# Case Study MANHOLE REPAIR: EROSION THREAT FROM WATER INFILTRATION



**The Poly Grout Professionals** 

Manhole infiltration can pose serious risks to roads and infrastructure. In a recent case, water infiltration pulled soil into a manhole, eroding the soils around it and the ground beneath. Stable Soils was called in to perform repairs to address this urgent situation.

AP Fill 700 was the product chosen to stabilize the soil around the manhole and seal the leaks. This product features low viscosity, making it ideal for permeating soil and sealing thin cracks. Additionally, it activates with moisture, which is perfect for damp environments like this one.

# **PRODUCT AND ADVANTAGES:**

After conducting a thorough site assessment and carefully evaluating various potential solutions, the team at Stable Soils identified AP Soil 700 as the optimal polymer for this challenging project. This choice was strategic. AP Soil 700 features low viscosity, a crucial characteristic that allows it to effectively penetrate and permeate sandy soil. Moreover, its impressive strength after curing promised long-lasting stability for the embankment.

## **PHYSICAL PROPERTIES - CURED**

AP Fill 700		
Tensile Strength	(ASTM D-1623)	45 psi (3,102 mb)
Tensile Elongation	(ASTM D-1623)	2.9%
Shrinkage	(ASTM D-1042/D-756)	Negligible
Compressive Strength (with fine sand)	(ASTM C-39)	2,050 psi (141,343 mb)
Pre-activated mix viscosity	110 - 130 cP	



# **PROCEDURES:**

The repair process began with stabilizing the soil around the manhole. To achieve this, injection rods were driven into the ground around the structure. Then, AP Fill 700 was injected to seal the leaks and stabilize the surrounding soil around the manhole.

### **RESULTS:**

The repair project yielded impressive outcomes. First and foremost, the manhole was successfully sealed. In addition, the surrounding soil was stabilized, preventing further erosion. Remarkably, all these tasks were completed in less than a day. Finally, the repaired area was prepared for the county to add backfill around the newly stabilized manhole.



# Headquarters

Stable Soils of Florida, Inc. 4265 Northwest 44th Ave., STE 7 Ocala, Florida 34482

**PHONE:** 352.433.2323 **TOLL FREE:** 866.622.3723

**LEARN MORE AT:** 

www.StableSoils.com



There are people out there that claim they can perform, but when you want the BEST, give us a call! NASA, Sikorsky Helicopter, U.S. Department of Energy (to name a few of many) know who to call when repairs are critical! Visit us on the web at StableSoils.com!

Quick, easy, non-disruptive and ready to use in a couple of hours... not days!