Engine House
Former Llay Hall Colliery
Sydallt
Wrexham

Heritage Statement



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for

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Revised June 2025

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1 Introduction

This heritage statement has been prepared in support of a forthcoming application for retrospective listed-building consent to add a new door to the former engine house, or power hall, of Llay Hall Colliery, Sydallt, Wrexham. The building is part of Alyn Industrial Estate, occupying the level ground between the A541 to the west and River Alyn to the east, at SJ 3156 5512 (fig 1). It is one of the surviving buildings at the former Llay Hall Colliery, where there are three other listed buildings: the colliery chimney and flue, washery and workshops.

The building is listed grade II (Cadw reference 15827). The purpose of this Heritage Impact Statement is to understand the historic asset and its vulnerabilities, and to assess the impact of the proposals on its significance.

The building was visited on 7 December 2023, and re-visited on 4 June 2025. The report is a revised version of an earlier heritage statement issued in December 2023. The previous report considered repairs to the roof which are no longer proposed.

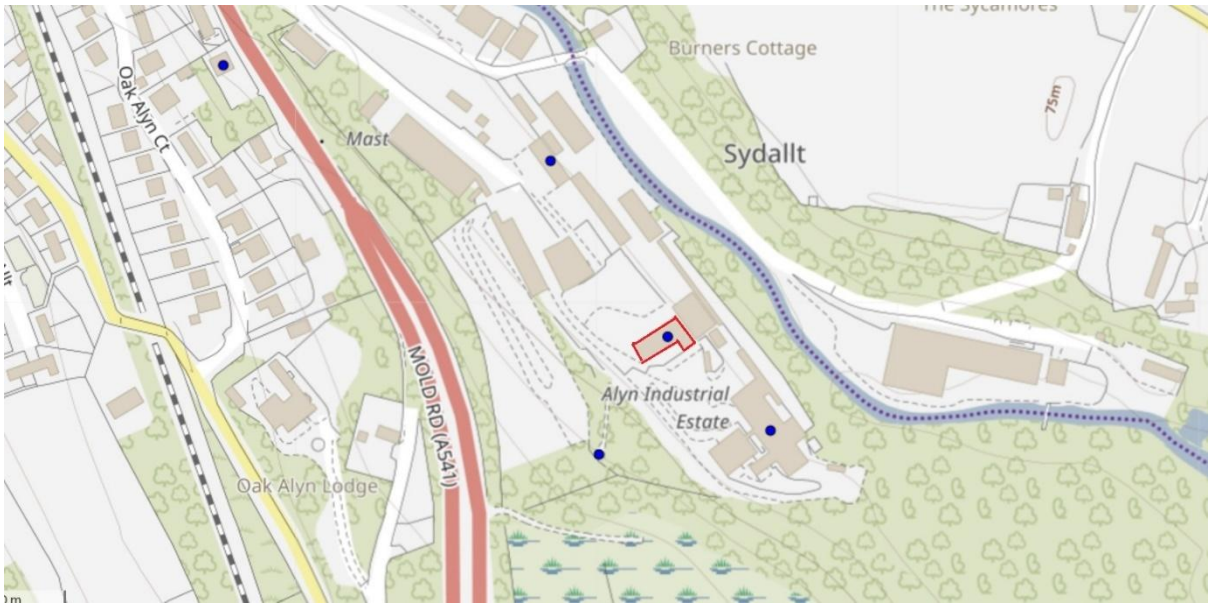


Figure 1. Location plan and associated listed buildings.

2 Policy and Guidance

2.1 National Policy

The legislative framework for the protection and management of the historic environment is contained in The Historic Environment (Wales) Act 2023. It repealed but incorporates earlier legislation, specifically the Planning (Listed Buildings and Conservation Areas) Act, 1990, which covered both England and Wales.

The means by which the preservation of heritage assets and their settings is incorporated into the planning process is set out in Planning Policy Wales (PPW), supplemented by guidance contained in Technical Advice Note (TAN) 24, which covers the historic environment. Paragraph 6.1.10 of PPW states that:

> There should be a general presumption in favour of the preservation or enhancement of a listed building and its setting, which might extend beyond its curtilage. For any development proposal affecting a listed building or its setting, the primary material consideration is the statutory requirement to have special regard to the desirability of preserving the building, its setting or any features of special architectural or historic interest which it possesses.

Paragraph 6.1.11 emphasises that

> the aim should be to find the best way to protect and enhance their special qualities, retaining them in sustainable use. The continuation or reinstatement of the original use should generally be the first option, but not all original uses will now be viable or appropriate. The application of planning and listed building controls should recognise the need for flexibility where new uses have to be considered in order to secure a building's survival or provide it with a sound economic future.

TAN 24 describes a heritage impact assessment as :

> a structured process that enables the significance of a designated asset to be taken into account when considering proposals for change. Heritage impact assessments should be proportionate both to the significance of the historic asset and to the degree of change proposed, and should include sufficient information to enable both the significance of the asset and the impact of change to be understood. The results of the heritage impact assessment should be summarised in a heritage impact statement.

Planning Policy Wales identifies how local planning authorities must treat designated heritage assets in their consideration of planning applications. This includes the impact of proposed developments within the settings of these historic assets. It therefore places an obligation upon local planning authorities to make the impact on the setting of heritage assets a factor in planning decisions.

TAN 24 defines the setting of historic assets in paragraph 1.25:

> The setting of an historic asset includes the surroundings in which it is understood, experienced, and appreciated embracing present and past relationships to the surrounding landscape. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral. Setting is not a historic asset in its own right but has

value derived from how different elements may contribute to the significance of a historic asset.

2.2 Local Policy

The Wrexham Unitary Development Plan (1996-2011) is the most recent adopted local policy document. It amplifies the national guidelines. Policy EC9 covers developments that affect listed buildings:

> **Policy EC9** Alterations or additions to, and development or redevelopment within the curtilage of, buildings or structures listed as of special architectural or historic interest must respect the setting and character of the listed buildings or structures.

In Paragraph 5.11 emphasis is placed on 'sensitive repair and improvement, using traditional materials and techniques, and in establishing appropriate new uses for them in order to guarantee their future survival'.

2.3 Cadw Guidance

Cadw has also issued guidance on change to listed buildings (Cadw 2017c). It underscores the importance of understanding a building's significance before changes to it are considered.

Section 4.4 covers restoration and reconstruction, for which listed-building consent would be required. It is a significant consideration because the application for listed-building consent concerns a modern doorway and window in the engine house. 'The restoration or reconstruction of lost, destroyed or superseded elements of a building will only be justified if it enhances the building, improves its viability, and is based on authentic and compelling evidence. You should avoid speculative reconstruction and the reinstatement of features that were deliberately superseded by later historical additions, or which were lost as a result of a significant historical event.'

Alterations to listed buildings is covered in Section 4.5 and advises that an applicant 'must be able to explain why the work is needed and provide sufficient information to explain the impact of your proposal on the significance of the building'.

3 Historical Background

Llay Hall Colliery was founded by Llay Hall Coal, Iron and Firebrick Company, which was formed in 1873. The pit opened in 1877. The main coal seam was discovered at 245 yards below the surface (and was therefore exploited earlier than nearby Llay Main, opened in 1921, where the seam was at 833 yards). By 1896 360 men were employed, producing house and steam coal. Fireclay was another product of the pit, and the colliery worked in conjunction with the Llay Hall Firebrick Works to the south-east of the colliery, on the opposite bank of the River Alun, but which was disused by 1914. Llay Hall Coal, Iron and Firebrick Company went into liquidation in 1885, and the pit was taken over and managed

by E.S. Clarke, and from 1901 by his executors. Llay Hall Colliery Company owned and operated it from 1918. Output in 1905 was 145,000 tons, when 533 men were employed there (Jones 2008, 290). There was a serious explosion in January 1947, and the pit closed later that year, just after nationalisation.



Figure 2. Ordnance Survey, 1879.

The colliery is shown on the 1879 Ordnance Survey map soon after it opened, but shows only a small group of buildings and no evidence of a connecting railway (fig 2). By 1900, after it had been taken over by E.S. Clarke, the colliery had expanded considerably, and included the present power hall (fig 3). A railway branch connected the colliery to the Wrexham, Mold and Connah's Quay Railway. The only major addition after this date was the washery, which is first shown on the 1914 revision of the OS map (fig 4).

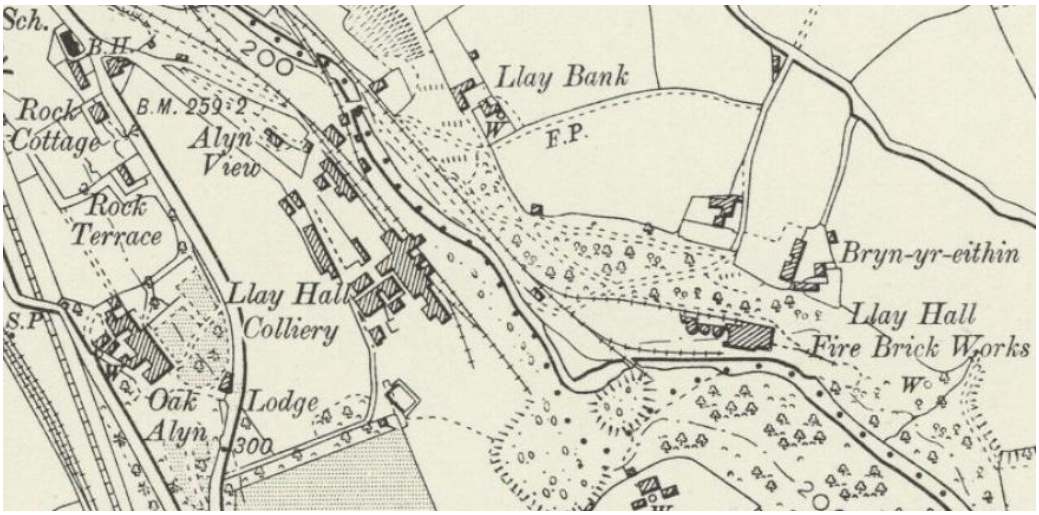


Figure 3. Ordnance Survey, 1900.

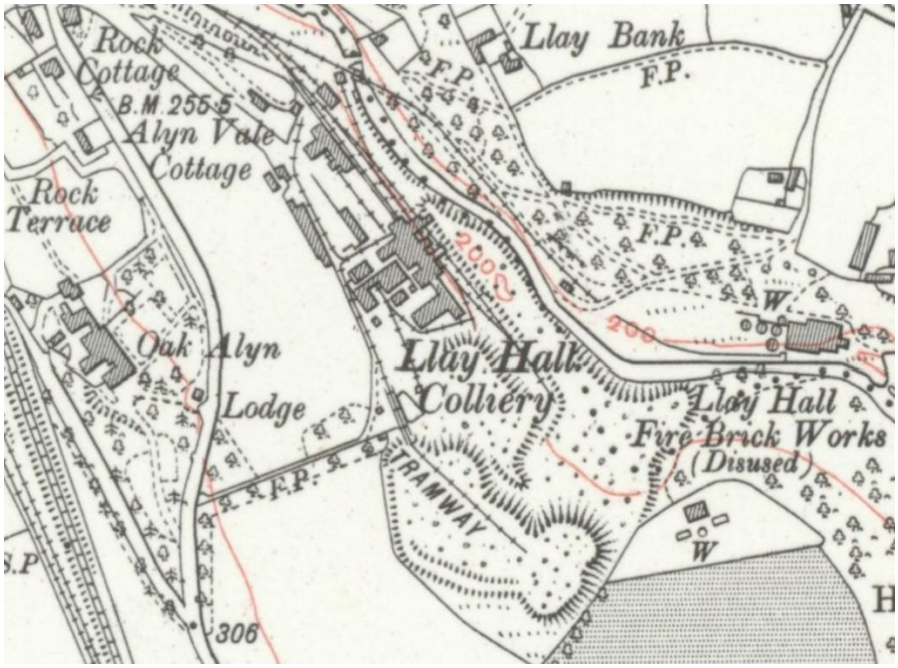


Figure 4. Ordnance Survey, 1914.

4 The Site

The site is a large, levelled area on the west side of the River Alyn. At the north end is a dwelling, and offices, which are not listed, and a single-storey workshop, which is listed grade II. The power engine house block is in the centre of the site, on the north side of which is a former shaft with a concrete cap (fig 5). The washery buildings are at the south-east end of the site. The tall boiler stack, on higher ground to the west of the site, was probably placed there to improve the draught from what was otherwise a colliery built on lower ground beside the river.



Figure 5. The engine house block, viewed from the capped shaft.

4.1 Building Exterior

The engine house block consists of three conjoined ranges: A gabled range on the west side, lower range at right angles under a hipped roof in the centre, and a longer range on the east side, also under a hipped roof, which gives the block and overall L-shaped plan.



Figure 6. The west range, north side.

The range on the west side is built of red brick on a blue-brick plinth (fig 6). It has round-headed windows with iron-framed radial glazing, but the frames are clearly secondary because brickwork below the sills indicates that the majority of the windows were originally floor length (fig 7). The upper part of the building is in a paler brick and is clearly later, probably a heightening of the original building. This is said to have occurred following a fire in 1972. On the north side is a large sliding door inserted probably after the colliery had closed and an alternative use was found for the building. (The sliding door has been painted black since 2023.) The range has a corrugated-iron roof with raised ridge vent.

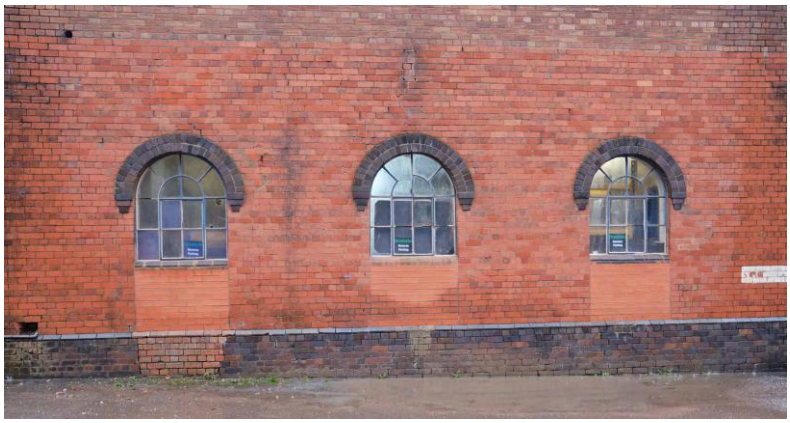


Figure 7. Windows in the west range, showing the brick infill below the sills.

The central range is also of red brick on a blue-brick plinth, but under a hipped slate roof on a moulded eaves cornice. It has a round-headed window in the south wall, with hood mould

and impost band. In the north wall is a modern entrance and window where much of the wall has been rebuilt (fig 8). This was probably made necessary after the wall was partially demolished for the removal of winding machinery.



Figure 8. North wall of the central range as it appeared in 2023.

The longer east range is also brick under a hipped slate roof on a moulded eaves cornice. On the north side is a brick évasée (the broad flue through which bad air is extracted from underground), to the left of which is a wide modern opening with sliding steel door, perhaps made necessary by partial demolition of the wall for the removal of machinery after the colliery had closed (figs 9, 10). (These doors have been painted black since 2023.)The évasée is set back from the end of the central and east ranges, and a modern lean-to has been added post colliery closure. The évasée has moulded brick and stone copings. In the south wall is a single round-headed window, with hood mould and impost band, with two small, inserted toilet windows, which are modern (fig 11). There are also round-headed windows in the east and west walls, in radial-glazed iron frames.



Figure 9. East and central ranges, north wall, photographed in 2023.



Figure 10. North wall of the évasée.



Figure 11. East range, south wall.

4.2 Building Interior

The interior of the building has been significantly altered, principally by the laying of a modern concrete/cement floor (fig 12). This has obscured evidence of how the machinery was placed within the building. In the west range the varying levels of the window suggest that the building originally had two floor levels. The west range has a travelling crane, built

by Herbert Morris Ltd (fig 13). It is set on a steel frame which is partly attached to the raised modern section of the walls and appears therefore to be a post-colliery installation. The range has a light steel-trussed roof.

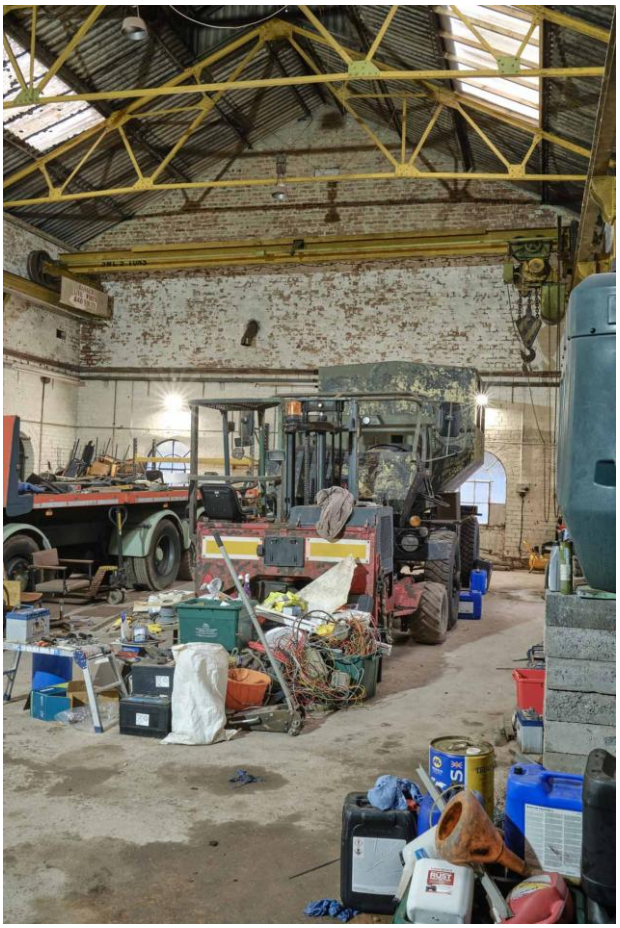


Figure 12. Interior of the west range.



Figure 13. Travelling crane in the west range.

There are four round-headed openings between west and central ranges, all with bullnose reveals. The outer round-headed openings are doorways, one of which retains a boarded door under a radial-glazed overlight. The two central openings are now open but appear to have been windows – there is evidence that iron-frame glazing has been removed (fig 14). Inside the central range the space has been sub-divided by modern blockwork walls. The four-bay roof is composite, consisting of timber collar beams and principal rafters, strengthened by iron tie rods.

The east range has a seven-bay roof similar to the central range (fig 15). On the north face of the évasée some of the brickwork has been cut away to create a large, irregular opening (fig 16).

The arrangement of machinery within the building is now difficult to interpret. The central range was the winding house, since it is directly in line with the capped shaft. Cables were therefore run out of the north side of the building, in the section of wall that was taken down. The fan is likely to have been housed within the east range, to judge from the position of the évasée. The steam engine and boilers are therefore likely to have been in the west range.

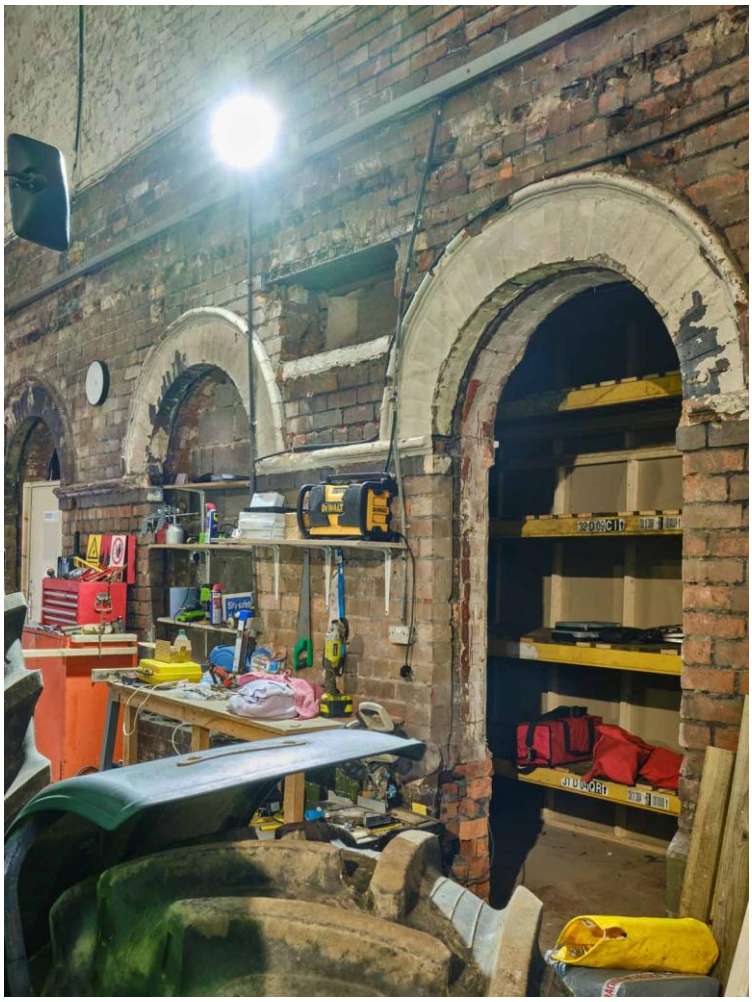


Figure 14. Openings between west and central ranges.



Figure 15. Roof trusses in the east range.

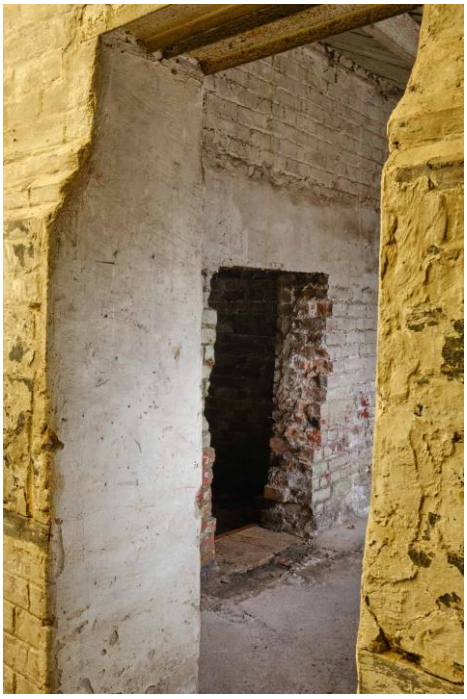


Figure 16. Irregular opening cut into the north wall of the évasée.

5 Statement of Significance

The significance of heritage assets is measured against agreed heritage values, as set out in *Conservation Principles* published by Cadw (2011):

- **Evidential value**: This derives from those elements of an historic asset that can provide evidence about past human activity, including its physical remains or historic fabric.

- **Historical value**: An historic asset might illustrate a particular aspect of past life or it might be associated with a notable family, person, event or movement.
- **Aesthetic value**: This derives from the way in which people draw sensory and intellectual stimulation from an historic asset. This might include the form of an historic asset, its external appearance and how it lies within its setting.
- **Communal value**: This derives from the meanings that an historic asset has for the people who relate to it, or for whom it figures in their collective experience or memory. It is closely linked to historical and aesthetic values but tends to have additional or specific aspects.

5.1 Evidential Value

The engine house was at the heart of the working colliery, connected to both the downcast shaft where workmen descended and coal was hauled up, and the upcast shaft by which the underground workings were ventilated. The engine house block has mostly original fabric, with only the raised section and modern roof of the west range and the modern floors altered from the original. The block stands on the south side of the downcast shaft, on a site with other colliery buildings (workshops, boiler stack, washery) that make up a substantial proportion of the buildings at a colliery of the late-nineteenth and early-twentieth centuries.

5.2 Historical Value

Coal was at the heart of the history of North-East Wales in the nineteenth and twentieth centuries. Llay Hall is one of a minority of collieries where significant building remains have survived. Its history spans the peak of coal production in Wales – in the decades leading up to the outbreak of war in 1914 – and continued, just, to the nationalisation of the coal industry in 1947. The colliery also had links with the local brick trade, a substantial industry in the North Wales coalfield in the late-nineteenth century.

5.3 Aesthetic Value

The buildings are built with a typical industrial aesthetic – brick with iron-framed glazing to the windows and hipped slate roofs – and retain a strong industrial character despite alterations, including to some of the windows. The red brick is typical of the locality (and best represented at Ruabon), whereas the blue brick was probably imported from Staffordshire and the slate from north-west Wales.

5.4 Communal Value

Seventy-eight years have passed since the closure of the colliery, so the number of people with a direct connection to the working pit is now very small. The communal value of the building is therefore now modest, confined mainly to post-colliery activities on the site.

6 Condition and Capacity for Change

The west range is an open space with modern concrete floor. The interior is generally in good condition. Although the height of the building and floor details have been altered significantly there is little capacity for further change.

The north end wall of the central range has a doorway and window that detract from the overall character of the building. They have more the character of a shop front than an industrial building. There is therefore a high capacity for change in this part of the building. It was argued above that the dismantling of the original north wall was probably associated with the removed of machinery from inside the building. Originally there was probably a round-headed opening through which the cables from the winding drum passed, but this can now only be speculation.

Many of the common rafters can be seen to have rotted at the ends (fig 17). The roof has been stabilised by some remedial measures, such as fixing battens on their upper side, although it was not possible to examine these at close quarters. The roof structure is an important contributor to the significance of the building and, while further remedial measures may need to be taken, it is important that they are repairs and not alterations.

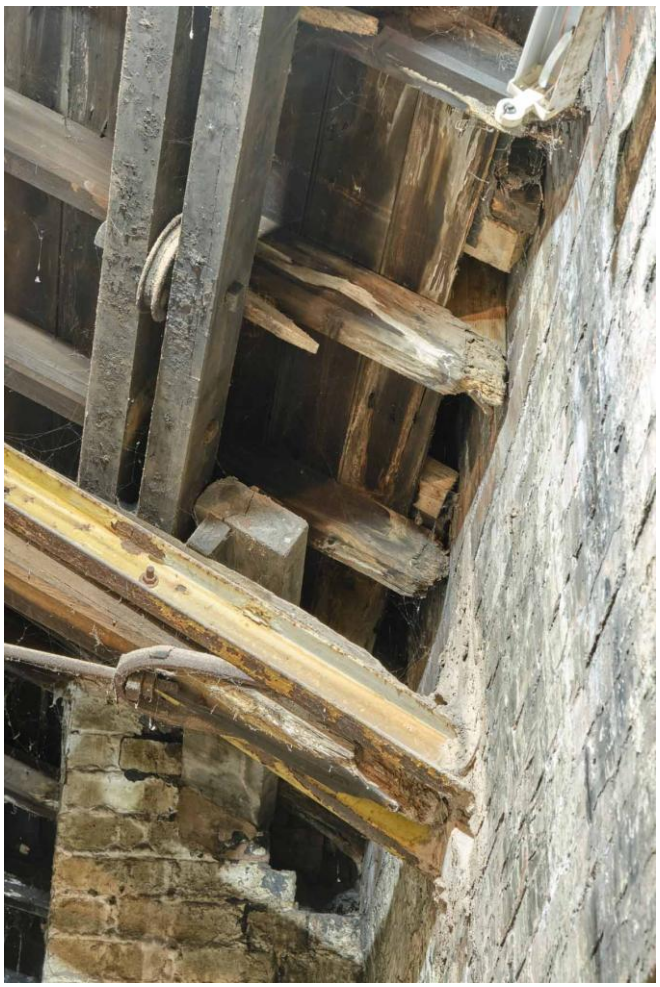


Figure 17. Detail of rotted ends to the common and principal rafters.

Two windows between the west range and the central range have been removed but it is not necessary to replace them. The central range has modern blockwork partitions of no historical value, which can be removed without affecting the significance of the building in any way.

The east range is generally in good condition. Partitions have been inserted to provide toilets at the south end of the range, which can be removed without affecting the significance of the building. Otherwise there is little capacity for change. Likewise there is little capacity for change to the évasée, which is an important structure in the working of, and the understanding of, the colliery layout. The condition of the évasée was not possible to determine with complete confidence. It may be worth examining the state of the coping courses, which may need repair. The blockwork lean-to on the north side of the évasée does not contribute to the significance of the building, although its removal would necessitate rebuilding the break in the évasée wall that would be exposed.

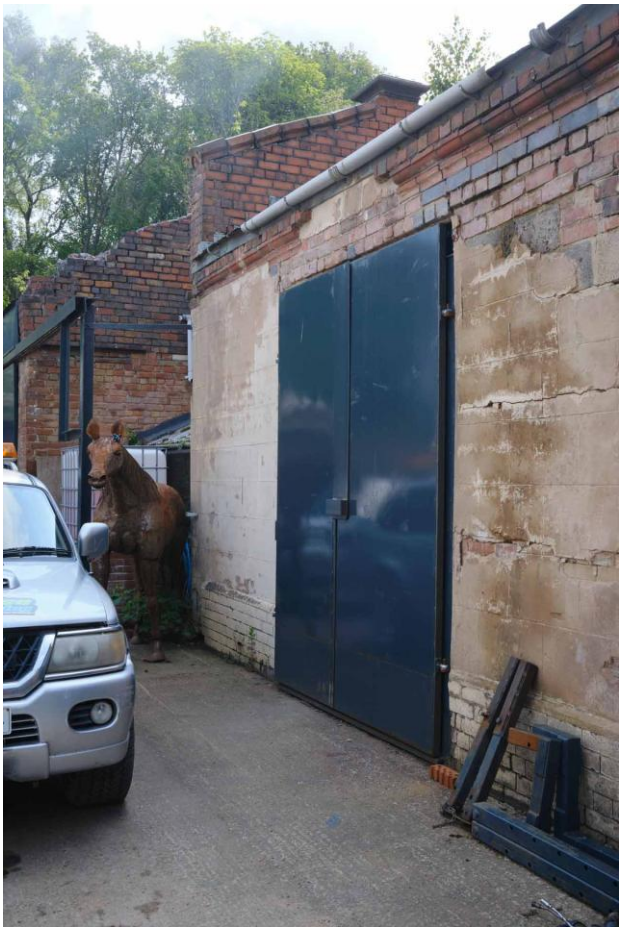


Figure 18. Steel doors added to the central range.

7 Impact Assessment

The doorway and window in the central range have been concealed by steel doors painted black, similar to those in the east and west ranges. It was argued above that the wall was partly dismantled when the colliery closed, in order to remove machinery. Therefore,

although it was probably similar to the south wall, it is not possible to determine the exact original appearance of the north wall, and the Cadw guidance cautions against speculative restoration. Partial demolition of the wall c1947 is part of the history of the colliery and therefore not without historical significance. Replacement of the doorway with another wooden door would give a misleading impression of the original appearance of the building and would therefore perpetuate the loss of significance derived from the current door and window. For this reason, addition of hinged steel doors would seem an appropriate solution which acknowledges that this side of the building has been altered, and it would therefore have a positive impact on the significance of the listed building (fig 18).

8 Assessment of Setting

The planning proposal affects both the listed building and the setting of other listed buildings in the vicinity. Guidance on good practice in the assessment of the setting of heritage assets has been published by Cadw (2017a). It sets out a methodology for assessing the impact of proposed developments on the setting of heritage assets, and the impacts they may have on an asset's significance. Cadw's recommended strategy has four stages.

1. Identification of heritage assets that would be affected by the proposed development.
2. Define and analyse the setting, identifying the key factors which contribute to the significance of each of the historic assets affected.
3. Evaluate the potential impact of change or development.
4. Consider options to mitigate the impact of a proposed change or development.

There are three listed buildings that could be affected by the proposals (see fig 1):

- Former Llay Hall Colliery Chimney and Flue, grade II (Cadw ref 15830) (fig 6)
- Former Llay Hall Colliery Washery Building, grade II (Cadw ref 15828) (fig 19)
- Former Llay Hall Colliery Workshops, grade II (Cadw ref 15829) (fig 20)



Figure 19. Former Llay Hall Colliery Washery.



Figure 20. Former Llay Hall Colliery workshops.

Approximately 310 metres north-west of the engine house is the grade-II listed Rock Cottage (Cadw ref 1714), but since the former colliery site is surrounded by mature trees, with no distant views possible, and since the cottage pre-dates Llay Hall Colliery, it will not be affected by development on the colliery site. There is one non-designated heritage asset close to the engine house, which is a single-storey brick building to the west of the shaft, and is part of a longer range shown on the 1900 OS map (fig 21).

These buildings share many of the qualities that contribute to the significance of the engine house. Firstly they are part of a group, providing evidential and historical value of a large colliery of the late-nineteenth century. The washery has additional evidential and historical value as one of the earliest of such buildings and the only surviving example in Wales to be protected by listing (RCAHM Wales 1995, 163-72). The workshop shares the same industrial aesthetic as the engine house, with its brick walls, hipped roof and round-headed iron-frame windows.



Figure 21. Unlisted former colliery building north of the engine house block.

Alteration to the exterior of the engine house will be on the north side, facing away from the washery and the chimney, with no direct view to the workshops, although the latter relationship could change in future development. The engine house is inter-visible with the unlisted building, although partially obscured by boundary fences. It was argued above that the proposed alterations to the engine house would be an enhancement and therefore it would have a small positive impact on the setting of the unlisted building.

In conclusion, therefore, alterations to the exterior of the engine house will not have a visual impact on other listed or unlisted buildings and so the impact on their significance will be neutral.

9 References

9.1 Cartographic sources

Ordnance Survey, county series maps 1879, 1900, 1914, 1946.

9.2 Online sources

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Appendix 1: Listed Building Description

Full Report for Listed Buildings

Cadw

Llywodraeth Cymru
Welsh Government

Summary Description of a Listed Buildings

Reference Number	Building Number	Grade	Status	Date of Designation	Date of Amendment
15827		II	Designated	26/09/1994	01/12/1995

Name of Property	Address
Former Llay Hall Collery Engine House	

Location

Unitary Authority	Community	Town	Locality	Easting	Northing
Wrexham	Gwersyllt		Sydallt	331561	355120

Street Side	Location
	Located in the group of former Llay Hall colliery buildings in use as an industrial estate east of Mold Road. The engine house is a large building at the middle of the group with a smaller wing attached, currently in use as industrial workshops and store

Description

Broad Class	Period
Industrial	

History

Llay Hall Colliery operated from 1877 until 1948. It was sunk by the Llay Hall Coal, Iron and Fireclay Company and worked in association with a fire brick works on the opposite side of the River Alyn. It was nationalised in 1947, but closed soon afterwards, following a serious underground explosion. The buildings accommodated the winding engine for the No 1 shaft together with a fan engine and other equipment.

Exterior

The buildings are of red brick on a blue brick plinth, with a corrugated roof. The windows are round headed with blue brick arches and metal frames with concentrically and radially glazed fanlights. The more northerly part of the building has blue brick and terracotta string courses and eaves cornices. The larger part is a tall gabled structure oriented south-west to north-east. There are three low-level windows to the south-west gable and there were formerly five openings to each side elevation, though one on the north-west side has been replaced with a large sliding door. The roof appears to have been raised at some time and re-covered, and contains a longitudinal raised vent. Inside is a travelling crane by Herbert Morris Ltd. At the north-east is a small square block with a hipped slate roof and high brick parapets which may have been connected with the fan drift. This is adjoined by a wing at right angles oriented north-west to south-east, also with a hipped slate roof, which appears to have housed the fan engines.

Interior

Reason for designation

Listed as an unusually complete example of a colliery engine house of complex form, especially rare in North Wales, and for group value with other former colliery buildings nearby.