



## Lakefront Seawall Repair in Wisconsin

The owner of a marquee lakefront property near Genoa City, Wisconsin contacted Seawall Repair Network contractor Phase One Shoreline Solutions regarding their crumbling seawall. There was a 75-foot slope behind the wall, guiding rainwater down into the soil behind the structure. There was no drainage system in place, so the water in the soil created immense hydrostatic pressure over time. If the wall failed completely, the slope behind it would begin to erode into the lake, dramatically affecting the value of the property.



## Repair Materials

The contractor repaired the structure with Seawall Repair Network’s SW-RP1, the installation of pressure release technology, and concrete patching and waterproofing coating.

SW-RP1 Uncured (Appearance brown liquid)		
Viscosity at 77°F (25°C)	(ASTM D4878-98)	± 215 cP (± 215 mPa.s)
Density	(ASTM D3505-96 [2000])	± 70.92 lbs/ft <sup>3</sup> (± 1.12 kg/dm <sup>3</sup> )

SW-RP1 Accelerator, Accelerator for SW-RP1 (Appearance: yellow - orange liquid)		
Viscosity at 77°F (25°C)	(ASTM D4878-98)	± 75 cP (± 75 mPa.s)
Flash point	(ASTM D1310-86)	313°F (156°C)
Density	(ASTM D3505-96 [2000])	± 65.5 lbs/ft <sup>3</sup> (± 1.05 kg/dm <sup>3</sup> )

## **Procedures**

The crew began by injecting the high-strength SW-RP1 repair material into the soil behind the wall in order to provide structural support and stop water leaks. Next, they repaired the cracks in the wall with high-performance patching concrete. After that, they installed pressure release technology in order to prevent future hydrostatic pressure build-up. Finally, they coated the entire wall with waterproofing cementitious coating.

## **Results**

The dramatic before and after pictures included in this case study indicate the effectiveness of this repair job. The original strength and appearance of the wall were restored. Safeguards were put into place to alleviate the cause of degradation, thus preventing future damage. The customer emailed the contractor with a simple three-word response to this repair job: "I love it!"