

Bewl Water Spillway Remedial Works

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SYNOPSIS. Bewl Water is a major impounding reservoir in South East England, UK. In the mid-1990's an external inspection confirmed that the crest of the spillway shaft was suffering from severe cracking. A paper, by one of the authors, presented at the British Dam Society Conference in Bangor in 1998 described the investigation that was carried out to determine the cause of the cracking. This paper describes the remedial works contract that was undertaken to replace the pre-cast concrete crest blocks that were suffering from Alkali Silica Reaction, and paper describes the extensive temporary works over the top of the spillway shaft, the methods used to remove the existing pre-cast units and the design of the new units. The new crest units have been designed to allow the crest to be raised by 350 mm without the need for further major temporary works over the top of the shaft.