

RIDGELY BRIDGE

ANNAPOLIS, MD

Slip Resistant Steel Road Plates Help Expand Ridgely Avenue Bridge



THE SITUATION

The Ridgely Avenue Bridge over Weem's Creek, is known for its intimate waterfront and wooded residential surroundings. The original bridge was built in the 1920's with a trestle approach, but has recently been renovated. A construction worker was looking for a durable yet slip resistant steel plate which could be removed easily if needed to access the structural beams supporting the bridge. The removable steel plates needed to be able to support expressway traffic, 24 hours a day, 7 days a week. This new modern structure was built on the alignment of the original bridge, but it improved the roadway width from 20' to 30' and provided a new 5' wide sidewalk. The contractor needed a way to expand the width of the bridge while still keeping it structurally sound.

THE SOLUTION

Included within the renovation, SlipNOT® was asked to provide 1-1/4" slip resistant steel plates to be used as temporary bridge decking for the US-50 bridge over Weems Creek. These plates were installed down the middle of the bridge, which allowed the width they needed. The SlipNOT® plates were installed once the old concrete was taken out. The steel plates were removed after a couple years, and re-used on another side. Due to high traffic, the bridge needed the strongest alloy possible. SlipNOT® steel has a file hard surface between 55 - 63 on the Rockwell "C" scale and has a bond strength of at least 4,000 psi, which provides a long lasting and durable surface. This became the most optimal choice for Weems Creek Bridge because all SlipNOT® slip resistant products can be easily bolted and welded down to any bridge structure.

SlipNOT® Metal Safety Flooring is an approved vendor for several departments of transportation such as Michigan DOT, Texas DOT, Caltrans and several more, making them the right choice for the Ridgely Avenue Bridge.

THE IMPACT

The steel plates were installed and now provide Weems Creek with slip resistant, movable plates. The plates were painted gray to resist corrosion and provided slip resistance even while wet. They also upheld an aesthetically pleasing appearance and blended well with the concrete bridge. Due to the durability and versatility of the slip resistant road plates, the needs of several projects were met.