

Liberty Bend Bridge

JACK13

GENERAL DATA

structure no.: L 568R1	city/town: 4.5 miles northeast of Independence
county: Jackson / Clay	feature inters.: Missouri River
	cadastral grid: S5, T50N, R32W
	highway route: State Highway 291
	highway distr.: 4
	current owner: Missouri Highway and Transportation Department

STRUCTURAL DATA

superstructure: steel, 2-span, rigid-connected cantilever through truss; cantilevered Warren deck truss approach spans; steel deck girder approach spans	
substructure: concrete abutments and spill-through piers	
span number: 2	condition: good
span length: 460.0'	alterations: deck replaced with steel grid, 1984; part of grid deck replaced, 1986
total length: 1,884.0'	floor/decking : concrete deck over steel stringers
roadway width: 24.0'	other features: upper chord and inclined end post: 2 built-up channels with cover and batten plates; lower chord: 2 built-up channels with lacing; vertical: 2 channels with lacing; diagonal: 2 channels with lacing or batten plates; lateral bracing: 2 angles; floor beam: I-beam, field-bolted to vertical; strut: 2 angles with lacing; steel guardrails

HISTORICAL DATA

erection date: 1947	
erection cost: unknown	
designer: Sverdrup and Parcel, St. Louis MO (probable)	
fabricator : Carnegie Steel Company, Pittsburgh PA	
contractor: unknown	
references: Missouri Highway and Transportation Department Structure Inventory and Appraisal: Structure Number L 568R1; files on primary system bridges, located at Missouri Highway and Transportation Department, Jefferson City MO; State Highway Commission, Thirteenth Biennial Report , 1941-42, page 149; field inspection by Lon Johnson, 3 February 1991.	
sign. rating: 52	
evaluation: NRHP possibly eligible (well-preserved example of large-scale truss bridge construction on a crossing of the Missouri River)	
inventoried by: Clayton B. Fraser	21 September 1994

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE

Liberty Bend Bridge
MHTD: L 568R1

JACK13

DATE(S) OF CONSTRUCTION

1947

LOCATION

State Highway 291 over Missouri River; S5, T50N, R32W
4.5 miles northeast of Independence; Jackson / Clay County, Missouri

USE (ORIGINAL / CURRENT)

highway bridge / highway bridge

RATING NRHP possibly eligible (score: 52)

CONDITION

good

OWNER

Missouri Highway and Transportation Department

span number: 2
span length: 460.0'
total length: 1,884.0'
roadway wdt.: 24.0'

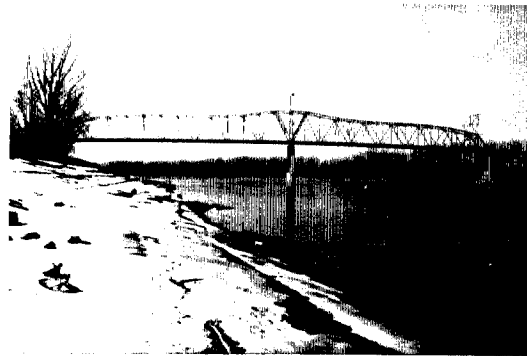
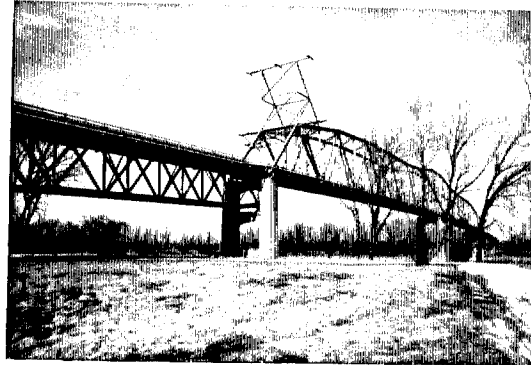
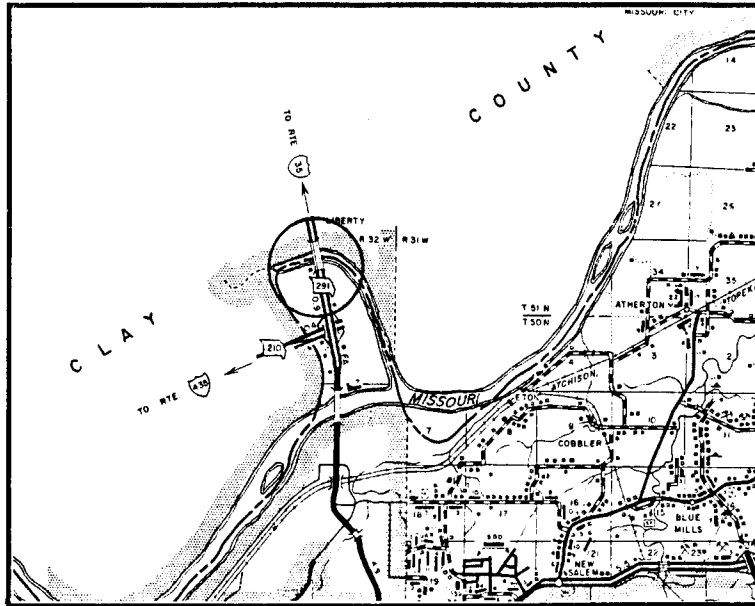
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Alternately known as the Liberty Bridge and the Liberty Bend Bridge, this massive steel structure carries State Highway 291 over the Missouri River between Jackson and Clay counties. The multiple-span superstructure consists of two rigid-connected, cantilevered Warren trusses over the river's main channel, supported by concrete spill-through piers and approached on both sides by cantilevered Warren deck truss and deck girder spans. MHTD records indicate that the Liberty Bend Bridge was constructed in 1947. The configuration of the structure is indicative of those trusses designed by engineers Sverdrup and Parcel of St. Louis. Little else is known of this structure, however. The bridge's deck was replaced with steel grid in 1984, and part of the grid deck was replaced in 1986. With an overall length of 1,884 feet, the Liberty Bend Bridge continues to carry vehicular traffic.

Fourteen vehicular steel truss bridges over the Missouri River are included in Missouri's statewide historic bridge inventory. As a group, these bridges comprise some of the state's longest examples of truss bridge construction. Undertaken in the wake of World War II, the Liberty Bend Bridge was the last of the great river truss bridges built in Missouri. It has formed a regionally important crossing of the Missouri River. Featuring a cantilevered design, the Liberty Bend Bridge ranks among Missouri's most monumental examples of steel truss construction. With a span length of 460 feet and an overall length of 1884 feet, the multiple-span structure clearly ranks as a superlative example of its type. Its distinctive curved profile distinguished it among several great river bridges undertaken in the state by prominent St. Louis civil engineers Sverdrup and Parcel. Similarly configured structures undertaken by Sverdrup and Parcel include the Mark Twain Bridge in Hannibal, the Hermann Bridge and the Miami Bridge. As an important river crossing and a well-preserved example of large-scale bridge construction, the Liberty Bend Bridge is one of Missouri's more noteworthy highway trusses.

NAME(S) OF STRUCTURE
Liberty Bend Bridge

PHOTOS AND SKETCH MAP OF LOCATION



LOCATION MAP

TAKEN FROM MISSOURI HIGHWAY AND TRANSPORTATION DEPARTMENT
GENERAL HIGHWAY MAP

SOURCES

Missouri Highway and Transportation Department Structure Inventory and Appraisal: Structure Number L 568R1; files on primary system bridges, located at Missouri Highway and Transportation Department, Jefferson City MO; State Highway Commission, **Thirteenth Biennial Report**, 1941-42, page 149; field inspection by Lon Johnson, 3 February 1991.

INVENTORIED BY
Clayton B. Fraser

AFFILIATION
Fraserdesign, Loveland CO

DATE
24 September 1994