Walters Farmhouse – A Dimensional Analysis.

This is a dimensional analysis of Walters Farmhouse in Tintinhull, for Ed Lorch. It is based purely on the SVBRG survey plan and therefore needs to be evaluated against the standing building. It uses gridding techniques, using known dimensions, to simplify complex building layouts and suggest different phases of construction. It is unlikely the original builders would have used grids, they would have simply used direct measurement. The techniques and units of measurement used are fully explained elsewhere.

Initial test, drawing 1

Jointed cruck buildings are frequently laid out in a Carpenters measure, 740mm. Therefore the initial grid was this dropped over the entire building. Initial inspection might suggest this is fine as it roughly picks out the length and width of the building. But from experience it looked wrong. Specifically the kitchen area where the beams were at an angle to the grid and there was an odd tapering wall.

Phase 1&2, drawing 2

The key to resolving the above can bee seen where the truss positions are located, at the bottom of the drawing. I have dropped a single row grid on these to measure them. You can see the first three trusses are spaced according to the grid. The second three trusses are similarly aligned. However the distance between truss 3&4 does not match the grid. This suggests there may be different build dates so we can consider two separate grids. Once we do this the left grid can be aligned with the tapering wall and ceiling beam.

Now things start to make sense, but it can be seen that the walls as they currently stand do not match the shaded grid. This is later rebuilding and will be dealt with in due course. You will note the mystery corbel now sits on line of the right wall. In the kitchen the 3x3 chamber to the left of the fireplace is a typical cob detail, as is the 1 unit wide chamber to the right. This might suggest an original smoke hood or similar. Note the ceiling beams do not align.

The suggestion is this building was occupied and the building to the right was a later extension, but not much later as it is using similar units of measurement. The misalignment is also a good indicator of different phases, the original wall being left in place till the extension was completed. The partition in phase 2 lines up nicely with the grid, suggesting it is in it's original location. Whilst F2 fireplace is noted as later, the opening could be part of this phase, but it is ambiguous as it also aligns with measurements in feet, see later drawing.

Phase 3, drawing 3

In phase 3 we see the replacement of Cob walls with stone. Generally this appears to happen after the dissolution of the monasteries, mid C16. It can be assumed that at this time there were a number of recently unemployed stone masons and lots of cheap stone. They work in different units. The Reed (11ft, 3352mm) appears to the unit. They divide this into 10, hence a grid of 335mm. (Some

may remember me talking about this measurement as North German feet, but this was confusing people so now I refer to it as "masons measurements", or "Reed/10")

Now the kitchen is complicated as it looks to have been modified in all phases. However it is notable the ceiling beams align with the grid, suggesting they are of this phase. The front wall is replaced at a thickness of 2 units. Normally any such alterations keep the inside line of the wall as it avoids replacing any older beams. Fireplace F3 is likely from this phase as it looks to be set out from the rear wall.

Phase 4, drawing 4

The final obvious phase is laid out in feet. The kitchen gets updated again, with possible replacement of the sides of F1. PT1 may have been inserted or repositions in this phase, but it also aligns with the previous phase so site inspection is required. I've not looked at all the walls in this phase, but the rooms to the North and the hall north wall all show signs of being from this phase.

Conclusion

This analysis cannot stand alone, and its accuracy depends on the quality of the plan it is based on. It should be used as a basis for further study of the standing building to confirm if the suggested phases are likely to be correct. Having said that, it does look to be a fairly convincing argument.

Dave Taylor <u>web@svbrg.org.uk</u> http://svbrg.org.uk/grids.php Somerset Vernacular Building Research Group

January 2023



Drawing 1: A grid that does not work



Drawing 2: Phase 1 & 2



