



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

ATTENTION: **ENCASED PILES**

Structure Safety Report

Routine Element Inspection

COUNTY: HALIFAX STRUCTURE NUMBER: 410127 FREQUENCY: 24 MONTHS
FACILITY CARRIED: SR1002 MILE POST: _____
LOCATION: 0.4 MI.E.JCT.SR1210
FEATURE INTERSECTED: JACKET SWAMP
LATITUDE: 36° 12' 24.34" LONGITUDE: 77° 43' 48.15"
SUPERSTRUCTURE: PPC CHANNELS
SUBSTRUCTURE: EBTS&IBTS:PPC CAPS/TIMBER PILES @ 5"9 CTS.
SPANS: 2@25.5'
2@25"6
☐ FRACTURE CRITICAL ☒ TEMPORARY SHORING ☐ SCOUR CRITICAL ☒ SCOUR PLAN OF ACTION
PRESENT CONDITION: Fair INSPECTION DATE: 07/15/2015
POSTED SV: 25 POSTED TTST: 29
OTHER SIGNS PRESENT: 4 DELINEATORS



LOOKING EAST

Sign noticed issued for		Number Required
<u>NO</u>	WEIGHT LIMIT	<u>0</u>
<u>NO</u>	DELINEATORS	<u>0</u>
<u>NO</u>	NARROW BRIDGE	<u>0</u>
<u>NO</u>	ONE LANE BRIDGE	<u>0</u>
<u>NO</u>	LOW CLEARANCE	<u>0</u>

INSPECTED BY Z.S. DUNLOW	SIGNATURE 	ASSISTED BY G.L. HARRINGTON
-----------------------------	---------------	--------------------------------

BRIDGE INSPECTION RECORD AND SUMMARY FOR SHORED STRUCTURES OR STRUCTURES WITH TEMPORARY REPAIRS MADE TO KEEP A BRIDGE OPEN

BRIDGE: 127 COUNTY: Halifax DATE: 8-15-11

THE FOLLOWING S. I. & A ITEMS ARE TO BE CODED TO REFLECT THE FACT
THAT THE STRUCTURE IS SHORED OR HAS HAD TEMPORARY REPAIRS MADE
TO KEEP THE BRIDGE OPEN :

	<u>CODE</u>	<u>BY</u>
S I & A ITEM 103 - TEMPORARY STRUCTURE DESIGNATION	<u>T</u>	<u>TSE</u>
S I & A ITEM 59 - SUPERSTRUCTURE		
S I & A ITEM 60 - SUBSTRUCTURE	<u>4</u>	<u>TSE 8/15/11</u>
S I & A ITEM 64 OPERATING RATING		
S I & A ITEM 66 - INVENTORY RATING		
HS		BY:
HS		BY:

COMMENTS

Some Piles Encased with Concrete.

Temporary Repairs

RETAIN TEMP TMS 02/01/16

Span Element Report

Structure Number: 410127

Inspection Date: 07/15/2015

Span Number 1

Span Length 25.5 Feet

Number of Slabs/Channels: 12

Element Number	Parent Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code
15		Prestressed Concrete Top Flange	780	780	0	0	0	0	3326
109		Prestressed Concrete Open Girder/Bearing	312	303	9	0	0	9	3306
206		Timber Column	6	6	0	0	0	0	3344
216		Timber Abutment	37	33	0	4	0	4	3346
233		Prestressed Concrete Pier Cap	31	31	0	0	0	0	3348
316		Other Bearings	24	24	0	0	0	0	3334
330		Metal Bridge Railing	52	52	0	0	0	0	3322
515	330	Steel Protective Coating	52	52	0	0	0	0	3342
510		Wearing Surface	748	748	0	0	0	0	2816

"Near" Approach and Substructure quantities have been include for reporting purposes. The last span will also include End Bent 2 and Far Approach quantities where applicable

Span Number 2

Span Length 25.5 Feet

Number of Slabs/Channels: 12

Element Number	Parent Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code
15		Prestressed Concrete Top Flange	780	780	0	0	0	0	3326
109		Prestressed Concrete Open Girder/Bearing	312	307	5	0	0	5	3306
216		Timber Abutment	37	33	0	4	0	4	3346
228		Timber Pile	12	11	0	1	0	0	3344
233		Prestressed Concrete Pier Cap	63	63	0	0	0	0	3348
301		Pourable Joint Seal	31	29	2	0	0	2	3310
316		Other Bearings	24	24	0	0	0	0	3334
330		Metal Bridge Railing	52	52	0	0	0	0	3322
515	330	Steel Protective Coating	52	52	0	0	0	0	3342
510		Wearing Surface	748	745	3	0	0	3	2816

"Near" Approach and Substructure quantities have been include for reporting purposes. The last span will also include End Bent 2 and Far Approach quantities where applicable

Superstructure Detailed Element Quantities

Structure Number: 410127

Inspection Date: 07/15/2015

Structure Number: 410127

Inspection Date: 07/15/2015

Span Number 1

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Bridge Rail	1	330	Metal Bridge Railing	26	26	0	0	0	0	3322	☐ Requested
Protective System		515	Steel Protective Coating	26	26	0	0	0	0	3342	
☒ Bridge Rail	2	330	Metal Bridge Railing	26	26	0	0	0	0	3322	☐ Requested
Protective System		515	Steel Protective Coating	26	26	0	0	0	0	3342	
☒ Wearing Surfaces		510	Wearing Surface	748	748	0	0	0	0	2816	☐ Requested
☐ Beam	1	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	1	109	Prestressed Concrete Open Girder/Bear	26	17	9	0	0	9	3306	☐ Requested
☐ Beam	2	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	2	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	3	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	3	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	4	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	4	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	5	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	5	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	6	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	6	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	7	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	7	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	8	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	8	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	9	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	9	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	10	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	10	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	11	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	11	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	12	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	12	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Bearing Device	1	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	1	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested

Structure Number: 410127

Inspection Date: 07/15/2015

Span Number 1

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☐ Bearing Device	2	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	2	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	3	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	3	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	4	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	4	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	5	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	5	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	6	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	6	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	7	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	7	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	8	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	8	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	9	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	9	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	10	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	10	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	11	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	11	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	12	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	12	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested

Structure Number: 410127
Span Number 2

Inspection Date: 07/15/2015

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Bridge Rail	1	330	Metal Bridge Railing	26	26	0	0	0	0	3322	☐ Requested
Protective System		515	Steel Protective Coating	26	26	0	0	0	0	3342	
☒ Bridge Rail	2	330	Metal Bridge Railing	26	26	0	0	0	0	3322	☐ Requested
Protective System		515	Steel Protective Coating	26	26	0	0	0	0	3342	
☒ Wearing Surfaces		510	Wearing Surface	748	745	3	0	0	3	2816	☐ Requested
☐ Beam	1	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	1	109	Prestressed Concrete Open Girder/Bear	26	21	5	0	0	5	3306	☐ Requested
☐ Beam	2	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	2	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	3	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	3	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	4	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	4	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	5	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	5	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	6	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	6	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	7	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	7	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	8	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	8	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	9	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	9	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	10	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	10	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	11	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	11	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Beam	12	15	Prestressed Concrete Top Flange	65	65	0	0	0	0	3326	☐ Requested
☒ Beam	12	109	Prestressed Concrete Open Girder/Bear	26	26	0	0	0	0	3306	☐ Requested
☐ Bearing Device	1	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	1	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested

Structure Number: 410127

Inspection Date: 07/15/2015

Span Number 2

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☐ Bearing Device	2	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	2	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	3	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	3	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	4	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	4	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	5	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	5	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	6	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	6	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	7	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	7	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	8	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	8	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	9	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	9	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	10	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	10	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	11	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	11	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	12	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☐ Bearing Device	12	316	Other Bearings	1	1	0	0	0	0	3334	☐ Requested
☒ Expansion Joints	1	301	Pourable Joint Seal	31	29	2	0	0	2	3310	☐ Requested

Superstructure Element Defect Descriptions

Structure Number: 410127

Inspection Date: 07/15/2015

Span Number 1

Span	1	Beam	1	Component Name:	Prestressed Concrete Channel								
Element:	109	Name	Prestressed Concrete Open Gir	Qty:	26	Lvl 2:	9	Lvl 3	0	Lvl 4	0	Maint. Qty	9
Defect Description:													

9 Feet of Delamination/Spall/Patched Area: 4' OF Delaminated AREAS. Spall 1 in. or less deep or 6 in. or less in diameter. 5' OF Patched area that is sound.

Span Number 2

Span	2	Wearing Surfaces			Component Name:		Asphalt Wearing Surface						
Element:	510	Name	Wearing Surface	Qty:	748	Lvl 2:	3	Lvl 3	0	Lvl 4	0	Maint. Qty	3
Defect Description:													

3 Square Feet of Crack (Wearing Surface): Width 0.012-0.05 in. or spacing of 1.0-3.0 ft.

Span	2	Beam	1	Component Name:		Prestressed Concrete Channel							
Element:	109	Name	Prestressed Concrete Open Gir	Qty:	26	Lvl 2:	5	Lvl 3	0	Lvl 4	0	Maint. Qty	5
Defect Description:													

4 Feet of Delaminated Area: Delaminated.
1 Feet of Patched Area: Patched area that is sound.

Span 2		Expansion Joints 1		Component Name:		Standard Joint							
Element: 301		Name Pourable Joint Seal		Qty:	31	Lvl 2:	2	Lvl 3	0	Lvl 4	0	Maint. Qty	2
Defect Description:													

2 Feet of Debris Impaction: Partially filled with hard-packed material but still allowing free movement.

Substructure Detailed Element Quantities

Structure Number: 410127

Inspection Date: 07/15/2015

End Bent 1

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Abutments	1	216	Timber Abutment	37	33	0	4	0	4	3346	☐ Requested
☒ Caps	1	233	Prestressed Concrete Pier Cap	31	31	0	0	0	0	3348	☐ Requested
☒ Piles and Columns	1	206	Timber Column	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	2	206	Timber Column	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	3	206	Timber Column	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	4	206	Timber Column	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	5	206	Timber Column	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	6	206	Timber Column	1	1	0	0	0	0	3344	☐ Requested

Bent 1

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Caps	1	233	Prestressed Concrete Pier Cap	32	32	0	0	0	0	3348	☐ Requested
☒ Piles and Columns	1	228	Timber Pile	1	0	0	1	0	0	3344	☐ Requested
☒ Piles and Columns	2	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	3	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	4	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	5	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	6	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested

Structure Number: 410127

Inspection Date: 07/15/2015

End Bent 2

Element Location	Location Number	Element Number	Element Name	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity	Maint. Quantity	Maint. Code	Priority Maintenance
☒ Abutments	1	216	Timber Abutment	37	33	0	4	0	4	3346	☐ Requested
☒ Caps	1	233	Prestressed Concrete Pier Cap	31	31	0	0	0	0	3348	☐ Requested
☒ Piles and Columns	1	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	2	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	3	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	4	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	5	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested
☒ Piles and Columns	6	228	Timber Pile	1	1	0	0	0	0	3344	☐ Requested

Substructure Element Defect Descriptions

Structure Number: 410127

Inspection Date: 07/15/2015

End Bent 1

End Bent 1	Row 1	Abutments	1							
Element: 216	Name	Timber Abutment	Qty:	37	Lvl 2:	0	Lvl 3	4	Lvl 4	0 Maint. Qty
Defect Description:										

4 Feet of Decay/Section Loss ON LEFT SIDE AT END BENT 1: Affects 10% or more of the member but does not warrant structural review.

End Bent 1	Row 1	Piles and Columns	1							
Element: 206	Name	Timber Column	Qty:	1	Lvl 2:	0	Lvl 3	0	Lvl 4	0 Maint. Qty
Defect Description:										

Bent 1	Row 1	Piles and Columns	1							
Element: 228	Name	Timber Pile	Qty:	1	Lvl 2:	0	Lvl 3	1	Lvl 4	0 Maint. Qty
Defect Description:										

1 Each of Split/Delamination FROM CAP DOWN 3': Length equal to or greater than the member depth but does not require structural review.

End Bent 2	Row 1	Abutments	1							
Element: 216	Name	Timber Abutment	Qty:	37	Lvl 2:	0	Lvl 3	4	Lvl 4	0 Maint. Qty
Defect Description:										

4 Feet of Decay/Section Loss BETWEEN PILES 1 AND 2: Affects 10% or more of the member but does not warrant structural review.

End Bent 2	Row 1	Piles and Columns	1							
Element: 228	Name	Timber Pile	Qty:	1	Lvl 2:	0	Lvl 3	0	Lvl 4	0 Maint. Qty
Defect Description:										

ENCASED.

National Bridge and NC Inspection Items

Structure Number: 410127

Inspection Date: 07/15/2015

National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	5
Item 59: Superstructure	0 - 9 , N	5
Item 60: Substructure	0 - 9 , N	5
Item 61: Channel and Channel Protection	0 - 9 , N	7
Item 62: Culvert	0 - 9 , N	
Item 71: Waterway Adequacy	0 - 9 , N	7
Item 72: Approach Roadway Alignment	0 - 9 , N	8

Note: If NBI Inspection Item is not present, code NBI item with "N"

NC SMU Inspection Items

Item	Grade Scale	Grade	Maint. Qty.	Maint. Code
Deck Debris	G, F, P, or C	G	0	3376
Drainage System	G, F, P, or C	G	0	3332
Utilities	G, F, P, or C			
Slope Protection	G, F, P, or C		0	3352
Wingwall	G, F, P, or C		0	3350
Scour	G, F, P, or C	G		
Field Scour Evaluation		O		
Drift	G, F, P, or C	G	0	3366
Fender System	G, F, P, or C		0	3364
Response to Live Load	G, F, P, or C	G		
Estimated Remaining Life	0 - 100 Years	10		

Note: If NC SMU Inspection Item is not present, leave NC SMU item blank

Inspection Information

Item	Grade Scale	Grade
Regulatory Sign Noticed Issued	YES/NO	N
Priority Maintenance Request Submitted	YES/NO	N
Inspection Time	Hours	3
Traffic Control Time	Hours	
Snooper Time	Hours	
Ladder Used	YES/NO	N
Bucket Truck Used	YES/NO	N
Boat Used	YES/NO	N
Other Equipment Used	YES/NO	Y

National Bridge and NC SMU Inspection Item Details

Structure Number: 410127

Inspection Date: 07/15/2015

Item	Priority Maintenance Issued	Grade	N	Maint Code	Qty.	0
------	-----------------------------	-------	---	------------	------	---

Details NOT POSTED.

Item	Presently Posted	Grade	Y	Maint Code	Qty.	0
------	------------------	-------	---	------------	------	---

Details PRESENTLY POSTED SV 25 TONS, TTST 29 TONS.

Item	Other Equipment Used	Grade	Y	Maint Code	Qty.	0
------	----------------------	-------	---	------------	------	---

Details BOOTS.

Item	Field Scour Evaluation	Grade	O	Maint Code	Qty.	0
------	------------------------	-------	---	------------	------	---

Details STRUCTURE IS NOT SCOUR CRITICAL, BUT IS RATED "Z". NCDOT HYDRAULICS UNIT REQUIRES NOTIFICATION IF MUDLINE SCOURS TO A DEPTH 4' GREATER THAN THE BASELINE ESTABLISHED BY THE 2008-2009 STREAMBED PROFILE.



End Bent 2 Abutment/Backwall : 4 Feet of Decay/Section Loss BETWEEN PILES 1 AND 2: Affects 10% or more of the member but does not warrant structural review.



End Bent 1 Abutment/Backwall : 4 Feet of Decay/Section Loss ON LEFT SIDE AT END BENT 1: Affects 10% or more of the member but does not warrant structural review.



Bent 1 Pile 1: 1 Each of Split/Delamination (Timber) FROM CAP DOWN 3': Length equal to or greater than the member depth but does not require structural review.



Span 1 Channel/Slab 1: 9 Feet of Delamination/Spall/Patched Area: 4' OF Delaminated AREAS. Spall 1 in. or less deep or 6 in. or less in diameter. 5' OF Patched area that is sound.



Span 2 Channel/Slab 1: 4 Feet of Delaminated Area: Delaminated.



LOOKING EAST



CLOSEUP WEIGHT LIMIT SIGN



APPROACH ROADWAY



WEARING SURFACE



WEARING SURFACE



SOUTH SIDE



EXPANSION JOINT 1



LOOKING NORTH UNDER STRUCTURE



LOOKING SOUTH DOWNSTREAM



LOOKING WEST WEIGHT LIMIT SV 25 TONS, TTST 29 TONS



NORTH SIDE



END BENT 2



BENT 1



BOTTOM OF DECK



BOTTOM OF DECK



PILE 1 AT END BENT 2 ENCASED.



5 REPAIR AREAS IN CHANNEL 1, LEG 1 IN SPAN 1.



END BENT 1

NATIONAL BRIDGE INVENTORY----- STRUCTURE INVENTORY AND APPRAISAL

Update Date: 01/15/2016

IDENTIFICATION							
(1) STATE NAME -NORTH CAROLINA	BRIDGE	410127		SUFFICIENCY RATING =		31.19	
(8) STRUCTURE NUMBER(FEDERAL)		00000000830127		STATUS =	Structurally Deficient		
(5) INVENTORY ROUTE (ON/UNDER) - ON		31010020					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		1		CLASSIFICATION		CODE	
(3) COUNTY CODE 83 (4) PLACE CODE		0		(112)NBIS BRIDGE SYSTEM -		YES	
(6) FEATURE INTERSECTED - JACKET SWAMP				(104)HIGHWAY SYSTEM Is not on NHS		0	
(7) FACILITY CARRIED SR1002				(26) FUNCTIONAL CLASS - Major Collector		07	
(9) LOCATION 0.4 MI.E.JCT.SR1210				(100)STRAHNET HIGHWAY - Not a STRAHNET Route		0	
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE - No Parallel Structure		N	
(16)LAT 36° 12' 24.34" (17)LONG 77° 43' 48.15"				(102)DIRECTION OF TRAFFIC - 2-way Traffic		2	
(98)BORDER BRIDGE STATE CODE	PCT SHARE			(103)TEMPORARY STRUCTURE - Temporary Structure/Conditions		T	
(99)BORDER BRIDGE STRUCTURE NO				(110)DESIGNATED NATIONAL NETWORK - Not on the National Network		0	
				(20) TOLL On Free Road		3	
				(31) MAINTAIN - State Highway Agency		01	
				(22) OWNER - State Highway Agency		01	
				(37) HISTORICAL SIGNIFICANCE - Not Eligible		5	
STRUCTURE TYPE AND MATERIAL							
(43) STRUCTURE TYPE MAIN: Prestressed Concrete							
TYPE - Channel Beam		CODE 522					
(44) STRUCTURE TYPE APPR :				CONDITION		CODE	
TYPE -		CODE 000		(58) DECK		5	
(45) NUMBER OF SPANS IN MAIN UNIT		2		(59) SUPERSTRUCTURE		5	
(46) NUMBER OF APPROACH SPANS				(60) SUBSTRUCTURE		4	
(107)DECK STRUCTURE TYPE - 1		CODE		(61) CHANNEL & CHANNEL PROTECTION		7	
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(62) CULVERTS		N	
(A) TYPE OF WEARING SURFACE -		CODE		LOAD RATING AND POSTING		CODE	
(B) TYPE OF MEMBRANE -		CODE		(31) DESIGN LOAD Unknown		0	
(C) TYPE OF DECK PROTECTION -		CODE		(63) OPERATING RATING METHOD - Allowable Stress		2	
				(64) OPERATING RATING - HS-1		1	
				(65) INVENTORY RATING METHOD - Allowable Stress		2	
				(66) INVENTORY RATING - HS-1		1	
				(70) BRIDGE POSTING - Posting Required		3	
				(41) STRUCTURE OPEN, POSTED ,OR CLOSED		P	
				DESCRIPTION - Posted for Load			
AGE AND SERVICE				APPRAISAL			
(27) YEAR BUILT		1967		(67) STRUCTURAL EVALUATION		3	
(106)YEAR RECONSTRUCTED				(68) DECK GEOMETRY		5	
(42) TYPE OF SERVICE : ON - Highway				(69) UNDERCLEARANCES,VERTI & HORIZ		N	
UNDER - Waterway		CODE 15		(71) WATERWAY ADEQUACY		7	
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE		0		(72) APPROACH ROADWAY ALIGNMENT		8	
(29) AVERAGE DAILY TRAFFIC		980		(36) TRAFFIC SAFETY FEATURES		0000	
(30) YEAR OF ADT 2012 (109) TRUCK ADT PCT		7%		(113)SCOUR CRITICAL BRIDGES		U	
(19) BYPASS OR DETOUR LENGTH		8 MI		PROPOSED IMPROVEMENTS			
GEOMETRIC DATA				(75) TYPE OF WORK -		CODE	
(48) LENGTH OF MAXIMUM SPAN		24 FT		(76) LENGTH OF STRUCTURE IMPROVEMENT			
(49) STRUCTURE LENGTH		51 FT		(94) BRIDGE IMPROVEMENT COST			
(50)CURB OR SIDEWALK: LEFT .4165 FT RIGHT .4165 FT				(95) ROADWAY IMPROVEMENT COST			
(51) BRIDGE ROADWAY WIDTH CURB TO CURB		29.25 FT		(96) TOTAL PROJECT COST			
(52) DECK WIDTH OUT TO OUT		30.667 FT		(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)		20 FT		(114)FUTURE ADT 1960 (115) YEAR FUTURE ADT 2025			
(33) BRIDGE MEDIAN - No Median		CODE 0		INSPECTIONS			
(34) SKEW 0° (35) STRUCTURE FLARED		0		(90) INSPECTION DATE		07/15/2015	
(10) INVENTORY ROUTE MIN VERT CLEAR		999.9 FT		(92) CRITICAL FEATURE INSPECTION :		(93) CFI DATE	
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR		29.25 FT		A) FRACTURE CRIT DETAIL - NO		A)	
(53) MIN VERT CLEAR OVER BRIDGE RDWY		999.9 FT		B) UNDERWATER INSP - NO		B)	
(54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad		0 FT		C) OTHER SPECIAL INSP NO		C)	
(55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad		000 FT		SCOUR			
(56) MIN LAT UNDERCLEAR LT REF -		000 FT					
NAVIGATION DATA							
(38) NAVIGATION CONTROL - No Navigational Control		CODE 0					
(111)PIER PROTECTION -		CODE					
(39) NAVIGATION VERTICAL CLEARANCE		0					
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR		FT					
(40) NAVIGATION HORIZONTAL CLEARANCE		0 FT					

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Update Date: 01/15/2016

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
HALIFAX	4	1	410127	51	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1002	JACKET SWAMP

LOCATED :	BRIDGE NAME :	CITY :
0.4 MI.E.JCT.SR1210		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
07	FA	NFA	980 2012	LT 233 RT 233

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1967	BMU	5.3051		Unknown

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :		
			TAN.	90	ON 2	UNDER	0

NAVIGATION :			HT. CRN. TO BED :		WATER DEPTH :		
VC 0 FT	HC 0 FT		12 FT		6		FT

SUPERSTRUCTURE :	PPC CHANNELS
------------------	--------------

SUBSTRUCTURE :	EBTS&IBTS:PPC CAPS/TIMBER PILES @ 5'9 CTS.
----------------	--

SPANS :	2@25'6
---------	--------

BEAMS OR GIRDERS :	12 PPC CHANNELS SECTIONS
--------------------	--------------------------

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
PPCCH/4" AWS		30.667 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
29.25 FT	30.083 FT	LT .4165 FT RT .4165 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :				
HS-1	HS-1	Pile	SV 25	TTST 29	DATE	08/07/2013	

SYSTEM :	GREEN LINE ROUTE :
Secondary S.R. Route	N

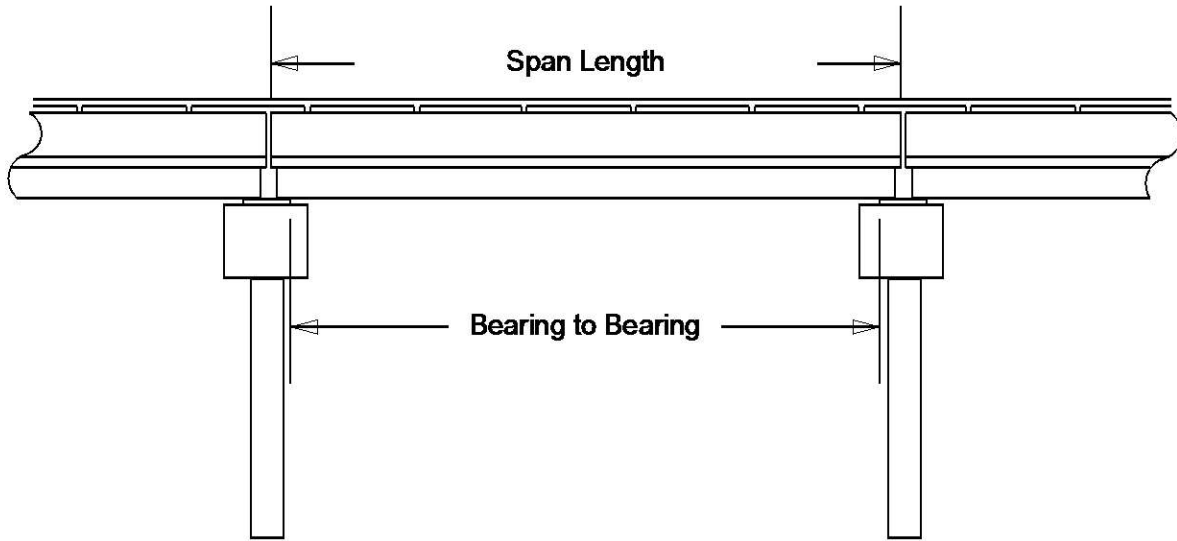
UNDER ROUTES AND CLEARANCES

REMARKS :

Structure Data Worksheet

Spans

County: HALIFAX Structure No: 410127 Date: Inspected By: ZSD



Span No	Span Length	Bearing to Bearing	Comments
1	25.5 FT.	23.5'	NBIS - 48.333'
2	25.5 FT.	23.5'	

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 410127 County: HALIFAX Date: _____ By: ZSD

Record sounding from top of rail. Other location if needed: _____

Distance from Highwater Mark to top of rail: _____ Location of Highwater Mark: _____

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
1	4.3	Top of Cap	1	6.4	END BENT 1
1	6.2	END BENT 1			
8	7.1				
9	8.6	WSWE			
9	9.9				
25	14.3	BENT 1	25	14.3	BENT 1
32	12.8				
42	8.6	WSWE			
42	9.9				
42.1	8.2	TOP OF OLD BULKHEAD			
50	7.3	END BENT 2	50	6.5	END BENT 2

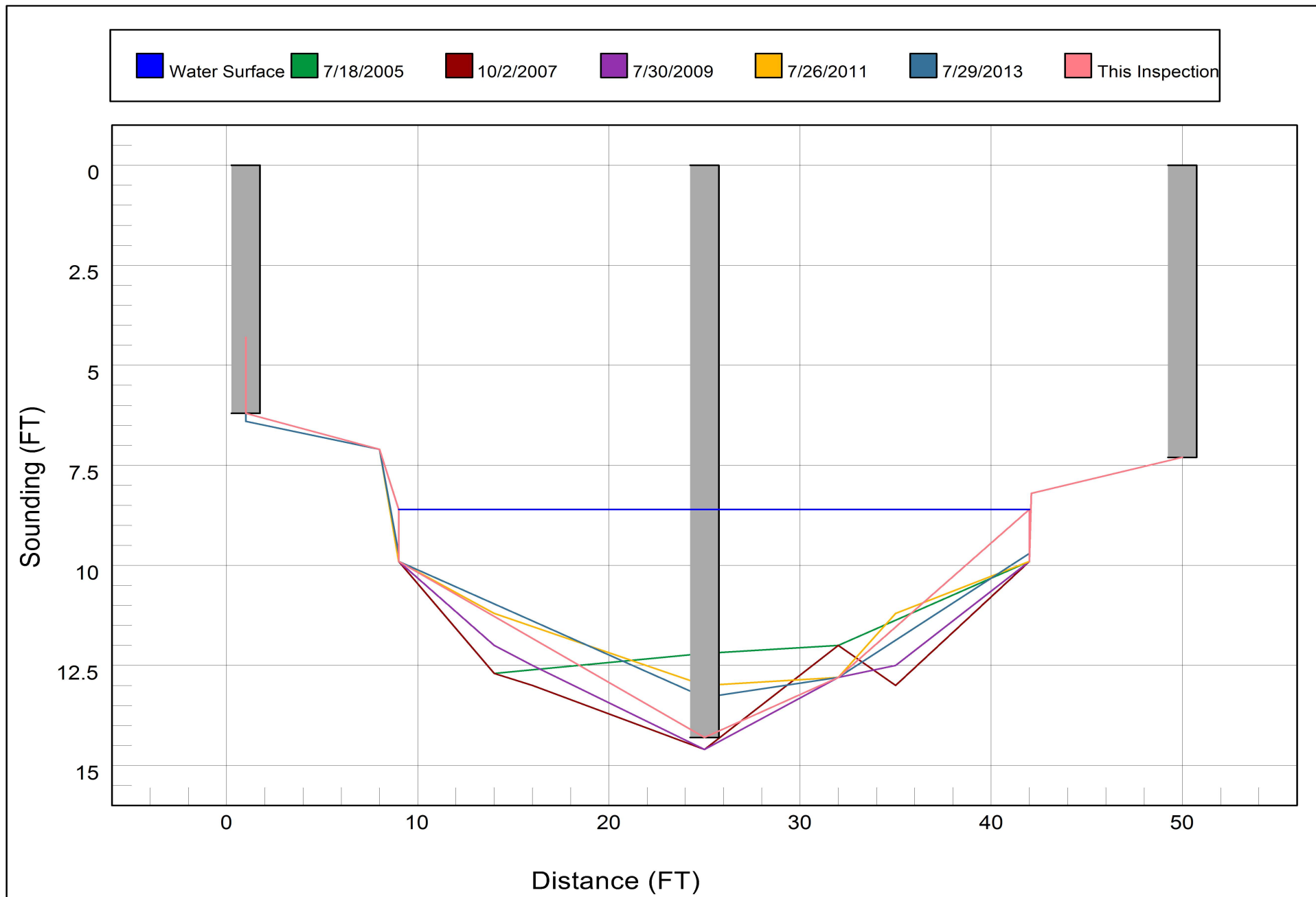
Bridge: 410127

County HALIFAX

Date:

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Bridge Inspection Field Sketch



Bent #	1		
Cap - Pre-Cast			
Cap Size	32ft Long	1.333ft Wide	1.167ft High
Left Overhang	1.125ft	Lt Cap/Beam Overhang	1ft
Right Overhang	1.125ft	Rt Cap/Beam Overhang	1ft

Pile #	Material	Pile Type	Spacing	Length	Width/Diam.	Height	Orientation
1	Wood or Timber	Pile Bent	5.75		12 IN. DIA.		VERT.
2	Wood or Timber	Pile Bent	5.75		12 IN. DIA.		VERT.
3	Wood or Timber	Pile Bent	5.75		12 IN. DIA.		VERT.
4	Wood or Timber	Pile Bent	5.75		12 IN. DIA.		VERT.
5	Wood or Timber	Pile Bent	5.75		12 IN. DIA.		VERT.
6	Wood or Timber	Pile Bent			12 IN. DIA.		VERT.

PILE 4 INT. BENT 1 IS A 10" DIA REPLACEMENT W/ 20" DIA CONC COLLAR

PILE 1 END BENT 2 SIZE UNKNOWN W/ 22" X 18" CONC COLLAR

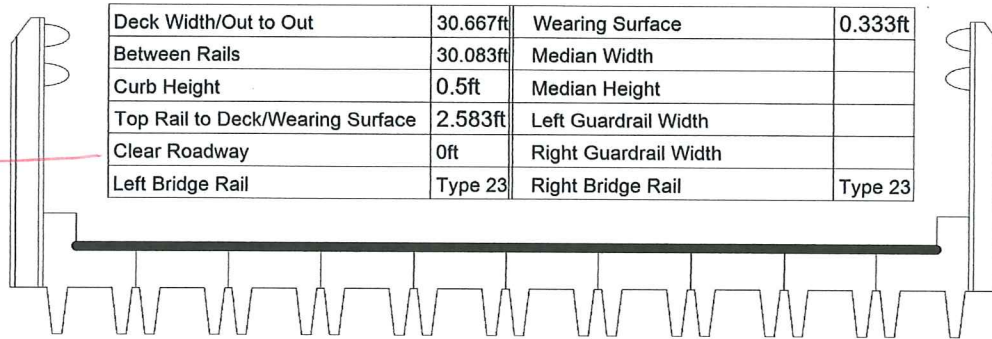
7/15/15. ZSD

Title		Description	
SUBSTRUCTURE		SUBSTRUCTURE	
Bridge No:	410127	Drawn By:	GLH
Date:	07/29/2013	File Name:	S0026001090

Bridge Inspection Field Sketch

29'3"
per 1996
Report
BTM

Deck Width/Out to Out	30.667ft	Wearing Surface	0.333ft
Between Rails	30.083ft	Median Width	
Curb Height	0.5ft	Median Height	
Top Rail to Deck/Wearing Surface	2.583ft	Left Guardrail Width	
Clear Roadway	0ft	Right Guardrail Width	
Left Bridge Rail	Type 23	Right Bridge Rail	Type 23



Measurements for Span #	1		
Deck Thickness	0.5	Left Overhang	0
Top of Rail to Bottom of Beam	4.417	Right Overhang	0

WEARING SURFACE IS 0.333 GLH 7/30 09 .

No. of Channels	12
Leg Width	.208ft
Leg Height	1ft
Leg to Leg (Centers)	2ft
Channel Width	2.542ft
Channel Height	1.5ft
Comments	

7/15/15. ZSD

Title

TYPICAL SECTION

Description

TYPICAL SECTION

Bridge No: 410127

Drawn By: GLH

Date: 07/29/2013

File Name: S0026001091

Bridge Inspection Field Sketch



Roadway	20ft Wide	2 Paved Lanes	Looking East
Left Shoulder	6ft Wide		6ft Unpaved
Right Shoulder	6ft Wide		6ft Unpaved
Left Guardrail			
Right Guardrail			

7/15/15. ZSD

Title APPROACH ROADWAY		Description APPROACH ROADWAY	
Bridge No: 410127	Drawn By: GLH	Date: 07/29/2013	File Name: S0026001092