

# WAHOO WATER TANK

After residents of Wahoo, Nebraska, decided to wrap their 118-foot water tower in a dramatic design featuring Old Glory, the project became a source of community pride, which is one reason the project's engineer insisted on using a protective coating system from Tnemec. "The old coating was in bad shape," recalled Tnemec coating consultant Ken Efferding. "The white coating was cracking, there was a considerable amount of rust and excessive mildew on the tank."

The exterior was blasted down to bare metal in accordance with SSPC-SP6/NACE No. 3 Commercial Blast Cleaning, followed by an application of Series 90-97 Tneme-Zinc, a moisture-cured, zinc-rich urethane primer. An intermediate coat of Series 161 Tneme-Fascure, a polyamide epoxy, was applied for its corrosion protection, followed by a topcoat of Series 1074U Endura-Shield II, an aliphatic acrylic polyurethane, that resists degradation caused by ultraviolet (UV) light. All of the coatings were applied using brush and roller.

The recoating project was started in the fall of 2007 when the exterior was sandblasted and prepared for painting. The following spring, work resumed when the tank was pressure washed and the artist started work on the detailed graphics depicting the American flag wrapped around the tower. Using patterns for the lettering and flag design, the artist worked from a basket crane and outlined the design by hand with a pencil.

Transferring the artwork from a sketch to the water tank involved converting the drawing from inches to feet. Stars in the flag are more than two feet in diameter and lettering on the dome is ten-feet tall. More than a week was required to lay out the design, followed by another four days of actual painting.

The flag design was selected by Wahoo residents in a survey conducted by Wahoo Utilities in 2007. "They had all of the designs on display at the city office," Efferding added. "Designs ranged from a giant light bulb to the flag. This design was pretty special."

Constructed in 1975, the Wahoo water tank was designed by JEO Consulting Group, Inc., which planned and oversaw the recoating project. The graphic design was oriented to be clearly visible from a highway bypass planned for construction. The tank was also featured in Tnemec's 2008 Water Tank Calendar.

## FEATURED PRODUCTS

Series 90-97 Tneme-Zinc

Series 161 Tneme-Fascure

Series 1074U Endura-Shield



## PROJECT INFORMATION

### Project Location

Wahoo, Nebraska

### Project Completion Date

June 2007

### Owner

Wahoo, Nebraska

### Engineer

JEO Consulting Group, Inc.  
Wahoo, Nebraska

### Applicator

Utility Service  
Perry, Georgia

The recoating project for the Wahoo, NE water tank included a top coat of Series 1074U Endura-Shield II to protect it from exterior weathering.

