Main Pylon

The pylon is the centerpiece of the new I-280 Maumee River Crossing. Rising 400 feet out of the middle of the river, it is destined to be a signature part of the Toledo skyline for generations.

The pylon is an engineering marvel, one of the world’s first to use a stainless steel stay cable cradle system that enables the bridge’s 20 stay cables to pass through the pylon. Stay cables have traditionally been anchored to the pylon. The innovative cradle system separates the individual steel strands that comprise each cable to prevent corrosion and prolong the bridge’s life. The cradle system also allows the pylon to be more slender.

Enhancing its unique appearance is another world first – using glass in the pylon’s design. Honoring the city’s heritage as “The Glass City,” glass panels will be installed on all four sides of the pylon, allowing for an advanced LED lighting system to illuminate the structure in limitless color combinations.

PYLON FAST FACTS

Total Height:
Approximately 400’ above the water level of the Maumee River

Roadway Height:
Approximately 130’ above the Maumee River

Glass Panels:
- 185’ tall x 7’ wide x 1 1/4” thick
- 4 layers of glass sandwiched together for high impact resistance
- One layer will disperse the colored lights behind the panels and another has a mirror coating over approximately 30% of its area to reflect the sky during the day and allow LED lighting to shine through at night

Light Emitting Diodes (LED):
- 96 LED fixtures in each quadrant
- Light from red, green and blue emitters can be blended for limitless color possibilities
- Each LED can last 100,000 hours, providing 22 years of illumination at 12 hours per day

[ W I G G L E R O O M ]

Each quadrant of the upper pylon will have maintenance lifts offering approximately three feet of space in which to work.
To enable the pylon to be built, a 104-foot diameter steel ring called a cofferdam (fig. A) was positioned in the middle of the river and filled with sand.

This created a temporary island that allowed for a giant drill-rig to bore a total of 17 shafts 15 feet into bedrock. The shafts were filled with reinforced concrete. Six feet of concrete was poured to seal out water, then an additional 16 feet of concrete was poured to create the foundation for the pylon (fig. B).

The pylon narrows to 29' x 13' 4" at the roadway level, some 130' above the water line (fig. C).

At approximately 400 feet tall, the pylon will be the second tallest structure in downtown Toledo.

Main Pylon
[BREATHTAKINGLY ORIGINAL]

For additional background materials on the Maumee River Crossing, call the project Hot line at 419-244-7696 or visit our Web site at www.lookuptoledo.org for the latest project updates.