Distinctiveness Assessment and Evaluation

Assessor: Adam Sharpe.

Date: 12 April 2017.

Asset / place: Wheal Busy Smithy.

Step 1: Define the asset

Define the entity that you want to describe the distinctiveness of (this could be a single asset like a building or monument, or an area like a Conservation Area or town. Please include a location plan / boundary.

Identify key evidence sources / existing descriptions such as HER / NHLE entries or other pieces of text describing the asset. Highlight or annotate any sections that relate to distinctiveness themes.

Name: SMITHY BUILDING AT WHEAL BUSY
List entry Number: 1391151

Location
SMITHY BUILDING AT WHEAL BUSY
County: Cornwall
Parish: Chacewater
Grade: II
II Former blacksmith's and workshop. Built c.1872 for Wheal Busy Mine.

**EXTERIOR:** A tall single storey building of random granite rubble with granite quoins and some modern repairs of brick and block work in places. A large and impressive, hipped scantle slate roof with ridge tiles. The tall central stack for the furnace has a lower stage of stone and upper of brick. The front elevation has cart entrances at either end; the one to the right is arched and has brick dressings, whilst that to left has a granite lintel. Two further doorways and a window opening are positioned in the central part of this elevation. An extension to the right is of rubble stone with a single pitch roof. Map evidence indicates that there was a further extension to the left but this, with the exception of a low projecting stone wall, has been demolished. There is a particularly fine cast iron lintel above the right side entrance to the building bearing "GREAT WHEAL BUSY MINE 1872", cast by Perran Foundry, near Truro, and a further cast iron lintel to the rear entrance.

**INTERIOR:** Two internal bays, formed by a partition wall of rubble stone and the base of the chimney, and open to roof. It has a tie beam hipped roof with angle struts. The purpose-built forge dominates the larger space and is constructed of granite rubble that has been lime-washed.

**HISTORY:** From the early C18 this area of Cornwall became the focus of intense mining activity and Wheal Busy was the site at which James Watt introduced some of his most historical improvements in steam engine design. In its heyday, Wheal Busy was a major employer and the mine's existence greatly contributed to the development of the village and new parish of Chacewater. It also influenced the development of the village and new parish of Chacewater. It also influenced the development of regional transport networks, using a pioneering horse-drawn tram road for the transportation of copper and tin ores. Mining was suspended at Wheal Busy in 1873, although arsenic was produced at the site during the late C19 and early C20. Wheal Busy is located within the Gwennap-Chacewater mining district, one of the World Heritage Site Bid Areas for Cornish Mining.

**ASSESSMENT OF IMPORTANCE:** The smithy at Wheal Busy is a remarkably well surviving example of this type building and is perhaps one of the largest blacksmith's workshops in the country. Together with the ruined structures and earthworks of the mine (which are protected as a scheduled monument), it represents some of the wide range of activities associated with extractive mining in Cornwall. As well as being of special interest both historically and for its completeness, it also has a considerable visual impact within the landscape, and has strong group value with the mine's engine house and chimney (qv).

**SOURCES:** Wheal Busy, PRN 19318. Cornwall and Scilly Historic Environment Record First Edition Ordnance Survey map.

https://historicengland.org.uk/listing/the-list/list-entry/1391151

**Wheal Busy**, sometimes called **Great Wheal Busy** and in its early years known as **Chacewater Mine**, was a metalliferous mine half way between Redruth and Truro in the Gwennap mining area of Cornwall, England. During the 18th century the mine produced enormous amounts of copper ore and was very wealthy, but from the later 19th century onwards was not profitable. Today the site of the mine is part of the Cornwall and West Devon Mining Landscape World Heritage Site.

Today, the site is within area A6i (The Gwennap-Chacewater Mining District) of the Cornwall and West Devon Mining Landscape World Heritage Site. There are good remains
of the Brunton calciner,\[15\] and the concrete bases of the Californian stamps are prominent. The Mineral Tramways cycle path passes the mine.\[16\]

The mine has been listed as a scheduled monument since 11 March 1974.\[19\] Many of the buildings on the mine property have been listed as Grade II buildings: the engine house and arsenic calciner on 21 November 1985,\[20\][21][22] the chapel for the mine on 14 April 1999,\[23\] and the mine's smithy building on 7 December 2004.\[24\] In 2011, it was determined that many of the mine's building were in need of restoration. Natural England's Higher Level Stewardship agreed to fund work on the engine house and associated buildings in 2014,\[21\] and the project was completed in the summer of 2015.\[25\] However, while the smithy building was also in need of work, the agency was not able to fund its restoration, but it was hoped there would be other means of funding the restoration of this building.\[26\] Note: it is understood that given that the Smith is a roofed building the landowner would be required to fund 20% of the costs of the work, which they declined to do.

https://en.wikipedia.org/wiki/Wheal_Busy

THIS spring will see the start of much-needed building conservation work at the Wheal Busy mine site, on the outskirts of the village of Chacewater near Truro.

Wheal Busy and Chacewater are part of the Unesco inscribed Cornish Mining World Heritage Site through their importance to tin and copper mining during the 18th and 19th centuries.

The conservation project is being undertaken by Natural England in partnership with the Tregothnan Estate, the landowner, with the works funded through the Natural England Higher Level Stewardship (HLS) scheme, which targets European Union environmental funding to improve land management.

Like many metalliferous mine sites, Wheal Busy was worked and reworked at different periods, and the buildings which are about to be conserved date from the mid-19th through to the early 20th centuries, these being the pumping engine house (1856), with its later boiler house (1909) and adjacent chimney. The HLS project is also to fund the preparation of a conservation management plan for the mine smithy, an extensive stone and slate building which formerly satisfied all the mine's metal working and tool sharpening requirements.

Wheat Busy Smithy
Tregothnan Estate
Chacewater

The project will focus on the conservation and reuse of the internationally recognised 19th century mine blacksmiths' workshop (Listed Grade II) at the former Wheal Busy mine site, near Chacewater.

www.calh.co.uk/newsletter/CALH_Newsletter_87.doc Cornwall Association of Local Historians
Wheal Busy Smithy and its surroundings circa 1878 as shown on the 1st Edition OS 25" to a mile mapping.

Wheal Busy Smithy and its surroundings circa 1908 as shown on the 2nd Edition OS 25” to a mile mapping.
Images of Wheal Busy Smithy showing its neglected appearance.
Further recent images of Wheal Busy Smithy.
One of the Perran Foundry cast iron lintels over the main doorways into the Smithy.

Significant deterioration to the extension to the Smithy.

The interior of the building, in use as a vehicle repair shop.
A view from the north looking towards Chacewater showing the landscape context within which Wheal Busy Smithy sits.

A 2005 CCC aerial photograph showing the relationship between the Smithy (centre) the engine house (top, right of centre) and cottages associated with the mine (upper centre). The scraped mine dumps (lower centre and right) are gradually revegetating.
Step 2: Identify which of the distinctiveness themes relate to the asset

*Use the prompts to identify what parts or features of the asset relate to each theme and why. This might include: materials, design, associations, function, use and so on.*

Physical distinctiveness

Constructed *circa* 1872 predominantly of mine waste with granite quoins and reveals to wall openings under a hipped scantle slate roof which probably originally incorporated a (now-removed) clerestory vent; a tall, tapering brick-built forge chimney protrudes from the roof; it is probable that the individual forges in the building originally had their own chimneys. Some repairs have been undertaken to the building in brick and using concrete blockwork, but it has deteriorated significantly. Much of the roof covering has been lost, some wall collapse has occurred. One of the most notable features of the exterior of the building is the cast iron lintel over a doorway on the northern elevation. The lettering on this reads GREAT WHEAL (1872) BUSY MINES. There is a similar lintel over a doorway on the eastern elevation.

Internally the listing description indicates that there are two internal bays, formed by a partition wall of rubble stone and the base of the chimney. The building is open to the roof, which is tie beam hipped with angle struts. The forge dominates the larger of the two internal areas: this is constructed of granite rubble which has been lime washed. The ends of the roof trusses have decayed, and some are now supported off blockwork-constructed internal buttresses.

As constructed, the smithy was part of a dispersed mine complex and stood within an extensive area of mine dumps within which there were a number of shafts. It is a substantial structure, the largest mine smithy constructed in Cornwall.

Since the closure of the mine the building has been used for a range of purposes, including car auctions and vehicle repairs. It has received little or no maintenance or repair work in the last few decades.

Wheal Busy Smithy was Listed Grade II in 2004. The south-eastern extension to the building is not Listed.

Economic distinctiveness

Great Wheal Busy was one of Cornwall’s great copper mines, and the site of many innovations in engineering and mining technology, particularly in relation to the development of steam pumping technology. Given the size of the mine, it required a substantial blacksmith’s shop with the capability of making up bespoke ironwork, undertaking repairs to machinery and re-sharpening many hand drills every day.

The smithy is thus a physical indicator of one of Cornwall’s most productive and important mines, and one which played a substantial role in developments which led to Cornwall becoming the leading force in mining technology during the 19th century, one of the factors which led to the 2005 inscription of the Cornish Mining World Heritage Site.

Smithies were formerly a commonplace of Cornish mines, but most examples have either been demolished or have been converted to other uses, retaining few, if any,
original features. In the south-west of Britain their distribution was restricted to the former mining districts of Cornwall and parts of west Devon. The example at Wheal Busy is an important indicator of the surface industries which were required to keep a mine in production.

**Spiritual folkloric and artistic distinctiveness**

These are not characteristics contributing to the distinctiveness of this site

**Linguistic distinctiveness**

Linguistic distinctiveness is not a characteristic of this site.

**Natural distinctiveness**

Not relevant to this site.

**Cultural connections and resonance beyond Cornwall**

Wheal Busy Smithy makes a key contribution to the Outstanding Universal Value\(^1\) of the Cornwall and West Devon Mining Landscapes World Heritage Site as a well-preserved example of an ancillary mine building.

Phases of migration amongst Cornish miners which took place during the 19\(^{th}\) century, particularly during the its later decades when local mines became uneconomic in the face of developing completion from foreign mines saw Cornish working men and mining technologies exported world-wide. The mines that they established in virtually every continent across the globe would, of course, have included smithies such as the one at Wheal Busy.

**Step 3: how does the asset’s distinctiveness inform and contribute to the historic, evidential, aesthetic, and communal heritage values of the asset?**

*Please use the tables within the ‘themes’ document to identify the relationship between the cultural distinctiveness of a place and established heritage values.*

**Historic value**

*Historic value connects contemporary places to past people, events and aspects of life and can be illustrative or associative*

Despite its size, long history and undoubted former importance, there are few physical remains of Wheal Busy these days beyond a recently-conserved late engine house and its attached boiler house, the battered bob wall of a second engine house (on Black Dog Shaft), the ruins of an arsenic calciner, its labyrinths and stack and the mine smithy. Its sprawling copper dressing floors have been cleared away, like almost all of its many engine houses and almost nothing survives of its substantial early 20\(^{th}\) century tin dressing mill. Much of the former mining landscape within which these are sited has

\(^1\) OUV is explained further on the Cornish Mining website [Link no longer available]
been reclaimed through the re-working of mine dumps, the siting of a pre D-Day US Army transit camp within this area and the reclamation of some surface areas of the mine to agriculture. The mine smithy at Wheal Busy, taken together with the nearby arsenic processing works and the engine house and boiler house therefore constitute an important group of surviving structures which mark out the former core of the Wheal Busy site.

**Evidential**

*The evidential value of a place lies in its potential to provide evidence of past activity.*

The substantial size of the Wheal Busy smithy is a good indicator of the former importance of this technologically innovative Cornish copper mine, particularly when compared to the much smaller examples found on other mines in the county. It is also an indicator of one of the surface activities needed to facilitate operations underground on every hard rock mine in Cornwall. The size of the smithy is an indicator of the size of such structures that were required in the period when all shothole drilling underground was undertaken by hand using drills with chisel tips work hardened on blacksmiths’ forges, this being prior to the introduction of both compressed air drills (*circa* 1880) and long-lasting tungsten-tipped drill steels (during the 20th century). Its size also reflects the size of the underground workforce in this very extensive mine.

**Aesthetic**

*The ways in which people draw sensory and intellectual stimulation from a place through its designed or fortuitous appearance*  

The building has little in the way of aesthetic value beyond its distinctive cast iron lintels (these were cast at Perran Foundry), though it was constructed using traditional building materials and methods; mines started up during the 20th century tended to construct buildings of distinctly utilitarian appearance, these often being of a deliberately temporary nature, and utilising timber or concrete construction and sheet tin roofs and cladding materials. Wheal Busy Smithy is thus a reminder of a period of optimism in Cornwall when it was assumed that mines would operate for many decades and it was worth investing in their buildings.

**Communal**

*The value of a place through its social and collective meanings and place in memory – particularly where this value is expressed in terms of commemoration, symbolism, social identity or spiritual understanding.*

Cornish people increasingly take a particular pride in their long mining heritage. This was not always the case, particularly following the catastrophic collapse of the local industry during the later decades of the 19th century and the failure of almost all attempts to revive it during the early decades of the 20th century. The physical reminders of what had long been an integral part of the local economy and identity became reminders of failure, hard times and economically-enforced emigration, resulting, in some areas, to their wholesale clearance to allow land to be used for other purposes, in others to a long period of abandonment. Some mine sites which had employed many hundreds
(sometimes thousands) of men, women and children, sustained and given identity to communities for well over a century became used as squalid rubbish dumps, sometimes formally, more often informally; mine buildings were plundered for re-usable materials, mine shafts were used for the disposal of old cars (and other unwanted materials). It was not until initiatives started during the mid-1980s that these places began to be re-valued and their significance to Cornwall’s social, economic and cultural history was recognised. Although many sites had been cleared and buildings demolished, those that remained began to be cherished, celebrated, conserved and designated as nationally important buildings and sites. Wheal Busy Smithy was Grade II Listed in December 2004.

Cornish mine buildings are now seen as an important resource which attest to an important aspect of its historical development and which contribute to its character - which should be appropriately managed into the future.

**Step 4 – Record your conclusions, specifically noting how distinctiveness should inform any current expression of the site’s significance and identifying opportunities for this distinctiveness to inform place making or ongoing management of the place.**

Wheal Busy Smithy is an important physical reminder of the former economic, social and cultural importance of the Cornish mining industry and of its international significance as an innovating force within the development of the industry between the second half of the 18th century and the First World War. Though mine smithies were formerly commonplace, this is now a rare surviving example of this site type; it is also one of the largest smithies constructed for a Cornish mine. Mine smithies are identified as one of the components of the Cornish Mining World Heritage Site which contribute to its Outstanding Universal Value.

Taking this into account, it is surprising that Wheal Busy Smithy has been allowed to deteriorate to such an extent and, from the evidence of its current condition and recent uses, to have apparently become so undervalued. This structure requires a radical re-appraisal of its current management, emergency works to stabilise it and prevent further deterioration, a major programme of conservation works to restore it to a condition appropriate to its importance and adaptive re-use which would not require its authenticity to be compromised to achieve this.