, railway sidings and spoil heaps. The Powder Magazine was located in the far northwestern corner of the study area, approached by rail lines. In the southern portion of the area there were further rail lines and railway sidings. Attached to the south of the No.1 Headgear was a heapstead and to the south of the No.2 Heapstead there were Screens. To the east of the No.2 Winder was the Electricians' and Fitters' Workshops, and immediately to the north of this were two large ponds. Various other smaller ancillary buildings were located in and around the main complex of colliery buildings. The southwest corner of the area seems to have been largely free of colliery activity.

Reclamation Data:
This area underwent a complex series of reclamations. It is clear from the bills issued by Northumberland County Council that all existing buildings within this area were to be demolished and their foundations, and other hard surfaces, broken up. The spoil heap was to be landscaped, but its base may survive undisturbed beneath the re-formed surface. However, the survival of a small area of concrete to the east of the East Fan House raises the possibility that the extent of destruction may have less comprehensive than the desk evidence indicates, and some archaeological deposits may survive within this area.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 The evidence studied indicates that the development of Woodhorn Colliery was surprisingly simple. No evidence has been located for any mining on the site before 1894 (though the possibility of unrecorded mining cannot be excluded). Colliery sinking began in 1894, and much of the final surface layout was already in existence by 1923; some non-surviving early buildings are recorded on the 1898 OS map, but their footprints lie largely within those of later structures. The main addition after 1923 was the baths block, completed by 1930. However, it should be noted that the interval between meaningful OS mappings at this period, from 1923 to 1965, is long (the 1938 edition was an emergency issue without field resurvey, and therefore merely duplicates the 1923 mapping information), so that buildings and structures may have 'come and gone' between map editions. It should also be noted that OS mapping is confined to buildings, railway lines, and physically-prominent structures, and does not form evidence for absence for less physically-prominent (but potentially functionally important) features and structures, or for socially-important archaeological deposits such as rubbish accumulations.

6.2 The assessment has confirmed that the surviving buildings and structures (with the probable exception of the Transformer House (Building 1.14)) form the best surviving example of a late 19th to 20th century colliery from the Northeast England regional tradition; they are of considerable national importance, as well as being an important iconic monument to the Northumberland coal industry, of such formative importance to the region and its inhabitants. This importance extends to the surviving complex as a group, as well as the individually-important structures within the group.

6.3 Although the assessment has produced very little evidence for former buildings and structures outside the 'footprint' of the final colliery layout (apart from railway lines), unmapped structures and archaeological deposits may have existed. The buildings will undoubtedly been connected by services and other infrastructure, not mapped on the surviving sources.

6.4 The potential survival of archaeological deposits, of all sorts, on the site is primarily constrained by the clearance and reclamation programme undertaken in the 1970s and 1980s. Documentary evidence indicates that within the individual areas covered by the successive reclamation contracts, the foundations of all buildings and structures should have been systematically destroyed, and this is likely to have disrupted most if not all archaeological deposits within these areas. Field inspection has yielded no evidence to contradict this picture. However the thoroughness with which the clearance procedures were carried out cannot be assessed, and the possibility of 'islands' of stratigraphic survival within the reclaimed areas cannot be excluded.

6.5 In the light of the assessment, the non-built-on areas of the site can be divided into three zones of survival (relating to the Areas defined in Section 5.2 above, and on Figure 7) in terms of their potential archaeological significance:

Zone 1. Areas within the core of the colliery layout, between and adjacent to the surviving buildings and structures, and where no reclamation is known to have taken place. These areas are likely to retain sub-surface deposits of major importance for the understanding of the Scheduled Monument, and are therefore of national importance. We recommend that sub-surface disturbance within these areas should be avoided wherever possible. If and when disturbance is considered to be inevitable, we recommend that localised interventions such as service trenches should be dug to archaeological excavation standards, and that any more widespread disturbance should be preceded by archaeological evaluation and the development of a mitigation strategy. **Areas 2.1, 2.2**

Zone 2. Areas outside the core of the colliery layout, but where no reclamation is known to have taken place. These areas are likely to retain any archaeological deposits that were laid down, but such deposits are likely to be of lesser importance, and may only occupy restricted areas within the zone. Within this zone, we recommend that localised interventions such as service trenches be excavated under archaeological observation, and that any more widespread disturbance should be preceded by careful archaeological evaluation, and the development of a mitigation strategy for any areas where the survival of significant deposits is confirmed. **Area 2.3, 2.4, 2.5**

Zone 3. Areas subject to documented reclamation schemes. Given the terms of the reclamation schemes, significant archaeological deposits are unlikely to survive within these areas. However, given the possibility that field survival may locally be better than the desk evidence would indicate, and the status of these areas as parts of the immediate vicinity of the Scheduled Monument (and locally extending into the Scheduled area), we recommend that any localised disturbances should be subject to an archaeological Watching Brief, and any major disturbance should be preceded by a rapid field evaluation, in order to provide field confirmation that significant deposits do not survive. **Area 2.6**

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8 FIGURES

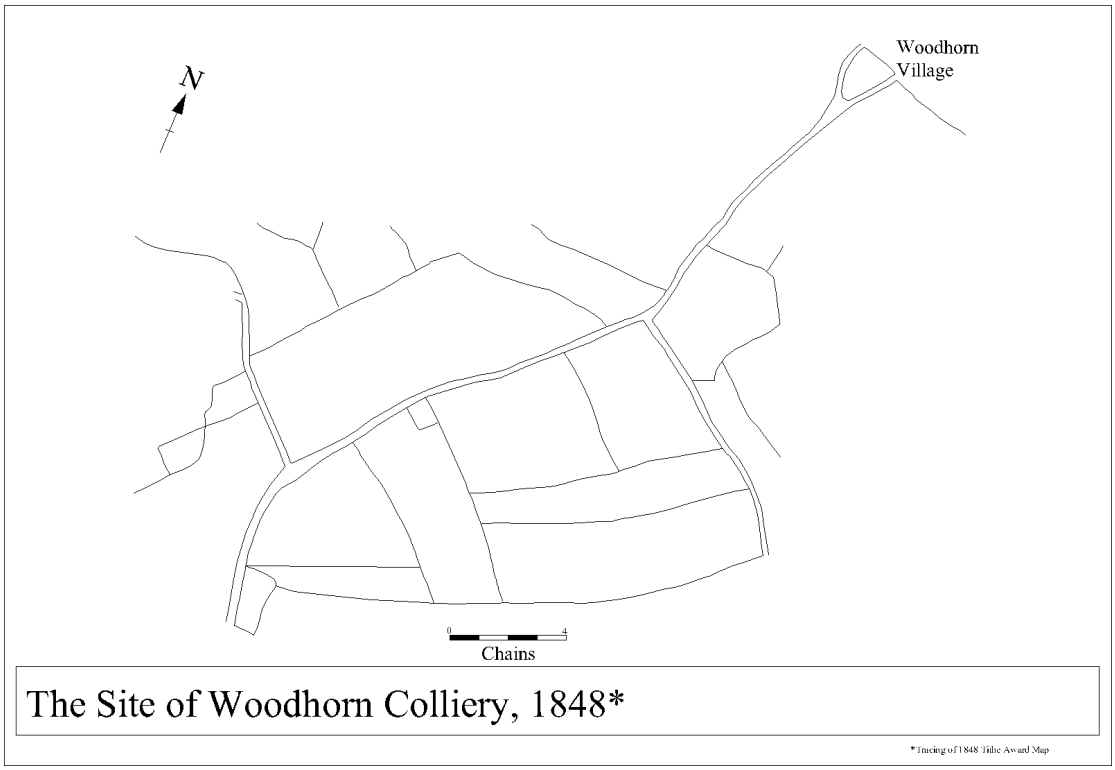

Figure 1: Site of colliery in 1848

Figure 2: Plan of colliery, c 1895

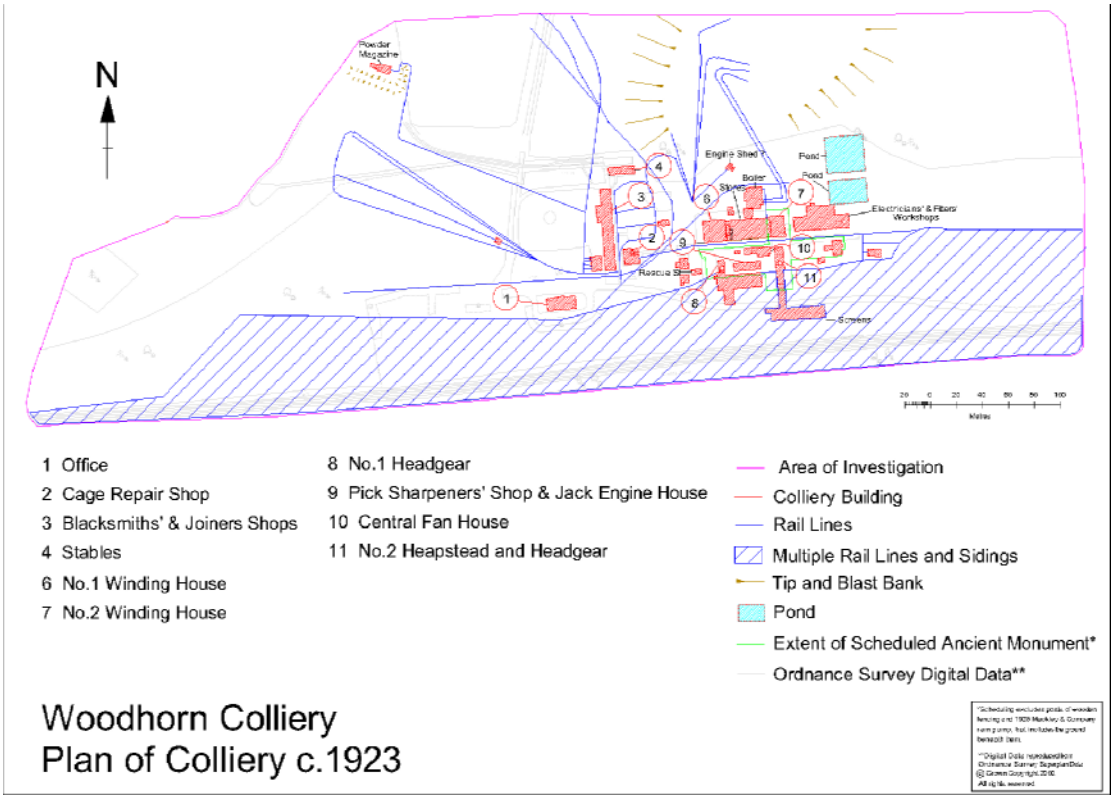

Figure 3: Plan of colliery, c 1923

Figure 4: Plan of colliery, c 1965

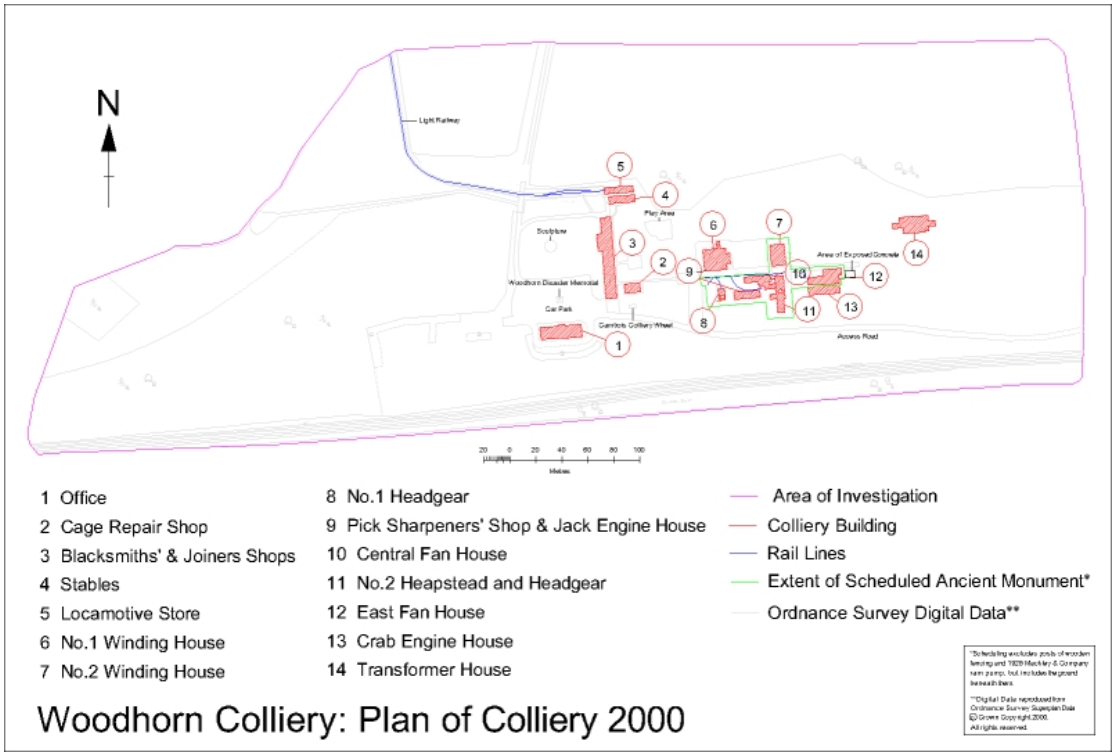

Figure 5:Plan of colliery, 2000, with building numbers

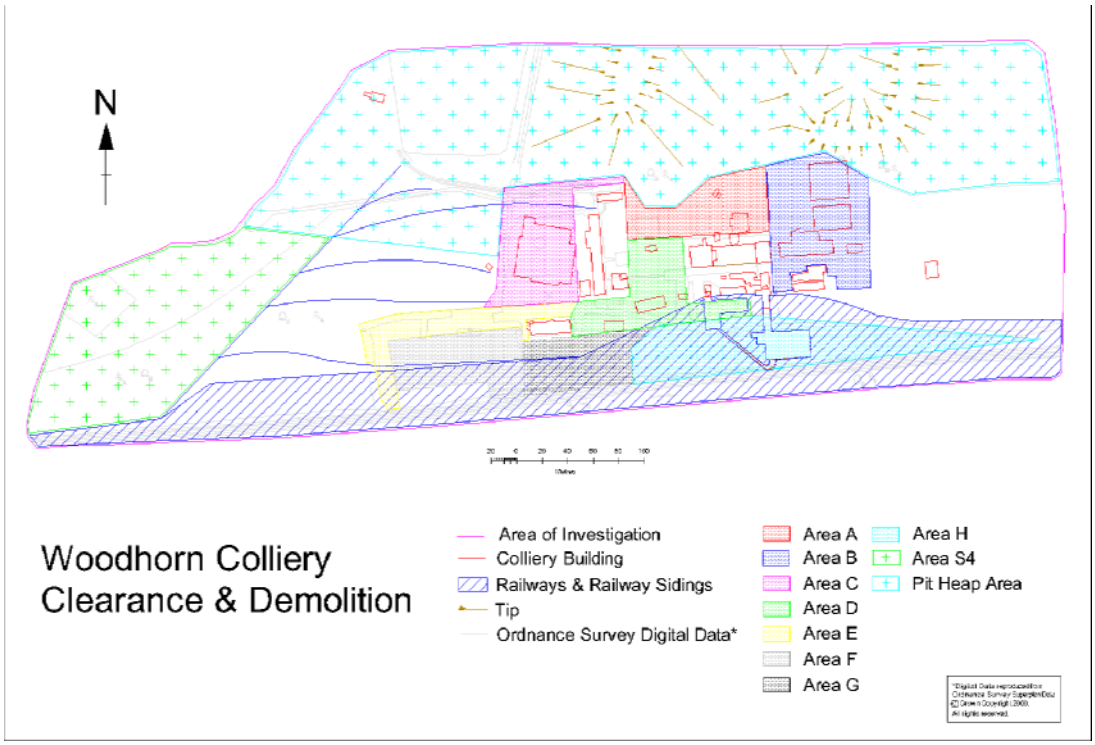

Figure 6:Clearance and demolition – contract areas

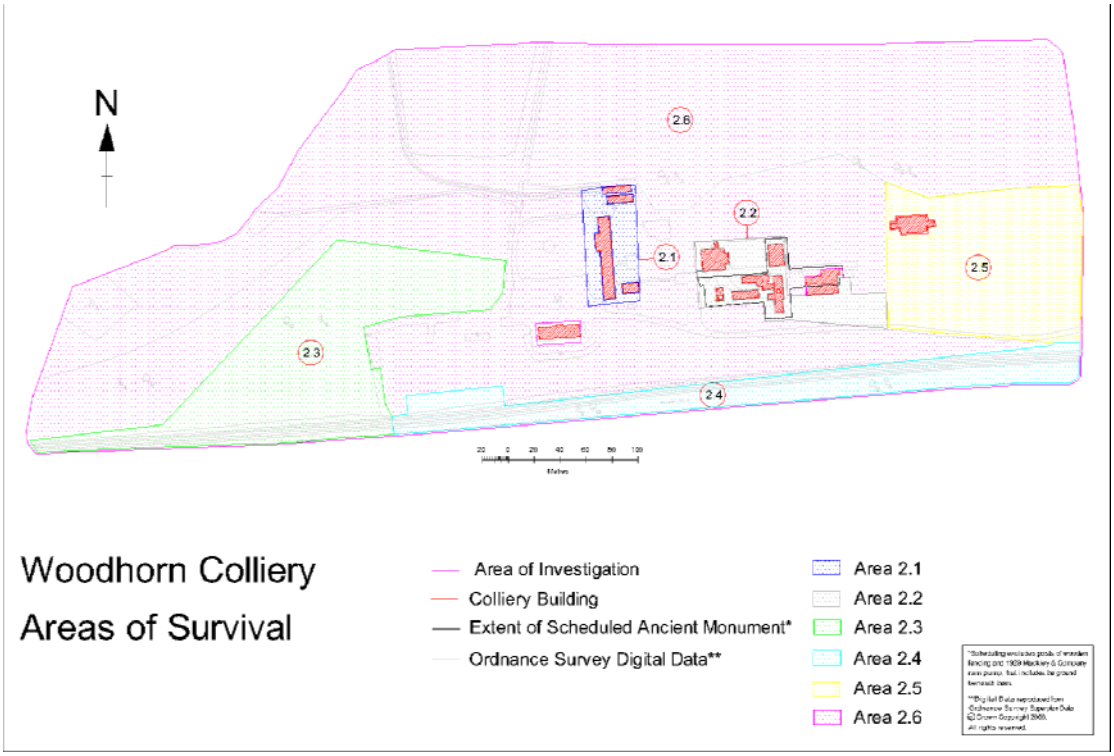

Figure 7:Plan of colliery, 2000, with area numbers