

Slide Rail System Enables Safe Storm Sewer Installation Beneath Busy Roadway

Underground Infrastructure Technologies (UIT), a Denver-based utility contractor and division of Harrison Western, recently completed construction and installation of a new 30-in. storm sewer line beneath an existing roadway in an extremely busy section of Westminster, Colo. Ensuring the stability of the existing roadway and



An NTS engineered slide rail system shored the launch shaft for an under-road storm sewer in Colorado.

surrounding structures, as well as the safety of its employees, UIT determined the most efficient and cost-effective way to approach this challenge would be performing a 42-in. tunnel excavation beneath the roadway.

UIT estimated the launch shaft for the tunnel needed to be 40 ft long and 24 ft wide excavated to a depth of 24 ft. After reviewing several options to shore the launch shaft, UIT selected a site-specific engineered slide rail system presented by Brian Schjorte of National Trench Safety (NTS). The slide rail system would provide positive soil support during the excavation, which was key due to the presence of the existing roadway and adjacent utility structures. “When working alongside a heavily congested roadway like this, governmental agencies are

very concerned with any potential undermining of the road,” explains Jeff Rumer, president and COO of UIT. “The slide rail system could be installed progressively, which allowed us to minimize any raveling of the soil that could negatively impact the road.”

To provide the necessary soil support along the excavation wall, UIT used steel plates at the open end of the shaft in coordination with the slide rail system and the NTS engineered plan. “The slide rail system performed very well on this project,” says Rumer. “NTS sent a slide rail specialist to our project for the installation and removal of the system to ensure things went well, and we were able to install and remove the system very quickly. Most importantly, the system allowed our employees to complete the job safely and efficiently.” ■

PHOTO: COURTESY OF UIT