## CUMBERLAND COUNCIL CONSULTATION RESPONSE

**Proposal**: works associated with material change of use of agricultural barn to residential use and associated works to incorporate remainder of barn into existing residential property & creation of self-contained annex within lower floor; and installation of solar panels on rear roof slope

Address: Orchard Brow Barn, Hardgates Road, Haile

**Reference**: 4/23/2196/0F1 & 4/23/2197/0L1

**Date**: 8/8/23

**Description**: Orchard Brow Barn is an early 19<sup>th</sup> century bank barn, listed for group value along with Orchard Brow, the farmhouse to the north now in separate ownership. It south end has already been converted to residential, although the pattern of fenestration then used has not preserved the character of the building well.

Consent/permission were granted in 2018 for material change of use and conversion, however it was concluded that a legal start had not been made within the three years allocated, and so new applications were needed.

## **Conclusion: Request further information**

**Assessment:** This is not the same scheme as previously approved, but has similarities. Principally, the following works are proposed (my commentary in bold):

- Insertion of some new openings into the barn; reopening of some closed openings; replacement of timber lintels with concrete; re-fenestration of all openings in the house and barn with mixture of timber and anthracite aluminium windows and timber doors;
  - Compared with the previously approved scheme, the number of new openings is reduced and more sensitive in character.
  - The proposal to reglaze all windows with new, predominantly aluminium framed windows is reasonable as the previous house conversion of the end of the barn domesticated its appearance and altered its character. The new window design will provide more uniformity across the whole barn.
  - Being a barn, although timber may have been used in openings, there is less clear mandate for timber instead of metal in comparison with a house from the same period. I therefore do not object to the use of aluminium frames.
  - The existing red painted timber doors are characterful, and this is also a style and colour I have seen on other sandstone barns in the area of the same period, suggesting it is an aspect of local character.
  - I would be interested to know if thought has been given to retaining these as shutters, with the new glazing positioned behind.
  - Are any of the timber lintels still viable or is the proposal to replace them with concrete stipulated for structural reasons?
- Connection of the house to the barn internally at ground and first floor levels. The former is accomplished by dividing the existing kitchen diner into an entrance hall with pantry

beyond, both of which are accessed from the new kitchen positioned within the barn. The latter is accomplished by a corridor that divides the master bedroom into a smaller bedroom and an office;

- My understanding is that the layout of these rooms is part of the prior scheme when the dwelling was created, and that the lateral wall in question is of breezeblock construction. The changes to the layout appear reasonable given the design intention of extending the house.
- At lower ground level, the barn is converted into an annexe consisting of kitchen diner, lounge and two en suite bedrooms, accessible only from outside;
  - I have no objection to this.
- Internal lining with insulated plasterboard and rebuilding of two internal lateral walls;
  - The rebuilding of these lateral walls appears necessary for structural reasons.
  - The internal lining would not generally be considered good practice as it's
    combining non-breathable interior materials with a fairly porous red sandstone,
    which risks creating cold, wet pockets of air, cold bridging and in a worst-case
    scenario, mould and damage to materials such as joist ends, which are sitting
    within the wall.
  - I would be grateful for comment on whether an alternative strategy, such as dubbing out the walls where necessary and lining with an insulated hot lime plaster (e.g. 50 or 75mm of hemp lime), has been considered.
  - Plasterboard will additionally result in a perfectly flat, mass-produced interior surface that will entail a loss of character.
- Installation of insulated concrete floor to ground floor;
  - The same comment applies here as above: This is a design that would more typically be used in conjunction with a cavity wall construction with a damp proof course. By contrast, the porous sandstone walls will be in the ground, and with impervious surfaces all around (e.g. the concrete floor slab and the tarmac road, or paving) there is a risk of inducing a high moisture content in the wall bases.
  - If nothing else, this could be expected to greatly reduce the thermal performance of the wall bases, reducing internal comfort, or even leading to black mould behind furniture or damage to surfaces. This may also additionally lead to increased surface spalling on the lower part of the external wall face.
- Replacement of section of barn upper ground floor with beam and block supported on blockwork inner walls at lower ground level;
  - This is certainly a fairly major intervention, although I understand that for reasons of fire safety and structural integrity, this is necessary.
  - I would view this as consisting of less-than-substantial harm to the significance of the barn.
  - Will this require the cavity behind to be ventilated, and if so how?
  - I appreciate that the Historic Environment Officer has requested a Level 2 survey of this part of the barn in the event of consent being granted.
  - Notwithstanding this request, I would be grateful if photos of the existing suspended floor could be included to evidence the fabric that is to be removed.
- Removal of suspended first floor over barn indicated void;
  - Please see above request
- Installation of PV array in the eastern roof pitch;

- I am sympathetic to this as the need to generate electricity passively is clearly high and likely to increase over time, thereby making it an argument in favour of the building's long-term viability. It also introduces more independence of the form of heating.
- However, the building is orientated north-south, suggesting that the east elevation may have less than optimal capacity for solar generation.
- I would be grateful if confirmation could be provided that a PV array in this
  location will be capable of generating a satisfactory amount of energy per year,
  that the indicated size/number of panels shown on the proposed elevation
  drawing reflects this amount, and a specification sheet for the panels, e.g. showing
  a flush-mounted installation.
- I would also be grateful for comment on what modifications the roof structure would need to be able to support the trays that hold the PV panels, and what ancillary equipment such as inverters, control units, cabling and batters will be needed. Where will this be located?
- Installation of a wood burner with flu projecting from roof near ridge on eastern pitch;
  - I have no objection to this
- Installation of services to barn;
  - Will new penetrations be required through the fabric to facilitate services such as water or fuel, sewerage etc.?
  - Please could more detail be provided on the proposed bathroom extractors? How will these appear externally?

## **Summary:**

I am supportive of the principle of this conversion, but have some questions about detailing and some choices that I think need further defence.

In particular, the proposed insulation/lining method raises some concern for the capacity to cause poor performance or even damage to materials, as well as a perfectly flat internal surface at odds with the more natural shape of the stone.

I would like expansion on the above comments outlined in bold.

## **Relevant Policies and Guidance:**

The Planning (Listed Buildings and Conservation Areas) Act 1990 establishes a need "in considering whether to grant listed building consent for any works [for the Local Planning Authority to] have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest" [Section 16(2)]. This requirement also applies to the granting of planning permission affecting a listing building or its setting [Section 66(1)].

Paragraph 134 of the National Planning Policy Framework (NPPF) asserts that "Development that is not well designed should be refused".

NPPF para. 197 states that "In determining applications, local planning authorities should take account of the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation..."

NPPF para. 199 states, in the case of designated heritage assets, "great weight should be given to the asset's conservation", irrespective of whether potential harm is substantial, less-than-substantial, or total loss. Where harm to a designated heritage asset is less-than-substantial, it should be weighed against the public benefits of the proposal (para. 202).

The former Copeland Borough Council's Local Plan contains a number of relevant policies:

- Local Plan Policy ST1C(ii) highlights the importance of protecting, enhancing and restoring the Borough's cultural and heritage features and their settings.
- ST1D emphases the council's commitment to creating and retaining quality places.
- ENV4A stresses the importance of protecting listed buildings, conservation areas and other features considered to be of historic, archaeological or cultural value.
- ENV4B outlines support for heritage-led regeneration, ensuring assets are put to appropriate, viable and sustainable uses.
- ENV4C aims to strengthen the distinctive character of settlements through high quality urban design and architecture that respect character and setting.
- DM10 emphasises the need for high quality design and quality places. Part B requires design to respond to local character at multiple scales, paying attention to plot size and arrangement, massing and scale, interstitial spaces, and materials. Part C requires the incorporation of existing features such as landscape and vernacular style.
- DM15A Part D outlines the need, in converting a rural building to residential use, for the proposal to preserve the essential character of the building and its surroundings. In this regard, existing features of interest and external facing materials should be retained.
- DM27A outlines support in principle for developments that "protect, conserve and where possible enhance the historic, cultural and architectural character of the borough's historic sites and their settings".
- DM27D highlights the necessity of avoiding disrespectful alterations, substantial demolition, adverse effects on setting or views, or changes of use that harm the conservation or economic viability of a listed building.

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