TOWN OF CHAPLIN

INSPECTION of BEDLAM ROAD BRIDGE over UNNAMED STREAM

Bridge No. 024004



Prepared For:

THE TOWN OF CHAPLIN

495 PHOENIXVILLE ROAD CHAPLIN, CT 06235

MAY 20, 2019

Prepared by:
Wengell, McDonnell & Costello
-Consulting Engineers87 Holmes Road
Newington, Connecticut 06111

TABLE OF CONTENTS

	<u>Page</u>
EXECUTIVE SUMMARY	1
GENERAL	1
OVERVIEW	1
<u>APPENDICES</u>	
Appendix A – BRI-18 Bridge Inspection Form BRI-19 Bridge Inspection Form	A1 – A4 A5 – A6
Appendix B – Photographs	B1 – B8
Appendix D – Location Map	D 1
Appendix E – Existing Plans	E 1

EXECUTIVE SUMMARY

GENERAL

Bridge No. 024004 carries Bedlam Road over Stream in the Town of Chaplin, Connecticut. The steel girders and concrete deck slab bridge was constructed in 1952 and was rebuilt 1992. The bridge has an approximate span of 17.5 feet and carries two lanes of traffic. The bridge consists of stone masonry and concrete abutment and wingwalls with metal guiderails parallel to the traffic direction.

WMC Consulting Engineers (WMC) performed the inspection of the steel girder bridge in May, 2019. The inspection included the visual evaluation of all bridge members and the channel through the structure, as well as just upstream and downstream of the bridge. The bridge was found to be in Serious Condition (Condition Rating = 3) mainly due to the substructure.

OVERVIEW

The Deck is in Satisfactory Condition (Condition Rating = 6). Concrete deck slab with corrugated metal deck forms left in place is in good condition.

The Channel and Channel Protection is in Poor Condition (Condition Rating = 4). There are scour holes at the upstream face of the west abutment and downstream face of the east abutment. Parts of the channel are heavily overgrown. There are a few loose stones along the west abutment embankment. No embankment erosion has been observed.

The Superstructure is in Fair Condition (Condition Rating = 5). It consists of a concrete deck slab. Both facial beams have rusting along the beams and moderate rusting at both ends due to moisture. No section loss was observed.

The Substructure is in Serious Condition (Condition Rating = 3). Mortar loss in stone abutment and wingwalls. There are full height vertical cracks from the bridge seat to the foundation on both abutments at both ends. There are also full height vertical cracks in the wingwalls. There are stone missing and minor efflorescence leakage is noticed in both wingwalls and abutment as well.

The Approach Roadway is in Fair Condition (Condition Rating = 5). Two lanes asphalt road with vegetation on the embankments. Guide rail are missing bolts and nuts. Guiderail length is insufficient to develop full strength and no wire guide rail is available with only individual posts in place. Cracks in asphalt exist on both approach of the bridge.

APPENDIX A Form BRI-18 & BRI-19

Connecticut Department of Transportation Bridge Inspection Report BRI-18

BRIDGE #:	0240	004					INSPECTION DA	TE:	05/18/19
INSPECTION TYPE:	:		ROUTINE		PREVIOUS INS	PECTION DATE:	02/08/17	SNOOPER RE	EQUIRED
INSPECTION PERF	ORMED B	3Y: [WMC ENGIN	EERS	j		Carrier Control Control	SNOOPER US	
TOWN: 1381	0 - Chaplir	n		FEATURE	CARRIED:	Bedlam Road		YEAR BUIL	T: 1952
	Mi West R		8	FEATURE	INTERSECTED:	an unnamed stream	1	YEAR REBI	
MAIN MATERIAL:	3 - Steel				MAIN DESIGN:				
INSPECTION VISITS Inspection Date:	5/18/2	N19 1	Start Time	6:30	INSPECTORS:	Coh Abdullati	1 		
Temperature	65		End Time:	9:30	Inspector:	Seb. Abdullah Nertil Semani	Task:		
					Inspector:		Task:		
58. DECK								OVERALL	RATING 6
0	VERLAY	RATING 6	-	dition only	a fow transvers	e cracks at both er	-46466-4	-	
DECK STR. CO		6				factory condition	nas of the briage		
	CURBS	N	Test in plan	Je deck 10	iiio aic iii salsii	actory condition			
	MEDIAN	N							
	EWALKS	N							
	ARAPET	N	-						
I	RAILING	6	Galvanize with the ex	d steel brid terior bea	dge rails at the t ms.	oridge and approac	ches, with some m	ninor rusting in	the connection
	PAINT	N							
	FENCE	N							
	DRAINS	N							
LIGHTING STA	ANDARD	N							
UTILITIES TY	PE/SIZE	N							
CONSTRUCTION	JOINTS	N							
EXPANSION	JOINTS	N							
59. SUPERSTRUCTU	JRE							OVERALL	PATING 5
	į	RATING						JOVERALL	RATING 5
BEARING D	EVICES	5	Moderate	rusting on	steel bearing pl	ates.			
STRI	INGERS	N							
G	IRDERS	6	Facia girde	ers exhibit	moderate rustir	ng all around and a	it each end		
FLOOR	BEAMS	N							
TRUSSES-GE	ENERAL	N							
TRUSSES-PO	ORTALS	N	Ε						
TRUSSES-BF	RACING	N							
	PAINT	4							
	RUST	4							
MACHINERY MO	V SPAN	\Box							

Connecticut Department of Transportation Bridge Inspection Report BRI-18

BRIDGE #:	0240	004	INSPECTION DATE:	5/18/2019
RIVETS &	BOLTS	N		
WELDS & C	RACKS			
TIMBER	DECAY	N		
CONCRETE CRA	ACKING	N		
COLLISION DA	AMAGE			
MEMBER ALIG	NMENT	N		
DEFLECT. UNDER	R LOAD	N		
VIBR, UNDER	R LOAD	N		
STAND	PIPES	N		
BARREL LA	DDERS			
			ARE BARREL LADDERS OSHA COMPLIANT?	
60. SUBSTRUCTURE			OVERALL RA	TING 3
		RATING		
ABUTMENTS	S-STEM	3	Abutments have some missing mortar, minor effirescence and light scalling. All wingwalls height vertical carcks, in some parts about 3-4 inches wide with random spalls. There are vertical cracks causing separation between the wingwalls and west abutment.	have full full height
ABUTMENTS-BACK	KWALL	4	There are cracks observed in backwall where it meets wingwalls and facia beams	
ABUTMENTS-FOC	DTINGS	4		
ABUTSETTLE	EMENT			
ABUTMENTS-WING\	WALLS	3		
PIERS/BENTS	S-CAPS	N		
PIERS/BENTS-PILE	BENT	N		
PIERS/BENTS-CO	OLUMN	N		
PIERS/BENTS-FOO	TINGS	N		
PIERS/BENTS-SETTLE	EMENT	N		
EROSION-S	SCOUR	4	On the east abutment downstream side and on west abutment upstream side about 4 fee pools have been observed.	et deep. scour
CONCRETE CRACK-	-SPALL	N		
STEEL CORR	OSION			
	PAINT			
TIMBER D	DECAY			
COLLISION DA	MAGE N	ı 🔲 ا		
D	EBRIS			
31. CHANNEL PROTEC		RATING	OVERALL RA	ATING 4
CHANNEL S	7	4	There are scoure holes at the east abutment downstream side and at the west abutment about 4 feet deep.	upstream side
EMBANKMENT ER	OSION	N		
D	EBRIS	4	On the upstream side dead tress and branches have created a pond.	
VEGETA	ATION	4	All banks and inside the channel is overly vegetated	

Connecticut Department of Transportation Bridge Inspection Report BRI-18

CHANNEL CHANGE N FENDER SYSTEM N SPUR DIKES & JETTIES &	BRIDGE #:	0240	04	INSPECTION DATE:	5/18/2019
FENDER SYSTEM N SPUR DIKES 4 JETTIES N RIPRAP N 82. CULVERTS & RETAINING MALL BATING BARREL N CONCRETE N STEEL N TIMBER N HEADWALL N DEBRIS N RETAINING WALL STEM N FOOTING N RETAINING WALL STEM N FOOTING N APPROACH CONDITION BATING APPROACH SLAB N RELIEF JOINTS N APPROACH GUIDE RAIL APPROACH GUIDE RAIL APPROACH EMBANKMENT N APPROACH EMBANKMENT N RAFFIC SAFETY FEATURES: BRIDGE RAILINGS S EXHIbit rust at the connections with facial beams. TRANSTIONS APPR GUARDRAILS S GUIderails are missing bolt and nusts in connections. APPR GUARDRAILS S GUIderails are missing bolt and nusts in connections. APPR GUARDRAILS S GUIderails are missing bolt and nusts in connections. APPR GUARDRAILS S GUIderails are missing bolt and nusts in connections. APPR GUARDRAILS S GUIderails are missing bolt and nusts in connections. APPR GUARDRAILS S GUIderails are missing bolt and nusts in connections. APPR GUARDRAILS S SINGLE UNIT (TONS) N H S (TONS) N H S (TONS) N L LEGIBILITY N LEGIBILITY N	CHANNEL CI	HANGE	N		
SPUR DIKES & JETTIES N RIP RAP N 62. CULVERTS & RETAINING WALL RATING BARREL N CONCRETE N STEEL N TIMBER N HEADWALL N CUTOFF WALL N DEBRIS N RETAINING WALL STEM N FOOTING N APPROACH CONDITION RATING APPROACH SIDE RAIL S APPROACH GUIDE RAIL S APPROACH PAVEMENT G APPROACH BANKMENT N RAFFIC SAFETY FEATURES: BRIDGE RAILINGS S TRANSITIONS S APPROACH GUARDRAILS S TRANSITIONS S APPROACH GUARDRAILS S TRANSITIONS S APPROACH GUARDRAILS S TRANSITIONS S TRANSITIONS S APPROACH GUARDRAILS S APPROACH GUARDRAILS S APPROACH GUARDRAILS S APPROACH GUARDRAILS S TRANSITIONS S APPROACH GUARDRAILS S APPR	FENDER S	YSTEM	16.00		
RIP RAP N 62. CULVERTS & RETAINING WALL RATING BARREL N CONCRETE N STEEL N TIMBER N HEADWALL N DEBRIS N RETAINING WALL STEM N FOOTING N APPROACH CONDITION APPROACH GUIDE RAIL S APPROACH GUIDE RAIL S APPROACH AUGUST RAIL S APPROACH PAVEMENT APPROACH EMBANKMENT N N RATING APPROACH EMBANKMENT N N RAFFIC SAFETY FEATURES BRIDGE RAILINGS S BRIDGE RAILINGS S BRIDGE RAILINGS S Guiderails are missing boil and nusts in connections. APPROACH GUARDRAILS S GUIDERIS N APPROACH GUARDRAILS S GUIDERIS N APPROACH GUIDERAIL S GUIDERIS N APPROACH EMBANKMENT N N RAFFIC SAFETY FEATURES BRIDGE RAILINGS S GUIDERIS RAILI	SPUR DIKES & J	ETTIES			
S2. CULVERTS & RETAINING WALE RATING BARREL N CONCRETE N STEEL					
RATING BARREL N CONCRETE N STEEL STEEL N STEEL STEEL N STEEL STEEL S STEEL N STEEL STEEL S STEEL N STEEL S STEEL N STEEL S STEEL N STEEL S STE					
BARREL N. CONCRETE N. TIMBER N. HEADWALL N. CUTOFF WALL N. DEBRIS N. RETAINING WALL STEM N. FOOTING N. APPROACH CONDITION RATING APPROACH SLAB N. RELIEF JOINTS N. APPROACH GUIDE RAIL APPROACH BUIDE RAIL APPROACH EMBANKMENT N. APPROACH EMBANKMENT N. TRAFFIC SAFETY FEATURES: BRIDGE RAILINGS TRANSITIONS APPROACH GUARDRALLS S Guiderails are missing bolt and nusts in connections. APPROACH GUARDRALLS S Guiderails are missing bolt and nusts in connections. APPROACH GUARDRALLS S Guiderails are missing bolt and nusts in connections. APPROACH GUARDRALLS S Guiderails are missing bolt and nusts in connections. APPROACH GUARDRALLS S Guiderails are missing bolt and nusts in connections. APPROACH GUARDRALLS S Guiderails are missing bolt and nusts in connections. APPROACH GUARDRALLS S GUIDERAIL	62. CULVERTS & RETA		*****	OVERAL	L RATING N
STEEL N TIMBER N HEADWALL N CUTOFF WALL N DEBRIS N RETAINING WALL STEM N FOOTING N APPROACH CONDITION RATING APPROACH SUIDE RAIL 5 APPROACH GUIDE RAIL 5 APPROACH PAVEMENT 6 APPROACH EMBANKMENT N IRAFFIC SAFETY FEATURES: BRIDGE RAILINGS 5 EXHIBIT RUSS S APPROACH GUARDRAILE S APPROACH GUARDRAILE S APPROACH GUARDRAILE S SINGLE UNIT (TONS) APPROACH GUARDRAILE S SINGLE UNIT (TONS)	В				
TIMBER N HEADWALL N HEADWALL N DEBRIS N DEBRIS N RETAINING WALL STEM N FOOTING N APPROACH CONDITION RATING APPROACH SLAB N APPROACH GUIDE RAIL S APPROACH GUIDE RAIL S APPROACH PAVEMENT S APPROACH EMBANKMENT N APPROACH EMBANKMENT N TRAFFIC SAFETY FEATURES: BRIDGE RAILINGS S TRANSITIONS S APPROACH GUIDARDRAILS S Guiderails are missing bolt and nusts in connections. APPROACH GUARDRAILS S APPR GUARDRAIL S SINGLE UNIT (TONS) N APPR GUARDRAIL ENDS S APPR GUARDRAIL ENDS S APPR GUARDRAIL ENDS S APPR GUARDRAIL S SINGLE UNIT (TONS) N ADVANCE WARNING Y/N N LEGIBILITY N LEGIBILITY N	CON	CRETE	N		
HEADWALL IN CUTOFF WALL IN DEBRIS IN RETAINING WALL STEM IN FOOTING IN APPROACH CONDITION RATING APPROACH SLAB IN RELIEF JOINTS IN APPROACH GUIDE RAIL APPROACH BMBANKMENT APPROACH EMBANKMENT IN BRIDGE RAILINGS FIRAFFIC SAFETY FEATURES: BRIDGE RAILINGS TRANSITIONS APPROACH GUARDRAILS APPROACH GUARDRAILS SINGLE UNIT (TONS) IN HS (TONS) IN ADVANCE WARNING Y/N IN LEGIBILITY IN LEGIBILITY IN DVERALL RATING SOVERALL RATING SOVERA		STEEL	N		
CUTOFF WALL N DEBRIS N RETAINING WALL STEM N FOOTING N APPROACH CONDITION RATING APPROACH SLAB N RELIEF JOINTS N APPROACH GUIDE RAIL 5 APPROACH PAVEMENT 6 Approach slab is satsifactory condition with minor longitudinal cracking. APPROACH EMBANKMENT N TRAFFIC SAFETY FEATURES: BRIDGE RAILINGS 5 Exhibit rust at the connections with facial beams. TRANSITIONS APPROACH GUARDRAILS 5 Guiderails look entact but there are boilt and nusts missing almost in every piece connections. APPROACH EMBANKMENT N TRAFFIC SAFETY FEATURES: BRIDGE RAILINGS 5 Exhibit rust at the connections with facial beams. TRANSITIONS APPR. GUARDRAILS 5 APPR. GUARDRAILS 5 Guiderails are missing bolt and nusts in connections. APPROACH GUIDE RAIL 5 APPROACH EMBANKMENT N LOAD POSTING SINGLE UNIT (TONS) N APPROACH GUIDE RAIL 5 APPROACH GUIDE RAIL 5 GUIDERAIL 5 GUIDERA					
DEBRIS N RETAINING WALL STEM N FOOTING N APPROACH CONDITION RATING APPROACH SLAB N RELIEF JOINTS N APPROACH GUIDE RAIL 5 Guiderails look entact but there are bolt and nusts missing almost in every piece connections. APPROACH EMBANKMENT N APPROACH EMBANKMENT N IRAFFIC SAFETY FEATURES: BRIDGE RAILINGS 5 Exhibit rust at the connections with facial beams. TRANSITIONS					
RETAINING WALL STEM N FOOTING N OVERALL RATING S APPROACH CONDITION RATING APPROACH SLAB N Guiderails look entact but there are bolt and nusts missing almost in every piece connections. APPROACH GUIDE RAIL 5 Guiderails look entact but there are bolt and nusts missing almost in every piece connections. APPROACH EMBANKMENT N TRAFFIC SAFETY FEATURES: BRIDGE RAILINGS 5 Exhibit rust at the connections with facial beams. APPROACH GUARDRAILS 5 Guiderails are missing bolt and nusts in connections. APPROACH EMBANKMENT N Guiderails are missing bolt and nusts in connections. APPROACH GUARDRAIL S 5 Guiderails are missing bolt and nusts in connections. APPROACH EMBANKMENT N Guiderails are missing bolt and nusts in connections. APPROACH GUIDERAIL S 5 Guiderails are missing bolt and nusts in connections. APPROACH EMBANKMENT N GUIDERAIL S 5 Guiderails are missing bolt and nusts in connections. APPROACH GUIDERAIL S 5 Guiderails are missing bolt and nusts in connections. APPROACH GUIDERAIL S 5 Guiderails are missing bolt and nusts in connections. APPROACH GUIDERAIL S 5 Guiderails are missing bolt and nusts in connections. APPROACH GUIDERAIL S 5 Guiderails are missing bolt and nusts in connections. APPROACH GUIDERAIL S 5 Guiderails are missing bolt and nusts in connections. APPROACH GUIDERAIL S 5 Guiderails are missing bolt and nusts in connections.			Cz 81		
APPROACH CONDITION APPROACH SLAB RELIEF JOINTS APPROACH GUIDE RAIL APPROACH PAVEMENT APPROACH EMBANKMENT APPROACH EMBANKMENT N IRAFFIC SAFETY FEATURES: BRIDGE RAILINGS TRANSITIONS APPROACH GUARDRAILS APPROACH GUARDRAILS S SINGLE UNIT (TONS) H S (TONS) ADVANCE WARNING YN LEGIBILITY N OVERALL RATING S OVERALL RATING S CALL RATING S OVERALL RATING S QUARTING APPROACH GUARTING APPROACH GUARTING G GUIderails look entact but there are bolt and nusts missing almost in every piece connections. APPROACH GUARTING G GUIderails look entact but there are bolt and nusts missing almost in every piece connections. APPROACH GUARTING G GUIderails look entact but there are bolt and nusts missing almost in every piece connections. APPROACH GUARTING G GUIderails are missing bolt and nusts in connections. APPROACH GUARTING G G G G G G G G G G G G			N		
APPROACH CONDITION RATING APPROACH SLAB N RELIEF JOINTS N APPROACH GUIDE RAIL APPROACH PAVEMENT APPROACH EMBANKMENT APPROACH EMBANKMENT APPROACH EMBANKMENT TRAFFIC SAFETY FEATURES: BRIDGE RAILINGS TRANSITIONS APPROACH GUARDRAILS APPROACH GUARDRAILS APPROACH GUARDRAILS APPROACH GUARDRAILS S Guiderails are missing bolt and nusts in connections. APPROACH GUARDRAIL ENDS S SINGLE UNIT (TONS) HS (TONS) HS (TONS) ADVANCE WARNING YIN LEGIBILITY N LEGIBILITY N			-		
APPROACH GUIDE RAIL APPROACH EMBANKMENT APPROACH EMBANKMENT APPROACH GUIDE RAIL APPROACH EMBANKMENT APPROACH EMBANKMENT APPROACH EMBANKMENT BRIDGE RAILINGS TRANSITIONS APPROACH GUARDRAILS SO Guiderails look entact but there are bolt and nusts missing almost in every piece connections. APPROACH EMBANKMENT IN BRIDGE RAILINGS SO Guiderails are missing bolt and nusts in connections. APPROACH GUARDRAILS APPROACH GUARDRAILS SO Guiderails are missing bolt and nusts in connections. APPROACH GUARDRAIL ENDS SINGLE UNIT (TONS) HS (TONS) AVAILE (TONS) ADVANCE WARNING Y/N LEGIBILITY NI CHARLES SO GUIDERAIL RAING SO GUIDERAIL RAING SO GUIDERAIL RAING APPROACH GUARDRAIL ENDS APPROACH GUARDRAIL ENDS SO GUIDERAIL RAING APPROACH GUARDRAIL ENDS APPR	FO	OTING	N		
APPROACH SLAB N RELIEF JOINTS N APPROACH GUIDE RAIL APPROACH PAVEMENT APPROACH EMBANKMENT APPROACH EMBANKMENT APPROACH EMBANKMENT APPROACH EMBANKMENT BRIDGE RAILINGS BRIDGE RAILINGS APPROACH GUARDRAILS APPROACH GUARDRAILS APPROACH GUARDRAILS BRIDGE RAILINGS S Guiderails are missing bolt and nusts in connections. APPROACH GUARDRAILS APPROACH GUARDRAILS S SINGLE UNIT (TONS) HS (TONS) HS (TONS) ADVANCE WARNING Y/N ADVANCE WARNING Y/N LEGIBILITY N LEGIBILITY N APPROACH SLIBS BRIDGE CONTENT (TONS) APPROACH GUARDRAILS APP	APPROACH CONDITIO	N		OVERAL	L RATING 5
RELIEF JOINTS N APPROACH GUIDE RAIL 5 Guiderails look entact but there are bolt and nusts missing almost in every piece connections. APPROACH PAVEMENT 6 Approach slab is satisfactory condition with minor longitudinal cracking. APPROACH EMBANKMENT N IRAFFIC SAFETY FEATURES: BRIDGE RAILINGS 5 Exhibit rust at the connections with facial beams. TRANSITIONS APPROACH GUARDRAILS 5 Guiderails are missing bolt and nusts in connections. APPR. GUARDRAIL ENDS 5 SINGLE UNIT (TONS) N HS (TONS) N 4 AXLE (TONS) N 253 (TONS) N ADVANCE WARNING Y/N N LEGIBILITY N	45555461	_			
APPROACH GUIDE RAIL 5 Guiderails look entact but there are bolt and nusts missing almost in every piece connections. APPROACH PAVEMENT 6 Approach slab is satsifactory condition with minor longitudinal cracking. APPROACH EMBANKMENT N TRAFFIC SAFETY FEATURES: BRIDGE RAILINGS 5 Exhibit rust at the connections with facial beams. TRANSITIONS APPROACH GUARDRAILS 5 Guiderails are missing bolt and nusts in connections. APPR. GUARDRAIL ENDS 5 SINGLE UNIT (TONS) HS (TONS) A AXLE (TONS) 2S3 (TONS) ADVANCE WARNING Y/N LEGIBILITY N Connections with facial beams. Exhibit rust at the connections with facial beams. APPROACH GUARDRAILS 5 Guiderails are missing bolt and nusts in connections. APPROACH GUARDRAILS 5 GUIDERAIL RUST RUST RUST RUST RUST RUST RUST RUST					
APPROACH PAVEMENT APPROACH EMBANKMENT APPROACH EMBANKMENT IRAFFIC SAFETY FEATURES: BRIDGE RAILINGS TRANSITIONS APPROACH GUARDRAILS APPROACH GUARDRAILS APPROACH GUARDRAIL ENDS SINGLE UNIT (TONS) HS (TONS) A AXLE (TONS) ADVANCE WARNING Y/N LEGIBILITY IN APPROACH EMBANKMENT APPROACH PAVEMENT BAPPROACH Satisfactory condition with minor longitudinal cracking. Approach slab is satsifactory condition with minor longitudinal cracking. Exhibit rust at the connections with facial beams. Connections Exhibit rust at the connections with facial beams. Connections APPROACH GUARDRAILS APPROACH GUARDRAIL	RELIEF J	IOINTS	N		
APPROACH EMBANKMENT ITAFFIC SAFETY FEATURES: BRIDGE RAILINGS TRANSITIONS APPROACH GUARDRAILS APPR. GUARDRAIL ENDS SINGLE UNIT (TONS) HS (TONS) A AXLE (TONS) ADVANCE WARNING Y/N LEGIBILITY N Exhibit rust at the connections with facial beams. Connections. Exhibit rust at the connections with facial beams. Connections. Exhibit rust at the connections with facial beams. Connections. Single unit (Tons) A AXLE (TONS) ADVANCE WARNING Y/N LEGIBILITY N	APPROACH GUID	E RAIL	5	Guiderails look entact but there are bolt and nusts missing almost in every piece cor	nections.
BRIDGE RAILINGS 5 Exhibit rust at the connections with facial beams. TRANSITIONS APPROACH GUARDRAILS 5 Guiderails are missing bolt and nusts in connections. APPR. GUARDRAIL ENDS 5 SINGLE UNIT (TONS) HS (TONS) 4 AXLE (TONS) ADVANCE WARNING Y/N LEGIBILITY N Exhibit rust at the connections with facial beams. Exhibit ru	APPROACH PAVE	EMENT	6	Approach slab is satsifactory condition with minor longitudinal cracking.	
BRIDGE RAILINGS 5 Exhibit rust at the connections with facial beams. TRANSITIONS COUNTY TO STAND STAN	APPROACH EMBANK	MENT	N		
TRANSITIONS APPROACH GUARDRAILS Guiderails are missing bolt and nusts in connections. APPR. GUARDRAIL ENDS SINGLE UNIT (TONS) HS (TONS) 4 AXLE (TONS) 2S3 (TONS) ADVANCE WARNING Y/N LEGIBILITY N Guiderails are missing bolt and nusts in connections. APPR. Guardrails Subject to the connections with racial pearlis. Guiderails are missing bolt and nusts in connections. APPR. Guardrails APPR. Guardrails APPR. Guardrails APPR. Guardrails Subject to the connections with racial pearlis. APPR. Guardrails APPR. Guardra	TRAFFIC SAFETY FEAT	TURES:			
APPROACH GUARDRAILS 5 Guiderails are missing bolt and nusts in connections. APPR. GUARDRAIL ENDS 5 SOLUTION SO	BRIDGE RAI	ILINGS	5	Exhibit rust at the connections with facial beams.	
APPR. GUARDRAIL ENDS 5 COAD POSTING SINGLE UNIT (TONS) N HS (TONS) N STORE TO THE CHIRCH THASE IT CONTRICTIONS. HS (TONS) N STORE TO THE CHIRCH THASE IT CONTRICTIONS. A AXLE (TONS) N STORE TO THE CHIRCH THASE IT CONTRICTIONS. ADVANCE WARNING Y/N N STORE TO THE CHIRCH THASE IT CONTRICTIONS. ADVANCE WARNING Y/N N STORE TO THE CHIRCH THASE IT CONTRICTIONS.	TRANSI	TIONS			
COAD POSTING	APPROACH GUARD	RAILS	5	Guiderails are missing bolt and nusts in connections.	
SINGLE UNIT (TONS)	APPR. GUARDRAIL	ENDS	5		
HS (TONS)	LOAD POSTING				
HS (TONS)	SINGLE UNIT (1	TONS)	וחו		
4 AXLE (TONS) N 2S3 (TONS) N ADVANCE WARNING Y/N N LEGIBILITY N 1					
2S3 (TONS) N ADVANCE WARNING Y/N N LEGIBILITY N					
ADVANCE WARNING Y/N N LEGIBILITY N			- 12		
LEGIBILITY N			- 14		
	LEGIE	BILITY	- 2		

Connecticut Department of Transportation Bridge Inspection Report BRI-18

BRIDGE #: 024	004	INSPECT	TION DAT	E:	5/18/2019
MISC.					
MIN VERT. UNDERCLR.	<u>"</u> "				
POSTED CLR UNDER BRIDGE	E ' "				
POSTED CLR UNIT (TONS)					
ADVANCE WARNING (Y/N)					
SPEED LIMIT (IF ANY)	МР Н				
CHARACTER OF TRAFFIC					
ADDITIONAL NOTES		•			
		9			
ADDITIONAL COMMENTS:					
Bridge is open to trafic					
Inspectors' Signatures:	1)		DATE:	//	
	2)		DATE:		
	3)		DATE:		
	4)		DATE:	//	
P.E. Signature: P.E. #:			DATE:		
Reviewed by:		СДОТ	DATE:		

91) Frequency Class	Access Flagman	FLAG ECTIONS Date	KED	4 0 6		<u>ي</u>	0 0							0 ft		#	OS		II.	¢= ¢=	Ref				
Date Inspection Team		CRITICAL FEATURE INSPECTIONS Type Frequency Team Date		AGE AND SERVICE] [B) Under	0 2 B) Under 400	1890	90	- GEOMETRIC DATA -	17.5 ft	21 ft	n o	20 ft B) Right	NATS	21 ft	420 sqft	deg	9999 ft in	n 20.4 ft	fi second	#	BRIDGE COMMENTS		
NNECTICUT 90) Inspection Date	Indepth Insp	EVALUATION BRI-19 REV 10/00	Fracture:	27) Vear Built	Service:	A) On 28) Number of Lanes:	A) On 29) Average Daily Traffic	109) Percent Truck	19) Bypass, Detour Length		48) Length of Max Span	49) Structure Length	5	sc A) Left ft f	52) Deck Width, Out-Out	32) Approach Roadway Width	Deck Area	34) Skew Angle	35) Structure Flared 10) Inv. Rte. Min. Vert Clearance	47) Log Inv. Rte. Total Horiz Cir.: 47)Rlog Inv. Rte. Total Horiz, Clr.:	53) Min Vert Clearance Over Bridge 54) Min Vert Under Clearance	55) Min Lat Under Clearance on Right	oo) wiii rat Olidel Olealailde off reit		
STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION		STRUCTURE EVALUATION SHEET 1 0F 2 FORM BRI-19 REV 10/00	SHEET OF		1 3 8 1 0	ber ==== 1 9 8	Suffix							min . sec		B) Percent Responsibility N %			AL	e 02					
	& Nertil Semani	16	3y: Date:	IDENTIFICATION	Town Code	D) Route Number	E) Directional Suffix	Un-named stream	Road		0.92 Mi West of Route 198			sec - deg		B) Percent			STRUCTURE TYPE AND MATERIAL	B) Design Type	B) Design Type	001	9	\$ 0	0
Bridge Number 024004	Inspected By: Seb. Abdullah	Sufficiency Rating 39.57% Previous Inspection Date 10/26/2016	BS&E Received Data Entry By: Copies Data Entry Date:	Bridge Name Bedlam Road Bridge	Town Name Chaplin	a) inventory route. A) Record Type	0.01	6) Feature Intersected Un-nam	7) Facility Carried Bedlam Road		9) Location 0.92 MI		t 0.92 N	16) Latitude 41 deg 46 min 40 sec 17) Longitude -72 deg 8 min 55 sec	:eß	A) State Code R) Border Town Name N		99) Border Bridge Structure No	STRUCI	3)Structure Type, Main: A) Material 02	F-	of Spans, Main Unit	all også	08) Wearing Surface/Protective System: A) Type of Wearing Surface B) Type of Membrane	C) Type of Deck Protection

	CLASSIFICATION		
112) NBIS Bridge Length	Z	STRUCTURE EVALUATION	Der
26) Functional Class		SHEET <u>2</u> OF <u>2</u> FORM BRI-19 REV 10/00	Town Name Chaplin
100) Defense Highway	╌	SHEET OF (INSP. REPORT)	Feature Crossed Ben
101) Parallel Structure	Z		
103) Temporary Structure		INSPECTED BY: _EDWARD SCOVILLE P.E.	пį
110) Designed National Networ	0		
20) ron 21) Maintain		51) Design Load 63) Operation Pating Type	Evaluation Code 0
22) Owner	+	01 000	
Report Class		65) Inventory Rating Type 5	S
37) Historical Significance	4	66) Inventory Rating	
	STRUCTURE TYPE AND MATERIAL	CONDITION	1
Drainage Basin Code		Rating	By
38) Navigation Control		58) Deck	6 SA 67) Structure Evaluation 4 SA
39) Navigation Vert Cfr.	40) Navigation Horiz Clr.	59) Superstructure	_
116) Vert-Lift Brg Nav Min		60) Substructure	3 SA 69) Under Clear Vert & Horiz
111) Pier Abutment Protection		61) Channel & Chan. Protection	71) Waterway Adequacy
		- 62) Culverts	N SA 72) Approach Rdwy Alignment 5 SA
75A) Type of Work Proposed			
75B) Work Done By		Items 58 Thru 72 Checked By:	Seb. Abdullah
76) Length of Struct. Improvement	ft	Ħ	
94) Bridge Improvement Cost		36) Traffic Safety Features:	
95) Roadway Improvement Cost		A) Bridge Railings	S
96) Total Project Cost		B) Transitions	9
97) Year of Improvement Cost Est.		C) Approach Guardrail	9
114) Future ADT	Total Title And	D) Approach Guradrail End	2
List No. 🐑 Project No.	Advertised POSTED SIGNS & LITTLITIES		OTHER FEATURES
Other Posted Signs 1		Fence Required	Barrel Ladder
Other Posted Signs 2		Fence Present	Stand Pipes
Actual P.L. Single Unit Truck	tons Actual P.L. 4Axle Truck	Fence Height	ft Cat Walks
Rec. P.L. Single Unit Truck	tons Rec. P.L. 4Axle Truck tons	Fence Type	Movable inspection System
Actual P.L. Semi-Trailer Truck	tons Actual P.L. 3S2 Truck tons	Fence Material	Loose Concrete Checked?
Rec. P.L. Semi-Trailer Truck	tons Rec. P.L. 3S2 Truck tons	Fence Top Type	
Rec. P.L. All Vehicles	tons Actual P.L. All Vehicles tons		INSPECTION FEATURES
Posted Vert Clearance On Bridge	ft ft	Proposed Next Indepth Insp Year	
Posted Vert UnderClearance	ft in		
Posted Speed Limit	hdm		
Jtility	コ		
Jtility		REVIEWED BY	Date

APPENDIX B Photographs



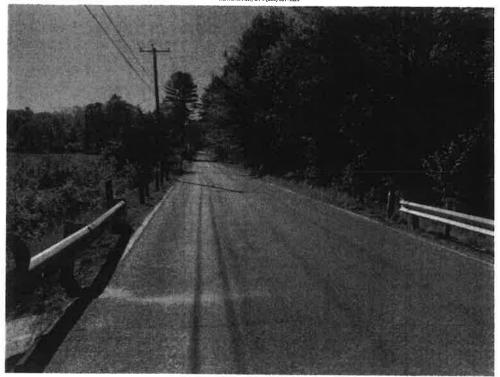


Photo 1 - East Approach to Bridge (Facing West)

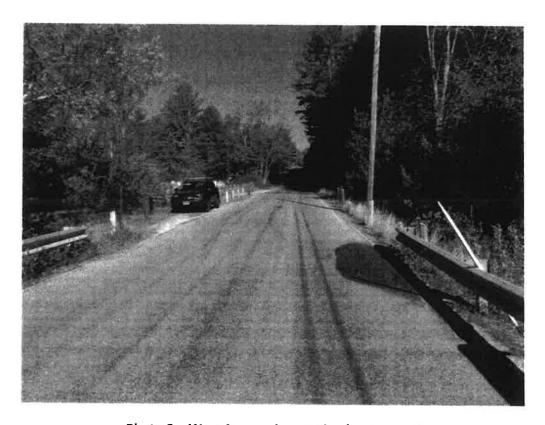


Photo 2 – West Approach to Bridge (Facing East)

BEDLAM ROAD BRIDGE OVER STREAM - BRIDGE NO. 024004





Photo 3 – West Abutment

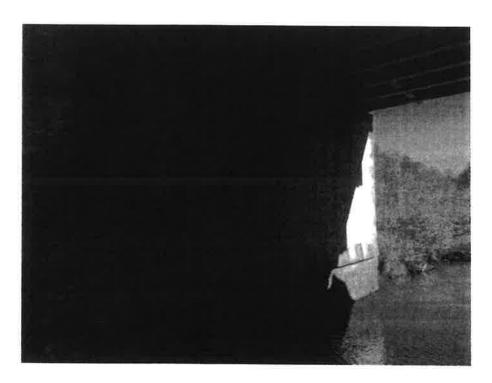


Photo 4 – East Abutment



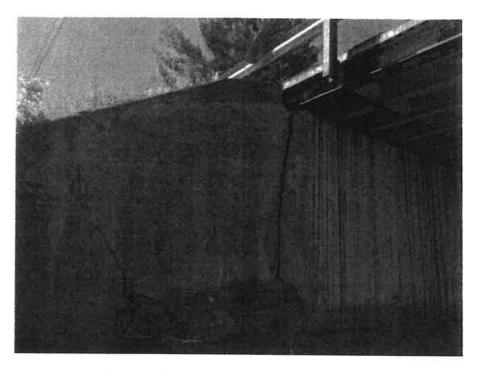


Photo 5 – Northwest Corner/West Abutment Large Vertical Crack and Tilted Wingwall

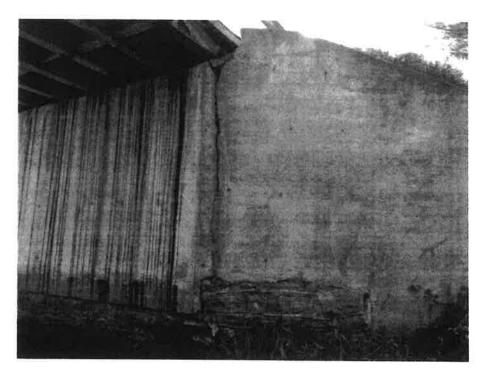


Photo 6 – Southwest Corner/West Abutment Large Vertical Crack and Missing Stones

BEDLAM ROAD BRIDGE OVER STREAM - BRIDGE NO. 024004



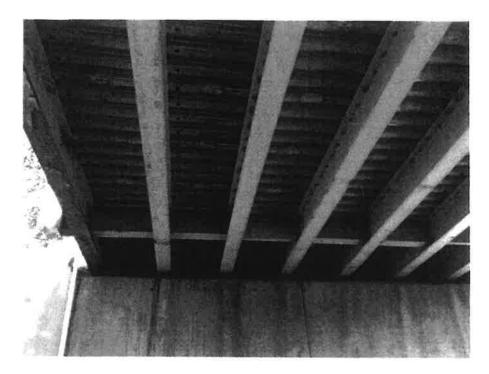


Photo 7 – Under the Bridge, Rusted Exterior Beam

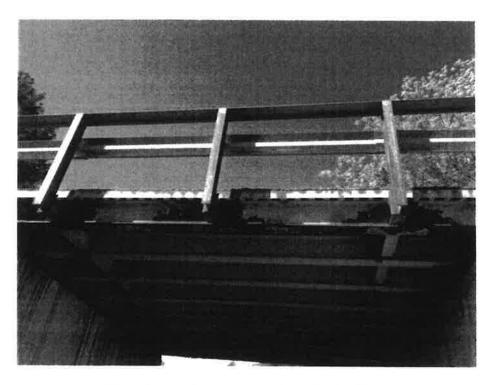


Photo 8 – Upstream Fac, Rusted Exterior Beam





Photo 9 – Downstream Face (Looking Upstream)



Photo 10 – Upstream Face (Looking Downstream)

BEDLAM ROAD BRIDGE OVER STREAM - BRIDGE NO. 024004





Photo 11 – Northeast Corner, Large vertical crack in the wingwall

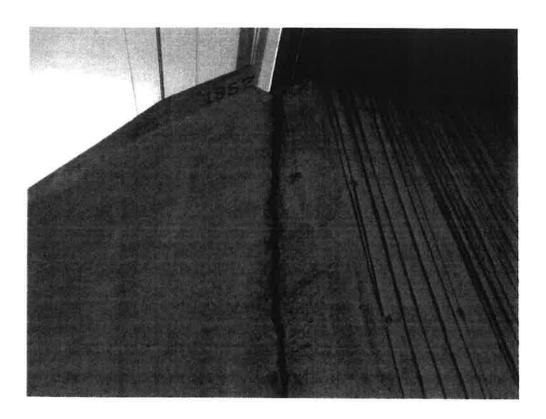


Photo 12 - Northwest Corner, Large crack and demolished top of wall





Photo 13 – Guiderails Missing Bolts at Joints



Photo 14 – Guiderails Missing Bolts at Joints





Photo 15 – Downstream (Looking from Top of Bridge)

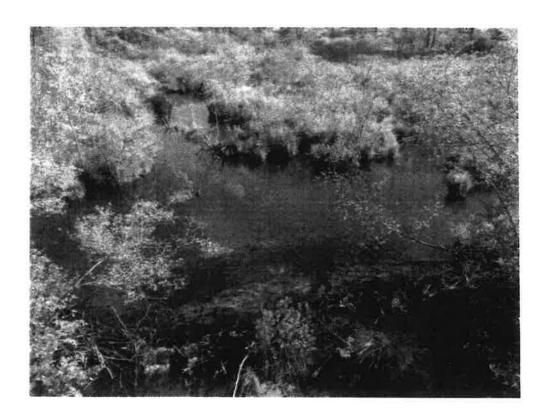


Photo 16 – Upstream (Looking from Top of Bridge)
BEDLAM ROAD BRIDGE OVER STREAM - BRIDGE NO. 024004

APPENDIX D Location Map



LOCATION MAP Bedlam Rd aediam Rd Roomer's Garage 6 Bats of Bedlam BRIDGE NO. 024004

FEATURE CARRIED: BEDLAM ROAD

FEATURE CROSSED: STREAM

TOWN: CHAPLIN, CT

APPENDIX E Existing Plans

