

JF/L469-003

Mr T. La Dell
Tom La Dell Landscape Architecture
Stocks Studio
Grafty Green
MAIDSTONE
ME17 2AP

10th October 2024

Dear Mr La Dell

**RE: THE AGRICULTURAL STORAGE BARN, FORMER NURSERY SITE,
STAPLEHURST ROAD, MARDEN, TONBRIDGE TN12 9BS - STRUCTURAL
REPORT FOLLOWING INSPECTION OF BUILDING**

- 1) It is proposed to convert an agricultural storage barn to residential Use. A site inspection was carried out on the 18th May 2023 to consider the structural suitability for conversion.

Description

- 2) The block is located to the north of Staplehurst Road and is accessed via an unmetalled road that runs to the west side of the plot and to the front of The Barn and the Agricultural Storage Barn. The road provides access to other agricultural buildings and a residential property.
- 3) The building includes concrete blockwork external and internal walls. The roofs to all areas are a timber-joisted mono-pitch, falling to the rear, with fibre-cement or profiled metal roof sheets over. There are 4 No. areas which have been used for storage of agricultural/horticultural materials and a larger storage area at the northern end with metal gates.
- 4) A range of full-height and half-height blockwork walls divide the areas along the building with timber studwork walls also in place. The storage areas have been built from a concrete slab foundation, which steps in level between the northern and southern areas.

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- 5) Most of the storage areas do not appear to be in use currently but there are some remaining pieces of equipment and wooden and cardboard boxes within them. The concrete forecourt to the front is overgrown and access to the northern end and rear of the building somewhat restricted by dense undergrowth. The building was measured externally as 5.2m wide and 33.6m long, 2.7m to high eaves level.
- 6) The front of the building faces west, towards the access road, with The Barn located approx. 20m to the west, with the access road immediately to the west of it. As noted above, the southern end of the building is divided into storage areas, which have horizontally split doors and windows at higher level.
- 7) There is a substantial mature oak tree approx. 4-4.5m from the centre front of the stables of some 18 to 20m height. Access to the southern elevation was not possible externally due to the presence of hedging and dense undergrowth. Access to the rear or east side was gained via the north end of the building where the undergrowth is less dense with hedgerow oak tree close to the rear elevation.

Observations

- 8) The British Geological Survey map sheet 288 covering the area shows the site to be underlain by Weald Clay with 2nd terrace river gravels found to the west of the site. The Weald Clay is a good founding subsoil but which can be greatly affected by moisture changes due to tree root extraction which can cause large changes in volume and hence movement of a building's foundations. Trial hole investigations of the building foundations will confirm their depth and the supporting subsoil beneath.
- 9) The Agricultural Storage Barn is situated to the north west side of the former nursey site, approx. 100m metres from Staplehurst Road close to the northern boundary hedge 6 to 7m from the northern end of the barn. The building was found within a plot containing other barns and storage buildings, all of which appear to be no longer in use with the site found in an overgrown condition. The plot falls slightly to the north east with ground levels generally level around the building.
- 10) The building was seen to be in generally fair condition with some cracking to walls, both due to thermal movement and other diagonal cracking and leaning of the walls due to some foundation movement to the rear of the building, possibly related to a rabbit warren or fox's earth found centrally around and under the rear wall. The roof structure was noted to be in variable condition but generally seen to be fairly watertight with no excessively decay members observed and the roof covering complete but with a build-up of tree debris and leaf mould present.
- 11) The Agricultural Storage Barn appears from GoogleEarth to have been built by 1960, with the extension to the north since that time. The building appears to have not been in use or occupation recently. Prior to your use from 1988, we understand that the building was used by deJager Bulbs who owned and operated this nursery plot, in conjunction with their ownership of the whole farm, and ran their business from the building to the north which currently fronts the Millbrook Garden Centre.

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- 12) A concrete floor slab, of unknown thickness, extends to the full area of the stables and storage barn internally and was found to be in good to fair condition with limited cracking and no significant fall measured. Externally, the rainwater downpipes were noted to be damaged and/or missing and discharging directly on to the ground adjacent to the barn. Mains water, electric supply and foul drainage was found at the stables but noted to not be connected currently.
- 13) As noted above, the plot boundary to the north is found near to the northern end of the agricultural storage barn with a domestic property, a recent conversion of a barn to residential, found close to the other side of this boundary. Access is made to the agricultural storage barn from the unmade road in front of and to the north of The Barn which fronts on to the road which provides private access to the neighbouring domestic property and a barn 50m or so to the north and is not a public footpath or bridleway.

Conclusions and Recommendations

- 14) We consider The Agricultural Storage Barn to be in fair condition and was found to be structurally robust and permanent. We consider that the buildings appear suitable for conversion to residential use. However, as is always the case, some minor works will be required to convert it into a habitable building. An outline of the likely works and the reasons for them are given below.
- 15) Some work may be required to increase the structural capacity of the roof, to support the additional weight of required insulation and internal finishes. We suggest that the internal lining walls and any cross-walls could be employed to provide necessary support without replacement or major works to the existing roof structure.
- 16) Damp and weather-proofing details will need to be provided to make a compliant habitable space. Trial holes will be required to expose the slab edge or foundations and supporting subsoil. Depending on the result of the investigations, the external walls may need additional foundations to support the external walls, but bearing in mind the previous use of the building it is considered likely that the existing ground floor slab will be suitable to support internal walls and structure.
- 17) The existing floor slab appears to be suitable for continued use with the application of insulation and finishes over, as required to comply with insulation requirements. Some areas of blockwork will require repair due to some foundation movement and damage due to impact from machinery and trees. This repair together with crack repair could be carried out using a stainless-steel helical bar system combined with the replacement of individual cracked blocks.

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18) In conclusion, we consider The Agricultural Storage Barn to be sound and stable, with no obvious structural barriers to prevent the conversion of these buildings to a dwelling under Class Q of the Town and Country Planning (General Permitted Development) (England) Order 2015 (as amended).

Yours sincerely

A solid black rectangular box used to redact the signature of James Folley.

**JAMES FOLLEY
FOR ALAN BAXTER PARTNERSHIP**



View across front of the Agricultural Storage Barn looking to north with neighbouring residential property visible beyond



View across front of barn looking to south



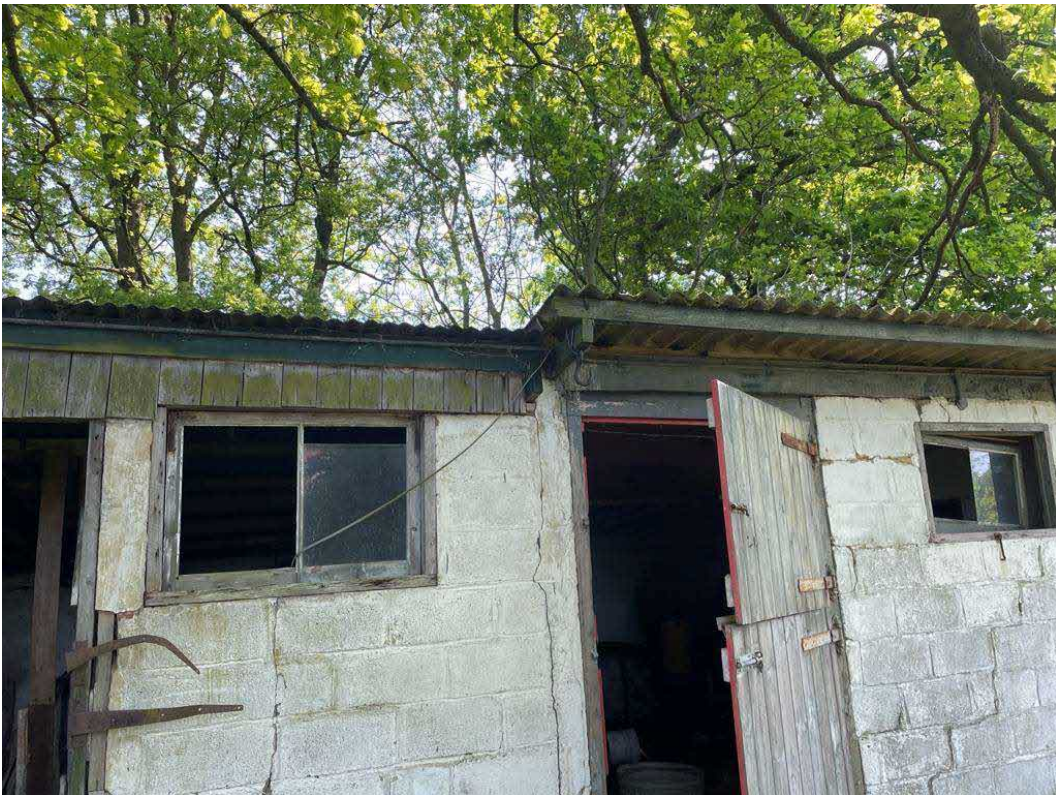
View from west looking toward barn showing mature oak tree in foreground



View on north end of building showing open side, roof structure and undergrowth



View along rear elevation of building looking south



View on connection between northern and southern ends of the barn with step in roof height shown



View of interior of stables showing timber purlin roof over stored materials