



Brick Sewer Manhole made Stronger than New

Wardsville, Missouri is located in Cole County, about five miles south of Jefferson City. The population of this village municipality has doubled in the past 10 years, but it has still remained a quaint, small-town, country ambiance.

Many of the sanitary sewer manholes in this small municipality were originally built of brick and are in need of attention due to the effects of corrosion. This 4' diameter by 10' deep brick manhole was one such manhole. The structure had irregular bricks and was missing mortar. Structural rehabilitation was necessary in order to restore the integrity of the sanitary sewer manhole.

The Town of Wardsville commissioned Mid-Mo Environmental to complete the task of rehabilitating this sanitary sewer manhole. Mid-Mo Environmental specializes in waste management. The company is a certified contractor of Epoxytec, manufacturer of epoxies, urethanes, and related products specialized for the water and wastewater industries. Upon examination of the structure, Mid-Mo Environmental, in conjunction with Marilyn Baron, Epoxytec's representative, determined that the combination of Epoxytec's Mortartec™ Ceramico™ and Epoxytec's CPPTM would be the best solution to restore this manhole.

Surface preparation of this structure was simple: a high power pressure wash of 3500. Epoxytec's CPP Mortartec Ceramico was then applied at 125 mils as an underlayment to help even out the irregular brick surface. Mortartec Ceramico is a highly advanced formulated epoxy blend incorporating cutting-edge epoxide technology with proprietary engineered curing agents. This blend is combined with a specific balance of Portland cement, hardened ceramics, graded silica aggregate, synthetic fibers and silica fume to produce one of the most coveted mortars in the industrial market today. The result is a smooth mortar application with the hardest surface in the industry once cured. The Mortartec Ceramico exhibits excellent acid

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Featured Products

CPP Trowel-Liner

Mortartec Ceramico



Project Information

Location

Wardsville, MO

Completion Date

March 2016

Structure

Manhole

Owner

Town of Wardsville

Applicator

Mid-Mo Environmental





Brick Sanitary Sewer Manhole Rehabilitation (cont.)

resistance, unlike any mortar technology before it, and outstanding adhesive properties, barrier sealing capabilities, and tolerances, as well as out-gassing, hydrostatic, and MVT reduction - perfect for the highly corrosive wastewater environment.

Once the Mortartec Ceramico cured, Epoxytec's CPP was then troweled on at 125 mils in order to provide a corrosion barrier. CPP, a 100% solid epoxy, is formulated to provide a structural liner with ultra-high flexural strength and properties to protect physical infrastructure.

The application of Epoxytec's Mortartec Ceramico followed by CPP on this brick sanitary sewer manhole resulted in a structure that is quite possibly stronger than it was when originally built. This combination of products provides excellent chemical resistance and has ultra-high adhesion. Wardsville residents can feel confident that their tax dollars were spent wisely and that this sanitary sewer manhole will not need to be addressed anytime in the near future.

