

Bridge of the Month 125. May 2021 Merry Harriers flood Damage

Sadly, I never got to see this little bridge intact. I heard about the flood damage and went to see what there was to see. I think it has now been replaced but it was [here](#). Even in the tattered remains, there is a lot to see.



What is left is rather less than half a bridge. The break is remarkably clean.



Look at that sag. The abutments have moved back more, nearer to the camera.



Here we get to see some details of construction. An arch ring two bricks thick. The relatively shallow curve may have allowed the engineer to bond through. There is a goodly layer of brick backing, which was surely rather deeper before the washout.



Looking closer, the spandrel wall is stepped and the lowest level is rendered.



From a different angle, there is a lump of displaced brick sitting at a jaunty angle. From here it is also clear we have 2.5 bricks or about 565mm in the ring.



The other half has some very different construction. First though, notice how few bricks have fractured on the longitudinal face. Most was just a butt joint with mortar.

Above the brick backing, there is a rubble stone inside face to the spandrel wall.



From here we can begin to see the extent of movement in the abutment.



Here, at around $\frac{1}{4}$ span, there seems to be an area better bonded across the width. Notice that gap between arch and spandrel, I suspect it is tight at the outside edge.



Is that very hard fill or rough concrete centre left?

And the surfacing is on a level with the last step in width as the spandrel reduces to the parapet.



A more general picture shows that this abutment, too, has dropped considerably. Look at the surfacing levels.



Viewed end on, the scale of the twist is impressive. I have heard the plastic theorems expressed in terms a structure will not fall down until it has exhausted all possible ways of standing up. Of course, that tells you nothing about serviceability.



Looking from the other side the view is not clear.



There is, though, a spectacular tilt on what remains of that abutment.



This view shows more. The abutment has completely broken up. Poor bridge didn't stand a chance.