

8. LISTED BUILDING CONSENT - ALTERATIONS TO LISTED BARN COMPRISING: ROOF COVERING RENEWAL, REPAIRS TO TIMBER ROOF STRUCTURE, AND MINOR REPOINTING TO INTERNAL STONEMASONRY. THE PROPOSED ROOF COVERING RENEWAL INCLUDES REPLACING SECTIONS OF CONCRETE HARDWARE TILES WITH NATURAL STONE SLATES, RELAYING OF EXISTING STONE SLATES, LEAD WORK RENEWAL, AND REPLACEMENT OF EXISTING BITUMEN FELT WITH A BREATHABLE MEMBRANE AT NORTH LEES BARN, BIRLEY LANE, HATHERSAGE (NP/DDD/0824/0806, JK)

APPLICANT: PEAK DISTRICT NATIONAL PARK AUTHORITY

Summary

1. North Lees Barn is a Grade II Listed agricultural cruck barn which is owned and managed by the National Park Authority.
2. Listed Building Consent is sought for roof repair and renovation works. As part of these works the scheme proposes the introduction of a modern breathable polymer membrane between the rafters and underside of the stone slates, which would replace an existing failing bitumen felt lining.
3. There are no concerns about the structural timber repairs (subject to conditions) or to the re-roofing using reclaimed stone slates as both are urgent works which are necessary to secure the building and would enhance the character and significance of the barn.
4. The key issue concerns the part of the works to install a modern breathable membrane underlay into the repaired roof structure. Its inclusion does not follow accepted conservation practice and would not be an appropriate intervention in repairs to a historic agricultural barn of this high significance. Its introduction would obscure views of the underside of the slates and its appearance would result in harm to character and significance of the listed barn.
5. Following the traditional method of ‘Torching’ the slates with a lime mortar (of which there is evidence that this was used in the building) would follow best conservation practice and achieve the same objective without the harm identified in the use of the modern membrane.
6. It is concluded that there are no public benefits or other material considerations which would outweigh the harm identified and the application is therefore recommended for refusal.

Site and Surroundings

7. The application building is North Lees Barn, a Grade II listed cruck framed barn forming an integral component of the historic North Lees Hall and farmhouse group of buildings. These lie in an upland location 2km north of Hathersage village and some 890m south-west of the iconic Stanage Edge.
8. The cruck barn sits around 50m north of the Grade II* Listed North Lees Hall and its attached Grade II listed farmhouse and outbuildings. There is a 5-bay modern open fronted general-purpose agricultural shed just north of the cruck barn serving the main agricultural needs of the tenanted farm.
9. The barn is a large linear agricultural cruck barn with four cruck frames. It is described by our Conservation Officer as being of “exceptional significance”, and “is likely one of the most important agricultural buildings in the Peak District”.

10. The barn measures some 48m in length with a width of 7m in the north-western cruck framed section. It is constructed from gritstone under a stone slate roof and has openings fitted with heavy stone surrounds. Later alterations to the cruck barn include a L-plan range at its south-eastern end.
11. The site is accessed by a long metalled private drive which rises steeply up from Birley Lane to the south and which also carries a Public Right of Way. Footpaths cross the open landscape to the north, east and west of the site offering views to the building as well as from the open access land of Stanage.
12. The accompanying Heritage Statement describes the building as a multi-phase barn dating from the 17th century with later 18th century and 19th century elements. The building incorporates the remains of four timber cruck frames dating to 1573-78. The building has been extensively altered with later extensions and a new first floor level, however historic elements remain visible and interpretable. The building is of High Heritage Significance as a good example of a 17th century vernacular agricultural building which retains historic, archaeological and architectural interest derived from its age and integrity of historic fabric.
13. The listing describes the barn as:-
Farm outbuildings. C17, C18 and C19 in linked range of coursed rubble gritstone with quoins, plain gables, stone slates and concrete tiles. Range consisting of five bay cowhouse with overlofts, to which were added an 'L' plan range at the south east end, with a further extension to the south east in C19. Cowhouse with overlofts. Two storey, five roof bays, with six external doorways, all with cambered heads to massive lintels, and massive stone surrounds. Three openings to centre now partially blocked to form windows. Some ventilation slits to ground and first floor. Former 3-light recessed hollow chamfer mullioned window to first floor, now each with one remaining mullion, and partially blocked. Rear elevation has triangular vents. Four cruck trusses, each with collars and yolks, supporting single purlins with wind-braces, and a ridge purlin. 'L' plan range. Two storeys, one and a half bays to each part with former threshing floor served by tall opening with chamfered segmental arch. Added at south east end, a two-bay carriage or cart shed.
14. The building is used as ad-hoc storage and partly for low key educational use by the National Park Authority. It was also part used for agriculture but has been taken out of the tenancy for the farm business whose operations are now confined to the modern farm shed to the north of the cruck barn.
15. The roof is natural stone slate however there are two sections of Hardrow Concrete tiles on the rear slope. These tiles were added in the 1960's and were there at the time of listing as these are referred to in the list description. Later the roof of the barn was re-laid and a bitumen felt underlay added without consent. Both these changes have harmed the character and significance of the historic barn.
16. The roof of the barn has fallen into a state of disrepair with the failed roof covering now leaving an area exposed to the elements. Failed guttering is also leading to damage. Urgent works are therefore necessary, hence the current application to repair the roof and secure the building from the elements, particularly its roof timbers which are of high significance.

Proposal

17. Listed Building Consent is sought for the repair and making good of the timber roof structure and stone slate covering to the cruck barn. The work would see the removal of the existing stone slates and concrete Hardrow tiles from the barn roof along with the battens and the bitumen underfelt. Following removal of the roof covering, limited

structural repair of the roof would be undertaken, the extent and nature of which would be further informed by the access afforded.

18. In summary the timbers that are known to need to be repaired or replaced are one ridge beam lying between Cruck Frame C4 and the former gable end wall, one timber brace to Cruck C2 (currently missing) and one timber brace to Cruck C3 (currently missing). However, the stripped roof covering will allow access to fully inspect the condition of hidden elements and thereby possibly identify a need for further repairs not yet apparent.
19. Limited minor re-pointing to tops of the walls and internally would be undertaken using an appropriate lime mortar mix. The stone slate roof would then be replaced over new battens with further cross battening (raising the current slightly) and with a breathable polymer membrane (*TLX batsafe*) installed to replace the current bitumen membrane.
20. The stone slates will be reused, with an expected need for around 5-10% to be replaced using reclaimed slates with more needed to replace the Hardrow concrete tiled sections. The ridge would be fixed using lime mortar. Leadwork would be replaced and the existing plastic gutters replaced with more appropriate cast iron gutters on existing brackets and existing cast iron down pipes.
21. The application is supported by the following documents/reports;
 - Heritage Statement
 - Heritage historical timeline
 - Structural Assessment Report
 - Project Notes from further Structural Engineers 17/4/23 & 30/10/23
 - Supplementary Supporting Rationale for the Breathable membrane (received 29/8/24).
 - Heritage Design and Access Statement: Summary Document August 2023 (*Essentially a summary of the Heritage and structural reports*)
 - Design and Access Statement – Cover Note
 - Preliminary Roost Appraisal (PRA) Bat Survey – February 2023
 - Bat and Bird Survey Report – June 2023

There is no existing detailed roof survey and record of condition other than within the structural surveys which did not have complete access. Therefore, the extent of the works and associated repair methodology will only be fully realised when full access to hidden areas afforded by roof stripping has taken place.

22. In terms of the submitted plans these were limited and lacking in detail. Amended plans have been requested in time for the meeting as the existing plans and elevations drawing did not identify the areas of concrete tile or the sections of failed/inappropriate plastic guttering. There were also no existing or proposed roof sections or as existing drawings of the sections of timber framing where the works of repair are to take place. However, whilst drafting the report scale roof sections have now been provided appended to further information in an updated 'Rationale for Proposed Roof Specification'.
23. The only submitted proposed drawing is a 1:100 scale simple roof plan which shows the location of the two missing wind braces to be replaced by new timber along with a proposed new ridge beam. This new ridge beam between cruck 4 will be required if the beam cannot be repaired. This is not expected to be repairable although information in the application discusses a method of repair to the beam with metal plates either side of the crack and potentially the splicing of new timber at the bearing end over the cruck frame.

24. RECOMMENDATION:

That the application be REFUSED for the following reason;

The introduction of a modern polymer membrane into the repaired roof structure would be a non-traditional and inappropriate intervention. It would obscure views of the underside of the slates, a key feature of agricultural barns and together with its white colour and overtly modern appearance would result in harm to the special character and significance of the historic cruck framed barn. The harm identified would be less than substantial but would not be outweighed by the public benefits of repairing the roof given the alternative traditional technique of torching with lime mortar would achieve a similar outcome without the harm. The proposed works are therefore contrary to Core Strategy policy GSP1, L3, Development Management policies DMC5 and DMC7 and the National Planning Policy Framework.

Key issues

25. The key issue is therefore the impact of the proposed works on the heritage significance and integrity of the historic barn.
26. The urgent need for repair works is understood and accepted by all. However, the single point of disagreement between the applicant and our Conservation Officers relates to the proposal to insert a modern breathable polymer membrane roofing underlay into the repaired roof structure.

Relevant Planning History

27. 1988 - Planning and Listed Building Consent granted for Alterations to the barn comprising new window frames and doors, reinstatement of stone mullions, lintels and jambs to enable conversion to mixed education and interpretive use alongside continued farming use. NP/WED/1088/515 and NP/WED/1188/576
28. 1990 – Planning Permission granted for new general-purpose agricultural shed just north of the historic North Lees Farm Barn. NP/WED/0690/287.
29. 1997 – Planning permission granted for Conversion of agricultural buildings to bunk house and teaching area for educational use. NP/DDD/1296/514 (Not Implemented)
30. 1997 – NP/DDD/597/209 – Listed Building Consent granted for alterations to the barn to facilitate conversion of the lower floor into a bunk house with dining and recreation area, lecture room and bunk rooms and bathroom facilities. (not implemented).
31. 2015 – NP/GDO/0715/0685 GDO Notification granted for Alterations to the existing general-purpose agricultural building to ensure the building is fit for purpose for the temporary accommodation of livestock throughout the winter months.
32. 2023 - NP/DDD/0723/0796 – Listed building Consent application withdrawn for alterations to the barns. The majority of the works involved the replacement of the existing stone slate roof complete including leadwork and pointing (to the ridges and verges) and including the insertion of a new polymer breather membrane.

Consultations

33. Derbyshire County Council Highways

No objections subject to an informative being added to any consent granted about the protection of the footpath.

34. Hathersage Parish Council

No response to date.

35. Derbyshire Dales District Council

No response to date.

36. PDNPA Conservation Officer: Object – Not possible to mitigate the harm identified.

The Conservation Officers detailed comments and appendix are as follows (lightly summarised given the significance to the case - full copy on the website);

Nationally and regionally, agricultural buildings dating to before 1750 are very rare and highly significant. Cruck frames are also very rare and architecturally significant, and the example seen here is largely complete, most of the timbers appear to be original, with the exception of the common rafters.

The barn is of exceptional significance, and is likely one of the most important agricultural buildings in the Peak District.

The barn has been owned by the Peak District National Park Authority since the 1970s along with the rest of the North Lees estate. During that time the barn has remained in low intensity use for agriculture and training. The barn was partially converted in the 1980s to include a teaching space and toilet facilities.

Unfortunately, the most important part of the building – the roof – has been neglected until now. The roof is currently in a poor state of repair, with water ingress and decay notable in some timbers.

A bitumen felt underlay has been laid to the underside of the roof (likely inserted in the 1980s – there was no consent for this). The introduction of this modern membrane has altered the traditional appearance and character of the listed barn's interior and has a negative impact on its special interest, resulting in less than substantial harm to its historic and architectural significance.

In principle, the Built Environment team strongly supports the reroofing and repairs to the barn. However, we have serious concerns regarding the provision of a new membrane to the roof. Rather than reversing the harm caused by the existing modern membrane, the proposed new membrane would also have a negative impact on the listed building's special architectural and historic interest, perpetuating the harm to its significance in a number of ways (see comments under 'Impact of the Proposals'). It is unnecessary for the repair of the roof, and is unnecessary as a means of 'future-proofing' the barn. The application in its current form is therefore contrary to the Planning (Listed Buildings and Conservation Areas Act) 1990 as well as national and local planning policy.

The National Parks and Access to the Countryside Act 1949 as amended by the Levelling Up Act 2023 now provides legal duty for any relevant authority (including national park authorities) to further the purposes of the Act. The first statutory purpose includes the conservation and enhancement of cultural heritage. 'Relevant authority' includes the PDNPA (referred to as 'the Authority' below).

The impact of the proposal:

Without the inclusion of the membrane, the proposal would have a positive impact, specifically as a result of the replacement of non-traditional concrete tiles with stone-

slates. However, the unnecessary inclusion of a membrane would harm the building in three main ways:

- Firstly, the presence of a membrane is visually intrusive, as it obscures the underside of the roof, something which is traditionally exposed in agricultural buildings. This will have a negative impact on the historic appearance and character of the listed barn's interior. The use of traditional materials and construction techniques is a key component of a building's architectural and historic interest, and is an essential part of the building's significance. The perpetuation of these, and of traditional construction skills, is in the interest of the PDNPA in furthering the purposes of the 1949 National Parks and Access to the Countryside Act.
- Secondly, on a technical level, roofing membranes can trap moisture and inhibit drying, leading to a higher risk of decay in the roof timbers. For more technical information relating to membranes (and more traditional torching) in historic buildings, please see the attached Appendix – Roofing Membranes and Traditional Construction.
- Membrane block any view of the underside of the roof. This makes maintenance more difficult, as any minor leaks in the roof are not readily visible.

Overall, the proposals would cause less than substantial harm to the significance of the Grade II listed building, and to its special architectural and historic interest. Therefore, according to the 1990 Act, the application should be refused.

Potential to install insulation to the roof at a later date:

The applicant has argued that the presence of a membrane would future-proof the building should the Authority later wish to convert the barn. However, the current application is for re-roofing and repairs only. Any proposals involving a change in the building's use would need to be determined as part of a change of use application, which fully explores the issues of significance, harm, and optimum viable use, in accordance with PDNPA policy DMC10.

Nevertheless, the Built Environment Team has consulted widely amongst other conservation experts and has been advised that there is no technical reason why roof insulation cannot be retrofitted to a roof without a membrane should the need arise - and be fully justified - as part of a future listed building consent and planning application for change of use.

If, in the future, a change of use is sought, our team can provide details of conservation architects who are experienced in retrofitting buildings of traditional construction, without the use of membranes.

Should the application be approved, or amended in a way to make it approvable, then suggested conditions have been provided to secure control of detailed matters.

37. PDNPA Archaeology Officer: No archaeological objections subject to a condition securing recording during the works. Detailed comments as follows (summarised);

This is an extremely important listed building, of high heritage significance, originating in the 16th century. The earliest parts of the barn (including the timber cruck blades) pre-date the adjacent Grade II hall. The building has high historic, archaeological and architectural interest derived from its age, integrity of historic fabric, evidence for phasing, historic association with North Lees Hall (which in itself is of very high significance) and from the contribution made by its rural setting.*

In principle, the repair of the roof structure is supported and necessary for the long-term protection of the building. The approach to the conservation of the building and the details of the proposal have been covered by the Built Environment Team so these are not reiterated here.

There will be no adverse impact to buried archaeological deposits as all works are above ground. The replacement of some timbers where necessary will involve the loss of some historic fabric - the details of the extent and the methods for repair are to be decided once the roof covering is removed and the condition of the roof structure can be fully assessed. If timber replacement is small scale and no more than is absolutely necessary any harm to significance would be less than substantial, at the lowest end of this scale. The removal of concrete tiles and replacement with stone would be an enhancement to the significance of the building. The removal of the roof covering may reveal archaeological information of significant benefit to understanding the development of the barn – it is common for cruck barns to have been originally built fully in timber and later encased in stone walls. We also know that carpenters' marks and apotropaic marks are present on the roof timbers – the roof has not previously been accessible and the building has never been subject to a systematic building survey; further important archaeological information is likely to be contained within the fabric.

As per NPPF Para 199, great weight needs to be given to the asset's conservation. The need for the work has been set out, as required by NPPF Para 200. Our key heritage policies L3, DM1, DMC5 and DMC7 apply.

Should the planning balance be favourable I recommend that the impacts detailed above are mitigated through a condition for archaeological building recording prior to and during the works.

Representations

38. One representation has been received from The Society for the Protection of Ancient Buildings (SPAB). It should be noted that although SPAB are one of the formal 'Amenity Bodies' we are required to consult on certain applications affecting listed buildings, this case, being for a Grade II listed building did not meet the consultation parameters. Therefore, whilst not a formal consultation response, SPAB nevertheless have provided highly relevant expert observations and advice which is reproduced below, largely in full because of the difficulty in summarising such detailed technical matters;

It is clear that the barns are suffering from a lack of repair and maintenance (and possibly poor detailing from previous works?) and that this has caused/contributed to some of the fabric problems the application now seeks to address. While we warmly welcome the proposition of repairs to the roofs of the barns, the Society remains to be convinced of the need for/justification of the proposed membrane in order to facilitate the installation of insulation at a later date.

Advise further investigation of the building, and the extent and causes of its problems and, if this application continues to be pursued - that additional information and justification is required to demonstrate

i. the potential impact of the proposals on the building's special interest and significance, and

ii. the technical compatibility of the proposals with the building's fabric, detailing, and proposed use.

Structural monitoring:

The Morton Partnership report recommended that the walls should be monitored for further movement. It is not clear however if any monitoring has been implemented (and what this shows thus far) or whether this recommendation remains outstanding. If it is the latter, we advise that a scheme of monitoring be put in place as soon as possible under the advice of the structural engineer.

Future Use:

It is advised that an Options Appraisal for possible future uses of the buildings should be undertaken as soon as possible and that this should help to inform works to the buildings. The arguments put forward for the proposed membrane (and against the use of traditional torching) are predicated on the need to provide insulation/allow for insulation to be installed at a later date. However, it is difficult to see how the application provides the requisite clear and convincing justification for the potential adverse effects/harm that would likely result from the proposed 'future-proofing' (i.e. membrane and insulation), and particularly in the absence of a definitive, compatible use for the barns.

Building Recording:

In the application reference is made to building recording once the existing roof covering has been removed. We advise however that a full building survey and recording should be undertaken prior to any works. The survey and recording would hopefully then assist in the understanding of the structure and help inform the structural interventions and repairs.

Interim provisions and until such time that a full scheme of repairs has been agreed and can be implemented:

Advise temporary works are undertaken to prevent further water ingress and allow the building to begin to dry out. The application images show blocked rain water goods and vegetation, and poor water disposal away from the building -these matters should be remedied as soon as possible and maintained regularly to ensure water is being correctly diverted away from the buildings and to encourage the drying out process to begin.

Refers to the statutory duty under Section 16(2) of the Planning(Listed Buildings and Conservations Areas) Act 1990 to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. The authority should also consider if the application meets the requirements of national policy as set out in the National Planning Policy Framework (NPPF). Relevant paras being 195, 203, 205 and 206.

Turning to the proposed works -

Support replacement of Hardrow concrete slates on technical and aesthetic grounds.

Proposed membrane and insulation

The SPAB believes that there are some circumstances where a breather membranes and insulation may be appropriate. However, these additions can also cause harm to/loss of significance, and result in unintended consequences to the building and its historic fabric. Careful consideration and caution must therefore be exercised.

There appears to be a small section to one area with riven laths to the underside - presumably the remains of torching(?) which would have been a traditional detail for several centuries and before the introduction of the modern felt.

Torching is a traditional detail which is becoming increasingly rare and where it survives it is important to retain and repair. The purpose of torching was/is to stabilise the slate heads and pegs and keep out draughts and wind-driven rain and snow; the traditional detailing of historic roofs facilitated the necessary moisture management and required ventilation. Today, torching remains a valuable and effective method in providing a permeable and effective weathering barrier, working in harmony with the traditional materials and construction/detailing of old buildings. It also conserves the historic

appearance of the roof from inside, a consideration which is particularly relevant and important in this case.

The roofs to the barns at North Lees Hall contribute enormously to their significance and special interest. At present, while the existing felt is visible internally, the rafters are also visible and these, combined with the principal roof structures, makes for an impressive sight and experience. The extant arrangement also allows for the legibility of the evolution of the buildings and their construction to be viewed and understood. Externally, the general detailing/relationship of the roof to eaves and verges is typical of many agricultural buildings and is one of the key characteristics in their appearance that differ from many traditional domestic buildings. Unfortunately, there are no 'As Existing' and 'As Proposed' sections and specifications in the application but the introduction of a membrane, and insulation, generally requires changes to the roofline. In this case, given the significance of the extant roof to eaves detailing, and the apparent shallow depth of the rafters, it is anticipated that the proposed membrane and insulation would result in a raised roofline which would change the appearance of the buildings, and potentially the historic roofing details to abutments, verges etc. The use of sawn battens, as opposed to traditional riven laths, will also result in a raise of roof level.

While breather membranes are valuable in modern construction, their use in historic buildings brings risks and may result in unintended consequences. The SPAB advises that even the addition of a vapour permeable membrane will lead to a lower rate of ventilation of moisture than no membrane at all. Where membranes and insulation are pursued, it is strongly advised that they are considered as part of an integrated solution and whole-building approach; an understanding of the structure's traditional construction (along with any subsequent alterations); an understanding of significance; and a definitive (and detailed) use. It is also strongly advised that where membranes and/or insulation is proposed, that precautions are taken to mitigate against any unintended consequences. As stated above, from the photographs included in the application, there appears to be very little depth to the rafters and the proposals will also likely require a raised roof level. It is not clear therefore that the proposed membrane and insulation could be achieved without significant visual change and moreover, that there would be sufficient depth/room to 'build in' precautions (please also see comment below re moss/lichen). In addition, due to the nature and configuration of the roof timbers could the insulation requirements actually be installed in accordance with manufacturer's instructions?

A further consideration for the re-roofing is the likely lifespan and repair and maintenance capabilities of the details and products used. The supporting documents argue that one of the drawbacks with torching is that it has to be maintained and repaired, whereas the longevity, and repair capabilities of a membrane and insulation are not addressed. The manufacturers of the TLX Batsafe membrane advise a lifespan of approximately 25ys if fitted correctly. Conversely, a traditionally laid and detailed roof can last at least 100years+. Additionally, the very fact that torching is visible and is capable of repair is a further strength in its favour vs modern membranes and insulation which cannot be seen/is inaccessible and cannot be repaired. Torching also has an exceptionally long life span as evidenced by that surviving in many historic roofs.

In the supporting documentation the applicant also quotes advice from the SPAB in respect of rafter level insulation which reads: 'the batten cavity may not require a ventilation path when using permeable, air-open roof coverings (such as clay tiles or rough natural slates) so long as there is no 'torching' (mortar to the underside) or a likelihood of airflow through joints becoming restricted by moss or lichens.' However, and as evidenced by the photographs included in the application, the roofs of the barns are covered in moss/lichens.

The authority and the applicant may also wish to consider further environmental impacts (such as manufacture, transportation, disposal/recycle capabilities etc) of the membrane and insulation vs that of traditional natural products (e.g. Laths, lime etc).

For the reasons outlined above, we advise against the use of a membrane and insulation and in this case. In our view, a better solution would be to re-slate and to reinstate the torching to the underside of the roofs. While we recognise this would not incorporate the desired insulation opportunity, it would provide a weathertight and breathable roof, and which conserves the building's special interest and significance. Should however the applicant continue to pursue the membrane (and insulation) proposals then we advise that 'As Existing' and 'As Proposed' details, specifications, and method statements, together with clear and convincing justification (including proposed use), should be provided.

In respect of the other repairs to the fabric we advise -

Timber Treatment:

The Timberwise report referred to in the application has not been included in the application but we fully concur with the advice set out in The Morton Partnership's report - that is to improve the environmental conditions (identify the source(s)/cause of the water ingress; undertake temporary repairs(where required) to prevent further water ingress; ensure adequate ventilation; use appropriate materials; encourage and allow sufficient time for building to dry out; undertake full repairs where needed).

Once the roof covering has been removed -

Timber repairs and/or replacements: Relevant 'As Existing' and 'As Proposed' (plans, elevations, sections) should be provided to show the location, extent, and nature (i.e. repair or replacement) of proposed works to any timbers. Detailed drawings should also be provided for any carpentry repairs or replacements. Where existing timbers are considered to have failed/now insufficient, consideration should be given to supplementing them with new timber alongside rather than removal of the original/historic timber member.

Statutory Framework

39. Section 16(2) of the Planning (Listed Buildings and Conservation Areas) Act 1990 requires the local planning authority, in considering whether or not to grant listed building consent for the works, to have '*special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.*'

Main Policies

National Planning Policy Framework

40. The Government's intention is that the NPPF should be considered as a material consideration and carry particular weight where a development plan is absent, silent or relevant policies are out of date. In the National Park the development plan comprises the Authority's Core Strategy 2011 and the Development Management Policies 2019. Policies in the Development Plan provide a clear starting point consistent with the National Park's statutory purposes for the determination of this application. There is no significant conflict between policies in the Development Plan and the NPPF.
41. Paragraph 182 of the NPPF states that '*great weight should be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to landscape and scenic beauty. The conservation of wildlife and cultural heritage are important considerations in all these areas, and should be given great weight in National Parks and the Broads.*'

42. Chapter 16 of the NPPF states out policies relating to ‘Conserving and Enhancing the Historic Environment.’
43. Para 195 states; Heritage assets These assets are an irreplaceable resource, and should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations.
44. Para 203 states that; In determining applications, local planning authorities should take account of:
- a) the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
 - b) the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
 - c) the desirability of new development making a positive contribution to local character and distinctiveness.
45. Paragraph 205 of the NPPF states;
- When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.
46. Paragraph 206. Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification.
47. Paragraph 208. Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.

Local Development Plan - Core Strategy

48. Policy GSP1 sets out the broad strategy for achieving the National Park’s objectives having regard to the Sandford Principle, (that is, where there are conflicting desired outcomes in achieving national park purposes, greater priority must be given to the conservation of the natural beauty, wildlife and cultural heritage of the area, even at the cost of socio-economic benefits). GPS1 also sets out the need for sustainable development and to avoid major development unless it is essential, and the need to mitigate localised harm where essential major development is allowed.
49. Policy L3 requires that development must conserve and where appropriate enhance heritage assets.

Local Development Plan – Development Management Policies

50. Policy DMC3 requires development to be of a high standard that respects, protects, and where possible enhances the natural beauty, quality and visual amenity of the landscape, including the wildlife and cultural heritage that contribute to the distinctive sense of place. It also provides further detailed criteria to assess design and landscaping, as well as requiring development to conserve the amenity of other properties.

51. Policy DMC5 provides detailed requirements relating to proposals affecting heritage assets and their settings, requiring new development to demonstrate how valued features will be conserved, as well as detailing the types and levels of information required to support such proposals. It also requires development to avoid harm to the significance, character, and appearance of heritage assets and details the exceptional circumstances in which development resulting in such harm may be supported. This states that for designated heritage assets, clear and convincing justification is provided, to the satisfaction of the Authority, that the:
 - b) in the case of less than substantial harm to its significance, the harm is weighed against the public benefits of the proposal, including securing its optimum viable use.
52. DMC7 notes specifically that development will not be permitted where it would directly, indirectly or cumulatively lead to, repairs or alterations involving materials, techniques and detailing inappropriate to a Listed Building or the replacement of traditional features other than with like for like, authentic or original materials and using appropriate techniques, unless substantial clear and convincing justification is provided to the satisfaction of the National Park Authority that substantial public benefits would outweigh any harm proposed.
53. DMC11 addresses nature conservation interests. It states that a net gain in biodiversity interest should be achieved through development and in considering whether a proposal conserves and enhances sites, features or species of wildlife, geological or geomorphological importance all reasonable measures must be taken to avoid net loss. It provides a sequence of actions to be taken into consideration, from enhancement proportionate to the development, avoid adverse effects, consider less impactful options, mitigate harm and in rare cases compensate for loss. Appropriate survey and assessment of the site with safeguarding measures must be provided with proposals.
54. DMC12 addresses sites, features or species of wildlife, geological or geomorphological importance. For Internationally designated or candidate sites, or European Protected Species, the exceptional circumstances where development may be permitted are those where it can be demonstrated that the legislative provisions to protect such sites or species can be fully met.

Assessment

55. The starting point for the assessment of this application for Listed Building Consent is Section 16(2) of the Planning (Listed Buildings and Conservation Areas) Act 1990 which requires the local planning authority, in considering whether or not to grant listed building consent for the works, to have *'special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.'*
56. Chapter 16 of the NPPF sets out National policy for conserving and enhancing the historic environment. Para 205 requires us, in considering the impact of these works on the significance of the cruck barn, that *'great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.'*
57. Our own development plan policies L3, DMC5 and 7 relating to listed buildings reflect those in the NPPF.
58. There are of course no objections in principle to the repair and renovation works in general. These are urgently necessary to maintain the barn and weather proof it so as to safeguard the future conservation of the building and its highly significant cruck frames.

The key issue is therefore whether the precise detail of those works meets the legislative and policy requirements which is discussed below.

59. It is important to note that this application is solely seeking Listed Building Consent to undertake this maintenance and repair work. There is no accompanying planning application for any conversion or proposed change of use. Consequently, wider planning considerations are not material to the current proposal which concerns only the impact of the repair works upon the character and significance of the listed cruck barn. This application must be determined on its own merits and no weight can be placed upon any proposals which may or may not come forward in the future.

60. The Impact of the Proposals on the Significance of the Designated Heritage Asset

61. A Heritage Statement and structural engineers' reports have been provided, in accordance with policies DMC5 and DMC7. The building is considered to be of High Heritage Significance as an example of 17th century vernacular agricultural building, with interest arising from its age and retained integrity.

62. Our in-house Specialist Conservation officers go further in considering that "*The barn is of exceptional significance, and is likely one of the most important agricultural buildings in the Peak District.*"

63. The proposals comprise significant works to strip and relay the stone slate roof incorporating reclaimed slates with new battens, achieve limited repairs to the roof timbers and the tops of the walls, limited repointing as well as the replacement of leadwork and inappropriate plastic or missing rainwater goods with metal goods.

64. There are no concerns about the general nature of this repair and renovation work which officers agree is urgently necessary in order to secure and maintain the weathertightness of the cruck barn and arrest damage to the timber roof structure. Furthermore, the proposal to replace the concrete tiles with stone slate is welcomed as it reverses previous harm and would enhance the barns external appearance, character and significance.

65. Internally the removal of the unauthorised bitumen roofing felt would also reverse the harm its installation caused. This would also enhance character, appearance and significance by removing a modern and inappropriate intervention which if not replaced, would also restore the clear, uninterrupted views again of the underside of the stone slates, a key feature of agricultural barns of this age/type.

66. All of the above works of repair and renovation are welcomed and there are no concerns about these aspects subject to appropriately worded conditions. These would be necessary to control the precise detail and archaeological recording of the roof structure as well as agreeing the methodology and nature of any additional repairs works found necessary once the roof was uncovered and inspected in its entirety.

67. However, whilst in general the repair works are acceptable, the Authority's Conservation Officers do raise very strong objections to the introduction of a breathable plastic polymer roofing membrane to replace the bitumen felt, the case for and against which is discussed in the next section.

68. Little details have been submitted about the type of membrane but a check of the manufacturer's website shows that the material would have a white underside facing down into the building. Additional plans received whilst this report was being written shows that the method of installation proposed to be employed, using counter battens, means that the roof would also need to be raised by a small amount – 25mm.

69. The case for the introduction of a modern roofing membrane below the slates

70. The National Park Authority property team, as the applicant's agent strongly recommend the inclusion of a breathable membrane in the proposed roofing works. They argue that;

“If the internal first floor space at Cruck Barn is ever to be used as a habitable, heated space (such as for teaching, bunk house, or holiday let etc) then it will require roof insulation. If it requires insulation, then it has to have a breathable membrane, as outlined within all relevant statutory and conservation supported literature. Without a breathable membrane, the roof structure will be at risk of condensation and subsequent damage.

Whilst this Listed Building Consent application does not include for the insulation element, it is critical to consider the long-term use of the space so as not to limited the building's future potential”

71. The applicant is therefore seeking to take the opportunity presented by the removal of the stone slate and the repair of the timber roof structure to insert a modern plastic polymer membrane between the new battens and the slate underside. The replacement membrane would be 'bat-safe' and 'breathable'. It would be a white colour, and without insulation applied below, would be visible from within the barn obscuring all view of the underside of the stone slates.
72. The applicant explains that the purpose of the membrane is to allow moisture within the barn to escape as well as resisting wind-blown rain ingress through gaps in the irregularly shaped stone slate layer. The applicants further consider that positive effects of the introduction of a modern felt membrane would arise by enhancing the overall resilience of the building to wind and water ingress and reducing maintenance needs.
73. The applicant also considers it would future proof the building by also allowing for the installation of insulation below at some future date which would not be possible without a breathable membrane. They further explain that a breather membrane cannot be effectively installed after the roofing works are complete and that the membrane will only be in a position to protect all roof timbers from water damage if it is installed during re-roofing works. If the first floor of Cruck Barn is ever to be used as a habitable, heated space, a breathable membrane must therefore be installed during the proposed reroofing works.
74. In doing so the applicant considers that a greater flexibility in potential sustainable future uses of the building would be facilitated. The applicant explains that the building has not been in active agricultural use for many years with lawful use and future potential uses being dependent on greater habitability of the space within, and as such appropriate weatherproofing and moisture management is necessary and appropriate.
75. The applicant has considered lime 'torching' suggested by our Conservation Officers as an alternative to the breathable membrane. However, although they appreciate there is merit to torching in appropriate roofing scenarios, they consider it is not suitable for this barn as it is known to deteriorate over time and therefore requires regular inspection and maintenance which would not be possible if obstructed by insulation. In summary, they conclude that if lime torching were to be applied to the roof of Cruck Barn, it would not be possible to later insulate the roof which in their words would *“categorically prevent the first floor of Cruck Barn being used in future as a heated, habitable, space (for teaching purposes, for example)”*.
76. Another alternative would be not to install torching or a membrane but this was clearly discounted as it would mean no barrier to prevent wind-driven rain from entering the roof space.
77. Whilst officers note the applicants desire to plan works now for some as yet unknown future use(s) the current application is solely an application for Listed Building Consent for repairs to an agricultural barn. The proposed works must therefore be determined upon the impacts upon the significance of the building and its special qualities. There is

no accompanying planning application for change of use and the future intentions and aspirations of the applicant for the future use(s) of the building are not relevant to this application.

78. The case against the introduction of a modern roofing membrane below the slates

79. In principle the Authority's Conservation Officers strongly support the reroofing and repairs to the barn. However, they have serious concerns and object strongly to the provision of a modern roofing membrane on the basis that it would not be an appropriate treatment for a designated heritage asset which displays high heritage significance.

80. They consider that, rather than reversing the harm caused by the existing bitumen felt, the proposed new membrane would also have a negative impact on the listed building's special architectural and historic interest, perpetuating the harm to its significance in the following three main ways;

- a) Firstly, the presence of a membrane is visually intrusive, and will have a negative effect upon character and appearance of the interior as it obscures the underside of the roof, something which is traditionally exposed in agricultural buildings. The use of traditional materials and construction techniques is a key component of a building's architectural and historic interest, and is an essential part of the building's significance. The perpetuation of these, and of traditional construction skills, is in the interest of the Authority in furthering the purposes of the 1949 National Parks and Access to the Countryside Act.
- b) Secondly, on a technical level, roofing membranes can trap moisture and inhibit drying, leading to a higher risk of decay in the roof timbers. The Conservation Officers provide more technical information relating to membranes (and more traditional torching) in historic buildings, in an Appendix to their response titled – Roofing Membranes and Traditional Construction (see web record for full copy).
- c) Thirdly a membrane blocks any view of the underside of the roof. This makes maintenance more difficult, as any minor leaks in the roof are not readily visible.

81. The Conservation Officers propose that the harm arising to the heritage significance of the barn by the introduction of a modern roofing felt could be avoided. Alternative and traditional weather-proofing treatments to the underside of the replaced stone slate known as torching are available and, in this instance, would be the most appropriate option.

82. The Conservation Officers therefore conclude that the membrane is unnecessary for the repair of the roof, and is unnecessary as a means of 'future-proofing' the barn. They consider that the application in its current form is therefore contrary to the Planning (Listed Buildings and Conservation Areas Act) 1990 as well as national and local planning policy.

83. Consequently, they raise formal objection assessing that it would not be possible to mitigate the highly significant impact which would represent less than substantial harm to the significance of the Grade II listed building, and to its special architectural and historic interest. Therefore, according to the 1990 Act, the application should be refused.

What is Torching?

84. Torching refers to a lime/sand/hair mortar applied to the underside of roof slates, either as the roof is laid, or after the slating is complete. Torching is a traditional method of weather-proofing a historic roof, preventing wind, rain and snow from penetrating the roof, and securing the slates in position, preventing them from wind-uplift. The mortar will absorb any excess moisture when it is raining and will then dry out in the wind. Excess

moisture from within the building, which is naturally carried to the roof by warm air, will be absorbed by the mortar and dried by the wind.

85. Torching is a tried and tested method used on traditional buildings for centuries, and will easily last around 100 years while also protecting the roof timbers, where no membrane is included. It is likely that torching would have been the historic treatment to the underside of the roof of the cruck barn (Officer note - photos do seem to show some evidence to support this).
86. Although torching is no longer a mainstream technique, it never fully fell out of use and is still used extensively in the Peak District. The use of torching, rather than membranes, is mandated for DEFRA-funded capital grant programmes for restoration of traditional buildings.
87. The Conservation Officers view is that a torched underside to the slate would not irreversibly restrict the future use or occupation of the barn, including appropriate roof insulation if the planning balance in any subsequent planning and listed building applications found that such interventions were justified.
88. Whilst the current application is for roof repairs only, nevertheless the Authority's Built Environment Team has consulted widely amongst other conservation experts and has been advised that there is no technical reason why roof insulation cannot be retrofitted to a roof without a membrane should the need arise - and be fully justified - as part of a future listed building consent and planning application for change of use.
89. The planning balance
90. The applicant has strongly expressed a clear preference to the use of a breathable membrane over a torching option on the grounds of its effectiveness and in their view, the only solution which enables future insulation installation and thus 'future proofs' the current repair works.
91. The implementation of a torched weather proofing to the roof would be more labour intensive than the membrane option, however it is a traditional method to waterproof a stone slate roof such as this. Whilst the applicant also expresses concerns that water or damp ingress through capillary action can occur through torching and be a further reason against torching which would rule out any insulation later this is clearly disputed by our in-house and other conservation experts.
92. In accordance with National Planning Policy Framework and the Authority's adopted policy, where harm is expected to arise to a heritage asset from a proposal, the magnitude of harm and the effect on the heritage asset's significance must be weighed against any public benefit which would demonstrably arise from those works.
93. This application is for Listed Building Consent only and no wider planning issues are material to it. The proposals do not specify that a change of use is proposed, and no planning application has been submitted to such effect to enable any balance regarding impacts of any changes that this might require.
94. The current lawful uses of the building are low key and intermittent, comprising a mixed agricultural and general storage with occasional educational and meeting space. It is appreciated that continuation of these uses is however limited by the building's current dilapidated condition however that limitation could have been reversed by timely repairs so little weight is attached to this aspect.
95. Whilst the applicant strongly considers the inclusion of the membrane would secure an increased level of flexibility in relation to potential future uses of the building, we are clearly advised by our expert Conservation Officers that this is not necessary, may cause

unintended consequences and that the appropriate and traditional method of repair using torching will not rule out later insulation to better enable such future uses if they are found to be acceptable with regard to their individual impact on character and significance.

96. The barn clearly needs a more secure future from more viable and sustainable use(s) which are consistent with the conservation of its special character and high significance. Whilst there are 'pro's' and 'con's' with either solution to weatherproofing, there is no convincing evidence that appropriate future uses would be prevented by traditional building repairs using torching.
97. Planning Policy DMC7(D)(v) and (vi) specifically restricts development which would lead to repairs or alterations involving materials, techniques and detailing inappropriate to a Listed Building and/or the replacement of traditional features other than with like for like, authentic or original materials and using appropriate techniques. The NPPF para 205 states that great weight should be given to the asset's conservation
98. The insertion of the breathable modern membrane to the underside of the slates would fall within these criteria as harmful interventions and the presumption would be that consent is refused unless it can be demonstrated that this harm is outweighed by the public benefits of the proposal including, where appropriate, securing its optimum viable use.
99. In weighing up these benefits it has to be acknowledged that the existing roof is lined with a bitumen felt which is not a traditional intervention and has caused some harm. It has been in place for some time and its proposed removal in itself would be an enhancement and a public benefit. Whilst neither the bitumen felt membrane nor its proposed breathable replacement are fundamental to the structural integrity or heritage significance of the building, what is important is the waterproofing of the highly significant roof structure.
100. This can be achieved by the use of torching which is a traditional and long lasting waterproofing technique appropriate to the historic barn and believed strongly to reinstate what was in fact a former torched roof. Its use/reinstatement would further and significantly enhance the significance of the historic barn roof and provide a substantial public benefit.
101. This would not be the case with the modern membrane. As an overtly modern intervention exacerbated by its visually strident white colour it would cover all views of the roofing slates and together with its potential for unintended consequences it cannot be concluded otherwise than its use would perpetuate and indeed increase the harm that the current bitumen liner causes to the character, appearance and significance of the barn .
102. An objective assessment of any public benefit arising from the scheme as proposed could be that a theoretical increase in the scope of future uses of the barn would arise and in doing so a long-term viable use of the building would be more feasible. Both your Planning and Conservation Officers recognise that such an outcome is desirable. However, potential future proposals cannot be material to determination of this Listed Building Consent application which is limited to consideration of the protection, conservation and enhancement of the heritage asset and significance in these repairs.
103. Furthermore, it is considered that whilst there would be a likely difference in long-term maintenance regimes between a breathable membrane and torched seal, there would otherwise be no or limited difference in scope of potential future uses to the barn through the application of torching as opposed to felt. The wider public benefit of an important heritage asset being properly protected from weather ingress, and the rectifying of past inappropriate repairs would be equally applicable to either technique. As noted above torching of the slate now would not preclude a greater degree of use of modern materials

such as insulation in the future if sufficient public benefits arising from the works could be demonstrated in weighing the planning balance of a future application for development.

104. In cases like this, even if one considered the issues were more finely balanced, application of our own policy GSP1 - Securing National Park purposes and sustainable development is clear in that;

'C. Where there is an irreconcilable conflict between the statutory purposes, the Sandford Principle will be applied and the conservation and enhancement of the National Park will be given priority.'

The conservation of our cultural heritage which includes this listed barn with its highly significant roof structure must therefore be given greater weight echoing NPPF policy.

105. Therefore, by definition under DMC7 that use of a modern roof felt would be harmful to the heritage significance of the asset and the proposals do not demonstrate clear and deliverable public benefits which might outweigh such harm. Furthermore, given further that adequate weather proofing can be secured through application of traditional techniques, it is not appropriate to approve the insertion of the modern breathable membrane. Accordingly, for the reasons set out above the application is recommended for refusal.

106. Consideration was given by officers as to whether, given the proposed repair works overall are broadly appropriate and required to secure the conservation of the heritage asset, it would be possible to recommend approval of the application subject to a condition to omit the breather membrane.

107. Any such approach would also require a condition requiring the specification of works for a torched seal to the replaced slate roof to be submitted and agreed by the Authority prior to the reinstatement of the salvaged original stone slate. However, this would not be appropriate because it would be a fundamental change outside the scope of the application proposal as well as being wholly contrary to the strong views of the applicant who seeks a formal decision on the use of the membrane as a key part of the works.

Protected species considerations

108. A Preliminary Roost Appraisal (PRA) Bat Survey has been submitted with the application. A daytime survey was conducted in February 2023 and considered the presence of protected species on site including bats, barn owls and other birds. The survey recorded a bat roost in the barn within the upper wall structure and concluded that due to the number of potential access points, suitable roosting features, and the presence of a bat(s), the building is deemed as having 'high' potential for roosting bats. Therefore, three bat activity surveys (dusk/dawn) are required during the bat activity season (May to August).

109. Only two bat emergence and activity surveys were carried out during 2023, one dusk (May) and one dawn (June) and report prepared in June 2023. This recognises that there are roosting bats inside the barn (ridge-board), with mitigation measures required to be implemented at the site. These propose any proposed works to the barn will need to take place from November through to March, alongside mitigation, monitoring and safeguarding measures to be undertaken in the course of the works.

110. The surveys also found there are nesting barn owls, swallows, wrens and blackbirds using the barn and therefore the barns cannot be disturbed during the breeding season. Mitigation is suggested in the form of exclusion measures and provision of bat boxes on poles close to the building and the current internal owl nest boxes are reinstalled inside the barn post repair/restoration works with appropriate access points in door shutters.

Further mitigation for the remaining bids species in the form of three types of internal nest boxes are recommended for mitigation post works

111. Subject to the full implementation of the mitigation measures secured via use of suitable planning conditions the proposals would be considered to meet the requirements of DMC11 and DMC12.

Conclusion

112. In conclusion, apart from the proposed breathable membrane the proposals would result in the necessary and appropriate repair and maintenance of a heritage asset of high significance being one of the most important historic barns in the National Park.

113. The application is for Listed Building Consent only for the proposed repairs and therefore references by the applicant to other considerations in relation to potential future uses are not material to the consideration of the current application proposals. As proposed the works would incorporate the inclusion of modern building materials which would harm the character, appearance and significance of the heritage asset and which local plan policy does not support in relation to the appropriate safeguarding of its high heritage significance.

114. Weighing this 'less than substantial harm' (using the terminology in the NPPF) against the public benefits that would arise from the repair and safeguarding of the building through weatherproofing in theory could outweigh the harm, however the need for the decision maker to place great weight to the conservation of the historic asset and be clear that such harm has a clear and convincing justification cannot be met given the harm can be avoided and the building enhanced and weatherproofed to the same or better standard by the traditional technique of torching which was in fact used in this roof historically before the bitumen felt was added.

115. Application of section 16(2) of the Planning and Listed Building Act, National policy in the NPPF alongside our own local plan policies therefore leads to a conclusion that whilst the majority of the work is acceptable subject to detailed conditions the introduction of a breather membrane would be a harmful intervention, which is not outweighed by public benefits. The proposal is therefore contrary to NPPF and local plan policies GSP1, L3, DMC5 and DMC7 and in the absence of any other material consideration to warrant a different decision, the application can only be recommended for refusal.

Human Rights

116. Any human rights issues have been considered and addressed in the preparation of this report.

117. List of Background Papers (not previously published) Nil

118. Planning Officer – John Keeley