HistoricBridges.org - National Bridge Inventory Data Sheet

2011 Inventory

The National Bridge Inventory contains data submitted by state transportion departments to the Federal Highway Administration in coded format.
Form Interface Design: www.historicbridges.org. Data Conversion Assistance By www.bridgehunter.com. None of the involved parties make any guarantee of accuracy.

Basic Information

Ohio [39]	Columbiana County [029]	Saint Clair [69512]	0.1 MI E SR170	40-42-24 = 40.706667	080-32-42 = -80.545000

1535501	Highway agency district	11	Owner	County Highway Agency [02]	Maintenance responsibility	County Highway Agency [02]	
Route	#Num!		MIDLAND FREDR 1038	Toll	On free road [3]	Features intersected	LITTLE BEAVER CREEK

Design - main	Steel [3]	Design - approach		Kilometerpoint	0 km = 0.0 mi		
1	Truss - Thru [10]	0	Other [00]	Year built	#Num!	Year reconstructed	2004
				Skew angle	0	Structure Flared	
				Historical significance	Bridge is eligible for the NRHP. [2]		

Total length	36.3 m = 119.1 ft	Length of maximum span	35.4 m = 116.1 ft	Deck width, out-to-out	4.7 m = 15.4 ft	Bridge roadway width, curb-to-curb	3.7 m = 12.1 ft
Inventory Route, Total Horizontal Clearance	4.4 m = 14.4 ft	Curb or sidewalk width - left	0 m = 0.0 ft	Curb or sidewalk width - right	0 m = 0.0 ft		

Deck structure type	Open Grating [3]
Type of wearing surface	Other [9]
Deck protection	
Type of membrane/wearing surface	

Weight Limits

Bypass, detour length	Method to determine inventory rating	Allowable Stress(AS) [2]	Inventory rating	19.4 metric ton = 21.3 tons	
1.3 km = 0.8 mi	Method to determine operating rating	Allowable Stress(AS) [2]	Operating rating	28.2 metric ton = 31.0 tons	
	Bridge posting	10.0 - 19.9 % below [3]	Design Load		

Functional Details

Average Daily Traffic	100	Average daily truck traffi	0 %	Year	1951	Future average daily traffic	139	Year	2027

Road classification	Local (Rural) [09]	Lanes on structure	1	Approach roadway width	5.5 m = 18.0 ft
Type of service on bridge	Highway [1]	Direction of traffic	One lane bridge for 2 - way traffic [3]	Bridge median	
Parallel structure designation	No parallel structure exists. [N]				
Type of service under bridge	Waterway [5]	Lanes under structure	0	Navigation control	
Navigation vertical clearanc	0 = N/A	Navigation horizontal clearance	0 = N/A		
Minimum navigation vertical clearance, vertical lift bridge		Minimum vertical clearance over bridge roadway	5.31 m = 17.4 ft		
Minimum lateral underclearance reference feature	Feature not a highway or railroad [N]				
Minimum lateral underclearance on right	0 = N/A	Minimum lateral underclearance on left	0 = N/A		
Minimum Vertical Underclearance	0 = N/A	Minimum vertical underclearance reference feature	Feature not a highway or railroad [N]		
Appraisal ratings - underclearances	N/A [N]				

Repair and Replacement Plans

Type of work to be performed

Work done by

Bridge improvement cost		Roadway improvement cost	
Length of structure improvement		Total project cost	
Year of improvement cost estimate			
Border bridge - state		Border bridge - percent responsibility of other state	
Border bridge - structure number			

Inspection and Sufficiency

Structure status	Posted for load [P]	Appraisal ratings - structural	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - superstructur	Satisfactory [6]	Appraisal ratings - roadway alignment	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - substructure	Very Good [8]	Appraisal ratings - deck geometry	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - deck	Very Good [8]		

Scour	Bridge foundations determined to be stable for the assessed or calculated scour condition. [8]
Channel and channel protection	Banks are protected or well vegetated. River control devices such as spur dikes and embankment protection are not required or are in a stable condition. [8]

Appraisal ratings - water adequacy	Superior to present desirable criteria [9]	Status evaluation	
Pier or abutment protection		Sufficiency rating	60.7

Culverts	Not applicable. Used if structure is not a culvert. [N]

Traffic safety features - railings	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - transitions	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - approach guardrail	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - approach guardrail ends	Inpected feature meets currently acceptable standards. [1]

Inspection date	August 2010 [0810]	Designated inspection frequency	12	Months

Underwater inspection	Not needed [N]	Underwater inspection date	
Fracture critical inspection	Every two years [Y24]	Fracture critical inspection date	August 2010 [0810]
Other special inspection	Not needed [N]	Other special inspection date	

District: **11** County **COLUMBIANA** (101) Location: **0.1 MI E SR170** (102) Facility Carried: **MIDLAND FREDR 1038**
(2)FIPS Code: **SAINT CLAIR TWP** (103) Route On Bridge: **TOWNSHIP** (104) Route Under Bridge: **NON-HIGHWAY**
(9) Direction of Traffic: **ONE LANE FOR 2-WAY TRAFFIC** (10) Temporary: **N** (11)Truck Network: **N** (12)Parallel: **N**
(95) Insp: **COUNTY** (96) Maint: **COUNTY** (97) Routine: **COUNTY** (100) Type Serv: (On): **HIGHWAY** (Under): **WATERWAY**

Inventory Route Data

(3) Route On/Under: **ON** Hwy Sys: **COUNTY/TOWNSHIP HIGHWAY**
Route No.: **T1038** Dir: Des: **MAINLINE** Pref:
(4) Feature Intersected: **LITTLE BEAVER CREEK**
(5) County: **STC** Mileage: **0204** Special Desig: **02**
(6) Avg. Daily Traffic(ADT): **100** (7) ADT Year: **1951**
(8) Truck Traf: **0** (14) NHS: **NO - X** (15) Corridor: **N**
(16) Functional Class: **LOCAL ROAD-RURAL** (19) Strahnt: **Not Applicable**

Intersected Route Data

(22) Route On/Under: Hwy Sys:
Route No.: Dir: Des: Pref:
(23) Feature Intersected:
(24) County: Mileage: Special Desig:
(25) Avg. Daily Traffic(ADT): **0** (26) ADT Year:
(27) Truck Traf: **0** (28) NHS: - (29) Corridor:
(30) Functional Class: (36) Strahnt: **Not Applicable**

Clearance On the Bridge

(154) Min Hriz on Bridge: NC: **0.0** Ft Card: **14.5** Ft
(155) Prac Max Vert On Brg: **18.0** Ft
(67) Min Vrt Clr On Brg: NC: **0.0** Ft Card: **17.4** Ft
(80) Min Latl Clr: NC: **0.0 / 0.0** Ft Card: **0.0 / 0.0** Ft
(81) Vrt Clr Lft: **0.0** Ft

Structure Information

(38) Bypass Length: **08** Miles
(39) Latitude: **40 Deg 42.4 Min** Longitude: **80 Deg 32.7 Min**
(40) Toll: **ON FREE ROAD**
(41) Date Built: **07/01/1900** (42) Major Rehabilitation: **01/01/2004**
(43) No. Lanes On: **1** No. Lanes Under: **0**
(44) Horiz Curve: **Deg. Min.** (45) Skew: **0** Deg
(49) App. Rdw Width: **18** Ft (50) Brg. Rdw Width: **14.6** Ft
(51) Deck Width: **15.3** Ft Deck Area: **1819** Sq. Ft
(52) Median Type: **NONE / NON BARRIE / NO JOINT**
(53) Bridge Median: **NO MEDIAN**
(54) Sidewalks: (left) **0** Ft (right) **0** Ft
(55) Type Curb or Sidewalks:
(Left) Matl: **NONE** Type: **NONE**
(Right) Matl: **NONE** Type: **NONE**
(56) Flared: **N** (57) Composite: **non-composite**
(58) Railing: **STL GUARDRL ON STL, CONCR, OR TMBR POSTS**
(59) Deck Drainage: **OVER THE SIDE (W/O DRIP STRIP)**
(60) Deck Type: **STEEL GRID - OPEN**
(61) Deck Protection: External: **NONE**
Internal: **NONE**
(62) Wearing Surface: **OTHER**
Thickness: **0.0** in (119) Date of Wearing Surface:
Slope Protection: **NONE-NATURAL PROTECTION(GRASS,BUSHES)**

(63) Main Spans Number: **1** Type: **STEEL / TRUSS / THRU**
Approach Spans Number: **0** Type: **NONE / NONE / NONE**
Total Spans: **1** (65) Max Span: **116** Ft (66) Overall Leng: **119** Ft

(70) Substructure	(71) Foundation and Scour Information	
Abut-Rear Matl: **STONE**	Type: **SOLID WALL**	Fnd: **OTHER**
Abut-Fwd Matl: **STONE**	Type: **SOLID WALL**	Fnd: **OTHER**
Pier-Pred Matl: **NONE**	Type: **NONE**	Fnd: **NONE/NOT APPLICABLE (SUCH AS CULVERTS)**
Pier-Other Matl: **NONE**	Type: **NONE**	Fnd: **NONE/NOT APPLICABLE (SUCH AS CULVERTS)**
Pier-Other Matl: **NONE**	Type: **NONE**	Fnd: **NONE/NOT APPLICABLE (SUCH AS CULVERTS)**
No of Piers Predominate: **NN**	Other: **NN**	Other: **NN**

(86) Stream Velocity: **UUU** (74) Scour: **STABLE: EVAL SCOUR ABOVE TOP OF FOOTING**
(189) Dive: **N Freq: 0** Probe: **Y** Freq: **12** (75) Chan Prot: **NONE**
(189) Date of last Dive Insp: (152) Drainage Area: **UUU** Sq Mi

Clearance Under the Bridge

(156) Min. Horiz Under Clear: NC: **0.0** Ft Card: **0.0** Ft
(157) Prac Max Vrt Under Clear: **0.0** Ft
(77) Min Vert Under Clear: NC: **0.0** Ft Card: **0.0** Ft
(78) Min Lat Under Clear: NC: **0.0 / 0.0** Ft Card: **0.0 / 0.0** Ft

Load Rating Information

(48) Design Load: **UNKNOWN [DEFAULT]**
(83) Operating: **31** Ton
Inventory: **22** Ton
Ohio Percent of Legal Load **90**
Year of Rating: **2008**
(84) Analysis: **ALLOWABLE STRESS OR WORKING STRESS**
(85) Rate Soft: **COMBINATION** Analyzed by: **RAH**
Analysis on Bars: **NOT ON BARS [DEFAULT]**

(88-89) Appraisal

(Including calculated Items)
(88) Waterway Adequacy **9**
(89) Approach Alignment **5**
Calc Gen Appraisal: **5**
Calc Deck Geometry: **6**
Calc Underclearance: **N**

Approach Information

(109) Approach Guardrail: **STEEL BEAM**
(110) Approach Pavement: **BITUMINOUS** (111) Grade: **GOOD**

Culvert Information

(131) Culvert Type: **NONE/NOT APPLICBLE** (127) Length: **0.0** Ft
(129) Depth of Fill: **0.0** Ft (130) Headwalls: **NONE**

General Information

(121) Main Member **N/A (CULVERTS, TRUSSES, ETC.)** (122) Moment Plate: **WELDED**
(169) Expansion Joint: **NONE**
(124) Bearing Devices: **SLIDING (BRONZE)/FIXED**
(126) Navigation: **Control- N** Vert Clr: **0.0** Ft Horiz Clear:: **0.0** Ft
(193) Spec Insp: **N** Freq: **0** Date:
(188) Fracture Critical Insp: **Y** Freq: **24** Date: **2012-08-24**
(138) Long Member: **TWO TRUSSES (RIVETED)** (135) Hinges: **PINS AND HANGERS**
(141) Structural Steel Memb: **OTHER** (139) Framing: **NONE**
Railing: **OTHER**
Pay Wt: **0** pounds Prime Loc: **UNKNOWN** Paint: **GALVANIZED**
Bridge Dedicated Name:

General Information (Continued)

(---) Hist Significance: **NON-REGISTERED HISTORIC BRIDGE**
(69) NBIS: **Y**
(---) Hist Builder: **PENN BRIDGE WORKS (T. B. WHITE & SONS -**
Hist Build Year: **1893**
(69) Hist Type: **PRATT (PINNED)**
(161) Special Features (see below):
(105) Border Bridge State: Resp % (106) SFN:

Proposed Improvements

(90) Type Work: **-**
(90) Length: Ft
(90) Bridge Cost ($1000s): **0**
(90) Roadway Cost ($1000s): **0**
(90) Total Project Cost ($1000s): **0**
(90) Year:
(91) Future ADT (On Bridge): **0**
(92) Year of Future ADT: **2033**

Programming Info

PID Number:
PID Status:
PID Date:

Inspection Summary

(I-8) Deck:	**8**
(I-32) Superstructure:	**6**
(I-42) Substructure:	**8**
(I-50) Culvert:	
(I-54) Channel:	**8**
(I-60) Approaches:	**8**
(I-66) General Appraisial:	**6**
(I-66) Operational Status:	**P**
Inspection Date:	**08/24/2012**
(94) Desig Insp Freq:	**12 Months**

(I-69) Survey Items

Railings:	**1 MEETS CURRENT STANDARDS**
Transitions:	**1 MEETS CURRENT STANDARDS**
Guardrail:	**1 MEETS CURRENT STANDARDS**
Rail Ends:	**1 MEETS CURRENT STANDARDS**
In Depth:	**1 MEETS CURRENT STANDARDS**
Fracture Critical:	**0 DOES NOT MEET CURRENT STANDARDS**
Scour Critical:	**N NONE N/A**
Critical Findings:	**N NONE N/A**
Insp. Update Date:	**11/20/2012**

SFNs Replacing this retired bridge: **-**
SFNs That where replaced by this bridge: **-**
This bridge was retired and copied to:
The bridge was copied from:

Original Plans Information

(142) Fabricator:
(143) Contractor:
(144) Ohio Original Construction Project No.:
(---) Microfilm Reel:
(151) Standard Drawing:
Aperture Cards: Orig: **N** Repair: **N** Fabr: **N**
Plan Information Available: **1PLAN INFORMATION AVAILABLE**

(153) Repair Projects

1. **000000 / 020**	2.	3.
4.	5.	6.
7.	8.	9.
10.		

Utilities

(46) Electric:	**N**
Gas:	**N**
Sanitary Sewer:	**N**
Telephone:	**N**
TV Cable:	**N**
Water:	**N**
Other:	**N**

Special Features

(161) Lighting:	**N**
Fencing:	**N**
Glare-Screen:	**N**
Splash-Guard:	**N**
Catwalks:	**N**
Other-Feat:	**N**
(184) Signs-on:	**N**
Signs-Under:	**N**
(162) Fence-Ht:	**0.0** Ft
(163) Noise Barr:	**N**

INV Field Bridge Marker: **COL-T1038-0204 -02**
INT Field Bridge Marker: **---**

PONTIS CoRe elements and Condition States

Elem No.	CoRe Element Description	Total Quantity	Unit Meas.	Condition State Percents(*)				
				1	2	3	4	5
		0						

(*) Percentages Should add to 100%

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

BR-86 REV 02-95

1	5	3	5	5	0	1

1 Structure File Number 7

Bridge Number **COL** (CO) **T1038** (ROUTE) **0204** (UNIT) **02** **SAINT CLAIR TWP** **Date Built 07/01/1900 - 2004**

District **11** Bridge Type **STEEL/TRUSS/THRU** Type Service **1** **15 LITTLE BEAVER CREEK** **COL**

DECK	Out/Out 15.3			THCK = 0.0	
1. Floor	5-STEEL GRID - OPEN 8	1	2. Wearing Surface	0-OTHER 41	1
	N-NONE			W.S. Date =	
3. Curbs, Sidewalks, Walkways	N-NONE 9		4. Median	42	
5. Railing	7-STL GUARDRL ON STL, CO 10	1	6. Drainage	1-OVER THE SIDE (W/O DRI 43	1
7. Expansion Joints	N-NONE 11		**8. Summary**	44	8
SUPERSTRUCTURE	MAX.SPAN=116				
9. Alignment	12	1	10. Beams/Girders/Slab	N-N/A (CULVERTS, TRUSSES 45	
	TOT.LGTH=119				
11. Diaphragms or Crossframes	13		12. Joists/Stringers	46	1
13. Floor Beams	14	1	14. Floor Beam Connections	47	1
15. Verticals	15	1	16. Diagonals	48	2
17. End Posts	16	1	18. Top Chord	49	1
19. Lower Chord	17	1	20. Lower Lateral Bracing	50	
21. Top Lateral Bracing	18		22. Sway Bracing	51	1
				3-SLIDING (BRONZE)	
23. Portals	19	1	24. Bearing Devices	B-FIXED 52	1
25. Arch	20		26. Arch Columns or Hangers	53	1
				TYPE = 6-GALVANIZED	
27. Spandrel Walls	21		28. Protective Coating System	DATE = 07/28/1978 54	9
29. Pins/Hangers/Hinges	22	1	30. Fatigue Prone Connections	55	
31. Live Load Response	23	S	**32. Summary**	56	6
SUBSTRUCTURE	1-STONE		PIERS=0	SPANS = 1	
33. Abutments	1-STONE 24	1	34. Abutment Seats	57	1
35. Piers	TYPE = N-NONE 25		36. Pier Seats	58	
				ABUTMENT:=OTHER / OTHER	
37. Backwalls	26	1	38. Wingwalls	59	1
39. Fenders and Dolphins	27		40. Scour	8-STABLE: EVAL SCOUR ABO 60 1	1
41. Slope Protection	N-NONE 28		**42. Summary**	DIVE DT=N/A 62	8
CULVERTS					
43. General	29		44. Alignment	63	
45. Shape	30		46. Seams	64	
47. Headwalls or Endwalls	31		48. Scour	65	
49.	32		50. Summary	66	
CHANNEL				N-NONE	
51. Alignment	33	1	52. Protection	67	
53. Waterway Adequacy	34	1	**54. Summary**	68	8
APPROACHES					
55. Pavement	2-BITUMINOUS 35	1	56. Approach Slabs	69	
57. Guardrail	1-STEEL BEAM 36	1	58. Relief Joints	70	
59. Embankment	BRDG.WIDTH=14.6 37	1	**60. Summary**	PCT.LEGAL=90 71	8
GENERAL				ROUTINE.RESP: 3-COUNTY	
61. Navigation Lights	38		62. Warning Signs	MAINT.RESP: 3-COUNTY 72	1
	MVC ON=17.4 UND=0000				
63. Sign Supports	39		64. Utilities	73	
65. Vertical Clearance	40	1	**66. General Appraisal & Operational Status**	74 COND 6 STAT P	

67. INSPECTED BY

SIGNED

76 PE

T A H 78 INITIALS

68. REVIEWED BY

SIGNED

6 5 5 7 8 81 PE

T A G 83 INITIALS

DOT 2852

DECK AREA 1,819

Date 0 8 2 4 1 2 (86 91)

1 1 1 1 1 0 N N (92 69 Survey 99)

Date 0 9 2 6 1 2 (100 105)

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

BR-86 REV 02-95

1	5	3	5	5	0	1

1 Structure File Number 7

Bridge Number **COL** (CO) **T1038** (ROUTE) **0204** (UNIT) **02**

Date Built 07/01/1900 - 2004

District **11** Bridge Type **STEEL/TRUSS/THRU**

Type Service **1** **1** **5**

LITTLE BEAVER CREEK

00	NO REMARKS FOUND FOR THIS INSPECTION.