City of Utuado Utuado, Puerto Rico



n September of 2017, Hurricane Maria, a category 5 storm, brought devastation to the island of Puerto Rico. Maria left the country without power and more than 1,100 lives were lost to this catastrophic event. Puerto Ricans were left struggling to access basic needs like fresh water, food, and shelter.

Back in Ohio, U.S. Bridge set to work to bring relief to the communities throughout the island by designing and installing modular Liberty bridges. To meet the urgent needs as winter was setting in and to ensure the bridges could survive the tropical climate, hotdip galvanizing was chosen to protect the structures.

Employees of U.S. Bridge and V&S Columbus Galvanizing took a sense of pride in this project, even working through some of their own holidays (Thanksgiving and Christmas) to aid the families of Puerto Rico. In just six weeks the first of the hotdip galvanized bridges were manufactured and installed, within six months, all of the bridges were completed reconnecting five communities across the island.

More than 850 metric tons of hot-dip galvanized US steel was used to create more than 950 feet of bridges, including the embedments, stringers, cross members, and all major structural support elements. The flooring was also galvanized and coated with a special grit surface. As the bridge was galvanized many miles away from where it would be erected, careful packaging and precaution was taken to guard against wet storage stain during transit.

Thanks to the use of modular design, the first hot-dip galvanized bridges were manufactured and installed in just six weeks, and all were completed in six months, reconnecting the communities throughout the island.

Barges were loaded when the contractor had arranged them to go, and correct packaging was critical so when they arrived the contractor would receive the right bridge at the right town in the order necessary for the contractor and labor to get to work. Not only was hot-dip galvanizing production easier to accomplish in the heart of winter, it also meant no need for touch-up when the steel arrived. The end result was aesthetically pleasing, functional hot-dip galvanized bridges which will keep these communities connected for generations to come.



Galvanizer V&S Columbus Galvanizing

Engineer U.S. Bridge International Del Valle Group

Fabricator U.S. Bridge Company

General Contractor Desarrolladora J.A., Inc.

Bridge & Highway

