

Prize Bridges / 1974





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Steel bridges selected in the annual national competition conducted by the American Institute of Steel Construction as the most beautiful bridges opened to traffic in 1973.

AWARD CATEGORIES

LONG SPAN BRIDGES

Bridges having one or more spans of over 400 ft in length.

MEDIUM SPAN BRIDGES, HIGH CLEARANCE

Bridges with vertical clearance of 35 ft or more, costing over \$500,000, and having no single span (as measured by the supporting foundations) longer than 400 ft in length.

MEDIUM SPAN BRIDGES, LOW CLEARANCE

Bridges having vertical clearances of less than 35 ft, costing over \$500,000, and having no single span (as measured by the supporting foundations) longer than 400 ft in length.

SHORT SPAN BRIDGES

Bridges having fixed spans and costing less than \$500,000.

HIGHWAY GRADE SEPARATION BRIDGES

Bridges whose basic purpose is highway grade separation as contrasted to the above categories.

ELEVATED HIGHWAYS OR VIADUCTS

Bridges having more than five spans, which cross over one or more established traffic lanes, and which may afford access for pedestrian travel and for parking.

MOVABLE SPAN BRIDGES

Bridges having a movable span.

SPECIAL PURPOSE BRIDGES

Includes pedestrian overpass bridges, and other special purpose bridges not identifiable to one of the above categories.



The enduring beauty of steel bridges is eloquent tribute to the vision and skill of the men who plan, design and build them. The bridge designer of today is both artist and engineer. He understands the potential for strength and beauty which is inherent in steel structures, and he knows that aesthetic appearance can be achieved at no sacrifice of efficiency or economy. The simple grace of a highway overpass, no less than the majestic sweep of a river crossing, reflects a creative integration of structure, function and form, skillfully executed in beautiful bridges of steel.

To promote a more widespread appreciation of the aesthetics of steel bridges and to honor the architectural excellence of modern bridge design, the American Institute of Steel Construction sponsors an annual Prize Bridge Competition. Each year a distinguished Jury of Awards, composed of leading educators, architects, and engineers, selects the steel bridges which it judges to be the most beautiful of those opened to traffic in the United States during the previous year.

To establish an equitable basis for competition, awards are made in each of several contest classifications. Size, cost and operating conditions determine the class in which each entry is eligible to compete. The prize winning bridges are marked with a stainless steel plaque, and the designers, owners and steel fabricators are awarded engraved certificates in recognition of their contribution and achievement.

The American Institute of Steel Construction sponsors this competition and awards the prizes in the belief that it is helping to render a public service by stimulating a lasting interest in improved bridge design.

JURY OF AWARDS

From left to right:

WILLIAM M. SANGSTER, F.ASCE
President-elect, American Society of Civil Engineers
Director, School of Civil Engineering
Georgia Institute of Technology
Atlanta, Georgia

WM. STEPHEN ALLEN, FAIA
Anshen & Allen
San Francisco, California

REECE H. WENGENROTH, F.ASCE
Executive Vice President
Westenhoff and Novick, Inc.
Chicago, Illinois

DAVID G. HAMMOND, F.ASCE
Daniel, Mann, Johnson & Mendenhall
Baltimore, Maryland



Fremont Bridge

PRIZE BRIDGE 1974 / LONG SPAN

DESIGNER Parsons, Brinckerhoff, Quade & Douglas, Inc., New York, New York

ARCHITECTURAL CONSULTANT Harrison & Abramovitz, New York, New York

OWNER Oregon Department of Transportation, Salem, Oregon

GENERAL CONTRACTOR Murphy Pacific Corporation, Emeryville, California

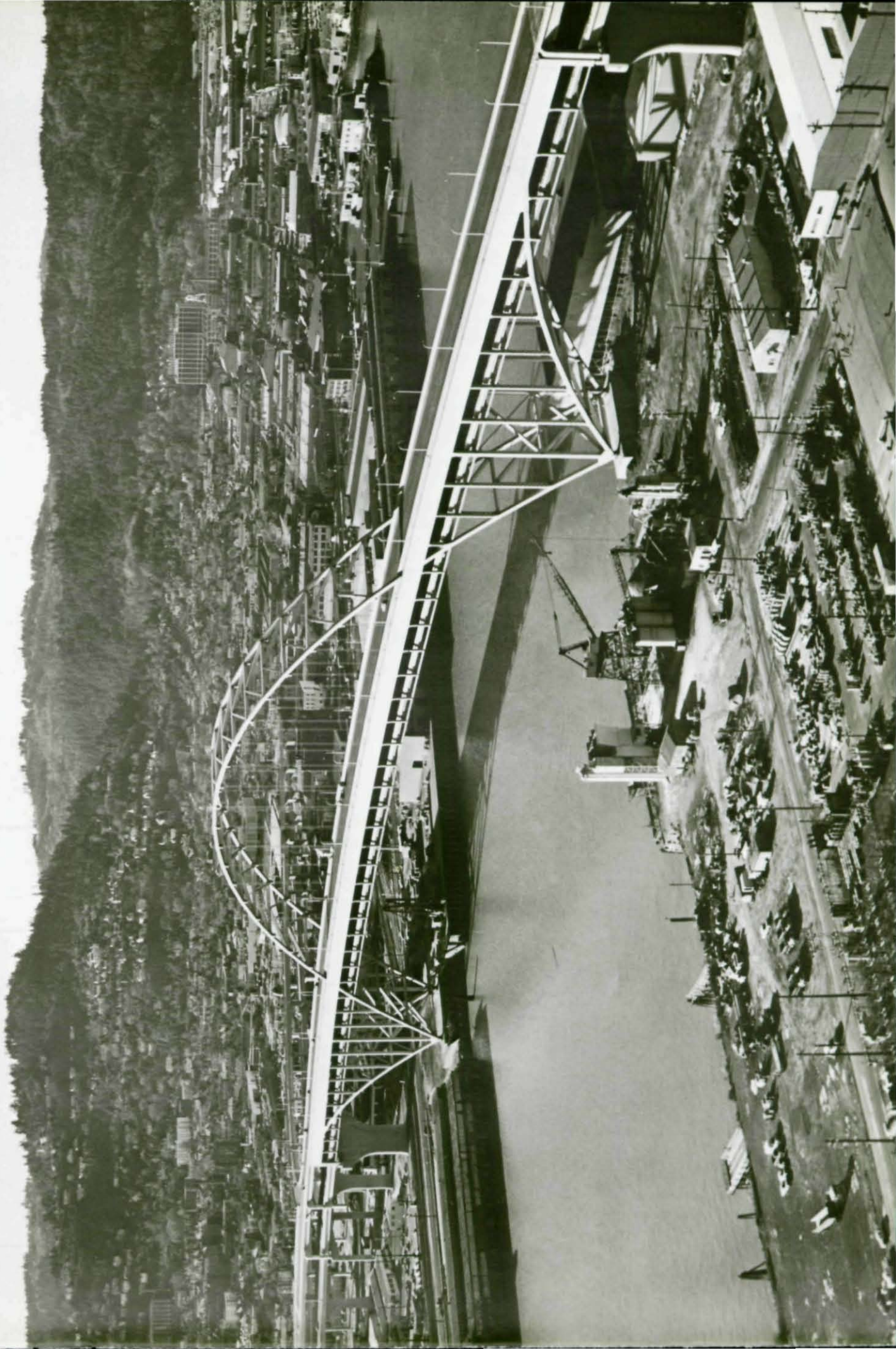
FABRICATORS American Bridge Division, United States Steel, Pittsburgh, Pennsylvania
Murphy Pacific Corporation, Emeryville, California

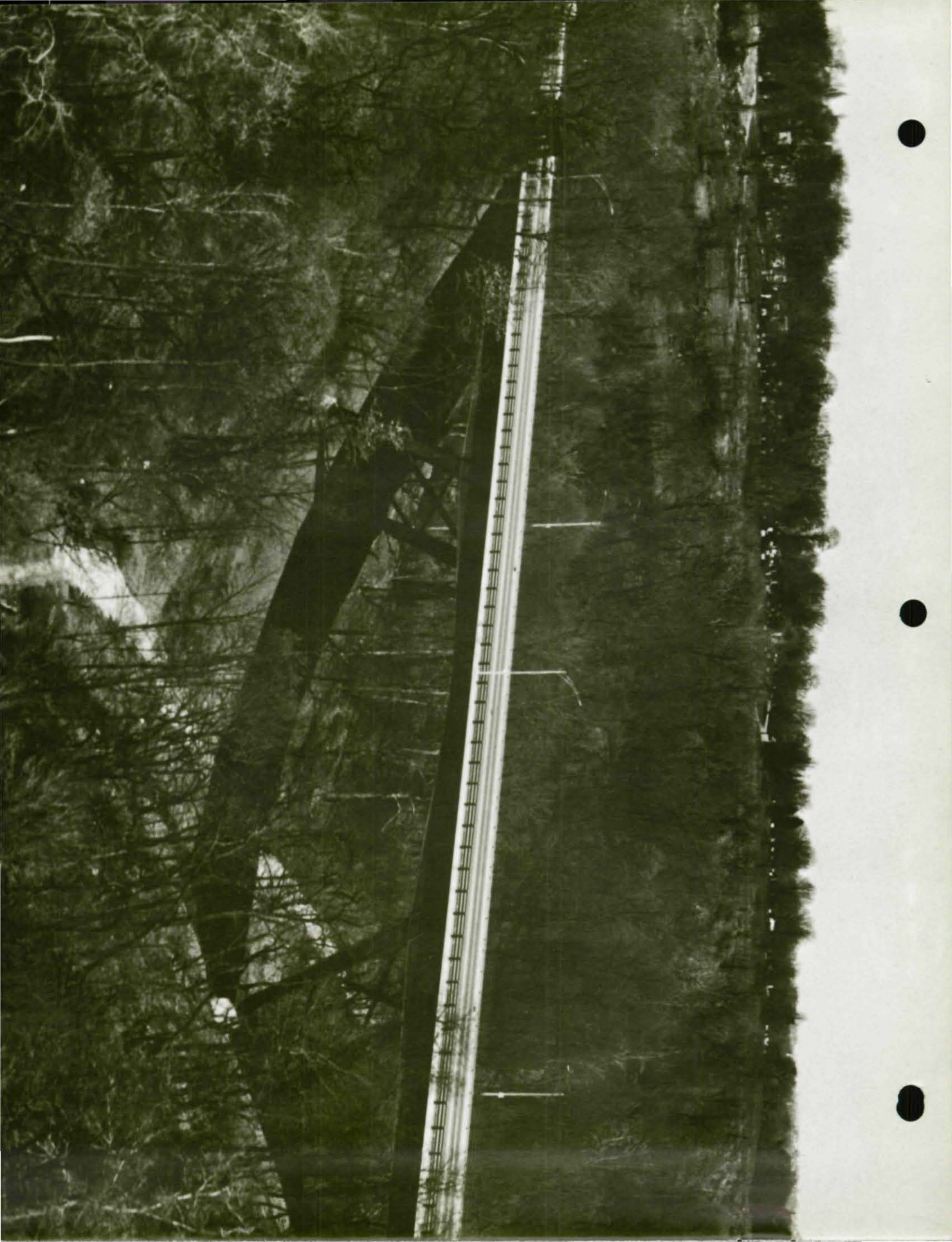
ERECTOR Murphy Pacific Corporation, Emeryville, California

*Jurors' Comments: "This graceful, attractive structure enhances its setting.
Light and slender, it conveys a sense of efficient design and economy of material."*



000623





Farbes Avenue Bridge Over Fern Hollow

PRIZE BRIDGE 1974 / MEDIUM SPAN, HIGH CLEARANCE

DESIGNER Richardson, Gordon and Associates, Pittsburgh, Pennsylvania

OWNER City of Pittsburgh, Pittsburgh, Pennsylvania

GENERAL CONTRACTOR Conn Construction Co., New Castle, Pennsylvania

FABRICATOR Conn Fabricating & Engineering Co., New Castle, Pennsylvania

ERECTOR Conn Construction Co., New Castle, Pennsylvania



Jurors' Comments: "This very handsome bridge blends well into its rustic setting. The sloping piers and their relationship to the hillsides give the entire structure a sense of logic and beauty."

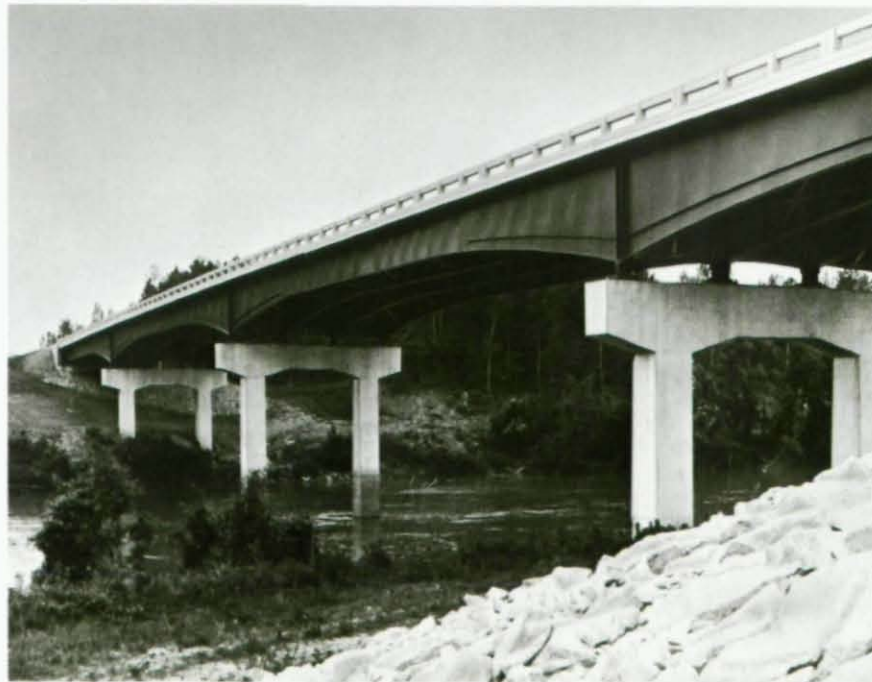
Pittsburgh, Pennsylvania

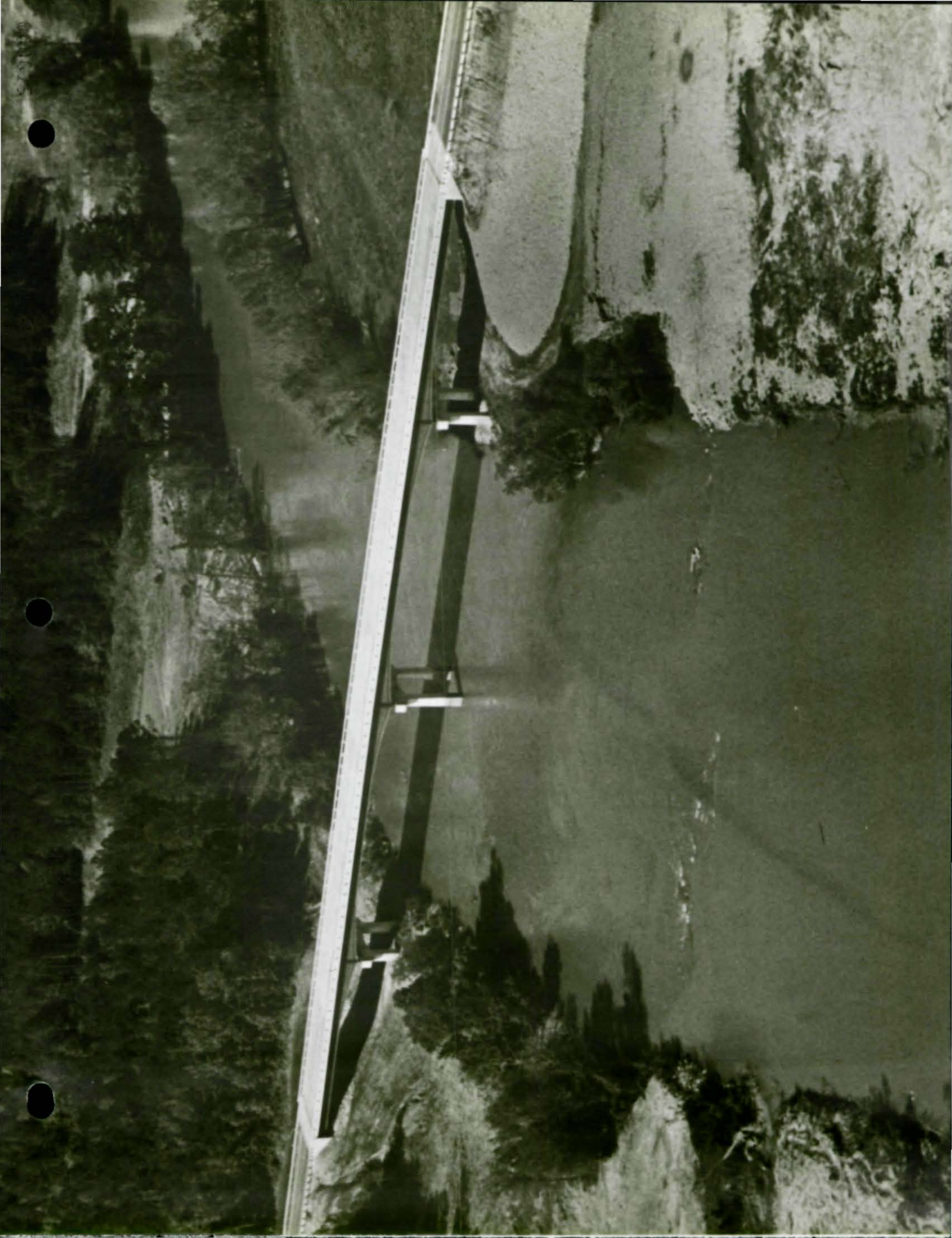
Chattahoochee River Bridge

PRIZE BRIDGE 1974 / MEDIUM SPAN, LOW CLEARANCE

DESIGNER John J. Harte Associates, Inc., Atlanta, Georgia
ARCHITECTURAL CONSULTANT Department of the Army, Savannah District Corps of Engineers, Savannah, Georgia
OWNER Department of Transportation, State of Georgia, Atlanta, Georgia
GENERAL CONTRACTOR Tidwell Construction Company, Douglasville, Georgia
FABRICATOR Bibb Steel & Supply Company, Inc., Macon, Georgia
ERECTOR Tidwell Construction Company, Douglasville, Georgia

Jurors' Comments: "This is an aesthetically pleasing bridge designed with great simplicity and excellent proportions. It fits nicely into its surroundings."





Service Road Bridge Over Railroad

PRIZE BRIDGE 1974 / SHORT SPAN

Trinidad Lake, Colorado

DESIGNER William H. Benton, Albuquerque, New Mexico

OWNER Department of the Army, Albuquerque District Corps of Engineers, Albuquerque, New Mexico

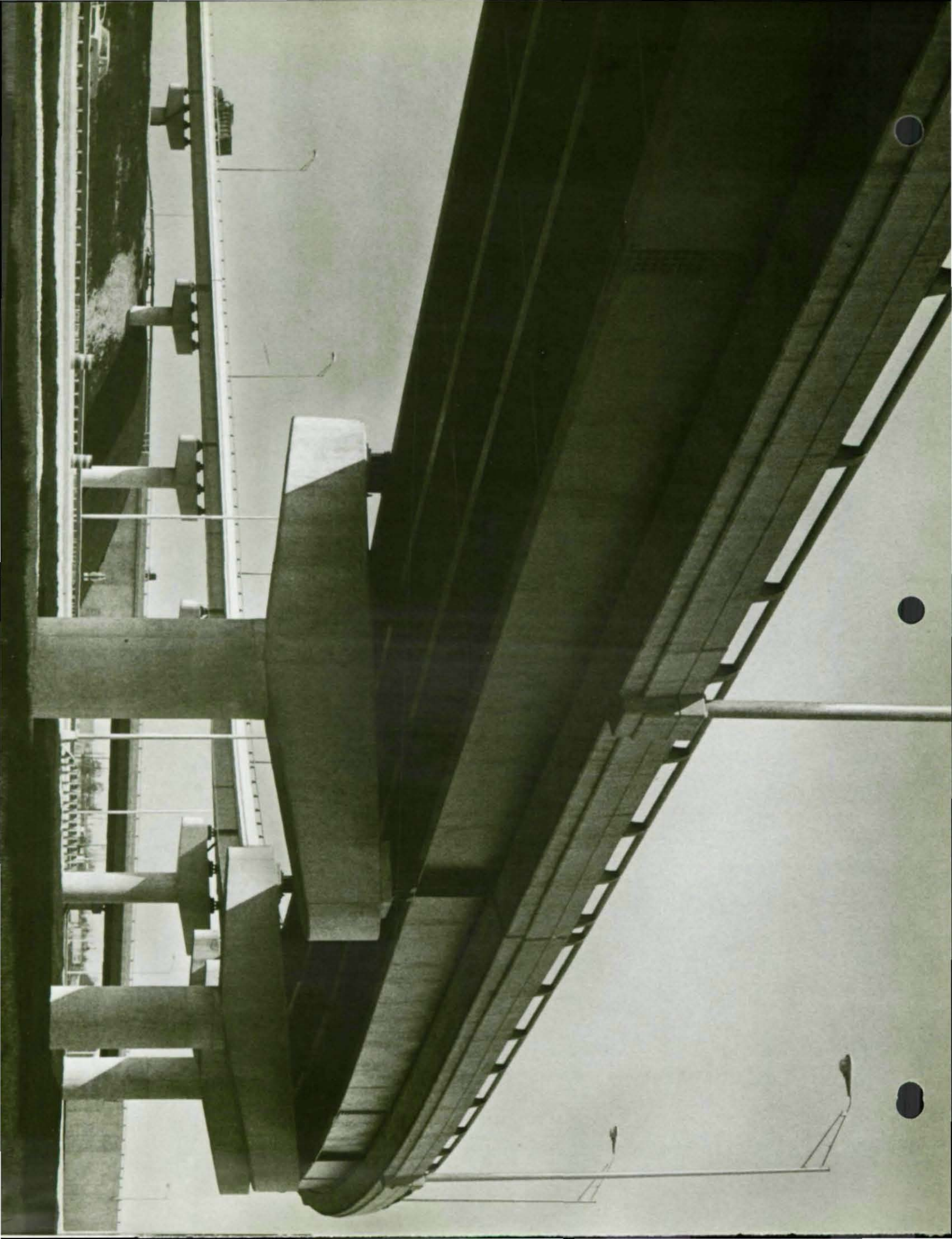
GENERAL CONTRACTOR Clement Brothers Company, Trinidad, Colorado

FABRICATOR Western Steel Company, Salt Lake City, Utah

ERECTOR Clement Brothers Company, Trinidad, Colorado

Jurors' Comments: "This elegantly simple bridge reflects the designer's careful attention to both function and aesthetics. Its light, airy appearance and the treatment of the sloping piers are well suited to the site."





Ramp "U" Structure

PRIZE BRIDGE 1974 / ELEVATED HIGHWAYS OR VIADUCTS

DESIGNER/OWNER Department of Highways, County of Cook, Chicago, Illinois
ARCHITECTURAL CONSULTANT Knoerle, Bender, Stone and Associates, Chicago, Illinois
GENERAL CONTRACTOR J. M. Corbett Company, Chicago, Illinois
FABRICATOR Pittsburgh-Des Moines Steel Company, Pittsburgh, Pennsylvania
ERECTOR J. M. Corbett Company, Chicago, Illinois

*Jurors' Comments: "This bridge is nicely proportioned and well detailed.
Its sweeping curves and the use of single piers produce an attractive, open feeling."*



Rabbit Valley Interchange

PRIZE BRIDGE 1974 / HIGHWAY GRADE SEPARATION

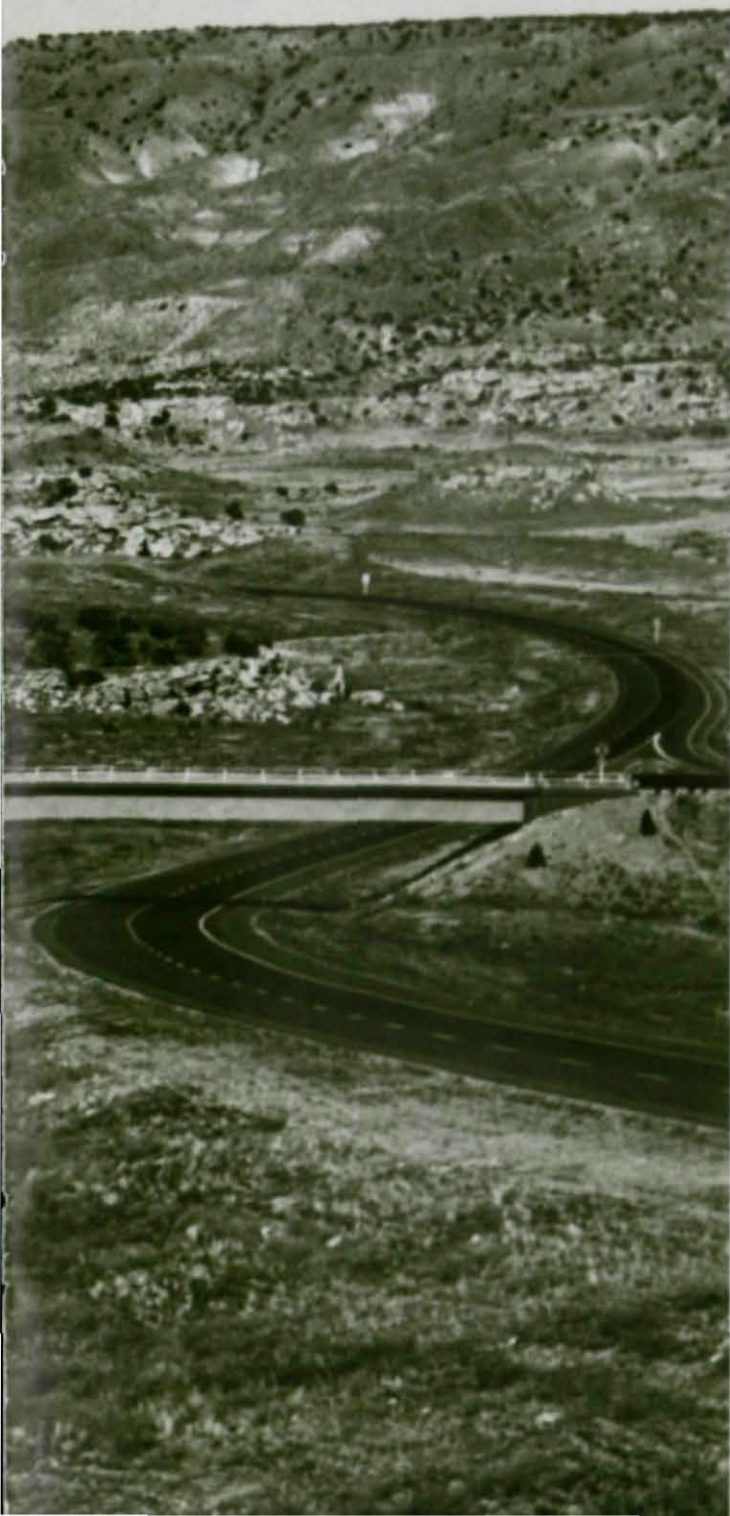
DESIGNER/OWNER Colorado Department of Highways, Denver, Colorado

GENERAL CONTRACTOR Engineered Structures, Inc., Cheyenne, Wyoming

FABRICATOR Burkhardt Steel Company, Denver, Colorado

ERECTOR Engineered Structures, Inc., Cheyenne, Wyoming

Jurors' Comments: "This exceptionally well proportioned bridge blends beautifully into its surroundings. The ratio of span length to bridge height is especially pleasing."



Miller-Sweeney Highway Bridge

PRIZE BRIDGE 1974 / MOVABLE SPAN

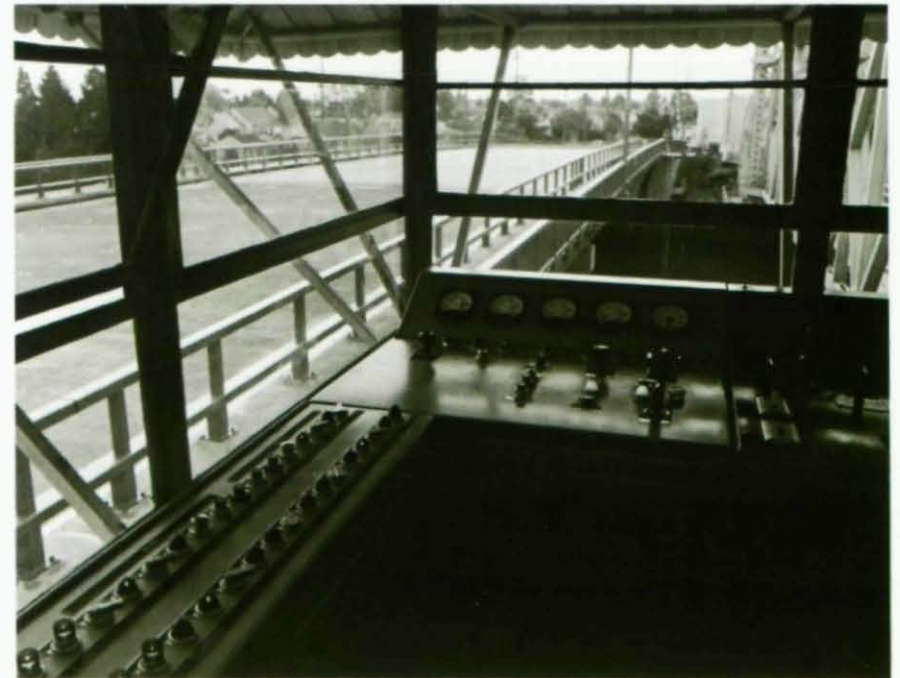
DESIGNER McCreary-Koretsky International, Inc., San Francisco, California

OWNER U.S. Army Engineer District, San Francisco, California

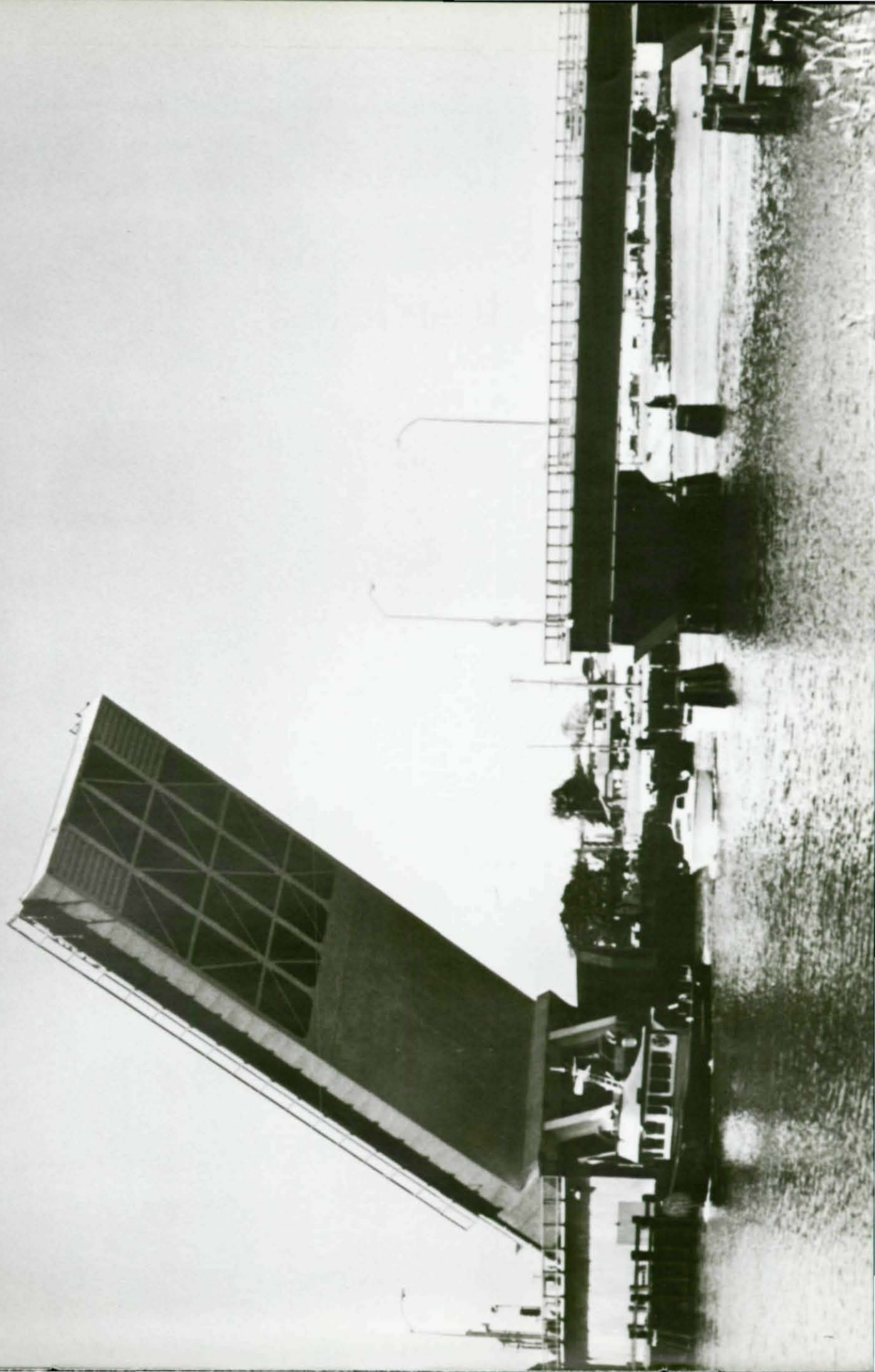
GENERAL CONTRACTOR Hensel Phelps Construction Co., Greeley, Colorado

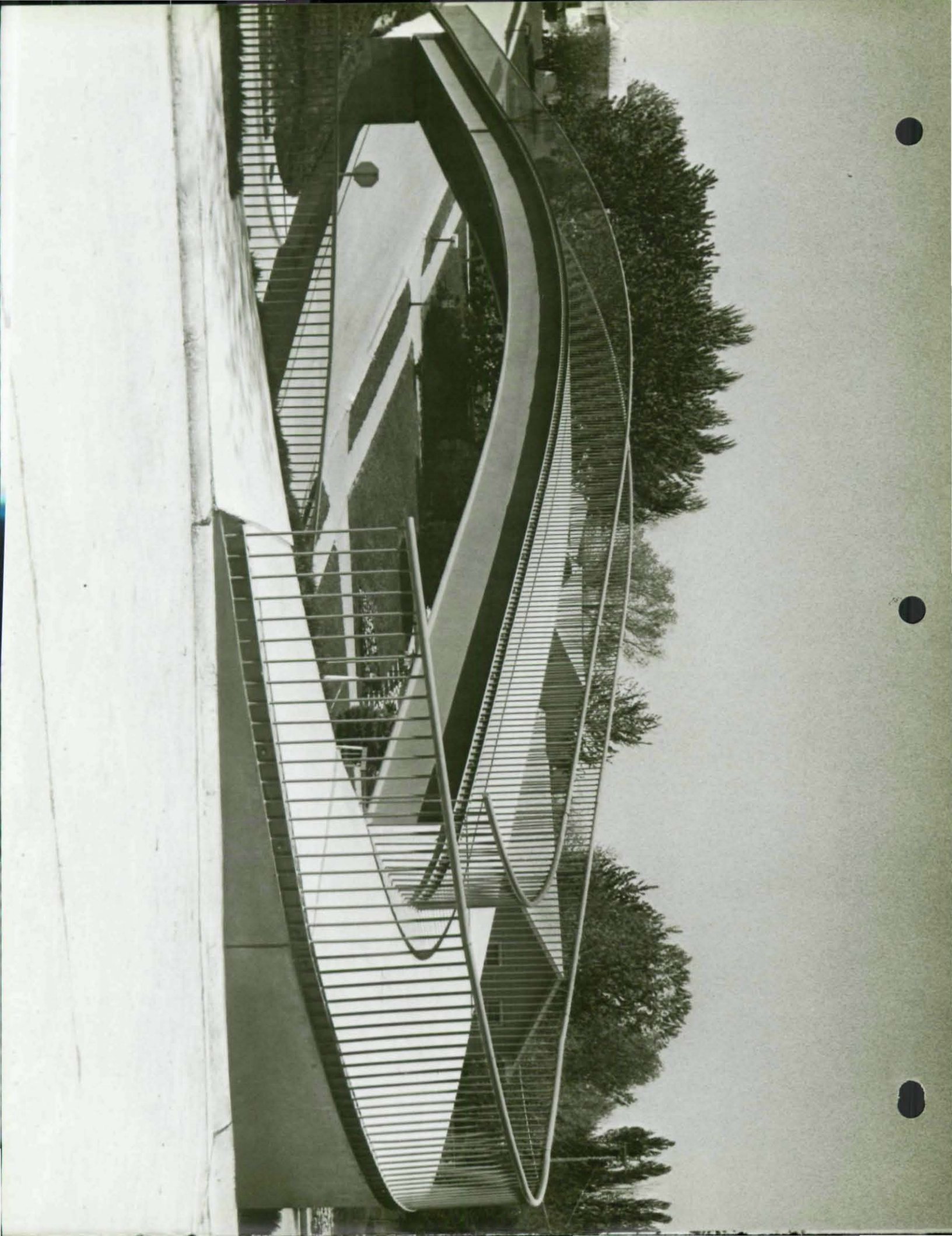
FABRICATOR/ERECTOR Kaiser Steel Corporation, Oakland, California

Jurors' Comments: "This is a pleasing bascule bridge with graceful proportions and simple lines. The control room is unobtrusive."



000629





Pedestrian Overpass

Over Galvin Road
PRIZE BRIDGE 1974 / SPECIAL PURPOSE

DESIGNER State of Nebraska, Department of Roads, Lincoln, Nebraska
OWNER City of Bellevue, Bellevue, Nebraska
GENERAL CONTRACTOR Peter Kiewit Sons' Co., Omaha, Nebraska
FABRICATOR Paxton & Vierling Steel Co., Omaha, Nebraska
ERECTOR Peter Kiewit Sons' Co., Omaha, Nebraska

Jurors' Comments: "Here is a very attractive pedestrian bridge. Its gracefully arching main span and nicely curved approach ramps provide visual interest and beauty and relate nicely to the irregular topography."





Iberville Parish, Louisiana

I-10 Over Whiskey Bay Pilot Channel

AWARD OF MERIT 1974 / LONG SPAN

DESIGNERS (A Joint Venture): Barnard and Burk / Howard, Needles, Tammen & Bergendoff
Baton Rouge, Louisiana

OWNER State of Louisiana, Department of Highways, Baton Rouge, Louisiana

GENERAL CONTRACTOR Dravo Corporation, Pittsburgh, Pennsylvania

FABRICATOR/ERECTOR Bethlehem Steel Corporation, Bethlehem, Pennsylvania

Lake Creek Bridge

AWARD OF MERIT 1974
MEDIUM SPAN, HIGH CLEARANCE

DESIGNER/OWNER U.S. Department of Transportation
Federal Highway Administration
Denver, Colorado

GENERAL CONTRACTOR Weyher Construction Company
Salt Lake City, Utah

FABRICATOR Western Steel Company
Salt Lake City, Utah

ERECTOR Weyher Construction Company
Salt Lake City, Utah





Lyndon, Vermont

1-91 Over SA No. 9 (NB & SB Twin Bridges)

AWARD OF MERIT 1974 / HIGHWAY GRADE SEPARATION

DESIGNERS Blauvelt Engineering Co., New York, New York
State of Vermont, Department of Highways, Montpelier, Vermont

OWNER State of Vermont, Department of Highways, Montpelier, Vermont

GENERAL CONTRACTOR Caledonia, Inc., St. Johnsbury, Vermont

FABRICATOR Bancroft & Martin Inc., South Portland, Maine

ERECTOR W. W. Wyman, Inc., Greenfield, Maine



South of Fargo, North Dakota

Durbin Interchange

AWARD OF MERIT 1974 / HIGHWAY GRADE SEPARATION

DESIGNER/OWNER North Dakota Highway Department, Bismarck, North Dakota

GENERAL CONTRACTOR James J. Igoe & Sons, Bismarck, North Dakota

FABRICATOR Hassenstein Steel Company, Sioux Falls, South Dakota

ERECTOR James J. Igoe & Sons, Bismarck, North Dakota



Bruckner-Cross Bronx Expressway Interchange

AWARD OF MERIT 1974
ELEVATED HIGHWAYS OR VIADUCTS

DESIGNER Howard, Needles, Tammen & Bergendoff
New York, New York

ARCHITECTURAL CONSULTANT A. Gordon Lorimer
Douglaston Manor, New York

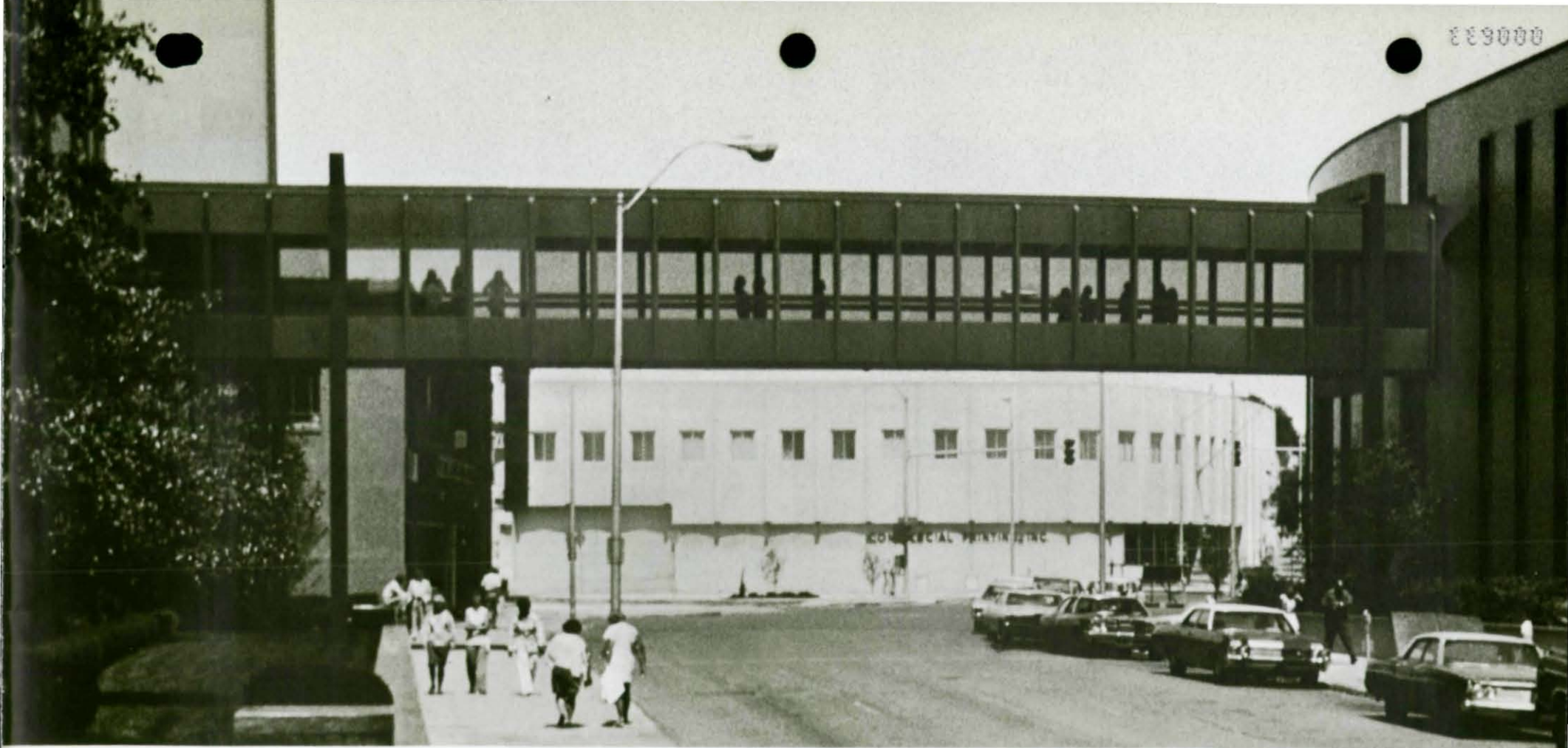
OWNER State of New York, Department of Transportation
Albany, New York

GENERAL CONTRACTOR Slattery Associates Inc., Maspeth, New York

FABRICATORS Chicago Heights Steel
Division of Allied Products Corporation
Chicago Heights, Illinois
Pittsburgh-Des Moines Steel Company
Pittsburgh, Pennsylvania
Vincennes Steel Division, Novo Corporation
Vincennes, Indiana

ERECTOR Karl Koch Erecting Co., Inc.
Carteret, New Jersey

New York, Bronx County, New York



Des Moines, Iowa

Bankers Life Pedestrian Skyway

AWARD OF MERIT 1974 / SPECIAL PURPOSE

DESIGNER Tinsley Higgins Lighter & Lyons, Des Moines, Iowa

OWNER Bankers Life, Des Moines, Iowa

GENERAL CONTRACTOR Wm. Knudson & Son, Inc., Des Moines, Iowa

FABRICATOR/ERECTOR Pittsburgh-Des Moines Steel Company, Pittsburgh, Pennsylvania



Spokane, Washington

Pedestrian Bridges No. 1, 2, and 3

AWARD OF MERIT 1974 / SPECIAL PURPOSE

DESIGNER John Graham and Company, Seattle, Washington

GENERAL CONTRACTOR Robert B. Goebel, General Contractor, Inc., Spokane, Washington

FABRICATOR The Coeur d'Alenes Company, Spokane, Washington

ERECTOR Crane Service Inc., Spokane, Washington

COLOR PHOTOS

Front Cover / Forbes Avenue Bridge / Pittsburgh, Pennsylvania
Inside Front Cover / Fremont Bridge / Portland, Oregon
Inside Back Cover / The Eads Bridge / St. Louis, Missouri
Back Cover / Pedestrian Overpass over Galvin Road / Bellevue, Nebraska

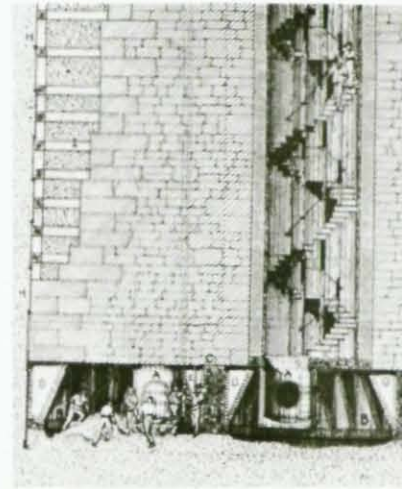
The Eads Bridge

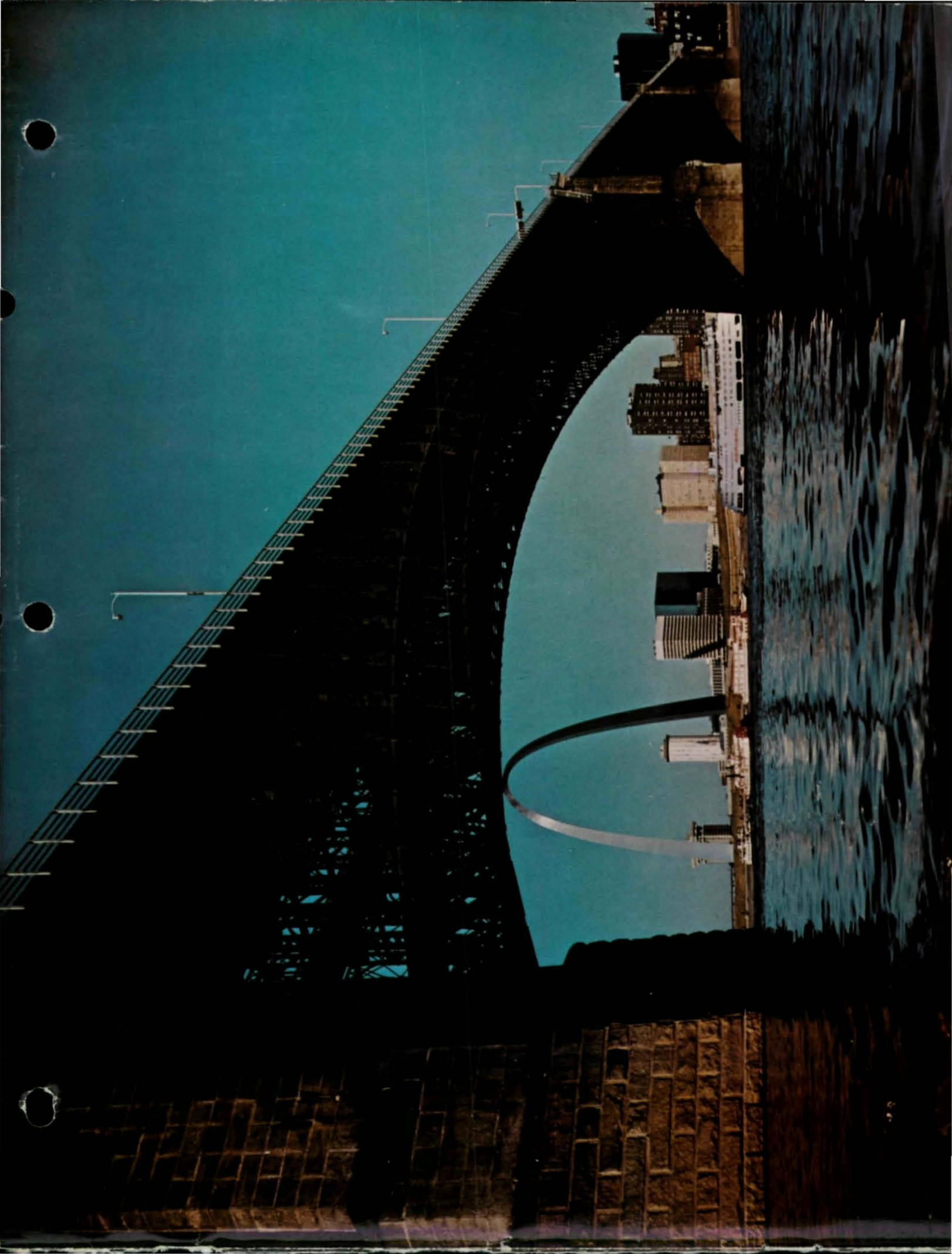
SPECIAL AWARD 1974

A special award of recognition has been made by AISC to the Eads Bridge, which spans the Mississippi River at St. Louis. Cited for its "outstanding historical significance," this remarkable structure is both an engineering and aesthetic landmark.

Designed by James Buchanan Eads, the bridge was the first of its kind in many ways. It was the world's first alloy steel bridge and, in fact, the first important construction in steel. It was the largest bridge of any type built up to that time. It was the first to use tubular chord members and the first to use the principle of the cantilever with no falsework for the building of the superstructure. A three-arch truss bridge, it has a center span of 520 feet, with side spans of 502 feet each.

The Eads Bridge is still in good condition and is serving railroads and vehicular traffic more than 100 years after its dedication on July 4, 1874.







American Institute of Steel Construction
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