



Manhole Repairs Utilizing FX-III Jet Set & Various FX Cementitious Repair Mortars



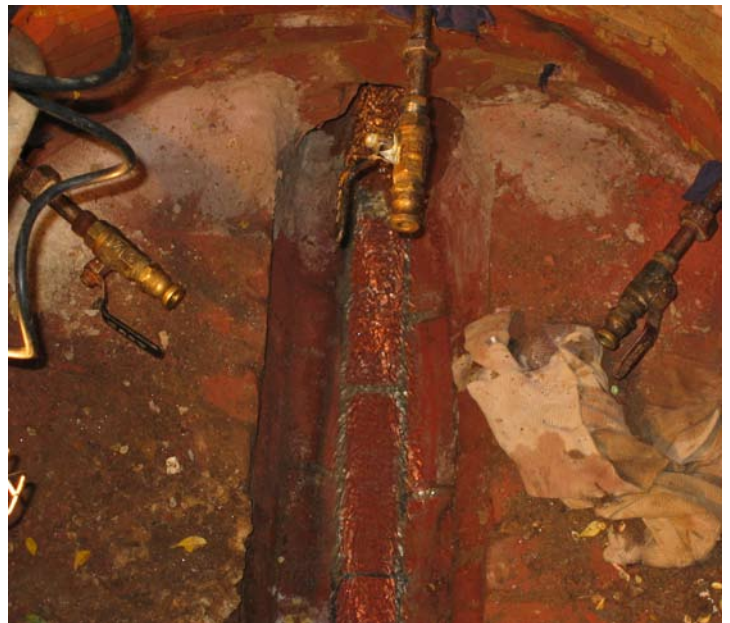
A broken sewer line leaking outside of a storm water manhole allowed raw sewage to infiltrate the walls of the manhole. **FX-III Jet Set** was needed to provide a waterproof barrier around the manhole to prevent additional contamination. Confined space safety equipment was required to enter the manhole.



Deteriorated brick manholes are common throughout the USA. Aging infrastructure is a growing problem in the water-wastewater industry.



Prior to **FX-III Jet Set** application, holes were drilled through the brick walls to the outside of the manhole. Injection packers were placed into drilled holes.



Ball valves were attached to injection packers and closed in preparation of pump hose attachment.



An airless spray pump is used to pump the **FX-III Jet Set** into the void behind the manhole. The hydrophilic material expands up to seven times its original size as it comes into contact with water.



The **FX-III Jet Set** foams on the backside of manhole creating a flexible, waterproof membrane. Above photo shows **FX-III Jet Set** sealing off voids in brick mortar joints. Once pumping is completed, the packers are removed and holes in brick wall are filled with **FX-922 Plug & Fast Set** hydraulic cement.

Once dry, the appropriate repair mortar can be applied to the aging brick substrate to prevent further deterioration.



FX-263 Rapid Hardening Trowelable Mortar can be used for hand patching.



FX-262 Repair Mortar contains microsilica for chemical protection and can be spray or trowel applied.



FX-293 Calcium Aluminate Mortar can be sprayed or troweled. **FX-293** is used when the manhole will continue to be exposed to H₂S gasses.

Additional protective coatings may be applied within hours of mortar application.