
Project Pandy Farm, Brecon Road, Merthyr Tydfil CF47 8PA
Reference 179_9011
Subject **Heritage Impact Assessment – Stables re-roofing, Pandy Farm**
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Impact Assessment

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Summary

This report concerns the essential re-roofing works for the stables at Pandy farm, Brecon Road, Merthyr Tydfil, to undertake emergency roofing works to protect the stables assets.

This impact assessment should be read in conjunction with the drawings and the Design, Access & Heritage Statement of which it forms part.

The history and development of the farmstead is linked to the former estate in which it sits and the wider context of Cyfarthfa Castle and Ironworks. Research and analysis have enabled an understanding of significance and a commentary on the potential impact of proposals and possible mitigation solutions. In this document the impact assessment analyses the re-roofing works of the south stables, coach house stable and coach house to provide emergency roof repairs to protect the assets of these barns

This report has been divided into the following sections:

Section 1: Proposals

Section 1 describing the architectural proposals for the site.

Section 2: Analysis of impact of proposals/ justification

Section 2 analysing the proposals for the site. Analysis by:

- Potential impact on heritage assets and setting
- Analysis of setting
- Evaluation of the Potential Impact of Change or Development

Section 3: Mitigation measures

Section 3 looking at measures to mitigate any potential negative impact of the proposed development.

Introduction

Assessing the impact that proposed changes may have on the significance of the historic asset has identified the most appropriate way to make those changes.

The following questions have been asking during the design process:

- How the proposals affect the evidential value of the historic asset? Would they result in the loss of or damage to historic fabric, including archaeological evidence, or make it harder to appreciate the way in which the building or site was used in the past, and how it has changed over time?
- How would the proposals affect the aesthetic or design qualities of the historic asset? Will they compromise its historical design principles — such as its layout, scale and proportion — or result in the loss of historic detail or craftsmanship?
- How would the proposals affect communal value? Would they make it easier for people to access and appreciate the building or site?
- Are there any other risks or benefits? For example, risks include increased maintenance and management liabilities, or compromised performance through the use of incompatible materials; benefits include the introduction of a sustainable new use.

Proposals have a range of impacts which may be:

- positive — such as the repair of damage, the removal of intrusive elements or bringing a building back into beneficial use so that it is no longer at risk
- neutral — such as where proposals are sympathetically designed, or change is accommodated in part of the building or site that is less sensitive The plans, elevations and other drawings provided as part of the application for consent provide supporting information, illustrating the existing situation and showing how the proposals will change it.
- negative — such as when important fabric or significant aspects of the original design are removed or altered. If the level of damage is unacceptable and there are few compensatory benefits, the application may be refused.

When developing proposals an approach that will realise the greatest benefit and cause the least harm to the historic asset has been identified, so that significance is sustained or enhanced. An in-depth survey of the existing structure has led to a sensitive approach of repair and essential interventions to strengthen the frame, this is combined with a carefully considered palate of roofing finishes and flashings which have been chosen to reflect the character of the property and the stables history.

It has been understood that:

- Interventions are necessary and that new work is designed to be installed without damage to significant fabric or archaeological evidence.
- The design is sensitive, in terms of scale, materials, location and form.
- The design is based on understanding all aspects of the site and its context as well as the significance of the historic asset. High-quality design can make a positive contribution to the heritage values of the historic asset and its setting.
- Methods for carrying out the proposed works are sensitive, including, for example, the protection of significant features, and commission of high quality craftsmanship.

Section 1: Proposals

The proposal covers the re-roofing of the South stables, coach house stables and coach house to provide essential maintenance works to the roof structure and roof finishes. These works aim to replace the current roof finishes to provide a waterproof roof covering to the stable buildings to protect the stable assets from the current water ingress.

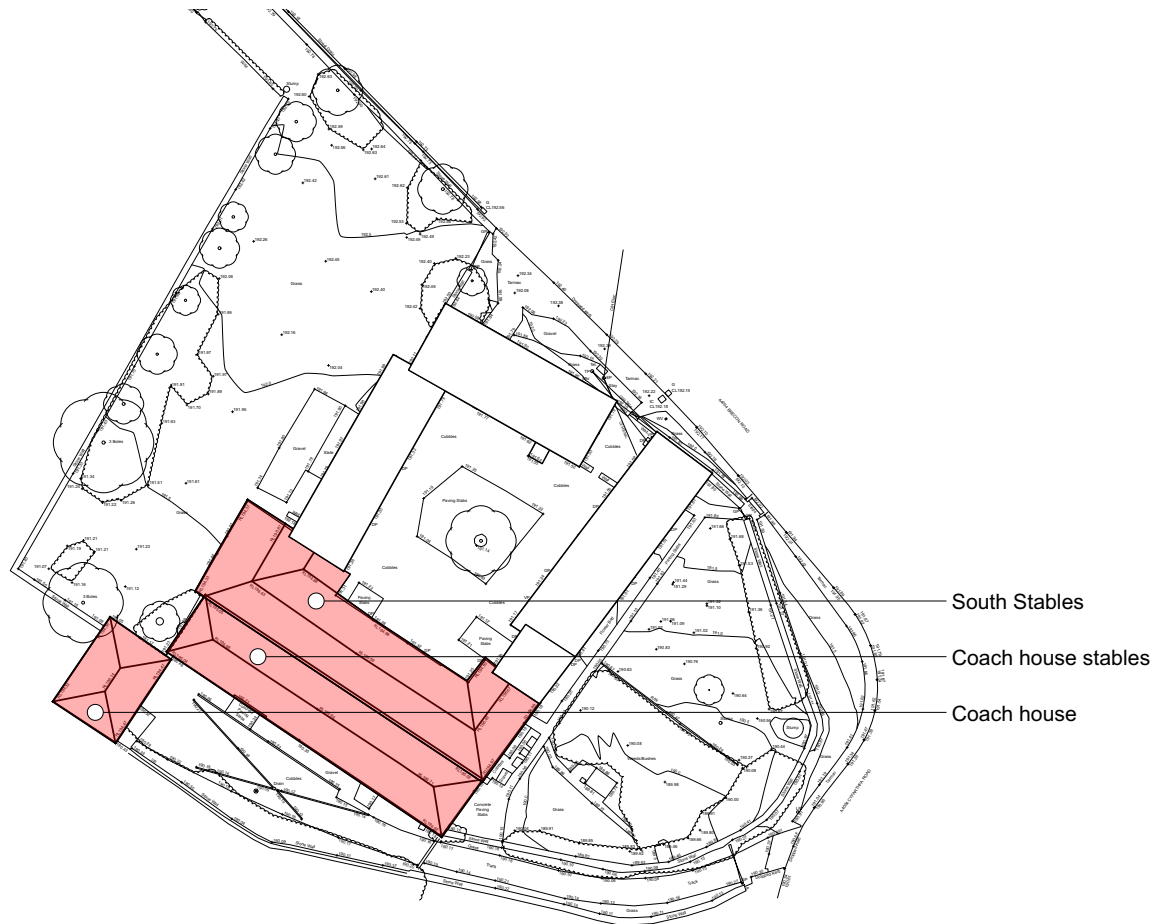


Fig 1. - Plan showing extent of roofing works within the Pandy farm site

These works involve:

- The sensitive repair and strengthening of the existing timber roof structure
- Replacement flashings, gutters and eaves boards to replace the current deteriorated elements
- Addition of a breather membrane and counter batten to allow for future insulating of the roof structure, to allow for future reuse of the stables
- Re-roofing with slate tiles, to remove the patchwork of existing materials. This is combined with ridge details that differentiate between the barns and are designed to match the current arrangement of ridgelines present.
- Addition of rooflights to improve the potential use of the barns and to ensure future re-use of the stables.

The application document sets out the design proposals thus:

Structure:

The low pitch and undersized members of the current roof structure is not suited to the imposed loads of the roof finishes, and this is causing the current roof to deflect. In addition to this, damage and

disrepair to the current roof finishes are causing water ingress to the roof, which is causing deterioration to the barns roof structure and walls.

A series of roof repairs and strengthening elements are proposed to the existing roof structure to ensure that the timber trusses and purlins are sufficient to support the roof finishes.

Areas of structure are to be replaced where the current structure is damaged or insufficient, for example the replacement of the damaged ridge boards and replacement of roof trusses where these are beyond repair (see engineer's drawings 11239_101, 102 and 103). The repair and replacement of existing elements are to be carefully detailed to match the existing traditional construction to show they are a replacement of an existing member.

Additional Purlins are to be provided between trusses to strengthen the roof in order to suit the proposed loadings. These new elements are to be detailed with contemporary connections with shadow gaps between the new and old, to show that these are new insertions into the existing structural frame.

Flashings, eaves boards and gutters:

The replacement of these elements is to match or enhance the current materials on site. Lead flashings are to be used to all visible locations to maintain the historic character, eaves boards are to be replaced with similar profiles and painted to match the existing finishes. Finally, the plastic gutters are to be replaced with a painted cast iron gutter and downpipe to ensure that the rainwater goods are in keeping with the character of the wider site.

Breather membrane and battens:

A new breather membrane will be added to the top of the rafters to improve the weatherproofing and overall performance of the roof. The inclusion of a counter batten, alongside the membrane, provides a ventilation zone over the membrane, which will improve the flexibility for the future, by enabling a full fill insulation to be provided to the rafters as part of future development. This will provide flexibility for the stables, improving their ability to be reused and therefore restored and maintained

Roof finishes:

The existing roofs are a combination of slate tiles, concrete roof tiles and corrugate sheeting. The proposals aim to provide a single slate finish to the roofs to provide a consistent material to the roofscape, which is more in keeping with the history of the stables.

A clay hogsback ridge tile and a lead roll top detail are to be used for the ridges and hips to all the stables. The arrangement of these details is to suit the current arrangement on site, with the south stables and coach house having a clay ridge tile and the coach house stables having a lead detail.

As well as reflecting the current arrangement, this also helps to differentiate between the stable buildings and the piecemeal construction of the site over time.

Rooflights:

The inclusion of a series of rooflights improves the flexibility of use of the stables and opens up the future reuse of the barns. The rooflights are all to be placed on the valley side of the roofs, so that they are not visible from the buildings surroundings. Conservation style rooflights (The rooflight company - conservation rooflights) are to be used to ensure a suitable character and a recessed detail to keep the rooflight low to the slate finish.



Fig 2. - Example of conservation rooflight (Rooflight company – Conservation rooflight)

Impact on Significance

Neutral impact. A sensitive conservation and repair of the roof structure and finishes will retain the internal features of the roof structure with carefully inserted interventions to bring the structure up to the loading requirements. The improvements to the roof build-up will enable the roof to be carefully insulated at a future date, opening the barns potential for further uses, ensuring the sustainable future of the stable buildings.

Impact on Character and Setting

Positive Impact.

No additions or changes are proposed to the setout or mass of the existing buildings.

The character of the stables will be improved by the replacement of deteriorated elements, the replacement of the patchwork of more contemporary roof finishes with a slate roof and the replacement of plastic guttering with a cast iron system, more in keeping with the character of the farm.

Section 2: Analysis of impact of proposals/ justification

Elements of Potential Impact on Significance

Area	Element	Context	Effect on Significance
Exterior	Slate roof finish and ridge details	Conservation and repair. Repair and reinstatement of slate finishes and clay or lead ridge details	Positive – The existing patchwork of slate, concrete roof tiles and corrugate roofing will be replaced with a slate roof finish consisting of existing slates supplemented with reclaimed tiles, to provide a consistent roof finish more in keeping with the original construction. This re-roofing will also provide a weathertight finish that protects the asset of the barns and enables the roof build up to be insulated in future, providing more flexibility and longevity to the use of the building.
Interiors	Existing timber roof structure	Conservation and strengthening of the timber structure to provide a suitable long term roof structure	Neutral impact – The structure of the existing barns is to be repaired and replaced where appropriate to retain the asset of the barns. Where undersized, the existing trusses are to be supported with additional struts and additional purlins. These are to be detailed to provide contemporary connections to the existing structure, showing these additions as contemporary inserts.
Landscape	Access, courtyard and environs	Courtyard landscape responding to the location and environment.	No Changes are proposed to the building surroundings at this time

As a general note historic fabric will be conserved and sensitively repaired where possible in appropriate materials as appropriate.

The proposed alterations have been carefully designed to retain historic fabric. Positive intervention will restore the fabric. Removal of later 20th century inappropriate materials and finishes will have a very positive impact not only on the buildings' appearance but the function and building health.

Section 3: Mitigation measures

- Roof heights and existing materiality will be retained to maintain the existing buildings character.
- Internal repairs will be limited to areas of critical need, with replacements structural members being detailed to match the existing frame, whilst new additions to strengthen the frame will be seen as contemporary additions.