



STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE INSPECTION REPORT

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

SR 10 over CUY RIVER VALLEY & FI RR

Inspection Type: Routine

Inspection Date: 10/10/2015

District: 12

County: CUYAHOGA

Place Code (FIPS): CLEVELAND

Bridge Type: STEEL

Type of Service: HIGHWAY-PEDESTRIAN

Owner: OHIO STATE TRANSPORTATION DEPARTMENT

Inspection Responsibility: OHIO STATE TRANSPORTATION
DEPARTMENT

Maintenance Responsibility: OHIO STATE TRANSPORTATION
DEPARTMENT

Lead Inspector: Malloy, Michael

Reviewed By: Malloy, Michael

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
LOCATION MAP**

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

No photos have been uploaded for this report.

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
GENERAL ELEVATION PHOTOS**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

Unit of Measure: ENGLISH
 Structure File Number: 1801503
 Sufficiency Rating: 48.4

Bridge Inventory and Appraisal
 Inventory Bridge Number: CUY 00010 16.130 N
 1 CUY RIVER VALLEY & FI RR

Report Date: 10/10/2015
 BR. TYPE: 3 - STEEL/4 - TRUSS/3 - DECK
 Date of Last Inventory Update: 01/30/2016

(2) District: 12 (4) FIPS Code: 16000 - CLEVELAND (102) Direction of Traffic: 2 - 2-way traffic	(3) County: 18 - CUYAHOGA (216) Temporary:	(9) Location: LORAIN/CARNEGIE (208) Route On Bridge: 99 - Non highway traffic (110) Truck Network: 0 (42A) Type Serv (On): 5 - Highway-pedestrian	(7) Facility Carried: SR 10 (207) Route Under Bridge: 10 - State (ODOT) (Toll) (101) Parallel: N (42B) Type Serv (Under): 7 - Railroad - waterway
Inventory Route Data		(45) Main Spans Number: 15 (46) Approach Spans Number: 5 (307) Total Spans: 0	Type: 3 - STEEL/4 - TRUSS/3 - DECK Type: 3 - STEEL/2 - BEAM/1 - SIMPLE (48) Max Span: 299 Ft (49) Overall Leng: 3657.333 Ft
(5A) Route On/Under: 1 - Route carried "on" the (5D) Route No: 00010 (6) Feature Intersected: CUY RIVER VALLEY & FI RR (3) County: CUY (200) Mileage: 16.130 (201) Special Desig: N (209) Mile Marker: (29) Avg. Daily Traffic (ADT): 11,960 (30) ADT Year: 2010 (235) Truck Traf: 750 (210) Corridor: N (104) NHS: 0 - NON-NHS BRIDGE (26) Functional Class: 16 - Urban - Minor Arterial (100) Strahnt: 0 - NOT STRAHNET	(5B) Hwy Sys: 3 - State Highway (5C) Des: 1 - Mainline (209) Mile Marker: (210) Corridor: N (104) NHS: 0 - NON-NHS BRIDGE (100) Strahnt: 0 - NOT STRAHNET	Substructure: Abut-Rear (532) Matl: 2 - Concrete Abut-Fwd (527) Matl: 2 - Concrete Pier-Pred (535) Matl: 2 - Concrete Pier-Other (538) Matl: 5 - Steel Pier-Other (541) Matl: 2 - Concrete (545) Pier, Total Count: 15 (663) Stream Velocity: 5.6 fps (92B) Dive: Y Freq: 60 (93B) Date of Last Dive Insp: 07/14/2015	Foundation and Scour Information: (531) Type: 2 - Cantilever (533) Fnd: 4 - Spread Footing (526) Type: 3 - Solid Wall (528) Fnd: 4 - Spread Footing (534) Type: 4 - Open Column (536) Fnd: 4 - Spread Footing (537) Type: 5 - Capped Column (539) Fnd: 0 - Other (540) Type: 5 - Capped Column (542) Fnd: 0 - Other (113) Scour: 8 - Bridge foundations determined to be stable for the assessed or (655) Chan Prot: 4 - Piling (657) Drainage Area:
Intersected Route Data		Clearance Under the Bridge	
(370A) Record Type: (370D) Route No: (373) Feature Intersected: (3) County: CUY (379) Avg. Daily Traffic (ADT): (381) Truck Traf: (375) Functional Class:	(370B) Hwy Sys: (370E) Dir: (370C) Des: (371) Mile Marker: (387) Special Desig: (380) ADT Year: (378) NHS: (386) Strahnt:	Min. Horiz Under Clear: (328) Prac Max Vrt Under Clear: Min. Vert Under Clear: Min Lat Under Clear:	(326) NC: 0 Ft (325) CARD: 0 Ft (327) NC: 0 Ft (54) CARD: R 0 Ft (329) Right NC: 0 Ft (55) Right CARD: R 99.99 Ft (330) Left NC: 0 Ft (56) Left CARD: 99.99 Ft
Clearance On the Bridge		Load Rating Information	
Min. Hrzt on Bridge: (53) Prac Max Vert On Brg: Min Vrt Clr On Brg: Min Latl Clr: (39) Vrt Clr Lft:	(335) NC: 0 Ft (47) CARD: 60 Ft (336) NC: 0 Ft (10) CARD: 99.99 Ft (338) Right NC: 0 Ft (337) Right CARD: 1.333 Ft (340) Left NC: 0 Ft (339) Left CARD: 1.583 Ft	(31) Design Load: 4 - H20 (64) Opr Rat Fact: 0.980 (66) Inv Rat Fact: 0.590 (734) Ohio Percent Legal 150 (704) Year of Rating: 7/1/2012 (63) Analysis: 6 - Load Factor (LF) rating reported by RF using HS20 (708) Rate Soft: 7 - Combination (707) PE# 69991	(71) Waterway Adequacy: 8 (72) Approach Alignment: 7 (67) Calc Str Appraisal: 4 - Meets minimum tolerable (68) Calc Deck Geometry: 5 - Somewhat better than (69) Calc Underclearance: 3 - Intolerable - high priority
Structure Information		Approach Information	
(19) Bypass Length: 2 Miles (16) Latitude: 41.487378 (20) Toll: 3 - On Free Road, the structure is toll (27) Date Built: 1932 (28A) No. Lanes On: 4 (301) Horiz Curve: (32) App. Rdw Width: 60 Ft (52) Deck Width: 83 Ft (406) Median Type: N - NONE/N - NON BARRIER/N - NO JOINT (33) Bridge median: N - No median Sidewalks: Type Curb or Sidewalk: (425) Left Matl: 1 - Concrete (427) Right Matl: 1 - Concrete (412) Flared: Y (407) Railing: 5 - Reinforced Concrete Post and Concrete Panel (409) Deck Drainage: 3 - Scuppers and downspouts (107) Deck Type: 1 - Reinforced concrete Deck Protection: (108A) Wearing Surface: C - Micro-silica Modified Concrete - Overlay (420) Thickness: 1.5 in (547) Slope Protection: 3 - Rip Rap (dumped rock or rock channel protection)	(17) Longitude: -81.696442 (106) Major Rehabilitation: 1983 Major Reconstruction Date: 01/01/1983 (28B) No. Lanes Under: 0 (34) Skew: 0 Deg (51) Brg. Rdw Width: 60 Ft Deck Area: 303556 (50A) Left: 6.7 Ft (50B) Right: 6.7 Ft (426) Type: 2 - Sidewalk (greater than 2' in (428) Type: 2 - Sidewalk (greater than 2' in (408) Composite: Y - Composite Construction (39) Vert Clr: 95 Ft (40) Horiz Clear: 185 Ft (92C) Spec Insp: N Freq: 0 (93C) Special Inspection Date: (93A) Special Inspection Date: 08/01/2014 (468) Hinges: 2 - Pins, Pin Plates (465) Framing: N - None or Not Applicable (407) Railing: 5 - Reinforced Concrete Post and Concrete Panel (482) Paint: 5 - Paint System OZEU	(401) Approach Guardrail: 0 - Other (403) Approach Pavement: 2 - Bituminous (402) Grade: 1 - Good	
		Culvert Information	
		(575) Culvert Type: N - Not a Culvert or Rigid Frame (580) Depth of Fill: 0 Ft	(578) Length: 0 Ft (582) Headwalls: N - None or Not Applicable (Not a
		General Information	
		(475) Main Member: 1 - Rolled Steel (414) Expansion Joint: 0 - OTHER/ (453) Bearing Devices: 1 - ROLLERS/N - NONE/ (38) Navigation: 1 - Yes Navigation control on (92C) Spec Insp: N Freq: 0 (92A) Fracture Critical Insp: Y Freq: 24 (474) Long Member: 7 - Three or More Trusses (Riveted) (486) Structural Steel Memb: U - Unknown (203) Bridge Dedicated HOPE MEMORIAL/LORAIN CARNEGIE	(477) Moment Plate: N - No Moment Plates (40) Horiz Clear: 185 Ft (93C) Special Inspection Date: (93A) Special Inspection Date: 08/01/2014 (468) Hinges: 2 - Pins, Pin Plates (465) Framing: N - None or Not Applicable (407) Railing: 5 - Reinforced Concrete Post and Concrete Panel (482) Paint: 5 - Paint System OZEU

Unit of Measure: ENGLISH
 Structure File Number: 1801503
 Sufficiency Rating: 48.4

Bridge Inventory and Appraisal
 Inventory Bridge Number: CUY 00010 16.130 N
 1 CUY RIVER VALLEY & FI RR

Report Date: 10/10/2015
 BR. TYPE: 3 - STEEL/4 - TRUSS/3 - DECK
 Date of Last Inventory Update: 01/30/2016

General Information (Continued)		Original Plans Information	
(37) Hist Significance: 4 - Not determinable (112) NBIS: Yes (842) Hist/Designer: 176 - WILBUR WATSON & ASSOCIATES (827) Hist Build Year: 1932 (828) Hist Type: 325 - CANITLEVER (98A) Border Bridge (98B) Resp: (99) SFN:		(250) Fabricator: (249) Contractor: (248) Ohio Original Construction Project Number: (252) Microfilm Reel: (251) Standard Drawing: Aperture Cards: (246) Orig: Y (247) Repair: Y (245) Fabr: Y (709) Rating Score: 1 - Plan information available for load rating analysis (Default)	
Proposed Improvements		Utilities	Special Features
(114) Future ADT (On Bridge): 16600 (115) Year of Future ADT: 2033		(265) Electric Line: U (266) Gas Line: Y (269) Sanitary Sewer: U (267) Telephone Line: U (268) TV Cable: U (270) Water Line: U (271) Other Utilities: U	(283) Lighting: Y (430) Fence: N (432) Glare Screen: N (435) Splash Guard: N (459) Catwalk: Y (271) Other-Feat: U (279) Signs on Bridge: Y (281) Signs Under Bridge: N (431) Fence Height: 0 Ft (433) Noise Barrier: N
Programming Info			
PID Number: PID Status: PID Date:			
Inspection Summary	Survey Items		
(58) Deck: 6 (59) Superstructure: 4 (60) Substructure: 7 (62) Culvert: N (61) Channel: 4 (c6) Approaches: 7 General Appraisal: 4 (41) Operational Status: A (90) Inspection Date: 10/10/2015 (91) Desig Insp Freq: 12 Months	(36A) Railings: 1 - Meets acceptable standards (36B) Transitions: 1 - Meets acceptable standards (36C) Guardrail: 1 - Meets acceptable standards (36D) Rail Ends: 1 - Meets acceptable standards (92A) Fracture Critical: Y (113) Scour Critical: 8 - Bridge foundations determined to Inspection Review Date:		
SFNs Replacing this retired bridge: - SFNs That were replaced by this bridge: - This bridge was retired and copied to: The bridge was copied from:		Insp 1st: 1 - Ohio State Transportation Department 2nd: X - None 3rd: X - None (21) Major Maint 1st: 1 - Ohio State Transportation Department 2nd: X - None 3rd: X - None (225) Routine Maint 1st: 4 - City or other Local Agency 2nd: X - None 3rd: X - None	

STATE OF OHIO DEPARTMENT OF TRANSPORTATION IDENTIFICATION

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK
 Sufficiency Rating: 48.4 Date Built: 7/1/1932
 District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

IDENTIFICATION

(1) State Code: 395 (8) Structure File Number (SFN): 1801503 (7) Facility Carried: SR 10 (2) Highway Agency District: 12 (3) County (Parish) Code: 18 (200) County Log Point (CL): 16.130 (201) Special Designation: N (4) Place Code (FIPS): 16000 (202) Bridge Inventory Status: 3 (203) Bridge Name (Dedicated): HOPE MEMORIAL/LORAIN CARNEGIE (204) Ohio Designated MPO: 08 (5) Inventory Route: (A) Record Type On/Under: 1 (B) Route Signing Prefix (Highway System): 3 (C) Designated Level of Service (Highway Design.): 1 (D) Route Number: 00010 (E) Directional Suffix: 0 (205) Route Number Extension: (206) Inventory Preferred Route: NP (6) Feature Intersected: CUY RIVER VALLEY & FI RR (207) Route Under the Bridge: 99 (208) Route On the Bridge: 10 (209) Interstate Mile Marker: mile (210) Macro Level Corridor: N	(9) Location: LORAIN/CARNEGIE BRIDGE (11) Kilometerpoint: 25.953 (12) Base Highway Network: 0 (13A) LRS Inventory Route: (13B) Subroute Number: (42) Type of Service: On 5 Under 7 (28) Lanes: On 4 Under 0 (19) Bypass Detour Length: 2 miles (16) Latitude at Rear Abutment: 41.487378 degrees (17) Longitude at Rear Abutment: -81.696442 degrees (211) Latitude at Forward Abutment: degrees (212) Longitude at Forward Abutment: degrees (98A) Border Bridge State Code: (98B) Border Bridge State % (99) Border State Bridge Number: (213) NLF_ID Inventory Route: SCUYSR00010**C (214) Railroad Identification: NN (215) AARDOT Number: (218) Major Bridge: Y (219) Temporary Barrier: (220) Inventory Location: CUY (222) Temporary Debris Net: (223) Temporary Shored: (224) Temporary Sub-Decking:
---	---

CLASSIFICATION

(20) Toll Bridge: 3 (21) Major Maint. Responsibility: 1 X X (225) Routine Maint. Responsibility: 4 X X (22) Owner: 1 (26) Functional Class of Inventory Route: 16 (43) Main Structure Type: 3 4 3 (44) Approach Type: 3 2 1	(100) STRAHNET Highway Designation: 0 (101) Parallel Highway Designation: N (103) Temporary Structure Designation: (104) Highway System of the Inventory: 0 (105) Federal Lands Highway: 0 (110) Designated National Network: 0 (226) Seismic Susceptible: N (227) GASB: Y
---	---

TRAFFIC

(29) Average Daily Traffic (ADT): 11960 (30) Year of ADT: 2010 (235) Avg. Daily Truck Traffic (ADTT): 750 (102) Direction of Traffic: 2	(236) Future Traffic Factor: 1.388 (114) Future Avg. Daily Traffic: 16600 (115) Year of Future Avg. Daily Traffic: 2033 (109) Average Daily Truck: 6
--	---

BRIDGE WORK HISTORY

Date Built: 7/1/1932 (27) Year Built: 1932 (245) Aperture Cards Fabrication: Y (246) Aperture Cards Original: Y (247) Aperture Cards Repair: Y (248) Original Construction Project #: (249) Name of Contractor: (250) Name of Fabricator: (251) Standard Drawing Number: (252) Microfilm Reel Number: (75) Type of Work: 36 1 (76) Length of Structure Improvement: 3300.00 (94) Bridge Improvement Cost: 3700 (261) Bridge Remarks: HOPE MEMORIAL/LORAIN CARNEGIE BRIDGE	(253) SFN REPLACING THIS RETIRED BRIDGE 1: (254) SFN REPLACING THIS RETIRED BRIDGE 2: (255) SFN(s) THAT WERE REPLACED BY THIS BRIDGE 1: (256) SFN(s) THAT WERE REPLACED BY THIS BRIDGE 2: (106) Year Reconstructed: 1983 Major Reconstruction Date: 01/01/1983 (257) Record Retiring Reason: (258) Bridge(s) Copied From: (259) Record Add Date: 1/1/1900 (260) Record Update Date: (262) Bridge(s) Copied To: (95) Roadway Improvement Cost: 100 (96) Total Project Cost: 3800 (97) Year Of Improvement Cost: 1990
---	--

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
IDENTIFICATION**

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

SIGNS & UTILITIES:

(265) Electric Line:	U	(272) Total Length:	ft.	(279) Signs on Bridge:	Y
(266) Gas Line:	Y	(273) Total Length:	ft.	(280) Signs Supports, Total	15 each
(267) Telephone Line:	U	(274) Total Length:	ft.	(281) Signs Under Bridge:	N
(268) TV Cable Bridge:	U	(275) Total Length:	ft.	(282) Warning/Regulatory Signs	
(269) Sanitary Sewer:	U	(276) Total Length:	ft.	(283) Lighting:	Y
(270) Water Line:	U	(277) Total Length:	ft.		
(271) Other Utilities:	U	(278) Total Length:	ft.		

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
CLEARANCES**

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

UNDER CLEARANCES

(325) Minimum Horizontal Clearance Under, Cardinal:	0	ft.
(326) Minimum Horizontal Clearance Under, Non-Cardinal:	0	ft.
(54) Minimum Vertical Clearance Under, Cardinal:	R 0	ft.
(327) Minimum Vertical Clearance Under, Non-Cardinal:	0	ft.
(328) Pratical Maximum Vertical Clearance Under Bridge:	0	ft.
(55) Minimum Lateral Clearance Under Right, Cardinal:	R 99.99	ft.
(329) Minimum Lateral Clearance Under Right, Non-Cardinal:	0	ft.
(56) Minimum Lateral Clearance Under Left, Cardinal:	99.99	ft.
(330) Minimum Lateral Clearance Under Left, Non-Cardinal:	0	ft.

ON CLEARANCES

(47) Minimum Horizontal Clearance On, Cardinal:	60	ft.
(335) Minimum Horizontal Clearance On, Non-Cardinal:	0	ft.
(10) Minimum Vertical Clearance On, Cardinal:	99.99	ft.
(336) Minimum Vertical Clearance On, Non-Cardinal:	0	ft.
(53) Pratical Maximum Vertical Clearance On Bridge:	99.99	ft.
(337) Minimum Lateral Clearance On Right, Cardinal:	1.333	ft.
(338) Minimum Lateral Clearance On Right, Non-Cardinal:	0	ft.
(339) Minimum Lateral Clearance On Left, Cardinal:	1.583	ft.
(340) Minimum Lateral Clearance On Left, Non-Cardinal:	0	ft.

RAMP CLEARANCES

(345) Ramp Lateral Clearance Left Under, Cardinal:	0	ft.
(346) Ramp Lateral Clearance Left Under, Non-Cardinal:	0	ft.
(347) Ramp Lateral Clearance Right Under, Cardinal:	0	ft.
(348) Ramp Lateral Clearance Right Under, Non-Cardinal:	0	ft.
(349) Ramp Roadway Width, Cardinal:	0	ft.
(350) Ramp Roadway Width, Non-Cardinal:	0	ft.
(351) Ramp Vertical Clearance Under, Cardinal:	0	ft.
(352) Ramp Vertical Clearance Under, Non-Cardinal:	0	ft.

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
INTERSECTED ROUTES**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

DECK

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

DECK AND APPROACH

(36C) Approach Guardrail:	1	(107) Deck Structure Type:	1
(36D) Approach Guardrail Terminal:	1	(411) Deck Concrete Type:	U
(400) Approach Guardrail Length:		(412) Deck Flared	Y
(401) Approach Guardrail Type:	0	(413) Embankment, Total Length:	4 ft.
(402) Approach Guardrail Grade:	1	(108B) External Deck Protection:	2
(403) Approach Pavement Wearing Surface Type:	2	(108C) Internal Deck Protection:	1
(72) Approach Roadway Alignment:	7	(414) Expansion Joint Type:	0
(32) Approach Rdwy Width:	60	(415) Expansion Joints Total Length:	ft.
(404) Approach Slab Type:	1	(416) Joint Retro Fit Type, Joint 1:	N
(405) Approach Slab Length:	0	(417) Expansion Joint W/Through Retrofit 1:	ft.
(36B) Approach Guardrail Transitions:	1	(418) Joint Retro Fit Type, Joint 2:	N
(33) Bridge Median:	N	(419) Expansion Joint W/Through Retrofit 2:	
(406) Bridge Median Type:	N N N	(420) Joint Retro Fit Type, Joint 3:	N
(36A) Bridge Railings:	1	(421) Expansion Joint W/Through Retrofit 3:	
(407) Bridge Railing Type:	5	(422) Wearing Surface Date:	09/01/2001
(51) Bridge Rdwy Width Curb-Curb:	60	(108A) Wearing Surface Type:	C
(408) Composite Deck Code:	Y	(423) Wearing Surface Thickness:	1.5 in.
(409) Deck Drainage Type:	3	(424) Deck Area:	303556 sq ft.
(410) Deck Drainage Total Count:		(425) Other Feature:	N
(52) Deck Width Out-Out:	83	(426) Bridge Railing Steel:	ft.

CURB/SIDEWALK

(427) Curb/Sidewalk Left Side - Material:	1	(429) Curb/Sidewalk Right Side - Material:	1
(428) Curb/Sidewalk Left Side - Type:	2	(430) Curb/Sidewalk Right Side - Type:	2
(50A) Curb/Sidewalk Left Side - Width:	6.7	(50B) Curb/Sidewalk Right Side - Width:	6.7 ft.

FENCING

(431) Fence:	N	(434) Noise Barrier Walls:	N
(432) Fence Height on Bridge:	0	(435) Noise Barrier Walls Type:	ft.
(433) Glare Screen:	N	(436) Splash Guard:	N

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE**

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

SUPERSTRUCTURE

(450) Arch Columns or Hangers, Count:		(475) Main Member Type:	1	
(451) Arch Length:	ft.	(476) Main Member Depth:	0	ft.
(452) Arch, Spandrel Walls Area:	sq ft	(477) Moment Plates Type:	N	
(453) Bearing Device 1, Type:	1	(478) Post Tensioned Main Member Code:	N	
(454) Bearing Device 1, Total Count:	each	(479) Post Tensioned Elem: Box Segment. Ext Count:		each
(455) Bearing Device 2, Type:	N	(480) Post Tensioned Elem: Box Segment. Int Count:		each
(456) Bearing Device 2, Total Count:	each	(481) Post Tensioned Elem: Ext Tendon Count:		each
(457) Bearing Device 3, Type:		(482) Protective Coating System Type:	5	
(458) Bearing Device 3, Total Count:	each	(483) Protective Coating System Date:	03/04/2004	
(459) Catwalk:	Y	(484) Protective Coating System Supplier:		
(460) Diaphragms, Cross Frames, Total Count:	55	(485) Spandrel Walls Total Length:		ft.
(461) End Blocks & End Dams, Total Count:	each	(486) Stringers Length:		ft.
(462) Floor Beams Size:		(487) Structural Member Steel Type:	U	
(463) Floor Beams Total Length:	ft.	(488) Structural Steel Pay Weight:	26000000	lbs.
(464) Floor Beams, Maximum Spacing:	ft.	(489) Joists/Stringers Total Length:		ft.
(465) Framing Type:	N	(490) Diagonals Member Count:	506	
(466) Haunched Girder:	N	(491) End Posts Member Count:		each
(467) Haunched Girder Depth:	0	(492) Lower Chord Member Count:	522	each
(468) Hinges/Pins/Hangers Type:	2	(493) Sway/Portal Bracing Member Count:		each
(469) Hinges/Pins/Hangers Total Count:	192	(494) Upper and Lower Lateral Bracing Member Count:	240	each
(470) Main Beam Lines Total Count:	each	(495) Upper Chords Member Count:	522	each
(471) Main Beam Size:		(496) Verticals Member Count:	529	each
(472) Main Beam Spacing:	ft.	(497) Gusset Plates, Total Count:	2116	each
(473) Main Beam Total Length:	ft.	(498) Protective Coating System Surface Area:	0	sq ft.
(474) Main Structure System:	7	(499) Structural Steel Paint:	U	

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
SUBSTRUCTURE**

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

SUBSTRUCTURE

(525) Abutment Columns or Bents, Total Count:		(539) Pier 2 Type - Foundation Type:	0
(526) Abutment Forward Type:	3	(540) Pier 3 Type:	5
(527) Abutment Forward Material Type:	2	(541) Pier 3 Material:	2
(528) Abutment Forward - Foundation Type:	4	(542) Pier 3 Type - Foundation Type:	0
(529) Abutment Foundation, Average Length:	0	(543) Pier Columns/Bents, Total Count:	
	ft.	(544) Pier Foundation, Average Length:	0
(530) Abutment Pile Load Testing:			ft.
(531) Abutment Rear Type:	2	(545) Pier, Total Count:	15
(532) Abutment Rear Material Type:	2	(546) Pile Log:	N
(533) Abutment Rear - Foundation Type:	4	(547) Slope Protection Type:	3
(534) Pier 1 (Predominate) Type:	4	(548) Wingwalls, Total Length:	
	ft.		ft.
(535) Pier 1 (Predominate) Material:	2	(549) Protective Coating System-Major:	
(536) Pier 1 Type - Foundation Type:	4	(550) Protective Coating System-Major Date:	
(537) Pier 2 Type:	5	(551) Protective Coating System-Minor:	
(538) Pier 2 Material:	5	(552) Protective Coating System-Minor Date:	

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

CULVERT

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

CULVERT

(575) Bridge/Culvert Type:	N	(585) Number of Cells:	
(576) Culvert Headwall Area:		(586) Outlet End Treatment:	sq ft
(577) Culvert Headwalls or Endwalls, Length:		(587) Rise:	ft. in.
(578) Culvert Length Inlet_to_Outlet:	0	(588) Shape:	
(579) Culvert Seams Total Count:		(589) Slope of Pipe:	%
(580) Fill Depth Over Culvert:	0	(590) Wall Thickness:	ft. in.
(581) Gage:		(591) Modification Type:	no.
(582) Headwalls or Endwalls Type:	N	(592) Modification Material Type:	
(583) Inlet End Treatment:		(593) Modification Size:	in.
(584) Material:		(594) Year Modified:	in.

EXTENSION - INLET

(600) Inlet Extension Length:	ft.	(604) Inlet Extension Year:	
(601) Inlet Extension Material Type:		(605) Inlet Rise:	in.
(602) Inlet Extension Shape:		(606) Inlet Gage:	no.
(603) Inlet Extension Span Length:	ft.	(607) Inlet Wall Thickness:	in.

EXTENSION - OUTLET

(610) Outlet Extension Length:	ft.	(614) Outlet Extension Year:	
(611) Outlet Extension Material Type:		(615) Outlet Rise:	in.
(612) Outlet Extension Shape:		(616) Outlet Gage:	no.
(613) Outlet Extension Span Length:	ft.	(617) Outlet Wall Thickness:	in.

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
WATERWAY**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK
 Sufficiency Rating: 48.4 Date Built: 7/1/1932
 District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

NAVIGATION DATA				
(38) Navigation Control:	1	(39) Navigation Vertical Clearance:	95	ft.
(650) Navigation Lights, Total Count:	6	(40) Navigation Horizontal Clearance:	185	ft.
(111) Pier Protection:		(116) Minimum Navigation Vertical Clearance, Vertical Lift Bridge:	0	ft.
(651) Scenic River:	N			

WATERWAY				
(655) Channel Protection Type:	4	(113) Scour Critical Bridge:	8	
(656) Channel Protection, Total Length:		(661) Slope Protection, Total Length:	.1	ft.
(657) Drainage Area:		(662) Hydraulic Opening Area:		sq ft
(658) Flow Volume:		(663) Stream Velocity:	5.6	fps
(659) Flow Year:		(664) Water Flow Direction:	L	
(660) Culvert Scour Length:		(71) Waterway Adequacy:	8	

HYDROLOGY/HYDRAULICS	
(670) Abrasive Conditions:	(672) pH:
(671) Culvert Channel Protection (Inlet):	(673) Culvert Channel Protection (Outlet):

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
LOAD RATING**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK
 Sufficiency Rating: 48.4 Date Built: 7/1/1932
 District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

LOAD RATING			
(31) Design Load:	4 - H20	(703) Inventory Rating Load GVW:	tons
(63) Operating Rating Method:	6 - Load Factor (LF) rating reported by RF using HS20 loading	(704) Load Rating Date:	7/1/2012
(64) Operating Rating Factor:	0.980	(705) Load Rater First Name:	WESLEY
(700) Operating Rating Load:	2 - HS20 Loading	(706) Load Rater Last Name:	WEIR
(701) Operating Rating Load GVW:	tons	(707) Load Rater Ohio PE Number:	69991
(65) Inventory Rating Method:	6 - Load Factor (LF) rating reported by RF using HS20 loading	(708) Load Rating Software:	7 - Combination
(66) Inventory Rating Factor:	0.590	(709) Rating Source:	1 - Plan information available for load rating analysis (Default)
(702) Inventory Rating Load:	2 - HS20 Loading	(711) Live Load Response:	S - Satisfactory
(41) Open, Posted or Closed:	A - OPEN, NO RESTRICTION		

OHIO LEGAL LOADS			
(715) Ohio Legal Load 1:	2F1	(724) Ohio Legal Load 4:	
(716) Ohio Legal Load 1 GVW:	15.000 tons	(725) Ohio Legal Load 4 GVW:	40.000 tons
(717) Ohio Legal Load 1 Rating Factor:		(726) Ohio Legal Load 4 Rating Factor:	
(718) Ohio Legal Load 2:	3F1	(727) Ohio Legal Load 5:	
(719) Ohio Legal Load 2 GVW:	23.000 tons	(728) Ohio Legal Load 5 GVW:	tons
(720) Ohio Legal Load 2 Rating Factor:		(729) Ohio Legal Load 5 Rating Factor:	
(721) Ohio Legal Load 3:	4F1	(730) Ohio Legal Load 6:	
(722) Ohio Legal Load 3 GVW:	27.000 tons	(731) Ohio Legal Load 6 GVW:	
(723) Ohio Legal Load 3 Rating Factor:		(732) Ohio Legal Load 6 Rating Factor:	
(70) Bridge Posting:	5 - Equal to or above legal loads	(733) Posting Required by Rating:	
		(734) Ohio Percent Legal:	150 %

Governing Member(s)

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
COMPLEX**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK
 Sufficiency Rating: 48.4 Date Built: 7/1/1932
 District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

CABLE STAYED	
---------------------	--

(750) Anchorage/Saddle at Tower, Total Count:	each	(753) Delta Frames, Total Count:	each
(751) Back Span Anchorage, Total Count:	each	(754) Stay Cable, Total Count:	each
(752) Dampeners, Total Count:	each	(755) Wind Ties, Total Count:	each

MOVEABLE	
-----------------	--

(760) Auxiliary Engines, Total Count:	each	(769) Limit Switches, Total Count:	each
(761) Bearings, Total Count:	each	(770) Shafts, Total Count:	each
(762) Brackets, Total Count:	each	(771) Sockets, Total Count:	each
(763) Buffers, Total Count:	each	(772) Span Balance, Total Count:	each
(764) Center Locks, Total Count:	each	(773) Tail Locks, Total Count:	each
(765) Circuit Breakers, Total Count:	each	(774) Traffic Gages/Lights, Total Count:	each
(766) Electric Motors, Total Count:	each	(775) Transformers, Total Count:	each
(767) Gears, Total Count:	each	(776) Movable: Wire Ropes, Total Count:	each
(768) General Operation, Total Count:	each		

SUSPENSION	
-------------------	--

(780) Anchorage, Total Count:	each	(784) Suspender Connections, Total Count:	each
(781) Bent Posts, Total Count:	each	(785) Suspenders, Total Count:	each
(782) Cable Bands, Total Count:	each	(786) Tower Saddles, Total Count:	each
(783) Main Cables, Total Count:	each	(787) Towers, Total Length:	ft.

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE HISTORY**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK
Sufficiency Rating: 48.4 Date Built: 7/1/1932
District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

HISTORICAL BRIDGE

(825) Historical Bridge Name:

(826) NR Recommendation: (827) Historical Year Built: 1932 (828) Historical Bridge Type: 325

(829) Previous Inventory/Date: 1981 (830) Historical Owner: (831) Historical Builder: 249

(832) Previous NR Status: Y (833) Score:

(834) Reviewed By:

(37) Historical Significance Code: 4

(835) Level of Significance Code: 2

(836) Historical Data Source: 014 (837) Historical District:

(838) Historical Review Date: 2/1/2008 (839) Historical Standard ODOT Design: N

(840) Historical National Register Listed:

(841) Historical Bridge/Designer: 176

(842) Historical Setting/Context:

The bridge carries a 4-lane arterial street over the valley from the Flats into downtown Cleveland in the area of the stadium and former industrial buildings. It is a gateway to the center of the city.

(843) Historical Physical Description:

The main spans of the Lorain-Carnegie Bridge consist of 14 cantilever deck trusses ranging in length from 132' to 299'. The bridge is double deck, but the lower deck designed for rapid transit was never used. The bridge has decorative sandstone archite

(844) Historical Integrity:

Rehabilitation, 2001.

(845) Historical Significant Description:

The Lorain-Carnegie Bridge is NR-listed (1976). The bridge was rehabilitated without adverse effect in 2001. When completed in 1932, the Lorain-Carnegie High Level Bridge provided a third high-level connection between Cleveland's downtown and the west

(846) Historical Bridge Remarks:

CUY-10-16.13 PID19425. Rehabilitation 2001.

MANAGEMENT PLAN

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE HISTORY**

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

(850) In Management Plan (2009): N

(851) Historical Management Plan Substructure:

(852) Historical Management Plan Superstructure:

(853) Historical Management Summary:

PRESERVATION

(860) Justification:

(861) Prudent and Feasible to Leave Bridge in Place?:

(862) Preservation Potential:

(863) Preservation Summary:

(864) No Build Alternative Consideration:

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
BRIDGE HISTORY**

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

(865) Historic Bypass Information:

(866) Other Preservation Options:

(867) Preservation Recommendation:

(868) Comment Recommendation:

(869) Comment Date:

(870) Plan Comment:

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
APPROACH INSPECTION PHOTOS**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
DECK INSPECTION**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK
Sufficiency Rating: 48.4 Date Built: 7/1/1932
District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

DECK

c13. Expansion Joint (LF)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
0.00	1419	75	0	0	1.07

Evidence of leakage through joint membranes. Deck armor in good condition and level with wearing surface.

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
DECK INSPECTION PHOTOS**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

STATE OF OHIO DEPARTMENT OF TRANSPORTATION SUPERSTRUCTURE INSPECTION

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK
 Sufficiency Rating: 48.4 Date Built: 7/1/1932
 District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

SUPERSTRUCTURE

(59) NBIS Superstructure Summary: 4

Recommended: 6

c14. Alignment (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
17	17	0	0	0	1.00

c15.1 Beams/Girders (LF)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
1207.0	1207	0	0	0	1.00

c16. Diaphragm/Cross Frames (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
55	55	0	0	0	1.00

c17. Stringers (LF)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
36709	33038	3671	0	0	1.14

Very isolated instances of corrosion at floorbeam connections. Minor web loss in areas, isolated through holes.

c18. Floorbeams (LF)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
11218	10318	900	0	0	1.12

Most distress including staining and minor section loss concentrated at deck expansion joints.

c19. Truss Verticals (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
529	501	28.0	0	0	1.08

The verticals are generally good condition, with scattered corrosion to flange angles, especially below deck joints. In Span 1, NE U10L10 has 50% section loss to the outstanding legs of its east flange angles. Nearby, SI U10L10 has deep pitting to both flange angles.

c20. Truss Diagonals (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
----------------	---------	---------	---------	---------	-------------------

STATE OF OHIO DEPARTMENT OF TRANSPORTATION SUPERSTRUCTURE INSPECTION

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK
 Sufficiency Rating: 48.4 Date Built: 7/1/1932
 District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

SUPERSTRUCTURE

506.00 481 25 0 0 1.07

The diagonals are in good condition, with active pack rust common to the exterior corners of the north exterior and south exterior diagonal members. Exterior diagonals adjacent to abandoned utility supports have remnants of a bracket welded to it web plates. Elsewhere, several diagonals have lower stay plates with deep section losses or perforations.

c21. Truss Upper Chord (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
522	512	10	0	0	1.03

The top chord is in good condition with few significant findings noted. Junction box drains dripping onto the upper chord has caused light corrosion to several exterior upper chord members. At expansion joints, dirt and construction debris is present inside some upper chord connections with the verticals.

c22. Truss Lower Chord (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
522	465	52	5	0	1.29

The majority of the lower chord is in good condition apart from various degrees of sections loss and pack rust located between the flange angles and the web plates. Portions of the flange angles of the exterior lower chords have pockets of deep pitting or perforations. The greatest section loss generally is located in Spans 11 and 13. In these spans, twelve lower chord members have between 5% and 22% net section loss as reported by the 2014 inspection report. The chords downstream of expansion joints have significant pack rust. Specifically, the interior chords at span 9 downstream of expansion joint 4 have about 2 inches of pack rust between the upper flange angles.

There is a longitudinal crack in the top north flange angle on the south exterior lower chord in Span 12 between panel points 3 and 4 that has not grown since the previous inspection.

Four members have over 10% estimated/measured section loss. One member has a longitudinal crack in an internally redundant flange angle.

c23. Truss Gusset Plate (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
2116	1840	200	76	0	1.59

Truss gusset plates below deck joints show the most distress. Section loss is most severe at these locations but generally present everywhere. Previously documented laminar tear in the south gusset at Unit 7 lower chord Panel Point 7 shows no growth. Advanced section loss commonly occurs above the lower chord and along the edges and ends of diagonal connections. Also commonly occurring are bows along the long free edges of the gussets caused by pack rust.

The upper chord gusset plates are in good condition with little corrosion observed. Areas of heaviest corrosion occur below deck expansion joints.

The gussets at the upper chord floorbeam connections below junction box drains are pitted.

c24. Lateral Bracing (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
240	228	12			1.07

Lateral bracing gussets below deck joints have section lost and pack rust causing their corners to peel away from the lateral bracing members, especially below deck joints.

c25. Sway Bracing (EA)

STATE OF OHIO DEPARTMENT OF TRANSPORTATION SUPERSTRUCTURE INSPECTION

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK
 Sufficiency Rating: 48.4 Date Built: 7/1/1932
 District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

SUPERSTRUCTURE

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
202.0	200	2	0	0	1.01

The sway bracing is in good condition having only minor pack rust and corrosion at the connections to the verticals below deck joints.

c26. Bearing Devices (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
164	0	164	0	0	2.00

Debris and water accumulation in some of the truss bearings. Section loss generally occurring around the pins in the gussets that house the pin assembly.

c30. Protective Coating System (LF)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
60961	36577	12192	12192	0	2.44

Scattered areas of peeling and bubbling, especially at expansion joints where water infiltration and active corrosion is occurring. There are several areas on the superstructure with active pack rust between gussets, web plates, angles, and lacing, with the worst areas below or downstream of deck joints.

c31. Pins/Hangers/Hinges (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
192	0	192	00	0	2.00

South interior truss line pin to zero force member is dislodged at Unit 13 lower chord Panel Point 12.

c32. Fatigue (LF)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
60691.0	60691	0	0	0	1.00

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE INSPECTION PHOTOS**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE INSPECTION

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK
 Sufficiency Rating: 48.4 Date Built: 7/1/1932
 District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

SUBSTRUCTURE

(60) NBIS Substructure Summary: 7 **Recommended:** 8

c33. Abutment Walls (LF)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
171	151	20	0	0	1.17

Minimal staining and hairline cracks in abutment faces.

c35. Abutment Columns/Bents (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
0.00	0	0	0	0	

c34. Abutment Caps (LF)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
0	0	0	0	0	

c38. Pier Columns/Bents (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
70.0	65	5	0	0	1.10

Areas of cracking/delamination concentrated around previously patched areas. Base of pier 8 north column west face has a hole approximately 2' x 3' into lower column cell filled with trash.

Patches on pier columns cracked but intact.

c36. Pier Walls (LF)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
166	124	42	0	0	1.34

c37. Pier Caps (LF)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
1079	539	540	0	0	1.60

Pier caps are in good condition. Pier towers were not considered in the rating but are in poor condition and pose a risk to public safety. Many of the pier tower roofs have been removed, but those that remain show active degradation with debris accumulating below. Advise against walking on manhole lids due to casting corrosion.

Pier 9: Deep, non-structural spall not repaired in 2002 rehab present below NE Truss.

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
SUBSTRUCTURE INSPECTION**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK
 Sufficiency Rating: 48.4 Date Built: 7/1/1932
 District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

SUBSTRUCTURE

c39. Backwalls (LF)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
171	120	34	17	0	2.10

Vertical crack approximated 12'-6" in East Pylon backwall behind the north exterior truss line between the sandstone fascia and abutment concrete.

c40. Wingwalls (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
4.0	4	0	0	0	1.00

c42. Scour (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
2	2	0	.0	0	1.00

The bridge had an underwater bridge inspection on July 14, 2015 by GPI under contract with Jones-Stuckey. See Attached. They found a change in the exposure of the footing at Pier 10 (West Pier), Column D, were the exposure of the footing has advanced since the 2010 dive inspection. "The maximum vertical exposure was measured to be 3.7 feet. 9.5 horizontal feet of footing are exposed along the south side and 18 horizontal feet are exposed on the east face of the footer."

No change significant change was noted at other locations. Pier 9 (East Pier) , Column A shown less exposure to the footing.

Timber debris is still lodged at the northeast corner of pier 10.

c43. Slope Protection (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
1	1	0	0	0	1.00

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
SUBSTRUCTURE INSPECTION PHOTOS**

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
CULVERT INSPECTION**

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

CULVERT

(62) NBIS Culvert Summary:

N

Recommended:

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
CULVERT INSPECTION PHOTOS**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
CHANNEL INSPECTION PHOTOS**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
SIGNS/UTILITIES INSPECTION**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK
 Sufficiency Rating: 48.4 Date Built: 7/1/1932
 District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

SIGNS/UTILITIES

(41) Open, Posted or Closed: A

c55. Signs (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
0.0	0				

c56. Sign Supports (EA)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
15	15				1.00

c57. Utilities (LF)

Total Quantity	State 1	State 2	State 3	State 4	Transition Rating
9054.0	6036	3018	0	0	1.43

Gas main appears recently rehabilitated (new pedestals, rollers, restraints)
 Telecom PVC conduits are damaged and cables are exposed, especially in the east tunnel
 Telecom structural supports, sheds, and corrugated roofs/walls are heavily corroded. Many steel pieces are hanging or have fallen to the utility deck below.
 Large spall and exposed reinforcement in base of concrete light pole on the south side of the road near Pier 2.
 Inspectors noted camera mounted in the north interior upper chord pointed at the utility deck.

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
SIGNS/UTILITIES INSPECTION PHOTOS**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL INSPECTION**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

SUPPLEMENTAL

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL INSPECTION PHOTOS**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
CRITICAL FINDINGS**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK
Sufficiency Rating: 48.4 Date Built: 7/1/1932
District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
REVIEW**

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
JOINT MEASUREMENT**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4 Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

Date: _____

Joints Labeled Upstation

Inspector: _____

Joints Measured Longitudinal (not perpendicular to joint armor)

Joint No.	Location:		Location:		Location:		Location:	
	Temp (F)	Msmt (in)	Temp (F)	Msmt (in)	Temp (F)	Msmt (in)	Temp (F)	Msmt (in)

STATE OF OHIO DEPARTMENT OF TRANSPORTATION MOVEABLE BEARING INSPECTION

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

Access: Inspection Date: 10/10/2015

Temperature: ° F Inspector(s)

Beams labeled left to right looking up station.

Rocker Bearing Field Documentation Summary

1. Reference Sketch:

A = Height of rocker

B = High corner of rocker plate

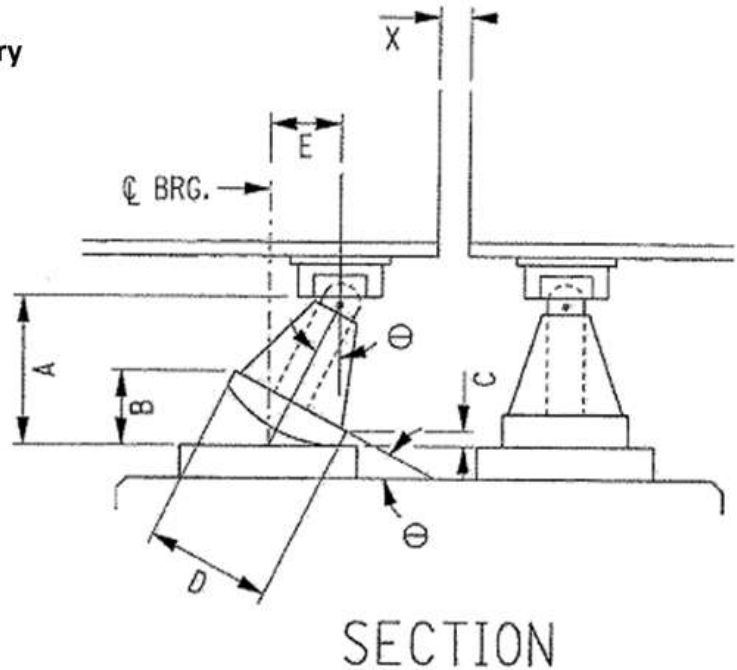
C = Low corner of rocker plate

D = width of rocker plate

θ = Angle of rotation (tilt)

E = Eccentricity (translation)

X = minimum clear distance between girders or from girder to abutment



Substructure Unit	Beam No.	Dim "A" (in)	Dim "B" (in)	Dim "C" (in)	Dim "D" (in)	Dim "X" (in)	Angle "θ" (deg)	Dim "E" (in)

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
CROSS CHANNEL PROFILE**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4 Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

Upstream or Downstream?:

The feature from which the measurements are taken (Curb, Top of Railing):

The distance between the underside of the superstructure and the reference feature labeled above: _____ ft.

Record the number of bents, tower legs or columns in water at the time of inspection:

and/or

Record the LINEAR FEET of Pier and Abutment Walls in water at the time of inspection:

Msmt	Span	Horizontal Distance from Rear (ft)	Object Measured (abutment, pier, slope change, flowline, 1/4 span, 1/2, 3/4, etc.)	Vertical or Profile Measurement (ft)	Comments
------	------	------------------------------------	--	--------------------------------------	----------

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
DAMAGE**

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

Date:

Time:

Route On:

Contacted: (ex. Owner, EMS, etc.)

Lane Closed:

Route Under:

Lane Closed:

Documents Attached:

- Accident Patrol Report
- Bridge Inspection Report
- Critical Findings Report
- Estimate of Damage (see Tables 1 and 2 below)
- Pictures

Controlling Minimum Vertical Clearance (xx' - xx") with location and additional pertinent information

Table 1 - Damaged Main Member to be Heat Straightened

Damaged Section	Beam Number	Pier/Abut Reference	B (ft)	C (ft)	D (ft)	E (ft)	F1 (ft)	F2 (ft)	G (ft)	J (ft)	Number of Nicks & Gouges to Grind

Table 2 - Damaged Secondary Member to be replaced (i.e. crossframe)

Between Beams	Pier/Abut	N	1D	2D	3S	4S
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

N = Number of crossframes from abutment or pier referenced

Notes:

STATE OF OHIO DEPARTMENT OF TRANSPORTATION DAMAGE

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

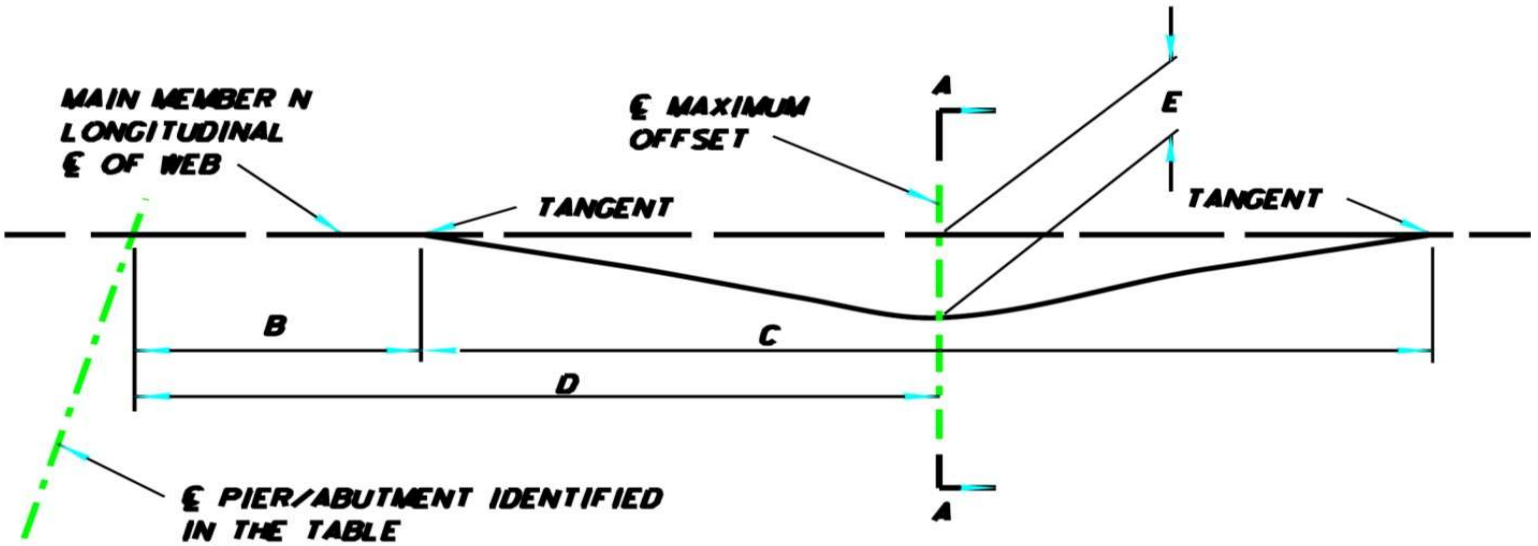
Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

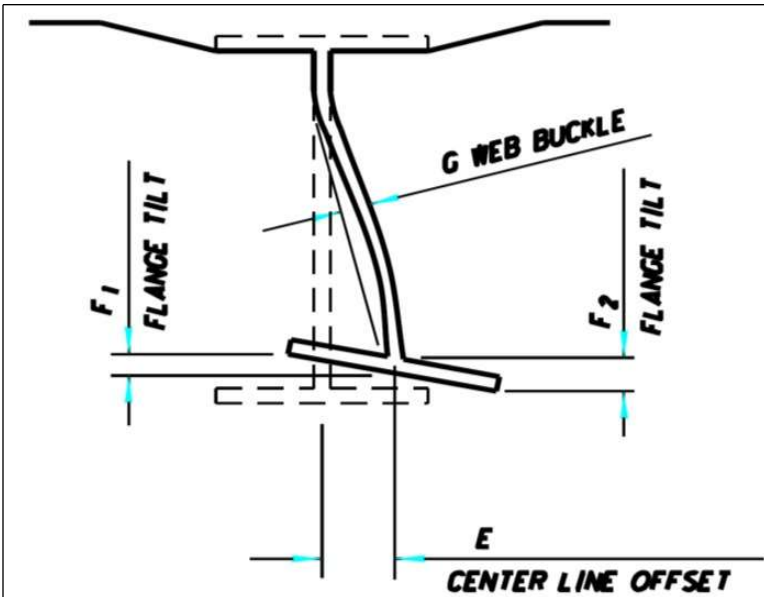
SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

Use for Table 1



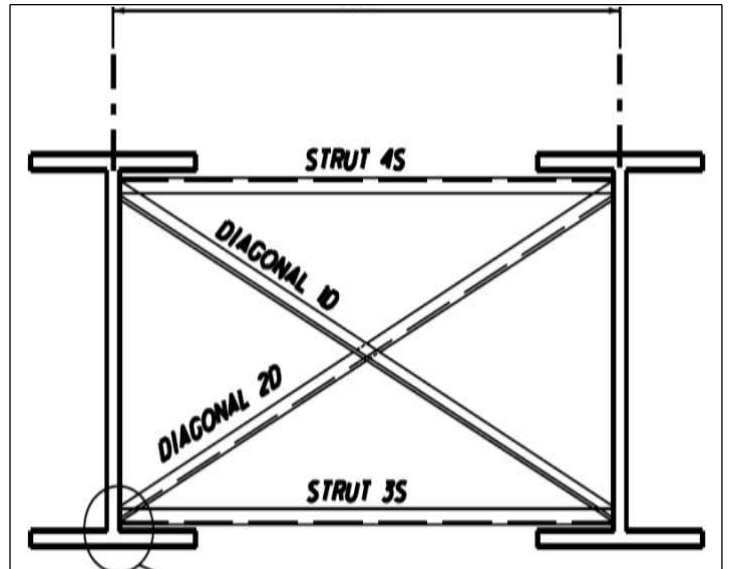
Use for Table 1



Section A-A

Negative E Values are bent left
 Negative F Values are bent down
 Negative G values are bent left
 J = Length of epoxy injection

Use for Table 2



Remove according to Item 202-Portions of secondary members removed, as per plan, replace by matching existing detail, see GSD-1-96 for additional clarification.

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
INSPECTION PHOTOS**

Structure File Number: 1801503 Inventory Bridge Number: CUY 00010 16.130 N Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK
Sufficiency Rating: 48.4 Date Built: 7/1/1932
District: 12 Place Code (FIPS): CLEVELAND SR 10 over CUY RIVER VALLEY & FI RR Type of Service on: HIGHWAY-PEDESTRIAN

**STATE OF OHIO DEPARTMENT OF TRANSPORTATION
MAINTENANCE**

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

NO FILES HAVE BEEN UPLOADED

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

Fracture Critical Plan

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

NO FILES HAVE BEEN UPLOADED

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

Scour Critical Plan of Action

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

NO FILES HAVE BEEN UPLOADED

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

Scour Assessment Checklist

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

NO FILES HAVE BEEN UPLOADED

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

Drawings

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

NO FILES HAVE BEEN UPLOADED

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

NDT Report

Structure File Number: 1801503

Inventory Bridge Number: CUY 00010 16.130 N

Bridge Type: 3 - STEEL/4 - TRUSS/3 - DECK

Sufficiency Rating: 48.4

Date Built: 7/1/1932

District: 12 Place Code (FIPS): CLEVELAND

SR 10 over CUY RIVER VALLEY & FI RR

Type of Service on: HIGHWAY-PEDESTRIAN

NO FILES HAVE BEEN UPLOADED