



<p>Purpose of Survey</p>	<p>The inspection was requested by Wendy Evans, owner of the property.</p> <p>Having undertaken Pre-Application discussions with the Local Authority Planners, Ms Evans is considering changing the use of the premises to Holiday Let.</p> <p>The purpose of the report is therefore to establish the structural condition of the building in support of a Planning Application paying due regard to the general condition of the building and its suitability for renovation to holiday let accommodation.</p>
<p>Brief</p>	<p>Brief agreed with Ms Rhiannon Morgan of Dewis Architecture, on behalf of Ms Evans, in EWP email dated 7th January 2020, reference Q1141, and instructed by email from Ms Rhiannon Morgan, on behalf of Ms Evans, dated 13th May 2020.</p> <ul style="list-style-type: none"> • Undertake site visit to review condition of existing property including inspection of trial holes, • Provide report on findings including any recommendations for further intrusive investigations or specialist inspections, • Make comment on the trial hole findings with relation to suitability for conversion, • Make comment on the condition of the building and its suitability for the proposed use • Review the elevations and confirm areas of re-build required based on the inspection • Our observations will be based upon a visual inspection of the property only from ground level and inspection of the foundation trial holes.

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<p>Survey Details</p>	<p>Survey was undertaken by Mrs Emma Hackney on Wednesday 10th June 2020 at which time the weather conditions were cool, dry and overcast.</p> <p>A number of photographs were taken and some of these are included in Appendix A. Others have been retained on file.</p> <p>Sketch Plans and elevations indicating the proposed extent of required repairs have been prepared and are included in Appendix B.</p>
<p>Occupancy</p>	<p>The building is currently unoccupied and has been used until recently as stables.</p>
<p>Property Description</p>	<p>The property is a single-storey detached building located at the end of a grassed access track and surrounded on three sides by paddock land (photo 01). To the fourth side, the northwest gable forms a property boundary, with the garden of a dwelling beyond. Mature trees are located adjacent to the northwest gable (photo 23), and there is evidence of a tree having been relatively recently removed adjacent to the southeast gable (photo 11).</p> <p>The roof is generally duo pitched covered with corrugated metal sheeting supported on timber purlins and ridges spanning between loadbearing walls. The roof over room 4 is mono pitched falling towards to gable supported on timber members spanning between the surrounding walls; this area of roof appears to be of a temporary or remedial nature. There were no rainwater goods on the building.</p> <p>The property has solid concrete ground bearing ground floor slabs.</p> <p>The external elevations, except for the front wall to room 4, are constructed in solid stonework, with large stones and areas of smaller stone infill, held in a mortar matrix (photo 31). The front wall to room 4 is formed in brickwork roughly bonded into the adjacent stonework (photos 02 and 12).</p> <p>The stone walls were measured to generally be in the order of 400mm - 500mm thick. Window and door lintels are formed with single pieces of slate, and slate sills and side mullions are provided to the windows (photo 09).</p> <p>Internally rooms 1, 2 and 3 are rendered to approximately mid height.</p> <p>Internally, the walls are of a similar construction to the external walls and there appears to be an infilled door between rooms 1 and 2 (photo 26). The internal walls are loadbearing providing support to the roof purlins.</p> <p>The property is constructed on a gently sloping site, with the property being set into the slope, the gable and rear walls retaining approximately 400mm – 600mm.</p> <p>The British Geological Survey web mapping indicates no recorded superficial geology, with Padarn Tuff Formation igneous bedrock.</p>

<p>Extent of Survey</p>	<p>Our observations are based upon a visual inspection and intrusive inspection of the foundations.</p> <p>All external observations undertaken from ground level and accessible internal floor levels; the report should be read taking account of this.</p> <p>Manhole/inspection chamber covers were not lifted to any extent during the survey.</p> <p>This report does not include for a damp survey, and damp meter readings were not undertaken.</p> <p>This report does not include for a full insect infestation survey, where signs of worm or insect activity is noted, a full specialist survey is advised.</p> <p>Inspection and appraisal of service installations (gas, electric, water etc) was not included in this survey.</p> <p>We did not undertake an asbestos survey and specialist advice should be obtained in respect of any asbestos based materials.</p> <p>The results of the survey are set out below and illustrated, where appropriate, by photographs in Appendix A accompanied by a reference plan.</p> <p>Reference to “front”, “rear”, “left hand” and “right hand” elevations and locations of individual rooms relate to the view of the building from the grassed area at the end of the access track. Elsewhere, “left” and “right” hand sides are in relation to the elevation being discussed.</p>
<p>SURVEY RESULTS</p>	
<p><u>External Inspection of the building</u> General</p>	<ul style="list-style-type: none"> • When viewed from a distance the external elevations appeared in reasonable overall horizontal and vertical alignments, unless noted otherwise. • The elevations did not display evidence of significant bulging or displacement from the vertical, when viewed from a distance, unless noted otherwise. • The inspection did not find any areas of significant cracking or structural distress, other than as noted below. • The ridge line, when viewed from a distance, ran true and level (photo 01).

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<p>Front elevation (photos 01-03, 08-11, 30)</p>	<ul style="list-style-type: none"> • The inspection found the front elevation wall to room 4 to consist of a mix of stonework and brickwork and in poor condition towards its head (photo 02 and 12). • The inspection noted repointing to the central section of wall between the doors to room 1 and room 2. The pointing was flush with the face of the stonework and appears of a “hard” cementitious type material (photo 09). Towards the base of the wall the recent pointing is remote from the substrata and the growth of moss indicates that the wall becomes saturated. • A fall to the right of the door frame to the entrance to room 1 was noted, however the stone surround appeared square.
<p>South-east Gable Elevation (photos 13-16)</p>	<ul style="list-style-type: none"> • Whilst the growth of ivy partially obscured the elevation (photo 13), a slight inwards lean of the gable pike was noted. Internally it was noted that stonework was missing towards the head of the pike (photo 34). • Where tree stumps remained to the right-hand side of the elevation a vertical crack was noted in the stonework, albeit a close inspection was not available due to vegetation growth (photo 14). Internally in this location a vertical crack was noted running from a 4mm wide crack at ground floor to an approximately 50mm wide crack at the bearing of the front purlin (photo 33).
<p>Rear Elevation (photos 16 - 23)</p>	<ul style="list-style-type: none"> • Ivy growth obscured the right-hand side of the elevation, albeit no signs of associated structural distress where visible (photo 17). • Towards the left hand side of the elevation a temporary opening has been formed at some point in the past. The stonework has not been made good around this opening, and the disturbance has extended to the internal division wall between rooms 2 and 3 immediately adjacent to the opening (photos 19, 20 and 21). • A vertical crack was noted within room 2 to the wall corresponding to the location of disturbance noted above (photo 27) • The inspection found that the rear wall to room 4 was in part dry laid (photo 06)
<p>North-west Gable Elevation (photos 13-16)</p>	<ul style="list-style-type: none"> • The gable wall formed the boundary to the property and as such an external examination was not possible. We viewed internally it appeared in good condition other than a distinct localised bulge / inwards lean towards the front corner (photos 3 and 4). A large tree was noted near this corner of the building.
<p><u>Internal Inspection</u></p>	

<p>of the building General (photos 24-34)</p> <p>Trial holes</p> <p>TH1 (photo 15)</p> <p>TH2 (photo 18)</p> <p>TH3 (photo 03)</p>	<ul style="list-style-type: none"> • The inspection found no structural defects of note other than those referenced above relating to corresponding defects in the external elevations. • The trial hole excavation found the stone wall to continue to approximately 800mm below ground level. It is noted that the gable wall retains approximately 400mm in this location. The stone wall increased in thickness by approximately 200mm and was founded on a very dense slightly silty, shaley sand with frequent cobbles. • The trial hole excavation found the stone wall to continue to approximately 800mm below ground level. It is noted that the rear wall retains approximately 400mm in this location. The stone wall increased in thickness by approximately 200mm and was founded on a very dense slightly silty, shaley sand with frequent cobbles. • The trial hole excavation found the stone wall to continue to approximately 840mm below ground level. The wall was founded on a very dense slightly silty, shaley sand with frequent cobbles.
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CONCLUSIONS / RECOMMENDATIONS

Based on the findings of the visual inspection and intrusive trial hole we are of the considered opinion that the building is in generally good condition for its age and previous use and is suitable for renovation as discussed with the Client.

The building appears structurally sound and suitable for conversion without major reconstruction of the existing walls.

The majority of original stonework walls appear to be in a good condition and considered to be stable and suitable for maintaining, with isolated areas of stonework requiring reconstruction because of damage due to vegetation / previous works to the building to form a temporary rear opening as highlighted on the plan in Appendix A. Stone masonry should be salvaged for re-use as part of any renovation works.

To the front elevation, between the entrance doors to rooms 1 and 2, historic repointing indicates that the panel may have been subject to weathering previously. Moss present to the base of the wall indicates a degree of ongoing saturation. This in turn appears to have led to further degradation of the original soft pointing and debonding of the more recent pointing. It is

recommended that the "hard" repointing in the panel is removed and that it is repointed in a lime-based mortar. Any renovation works should then address the cause of the saturation including the potential installation of rainwater good and removal of the concrete slab which abuts the front elevation potentially causing splash back.

The crack to the south east gable to room 1 appears most likely associated with the growth of the tree immediately adjacent to the front corner of the building, most likely due to the physical growth of the stump and roots, rather than the effect on the bearing stratum which is predominantly sandy in nature. The remains of the tree should be removed, and the wall locally repaired / rebuilt as required to ensure the long term structural integrity.

Where ivy growth is removed, repointing should be undertaken as necessary.

The slight inward lean of the gable pike to the south-east elevation appears likely due to the removal of the stone internally local to the pike. Whilst the degree of out of alignment is not structural significant as this time, it is recommended that this is locally rebuilt to ensure long term structural stability.

The crack in the division wall between rooms 2 and 3 appears due to the disruption to the stonework caused by the formation of the temporary entrance to the rear. We recommend that the stonework to the rear be made good including local rebuilding of the internal return wall as required.

Within room 4 the rear section of "loose laid" stonework should be rebuilt using a suitable lime-based mortar to provide structural integrity.

It is further recommended that the front section of the north-west gable wall in room 4, which was observed to bulge inwards, is reconstructed plumb above the retained ground level, and that the poorly constructed upper section of brickwork / masonry to the front elevation is rebuilt to ensure long term structural integrity.

We understand that it is proposed to replace the existing roof covering with a slated roof. Generally, the head of front and rear walls require regulating to take a wall plate to support common rafters for replacement of the roof. In addition, due to the increase in weight of the roof, the roof purlins and ridges will require replacement with suitable members.

Stability of the walls will need to be considered and addressed when the roof is being removed and in a temporary unsupported condition.

It is considered that the increase in foundation loads from the replacement of the roof during the conversion works is nominal when considered in relation to the self-weight of the walls and also taking into account the consistent dense bearing stratum. The foundations are therefore considered suitable for the outlined renovation of the building.

The proposed renovation will need to provide new gutters and downpipes connected to a suitable drainage system away from the property.

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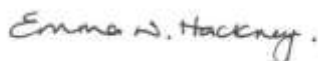
No form of damp proof course was identified in the external stone walls and it may be necessary to provide an appropriate form of DPC within the walls and / or tanking to the partially retaining rear and gable elevations.

In summary, we are of the considered opinion that the existing structure is suitable for renovation, with minor rebuild of the existing walls being required as outlined in sketch drawings in Appendix B.

• **RIGHTS OF ORIGINATOR**

- This report is for the sole use of Ms Wendy Evans and/or her professional advisors. It must not be reproduced or transferred to any third party without prior written permission of the author
- We will consider the reissue of the report in its original form to a third party within six months of the original inspection date for an administrative fee (currently 50% of the cost of the original report)
- Upon the lapse of a six-month period from the date of inspection, the report can only be reissued following a full re-inspection which will be charged at a full survey rate
- We reserve the right to refuse copies of the report to any third party (other than those named above)
- We reserve the right to amend our opinions in the event that additional information is made available

For and on behalf of
Evans Wolfenden Partnership Ltd
Report completed by



Emma N Hackney
BEng(Hons) CEng MStructE

Reviewed by



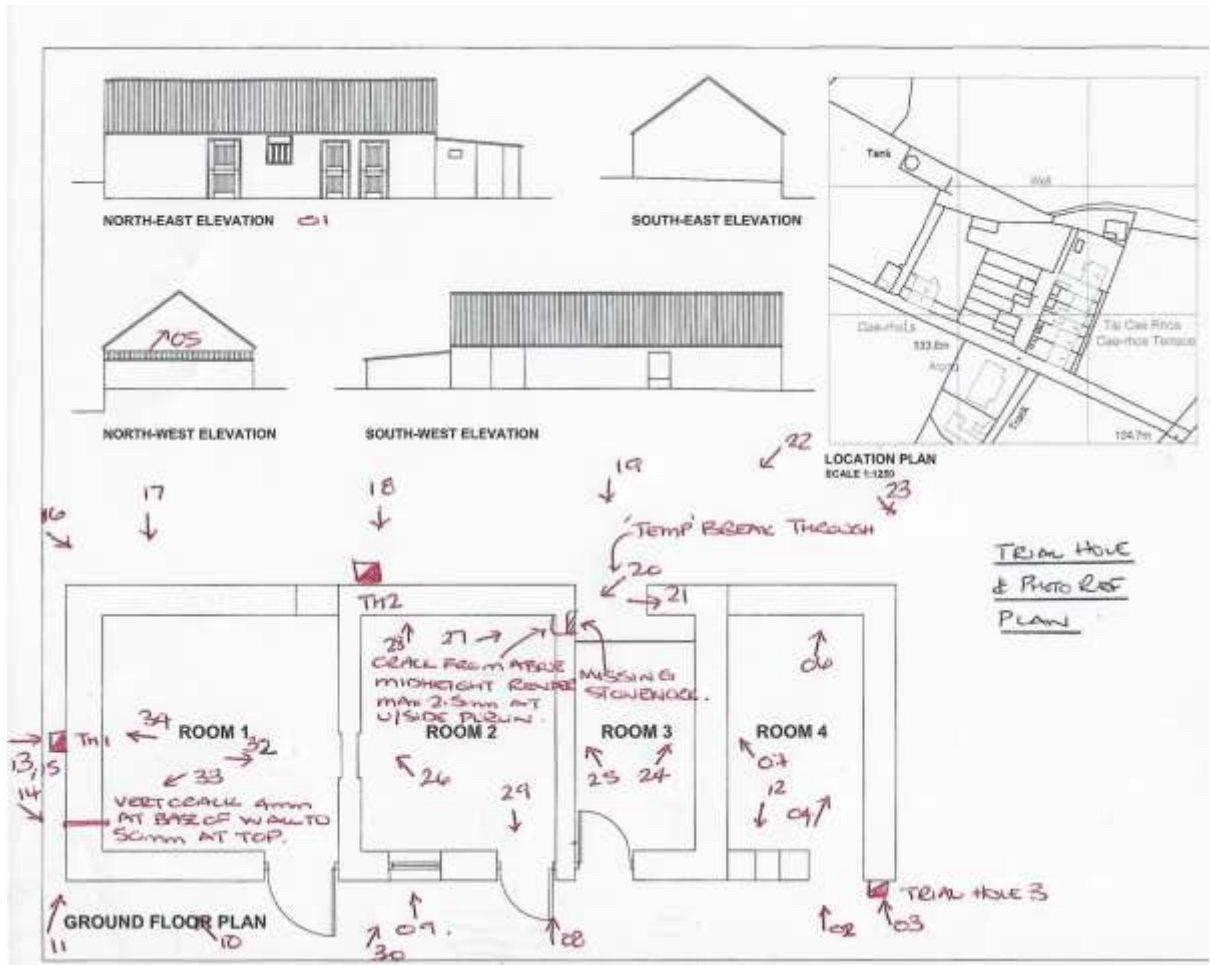
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Appendix A

Photograph Index

Key Plans and Photographs taken 10th June 2020

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01 - front (north east) elevation



02 - front elevation room 04

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03 - left hand end of north-west gable wall - note slight inward lean



04 - inside of north-west gable wall - note inward bulge local to end of wall



05 - gable pike to room 3



06 - rear wall to room 4 - note loose stone infill to upper right-hand side



07 - temporary roof structure over room 4



08 - front elevation to Room 02 and room 03 - note slope to left hand door frame does not extend to structural door head which appeared square

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09 - window to room 2



10 - front elevation to room 1



11 - tree located adjacent to south-east elevation



12 - inside of front wall to room 4



13 - south-east elevation



14 - south east elevation - note vertical crack adjacent to tree stump

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15 - south-east elevation - trial hole 1



16 - rear elevation



17 - rear elevation to room 1



18 - rear elevation - trial hole 2



19 - rear elevation - temporary opening



20 - missing stonework to division wall between room 3 and room 2 adjacent to temporary opening

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21 - rear elevation - typical wall construction



22 - rear elevation



23 - junction of rear elevation and north-west gable - note adjacent tree



24 - wall between rooms 3 and 4, from room 3



25 - wall between rooms 2 and 3, from room 3



26 - wall between rooms 1 and 2, from room 2

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27 - vertical stepped cracking to rear of wall between rooms 2 and 3 - from room 2 - note missing stonework on far side of wall



28 - inside of rear wall to room 2 - note uneven eaves level



29 - inside of front wall to room 2 - note dropped door frame but square door head



30 - front elevation wall between doors to room 1 and room 2 - note smooth, hard repointing works



31 - front elevation to room 1 - large stones with smaller stone infill



32 - wall between rooms 1 and 2, from room 1



33 - inside of room 1 gable wall - note vertical crack becoming wider with height



34 - inside of room 1 - external gable pike - note missing stonework

Appendix B
Sketch Plan indicating areas
of repair / rebuild required

