

Nova House 94 Boughton Chester Cheshire CH3 5AQ

Tel: 01244 314111 Fax: 01244 314700

E-mail: info@plattwhite.co.uk www.plattwhite.co.uk

Our Ref: 2637.RBS

Mrs S Gleave, Dutton Park Cottage, Dutton, WA4 4HP.

19th May 2021

Dear Mrs S Gleave,

RE: SPECIFIC DEFECT REPORT: STRUCTUAL REPORT ON BARNS AT DUTTON PARK FARM, DUTTON, CHESHIRE, WA4 4HL

Further to your recent instruction, I can confirm that I carried out my inspection of the property on 7th June 2021 and on the basis of this inspection now report hereunder, subject to the limitations detailed under those detailed in the Terms and Conditions of Engagement.

A. TERMS AND CONDITIONS OF ENGAGEMENT

A1 Particulars

A1.1 The Client:

Mrs S Gleave,

Dutton Park Cottage,

Dutton, WA4 4HP.

A1.2 The Surveyor:

Platt White Partnership

Nova House 94 Boughton Chester





CH3 5AQ

A1.3 The Property:

Barns at Dutton Park Farm,

Dutton, Cheshire, WQ4 4HL

A1.4

Purpose of the Report:

Confirm suitable for conversion.

A1.5 Principal Exclusions:

Our report is restricted to this specific Claimed defect. We have not looked at any other part of the structure and cannot vouch for the condition of any other part of the property as this would override our instruction. This report shall be for the private and confidential use of yourself and your professional

advisers/insurance firm assisting you in the matter.

It shall not be reproduced in whole or In part or relied upon by third parties for Any use without the express written authority of Platt White Partnership.

A1.6 Details of any special Instructions:

See section 'C'.

A1.7 Define Costing:

Not Applicable

A1.8 Inspection Date:

4th May 2021

A1.9 Likely report delivery date:

19th May 2021

A1.10 Number of copy reports to

be provided:

One.

A1.11 Reports to be delivered

To:

Client

On delivery of report and late

base rate for late payment.

Payment provisions.

A1.15 Date:

19th May 2021

A1.16 If this report relates to settlement in buildings, you should read the "Brief Explanation of Settlement in Buildings" which forms part of this report, in order to obtain a greater understanding of the risks involved.

A2 Additional Particulars

A2.1 Other specialists directly engaged by client

Who/Responsibility for co-ordination/Liability/Costs

N/A

A2.2 Other specialists engaged by Surveyor

Who/Liability/Costs

N/A

A2.3 Contractors' attendance

Who/Liability/Costs

N/A

A2.5 Dispute Procedures:

Platt White Partnership complies with the Royal Institution of Chartered Surveyors complaints handling procedure requirements. A copy of our procedure is available on request.

A3 Limitations

A3.1 Content of the Report

In accordance with these terms the Surveyor will use his or her best Endeavours to report upon:

- (a) Specific defect instructed in A1.6;
- (b) any requirements for further investigation arising from the inspection.

A3.2 Scope of the inspection

- (a) Generally
 - (i) the Surveyor will consider his or her advice carefully but is not required to advise on any matter the significance of which in relation to the Building is not apparent at the time of inspection from the inspection itself.

- (ii) The Surveyor will inspect diligently but is not required to undertake any action that would risk damage to the Building or injury to himself, herself or any other party.
- (iii) The surveyor will not undertake any structural or other calculations, unless agreed with client.
- (iv) The Surveyor will not produce a repair schedule, planned maintenance report, feasibility report or advise on design, procurement or project management unless expressly agreed with the client.

(b) Accessibility

- (i) The Surveyor will inspect as much of the internal surface area of the building as is practicable but will not inspect those areas which are covered, unexposed or not reasonably accessible from within the site, or adjacent public areas.
- (ii) The Surveyor is not required to move any obstruction to inspection including, but not limited to, fixtures, fittings and floor coverings.
- (iii) The Surveyor will not open up or cut into the building fabric without specific directions from the Client. Such intrusive investigations, if instructed by the client, will be at the risk and liability of the client and will be assumed to be with agreement between the client and the building owner.

(c) Floors

The Surveyor will lift accessible sample loose floorboards and trap doors, if any, which are not covered by heavy furniture, ply or hardboard, fitted carpets or other fixed floor coverings. The Surveyor will not attempt to cut or lift fixed floorboards or other floor fabric without the express permission of the owner.

(d) Fixed covers or housings

The Surveyor will not attempt to remove securely fixed covers or housings without the express permission of the owner.

(e) Roofs

The Surveyor will inspect the roof spaces if applicable if there is a safe working platform available to work from. Where no safe working platform or access is available, the roof spaces will not be inspected using binoculars, but will be excluded if they cannot be seen.

(f) Boundaries, Grounds and outbuildings

If applicable and where reasonable access is available the inspection will include boundaries, grounds and permanent outbuildings but will not include temporary buildings or structures.

(g) Services

If applicable, the Surveyor will carry out a visual inspection of the service installations, as instructed. Drainage inspection covers will be lifted where they are reasonably accessible and it is safe and practicable to do so. No tests of the service installations will be carried out unless previously agreed, although general overall comments will be made where reasonable and practicable. The Surveyor will report if it is considered that tests are advisable. Specialist inspection of electrical installations or gas mains will not be undertaken.

B CURRICULUM VITAE

- B.1 This report has been prepared by Robert Benjamin Sunderland, Partner in Platt White Partnership, Chartered Building Surveyors and Consulting Engineers of Nova House, 94 Boughton, Chester, CH3 5AQ.
- B.2 I have been a Professional Member of the Royal Institution of Chartered Surveyors since 2002 and hold the post nominals M.R.I.C.S and (Hons). I graduated with a Bachelor of Science Degree in Building Surveying in 1993.
- B.3 I have 23 years' experience of commercial and residential building surveying working mainly in the areas of defect diagnosis and repair, survey and dilapidations and neighbourly matters including party wall and boundary disputes. I have experience of the design and project management of extensions and refurbishment of commercial and residential buildings. I am currently acting on behalf of several clients in relation to defective building work.

C INSTRUCTION

- C.1 I have been instructed to inspect Dutton Farm Barns to report on the structure of the existing barn buildings, taking into account a proposed scope of works for its conversion to habitable accommodation.
- C.2 No other elements or buildings have been commented on as this is outside the scope of our instruction. We have not undertaken calculations of existing elements or designed replacement elements.
- C.3 Trial holes have not been excavated.
- C.4 We are unable to comment upon any concealed area of the structure and as such some additional defects may be present. If we believe that there are any hidden defects, we will highlight the fact and either request further investigation or recommend how to proceed.

BUILDINGS D.1 The property is a range of single and two-storey brick build barn of 330mm (13 inch) & 225mm (9 inch) thick brickwork of a modified English garden wall bond, stepping in at certain locations such as gables. We will reference the property as the front elevation of each barn being the courtyard elevation. D.1.1 There are two main barns that we have been requested to inspect these being Barn A (South most Barn) and Barn B (Northern most Barn). Barn A has a single story element to the South East end and both barns are connected by a single story link. The barns are set within the curtilage of a farm and farm house D.1.2 The ground floor slabs are of concrete generally with some areas of brick all being D.1.3 relatively uneven. The first floors are of suspended timber, supported on brick walls, steel props or steel D.1.4 beams. D.1.5 The roof is of slate of asbestos sheeting cover supported on basic purlin and rafter construction on inner walls and detailed roof trusses. D.1.6 Timber doors and windows of differing styles are provided to front, left and right elevations. D.1.7 The external ground level to the perimeter is approx. 100-150 below slabs. E **FINDINGS** E.1 BARN A: ROOF: The roof is of slate cover over timber structure. E.1.1 The rafters are supported on purlins, trusses and walls. These appear to be in a fair condition with isolated rot due to water ingress. E.1.2 The purlins are supported on gable ends and inner detailed trusses. The trusses are in a fair condition. The original purlins can possibly also be reused when treated and cleaned. E.1.3 The slate will need to be removed and stacked for re use or disposal depending on the approved final finish of the roof. E.2 WALLS GENERAL: The walls were noted to be of varying thickness but the predominant thickness was 330mm 1 1/2 brick thick (13 inch) to the ground floor. There were no signs of foundation failure, major structural cracking or overloading to any of the walls. Loss of lateral restraint was noted however to front and rear walls.

- E.2.1 FRONT COURTYARD ELEVATION: The elevation is 330mm to ground floor and 225mm to first floor with brick arches and timber lintels being provided over doors and windows.
- E.2.2 The pointing was weathered in places to the elevation and spalling was noted. The walls have been patched in the past but this is only an aesthetic matter.
- E.2.3 Lateral restraint plates are noted to ends of first floor beams to this and rear elevation. This elevation has a self-seeded tree growing to the left side which has caused damage to the wall and loss of lateral restraint has occurred. Part of this wall will need to be removed and rebuilt.
- E.2.4 LEFT GABLE ELEVATION: This gable with single storey element. This is in a fair condition and a Dove cot was noted at high level, minor weathering of pointing that will require rectification.
- E.2.5 REAR ELEVATION: The rear elevation has the single-story element to the right with link to left. The single storey element to the right has been affected by impact damage to the 225mm wall and this will need to be rebuilt in any conversion.
- E.2.6 The main walls were again of 330mm and 225mm with 5 lateral restraint plates at ends of steel beams. A render plinth was noted to the right side. The bricks again were weathers with some spalling and isolated reinstatement would be required.
- E.2.7 RIGHT GABLE ELEVATION: This gable was again noted to be 330mm and 225mm and was of English garden wall bond, minor spalling but no major defects. This is partially concealed by single storey link.
- E.2.8 All walls will need to be upgraded thermally internally to meet current thermal standards.
- E.3 GROUND FLOOR: This floor was of concrete and brick. The floor was uneven and would require to be excavated and reinstated in any conversion to comply with thermal requirements.
- E.3.1 FIRST FLOOR: The first floor is of suspended timber and has been affected by some rot and woodworm. This floor again would need to be removed and reinstated to comply with current loading, sound proofing and fire rating requirements.
- E.4 INTERNAL STRUCTURE: The internal brickwork was generally plumb but some cracking was evident due to loss of lateral restraint.
- E.4.1 When checked with a laser level and plumb bob the inner side of the external walls were relatively plumb to side and rear but the front elevation dis belly out due to action of self-seeded tree and loss of lateral restraint and part of elevation will need to be lowered and rebuilt..

- E.5 DOORS AND WINDOWS: All doors and windows will be upgraded within the conversion to meet thermal requirements and added security.
- E.6 SERVICES: All services will need to be upgraded in any conversion.
- E.7 BARN B:
 ROOF: The roof is of Cementous asbestos cover.
- E.7.1 The rafters are supported on purlins, trusses and walls. These appear to be in a fair condition with isolated rot due to water ingress.
- E.7.2 The purlins are supported on gable ends and inner detailed trusses. The trusses are in a fair condition.

 The original purlins can also be reused when treated and cleaned.
- E.7.3 The roof is of Cementous asbestos cover and will need to be correctly removed and disposed of and replaced with approved material.
- E.8 WALLS GENERAL: The walls were noted to be of varying thickness but the predominant thickness was 330mm 1 1/2 brick thick (13 inch) to the ground floor. There were no signs of foundation failure, major structural cracking or overloading to any of the walls. Lateral restraint plates and bars were noted to the front and rear elevations.
- E.8.1 COURTYARD ELEVATION: The elevation is 330mm to ground floor and 225mm to first floor with brick arches and timber lintels being provided
- E.8.2 The pointing was weathered in places to the elevation and a small amount of spalling was noted. Past patching and infill of windows is noted and the right side is an addition but of some age.
- E.8.3 The left side of the elevation has also bee rebuilt in the past with differing bricks being noted.
- E.8.4 LEFT GABLE ELEVATION: This gable was noted to be of a stock brick with large ground floor opening and all lintels to elevation were of concrete. No major issues noted.
- E.8.5 REAR ELEVATION: The rear elevation is of two differing bricks with the right side being rebuilt in the past, lateral restraint bars noted to the older right-hand section. The walls were noted to be relatively plumb however.
- E.8.6 Spalling of bricks and weathered pointing was noted to the elevation. A render plinth being present to the left side along with past rebuilding of left corner element.
- E.8.7 RIGHT GABLE ELEVATION: This gable was again noted to be 330mm and 225mm and was of English garden wall bond, minor spalling of bricks and mortar but no major defects.

- E.8.8 All walls will need to be upgraded thermally internally to meet current thermal standards.
- E.9 GROUND FLOOR: This floor was of concrete and brick. The floor was uneven and would require to be excavated and reinstated in any conversion to comply with thermal requirements.
- E.9.1 FIRST FLOOR: The first floor is of suspended timber and has been affected by some rot and woodworm. This floor again would need to be removed and reinstated to comply with current loading, sound proofing and fire rating requirements.
- E.10 INTERNAL STRUCTURE: The internal brickwork was generally plumb with no major defects noted.
- E.10.1 When checked with a laser level and plumb bob the inner side of the external walls were relatively plumb.
- E.11 DOORS AND WINDOWS: All doors and windows will be upgraded within the conversion to meet thermal requirements and added security.
- E.12 SERVICES: All services will need to be upgraded in any conversion.

RECOMMENDATIONS ON DESIGN AND STRUCTURAL STABILITY OF BARN

- F.1 BARN A
 - **EXISTING WALLS:**
 - FRONT ELEVATION: The front elevation will require some rebuilding due to self-seeded tree and loss of lateral restraint, normal thermal upgrade required internally and aesthetic repair externally.
- F.1.1 REAR ELEVATION: The single storey element will require to be partially rebuild due to impact damage, normal thermal upgrade required internally and aesthetic repair externally.
- F.1.2 RIGHT ELEVATION: No major issues, normal thermal upgrade required internally and some aesthetic repair externally.
- F.1.3 LEFT ELEVATION: No major issues, normal thermal upgrade required internally. Some aesthetic repair.
- F.2 NEW INTERNAL WALLS: The new walls will be constructed off a new engineered designed inner raft/slab. This will have the effect of removing all loads off the existing external envelope.
- F.2.1 The new roof and floor loads will be supported of inner block walls constructed of the new raft. The existing foundations/walls can also be supported on the raft with 20mm reinforcement bars drilled in at 400mm centres set within the raft's reinforcement

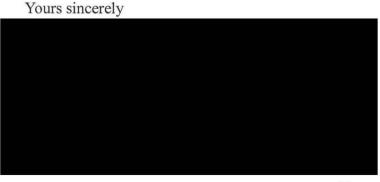
- F.3 BARN B
 - **EXISTING WALLS:**

FRONT ELEVATION: No major issues, normal thermal upgrade required internally and aesthetic repair externally.

- F.3.1 REAR ELEVATION: No major issues, normal thermal upgrade required internally and some aesthetic repair externally.
- F.3.2 RIGHT ELEVATION: No major issues, normal thermal upgrade required internally and some aesthetic repair externally.
- F.3.3 LEFT ELEVATION: No major issues, normal thermal upgrade required internally. Some aesthetic repair required.
- F.4 NEW INTERNAL WALLS: The new walls will be constructed off a new engineered designed inner raft/slab. This will have the effect of removing all loads off the existing external envelope.
- F.4.1 The new roof and floor loads will be supported of inner block walls constructed of the new raft. The existing foundations/walls can also be supported on the raft with 20mm reinforcement bars drilled in at 400mm centres set within the raft's reinforcement

G. CONCLUSIONS

- G.1 The barns are suitable for conversion but some sympathetic isolated rebuilding will need to be undertaken to ensure long term stability of the building and to reverse some of the neglect and damage caused over the past years.
- G.1.1 The barns will need to be upgraded for thermal and current building control standards with full building regulations being required. All details with regards to building control will be standard practices with no special requirements needed.
- G.1.2 The barns are more that capable of being converted with the correct structural design internally and aesthetic upgrade of external elevations to include removal of spalled bricks, rebuilding of defective areas and repointing to all.





Barn A Front elevation



Barn A Rear elevation



Barn A Rear elevation single element.



Barn A Right elevation



Barn A Left elevation gable.



Barn B Front elevation



Barn B Left elevation



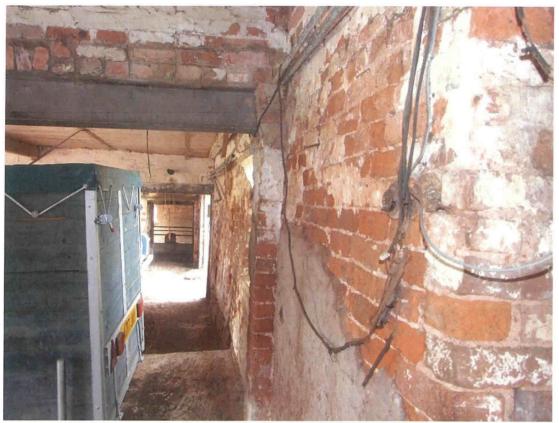
Barn B Rear elevation



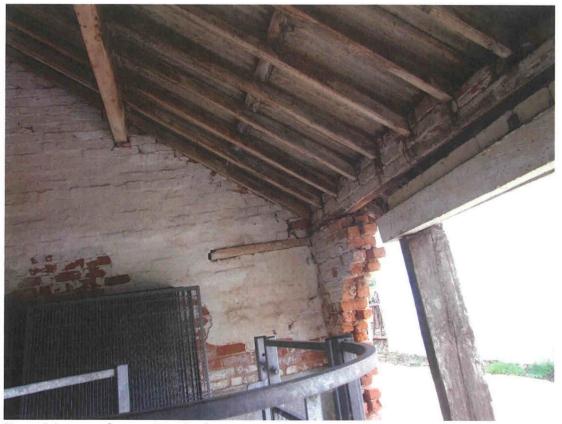
Barn B Rear elevation



Barn B Right elevation



Barn A rear wall internal



Barn A impact damage to single story.



Barn A first floor, minor cracking due to deflected beam.

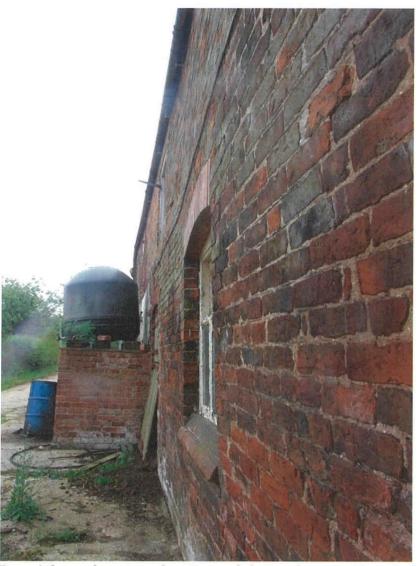




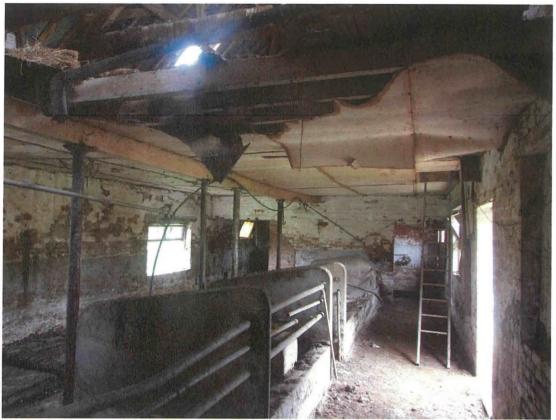
Barn A showing self-seeded tree and damage.



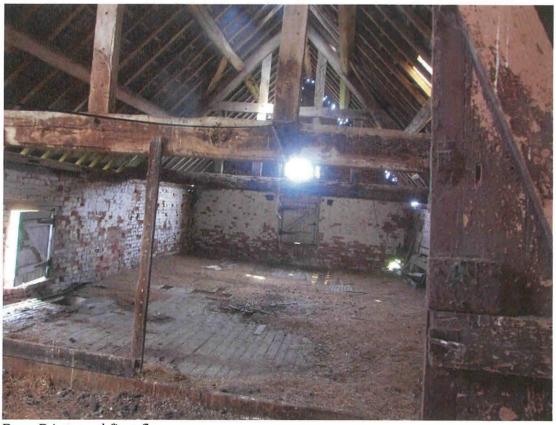
Barn A showing end of inner beam supporting floors with plate.



Barn A front elevation, showing undulation due to self-seeded tree and some loss of lateral restraint.



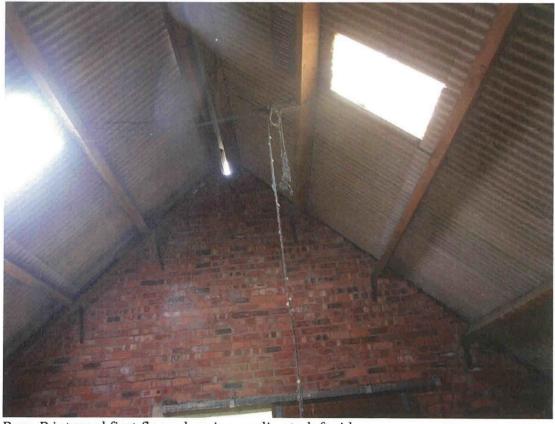
Barn B internal ground floor.



Barn B internal first floor.



Barn B internal first floor showing truss configuration central and right side.



Barn B internal first floor showing purlins to left side.