

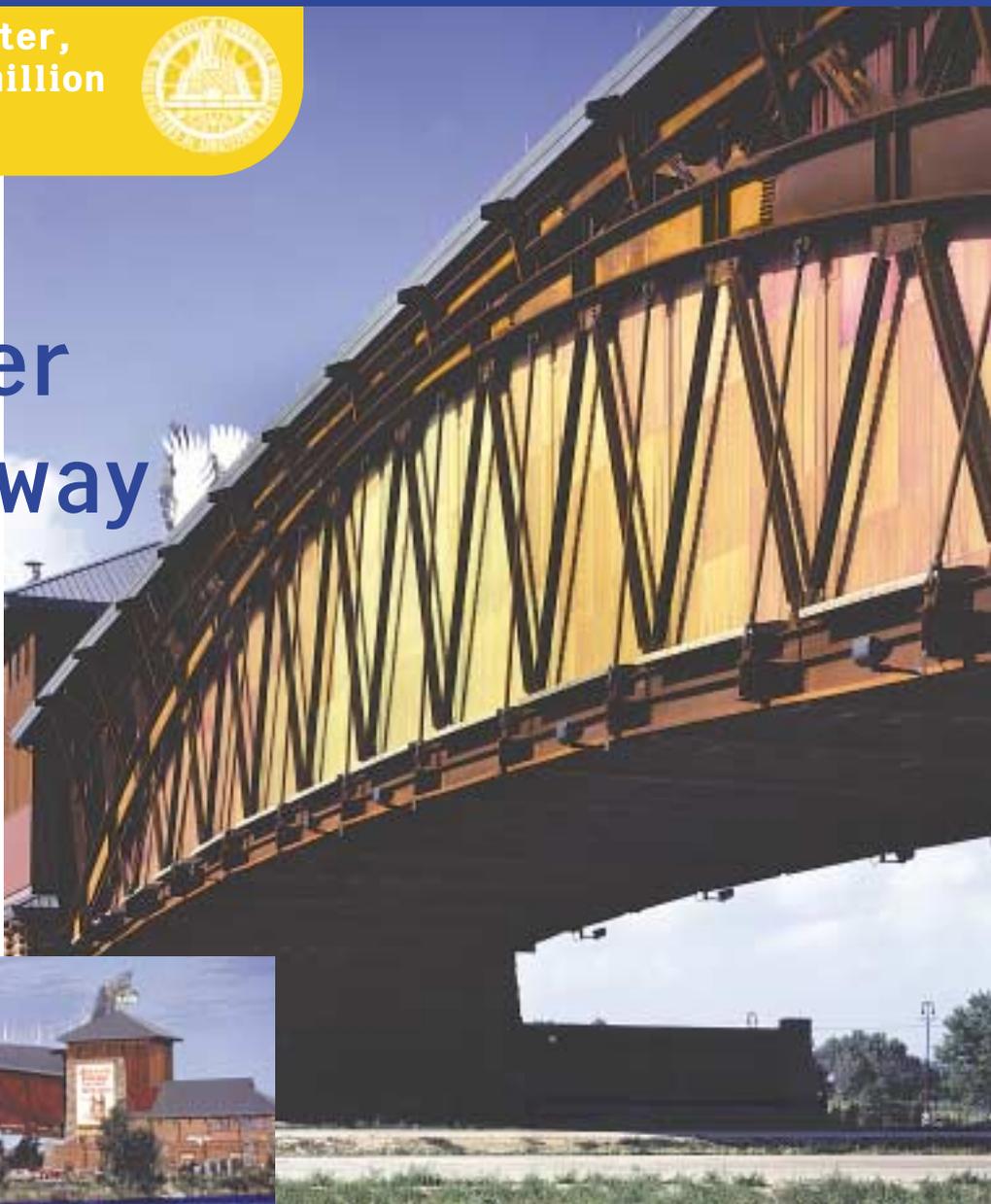
MERIT AWARD

\$25 million and greater,
but less than \$100 million



The Great Platte River Road Archway Monument

Kearney, NE



Located in Kearney, NE, and spanning a busy stretch of Interstate 80, the Great Platte River Road Archway Monument celebrates both historic pioneer migration trails and the more contemporary links that join the eastern and western halves of the United States. The monument's exhibits draw parallels between the more traditional Mormon, Oregon and California trails, and the other "trails" that followed: the Pony Express, the first telegraph line, the Transcontinental Railroad, the Lincoln Highway, Interstate 80 and fiber optic cables.

The monument, which appears to be a large bridge structure over the interstate, contains a two-story building,

Filled with interactive exhibits, the building is accessed through pavilions that serve as abutments for the 308' span. Numerous architectural treatments were considered for the facades before deciding that the best solution for a building of such length was to expose the structure. The skin and the structure were reversed, exposing an arched truss of weathering steel, replete with bolts, welds and plates. Glass panels forming the skin of the monument are located behind the steel truss.

The monument's location (spanning an interstate highway) required innovating construction techniques. The entire structure—including cladding and roofing—was constructed on one side of

the highway and "rolled out" over the highway at night. The building incorporates a steel plate floor at the lower level, adapted from the concept of orthotropic plate bridge decks. This floor serves as the primary tension tie and enabled the designers to minimize the mass of the lower chord of the truss—desirable from both an economic and visual standpoint. Loads are transferred from the webs of the girders into the plate at each corner through full-penetration welds.

To protect the building from potential petroleum-fueled fires from the roadway below, the building was fire-engineered, resulting in the addition of discreetly detailed steel plate flame shields.

JURORS' COMMENTS

Given the span, steel was the logical choice. The use of weathering steel is consistent with the rustic setting of the "frontier." At once romantic and evocative, it recalls the past in a muscular way that is totally American and unquestionably bold.



STRUCTURAL ENGINEER

KL&A of Colorado, Loveland, CO

ARCHITECT

Urban Design Group, Inc., Denver, CO

STEEL FABRICATOR

Lincoln Steel Company (AISC member), Lincoln, NE

STEEL ERECTOR

Lincoln Steel Company (AISC member), Lincoln, NE

STEEL DETAILER

KL&A of Colorado (NISD member), Denver, CO

GENERAL CONTRACTOR

Kiewit Construction Company, Omaha, NE

DESIGN SOFTWARE

SAP2000, RISA 3D

DETAILING SOFTWARE

SDS-2