

## **Looking inside Lennox Bridge, Parramatta, Australia**

**Ian Berger, Heritage Officer, Roads and Maritime Services, New South Wales, Australia**

**David Greenfield, ICE**

### **Abstract**

Lennox Bridge in Parramatta is a masonry arch bridge built in stages from 1836 to 1838 to service the primary agricultural route into that town which was the seat of the Governor of the Colony of New South Wales. It was the third bridge built at the crossing after the previous two timber structures had been lost to floods. David Lennox, its bridge builder had previously worked on several of Thomas Telford's major bridges before immigrating to Australia and his surviving works exhibit some of this technical skill. Major development works on this bridge in 2014 made it the focus of an archaeological excavation which gleaned valuable insights into early 19<sup>th</sup> century building practices that have not previously been published. These include the presence of a series of internal galleries within the masonry arch, a principle espoused by Telford, for the purposes of reducing weight on the arch and enabling future inspection. In addition a central wall located within the bridge appears to demonstrate the manner in which the bridge was built in two halves, enabling its more rapid availability to traffic. Furthermore, revealed within the bridge approaches was the stub of a masonry pier belonging to the previous timber bridge at the site which had been integrated into the construction. Presentation of these finds (which were only revealed as a process of destructive investigation) will focus on questions of technology transfer and best practice methods for masonry bridge construction as developed by Telford.