# STRUCTURAL DATA RECORD

# **Sufficiency Rating:** 97.8

IDENTIFICATION Bridge ID: 1758E6141 Inventory Route:	(2) District:	01	<ul><li>(3) County: 3</li><li>(4) Place Code: 77580</li></ul>
(A) On/Under: 1 (D) Route No: 00048	(B) Highway Type (E) Direction:		(C) Service Lvl: 7
6A) Features Intersected: SECC	ND ST & ADAMS ST		6B) Critical: *
<ul><li>(7) Facility Carried: MLK BLD</li><li>(9) Location: WILMINGTON</li></ul>	TO I 95 N		11) Km. Point: 0.010 mi
<b>16) Latitude:</b> 39^44'30.24"	17) Longitude:	75^33'38.60"	
98) Border Bridge Code: NA	99) Border Br. S	Str. No.: NA	
STRUCTURE TYPE AND MATERIAL			
43A) MAIN SPAN MATERIAL: 3			43B) DESIGN TYPE: 02
44A) APPR. SPAN MATERIAL: NA	46) Approach Spa	<b></b>	44B) DESIGN TYPE: NA
45) Main Spans: 6	46) Approach Spa	ans: 0	
<pre>107) Deck Type: 1 108A) Wearing Surface: 1</pre>	108B) Membrane:	0	108C) Deck Protection: 1
-			108C) Deck Protection: 1
Pier 1:         33         P.           Abut 1:         NA         Al	but 2: NA	Pier Ftg. 1: E Abut Ftg. 1: NA	_
NAVIGATION DATA			
38) Navigational Control: N 111) Pier Protection: !		earance: 0.0 ft ert. Clr: 0.0 ft	<b>40) Horizontal Clearance:</b> 0.0 ft
AGE AND SERVICE			
19) Detour Length: 4 mi	27) Year Built:	1976	
28) No. of Lanes:	A) On Bridge:	1	B) Under Bridge: 4
<b>29) ADT:</b> 6607	30) Year of ADT	: 2012	
42) Type of Service:	A) On Bridge:	1	B) Under Bridge: $1$
<b>106) Year Reconst.:</b> -4	109) % Truck AD	<b>F:</b> 11	
CLASSIFICATION	1222 720 7	0000000141	<b>105) 155 C b 1 b b b b b b b b b b</b>
12) Base Hwy. Network: 1	13A) LRS Inv. R		13B) LRS Subroute No.: 00
<ul><li>20) Toll Facility: 3</li><li>26) Functional Class: 14</li></ul>	21) Maintenance 37) Historical:		<b>22) Owner:</b> 1 <b>100) Defense Highway:</b> 0
101) Parallel Str.: N	102) Direction:		103) Temp. Str.:
104) NHS: 1	105) Fed. Lands		110) Nat. Truck Network: 0
112) NBIS Length: Y			
LOAD RATING AND POSTING			
31) Design Load: 6	41) Oper. Statu		Rating Date: 10/25/2010
63) Oper. Rating Method: 3	64) Operating Ra	-	
65) Inv. Rating Method: 3	66) Inv. Rating		70) Bridge Posting: 5
Reason of Posting: NA	Date of Resolut:	LON: NA	Rating Analysis Req'd: NA T330: 0
<b>s335:</b> 0 <b>T435:</b> 0	<b>S437:</b> 0 <b>T540:</b> 0		1330: 0
PROPOSED IMPROVEMENTS			
75) Type of Work: NA			76) Length of Imp.: NA
94) Bridge Cost: NA			95) Roadway Cost: NA
96) Total Cost: NA			97) Year of Cost Est.: NA
114) Future ADT: 8465			<b>115) Year of Future ADT: 2031</b>
CONTRACT INFORMATION			
Contract 1: 6403004	Contract 2: 76	03020	Contract 3: -1
Contract 4: -1	Contract 5: -1		Contract 6: -1

#### INSPECTION RECORD **90) Inspection Date:** 8/19/2013 92A) FC Frequency: NA 92B) UW Frequency: NA 92C) SI Frequency: NA Element Frequency: 24 months UBIV Required: N Boat: N

#### **CONDITION**

58) Deck: 7 61) Channel: N 62) Culvert: N

#### **APPRAISAL**

36) Traffic Sfty Feat.:	
A) Bridge Rail: 1	B) Transition: 1
D) Approach Rail Ends: 1	
67) Structure Evaluation: 7	68) Deck Geometry: 6
71) Waterway Adequacy: N	72) Approach Rdwy Alignment: 8
113) Scour Critical Evaluation: N	

#### GEOMETRIC DATA

GLUI			
32)	Appr. Rdwy Width (w/ Shldrs): 23.00	ft	<b>33) Median:</b> 0
34)	Skew: 9^ 0' 0" 35	5) Structure Flared: $1$	
48)	Length Maximum Span: 91.21 ft 49	9) Structure Length: 453.00 ft	
50)	Curb or Sidewalk: A)	) Left: 0.00 ft	B) Right: 0.00 ft
51)	Width Curb to Curb: 23.00 ft 52	2) Deck Width o/o: 25.70 ft	
53)	Minimum Vertical Clearance Over Bridg	<b>e Roadway:</b> 99.9 ft	
54)	Vertical Underclearance: A)	) Reference: H	<b>B) Minimum:</b> 34.50 ft
55)	Lateral Underclearance: A)	Reference: H	<b>B) Minimum:</b> 12.00 ft
56)	Lateral Underclearance - Minimum Left	: 13.00 ft	

1

91) Frequency: 24 months

93B) UW Insp. Date: NA

**UBIV Days:** 01

59) Superstructure: 7

Paint Priority: 96.71

Paint Condition: 7

Tidal: N

93C) SI Date: NA Elem. Insp. Date: 8/19/2013

93A) FC. Insp. Date: NA

Next FC Inspection: 8 Next FC Insp.: NA

GPS: Y

Next UW Insp.: NA

Next SI: NA Next Elem Insp.: 8/19/2015

Inspection Zone: 99

60) Substructure: 7

C) Approach Rail: 1

Inspector: PENNONI

69) Underclearance: 6

Scour Analysis Date: NA

Next Inspection: 8/19/2015

### PAST INSPECTION

Inspection Date:	8/19/2013	Type :
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#### INSPECTION NOTES

INSPECTED BY: Pennoni Associates, Inc. - SON (I,P), CWM (I), KFA (TL, I, R, P), DJC (I) Maintenance Items: Repair all deck joints. Repair parapet spalls. Clean & flush deck. Reattach conduit for lights in Span 2. Securely attach mast arm on the u/side of BM 2 in Span 1. Cover exposed wires at light post supports in Spans 2 & 5. Inspection Notes: Spans are labelled East to West (beginning with Span 1). Piers are labelled West to East beginning with Pier E6 at the West end. Span 1: Light pole attached to u/side of BM 2 w/ one u-bolt instead of two which is allowing more severe vibration. Span 2: Conduit attached to u/side of BM 2 has pulled off the beam @ E. end of span and is hanging down. Lights attached to u/side of BM 2 & 3 w/ two u-bolts w/ very slight vibration - NDN. Junction box cover in N. Parapet is missing 6 of 10 screws; cover is secure. Previously noted missing handhole cover has been replaced (Photo 17). Light post support on the N. side of barrier is open with exposed wires and trash (Photo 18). Span 3: Bay 3 @ E. end w/ section of missing SIP's. Lights attached to u/side of BM 1 & 4 w/ two u-bolts each w/ slight vibration - NDN. Span 5: Junction box cover in N. Parapet is missing 8 of 10 screws; cover is secure. Previously noted missing handhole cover has been replaced. Light post support on the N. side of the parapet is open with exposed wires and trash.

### **BRIDGE NOTES**

NBI DONE BY: JARNDT & DMJM ....NOTE: SCALE FACTORS ENTERED BY GRD ON 12/30/05, DO NOT CHANGE....

### PONTIS DATA

Elements	ID	ENV	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	Comments
Concrete Deck - Protected w/ Coated Bars	26	4	(SF)	13530	0	13530	0	0	0	For Notes See MSPE Report
Drains/Downspouts/Scuppers	65	4	(EA)	1	0	1	0	0	0	For Notes See MSPE Report
Painted Steel Open Girder/Beam	107	3	(LF)	1926	1735	167	24	0	0	For Notes See MSPE Report
Reinforced Concrete Pier Wall	210	3	(LF)	48	45	3	0	0	0	For Notes See MSPE Report
Reinforced Concrete Pier Cap	234	3	(LF)	158	147	9	2	0	0	For Notes See MSPE Report
Compression Joint Seal	302	4	(LF)	155	0	130	25	0	0	For Notes See MSPE Report
Elastomeric Bearing	310	4	(EA)	25	14	10	1	0	0	For Notes See MSPE Report
Moveable Bearing (roller, sliding, etc.)	311	4	(EA)	25	13	12	0	0	0	For Notes See MSPE Report
Bridge Railing - Reinforced Concrete	331	4	(LF)	935	924	4	7	0	0	For Notes See MSPE Report
Bridge Railing - Metal Coated	334	4	(LF)	166	28	30	20	88	0	For Notes See MSPE Report
Deck Cracking	358	1	(EA)	1	1	0	0	0	0	For Notes See MSPE Report
Soffit (or Under Surface) of Concrete Deck or Slab	359	1	(EA)	1	1	0	0	0	0	For Notes See MSPE Report
Painted Steel Diaphragm	381	3	(EA)	110	89	14	7	0	0	For Notes See MSPE Report

Total Elements: 13

Bridge Management Section MultiSpan PONTIS Element Report for Span No. 1

Inspection Date: 8/19/2013

Bridge ID: 1758E6141 Inspection D Description: Span 1 (Pier E12 at East end, Pier E11 at West end)

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
26	4	Conc Deck/Coatd Bars	(SF)	13530	0	13530	0	0	0	CS2: (13530 SF) Moderate wear w/ exp agg thruout. (NC-13)
65	4	Drainage	(EA)	0	0	0	0	0	0	0
302	4	Compressn Joint Seal	(LF)	26	0	26	0	0	0	CS2: (26 LF) Joint seal is not water tight and has twisted and sunken up to 1;". Keeper bar is laying on pier seat. Spalls in conc. adj. to armoring and minor to heavy debris thruout. Joint steel has moderate corrosion to lam. rust with <1/16" section loss. The E. face of the pier cap has rust stains due to joint leakage.
107	3	Paint Stl Opn Girder	(LF)	365	357	5	3	0	0	CS2: (5 LF) Very light surface rust at ends of beams, BM 3 with freckled rust along the W. end. CS3: (3 LF) BM 3 @ W. end w/ few small chips in paint w/ rusted base metal @ pier and small area of flaked paint w/ rust. BM 3 top fl w/ scraped off paint @ N. interm diaph.
331	4	Conc Bridge Railing	(LF)	150	149	1	0	0	0	CS2: (1 LF) Spall @ W. end of S. parapet (1' x 6" x 2") on outside face.
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	20	20	0	0	0	0	NDN
310	4	Elastomeric Bearing	(EA)	5	0	4	1	0	0	CS2: (4 EA) Pier E12 brg's w/ light surface rust and bleeding typical. Pack rust btwn sole and filler plates w/ deforming of filler plates @ Brg 1 by ¿" (max), Brg 2 by ¿", Brg 3 by ¿", Brg 4 by 5/16". CS3: (1 EA) Pack rust btwn sole and filler plates w/ 5/16" deformation (packing) @ Pier 12 Brg 5 and sheared off N. anchor bolt w/ rust @ bolt area (Photo 12).
311	4	Moveable Bearing	(EA)	5	2	3	0	0	0	The bearings at Pier Ell have been cleaned and painted since the previous inspection. CS1: (2 EA) Pier Ell bearings w/ light spot & lam rust to guide plates with <1/16" section loss. CS2: (3 EA) At Pier Ell bearings, anchor bolts were found bent slightly out of plumb @ Brg 1, NE & NW bolts; Brg 2, SW & SE bolt; Brg 5, NE bolt.
210	3	R/Conc Pier Wall	(LF)	8	8	0	0	0	0	CS1: (8 LF) Pier wall repaired and painted since the previous inspection. NDN.
234	3	R/Conc Pier Cap	(LF)	29	28	1	0	0	0	Pier cap repaired and painted since the previous inspection (Photo 15). CS2: (1 LF) Top of cap between BM2 and BM3 has 12"L x 18"W delam.
358	1	Deck Cracking SmFlag	(EA)	1	1	0	0	0	0	CS1: (1 EA) Scattered HL to fine cracks. (NC-13)
359	1	Soffit Smart Flag	(EA)	1	1	0	0	0	0	CS1: (1 EA) Few HL to fine trans. cracks at o/hangs typ. Cracks w/ rust @ jts. Span 2 @ NE end w/ 3" dia. spall @ BM 4 top flange. Span 3 w/ 12"W x 2"L spall in exposed concrete in Bay 3 @ E. end. Span 4 @ NW end w/ 22"L x 4"W spall w/ exp. ends of steel. Ends of Spans 2 & 3 @ N. o/hang w/ long cracks up to 2'L w/ rust. Spans 5 & 6 NE o/hang w/ HL long cracks up to 2'L w/rust.

Bridge Management Section MultiSpan PONTIS Element Report for Span No. 2

Inspection Date: 8/19/2013

Bridge ID: 1758E6141 Inspec Description: Span 2 (Pier Ell at East end, Pier El0 at West end)

ELEM ENV DESCRIPTION UNITS TOTAL CS1 CS2 CS3 CS4 CS5 COMMENTS Conc Deck/Coatd 26 4 (SF) 0 0 0 0 0 0 0 Bars CS2: (1 EA) Grate is partially clogged w/ 65 4 1 0 1 0 0 (EA) 0 Drainage trash & debris; downspout open. (NC-13) CS2: (26 LF) Pier E10 seal replaced since the previous inspection. Old compression seal & keeper bars have fallen onto the pier cap. Compressn Joint 302 4 (LF) 26 0 26 0 0 0 Numerous small edge spalls along jt and mod. Seal to hvy accum. of debris. West side of joint over Pier E10 is ¿" higher. CS2: (10 LF) Localized light spot rust @ ends. BM 2 w/ area of freckled rust & flaked paint w/ exp primer on u/side. (NC-13) CS3: Paint Stl Opn 107 7 3 (LF) 284 267 10 0 0 (7 LF) BM 2 w chipped paint w/ exp & rusted Girder base metal @ E. & W. ends of flange and thruout E. half where clips for conduit broke off flange. (NC-13) Conc Bridge CS2: (1 LF) Parapet is vertically misaligned 331 4 (LF) 142 141 1 0 0 0 Railing up to ¿" over Pier E10. 334 4 Metal Rail Coated (LF) 0 0 0 0 0 0 0 CS2: (1 EA) Bay 3, S. interm diaph with minor Painted Steel 3 381 (EA) 12 10 1 1 0 0 spot of rust. CS3: (1 EA) Diaph in Bay 2 @ Diaphr PE11 w/ chipped paint w/ rust to exp. metal. The elastomeric pads at Pier Ell have been Elastomeric painted since the previous inspection. CS1: 4 310 (EA) 4 4 0 0 0 0 (4 EA) Pier Ell w/ light spot rust to sole Bearing plates. CS1: (3 EA) Pier E10 brg's w/ light spot rust w/ lam rust on guide plates (<1/16" section 311 4 Moveable Bearing (EA) 4 3 1 0 0 0 loss) and areas of chipped paint  $w/\ensuremath{\left|} \exp.\ensuremath{\right|}$  base metal, rusted. CS2: (1 EA) Pier E10 Brg 2 w/ slightly bent anchor bolt. CS1: (8 LF) Pier wall repaired and painted 210 3 R/Conc Pier Wall (LF) 8 8 0 0 0 0 since the previous inspection. NDN. Pier cap repaired and painted since the previous inspection. CS2: (2 LF) Top of cap 234 3 R/Conc Pier Cap (LF) 26 24 2 0 0 0 between BM 1 and BM 2 with 2'W x 1'-6"L area of wide pattern map cracks up to 1/16"W. Deck Cracking 358 1 0 0 0 0 0 0 0 (EA) SmFlag Soffit Smart Flag 359 1 (EA) 0 0 0 0 0 0 0

Bridge Management Section MultiSpan PONTIS Element Report for Span No. 3

Bridge ID: 1758E6141 Description: Span 3(Pier E10 at East end, Pier E9 at West end)

Inspection Date: 8/19/2013

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
26	4	Conc Deck/Coatd Bars	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	0	0	0	0	0	0	0
302	4	Compressn Joint Seal	(LF)	26	0	26	0	0	0	CS2: (26 LF) Pier E9 deck joint is not water tight, debonded and sunken up to 2". Keeper bar is sitting on cap in Bays 1-3 and jt filler is hanging down in Bay 4. Spalls along edges of armoring and mod. to hvy accum. of debris.
107	3	Paint Stl Opn Girder	(LF)	244	234	6	4	0	0	CS2: (6 LF) Light spot or freckled rust on bottom flanges, mostly at ends of beams below joints. BM 1 u/side w/ rust btwn fl & sole pl's. CS3: (4 LF) BM 2, BM 3 & BM 4 N. ends w/ small spots of exp & rusted steel. BM 4 w/ chipped paint on edges near N. end.
331	4	Conc Bridge Railing	(LF)	124	120	0	4	0	0	CS3: (4 LF) N. barrier with random shallow spalls with exposed steel (insufficient cover).
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	12	12	0	0	0	0	NDN. (NC-13)
310	4	Elastomeric Bearing	(EA)	4	1	3	0	0	0	CS1: (1 EA) Pier E10 Brg 4 w/ freckled rust. CS2: (3 EA) Brg's 1 & 2 w/ pack rust between the sole & filler plates has deformed filler plates by ¿" max (prev. 3/8") @ Brg 1 and 3/8" max @ Brg 2. Brg 3 w/ flaking paint w/ exp metal w/ lt freckles. E. anchor bolt @ Brg 3 is slightly bent.
311	4	Moveable Bearing	(EA)	4	0	4	0	0	0	CS2: (4 EA) Pier E9 Brg 1 w/ slightly bent anchor bolts on the S. side, light freckled & spot rust w/ cracking and flaking paint and laminated rust on guide plt w/ <1/16" section loss.
210	3	R/Conc Pier Wall	(LF)	8	7	1	0	0	0	Pier wall repaired and painted since the previous inspection. CS2: (1 LF) West face has two vertical cracks up to 3'L x 1/16"W.
234	3	R/Conc Pier Cap	(LF)	26	23	1	2	0	0	Pier cap repaired and painted since the previous inspection. CS2: (1 LF) Top of cap between BM 3 & BM 4 has a 1' dia. delam. CS3: (2 LF) N. end has a full-height vertical crack up to 1/16"W with rust stain (Photo 16). E. face at BM 2 has a 12"L HL horiz crack with rust.
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0

Bridge Management Section MultiSpan PONTIS Element Report for Span No. 4

Inspection Date: 8/19/2013

Bridge ID: 1758E6141
Description: Span 4 over N. Adams
Street (Pier E9 at East end, Pier E8
at West end).

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
26	4	Conc Deck/Coatd Bars	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	0	0	0	0	0	0	0
302	4	Compressn Joint Seal	(LF)	26	0	26	0	0	0	CS2: (26 LF) Joint material is sunken up to 1¿". Evidence below (rust stains) that the joint is not water tight. Some debris in the top of the joint. Spalling along jt.
107	3	Paint Stl Opn Girder	(LF)	373	319	51	3	0	0	CS2: (51 LF) Beam ends @ S. jt w/ light spot rust, BM 1 W. half w/ freckled rust, BM 2 w/ random spot & freckled rust on bott fl. BM 4 w/ light freckled rust along W. half. CS3: (3 LF) W. end of BM 4 @ top flange edge w/ chipped paint and rusted base metal @ soffit spall.
331	4	Conc Bridge Railing	(LF)	188	185	1	2	0	0	CS2: (1 LF) Cr w/ delam in NW end of barrier (4"W x 1'H) @ Pier E8. CS3: (2 LF) Large spall at the base of the NE end of barrier @ Pier E9 joint w/ exp. reinforcing (8"L x 17"H x 3"Dp) and small spall (2" diam) in top of N. parapet w/ exp steel (Photo 10).
334	4	Metal Rail Coated	(LF)	0	0	0	0	0	0	0
381	3	Painted Steel Diaphr	(EA)	27	21	2	4	0	0	CS2: (2 EA) Bay 2 & 3 diaph @ PE8 w/ light freckled rust. (NC-13) CS3: (4 EA) Bays 1 to 3 @ Pier E9 and Bay 1 @ Pier E8 w/ blistering flaking paint w/ rusted steel. (NC-13)
310	4	Elastomeric Bearing	(EA)	4	4	0	0	0	0	CS1: (4 EA) At Pier E9, spot rust typical @ BM 1 and @ BMs 2-4 spot or bleeding rust typical. Anchor bolts are slightly bent and the nuts are not completely seated against the masonry plates.
311	4	Moveable Bearing	(EA)	4	0	4	0	0	0	CS2: (4 EA) Exp. brgs at Pier E8. Spot rust w/ some chipped paint on Brg. 1. Brg.'s 2, 3 and 4 are greased and all four are within limits. N. sides of brgs o/hang ped's by 1/4" to 1/2" max. Brg 1 pushing against S. keeper bar moving it outward, packed and N. side keeper o/hangs ped by 5/8", both anchor bolts are bent. Brgs 2 thru 4 also push on the S. keeper bar.
210	3	R/Conc Pier Wall	(LF)	8	6	2	0	0	0	Pier wall repaired and painted since the previous inspection. E. face has graffiti at bottom. CS2: $(2 \text{ LF})$ W. face with (3) vert hairline cracks (4'L, $12^{"}L \& 8'L)$ at bottom and (1) vert hairline crack (4'L). E. face with (2) vert cracks ( $15'L \& 8'L$ ) up to $1/16"_{W}$ at bottom.
234	3	R/Conc Pier Cap	(LF)	26	26	0	0	0	0	CS1: (26 LF)Pier cap repaired and painted since the previous inspection. NDN.
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0

Bridge Management Section MultiSpan PONTIS Element Report for Span No. 5

Inspection Date: 8/19/2013

Bridge ID: 1758E6141
Description: Span 5 over W. 2nd
Street (Pier E8 at East end, Pier E7
at West end).

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
26	4	Conc Deck/Coatd Bars	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	0	0	0	0	0	0	0
302	4	Compressn Joint Seal	(LF)	26	0	26	0	0	0	CS2: (26 LF) Comp. seal has sunken up to 1;". Minor spalls along armor and filled w/ debris.
107	3	Paint Stl Opn Girder	(LF)	372	331	40	1	0	0	CS2: (40 LF) Ends of Bms w/ light freckled rust @ jts and bms w/ light freckled rust to bottom flanges @ W. end. (NC-13) CS3: (1 LF) BM 4 @ E. end of bott flange w/ paint chipped w/ rust to exp base metal. (NC-13)
331	4	Conc Bridge Railing	(LF)	187	187	0	0	0	0	NDN
334	4	Metal Rail Coated	(LF)	94	28	7	11	48	0	CS2: (7 LF) One panel @ N. end with collision damage at the bottom, some posts w/ blistering around fasteners. CS3: (11 LF) Small areas of flaked off paint w/ exp metal. CS4: (48 LF) Several panels with numerous small holes up to ¿" dia. (100% loss) (Photo 11).
381	3	Painted Steel Diaphr	(EA)	27	21	5	1	0	0	CS2: (5 EA) Bay 2 & 3 @ PE8 and Bay 1 - 3 @ PE7 w/ light freckled rust. CS3: (1 EA) Bay 1 @ Pier E8 w/ blistering w/ flaking and rusted steel.
310	4	Elastomeric Bearing	(EA)	4	1	3	0	0	0	Random elastomeric pads at Pier E8 have been painted since the previous inspection. CS1: (1 EA) Typically very light freckled rust to plates. CS2: (3 EA) Brg 1 w/ bent anchor bolts and N. end of pad o/hangs pedestal by ¿" deforming the pad. Brgs 2 & 4 w/ N. edge o/hang ped by 3/8" (prev 1/4") w/ slight deformation to pad. Gap btwn bott fl & sole pl @ brgs 3 & 4 with pack rust.
311	4	Moveable Bearing	(EA)	4	4	0	0	0	0	CS1: (4 EA) Brg's at Pier E7 are heavily greased and contracted @ 75 degrees. Lam. rust on the guide plates with <1/16" section loss.
210	3	R/Conc Pier Wall	(LF)	8	8	0	0	0	0	CS1: (8 LF) Pier wall has been repaired and painted since the previous inspection. The E. face has three vertical hairline cracks (<1/16"W) up to full-height. The W. face has one vertical hairline crack (<1/16"W) up to full-height. The S. face has one 4'L vertical hairline crack (<1/16"W).
234	3	R/Conc Pier Cap	(LF)	26	26	0	0	0	0	CS1: (26 LF) Pier cap has been repaired and painted since the previous inspection. NDN.
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0

Bridge Management Section MultiSpan PONTIS Element Report for Span No. 6

Bridge ID: 1758E6141 Description: Span 6 (Pier E7 at East end, Pier E6 at West end).

Inspection Date: 8/19/2013

ELEM	ENV	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4	CS5	COMMENTS
26	4	Conc Deck/Coatd Bars	(SF)	0	0	0	0	0	0	0
65	4	Drainage	(EA)	0	0	0	0	0	0	0
302	4	Compressn Joint Seal	(LF)	25	0	0	25	0	0	CS3: (25 LF) Pier E6 seal is not water tight, portion in Bay 2 & 3 hangs down (sunken up to 1.2') (Photo 9). Minor spalls in adj. conc. deck on top and filled w/ debris.
107	3	Paint Stl Opn Girder	(LF)	288	227	55	6	0	0	CS1: (227 LF) End 5' of all BMs at PE6 have previously been painted (prior to previous inspection). CS2: (55 LF) Localized light spot or freckled rust at ends and on bottom flanges. BM4 w/ light rust thruout bottom flange and BMs 1-3 w/ light freckled rust along W. half of bottom flange. CS3: (6 LF) BM4 end at PE6 and near PE6 with 1' long areas of mod. corrosion on bottom flange. BMs 1-4 at PE7 have minor corr. with exposed steel and surface rust (Photo 13).
331	4	Conc Bridge Railing	(LF)	144	142	1	1	0	0	CS2: (1 LF) Spall to outside face of S. parapet @ W. end (8"L x 19"H x 1"Dp). CS3: (1 LF) Spall and crack w/ rust stain @ NW end (outside face).
334	4	Metal Rail Coated	(LF)	72	0	23	9	40	0	CS2: (23 LF) Two panels with collision dents and some posts w/ blistering around fasteners. (NC-13) CS3: (9 LF) Few areas of missing paint w/ exp metal. (NC-13) CS4: (40 LF) Panels with areas of holes up to ¿" dia. 100% loss thruout. (NC-13)
381	3	Painted Steel Diaphr	(EA)	12	5	6	1	0	0	CS2: (6 EA) Few diaph's have very light spot rust, mostly @ ends. CS3: (1 EA) End diaph @ Pier E6, Bay 1 top flange has mod. corr. with 100% loss in SIP above diaphragm (Photo 14).
310	4	Elastomeric Bearing	(EA)	4	4	0	0	0	0	CS1: (4 EA) Pier E7 brg's are heavily greased w/ NDN. (NC-13)
311	4	Moveable Bearing	(EA)	4	4	0	0	0	0	Bearings at Pier E6 have random areas of paint/grout from recent pier repairs. CS1: (4 EA) Pier E6 brgs are heavily greased & contracted @ 75 degrees. There is lam. rust on the guide plates with <1/16" section loss.
210	3	R/Conc Pier Wall	(LF)	8	8	0	0	0	0	CS1: (8 LF) Pier wall has been repaired and painted since the previous inspection. The E. face has a 6'L vertical hairline crack (<1/16"W).
234	3	R/Conc Pier Cap	(LF)	25	20	5	0	0	0	Pier cap has been repaired and painted since the previous inspection. CS2: (5 LF) The top of cap in Bay 2 has a 4Ll x 2'W delam. The E. face in Bay 1 has a 1' dia. delam.
358	1	Deck Cracking SmFlag	(EA)	0	0	0	0	0	0	0
359	1	Soffit Smart Flag	(EA)	0	0	0	0	0	0	0



1. East approach, looking west onto the bridge.



2. East elevation.



3. General view of Span 5 underside, looking northwest.



4. Under record, Span 4, Adams Ave, looking north.



5. Under record, Span 4, Adams Ave, looking south.



6. Under record, Span 5, 2nd Ave, looking east.



7. Under record, Span 5, 2nd Ave, looking west (Bridge 1-748N shown).



8. General view of Span 2 top of deck, looking northwest.



9. PE6 joint, looking southwest. Joint seal has failed.



10. Span 4, N. parapet at PE9. The parapet has an 8"L x 17"H x 3"Dp spall.



11. Span 5, N. sound wall, 4th panel from W. end. Areas of 100% SL.



12. Span 1, Brg 5 @ PE12. N. AB sheared off and pack rust btwn plates.



13. Span 6, BM1 at PE7 has exposed steel with surface rust.



14. Span 6, Bay 1 end diaphragm at PE6 has moderate corrosion.



15. Span 1, PE12 has been repaired since prev. inspection (typ).



16. PE8, N. end of cap has a crack with corrosion staining.



17. Span 2 light pole handhole cover has been replaced since prev. inspection.



18. Span 2 light pole on N. parapet. N. side open with exposed wires and trash.

### **UNDER RECORD**

# **For Bridge:** *1758E6141*

<u>IDENTIFICATION</u>		
Bridge ID: 1758E6141	(2) District: 01	(3) County: 3
Inventory Route:		
(A) On/Under: A	(B) Highway Type: 4	(C) Service Lvl: $1$
(D) Route No: 00505		11) Mile Pt: 0.15 mi
6A) Features Intersected: SECOND ST &	ADAMS ST	6B) Critical:
<b>16) Latitude:</b> 39^44'30.24"	<b>17) Longitude:</b> 75^33'38.60"	
AGE AND SERVICE	27) Yaan Duilta 1076	
19) Detour Length: 4 mi 28) No. of Lanes:	27) Year Built: 1976	D) Weden Duidee, (
28) NO. OF Lanes: 29) ADT: 4472	<ul> <li>A) On Bridge: 3</li> <li>30) Year of ADT: 2012</li> </ul>	B) Under Bridge: 4 109) % Truck ADT: 11
<b>29) ADI:</b> 4472	SU) fear of ADT: 2012	109) % IFUCK ADT: 11
<pre>CLASSIFICATION 20) Toll Facility: 3 26) Functional Class: 17 102) Direction: 1 110) Nat. Truck Network: 0</pre>	<pre>37) Historical: 5 103) Temp. Str.:</pre>	<b>100) Defense Highway:</b> 0 <b>104) NHS:</b> 0
<b><u>GEOMETRIC DATA</u></b> 10) Clearances - Vertical:: 34.5 ft 42) Type of Service: 43A) MAIN SPAN MATERIAL: 3 47) Inv. Route - Horiz. Clearance: 34.0 ft	A) On Bridge: 1	<ul><li>B) Under Bridge: 1</li><li>43B) DESIGN TYPE: 02</li></ul>
	49) Structure Length: 453.0 ft	

# This Bridge DOES NOT HAVE any UNDER RECORD SKETCH SHEET

### **UNDER RECORD**

# **For Bridge:** *1758E6141*

IDENTIFICATION		
Bridge ID: 1758E6141	(2) District: 01	(3) County: 3
Inventory Route:		
(A) On/Under: B	(B) Highway Type: 3	(C) Service Lvl: 1
(D) Route No: 00048		11) Mile Pt: 9.18 mi
6A) Features Intersected: SECOND ST 8	ADAMS ST	6B) Critical:
<b>16) Latitude:</b> 39^44'30.24"	<b>17) Longitude:</b> 75^33'38.60"	
AGE AND SERVICE		
19) Detour Length: 4 mi	<b>27) Year Built:</b> 1976	
28) No. of Lanes:	A) On Bridge: 3	B) Under Bridge: 4
<b>29) ADT:</b> 8811	<b>30) Year of ADT: 2012</b>	<b>109) % Truck ADT:</b> 11
<u>CLASSIFICATION</u> 20) Toll Facility: 3 26) Functional Class: 14 102) Direction: 1 110) Nat. Truck Network: 0	<pre>37) Historical: 5 103) Temp. Str.:</pre>	<b>100) Defense Highway:</b> 0 <b>104) NHS:</b> 1
<b><u>GEOMETRIC DATA</u></b> 10) Clearances - Vertical:: 35.2 ft 42) Type of Service: 43A) MAIN SPAN MATERIAL: 3 47) Inv. Route - Horiz. Clearance: 32.0 ft	A) On Bridge: 1	<ul><li>B) Under Bridge: 1</li><li>43B) DESIGN TYPE: 02</li></ul>
48) Length Maximum Span: 91.2 ft	49) Structure Length: 453.0 ft	

# This Bridge DOES NOT HAVE any UNDER RECORD SKETCH SHEET