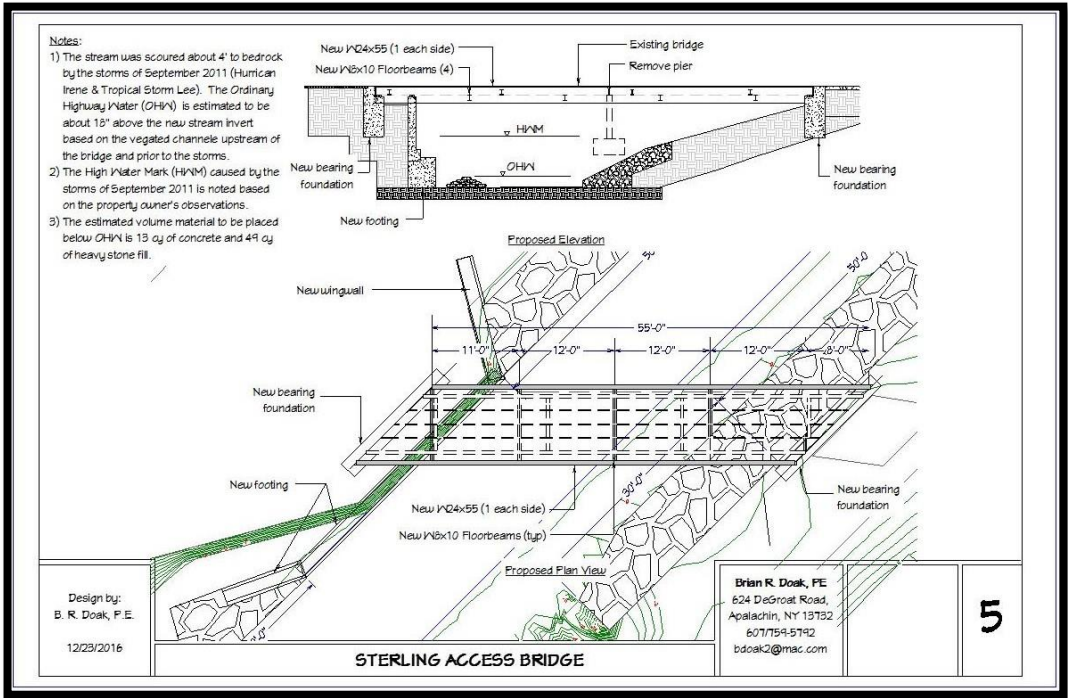


# STERLING BRIDGE



**PROJECT LOCATION**  
CASTLE CREEK, NY

**CLIENT:**  
MR. CHRIS STERLING

**CONTACT:**  
MR. CHRIS STERLING  
607-759-7492

**YEAR COMPLETED:**  
2011

**ESTIMATED COST:**  
\$0.150 M

Beautifully perched on a south-side ledge overlooking Glen Castle Creek, the Sterling family fell in love with their new home. However, the only access to their home was across a single span bridge crossing the creek and connecting to their north-side driveway.

The storms of 2011 and resultant flooding severely reshaped the stream channel and undermined the bridge abutments to the point where the Sterling family cross the bridge only by foot. Oil deliveries became an issue since the delivery truck could barely reach the thanks by parking on the north side and scaling the south embankment to deliver oil. Mr. Sterling called on Doak Engineering Design, PC to redesign the bridge to provide a secure and storm-resistant access bridge.

The new bridge design called for a single-span steel girder bridge with expanded steel decking. The mid-span pier was eliminated to avoid the heavy bed-load in storm events with this mountain stream. A new north abutment was placed behind the existing abutment for reduced vulnerability and the south abutment was reused as it sets well back from the main channel. We designed the bridge to resist floodwaters, and the resultant bed-loading, as well as to support oil deliveries and other similar loadings.