



Case Study

A425 CANAL BRIDGES

Client: Warwickshire County Council

Contractor: R & C Williams

Approved Installer: [Churchman Fenner & Brown Ltd](#)

PROJECT SPECIFICATION

Warwickshire County Council identified various problems at Nimrod and Shuckburgh bridges carrying the A425 over the Grand Union Canal. Remedial work including tying back the bridge wing walls was specified as a means of increasing the life span of the bridge. Limited access meant that specialist installation methods would need to be considered.

SOLUTION

Following extensive site testing by Churchman Fenner & Brown, it was determined that the S10 anchor installed to a depth of 7m at 20° below the horizontal would provide the best balance of retention force and ease of installation. A barge mounted excavator was employed, to ensure that installation was completed swiftly while allowing the canal to remain open to navigation. The anchor load was transferred to the wing walls using IP1 aluminium bronze pattress plates, providing an aesthetically pleasing finish. Churchman Fenner & Brown were also sub contracted to provide cathodic protection and concrete repairs to the bridge structure.

Anchor System: S10TB aluminium bronze anchor c/w 8m of 12mm Ø stainless steel wire tendon, 250mm Ø aluminium bronze inverted pattress plate and 12mm stainless steel wedge grip.

Quantity: 32 **Anchor Design Life:** 120 yrs **Soil Type:** Embankment fill

