



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

ATTENTION: HURRICANE HELENE
BRIDGE FAILURE, ROADWAY CLOSED

Structure Safety Report

High Water Supplemental

STRUCTURE NUMBER: 600229 SAP STRUCTURE NO: 0610229 FHWA STRUCTURE NO: 000000001210229
DIVISION: 13 COUNTY: MITCHELL INSPECTION DATE: 10/09/2024 FREQUENCY: None
FACILITY CARRIED: SR1357 MILE POST:
LOCATION: .01 N.JCT.SR1336
FEATURE INTERSECTED: NORTH TOE RIVER
LATITUDE: 35° 59' 33.58" LONGITUDE: 82° 15' 28.3"
SUPERSTRUCTURE: RC FL.& PPC DECK PANELS ON PPC GDR.(S.I.P.METAL FORMS)
SUBSTRUCTURE: E.BTS&INT.BT4:RC CAPS/H-PILES;INT.BTS1-3:REINF.CONC.P&B
SPANS: 5 SPANS. SEE SPAN PROFILE SHEET FOR SPAN DETAILS
☐ FRACTURE CRITICAL ☐ TEMPORARY SHORING ☐ SCOUR CRITICAL ☐ SCOUR PLAN OF ACTION
GRADES: (Inspector/NBI Coding) DECK 0 / 7 SUPERSTRUCTURE 0 / 6 SUBSTRUCTURE 0 / 7 CULVERT N / N
POSTED SV: Not Posted POSTED TTST: Not Posted
OTHER SIGNS PRESENT: NONE



south approach looking north

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

DIRECTION OF INSPECTION S-N

DIRECTION MATCHES PLANS

INSPECTED BY MICHAEL CRAIG	SIGNATURE <i>Michael Craig</i>	ASSISTED BY CASEY HOWARD
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Structure: 600229

County: MITCHELL

Date: 10/09/2024

Condition Photos

Bridge Inspection Field Sketch

SR1357

Roadway	182ft Wide		Looking North
Left Shoulder	9ft Wide	9ft Paved	
Right Shoulder	9ft Wide	9ft Paved	
Left Guardrail			
Right Guardrail			

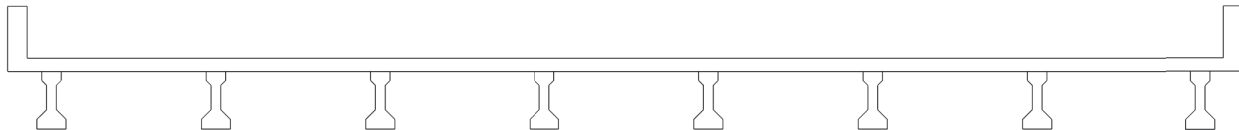
MEASUREMENTS TAKEN AT 50 FEET EAST OF INTERSECTION AT SOUTH END

MEASUREMENTS VERIFIED BY MW ON 10/17/23

Title APPROACH ROADWAY SKETCH		Description SUPERSTRUCTURE	
Structure No: 600229	Drawn By: ZK	Date: 10/27/2023	Filename: S001170000429.wes

Bridge Inspection Field Sketch

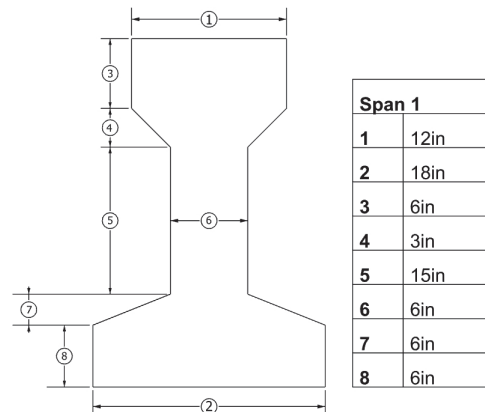
Deck Width/Out to Out	63.667ft	Between Rails		60.33ft
Clear Roadway	60.333ft	Wearing Surface		
Median Width		Median Height		
Curb Height		Left		Right
Sidewalk Width		Left		Right
Clear Roadway (Rail to Median)		Left		Right
Guardrail Width		Left	15in	Right 15in
Top of Rail to Deck/Wearing Surface		Left	2.667ft	Right 2.667ft
Bridge Rail Type		Left	Type 4	Right Type 4



Measurements for Span #	1		
Deck Thickness	8.00in	Left Overhang	2.25ft
Top of Rail to Bottom of Beam (Avg)	6.500ft	Right Overhang	2.25ft

Beam #	Beam Type	Width	Height	Spacing	From
1	Prestressed Concrete Girder	18in	36in	2.25ft	Left Edge of Deck
2	Prestressed Concrete Girder	18in	36in	8.458ft	Beam 1
3	Prestressed Concrete Girder	18in	36in	8.458ft	Beam 2
4	Prestressed Concrete Girder	18in	36in	8.458ft	Beam 3
5	Prestressed Concrete Girder	18in	36in	8.458ft	Beam 4
6	Prestressed Concrete Girder	18in	36in	8.458ft	Beam 5
7	Prestressed Concrete Girder	18in	36in	8.458ft	Beam 6
8	Prestressed Concrete Girder	18in	36in	8.458ft	Beam 7

NOTE: MEASUREMENT TAKEN AT NEAR END OF SPAN. SPAN 1 IS FLARED AND NARROWS AT FAR END

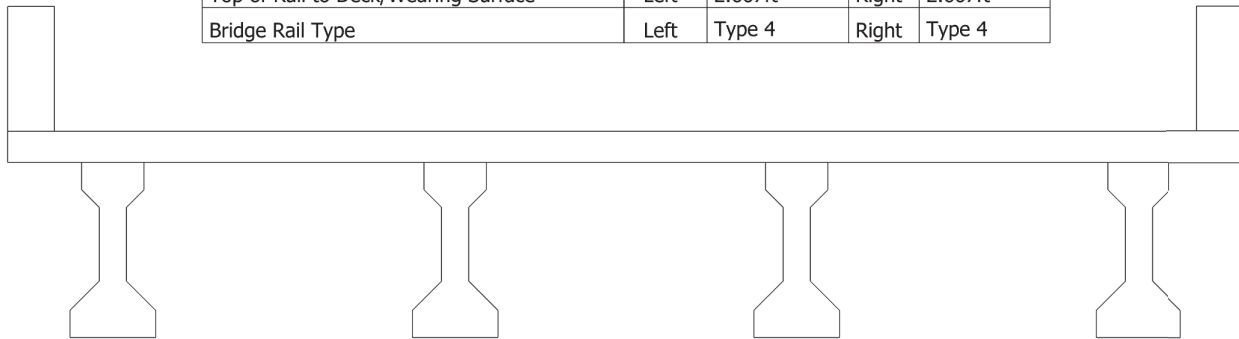


MEASUREMENTS VERIFIED BY MW ON 10/17/23

Title TYPICAL SECTION (SPAN 1)		Description SUPERSTRUCTURE	
Structure No: 600229	Drawn By: ZK	Date: 10/27/2023	Filename: S001170000430.wes

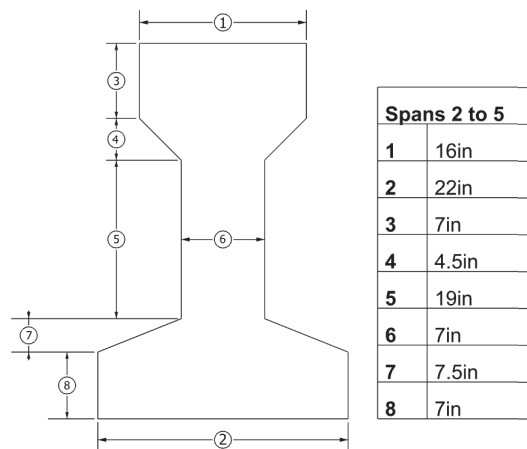
Bridge Inspection Field Sketch

Deck Width/Out to Out	26.5ft	Between Rails		24.667ft
Clear Roadway	24ft	Wearing Surface		
Median Width		Median Height		
Curb Height		Left		Right
Sidewalk Width		Left		Right
Clear Roadway (Rail to Median)		Left		Right
Guardrail Width		Left	15in	Right 15in
Top of Rail to Deck/Wearing Surface		Left	2.667ft	Right 2.667ft
Bridge Rail Type		Left	Type 4	Right Type 4



Measurements for Span #	2 to 5		
Deck Thickness	8.00in	Left Overhang	2.25ft
Top of Rail to Bottom of Beam (Avg)	7.250ft	Right Overhang	2.25ft

Beam #	Beam Type	Width	Height	Spacing	From
1	Prestressed Concrete Girder	22in	45in	2.25ft	Left Edge of Deck
2	Prestressed Concrete Girder	22in	45in	7.33ft	Beam 1
3	Prestressed Concrete Girder	22in	45in	7.33ft	Beam 2
4	Prestressed Concrete Girder	22in	45in	7.33ft	Beam 3



MEASUREMENTS VERIFIED BY MW ON 10/17/23

Title
TYPICAL SECTION (SPANS 2 TO 5)

Description
SUPERSTRUCTURE

Structure No: 600229

Drawn By: ZK

Date: 10/27/2023

Filename: S001170000431.wes

Bridge Inspection Field Sketch



Caps

#	Name	Type	Length	Width	Height	Left Beam to End of Cap	Right Beam to End of Cap
1	Cap 1	Reinforced Concrete Pier Cap	25.5ft	36in	24in	2ft	2.040ft

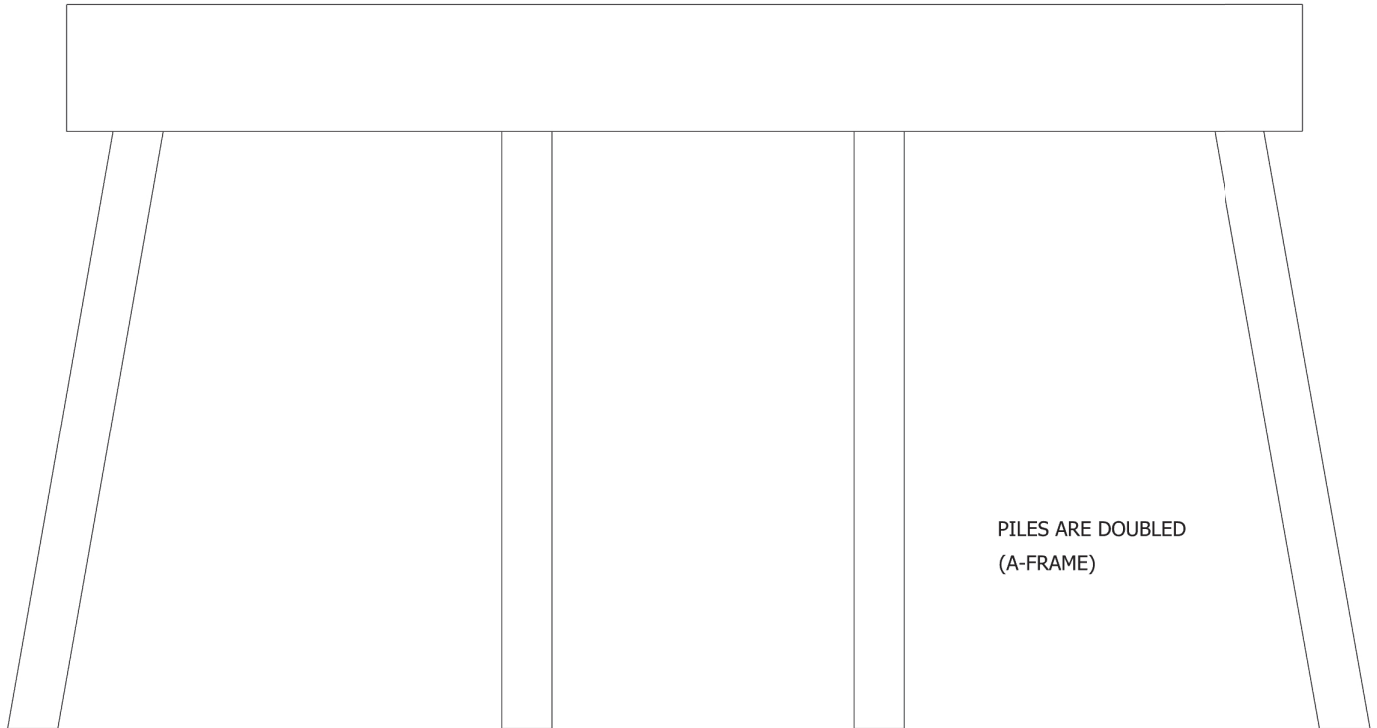
Piles

#	Name	Type	Spacing	From	Height/Diam.	Width	Length
1	Pile 1	Reinforced Concrete Column	4.5ft	Left End of Bent	36in		23ft
2	Pile 2	Reinforced Concrete Column	16.5ft	Pile 1	36in		23ft

MEASUREMENTS VERIFIED BY MW ON 10/17/23

Title INTERIOR BENTS (1 TO 3)			Description SUBSTRUCTURE		
Structure No: 600229	Drawn By: ZK		Date: 10/27/2023	Filename: S001170000432.wes	

Bridge Inspection Field Sketch



Caps							
#	Name	Type	Length	Width	Height	Left Beam to End of Cap	Right Beam to End of Cap
1	Cap 1	Reinforced Concrete Pier Cap	26.2ft	44in	33in	2ft	1.970ft
Piles							
#	Name	Type	Spacing	From	Height/Diam.	Width	Length
1	Row 2 Pile 1	Steel Pile	1.5ft	Left End of Bent	12.65in		10ft
1	Row 1 Pile 1	Steel Pile	1.5ft	Left End of Bent	12.65in		10ft
2	Row 2 Pile 2	Steel Pile	8.167ft	Row 2 Pile 1	12.65in		10ft
2	Row 1 Pile 2	Steel Pile	8.167ft	Row 1 Pile 1	12.65in		10ft
3	Row 2 Pile 3	Steel Pile	7.417ft	Row 2 Pile 2	12.65in		10ft
3	Row 1 Pile 3	Steel Pile	7.417ft	Row 1 Pile 2	12.65in		10ft
4	Row 2 Pile 4	Steel Pile	7.583ft	Row 2 Pile 3	12.65in		10ft
4	Row 1 Pile 4	Steel Pile	7.583ft	Row 1 Pile 3	12.65in		10ft

MEASUREMENTS VERIFIED BY MW ON 10/17/23

Title INTERIOR BENT 4			Description SUBSTRUCTURE		
Structure No: 600229		Drawn By: ZK		Date: 10/27/2023	Filename: S001170000433.wes



south approach looking north



east profile, looking west