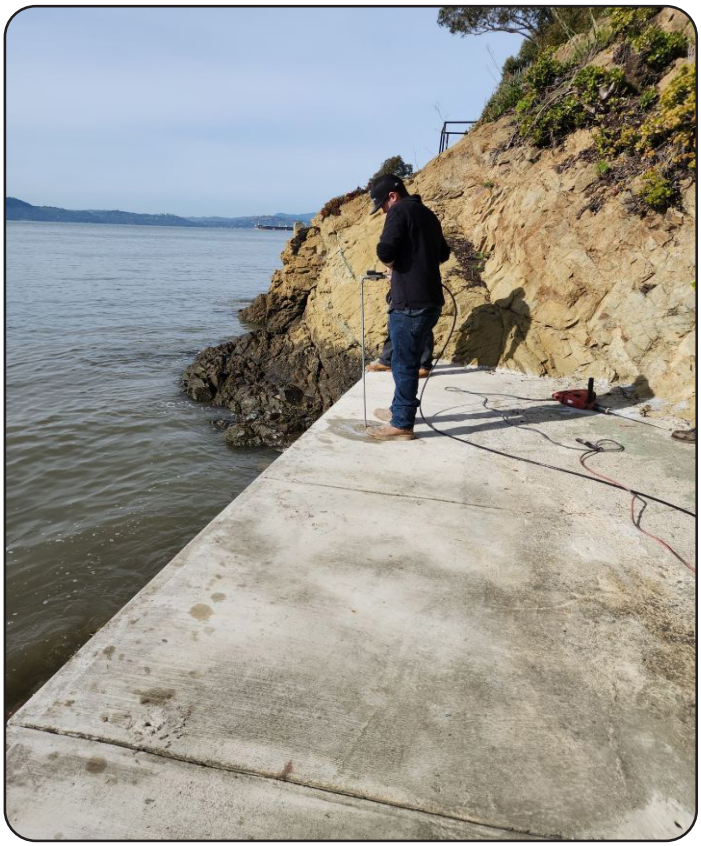
SEAWALL REPAIR NETWORK

Case Study

Reinforcing an Existing Structure in a "No-New Seawalls" Zone

A property owner faced a critical situation in a coastal area where new seawall construction was prohibited. Their existing 2-foot-tall residential seawall, complete with a walkway on top, showed signs of potential failure. A large void underneath the walkway compounded the risk. If the seawall collapsed, the ban on new construction would leave the property vulnerable. Fortunately, Seawall Repair Network® contractor Bay Area Underpinning was able to stabilize the existing structure. This timely intervention aimed to prevent failure and ensure continued coastal protection. The owner safeguarded their property by hiring an expert to reinforce the current structure while adhering to local environmental regulations.



Repair Materials

The chosen repair material was SW-RP1, a structural polymer foam. This seawall repair foam offers exceptional strength and durability. Once fully cured, it surpasses the strength of traditional materials like sodium silicate or cement grout. Furthermore, SW-RP1 is eco-friendly and certified to strict environmental standards, making it an ideal choice for waterfront properties. The foam seals leaks, repairs defects, and stabilizes the soil behind the wall. As a result, it creates a water-tight barrier, providing long-lasting protection against the elements.

Procedures

The reinforcement process began with drilling holes across the entire surface area of the walkway. These holes were spaced 24 inches apart to ensure even distribution of the repair material. Following this, contractors injected each drill hole with two gallons of the structural polymer foam. This amount equates to one gallon per vertical foot of the structure. By using this systematic approach, the team ensured thorough reinforcement of the existing seawall and walkway.

Results

The outcome of this reinforcement project was highly successful. The property owner was pleased with the results, as the existing structure was now reinforced to last a lifetime. This improvement was particularly important in an area that prohibits the construction of new seawalls. By taking this proactive measure, the owner not only extended the life of their seawall but also protected their property from potential water damage. In conclusion, this project demonstrated an effective solution for maintaining coastal structures in areas with strict new construction regulations.