

STATE OF OHIO  
BRIDGE INSPECTION REPORT

Structure File Number: 2801655

Inventory Bridge Number: GEA-00422-0986L\_(2801655)

USR 422 over LA DUE RES. 0.71 MI E 44

Inspection Type: Routine

Inspection Date: 07/09/2020

District: 12

County: 28 - Geauga

Place Code (FIPS): 02904

Bridge Type:

4 - Steel continuous

02 - Stringer/Multi-beam or Girder

N- Not Applicable

Type of Service:

1 - Highway

Maintenance Responsibility:

01 - State Highway Agency

Inspection Responsibility:

01 - State Highway Agency

Routine Maintenance Responsibility:

01 - State Highway Agency

Lead Inspector: Gerstenslager,  
Michael

Reviewed by: Youssef Seif

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# Ohio Bridge Inspection Summary Report

**GEA-00422-0986L (2801655)**

2: District 12 02904 - AUBURN TWP (GEA county)  
 21: Major Maint A/B 01 - State Highway Agency /  
 225 Routine Main A/B 01 - State Highway Agency /  
 221 Inspection A/B 01 - State Highway Agency /  
 220: Inv. Location GEA

5A: Inventory Route 1 00422  
 7: Facility On USR 422  
 6: Feature Ints LA DUE RES. 0.71 MI E 44  
 9: Location 0.92 MI E SR44

## Condition

**58: Deck** **7 - Good Condition**  
 58.01 Wearing Surface 7 - Good (1% distress)  
 58.02 Joint 4- Poor (heavy leaking)  
**59: Superstructure** **6 - Satisfactory Condition**  
 59.01 Paint & PCS 6 - Satisfactory (5-10% corr.)  
**60: Substructure** **6 - Satisfactory Condition**  
**61: Channel** **8 - Banks are protected**  
 61.01 Scour **7 - Good**  
**62: Culverts** **N - Not Applicable**

**67.01 GA** **6**

## Appraisal

36: Rail, Tr, Gd, Term Std 1 1 1 1  
 72: Approach Alignment 8 - Equal to present desirable criteria  
 113: Scour Critical 8 - Stable for scour conditions  
 71: Waterway Adequacy 6 - Occasional Overtopping of Approaches

## Geometric

48: Max Span Length (ft) 60.0  
 49: Structure Length (ft) 220.0  
 52: Deck Width, Out-To-Out (ft) 41.3  
 424: Deck Area (sf) 9085.0  
 32: Appr Roadway Width (ft) 38.0  
 51: Road Width, Curb-Curb (ft) 38.0  
 50A: Curb/SW Width: Left (ft) 0  
 50A: Curb/SW Width: Right (ft) 0  
 34: Skew (deg) 0  
 33: Bridge Median 0 - No median  
 54B: Min Vert Underclearance (ft) 0  
 336A: Min Vert Clrnce IR Cardinal (ft) 99  
 336B: Min V Clr IR Non-Cardinal (ft) 0  
 578: Culvert Length (ft) 0

## Load Posting

41: Op/Post/Closed A - Open  
 70: Posting 5 - Equal to or above legal loads  
 70.01: Date  
 70.02: Sign Type  
 734: Percent Legal (%) 150  
 704: Analysis Date 06/23/2020  
 63: Analysis Method 8 - Load and Resistance Factor Rating (LRFR) rating report by rating factor (RF) method using HL-93 loadings.

## Structure Type

43: Bridge Type 4 - Steel continuous  
 02 - Stringer/Multi-beam or Girder  
 N- Not Applicable  
 45: Spans Main / Approach 4 / 0  
 107: Deck Type 1 - Concrete Cast-in-Place  
 408: Composite Deck Y - Composite Construction  
 414A Joint Type 1 3 - Compression Seal  
 414B: Joint Type 2 N - None  
 108A: Wearing Surface 1 - Monolithic Concrete (concurrently placed with structural deck)  
 N- Not Applicable

422: WS Date 01/01/1994  
 423: WS Thick (in) 2.0  
 482: Protective Coating 5 - Paint System OZEU  
 483: PCS Date 01/01/1987  
 453: Bearing Type 1 2 - Rockers & Bolsters  
 455: Bearing Type 2 N - None  
 528: Foundn: Abut Fwd 2 - Cast-in-Place Reinforced Concrete Piles (Other diameter)  
 533: Foundn: Abut Rear 2 - Cast-in-Place reinforced Concrete Piles (Other diameter)  
 536: Foundn: Pier 1 2 - Cast-in-Place Reinforced Concrete Piles (Other diameter)  
 539: Foundn: Pier 2 3 - Drilled Shafts

## Age and Service

27: Year Built/ 106 Rehab 1960 / 1994  
 42A: Service On 1 - Highway  
 42B: Service Under 5 - Waterway  
 28A: Lanes on 02  
 28B: Lanes Under 00  
 19: Bypass Length 1  
 29: ADT 6832  
 109: % Trucks (%) 10

## Inspections

	Months	
90: Routine Insp.	12	07/09/2020
92A: FCM Insp.	N	
92B: Dive Insp.	Y 60	06/11/2019
92C: Special Insp.	N	
92D: UBIT Insp.	N	
92E: Drone Insp.		
Inspector	Gerstenslager, Michael	

**Inspector:** Michael Gerstenslager

**Inspection Date:** 07/09/2020

**Structure Number:** 2801655

**Facility Carried:** USR 422

**Bridge Inspection Report**

**Location Map**

**Inspector:** Michael Gerstenslager

**Inspection Date:** 07/09/2020

**Structure Number:** 2801655

**Facility Carried:** USR 422

**Bridge Inspection Report**

**Executive Summary**

ODOT District: 12

### GEA-00422-0986L\_(2801655)

Date Built: 07/01/1960

Major Maint: 01 - State Highway Agency

Facility Carried: USR 422

Traffic On: 1 - Highway

Rehab Date: 01/01/1994

Routine Maint: 01 - State Highway Agency

Feature Inters: LA DUE RES. 0.71 MI E 44

Traffic Under: 5 - Waterway

Insp. 01 - State Highway Agency

FIPS Code: 02904 - AUBURN TWP (GEA county)

Location: GEA

0.92 MI E SR44

Insp

Inspector Gerstenslager,Michael Inspection Date 07/09/2020

Reviewer Youssef Seif

Insp

Resp B:

## National Bridge Inventory

Status 0 - ND Sufficiency Rating 99.4

Identification	Inspections
----------------	-------------

(1) State Code	395 - Ohio	(90) Inspection Date	07/09/2020
(8) Structure File Number (SFN)	2801655	(91) Designated Inspection Frequency	12
(7) Facility Carried	USR 422	(92) Critical Feature Inspection	(93) CFI Date
(208) Route on the Bridge	10 - State (ODOT) (Toll Free)	A. Fracture Critical Detail	N
(2) Highway Agency District	12	B. Underwater Inspection	Y 60 06/11/2019
(3) County Code	28 - Geauga	C. Other Special Inspection	N
(209) Interstate Mile Marker		D.01 Snooper Inspection	N
(201) Special Designation	L	E.01 Drone Inspection	

Condition
-----------

(4) Place Code (FIPS)	02904 - AUBURN TWP (GEA county)	(58) Deck	7 - Good Condition
(5) Inventory Route		(58.01) Wearing Surface	7 - Good (1% distress)
(A) Record Type On/Under Always "On"	1: Route carried "on" the structure	(58.02) Expansion Joint	4- Poor (heavy leaking)
(B) Route Signing Prefix (Highway System)	2 - U.S. NUMBERED HIGHWAY	(59) Superstructure	6 - Satisfactory Condition
(C) Designated Level of Service (Highway Designation)	1 - MAINLINE	(59.01) Protective Coating System (PCS)	6 - Satisfactory (5-10% corr.)
(D) Route Number	00422	(60) Substructure	6 - Satisfactory Condition
(E) Directional Suffix	0 - NOT APPLICABLE	(61) Channel & Channel Protection	8 - Banks are protected
(6) Features Intersected	LA DUE RES. 0.71 MI E 44	(61.01) Scour	7 - Good
(9) Location	0.92 MI E SR44	(62) Culvert	N - Not Applicable
(11) Milepoint	09.860	(67.01) General Appraisal	6 - Satisfactory Condition (minor deterioration)
(12) Base Highway Network	Inventory Route is on the Base Network		
(13A) LRS Inventory Route	422		
(13B) Subroute Number	0		
(16) Latitude	41.38384 Degrees		
(17) Longitude	-81.20328 Degrees		
(16.01) Latitude - Ohio	41.383842		
(17.01) Longitude - Ohio	-81.203281		
(98A) Border Bridge State Code			
(98B) Border Bridge State Percent Responsibility			
(99) Border Bridge Struct No.			

ODOT District: 12

### GEA-00422-0986L\_(2801655)

Date Built: 07/01/1960

Major Maint: 01 - State Highway Agency

Facility Carried: USR 422

Traffic On: 1 - Highway

Rehab Date: 01/01/1994

Routine Maint: 01 - State Highway Agency

Feature Inters: LA DUE RES. 0.71 MI E 44

Traffic Under: 5 - Waterway

Insp. Resp A: 01 - State Highway Agency

FIPS Code: 02904 - AUBURN TWP (GEA county)

Location: GEA

0.92 MI E SR44

Insp Resp B:

Inspector Gerstenslager, Michael Inspection Date 07/09/2020

Reviewer Youssef Seif

#### Structure Type and Material

#### Load Rating and Posting

(43) Main Structure Type

A. 4 - Steel continuous

B. 02 - Stringer/Multi-beam or Girder

C. N- Not Applicable

(31) Design Load 6 - HS 20+Mod

(63) Operating Rating Method 8 - Load and Resistance Factor Rating (LRFR) rating report by rating factor (RF) method using HL-93 loadings.

(64) Operating Rating Factor 1.8

(44) Approach Type

A. 0 - Other

B. 00 - Other

C. N- Not Applicable

(65) Inventory Rating Method 8 - Load and Resistance Factor Rating (LRFR) rating report by rating factor (RF) method using HL-93 loadings.

(66) Inventory Rating Factor 1.4

(41) Structure Open, Posted, or Closed to Traffic A - Open

(45) Number of Spans in Main Unit 4

(70) Bridge Posting 5 - Equal to or above legal loads

(46) Number of Approach Spans 0

(70.01) Date Posted

(107) Deck Structure Type 1 - Concrete Cast-in-Place

(70.02) Posted Sign Type

(107.01)

(70.03) Posted Weight

(108B) External Deck Protection N - NA

(108C) Internal Deck Protection 1 - Epoxy Coated Reinforcing

(422) Wearing Surface Date 01/01/1994

(108A) Wearing Surface Type 1 - Monolithic Concrete (concurrently placed with structural deck)

#### Appraisal

(108A.01) N- Not Applicable

(67) Structural Evaluation 6 - Equal to present minimum criteria

(423) Wearing Surface Thickness 2.0 in

(68) Deck Geometry 7 - Better than present minimum criteria

(483) Protective Coating System Date 01/01/1987

(69) Underclearances, Horizontal and Vertical N - Not applicable

#### Age of Service

(27) Year Built 1960

(71) Waterway Adequacy 6 - Occasional Overtopping of Approaches

(263) Date Built 07/01/1960

(72) Approach Roadway Alignment 8 - Equal to present desirable criteria

(106) Year Reconstructed 1994

(36) Traffic Safety Feature

(264) Major Reconstruction Date 01/01/1994

(42) Type of Service  
On 1 - Highway

A. Bridge Railings: 1 - Meets acceptable standards

B. Transitions: 1 - Meets acceptable standards

C. Approach Guardrail 1 - Meets acceptable standards

D. Approach Guardrail Ends 1 - Meets acceptable standards

Under 5 - Waterway

(28) Lanes On 02 Under 00

(113) Scour Critical 8 - Stable for scour conditions

(29) Average Daily Traffic 6832 (30) ADT Yr. 2015

(109) Truck Percentage 10 % Truck

(114) Future Avg Daily Traffic 9483 (115) Future ADT Yr. 2038

(19) Bypass Detour Length 1 mi.

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Routine Maint: 01 - State Highway Agency

FIPS Code: 02904 - AUBURN TWP (GEA county)

Facility Carried: USR 422

Feature Inters: LA DUE RES. 0.71 MI E 44

Location: GEA

Traffic On: 1 - Highway

Traffic Under: 5 - Waterway

0.92 MI E SR44

Date Built: 07/01/1960

Rehab Date: 01/01/1994

Insp. Resp A: 01 - State Highway Agency

Insp. Resp B:

Inspector Gerstenslager, Michael      Inspection Date 07/09/2020      Reviewer Youssef Seif

Classification		Geometric Data	
(112) NBIS Bridge	Yes	(48) Longest Span	60.0 Ft.
(104) Highway System of the Inventory Route	1 - Structure/Route is on NHS	(49) Structure Length	220.0 Ft.
(26) Functional Classification of Inventory Route	02 - Rural - Principal Arterial - Other	(50A) Curb/Sidewalk Left Side - Width	0 Ft.
		(50B) Curb/Sidewalk Right Side - Width	0 Ft.
(100) Strahnet Highway Designation	Not a STRAHNET route	(51) Brdg Roadway Width Curb-to-Curb	38.0 Ft.
(101) Parallel Structure Designation	L - Left structure (South or West)	(52) Deck Width, Out-to-Out	41.3 Ft.
(102) Direction of Traffic	1-way traffic	(32) Approach Roadway Width	38.0 Ft.
(103) Temporary Structure Design		(33) Bridge Median	0 - No median
(105) Federal Lands Highways	Not Applicable	(34) Skew	0 Deg.
(110) Designated National Network	Inventory route not on network	(35) Structure Flared	0 - No flare
(20) Toll	3 - On Free Road	<b>Clearances</b>	
(225) Routine Maintenance Responsibility	A. 01 - State Highway Agency	(10) Practical Maximum Vertical Clearance	99 Ft.
	B.	(53) Minimum Vertical Clearance Over Bridge Roadway	99 Ft.
(21) Maintenance Responsibility	01 - State Highway Agency	(47) Total Horizontal Clearance (Inventory Route)	38 Ft.
(21B) Major Maint. Responsibility B			
(221) Inspection Program Responsibility	A. 01 - State Highway Agency	(54) Minimum Vertical Under Clearance	B. 0 Ft.
	B.	A. N - Feature not a highway or railroad	
(22) Owner	01 - State Highway Agency	(56) Minimum Lateral Under Clearance on Left	0 Ft.
(37) Historical Significance	5 - Not eligible	(55) Minimum Lateral Under Clearance on Right	B. 0 Ft.
		A. N - Feature not a highway or railroad	

## Navigation Data

(38) Navigation Control	0 - No navigation control on waterway (bridge permit not required)	
(39) Nav Vert Clearance	0.0	Ft.
(40) Nav Horizontal Clearance	0.0	Ft.
(111) Pier or Abutment Protection		
(116) Minimum Navigation Vertical Clearance, Vertical Lift Bridge	0.0	Ft.

## Inventory Route Clearances

NBI 005A: On/Under      1: Route carried "on" the structure  
 NBI 005D: Route No.      00422

	<u>Cardinal Direction</u>	<u>Non-Cardinal Direction</u>
(336) Minimum Vertical Clearance on IR	99 Ft.	0 Ft.
(335) Minimum Horizontal Clearance on IR	38 Ft.	0 Ft.



## Ohio Bridge Inventory

General
---------

(203) Bridge Name (Dedicated Name)	
(204) Ohio Designated MPO	08 - NOACA (Cleveland)
(205) Route Number Extension	
(206) Inventory Preferred Route	NP - Non Preferred Route
(5.01) Priority System Code (Inventory Route)	
(213) NLF_ID Inventory Route	SGEAUS00422**C
(218) Major Bridge	N - No
(220) Inventory Location	GEA
(226) Seismic Susceptibility	N - not applicable
(227) GASB	Y - Yes
(236) Future Traffic Factor	1.388
(245) Aperture Cards Fabrication	2 - No
(246) Aperture Cards Original	2 - No
(247) Aperture Cards Repair	1 - Yes
(248) Original Construction Project Number	031859
(251) Standard Drawing Number	
(252) Microfilm Reel Number	GEA005
(261) Bridge Remarks	

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(265) Electric Line Present	U - Unknown
(266) Gas Line Present	U - Unknown
(269) Sanitary Sewer Present	U - Unknown
(306) NBIS Bridge Length	220
(207) Route Under the Bridge	99

Inventory Route Clearances
----------------------------

<u>Inventory Route</u>	<u>Cardinal</u>	<u>Non-Cardinal</u>	
(336) Minimum Vertical Clearance	99	0	ft.
(335) Minimum Horizontal Clearance	38	0	ft.

**Load Rating**

(717) 2F1 Operating Rating Factor (GVW 15 T)	4.797
(720) 3F1 Operating Rating Factor (GVW 23 T)	3.320
(723.01) 4F1 Operating Factor (GVW 27 T)	2.973
(726.01) 5C1 Operating Rating Factor (GVW 40 T)	2.604
(723.02) SU4 Operating Rating Factor (GVW 27 T)	2.943
(726.02) SU5 Operating Rating Factor (GVW 31 T)	2.711
(732.01) SU6 Operating Rating Factor (GVW 34.75 T)	2.464
(732.02) SU7 Operating Rating Factor (GVW 38.75 T)	2.291
(735) EV2 Operating Rating Factor (GVW 28.75 T)	3.139
(738) EV3 Operating Rating Factor (GVW 43 T)	2.078
(734) Ohio Percent Legal	150
(705) Load Rater First Name	BRADLEY
(706) Load Rater Last Name	NOLL
(707) Load Rater PE Number	81740
(704) Load Rating Date	06/23/2020
(708) Load Rating Software	3 - AASHTO BrR (VIRTIS)
(709) Rating Source	1 - Plan information available for load rating analysis (Default)

**Inspection Access**

(92.02) Snooper Inspection Traffic Control	
(92.03) Snooper Inspection Est. Crew Hours	
(459) Inspection Access	N - The bridge does not include this feature

<b>Deck &amp; Approach</b>
----------------------------

(224) Temporary Subdecking	N - No		
(404) Approach Slab Type	1 - Reinforced Concrete		
(405) Approach Slab Length	0		
	1	2	
(406) Bridge Median Type	N - None	N - Non Barrier	3
(407) Bridge Railing Type	C - 32" Deflector Type Parapet (New Jersey Shape)		
(408) Composite Deck Code	Y - Composite Construction		
(419) Expansion Joint with Trough Retrofit 2	N - No		
(421) Joint Trough (Y/N)	N - No		
(431) Fence	N - The bridge does not include this feature		
(432) Fence Height on Bridge	0		
(433) Glare Screen	N - The bridge does not include this feature		
(434) Noise Barrier Walls	N - The bridge does not have Noise Barrier Walls		
(424) Deck Area	9085.0		
(427) Left Sidewalk/Curb Material	N - None		
(428) Left Sidewalk/Curb Type	N - None or N/A (RR, Pedestrian, etc.)		
(429) Right Sidewalk/Curb Material	N - None		
(430) Right Sidewalk/Curb Type	N - None or N/A (RR, Pedestrian, etc.)		

<b>Substructure</b>
---------------------

(526) Abutment Forward Type	6 - Stub - Capped Pile (Single Row Piles)
(527) Abutment Forward Material Type	2 - Concrete
(528) Abutment Forward - Foundation Type	2 - Cast-in-Place Reinforced Concrete Piles (Other diameter)
(531) Abutment Rear Type	6 - Stub - Capped Pile (Single Row Piles)
(532) Abutment Rear Material Type	2 - Concrete
(533) Abutment Rear - Foundation Type	2 - Cast-in-Place reinforced Concrete Piles (Other diameter)
(534) Pier 1 (Predominate) Type	5 - Capped Column
(535) Pier 1 (Predominate) Material	2 - Concrete
(536) Pier 1 Type - Foundation Type	2 - Cast-in-Place Reinforced Concrete Piles (Other diameter)
(537) Pier 2 Type	N - None
(538) Pier 2 Material	N - None
(539) Pier 2 Type - Foundation Type	3 - Drilled Shafts
(547) Slope Protection Type	3 - Rip Rap (dumped rock or rock channel protection)

<b>Superstructure</b>
-----------------------

(711) Live Load Response	S - Satisfactory		
(468) Hinges/Pins/Hangers Type	N - Not Applicable (structures with no hinges)		
(409) Deck Drainage Type	0 - Other (Natural-off the bridge ends)		
(411) Deck Concrete Type	U - Unknown		
	A	B	C
(414) Expansion Joint Type	3 - Compression Seal	N - None	N - None
(301) Horizontal Curve Degree			
(453) Bearing Device 1, Type	2 - Rockers & Bolsters		
(455) Bearing Device 2, Type	N - None		
(465) Framing Type	N - None or Not Applicable		
(466) Haunched Girder	N - Bridge does not contain a haunched girder		
(467) Haunched Girder Depth	0		
(474) Main Structure System	N - Not Applicable (i.e. Culvert, Beam, Slab, etc.)		
(475) Main Member Type	1 - Rolled Steel		
(482) Protective Coating System Type	5 - Paint System OZEU		
(487) Structural Member Steel Type	U - Unknown		
(498) Protective Coating System Surface Area	0		
(499) Structural Steel Paint	2 - Field		
(478) Post Tensioned Main Member Code	N - Bridge is not Post Tensioned		

<b>Culvert and Waterway</b>
-----------------------------

(575) Culvert Type	N - Not a Culvert or Rigid Frame		
(578) Culvert Length Inlet_to_Outlet	0		
(580) Fill Depth Over Culvert	0		
(651) Scenic River	N - Waterway is not classified as Scenic River		
(587) Rise			
(588) Shape			
(655) Channel Protection Type	2 - Stone		
(663) Stream Velocity	1.0		
(672) pH			

Inspector: Michael Gerstenslager

Structure Number: 2801655

Inspection Date: 07/09/2020

Facility Carried: USR 422

Bridge Inspection Report

Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
<b>12 - Reinforced Concrete Deck</b>	3 - Mod.	9094	sq. ft.	8639	455	0	0
805 - Wearing Surface - Monolithic Concrete		8360	sq. ft.	7942	418	0	0
<b>107 - Steel Open Girder/Beam</b>	3 - Mod.	1320	ft.	0	1254	66	0
515 - Steel Protective Coating		19703	sq. ft.	0	19500	152	51
<b>202 - Steel Column</b>	3 - Mod.	3	each	0	3	0	0
<b>205 - Reinforced Concrete Column</b>	3 - Mod.	9	each	9	0	0	0
<b>215 - Reinforced Concrete Abutment</b>	3 - Mod.	83	ft.	51	16	16	0
<b>234 - Reinforced Concrete Pier Cap</b>	3 - Mod.	124	ft.	117	6	1	0
<b>302 - Compression Joint Seal</b>	3 - Mod.	82	ft.	1	0	20	61
<b>311 - Movable Bearing</b>	3 - Mod.	24	each	0	21	3	0
<b>313 - Fixed Bearing</b>	3 - Mod.	6	each	0	6	0	0
<b>321 - Reinforced Concrete Approach Slab</b>	3 - Mod.	1900	sq. ft.	1520	380	0	0
<b>331 - Reinforced Concrete Bridge Railing</b>	3 - Mod.	440	ft.	218	220	2	0
<b>815 - Drainage</b>	3 - Mod.	2	each	2	0	0	0
<b>830 - Abutment Backwall</b>	3 - Mod.	83	ft.	73	9	1	0

ODOT District: 12

## GEA-00422-0986L\_(2801655)

Major Maint: 01 - State Highway Agency

Facility Carried: USR 422

Traffic On: 1 - Highway

Date Built: 07/01/1960

Rehab Date: 01/01/1994

Routine Maint: 01 - State Highway Agency

Feature Inters: LA DUE RES. 0.71 MI E 44

Traffic Under: 5 - Waterway

Insp. 01 - State Highway Agency

FIPS Code: 02904 - AUBURN TWP (GEA county)

Location: GEA

0.92 MI E SR44

Resp A:

Insp

Resp B:

Inspector

Gerstenslager, Michael

Inspection Date 07/09/2020

Reviewer Youssef Seif

### Inspector Comments - Deck and Approach

#### Deck

##### Floor/Slab (SF)

A few transverse cracks. 2020 QAR sticker 12-13 on floor of bay 1 at rear.

##### Bridge Wearing Surface (SF)

A few cracks.

##### Bridge Railing (LF)

Many vertical leaching cracks. 2 SF spall to inside right railing at embedded wood 2 x 4 (span #3). Collision scrapes.

##### Deck Drainage (EA)

Dirt and debris along berms.

##### Expansion Joint (LF)

Approx 20' of rear seal and nearly entire forward seal missing (piles of debris on abutment seats). 12' of forward backwall armor missing (epoxy resin used to fill the forward backwall has cracked & some has popped out). Deck side is 1" lower than slab side at forward joint. Deep gouges in backwall armor. Minor spalls to exjt headers.

#### Approach

##### Approach Wearing Surface

Sealed cracks to both. Minor asphalt break up along rear slab.

##### Approach Slab (SF)

Long cracks at rear. 1 SF asphalt patch in forward lane #1.

### Inspector Comments - General Appraisal

#### Superstructure

##### Beams/Girders (LF)

Surface rust, mainly along lower flanges. Rusting section loss at beam ends & exteriors of fascias (worst is right fascia at piers).

##### Diaphragm/X-Frames

Surface rust. Some endframe rusting section loss. Bent angles at rear endframes 3-5 and forward endframe 5.

### **Bearing Devices (EA)**

Surface rust. Rusting section loss to right fascia bearings at piers.

### **Protective Coating System (SF)**

Rusting with areas of failed pcs. Peeling & faded paint.

### **Fatigue**

Welded moment plates at piers.

## **Substructure**

### **Abutment Walls (LF)**

Leaching cracks. Rust stains. Approx. 15 sf of spalls with exposed rebar in forward bays 3 & 5 and at the forward-right corner. A few delams. Thick debris on abutment seats.

### **Pier Caps (LF)**

Cracks, some leaching. Two minor spalls on right end of P1 cap.

### **Pier Columns/Bents (EA)**

Rusting section loss of steel & scaling of concrete at & below waterline.

### **Backwalls (LF)**

Cracks. Rust stains.

## **Culvert**

## **Inspector Comments - Waterway**

### **Waterway Adequacy**

#### **Channel Hydraulic Opening**

Water depth at piers >12'. Reference point - bottom of lower flange to water surface at P1 = 5' 9".

### **Channel**

### **Scour Critical**

#### **Substructure Scour**

*NOTE: Dive inspection in 2019. Boated in 2020.*

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ODOT District: 12

Major Maint: 01 - State Highway Agency

Routine Maint: 01 - State Highway Agency

FIPS Code: 02904 - AUBURN TWP (GEA county)

Facility Carried: USR 422

Feature Inters: LA DUE RES. 0.71 MI E 44

Location: GEA

Traffic On: 1 - Highway

Traffic Under: 5 - Waterway

0.92 MI E SR44

Date Built: 07/01/1960

Rehab Date: 01/01/1994

Insp. 01 - State Highway Agency

Resp A:

Insp

Resp B:

Inspector

Gerstenslager, Michael

Inspection Date

07/09/2020

Reviewer

Youssef Seif

**Under Records**



**Inspector:** Michael Gerstenslager

**Inspection Date:** 07/09/2020

**Structure Number:** 2801655

**Facility Carried:** USR 422

**Bridge Inspection Report**

**Channel Measurement**

Date of Channel Measurements:

Distance Measured From:

Depth Measured From:


Number of Measurement Points Taken:

Number of Fixed Objects in Channel:

Water Level:

High Water Mark:

Measurement Type:







**Inspector:** Michael Gerstenslager

**Inspection Date:** 07/09/2020

**Structure Number:** 2801655

**Facility Carried:** USR 422

**Bridge Inspection Report**

**Pictures**

**Inspector:** Michael Gerstenslager

**Inspection Date:** 07/09/2020

**Structure Number:** 2801655

**Facility Carried:** USR 422

**Bridge Inspection Report**

**Sketches**

# GEA-00422-0986L\_(2801655)

ODOT District: 12

Major Maint: 01 - State Highway Agency

Routine Maint: 01 - State Highway Agency

FIPS Code: 02904 - AUBURN TWP (GEA county)

Facility Carried: USR 422

Feature Inters: LA DUE RES. 0.71 MI E 44

Location: GEA

Traffic On: 1 - Highway

Traffic Under: 5 - Waterway

0.92 MI E SR44

Date Built: 07/01/1960

Rehab Date: 01/01/1994

Insp. 01 - State Highway Agency

Resp A:

Insp

Resp B:

Inspector

Gerstenslager,Michael

Inspection Date

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## Summary Recommendations

**GEA-00422-0986L\_(2801655)**

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FIPS Code: 02904 - AUBURN TWP (GEA county)

Location: GEA

0.92 MI E SR44

Insp

Resp B:

Inspector

Gerstenslager, Michael

Inspection Date

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**Governing Members**

# GEA-00422-0986L\_(2801655)

ODOT District: 12

Major Maint: 01 - State Highway Agency

Routine Maint: 01 - State Highway Agency

FIPS Code: 02904 - AUBURN TWP (GEA county)

Facility Carried: USR 422

Feature Inters: LA DUE RES. 0.71 MI E 44

Location: GEA

Traffic On: 1 - Highway

Traffic Under: 5 - Waterway

0.92 MI E SR44

Date Built: 07/01/1960

Rehab Date: 01/01/1994

Insp. 01 - State Highway Agency

Resp A:

Insp

Resp B:

Inspector

Gerstenslager,Michael

Inspection Date

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Reviewer

Youssef Seif

## Complex Bridge Superstructure Comments



## Historic Bridge Data

### Status

(8) Structure File Number (SFN)	2801655	(37) Historical Significance Code	5 - Not eligible
(826) NR Recommendation		(837) Historical District	
(840) Historical National Register Listed		(834) Reviewed By	
(850) In Management Plan (2009)	N- No		

### Identification

(825) Historical Bridge Name		(7) Facility Carried	USR 422
(22) Owner	01 - State Highway Agency	(6) Feature Intersected	LA DUE RES. 0.71 MI E 44
(4) Place Code (FIPS)	02904 - AUBURN TWP (GEA county)	(5) Inventory Route	
(3) County (Parish) Code	28 - Geauga	(B) Route Signing Prefix	2 - U.S. NUMBERED HIGHWAY
(2) Highway Agency District	12	(D) Route Number	00422
(9) Location	0.92 MI E SR44	(16) Latitude at Rear Abutment	41.38384 degrees
(883) UTM		(17) Longitude at Rear Abutment	-81.20328 degrees

### Structural Information

(43) Main Structure Type	4 - Steel continuous	02 - Stringer/ Multi-beam or Girder	N- Not Applicable	(827) Historical Year Built	1960
(828) Historical Bridge Type	330 - CONTINUOUS			(836) Historical Data Source	014 - ODOT
(49) Structure Length	220.0	ft		(831) Historical Builder	192
(45) No. of Main Spans	4			(842) Historical Bridge Designer	126
(407) Bridge Railing Type	C - 32" Deflector Type Parapet (New Jersey Shape)			(106) Year Reconstructed	1994
				(829) Previous Inventory Date	

### Classification of Service

(26) Functional Class of Inventory Route	02 - Rural - Principal Arterial - Other	(29) Average Daily Traffic (ADT)	6832
(104) Highway System of the Inventory Route	1 - Structure/Route is on NHS	(30) Year of ADT	2015
(71) Waterway Adequacy	6 - Occasional Overtopping of Approaches	(109.01) Avg. Daily Truck Traffic (ADTT)	683
		(102) Direction of Traffic	1-way traffic

### Historical Significance

(843) Historical Setting/Context

(844) Historical Physical Description

No photos available.

(845) Historical Integrity

(846) Historical Significant Description

The bridge is an excluded bridge type that has been recommended not eligible based on the context of its type/design and date of construction.

(847) Historical Bridge Remarks

(860) Justification

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**Capacity**

(51) Bridge Rdwy Width Curb-Curb	38.0	ft	(66) Inventory Rating Load	1.4	
(873) Bridge Rdwy Width Required		ft	(64) Operating Rating Load	1.8	
(872) Bridge Rdwy Width Adequare	Y		(878) Inventory Rating Load - Required		
(32) Approach Rdwy Width	38.0	ft	(877) Inventory Rating Load - Adequate	Y	
(841) Bridge Wider	N		(28) Lanes On	02	
(52) Deck Width Out-Out	41.3	ft	(880) Lanes On - Required		ft
(50A) Curb/Sidewalk Left Side - Width	0	ft	(879) Lanes On - Adequate	Y- Yes	
(50B) Curb/Sidewalk Right Side - Width	0	ft	(876) Geometry Adequate		
(10) Minimum Vertical Clearance On, Cardinal	99	ft	(871) Alignment/Sight Distance Adeqaute		

(874) Conformance Comments

(882) Structural Deficiency Summary

(875) Crash Data

**Historic Bridge Management Plan**

(853) Historical Management Summary

**Preservation Potential**

(861) Prudent and Feasible to Leave Bridge in Place

(862) Preservation Potential

(863) Preservation Summary

(864) No Build Alternative Consideration

(881) Rehab Without Adverse Effect

(865) Historic Bypass Information

(866) Other Preservation Options

(867) Preservation Recommendation

(868) Comment Recommendation

(869) Comment Date

(870) Plan Comment

