Executive Summary

Harrisburg International Airport Levee System Rehabilitation Category G

Far too often, infrastructure challenges are not addressed until there has been a disaster. In the case of the Susquehanna Area Regional Airport Authority's (SARAA) levee at Harrisburg International Airport (HIA), the authority was able to work with a capable consultant to resolve a water resource challenge before failure.

HIA's levee system was constructed in 1958 to prevent flooding from the Susquehanna River onto the airport's runway. Only minor maintenance and repair work had been performed on the levee since its construction. During the past 60 years, erosion, vegetative growth, ice jams, and other natural forces reduced the cross section and condition of the levee that protects the airport's infrastructure. SARAA sought a consulting firm to provide design and construction management services for the rehabilitation of the airport's flood dike and levee system. The project would improve drainage by rehabilitating 13,025 feet of the system along the river.

Urban Engineers, Inc. was tasked with providing design services and construction administration/ management services under an on-call contract with SARAA. The objective was to rehabilitate the existing flood dike and levee system using ACB Mats along the slope and rebuilding of the riprap toe at the river's edge. Despite construction delays due to COVID, the team was able to reach substantial completion in July 2021, four months ahead of the baseline schedule completion. With the effects of climate change and increased flooding becoming more common, making sure that important local infrastructure like HIA is protected from future flooding is of utmost importance.