

HERITAGE IMPACT STATEMENT

WORK CARRIED OUT AT THE HEN TY FFERM,
PENRALLT, LOGIN, WHITLAND, CARMARTHENSHIRE,
SA34 0TL

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OBJECTIVE

Mr & Mrs Lewis purchased the Hen Ty Fferm about ten years ago. It was in a dilapidated state having last been occupied in the 1960's and left to ruin with uncontrolled livestock access. The previous owner had secured planning permission (ref:W/07906) and listed building consent (ref:W/08409) however to restore the original house and convert the adjoining stable into domestic use. Mr & Mrs Lewis were living in Somerset at the time and had not worked on a listed building before. They therefore appointed a local agent familiar with historic buildings but due to personal circumstances, this service is perhaps not what it ought to have been. This only came to light late 2016 when a casual enquiry to the planning department regarding another matter eventually led to threat of enforcement action due to works not in accordance with the approved plans as well as failure to discharge statutory conditions. No planning officer had previously been to site.

Mr & Mrs Lewis have been in dialogue with planning and conservation officers and submitted documents to try to obtain retrospective permission for the outstanding issues for almost two years now. There is also a trail of paper work proving that they submitted various documentation to Carmarthenshire County Council at the time. Whilst they may have struggled to comply with conflicting interests such as ecological constraints and building regulations, they have otherwise fully embraced building conservation by using traditional materials and techniques and retained original features. The overall result is that of a successful and sensitive reuse of an abandoned building. They have created a family home whilst conserving vernacular character and genuinely believed this had been done in accordance with statutory consents.

The lack of progress over the past couple of years has been stressful, frustrating and impacts on their enjoyment of the house. Mr & Mrs Lewis objectives are therefore simple – to obtain consent for completed works which do not comply with the planning permission and listed building consent as well as discharge outstanding conditions.

RELEVANT POLICIES AND GUIDANCE

Planning Policy Wales - Chapter 6: The Historic Environment

Technical Advice Note 12: Design

Technical Advice Note 24: The Historic Environment

Historic Environment (Wales) Act 2016

Cadw: Conservation Principles

Cadw: Managing Change to Listed Buildings Wales

Cadw: Heritage Impact Assessment in Wales

Cadw: Managing Historic Character in Wales

Cadw: Setting of Historic Assets in Wales

Cadw: Understanding Listing

BS7913 Guide to the Conservation of Historic Buildings

Carmarthenshire County Council Local Development Plan 2006 – 2021:

Policy GP1 Sustainability and High Quality Design

Policy H8 Renovation of Derelict or Abandoned Dwellings

Policy EQ1 Protection of Buildings, Landscapes and Features of Historical Importance

Policy EQ4 Biodiversity

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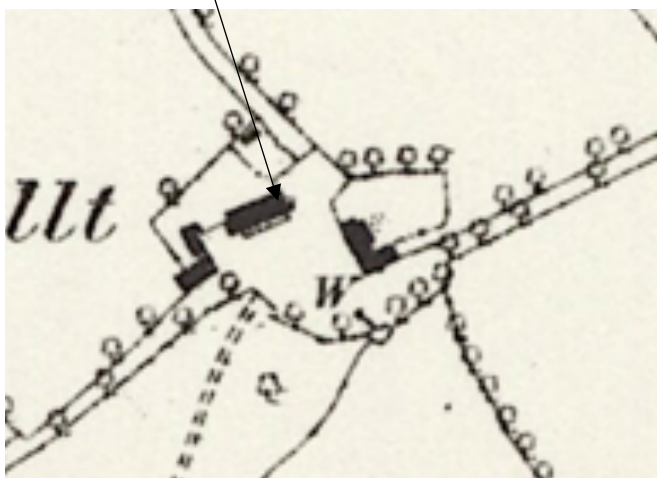


In the C19th Penrallt Fawr or Pen-yr-allt comprised a traditional house and range of outbuildings including mill. The house was abandoned in the 1960's with a new brick dwelling built on the site. This new house took the name of Penrallt with the former dwelling being referred to as the old farmhouse (welsh translation - Hen Ty Fferm).



Above: map from 1887 with site named Pen-yr-allt

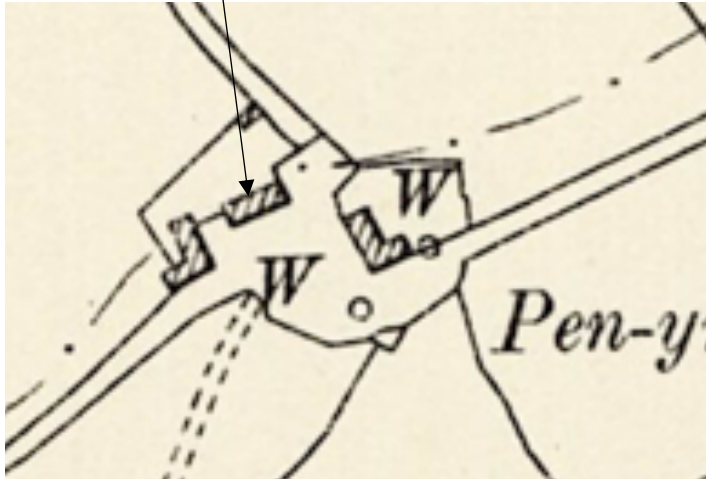
The Hen Ty Fferm



Above: Map of 1887 survey



The Hen Ty Fferm



Above: Map of 1905 survey

The Hen Ty Fferm

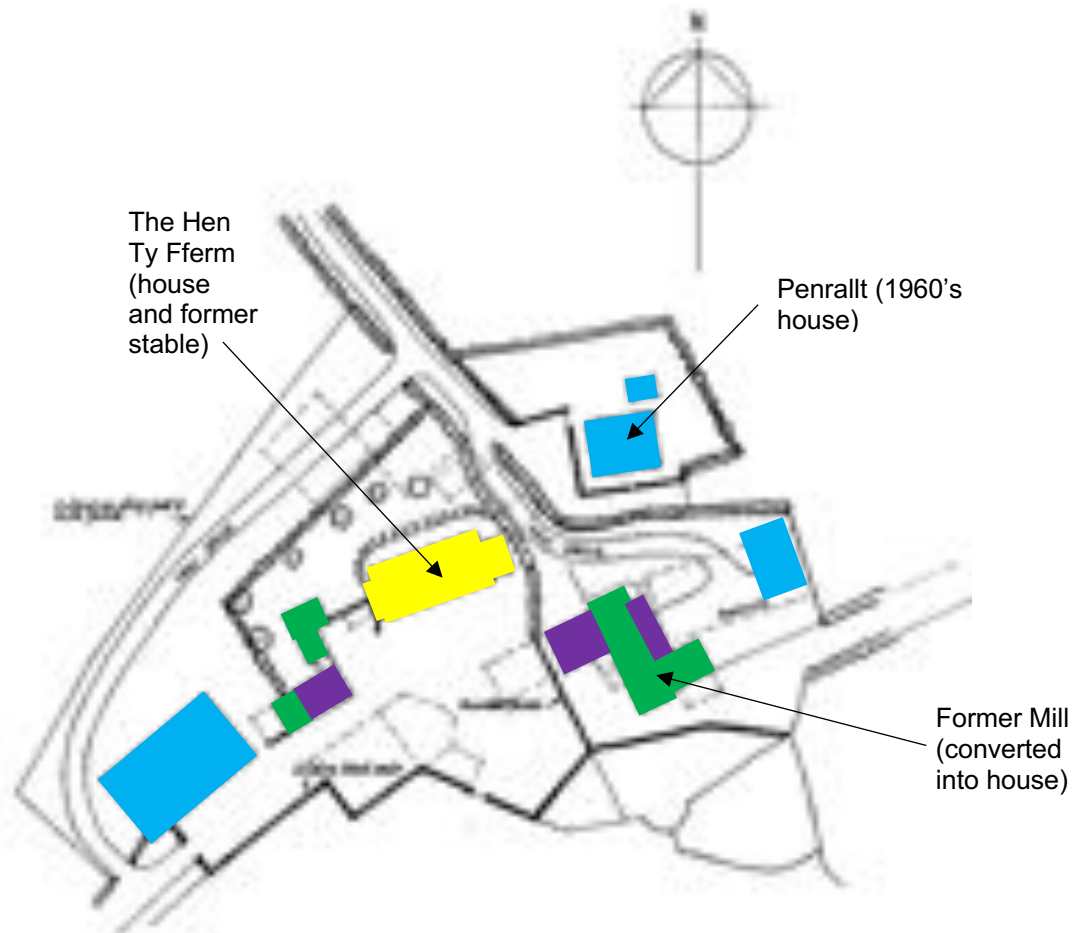


Above: Map of 1953 survey

Modern farm buildings were added in the late C20th and the farmstead by then comprised 100 acres with a single dwelling. In 2006 planning permission was sought to divide the site up into three separate dwellings with the land also split up. The former mill would become a new dwelling with the old house and adjoining stable turned into another dwelling. Most of the modern buildings have been demolished with banks and hedges added in the last decade to provide separation.



Below: significance of the setting today with the Hen Ty Fferm the only designated building



KEY FOR SIGNIFICANCE OR VALUE OF HERITAGE ASSET

Very high - exceptional significance	Low significance
High - considerable significance	Negligible significance
Medium significance	Unknown

See Appendix Table 1 for full definition

The Hen Ty Fferm is situated on the southern fringes of the Preseli mountain range and straddles the Landsker border which delineates the linguistic change in north Pembrokeshire. The house lies in welsh speaking community where old fashioned values and customs persist, preserving many an old building. The Hen Ty Fferm is a typical rural dwelling built by the working class and in architectural terms, they were not highly valued with historic travellers and historians considering them inferior quality.

The area is sparsely populated and the Hen Ty Fferm is fairly isolated, accessed by a private track c.400 yards off a minor road with no neighbouring buildings aside the new house and former mill. The nearest hamlet of Login lies c.1km to the SSE was once served by the Cardigan and Whitland branch



of the railway (known as Cardi bach) carrying people and freight to the quarries of the north. The area is well known for its associated with the Rebecca Riots with the toll gate at Efailwen nearby.



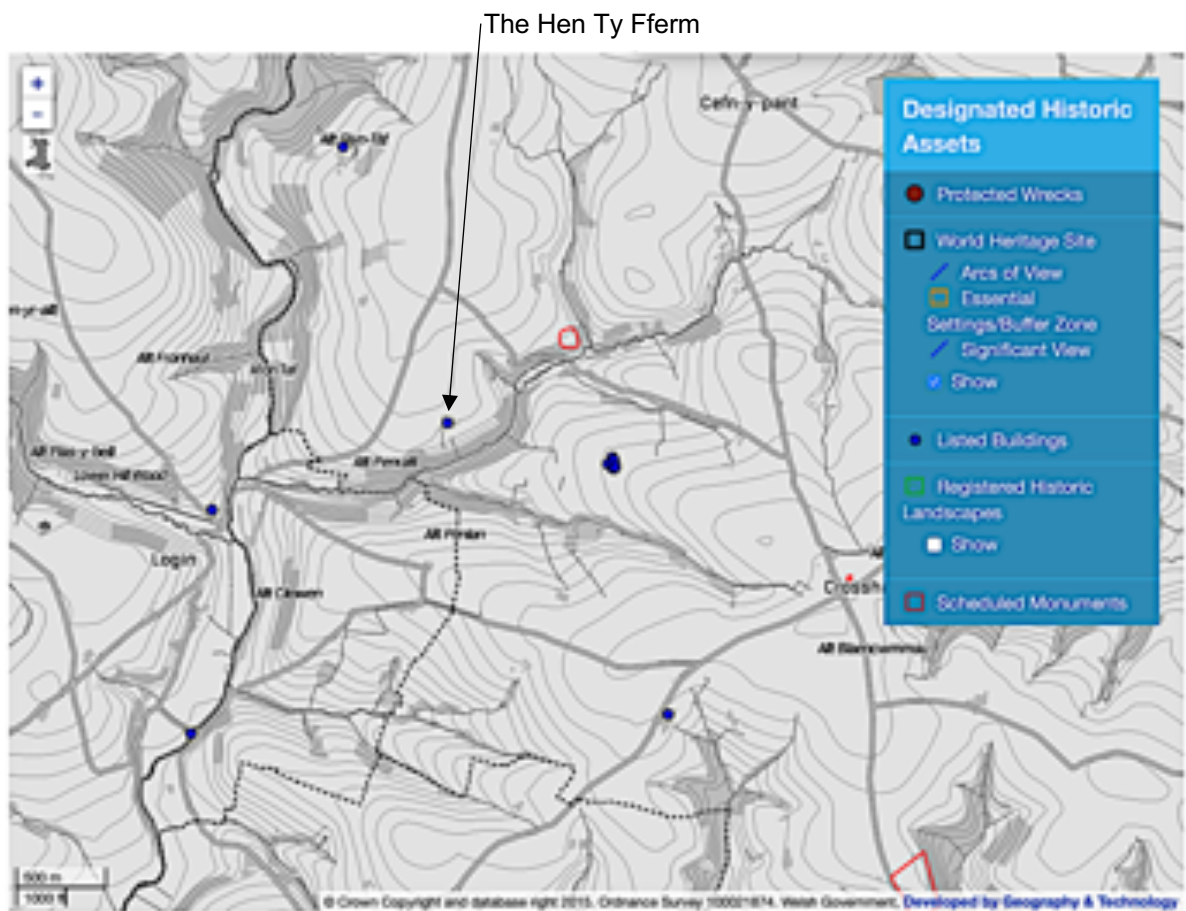
Login

The Hen Ty Fferm

The terrain is steeply sloping in all directions with series of deep wooded valleys and from which Penrallt takes its name. The river Taf lies to the south. The area is surrounded by rural farmsteads and industry taking advantage of the power of water with numerous mills scattered nearby.

The Hen Ty Fferm is part of an upland landscape with Pembrokeshire Coast National Park border only some 5km north. The area once sculpted by ancient glaciers provides ideal habitat for a number of protected species such as bats. Valleys contain otter, kingfishers, herons with red kites, owls and buzzards on the higher ground. Tree plantations immediately below (south) of the Hen Ty Fferm are described as restored woodland on the Ancient Woodland Inventory. Land located c. 5 miles north of the site is a Site of Special Scientific Interest, Special Area of Conservation and Registered Landscape of Outstanding and Special Interest in Wales. LANDMAP classifications and evaluations are high in terms of Geological Landscape, Historic Landscape and Cultural Landscape with moderate values for Landscape Habitat and Visual and Sensory.

The surrounding area is rich in archaeology and history with many finds going as far back as the Neolithic period. Within 2km radius of the Hen Ty Fferm there are a couple of Scheduled Ancient Monuments and nine grade 2 listed buildings which are listed in detail in the impact assessment section.



Above: Designated buildings within 2km of the Hen Ty Fferm.

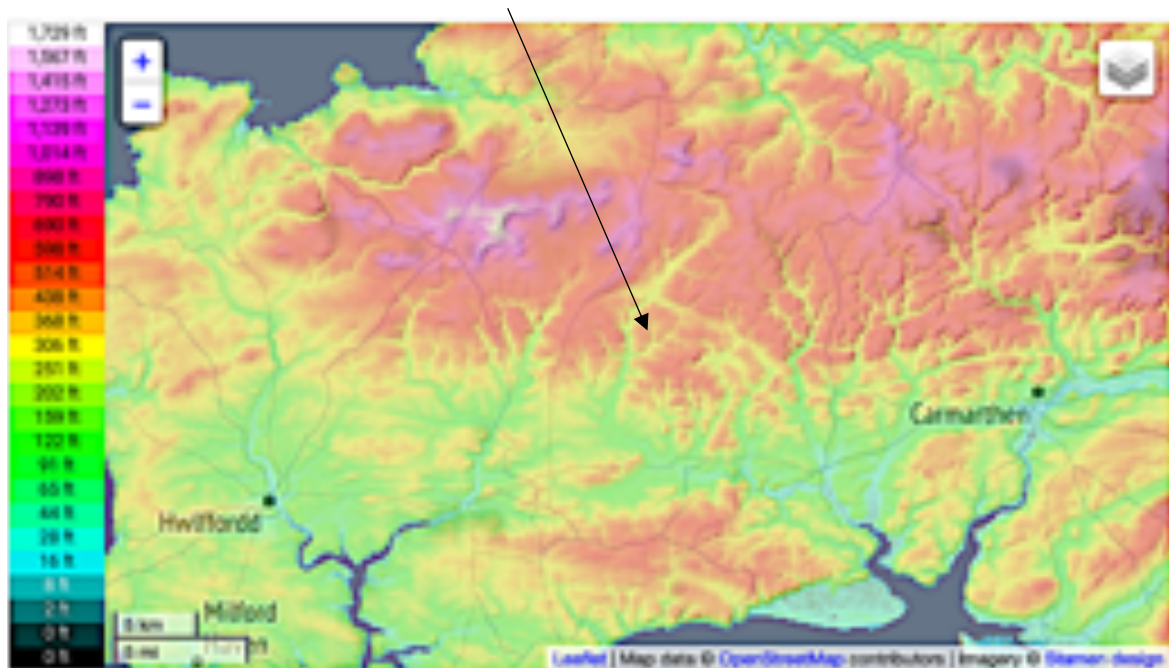
The Hen Ty Fferm



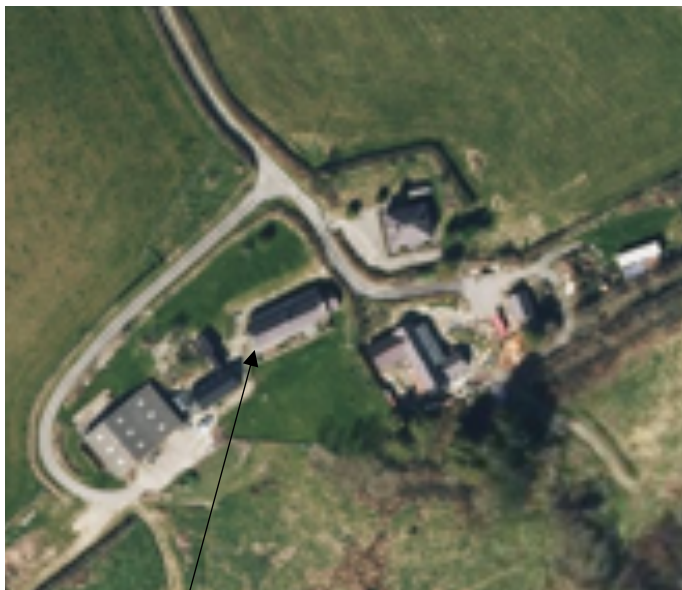


Although the Hen Ty Fferm is only located some 400m above sea level, its climate is harsher being in the shadow of the Preseli mountain range and the exposure is visible apparent with weather beaten appearance to buildings. Although most of the west Wales has significant rainfall, temperatures in the north are typically 4 degrees cooler than the south creating a unique microclimate.

Location of the Hen Ty Fferm on southern fringes of Preseli mountain range c.400m above sea level



The Hen Ty Fferm is a listed grade 2 building and a copy of this is included in the appendix. It was listed due to its *'remarkable unaltered C19th range farmhouse and outbuildings in a single roofed long range, echoing the earlier long house tradition'*. This type of house is very common in this area however although most have now been modernised. The architecture is typically vernacular with simple shapes and detailing, using local materials and responding to local context. Buildings are rectilinear in shape comprising small rooms. They are usually single aspect with larger openings to the south with large chimney to the east to protect from the biting NE winds. The elevations are asymmetrical with the 'sime fawr' (welsh translation – large chimney) to the gables. Roofs are steeply pitched, initially covered with thatch or local slate and later using slates from north Wales. Walls are simply construction from stone, earth and lime mortars with timber and stone lintels and cills. Early buildings tended to lime washed, some on exposed facades only and if the stone was poor, a butter render coat underneath. This practice steadily declined in the C19th with exposed stone and localised brick detailing arriving but the practice of limewash persisted due to its sterile properties. The manner in which stones are quarried and laid very much depend upon their source, workmen and local conditions create very distinctive buildings in a small area. Timber joinery was usually painted in red or black in stark contrast to the limewash. The house was sometimes coloured (red and ochres limewashes) and the joinery painted in different colour to elevate it from the farm buildings. Window openings from the C19th tend to have a vertical emphasis, fitted with small glass panes. Earlier windows were smaller and squatter with lack of symmetry and often fitted with shutters. Doors are usually boarded and ledged within frames or with pinned hinges into stone rebates.



The house is predominately south facing was set into the bank. Ground levels have been adjusted during development but the eaves of the lean-to to the north was roughly near ground level with steeply sloping ground to the south which has since been raised and levelled behind a dwarf retaining wall.

Although the farmstead is located above woodland, there is an area of clearance immediately south which draws your eye towards it creating a focal point. The surrounding terrain and landscape features limit views to the southern aspect only and within a couple of kilometers only however

The Hen Ty Fferm with 'new' house to north east and former mill to east

The Hen Ty Fferm viewed within woodland clearing from south east at local vantage point



The last occupant of the Hen Ty Fferm was Mr John Gibbin who was born in 1934 but his family had owned this farmstead since the C19th with deeds going back to the 1830's. Although the Hen Ty Fferm was abandoned in the 1960's, Mr Gibbin remained on site in the new brick house (Penrallt) until fairly recently. Mr Gibbin confirmed that the old house had changed little during in his lifetime. When last occupied (pre-1960), the Hen Ty Fferm contained no modern amenities such as electric or indoor plumbing. The family relied upon hurricane and tilly lamps for lighting with couple of open fireplaces providing both warmth and cooking. The eastern inglenook contained a bread oven which was not original and had fallen out of use. Sides of pork were hung inside the chimney to cure. The fireplace was later fitted with a range and then solid fuelled Rayburn with boiler in the eastern outbuilding. Water was provided by a well near the mill which was pumped up to a brick tank and gravity fed back to the house. A cold water tap was introduced to the end of the outbuilding but there was no grey water drainage and an outside privy was still in use at the end of the house which had no connection to drainage. Bedrooms were cold and draughty despite boarded ceilings. Many houses took advantage



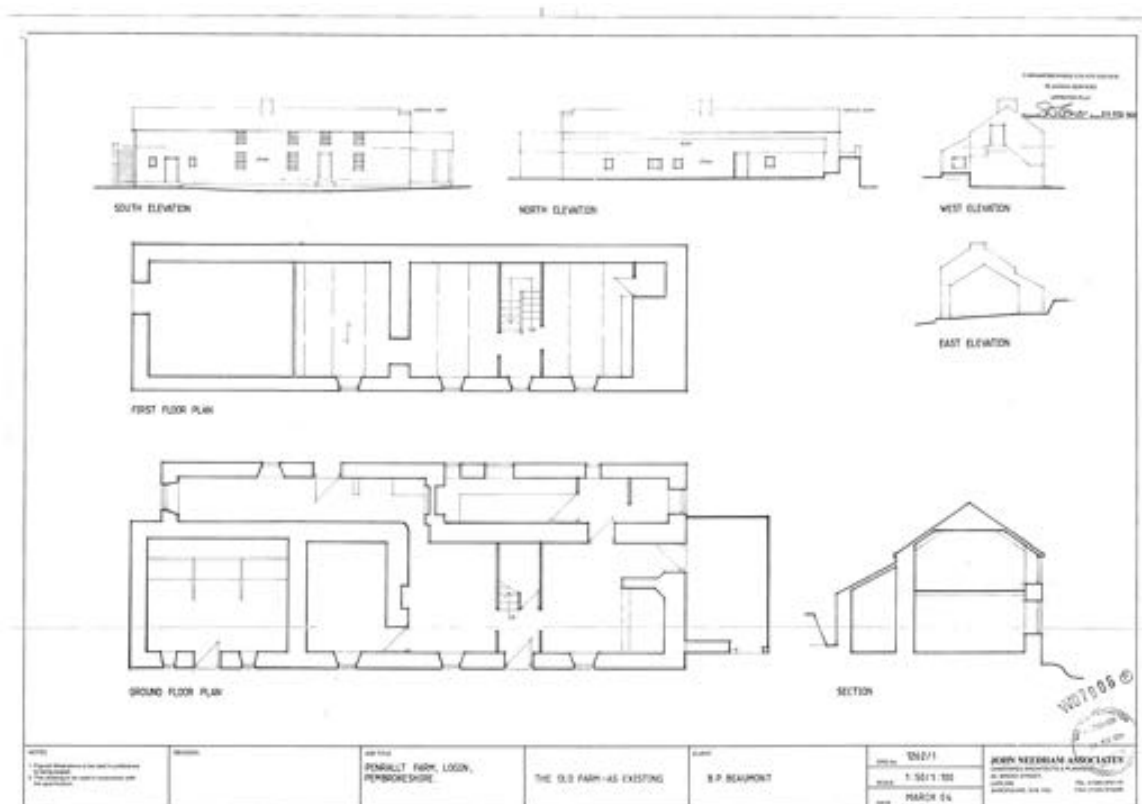
of improvement grants which introduced unsympathetic materials with significant loss of original features. At Penrallt, they decided to build a new house instead leaving the old house pretty much unchanged.

Many farm processes took place within the house with blurred boundary between domestic and agricultural life well into the C20th. The earliest house may well have had internal space shared between humans and animals as longhouses continued in rural Wales for some time. During the C19th improvements were made in the size and quality of farm buildings as well as domestic accommodation which coincided with more productive agricultural practises. Many farm houses had already evolved from one roomed cottage to two storeys with lean-to additions to the rear but eventually many turned into bigger ranges arranged into 'L' and 'T' or linear shapes. Post war, farmers had to significantly increase production and whilst some traditional buildings were initially adapted, most eventually became redundant as more industrialised farming practises became widespread during the latter end of the C20th. From the 1930's for example, many dairies were forced outside the house. Evidence of this evolution can be seen at the Hen Ty Fferm:

- 1) The east end appears to have initially been single storey with earth mortars to the lower parts of the building – this is likely to have been built in the late C18th or earlier.
- 2) Although the part timber framed outbuilding to the east end was probably a later addition, there is evidence of an older structure with protruding stones suggesting a possible lean-to and flue opening.
- 3) The east end was extended upwards using lime mortars in the C19th with inglenook chimney. A brick built bread oven appears to have been inserted later too.
- 4) A lean-to was added to the north east with new opening into the kitchen at the east end.
- 5) The building was later extended westward, initially single storey with upper floor added to create two storeys under one continuous roof.
- 6) The northern lean-to was also extended westwards under one continuous roof but a concealed first floor window in the north wall of the stable suggests this was done in separate phases. A vertical joint in the stonework to the lean-to north wall is still evident.
- 7) It is believed the external steps were added later again as these were built over an opening to the west end of the stable and these steps appear to have been modified later too with vertical joint in the masonry.
- 8) Internal alterations also suggest the house migrated outwards with access created in the middle wall heading west. An opening was also made eastward connecting the house to the eastern outbuilding as well as two other openings connecting into the lean-to areas.
- 9) Seven large matching windows to the front (south) elevation suggest one phase of work for these openings, perhaps when the upper floor was added.
- 10) The house did not evolve any much further during the last 80+ years until the stable was converted into domestic use by Mr Lewis in 2010 and the house was brought back in use. Although the original farmstead has been divided into three separate domestic properties, the Hen Ty Fferm still possesses 47 acres devoted to forestry and grazing by tenant farmer.

Mr Gibbins family continued to look after the old house initially after it had been abandoned for the new dwelling with emergency repairs to the roof when needed and dismantling of chimney due to water ingress and instability. Periodic lime washing was laborious however given the site exposure and this practice did not continue for long. The house condition slipped as time and money had to be focused on the new buildings. When Mr Gibbin retired from farming, he sold the farm. The new owners rented the land and livestock was allowed to freely roam the buildings, soiling the house and damaging fabric.

The building pre-development in 2010 consisted of a two storey range with house to the east and stable to the west with continuous lean-to along the north. A single storey one roomed outbuilding extension was located to the east with flight of external steps to the west.



Above: drawings of existing house and stable from 2004 submitted as part of planning and listed building consent application

The dwelling had evolved into a number of small rooms, some with dual access. On the ground floor there was a large inglenook fireplace at the east end with external door to the eastern outbuilding and internal doors leading into the lean-to and entrance hall. The earlier two storey house was divided into two with central staircase and half landing off main entrance door to the south. The room west of the staircase contained a fire place on the its west wall with doorways added to the north and west connecting to later extensions. The first floor was similarly split with one room east of the staircase and two rooms to the west side subdivided by timber partition. The three front rooms to the house were all single aspect facing south. The single storey lean-to was split into two sections with salting room, lobby and pantry in the east side lit by three windows on the north and one window on the east elevation. The west end of the lean-to appeared to be used last used as a utility/store with central external door on the north wall and lit by windows on the north and west elevations.

The stable had been converted in to a cowshed with single room on both floors. The ground floor room contained central external door with small shuttered openings each side. The upper floor was accessed by the west external door and there were remains of an old glazed timber window opening to the north which was straddled by the lean-to roof added later. The external steps to the west end contained a small opening at ground level for poultry or a dog. There was also an old detached pigsty further west which was demolished as part of the planning and listed building consent.

The duo pitched roof was covered in slate from north Wales laid to regular tally coursing. A projecting stone wall plate ran across the south eaves. Ridge tiles were all in blue/black with mix of interlocking



and butt jointed type to the stable and roll top tiles to the house. The last common rafter to the verges had been rendered over with no slate overhang and exposed wall plates to eaves. Painted cast iron rainwater goods were found on to the south elevation only originally and were probably mounted on drive in brackets and with half round gutter and circular downpipes. The eastern extension had a duo pitched roof covered with black painted sinusoidal profile steel sheet roofing and metal ridge.

The house had remains of a large chimney to the east end with another located in the middle of the range which coincided with an earlier west gable of the house. Both rubble stone stacks were in poor condition with the eastern one taken down to roof level. Both chimneys appeared to have been capped with slates, stone and clay ridge tile to try and limit water ingress. The surviving eastern chimney stack had small squared holes suggesting the chimney was probably capped when in use too with no evidence of chimney pots. The chimney and eastern extension abutments were weathered with mortar fillets.

The south and east elevations of the house had traces of white and cream limewash with a butter coat of render evident to the stable but north and west elevations had exposed stonework. Protruding stones to the east end of the house suggested an older structure and there was a projecting stone course right along the southern eaves. The eastern outbuilding was clad in vertical timber boarding painted black with painted stone plinth below. External steps to the west end were partly finished with rounded soldier course of stone with flag stone copings to the landing area slate treads. The steps acted as a retaining wall to the higher ground level. A small opening below the steps was probably for the dog or poultry.

Openings were fitted with stone lintels externally and timber internally with most limewashed and painted. Most windows had painted slate cills but those to the north elevation of the lean-to had no cills. External doors to the south elevation were set at two different levels with the stable below the house. The house entrance was elevated on concrete steps with concrete ramp to the stable.

Windows to the south elevation of the house had vertically proportioned timber box sashes split into 12 panes each and painted white. Two small openings to the stable were fitted with timber shutters and painted black. The lean-to windows had more of a horizontal emphasis with mix of single and pairs of casements. Not all windows were glazed with the lean-to window to the west end fitted with chicken wire and timber shutters. Doors were vertically boarded and ledged within frames, some with bead mouldings. Decoration again contrasted with iron/red paint for the house and black to the stable.

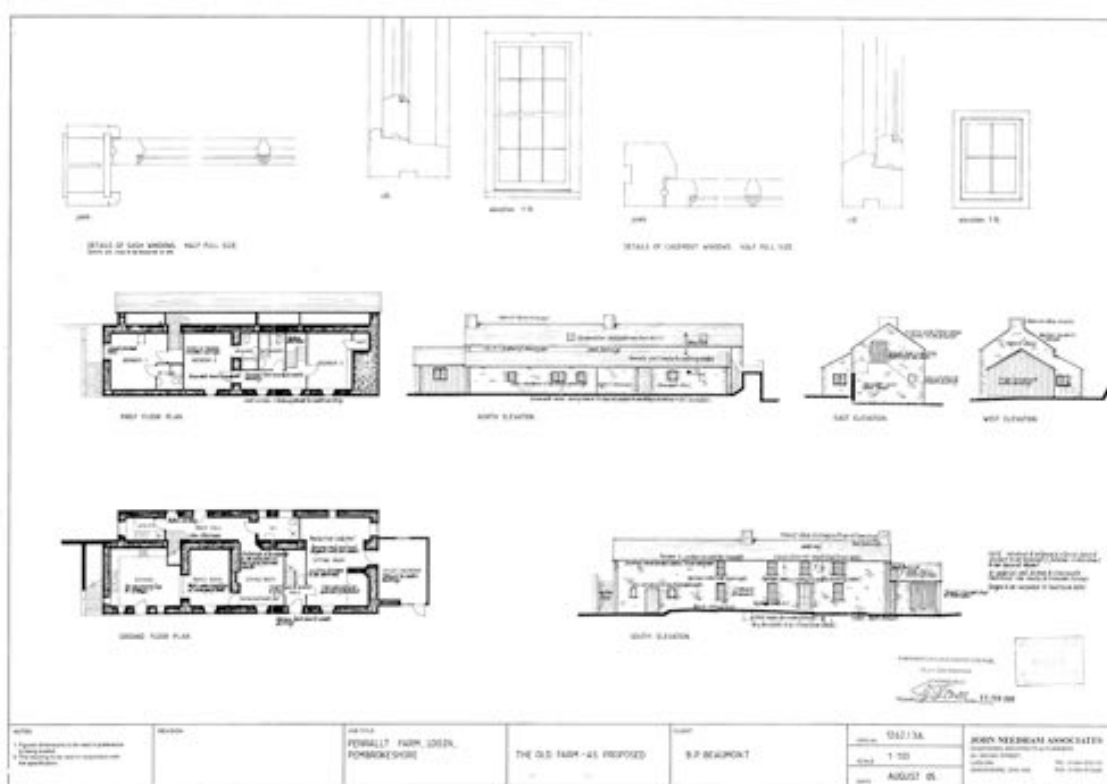
The interior was in a semi-derelict state with partial loss of timber floors and ceilings. The roof structure comprised a series of 'A' frames jointed with wooden pegs with timber purlins and rafters. The underside of the slate and battens were clean with little torching, although this had presumably all been cleared away many years ago along with the ceilings. Within the eastern extension, the 'A' frames and purlins were painted black with underside of corrugated sheeting exposed. Roof and floor timbers had irregular timber sections, generally free of bark. Decoration suggested that there had been a ceiling to the house upper floor only with bottom 300mm of the truss rafter foot exposed and painted. Within the lean-to area there was a painted timber boarded ceiling. Timber first floors were exposed to the rooms below with timber joists and underside of the floor boards varnished or painted. The ground floor within the house was a mixture of exposed concrete and hard standing finished with quarry tiles. The floor in the stable steeple sloped from north to south with step up to the cubicle area. During excavation for the floor, a few cobbles were found underneath. Floor levels in the house were level but there was evidence that the middle room floor was historically lower however due to the fire place position. There was a single step between the house and eastern extension with the house slightly elevated above.

The original timber staircase was narrow, steep and uneven steps with use of both oak and pine, suggesting it has been altered. The newel posts and balustrade comprised simple rectangular sections with oval handrail positioned at low height compared to modern standards and varnished. Only a few

partitions survived and were clad with timber panelling and varnished, painted or covered with wall paper.

Stone walls were finished internally with mix of plasters, limewashes and paints. Coloured limewashes (reds and ochres) were noted in the eastern end of the house with cream externally but the rest including the stable was in white. In some areas, the plaster was merely a butter coat or limewash had been applied directly over stone and finishes throughout were in poor condition. The east inglenook contained a brick bread oven with rounded timber to supporting hangers for curing meat and small opening into the adjoining outbuilding. Slate sinks in the slating room were supported on stone pillars and there was wooden slatted racking at the west end of the lean-to. The stable contained concrete feeding trough and stalls from when it was converted into a cowshed.

Doorways were low and mainly fitted with ledged boarded doors although there was one six panelled doors in the house which was presumably a later addition. Simple frames and plain architraves were fitted to openings in timber partition around the house staircase. A few varnished timber skirtings c. 8" deep with chamfer or bead moulding were noted in the east end of the house. Windows to the south wall of the house had seats to the ground floor and there was a mix of slate and timber window boards elsewhere in the house with simple stone rebates in the stable and lean-to areas. Windows were positioned low in the wall to the south elevation, at above worktop height in the lean-to and higher again in the stable. The salting room had an internal window with four glass panes.



Above: Approved plans from 2006

Post 2010 development, the stable has been converted into domestic with minor alterations to the house layout. A new doorway has been created into the stable at ground floor with the existing opening



between house and lean-to on the north east corner widened. The west end of the lean-to has been divided into toilet, utility room and entrance hall with a new second flight of steps to the upper level. The first floor was reconfigured to create three bedrooms with ensuite and bathroom facilities. The number of openings and appearance received minor changes too. The eastern extension was rebuilt to match existing.

The Gazetteer in the Appendix shows photographs of house in its current state.

All roofs are covered in salvaged purple slate from north Wales laid to regular tally coursing. The stone wall plate has been conserved insitu. Many ridge tiles had to be replaced and this was all done in matching salvaged blue/black interlocking tiles. Both chimneys were rebuilt above roof level using salvaged stone with flagstone capping's, lead tray and flashings. The verges are now finished by a slate cladding and the roof over sales to minimise water ingress. The stone eaves course and projecting stones to the east elevation have been retained with new cast iron rainwater goods fitted throughout. Soil and vent pipe, mechanical ventilation and bat access has been introduced with lead penetrations into the roof. Salvaged cast iron rooflights have also been inserted to the north roof slope.

The external stonework has been repointed in lime with traces of white and cream limewash still evident. Small voids were left to allow bat access to the south elevation. The eastern outbuilding is partially clad in vertical timber boarding and painted black. Black painted cast iron vents have been inserted for the solid fuel boiler and range and mechanical ventilation. One stone window cill was replaced with new cills added to the lean-to openings but the other cills were retained and redecorated. Door positions including thresholds have been retained despite changes to external ground levels. Stone lintels have been retained with decayed timber lintels replaced and decorated.

Windows have been replaced like for like with vertically proportioned 12 panes sashes to the southern elevation of the house. Fixed and opening casements elsewhere have all been fitted with glass. New doors have been fitted comprising ledged timber boards within frames. External doors have been fully glazed with narrow panes suggesting boarding or fitted with small glass vision panels. All external windows and doors have been painted in a dark green colour throughout.

Land to the north has been lowered with part of the retaining wall to the NW corner demolished. External steps to the west end have been conserved with galvanised metal railings added for safety. The railings comprise flat and round sections with some ribbed concrete reinforcement bars. Land in front of the house has been raised to meet the door levels similar to that evident in the C19th maps with surface and steps finished in slate behind a new retaining wall.

Painted timber boarded ceilings have been reinstated throughout with the exposed soffit of the first floor visible to the room below too. Lath and plaster ceilings have been introduced to the west end of the former stable which was formerly open to the roof. The roof space has been improved with sheep's wool insulation. Exposed rafter feet and floor joists have all be redecorated. The ground floor has been renewed with new internal steps down to the former stable doorway, finished throughout with salvaged quarry tiles.

The original timber staircase has been conserved and redecorated including the timber partitions. New partitions comprise a mix of painted lath and plaster or timber boarding with paint and limewash finishes. Internal doors are vertically boarded and painted throughout with simply detailed architraves and skirting boards. Stone walls including lintels are finished internally with mix of plasters and limewashes with some limewash applied directly over stone. Localised timber panelling and wall tiles has been introduced behind sanitary appliances. The east inglenook with brick bread oven, beam for hanging meat and small opening into the adjoining outbuilding have all been conserved. Fittings such as the slate sinks, wooden racking, concrete cubicles were removed in accordance with the approved plans



but the internal window was recycled and fitted to the new utility room partition. Roof structures were repaired locally.

In accordance with Cadw Conservation principles, the significance can be summarised as follows:

Evidential values: Documentary sources provide evidence of this farmstead existing for over two hundred years but its physical fabric suggests this may go back further with evolution from single storey cottage to multi room house with upper floors and outbuildings. The materials and manner in which they were used were locally sourced and typically vernacular. The fate of the site represents many a traditional small holding with buildings adapted to other uses and land split up in response to rapidly changing agricultural practices.

Historical values: Linear buildings known as longhouses whereby animals and humans coexisted under the same roof continued in use into the C20th in west Wales but they also evolved into bigger ranges with separated uses. the Hen Ty Fferm is an example of a linear range with farm building located alongside but separated from the house. It records the transition period during the C19-20th as agricultural productivity increased, becoming more industrialised as farming methods improved and mechanisation took over. It also illustrates how daily activities gradually moved out of the home, living conditions improved, older farm buildings became redundant and sites become fragmented.

Aesthetical values: The Hen Ty Fferm has a traditional appearance within the rural backdrop of the Preseli mountains which most find pleasing. The aspect from the house is equally fine views along the valley over rolling fields and woodland. The house is simply crafted and detailed using local materials which responds to context. It shares many vernacular characteristics of the area but yet is still unique.

Communal values: The Hen Ty Fferm helps sustain memories of vernacular architecture practices and changing rural life for those farming the land. It emphasises local distinctiveness in an area known for its conservative culture and tradition.



PROPOSALS INCLUDING JUSTIFICATION AND MITIGATION MEASURES

In accordance with Cadw Conservation principles, the proposed schedule of work can be broken down in the table below. References to the conditions imposed by planning permission W/07906 and listed building consent W/08409 are made in brackets where applicable.

Routine management and maintenance	1. Redecoration of walls (condition no.9)
Repair	2. Repointing of external walls with omission of limewash finish (condition no.4) 3. Re-roofing and repairs to roof structure (condition no.13) 4. Localised rebuilding to detached stone skin to east end of lean-to north wall 5. Rebuilding and consolidation of chimneys and fireplaces
Periodic renewal	6. Replacement of windows, doors and shutters (conditions no. 5 & 6) 7. Floor replacement including levels (condition no. 8) 8. Re-plastering of walls internally and replacement partitions (condition no.9) 9. Replacement lintels with partial use of concrete
Archaeological intervention	-
Restoration	-
New work and alteration	10. Addition of vision panel and glazed external doors (conditions no. 5 & 6) 11. New partitions (condition no.9) 12. Leadwork to chimneys including tray and flagstone capping 13. Removal of window and opening to north wall of stable for new staircase 14. New roof light
Integrating conservation with other interests	15. Floor insulation (condition no.8) 16. Roof insulation and felt (condition no. 13) 17. Metal railings to western external steps 18. Soil and vent pipes 19. Mechanical extract ventilation 20. Air supply for combustion of solid fuel appliances 21. Ecology survey and mitigation measures to include bat access points to roof and walls (condition no. 20) 22. Photographic survey (condition no. 19)
Enabling development	-

**Schedule of works item no. 1, 8 and 11: Decoration, plaster and finishes internally (condition no.9)**

The condition of plasters and finishes in the house was generally poor. The house had been unoccupied since the 1960's with the fabric left to ruin. Several areas suffered with water ingress with hygroscopic salts, staining and contamination from animal occupation such as urine, faeces and oil. Farm and wild animals had free access to the whole of the ground floor. Detached and spalled sections of plaster and limewash was found throughout which substantial re-plastering required. There was extensive evidence of alteration with numerous colour schemes and different finishes laid over one another as well as obvious patch repairs to plaster including use of cementitious material.

Traditional, breathable materials have been used throughout with limewash directly over stone and lime plaster. Timber boarding has been salvaged and painted in oil based paint and varnished. New partitions comprise a mix of lath and plaster and vertically boarded finished similarly. Retained surfaces were cleaned and simple redecorated. These finishes match that which was already evident in the house, lean-to and stable areas. Whilst it is possible to determine from photographs, the type of plasters used they are likely to have been a mix of earth, fat or feebly hydraulic lime. Moderately hydraulic lime and sand plasters were used throughout however given the risk of frost. Roofing work had commenced in the summer of 2012 and it took c.3 months for windows to be made so the interior work commenced during the winter months. The preceding couple of winters had been very cold with long periods of freezing weather in double minus temperatures. The building fabric could also not be left for months to dry with high levels of moisture in an unheated building.

The consented plans showed the removal of the eastern partition to the slating area with the room reduced in size to create a new shower room in the ground floor of the lean-to. This partition had character however with vertical boarding and internal window. The applicant salvaged this partition and relocated to the new utility room at the west end of the lean-to, conserving original fabric.

Details of the finished used in each area are annotated on the proposed drawings but photographs below show before and after photographs.



Above: Existing partition cleaned and redecorated



Above: Existing partition before works with varnished joinery in faded condition



Above: As built varnished and painter joinery finishes to stairwell



Above: Existing paint and varnished joinery finishes to stairwell



Above: Limewash finish over stone and painted joinery



Above: Existing limewash and painted joinery showing condition with patch cementitious repairs, spalling, aglae around windows and peeling limewash



Above: New utility room partition reusing the window and boarding opposite in painted finish



Above: Former salting room with painted vertical boarding and window



Above: Limewash over lime plaster



Above: Existing finishes with limewash over plaster, painted and varnished joinery with partial wall paper over partition. Note poor condition



Above: New study with limewashed plaster in eastern extension



Above: Existing eastern extension with partial limewash to stone



Above: Original boarding to cupboard door refitted and decorated in bedroom with limewash to stone



Above: Existing limewashed and bare stone finishes in poor condition and absent ceiling but decoration visible to bottom of rafters



Above: New kitchen finishes with limewash over lime plaster and painted boarding to new staircase soffit within former stable



Above: Existing stable with partial limewash and exposed stone finishes



Above: New ensuite finished with wall tiling behind shower to west bedroom



Above: New painted timber boarding to new partitions on first floor hallway



Above: New painted timber boarding to new partitions to west bedroom



Above: New limewash to stone and localised tiling behind shower to lean-to shower room



Above: Localised area of exposed stonework pointed in lime to north wall of lean-to area now within sitting room



Above: Partial limewash and painted vertical timber wainscoting with first floor bathroom

Schedule of works item no. 2: External wall finishes (condition no.4)

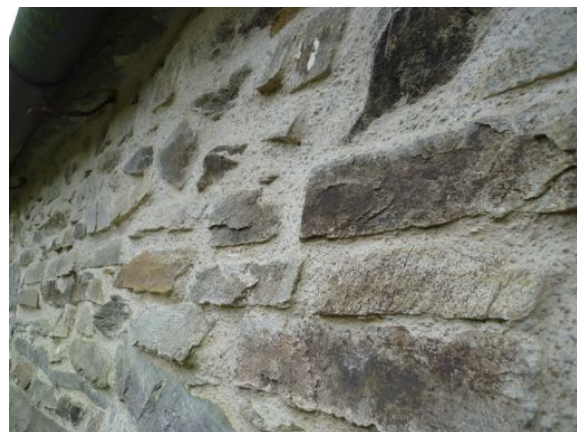
The consented drawings from 2006 were annotated with 'repoint stonework' on the north, east and west elevations with 'limewash stonework' on the south elevation. No detail was provided as the amount of repointing required in the structural report either. Condition no.4 of the consent stipulated that *'the existing stone walls shall only be pointed in a suitable lime based mortar and the exterior walls whitewashed finished unless otherwise agreed in writing with the Local Planning Authority'*.



The applicant began work on the house in the middle of 2011 and initially work had to focus on re-roofing in order to comply with the bat license method statement and another seven years had therefore passed between the original survey and the works. The exterior of the building was in poor condition with maintenance having ceased for many decades. The limewash finish had significantly eroded and spalled in a number of locations with voids and vegetation growth established. Iron ore leached through causing staining. Underlying stone was visible in a number of places but not all the elevations appeared to have been covered with the north elevation and probably the west elevation originally exposed stonework. There was evidence of repointing with cementitious mixes introduced along the west elevation too. Localised rebuilding was necessary to the bulging masonry to the south elevation (as shown on the consented drawings) plus an area to the NE corner of the lean-to as described in this document together with replacement of decayed timber lintels. Cumulatively, a large proportion of the external elevation resulted in repointing works and the applicant undertook this work using a hydraulic lime sand mix. The work was undertaken by hand but the thin brittle limewash coating was damaged during the works leaving traces insitu. The small scale nature of the stone and high proportion of mortar bedding meant much of the limewash was chipped off but the underlying stone also contributed with shaley surfaces providing poor adhesion. The applicants have not attempted to remove the remaining limewash and it is still clearly evident. The projecting stone courses along the eaves and east elevation have also been retained and conserved insitu.



Above: Traces of limewash with complete loss over shaley stone surfaces



Above: Repointing undertaken in lime showing volume of mortar to stone ratio

The former owner, Mr Gibbin had warned the applicant they had struggled to maintain the limewash despite annual application. This is sadly a general trend with many buildings receiving an initial limewash application during restoration and being left with no maintenance thereafter. Although the cost of limewash is not particularly expensive, modern legislation has not helped. Working from ladders is no longer acceptable practice so requiring scaffolding. Most historic building also have to plan and work around protected species such as bats and there is an administrative cost in complying with the ecological licenses and health and safety legislation such as the Construction Design Management Regulations 2015. As retired owners, the applicants are understandably, reluctant to reinstate the limewash finish due to the burden it will place upon them, particularly when they have made such an investment to get the derelict property into habitable condition once more. The future sustainability of a building must take into account the durability of materials and the ease of maintenance. If the Hen Ty Fferm was limewashed annually, it would cost in the region of £7.5K each time. Since the house has been occupied, Mr & Mrs would have spent over £50K on limewashing alone not taking into account any inflation or the cost of the initial application. Stones



in this region are rich in iron and this leaches through limewash finishes unless there is regular application. Although the protective properties of a limewash cannot be dismissed, there are examples of exposed stone buildings in the locality which demonstrate that the stone is relatively robust to the exposed location with notable absence of decay. The pointing material suffers the worst with earthen mortars being eroded and cementitious mixes causing spalling and water ingress. Given that the stonework has been pointed in suitable lime mortar mix, this provides the most durable long term solution. The applicants have essentially conserved as found with unavoidable loss of limewash during pointed and rebuilding works.



Above: Limewash adhered to bigger stone with loss over smaller stones

Left: Remaining patchy traces of limewash to the south elevation retained

Based upon the limewash remains and 2010 photographs, it appears that the eastern end of the building had been limewashed the longest, particularly the lower levels. This coincides with the oldest parts of the house which had earthen mortars that needed protection from the elements. The northern lean-to has very little evidence of limewash and this is probably because it was more sheltered along the raised ground levels. The stable may not have been originally limewashed either with a parged or butter type coat evident underneath. Perhaps the owner felt that limewashing the entire south elevation would have aesthetically more pleasing in the latter stages of development. Although the western elevation is most exposed, the stonework is much more visible suggesting that limewash was applied directly over the stone. The limewashing of buildings appears to have been largely based upon the occupants knowledge and experience with more conservative farmers continuing this tradition of annual limewash to sterilise buildings after the livestock were let out at late spring. More progressive farmers stopping this practice altogether however with exposed stonework becoming increasingly more fashionable in the latter stages of the C19th. Farm buildings in this area therefore tend to be a mix of limewashed, render and exposed stone. Local grade 2 listed examples within the immediate vicinity of similar period and vernacular construction can be found at:

- A group of buildings c.700mm south west of the Hen Ty Fferm known as Cilgynydd are a mix of finishes with the old cowhouse, stable and granary exposed stone, cowhouse and cartshed limewashed and house rendered on a couple of elevations.
- Eithin-man located between Llandissilo and Llanfallteg is another farm house where the front of the house was roughcast rendered and the rest left as exposed pointed stonework.



- Maencoch east of Llanboidy is a farmhouse where one of the elevations was rendered with slate hanging added in the C20th but the rest is exposed stone.
- The old stable and house attached to Maengywn near Efailwen has exposed stonework on all elevations

The Hen Ty Fferm initially continued with limewashing but there are plenty of examples in the locality that did not and therefore the decision to retain the lime pointed façade has precedent and would not be out of place in terms of local vernacular architectural practices. The relative isolation of the Hen Ty Fferm also means that it is not viewed against a backdrop of limewashed buildings with the former mill having also been stripped of its limewash and Penrallt an exposed brick building. When viewed in the landscape, there are no neighboring buildings visible and the Hen Ty Fferm remains a prominent feature in the landscape despite the absence of limewash.

Cadw Conservation principles specifically state that *'If, for instance an historic asset or part of it was modified primarily in order to reduced maintenance costs, restoration without considering the increased resources for maintenance are likely to be counterproductive'*. The inability of the previous occupant to continue with the annual limewashing therefore has to be an important consideration.

Below: South and west elevations taken before the works in 2010 with visible stonework even in the more sheltered areas of the stable in particular. Note: see photographs of the north and east elevations in the next section of this document on windows, doors and shutter.





As part of the consented scheme, part of the eastern extension was rebuilt. The new timber cladding was also painted black to match the existing finish.

Schedule of works item no. 3 & 16. Removal of roof covering including timber repairs, introduction of felt and insulation (condition no. 13)

The roof covering over the lean-to had sustained damaged which would have been apparent at the time of the listed building consent application in 2006 and yet neither the agent nor conservation officer addressed the need for re-slating the roof in order to replace the roof timbers. Stones from the western chimney had also fallen and crashed through the roof covering of the lean-to. Extensive ivy growth along the north west corner of the roof had also displaced several slates. Several common rafters needed replacing with repairs to the purlins and principle rafter which could not take place with the roof insitu. The engineer's report stated that the roof timbers would be replaced however with the assumption that the roofs would be renewed. The applicant wanted to conserve as much of the original timber as possible however and did not follow the engineer's advice with rotten timbers replaced locally on a like for like basis.

On the house, there had been historic water ingress around the chimneys stacks due to the absence and failure of mortar fillets. The absence of slate over sail along the verge had also saturated timbers along gable walls locally too causing decay. Localised stripping was also required in order to fit the leadwork and rebuild the two chimney stacks to the house. The site exposure had historically allowed a lot of rainwater ingress into the house and stable area although most of the roof covering was in good condition. This is particularly evident due to the extent of decay to the ceilings and upper timber floors with all but the eastern most ceiling over the bedroom already having been lost. The applicant had to address this issue in bringing the house back into use however and also wanted to try and improve thermal efficiency by insulating the ceilings or roof.

Although there were numerous options for insulating the roof and ceilings, the applicant was keen to use naturally occurring material which would benefit the traditional construction and chose sheep's wool as an insulator to be laid along the ceiling and between the rafters. The sheep's wool from this period was treated with boron to try and reduce the risk of insect attack and typically contained a small percentage of polyester to ensure the insulation quilt retained its shape. Although the long term impact of this type of product is not yet known, sheep wool is still considered one of the most suitable insulation options for traditional buildings. The material is minimally fixed and easily reversible with the quilt lifted laid loosely between timbers allowing a good fit between irregular shaped timbers. Manufacturer's claim that the wool may provide a temporary buffer when humidity levels increase by drawing moisture away from timbers and helping to reduce the risk of condensation. Unlike other insulation, they also claim that its efficiency is not reduced from moisture, it actually generates heat as moisture is absorbed, raising dew point. The material is claimed to be less toxic, absorbs VOC, provides a degree of fire and acoustic insulation and offers sustainability benefits such as carbon absorption, renewable sourced and is fully biodegradable recycling. Technical guidance from the manufacturer should be read carefully however as it specifically discourages use in persistently damp locations unless there is a ventilated void. Insulation alone will not negate persistent moisture ingress such as driving rain through slating and the boron salt treatment eventually leaches out leading to moth infestation. It is therefore important to manage and control the amount of moisture entering the roof space from below and above. A bituminous felt throughout would not serve this purpose as there



was a risk of condensation on the underside dripping back into the roof space compared to a breathable felt would allow the vapour to diffuse in the roofing batten cavity.

The roof covering is almost certainly not original with slates from north Wales and the raising of the roof to two storeys probably undertaken in the late C19th. The earlier roof may have been thatched but most likely covered in local slates which were much heavier and smaller. Such slates were usually grouted or torched along the underside to try and deal with water ingress. An example of this can be found nearby at non listed cowhouse at Llwyn Yr Ebol Farm c. 3 miles NW of the site (see image opposite). The applicant could have used a similar full torching method but there are disadvantages to this too as outlined below:



- The mortar torching requires regular upkeep and access is only readily available to the top third of the roof at the Hen Ty Fferm due to the position of the ceiling which remains as originally intended. The eaves area of the roof is only accessible by removing the ceiling and this would be a disruptive process and affect the bat roost.
- Torching does affect the lifespan of the slate. Although lime is a breathable material, the underside of the slate is subjected to more saturation. When the roof is re-slatted in the future, the amount of salvaged slates will be significantly reduced.
- The modern roof also needed to incorporate several roof penetrations such as bat access points, soil and vent pipes and mechanical ventilation extract terminals and the torching would be vulnerable in these locations, creating a weak area for water ingress.
- A fully torched roof adds considerable weight. The engineer's report suggested that the roof structure should be replaced and commented upon suitability for future loading. The applicant actually repaired the roof structure and replaced the ceilings like for like with timber boarding so there is little difference in weight which the roof has historically been able to support. Whilst sheep wool insulation has been added, it has not made much difference in terms of weight.
- Tolerance to moisture ingress is probably less than it was historically, particularly in vernacular properties that had limited options for improvement other than to maintain the property to the best of their ability. Even a well maintained roof can expect some discoloration and peeling finishes to the ceilings given the exposure. The house is also connected to electrical supplies with outlets in all rooms and expensive appliances. The nature of the house contents has also changed with increase in more highly valuable objects which have been purchased rather than made.

Although there is no local precedent for this, timber sarking boards could perhaps have been used but they have similar disadvantages to the lime torching above in terms of adding weight to the roof and would also not control moisture so effectively. The applicant therefore feels that a roofing felt would be the better solution and despite concerns raised by the conservation officer, it is still the preferred solution. The suggested removal of the felt by cutting away with a knife is not that practical and also wholly unnecessary. The roof space is now a bat roost and the works would both require a license and would have to be phased, causing unnecessary disturbance for bats and humans. Although there are some valid concerns about the use of roofing felt, these can be addressed as follows:



- The underside of the roof was originally concealed from view by the ceilings and therefore the use of roofing felt has hardly any visual impact upon character except for the occupant and perhaps the ecologist. Externally there is no alteration.
- The applicant has installed a breathable roofing felt with localized strips of bituminous felt required along the ridge to comply with the bat license. The felt was laid in accordance with the manufacturer's recommendations by ensuring that moisture into the roof space is minimized. A vapour control layer was fitted to the new ceilings along with sealed penetrations and ducted mechanical ventilation extracts removing moisture from high source levels such as showers.
- The roof space is also ventilated with gaps and over fascia vents laid to the eaves on all roof slopes. Insulation has also been positioned to maintain a 50mm air gap along the underside of the rafters too helping the air circulate. During an inspection of the roof space on 19th February 2019, air movement within the roof space was apparent with no musty odor, signs of condensation or mould on any of the roof timbers of underside of the roofing felt. This is some 7 years since installation illustrating that the alteration has not caused any damage from the initial increase in moisture from wet trades during development or from subsequent occupation from both humans and bats.
- Although roofing felts are a relatively modern introduction, they have been in use for c.100 years now and when properly installed within a ventilated roof, there is little evidence of consequential damage.
- Insulation and heating has been sensibly introduced into the house with solid fuel appliances generating less sustained intense heat than modern gas or oil boilers. The thermal mass of the building is also conserved with the absence of drylining to the external walls. The insulation chosen is not particularly effective in terms of its thermal conductivity or the thickness installed by the applicant as a consequence of preserve the existing roof and ceiling positions and therefore the temperature gradient between the house and roof space is not so marked. The insulation manufacturer's also claim that their product has hygroscopic properties which offer a buffer in dealing with moisture levels.
- Although the works have been undertaken relatively recently, the applicant has looked after the fabric and understands the need to properly maintain traditional building. The use of second hand slates means that they are more vulnerable to breakage however and the roofing felt offers temporary protection in such situation.
- The roofing felt provides some benefit in terms of ecology with the void created between the roof covering and felt ideal for smaller crevice dwelling bats such as pipistrelles that occupy the Hen Ty Fferm.
- Although this application falls under Carmarthenshire County Council, it is worth noting the inconsistency in the acceptance of roofing felt in neighboring Pembrokeshire County Council and Pembrokeshire Coast National Park Authority where neither conservation officer has concern over the use of roofing felt. The Hen Ty Fferm is barely a couple of miles from these local authorities and therefore the differences in opinion are particularly hard to accept although each listed building has to be considered for its own merit.



Above: lean-to interior at west end showing condition of roof before development

As part of the re-roofing the original slates and ridge tiles were salvaged and reused helping to conserve fabric. Matching second hand slates and ridge tiles were also brought in to make up the difference so aesthetically, the roof character has hardly changed. Matching section cast iron rainwater goods were also fitted. The re-slating works allowed the insertion of lead soakers and flashings around the chimney stacks providing a more effective and durable detail against the weather.



Above: Ivy growth to the NW corner prior to development

Below: View of the roof void in 2019 with roof timbers, felt and insulation in good order



Schedule of works item no.4: Localised rebuilding work to detached stone skin to east end of lean-to north wall

The house is situated on steeply sloping bank with the ground level to the north almost level with the eaves level of the lean-to. In accordance with the approved plans, the bank was lowered and a land drain introduced. Surface water had historically collected along the north wall of the lean-to and pooled towards the east end. During dry periods, water emerged from under the floor exiting at the southern side of the house. Loose stone visible above the higher ground level had already been noted in the structural report and following excavation a small section of detached stone outer skin was exposed. The roof was temporarily supported whilst the area was rebuilt locally using the salvaged stone and lime mortar.



Above: local masonry collapse post excavation



Above: same rebuilt area upon completion

Schedule of works items no.5 & 12: rebuilding of chimneys with lead trays and flagstone capping, consolidation of fireplaces

The existing chimneys were in very poor condition. The eastern stack had been dismantled down to roof level and capped off with slate and a ridge tile. The western chimney masonry was in a dangerous state with substantial cracking on all faces, loss of masonry and loose sections. Attempts appeared to have been made to limit water ingress with roofing slates laid flat followed by a perimeter of rubble stone, another roofing slate with rubble stone on top to try and weight it all down. Daylight was visible around the west chimney internally and with the absence of any mortar fillets or stone water tabling for protection against water ingress. Timber decay was noted around the chimney areas.



Above: capped east chimney and poor state of west chimney viewed from south west and north east in 2010

Listed building consent included the rebuilding of both chimneys with a note referring to cement hanuching and lead flashings but there was no detail on the drawing with the absence of chimney pots or flaunching. Other than using salvaged stone and lime mortar, rebuilding like for like was also difficult in that the chimneys had been effectively capped off and much original detail lost. The listed building consent referred to using a 'traditional detail' with no condition requesting the precise detail to be agreed later. The chimneys were therefore rebuilt with lead flashings and a squared chimney top as illustrated on the drawings. Given the roof was being reslated at the same time (instead of



repair), the mortar haunching was substituted with lead soakers as a more durable solution and a lead tray was introduced to limit water ingress down the chimney. The absence of a chimney pot and protection to the flue also had to be addressed given weather conditions in this area which suffer from heavy rainfall with water ingress inevitable. Although water ingress was a historic concern too, the use of sealed appliances such as stoves are particularly vulnerable with modern metal liners which provide no masonry buffer. There is also a lot less tolerance to staining and dampness in the modern home with more valuable internal furnishings and electrical equipment at risk. Although the conservation officer has expressed concern over the as built detail, the alternative options all have an impact as A – C outlined below:



- A) Fit chimney pot with cowl and mesh. This would be visually intrusive with noticeable change in roofline although black terracotta and matching powder coated terminal could be used to minimise visual impact. The metal cowls can crack chimney pots due to thermal stress and require regular replacement and cleaning due to the thin metal and mesh used. It is not a particularly durable solution.



- B) Fit 'H' type chimney pots. These are large, heavy and most noticeable with significant visual impact and clearly modern.



- C) Rotary cowls fitted to the top of the chimney pot. Whilst power coated versions can be obtained the shape is clearly modern with change to the roofscape when mounted on a chimney pot that would be visible from a far. These cowls can sometimes tilt on their axis causing noise and vibration. They also need regular replacement and cleaning. As with the fixed metal cowl, there is risk of cracking and this is considered a less durable solution.

The applicants feel that a chimney pot and cowl would be an alien and visually intrusive addition compared to the traditional detail used. There is historical evidence to support the absence of a chimney pot too. Whilst wooden chimney pots were often used on thatched roofs in west Wales, terracotta pots were not common until the C19th when industrialised materials became more readily available. Most rural houses continued without any chimney pots well into the C20th however with the chimney top left squared. Some stacks were finished with a roofing slate laid flat with dome of mortar above which reduced the flue opening slightly. The three images below were taken from old photographs in Peter Smith's book *Houses of the Welsh Countryside* and although from various parts of Wales, they were all commonly used in the west.



Above: Pen-y-bont, Beddgelert, Caernarfon with mortar domed above flat roofing slate course



Above: Blain-llain, Llanwenog, Ceredigion with squared rubble course above roofing slate course



Above: Garn, Llanychar, Pembrokeshire with flat slab raised up on stoned course

Larger chimneys were usually capped with heavy slabs raised on intermittent smaller stones and this detail has been in use since medieval times. Other attempts to minimise water ingress involve the use of roofing slate or a ridge tile but this detail is unlikely to be acceptable for modern regulations given the potential to inhibit smoke in certain wind directions.



Above: Recently restored chimney with raised slab detail at Llwyn celyn, Monmouthshire within Brecon Beacons National.



Above: Recently restored thatch roof and chimney with slab detail at Penrhos, Maenclochog, Pembrokeshire.



Above: Restored chimney with ridge tile detail at Museum cottage, Llanon, Ceredigion

The chimneys as rebuilt continue to be the preferred option by providing a simple square shape that has deep historical precedent whilst offering shelter in an exposed location. It should also be noted that the consented plans had an external metal flue pipe shown on the north elevation penetrating the lean-to roof for a new boiler. The applicants have therefore been able to eliminate this alteration and ensure that both chimneys are in working order.

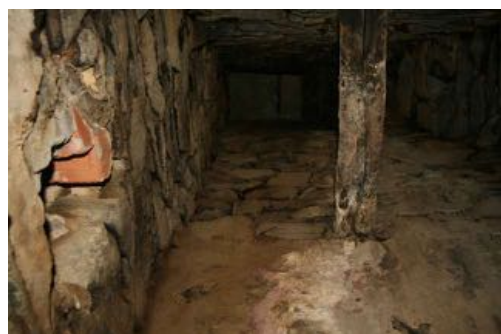


Above: Completed east chimney (left) and west chimney (west) both viewed from north west at close range.



Left: View of the house from the from south but within the property boundary with simple squared outline of the chimneys retained and traditional detail conserved. The smoke holes and lead work are not apparent but the addition of chimney pots would be noticeable from afar due to the change in roof line. Although the height of the chimneys had to be estimated due to lack of primary evidence, their proportions are in keeping with the house and other historical examples.

Chimneys below roof level were in fair condition with rebuilding work concentrated above roof level. Minor repairs were undertaken to the east inglenook where a hole had been knocked through to accommodate pipework from an old Rayburn. Small pieces of brick and cement mortar were removed with the hole repaired with salvaged stone and lime mortar. A wire brush was used to remove tar and soot from the stonework. A timber beam that was once used to cure meat was left insitu and other than cleaning and replastering, no works were necessary to the for the bread oven.





Above: east inglenook before



Above: east inglenook after



Above: old flue before



Above: old flue after

The small opening in the east inglenook (probably old flue) into the east extension was also conserved with surrounding area replastered and limewashed. The old fireplace in the western chimney had been built up and this was opened up with decayed timber lintel replaced but other than cleaning and galletting voids prior to plastering, no other work was required.

Schedule of works item no.6: Replacement of windows, doors and shutters (conditions no. 6 & 10)

The consented drawings stipulated new windows in the lean-to and stable areas and sash windows to the house replaced. Drawings of the replacement sash windows were also included as part of the 2006 consent. This appears to have been overridden by conditions no.5 and no.6 however which stated that '*existing doors, windows and shutters shall be preserved and repaired on a like for like basis*'. The extent of replacement including 1:10 drawings and further details were also subject to agreement with the Local Authority before commencement. Many of the openings had no existing surviving joinery however and new styles were also included in consented plans, clearly indicating new work.



The applicant removed the windows and doors carefully but the joinery was generally in very poor condition. Salvageable sections were retained and the applicant sent a few samples sent to joinery firms in attempt to obtain a quotation for repair. Despite approaching three joinery firms, none of them felt there was sufficient good timber to justify repair. The applicant's agent prepared detailed drawings including minor changes to the local authority and believed these had therefore been agreed.

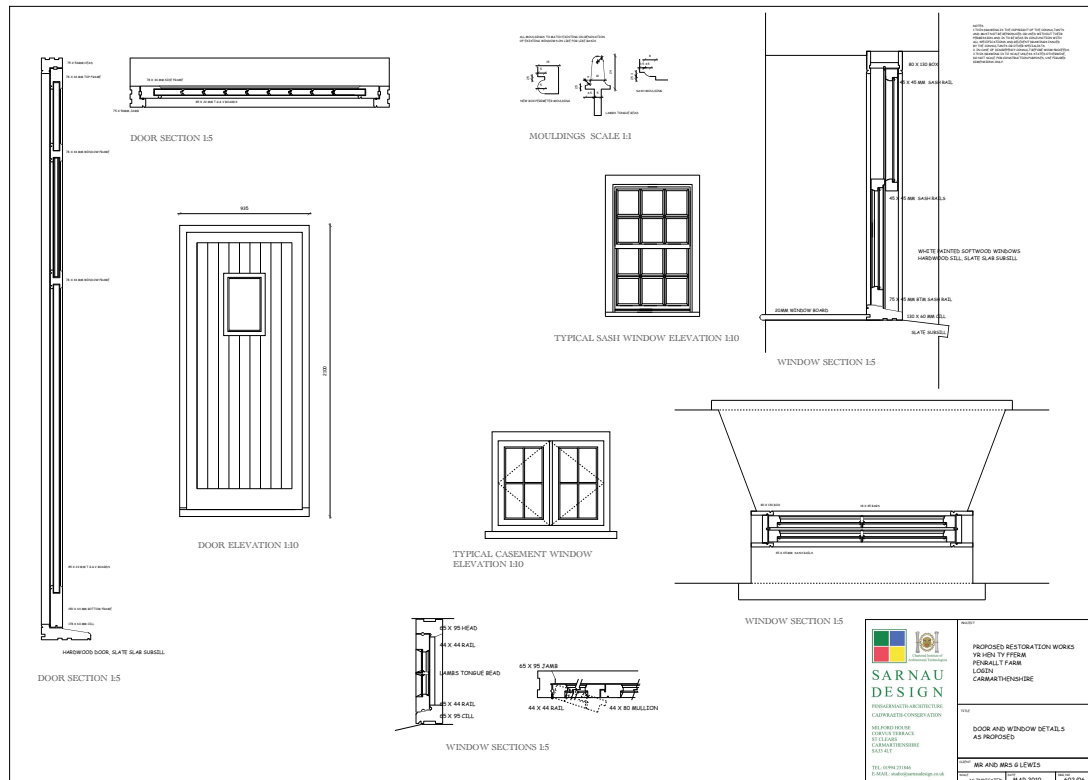
The applicant has complied with condition no.11 in that all the joinery is painted with the same design and specification as shown on the approved plans.

Upon discovering that conditions no.5 and 6 had not been discharged however, the applicant has re-submitted the drawings for retrospective approval. In addition, Helen Rice (planning officer at Carmarthenshire County Council) inspected the remaining fragments of window in spring 2017 and images of these are shown opposite and below.



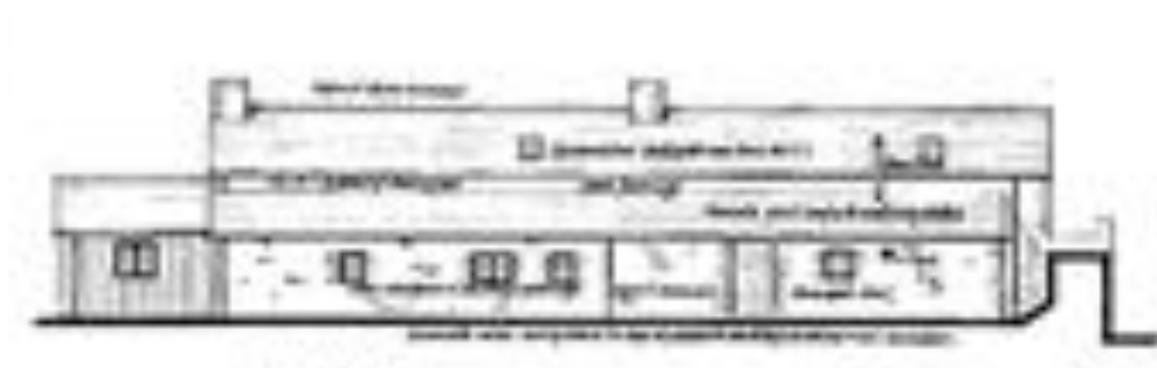


Below: drawing believed to have been agreed with Carmarthenshire County Council



Modest changes were made to the joinery and openings as detailed below:

On the northern elevation, the central window in the former slating room was shown as a four pane casement but the actual opening was narrower than shown. This meant that the window panes would have been very narrow and so it was reduced to single pane width to maintain consistency with the other windows. The original window opening has been conserved. The other central window to the salting room had a simple frame with chicken wire only with wooden internal shutters. These too were in poor condition with salvaged sections set aside.



Above: consented drawing of north elevation



Above: As built photographs of the north elevation east end (left) and west end (right)

The proposed new window to the west elevation was not constructed as there was some concern over weakening that corner of the building as a number of openings had already been made into the stone walls connecting the south and north walls with comments made regarding this in the 2004 structural report. The stable openings have therefore been conserved with no new openings made.

The proposed window to the east elevation appeared to be a new opening as it was wider with pair of casements. The original opening was retained however with a resulting narrower window comprising four pane casement fitted.



Above: consented drawing east (right) and west (left) elevations

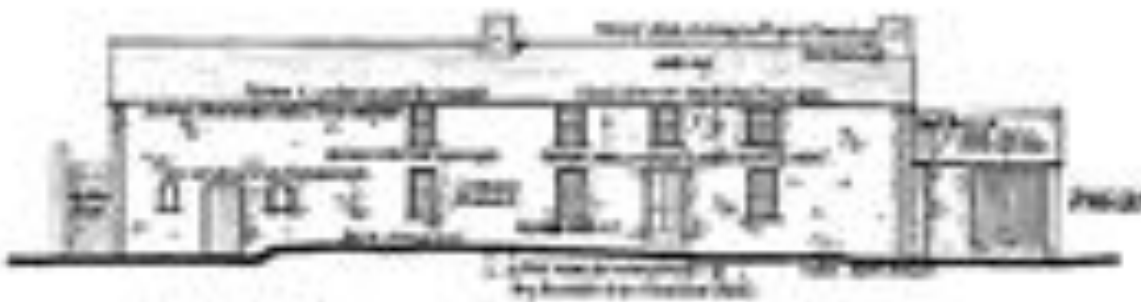


Above: As built photograph consented east (right) and west (left) elevations

The glazed doors to the south elevation of the eastern extension were narrow and therefore a slightly wider door and fixed side light were fitted. Both the side light and door had long narrow glass panels as consented however so that it reads as a boarded door to retain agricultural character.

Consented to the stable contained no subdivision, perhaps to distinguish as agricultural use. Four pane windows have been fitted to both openings. The shutters are beyond repair but surviving parts were retained by the applicant to allow faithful reproduction to be made.

The consented plans showed a fully boarded door to the stable and four paneled door to the house. Fully boarded doors with small glazed vision panels have been fitted to both doors instead. The four paneled door was felt inappropriate since it contrasted with the utilitarian detailing of the other existing doors. Changes to the internal floor level meant that additional steps were added near the stable door and in order to avoid potential collision in the landing area, visibility between exterior and interior was desirable. Given that both southern doors had originally matched one another, the house door was also changed and this also had the benefit of providing additional light at the bottom of the stairwell.



Above: consented drawing of south elevation



Above: As built photograph of south elevation

Despite the minor changes to the joinery, the dark green paint finish and small scale of the vision panels and other modified glass panes are only evident at close range and do not detract from the overall appearance and character of the house. The joinery remains simply detailed and although new, matches the salvaged pieces of joinery.



Left: Pre-development west elevation to lean-to and stable with open frame to lean-to window and fully boarded door

Below: New glazed bedroom door to west elevation stable door as consented



Above: New utility room window to west elevation lean-to window as consented



Above: New rear hallway window to north elevation of lean-to as consented



Above: New rear hallway door to north elevation of lean-to as consented



Above: New shower room window to north elevation of lean-to with glazing reduced to two panes to fit original opening (former salting room)



Above: New shower room window to north elevation of lean-to as consented (former salting room)



Above: New sitting room window to north elevation of lean-to as consented



Above: New study window to north elevation of east extension as consented



Above: New sitting room window to east elevation of lean-to with window reduced to single casement and four panes to fit original opening



Above: New study room glazed door to south elevation of east extension. Consented pair of doors changed to single door with fixed side light



Above: Pre-development east elevation to lean-to and east extension showing narrower window opening which has been retained



Above: New kitchen window to south elevation of former stable (two in total). Consented single panel changed to four panes.



Above: New house entrance door to south elevation (stable door similar). Consented four panel door changed to boarded door to matching existing. Small glazed vision panel added.



Above: Typical new sash window to south elevation of house (eight in total)



Above: Pre-development south elevation. Sash windows replaced like for like with solid boarded doors modified with addition of small vision panes. Former stable openings with single timber shutter (left) replaced with glazed four pane side hung casements.

Schedule of works items no. 7, 13 & 17: Details of new floors including levels and introduction of insulation

First floors to the house were in reasonable fair condition and the applicant was able to repair locally due to decay so that most of the original construction has simply been cleaned and redecorated. First floor in the stable to the west was in a very poor condition and too dangerous to walk over and



this necessitated more like for like repair but the floor levels were not altered. Most of the boarded floors are left exposed with varnish decoration except for the bathroom which as a painted finish and ensuite floor which is covered with floor tiles.

The ground floor level in the west end of the house had previously been raised to match that of the east end but the stable floor remained well below the house. Whilst the house ground floor was relatively level, the stable floor had also been laid to slope down from north to south with difference of c.500mm over 4m. The concrete floor in the stable was also a later addition, probably added when it was converted into cowshed and appeared to have been raised to create the deep feeding troughs in the cattle stalls. When excavated, a few patches of cobbles were found but none remained in the cattle stall area.

Below: existing ground levels



Ground levels along the south elevation generally appeared to have been lowered with vehicular use running past the house causing further erosion. Concrete steps had therefore been added for access into both the stable and house entrances. The position of the existing thresholds and stairs dictated the position of the new finished floor levels. In order to conserve the door openings, internal steps were added between the changes of floor level.

The consented drawings indicated a couple of steps but the actual change in floor levels had not been accurately recorded and additional steps were required to make the difference. The base of the south wall was also visible in places and following excavation of trials holes, it was evident that underpinning would be required to construct the stable floor on one level. It was therefore decided that the stable area would be construction in two levels to avoid underpinning with the extra internal steps located near the stable door. The floor level in the eastern extension was also raised to match that of the house to avoid underpinning. The house floor including lean-to remains as one level area as the existing layout.



Above: Steps at change in level to stable floor

Left: Steps at stable door

The applicants wanted to minimise the use of modern radiators and pipework in the ground floor to try and retain some of the old character of the house which was heated by fireplaces only. Given concerns over the condition of the floor, it was likely that many areas would need to be replaced anyway which would allow the introduction of an insulated, heated floor. Underfloor heating was the most attractive option for a traditionally constructed building, producing gradual warmth which utilised thermal mass. A solid fuel heating system was preferable too given access to their own managed woodland. This meant that a gas or oil tank and all its modern paraphernalia would also not be required. The house could continue to be heated in a sustainable manner without the intense heat of modern central heating systems that can cause problems with condensation.

Existing solid floors in the eastern extension, house and lean-to had been soiled by animal occupation. Sheep carcasses were discovered under the staircases and the base of walls and floor were contaminated with urine, faeces and oils from wool and fur. Some of the exposed concrete was friable and cracked. A trial hole was excavated to ascertain the base of the wall and large voids were discovered under the slab, possibly where vermin has been allowed to accumulate. There was not much strength in the concrete and is varied in thickness. The applicant was keen for the new floors to have a breathable construction, similar to existing. Following research, they came across a lime based floor system that included clay aggregate insulation which could be used with underfloor heating offering traditional construction which allowed them to inconspicuously introduce a new heating system into the house. The ground floor construction therefore comprised quarry tiles on 75mm thick lime screed incorporating underfloor heating pipes on a 100mm thick limecrete base laid over a geotextile membrane with insulation below in the form of lightweight expanded clay aggregate (LECA). The thickness of the insulation varied to suit the depth available without undermining the walls. In the east end of the house, the old floor was in better condition, with loose material scraped back only limecrete laid over. Many historic buildings have adapted this same system which is felt more suited solid walled buildings.

Most of the ground floors were finished as bare concrete, perhaps covered with mats/carpet when occupied. Quarry tiles had been laid in the central and east end of the house as well as the salting room in the lean-to and these were salvaged and re-laid where possible. Matching second hand tiles



were sourced to make up the deficiency and to tile the previous bare concrete areas. The floor at the west end of the lean-to was partially covered with stone flags but these were substantially broken and could not be reused. Slate flags were introduced near the stable door locally at the new steps.

Schedule of works item no.9: Replacement lintels with partial use of concrete

The 2004 structural report submitted and approved by Roger Casey Associates Ltd identified decay in the timber lintels and advised that these should be checked individually, treated or replaced as necessary. Neither the consented drawings or engineers report provided a detailed assessment other than a note on the drawing showing the south elevation '*replace lintels over openings*'. The listed building consent imposed no conditions for the scope of work to be agreed later either. The applicant had to replace numerous timber lintels but the outer stone ones were conserved. Lintels to the south and west elevations in particular were in poor condition. Although high level access would not have been available to the engineer at the time, the plaster and limewash finishes also concealed many of the lintels. Give the location, extent of decay and exposure of the site, the applicant considered replacing the timber lintels with more durable material but wish to retain the character of the timber lintels which were generally from roughly hewn sections. Lintels nearest the outside of the wall, directly behind the external stone lintel were more at risk of decay and these were therefore replaced with concrete lintels. Concrete lintels had been specified in the structural report as a repair method to tie the front bowing wall and therefore this material was already part of the proposals. The inner timber lintels were replaced in oak with an oak soffit fitted to the concrete lintels to conceal them. The applicants were able to replace the lintels like with timber from their own woodland used alongside salvaged timbers elsewhere on the farmstead. The necessity of repair coupled with material available on site has minimal impact and the concrete lintels will provide a more durable solution, requiring less disturbance to historic fabric in the future.



Above: Typical examples of timber lintels replaced with oak lintels used internally and oak lining added to conceal concrete lintels to wall core.

**Schedule of works item no.13: Removal of window and opening to north wall of stable for new staircase**

The consented drawings did not accurately reflect the existing building or works required with many issues missed by both the applicant and conservation officer at the time. Within the first floor area of the stable, there was a small window on the north wall which straddled below and above the lean-to roof. Although hidden by extensive ivy growth externally, it was clearly evident internally but not shown on the existing survey.



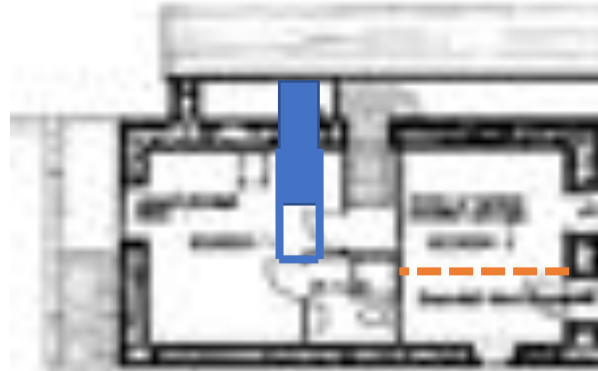
Little attempt had been made to protect this area from weather ingress with a gap between the roof slating. The window also had a number of missing glass panes with timbers and masonry sodden in this area. Whilst this detail could have been improved, the proposals also showed the insertion of a new staircase directly below. A new opening required headroom above for the staircase and this essentially necessitating removal of masonry up to roof level. Keeping the window was therefore not possible as the consented staircase would not have enough headroom.

Options could have been considered to locate the staircase in a slightly different position. This would have had implications on several rooms on both floor levels however. The consented staircase position was tucked into the corner of the room as the area directly below had reduced headroom which would have limited useable space. In order to conserve the original separating wall between the stable and house, the stairs could also only be moved westwards thus pushing it towards the center of the room. The first floor bedroom above would effectively have been split into two smaller spaces leaving little space for a double bed. On the ground floor the length of the rear hallway would have also extended making the proposed utility room very small. The width and height of the lean-to limited options to push the stairs further northwards unless it was turned into dog led stairs which would have doubled the loss of bedroom space. The need for a second staircase was perhaps imposed by the conservation officer who wanted to preserve the distinction between the stable and house with no openings between. The middle bedroom would need to be c.40% smaller however if a single staircase option had been introduced and another roof light would have been required due to loss of window to the south. There is also a slight difference in upper floor levels between the stable and house which would have necessitated a step down at the new door threshold from house to stable.



GROUND FLOOR PLAN

Above: Stairs (in blue) moved westwards leaving small utility and reducing functional space



FIRST FLOOR PLAN

Above: Stairs (in blue) moved westwards splitting bedroom into two areas. Second stairs omitted creating longer hallway and smaller bedroom (orange dotted line)

Removal of the window was therefore considered the best option and the applicant/agent also assumed that since this alteration would have been apparent at the time, that is was part of the original planning and listed building consent. Internally, the complete window had to be removed to allow the staircase to work but the small area of window above roof level was infilled conserving traces of an opening. Lead flashings introduced at the head of the lean-to monopitch for weather proofing conceal c.50% of this area however and therefore the opening is not readily apparent. Photographs were also taken prior to the work so that the features is recorded however.





Schedule of works item no.14: New roof light

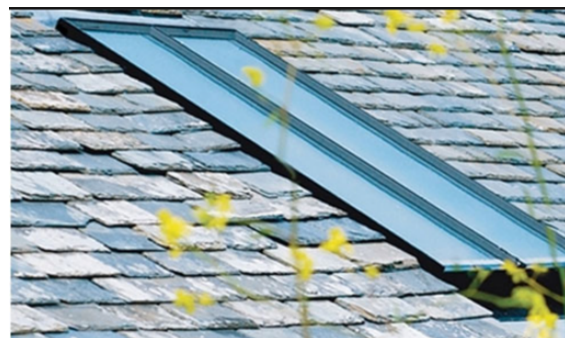
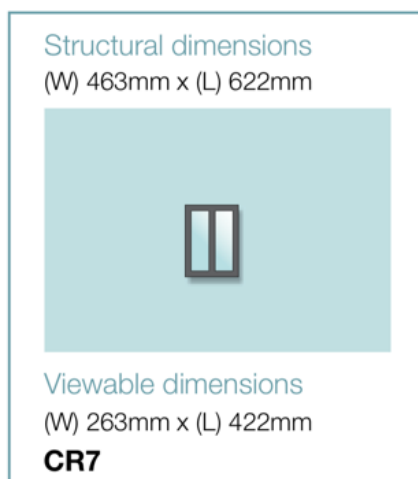
The consented scheme included the introduction of 2no. new roof lights to the rear roof slope. The applicant was able to source second hand Victorian cast iron roof lights which were fitted. Excessive condensation occurs on the single glazing however which drips onto the room below. This is particularly undesirable in western bedroom as the water drips directly onto the bed. The applicant therefore proposes to replace the roof lights with a modern reproduction which has double glazing but it made of cast iron and sits flush with the roof plane. The roof light is the smallest version available and the position will not change with appearance as that originally consented. Had the applicant not sourced a second hand roof light, they would have fitted this reproduction anyway and therefore the alteration is negligible.



Above: Rear (north) roof light with current salvaged roof lights



Above: Close up of current salvaged roof light



Above: Proposed rooflight set flush into the slating

Left: Proposed rooflight from The Rooflight Company Conservation Rooflight CR7 model (smallest available)

**Schedule of works item no.17: Metal railings to western external steps**

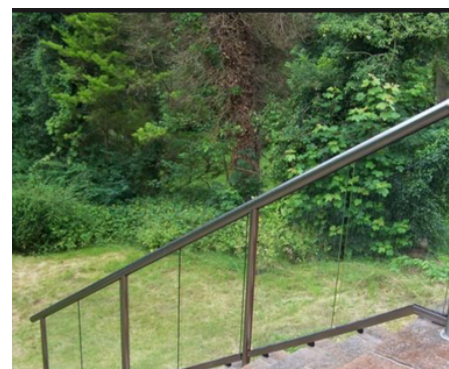
Complying with building regulations can be difficult for historic buildings with potential harm to character and fabric. Reasonable concessions are therefore possible in most situations except for and understandably, where there is a risk to life. Falling from height and escape from fire usually necessitate some degree of alteration and at the Hen Ty, Fferm, the as built solution is still the preferred option and is justified below.

Bedrooms should ideally have two options to escape from fire, particularly as the occupant may already be in a drowsy state. The western bedroom has the potential to provide this with internal access and external door which leads out onto external steps. The existing steps are fairly steep and do not strictly comply with building regulations but the officer agreed they could be retained provided the risk of fall was reduced by adding some form of guarding to the exposed perimeter. The existing walls are low and typically vernacular with the absence of any guarding or handrails and therefore any solution has impact. Options considered for the external steps guarding outlined A – F below:

- A) Raise the stone wall: the existing wall has particular character as most external steps of this type and finished simply with domed mortar coping, flagstone or cow and calf stone copings. This wall has flagstones at the upper landing with solid type stone coursing along the steps whereby the stone have been purposefully rounded to create a smoother line. The different use of materials also hints at different periods of construction given perpendicular joints in the stone below. The raising of this wall is therefore not desirable as it permanently destroys the existing detail. The glazed door is also an important source of daylight and this benefit would be diminished by a solid guarding.

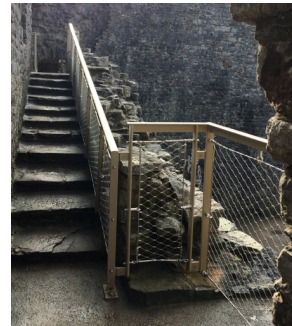


- B) Glass balustrade with stainless steel posts: the lightweight, transparent nature of the design may have benefit although some sun reflection could occur from the glass. As a westerly location, driving rain would hit the glass sheets causing local water run off which could eventually cause erosion. The guarding is easily reversible with minimal fixings. It reads as a completely new, honest addition but may conflict with the nature of the building which was constructed simply using materials available locally. This design is therefore perhaps too modern.





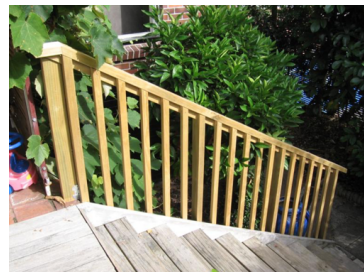
- C) Metal frame with mesh: This option has transparency and lightness and would fully protect against fall. The guarding would be easily reversible with minimal fixings. In terms of appropriate use of modern material, chicken wire or some other form of netting more traditional materials could perhaps be used.



- D) Cast iron handrail only: Although a handrail would be an improvement, the gap below could still be an issue, particular for the applicant's grandchildren who could squeeze through. Very few steps of this nature historically had any sort of handrail and were usually fitted to the main wall of the building, not on posts. The use of cast iron confuses and misleads when there is little past precedent for such a detail. The guarding is however easily reversible with minimal fixings.



- E) Timber balustrade: Timber would be a heavier option but durability would be a real concern given the westerly exposure which visibly batters the fabric on this side of the house. Improved detailing such as the use of steel flitch plates could be considered but it becomes an overly engineered solution. It has potential for ease of reversibility although may confuse as a traditional feature.



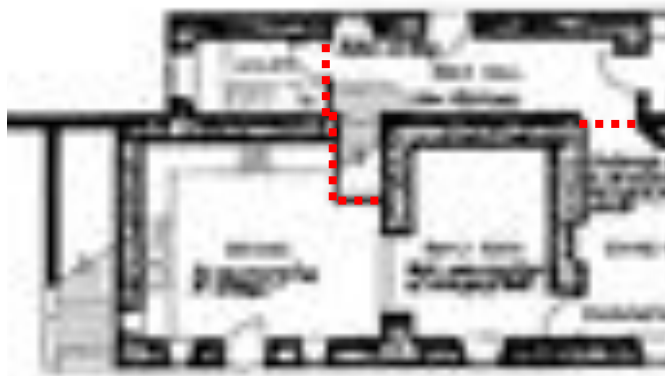


- F) Galvanised steel balustrade: The galvanized finish would provide greater durability. Use of traditional sections such as flat bar and solid round bar in small sections provide a transparency which will allow light into the room despite regular bar spacings needed to reduce risk of fall. The fixings are minimal and easily reversible. The overall design reads as a later addition but it is simple and utilitarian using materials readily available locally and therefore is more in keeping with the original vernacular architectural language than any of the other options. This is enhanced by the use of ribbed concrete reinforcement bars as rural folk recycled and made enterprising decisions based upon their skill and materials available to them.

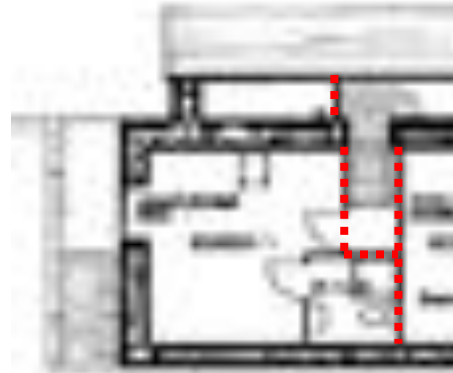


A single means of escape from fire is also possible but the surrounding fabric must have minimum 30 minutes fire resistance and fire detection system which would necessitate a number of other alterations as follows:

- The floor between the kitchen and bedroom has no fire resistance with underside of the floor boards exposed to the room below. Given that most fires start in rooms with appliances and fireplaces, the west bedroom in particular is poorly located. The floor board joints have opened up and although this could be filled to limit smoke, it would need ongoing attendance. This is the original detail of the house and any improvements would impact upon character. Essentially a new ceiling is required with layer of fire resistant plasterboard and insulation covering the floor boards and joists. An intumescent coating could perhaps be applied to the exposed floor joists instead but the joist depth would be visible reduced by the extra layers of plasterboard and insulation.
- The internal staircase would become the single route to escape from fire and although this does have direct access to the external north door in the lean-to, the surrounding rooms need to also have 30 minutes fire resistance. Since the underside of the stairs and separating partitions are newly constructed, improvements to achieve the desired fire resistance would not directly affect historic fabric. The exception to this however is the utility room partition which was salvaged from the slating room. This partition contains the original internal window and timber boarding and therefore the glass would need to be upgraded with the partition insulated with layer of plasterboard below the boarding.
- Doors leading from the utility room are simple planked doors as part of the character of the house but provide little fire resistance but a similarly constructed door could be obtained together with smoke seals to the frame that could comply.
- At present there is no door leading from the central room to the lean-to and there did not appear to be one there historically. A new fire door would be required in this location however given the risk of fire spread from the fireplace in the central room.
- The sketch below highlights fabric that would need to be upgraded for a single means of escape to provide a protected route from the western bedroom



GROUND FLOOR PLAN



FIRST FLOOR PLAN

Above: partitions and doors requiring 30 minutes fire resistance dotted in red



Opposite: utility room window and partition salvaged from slating room that would need improving to provide required fire resistance

If the external steps were not required as a second means of escape from fire, the risk of fall remains unless the steps were brought out of use. The external west door could perhaps be fixed or set to open slightly for ventilation with obstruction at the base of the steps. A redundant feature is prone to lack of maintenance however and it is better for the steps to have some purpose. Given the degree of alteration and desire to use the external steps, the option for single means of escape is not desirable. The as built option remains the best solution but there is potential to improve this by painting the metal in stone colour so that it blends in with the background a bit better.



Other options to provide an alternative second means of escape are not viable. A new window to the south elevation would alter the primary façade and introduce a new element which would diminish the distinction between the house and stable. A window to the north elevation is difficult to achieve due to the position of the lean-to roof and would probably involve an inverted dormer window type design with significant impact. A roof light can be discounted because it would be positioned too high to be within easy reach i.e. cill no more than 900mm high.



Opposite: Inverted dormer option

Below: New railings with original stone detailing conserved



Schedule of works item no.18: Soil and vent pipes

The consented drawings had no detail on means of foul drainage and the conservation officer did not impose any conditions asking for additional information either. This is somewhat surprising because the existing building had no means of drainage necessitating alteration and new work. Most historic buildings in modern use gradually evolved to accommodate sanitary accommodation and the pipework required to carry water and waste. Had the Hen Ty Fferm been in continuous use, it probably would have had a cast iron external soil pipe with lead pipes for waste water which may



have been replaced with plastic and copper. The applicants wanted to minimise the impact of introducing services for modern living standards and preferred to conceal the above ground drainage internally within boxing. The below ground drainage requires ventilation however to release gases as well as ensure effective discharge. Options A – D for achieving this below entail:

- A) Extending pipes to an air brick located in the external wall, at high level and away from window openings: Finding a suitable location for all the air bricks was difficult as each needed to be at least 900mm above and 3m away from a window and this entailed longer lengths of pipework and boxing internally. Air bricks were required to provide air for combustion and mechanical ventilation extracts too however and so this option was discounted to minimise the number of air bricks required.
- B) Extending pipes through the roof with a balloon or wire cowl: this option was the most straightforward and the plastic pipe could be concealed within a lead sleeve using traditional materials that would be more aesthetically pleasing. This was the preferred option by the applicant.
- C) Extending pipes through the roof to a proprietary slate vent: The applicant initially discounted this option as the slates were usually man made with plastic inserts and this was therefore not a traditional option. The slate vent is advantageous however in that it is discreet with no pipe penetrations above the roof. Materials have also evolved since 2010 and Welsh Slate manufacture a natural slate with plastic insert which would be more in keeping with the surrounding slates. The applicant therefore proposes to replace the lead sleeves with slate vents.
- D) Extending one pipe externally (preferably to the rear elevation) with air admittance valves fitted to the other pipes internally within ventilated boxing: The applicant had not been aware of this option at the time but these valves do fail and require periodic replacement with removable boxing. This option seemed to the most destructive to implement in retrospect and has been therefore been discounted.

Below: soil and vent pipe to lean-to north roof Below: soil and vent pipe to south roof slope





Left: Proposed natural slate vent

Schedule of works item no.19: Mechanical extract ventilation

Ventilation is vitally important for the need of the occupant as well as building fabric. Although the needs of the building fabric have changed little, the manner in which they are occupied has. Poorly executed alterations cause considerable damage to the historic fabric and each building needs to be considered holistically. Sources of moisture stem from occupation such as breathing and perspiration and activities such as washing and cooking. Traditional building fabric also contributes with permeable solid walls and floor, ill-fitting doors and windows, large fireplaces and even well maintained roofs, all adding to the moisture levels.

Modern life has changed the way we occupy traditional buildings however both in terms of the moisture generated as well as the ability to control. When last occupied, the Hen Ty Fferm would have had few sanitary conveniences with sink in the kitchen area and salting room. Personal hygiene would have been with jugs of water used to fill wash stand bowls and perhaps a portable tin bath in front of the fire. Washing linen and clothing was usually undertaken outside and left to dry outside too or hung in the kitchen as suggested by the ceiling rail in the old kitchen of the Hen Ty Fferm. There also was ample means of ventilation in the old house too however with draughty roofs and large open fireplaces, poorly fitting windows and doors.

Plumbed sanitary appliances such as toilets, basins, baths, sinks, washings machines, tumble dryers, dish washers, showers etc. have all helped increase the level of moisture generated in the house together with more frequent use. The building fabric has also been improved with better fitting windows and doors, insulation to the roof, sealed combustion appliances and reduced flue sizes. Room temperatures have generally risen, allow the air to hold more moisture and increasing the risk of condensation on cold surfaces. The drive to improve thermal efficiency and reduce fuel use has led to the need to introduce more controlled ventilation rather reliance on leaky fabric to try and mitigate the increased moisture levels. Mechanical ventilation in areas where there are high levels of moisture generation are therefore an important addition to historic buildings. Rooms such as bathrooms, ensuites, kitchens and utility rooms are required by building regulations to have some means of ventilation but it is not always possible to provide ample means of natural ventilation either. The ensuite has no opening window or roof light, the kitchen has window openings to one side of the room only (no through draft). Whilst there are windows to the utility and shower room and roof light to the bathroom, they require manual operation and this is not always done with the regularity is



requires. Opening windows or roof lights also results in heat loss and water ingress when it is raining and can leave the building unsecure when unoccupied. Mechanical ventilation is automatically controlled for short bursts and has minimal effect on heat loss or can actually recover and reuse heat.

The consented drawings showed a cast iron vent on the proposals located on the west end of the north elevation serving the utility room. It is not clear whether this was meant for ventilation of the soil pipe or mechanical ventilation but there were no other means indicated. There was also no detail on the type of vent or finish and no conditions requested this information be provided. Options A - D available for mechanical ventilation terminals are as follows:

- A) Fit air brick or grill in the external wall: this could be in plastic, terracotta, cast iron or other metals such as stainless or galvansied steel, aluminum, lead. The applicants preferred a cast iron finish coupled with the need for traditional materials which already been consented. These sit flush to the wall unobtrusively but it would not be possible to locate the air brick close to the extraction point in every location without extensive internal ducting. The air bricks also needed to be located away from open windows so avoid moist air returning into the building. Ceiling extractors best located above showers in particular were problematic given that they were higher than the eaves level of the building. The air brick is therefore most suited to the utility room with roof terminals to the other areas.
- B) Fit external pipe with ventilated cowl that could penetrate the wall or roof: this option seemed to the most visually distracting in terms of the protruding shape and also the quantity required (see image in schedule of works item no. 20 for external pipe)
- C) Fit slate vent to roof: the applicant had seen samples of this and did not like they non traditional appearance – back in 2010 these were made from manmade slate only with plastic inserts. They would not provide a durable solution and would have weathered quickly in such an exposed location.
- D) Fit lead vent to the roof: as a traditional material with durability, this was the preferred option. Although the cowls are elevated slightly above the roof plane, they are small in size. Most of the lead vents could also be located to the rear roof slope thus minimising visual impact.



Above: Lead cowl fitted to north lean-to roofslope serving shower room



Above: Lead cowl fitted to main house north roofslope serving bathroom



Above: Lead cowl fitted to south roofslope serving ensuite

The cast iron air brick to the utility room and lead vent to the ensuite, bathroom and ensuite are still preferred by the applicant as they are the most durable and traditional solution.



Above: Cast iron air brick fitted to west elevation serving utility room

Schedule of works item no.20: Air supply for combustion of solid fuel appliances

The need to conserve use of fuel for heating and live more sustainably has implications for traditional solid fuel open fires and appliances. Modern gas or oil boilers tend to have balanced flues which provides both air inlet and outlet for exhaust gases under pressure. Solid fuel fires and appliances also require air for combustion and an outlet for exhaust gases but their design has hardly changed for hundreds of years. They rely on a positive air pressure inside the room to help create a natural draught which combined with the heat of the fire, pushes gases up the chimney. Traditionally the building fabric was so leaky that his system worked fine but as buildings have become more air tight, combustion gases no longer exit the chimney or flue effectively causing potentially lethal gases to accumulate internally. Improvements such as better sealed windows and doors, vapour control layers and insulation, reduced or sealed chimney flues and mechanical ventilation all play a part. There is therefore a need to create a permanent air supply for combustion and the bigger the appliance, the greater the air input required.



The Hen Ty Fferm has two log burners and a solid fuel stove which provides hot water and central heating for the whole house. Guidance on the required air flow is provided in building regulations but the solid fuel installation must also be undertaken by an accredited person on the HETAS scheme which has its own guidance as well as British Standards. A traditional building usually requires 550mm² per kW above 5kW unless extensive measures have been undertaken to improve air tightness. The stove alone has 27kW capacity therefore requiring 132cm².

The air supply is usually provided though permanent passive vents. Trickle vents or sash locks to windows are not suitable as they can be closed and the vents are best located at low level too. The air supply must not be obstructed or draw air direction from the exterior. Air bricks are the most common method of providing the air supply but piped supplies with cowls or grills may also be suitable as shown in the image opposite. Given that several of these needed to be located on the southern wall and primary elevation, air bricks were the preferred option as they would sit flush with the wall. As outlined in the options for mechanical ventilation, air bricks in a variety of materials are available but the applicant wanted a traditional finish and opted for cast iron, the use of which had already been approved on the consented drawings.

Below: 3no. cast iron air bricks fitted to central area of south wall at low level

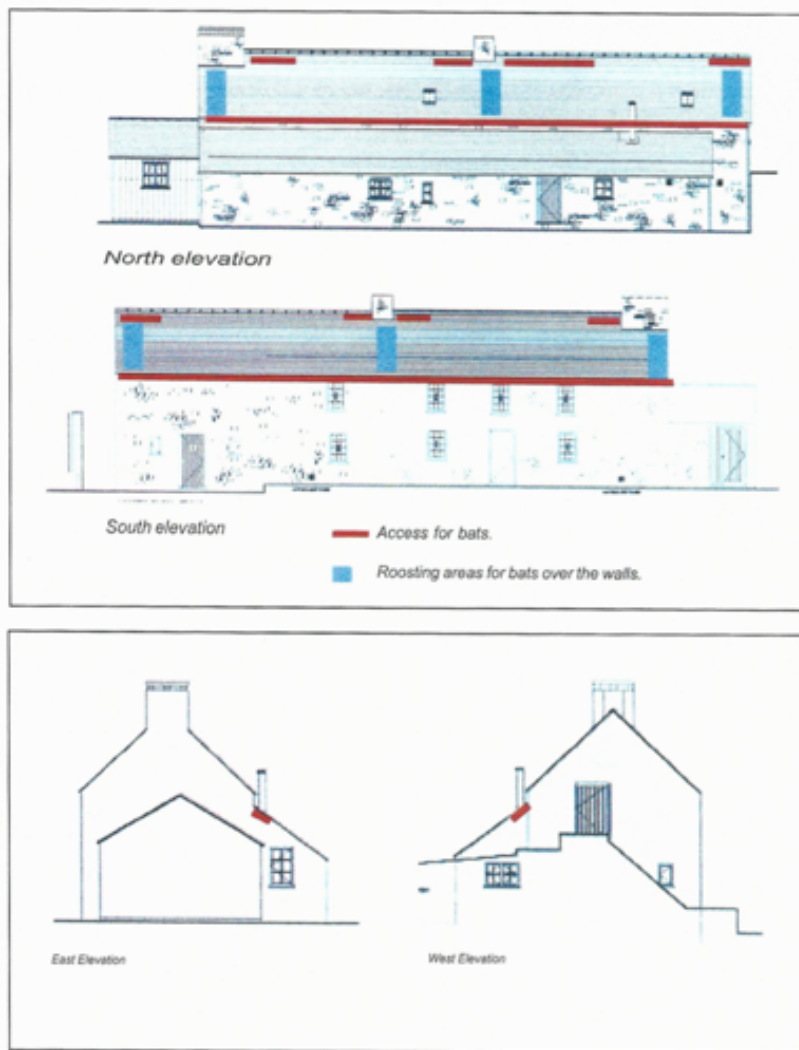


Schedule of works item no. 21: Ecology survey and mitigation measures to include bat access points to roof and walls (condition no. 20)

A bat survey was undertaken with the report submitted to Carmarthenshire County Council who discharged planning condition no.20. The applicants naturally assumed that the mitigation measures in the report should therefore be adhered to in accordance with that planning condition. Although the alteration work should also have also been agreed with the conservation officer at the time, options would have been limited with bat access points unavoidable. The survey found that common and soprano pipistrelle's were using the house and stable near the front (south) of the building and possibly near the ridge too. The ecologist believed that the site was used for mating as well as night roosting and night feeding. Numerous holes in the masonry also providing opportunity for cool roosting and hibernation. The ecologist concluded that the bat roost would be 'disturbed and damaged' by the development. Given that the house and stable would become fully occupied once



more, night roosting and feeding accommodate would therefore be provided in the adjacent outbuildings instead. The house would still need to accommodate bats in the roof space and wall cavities however as shown on the illustrated sketch below:





It is a criminal offence to intentionally kill, injure, capture, take or disturb bats and their roosts. The applicant's had no choice but to work within the terms of the habitats license granted by the countryside Council for Wales/Welsh Assembly Government. Building works to the roof were undertaken under the watchful eye of an ecologist who was able to advise on best means of access for that bats based upon site use. The number of access points were therefore limited to three lead bat slates on the south roof slope together with a few voids left in the stonework on the south elevation. The roof space has now become a bat roost and any works in this area are similarly controlled.



Above: Holes in stonework for bats

Below: Lead bat access point near east chimney



Below: Two lead bat access point near west chimney



Since the works were undertaken in 2010, new products have come to the market to provide access and accommodation for bats. Welsh Slate now manufacture a bat access point made out of welsh slate with a plastic cowl (see opposite). Although the slate would be a close match to the slating at the Hen Ty Fferm, the cowl is still elevated above the roof slope and is likely to fade and deteriorated in time due to UV exposure. The lead bat sleeves are therefore still preferred by the applicant as they are durable and a traditional material compatible with the age of the house.



It is assumed that the ecologist used openings in the roof to coincide with the existing entry and exit points that the bats had been using. A possible alternative which have been to raise a couple of ridge tiles locally to allow entry right at the ridge although this is more exposed and less desirable

**Schedule of Works no.22: Photographic Survey (condition no. 19)**

The applicants contacted someone to enquire as to what should be photographed and where it would be sent. They unfortunately did not keep a record of this but suspect they were sent to either Cadw or the Royal Commission on the Ancient and Historic Monuments in Wales. Having contacted Dyfed Archeological Trust, they have confirmed no records have been received. A disk with the photographs was sent to Helen Rice (planning officer at Carmarthenshire County Council) in March 2017 however and recently to Dyfed Archaeological Trust direct and therefore the authority should have the necessary information to discharge this condition.



HERITAGE IMPACT ASSESSMENT

Internal wall finishes were in ruinous condition throughout with exposure to the weather and contamination from animals with the building been unoccupied since the 1960's. Although there is a slightly negative effect on evidential and historical values with the loss of original fabric and colour scheme, it is minor. In contrast, the use of traditional finishes and colours have a beneficial impact on aesthetical and communal values. The building is now inhabited and good condition which is the best long term solution compared to conserving and unused shell.

The limewash finish was in poor condition and had not been maintained for decades with the last occupant reporting the annual struggle. Evidence suggests that the lower levels and eastern end of the house had the thickest layers of limewash, perhaps to protect the earthen mortars. Although the upper levels of the house added later were also limewashed, the south elevation of the stable may have just had a parged or butter coat of lime render finish initially but at some stage the whole south elevation was limewashed for consistency. Significant loss of limewash occurred during repointing and rebuilding works despite the work being undertaken carefully. The stone is durable enough with lime mortar used for pointing helping to protect the stone in the future. The retention of the remaining limewash and photographic record help to reduce the negative impact upon historical and evidential values. The applicants have conserved as found leaving the patch traces of limewash on all elevations but they are reluctant to keep the annual practice of limewashing going due to the administrative burden, time and expense involved and they are regrettably not alone with negative impact upon aesthetical and communal values. Nevertheless, the practice of limewashing was dying out in the C19th with increasing numbers of farm buildings being built and maintained as exposed stone so the Hen Ty Fferm follows this trend. The isolation of the house and grade 2 listing has to be borne in mind as well as the sustainability of maintaining the house for future occupants.

The Hen Ty Fferm had to reconcile many requirements which have potential to conflict with the conservation of the building. The need to reduce heat loss, control moisture and conserve protected species habitat in particular impacts on the roof with the new addition on insulation and vapour control membranes. The applicant has carefully considered the options however and endeavoured to use traditional materials whilst repairing wherever possible with positive impact upon aesthetical, communal and historical values. The end result is an effective, durable roof covering which helps safeguard the building for the future. Whilst the roof is part of the later fabric of the house, probably late C19th, retention of most roof timbers with local repair, reuse of salvaged slate and ridge tiles all help minimise impact upon evidential values.

The localised rebuilding to the NE corner of the lean-to area was undertaken due to condition with repairs concentrated to minimal area required and undertaken like for like using salvaged loose stone and lime mortar. Although the eastern end of the house is the oldest, the lean-to was probably a later addition and built of random rubble with lower significance and is therefore of very minor impact upon evidential significance. The finished repair is discreet with no impact upon historical, aesthetical or communal values.

Works to the chimneys need to balance retention of historic detail against the need to minimise water ingress and protect fabric and contents of the building. Robust detailing which minimises maintenance is also important given the exposure of the chimneys on this site which are evident by the past attempts to cap the disused flues. The chimneys have been rebuilt using salvaged stone on site and lime mortars with proportions similar to that which might have been expected when in use and therefore impact upon evidential values this respect is minimal with work limited to that which was essential. Minor repairs and cleaning were also undertaken to the fireplaces. The introduction of a lead tray and flashings provides is a relatively modern addition but is a much improved detail against the weather compared to mortar fillets which are liable to saturation. The new leadwork is also far more durable with mortar fillets



barely lasting 10 years without needing repair. Although several options are available for weathering the top of the chimney, the flagstone is the most durable and has been used as a detail in the area for hundreds of years, although there are few surviving examples. In the absence of clear evidence on how the chimney was finished on this site, the use of the flagstone fulfils a practical need and will also help educate future generations with benefits in terms of historical and communal values. This detail conserves the traditional squared top to the chimneys with minimal visible impact in the landscape with the leadwork only visible in close proximity and has the least impact on aesthetical values. The alterations to the chimney provide a cumulative benefit in longer term management of the historic fabric and help conserve evidential, aesthetical, historical and communal values.

Minor changes to the joinery have overall, made a positive contribution. A new window opening in the west elevation has been avoided with original openings to the north and east elevations retained rather than altered. Although the original joinery was in too poor a condition to justify re-use, the applicant has retained the salvageable fragments including shutters and replaced the windows and doors like for like in most areas to minimise impact. Traditional oil based paint and single glazed also been used to minimise impact upon evidential and aesthetical values. The small pane glazing detail to the two windows on the former stable are more domestic in style but overall, there is minimal impact upon communal and historical values. It is worth noting that the consented plans allowed for the larger unglazed openings to the north and west elevation to be subdivided into small glass panes with similar effect and reflects the change in use of these areas from agricultural activities to full residential.

Existing door threshold positions have been retained externally conserving the stable positioned below that of the house post conversion with negligible impact upon historical and communal values. The new floor positions have also been constructed taking into account the shallow wall footings with underpinning avoided by splitting the stable floor level and slightly raising the eastern extension floor. The house floor remains level and although substantial areas of floor have been replaced, the existing floor slab in the east end of the house has been repaired with new layer of limecrete over only. Existing quarry tiles were also salvaged and reused with moderate impact on evidential values. Coupled with the use of new stone flags locally, there is a positive impact upon aesthetical values too. The use of limecrete and clay aggregate is similar a traditional floor construction and contributes to future communal values by displaying the desire to provide heating in a sensitive and sustainable manner.

Extensive decay to the timber lintels had to be addressed given their structural importance. Lintels were only replaced where needed to keep work to the minimum. The applicant was able to source timber grown on the surrounding land and therefore no better like for like replacement could have been achieved. The pattern of decay highlighted the vulnerability of the timber lintels situated in the wetter, outer parts of the wall and an improved detail using concrete lintels will provide a more durable solution longer term. The quality of timber today is substantially poorer than historic timbers with species such as oak barely surviving 25+ years in exposed locations. The impact upon evidential value is minor with work to fabric kept to the minimum. There is negligible impact upon aesthetical values since the applicant used timber soffits to conceal the concrete lintels and the timber lintels all vary in shape and size to match the space left by removal of the existing timber lintel. The use of concrete has beneficial impact upon historical and communal values since the replacement material is clearly modern, simple and readily available which fits in with the vernacular style.

The building up of the first floor stable window on the north wall to allow insertion of a new staircase results in minor loss of physical fabric which documents part of the house and stable chronology in its latter stages as well as the way in which the first floor of the stable may have been used. The window is not located on the principle elevation however and is also largely concealed under the lean-to which was added at a later date. The window no longer serves a practical use either and is poorly detailed allowing water ingress internally. Alteration to bring the window into use or to provide effective weather protection would be required to retain the window. Relocating the stairs still requires a new opening



but it compromises the internal layout with substantial loss of usable space. Omitting the second staircase has a greater negative impact too with a new opening between the stable and house where no such access exists. There is a vertical joint in the stonework of the lean-to which also conveys the western part was added later and together with a photographic record should help minimise impact on evidential, historical and communal values. Aesthetically there is hardly any change from building up the window due to its location and size.

The replacement rooflights have negligible impact given the current rooflights are similar shape and size and located in the same position in the roofspace. The current rooflights were also a new addition, inserted as part of the 2010 works in accordance with the approved plans. Had the applicant not sourced salvaged Victorian rooflights, they would have had to install the new reproduction ones anyway. There is a slightly beneficial impact on historical, communal values with hardly any impact on evidential and aesthetical either. The reproduction rooflight is an honest addition whereas the salvaged rooflight could confuse or mislead into future generations into believing that the rooflights were original to this building.

A home, even a historic building must be a safe place to live. The ability to be able to escape from fire and reduce the risk of falling from height therefore had to be addressed. All the options considered had some form of impact but the preferred option had the least impact. The use of the external western steps should be encouraged so that it is maintained as a working part of the house. Galvanised steel railings have a moderate impact upon aesthetical values but this can be improved by decorating in a stone colour. The use of flat and round bars are traditional sections and small in scale however, allowing light into the room and not obscuring the building behind. The guarding is clearly a later addition, providing an additional honest layer that has negligible impact on historical and communal values. The use of material readily, simple detailing and use of items meant for another purpose (i.e. the ribbed concrete reinforcement bars) is totally in keeping with the vernacular character in which this building has evolved. The metal guarding can also be fixed and removed with relative ease with only a few bolt holes in the floor to be filled in and therefore there is minimal impact upon evidential values. The unusual wall capping is also conserved without alteration.

The house had not previously had no means of drainage other than discharging over the ground locally which is unacceptable today. The applicants therefore wanted to keep the above ground drainage as discreet as possible by location pipework internally within boxing. Suitable pipe ventilation had to be provided and this was done using lead collars through the roof as a traditional method. The pipes are visually intrusive however, particular on the principal south elevation as they stick up above the roof plane. Since 2010 more traditional slate vents have been introduced and these will have less impact on aesthetical values. The location of vents through the slate covering is less impactful on evidential values than fitting air bricks in the external wall in terms of disruption and also concerns later fabric as the roof has been replaced. The slate vent is an honest new layer with negligible impact upon historical and communal values.

Modern life has led to the necessity for vented drainage, effective ventilation by mechanical means and creation of permanent air supply for safe combustion. Terminals located within the roof are minimally invasive and effect later fabric with low impact on evidential values. Vents through the wall are more destructive but they are small and few in nature. There is an aesthetical impact with cumulative of small fittings detracting from the simple roof and wall finishes but the use of traditional materials such as lead and cast iron are more sympathetic. Location vents on the rear elevation and using flush fittings such as slate vents and air bricks help to minimise this impact. These features are clearly of their time and contribute towards historical values of the future. There is negligible impact on communal values.

Protected species were found using the house and mitigation measures were incorporated to minimise disturbance to bats during the work as well as alternative accommodation upon completion. The small



voids left in the stonework have little impact on evidential, aesthetic, historical or communal values. The lead bat access points on the roof are a noticeable alteration however with slightly negative impact in terms of aesthetical values. Historic buildings must comply with the modern legislation in place to protect bats and their roosts however and conservation of ecology has a positive impact on communal values. The bat access points have been made out of lead – a traditional material and they are clearly a later addition with minimal impact upon evidential and historical values.

Conservation is founded on appropriate and planned routine management and maintenance. Discontinued practices often coincide with the stewardship of the building and the lack of occupancy at the Hen Ty Fferm resulted in reactive maintenance at best. We know from the previous occupant that they struggled to keep the weather out of the building with the chimneys eventually taken down or capped off. They also had to apply the limewash annually to try and maintain its condition on this exposed site. The struggle of the previous occupant should not be ignored and although the unoccupied building has not helped matters, reasons for past maintenance failure must be addressed by the new occupant. In accordance with Cadw Conservation Principles the applicant has therefore sought to improve the weathering of the chimneys by fitting leadwork and capping the chimneys and have repointed the masonry in lime mortar to help sustain the stonework without regular limewashing.

In accordance with Cadw Conservation Principles, the applicant has both understood the heritage values and impact of proposals for repair. Like for like repair in the form of repointing and rebuilding in lime and salvaged stone, carpentry repairs and re-roofing using salvaged materials are long term solutions with proven durability and low risk. The extent of the work has also been limited to what is reasonably necessary to make a failing element capable of fulfilling its intended function. Photographic records have been used to record before works were undertaken.

The condition of the original windows and doors would have already resulted in greater loss of historic fabric and they were no longer fit for purpose, allowing water ingress into the building. Timber lintels too were gradually failing and would eventually cause structural weakness. In accordance with Cadw Conservation Principles, periodic renewal has been undertaken by recording existing details and creating new elements which follow this detail and were made to fit the old fabric with minimal alteration. No attempt has been to make a restoration without following evidence within the historic fabric itself or relevant case studies of similar buildings in the locality. Work has been confined to that required due to progressive decay without prejudice to alternative solutions in the future. Consideration has also been given to future maintenance implications. New layers have been sympathetic and honestly added without diminishing surviving historic fabric or compromising future authenticity.

The applicant has fully justified the need for new work and alteration with sufficient information to comprehensively understand the impact upon significance in accordance with Cadw Conservation principles. Work generally does not materially harm the heritage values, affecting later fabric in most instances. Elements such as the felt, insulation, bat access points, soil and vents pipes, mechanical ventilation could all be removed with relative ease in the future, should they no longer be desirable. The use of traditional materials in the form of lead roof terminals has ensured some form of craftsmanship has been applied. The modest changes introduced as a result of modern occupation would probably already have been incorporated into the building had it remained in occupation and no doubt less sensitively than the applicant has attempted.

The Hen Ty Fferm is nestled on southern slopes below the Preseli mountainous range and only visible from c.500m and above from the southern aspect only. The sinuous valley and wooded landscape shield glimpses however with best views from the south west. A prominent aspect can be found at c.470m near a property named Penlan some 1.5km from the south as shown in the photograph below.



The building continues to be a distinctive landmark despite the absence of limewash finish due to surrounding fields creating a gap in the wooded valley. Finer details such as the railings, bat access, air vents, changes to window panes and soil pipe are virtually indistinguishable and have very little impact on its setting. It's remote location also means it has limited effect on the character of the immediate neighbouring buildings, namely Penrallt and the former mill.

Designated buildings within 2km of the Hen Ty Fferm are listed in the table below. Nearest is the scheduled ancient monument of Pen-Gaer Promontory Fort to the north east followed by a cluster of grade 2 listed buildings comprising four outbuildings and farmhouse at Cilgynydd some 700m away to the south east.

Ref.	Name	Description	Grid reference/ distance
GRADE 2 LISTED BUILDINGS			
16592	Glyntaf	C19th small country house in picturesque Gothic style	SN 17208 25113
25642	Lofted cartshed at Cilgynydd	C19th vernacular outbuilding part of group	SN 18431 23539
25648	Outbuilding at north end of yard at Cilgynydd	C19th vernacular outbuilding (perhaps lofted cowhouse) part of group	SN 18452 23570
25643	Cowhouse at Cilgynydd	C19th lofted vernacular outbuilding part of group	SN 18461 23556
25641	Outbuilding behind Cilgynydd	C19th vernacular outbuilding (perhaps lofted granary over stable) part of group	SN 18465 23523
25640	Cilgynydd	C19th farmhouse in Georgian style, replacing earlier house and central piece of farmstead group	SN 18454 23516
25649	The Rest	C19th farmhouse built for the Maesgwynne estate	SN 18678 22323



Ref.	Name	Description	Grid reference/ distance
22502	Calfaria Baptist Chapel	Romanesque style 1877 rebuild from earlier chapel	SN 16512 233388
82459	Pont Cwm-Miles	C19th single span road bridge in local vernacular style	SN 16371 22314
GRADE 2* LISTED BUILDINGS			
None			
GRADE 1 LISTED BUILDINGS			
None			
SCHEDULED ANCIENT MONUMENTS			
CM214	Pen-Gaer Promontory Fort	Defended enclosure possibly Iron Age period	SN 18265 24149
CM031	Dol-wilym Burial Chamber	Chambered tomb dating back to Neolithic period	SN 17051 25655

These designated buildings are scattered 360 degrees around the Hen Ty Fferm and at varying heights. Both topography and natural landscape features limit direct views to/from the Hen Ty Fferm. Cilgynydd is on a similar level to the Hen Ty Fferm however and probably the only one with direct visual contact from south east although this is partially obscured by trees and hedges. Prominent features such as building shape, openings and finishes only would be discernible to the naked eye and therefore finer alterations such as air vents, bat access points, soil and vent pipe, minor changes to window panes are not visually apparent from Cilgynydd. The viewing angle from the south east also means that the external steps on the western gable are somewhat shielded by the house itself. In terms of visual impact, the works at the Hen Ty Fferm are therefore very low. Other impacts sensory impacts such as noise and smell are also negligible given that the use of the building has not changed, density has not increased and this type of use (farmhouse) is widespread and historically part of the landscape.

A summary of the heritage impact assessment for the preferred approach is as follows:

IMPACT RATING KEY:				
Effect of overall impact:				
Positive	Slightly positive	Neutral	Slightly negative	Negative
Scale or severity of impact:				
1 No change	2 Negligible	3 Minor	4 Moderate	5 Major
See Appendix Table 2 for full definition				



PROPOSED WORK AND IMPACT ASSESSMENT		MITIGATION MEASURES ADOPTED
SIGNIFICANCE EVIDENTIAL	Wall finishes internally: mix of significance with early and later fabric affected but in poor condition with numerous alteration (schedule of works item no. 1, 8 and 11)	2 Photographic survey to record
	Wall finishes externally: most parts of fabric affected from all stages of development. Limewash in poor condition but recorded with photographs before work (schedule of work item no.2)	2 Photographic survey to record
	Re-roofing work incorporating felt and insulation: much of original fabric and materials retained (schedule of works item no. 3 & 16)	3
	Rebuild stone wall to NE corner locally: very minor impact with localised repair due to condition focusing on later addition to the house. Like for like repair. (schedule of works item no. 4)	2
	Rebuild chimneys with introduction of leadwork and flagstone capping: minimal rebuilding using salvaged stone has been undertaken, flagstone detail has historic precedent and leadwork provides the most durable solution (schedule of works item no. 5 & 12)	3 Photographic survey to record
	Replacement windows, doors and shutters: Sections have been salvaged with new like for like, original openings retained and number of new openings reduced (schedule of works item no. 6 & 10)	3 Photographic survey to record
	New ground floors including insulation and underfloor heating from solid fuel: some loss of fabric with unknown evidential value (schedule of works items no. 7, 15 & 17)	2
	Replacement lintels with partial use of concrete: work concentrated to decayed areas with minimal rebuilding to conserve fabric (schedule of works item no.9)	2



PROPOSED WORK AND IMPACT ASSESSMENT		MITIGATION MEASURES ADOPTED
SIGNIFICANCE	EVIDENTIAL	
	Build up first floor window to stable north wall to allow insertion of staircase: loss of feature in latter stages of house and stable chronology (schedule of works item no. 13)	3 Photographic survey to record
	New rooflight: Current rooflight is a new addition installed in 2010 as part of the consented scheme with minimal impact (schedule of works item no.14)	2
	Add galvanised guarding to steel steps: Clearly new addition with minimal fixings and ease of reversal. (schedule of works item no. 17)	3 Ease of future removal
	Soil pipe terminal: Roof covering is a later addition and use of slate vent is minimally invasive (schedule of works item no. 18)	2
	Mechanical extract ventilation: Roof covering and wall to west end of lean-to are later additions with use of lead vent minimally invasive (schedule of works item no. 19)	2
	Air supply for combustion of solid fuel appliances: vents are not located in the oldest part of the house although physically invasive (schedule of works item no. 20)	2
	Bat access points: Existing voids utilised in the stonework. Location of bat access points to roof and upper walls part of later fabric and minimally invasive (schedule of works item no. 21)	2
	AESTHETICAL	
	Wall finishes internally: traditional finishes with small areas of modern wall tiling (schedule of works item no. 1, 8 and 11)	1



PROPOSED WORK AND IMPACT ASSESSMENT		MITIGATION MEASURES ADOPTED	
SIGNIFICANCE	AESTHETICAL	Wall finishes externally: Lime mortars used for the pointing and cladding painted in black to match existing. House appearance naturally aged so the contrast between current elevations and building before the works is not significantly altered with low impact due to isolation (schedule of work item no.2)	3
		Re-roofing work incorporating felt and insulation: appearance externally remains traditional with new additions concealed within roof space (schedule of works item no. 3 & 16)	2
		Rebuild stone wall to NE corner locally: negligible impact as repair not noticeable and house appears now appears in good condition. (schedule of works item no. 4)	1
		Rebuild chimneys with introduction of leadwork and flagstone capping: chimney retains traditional roofline and the leadwork has minimal impact at close range (schedule of works item no. 5 & 12)	3
		Replacement windows, doors and shutters: painted finish with single glazing, simple flush frames reinstated (schedule of works item no. 6 & 10)	2
		New ground floors including insulation and underfloor heating from solid fuel: reuse of salvaged floor tiles and local stone aesthetically pleasing (schedule of works items no. 7, 15 & 17)	2
		Replacement lintels with partial use of concrete: modern material concealed by timber and like for like variation in timber lintels conserved (schedule of works item no.9)	2
		Build up first floor window to stable north wall to allow insertion of staircase: loss of window to rear facing elevation is hardly apparent (schedule of works item no. 13)	2



PROPOSED WORK AND IMPACT ASSESSMENT			MITIGATION MEASURES ADOPTED	
SIGNIFICANCE	AESTHETICAL	New rooflight: Reproduction rooflight very similar to the salvaged Victorian version (schedule of works item no.14)	2	
		Add galvanised guarding to steel steps: Visible at close range primarily from south and west (schedule of works item no. 17)	3	Steelwork painted in stone colour to blend into background better
		Soil pipe terminal: Slate vent matches adjacent slate and is flush with the roof plane and will be visually less apparent (schedule of works item no. 18)	3	Slate vent replaces soil pipe on principal elevation
		Mechanical extract ventilation: Although visually apparent, most terminals are located on the rear elevation to minimise impact (schedule of works item no. 19)	3	
		Air supply for combustion of solid fuel appliances: located on principal elevation although at low level so not that visually apparent and traditional cast iron used (schedule of works item no. 20)	3	
		Bat access points: Visually intrusive along roof (schedule of works item no. 21)	3	
	HISTORICAL	Wall finishes internally: loss of colour scheme and original finishes to distinguish between different areas (schedule of works item no. 1, 8 and 11)	2	Photographic survey to record
		Wall finishes externally: Retention of remaining limewash provides some indication of past colour schemes which would be concealed by new layers of limewash (schedule of work item no.2)	2	
		Re-roofing work incorporating felt and insulation: new historical layer added as well as conservation of earlier ones (schedule of works item no. 3 & 16)	2	
		Rebuild stone wall to NE corner locally: no impact as work of repair nature (schedule of works item no. 4)	1	



PROPOSED WORK AND IMPACT ASSESSMENT		MITIGATION MEASURES ADOPTED	
SIGNIFICANCE HISTORICAL	Rebuild chimneys with introduction of leadwork and flagstone capping: historical detail used in the region has been used on this building in the absence of clear primary evidence for the chimney capping (schedule of works item no. 5 & 12)	2	
	Replacement windows, doors and shutters: more domesticity introduced with subtle changes between house, stable and lean-to (schedule of works item no. 6 & 10)	2	Photographic survey to record
	New ground floors including insulation and underfloor heating from solid fuel: door thresholds retained with stable floor stepped down from house conserves historically evolution (schedule of works items no. 7, 15 & 17)	2	
	Replacement lintels with partial use of concrete: concrete is an honest repair which will not confuse (schedule of works item no.9)	2	
	Build up first floor window to stable north wall to allow insertion of staircase: minor impact as other surviving features such as joint in the lean-to stonework help record westward extension of the lean-to (schedule of works item no. 13)	3	Photographic survey to record
	New rooflight: Reproduction rooflight using double glazing is a more honest addition than the salvaged version (schedule of works item no.14)	2	
	Add galvanised guarding to steel steps: No historic precedent as new element from change of use (schedule of works item no. 17)	3	Use modern materials in traditional way as sensitive new historical layer that aids future interpretation
	Soil pipe terminal: Honest new layer added reflecting modern hygiene practices (schedule of works item no. 18)	2	



PROPOSED WORK AND IMPACT ASSESSMENT		MITIGATION MEASURES ADOPTED	
SIGNIFICANCE	HISTORICAL	Mechanical extract ventilation: Honest new layer added reflecting change in occupancy and treatment of fabric (schedule of works item no. 19)	2
		Air supply for combustion of solid fuel appliances: Required as a consequence of improvements to conserve energy adding new layer to historic building (schedule of works item no. 20)	2
		Bat access points: Feature introduced in compliance with modern legislation adding new layer to historic building (schedule of works item no. 21)	3
	COMMUNAL	Wall finishes internally: traditional finishes employed conserving skills for future generations (schedule of works item no. 1, 8 and 11)	1
		Wall finishes externally: decline in regular lime washing practice and traditional skills being passed on (schedule of work item no.2)	3
		Re-roofing work incorporating felt and insulation: traditional skills used and alterations introduced sensitively to inform future generations (schedule of works item no. 3 & 16)	2
		Rebuild stone wall to NE corner locally: negligible impact as repair similar to traditional practice. (schedule of works item no. 4)	1
		Rebuild chimneys with introduction of leadwork and flagstone capping: ongoing use of traditional methods will help aid future generations of conservation (schedule of works item no. 5 & 12)	2
		Replacement windows, doors and shutters: traditional detailing and finishes have been used (schedule of works item no. 6 & 10)	1



PROPOSED WORK AND IMPACT ASSESSMENT		MITIGATION MEASURES ADOPTED	
SIGNIFICANCE COMMUNAL	New ground floors including insulation and underfloor heating from solid fuel: possible benefit for future generations displaying sensitive addition of new heating and breathable floor construction (schedule of works items no. 7, 15 & 17)	1	
	Replacement lintels with partial use of concrete: concrete lintel readily available adding another vernacular layer (schedule of works item no.9)	2	
	Build up first floor window to stable north wall to allow insertion of staircase: minor impact with loss of feature helping to define use of first floor above stable (schedule of works item no. 13)	2	Photographic survey to record feature
	New rooflight: Reproduction rooflight using double glazing is a clearly of its time adding new layer to the house evolution (schedule of works item no.14)	2	
	Add galvanised guarding to steel steps: New honest addition – clearly of its time (schedule of works item no. 17)	1	
	Soil pipe terminal: New layer added sympathetically (schedule of works item no. 18)	2	
	Mechanical extract ventilation: New layer added using traditional materials (schedule of works item no. 19)	2	
	Air supply for combustion of solid fuel appliances: New layer added using traditional materials (schedule of works item no. 20)	2	
	Bat access points: Conservation of protected species will benefit future generations (schedule of works item no. 21)	2	



SUMMARY

A summary of the options considered and reasons for preferred approach are outlined in the table below:

PROPOSED WORK	YOUR OBJECTIVE	SIGNIFICANCE OF FABRIC AFFECTED	ASSESSING BENEFICIAL IMPACT	ASSESSING HARMFUL IMPACT	PROPOSED SOLUTION
Wall finishes internally (schedule of works item no.1, 8 and 11)	Provide traditional finish	Mixed with earliest and oldest parts of the fabric affected. Fabric had been subjected to significant alteration in term of finishes and in poor condition	Traditional finishes proposed with lime plasters, limewashed and oil based painted and varnished joinery similar to existing	Loss of earlier colour schemes and exact finishes in each location	Like for like finishes proposed with traditional colour scheme which matches majority of existing fabric
Wall finishes externally (schedule of works item no.2)	Bring building back into use and minimise burden for future maintenance	Mixed with all stages of all house, stable and lean-to affected. The limewash was in poor condition with further unavoidable loss during repointing and rebuilding	Stonework has been repointed in lime mortar providing durability material which will help conserve the stone	Evidence of limewash remains but reduced so essentially reading as exposed stone façade. Upkeep of a fully lime washed building places strain on occupants	Conserve as found
Re-roofing work incorporating felt and insulation (schedule of works item no. 3 & 16)	Provide an effectively insulation and weather proof roof covering	Roof is part of later alteration with roof raised and non-local slates	Building is brought back into use with sustainable, durable detailing	Introduction of new materials with limited knowledge of long term impact yet	Renew roof covering, repairing and reusing as much fabric as possible with insulation and felt which continues to allow the roof to breathe



PROPOSED WORK	YOUR OBJECTIVE	SIGNIFICANCE OF FABRIC AFFECTED	ASSESSING BENEFICIAL IMPACT	ASSESSING HARMFUL IMPACT	PROPOSED SOLUTION
Repair stone wall to NE corner locally insulation (schedule of works item no. 4)	Put wall back in good working order	Random rubble masonry to rear of house at the east end more likely to have been part of the earlier phases of house construction	Repair can be done like for like using salvaged stone and lime mortar	None	Rebuild area locally
Rebuild chimney stonework with the introduction of leadwork and flagstone capping (schedule of works item no. 5 & 12)	To reinstate functioning chimneys and minimise deterioration from water ingress	Chimneys were in poor state with one dismantled to roof level and the other capped off with loss of original features. Both chimneys are later additions, certainly the west one and the upper level of the east as the single storey dwelling was raised. Eastern inglenook may part of the oldest house fabric with later alteration with addition of bread oven and the western fireplace is also a later addition.	Minimal rebuilding helps conserve fabric. Leadwork provides a more durable, weather resistant solution for the longer term. The use of the traditional flagstone detail will help inform future generations. Essential repairs only to fireplaces conserves fabric	Leadwork was not used historically with junctions weathered by mortar fillets and slate and will be visible in close proximity. The introduction of a chimney pot with either fixed or rotating capping is visually intrusive, altering the roofline and requires regular replacement.	Introduce leadwork and flagstone capping detail to rebuild chimneys



PROPOSED WORK	YOUR OBJECTIVE	SIGNIFICANCE OF FABRIC AFFECTED	ASSESSING BENEFICIAL IMPACT	ASSESSING HARMFUL IMPACT	PROPOSED SOLUTION
Replacement windows, doors and shutters (schedule of works item no. 6 & 10)	Make the building weather resistant to bring back into use	It is unlikely that any of the openings or joinery are part of the original building with the sash windows introduced later as the building was pushed up to first storey and western stable also later addition	Original opening have been retained and new openings minimised	Significant loss of fabric due to poor condition but sections salvaged	Replace joinery
New ground floors incorporating insulation (schedule of works items no. 7, 13 & 17)	Bring building back into use sympathetically	It is probably that most of the floors have been replaced already or part of the later construction. Evidence of floors to the stable and west end of the house had been raised and concreted	Floor in the oldest east end has been retained with levels positioned to avoid underpinning. Underfloor heating operated by solid fuel is kinder to historic fabric, similar to past with sustainable fuel source. Limecrete construction similar to earlier floor with quarry tiles salvaged and reused.	Removal of earlier layers of fabric with unknown significance	Breathable limecrete floor with underfloor insulation finished with salvaged floor tiles



PROPOSED WORK	YOUR OBJECTIVE	SIGNIFICANCE OF FABRIC AFFECTED	ASSESSING BENEFICIAL IMPACT	ASSESSING HARMFUL IMPACT	PROPOSED SOLUTION
Replacement lintels with partial use of concrete (schedule of works item no.9)	Provide structural stability with durability	Mixed significance with lintels within the earliest fabric to east end as well as later additions	Like for like replacement in areas dictated by condition is minimally invasive. Concrete is more durable in wetter locations and provides honest repair.	Modern timber durability a concern	Use timber inner lintels with concrete lintels near the outer parts of the wall
Provide access to first floor of stable (schedule of works item no. 13)	Create useable space with minimal impact	The upper floor of the stable is part of the latter alterations made to the building with the window itself no longer serving a purpose after the lean-to was extended westwards and partially conceals the window.	Providing a second stair case preserves distinction between house and stable with retention of first floor partition. Positioning the stairs in the corner of the room maximises functional use of small spaces.	Alteration required to the non-functioning window if retained due to poor detailing allowing water ingress. Omitting or moving the position of second staircase increases non usable space with smaller areas and low headroom.	Provide second staircase in consented position including building up former window opening.



PROPOSED WORK	YOUR OBJECTIVE	SIGNIFICANCE OF FABRIC AFFECTED	ASSESSING BENEFICIAL IMPACT	ASSESSING HARMFUL IMPACT	PROPOSED SOLUTION
New rooflight (schedule of works item no.14)	Reduce condensation	Roof covering is a mix of original and matching salvaged roof slates with roof structure repaired. The roof is part of a later extension of the house moving two storeys and westwards.	Double glazed rooflight with conserve more energy	None – the original rooflight was a new addition	Replace rooflight with double glazed cast iron, positioned flush in the roof slope.
Add guarding to external steps (schedule of works item no. 17)	Provide safe use	External steps are part of later addition with evidence of alteration but the capping stone detailing elevated it from other examples	Separate guarding's offer reversibility with minimal alteration compared to single means of escape or adding another window.	Visually intrusive although light weight options have lesser impact	Galvanised steel guarding
Soil pipes (schedule of works item no. 18)	Provide effective drainage system	Alteration to roof covering or high level masonry affects later fabric	Slate vent is visually less intrusive than a pipe through the roof.	Several air bricks are required for other purposes and more impact on physical fabric.	Slate vent
Mechanical extract ventilation (schedule of works item no. 19)	Control moisture levels to reduce risk of condensation	Alteration to roof covering or high level masonry affects later fabric	Roof vents and air bricks are visually less intrusive. Cast iron and lead are traditional materials.	Number of extract points required although most can be located on rear elevation	Lead cowl or air brick depending on proximity



PROPOSED WORK	YOUR OBJECTIVE	SIGNIFICANCE OF FABRIC AFFECTED	ASSESSING BENEFICIAL IMPACT	ASSESSING HARMFUL IMPACT	PROPOSED SOLUTION
Air supply for combustion of solid fuel appliances (schedule of works item no. 20)	Provide safe combustion for solid fuel appliances	Openings in the wall are located in the central area of the south wall affecting the west extension of the house	Cast iron air bricks are located at low level and visually less intrusive than pipework	Three air bricks required affecting principle elevation	Cast iron air bricks
Create bat access points (schedule of works item no. 21)	Comply with protected species legislation	Works are located in the upper area of the masonry and later phase of works. The roof covering is also a later addition.	Conservation of ecology. Holes in the stonework are minimally invasive.	Roof access points are visually intrusive, located on the principle façade, elevated above the roof plane near the ridge	Voids to stone work and lead bat access points to roof slating

The Hen Ty Fferm had been unoccupied since the 1960's and was rapidly deteriorating. In order to survive, it needed to find a new occupant to repair and maintain as well as adapt to changing needs. Cadw recognised it's importance by listing in 2001 but in turn, this placed greater responsibility on the applicant to follow conservation guidelines and the scale work required to get the Hen Ty Fferm back into use should not be under estimated. The applicant has successfully and sensitively completed the work and did not knowingly fail to comply with the statutory conditions imposed by the listed building consent. They have used traditional materials and repaired for a like for like basis as much as possible whilst trying to navigate other legislation imposed by building regulations and ecology. Good records have been made of historic features and items which were not used e.g. windows, salting sinks retained and stored on site. Great effort has been undertaken to minimise modernity e.g. electrical wiring has been concealed, no plastic has been used, TV/Satellite dishes have been concealed in the loft, no oil/gas tanks were added. The late C20th farm buildings detracted from the rural setting and these have been demolished where they no longer serve a purpose. The vacant exterior is now surrounded by lawn, shrubs and garden with planted hedgerow along the lane. The applicants have invested a great deal in this house both saving a historic building and turning it into a family home. The works have addressed several major issues that if left unattended could have led to the demolition and loss of this building. These include:

- Water ingress around the chimneys, as a result of collapsing masonry and extensive ivy growth was causing structural damage locally to a roof structure which was otherwise in salvageable condition back in 2010. Timbers and masonry in those areas were regularly and persistently sodden.
- Broken or missing rainwater goods meant the walls were often soaked from top to bottom and that the ground around the building was often inundated.
- The southern wall around the front door was bowing outwards



- Many timber lintels were decayed with reduced structural capability
- A section of the lean-to wall had partially collapsed to the NE corner with lack of guttering allowing water to enter the building and wall core accelerating decay
- Condition of the windows and doors was so poor that they no longer provided effective control against the elements in such an exposed location. This coupled with the lack of occupation meant wet fabric was at increased risk of damage from frost.
- Stone foundations along the southern elevation in particular were exposed where the ground levels has been eroded back through regular use of large farm machinery. Floors were also being undermined by vermin.

Although **Cadw Conservation Principles** had not been published when the applicant first undertook the work, their approach meets many of these principles as follows:

Principal 1 – Historic Assets will be managed to sustain their values

Within an historic environment, change is inevitable and must be carefully managed. By preparing this statement the applicants are revealing and sharing the significance of the building ensuring that its special qualities are understood by current and future generations. They have identified heritage values vulnerable to change and the constraints needed to protect and sustain those values to achieve balance and consistency in decision making. They have justified the works undertaken and new work generally adds value to the site and setting. They have also recognised and respected the natural environment with new habitat for protected species, hedgerows reinstated as well as the use of sustainable means of heating and insulation.

Principal 2 – Understanding the significance of historic assets is vital

The applicant had researched the house and collected history from the former occupant. Together with help from a conservation professional, they have been able to assess the significance according to the four component values such as evidential, historical, aesthetical and communal. They therefore both understand and are able to articulate the value of the Hen Ty Fferm to inform decisions about its future.

Principal 3 – The historic environment is a shared resource

The applicant has embraced their responsibility for shaping and sustaining the Hen Ty Fferm so that it can be enjoyed without compromise by future generations. They have sought advice and assistance to help them sustain the heritage under their stewardship.

Principal 4 – Everyone will be able to participate in sustaining the historic environment.

The applicant has outlined their options and preferred solutions in an open and transparent manner throughout this process. They employed local craftsmen in the work helping to encourage and pass on traditional or craft based skills necessary to sustain the historic environment. They have also engaged other professionals with the appropriate skills and qualifications to undertake the work.

Principal 5 – Decisions about change must be reasonable, transparent and consistent

The applicant has sought advice throughout this process and provided the necessary information. The local authority is expected to decisions in a consistent and transparent manner, guided by law and policy.



Principal 6 – Documenting and learning from decisions is essential

The applicant has collected documentation and images in the course of this project with a copy provided to RCAHMMW's public archive and Carmarthenshire County Council.

Equally, the works are also accord with relevant policies within the **Carmarthenshire Local Development Plan** as follows:

Policy GP1 Sustainability and High Quality Design

The works do not have adverse effects on the setting or integrity of the historic environment

Policy H8 Renovation of Derelict or Abandoned Dwellings

Works are sympathetic to the original architectural qualities and there are no adverse effects on the setting or integrity of the historic environment

Policy EQ1 Protection of Buildings, Landscapes and Features of Historical Importance

Historic features or items of architectural interest have been retained and character respected. Due regard has been placed upon the impact of distinctiveness, integrity or setting of the building within its landscape. The effect upon European protected species has also been considered.

Policy EQ4 Biodiversity

Impact on protected has been minimised and appropriately managed with enhancement in the form of alternative accommodation in the adjoining outbuildings and new access point to the house for bats

Planning Policy Wales Chapter 6 The Historic Environment paragraph 6.5.11 states:

'...The aim should be to find the best way to protect and enhance the special qualities of listed buildings, 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 development 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.'

Although part of the Hen Ty Fferm was previously used as a dwelling, it was a dwelling from a different period which needed to be adapted to meet the needs of a modern home. The applicant has justified their proposals to show why alteration is necessary to a grade 2 building representing buildings of special interest which justify every effort being made to preserve them.

Technical Advice Note 24: The Historic Environment:

Paragraph 5.13 requires consideration of a number of issues when determining a listed building application. These include:

- *'The importance and grade of the building and its intrinsic architectural or historic interest.*
- *The physical features of the building which justify its listing and contribute to its significance, (for example its form and layout, materials, construction and detail) including any features of*



importance such as the interior, which may have come to light after the building's inclusion on the list.

- *The contribution of curtilage and setting to the significance of the building, as well as its contribution to its local scene.*
- *The impact of the proposed works on the significance of the building.*
- *The extent to which the proposed works would bring substantial community benefits for example, by contributing to the area's economy or the enhancement of its local environment.'*

The applicant has endeavoured to address each of the above in the proposals.

Paragraph 5.14 also acknowledges that:

'Many listed buildings can sustain a degree of sensitive alteration...'

and

'When applicants and the local planning authority assess the heritage values and significance of a listed building, which is the subject of a consent application, they must consider the sensitivity of that building to the proposed changes. Sustaining the special interest and significance of a listed building through the process of alteration, extension or re-use is exacting, and should always be based on specialist knowledge and skill in order to realise the benefits that well-designed interventions can bring'

The applicant believed that the Hen Ty Fferm was capable of sustaining the degree of alteration necessary to create a new family home both conserving a historic building and meeting the modern day requirements. Carefully though was given to making balanced decisions to reduce impact upon the heritage values of the property. The applicant also sought specialist help to help navigate them through the process.

SOURCES

Mr Geoffrey Lewis

Cof Cymru <http://cadw.gov.wales/historicenvironment/recordsv1/cof-cymru/?lang=en>

Archwilio www.archwilio.org.uk

Coflein www.coflein.gov.uk

Historic Wales www.historicwales.gov.uk

List of Historic Place Names in Wales <https://historicplacenames.rcahmw.gov.uk/>

Archives Wales www.archiveswales.org.uk

Tithe maps <https://places.library.wales>

Peoples collection <https://www.peoplescollection.wales>

Historic maps <https://maps.nls.uk>

LANDMAP <https://landmap-maps.naturalresources.wales>

Lle website <http://lle.gov.wales>

GENUKI <https://www.genuki.org.uk>

Houses of the Welsh Countryside by Peter Smith 1988

APPENDIX

Gazetteer



Figure 1 view from south



Figure 2 view from south west



Figure 3 view from west



Figure 4 view from north west



Figure 5 view from north (east end)



FIGURE 6 VIEW FROM NORTH (WEST END)



Figure 7 view from north east



Figure 8 view from north east



Figure 9 dining area



Figure 10 kitchen



Figure 11 reception room



Figure 12 lounge lean-to area



Figure 13 lounge



Figure 14 eastern extension



Figure 15 ground floor bathroom



Figure 16 lean-to entrance hall



Figure 17 lean-to



Figure 18 utility room



Figure 19 main stairwell at bottom



Figure 20 main stair well at top



Figure 21 first floor corridor east end



Figure 22 first floor corridor west end



Figure 23 first floor bathroom



Figure 24 east bedroom



Figure 25 central bedroom



Figure 26 west bedroom



Figure 27 west bedroom ensuite



Figure 28 west bedroom stairwell

**Table 1: Value of heritage asset (adapted from ICOMOS Guidance on Heritage Impact Assessments 2011)**

Grade	Archaeology	Built heritage or urban historic landscape	Historic landscape	Intangible cultural heritage or associations
Very High	Sites of acknowledged international importance inscribed as World Heritage property. Individual attributes that convey Outstanding Universal Value of the World Heritage property. Assets that can contribute significantly to acknowledged international research objectives.	Sites or structures of acknowledged international importance inscribed as of universal importance as World Heritage property. Individual attributes that convey Outstanding Universal Value of the World Heritage property. Other buildings or urban landscapes of recognised international importance.	Landscapes of acknowledged international importance inscribed as World Heritage property. Individual attributes that convey Outstanding Universal Value of the World Heritage property. Historic landscapes of international value, whether designated or not. Extremely well- preserved historic landscapes with exceptional coherence, time- depth, or other critical factors.	Areas associated with Intangible Cultural heritage activities as evidenced by the national register. Associations with particular innovations, technical or scientific developments or movements of global significance. Associations with particular individuals of global importance
High	Nationally-designated Archaeological Monuments protected by the State Party's laws. Undesignated sites of the quality and importance to be designated. Assets that can contribute significantly to acknowledged national research objectives.	Nationally-designated structures with standing remains. Other buildings that can be shown to have exceptional qualities in their fabric or historical associations not adequately reflected in the listing grade. Conservation Areas containing very important buildings. Undesignated structures of clear national importance.	Nationally- designated historic landscape of outstanding interest. Undesignated landscapes of outstanding interest. Undesignated landscapes of high quality and importance, and of demonstrable national value. Well preserved historic landscapes, exhibiting considerable coherence, time- depth or other critical factors.	Nationally- designated areas or activities associated with globally- important Intangible Cultural Heritage activities. Associations with particular innovations, technical or scientific developments or movements of national significance. Associations with particular individuals of national importance
Medium	Designated or undesignated assets that can contribute significantly to regional research objectives.	Designated buildings. Historic (unlisted) buildings that can be shown to have exceptional qualities or historical associations. Conservation Areas containing buildings that contribute significantly to its historic character. Historic townscapes or built-up areas with important historic integrity in their buildings, or built settings.	Designated special historic landscapes. Undesignated historic landscapes that would justify special historic landscape designation. Landscapes of regional value. Averagely well preserved historic landscapes with reasonable coherence, time- depth or other critical factors.	Areas associated with Intangible Cultural heritage activities as evidenced by local registers. Associations with particular innovations or developments of regional or local significance. Associations with particular individuals of regional importance
Low	Designated or undesignated assets of local importance. Assets compromised by poor preservation and/or poor survival of contextual associations. Assets of limited value, but with potential to contribute to local research objectives.	"Locally Listed" buildings. Historic (unlisted) buildings of modest quality in their fabric or historical associations. Historic Townscape or built-up areas of limited historic integrity in their buildings, or built settings.	Robust undesignated historic landscapes. Historic landscapes with importance to local interest groups. Historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations.	Intangible Cultural heritage activities of local significance. Associations with particular individuals of local importance. Poor survival of physical areas in which activities occur or are associated
Negligible	Assets with little or no surviving archaeological interest.	Buildings or urban landscapes of no architectural or historical merit; buildings of an intrusive character.	Landscapes little or no significant historical interest.	Few associations or Intangible Cultural Heritage vestiges surviving
Unknown potential	The importance of the asset has not been ascertained.	Buildings with some hidden (i.e. inaccessible) potential for historic significance.	n/a	Little is known or recorded about Intangible Cultural Heritage of the area



Table 2: Guide for assessing magnitude or impact (adapted from ICOMOS Guidance on Heritage Impact Assessments 2011)

Grade	Archaeology	Built heritage or urban historic landscape	Historic landscape	Intangible cultural heritage or associations
Major	Changes to attributes that convey Outstanding Universal Value of World Heritage properties Most or all key archaeological materials, including those that contribute to Outstanding Universal Value such that the resource is totally altered. Comprehensive changes to setting.	Change to key historic building elements that contribute to Outstanding Universal Value, such that the resource is totally altered. Comprehensive changes to the setting.	Change to most or all key historic landscape elements, parcels or components; extreme visual effects; gross change of noise or change to sound quality; fundamental changes to use or access; resulting in total change to historic landscape character unit and loss of Outstanding Universal Value.	Major changes to area that affect the Intangible Cultural Heritage activities or associations or visual links and cultural appreciation.
Moderate	Changes to many key archaeological materials, such that the resource is clearly modified. Considerable changes to setting that affect the character of the asset.	Changes to many key historic building elements, such that the resource is significantly modified. Changes to the setting of an historic building, such that it is significantly modified.	Change to many key historic landscape elements, parcels or components; visual change to many key aspects of the historic landscape; noticeable differences in noise or sound quality; considerable changes to use or access; resulting in moderate changes to historic landscape character.	Considerable changes to area that affect the Intangible Cultural Heritage activities or associations or visual links and cultural appreciation.
Minor	Changes to key archaeological materials, such that the resource is slightly altered. Slight changes to setting.	Change to key historic building elements, such that the asset is slightly different. Change to setting of an historic building, such that it is noticeably changed.	Change to few key historic landscape elements, parcels or components; slight visual changes to few key aspects of historic landscape; limited changes to noise levels or sound quality; slight changes to use or access; resulting in limited change to historic landscape character.	Changes to area that affect the Intangible Cultural Heritage activities or associations or visual links and cultural appreciation.
Negligible	Very minor changes to key archaeological materials, or setting.	Slight changes to historic building elements or setting that hardly affect it.	Very minor changes to key historic landscape elements, parcels or components; virtually unchanged visual effects; very slight changes in noise levels or sound quality; very slight changes to use or access; resulting in a very small change to historic landscape character.	Very minor changes to area that affect the Intangible Cultural Heritage activities or associations or visual links and cultural appreciation.
No change	No change.	No change to fabric or setting.	No change to elements, parcels or components; no visual or audible changes; no changes in amenity or community factors.	No change



List description

Full Report for Listed Buildings		Cadw			
Summary Description of a Listed Buildings					
Reference Number	Building Number	Grade	Status	Date of Designation	Date of Amendment
25622		II	Designated	06/08/2001	06/08/2001
Name of Property		Address			
Penrallt (old farmhouse)					
Location					
Unitary Authority	Community	Town	Locality	Easting	Northing
Carmarthenshire	Llanboidy	Whitland	Login	217663	223765
Street Side		Location			
		Situating in farmyard beyond modern farmhouse, down track running SSE from point about 1 km NE of Login.			
Description					
Broad Class		Period			
Domestic					
History					
Late C18 to early C19 farmhouse with service range and outbuilding in line, marked on 1839 Llanboidy Tithe map as Penrallt Fawr, owned and occupied by Esther Gibby with 142 acres (57.5 hectares).					
Exterior					
Farmhouse and lofted stable in one range, whitewashed rubble stone with slate roofs. One stone stack on ridge at left of main house, but corresponding right end stack has gone. Two storeys, three-window house to right, the facade offset to left, then 1-window service range, all 12-pane sashes, with stone lintels and sills. At left under continuous roof, is stable with door between 2 square windows. On end wall are outside steps to loft door with slate lintel. Attached small outbuilding at right end with corrugated iron roof and door.					
Interior					
Not available for inspection at time of survey.					
Reason for designation					
Included as a remarkable unaltered early C19 range of farmhouse and outbuilding in a single-roofed long range, echoing the earlier long-house tradition.					