

WORTH COUNTY

INCLUDED: [Significant feature(s) of bridge given in boldface]
 [Field inventoried bridge indicated by asterisk]

Inv. No.	MHTD	Bridge Name	Description
WORT01	060R01.5	X Branch Bridge	1- 50' pinned Pratt pony truss c1910 Midland Bridge Co. (prob.)
*WORT02	103001.0	Marlowe Creek Bridge	1- 90' pinned Pratt through truss c1885 CB&Q Railroad bridge crew
WORT03	116000.3	Middle Fork Bridge	2- 80' pinned Pratt pony truss c1915
WORT04	140R00.3	East Fork Bridge	1- 64' pinned Pratt pony truss 1908 Midland Bridge Company (replaced)
WORT05	171000.8	Little Rock Creek Bridge	
WORT06	174002.1	Savacool Bridge	1- 44' pinned Pratt pony truss 1905 M.D. Haas
*WORT07	251001.0	Lotts Creek Bridge	1- 80' riveted polyg. Warren pony truss c1920
WORT08	254000.3	Sand Creek Bridge	1- 40' pinned Pratt pony truss c1910 Midland Bridge Co. (prob.) (replaced)
WORT09	258R00.1	Lotts Creek Bridge	
WORT10	266R00.3	Grand River Bridge	1- 60' pinned Pratt pony truss c1910 Midland Bridge Co. (prob.)
WORT11	281001.9	Middle Fork Bridge	1-100' riveted Warren pony truss 1932 Graham Brothers

EXCLUDED:

Pratt pony truss
037000.0

Warren pony truss
G 795 H 617 J 840 X 111 112000.2 119000.1 261001.2

Steel stringer
S 50 T 898 X 112 X 141 X 142 X 970 001000.2
002000.8 011000.3 022000.4 023000.1 035000.2 036000.8 053000.3
059000.4 059001.0 059001.6 062R00.7 062000.1 071000.8 076R00.4
076R01.3 081000.6 083000.0 091000.4 098R00.2 106000.7 111001.7
125001.1 129000.3 133001.7 140000.2 144001.1 150001.3 151001.1
155000.1 164000.9 170000.8 180000.9 200000.2 203000.2 207000.9
209000.1 209000.7 216000.9 228000.1 246000.8 257R01.0 260000.2
263000.8

Concrete girder
J 24

Concrete box culvert
H 649 H 650 H 883

WORTH COUNTY

SUMMARY:

	Primary	Secondary	Urban	Other	Total
Included	0	9	0	0	9
Excluded	14	48	0	0	62
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	14	57	0	0	71 structures

X Branch Bridge

WORT01

GENERAL DATA

structure no.: 060R01.5	city/town: 8.9 miles southwest of Grant City
county: Worth	feature inters.: X Branch
	cadastral grid: S11/14, T65N, R13W
	highway route: County Road 60
	highway distr.: 1
	current owner: Worth County

STRUCTURAL DATA

superstructure: steel, 3-panel, pin-connected Pratt pony truss	
substructure: timber abutments and wingwalls	
span number: 1	condition: fair
span length: 50.0'	alterations: unknown
total length: 63.0'	floor/decking : timber deck
roadway width: 13.9'	other features: unknown

HISTORICAL DATA

erection date: c1910
erection cost: Midland Bridge Company, Kansas City MO (probable)
designer: Midland Bridge Company, Kansas City MO (probable)
fabricator : Midland Bridge Company, Kansas City MO (probable)
contractor: unknown
references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number 060R01.5.
sign. rating: 25
evaluation: NRHP non-eligible (typically configured, poorly documented example of common structural type)

inventoried by: Mark Hufstetler 31 July 1992

Marlowe Creek Bridge

WORT02

GENERAL DATA

structure no.: 103001.0	city/town: 4.0 miles southwest of Grant City
county: Worth	feature inters.: Marlowe Creek
	cadastral grid: S13, T65N, R32W
	highway route: County Road 103
	highway distr.: 1
	current owner: Worth County

STRUCTURAL DATA

superstructure: wrought iron or steel, 4-panel, pin-connected Pratt through truss, with timber stringer approach spans

substructure: timber pile bent abutments, wingwalls and piers

span number: 1	condition: good
span length: 90.0'	alterations: converted from railroad to roadway use
total length: 228.0'	floor/decking : timber deck over steel stringers
roadway width: 10.0'	other features: upper chord / inclined end post: 2 face-to-face channels with cover plate and double lacing; lower chord: 2 face-to-face channels with lacing; vertical: 2 face-to-face channels with lacing (2 looped square eyebars at the hip); diagonal: 2 punched rectangular eyebars; counter: square eyebar with turnbuckle; lateral bracing: square rod with threaded ends; floor beam: riveted plate girder, riveted to vertical

HISTORICAL DATA

erection date: c1885
erection cost: unknown
designer: unknown
fabricator : unknown
contractor : Chicago, Burlington and Quincy Railroad bridge crew (probable)

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number 103001.0; Missouri Highway and Transportation Department, "Missouri Rail Plan, 1984 Update," page 4-1; field inspection by Mark Hufstetler, 10 September 1990.

sign. rating: 43
evaluation: NRHP possibly eligible (well-preserved, early railroad truss, converted in place with the adjacent right-of-way to roadway use)

inventoried by: Mark Hufstetler 31 July 1992

Middle Fork Bridge

WORT03

GENERAL DATA

structure no.:	116000.3	city/town:	5.9 miles southwest of Grant City
county:	Worth	feature inters.:	Middle Fork of Grand River
		cadastral grid:	S30/31, T65N, R31W
		highway route:	County Road 116
		highway distr.:	1
		current owner:	Worth County

STRUCTURAL DATA

superstructure: steel, pin-connected Pratt pony truss, with steel stringer approach spans
substructure: steel pile bent abutments and piers

span number:	2	condition:	fair
span length:	80.0'	alterations:	two dissimilar trusses, moved to this site
total length:	162.0'	floor/decking :	timber deck
roadway width:	14.0'	other features:	unknown

HISTORICAL DATA

erection date: c1915
erection cost: unknown
designer: unknown
fabricator : unknown
contractor: unknown

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number 116000.3.

sign. rating: 21
evaluation: NRHP non-eligible (two dissimilar trusses, moved to this site)

inventoried by: Mark Hufstetler 31 July 1992

East Fork Bridge

WORT04

GENERAL DATA

structure no.:	140R00.3	city/town:	4.8 miles southeast of Grant City
county:	Worth	feature inters.:	East Fork of the Grand River
		cadastral grid:	S12/13, T65N, R31W
		highway route:	County Road 140
		highway distr.:	1
		current owner:	Worth County

STRUCTURAL DATA

superstructure:	steel, 4-panel, pin-connected Pratt pony truss		
substructure:	timber back- and wingwalls, steel pile bent piers		
span number:	1	condition:	fair
span length:	64.0'	alterations:	unknown
total length:	114.0'	floor/decking :	timber deck
roadway width:	12.1'	other features:	unknown

HISTORICAL DATA

erection date:	1908
erection cost:	\$935.00
designer:	Midland Bridge Company, Kansas City MO
fabricator :	Midland Bridge Company, Kansas City MO
contractor:	Midland Bridge Company, Kansas City MO
references:	Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number 140R00.3; Worth County Bridge Commissioner's Report, 4 February 1909, located at Worth County Courthouse, Grant City MO.
sign. rating:	44
evaluation:	NRHP non-eligible (typically configured example of common structural type)

Inventoried by: Mark Hufstetler 31 July 1992

Savacool Bridge

WORT06

GENERAL DATA

structure no.: 174002.1	city/town: 9.2 miles southeast of Grant City
county: Worth	feature inters.: Little Rock Creek
	cadastral grid: S14/15, T65N, R30W
	highway route: County Road 174
	highway distr.: 1
	current owner: Worth County

STRUCTURAL DATA

superstructure: steel, 3-panel, pin-connected Pratt pony truss	
substructure: timber abutments and wingwalls	
span number: 1	condition: fair
span length: 44.0'	alterations: unknown
total length: 45.0'	floor/decking : timber deck
roadway width: 13.0'	other features: unknown

HISTORICAL DATA

erection date: 1905
erection cost: \$300.00
designer: unknown
fabricator : unknown
contractor: M.D. Haas

references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number 174002.1; Worth County Court Record Book I: 20 March 1905, located at the Worth County Courthouse, Grant City MO.

sign. rating: 37
evaluation: NRHP non-eligible (typical example of common structural type)

Inventoried by: Mark Hufstetler 31 July 1992

Lotts Creek Bridge

WORT07

GENERAL DATA

structure no.: 251001.0	city/town: 6.2 miles northeast of Grant City
county: Worth	feature inters.: Lotts Creek
	cadastral grid: S28, T66N, R30W
	highway route: County Road 251
	highway distr.: 1
	current owner: Worth County

STRUCTURAL DATA

superstructure: steel, 5-panel, rigid-connected Warren pony truss, with polygonal upper chords; timber and steel stringer approach spans	
substructure: steel pile bent piers and abutments with timber backwalls	
span number: 1	condition: good
span length: 80.0'	alterations: none
total length: 124.0'	floor/decking : timber deck over timber stringers
roadway width: 14.0'	other features: upper chord / inclined end post: 2 channels with cover and batten plates; lower chord: 2 angles; vertical: 4 angles with batten plates; diagonal: 2 angles with batten plates; floor beam: I-beam, field bolted to vertical

HISTORICAL DATA

erection date: c1920	
erection cost: unknown	
designer: unknown	
fabricator : Cambria Steel Company, Pittsburgh PA	
contractor: unknown	
references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number 251001.0; Field Inspected by Mark Hufstetler, 10 September 1990.	
sign. rating: 45	
evaluation: NRHP non-eligible (salvaged railroad truss with unusual Warren configuration)	

inventoried by: Mark Hufstetler 31 July 1992

Sand Creek Bridge

WORT08

GENERAL DATA

structure no.: 254000.3	city/town: 10.0 miles northeast of Grant City
county: Worth	feature inters.: Sand Creek
	cadastral grid: S25, T66N, R29/30W
	highway route: County Road 254
	highway distr.: 1
	current owner: Worth County

STRUCTURAL DATA

superstructure: steel, 3-panel, pin-connected Pratt pony truss	
substructure: steel pile bent piers with timber back- and wingwalls	
span number: 1	condition: fair
span length: 40.0'	alterations: unknown
total length: 52.0'	floor/decking : timber deck
roadway width: 12.4'	other features: unknown

HISTORICAL DATA

erection date: c1910	
erection cost: unknown	
designer: Midland Bridge Company, Kansas City MO (probable)	
fabricator : Midland Bridge Company, Kansas City MO (probable)	
contractor: Midland Bridge Company, Kansas City MO (probable)	
references: Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number 254000.3.	
sign. rating: 25	
evaluation: NRHP non-eligible (typical example of common structural type)	

Inventoried by: Mark Hufstetler 31 July 1992

Grand River Bridge

WORT10

GENERAL DATA

structure no.: 266R00.3 city/town: 8.4 miles northeast of Grant City
county: Worth feature inters.: Grand River
cadastral grid: S3, T66N, R30W
highway route: County Road 266
highway distr.: 1
current owner: Worth County

STRUCTURAL DATA

superstructure: steel, 4-panel, pin-connected Pratt pony truss
substructure: unknown

span number: 1 condition: fair
span length: 60.0' alterations: unknown
total length: 79.0' floor/decking : timber deck
roadway width: 12.2' other features: unknown

HISTORICAL DATA

erection date: c1910
erection cost: unknown
designer: Midland Bridge Company, Kansas City MO (prob.)
fabricator : Midland Bridge Company, Kansas City MO (prob.)
contractor: Midland Bridge Company, Kansas City MO (prob.)

references: Missouri Highway and Transportation Department, Structure Inventory
and Appraisal: Structure Number 266R00.3.

sign. rating: 28
evaluation: NRHP non-eligible (typical example of common structural type)

inventoried by: Mark Hufstetler 31 July 1992

Middle Fork Bridge

WORT11

GENERAL DATA

structure no.:	281001.9	city/town:	2.2 miles south of Grant City
county:	Worth	feature inters.:	Middle Fork of the Grand River
		cadastral grid:	S8, T65N, R31W
		highway route:	County Road 281
		highway distr.:	1
		current owner:	Worth County

STRUCTURAL DATA

superstructure:	steel, 6-panel, rigid-connected Warren pony truss		
substructure:	concrete abutments and piers		
span number:	1	condition:	good
span length:	100.0'	alterations:	none
total length:	292.0'	floor/decking :	concrete deck over steel stringers
roadway width:	21.9'	other features:	unknown

HISTORICAL DATA

erection date:	1932
erection cost:	\$22,776.87
designer:	Missouri State Highway Department
fabricator :	unknown
contractor:	Graham Brothers
references:	Missouri Highway and Transportation Department, Structure Inventory and Appraisal: Structure Number 281001.9; Missouri Highway and Transportation Department, Primary Bridge Record, located at the Bridge Division, MHTD, Jefferson City MO.
sign. rating:	43
evaluation:	NRHP non-eligible (typical MSHD highway pony truss)

Inventoried by: Mark Hufstetler 31 July 1992

HAER INVENTORY

Missouri Historic Bridge Inventory

NAME(S) OF STRUCTURE
Marlowe Creek Bridge
MHTD: 103001.0

LOCATION
County Road 103 over Marlowe Creek; S13, T65N, R32W
4.0 miles southwest of Grant City; Worth County, Missouri

WORT02

DATE(S) OF CONSTRUCTION
c1885

USE (ORIGINAL / CURRENT)
railroad bridge / roadway bridge

RATING NRHP potentially eligible (score: 43)

CONDITION
good

OWNER
Worth County

span number: 1
span length: 90.0'
total length: 228.0'
roadway wdt.: 10.0'

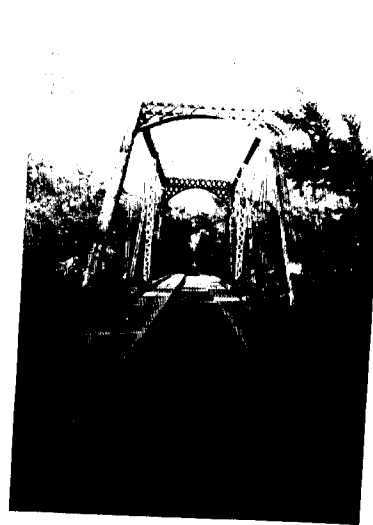
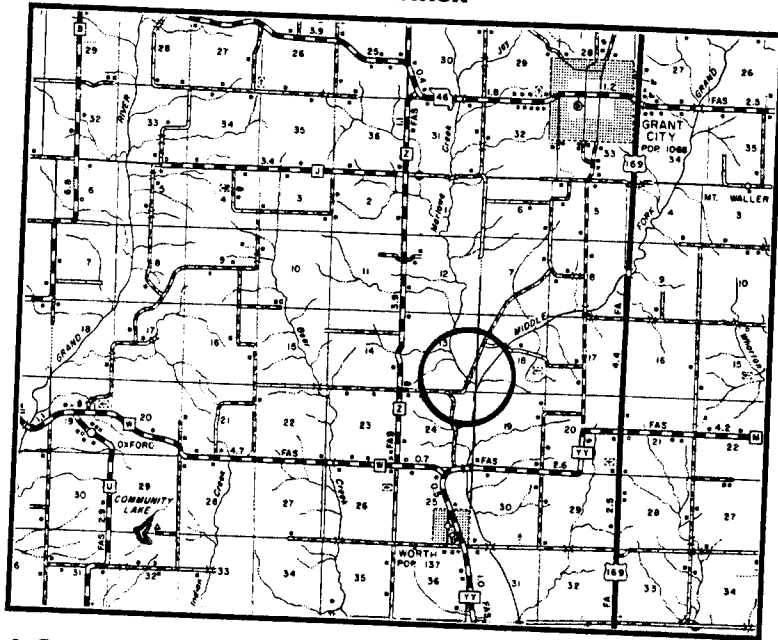
superstructure: wrought iron or steel, 4-panel, pin-connected Pratt through truss, with timber stringer approach spans
substructure: timber pile bent abutments, wingwalls and piers
floor/decking: timber deck over steel stringers
other features: upper chord / inclined end post: 2 face-to-face channels with cover plate and double lacing; lower chord: 2 face-to-face channels with lacing; vertical: 2 face-to-face channels with lacing (2 looped square eyebars at the hip); diagonal: 2 punched rectangular eyebars; counter: square eyebar with turnbuckle; lateral bracing: square rod with threaded ends; floor beam: riveted plate girder, riveted to vertical

Located on the grade of the former Chicago, Burlington and Quincy Railroad - Grant City Branch, this short-span, pinned through truss was built by the railroad to span Marlowe Creek. The truss' configuration and detailing indicate an approximate fabrication date of 1885. The Albany Junction / Grant City line, some 20 miles long, was abandoned by the Burlington Railroad in October 1981. This bridge was subsequently converted from railroad to roadway use.

All of the railroads that once served Nodaway and Worth counties have since been abandoned. The Marlowe Creek Bridge appears to be the only bridge that was not dismantled during the abandonment process. It is thus historically significant as one of the few remaining resources associated with early railroad transportation in the region. With its heavily latticed portals, the truss is a distinctive representative of the mainstay railroad - and vehicular - truss type of the late 19th century - the pinned Pratt through truss.

NAME(S) OF STRUCTURE
Marlowe Creek 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 103001.0; Missouri Highway and Transportation Department, "Missouri Rail Plan, 1984 Update," page 4-1; field inspection by Mark Hufstetler, 10 September 1990.

INVENTORIED BY
Mark Hufstetler

AFFILIATION
Renewable Technologies, Inc., Butte MT

DATE
31 July 1992