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]	Ashtabula County [007]	Harpersfield [33642]	GRAND RIVER	41-45-24 = 41.756667	080-56-39 = -80.944167

432466	Highway agency district	4	Owner	County Highway Agency [02]	Maintenance responsibility	County Highway Agency [02]	
Route	#Num!		HARPERSFIELD ROAD	Toll	On free road [3]	Features intersected	GRAND RIVER

Design - main	Steel [3]	Design - approach		Kilometerpoint	0 km = 0.0 mi		
1	Truss - Thru [10]	0	Other [00]	Year built	#Num!	Year reconstructed	1990
				Skew angle	0	Structure Flared	
				Historical significance	Bridge is eligible for the NRHP. [2]		

Total length	42.4 m = 139.1 ft	Length of maximum span	41.5 m = 136.2 ft	Deck width, out-to-out	6.3 m = 20.7 ft	Bridge roadway width, curb-to-curb	4.9 m = 16.1 ft
Inventory Route, Total Horizontal Clearance	4.9 m = 16.1 ft	Curb or sidewalk width - left	1.2 m = 3.9 ft	Curb or sidewalk width - right	0 m = 0.0 ft		

Deck structure type	Wood or Timber [8]
Type of wearing surface	Bituminous [6]
Deck protection	
Type of membrane/wearing surface	

Weight Limits

Bypass, detour length	Method to determine inventory rating	No rating analysis performed [5]	Inventory rating	24.3 metric ton = 26.7 tons	
0.3 km = 0.2 mi	Method to determine operating rating	No rating analysis performed [5]	Operating rating	32.4 metric ton = 35.6 tons	
	Bridge posting	20.0 - 29.9 % below [2]	Design Load		

Functional Details

Average Daily Traffic	100	Average daily truck traffi	0 %	Year	2000	Future average daily traffic	139
Year	2027						
Road classification	Local (Rural) [09]	Lanes on structure	2	Approach roadway width	5.5 m = 18.0 ft		
Type of service on bridge	Highway [1]	Direction of traffic	2 - way traffic [2]	Bridge median			
Parallel structure designation	No parallel structure exists. [N]						
Type of service under bridge	Waterway [5]	Lanes under structure	0	Navigation control	Not applicable, no waterway. [N]		
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	5.49 m = 18.0 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	Equal to present minimum criteria [6]
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	Satisfactory [6]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of corrrective action [3]
Condition ratings - deck	Good [7]		
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	Better than present minimum criteria [7]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection		Sufficiency rating	72
Culverts	Not applicable. Used if structure is not a culvert. [N]		
Traffic safety features - railings			
Traffic safety features - transitions			
Traffic safety features - approach guardrail			
Traffic safety features - approach guardrail ends			
Inspection date	April 2010 [0410]	Designated inspection frequency	12 Months
Underwater inspection	Not needed [N]	Underwater inspection date	
Fracture critical inspection	Every two years [Y24]	Fracture critical inspection date	April 2010 [0410]
Other special inspection	Not needed [N]	Other special inspection date	

District: **04** County **ASHTABULA** (101) Location: **GRAND RIVER** (102) Facility Carried: **HARPERSFIELD ROAD**
(2)FIPS Code: **HARPERSFIELD TWP** (103) Route On Bridge: **COUNTY** (104) Route Under Bridge: **NON-HIGHWAY**
(9) Direction of Traffic: **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.: **C154A** Dir: Des: **MAINLINE** Pref:
(4) Feature Intersected: **GRAND RIVER**
(5) County: **ATB** Mileage: **0069** Special Desig:
(6) Avg. Daily Traffic(ADT): **100** (7) ADT Year: **2000**
(8) Truck Traf: **2** (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: **16.1** Ft
(155) Prac Max Vert On Brg: **18.0** Ft
(67) Min Vrt Clr On Brg: NC: **0.0** Ft Card: **18.0** 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: **02** Miles
(39) Latitude: **41 Deg 45.4 Min** Longitude: **80 Deg 56.7 Min**
(40) Toll: **ON FREE ROAD**
(41) Date Built: **07/01/1900** (42) Major Rehabilitation: **01/01/1990**
(43) No. Lanes On: **2** No. Lanes Under: **0**
(44) Horiz Curve: **00 Deg. D00M Min.** (45) Skew: **0** Deg
(49) App. Rdw Width: **18** Ft (50) Brg. Rdw Width: **16.1** Ft
(51) Deck Width: **20.8** Ft Deck Area: **2896** Sq. Ft
(52) Median Type: **NONE** / **NON BARRIE** / **NO JOINT**
(53) Bridge Median: **NO MEDIAN**
(54) Sidewalks: (left) **4** Ft (right) **0** Ft
(55) Type Curb or Sidewalks:
(Left) Matl: **TIMBER** Type: **SIDEWALK(>2')**
(Right) Matl: **NONE** Type: **NONE**
(56) Flared: **N** (57) Composite:
(58) Railing: **STL GUARDRL ON STL, CONCR, OR TMBR POSTS**
(59) Deck Drainage: **OVER THE SIDE (W/O DRIP STRIP)**
(60) Deck Type: **LAMINATED TIMBER STRIP**
(61) Deck Protection: External: **NONE**
Internal: **NONE**
(62) Wearing Surface: **BITUM (ASPHLT CONCRT)**
Thickness: **2.0** in (119) Date of Wearing Surface: **01/01/1999**
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: **136** Ft (66) Overall Leng: **139** Ft

(70) Substructure	(71) Foundation and Scour Information	
Abut-Rear Matl: **STONE**	Type: **GRAVITY**	Fnd: **ROCK**
Abut-Fwd Matl: **STONE**	Type: **SOLID WALL**	Fnd: **ROCK**
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: **HS/20**
(83) Operating: **36** Ton
Inventory: **27** Ton
Ohio Percent of Legal Load **135**
Year of Rating: **2011**
(84) Analysis: **LOAD FACTOR (LF)**
(85) Rate Soft: **NO SOFTWARE USED** Analyzed by:
Analysis on Bars: **NOT ON BARS [DEFAULT]**

(88-89) Appraisal

(Including calculated Items)
(88) Waterway Adequacy **7**
(89) Approach Alignment **5**
Calc Gen Appraisal: **6**
Calc Deck Geometry: **3**
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: **NONE**
(169) Expansion Joint: **NONE**
(124) Bearing Devices: **ROLLERS/NONE**
(126) Navigation: **Control- X** 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: **2013-05-02**
(138) Long Member: **TWO TRUSSES (RIVETED)** (135) Hinges: **NOT APPLICABLE**
(141) Structural Steel Memb: **A36** (139) Framing: **NONE**
Railing: **A36**
Pay Wt: **99** pounds Prime Loc: **FIELD** Paint: **PAINT SYSTEM A**
Bridge Dedicated Name:

General Information (Continued)

(---) Hist Significance: **NON-REGISTERED HISTORIC BRIDGE**
(69) NBIS: **Y**
(---) Hist Builder: **RIVERSIDE BRIDGE COMPANY (MARTINS FERRY,**
Hist Build Year: **1913**
(69) Hist Type: **PRATT (RIVETED)**
(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:	**6**
(I-32) Superstructure:	**6**
(I-42) Substructure:	**6**
(I-50) Culvert:	
(I-54) Channel:	**8**
(I-60) Approaches:	**8**
(I-66) General Appraisial:	**6**
(I-66) Operational Status:	**A**
Inspection Date:	**05/02/2013**
(94) Desig Insp Freq:	**12 Months**

(I-69) Survey Items

Railings:	**0 DOES NOT MEET CURRENT STANDARDS**
Transitions:	**0 DOES NOT MEET CURRENT STANDARDS**
Guardrail:	**0 DOES NOT MEET CURRENT STANDARDS**
Rail Ends:	**0 DOES NOT MEET CURRENT STANDARDS**
In Depth:	**N NONE N/A**
Fracture Critical:	**1 MEETS CURRENT STANDARDS**
Scour Critical:	**N NONE N/A**
Critical Findings:	**N NONE N/A**
Insp. Update Date:	**05/17/2013**

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

Utilities

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

Special Features

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

INV Field Bridge Marker: **ATB-C154A-0069 -**
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

0	4	3	2	4	6	6

1 Structure File Number 7

Bridge Number **ATB** (CO) **C154A** (ROUTE) **0069** (UNIT) **HARPERSFIELD TWP** **Date Built 07/01/1900 - 1990**

District **04** Bridge Type **STEEL/TRUSS/THRU** Type Service **1** **15 GRAND RIVER** **ATB**

DECK Out/Out 20.8		1	2. Wearing Surface THCK = 2.0 6-BITUM (ASPHLT CONCRT) 41		1
1. Floor 2-LAMINATED TIMBER STRIP 8					
3. Curbs, Sidewalks, Walkways 3-TIMBER N-NONE 9		1	4. Median W.S. Date = 01/01/1999 42		
5. Railing 7-STL GUARDRL ON STL, CO 10		2	6. Drainage 1-OVER THE SIDE (W/O DRI 43		1
7. Expansion Joints N-NONE 11			**8. Summary** 44		6
SUPERSTRUCTURE MAX.SPAN=136					
9. Alignment 12		1	10. Beams/Girders/Slab N-N/A (CULVERTS, TRUSSES 45		
TOT.LGTH=139					
11. Diaphragms or Crossframes 13			12. Joists/Stringers 46		2
13. Floor Beams 14		2	14. Floor Beam Connections 47		2
15. Verticals 15		2	16. Diagonals 48		2
17. End Posts 16		2	18. Top Chord 49		2
19. Lower Chord 17		1	20. Lower Lateral Bracing 50		
21. Top Lateral Bracing 18			22. Sway Bracing 51		
23. Portals 19		2	24. Bearing Devices 1-ROLLERS N-NONE 52		2
25. Arch 20			26. Arch Columns or Hangers 53		
27. Spandrel Walls 21			28. Protective Coating System TYPE = 3-PAINT SYSTEM A DATE = 07/01/1990 54		2
29. Pins/Hangers/Hinges 22			30. Fatigue Prone Connections 55		
31. Live Load Response 23		S	**32. Summary** 56		6
SUBSTRUCTURE 1-STONE					
33. Abutments 1-STONE 24		2	34. Abutment Seats PIERS=0 SPANS = 1 57		2
35. Piers TYPE = N-NONE 25			36. Pier Seats 58		
37. Backwalls 26		2	38. Wingwalls ABUTMENT:=ROCK / ROCK 59		2
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		6
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					
51. Alignment 33		1	52. Protection N-NONE 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=16.1 37		1	**60. Summary** PCT.LEGAL=135 71		8
GENERAL					
61. Navigation Lights 38			62. Warning Signs ROUTINE.RESP: 3-COUNTY MAINT.RESP: 3-COUNTY 72		
MVC ON=18.0 UND=0000					
63. Sign Supports 39			64. Utilities 73		
65. Vertical Clearance 40		1	**66. General Appraisal & Operational Status** 74	COND 6	STAT A

67. INSPECTED BY

SIGNED 76 PE RRA 78 INITIALS

68. REVIEWED BY

SIGNED 660654 81 PE TGP 83 INITIALS

DOT 2852

DECK AREA 2,896

Date 050213 (86–91)

0000N1NN (92 – 69 Survey – 99)

Date 050213 (100–105)

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

BRIDGE INSPECTION REPORT

BR-86 REV 02-95

0	4	3	2	4	6	6

1 Structure File Number 7

Bridge Number **ATB** (CO) **C154A** (ROUTE) **0069** (UNIT)

Date Built 07/01/1900 - 1990

District **04** Bridge Type **STEEL/TRUSS/THRU**

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

GRAND RIVER

00	NO REMARKS FOUND FOR THIS INSPECTION.