Outfall Pipe & Headwall Infiltration Repair

Highland Heights, KY

GROUND WORKS SOLUTIONS

Project Challenges	Solution	Support	Outcome
• 24” RCP dam outfall pipe had faulted joints at the entry and exit • Faulted joints varied from 3” – 8” in width • Faults allowed water to travel around pipe and through berm causing a sinkhole in the roadway • Water was also observed traveling through the stone headwall at the inlet and exit	• Stabilize and densify surrounding soils, creating a non-permeable layer to stop water movement by use of Deep Injection of high density polyurethane • Inject the Uretek 486 material to seal the leaking joints • Barrier wall placed at the headwall to prevent water migration through headwall	• Ground Works designed the injection process using a hydrophobic 2 part HDP material • Design included injections for joints, soil stabilization, and barrier wall	• **Quick Installation:** Project took 4 hours compared to multiple days for rip and replace • **Cost Effective:** Project was more cost effective than remove and replace. • Traffic back on roadway 15 minutes after injections • Joints and headwalls sealed • Completed while water was flowing through pipe