# STRUCTURAL SURVEY

1 MAY 2018

# PROPOSED BARN CONVERSION TO HOLIDAY COTTAGES THIRLEY COTES FARM, HARWOOD DALE, SCARBOROUGH FOR P&G DURBIN PROPERTIES

#### BACKGROUND

The barns at Thirley Cotes Farm round the courtyard would be built with the Farm House in the early 19<sup>th</sup> Century (Georgian). The remaining barn (Rowan) built outside the courtyard may be from a slightly later date.

The farm buildings are traditionally constructed in coursed stone under a clay pantile roof supported by king post trusses, purlins and rafters.

The attached photographs provide all the principle elevations of the buildings and these photographs generally demonstrate that the buildings are in reasonably sound condition with plumb walls and level roofs.

Attached is also drawing S1 which is a measured survey with plans and elevations of the existing buildings.

Thirley Cotes Farm House itself is a grade II listed building so the barns themselves will be considered as curtilage buildings to the listed building and therefore of additional significance in the National Park landscape.

#### **ROWAN BARN**

Rowan Barn is a barn with an open side to the north elevation with brick support piers and formed into four bays. As referred to previously this may be later than the other barns.

Within the last few years this building was refurbished by previous owners as a garage and a store. The roof has been completely replaced with new rafters, purlins and trusses and the walls have been repointed internally and externally. The walls are generally true and do not display any significant movement, the roof also does not display any signs of movement and is in good condition.

A timber division has been formed to one bay to form a secure store.

Clearly this building is in good / sound condition for conversion to a holiday cottage with minimal work required to the structure.

### **MULBERRY BARN**

This is the northern section of the western range of barns to the courtyard.

The walls and crosswalls are sound and true with no significant evidence of movement but they are in need of localised pointing.

The roof as the other barns is constructed with king post trusses with purlins and rafters. These are in sound condition but may need attention to localised rot where damp penetration has occurred.

The roof finish to Mulberry Barn in the main is asbestos sheet which probably replaced pantiles in the 1960's. This is probably a chrysotile form of asbestos which is not notifiable but clearly it would be sensible to remove it to a registered tip.

There is a lean-to projection to the west of the building which again may not be original. This has a lean-to rafter roof finished in pantiles; the roof is clearly in need of replacement although this is not structurally imminent.

The masonry to Mulberry Barn is sound but it would be prudent to fully replace the roof to ensure a sixty year lifespan for this curtilage building.

#### HORNBEAM BARN

Hornbeam is formed from the southern section of the western barn range to the courtyard together with a small individual barn on the southern range of the courtyard.

Concerning the small barn on the south range, this is constructed as before in coursed stone under a pantile roof with rafters, purlins and a truss. The masonry is generally sound and true, although in need of some localised pointing. The roof is also reasonably sound but wit localised damp ingress causing some rot.

The southern section of the western range is again coursed stone under a pantile roof with trusses, purlins and rafters and again the walls are true with no evidence of significant settlement but again some localised pointing is required. The roof is also sound for its age but again with localised damp penetration causing rot.

Again these buildings are sound and suitable for conversion to a holiday cottage. It is generally envisaged that the roofs will be fully replaced and finished with matching pantiles to give a sixty year lifespan. Externally the building should be effectively pointed and a gutter and surface water drainage system should be provided as this reduces water damage to the masonry.

## **GENERAL NOTE**

This survey is prepared by David R Bamford (BA Hons Arch, Dip Arch, Leeds, RIBA Chartered Architect) who has been responsible for hundreds of barn conversions over a forty year career. Relevant professional indemnity insurance is carried for all work.