

Merritt Parkway, Morehouse Highway Bridge
Spanning the Merritt Parkway at the 27.87 mile mark
Fairfield
Fairfield County
Connecticut

HAER No. CT-113

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
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HISTORIC AMERICAN ENGINEERING RECORD

Merritt Parkway, Morehouse Highway Bridge

HAER No. CT-113

Location: Spanning the Merritt Parkway at the 27.87 mile mark in Fairfield, Fairfield County, Connecticut

UTM: 18.645655.4563430
Quad: Westport, Connecticut

Construction Date: August 1939

Engineer: Connecticut Highway Department

Architect: George L. Dunkelberger, of the Connecticut Highway Department, acted as head architect for all Merritt Parkway bridge.

Contractor: Edward E. Bray Construction Company
Bridgeport, Connecticut

Present Owner: Connecticut Department of Transportation
Wethersfield, Connecticut

Present Use: Used by traffic on the Morehouse Highway to cross the Merritt Parkway

Significance: The bridges of the Merritt Parkway were predominately inspired by the Art Deco and Art Moderne architectural styles of the 1930s. Experimental forming techniques were employed to create the ornamental characteristics of the bridges. This, combined with the philosophy of incorporating architecture into bridge design and the individuality of each structure, makes them distinctive.

Historians: Todd Thibodeau, HABS/HAER Historian
Corinne Smith, HAER Engineer
August 1992

For more detailed information on the Merritt Parkway, refer to the Merritt Parkway History Report, HAER No. CT-63.

LOCAL HISTORY

Fairfield was known as Uncoway or "looking forward to a valley" by the Indians that inhabited this region when Europeans first arrived. In 1637, Roger Ludlow landed at Uncoway and named it Fair Fields. Later that year Ludlow defeated the Pequot Indians in the Great Swamp Fight, ending the Pequot Wars.¹

With the Pequot's demise, Ludlow took immediate steps to obtain a commission from the General Court of Connecticut to begin a new settlement. In 1639, with commission in hand, Ludlow and four others journeyed back to Fair Fields, and acquired land from the local Indians. The original purchase consisted of the present-day communities of Fairfield, Black Rock, Easton, Redding, Weston, and Westport. Three years later, Ludlow convinced Governor Hayes to hold General Court in Fairfield twice a year. Thus, early in its history, Fairfield became a place of unusual importance in the Connecticut colony.²

During the first half of the eighteenth century, trade flourished among Fairfield and other communities on the Atlantic coast. By 1745 Fairfield was the third-largest town in the colony. As it expanded eleven neighborhoods developed: the Beach Area, Tunxis Hill, Stratfield, Grasmere, Greenfield Hill, Mill Plain, Holland Hill, the University area, Southport, Black Rock Turnpike, and the Center. Early Fairfield was primarily an agricultural and trading node, with properties along the original roads developing the quickest. Thus, the Boston Post Road played a prominent role early in town development.³

¹Rita Papazion, Fairfield Connecticut, 350 Years, (Fairfield: Fairfield House, Inc., 1989), 6.

²Papazion, 6.

³George O. Pratt, Fairfield in Connecticut, 1776-1976, (Fairfield: Fairfield Bicentennial Commission, 1976), 5.

On the morning of July 7, 1779, the British set fire to a large section of Fairfield's downtown. It would be several years before the community rebounded from the loss. During the nineteenth century, the municipalities of Redding, Weston, Easton, Westport, and Black Rock split off from Fairfield. The industrialization of Bridgeport and the increased popularity of commuting brought further change to the town's demography. Improved transportation meant that factory workers could live in Fairfield and work in Bridgeport. Between 1900 and 1910, Fairfield's population increased by 50 percent to 6,134, heralding the start of the town's transformation into a suburban community. By 1920, the population almost doubled again to 11,000. Fairfield developed in a conservative manner, though, implementing its first zoning ordinance in the early 1920s.⁴

On to this backdrop the Merritt Parkway was built, and conflict quickly developed. Local residents sought the benefits of increased land values and reduced traffic congestion on the Boston Post Road, but worried about over-development and traffic choking residential areas. Their solution was to allow the parkway to follow a northerly route with few on and off ramps. This group promptly formed the Greenfield Hill Improvement Society. Local business leaders aimed to reduce congestion on the Boston Post Road without losing customers; they wanted the parkway to parallel the Post Road and have several exits throughout the community. Local entrepreneurs rallied around the Fairfield Lion's Club and the Fairfield Businessmen's Association. After several petitions and town meetings Commissioner Cox settled on a compromise; the road would have several interchanges, but exit 43 in Greenfield Hill

⁴Pratt, 21-25.

would not be built.⁵ After the parkway was completed, both groups appeared to be satisfied with the results.

BRIDGE CONSTRUCTION HISTORY

The Morehouse Highway commences at Fairfield Woods Road just south of the parkway and proceeds north to Westport Road in the town of Easton. The Osborn-Barnes Construction Company of Danbury, CT, received the contract to grade the Merritt Parkway from the Black Rock Turnpike, in Fairfield, to Main Street/Route 25, in Trumbull (ConnDot project #180-52). While the Morehouse Highway Bridge is located within this section of the Merritt, the grade separation and bridge contract went to the Edward E. Bray Construction Company of Bridgeport, CT (ConnDot project #180-83).⁶ The bridge cost \$32,175 and was under construction from April 28, 1939, to the fall of that year. The paving work for this region of the Merritt extended from the Black Rock Turnpike to Main Street/Route 25. This contract was awarded to the New Haven Company of New Haven, CT (ConnDot project #180-102). The Morehouse Highway Bridge has received little maintenance since it was built. Some arch detail was lost when patching was done on the west side of the north bound lane.⁷

⁵"Greenfield Hill Residents Oppose New Highway Entrance," Fairfield News, 9 September 1938, p. 1.

"Cox to Visit Fairfield Over Entrance Controversy," Fairfield News, 16 September 1938, p. 1.

"Local Businessmen Want Entrance at Cross Highway or Redding Road," Fairfield News, 13 January 1939, p. 1.

"Lions Club Offering Petitions For Merritt Parkway Approach," Fairfield News, 27 January 1939, p. 1.

⁶Contract Card File, Map File and Engineering Records Department, Connecticut Department of Transportation, Wethersfield, CT.

⁷Morehouse Highway Bridge, DOT #742; Bridge Maintenance File, Engineering Department, Connecticut Department of Transportation, Newington, CT.

BRIDGE DESCRIPTION

The Morehouse Highway Bridge is a double-span, reinforced-concrete, barrel-type rigid-frame bridge. Each frame spans 36'-4" over two lanes of the Merritt Parkway. The bridge provides a 30' wide roadway at a 6 percent grade for Morehouse Highway. Parallel reinforced-concrete wing walls of varying length form the approach for the underpass.

The two frames are completely independent except for a shared footing at the center pier. The rigid-frame design allows the engineer to decrease the structural material at the center of the span, thus forming an arched opening. (See the Merritt Parkway History Report, HAER No. CT-63, for a more detailed description of the rigid-frame.) The intrados of the span rises 2'-6" from the springline to the crown, while the extrados rises a few inches from the knee to the crown. The frame thickness at the crown is 15". The frame leg thickness increases from 2' at the base to 2'-8" at the knee. The exposed face of the legs remains vertical, and the hidden face slopes away from the roadway. The minimum clearance provided is over 14' at the edge of the pavement. Despite the steep grade of the road, both frames are the same height. The correct grade is achieved by the depth of gravel fill placed on the frame.

The spandrel walls, which vary in height according to the grade, appear to be faced with 30" square tiles. Actually, the concrete is grooved to form these squares. The tiles are grouped in columns four squares wide with a railing panel at the top. The top of each column steps to follow the grade of the road, so the horizontal grooves are offset several inches from column to column. The size of the "tiles" are varied at the pylons because they do not fit the module of the squares. A tile one-fourth the size of the typical module, 15" square, is molded with a quarter bull's-eye pattern and used to accent the pylons and railing in a random fashion. In some places the quarter bull's-eyes are placed next to each other to form half bull's-eyes. At the center pylon, rectangular tiles form a thin column down the center of the pylon. These tiles are molded in a geometrical pattern. The railing is a balustrade with a quarter

bull's-eye at the top of each baluster. The square space at the south end of each panel contains four 15" square tiles molded with quarter bull's-eyes. All the grooves and tile patterns are the result of reverse plaster molds placed in the concrete formwork.

The surface concrete is in poor condition. The west railing is spalling badly, and vertical reinforcing bar is exposed in several locations. A patch of repaired concrete on the west face mars the decorative details.

BIBLIOGRAPHY

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Papazion, Rita. Fairfield Connecticut, 350 Years. Fairfield: Fairfield House, Inc., 1989.

Pratt, George O. Fairfield in Connecticut, 1776-1976. Fairfield: Fairfield Bicentennial Commission, 1976.

Fairfield News. 1938-1939.

----- . Contract Card File. Map File and Engineering Records Department, Connecticut Department of Transportation: Wethersfield, CT. This includes construction drawings, copies of which are in the HAER field records.

----- . Bridge Maintenance File. Engineering Department, Connecticut Department of Transportation: Newington, CT.

PROJECT INFORMATION

This recording project was undertaken by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER) Division of the National Park Service, Robert J. Kapsch, Chief. The Merritt Parkway recording project was sponsored and funded by the Connecticut Department of Transportation (ConnDot) and the Federal Highway Administration.

The fieldwork, measured drawings, historical reports and photographs were prepared under the general direction of Eric N. DeLony, HAER Chief, and Sara Amy Leach, HABS Historian.

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The recording team consisted of Jacqueline A. Salame (Columbia University), architect and field supervisor; Mary Elizabeth Clark (Pratt Institute) and B. Devon Perkins (Yale University), architectural technicians; Joanne McAllister-Hewlings (US/ICOMOS-Great Britain, University of Sheffield), landscape architect; Corinne Smith (Cornell University), engineer; Gabrielle M. Esperdy (City University of New York) and Todd Thibodeau (Arizona State University), historians; and Jet Lowe, HAER photographer.