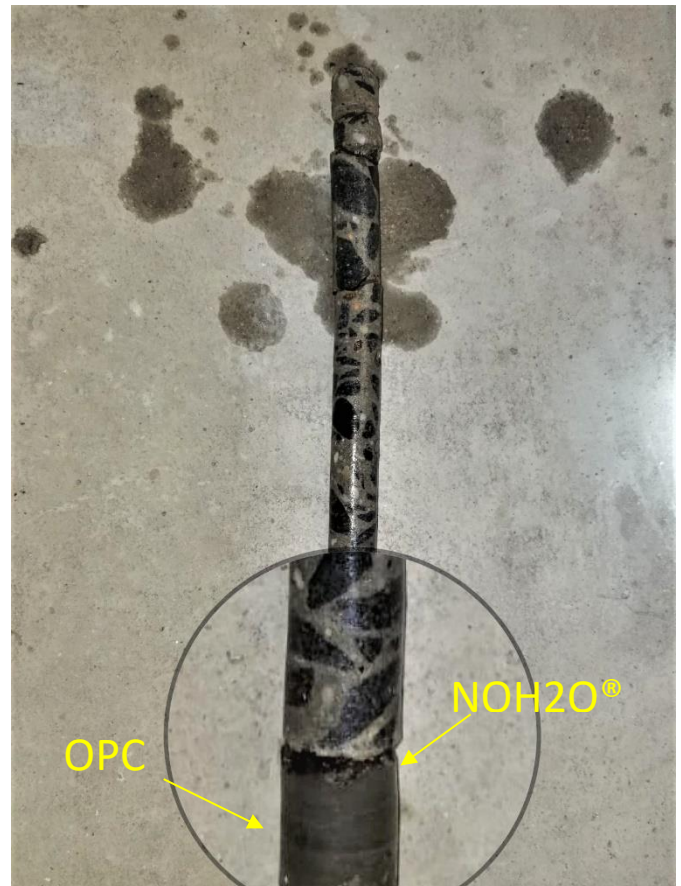


## 2020 MTA Bridges and Tunnels – Verrazzano Bridge Toll Collection Tunnel



Concrete core taken after OPC and NOH2O® injection



### Highlights

- Combined use of NOH2O® and Ordinary Portland Cement (OPC) as a positive side, curtain grouting, leak remediation application
- NOH2O® forms a waterproofing membrane along the outer utility tunnel structure
- Schedule driven performance to ensure completion in time for the summer Holiday season

### Project Overview

The Verrazzano Narrows Bridge Toll Plaza Utility Tunnel has suffered significant water infiltration since its construction. As part of an overall bridge rehabilitation program, Sovereign was tasked to ensure the Toll Plaza Utility Tunnel provides a long-term dry environment for existing and future communication, surveillance, and power systems.

### Strategy

Sovereign was tasked to engineer a cost effective solution and, based on extensive research and development, designed a combination of OPC and NOH2O® to cost effectively fill voids at the interface of the outside tunnel structure and surrounding soils/rock and mitigate water infiltration.

### Results

Work was successfully completed in 12 weeks, in time for the summer Holiday season. OPC cost effectively filled voids behind the concrete tunnel structure, created a waterproofing membrane protection layer under which an NOH2O® waterproofing membrane formed, rendering the tunnel dry.