GARRISON FLOOD CONTROL

CASE STUDY

Guppy™ Water Filled Flood Control Tubes Roadway Construction Project



Project Overview:

GeoStabilization International®, founded in 2002, is the leading geohazard mitigation firm operating throughout the United States, Canada, and New Zealand. GeoStabilization specializes in emergency slope stabilization and landslide repair, rockfall mitigation, grouting, and micropiles using design/build contracting.

In a recent emergency roadway construction project aimed at repairing and upgrading a state highway, the use of Guppy™ Water Filled Flood Control Tubes played a pivotal role in ensuring the successful and timely completion of the project. The project's primary challenge involved diverting a stream of water to facilitate safe and uninterrupted construction activities alongside a hazardous roadside.

Solution Implementation:

To address this critical challenge, GeoStabilization International® contacted Garrison Flood Control to speak with a technical flood expert about which type of flood mitigating product would be most effective at re-routing flood water away from the job site. Due to the uneven ground conditions a flexible flood control product was needed that could conform to the undulating ground below.

After careful consideration and reviewing their specific needs for the project with the Garrison Flood Control Technical Team, Project Manager, Joe Henthorn, at GeoStabilization International® placed an order for three 24-inch by 100-foot Guppy™ Water Filled Flood Control Tubes. These tubes were strategically deployed to redirect the water flow, thus creating a dry and safe workspace for the construction crew to complete the job. This enabled the workers to perform various tasks alongside the highway without the interference of water, significantly enhancing efficiency and safety.

"When unanticipated geohazards threaten critical sources, our ability to rapidly respond with effective solutions is paramount." - Joe Henthorn, Project Manager at GeoStabilization International. The inclusion of this quote adds a personal and expert perspective to the case study, highlighting the industry's commitment to finding innovative solutions for geotechnical challenges.

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Impacts & Benefits:

The deployment of the Guppy™ Water Filled Flood Control Tubes had several key benefits for the remediation of this project:

Enhanced Safety: By effectively diverting the water stream away from the job site, the tubes ensured a safer working environment for the construction team, mitigating the risk of accidents associated with water-related hazards. The diversion of water away from the roadway embankment allowed work to be done without risk of collapse of the embankment due to water infiltration.

Operational Efficiency: The dry and stable working area allowed the crew to perform their tasks more efficiently and expedite the roadway repair process. The creation of a water-free work area facilitated seamless and rapid progress in the repair operations, illustrating the practical utility of the flood control tubes.

Timely Project Completion: Thanks to quick setup of the Guppy™ Flood Tubes and the expedited shipping facilitated by Garrison, the tubes were promptly delivered and installed, ensuring no delays in the project timeline.

Environmental Consideration: The use of water-filled tubes as a temporary solution minimized the environmental and ecological impact, aligning with GeoStabilization International®'s commitment to eco-friendly practices and sustainability.

Conclusion:

The successful application of Garrison's Guppy™ Water Filled Flood Diversion Tubes in this roadway construction project underscores the value of innovative, flexible solutions in addressing complex geohazard challenges. GeoStabilization International®'s strategic approach and effective execution not only facilitated the timely repair of the affected roadway but also reinforced the company's reputation as a leader in geohazard mitigation.

Guppy™ Water Filled Flood Tubes™ are available in 6″, 12″ and 24″ diameters as well as 10ft, 25ft, 50ft and 100ft lengths, providing flexible large-scale flood protection for any type of flood event or scenario.

The ecological footprint of the project was minimized through the use of the Guppy $^{\text{TM}}$ Flood Tubes as a temporary and environmentally considerate water management solution, reflecting GeoStabilization International $^{\text{B}}$'s commitment to sustainability.









