

# WATER COL

*South Bend tank finish signals a trend*

City Of

*South Bend*



**T**here was a time when eastbound travelers on Interstate 80 knew they were approaching South Bend, Ind., by the heavy traffic they encountered on a fall Saturday. University of Notre Dame football games, after all, tend to draw a crowd.

But as of Summer 2002, a shimmering 1.5-million-gallon water tank on South Bend's western outskirts now confirms for highway travellers that they have reached this city of 105,000 residents.

The tank, a 157-foot water spheroid that was designed, erected and painted by Chicago Bridge & Iron (CB&I), is nothing out of the ordinary for this company that has been building such structures since 1894. CB&I, in fact, has erected more than 25,000 elevated tanks in its history.

But what is striking about the tank is its graphic design element and its colorful finish. Clearly, the days when such tanks were painted gray and their municipal owners were identified in black, block letters are disappearing. And few will miss them after viewing attractive structures like the one in South Bend.

"Tanks like these are definitely getting more popular," says CB&I Paint Supervisor Dave Hartman. "People from other cities drive down the road and see that tank. Pretty soon they're asking, 'Can we get one like that?'"

## At a Glance

### CONTRACTOR

Chicago Bridge & Iron

### ENGINEERING

Tank Industry Consultants

### HIGHLIGHTS

Sherwin-Williams Color Marketing & Design Group, the City of South Bend and CB&I collaborated to create an attractive design for this high-profile tank



# ORS

*in industrial aesthetics*

In most cases, the answer is yes, they can — especially if they learn from the collaborative effort employed by CB&I, engineering firm Tank Industry Consultants and coatings supplier Sherwin-Williams.

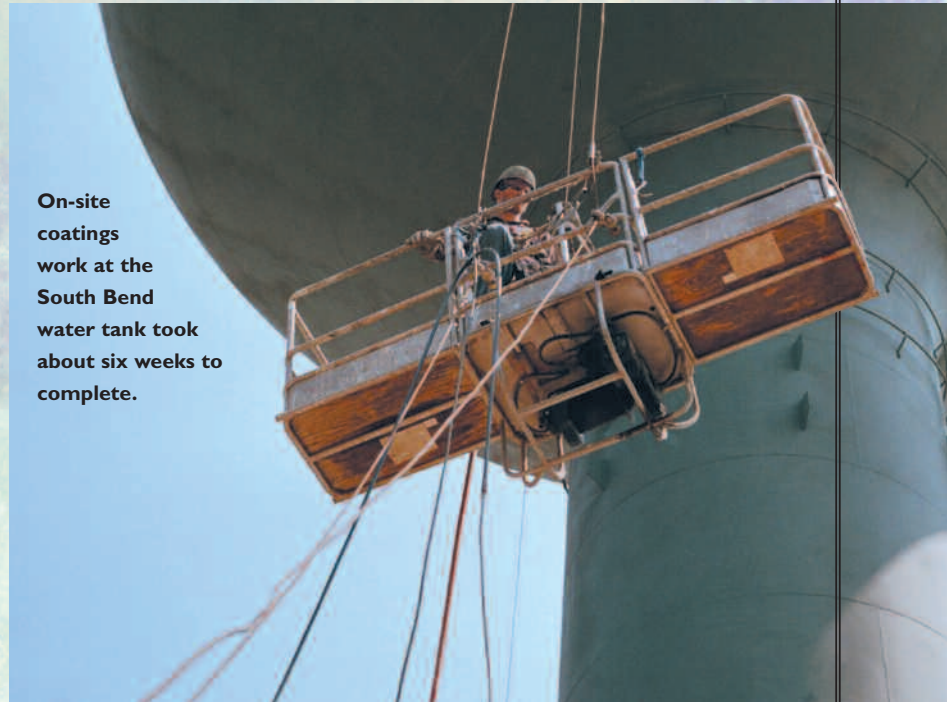
## SHOP PRIMING

Fabrication and priming for the South Bend tank actually began late in 1999, but came to a halt while the city resolved some site procurement issues. CB&I received the go-ahead again in December 2001. The steel was shop-primed on interior “wet” surfaces with a coat of Sherwin-Williams High Solids Catalyzed Epoxy at 5-6 mils dft. Exterior surfaces and interior “dry” surfaces received a single prime coat of Zinc Clad II at 3-5 mils dft.

The steel was loaded onto trucks and delivered to the jobsite in early 2002 and by May, the erection was practically complete. A paint crew of five, led by supervisor Melvin Jannink, was “right on the erection crew’s heels,” according to Hartman.

Because some of the steel had sat in storage for more than a year and slight oxidation had occurred, CBI was aggressive with what normally would have been a spot blast addressing only weld seams. Hartman estimated that 50 to 60 percent of the sphere was blasted back to bare metal before Zinc Clad II was re-applied to the exterior.

Exterior priming and interior priming of the dry areas lasted into the third week of the on-site painting portion of the project. By week 6, these areas had received a brush-applied intermediate coat of Sherwin-Williams Macropoxy 646 at 5-6 mils dft in a light blue and a topcoat of SherThane 2K Urethane at 2-4 mils in a darker blue recommended by the Sherwin-Williams Color Marketing and Design Group.



On-site coatings work at the South Bend water tank took about six weeks to complete.

The darker blue finish has a practical as well as an aesthetic function: the color hides mold that can occur.

Interior wet areas, meanwhile, were sprayed with second and third coats of High-Solids Catalyzed Epoxy.

## GRAPHIC ELEMENT

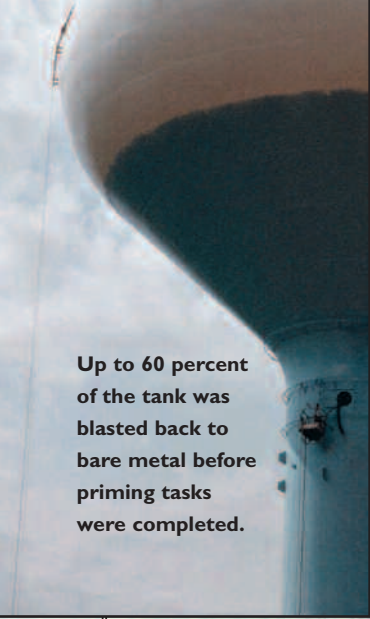
What might appear to be the most challenging part of the project — painting the graphic design — was a matter of routine for CB&I, according to Hartman.

“We do some pretty fancy work, so this was nothing new to us,” says Hartman. “We’ve painted hot-air balloons on tanks, locomotives, all kinds of different color schemes. Our guys are pretty sharp.”

Once given a final design, CB&I computer technicians created what Hartman calls a “pounce pattern,” which was used to print out 4-foot-wide sheets of paper imbedded with tiny holes. Painters then laid these patterns on the tank and spray painted over the top of them, creating a stenciled outline of the design.

“It looks just like it’s been traced up there,” says Hartman.






Up to 60 percent of the tank was blasted back to bare metal before priming tasks were completed.

Working from left to right, painters simply matched the colors to the design and kept their brushes and rollers between the lines in completing the design.

The final step in the 10-week on-site painting project was applying a layer of Diamond Clad Clear Coat to preserve the tank's fresh-painted appearance and resist color fading. The result is an attractive structure that South Bend officials figure will help attract business to area land that is primed for

future development.

"We wanted a design that would be symbolically consistent with the developing area out there, something that would say to potential businesses that South Bend is an up and coming city," says John Wiltrout, the Director of Treatment for the city's Water Works. "We presented this rendering to the mayor and he said, 'Go for it.'"

"Besides," observes Wiltrout, "it just looks so cool." 

## SHERWIN-WILLIAMS COLOR MARKETING AND DESIGN *offers appealing alternatives*

The City of South Bend's colorful new water storage tank is just the latest example of how the Sherwin-Williams color experts are adding aesthetic appeal to structures that have typically been finished in shades of gray.

"There's a trend in featuring color in the industrial environment, and this trend becomes most apparent in large civic projects," says Sue Wadden, a Color Marketing and Design consultant who ensured the tank's coating system offered aesthetic appeal as well as creating a visual link to the surrounding environment. "Bridges, health care and manufacturing facilities and commercial properties are employing more non-traditional color than ever."

The South Bend project was typical of the Color Marketing and Design Group's involvement in industrial projects. Once a coatings system was recommended, IM rep Jim Sychalski and store manager Paul Quindlen contacted Wadden and asked her to provide a color and design proposal.

Wadden's full-color alternative appealed most to South Bend officials. To create it, she did some searching on the chamber of commerce website, found a little-used city logo and tweaked its design so it would display well on the rounded sides of the structure.

"I thought they had a great graphic," says Wadden. "I made some adjustments so the logo would work on the side of the tank, then I selected the Sherwin-Williams colors that matched the graphic. I think the end result is a

structure that looks great in its environment, but more importantly, resulted in a high level of customer satisfaction."

Wadden is often challenged in selling her designs to people unaccustomed to seeing any artistic elements in their working environments.

"In addition to its practical uses in the industrial environment such as creating a safe, unified and productive environment, color can provide visual interest, enhanced performance and employee satisfaction."

