





PROJECT NEWS

AQUEDUCT CONDUIT BRIDGES WATERPROOFING **PROJECT**

PROCESSES HELICOPTER ACCESS, WATERPROOFING, CONFINED SPACE WORKING

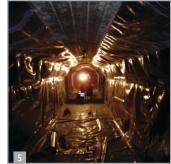












Stonbury Ltd carried out an innovative internal waterproofing system to a total of eleven conduit bridges bringing pre-chlorinated water from Lake Thirlmere to Bolton for distribution to the Manchester area.

Access to the bridges was sometimes so difficult as to require helicopter assistance, whilst for all others four wheel drive all terrain vehicles were used. The limited outage period combined with problems of ground water ingress and foul weather conditions meant that orthodox waterproofing systems could not be used.

- 1. External images of aqueduct bridge
- 2. Helicopter access
- 3. Aqueduct cleaned and ready for lining
- 4. Installation of geotextile backing fleece
- 5. Aqueduct lining complete

Relying on previous experience gained with similar but smaller schemes for other Water Companies, Stonbury were able to provide a successful alternative utilising prefabricated DWI Approved Polypropylene Sheet Membrane sections, site welded together.

A specially designed stainless steel fixing and termination system was employed, to ensure the total integrity of the system and a geotextile backing fleece ensured that no damage was caused in service from the variable concrete surfaces of the aqueduct.