

Routine Inspection Report

Date: 7/21/2020

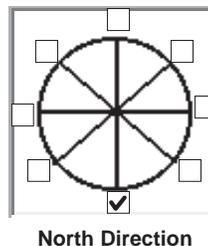
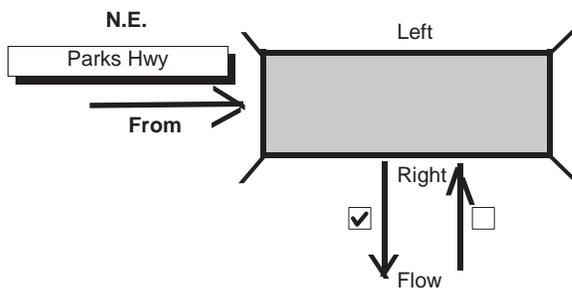
Br No 1558 WEST MIDDLE RIVER

Cloudy 56 F

INSPECTOR: Nicholas Murray ASSISTANT: Jasmine Langmann

Initials NWM

Initials _____



Apprh Rdwy Width (ft)	14.00
Est Camber (inch)	0.00
Bridge Length (ft)	80.00
Bridge Width O-O (ft)	14.30
CDS Route	158000
CDS Mile	3.1

Left							
Type	BRIDGE RAIL	Ht (in)	Curb Height (in)	Transition Type	Ht (in)	Approach Type/Post	Leading End Treat
	3.5 inch steel tube & bullrail	21.00	8.50	None		None	
Right							
Type	BRIDGE RAIL	Ht (in)	Curb Height (in)	Transition Type	Ht (in)	Approach Type/Post	Leading End Treat
	3.5 inch steel tube & bullrail	22.00	8.50	None		None	

<i>Near End</i>		SIGNS		<i>Far End</i>	
Lt.	Rt.	Object Markers	Load Limit Wording or Other Sign	Lt.	Rt.
<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"/>	<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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Deck Material	Thk(Inches)
Timber	3.00
Location Measured	
Edge of Deck	

Wear Surface	Thk (Inches)
Timber Run Pl	3.00
Wear Location	
Edge of Deck	

Drive Condition	
Unsatisfactory	
Locality	Route
Nenana	Totchaket Road

Utilities

Kind	Size	Location	Owner
None			

Bridge No. 1558, WEST MIDDLE RIVER

Work Candidates

Inspected on: 07/21/2020

<i>Priority</i>	<i>Description</i>	<i>Quantity</i>	<i>Work Needed</i>
High	Substructure-Riprap (EA)	1	Stabilize gabion baskets at NE.
High	Deck-Resurface	1	Replace timber running planks to prevent damage to deck.
Medium	Bridge Rail-Replace		Replace timber bull rails.
Low	Misc-Remove Vegetation (EA)	1	Cut brush around and under bridge.

Bridge No. 1558, WEST MIDDLE RIVER

Element Inspection

Inspected on: 07/21/2020

<i>Element</i>	<i>Description</i>	<i>Observations</i>
31	Timber Deck	Deck planks are rough sawn Number 2's or better, treated with CCA preservative.
> 510	<i>Wearing Surfaces</i>	Untreated, rough sawn running planks. Most planks are deteriorated or rotten.
107	Steel Open Girder/Beam	Mud and rocks resting on the bottom flanges. Manufacturer's (Rapid Span) plate on the girder ends. See 2020 FC report for more details.
> 515	<i>Steel Protective Coating</i>	Uniform, protective rust coating. No pack rust observed.
156	Timber Floor Beam	Floorbeams are Number 2's or better, treated with CCA preservative. Approximately 10% of floorbeams have full length splits.
216	Timber Abutment	Both abutment mudsills are undermined up to 12" at front face.
311	Movable Bearing	No anchor bolts on any of the bearings.
330	Metal Bridge Railing	Timber bull rail is rotten and deteriorated. One section of bull rail is broken on the US side.
> 515	<i>Steel Protective Coating</i>	
601	Brush Smart Flag	Brush encroaching on bridge.
604	Bank Protection Smart Flag	Gabions at the NE are leaning toward the river.

Br No 1558	WEST MIDDLE RIVER	Date: 7/21/2020	ID	04 Even 2020 1558
INSPECTOR: Nicholas Murray	ASSISTANT: Jasmine Langmann	Weather Cloudy	Temperature 56 F	

HYDRAULICS REPORT

Inspection To Mudline At All Piers and Abuts? <input type="text" value="Yes"/>	Apparent HW <input type="text" value="Yes"/>	Stream Bottom Material
Activities <input type="text"/>	AHW Comments <input type="text" value="Derbis on top of bottom flanges."/>	<input type="text" value="Silt"/>
Drift <input type="text" value="Light"/>	Bank Erosion <input type="text" value="Yes"/>	<input type="text" value="Sand"/>
Riprap Condition <input type="text" value="None"/>	Erosion Comments <input type="text" value="NE gabions are leaning towards river. Both mudsills undermined by up to 12"/>	<input type="text"/>
	Drift Comments <input type="text" value="Sticks"/>	
	Other Hydraulic Comments <input type="text"/>	

SOUNDINGS Measured At Surface Location

Soundings Report		<u>All measurements in feet</u>		<input type="text" value="04 Even 2020 1558"/>
Horiz Dist from	Substr Unit No.	Vert Dist to Water Surface	Vert Dist to Stream Bottom	Remarks
0.00	1	0.0	7.7	Begin Bridge
5.00	1	0.0	7.7	
5.30	1	0.0	8.9	
8.70	1	0.0	10.3	
11.10	1	0.0	14.3	
24.00	1	0.0	16.5	EOW
30.70	1	0.0	19.6	
40.80	1	0.0	20.3	
51.00	1	0.0	21.1	
61.90	1	0.0	18.2	
64.80	1	0.0	16.5	EOW
71.50	1	0.0	13.9	
76.70	1	0.0	9.3	
77.00	1	0.0	7.8	
81.00	1	0.0	7.8	End Bridge

Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 1558	Agency ID: 1558	On/Off System: Off System	SR: 75.9
			SD/FO/ND: ND

IDENTIFICATION			
State 1:	02 Alaska	Struc Number 8:	1558
Facility Carried 7:	TOTCHAKET ROAD	Location 9:	MILE POINT 3.1
Rte.(On/Under)5A:	Route On Structure	Rte Signing Prefix 5B:	5 City Street
Level of Service 5C:	0	Rte. Number 5D:	00000
Directional Suffix 5E:	0 N/A	% Responsibility:	
SHD District 2:	02 North., Interior	County Code 3:	Yukon-Koyukuk Census
Place Code 4:	Nenana	Mile Post 11:	3.100 mi
Feature Intersected 6:	WEST MIDDLE RIVER		
Latitude 16:	64d 33' 37.0 "	Longitude 17:	149d 13' 1.9 "
Border Bridge Code 98:	Unknown (P)		
Border Bridge No. 99:	NA		

INSPECTION			
Frequency 91:	24 months	Inspection Date 90:	07/21/2020
Next Inspection:	07/21/2022		
FC Freq. 92A:	24 months	FC Insp. Date 93A:	06/22/2020
Next FC Inspection:	06/22/2022		
UW Freq. 92B:	NA	UW Insp. Date 93B:	NA
Next UW Inspection:	NA		
SI Freq. 92C:	NA	SI Date 93C:	NA
Next SI:	NA		

CLASSIFICATION			
Defense Highway 100:	0 Not a STRAHNET hwy	Parallel Structure 101:	No bridge exists
Traffic Direction 102:	3 1-lane Br for 2-way	Temporary Structure 103:	No
Highway System 104:	0 Not on NHS	NBIS Length 112:	Long Enough
Toll Facility 20:	3 On free road	Functional Class 26:	09 Rural Local
Natl. Network 110:	0 Not on truck network	Historical Sig. 37:	5 Not eligible for NRHP
Owner 22:	City or Municipal Highway Agency		
Custodian 21:	City or Municipal Highway Agency		

STRUCTURE TYPE AND MATERIALS			
Number of Approach Spans 46:	0	Number of Spans Main Unit 45:	1
Main Span Mat'l and Type 43A/B:	3 Steel		
	2 Stringer/Girder		
Appr Span Mat'l and Type 44A/B:	N/A		
Deck Type 107:	8 Wood or Timber		
Wearing Surface 108A:	7 Wood or Timber		
Membrane 108B:	0 None		
Deck Protection 108C:	0 None		

CONDITION			
Deck 58: 7 Good	Super 59: 7 Good	Sub 60:	6 Satisfactory
Channel/Ch. Protection 61:	5 Eroding	Culvert 62:	N/A

AGE AND SERVICE			
Year Built 27:	2013	Year Reconstructed 106:	
Type of Service on 42A:	1 Highway		
Type of Service under 42B:	5 Waterway		
Lanes on 28A:	1	Lanes under 28B: 0	Detour Length 19: 124 mi
ADT 29:	10	Truck ADT 109: 1%	Year of ADT 30: 2018

LOAD RATING AND POSTING			
Operating Rating 64:	HS 33	Operating Method 63:	1 LFR
Inventory Rating 66:	HS 20	Inventory Method 65:	1 LFR
Design Load 31:	C Other	Posting 70:	5 At/Above legal loads
Posting Status 41:	A Open, no restriction		

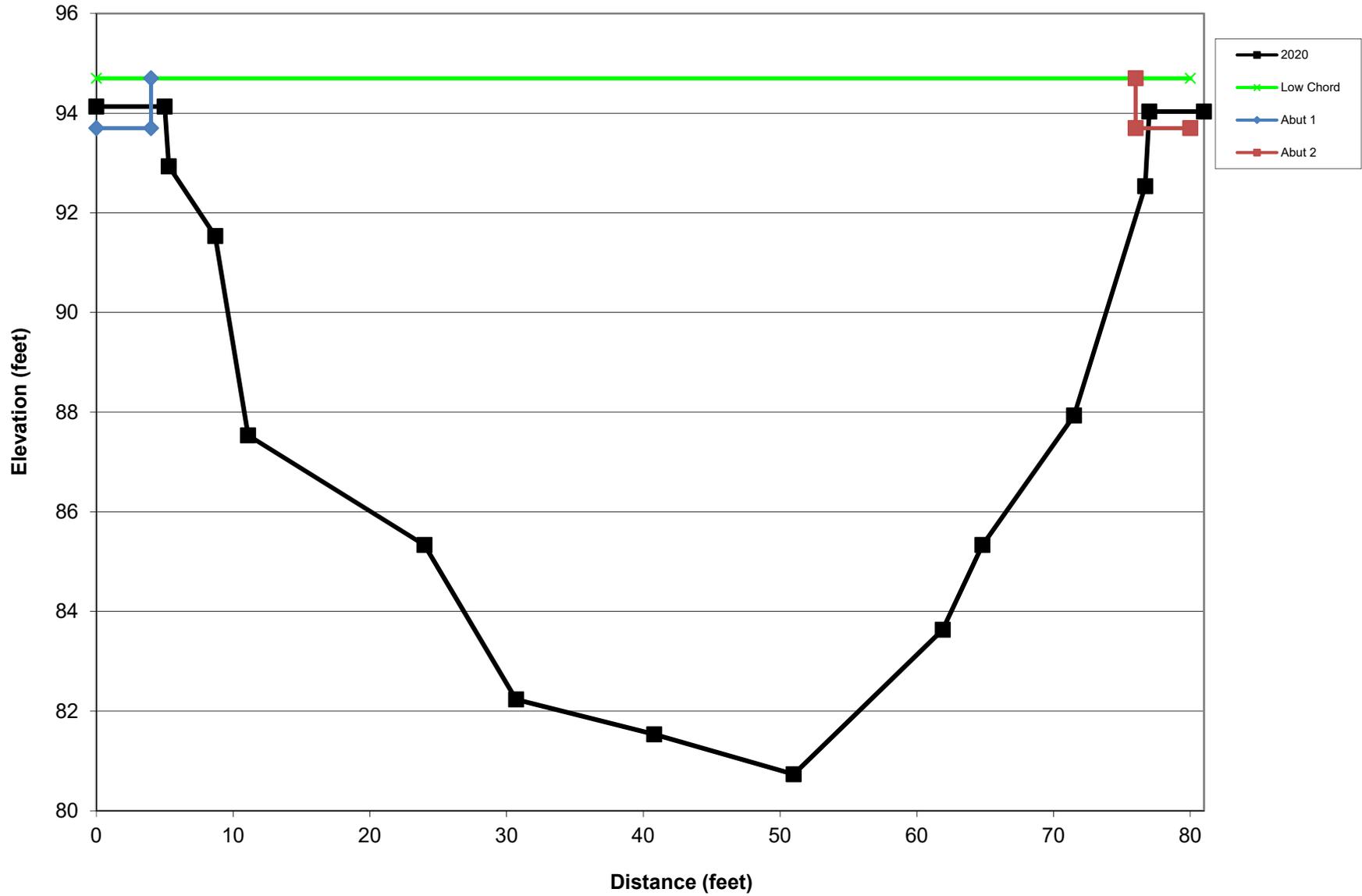
GEOMETRIC DATA			
Length Max Span 48:	77.00 ft	Structure Length 49:	80.00 ft
Curb/Sdwk Width L 50A:	0.0 ft	Curb/Sidewalk Width R 50B:	0.0 ft
Width Curb to Curb 51:	13.3 ft	Deck Width Out to Out 52:	14.3 ft
Approach Roadway Width 32: (w/ shoulders)	14.00 ft	Median 33:	0 No median
Deck Area:	1,144.0 sq ft		
Skew 34:	0	Structure Flared 35:	0 No flare
Route Minimum Vertical Clearance 10:	99.99 ft	Route Horizontal Clearance 47:	14.00 ft
Minimum Vertical Clearance Over Bridge 53:	100.0 ft		
Minimum Vertical Underclearance 54A:	N Feature not hwy or RR		
Minimum Vertical Underclearance 54B:	0.0 ft		
Minimum Lateral Underclearance 55A:	N Feature not hwy or RR		
Minimum Lateral Underclearance R 55A:	99.9 ft		
Minimum Lateral Underclearance L 56:	0.0 ft		

APPRAISAL			
Bridge Rail 36A:	0 Substandard	Approach Rail 36C:	0 Substandard
Transition 36B:	0 Substandard	Approach Rail Ends 36D:	0 Substandard
Str Evaluation 67:	6 Equal Min Criteria	Deck Geometry 68:	5 Somewhat Better than Min
Underclearance, Vertical and Horizontal 69:	N/A		
Waterway Adequacy 71:	7 Better than Min	Approach Alignment 72:	8 Equal Desirable Crit
Scour Critical 113:	3 Scour Critical - Within Limits		

PROPOSED IMPROVEMENTS			
Bridge Cost 94:	\$	Type of Work 75:	Unknown
Roadway Cost 95:	\$	Length of Improvement 76:	0.0 ft
Total Cost 96:	\$	Future ADT 114:	15
Year of Cost Estimate 97:		Year of Future ADT 115:	2035

NAVIGATION DATA			
Navigation Control 38:	0 Permit Not Required		
Vertical Clearance 39:	0.0 ft	Horizontal Clearance 40:	0.0 ft
Pier Protection 111:	1 Not required	Lift Bridge Vertical Clearance 116:	0.0 ft

BN 1558 - West Middle River Soundings.





Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 1
 NE Looking at Bridge File P7210872.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 2
 FE Looking at Bridge File P7210869.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 3
 Looking US File P7210880.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 4
 Looking DS File P7210877.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 5
 DS NE Bank File P7210878.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 6
 US NE Bank File P7210879.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 7
 US FE Bank File P7210881.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 8
 DS FE Bank File P7210876.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 9
 Abutment 1 File P7210884.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 10
 Abutment 2 File P7210873.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 11
 Elevation Looking DS File P7210885.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 12
 Deck Typ File P7210870.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 13
 Rail Typ File P7210882.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 14
 Underside Typ File P7210874.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 15
 Deck Exterior Underside Typ File P7210875.jpg



Bridge No. 1558 Br. Name West Middle River Date 07/21/20
 Inspector Nicholas Murray / Jasmine Langmann Frame 16
 US NE Curb Damage File P7210871.jpg



Bridge No.	1558	Br. Name	West Middle River	Date	07/21/20
Inspector	Nicholas Murray / Jasmine Langmann			Frame	17
Fabrication Plaque				File	P7210883.jpg

Bridge No.	1558	Br. Name	West Middle River	Date	07/21/20
Inspector	Nicholas Murray / Jasmine Langmann			Frame	18
				File	

Bridge No.	1558	Br. Name	West Middle River	Date	07/21/20
Inspector	Nicholas Murray / Jasmine Langmann			Frame	19
				File	

Bridge No.	1558	Br. Name	West Middle River	Date	07/21/20
Inspector	Nicholas Murray / Jasmine Langmann			Frame	20
				File	