

A supplementary note from Ian Anderson of the ICE Panel for Historic Engineering works.

HEW 1887

Barford Bridge (sometimes known as Great Barford Bridge) crosses the River Great Ouse, connecting Blunham & Great Barford parishes, and is the nearest public road crossing downstream from Bedford. Oriented SE (Blunham) to NW (Gt Barford), the bridge consists of 17 arches. Originally built from limestone & sandstone, it has been much altered and repaired over the years with a brickwork widening added on the west side in the 19th century. Numbered from Blunham (SE), approx. arch spans original/19th century widening: arches 1 & 2 10ft/12ft, arch 3 15ft/23ft, arches 4 & 5 15ft 6in/24ft 6in, arch 6 15ft 6in/26ft, arch 7 15ft 6in/24ft 6in, arches 8 & 9 15ft 6in/25ft, arch 10 16ft/23ft 6in, arches 11 & 12 16ft/23ft, arch 13 16ft 6in/20ft 6in, arch 14 15ft/21ft 6in, arch 15 15ft 6in/21ft 6in, arch 16 15ft 6in/21ft 6in, arch 17 10ft/10ft. All the original arches are pointed except arches 5 & 17 of segmental form. All the 19th century widened arches are pointed. Overall length is approx 517ft.

The earliest mention of Barford Bridge is in the will of Sir Gerard Braybroke of Colmworth in 1427, proved in 29, which mentions a bequest for the construction of a new bridge. John Leland described it in the 1530s as 'a great stone bridge of eight stone arches near the uplandish towne of Berford'. These are now arches 8 to 15 of the present bridge, working from the SE side. Further arches were added in the 17th century to aid navigation. The extra long piers would suggest that one extra arch was added on the Barford side and five flood arches on the Blunham side., the initials W S and the year 1704 being on a date-stone on pier 6/7. Some time in the 18th century, arch 17 was added to the north end and arches 1 & 2 to the south end. Two arches, 12 & 13, seem to have been rebuilt in 1781 by John Wing, the stone from Sandy appearing similar to that used at Girtford Bridge, which he built in the same year.

In 1817 traffic was so heavy that plans were drawn up to widen the bridge by laying timbers across the cutwaters on the west (upstream) side, the work being completed in 1818, increasing the width of carriageway from 12ft to 16ft. The solid parapet on the west side was replaced by an open railing. A few years later the east side parapet was similarly altered. The bridge was badly damaged by flooding in 1823. The SE corner collapsed and was rebuilt, and two damaged arches (1 & 2) needed repairs. Following the collapse of an iron bridge at Broom under the weight of a traction engine in 1873, the decaying widening timbers were replaced by decorative brickwork including pointed arches in 1874, hiding most of the medieval stonework as a result. Brick parapets were added on both sides with small buttresses every 13ft along the external face. On the west side (upstream) the cutwaters were extended up to the parapets in brick. Unfortunately the brick face began to separate from the stonework after twenty years, as the void between the two had simply been filled with debris & earth. In 1897 massive iron tie-bars, by Baker & Co of Bedford, were inserted at regular intervals along the length to restrain the walls. This has not prevented further movement between the tie-bars. Between 1971 and 1974 the inverts of two arches were lowered to allow navigation. Both sandstone & limestone have been widely used from the original construction onwards. Initially sandstone was used for the piers and limestone for the arches, but the extensions of 1704 consisted of alternate courses of limestone & sandstone. There have been widespread repairs in both materials.

Extensive repairs were undertaken by Bedfordshire CC between 1982 & 1991. Phase 1 covered the East spandrel wall between arches 16-17 (1982-3), phase 2 arches 15,16 & 17 (East & West) (1983-4), phase 3 arches 11, 12, 13, & 14 (East & West) (1984-5), phase 4 arches 8, 9 & 10 (East & West) (1985-7), phase 5 arches 4, 5, 6 & 7 (East & West) (1987-8), phase 6 arches 1, 2 & 3 (East & West) (1988-9), with phase 7 covering parapet repairs & carriageway reconstruction (1990-1).

References

Angela Simco & Peter McKeague., Bridges of Bedfordshire, Bedfordshire Archeology Monograph No.2 (1997), pp 26-30