



Bridge of the Month No 40, April 2014 Hereford Old Bridge



The most serious news this month

And for many months.

Is that piers are not as stable as I thought. The mechanism described in my paper at <http://www.icevirtuallibrary.com/content/article/10.1680/bren.11.00032>

says that the stabilising force is controlled by bending action between the two arch crowns. This in turn is controlled by elastic behaviour of the masonry over the full length of the viaduct. The diagonal between intrados at one crown and extrados at the next is not much longer than the horizontal distance between crowns so the wedging action is very limited.

I am working on the implications and will try to get more details out within the month.

The seminar in Hertford had to be postponed for lack of interest. That leaves three customers waiting for revised dates and places. Two of those were planning to travel from Scotland so perhaps I need to go there. Will try to sort that out too. I suspect that the Hertford event will have to be moved to London to make it accessible.

Seminar for CASE consultants in Torbay on 15th April

Talk to ICE Exeter city club 15th May



Bridge of the Month No 40, April 2014 Hereford Old Bridge



Some time ago (the date stamp on the photographs suggests almost exactly 4 years) I visited Hereford to see a FlexiArch erected. While there I found time to look at, and take a few photos of, [the mediaeval bridge](#). And when I look at that Googleplan view, the first thing I notice is that the bridge is skew, not severely so but enough to count as skew.



There is quite a mixture of spans here. The oldest are probably the semi-circular ribbed arches to the left and third from the right.



A closer look shows vestiges of ribs in the higher spans.

This picture also shows how the bridge has been widened by springing additional arches off the sloping face of the cutwater.



The north end of the bridge, shown above also gets noticeably wider. That means that the side shown here is more skew than the rest of the bridge.



A closer look confirms that the edge strip is a later addition.



The starlings around the piers are very evident here. This was a common approach to scour and creates inevitable difficulties with water flow through the much reduced channel.