

## BRIDGE BEARING INSPECTIONS

**Project:** **M25 Gade Valley Viaduct - Hertfordshire**

**Client:** Connect Plus / Highways England / Geoffrey Osborne Ltd.

**Overview:** Gade Valley Viaduct near Kings Langley, is a 450 metres long multi-span composite viaduct carrying the M25 motorway between junctions 20 and 21. The viaduct comprises 11 spans that is composed of twin decks, where each deck is formed from 4 open topped steel box girders within an in-situ cast concrete slab.



**Supplied:** USL Ekspan carried out a detailed inspection of 166 pot bearings over a 7-day period. All evaluations were recorded and photographed for inclusion in a comprehensive report offering options for ongoing corrective and preventive maintenance measures.

**Project:** **Warden Rail Bridge - Northumberland**

**Client:** Balfour Beatty

**Overview:** The bridge spans the River South Tyne between Hexham and Haydon Bridge in Northumberland. This rail bridge is a steel, three span continuous half-through truss supported on two abutments and two piers loaded with ballast and carrying two rail tracks.



**Supplied:** USL Ekspan carried out an inspection of the 4 existing mechanical rocker bearings on the East and West abutments, followed by a subsequent inspection of the 4 no. pier bearings to ascertain their physical condition and their service capacity. All findings, conclusions and recommendations were provided in a report.

**Project:** **M4 Boston Manor Viaduct - Elevated Section, Brentford, West London**

**Client:** Geoffrey Osborne Ltd.

**Overview:** Boston Manor Viaduct is a steel lattice girder arched viaduct motorway bridge that carries the M4 over Boston Manor Road between junctions 3 and 2 in West London. Part of the viaduct also spans Thames Valley University Car Park, GSM Car Park and part of Boston Manor Park. The bridge is constructed from fabricated steel box sections and is braced horizontally & vertically with bolted steel sections.



**Supplied:** USL Ekspan inspected eight (mechanical roller and spherical bearings) of the existing twelve bearings supporting the steel lattice girder section of the Boston Manor Viaduct. A report was compiled detailing their condition and serviceability.

**Head Office**

Kingston House, 3 Walton Road, Pattinson North, Washington, Tyne & Wear, NE38 8QA, UK  
t: +44 (0) 191 416 1530 e: info@uslekspan.com www.uslekspan.com