

### **Bridge Facts**

Construction began: May 1997

Opened to traffic: August 14, 1999

Contractor: C.C. Myers Inc.

Cost: \$47.5 million

Type of structure: Box-girder

Material used: Lightweight concrete

Length of span: 2,264 feet

Length of project: 3,307 feet

Width of bridge: 105 feet

Height above the water: 65 feet
Weight of bridge: 100 million pounds

Number of columns: 36

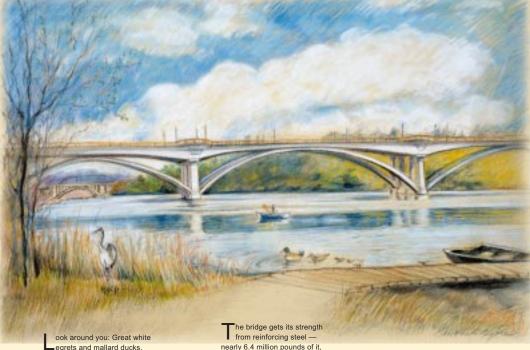
### Do you know?

The Lake Natoma Crossing isn't attached to the columns that support it. In theory, the 100-million-pound bridge could be lifted up in one piece. The bridge sits on the columns in isolation bearings, like balls in cups. If the Earth were to move, these bearings would prevent the bridge from falling. It would sway but not break, much as a ball being shaken in a cup rolls but does not fall out.

The Lake Natoma Crossing is built of lightweight concrete, which contains synthetic clay in place of gravel. It's as strong as regular concrete but weighs 20 percent less. The lower weight allows the spans to be longer between the columns and makes the bridge more earthquake safe.

# bridge for the community

A committee of Folsom residents helped design the Lake Natoma Crossing. They suggested the sidewalks, balconies with benches, bike lanes, light rail stop and the decorative arches.



The Leidesdorff Lid

Folsom in 1999.

or about as much as the weight of the entire population of

depicted here, are only two of many

might also catch herring gulls, Canada

bird species at Lake Natoma, You

geese, finches, sparrows, herons,

The Leidesdorff Lid was an innovative element of the Lake Natoma Crossing project. Its purpose is to unify downtown Folsom. Structurally, the Leidesdorff Lid is a short, wide bridge 365 feet by 106 feet. Traffic flows under it, and the deck, at ground level, is a plaza for the historic area. The lid was designed to include parking, a light rail station and a ramp to take the light rail trains onto the Lake Natoma Crossing and across the river.

## What is inside the bridge?

The Lake Natoma Crossing is a box-girder structure, meaning its deck is a huge concrete box with the road as its top. The bridge was built in two sections, one spanning the lake and the other extending from the north shore to Greenback Lane. The sections are connected by an expansion joint that allows the bridge to withstand temperature changes and earth movements. Inside these boxes are ducts and pipes that carry utilities and miles of crisscrossed high-strength steel cables. These cables support this bridge the same way external cables support suspension bridges. The lengthwise cables curve inside the box just as the cables of the Golden Gate Bridge curve above the road.









## The 'stone' walls - are they real?

The walls of the Leidesdorff Lid look like stacked stones or granite blocks, but they are really concrete. To make them, bridge workers poured concrete into waxy, wall-size molds. After the concrete hardened, the molds were pulled off. The individual stone shapes were then hand-finished with six coats of stain to match rocks from the Folsom area, and the block shapes were spattered to look like Folsom granite.