## **Highway Bridge Inspection Report**

BR# 1427

195 SB / STILLWATER AVE

I-95 SOUTHBOUND

Over

**STILLWATER AVENUE** 

Town: Bangor



**Inspection Date:** 09/07/2021

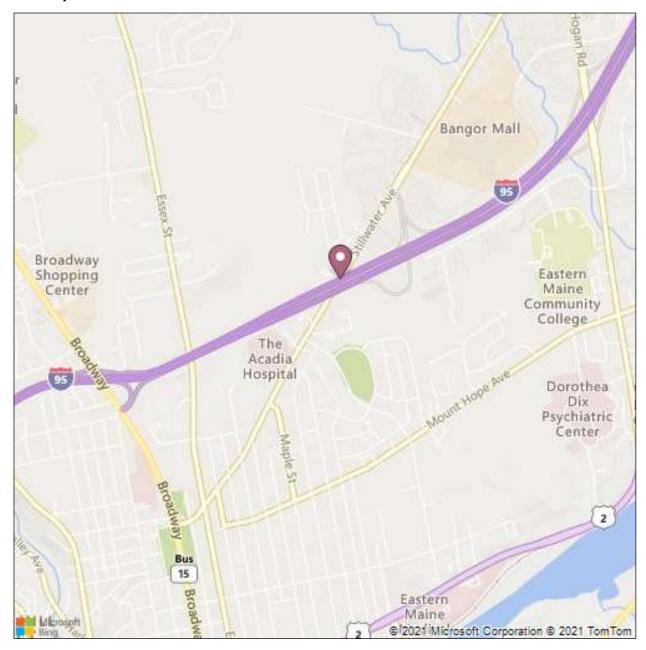
Inspected By: Harris, Scott

**Inspection Type(s):** Routine

Inspection Date: 09/07/2021 Facility Carried: I-95 SOUTHBOUND

#### **Highway Bridge Inspection Report**

#### **Location Map**



Latitude: 44.82413 Longitude: -68.75881

#### **National Bridge Inventory**

Status: 1 - SD Bridge Name: I95 SB / STILLWATER AVE Sufficiency Rating: 60.3

Inspections

(90) INSPECTION DATE & (91) DESIGNATED INSPECTION FREQUENCY 24 09/07/2021

(92) CRITICAL FEATURE INSPECTION & (93) CFI DATE

 (92A) FRACTURE CRITICAL DETAIL
 N

 (92B) UNDERWATER INSPECTION
 N

 (92C) OTHER SPECIAL INSPECTION
 N

Identification

 (1) STATE CODE
 231 - Maine

 (8) STRUCTURE NUMBER
 1427

(5) INVENTORY ROUTE

(5A) RECORD TYPE 1: Route carried "on" the structure

(5B) ROUTE SIGNING PREFIX

(5C) DESIGNATED LEVEL OF SERVICE

(5) INVENTORY ROUTE

3 - STATE HIGHWAY

1 - MAINLINE

95

 (5) INVENTORY ROUTE
 3 - SOUTH

 (2) HIGHWAY AGENCY DISTRICT
 04 - Eastern

 (3) COUNTY CODE
 019 Penobscot

 (4) PLACE CODE
 02795

(6) FEATURES INTERSECTED STILLWATER AVENUE
(7) FACILITY CARRIED I-95 SOUTHBOUND
(9) LOCATION 0.8 MI N JCT RTE 15

(11) MILEPOINT 118.431

(12) BASE HIGHWAY NETWORK Inventory Route is on the Base Network

(13) LRS INVENTORY ROUTE, SUBROUTE (13A) LRS INVENTORY ROUTE

 (13B) SUBROUTE NUMBER
 00

 (16) LATITUDE
 44.82413

 (17) LONGITUDE
 -68.75881

 (98A) BORDER BRIDGE CODE

 (98B) PERCENT RESPONSIBILITY
 0

 (99) BORDER BRIDGE STRUCT NO.
 n/a

**Structure Type and Material** 

000000095S

(43) STRUCTURE TYPE, MAIN

(43A) KIND OF MATERIAL/DESIGN 3 - Steel

(43B) TYPE OF DESIGN/CONSTR 02 - Stringer/Multi-beam or Girder

(44) STRUCTURE TYPE, APPROACH SPANS

 (44A) KIND OF MATERIAL/DESIGN
 0 - Other

 (44B) TYPE OF DESIGN/CONSTRUCTION
 00 - Other

 (45) NUMBER OF SPANS IN MAIN UNIT
 3

 (46) NUMBER OF APPROACH SPANS
 0

(107) DECK STRUCTURE TYPE 1 - Concrete Cast-in-Place

(108) WEARING SURFACE/PROTECTIVE SYSTEMS

 (108A) WEARING SURFACE
 6 - Bituminous

 (108B) DECK MEMBRANE
 2 - Preformed Fabric

 (108C) DECK PROTECTION
 0 - None

Age of Service

(27) YEAR BUILT 1960

(106) YEAR RECONSTRUCTED

(42) TYPE OF SERVICE

(42A) TYPE OF SERVICE ON BRIDGE 1 - Highway

(42B) TYPE OF SERVICE UNDER BRIDGE 1 - Highway, with or w/out pedestrian

(28) LANES

 (28A) LANES ON THE STRUCTURE
 02

 (28B) LANES UNDER THE STRUCTURE
 02

 (29) AVERAGE DAILY TRAFFIC
 25150

 (30) YEAR OF AVERAGE DAILY TRAFFIC
 2016

 (109) AVERAGE DAILY TRUCK TRAFFIC
 5

 (19) BYPASS DETOUR LENGTH
 1

Geometric Data

(50) CURB/SIDEWALK WIDTHS (50A) LEFT CURB SIDEWALK (ft.) 0.5 (50B) RIGHT CURB SIDEWALK (ft.) 0.5 (51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 30.2 (52) DECK WIDTH, OUT-TO-OUT (ft.) 35 (32) APPROACH ROADWAY WIDTH (ft.) 40 (33) BRIDGE MEDIAN 0 - No median (34) SKEW (deg.) 56 (35) STRUCTURE FLARED 0 - No flare (10) INV RTE, MIN VERT CLEARANCE (ft.) 328.05 (47) TOTAL HORIZONTAL CLEARANCE (ft.) 30 (53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 327.76 (54) MIN VERTICAL UNDERCLEARANCE (54A) REFERENCE FEATURE H - Highway beneath structure (54B) MIN VERTICAL UNDERCLEARENCE (ft.) 14.67 (55) MIN LATERAL UNDER CLEARANCE RIGHT (55A) REFERENCE FEATURE H - Highway beneath structure (55B) MIN LATERAL UNDER CLEARANCE RIGHT (ft.) 12.14 (56) MIN LATERAL UNDER CLEARANCE (ft.) 12.1 Classification (112) NBIS BRIDGE LENGTH Yes (104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE 1 - Structure/Route is on NHS (26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE 11 - Urban - Principal Arterial - Interstate (100) STRAHNET HIGHWAY DESIGNATION Is on an Interstate STRAHNET route (101) PARALLEL STRUCTURE DESIGNATION L - Left structure (South or West) (102) DIRECTION OF TRAFFIC 1-way traffic (103) TEMP STRUCTURE (105) FEDERAL LANDS HIGHWAYS Not Applicable (110) DESIGNATED NATIONAL NETWORK Inventory route on National Truck Network (20) TOLL 3 - On Free Road (21) MAINTENANCE RESPONSIBILITY 01 - State Highway Agency (22) OWNER 01 - State Highway Agency (37) HISTORICAL SIGNIFICANCE 4 - Not determinable Condition (58) DECK 4 - Poor Condition (advanced deterioration) (59) SUPERSTRUCTURE 6 - Satisfactory Condition (minor deterioration) (60) SUBSTRUCTURE 5 - Fair Condition (minor section loss) (61) CHANNEL & CHANNEL PROTECTION N - Not Applicable (62) CULVERT N - Not Applicable Load Rating and Posting (31) DESIGN LOAD 6 - HS 20+Mod (63) METHOD USED TO DETERMINE OPERATING RATING 8 - Load and Resistance Factor Rating (LRFR) rating report by rating factor (RF) method using HL-93 loadings. (64) OPERATING RATING 1 93 (65) METHOD USED TO DETERMINE INVENTORY RATING 8 - Load and Resistance Factor Rating (LRFR) rating report by rating factor (RF) method using HL-93 loadings. (66) INVENTORY RATING (70) BRIDGE POSTING 5 - Equal to or above legal loads (41) STRUCTURE OPEN/POSTED/CLOSED A - Open **Appraisal** (67) STRUCTURAL EVALUATION 5

4

6

N - Not Applicable

8 - Equal to present desirable criteria

0 - Does not meet acceptable standards/safety feature is required

0 - Does not meet acceptable standards/safety feature is required

0 - Does not meet acceptable standards/safety feature is required

0 - Does not meet acceptable standards/safety feature is required

91.5

260

(49) STRUCTURE LENGTH (ft.)

(68) DECK GEOMETRY

(71) WATERWAY ADEQUACY

(36) TRAFFIC SAFETY FEATURE 36A) BRIDGE RAILINGS:

36B) TRANSITIONS:

(72) APPROACH ROADWAY ALIGNMENT

36C) APPROACH GUARDRAIL

36D) APPROACH GUARDRAIL ENDS

(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL

#### Proposed Improvements

(75) TYPE OF WORK

(75A) TYPE OF WORK PROPOSED

(75B) WORK DONE BY

(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)

(94) BRIDGE IMPROVEMENT COST (SK)

(95) ROADWAY IMPROVEMENT COST (SK)

(96) TOTAL PROJECT COST

(97) YEAR OF IMPROVEMENT COST ESTIMATE

(114) FUTURE ADT

35210

(115) YEAR OF FUTURE ADT 2036

#### Navigation Data

(38) NAVIGATION CONTROL	N - Not applicable, no waterway
(111) PIER OR ABUTMENT PROTECTION	
(39) NAV VERT CLEARANCE	0
(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE	0
(40) NAV HORIZONTAL CLEARANCE	0

#### **Inspection Notes**

Structure Number: 1427	Town: Bangor
Structure Name: 195 SB / STILLWATER AVE	
Structure Notes 1960 Three simple spans, rolled steel beams supporting	concrete deck on concrete substructure. Bituminous wearing surface.
Wearing Surface Wearing surface being replaced at this time.	
<b>Deck</b> Deck underside has scattered minor cracking, patches ar rail has scattered areas of plow scrapes and minor dama	NBI Item 58: 4 and minor spalls with exposed rebar. large areas of wet staining interior bays. Bridge ge.
Superstructure  Girders have isolated paint failures, scattered freckle rust paint failures with minor to moderate rusting. Several and	NBI Item 59: 6 t forming. Exterior girder ends, bearings and girder ends over piers have isolated chor bolts missing from east abutment bearings.
	NBI Item 60: 5 with dark staining. Isolated areas of spalling with exposed rebar at SW corner of racking. Pier columns have scattered minor map cracking with isolated delams. ing with isolated areas of spalling/large delamination.
Culvert	NBI Item 62: N

Channel NBI Item 61: N

Other		
O control to control to		
Special Inspection		
Monitoring		
Pontis Notes		

Inspection Date: 09/07/2021 Facility Carried: I-95 SOUTHBOUND

#### **Highway Bridge Inspection Report**

## **Element Inspection**

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	4 - Sev.	7700	sq. ft.	0	6950	750	0
107 - Steel Open Girder/Beam	3 - Mod.	1300	ft.	1200	100	0	0
515 - Steel Protective Coating		1300	sq. ft.	0	1000	200	100
205 - Reinforced Concrete Column	3 - Mod.	6	each	0	6	0	0
215 - Reinforced Concrete Abutment	2 - Low	198	ft.	0	178	20	0
234 - Reinforced Concrete Pier Cap	3 - Mod.	122	ft.	0	116	6	0
300 - Strip Seal Expansion Joint	4 - Sev.	61	ft.	0	49	12	0
302 - Compression Joint Seal	4 - Sev.	61	ft.	0	61	0	0
311 - Movable Bearing	3 - Mod.	15	each	0	15	0	0
515 - Steel Protective Coating		15	sq. ft.	0	0	5	10
313 - Fixed Bearing	3 - Mod.	15	each	10	5	0	0
515 - Steel Protective Coating		15	sq. ft.	0	5	5	5
841 - Asphalt Wearing Surface with Membrane	1 4 - Sev.	6644	sq. ft.	6644	0	0	0
855 - Slope Protection - Concrete	2 - Low	4200	sq. ft.	3000	1200	0	0
871 - Aluminum Bridge Railing	4 - Sev.	520	ft	480	40	0	0

#### **Over Limit Report**

1427 Town1: Bridge #: Bangor Bridge Name: 195 SB / STILLWATER AVE Town2: Owner: 01 - State Highway Agency Maintainer: 01 - State Highway Agency N Not applicable Co-Owner: N Not applicable Co-Maintainer: Region: 04 - Eastern Vertical Clearance - Under Left, Center, and Right is based on the direction of travel Roadway - Heading North or East Actual Heights in Feet-Inches Date Measured: 07/23/2013 Center Deficient Sign Left Right **Posted** Main: STILLWATER AVENUE 14 - 6 15-0 14 - 8 Main 14-4 Other: Other Ramp Ramps: Roadway - Heading South or West Actual Heights in Feet-Inches Date Measured: 07/23/2013 Deficient Sign <u>Left</u> Center Posted Main: STILLWATER AVENUE 14 - 6 15 - 0 14-8 ✓ Main 14 - 4 Other: Other Ramp Ramps: **Vertical Clearance - Portal** Roadway: I-95 SOUTHBOUND Heading North or East Actual Heights in Feet-Inches Date Measured: <u>Left</u> Center Right **Deficient Sign Posted** Portal **Heading South or West** Actual Heights in Feet-Inches Date Measured: Left Center Right **Posted Deficient Sign** Portal Permitting ☐ Red Flag Comments **Pointer** Heading North Height: 14 - 4 2037280-BRPT Heading South Height: 14 - 4 2037280-BRPT Left Ramp Height: Right Ramp Height: Portal North Height: Portal South Height: Other Road Height: Bridge Width: 30.2 ft Roadway Width: 40 ft Underclearance heights are signed if less than 14 ft 6 in Check with Maine Turnpike Authority for load heights over 13 ft 6 in Always check 511 **Load Restrictions** Posted tons Date posted: Posted One Truck at aTime Posted for 4 axle only Operating Load Rating 1.93 Permit Load Ratings axles

axles axles

#### **Underwater Dive Inspection Report**

Structure Number: 1427		Bridge Name:	I-95 SB/STILLWATER AVE		
<b>Town 1</b> : 19020 - Bangor		Town 2:			
Division: Bangor		DiveID:	2108		Tidal:
Location: .8 MI N #15					
Tide Information:				PI	hotos:
Dive Entry Location:					
Scour:					
Comments/Hazards:					
Streambed Description:					
Streambed Description.					
Channel Description:					
Substructure Description:					
Inspection Team:	Role:		Dive Conditions:		
			Time: Entry:	AM/PM	
			Time: Exit:	AM/PM	
			Water Temp:		
			Visibility (ft):		
			Max Depth (ft):		
			Current: Weather:		
			Underwater Inspection Date:		
			Channel Condition:		
			Substr/Culvert Condition:		
			Inspection Cycle:		
			поросион Сусте.		
Ratings Comments:					

Inspection Date: 09/07/2021 Facility Carried: I-95 SOUTHBOUND

#### **Highway Bridge Inspection Report**

## **Pictures**



PHOTO 1

Description Roadway looking east



PHOTO 2

Description west joint

Inspection Date: 09/07/2021 Facility Carried: I-95 SOUTHBOUND

#### **Highway Bridge Inspection Report**

## **Pictures**



РНОТО 3

Description north rail



PHOTO 4

Description Pier joint

Inspection Date: 09/07/2021 Facility Carried: I-95 SOUTHBOUND

#### **Highway Bridge Inspection Report**

## **Pictures**



PHOTO 5

Description North side view



РНОТО 6

Description Abutment beam end

Inspection Date: 09/07/2021 Facility Carried: I-95 SOUTHBOUND

#### **Highway Bridge Inspection Report**

#### **Pictures**



PHOTO 7

Description east abutment



РНОТО 8

Description Cracking east abutment

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#### **Highway Bridge Inspection Report**

## **Pictures**



РНОТО 9

Description east abutment



PHOTO 10

Description east pier east face

Inspection Date: 09/07/2021 Facility Carried: I-95 SOUTHBOUND

#### **Highway Bridge Inspection Report**

## **Pictures**



PHOTO 11

Description east span



PHOTO 12

Description center span

Inspection Date: 09/07/2021 Facility Carried: I-95 SOUTHBOUND

#### **Highway Bridge Inspection Report**

#### **Pictures**



PHOTO 13

Description Spall bottom of deck center span



PHOTO 14

Description

Inspection Date: 09/07/2021 Facility Carried: I-95 SOUTHBOUND

#### **Highway Bridge Inspection Report**

## **Pictures**



PHOTO 15

Description west span/ abutment



PHOTO 16

Description west abutment

Inspection Date: 09/07/2021 Facility Carried: I-95 SOUTHBOUND

#### **Highway Bridge Inspection Report**

## **Pictures**



PHOTO 17

Description west abutment interior bearing



PHOTO 18

Description west pier west face

#### **Maintenance Work Items**

Structure Number: 1427 Structure Name: 195 SB / STILLWATER AVE

Town: 19020 Owner: Harris, Scott

Туре	Work Item	Priority	Notes
Maintenance	Rehab Substructure		Rehab abutments and piers.
Capital	Paint		Clean and paint all steel.
Maintenance	Repair Erosion		Repair shoulder erosion at road below adjacent to pier column.
Preservation	Other		Apply Silane
Maintenance	Repair Joint		Rehab east pier joint that has missing seal, install header
Preservation	Coat Beam Ends		
Preservation	Repair Wearing Surface		mill and fill

# MaineDOT NBIS Bridge Safety Inspection JSA

Structure Number: 1427

Inspector: Harris,Scott	Structure Name: 195 SB / STILLWATER AVE
Team Lead: Scott Harris	Town: Bangor
Additional Team Members/Visitors:	
1.)	6.)
2.)	7.)
3.)	8.)
4.)	9.)
5.)	
Job being performed:	
Routine bridge inspection.	
Potential Hazard:	Controls:
✓ Exposure to traffic	✓ Parked off road with strobe
	✓ Less than 1 hour on bridge
	✓ Wear standard reflective clothing and hard hat
	Spotter Traffic Control Crew
Potential Hazard:	Controls:
✓ Steep slopes and uneven working areas	✓ Wear appropriate, prudent footwear
(rip rap, mud, loose fill, etc)	Rope or fall protection
Potential Hazard:	Controls:
✓ Chipped Concrete or Steel (hand tools only)	✓ Wear appropriate, prudent eye/hand protection
Potential Hazard:	<u>Controls:</u>
✓ 6' Vertical drops	✓ Stay away from areas
• o vertical drops	Stay away nom areas
Potential Hazard:	Controls:
Water Hazards	Evaluate Water Hazard conditions
Water depth under 1 foot	Use/Wear appropriate PPE
☐ Water depth 1 to 4 feet ☐ Water depth over 4 feet	☐ Buddy System
☐ Water flow calm/slow moving	
Water flow visible/not rapid	
Water flow rapid with some short falls	
☐ Tidal Water	
Potential Hazard:	Controls:
	<del></del>
☐ Insects, Poision Ivy, or other environmental hazards	Apply insect repellant and/or sunscreen

	Protect skin with appropriate, prudent clothing
Potential Hazard:	<u>Controls:</u>
Lead paint and Avian excrement	☐ Wear gloves, do not scrape
Potential Hazard:	Controls:
Heavy Manual Lifting	Ask for assistance in donning dive gear, lifting equipment
Potential Hazard:	<u>Controls:</u>
DCS, Lung Expansion	Ascend slowly, user computers, Safety Stops (15' mark for 3 min.)
Potential Hazard:	<u>Controls:</u>
☐ Entanglement U/W	Use knife, Comm gear
Potential Hazard:	<u>Controls:</u>
☐ Boat Traffic	Fly Dive Flag, user spotter, contact bridge on Chan. 13
Potential Hazard:	<u>Controls:</u>
Cold Water	Use adequate dry suit underwear for water temperature
Potential Hazard:	<u>Controls:</u>
Live Boating	Keep track of divers, avoid powering during  drop-off/pick-up
Other Potential Hazards:	Other Controls:
Safety Equipment Required:  ☑ Hard hat ☐ Sunscreen ☑ Vest ☐ First Aid	Emergency Action Plan:  ☐ Throw Ring ☐ Throw Rope ☐ First Aid Kit

<b>✓</b> Glasses	O2	Positioning Device	☐ Fall Rescue Plan
✓ Gloves	☐ AED		
□PFD	Comm Gear		☐ Dan 1-919-684-9111
Rain Gear	✓ Cell Phone		☐ USCG 741-5465
☐ Bug Spray	☐ Boat		
Other Safety Equipment:		Other Emergency Ac	tion Plan:

I certify that the MaineDOT NBIS Bridge Safety Inspection JSA has been completed according to all proper procedures required by the Maine Department of Transportation.

© Complete Scott B Harris

# **Bridge Components**

Bridge #: Bridge Name: Owner: Co-Owner: Region:	1427 195 SB / STILLWA 01 - State Highwa N Not applicable 04 - Eastern		Town1: Town2: Maintainer: Co-Maintainer:	Bangor 01 - State Hiç N Not applica	ghway Agency able
Joint Seal Type/II Emseal V Seal Watson Bo Hot Rubbe Pour-in-Pla DS Brown  Superstructure	pwman C Pr A A A A A A A A A A A A A	ringer Sliding Sliding Transflex Compression Open Modular Sland Vaybo Crete	Joint HDR Ma	Curtain Troughs	<u>Rebar Type:</u> s
Material Shape Attached To Number of Bars Extra Height Bearing Type Qu Disk Pot Roller 30 Other:	Left Side  Aluminum Semi-Elliptical Curb 2 N santity: Elastomeric Rocker Sliding Plate	Rail:  Retrofit Safety Walk Pales Snow Fence  Fatigue Prone Detail:  Narrow Cover Plate - Sq End W Mide Cover Plate - Sq End We Wide Cover Plate - Sq End We Lateral Connection Plate - Weld	n/o Weld Ided Weld	☐ Narrow Cove	Retrofit Safety Walk Pales Snow Fence  The Plate - Tapered End Welded For Plate - Tapered End w/o Weld Stiffener - Welded w/o Radius
Substructure  Pier Collars Abutment Coll Wood Piles Steel Piles Blocked Bridg  General Notes	e	etaining Wall Type:			Other  Confined Space Bridge Lighting Cat Walk Navigational Lighting Signs Attached

## **Bridge Preservation**

Bridge #: 1427 Town1: Bangor

Bridge Name: 195 SB / STILLWATER AVE Town2:

Owner: 01 - State Highway Agency Maintainer: 01 - State Highway Agency
Co-Owner: N Not applicable Co-Maintainer: N Not applicable

Co-Owner: N Not applicable Region: 04 - Eastern

Deck			Common Preservation	
NBI Deck Information:		Wearing Surface:	Paint Information:	Anodes:
Deck Type 1 - Concrete Cast-in-Place  Deck Protection 0 - None  Membrane Type 2 - Preformed Fabric		Type 6 - Bituminous  Last Date 2006  Lifespan (Yrs) Next Date Est. 2006  Mill & Fill Date	Type Last Date 1960 Lifespan (Yrs) Next Date Est. 1985	☐ Installed ☐ Detached ☐ Replace
Superstructure			1	
Beam Ends Paint: Last Date	Bearings Paint: Last Date 2018	Bearings Lubrication: Last Date 2028	Concrete-Silane: Last Date	Washing: ✓ Required
Next Date Est.	Next Date Est.	Next Date Est. 2028	Next Date Est. 1960	UBIT
Beam Ends Fluid Film: Last Date	Bearings Fluid Film: Last Date 10	Treatment: Core 10	Concrete-Linseed Last Date  Next Date Est.	
Next Date Est. 2018	Next Date Est. 10	☐ Galvanized ☐ Metalized	Alkali-Silica reactivity	
Substructure				
General Notes				