



A861 SHIEL BRIDGE – ACHARACLE REFURBISHMENT OF FOUNDATIONS

Shiel Bridge is a three-span masonry arch bridge built in 1900. The masonry foundations were founded on soft silt which was stabilised by driving timber cofferdams to allow excavation of soft material and filling with concrete hearting. Deterioration of the timber piles and subsequent scouring had resulted in large voids below the masonry foundations endangering the stability of the bridge.

This contract was to form a new concrete filled greenheart timber cofferdam around the existing timbers. Subsequent filling of voids by drilling and grout injection. Lower sections of masonry were also injected with grout and repointed during the works.

In order to complete the works a large portable fabric cofferdam was placed around one pier and abutment to divert the river flow and allow the works to be completed in the dry.



CLIENT:	The Highland Council
ENGINEER / DESIGNER:	Wallace Stone
CONDITIONS OF CONTRACT:	NEC3 Option A
DURATION OF WORKS:	June – November 2011 (24 weeks)
CONTRACT VALUE:	£300,000

The River Shiel is a first class salmon fishing river and careful consideration to possible water pollution was the main driver behind the use of the non-intrusive portable dam system. After successfully completing the works on the south side of the river the dam was relocated on the north side where the operation was repeated.