Report on the archaeological inspection and recording of the Cruck Framed Barn at Hougher Fall Farm by Peter McCrone of McCrone Archaeology Consulting and Contracting Services, following small scale opening up works.

The Cruck framed barn at Hougher Fall was archaeologically recorded in Summer, 2015. During the recording work there were a number of features noted that were of potential interest but could not be fully examined as they were largely hidden within the fabric of the building.

This further report should be read in conjunction with the original recording report which shows the location of trusses within the building.

In October 2015 a further site visit was carried out with the architect, PGB Architectural Services, a technical expert on the restoration of timber framed structures, Robinsons Preservation Ltd, and the owner.

During the visit four main areas were examined, these were:

1. Base of Cruck 1 west blade
2. Base of cruck 1, east blade
3. Timber in walling at level of cruck spur on C1 west blade
4. Base of Cruck 2, west blade.
5. External edge of Cruck 2, west blade, exposed by small opening up area on exterior of west wall
6. Cruck 3, west blade, timber embedded in wall at level of cruck spur.

The base of C1 W appears to be in reasonably sound condition on the eastern edge, although some of the west edge seems to have suffered decay. No trace of holes or pegs used to stabilise the base of the cruck frame while raising the cruck was found.
The base of Cruck 1, E, is sitting on a stone pad. It appears that part of the base of the blade has been cut away and a second padstone inserted, with a notch left on the west edge, possibly to help prevent the base spreading.
3. Timber in walling at level of cruck spur on C1 west blade.

Embedded in the wall and visible in opening up to the north of Cruck 1 W, at a level just below the first (lower) cruck spur is a length of wood. This appears to be a piece of ash from a small tree or branch, roundwood with the bark present and a long scar where a wound in the tree has started to heal over a strip where the bark has been torn off. Similar in location, structurally, to a block at Cruck 3 (see below) this timber may have been to act as a bearer to spread weight pressing down from the spur, or more likely given the walls have been built up round the trusses to act as a tie within the wall to attach the stonework to the trusses more securely.

4. Base of Cruck 2, west blade. Reveals the base of the cruck blade within the wall. This appears to show a vertical crack and possibly horizontal joint suggesting possible splicing in of timber. This was not visible by eye as the area was in poor light when visited but shows on the photo below.

![Image of base of Cruck 2, west blade](image)

5. External edge of Cruck 2, west blade, exposed by small opening up area on exterior of west wall

This blade has a slab of concrete cast against the base and adjoining wall inside the barn. To allow inspection of the condition of the base of the cruck a small area was opened up on the exterior wall. This revealed that the base of the cruck blade had been cut short, at the level with the top of the concrete slab on the interior, and was sitting on the slab. The concrete had been cast replacing the inner skin of the rubble wall apparently using timber shuttering, cast marks of which were visible on the west face, embedded in the wall. There was no apparent sign of surviving timber or decayed remains so the concrete slab may have been cast freestanding and the wall rebuilt around it.
Base of cruck blade sitting on top of slab, cast marks on concrete visible below timber.
Detail of cut off foot of cruck frame and concrete slab supporting the blade.
6. Cruck 3, west blade, timber embedded in wall at level of cruck spur.

Embedded in the wall at the level of the upper cruck spur on cruck 3 (the southernmost), west blade is a block of dressed timber, noticed on the first recording work and further exposed to investigate extent and state of preservation. This is shallowly embedded in the masonry and extends behind the cruck blade, possibly, as the roundwood length at Cruck 1, acting as a tie to help hold the stone walls to the crucks and prevent spreading.

Timber built into masonry behind Cruck 3, W blade. Scale is 300mm long.
Scale resting on masonry under timber embedded in wall. The scale is 300mm and indicates that the timber extends for c.200mm at least behind the cruck blade on the right.

Conclusions.

The small scale opening up work has exposed several features which elaborate on the development of the barn from a cruck framed building with timber framed wall to a stone walled building. The crucks are apparently, on the whole, in good condition, with some minor areas of decay at the foot of Cruck 1 W where it was embedded in the wall, and possibly more severe problems have afflicted Cruck 2 W in the past, resulting in the removal of about 0.5 m of the foot of the cruck and its replacement with a concrete slab as a “padstone”. The presence of the two horizontal timbers at the level of the cruck spurs may indicate an attempt to ensure that the new stone walls of the barn were tied firmly to the cruck frame at the time that the stone walls replaced the timber framed predecessors. It is recommended that the same locations relative to the other cruck spurs are investigated to see if there are similar timbers in these locations.