

# River Doe Lea Bridge

Sheet piling stabilisation for bridge wing walls.



**AARSLEFF**

In September 2019, Aarsleff Ground Engineering were awarded the sheet piling contract near Staveley, Chesterfield. The bridge on the Seymour Link Road that crosses the River Doe Lea was showing signs of deformation, having only been constructed in 2016/17. The bridge had been continually monitored by the Derbyshire City Council for the severity.

Eurovia were contracted by the council to deliver the remedial works. They worked with Aarsleff to evaluate and refine the solution, which consisted of extending the wing walls either side of the bridge deck to stabilise the ground.

The client required that one of the two lanes on the bridge was kept open whilst the construction works were ongoing. As a result, Aarsleff adapted its method of working and equipment to cater for the limited working space.

68No. 10.5m long sheet piles were initially driven by Aarsleff's

Movax vibrator rig, which was then switched to an air hammer for the final couple of metres due to the challenging and hard ground conditions.

Aarsleff's Head of Pre-Construction Ashley Carter commented on the project saying:

*"We are pleased to work with Eurovia again on another slope stabilisation scheme, after delivering sheet piling on the A17 in 2018. We worked closely with them on designing and refining the final solution, along with installing the sheet piles utilising a zero-tail swing vibratory piling rig and impact hammer. A lot of careful planning was involved, with materials and logistics being arranged just in time to maximise the available space on site."*

Single lane traffic management was managed by main contractor Eurovia, enabling Aarsleff to complete the sheet pile installation to the client's satisfaction over a 6-week programme.



**Scope of Works**

68No. 10.5m long sheet piles

**Main Contractor**

Eurovia Contracting

**Main Client**

Derbyshire City Council

**Equipment**

Movax vibrator rig

Air hammer

**Construction period**

10th February 2020 - 25th March 2020

Aarsleff Ground Engineering Ltd, is the UK trading arm of Danish contracting giant Per Aarsleff A/S, and is one of the UK's leading piling and geotechnical design and installation specialist contractors; actively promoting early consultation to ensure each scheme can be Value Engineered to give clients the best service, quality design, safety and value. Aarsleff's strategy and philosophy of investment into the future has resulted in its wholly owned subsidiary Centrum Pile Ltd having the most advanced precast pile production facilities in the UK, producing segmentally jointed precast concrete piles to BS En12794 to Class 1A.

**Contact**

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