

## **Okaloosa County Infrastructure Renewal: A Comprehensive Sewer Rehabilitation Project**

The Okaloosa County Sanitary Sewer project, located Okaloosa Island, Florida, involved significant rehabilitation to improve the functionality and lifespan of the county's sewer infrastructure. As a coastal area, Okaloosa County experiences considerable inflow and infiltration (I&I) issues within its infrastructure. Completed in February 2025, the project specifically focused on addressing water infiltration and resurfacing the infrastructure's brick walls and cone sections, which were compromised by corroded mortar joints allowing groundwater infiltration.

Okaloosa County Water & Sewer Department worked closely with its engineering department and GCU, an Epoxytec Certified Applicator based in Mobile, Alabama, to implement Epoxytec's composite system solution. GCU's certification as an Epoxytec Certified Applicator means they have participated in specialized training. The certified status ensures that GCU can deliver long-lasting, reliable solutions using Epoxytec products, a subsidiary of Tnemec Company, Inc. Additionally, Robert Crumbaugh of Steelcon Coating Systems Inc. served as the sales representative for the project, providing expertise in product selection and project management. Michael Lovell from Tnemec's technical service department provided on-site field assistance, ensuring optimal application and quality control throughout the project.

The solution included a combination of Epoxytec's high-performance products: Hydroxx-3, Mortartec Silicate, and CPP Sprayliner MH. These products were carefully selected to halt infiltration, resurface, and protect the substrates.

**Hydroxx-3** was used to stop active water flow from seeping into the structure due to the compromised mortar joints. Since the leaks were not high-pressure, no chemical grout was necessary.

Mortartec Silicate filled the mortar joints, resurfaced the brick

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**Featured Products** 

Hydroxx-3 Mortartec Silicate **CCP Sprayliner MH** 



## **Project Information**

**Location** Okaloosa Island, Florida

**Completion Date** February 2025

**Structure** Brick and Concrete, Precast Sanitary Sewer Manhole

**Owner** Okaloosa County

**Engineer** Okaloosa

**Applicator** GCU – Mobile, AL

Top: ECAN contractor vehicle and crew on site at Okaloosa County

Bottom: Before image showing the deteriorated condition of the sanitary sewer manhole prior to rehabilitation





## Okaloosa County Infrastructure Renewal: A Comprehensive Sewer Rehabilitation Project (cont.).

substrate, and smoothed out irregularities caused by staggered bricks. It also filled foundation joints and pipe seams and was used to rebuild the bench and refurbish the invert channel.

**CPP Sprayliner MH** was applied to the walls to provide additional protection and ensure a quick return to service, minimizing downtime and allowing the infrastructure to resume operation swiftly and efficiently.

The substrates involved in the project included brick and precast concrete. Surface preparation was carried out in compliance with SSPC SP13/NACE 6 and ICRI CSP 4 standards, ensuring a strong bond for the applied products. Despite the challenging conditions, such as deteriorating mortar joints and the need for precision application, the team's use of advanced Epoxytec products enabled them to achieve long-lasting protection, extending the service life of the infrastructure.

The project's success was marked by the effective resolution of infiltration issues, ensuring a more reliable and sustainable wastewater system for Okaloosa County. The strategic application of these products provided a swift return to service, minimizing disruptions and continuing to support the community while significantly extending the infrastructure's operational lifespan.



Top: Application of Mortartec Silicate to fill mortar joints and create a smooth, uniform substrate for subsequent protective coatings.

Bottom: After image showing the successfully rehabilitated sanitary sewer manhole

