© Landmarks Association of St. Louis, Inc., 1983.

United States Department of the Interior National Park Service

National Register of Historic Places Inventory—Nomination Form

20 may 70 0	STATE OF	marin St.	2 6 20	e de	11 m 77 5 2 3 11
For 1	(PŠ ii	Z.	4,0		er Vi
tive no	and we	- A		Tighty.	100
rece	المثرية	1	2.00		
A 70-12-	ers in the		Name of	lana.	100
date	ente	red	The state of		46.
	ari i			a programa	e specie

1. Nam	ne			
istoric				
nd/or common	Windsor Harbor Roa	ad Bridge		
2. Loca			7	
treet & number	Windsor Harbor Re	oad at Rock Creek	-	not for publication
ity, town Kin	mswick	vicinity of		
tate Misso	ouri cod	e 29 county	Jefferson County	code 099
3. Clas	sification			
category cat	Ownership X public private both Public Acquisition in process being considered X n/a	Status occupied unoccupied work in progress Accessible yes: restricted _X_ yes: unrestricted	Present Use agriculture commercial educational entertainment government industrial military	museum park private residence religious scientific X transportation other:
	Jefferson County	rty		
ame .	Jefferson County	rty		
ame treet & number ity, town Hi	Jefferson County	vicinity of	state M	0 63050
ame treet & number ity, town Hi	Jefferson County	vicinity of		0 63050
ame treet & number ty, town Hi	Jefferson County	vicinity of al Descripti	on	0 63050
ame treet & number ity, town Hi LOC4 ourthouse, regi	Jefferson County illsboro ation of Leg	vicinity of al Descripti	on	0 63050
ame treet & number ity, town Hi LOC burthouse, regintreet & number	Jefferson County illsboro ation of Leg	vicinity of al Descripti	on	0 63050 M0 63050
treet & number ity, town Hi LOCA burthouse, regi	Jefferson County illsboro ation of Legatry of deeds, etc. Jeffe	vicinity of al Descriptions	ouse	
ame treet & number tty, town Loca ourthouse, regintreet & number tty, town Repl	Jefferson County illsboro ation of Leg stry of deeds, etc. Jeffe Hillsboro,	vicinity of ai Description rson County Court H	ouse	MO 63050
treet & number Ity, town Hi LOCA ourthouse, regintreet & number Ity, town Repi	Jefferson County illsboro ation of Leg stry of deeds, etc. Jeffe Hillsboro, resentation i State Historical	vicinity of ai Description rson County Court H in Existing Survey has this pro	state Surveys perty been determined elignment of the state of the st	M0 63050
treet & number ity, town Hi LOC ourthouse, regi treet & number ity, town Repi	Jefferson County illsboro ation of Leg stry of deeds, etc. Jeffe Hillsboro, resentation i State Historical 83	vicinity of ai Description rson County Court H in Existing Survey has this profite i Department of Nat	state Surveys perty been determined elignment of the state of the st	M0 63050

7. Description

Condition excellentdeteriorated Xgoodruinstairunexposed	Check one unaltered X altered	Check one original siteX_ moved date1930
--	-------------------------------	--

Describe the present and original (if known) physical appearance

The wrought iron bridge at Windsor Harbor Road over Rock Creek in Kimmswick, Missouri, is a nine panel, single span, pin-connected Pratt through truss structure (Photo #1). The roadway is 20.3 feet wide; the span is 123.3 feet and the height of the trusses is 13.7 feet. Short, beam-supported approaches at each end are borne on concrete abutments. The bridge is supported on vertical rolled steel sections installed as driven piles. (Four abandoned tubular steel piers, the north pair of which has fallen at the river bank, undoubtedly are remnants of an earlier bridge known to have existed at the site.) The roadway is constructed of timber planking over wide-flange girders and beams. A thin coating of asphaltic concrete has been applied to the surface of the decking (Photo #2). Constructed in 1874-75 by the Keystone Bridge Company, the bridge was dismantled and re-erected at its present site in 1930.

Although the truss configuration is no different than later bridges, the design of the members is significantly so. Vertical compression members are "Phoenix" sections consisting of four rolled shapes bolted together with cast lugs to form roughly octagonal members (Photo #3). Diagonal and bottom chord tension members are solid bars of various proportions with formed eyes at the ends for pin connections. Cast fittings occur at panel point and bearings; deocrative cast knee braces survive at the entrance bents. Rolled sections similar to modern wide-flange beams occur in the top chord. Panel points are braced with lattice trusses (Photo #4). (These members show considerable deterioration not evident elsewhere.) The elaborate methods used for connecting members are of considerable interest; for reasons of economy and standardization, later bridges tended to lose these interesting variations in detailing.

The bridge was originally designed to carry traffic across the River des Peres from Alabama Avenue in St. Louis to Lemay Ferry Road in Luxemburg. A comparison of a 1927 photograph showing the bridge at its original location (Photo #5) with a current photograph of the bridge at its present location (Photo #1) indicates that the superstructure above the roadway has not been altered. The earlier photograph documents walkways on the outboard face of the trusses (apparently supported by extensions of the floor girders) with three member pipe guardrails carried on uprights which appear to be castings. With the exception of the handrails and identifying plaques (now removed and replaced by sheet metal signs reading "Load Limit, 4 Tons"), the earliest known iron truss bridge in Missouri is remarkably intact.

8. Significance

Period prehistoric 1400-1499 1500-1599 1600-1699 1700-1799X 1800-1899 1900-	agriculture	community planning conservation economics education X engineering exploration/settlement	landscape architecture law literature military music philosophy politics/government	religion science sculpture social/ humanitarian theater transportation other (specify)
Specific dates	1874-75	Builder/Architect	Keystone Bridge Compa	any

Statement of Significance (in one paragraph)

The bridge at Windsor Harbor Road over Rock Creek in Kimmswick, Missouri, qualifies for listing in the National Register of Historic Places under Criterion C and is significant in the following area: ENGINEERING: The bridge is the one of the oldest wrought iron span in the State and is an outstanding example of a transition period in engineering. In response to the demands of the railroads and expanding road systems, bridge technology made rapid strides in the nineteenth century. By the end of the century, standardized rolled steel sections connected with gusset plates and rivets brought an end to the handsome individuality expressed in the 1874-75 bridge built by the Keystone Bridge Company and now located at Kimmswick.

When the city of Carondelet with a population of 5,387 was incorporated by the city of St. Louis in 1870, the bustling farm-to-market traffic crossed the River des. Peres at the southern boundary of the expanded city limits on a covered toll bridge. Ordinances were passed in the summers of 1874 and 1875 to fund the construction of a new wrought iron span. The cost was to be shared equally by the city of St. Louis and St. Louis County. The city appropriated \$6,500 from general revenue for its share and the Keystone Bridge Company won the construction contract. The company was organized on April 25, 1865, with a capital of \$300,000. The list of incorporators included Aaron G. Shiffler, J. L. Piper, Walter Katte, James Stewart and Andrew Carnegie. (Never an outstanding money-maker, the Keystone Bridge Company was sold to the American Bridge Company in 1900.)

In 1928, after fifty-three years of service, the bridge was moved to a point just west of its original location while a new concrete and steel viaduct was under construction. Upon completion of the new span -- noted by a local poet4 -- the bridge was dismantled and re-erected in 1930 at Kimmswick in Jefferson County. The city of St. Louis donated the bridge; the County Court of Jefferson County paid for dismantling, moving and re-erection except for iron piling and driving which was paid for by the County. The bridge's somewhat remote location in Kimmswick left it undisturbed from threats of "progress" until the late 1970s. Preservationists began urging that a new bridge be built upstream and that the old bridge be reserved for bicycle and pedestrian traffic. A Federal Aid Urban Program Agreement between the Missouri Highway and Transporation Commission, Jefferson County and the city of Kimmswick will make that possible since the Kimmswick Historical Society voted to accept ownership, control and maintenance of the old bridge. Fortunately, the December 1982-January 1983 floods which washed away the 1879 iron truss bridge at Old Appleton on the Perry-Cape Girardeau County line in Missouri did not damage the Kimmswick span.

United States Department of the InteriorNational Park Service

National Register of Historic Places Inventory—Nomination Form

Windsor Harbor Road Bridge, Kimmswick, MO

Continuation sheet

Item number 8



Page 1

While the River des Peres at St. Louis has become a cement-lined drainage ditch crossed by a major highway, the bridge's bucolic setting in Kimmswick (Photo #2) conveys the sense of the original 1875 context. Mentioned in an article by Mark C. Stauter in the Winter 1982 issue of the Society for Industrial Archaeology Newsletter, the decorative Pratt through truss span may soon be not only the oldest but one of the few remaining examples in the State from an innovative period in engineering history.

FOOTNOTES

¹H. G. Hertich, <u>History of Old Roads</u>, <u>Pioneers and Early Communities of</u>
St. Louis County (Clayton, MO: St. Louis County Historical Society, n.d.), p. 8.

²The 1875 ordinance was supplemental to cover \$591.58 overrun. Of the original \$6,500 appropriated by the city, \$3,420 was paid to Keystone Bridge, \$3,029.38 to one Harry Doering for construction of the substructure and \$255.75 to various persons. From the Mayor's Message, May 1875, Table #6.

³The Keystone Bridge Company plant in Pittsburgh still operates as USS Fabrication's Division Shiffler Plant fabricating transmission towers. Records of previous operations are lost.

⁴"Lemay Ferry Bridge" by Paul G. Ulrich of Luxemburg, Missouri, as printed in the August 9, 1929, edition of the <u>Carondelet News</u>:

The old bridge was a beauty, In the days of long ago; Over it traveled Presidents, And soldiers to and fro. It saw the days of the ox cart, And the horse and buggy, too; And many heavy loaded trucks, In our later years. It was built by the Keystone Bridge Co., In the year of eighteen-seventy-four, It was the first bridge or gateway From the south to the City's door; Spanned with its single span River des Peres, One time a splendid stream; It weathered storms and blizzards, And many high waters, too; ETC....

United States Department of the InteriorNational Park Service

National Register of Historic Places Inventory—Nomination Form

Windsor Harbor Road Bridge, Kimmswick, MO

Continuation sheet

Item number 9



Page 1

BIBLIOGRAPHY

Allen, Richard. "Truss Bridges: Endangered Species in One Missouri County."

Society for Industrial Archeology Newsletter 11 (Winter 1982): 7.

City of St. Louis, Missouri. Mayor's Message. May 1975, Table #9.

Comp, T. Allan, and Jackson, Donald. <u>Bridge Truss Types: A Guide to Dating and Identifying</u>. Technical Leaflet #95, <u>History News</u> 32 (May 1977).

Hertich, H. G. <u>History of Old Roads</u>, <u>Pioneers and Early Communities of St. Louis County</u>. Clayton, MO: St. Louis County Historical Society, n.d.

Jefferson County, Missouri. County Court Record #14, September 1929 - June 2, 1930.

St. Louis, Missouri. Landmarks Association of St. Louis, Inc. Joseph D. Covin, Manager, Information Systems, American Bridge, Division of United States Steel Corporation, to Elizabeth Eldridge, St. Louis, Missouri. 5 April 1983. (Xerox copy.)

Ulrich, Paul G. "Lemay Ferry Bridge." <u>Carondelet (Missouri) News</u>, 9 August 1929, p. 4.

Item number 11

Page 1

2. James M. Denny, Section Chief and State Contact Person Historic Preservation Program Department of Natural Resources P.O. Box 176 Jefferson City

22 July 1983 314/751-4096

Missouri 65102

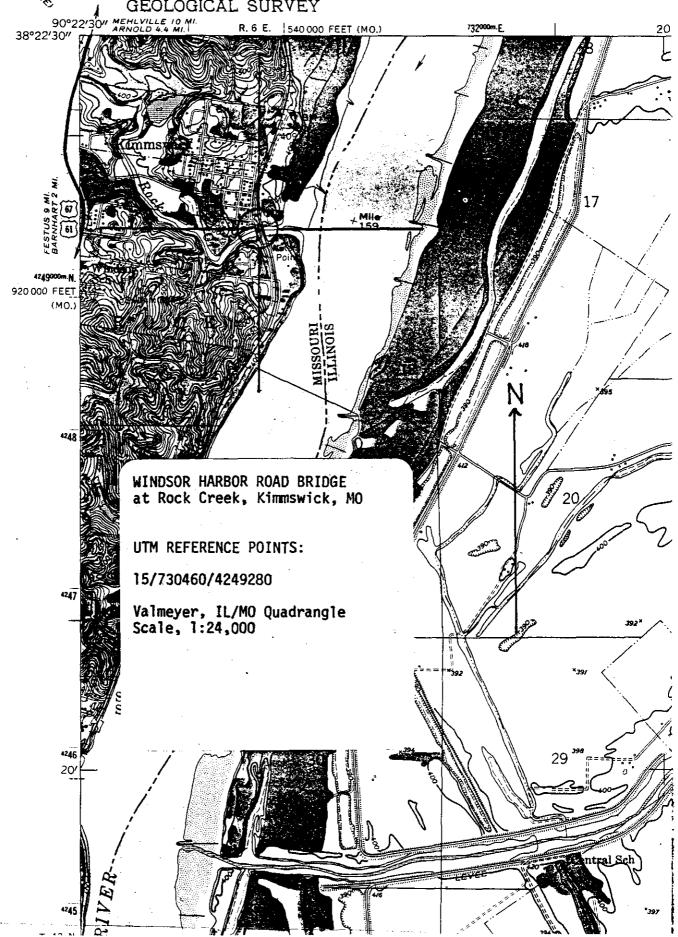
9	Major			References
J .	majvi	bibliogra	pilivai	uciciciice?

See attached.

10. Geograp	hical Data				
Acreage of nominated proper		acre			
Quadrangle name Valmeye	r, IL/MO		Quadrangle	scale 1:24,000	
UTM References					
A 1 15 7 3 10 4 16 10 Zone Easting	4 2 4 9 2 8 0 Northing	BZone	Easting	Northing	•
		ВЦ			
		F LL			
$G \sqcup I \sqcup I \sqcup I \sqcup I$		нЦ			
Verbal boundary descripti a 100 meter by 20 mete sides of which are par	er rectangle cente	red on the abov	re referenced Ŭ		
List all states and countie	s for properties over	lapping state or co	unty boundaries		
state	code	county		code	
state	code	county		code	
11. Form Pre	nared By	C Landmarks	Accordation of	St. Louis, Inc.	1003
organization Landmarks A	Association of St. 2 Street, Room 111	- 	te 22 June 19 lephone (314) 42	13.45.5	
city or town St. Louis,)	st	nte MO 63101		
12. State His	storic Pres	ervation (Officer C	ertificatio	n
The evaluated significance of	this property within the	state is:			
national	_X_ state	local			
As the designated State Histo 665), I hereby nominate this paccording to the criteria and pactors of the Criteria	ric Preservation Officer roperty for inclusion in terocedures set forth by the control of the co	he National Register	and certify that it ha		19 _
Director, Depart	ment of Natural R			* 20 02	
Me State Historic P	reservation Offic	er	date d	1-28-83	
For NPS use only I hereby certify that this	property is included in	he National Register			
Keeper of the National Re	gistes				**************************************
Attest					
Chief of Registration					

TO THE LANGE

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY



WINDSOR HARBOR ROAD BRIDGE

COUNTY:

Jefferson

LOCATION:

Windsor Harbor Road at Rock Creek, Kimmswick

OWNER: ADDRESS:

DATE APPROVED BY A.C.:

DATE SENT TO D.C.:

DATE OF REC. IN D.C.:

DATE PLACED ON NATIONAL REGISTER:

DATE CERTIFICATE AWARDED (AND PRESENTOR):

DATE FILE REVIEWED:

July 12, 1983

Jefferson County Hillsboro, Mo. 63050

August 4, 1983

August 2, 1983

September 8, 1983

The bridge is one of the oldest wrought iron span in the State and is an outstanding example of a transition period in engineering.

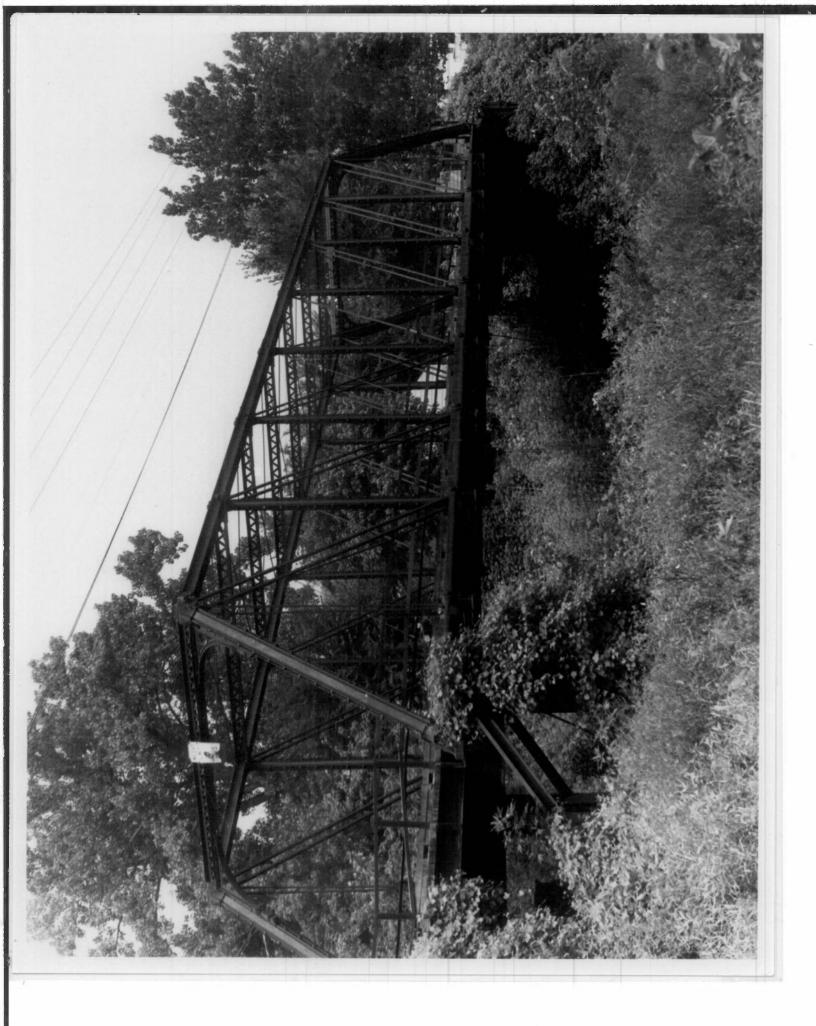
WINDSOR HARBOR ROAD BRIDGE at Rock Creek, Kimmswick, MO

#1 of 5 View of bridge looking northwest.

Photographer: Richard L. Bliss

Date: 1982

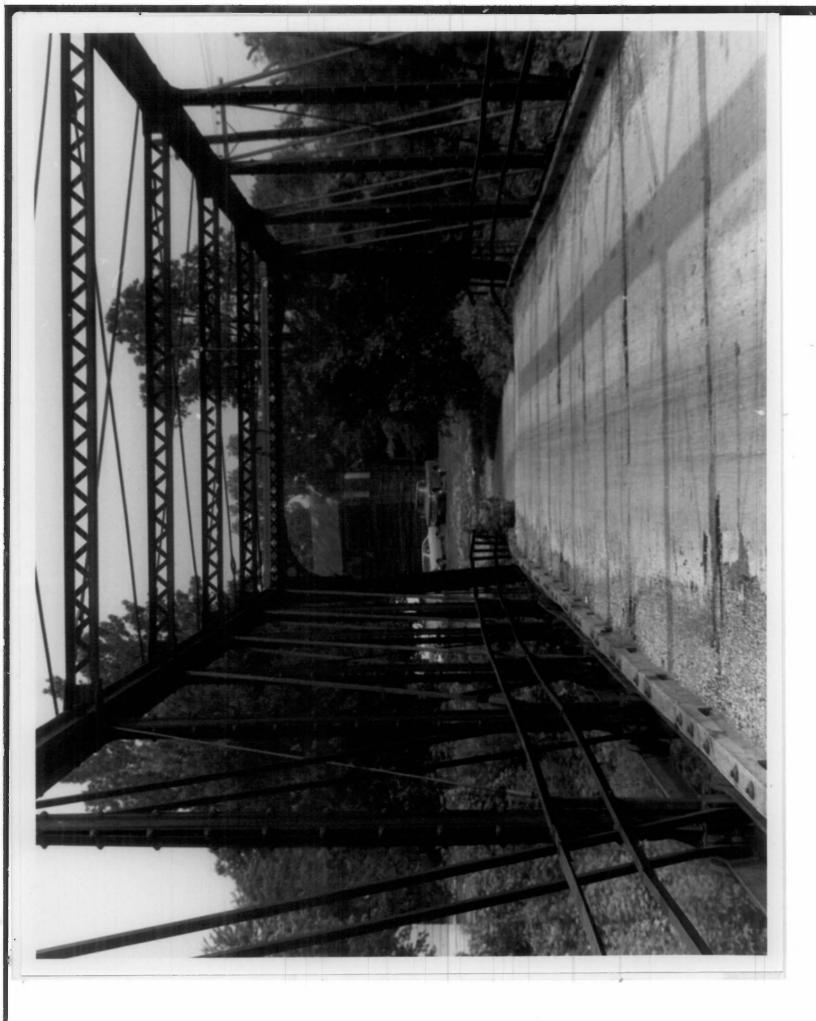
Negative: Richard L. Bliss



WINDSOR HARBOR ROAD BRIDGE at Rock Creek, Kimmswick, MO

#2 of 5 View of bridge looking north.

Photographer: Richard L. Bliss Date: 1982 Negative: Richard L. Bliss



WINDSOR HARBOR ROAD BRIDGE at Rock Creek, Kimmswick, MO

#3 of 5 Detail.

Photographer: Richard L. Bliss Date: 1982

Negative: Richard L. Bliss

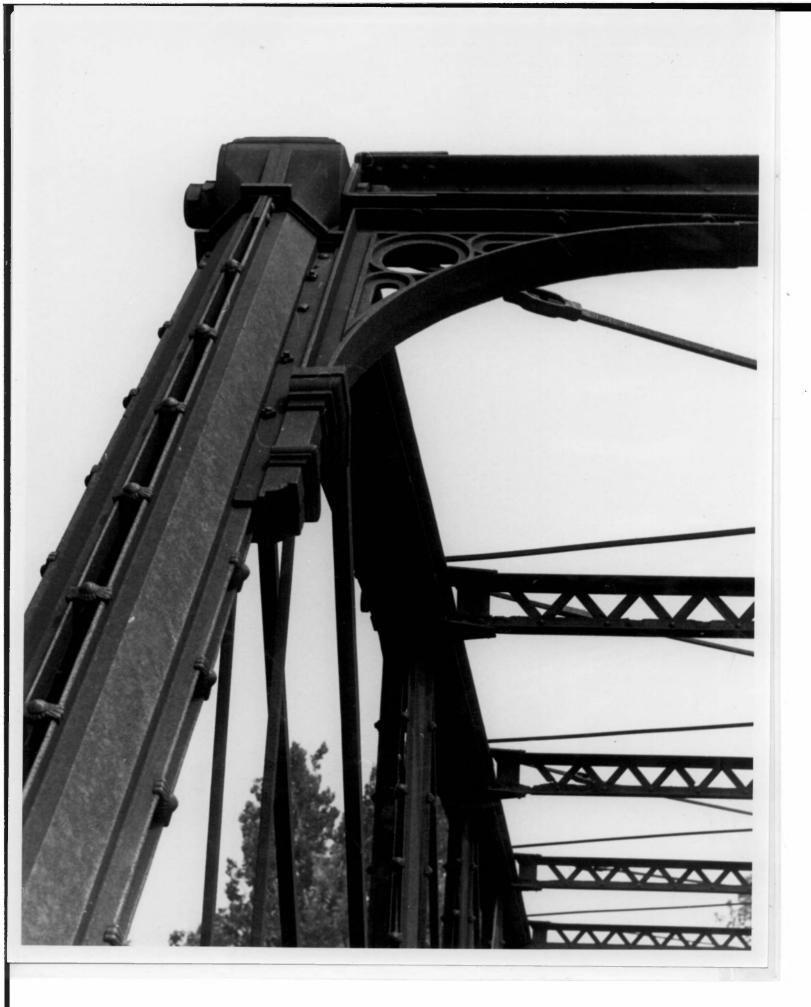


WINDSOR HARBOR ROAD BRIDGE at Rock Creek, Kimmswick, MO

#4 of 5 Detail.

Photographer: Richard L. Bliss Date: 1982

Negative: Richard L. Bliss



WINDSOR HARBOR ROAD BRIDGE at Rock Creek, Kimmswick, MO

#5 of 5 Bridge at original site over River des Peres.

Photographer: Unknown

Date: 1927

Photocopy & Negative:

Richard L. Bliss St. Louis, MO

Camera looking northeast.

