STR 11996	BRIDGE SAFETY INS			
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
STOEFLET ROAD	42.09 / -83.1914	824263600006B04	Fair Condition(5)	
Feature	Length / Width / Spans	Owner		
E GIBRALTAR WATERWAY	26.9 / 37.7 / 1	City: GIBRALTAR(2636)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
GIBRALTAR, W/BAYVIEW	1992 / / /	Taylor(25)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
Metro(7) / Wayne(82)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple	08/02/2023 / GBW2	5 Stable w/in footing	

NBI INSPECTION					
Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date		
Joel Thorne	Great Lakes Engineering Group	24	08/02/2023		

# **GENERAL NOTES**

Apply for PM work.

DECK				
	08/19	08/21	08/23	
1. Surface (SIA-58A)	6	5	5	Concrete surface with 3 full length longitudinal cracks. Along centerline, 12" wide HMA patch along full length of bridge. At midspan, 6"-12" wide full width HMA patch. At east end 12" wide full width HMA patch. (08/23)  Concrete surface. Along centerline 12" wide HMA patch along full length of bridge. At midspan, 6"-12" wide full width HMA patch. At east end 12" wide full width HMA patch. (08/21)  Cracks and spalls at centerline at midspan are patched and sealed, patches are beginning to fail. Spall in east bound lane at east abutment is open. Spalls in west bound lane near the north side walk. (08/19)
2. Expansion Joints	N	N	N	(08/23) (08/21) (08/19)
3. Other Joints	6	4	4	End joints are covered with HMA patch. (08/23) End joints are covered with HMA patch. (08/21) Joints are sealed. (08/19)
4. Railings	6	6	6	Concrete parapet railing. Hairline vertical cracks in both parapets. South railing: West end of parapet has 1sft map cracking and spalling (8 in x 6 in x 2 in pen). Cracked weld at the SE metal rail to base plate connection. North railing: Metal railing base plate at NE end has 1 of 4 nuts missing. The nuts were generally poorly tightened on the metal railings. (08/23) Concrete parapet railing. Hairline vertical cracks in both parapets. West end of south parapet has 1sft map cracking and spalling (8 in x 6 in x 2 in pen). Metal railing base plate at NE end has 1 of 4 nuts missing. The nuts were generally poorly tightened on the metal railings. Cracked weld at the SE metal rail to base plate connection. (08/21) Hairline vertical cracks in both parapets. West end of south parapet has 1 sq. ft. area of heavy 1/16 in. map cracking and spalling (8 in x 6 in x 2 in pen). Metal railing base plate at NE end has 1 of 4 nuts missing. The nuts were generally poorly tightened on the metal railings. Cracked weld at the SE metal rail to base plate connection. (08/19)
5. Sidewalks or Curbs	7	7	7	Concrete sidewalks along both sides with newer sections at reference lines. Incipient spall in SW sidewalk section. (08/23) Concrete sidewalks along both sides with newer sections at reference lines. (08/21) Sidewalks have been repaired. (08/19)
6. Deck Bottom Surface (SIA-58B)	8	N	N	Side by side box beams. Efflorescence noted along all joints at abutments. (08/23) Side by side box beams (08/21) Bottom of girders are in good condition. (08/19)

STR 11996				BRIDGE SAFETY INSI	PECTION REPORT	
Facility STOEFLET ROAD 42 Feature E GIBRALTAR WATERWAY Location Bu GIBRALTAR, W/BAYVIEW 19 Region / County Metro(7) / Wayne(82) 5 F			42.09 Lengt 26.9 Built 1992 Mater 5 Pres	th / Width / Spans / 37.7 / 1 / Recon. / Paint / Ovly. / / / rial / Design stressed Concrete / 05 m/Gird- Multiple	MDOT Structure ID 824263600006B04 Owner City: GIBRALTAR(2636) TSC Taylor(25) Last NBI Inspection 08/02/2023 / GBW2	Structure Condition Fair Condition(5)  Operational Status A Open, no restriction(A) Scour Evaluation 5 Stable w/in footing
7. Deck (SIA-58)	6	5	5	wide HMA patch along full east end 12" wide full width Deck bottom: Side by side Fascias: South fascia has Surface: Concrete surface	length of bridge. At midspan HMA patch. box beams. Efflorescence a 1sft delamination. (08/23 b. Along centerline 12" wide II width HMA patch. At eas ams. a 1sft delamination. (08/21	e HMA patch along full length of bridge. st end 12" wide full width HMA patch.
8. Drainage				(08/23) (08/21) (08/19)		
SUPERSTRUCT	URE					
	08/19	08/21	08/23			
9. Stringer (SIA-59)	7	7	6	beam, 4 inches from the be 2S, 6S, and 10S. All other loose grout. Beams 6S an Side by side box beams. It beam, 4 inches from the be 2S, 6S, and 10S. Joint 10: length of beam. (08/21) Horizontal hairline crack ex	ottom. Efflorescence obser joints have efflorescence jud 7S have hairline cracks a Horizontal hairline crack extottom. Efflorescence obser S has loose grout. Beams attending the full length of the moderate efflorescence of	tending the full length of the north fascia rived along the span length at grout joints ust at the abutments. Joint 10S has along length of beam. (08/23) tending the full length of the north fascia rived along the span length at grout joints 6S and 7S have hairline cracks along the north fascia beam, 4 inches from the observed along the span length at box 3)
10. Paint (SIA-59A)	N	N	N	(08/23) (08/21) (08/19)		
11. Section Loss	N	N	3	Longitudinal cracks at ender (08/21) (08/19)	s of beams 6S and 7S. (08/	/23)
12. Bearings	6	6	6	west abutment. (08/23) Damaged and displaced el west abutment. (08/21)	lastomeric pad at the 3rd at	nd 4th box beams from the north at the nd 4th box beams from the north at the nd 4th box beams from the north at the
SUBSTRUCTUR	E					
	08/19	08/21	08/23			
13. Abutments (SIA-60)	6	6	6	cracked and not functioning. The slab above this area he corrosion staining in east a concrete walls below the wear was to the steel sheet pile cracked and not functioning. The slab above this area he corrosion staining in east a Moderate corrosion and dethe ground line. The drain of loss of backfill through the	g with evidence of loss of blas settled 3 inches. (2) verified that the settled 3 inches. (2) verified that the ground g with evidence of loss of blas settled 3 inches. (2) verified that the NE wingwall was craft that the NE wingwall was craft the NE wingwall was craft that the NE wingwa	d line. The drain at the NE wingwall was backfill through the hole (up to 6 in pen). In tical cracks with efflorescence and tion noted light scaling up to 1/2" deep in d line. The drain at the NE wingwall was backfill through the hole (up to 6 in pen). In tical cracks with efflorescence and like on the steel sheet pile wingwalls near backed and not functioning with evidence he slab above this area has settled 3 is no further change in 2019. (2) vertical last abutment. (08/19)

STR 11996				BRIDGE SAFETY INS	SPECTION REPORT			
Facility STOEFLET ROAD Feature E GIBRALTAR WATERWAY Location GIBRALTAR, W/BAYVIEW Region / County Metro(7) / Wayne(82)			42.09 Leng 26.9 Built 1992 Mate 5 Pre	erial / Design estressed Concrete / 05	MDOT Structure ID 824263600006B04 Owner City: GIBRALTAR(2636) TSC Taylor(25) Last NBI Inspection 08/02/2023 / GBW2	Structure Condition Fair Condition(5)  Operational Status A Open, no restriction(A) Scour Evaluation 5 Stable w/in footing		
14. Piers	N	N	Box I	Bm/Gird- Multiple (08/23)				
(SIA-60)				(08/21) (08/19)				
15. Slope Protection	N	N	N	(08/23) (08/21) Not used as structure cro	sses waterway. (08/19)			
16. Channel (SIA-61)	8	8	8	Flow north to south. Waterway is open. Retaining walls at NW, SE, and SW quadrants, and embankment with riprap at the NE quadrant. (08/23) Waterway is open. Retaining walls at NW, SE, and SW quadrants, and embankment with riprap at the NE quadrant. (08/21) Waterway is open. Private property retaining walls at NW, SE, and SW quadrants, and embankment with 1 ft. diameter rip rap at the NE quadrant. (08/19)				
17. Scour Inspection	8	8	8	2021 UW inspection found no footing exposure or undermining along the abutments. (08/23 See 2021 UW inspection (08/21) Probed from boat. No scour observed. (08/19)				
APPROACH								
	08/19	08/21	08/23	<b>,</b>				
18. Approach Pavement	6		6	corners. (08/23) HMA with sealed cracks, HMA patching at reference	sealant beginning to fail. The lines. (08/21) tched and the patches are be	ne west approach has HMA wedges at ne west approach has settled 2"-5". eginning to fail. The west approach has		
19. Approach Shoulders Sidewalks	6	7	7	Concrete approach sidew	alks repaired. 25' of approa	ach sidewalk in each quad. (08/23) ach sidewalk in each quad. (08/21) alt and sidewalks repaired. (08/19)		
20. Approach Slopes				Large, heavy broken pieces of 6 in thick concrete slab. (08/23) Large, heavy broken pieces of 6 in thick concrete slab. No change. (08/21) Large, heavy broken pieces of 6 in thick concrete slab. No change. (08/19)				
21. Utilities				Overhead lines across the channel at 15 feet south of the bridge. (08/23) Overhead lines across the channel at 15 feet south of the bridge. No change. (08/21) Overhead lines across the channel at 15 feet south of the bridge. No change. (08/19)				
22. Drainage Culverts				(08/23) (08/21) NE and NW quadrants ha	ave storm sewer outfalls. No	change. (08/19)		
MISCELLANEOUS	<b>S</b>							
Guard Rail					Other Items			
<u>Item</u>			Rati	<u> </u>	<u>Item</u>	Rating		
36A. Bridge Railing	S		1		71. Water Adequacy	7		
36B. Transitions		1 1		72. Approach Alignment Temporary Support	8 0 No Temporary Supports			
36C. Approach Guardrail 36D. Approach Guardrail Ends		0		Temporary Support High Load Hit (M)	No Temporary Supports     No			
Job. Appidacii Gud	ii di ali Eli	us	U		Special Insp. Equipment Underwater Insp. Method	1 3		
False Decking (Timi	ber) Rem	oved t	o Con	nplete Inspection	N/A - No False Decking			
Critical Feature In	spectio	ns (SI	A-92)		-			
	- F	(01	Fred					

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STR 11996	BRIDGE SAFETY INSPECTION REPORT					
Facility	Latitude	/ Longitude	MDOT Structure ID	Structure Condition	<b>1</b>	
STOEFLET ROAD	42.09 / -	83.1914	824263600006B04	Fair Condition(5)		
Feature	Length /	Width / Spans	Owner			
E GIBRALTAR WATERWAY	26.9 / 37	7.7 / 1	City: GIBRALTAR(2636)			
Location	Built / Re	con. / Paint / Ovly.	TSC	Operational Status		
GIBRALTAR, W/BAYVIEW	, W/BAYVIEW 1992 / / /		Taylor(25)	A Open, no restriction(A)		
Region / County	Material	/ Design	Last NBI Inspection	Scour Evaluation		
Metro(7) / Wayne(82)	5 Prestressed Concrete / 05 Box Bm/Gird- Multiple		08/02/2023 / GBW2	5 Stable w/in footing		
92A. Fracture Critical						
92B. Underwater	60	08/18/2021				
92C. Other Special						
92D. Fatigue Sensitive						

### **STR 11996**

## **BRIDGE SAFETY INSPECTION REPORT**

**Facility** 

STOEFLET ROAD

**Feature** 

E GIBRALTAR WATERWAY

Location

GIBRALTAR, W/BAYVIEW

Region / County

Metro(7) / Wayne(82)

Latitude / Longitude 42.09 / -83.1914 Length / Width / Spans

26.9 / 37.7 / 1

Built / Recon. / Paint / Ovly.

1992 / /

Material / Design

5 Prestressed Concrete / 05 Box Bm/Gird- Multiple

**MDOT Structure ID** 824263600006B04

Owner

City: GIBRALTAR(2636)

**TSC** Taylor(25)

**Last NBI Inspection** 

08/02/2023 / GBW2

**Structure Condition** 

Fair Condition(5)

**Operational Status** 

A Open, no restriction(A)

**Scour Evaluation** 

5 Stable w/in footing

### **SUPPORTING IMAGES**

### GBW2 08/02/2023



Document Name: IMG\_4564.JPG

Category: Elevation Span Number:

Comments: North elevation



Document Name: IMG\_4569.JPG

Category: Elevation Span Number:

Comments: South elevation



Document Name: IMG\_4552.JPG

Category: Approach Span Number:

Comments: Looking west through structure



Document Name: IMG\_4553.JPG

Category: Approach Span Number:

Comments: West approach

### **STR 11996**

# **BRIDGE SAFETY INSPECTION REPORT**

**Facility** 

STOEFLET ROAD

**Feature** 

E GIBRALTAR WATERWAY

Location

GIBRALTAR, W/BAYVIEW

Region / County

Metro(7) / Wayne(82)

**Latitude / Longitude** 42.09 / -83.1914

**Length / Width / Spans** 26.9 / 37.7 / 1

D::!! / D::::: / F

Built / Recon. / Paint / Ovly.

1992 / / /

Material / Design

5 Prestressed Concrete / 05 Box Bm/Gird- Multiple MDOT Structure ID

824263600006B04

Owner

City: GIBRALTAR(2636)

TSC Taylor(25)

**Last NBI Inspection** 

08/02/2023 / GBW2

Structure Condition

Fair Condition(5)

Operational Status

A Open, no restriction(A)

**Scour Evaluation** 

5 Stable w/in footing



Document Name: IMG\_4557.JPG

Category: Approach Span Number:

Comments: East approach



Document Name: IMG\_4559.JPG

Category: Railing Span Number: Comments: South rail



Document Name: IMG\_4562.JPG

Category: Railing Span Number: Comments: North rail



Document Name: IMG\_4555.JPG

Category: Deck Span Number:

Comments: Deck surface

### **STR 11996**

## **BRIDGE SAFETY INSPECTION REPORT**

Facility

STOEFLET ROAD

**Feature** 

E GIBRALTAR WATERWAY

Location

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Latitude / Longitude 42.09 / -83.1914 Length / Width / Spans

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**MDOT Structure ID** 824263600006B04

Owner

City: GIBRALTAR(2636)

TSC Taylor(25)

Last NBI Inspection

08/02/2023 / GBW2

**Structure Condition** 

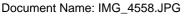
Fair Condition(5)

Operational Status
A Open, no restriction(A)

Scour Evaluation

5 Stable w/in footing





Category: Deck Span Number:

Comments: South sidewalk



Document Name: IMG\_4561.JPG

Category: Deck Span Number:

Comments: North sidewalk



Document Name: IMG\_4554.JPG

Category: Joints Span Number:

Comments: West reference line



Document Name: IMG\_4556.JPG

Category: Joints Span Number:

Comments: East reference line

### STR 11996

## **BRIDGE SAFETY INSPECTION REPORT**

**Facility** STOEFLET ROAD

**Feature** 

E GIBRALTAR WATERWAY

Location

GIBRALTAR, W/BAYVIEW

Region / County

Metro(7) / Wayne(82)

Latitude / Longitude 42.09 / -83.1914 Length / Width / Spans

26.9 / 37.7 / 1

Built / Recon. / Paint / Ovly.

1992 / / / Material / Design

5 Prestressed Concrete / 05 Box Bm/Gird- Multiple

**MDOT Structure ID** 824263600006B04

Owner

City: GIBRALTAR(2636)

**TSC** Taylor(25)

**Last NBI Inspection** 

08/02/2023 / GBW2

**Structure Condition** 

Fair Condition(5)

**Operational Status** 

A Open, no restriction(A)

**Scour Evaluation** 

5 Stable w/in footing



Document Name: IMG\_4567.JPG

Category: Superstructure

Span Number: Comments: Beams



Document Name: IMG\_4568.JPG

Category: Superstructure

Span Number:

Comments: Leakage between beams



Document Name: IMG\_4565.JPG

Category: Substructure

Span Number:

Comments: West abutment



Document Name: IMG\_4566.JPG

Category: Substructure

Span Number:

Comments: East abutment

## STR 11996

# **BRIDGE SAFETY INSPECTION REPORT**

**Facility** 

STOEFLET ROAD

**Feature** 

E GIBRALTAR WATERWAY

Location

GIBRALTAR, W/BAYVIEW

Region / County

Metro(7) / Wayne(82)

Latitude / Longitude 42.09 / -83.1914 Length / Width / Spans

26.9 / 37.7 / 1

Built / Recon. / Paint / Ovly.

1992 / / /

Material / Design

5 Prestressed Concrete / 05 Box Bm/Gird- Multiple

**MDOT Structure ID** 

824263600006B04

Owner

City: GIBRALTAR(2636)

**TSC** Taylor(25)

**Last NBI Inspection** 

08/02/2023 / GBW2

**Structure Condition** 

Fair Condition(5)

**Operational Status** A Open, no restriction(A)

**Scour Evaluation** 

5 Stable w/in footing





Category: Channel Span Number:

Comments: South channel



Document Name: IMG\_4563.JPG

Category: Channel Span Number:

Comments: North channel