



**(A) BEFORE**



**(A) AFTER**

## WHEN STEEL FALLS SHORT

In 2015, Pipex px<sup>®</sup> supplied and fabricated two FRP bridges in Scotland. One bridge is located in the Craigenduntun Reservoir (A), covering approximately 24 acres and providing drinking water as well as supporting a recreational trout fishery. The other bridge is located in the Loch Craig Reservoir (B), covering 65 acres. Both footbridges serve as vital points for valve access to each individual reservoir. Over the years, the challenging environment of Scotland brought unwarranted aesthetic and safety concerns to each of the steel footbridges which were in place.

The water and sewage provider wanted a cost effective and durable structural alternative to steel. Pipex px<sup>®</sup> and an engineering firm worked together to design, fabricate, and install two almost identical bridges constructed entirely with FRP profiles.

Upon completion, the Craigenduntun Reservoir Footbridge measured 45' long x 4' wide x 5' high. The Loch Craig Reservoir Bridge came in slightly shorter, measuring 40' long x 4' wide x 5' high. Pipex px<sup>®</sup> assembled the bridges at its Glasgow facility for quality assurance and then disassembled them for delivery.

Both bridges were built to ensure corrosion resistance and structural durability using EXTREN<sup>®</sup> structural tubes, angles, and plates. SAFPLANK<sup>®</sup> fiberglass planking with an epoxy, anti-skid surface was used as a long-lasting pedestrian flooring solution. With the robust engineering services of Pipex px<sup>®</sup>, the design life expectancy of both bridges is expected to be more than 60 years. ●



**(A) AFTER**



**(B) AFTER**

### TECHNICAL DATA

Product:	FRP Reservoir Bridges
Process:	Pultrusion
Materials & Sizes:	EXTREN <sup>®</sup> Structural Shapes SAFPLANK <sup>®</sup> Planking with epoxy, anti-skid surface
For:	Pipex px <sup>®</sup>
User:	Scottish Water



Bristol Location  
400 Commonwealth Ave.  
Bristol, VA 24201-3820 USA  
(276) 645-8000, FAX (276) 645-8132  
[www.strongwell.com](http://www.strongwell.com)