Element Inspection			
Element Group:	Abutments	Site Number:	B-018
Element type:	Abutment walls	-	7.3 m
Sub-element:		Height:	1.93 m
Material:	Cast-in-place Concrete	Length:	0 m
Location:	Todat in place concrete	Count:	2
Environment:	Benian	Total Quantity: Not inspected:	28 sqm
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period: Quantity: General Comments:	28 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	

Element Group: Element Name: Element type:	Abutments Wingwalls	Site Number: Width: Height:	B-018 m
Sub-element:		Length:	6 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	23 sqm
Environment:	Moderate	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	23 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:	0	Estimated Cost:	

General Comments:



-				
Element Group:	Accessories (Attachments and Signs)	Site Number:	B-018	
Element Name:	Signs	Width:	0 m	
Element type:		Height:	0 m	
Sub-element:		Length:	0 m	
Material:	Steel	Count:	4	
Location:		Total Quantity:	4 each	
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: 0 Good: Rehab Needs:	4 Fair: 0 Poor: 0	Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0	20		

1				
Element Group:	Approaches	Site Number:	B-018	
Element Name:	Approach slabs	Width:	6.71	m
Element type:		Height:	0	m
Sub-element:		Length:	6.1	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	81	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec:	81 Fair: 0 Poor: 0	Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0			
General Comments:				
		2024	Jun 10 12:25 P	M

Element Group:	Approaches	Site Number:	B-018	
Element Name:	Curbs	Width:	0.54	m
Element type:		Height:	0.31	m
Sub-element:		Length:	6	m
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:	20	m
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: 0 Good:	18 Fair: 2 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		P	

General Comments:

Light to medium vertical cracking throughout.



Element Group:	Approaches	Site Number:	B-018	
Element Name:	Wearing surface	Width:	6.71	m
Element type:		Height:	0	m
Sub-element:		Length:	6.1	m
Material:	Asphalt	Count:	2	
Location:		Total Quantity:	81	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:	Ì	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good: Rehab Needs:	75 Fair: 4 Poor: 2	Unit Cost:		
Rehab time period:				
	0	Estimated Cost:		
Quantity:	U			
General Comments:				
		2024	Jun 10 12:26 F	T T T T T T T T T T T T T T T T T T T

Element Group:	Barriers	Site Number:	B-018	
Element Name:		Width:		
Liement Name.	Railing systems	widii.	0 m	
Element type:	Post and rail	Height:	0.5 m	
Sub-element:		Length:	38.5 m	
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	77 m	
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: Good:	65 Fair: 6 Poor: 6			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0			

General Comments:

Moderate spalls with exposed reinforcing throughout.



Element Group:	Decks	Site Number:	B-018	
Element Name:	Deck top (with thick slab)	Width:	7.3 m	
Element type:		Height:	0 m	
Sub-element:		Length:	26.5 m	
Material:	Cast-in-place Concrete	Count:	1	
Location:		Total Quantity:	193 sqm	
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: O Good:	193 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	0	Estimated Cost:		

General Comments:



Element Group:	Decks	Site Number:	B-018	
Element Name:	Drainage System	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Steel	Count:	4	
Location:		Total Quantity:	4	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: 0 Good:	0 Fair: 4 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		1	
General Comments:				
Medium corrosion through	oout			



Element Group:	Decks	Site Number:	B-018	
Element Name:	Soffit - thick slab	Width:	1	m
Element type:		Height:	1	m
Sub-element:	Exterior	Length:	24.38	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	98	sqm
Environment:	Moderate	Not inspected:		•
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	97 Fair: 1 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	0	Estimated Cost:		
General Comments:				

General Comments:

Minor popout with exposed reinforcing.



Element Group:	Decks	Site Number:	B-018
Element Name:	Soffit - thick slab	Width:	5.3 m
Element type:		Height:	0 m
Sub-element:	Interior	Length:	24.38 m
Material:	Cast-in-place Concrete	Count:	1
Location:		Total Quantity:	129 sqm
Environment:	Benign	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	127 Fair: 1 Poor: 1		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:	0	Estimated Cost:	

General Comments:

Light spalling with exposed reinforcing.



Element Group:	Decks	Site Number:	B-018	
Element Name:	Wearing Surface	Width:	6.71	m
Element type:		Height:	0	m
Sub-element:		Length:	26.5	m
Material:	Asphalt	Count:	1	
Location:		Total Quantity:	178	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	174 Fair: 4 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	0	Estimated Cost:		

General Comments:

Moderate ravelling along edges.

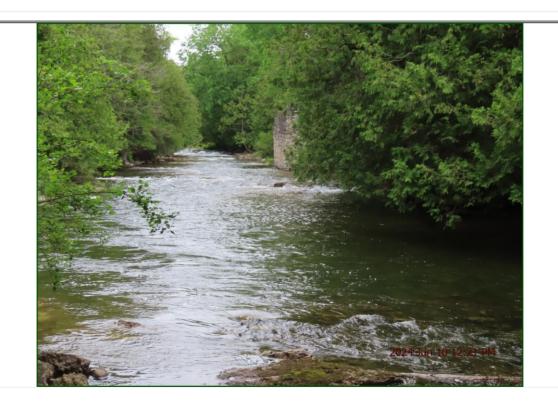


Moderate erosion on E quadrants.

Embankments & Streams	Site Number:	B-018	•
Embankments	Width:	0	m
	Height:	0	m
	Length:	0	m
	Count:	4	-
	Total Quantity:	4	each
Moderate	Not inspected:		
	Maintenance Type:	Routine	
Erosion control	Maint. Time Period:	2 Year	
2 Fair: 2 Poor: 0			
	Unit Cost:		
	Estimated Cost:		
	Embankments Moderate Erosion control	Embankments Width: Height: Length: Count: Total Quantity: Not inspected: Maintenance Type: Erosion control Maint. Time Period:	Embankments Width: Height: Count: Total Quantity: Not inspected: Maintenance Type: Erosion control Maint. Time Period: 2 Fair: Poor: O



Element Group:	Embankments & Streams	Site Number:	B-018	
Element Name:	Streams and Waterways	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	1	•
Location:		Total Quantity:	1	each
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: 0 Good:	1 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0			
General Comments:				
Heavy flow at time of insp	pection.			



Element Inspection				
Element Group:	Foundations	Site Number:	B-018	
Element Name:	Foundation (below ground level)	Width:		m
Element type:		Height:		m
Sub-element:		Length:		m
Material:	Cast-in-place Concrete	Count:		
_ocation:		Total Quantity:		each
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	0 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	
General Comments:				

Element Group:	Sidewalks/ curbs	Site Number:	B-018
Element Name:	Curbs	Width:	0.54 m
Element type:		Height:	0.31 m
Sub-element:		Length:	26.5 m
Material:	Cast-in-place Concrete	Count:	2
Location:	On deck	Total Quantity:	45 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: 0 Good:	43 Fair: 2 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:	0		Į.

General Comments:

Light to medium vertical cracks throughout.



OSIM Biennial Inspection Report



Site Number:
N-057

Kreller Bridge, Concession 11/12, Lot 9



South Elevation



Inventory Data				
Structure Name:	Kreller Bridge, Concession 11/12, Lot 9	Site Number:	N-057	
District:	Concession 11 & 12, Lot 9	Road Name:	Concession Rd 12	
County:	Grey County	Owner:	West Grev	
Township:		Skew:	0	
Bridge or Culvert:	Bridge	AADT:	200	
Structure Type:	Concrete Deck w/ Pre-stressed Beams	Overall Struct. Width:	10.3 m	
Number of Spans:	2	Roadway Width:	7.9 m	
Direction of Structure:	East-West	Total Deck Length:	47.1 m	
GPS Coordinates (Degr	rees)	Span (s):	45.7 m	
Lati REVIEWED	tude: 44.064106	Total Deck Area:	485 sq.m	
	gitude: -80.964048	Current Load Limit:	0	
Inspection Data				
Date of Inspection:	30-Jul-24			
Name of Inspector:	Andrew Burgess, P.Eng. & Joel Ziegler CET			
Equipment Used:	Sounding hammer, measuring equipment, GF	PS		
Weather Conditions:	Cloudy			
Temperature:	23			
Special Notes: Bridge is in good condition, showing no signs of structural distress.				
Overall Inspection S	Summary			
Additional Investigation Required: Additional Investigation Cost: Rehabilitation Needs: Rehabilitation Timing: Total Rehabilitation Budget Costings: Engineering Fee:				
Year Built:	1979	Contract Number When Bu	ilte	
Latest Biennial Inspection	1010	atest Specialized Inspecti		
Latest Structure Rating:		atest Structure Condition:		
RehabHistory:	70.0			
Regional Priority Numbe	r.	Programmed Work Year:		
NatureOfProgramWork:		grammou from Four		

Description: Approach Wearing Surface: Wide transverse crack.



Description: Wearing Surface: Light to medium map cracking.



Element Group:	Abutments	Site Number:	N-057	
Element Name:	Walls	Width:	10.3	m
Element type:		Height:	2.2	m
Sub-element:		Length:		m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	45	sqm
Environment:	Benign	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: O Good:	45 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				
General Comments:				



Element Group:	Abutments	Site Number:	N-057	
Element Name:	Wingwalls	Width:	m	
Element type:		Height:	2.2 m	
Sub-element:		Length:	4.2 m	
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:	37 sqm	
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec:	37 Fair: 0 Poor: 0	Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				
General Comments:				
		2024	Jul 30 10:45 AM	

Element Group: Abutments Site Number: N-057 Element Name: Ballast walls Width: 10.3 m Height: 1.6 m Sub-element: Length: m Material: Cast-in-place Concrete Count: 2 Total Quantity: 33 sqm Not inspected: None Maintenance Type: Maint needs: Maint needs: Maint needs: Unit Cost: Estimated Cost: Quantity: Seneral Comments: Ceneral Comments: Limited inspection due to diaphragms.	Element Inspection			
Element type: Sub-element: Material: Length: Count: Total Quantity: Benian Not inspected: Perform. deficiencies: Maint needs: Maint needs: Maint. Time Period: Rehab Needs: Rehab time period: Quantity: General Comments:	Element Group:	Abutments	Site Number:	N-057
Sub-element: Material: Location: Location: Environment: Beniqn Not inspected: Perform. deficiencies: Maint needs: Condition Data (sqm): Exec: Good: Rehab Needs: Rehab time period: Quantity: General Comments:	Element Name:	Ballast walls	Width:	10.3 m
Material: Cast-in-place Concrete Count: Total Quantity: Benian Not inspected: Perform. deficiencies: Maint needs: Maint needs: Condition Data (sqm): Exec: Good: Rehab Needs: Rehab time period: Quantity: General Comments:	Element type:		Height:	1.6 m
Material: Location: Environment: Beniqn Not inspected: Perform. deficiencies: Maint needs: Maint needs: Count: Total Quantity: Maintenance Type: Maint. Time Period: Condition Data (sqm): Exec: Quantity: Rehab Needs: Rehab time period: Quantity: General Comments:	Sub-element:		Length:	m
Location: Environment: Beniqn Not inspected: Perform. deficiencies: Maint needs: Maint needs: Condition Data (sqm): Exec: General Comments: Total Quantity: 33 sqm Not inspected: Maintenance Type: Maint. Time Period: Unit Cost: Estimated Cost: General Comments:	Material:	Cast-in-place Concrete		2
Environment: Benian Not inspected: Perform. deficiencies: None Maintenance Type: Maint needs: Maint. Time Period: Condition Data (sqm): Exec: 0 Good: 33 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Estimated Cost: Quantity: General Comments:	Location:			
Maint needs: Maint. Time Period: Condition Data (sqm): Exec: 0 Good: 33 Fair: 0 Poor: 0 Rehab Needs: Rehab time period: Quantity: General Comments:	Environment:	Benian		
Condition Data (sqm): Exec: 0 Good: 33 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity: General Comments:	Perform. deficiencies:	None	Maintenance Type:	
Exec: 0 Good: 33 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Estimated Cost: Unit Cost: Comments:	Maint needs:		Maint. Time Period:	
Rehab time period: Quantity: General Comments:		33 Fair: 0 Poor: 0		
Quantity: General Comments:	Rehab Needs:		Unit Cost:	
Quantity: General Comments:	Rehab time period:		Estimated Cost:	
	Quantity:			
Limited inspection due to diaphragms.	General Comments:			

Element Group:	Abutments	Site Number:	N-057
Element Name:	Bearings (elastomeric)	Width:	
	Bearings (elastomeric)	-	m
Element type: Sub-element:		Height:	m
Material:	Elastomeric	Length:	m
ocation:	Elastomeric	Count:	8
		Total Quantity:	8 each
Environment:	Benian	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab time period: Quantity: General Comments:		Estimated Cost:	

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Element Group:	Decks	Site Number:	N-057
Element Name:	Drainage system	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:	Steel	Count:	6
Location:		Total Quantity:	6 each
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (each): Exec: O Good: Rehab Needs: Rehab time period: Quantity:	6 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	
		2024	Jul 30 10:47 AM

Element Inspection Element Group: Decks Site Number: N-057 **Element Name:** Soffit - thin slab Width: 10.3 m Element type: Height: 0 m Sub-element: Length: 47.1 m Material: Cast-in-place Concrete Count: Location: **Total Quantity:** 485 sqm **Environment:** Moderate Not inspected: Perform, deficiencies: None **Maintenance Type:** Maint. Time Period: Maint needs: Condition Data (sqm): Exec: 0 Poor: 0 Good: 485 Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:** Quantity: **General Comments:**

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Element Group:	Foundations	Site Number:	N-057
Element Name:	Foundation (below ground)	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	3
Location:		Total Quantity:	3
Environment:	Benian	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: 0 Good:	3 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:		Estimated 00st.	
General Comments:			
No signs of settlement.			



Element Inspection Element Group: Site Number: N-057 Beams/MLE's **Element Name:** Width: Girders (concrete) 0.55 m Element type: I Type Height: 1.15 m Sub-element: Length: 47.1 m Material: Pre-cast Concrete Count: 8 Location: **Total Quantity:** 1488 sqm **Environment:** Benian Not inspected: Perform, deficiencies: None Maintenance Type: Maint. Time Period: Maint needs: Condition Data (sqm): Exec: 0 Poor: 0 Good: 1488 Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:** Quantity: **General Comments:**



Element Inspection Element Group: Site Number: N-057 Beams/MLE's **Element Name:** Diaphragms Width: Element type: Height: m Sub-element: Length: m Material: Cast-in-place Concrete 9 Count: Location: **Total Quantity:** 9 each **Environment:** Moderate Not inspected: Perform, deficiencies: None Maintenance Type: Maint. Time Period: Maint needs: Condition Data (each): Exec: 0 Poor: 0 Good: 9 Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:** Quantity:

General Comments:



Element Group:	Piers	Site Number:	N-057
Element Name:	Bearings (elastomeric)	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:	Elastomeric	Count:	8
Location:		Total Quantity:	8 each
Environment:	Benian	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (each): Exec: Good:	8 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			•
General Comments:			
		2024	Tul 30 10:49 AM

Element Group:	Piers	Site Number:	N-057	
Element Name:	Shafts/Columns/Pile Bents	Width:	9.2	m
Element type:		Height:	4.3	m
Sub-element:		Length:	1	m
Material:	Cast-in-place Concrete	Count:	1	
Location:		Total Quantity:	88	sqm
Environment:	Benign	Not inspected:		•
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	88 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			,	
General Comments:				
1				



Element Inspection				
Element Group:	Approaches	Site Number:	N-057	
Element Name:	Wearing surface	Width:	7.9	m
Element type:		Height:		m
Sub-element:		Length:	5	m
Material:	Asphalt	Count:	2	
Location:		Total Quantity:	79	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	77 Fair: 1 Poor: 1			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			,	
General Comments:				
Wide transverse crack.				

2024 Jul 30 10:52 AM

Element Inspection Element Group: Site Number: N-057 Approaches **Element Name:** Width: Approach slab 10.3 Element type: Height: m Sub-element: Length: 5 m Material: Cast-in-place Concrete 2 Count: Location: **Total Quantity:** 103 **Environment:** Moderate Not inspected: Perform. deficiencies: None Maintenance Type: Maint. Time Period: Maint needs: **Condition Data:** Exec: 0 Poor: 0 Good: 102 Fair: 1 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:** Quantity: **General Comments:** No signs of settlement.



Element Group:	Approaches	Site Number:	N-057
Element Name:	Curbs	Width:	0.55 m
Element type:		Height:	0.15 m
Sub-element:		Length:	5 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	20 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period: Quantity: General Comments:	20 Fair: 0 Poor: (Unit Cost: Estimated Cost:	
		2024	Jul 30 10:52 AM

Element Group:	Approaches	Site Number:	N-057	
Element Name:	Barrier/Parapet walls	Width:	0.26	m
Element type:	Parapet wall w/ a double railing	Height:	1.1	m
Sub-element:		Length:	5	m
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:	49	sqm
Environment:	Severe	Not inspected:		·
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good: 49 Fair: 0 Poor: 0				
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				

General Comments:



Element Group: Element Name: Element type: Sub-element:	Barriers Barrier/Parapet walls Parapet wall w/ a double railing	Site Number: Width: Height: Length:	N-057 m 0.26 m 1.1 m 47.1 m
Material: Location: Environment:	Cast-in-place Concrete Severe	Count: Total Quantity: Not inspected:	232 sqm
Perform. deficiencies: Maint needs: Condition Data (sqm):	None	Maintenance Type: Maint. Time Period:	
Rehab Needs: Rehab time period: Quantity:	232 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	

General Comments:



Barriers Hand railings Double railing	Site Number: Width:	N-057 m
r		m
Double railing		·
	Height:	m
	Length:	47.1 m
Steel	Count:	2
	Total Quantity:	94 m
Severe	Not inspected:	
None	Maintenance Type:	
	Maint. Time Period:	
94 Fair: 0 Poor: 0		
	Unit Cost:	
	Estimated Cost:	
	Severe	Steel Count: Total Quantity: Not inspected: None Maintenance Type: Maint. Time Period:



-			
Element Group:	Decks	Site Number:	N-057
Element Name:	Deck top (with thin slab)	Width:	10.3 m
Element type:		Height:	m
Sub-element:		Length:	47.1 m
Material:	Cast-in-place Concrete	Count:	
Location:		Total Quantity:	485 sqm
Environment:	Moderate	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: O Good: Rehab Needs: Rehab time period: Quantity:	485 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	
		2024	Jul 30 10:53 AM

Element Inspection Element Group: Site Number: N-057 Joints **Element Name:** Width: Seals (paved over) Element type: Height: m Sub-element: Length: 10.3 m Material: 2 Count: Location: 2 **Total Quantity:** each **Environment:** Severe Not inspected: Perform. deficiencies: None **Maintenance Type:** Maint. Time Period: Maint needs: Condition Data (each): Exec: 0 Poor: 0 Good: 2 Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:** Quantity:

General Comments:



Element Group:	Decks	Site Number:	N-057	
Element Name:	Wearing surface	Width:	7.9	m
Element type:		Height:		m
Sub-element:		Length:	47.1	m
Material:	Asphalt	Count:		
Location:		Total Quantity:	372	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	368 Fair: 4 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				
Company Commander				

General Comments:

Light to medium map cracking.



Element Group:	Embankments and Streams	Site Number:	N-057
Element Name:	Streams & waterways	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	1
Location:		Total Quantity:	1
Environment:		Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: 0 Good: Rehab Needs:	1 Fair: 0 Poor: 0	Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			

2024 Jul 30 10:50 AM

Element Inspection				
Element Group:	Embankments and Streams	Site Number:	N-057	
Element Name:	Embankments	Width:	n	1
Element type:		Height:	n	ı
Sub-element:		Length:	n	n
Material:		Count:	4	
Location:		Total Quantity:	4 e	ach
Environment:		Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Rehab Needs: Rehab time period:	4 Fair: 0 Poor:	Unit Cost: Estimated Cost:		
Quantity:		Estimated Cost.	J.	
General Comments:				



Element Group:	Sidewalks/curbs	Site Number:	N-057
Element Name:	Curbs	Width:	0.55 m
Element type:		Height:	0.15 m
Sub-element:		Length:	47.1 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	94 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: Good:	94 Fair : 0 Poor : 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			



Element Inspection			
Element Group:	Sians	Site Number:	N-057
Element Name:	Signs	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	4
Location:		Total Quantity:	4 each
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period:	4 Fair: 0 Poor: 0	Unit Cost:	
Quantity:	<u></u>	Estimated Cost:	
Quality.			
General Comments:			

2024 Jul 30 10:54 AM

OSIM Biennial Inspection Report



Site Number:

B-002

Concession 4 & 5, Styx View Bridge



South Elevation



Inventory Data			
Structure Name:	Concession 4 & 5, Styx View Bridge	Site Number:	B-002
District:		Road Name:	Concession 4
County:	Grey County	Owner:	West Grev
Township:	West Grey	Skew:	0
Bridge or Culvert:	Bridge	AADT:	150
Structure Type:	Concrete Deck w/ Pre-stressed Beams	Overall Struct. Width:	8.6 m
Number of Spans:	1	Roadway Width:	7.5 m
Direction of Structure:	East-West	Total Deck Length:	29 m
GPS Coordinates (Degr	ees)	Span (s):	27.4 m
	tude: 44.201267	Total Deck Area:	249 sq.m
General Lon	gitude: -80.956352	Current Load Limit:	0
Inspection Data			
Date of Inspection:	10-Jun-24		
Name of Inspector:	A. Burgess P.Eng. & J. Ziegler CET		
Equipment Used:	Sounding hammer, measuring equipment, GF	PS	
Weather Conditions:	Cloudy		
Temperature:	12		
Special Notes:	Bridge is in good condition, showing no signs	of structural distress.	
Overall Inspection S	Summary		
BCI: 75	Next Inspection: 10-Jun-2	6	
Additional Investigation	Required:	P	riority:
Additional Investigation	Cost:		
Rehabilitation Needs:			
Rehabilitation Timing:			
Total Rehabilitation Budg	get Costings:	Engineering Fee:	
Historical Data			
Year Built:	1970	Contract Number When Bu	ilt·
Latest Biennial Inspectio		atest Specialized Inspecti	
Latest Structure Rating:		atest Structure Condition:	
RehabHistory:	73		1
Concrete Rehab complete	ed in 2018		
Regional Priority Numbe		Programmed Work Year:	
NatureOfProgramWork:		Tage and the state of the state	,

Description: Abutment walls: Light vertical cracking with leachate staining.



Description: Railing Systems: Minor impact damage.



Element Group:	Barriers	Site Number:	B-002	
Element Name:	Railing systems	Width:	0	m
Element type:	Flexi beam with steel posts	Height:	0.7	m
Sub-element:		Length:	22	m
Material:	Steel	Count:	4	
Location:	Approaches	Total Quantity:	88	m
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: Good:	88 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0			

General Comments:



Element Group:	Abutments	Site Number:	B-002	
Element Name:	Abutment walls	Width:	8.64	m
Element type:		Height:	0.75	m
Sub-element:		Length:	0	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	13	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	13 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0			

General Comments:

Light vertical cracking with leachate staining.



Element Inspection				
Element Group:	Abutments	Site Number:	B-002	
Element Name:	Wingwalls	Width:	0	m
Element type:		Height:	2	m
Sub-element:		Length:	3	m
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:	12	sqm
Environment:	Moderate	Not inspected:		•
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	12 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	
General Comments:				



Element Group:	Abutments	Site Number:	B-002	
Element Name:	Ballast walls	Width:	8.64	m
Element type:		Height:	1.38	m
Sub-element:		Length:	0	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	24	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	24 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	0	Estimated Cost:		

General Comments:

Limited inspection due to diaphragms.



Element Name: Element type: Bub-element: Material: Length: Count: Beniqn Count: Total Quantity: Beniqn Not inspected: Perform. deficiencies: Maint needs: Condition Data (each):	Element Inspection			
Element type: Sub-element: Material: Length: Count: Benign Total Quantity: Benign Not inspected: Maintenance Type: Maint needs: Maint. Time Period: Condition Data (each): Exec: Rehab Needs: Rehab time period: Quantity: 0 m Maintenance Maint. Time Period: Unit Cost: Estimated Cost: Quantity: 0	Element Group:	Abutments	Site Number:	B-002
Sub-element: Material: Length: Count: 8 Total Quantity: Benian Not inspected: Maint needs: Maint needs: Maint. Time Period: Condition Data (each): Exec: Rehab Needs: Rehab Needs: Rehab time period: Quantity: Quantity: O Maint needs: Unit Cost: Estimated Cost: Quantity: O	Element Name:	Bearings (elastomeric)	Width:	0 m
Material: Elastomeric Count: 8 Count: 9	Element type:		Height:	0 m
Material: Elastomeric Count: 8 Location: Total Quantity: 8 each Environment: Benian Not inspected: Not inspected: Maintenance Type: Maint needs: Maint. Time Period: Condition Data (each): Exec: 0 Good: 8 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Estimated Cost: Quantity: 0	Sub-element:		Length:	0 m
Condition Data (each): Exec: 0 Good: 8 Fair: 0 Poor: 0 Rehab Needs: Rehab time period: Quantity: 0	Material:	Elastomeric		
Perform. deficiencies: Maint needs: Maint. Time Period: Condition Data (each): Exec: 0 Good: 8 Fair: 0 Poor: 0 Rehab Needs: Rehab time period: Quantity: 0	.ocation:		Total Quantity:	
Maint needs: Maint. Time Period: Condition Data (each): Exec: 0 Good: 8 Fair: 0 Poor: 0 Rehab Needs: Rehab time period: Quantity: 0	Environment:	Benign		
Condition Data (each): Exec: 0 Good: 8 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity: 0	Perform. deficiencies:		Maintenance Type:	
Rehab Needs: Rehab time period: Quantity: Unit Cost: Estimated Cost:	Maint needs:		Maint. Time Period:	
	-	0		
	-	,		
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Element Inspection				
Element Group:	Accessories (Attachments and Signs)	Site Number:	B-002	
Element Name:	Signs	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Steel	Count:	7	
Location:		Total Quantity:	7	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good: Rehab Needs:	7 Fair: 0 Poor: 0	Unit Cost:		
Rehab time period:				
	0	Estimated Cost:		
Quantity:	U			
General Comments:				
			Show a stiff to the to the	

метет твресион					
Element Group:	Approaches		Site Number:	B-002	
Element Name:	Approach slabs		Width:	7.5	m
Element type:			Height:	0	m
Sub-element:			Length:	6.1	m
Material:	Cast-in-place Concrete		Count:	2	
Location:			Total Quantity:	92	sqm
Environment:	Moderate		Not inspected:		
Perform. deficiencies:			Maintenance Type:		
Maint needs:			Maint. Time Period:		
Condition Data (sqm): Exec: Good:	92 Fair : 0	Poor: 0			
Rehab Needs:			Unit Cost:		
Rehab time period:			Estimated Cost:		
Quantity:	0			,	
					•
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Element Group: Element Name: Element type: Sub-element: Material:	Approaches Curbs Cast-in-place Concrete	Site Number: Width: Height: Length:	B-002
Location: Environment:	Severe	Count: Total Quantity: Not inspected:	9 m
Perform. deficiencies: Maint needs: Condition Data (m):		Maintenance Type: Maint. Time Period:	
Rehab Needs: Rehab time period: Quantity:	9 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	

General Comments:



Element Inspection Element Group: Site Number: Approaches B-002 **Element Name:** Width: Wearing surface 7.5 m Element type: Height: 0 m Sub-element: Length: 6.1 m Material: Asphalt 2 Count: Location: **Total Quantity:** 92 sqm **Environment:** Severe Not inspected: Perform. deficiencies: **Maintenance Type:** Maint. Time Period: Maint needs: Condition Data (sqm): Exec: 0 Poor: 0 Good: 92 Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:** 0 Quantity: **General Comments:**

2024 Jun 10 03:10 PM

Element Group:	Barriers	Site Number:	B-002
Element Name:	Barrier/Parapet Walls	Width:	0.31 m
Element type:		Height:	0.83 m
Sub-element:		Length:	2.8 m
Material:	Cast-in-place Concrete	Count:	4
Location:	Approaches	Total Quantity:	19 sqm
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	19 Fair : 0 Poor : 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:	0		
General Comments:			



Element Group: Element Name: Element type: Sub-element: Material: Location: Environment: Perform. deficiencies:	Railing Systems Aluminum Severe	Site Number: Width: Height: Length: Count: Total Quantity: Not inspected: Maintenance Type:	B-002
Maint needs: Condition Data (m): Exec: 0 Good: Rehab Needs: Rehab time period: Quantity:	58 Fair: 1 Poor: 0	Maint. Time Period: Unit Cost: Estimated Cost:	

General Comments:

Minor impact damage.



Element Group:	Beams/Main Longitudinal Elements	Site Number:	B-002	
Element Name:	Girders (concrete)	Width:	0.66	m
Element type:	I Type	Height:	1.38	m
Sub-element:		Length:	29.4	m
Material:	Pre-cast Concrete	Count:	4	
Location:		Total Quantity:	557	sqm
Environment:	Benian	Not inspected:		•
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	557 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	
General Comments:				



Element Inspection				
Element Group:	Beams/Main Longitudinal Elements	Site Number:	B-002	
Element Name:	Diaphragms	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Cast-in-place Concrete	Count:	9	
Location:		Total Quantity:	9	each
Environment:	Benign	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: 0 Good: Rehab Needs:	9 Fair: 0 Poor:	_		
		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0			
General Comments:				

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Element Group:	Decks	Site Number:	B-002	
Element Name:	Deck top (with thin slab)	Width:	8.64	m
Element type:		Height:	0	m
Sub-element:		Length:	29.4	m
Material:	Cast-in-place Concrete	Count:	1	
Location:		Total Quantity:	254	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	254 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0	Zominatou Gooti	,	
General Comments:				



Element Group:	Decks	Site Number:	B-002	
Element Name:	Drainage System	Width:	0	m
Element type:	1	Height:	0	m
Sub-element:		Length:	0	m
Material:	Steel	Count:	10	•••
Location:		Total Quantity:	10	each
Environment:	Severe	Not inspected:		00011
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Rehab Needs:		Unit Cost:		
Condition Data (each): Exec: 0 Good:	10 Fair: 0 Poor: 0	_		
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	
Conoral Comments				
General Comments:				
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Element Inspection				
Element Group:	Decks	Site Number:	B-002	
Element Name:	Soffit - thin slab	Width:	0.9	m
Element type:		Height:	0.22	m
Sub-element:	Exterior	Length:	29.4	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	66	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good: Rehab Needs:	66 Fair: 0 Poor: 0	Unit Cost:		
Rehab time period:				
Quantity:	0	Estimated Cost:		
General Comments:				

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Element Inspection				
Element Group:	Decks	Site Number:	B-002	
Element Name:	Soffit - thin slab	Width:	6.84	m
Element type:		Height:	0	m
Sub-element:	Interior	Length:	29.4	m
Material:	Cast-in-place Concrete	Count:	1	
Location:		Total Quantity:	201	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Rehab Needs: Rehab time period: Quantity: General Comments:	201 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:		

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Element Inspection				
Element Group:	Decks	Site Number:	B-002	
Element Name:	Wearing Surface	Width:	7.5	m
Element type:		Height:	0	m
Sub-element:		Length:	29.4	m
Material:	Asphalt	Count:	1	
Location:		Total Quantity:	220	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0			
General Comments:				
		The part of the pa	SITIO	



Element Inspection			
Element Group:	Embankments & Streams	Site Number:	B-002
Element Name:	Embankments	Width:	m
Element type:		Height:	m
Sub-element:		Length:	0 m
Material:		Count:	4
Location:		Total Quantity:	4 each
Environment:	Moderate	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs:		Unit Cost:	
Exec: 0 Good:	4 Fair: 0 Poor:	0	
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:	0		
General Comments:			
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Element Inspection			
Element Group:	Embankments & Streams	Site Number:	B-002
Element Name:	Streams and Waterways	Width:	m
Element type:		Height:	m
Sub-element:		Length:	0 m
Material:		Count:	1
Location:		Total Quantity:	1 each
Environment:	Benian	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (each):			
Exec: O Good:	1 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:	0		,
General Comments:			
			Marie Committee
			A CONTRACTOR OF THE CONTRACTOR
71			
(4) (4) (4)	MARKET STATE OF THE STATE OF TH		Section 1997



Element Inspection			
Element Inspection Element Group: Element Name: Element type: Sub-element: Material: Location: Environment: Perform. deficiencies:	Foundations Foundation (below ground level)	Site Number: Width: Height: Length: Count: Total Quantity: Not inspected: Maintenance Type:	B-002
Maint needs:		Maint. Time Period:	
Condition Data (each): Exec: 0 Good: Rehab Needs: Rehab time period:	0 Fair: 0 Poor: 0	Unit Cost:	
	0	Estimated Cost:	
Quantity:	0		
General Comments:			
No signs of settlement			

Element Inspection Element Group: Site Number: Joints B-002 **Element Name:** Width: 0 Armouring/retaining devices m Element type: Height: 0 m Sub-element: Length: 7.5 m Material: Steel Count: 4 Location: **Total Quantity:** 30 **Environment:** Severe Not inspected: Perform, deficiencies: **Maintenance Type:** Maint. Time Period: Maint needs: Condition Data (m): Exec: 0 Poor: 0 Good: 30 Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:** 0 Quantity: **General Comments:**





Element Group:	Joints	Site Number:	B-002	
Element Name:	Concrete end dams	Width:	7.5	m
Element type:		Height:	0	m
Sub-element:		Length:	0.4	m
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:		sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good: Rehab Needs: Rehab time period:	12 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:		
Quantity:	0	Estimated Oost.		
General Comments:				
Paved over.				
		2024	Jun 10 03:12 Ph	

Element Inspection Element Group: Joints Site Number: B-002 **Element Name:** Width: 0 Seals (strip) Element type: Height: 0 m Sub-element: Length: 7.5 m Material: Rubber Count: 2 Location: 2 **Total Quantity:** each **Environment:** Severe Not inspected: Perform, deficiencies: Maintenance Type: Maint. Time Period: Maint needs: Condition Data (each): Exec: 0 Poor: 0 Good: 2 Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:** 0 Quantity:

General Comments:

Paved over.



Element Group: Element Name: Element type: Sub-element: Material: Location: Environment: Perform. deficiencies:	Curbs Cast-in-place Concrete On deck Severe	Site Number: Width: Height: Length: Count: Total Quantity: Not inspected: Maintenance Type:	B-002 0.57 m 0.21 m 29.4 m 2
Maint needs: Condition Data (m): Exec: 0 Good: Rehab Needs: Rehab time period: Quantity:	46 Fair: 0 Poor: 0	Maint. Time Period: Unit Cost: Estimated Cost:	

General Comments:



OSIM Biennial Inspection Report



Site Number:

B-007

Concession 12, Lot 30 & 31 Bridge



East Elevation



Inventory Data			
Structure Name:	Concession 12, Lot 30 & 31 Bridge	Site Number:	B-007
District:		Road Name:	30th Sideroad NDR
County:	Grey County	Owner:	West Grey
Township:	West Grey	Skew:	0
Bridge or Culvert:	Bridge	AADT:	50
Structure Type:	Timber Deck w/ Steel Beams	Overall Struct. Width:	4.94 m
Number of Spans:	1	Roadway Width:	4.64 m
Direction of Structure:	North-South	Total Deck Length:	11 m
GPS Coordinates (Degre	ees)	Span (s):	10 m
Latit General	ude: 44.275096	Total Deck Area:	54 sq.m
	gitude: -80.909921	Current Load Limit:	5
Inspection Data			
Date of Inspection:	13-Jun-24		
	A. Burgess P.Eng. & J. Ziegler CET		
	Sounding hammer, measuring equipment, GP	PS	
	Cloudy		
Temperature:	20		
Special Notes:	Bridge is in fair to good condition, showing no	signs of structural distress.	
ļ			
Overall Inspection S	ummary		
Additional Investigation of Additional Investigation of Rehabilitation Needs: Rehabilitation Timing: Total Rehabilitation Budge	Cost:		riority:
Historical Data			
Year Built: Latest Biennial Inspection Latest Structure Rating: RehabHistory:	n: March 23, 2023	contract Number When Bu atest Specialized Inspecti atest Structure Condition	on:
Regional Priority Number NatureOfProgramWork:	: F	Programmed Work Year:	

Description: Shafts/Columns/Pile Bents: Light spalling throughout.



Description: Abutment walls: Medium honeycombing throughout.



Description: Wingwalls: Medium honeycombing throughout.



Description: Signs: Missing hazard sign at SW quadrant.



Description: Approach Wearing surface: Light rutting on south side.



Description: Girders: Very wide vertical crack in west girder above pier.



Description: Deck top: Light to medium weathering throughout.



Description: Soffit (ext): Medium to severe rotting throughout.



Description: Soffit (int): Light weathering.



Description: Curbs: Light weathering and light rot throughout.



Description: Shafts/Columns/Pile Bents: Light to medium honeycombing throughout.



Element Group:	Piers	Site Number:	B-007	
Element Name:	Shafts/Columns/Pile Bents	Width:	4.88	m
Element type:		Height:	1.5	m
Sub-element:		Length:	0.6	m
Material:	Pre-cast Concrete	Count:	1	
Location:		Total Quantity:	16	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: O Good:	13 Fair: 3 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Fetimated Cost:		

General Comments:

Quantity:

Light to medium honeycombing throughout. Light spalling throughout. High water level at time of inspection.



Element Group:	Piers	Site Number:	B-007	
Element Name:	Caps	Width:	0.5	m
Element type:		Height:	0.2	m
Sub-element:		Length:	4.2	m
Material:	Steel	Count:	1	
Location:		Total Quantity:	2	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	2 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Fstimated Cost:		

Estimated Cost:

General Comments:

Quantity:

Light corrosion throughout. Cap is Steel I-beam.

0



Element Group:	Abutments	Site Number:	B-007	
Element Name:	Abutment walls	Width:	4.94	m
Element type:		Height:	0.9	m
Sub-element:		Length:	0	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	9	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	5 Fair: 4 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	0	Estimated Cost:		

General Comments:

Medium honeycombing throughout.



Element Group:	Abutments	Site Number:	B-007	
Element Name:	Wingwalls	Width:	0	m
Element type:		Height:	0.9	m
Sub-element:		Length:	1.5	m
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:	3	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	2 Fair: 1 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	0	Estimated Cost:		

General Comments:

Medium honeycombing throughout.



Element Group:	Accessories (Attachments and Signs)	Site Number:	B-007	
Element Name:	Signs	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Steel	Count:	4	
Location:		Total Quantity:	4	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:	Routine	
Maint needs:	Sign Repair	Maint. Time Period:	1 Year	
Condition Data (each):				
Exec: 0 Good:	3 Fair: 0 Poor: 1			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	

General Comments:

Missing hazard sign at SW quadrant.



Element Group:	Approaches	Site Number:	B-007	
Element Name:	Wearing surface	Width:	4.64	m
Element type:		Height:	0	m
Sub-element:		Length:	6.1	m
Material:	Gravel	Count:	2	
Location:		Total Quantity:	58	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	53 Fair : 5 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	0	Estimated Cost:		

General Comments:

Light rutting on south side.



Light weathering throughout. Very light design.

Element Group:	Barriers	Site Number:	B-007	
Element Name:	Railing systems	Width:	0	m
Element type:		Height:	0.91	m
Sub-element:		Length:	11	m
Material:	Timber	Count:	2	
Location:		Total Quantity:	22	m
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: 0 Good:	20 Fair : 2 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	
General Comments:				



Element Group:	Beams/Main Longitudinal Elements	Site Number:	B-007	
Element Name:	Girders (steel)	Width:	0.1	m
Element type:		Height:	0.2	m
Sub-element:		Length:	11	m
Material:	Steel	Count:	8	
Location:		Total Quantity:	62	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	62 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	0	Estimated Cost:		

General Comments:

Light corrosion throughout. Very wide vertical crack in west girder above pier, not critical.



Element Group:	Decks	Site Number:	B-007	
Element Name:	Deck top (with thin slab)	Width:	4.94	m
Element type:		Height:	0	m
Sub-element:		Length:	11	m
Material:	Timber	Count:	1	
Location:		Total Quantity:	54	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	50 Fair: 4 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	0	Estimated Cost:		

General Comments:

Light to medium weathering throughout.



Element Group:	Decks	Site Number:	B-007	
Element Name:	Soffit - thin slab	Width:	0.82	m
Element type:		Height:	0	m
Sub-element:	Exterior	Length:	11	m
Material:	Timber	Count:	2	
Location:		Total Quantity:	18	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	16 Fair: 2 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	0	Estimated Cost:		

General Comments:

Medium to severe rotting throughout.



B-007
3.3 m
0 m
11 m
1
tity: 36 sqm
ed:
ype:
riod:
Cost:



Element Inspection				
Element Group:	Embankments & Streams	Site Number:	B-007	
Element Name:	Embankments	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	4	-
Location:		Total Quantity:	4	each
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Rehab Needs:	4 Fair: 0 Poor: 0	Unit Cost:		
Rehab Needs: Rehab time period:		Unit Cost: Estimated Cost:		
Quantity:	0	Estimated Oost.		
General Comments:				
		1		



Element Inspection			
Element Group:	Embankments & Streams	Site Number:	B-007
Element Name:	Streams and Waterways	Width:	0 m
Element type:		Height:	0 m
Sub-element:		Length:	0 m
Material:		Count:	1
Location:		Total Quantity:	1 each
Environment:	Benian	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (each): Exec: 0 Good: Rehab Needs: Rehab time period: Quantity: General Comments:	1 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	

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Element Inspection			
Element Group:	Foundations	Site Number:	B-007
Element Name:	Foundation (below ground level)	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:	Cast-in-place Concrete	Count:	
Location:		Total Quantity:	each
Environment:	Benign	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (each): Exec: Good:	0 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:	0		
General Comments:			

Element Group:	Sidewalks/ curbs	Site Number:	B-007
Element Name:	Curbs	Width:	0.15 m
Element type:		Height:	0.15 m
Sub-element:		Length:	11 m
Material:	Timber	Count:	2
Location:		Total Quantity:	7 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: 0 Good:	7 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:	0	Estimated Cost:	
-			

General Comments:

Light weathering and light rot throughout.



OSIM Biennial Inspection Report



Site Number:
N-067

Concession 2/3, Lot 63



South Approach



Inventory Data			
Structure Name:	Concession 2/3, Lot 63	Site Number:	N-067
District:	Concession 2 & 3. Lot 63	Road Name:	Concession Rd 2 WGR
County:	Grey County	Owner:	West Grev
Township:		Skew:	0
Bridge or Culvert:	Culvert	AADT:	0
Structure Type:	Concrete Arch	Overall Struct. Width:	5.7 m
Number of Spans:	1	Roadway Width:	4.9 m
Direction of Structure:	East-West	Total Deck Length:	10 m
GPS Coordinates (Deg	grees)	Span (s):	9.5 m
	titude: 43.999966	Total Deck Area:	57 sq.m
REVIEWED Lo	ngitude: -80.814465	Current Load Limit:	0
Inspection Data			
Date of Inspection:	31-Jul-24		
Name of Inspector:	Andrew Burgess, P.Eng. & Joel Ziegler CET		
Equipment Used:	Sounding hammer, measuring equipment, GF	PS	
Weather Conditions:	Sunny		
Temperature:	23		
Special Notes:	Concrete arch with steel girder and a fiber gla a structural element.	ass slab on top. Original con	crete arch no longer fuctioning as
Overall Inspection	1		
Additional Investigation Required: Additional Investigation Cost: Rehabilitation Needs: Rehabilitation Timing: Total Rehabilitation Budget Costings: State			
Historical Data			
Year Built:		Contract Number When Bu	
Latest Biennial Inspecti	COP. C	atest Specialized Inspection	
Latest Structure Rating	: 72.9	atest Structure Condition:	
RehabHistory:			
Regional Priority Numb	r	Programmed Work Year:	
NatureOfProgramWork:	:		

Description: Barrel: Severe spalling with exposed reinforcing throughout.



Description: Barrel: Severe spalling and disintegration at footing on east side.



Description: Outlet: Severe spalling and cracking throughout.



Description: Approach Wearing surface: Severe potholing throughout and possible settlment at west appr



Description: Embankments: Severe erosion on south-east quadrant around retaining wall.



Description: Signs: North signs both very bent.



Description: Wearing surface: Moderate potholing throughout.



Description: Retaining Walls: Retaining walls on east side and north west quadrant starting to push outwa



Element Group:	Approaches	Site Number:	N-067	
Element Name:	Wearing surface	Width:	4.9	m
Element type:		Height:	0	m
Sub-element:		Length:	5	m
Material:	Gravel	Count:	2	
Location:		Total Quantity:	49	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	39 Fair: 5 Poor: 5			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0		1	

General Comments:

Severe potholing throughout and possible settlment at west approach.



Element Group:	Embankments & Streams	Site Number:	N-067	
Element Name:	Embankments	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:		Not inspected:		
Perform. deficiencies:	None	Maintenance Type:	Routine	
Maint needs:	Erosion control	Maint. Time Period:	1 Year	
Condition Data (each): Exec: 0 Good:	2 Fair: 0 Poor: 2			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended	Estimated Cost:		

General Comments:

Severe erosion on south-east quadrant around retaining wall.



Element Group:	Approaches	Site Number:	N-067
Element Name:	Curbs	Width:	0.6 m
Element type:		Height:	0.3 m
Sub-element:		Length:	5 m
Material:	Pre-cast Concrete	Count:	4
Location:		Total Quantity:	20 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: 0 Good:	20 Fair : 0 Poor : 0		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:	None Recommended	Estimated Cost:	





Element Group:	Barriers	Site Number:	N-067	
Element Name:	Railing systems	Width:	0	m
Element type:	Double box beam with Steel Posts	Height:	0	m
Sub-element:		Length:	10	m
Material:	Steel	Count:	2	
Location:		Total Quantity:	20	m
Environment:	Severe	Not inspected:		
Perform. deficiencies: Maint needs:		Maintenance Type: Maint. Time Period:		
Condition Data (m): Exec: Good:	20 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		

General Comments:

Light corrosion throughout.



Element Group:	Signs	Site Number:	N-067	
Element Name:	Signs	Width:	0 m	
Element type:		Height:	0 m	
Sub-element:		Length:	0 m	
Material:		Count:	4	
Location:		Total Quantity:	4 each	
Environment:	Severe	Not inspected:		
Perform. deficiencies:	Pedestrian hazard	Maintenance Type:	Routine	
Maint needs:	Sign Repair	Maint. Time Period:	1 Year	
Condition Data (each): Exec: Good:	2 Fair: 2 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0			

General Comments:

North signs both very bent.



Element Group:	Decks	Site Number:	N-067	
Element Name:	Wearing surface	Width:	4.9	m
Element type:		Height:	0	m
Sub-element:		Length:	10	m
Material:	Asphalt	Count:	0	
Location:		Total Quantity:	49	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	46 Fair: 3 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:		

General Comments:

Moderate potholing throughout.



Element Group:	Retaining Walls	Site Number:	N-067	
Element Name:	Walls	Width:	0.6	m
Element type:		Height:	0.8	m
Sub-element:		Length:	0	m
Material:	Pre-cast Concrete	Count:	4	
Location:		Total Quantity:	2	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	Continuing movement	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	2 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0		,	

General Comments:

Retaining walls on east side and north west quadrant starting to push outwards. Monitor further movement.



Element Group: Element Name: Element type: Sub-element: Material: Location: Environment:	Beams/Main Longitudinal Elements Girders (steel) Steel Benign	Site Number: Width: Height: Length: Count: Total Quantity: Not inspected:	N-067	m m m
Perform. deficiencies: Maint needs: Condition Data (%): Exec: Good:	100 Fair: 0 Poor: 0	Maintenance Type: Maint. Time Period:		
Rehab Needs: Rehab time period: Quantity:	None Recommended	Unit Cost: Estimated Cost:		

General Comments:

Beam details not known. Inspected as %.



Element Group:	Embankments & Streams	Site Number:	N-067
Element Name:	Streams and Waterways	Width:	0 m
Element type:	Streams and Waterways	•	
ub-element:		Height:	0 m
laterial:		Length:	0 m
ocation:		Count:	1
nvironment:		Total Quantity:	1 each
nvironinent.		Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:	
General Comments:			



Element Group:	Approaches	Site Number:	N-067	
Element Name:	Railing systems	Width:	0	m
Element type:	Flexi beam with timber posts	Height:	0	m
Sub-element:		Length:	0	m
Material:	Steel	Count:	0	
Location:		Total Quantity:	0	m
Environment:	Severe	Not inspected:		
Perform. deficiencies:	Vehicular hazard	Maintenance Type:	Structural	
Maint needs:	Barrier/railing system repair	Maint. Time Period:	1 Year	
	•			

Condition Data (%):

Exec: 0 Good: 50

Rehab Needs:

Rehab time period:

Quantity:

Unit Cost:

Estimated Cost:

Poor: 0

General Comments:

Recommend attaching approach railing system to bridge railing system.

Fair: 50



Element Group:	Culverts	Site Number:	N-067
Element Name:	Inlet Components	Width:	0 m
Element type:		Height:	0 m
Sub-element:		Length:	0 m
Material:		Count:	0
Location:		Total Quantity:	0 sqm
Environment:		Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	0 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:	None Recommended	Estimated Cost:	

General Comments:

Not current structure.



Element Group:	Culverts	Site Number:	N-067	
Element Name:	Barrels	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	0	
Location:		Total Quantity:	0	sqm
Environment:		Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	0 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0		,	

General Comments:

Not current structure. Severe spalling with exposed reinforcing throughout. Severe spalling and disintegration at footing on east side.



Element Group:	Culverts	Site Number:	N-067	
Element Name:	Outlet Components	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	0	
Location:		Total Quantity:	0	sqm
Environment:		Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	0 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
	None Recommended	Estimated Cost:		
Quantity:	0			

General Comments:

Not current structure. Severe spalling and cracking throughout.



OSIM Biennial Inspection Report



Site Number:
N-064

Diepel Bridge, Concession 7, Lot 5/6



West Elevation



Inventory Data				
Structure Name: Diepel Bridge.	Concession 7, Lot 5/6	Site Number:	N-064	
District: Concession 5	& 6, Lot 9	Road Name:	Side Rd 5	
County: Grey County		Owner:	West Grev	
Township:		Skew:	0	
Bridge or Culvert: Bridge		AADT:	200	
Structure Type: Concrete Rigid	l Frame	Overall Struct. Width:	8.2 m	
Number of Spans:		Roadway Width:	7.3 m	
Direction of Structure: North-South		Total Deck Length:	11.6 m	
GPS Coordinates (Degrees)		Span (s):	10.7 m	
Latitude: 44.02	3003	Total Deck Area:	95 sq.m	
	72402	Current Load Limit:	0	
Inspection Data				
Date of Inspection: 30-Jul-24				
Name of Inspector: Andrew Burgess	P.Eng. & Joel Ziegler CET			
Equipment Used: Sounding hamme	er, measuring equipment, GPS	S		
Weather Conditions: Cloudy				
Temperature: 23				
Special Notes: Bridge is in good	condition, showing no signs of	of structural distress.		
Overall Inspection Summary				
Additional Investigation Required: Additional Investigation Cost: Rehabilitation Needs: Rehabilitation Timing: Total Rehabilitation Budget Costings: Engineering Fee: Historical Data				
Year Built: 1980	Co	ontract Number When Bu	ilt:	
		test Specialized Inspection		
Latest Structure Rating: 74.4		test Structure Condition:		
RehabHistory:			,	
Regional Priority Number:	P	rogrammed Work Year:		
NatureOfProgramWork:		.		

Description: Wingwalls: Medium to wide vertical cracking with leachate staining.



Description: Soffit (int): Light to medium longitudinal crack with leachate staining.



Description: Soffit (ext): Light to medium transverse crack.



Description: Soffit (ext): Medium to wide cracking at construction joint.



Description: Approach curbs: Light spalling throughout.



Description: Barrier/Parapet walls: Light to medium vertical cracking with wetness staining.



Description: Deck top: Shallow popouts throughout.



Description: Curbs: Light spalling throughout.



Element Group:	Abutments	Site Number:	N-064	
Element Name:	Walls	Width:	8.2	m
Element type:	Legs of a rigid frame	Height:	3	m
Sub-element:		Length:		m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	49	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec:	49 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				
General Comments:				



Element Group:	Abutments	Site Number:	N-064	
Element Name:	Wingwalls	Width:		m
Element type:		Height:	3	m
Sub-element:		Length:	6	m
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:	72	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	70 Fair: 1 Poor: 1			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		

General Comments:

Medium to wide vertical cracking with leachate staining.



Element Inspection Element Group: Decks Site Number: N-064 **Element Name:** Width: Drainage system Element type: Height: m Sub-element: Length: m Material: Steel Count: 4 Location: **Total Quantity:** each **Environment:** Severe Not inspected: Perform, deficiencies: None Maintenance Type: Maint. Time Period: Maint needs: Condition Data (each): Exec: 0 Poor: 0 Good: 4 Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:** Quantity: **General Comments:** 2024 Jul 30 10:18 AM

Element Group:	Decks	Site Number:	N-064	
Element Name:	Soffit - thick slab	Width:	6.2	m
Element type:		Height:		m
Sub-element:	Interior	Length:	10.7	m
Material:	Cast-in-place Concrete	Count:	1	
Location:		Total Quantity:	66	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	65 Fair: 1 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				
General Comments:				
Light to medium longitudin	nal crack with leachate staining.			



Element Group:	Decks	Site Number:	N-064	
Element Name:	Soffit - thick slab	Width:	1	m
Element type:		Height:	0.3	m
Sub-element:	Exterior	Length:	10.7	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	28	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	25 Fair: 2 Poor: 1			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			,	

General Comments:

Light to medium transverse crack. Medium to wide cracking at construction joint.



Element Name: Foundation (below ground) Element type: Height: m Sub-element: Length: m Material: Count: 2 Location: Total Quantity: 2 Environment: Not inspected: Perform. deficiencies: None Maintenance Type: Maint. Time Period:				
Element type: Sub-element: Material: Location: Environment: Not inspected: Perform. deficiencies: Maint needs: Coudition Data: Exec: Quantity: General Comments: Height: Maint: Maint: Maint: Maint: Maint: Maintenance Type: Maint. Time Period: Unit Cost: Estimated Cost: General Comments:	Element Group:	Foundations	Site Number:	N-064
Sub-element: Material: Location: Total Quantity: Not inspected: None Maint needs: Maint needs: Condition Data: Exec: Rehab Needs: Rehab Veeds: Rehab time period: Quantity: General Comments:		Foundation (below ground)	_	
Material: Location: Environment: Not inspected: Perform. deficiencies: Maint needs: Condition Data: Exec: O Good: Rehab Needs: Rehab time period: Quantity: General Comments:				m m
Location: Environment: Not inspected: Perform. deficiencies: Maint needs: Condition Data: Exec: Rehab Needs: Rehab time period: Quantity: General Comments:			_	
Environment: Not inspected:			Count:	
Perform. deficiencies: None Maintenance Type: Maint needs: Maint. Time Period: Condition Data: Exec: 0 Good: 2 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Estimated Cost: Quantity:			Total Quantity:	2
Maint needs: Maint. Time Period: Condition Data: Exec: 0 Good: 2 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity: General Comments:	Environment:		Not inspected:	
Condition Data: Exec: 0 Good: 2 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity: General Comments:	Perform. deficiencies:	None	Maintenance Type:	
Rehab Needs: Rehab time period: Quantity: General Comments:	Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period: Quantity: General Comments:	Condition Data:			
Rehab time period: Quantity: General Comments:	Exec: 0 Good:	2 Fair: 0 Poor:	0	
Quantity: General Comments:			Unit Cost:	
General Comments:			Estimated Cost:	
	Quantity:			
No signs of settlement.	General Comments:			

Element Group:	Approaches	Site Number:	N-064	
Element Name:	Wearing surface	Width:	7.3	m
Element type:		Height:		m
Sub-element:		Length:	5	m
Material:	Gravel	Count:	2	Ţ
Location:		Total Quantity:	73	sqm
Environment:	Severe	Not inspected:		·
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	73 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			,	
General Comments:				
1				



Element Inspection			
Element Group:	Approaches	Site Number:	N-064
Element Name:	Approach slab	Width:	8.2 m
Element type:		Height:	m
Sub-element:		Length:	5 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	82
Environment:	Moderate	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: Good:	82 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			
No signs of settlement.		Marie Barrell	



Element Group:	Approaches	Site Number:	N-064
Element Name:	Curbs	Width:	0.5 m
Element type:		Height:	0.2 m
Sub-element:		Length:	5 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	20 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: 0 Good:	18 Fair: 1 Poor: 1		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Conoral Commenter			

General Comments:

Light spalling throughout.



Element Group:	Approaches	Site Number:	N-064	
Element Name:	Barrier/Parapet walls	Width:	0.27	m
Element type:	Parapet wall w/ a double railing	Height:	0.61	m
Sub-element:	Interior	Length:	5	m
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:	18	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	18 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		
General Comments:				



Element Group:	Approaches	Site Number:	N-064	
Element Name:	Barrier/Parapet walls	Width:		m
Element type:	Parapet wall w/ a double railing	Height:	0.61	m
Sub-element:	Exterior	Length:	5	m
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:	12	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	12 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				

General Comments:



Element Group:	Barriers	Site Number:	N-064	
Element Name:	Barrier/Parapet walls	Width:	0.27	m
Element type:	Parapet wall w/ a double railing	Height:	0.61	m
Sub-element:	Interior	Length:	11.6	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	20	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	18 Fair : 2 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			,	

General Comments:

Light to medium vertical cracking with wetness staining.



Element Group:	Barriers	Site Number:	N-064	
Element Name:	Barrier/Parapet walls	Width:		m
Element type:	Parapet wall w/ a double railing	Height:	0.61	m
Sub-element:	Exterior	Length:	11.6	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	14	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	14 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity: General Comments:				



Element Inspection				
Element Group:	Barriers	Site Number:	N-064	
Element Name:	Hand railings	Width:		m
Element type:		Height:		m
Sub-element:		Length:	11.6	m
Material:	Steel	Count:	2	
Location:		Total Quantity:	23	m
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: Good:	23 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			,	
General Comments:				



Element Group:	Decks	Site Number:	N-064	
Element Name:	Deck top (with thick slab)	Width:	8.2 m	
Element type:		Height:	m	
Sub-element:		Length:	11.6 m	
Material:	Cast-in-place Concrete	Count:		
Location:		Total Quantity:	95 sqm	
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	95 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		
, ,				

General Comments:

Shallow popouts throughout.



Element Group:	Embankments and Streams	Site Number:	N-064	
Element Name:	Streams & waterways	Width:		m
Element type:		Height:		m
Sub-element:		Length:		m
Material:		Count:	1	
Location:		Total Quantity:	1	
Environment:		Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data: Exec: 0 Good:	1 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			p.	
Conoral Comments				

General Comments:

Build up of sediment on south side has diverted river to north abutment.



Element Group:	Embankments and Streams	Site Number:	N-064	
Element Name:	Embankments	Width:		m
Element type:		Height:		m
Sub-element:		Length:		m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:		Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	4 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			,	
General Comments:				



Light spalling throughout.

Element Group:	Sidewalks/curbs	Site Number:	N-064
Element Name:	Curbs	Width:	0.5 m
Element type:		Height:	0.2 m
Sub-element:		Length:	11.6 m
Material:		Count:	2
Location:		Total Quantity:	23 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: Good:	21 Fair: 2 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			



Element Group:	Signs	Site Number:	N-064	
Element Name:	Signs	Width:		m
Element type:		Height:		m
Sub-element:		Length:		m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each):				
Exec: 0 Good:	4 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			,	
General Comments:				
1				



OSIM Biennial Inspection Report



Site Number:

B-027

Concession 3 SDR, Lot 57, Concession 2 SDR



North Elevation



Inventory Data			
Structure Name:	Concession 3 SDR, Lot 57, Concession 2	Site Number:	B-027
District:	Concession 3SDR, Lot 57	Road Name:	Concession Rd 2 SDR
County:	Grey County	Owner:	West Grev
Township:		Skew:	0
Bridge or Culvert:	Bridge	AADT:	200
Structure Type:	Concrete Rigid Frame	Overall Struct. Width:	8.25 m
Number of Spans:	1	Roadway Width:	7.35 m
Direction of Structure: East-West		Total Deck Length:	16 m
GPS Coordinates (Degrees)		Span (s):	14 m
	ude: 44.154426	Total Deck Area:	132 sq.m
REVIEWED Long	gitude: -80.883504	Current Load Limit:	0
Inspection Data			
Date of Inspection: 11-Jun-24			
Name of Inspector:	of Inspector: Andrew Burgess, P.Eng. & Joel Ziegler CET		
Equipment Used:	Sounding hammer, measuring equipment, GPS		
Weather Conditions: Sunny			
Temperature: 16			
Special Notes: Bridge is in fair to good condition, showing no signs of structural distress.			
Overall Inspection Summary			
BCI: 73 Next Inspection: 11-Jun-26			
Additional Investigation Required: Priority:			
Additional Investigation Cost:			
Rehabilitation Needs:			
Rehabilitation Timing:			
Total Rehabilitation Budget Costings: Engineering Fee:			
Historical Data			
Year Built:	1940 C	ontract Number When Bu	ilt:
Latest Biennial Inspection		atest Specialized Inspection	on:
Latest Structure Rating: 73 Latest Structure Condition:			
RehabHistory:			
Regional Priority Number	·: P	Programmed Work Year:	
NatureOfProgramWork:			

Description: Abutment walls: Wide vertical cracking with leachate staining.



Description: Wingwalls: Shallow delamination throughout.



Description: Soffit (int): Medium to wide transverse crack with leachate staining.



Description: Soffit (int): Shallow delamination along construction joint.



Description: Soffit (ext): Light to medium cracking with leachate staining.



Description: Soffit (ext): Light to moderate delamination.



Description: Approach Wearing surface: Narrow to medium transvere and longitudinal cracks.



Element Group:	Abutments	Site Number:	B-027
Element Name:	Walls	Width:	8.25 m
Element type:	Legs of a rigid frame	Height:	1.2 m
Sub-element:		Length:	m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	20 sqm
Environment:	Benian	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: 0 Good:	17 Fair: 2 Poor: 1		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			

General Comments:

Wide vertical cracking with leachate staining.



Element Group:	Abutments	Site Number:	B-027	
Element Name:	Wingwalls	Width:		m
Element type:		Height:	2	m
Sub-element:		Length:	4.3	m
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:	34	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	32 Fair: 2 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		

General Comments:

Shallow delamination throughout.



Element Group:	Decks	Site Number:	B-027	
Element Name:	Soffit - thick slab	Width:	6.25	m
Element type:		Height:		m
Sub-element:	Interior	Length:	14	m
Material:	Cast-in-place Concrete	Count:	1	
Location:		Total Quantity:	88	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	80 Fair: 4 Poor: 4			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		

General Comments:

Medium to wide transverse crack with leachate staining. Shallow delamination along construction joint.



Element Group:	Decks	Site Number:	B-027	
Element Name:	Soffit - thick slab	Width:	1	m
Element type:		Height:	0.9	m
Sub-element:	Exterior	Length:	14	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	53	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	49 Fair : 4 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		

General Comments:

Light to medium cracking with leachate staining. Light to moderate delamination.



,			
Element Group:	Foundations	Site Number:	B-027
Element Name:	Foundation (below ground)	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	2
ocation:		Total Quantity:	2
invironment:		Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
flaint needs:		Maint. Time Period:	
Condition Data:			
xec: 0 Good:	Poor:	0	
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			,
General Comments:			

Element Group: Element Name: Element type: Sub-element:	Approaches Wearing surface	Site Number: Width: Height: Length:	7.35 5	m m m
Material:	Asphalt	Count:	2	
Location:		Total Quantity:	74	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec:	74 Fair: 0 Poor: 0	-		
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		

General Comments:

Narrow to medium transvere and longitudinal cracks.



Element Inspection			
Element Group:	Approaches	Site Number:	B-027
Element Name:	Approach slab	Width:	8.25 m
Element type:		Height:	m
Sub-element:		Length:	5 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	82
Environment:	Moderate	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: 0 Good:	82 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			
No signs of settlement.			

Element Group: Element Name: Element type: Sub-element: Material:	Approaches	Site Number: Width: Height: Length:	B-027 0.45 m 0.3 m 5 m
Location: Environment:	Cast-in-place Concrete Severe	Count: Total Quantity: Not inspected:	20 m
Perform. deficiencies: Maint needs: Condition Data (m):	None	Maintenance Type: Maint. Time Period:	
Rehab Needs: Rehab time period: Quantity: General Comments:	20 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	



arement inspection				
Element Group:	Approaches	Site Number:	B-027	
Element Name:	Railing system	Width:		m
Element type:	Flexi beam with timber posts	Height:	0.9	m
Sub-element:		Length:	5	m
Material:	Steel	Count:	4	
Location:		Total Quantity:	20	
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data: Exec: Good:	20 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			-	
General Comments:				
r				



Element Group:	Barriers	Site Number:	B-027	
Element Name:	Railing system	Width:		m
Element type:	Flexi beam with timber posts	Height:	0.9	m
Sub-element:		Length:	16	m
Material:	Steel	Count:	2	
Location:		Total Quantity:	32	
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data: Exec: 0 Good:	32 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			,	
General Comments:				



Element Group:	Decks	Site Number:	B-027	
Element Name:	Deck top (with thick slab)	Width:	8.25	m
Element type:		Height:		m
Sub-element:		Length:	16	m
Material:	Cast-in-place Concrete	Count:		
Location:		Total Quantity:	132	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	132 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				
General Comments:				



Element Group:	Decks	Site Number:	B-027	
Element Name:	Wearing surface	Width:	7.35	m
Element type:		Height:		m
Sub-element:		Length:	16	m
Material:	Asphalt	Count:		
Location:		Total Quantity:	118	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	118 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			,	
General Comments:				



Element Group:	Embankments and Streams	Site Number:	B-027
Element Name:	Streams & waterways	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	1
Location:		Total Quantity:	1
Environment:		Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period: Quantity:	1 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	
General Comments:			
		2024	

Element Group:	Embankments and Streams	Site Number:	B-027	
Element Name:	Embankments	Width:		m
Element type:		Height:		m
Sub-element:		Length:		m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:		Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	4 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		
General Comments:				



Element Group:	Sidewalks/curbs	Site Number:	B-027
Element Name:	Curbs	Width:	0.35 m
Element type:		Height:	0.25 m
Sub-element:		Length:	16 m
Material:		Count:	2
Location:		Total Quantity:	32 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	Routine
Maint needs:	Bridge cleaning	Maint. Time Period:	2 Year
Condition Data (m): Exec:	32 Fair : 0 Poor : 0		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:		Estimated Cost:	

General Comments:

Recommend removing vegetation from curbline.



Element Inspection				
Element Group:	Signs	Site Number:	B-027	
Element Name:	Signs	Width:		m
Element type:		Height:		m
Sub-element:		Length:		m
Material:	Steel	Count:	4	
Location:		Total Quantity:	4	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Rehab Needs: Rehab time period:		Unit Cost: Estimated Cost:		
Quantity: General Comments:				



OSIM Biennial Inspection Report





Glenelg Centre Bridge, Concession 5, Lot 17



West Elevation



Inventory Data					
Structure Name:	Glenela Centre Bridge, Concession 5, Lot	Site Number:	G-043		
District:	Concession 4 & 5, Lot 17	Road Name:	Consession Rd 4		
County:	Grey County	Owner:	West Grey		
Township:		Skew:	0		
Bridge or Culvert:	Bridge	AADT:	150		
Structure Type:	Concrete Deck w/ Pre-stressed Beams	Overall Struct. Width:	8.5 m		
Number of Spans:	2	Roadway Width:	7.4 m		
Direction of Structure:	North-South	Total Deck Length:	43.9 m		
GPS Coordinates (Degre	ees)	Span (s):	21.35 m		
Latit REVIEWED	ude: 44.233907	Total Deck Area:	373 sq.m		
	gitude: -80.695979	Current Load Limit:	0		
Inspection Data					
Date of Inspection:	12-Jun-24				
	Andrew Burgess, P.Eng. & Joel Ziegler CET				
	Sounding hammer, measuring equipment, GP	S			
	Sunny				
Temperature:	22				
Special Notes:					
<u> </u>					
Overall Inspection S	ummary				
Additional Investigation Required: Additional Investigation Cost: Rehabilitation Needs: Rehabilitation Timing:					
Total Rehabilitation Budget Costings: Engineering Fee:					
Historical Data					
Year Built: Latest Biennial Inspection Latest Structure Rating: RehabHistory:	n: March 24, 2023 La	ontract Number When Bu atest Specialized Inspecti atest Structure Condition:	on:		
Regional Priority Number NatureOfProgramWork:	: P	rogrammed Work Year:			

Description: Girders: Moderate delamination at girder ends.



Description: Approach Wearing surface: Medium transverse crack.



Element Group:	Abutments	Site Number:	G-043	
Element Name:	Walls	Width:	0	m
Element type:		Height:	1.4	m
Sub-element:		Length:	8.5	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	24	sqm
Environment:	Benign	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	24 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		
General Comments:				



Element Group:	Abutments	Site Number:	G-043
Element Name:	Wingwalls	Width:	0 m
Element type:		Height:	1.5 m
Sub-element:		Length:	6 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	18 sqm
Environment:	Moderate	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	18 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:		Estimated Cost:	
General Comments:			



Element Group:	Abutments	Site Number:	G-043	
Element Name:	Ballast walls	Width:	8.5	m
Element type:		Height:	1.825	m
Sub-element:		Length:		m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	31	sqm
Environment:	Benian	Not inspected:		•
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	31 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				

General Comments:

Limted inspection due to diaphragms.



Element Inspection			
Element Group:	Abutments	Site Number:	G-043
Element Name:	Bearings (elastomeric)	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:	Elastomeric	Count:	8
Location:		Total Quantity:	8 each
Environment:	Benian	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period:	<u> </u>	Unit Cost: Estimated Cost:	
Rehab Needs:		Unit Cost:	
Quantity:		Estimated Cost:	
	,		
General Comments:			
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Element Group: Element Name: Element type: Sub-element: Material: Location: Environment: Perform. deficiencies: Maint needs:	Decks Drainage system Steel Severe	Site Number: Width: Height: Length: Count: Total Quantity: Not inspected: Maintenance Type: Maint. Time Period:	G-043 16 16	m m m each
Condition Data (each): Exec: 0 Good: Rehab Needs: Rehab time period: Quantity: General Comments:	16 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:		



Element Inspection Element Group: Decks Site Number: G-043 **Element Name:** Soffit - thin slab Width: 8.5 m Element type: Height: 0 m Sub-element: Length: 43.9 m Material: Cast-in-place Concrete Count: Location: **Total Quantity:** 373 sqm **Environment:** Moderate Not inspected: Perform, deficiencies: None Maintenance Type: Maint. Time Period: Maint needs: Condition Data (sqm): Exec: 0 Poor: 0 Good: 373 Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:** Quantity: **General Comments:**

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Element Inspection			
Element Group:	Foundations	Site Number:	G-043
Element Name:	Foundation (below ground)	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	3
Location:		Total Quantity:	3
Environment:	Benian	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: 0 Good:	3 Fair: 0 Poor: 0	_	
Rehab Needs:	je i je i je	Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			

Element Group:	Beams/MLE's	Site Number:	G-043
Element Name:	Girders (concrete)	Width:	0.75 m
Element type:		Height:	1.375 m
Sub-element:		Length:	43.9 m
Material:	Pre-cast Concrete	Count:	4
Location:		Total Quantity:	878 sqm
Environment:	Benian	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	876 Fair: 1 Poor: 1		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:		Estimated Cost:	

General Comments:

Moderate delamination at girder ends.



пенен Тигресион			
Element Group:	Beams/MLE's	Site Number:	G-043
Element Name:	Diaphragms	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:	Cast-in-place Concrete	Count:	15
Location:		Total Quantity:	15 each
Environment:	Benign	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (each): Exec: Good:	15 Fair : 0 Poor : 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			
-			

Element Group:	Piers	Site Number:	G-043	
Element Name:	Bearings (elastomeric)	Width:		m
Element type:		Height:		m
Sub-element:		Length:		m
Material:	Elastomeric	Count:	8	
Location:		Total Quantity:	8	each
Environment:	Benian	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: O Good:	8 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		

General Comments:

Limited inspection due to height of pier.



Element Group: Element Name: Element type: Sub-element: Material: Location:	Piers Caps Cast-in-place Concrete	Site Number: Width: Height: Length: Count: Total Quantity:	G-043 1 1.5 10.5 1 37	m m m
Environment:	Benign	Not inspected:		
Perform. deficiencies: Maint needs:	None	Maintenance Type: Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good: Rehab Needs: Rehab time period:	37 Fair: 0 Poor: 0	Unit Cost:		
Quantity: General Comments:		Estimated Cost:]	



Element Group:	Piers	Site Number:	G-043	
Element Name:	Shafts/Columns/Pile Bents	Width:	8.5	m
Element type:		Height:	12	m
Sub-element:		Length:	1	m
Material:	Cast-in-place Concrete	Count:	1	
Location:		Total Quantity:	228	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	228 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			P	
Company Community				

General Comments:



Element Group:	Approaches	Site Number:	G-043	
Element Name:	Wearing surface	Width:	7.4	m
Element type:		Height:		m
Sub-element:		Length:	5	m
Material:	Asphalt	Count:	2	
Location:		Total Quantity:	74	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	73 Fair: 1 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		
General Comments:				

Medium transverse crack.



Element Group:	Approaches	Site Number:	G-043
Element Name:	Approach slab	Width:	8.5 m
Element type:		Height:	m
Sub-element:		Length:	5 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	85
Environment:	Moderate	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: 0 Good: Rehab Needs:	85 Fair: 0 Poor:	Unit Cost:	
		Estimated Cost:	
Rehab time period: Quantity:			
_			,



Element Group: Element Name: Element type: Sub-element: Material: Location: Environment: Perform. deficiencies: Maint needs:	Approaches Curbs Cast-in-place Concrete Severe	Site Number: Width: Height: Length: Count: Total Quantity: Not inspected: Maintenance Type: Maint. Time Period:	G-043 0.25 m 0.2 m 5 m 4 20 m
Condition Data (m): Exec: 0 Good: Rehab Needs: Rehab time period: Quantity:	20 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	

General Comments:



Element Group:	Approaches	Site Number:	G-043
Element Name:	Barrier/Parapet walls	Width:	0.44 m
Element type:		Height:	1 m
Sub-element:		Length:	5 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	49 sqm
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: 0 Good: Rehab Needs: Rehab time period:	49 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	
Quantity:			
General Comments:			
		2024	No. 12 01 32 9M

Element Inspection			
Element Group:	Barriers	Site Number:	G-043
Element Name:	Railing system	Width:	0.44 m
Element type:	Three rail	Height:	1 m
Sub-element:		Length:	43.9 m
Material:	Aluminum	Count:	2
Location:		Total Quantity:	88
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Exec: 0 Good:	88 Fair: 0 Poor: 0	Unit Cost:	
Rehab time period:			
Quantity:		Estimated Cost:	
General Comments:			



Element Inspection			
Element Group:	Decks	Site Number:	G-043
Element Name:	Deck top (with thin slab)	Width:	8.5 m
Element type:		Height:	m
Sub-element:		Length:	43.9 m
Material:	Cast-in-place Concrete	Count:	
Location:		Total Quantity:	373 sqm
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm):			
Exec: O Good:	373 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			
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Element Group:	Joints	Site Number:	G-043	
Element Name:	Armouring/retaining devices	Width:		n
Element type:		Height:		m
Sub-element:		Length:	8.5	m
Material:	Steel	Count:	4	
Location:		Total Quantity:		n
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: Good:	34 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			,	
General Comments:				

Element Inspection			
Element Group:	Joints	Site Number:	G-043
Element Name:	Concrete end dams	Width:	8.5 m
Element type:		Height:	m
Sub-element:		Length:	0.2 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	7 sqm
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab time period: Quantity:		Estimated Cost:	
General Comments:			
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Element Inspection			
Element Group:	Joints	Site Number:	G-043
Element Name:	Seals (strip)	Width:	m
Element type:		Height:	m
Sub-element:		Length:	8.5 m
Material:		Count:	2
Location:		Total Quantity:	2 each
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	Routine
Maint needs:	Bridge cleaning	Maint. Time Period:	1 Year
Rehab Needs: Rehab time period: Quantity: General Comments:	2 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	

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Element Inspection			
Element Group:	Embankments and Streams	Site Number:	G-043
Element Name:	Streams & waterways	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	1
Location:		Total Quantity:	1
Environment:		Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: 0 Good:	1 Fair: 0 Poor:	0	
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:		20	
General Comments:			

Element Inspection				
Element Group:	Embankments and Streams	Site Number:	G-043	
Element Name:	Embankments	Width:		m
Element type:		Height:		m
Sub-element:		Length:	·	m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:		Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Rehab Needs: Rehab time period: Quantity:		Unit Cost: Estimated Cost:		
General Comments:				



Element Group:	Sidewalks/curbs	Site Number:	G-043
Element Name:	Curbs	Width:	0.6 m
Element type:		Height:	0.2 m
Sub-element:		Length:	43.9 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	88 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: 0 Good:	88 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:		Estimated Cost:	
General Comments:			



Element Inspection					
Element Group:	Signs		Site Number:	G-043	
Element Name:	Signs		Width:		m
Element type:			Height:		m
Sub-element:			Length:		m
Material:	Steel		Count:	4	
Location:			Total Quantity:	4	each
Environment:	Severe		Not inspected:		
Perform. deficiencies:	None		Maintenance Type:		
Maint needs:			Maint. Time Period:		
Exec: 0 Good: Rehab Needs:	4 Fair: 0	Poor: 0	Unit Cost:		
Rehab time period:			Estimated Cost:		
Quantity:					
General Comments:					
					0/43N6

OSIM Biennial Inspection Report





Concession 4, Burkes Overflow Bridge



South Elevation



Inventory Data				
Structure Name:	Concession 4. Burkes Overflow Bridge	Site Number:	G-041	
District:		Road Name:	Concession 4	
County:	Grey County	Owner:	Township	
Township:	West Grey	Skew:	0	
Bridge or Culvert:	Bridge	AADT:	100	
Structure Type:	Concrete Rigid Frame	Overall Struct. Width:	6.5 m	
Number of Spans:	1	Roadway Width:	5.12 m	
Direction of Structure:	East-West	Total Deck Length:	10.7 m	
GPS Coordinates (Degre	ees)	Span (s):	6.5 m	
Latitu	ude: 44.231251	Total Deck Area:	70 sq.m	
General Long	jitude: -80.713849	Current Load Limit:	5	
Inspection Data				
Date of Inspection:	2-Jun-24			
	A. Burgess P.Eng. & J. Ziegler CET			
	Sounding hammer, measuring equipment, GP			
	Sunny			
_	22			
	Bridge is in fair condition, showing no signs of	structural distress. Recom	mend railing system repair.	
Overall Inspection St	ummary			
Additional Investigation Required: Additional Investigation Cost: Rehabilitation Needs: Rehabilitation Timing: Total Rehabilitation Budget Costings: Priority:				
Historical Data				
Year Built:		ontract Number When Bu		
Year Built: Latest Biennial Inspection	March 24, 2023	atest Specialized Inspecti	on:	
Year Built: Latest Biennial Inspection Latest Structure Rating:	March 24, 2023		on:	
Year Built: Latest Biennial Inspection	March 24, 2023 La	atest Specialized Inspecti	on:	

Description: Approach Wearing surface: Localized alligator cracking.



Description: Approach Wearing surface: Moderate pothole on east approach.



Description: Abutment walls: Medium vertical cracking with leachate staining.



Description: Wingwalls: Light to medium map cracking with leachate staining throughout.



Description: Railing systems: Severe impact damage on NW quadrant.



Description: Railing systems: Severe rot.



Description: Soffit (int): Medium to wide longitudinal cracking with leachate staining.



Element Group:	Approaches	Site Number:	G-041	
Element Name:	Approach slabs	Width:	5.2	m
Element type:		Height:	0	m
Sub-element:		Length:	6.1	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	64	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm):				
Exec: Good:	63 Fair: 1 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0		s*	



Element Group:	Approaches	Site Number:	G-041	
Element Name:	Wearing surface	Width:	5.2	m
Element type:		Height:	0	m
Sub-element:		Length:	6.1	m
Material:	Asphalt	Count:	2	
Location:		Total Quantity:	64	sqm
Environment:	Severe	Not inspected:		·
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	62 Fair: 1 Poor: 1			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:		

General Comments:

Localized alligator cracking. Moderate pothole on east approach.



Element Group:	Abutments	Site Number:	G-041
Element Name:	Abutment walls	Width:	0 m
Element type:		Height:	1.75 m
Sub-element:		Length:	5.75 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	20 sqm
Environment:	Benign	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	18 Fair: 2 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:	None Recommended	Estimated Cost:	
Quantity:	0		,

General Comments:

Medium vertical cracking with leachate staining.



Element Group:	Abutments	Site Number:	G-041	
Element Name:	Wingwalls	Width:	0	m
Element type:		Height:	1.75	m
Sub-element:		Length:	2.1	m
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:	15	sqm
Environment:	Moderate	Not inspected:		·
Perform. deficiencies:		Maintenance Type:		
i citoriii. denoienoies.				
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	14 Fair: 1 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0			

General Comments:

Light to medium map cracking with leachate staining throughout.



Element Group:	Barriers	Site Number:	G-041	
Element Name:	Barrier/Parapet walls	Width:	0.25 m	
Element type:	Parapet wall w/ no railing	Height:	0.86 m	
Sub-element:		Length:	10.9 m	
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	43 sqm	n
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	41 Fair: 2 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0		P	

General Comments:

Light to medium vertical cracks with leachate staining.



Element Group:	Barriers	Site Number:	G-041
Element Name:	Railing systems	Width:	0 m
Element type:	Flexi beam with timber posts	Height:	0.75 m
Sub-element:		Length:	21.25 m
Material:	Steel	Count:	4
Location:	Approaches	Total Quantity:	85 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	Structural
Maint needs:	Barrier/railing system repair	Maint. Time Period:	1 Year
Condition Data (m): Exec:	61 Fair: 1 Poor: 23	3	
Rehab Needs:		Unit Cost:	
Rehab time period:	None Recommended	Estimated Cost:	

General Comments:

Quantity:

Severe impact damage on NW quadrant. Severe rot.

0



Element Group: Element Name: Element type:	Decks Soffit - thick slab	Site Number: Width: Height:	G-041 1 0.5	m m
Sub-element:	Exterior	Length:	6.5	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	20	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	20 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:		



Element Group:	Decks	Site Number:	G-041	
Element Name:	Drainage system	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Steel	Count:	2	
Location:		Total Quantity:	2	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: 0 Good:	2 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:		

General Comments:

Light corrosion typical.



Element Group:	Decks	Site Number:	G-041	
Element Name:	Soffit - thick slab	Width:	4.75	m
Element type:		Height:	0.5	m
Sub-element:	Interior	Length:	6.5	m
Material:	Cast-in-place Concrete	Count:	1	
Location:		Total Quantity:	31	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	28 Fair: 2 Poor: 1			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0		,	

General Comments:

Medium to wide longitudinal cracking with leachate staining.



Element Group:	Decks	Site Number:	G-041
Element Name:	Deck top (with thick slab)	Width:	6.5 m
Element type:		Height:	5.75 m
Sub-element:		Length:	m
Material:	Cast-in-place Concrete	Count:	1
Location:		Total Quantity:	37 sqm
Environment:	Moderate	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	37 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:	None Recommended	Estimated Cost:	



Element Group:	Decks	Site Number:	G-041	
Element Name:	Wearing surface	Width:	5	m
Element type:		Height:	6.5	m
Sub-element:		Length:	0	m
Material:	Asphalt	Count:	1	
Location:		Total Quantity:	33	sqm
Environment:		Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	33 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:		



Embankments & Streams	Site Number:	G-041
Embankments	Width:	0 m
	Height:	0 m
	Length:	0 m
	Count:	4
	Total Quantity:	4 each
Moderate	Not inspected:	
	Maintenance Type:	
	Maint. Time Period:	
None Recommended	Estimated Cost:	
	Embankments	Embankments Height: Length: Count: Total Quantity: Not inspected: Maintenance Type: Maint. Time Period: Viit Cost: None Recommended Estimated Cost:



Element Group:	Embankments & Streams	Site Number:	G-041	
Element Name:	Streams and Waterways	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	1	
Location:		Total Quantity:	1	each
Environment:	Benign	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: 0 Good:	1 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended	Estimated Cost:		
Conoral Commenter				

General Comments:

Stream dry at time of inspection.

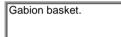


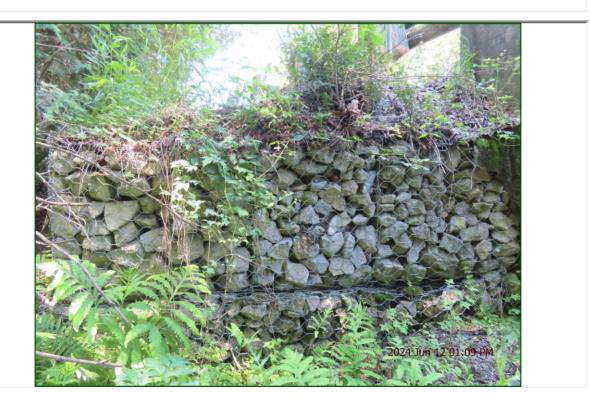
Element Inspection				
Element Group:	Accessories (Attachments and Signs)	Site Number:	G-041	
Element Name:	Signs	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Steel	Count:	4	
Location:		Total Quantity:	4	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Exec: O Good:	4 Fair: 0 Poor: 0	1		
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0			
General Comments:				
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Element Inspection			
Element Group:	Foundations	Site Number:	G-041
Element Name:	Foundation (below ground level)	Width:	0 m
Element type:		Height:	0 m
Sub-element:		Length:	0 m
Material:	Cast-in-place Concrete	Count:	0
Location:		Total Quantity:	0 each
Environment:		Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (each): Exec: Good:	0 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:	None Recommended	Estimated Cost:	
Quantity:	0		,
General Comments: No signs of settlement.			

Element Group:	Retaining Walls	Site Number:	G-041	
Element Name:	Walls	Width:	1.5	m
Element type:		Height:	1	m
Sub-element:		Length:	3	m
Material:		Count:	4	
Location:		Total Quantity:	12	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	12 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0			
General Comments:				





OSIM Biennial Inspection Report



Site Number:
N-069

Pfeffer Bridge, Concession 2, Lot 70/71



South Elevation



Inventory Data					
Structure Name:	Pfeffer Bridge, Concession 2, Lot 70/71	Site Number:	N-069		
District:	Concession 2, Lot 70	Road Name:	Rd 71		
County:	Grey County	Owner:	West Grey		
Township:		Skew:	0		
Bridge or Culvert:	Bridge	AADT:	250		
Structure Type:	Concrete Deck w/ Pre-stressed Beams	Overall Struct. Width:	9.2 m		
Number of Spans:	3	Roadway Width:	7.3 m		
Direction of Structure: East-West		Total Deck Length:	51.2 m		
GPS Coordinates (Degrees)		Span (s):	48.8 m		
Latit REVIEWED	ude: 43.98177	Total Deck Area:	471 sq.m		
	gitude: -80.80888	Current Load Limit:	0		
Inspection Data					
Date of Inspection:	31-Jul-24				
Name of Inspector:					
Equipment Used:	Sounding hammer, measuring equipment, GPS				
Weather Conditions: Sunny					
Temperature: 22					
Special Notes:	Special Notes: Bridge is in good condition, showing no signs of structural distress. Consider deck condition survey.				
Overall Inspection Summary					
Additional Investigation Required: Additional Investigation Cost: Rehabilitation Needs: Rehabilitation Timing: Total Rehabilitation Budget Costings: Next Inspection: 31-Jul-26 Priority: Priority: Engineering Fee:					
Historical Data					
Year Built:	1977 C	ontract Number When Bu	ilt:		
Latest Biennial Inspection	000000000000000000000000000000000000000	atest Specialized Inspecti			
Latest Structure Rating: 74.6 Latest Structure Condition:					
RehabHistory:					
Regional Priority Number NatureOfProgramWork:	: F	Programmed Work Year:			

Description: Approach curbs: Light spalling at corners.



Description: Curbs: Minor abrasians along curbline.



Description: Barrier/Parapet walls (int): Light to medium map cracking with wetness staining throughout.



Description: Deck top: Moderate to severe spalling throughout has been patched using cold patch.



Description: Deck top: Various locations still have allagator cracking around patching.



Description: Railing system: Minor impact damage throughout.



Description: Abutment walls: Medium to wide horizontal crack in previously patched area below girder. 5



Description: Diaphragms: Light localized spalling on one diaphragm.



Description: Soffit (ext): Shallow spall with exposed reinforcing.



Description: Caps: Light map cracking with wetness staining.



Element Group:	Approaches	Site Number:	N-069	
Element Name:	Wearing surface	Width:	7.3	m
Element type:		Height:	0	m
Sub-element:		Length:	5	m
Material:	Asphalt	Count:	0	
Location:		Total Quantity:	37	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	31 Fair: 4 Poor: 2			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0			

General Comments:

Moderate alligator cracking at joint.



Element Group:	Approaches	Site Number:	N-069	
Element Name:	Approach slabs	Width:	7.3	m
Element type:		Height:	0	m
Sub-element:		Length:	5	m
Material:	Cast-in-place Concrete	Count:	0	
Location:		Total Quantity:	37	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: O Good:	35 Fair: 2 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:		
General Comments:				



Element Group:	Approaches	Site Number:	N-069
Element Name:	Curbs	Width:	0.45 m
Element type:		Height:	0.2 m
Sub-element:		Length:	5 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	20 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: 0 Good:	18 Fair: 2 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:	None Recommended	Estimated Cost:	

General Comments:

Light spalling at corners.



Element Group:	Approaches	Site Number:	N-069	
Element Name:	Barrier/Parapet walls	Width:	0	m
Element type:		Height:	1	m
Sub-element:	Exterior	Length:	5	m
Material:	Cast-in-place Concrete	Count:	4	
Location:	End posts	Total Quantity:	20	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	20 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:		



Element Inspection				
Element Group:	Accessories	Site Number:	N-069	
Element Name:	Signs	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Rehab Needs: Rehab time period: Quantity:	None Recommended	Unit Cost: Estimated Cost:		
General Comments:	U			



Element Group:	Sidewalks/ curbs	Site Number:	N-069
Element Name:	Curbs	Width:	0.85 m
Element type:		Height:	0.2 m
Sub-element:		Length:	51.2 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	102 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: Good:	102 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:	None Recommended	Estimated Cost:	

General Comments:

Quantity:

Minor abrasians along curbline.

0



nement Inspection				
Element Group:	Joints	Site Number:	N-069	
Element Name:	Armouring/retaining devices	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	9.2	
Material:	Steel	Count:	6	
Location:		Total Quantity:	55	
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: 0 Good:	55 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended	Estimated Cost:		
General Comments:				
Light corrosion.				
I .				



Element Group:	Joints	Site Number:	N-069	
Element Name:	Seals (strip)	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	2	
Location:		Total Quantity:	2	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each):				
Exec: 0 Good:	0 Fair: 2 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0		,	

General Comments:

Seals beginning to fail. Seals filled with debris.



Element Group:	Approaches	Site Number:	N-069	
Element Name:	Barrier/Parapet walls	Width:	0	m
Element type:		Height:	1	m
Sub-element:	Interior	Length:	5	m
Material:		Count:	4	
Location:		Total Quantity:		sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	19 Fair: 1 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		

General Comments:

Light to medium map cracking with wetness staining throughout.



Element Group:	Decks	Site Number:	N-069	
Element Name:	Deck top (with thick slab)	Width:	7.3	m
Element type:		Height:	0	m
Sub-element:		Length:	51.2	m
Material:	Cast-in-place Concrete	Count:	0	
Location:		Total Quantity:	374	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	364 Fair: 6 Poor: 4			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0		,	

General Comments:

Moderate to severe spalling throughout has been patched using cold patch, various locations still have allagator cracking around patching.



Element Group: Element Name:	Barriers Railing systems	Site Number: Width:	N-069 0 m
Element type: Sub-element: Material:	3 Rail Aluminum	Height: Length: Count:	0 m 51.2 m
Location: Environment:	Severe	Total Quantity: Not inspected:	102 m
Perform. deficiencies: Maint needs:		Maintenance Type: Maint. Time Period:	
Condition Data (m): Exec:	102 Fair: 0 Poor: 0		
Rehab Needs: Rehab time period: Quantity:	None Recommended	Unit Cost: Estimated Cost:	

General Comments:

Minor impact damage throughout.



Element Group:	Joints	Site Number:	N-069	
Element Name:	Concrete end dams	Width:	9.2 m	
Element type:		Height:	0 m	
Sub-element:		Length:	0.1 m	
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	2 50	ım
Environment:	Severe	Not inspected:		•
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm):				
Exec: 0 Good:	Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0		1	
General Comments:				



Element Group:	Embankments & Streams	Site Number:	N-069	
Element Name:	Embankments	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:		Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: 0 Good:	4 Fair: 0 Poor: ()		
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:		
General Comments:				



Element Inspection					
Element Group:	Embankments & Streams	Site Number:	N-069		
Element Name:	Streams and Waterways	Width:	0 m		
Element type:		Height:	0 m		
Sub-element:		Length:	0 m		
Material:		Count:	1		
Location:		Total Quantity:	1 each		
Environment:		Not inspected:			
Perform. deficiencies:		Maintenance Type:			
Maint needs:		Maint. Time Period:			
Quantity:	None Recommended	Unit Cost: Estimated Cost:			
General Comments:					



Element Group: Element Name: Element type:	Abutments Wingwalls	Site Number: Width: Height:	N-069 0 3.1	m m
Sub-element: Material:	Cast-in-place Concrete	Length:	4.5	m
Location: Environment:	Moderate	Total Quantity: Not inspected:	56	sqm
Perform. deficiencies: Maint needs:		Maintenance Type: Maint. Time Period:		
Condition Data (sqm): Exec: Good:	56 Fair: 0 Poor: 0			
Rehab Needs: Rehab time period: Quantity:	None Recommended	Unit Cost: Estimated Cost:		
General Comments:				



Element Group:	Abutments	Site Number:	N-069	
Element Name:	Walls	Width:	0	m
Element type:		Height:	3.1	m
Sub-element:		Length:	8.2	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	51	sqm
Environment:	Benian	Not inspected:		
Perform, deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	50 Fair: 0 Poor: 1			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended	Estimated Cost:		

General Comments:

Quantity:

Medium to wide horizontal crack in previously patched area below girder.



Element Group:	Decks	Site Number:	N-069	
Element Name:	Drainage system	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Steel	Count:	16	
Location:		Total Quantity:	16	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	16 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended	Estimated Cost:		



Element Group:	Abutments	Site Number:	N-069
Element Name:	Ballast walls	Width:	9.2 m
Element type:		Height:	1.75 m
Sub-element:		Length:	m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	32 sqm
Environment:	Benign	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	32 Fair : 0 Poor : 0		
Rehab Needs:		Unit Cost:	
Rehab time period:	None Recommended	Estimated Cost:	
Quantity:	0		-



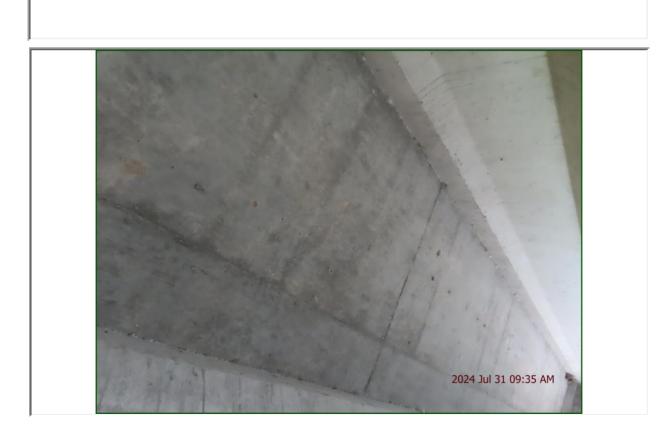
Element Group:	Beams/Main Longitudinal Elements	Site Number:	N-069	
Element Name:	Diaphragms	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Cast-in-place Concrete	Count:	12	
Location:		Total Quantity:	12	each
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	11 Fair: 1 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0		-	

General Comments:

Light localized spalling on one diaphragm.



Element Inspection Element Group: Decks Site Number: N-069 **Element Name:** Soffit - thick slab Width: 8 Element type: Height: 0 m Sub-element: Interior Length: 51.2 m Material: Count: 0 Location: **Total Quantity:** 410 sqm **Environment:** Benian Not inspected: Maintenance Type: Perform, deficiencies: Maint needs: Maint. Time Period: Condition Data (sqm): Exec: 0 Poor: 0 Good: 410 Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: None Recommended **Estimated Cost:** 0 Quantity: **General Comments:**



Element Group:	Decks	Site Number:	N-069	
Element Name:	Soffit - thick slab	Width:	0.6	m
Element type:		Height:	0.2	m
Sub-element:	Exterior	Length:	51.6	m
Material:		Count:	2	
Location:		Total Quantity:	83	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	81 Fair: 1 Poor: 1			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0		,	

General Comments:

Shallow spall with exposed reinforcing.



Element Group:	Beams/Main Longitudinal Elements	Site Number:	N-069	
Element Name:	Girders (concrete)	Width:	0.55 m	
Element type:		Height:	1.15 m	
Sub-element:		Length:	48.8 m	
Material:	Pre-cast Concrete	Count:	4	
Location:		Total Quantity:	771 sqm	
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	771 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0			



Element Group:	Piers	Site Number:	N-069	
Element Name:	Shafts/Columns/Pile Bents	Width:	7.5	m
Element type:		Height:	5	m
Sub-element:		Length:	0.9	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	168	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	168 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended	Estimated Cost:		



Element Inspection				
Element Group:	Piers	Site Number:	N-069	
Element Name:	Bearings (elastomeric)	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Elastomeric	Count:	8	
Location:		Total Quantity:	8	each
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec:	8 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended	Estimated Cost:		
Quantity.				
General Comments:				



Element Group:	Piers	Site Number:	N-069
Element Name:	Caps	Width:	9.2 m
Element type:		Height:	1 m
Sub-element:		Length:	1.2 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	59 sqm
Environment:	Benian	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	59 Fair : 0 Poor : 0		
Rehab Needs:		Unit Cost:	

Estimated Cost:

General Comments:

Quantity:

Rehab time period:

Light map cracking with wetness staining.

None Recommended

0



Element Inspection				
Element Group:	Abutments	Site Number:	N-069	
Element Name:	Bearings (elastomeric)	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Elastomeric	Count:	8	-
Location:		Total Quantity:	8	each
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	8 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0		,	
General Comments:				
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OSIM Biennial Inspection Report



Site Number:

B-014

Concession 4 & 5, Roy Hopkins Bridge



North Elevation



Structure Name: Concession 4 & 5. Rov Hopkins Bridge	Site Number:	B-014		
District:	Road Name:	Concession 4		
County: Grey County	Owner:	West Grev		
Township: West Grey	Skew:	0		
Bridge or Culvert: Bridge	AADT:	200		
Structure Type: Concrete Deck w/ Pre-stressed Beams	Overall Struct. Width:	9.9 m		
Number of Spans: 3	Roadway Width:	8.3 m		
Direction of Structure: East-West	Total Deck Length:	63 m		
GPS Coordinates (Degrees)	Span (s):	58.8 m		
Latitude: 44.204088	Total Deck Area:	624 sq.m		
General Longitude: -80.938854	Current Load Limit:	0		
Inspection Data				
Date of Inspection: 10-Jun-24				
Name of Inspector: A. Burgess P.Eng. & J. Ziegler CET				
	Sounding hammer, measuring equipment, GPS			
Weather Conditions: Cloudy				
Temperature: 5				
Special Notes: Bridge is in good condition, showing no signs of	Bridge is in good condition, showing no signs of structural distress.			
Overall Inspection Summary				
Additional Investigation Required: Additional Investigation Cost: Rehabilitation Needs: Rehabilitation Timing: Total Rehabilitation Budget Costings: So.00 Investigation: Investigation				
Latest Discussion languages land		-		
	C			
Latest Structure Rating: 75 La	itest Structure Condition:			
Latest Structure Rating: 75 La RehabHistory:				
Rehabilitation Timing: Total Rehabilitation Budget Costings: \$0.00 Engineering Fee: Historical Data Year Built: 1924 Contract Number When Built: Latest Biennial Inspection: March 23, 2023 Latest Specialized Inspection: Latest Structure Rating: 75 Latest Structure Condition:				

Description: Railing Systems: Improper connection to bridge.



Element Group:	Abutments	Site Number:	B-014	
Element Name:	Abutment walls	Width:	9.9	m
Element type:		Height:	2.22	m
Sub-element:		Length:	0	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	44	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	44 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	0	Estimated Cost:		





Element Inspection			
Element Group:	Abutments	Site Number:	B-014
Element Name:	Wingwalls	Width:	0 m
Element type:		Height:	3.72 m
Sub-element:		Length:	5 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	37 sqm
Environment:	Moderate	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: 0 Good:	37 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
		Offit Cost.	
Rehab time period:		Estimated Cost:	
Quantity:	0		
General Comments:			
			The same of the sa



Element Inspection				
Element Group:	Abutments	Site Number:	B-014	
Element Name:	Ballast walls	Width:	9.9	m
Element type:		Height:	1.4	m
Sub-element:		Length:	0	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	28	sqm
Environment:	Benign	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Rehab Needs: Rehab time period: Quantity: General Comments:	0	Unit Cost: Estimated Cost:		

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refic Fair: 0 Poor:	Site Number: Width: Height: Length: Count: Total Quantity: Not inspected: Maintenance Type: Maint. Time Period:	B-014 0 m 0 m 10 eac
eric	Height: Length: Count: Total Quantity: Not inspected: Maintenance Type: Maint. Time Period:	0 m 0 m 10 eac
	Length: Count: Total Quantity: Not inspected: Maintenance Type: Maint. Time Period:	0 m 10 eac
	Count: Total Quantity: Not inspected: Maintenance Type: Maint. Time Period:	10 eac
	Total Quantity: Not inspected: Maintenance Type: Maint. Time Period:	10 eac
Fair: 0 Poor: 0	Not inspected: Maintenance Type: Maint. Time Period:	10 eac
Fair: 0 Poor:	Not inspected: Maintenance Type: Maint. Time Period:	
Fair: O Poor: 0	Maint. Time Period:	
Fair: 0 Poor:	Maint. Time Period:	,
Fair: O Poor: O		
0	Estimated Cost:	1
The same of the sa		



ziemeni Inspection				
Element Group:	Accessories (Attachments and Signs)	Site Number:	B-014	
Element Name:	Signs	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Steel	Count:	4	
Location:		Total Quantity:	4	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	4 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	
General Comments:				



Element Inspection			
Element Group:	Approaches	Site Number:	B-014
Element Name:	Approach slabs	Width:	8.3 m
Element type:		Height:	0 m
Sub-element:		Length:	6.1 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	101 sqm
Environment:	Moderate	Not inspected:	
Perform, deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab time period: Quantity:	0	Estimated Cost:	
Rehab time period: Quantity:	0	Estimated Cost:	
General Comments:			



Element Group: Element Name: Element type: Sub-element: Material: Location: Environment: Perform. deficiencies:	Approaches Curbs Cast-in-place Concrete Severe	Site Number: Width: Height: Length: Count: Total Quantity: Not inspected: Maintenance Type:	B-014	
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: 0 Good: 17 Fair: 0 Poor: 0				
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	0	Estimated Cost:		
General Comments:				



Element Inspection			
Element Group:	Approaches	Site Number:	B-014
Element Name:	Wearing surface	Width:	8.3 m
Element type:		Height:	0 m
Sub-element:		Length:	6.1 m
Material:	Asphalt	Count:	2
Location:		Total Quantity:	101 sqm
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period:	101 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	
Quantity:	0		
General Comments:			



Element Group:	Barriers	Site Number:	B-014
Element Name:	Barrier/Parapet Walls	Width:	0.28 m
Element type:	Parapet wall w/ a double railing	Height:	0.7 m
Sub-element:		Length:	68.79 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	231 sqm
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	231 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:	0	Estimated Cost:	
equality.	Ü		

General Comments:



Element Group: Element Name: Element type: Sub-element: Material:	Railing Systems Flexi beam with timber posts Steel	Site Number: Width: Height: Length: Count:	B-014 m 0 m 0.7 m 21 m
Location:	Approaches	Total Quantity:	84 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: 0 Good:	84 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:	0	Estimated Cost:	

General Comments:

Improper connection to bridge.



Element Group:	Beams/Main Longitudinal Elements	Site Number:	B-014	
Element Name:	Girders (concrete)	Width:	0.65	m
Element type:	I Type	Height:	1.4	m
Sub-element:		Length:	58.79	m
Material:	Pre-cast Concrete	Count:	5	
Location:		Total Quantity:	1396	sqm
Environment:	Benian	Not inspected:		'
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	1396 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		ļ	
General Comments:				



arement inspection				
Element Group:	Beams/Main Longitudinal Elements	Site Number:	B-014	
Element Name:	Diaphragms	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Cast-in-place Concrete	Count:	20	
Location:		Total Quantity:	20	each
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: 0 Good:	20 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	0	Estimated Cost:		
General Comments:				



Element Group:	Decks	Site Number:	B-014	
Element Name:	Deck top (with thin slab)	Width:	9.9	m
Element type:		Height:	0	m
Sub-element:		Length:	58.79	m
Material:	Cast-in-place Concrete	Count:	1	-
Location:		Total Quantity:	582	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	582 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	
General Comments:				



-				
Element Group:	Decks	Site Number:	B-014	•
Element Name:	Drainage System	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Steel	Count:	6	-
Location:		Total Quantity:	6	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: O Good:	6 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	
General Comments:				



Element Group:	Decks	Site Number:	B-014	
Element Name:	Soffit - thin slab	Width:	1	m
Element type:		Height:	0.4	m
Sub-element:	Exterior	Length:	58.79	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	165	sqm
Environment:	Moderate	Not inspected:		•
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: -88 Good:	253 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	
General Comments:				



Element Inspection Element Group: Decks Site Number: B-014 **Element Name:** Soffit - thin slab Width: 7.9 m Element type: Height: 0 m Sub-element: Interior Length: 58.79 m Material: Cast-in-place Concrete Count: 1 Location: **Total Quantity:** 464 sqm **Environment:** Benian Not inspected: Perform, deficiencies: Maintenance Type: Maint. Time Period: Maint needs: Condition Data (sqm): Exec: 0 Poor: 0 Good: 464 Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:** 0 Quantity: **General Comments:**

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Element Inspection				
Element Group:	Embankments & Streams	Site Number:	B-014	
Element Name:	Embankments	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Rehab Needs:		Unit Cost:		
Pohoh Noodo		Unit Coat		
Rehab time period:		Estimated Cost:		
Quantity:	0			
General Comments:				

Element Inspection				
Element Group:	Embankments & Streams	Site Number:	B-014	
Element Name:	Streams and Waterways	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	1	
Location:		Total Quantity:	1	each
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Exec: Good:	1 Fair: 0 Poor: 0	Unit Cost:		
Rehab time period:				
Quantity:	0	Estimated Cost:		
General Comments:				



Element Inspection			
Element Group:	Foundations	Site Number:	B-014
Element Name:	Foundation (below ground level)	Width:	m
Element type:		Height:	m
Sub-element:		Length:	0 m
Material:	Cast-in-place Concrete	Count:	
Location:		Total Quantity:	each
Environment:	Benign	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (each): Exec: Good:	O Fair: O Poor: O		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:	0		
General Comments:			

Element Inspection			
Element Group:	Joints	Site Number:	B-014
Element Name:	Armouring/retaining devices	Width:	0 m
Element type:		Height:	0 m
Sub-element:		Length:	8.3 m
Material:	Steel	Count:	4
Location:		Total Quantity:	33 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m):			
Exec: 0 Good:	33 Fair: 0 Poor:	0	
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:	0	Estimated Cost.	
General Comments:			

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Element Inspection			
Element Group:	Joints	Site Number:	B-014
Element Name:	Concrete end dams	Width:	8.3 m
Element type:		Height:	0 m
Sub-element:		Length:	0.3 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	5 sqm
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period: Quantity:	0	Unit Cost: Estimated Cost:	
General Comments:			



Element Inspection			
Element Group:	Joints	Site Number:	B-014
Element Name:	Seals/sealants	Width:	0 m
Element type:		Height:	0 m
Sub-element:		Length:	8.3 m
Material:	Rubber	Count:	2
Location:		Total Quantity:	2
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: 0 Good:	2 Fair: 0 Poor: 0	_	
Rehab Needs:	12 Tuni jo 1001. jo	Unit Cost:	
Rehab time period:			
Quantity:	0	Estimated Cost:	\$0
General Comments:			

Element Group:	Sidewalks/ curbs	Site Number:	B-014
Element Name:	Curbs	Width:	0.58 m
Element type:		Height:	0.27 m
Sub-element:		Length:	58.79 m
Material:	Cast-in-place Concrete	Count:	2
Location:	On deck	Total Quantity:	100 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: 0 Good:	100 Fair: 0 Poor: 0	_	
_xoo. ₁₀	100 101. 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:	0		,
General Comments:			



Element Group:	Piers	Site Number:	B-014	
Element Name:	Caps	Width:	10.3	m
Element type:		Height:	0.6	m
Sub-element:		Length:	0	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	25	sqm
Environment:	Benign	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	25 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
	None Recommended	Estimated Cost:		
Quantity:	0			

General Comments:



Element Inspection				
Element Group:	Piers	Site Number:	B-014	
Element Name:	Bearings (elastomeric)	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Elastomeric	Count:	10	-
Location:		Total Quantity:	10	each
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	10 Fair: 0 Poor: 0	_		
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0			
General Comments:				
1				



Element Group:	Piers	Site Number:	B-014	
Element Name:	Shafts/Columns/Pile Bents	Width:	9.9	m
Element type:		Height:	3	m
Sub-element:		Length:	0.6	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	126	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	126 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:		

General Comments:



OSIM Biennial Inspection Report



Site Number:
N-184

Sideroad 25, Conc. 8, Lot 25/26



South Approach



Inventory Data				
Structure Name:	Sideroad 25, Conc. 8, Lot 25/26	Site Number:	N-184	
District:	Sideroad 25, Conc 8	Road Name:	Side Rd 25	
County:	Grey County	Owner:	West Grev	
Township:		Skew:	0	
Bridge or Culvert:	Culvert	AADT:	150	
Structure Type:	Box Culvert Open Footing - Simple	Overall Struct. Width:	9 m	
Number of Spans:	1	Roadway Width:	6.2 m	
Direction of Structure:	North-South	Total Deck Length:	3.7 m	
GPS Coordinates (Deg	rees)	Span (s):	3.2 m	
	itude: 44.039948	Total Deck Area:	33 sq.m	
REVIEWED Loi	ngitude: -80.872939	Current Load Limit:	0	
Inspection Data				
Date of Inspection:	31-Jul-24			
Name of Inspector:	Andrew Burgess, P.Eng. & Joel Ziegler CET			
Equipment Used:	Sounding hammer, measuring equipment, GF	PS		
Weather Conditions:	Sunny			
Temperature:	22			
Special Notes:	Culvert is in poor condition. Schedule for close	ure and complete follow up	inspection in 1 year.	
	<u> </u>			
Overall Inspection	Summary			
BCI: 47 Next Inspection: 31-Jul-26				
Additional Investigation	Required:	P	riority:	
Additional Investigation	Cost:			
Rehabilitation Needs:	Replace			
Rehabilitation Timing:	1 to 5 vears			
Total Rehabilitation Budget Costings: \$224,000.00 Engineering Fee: \$26.880				
Historical Data				
Year Built:	0	ontract Number When Bu	ilt:	
Latest Biennial Inspection	on: September 7, 2022	atest Specialized Inspecti	on:	
Latest Structure Rating:		atest Structure Condition		
RehabHistory:	,			
Regional Priority Number	er:	Programmed Work Year:		
NatureOfProgramWork:		<u> </u>	P	

Description: Inlet: Wide cracking at construction joint.



Description: Inlet: Severe spalling and disintegration.



Description: Inlet: Light to medium map cracking with leachate staining.



Description: Outlet: Severe disintegration along fascia with exposed reinforcing.



Description: Outlet: Severe disintegration at waterline, undermining culvert.



Description: Barrel: Severe spalling with exposed reinforcing throughout.



Description: Barrel: Severe scaling.



Description: Barrel: Severe disintegration along waterline, has undermined culvert.



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Description: Barrel: Wide vertical cracks propagating from spalling.



Description: Curbs: Medium to wide cracking throughout.



Element Group:	Culvert (overall)	Site Number:	N-184
Element Name:	All Elements	Width:	9 m
Element type:		Height:	0 m
Sub-element:		Length:	3.7 m
Material:	Cast-in-place Concrete	Count:	1
Location:		Total Quantity:	33 sqm
Environment:	Severe	Not inspected:	
Perform. deficiencies:	Load carrying capacity	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	0 Fair: 0 Poor: 33		
Rehab Needs:	Replace with Culvert (concrete)	Unit Cost:	\$5600 / sq.m
Rehab time period:	1 - 5 Years	Estimated Cost:	\$224,000
Quantity:	40 sq.m		

General Comments:

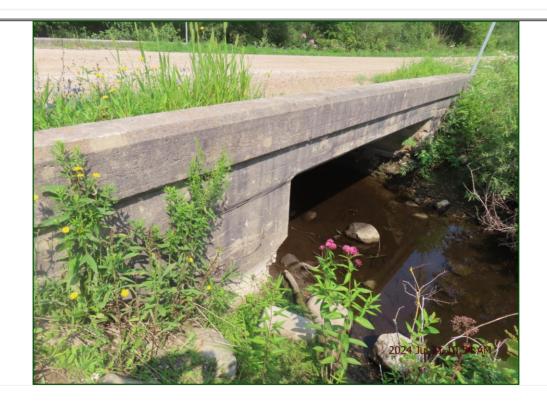


Element Group:	Decks	Site Number:	N-184	
Element Name:	Wearing surface	Width:	6.2 m	
Element type:		Height:	m	
Sub-element:		Length:	3.7 m	
Material:	Gravel	Count:		
Location:	Over Barrel	Total Quantity:	23 sqm	
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	23 Fair: 0 Poor:	0		
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				
General Comments:				
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Element Group:	Culverts	Site Number:	N-184
Element Name:	Inlet Components	Width:	3.2 m
Element type:		Height:	1 m
Sub-element:		Length:	m
Material:	Cast-in-place Concrete	Count:	1
Location:	East	Total Quantity:	8 sqm
Environment:	Moderate	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: O Good:	5 Fair: 2 Poor: 1		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:		Estimated Cost:	

General Comments:

Wide cracking at construction joint. Severe spalling and disintegration. Light to medium map cracking with leachate staining.



Element Group:	Culverts	Site Number:	N-184	
Element Name:	Outlet Components	Width:	3.2	m
Element type:		Height:	1	m
Sub-element:		Length:		m
Material:	Cast-in-place Concrete	Count:	1	
Location:	West	Total Quantity:	8	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	0 Fair: 2 Poor: 6			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		

General Comments:

Severe disintegration along fascia with exposed reinforcing. Severe disintegration at waterline, undermining culvert.



Element Group:	Culverts	Site Number:	N-184		
Element Name:	Barrels	Width:	3.2	m	
Element type:		Height:	1	m	
Sub-element:		Length:	9	m	
Material:	Cast-in-place Concrete	Count:	1		
Location:		Total Quantity:	47	sqm	
Environment:	Benian	Not inspected:			
Perform. deficiencies:	None	Maintenance Type:			
Maint needs:		Maint. Time Period:			
Condition Data (sqm): Exec: O Good: 23 Fair: 16 Poor: 8					
Rehab Needs:		Unit Cost:			
Rehab time period:		Estimated Cost:			
Quantity:					

General Comments:

Severe spalling with exposed reinforcing throughout. Severe scaling. Severe disintegration along waterline, has undermined culvert. Wide vertical cracks propegating from spalling.



Element Inspection			
Element Group:	Embankments and Streams	Site Number:	N-184
Element Name:	Embankments	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	4
Location:		Total Quantity:	each
Environment:		Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period:		Unit Cost:	
Condition Data (each): Exec: 0 Good:	4 Fair: 0 Poor:	0	
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			
8.5			
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Element Group:	Embankments and Streams	Site Number:	N-184
Element Name:	Streams & waterways	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	1
Location:		Total Quantity:	1
Environment:		Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: Good:	1 Fair: 0 Poor:	0	
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:		Zominatou Gooti	
General Comments:			

Element Inspection			
Element Group:	Foundations	Site Number:	N-184
Element Name:	Foundation (below ground)	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	2
ocation:		Total Quantity:	2
Environment:	Benian	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
laint needs:		Maint. Time Period:	
Condition Data:		_	
ixec: 0 Good:	2 Fair: 0 Poor: 0)	
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			

Element Group:	Signs	Site Number:	N-184	
Element Name:	Signs	Width:		m
Element type:		Height:		m
Sub-element:		Length:		m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Rehab Needs: Rehab time period: Quantity:	4 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:		

Element Group:	Sidewalks/ curbs	Site Number:	N-184
Element Name:	Curbs	Width:	0.35 m
Element type:		Height:	0.2 m
Sub-element:		Length:	3.7 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	7 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec:	3 Fair: 3 Poor: 1		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:	None Recommended	Estimated Cost:	

General Comments:

Curb beginning to lean outwards. Medium to wide cracking throughout.



OSIM Biennial Inspection Report



Site Number:
N-188

Sideroad 25, Conc. 12, Lot 25/26



North Approach



Inventory Data				
Structure Name:	Sideroad 25, Conc. 12, Lot 25/26	Site Number:	N-188	
District:	Sideroad 25, Conc. 12	Road Name:	Side Rd 25	
County:	Grey County	Owner:	West Grev	
Township:		Skew:	0	
Bridge or Culvert:	Culvert	AADT:	100	
Structure Type:	Box Culvert Open Footing - Simple	Overall Struct. Width:	5 m	
Number of Spans:	1	Roadway Width:	5 m	
Direction of Structure:	North-South	Total Deck Length:	5.3 m	
GPS Coordinates (Degree	ees)	Span (s):	4.1 m	
Latit REVIEWED	ude: 44.082926	Total Deck Area:	sq.m	
	jitude: -80.882706	Current Load Limit:	0	
Inspection Data				
Date of Inspection:	31-Jul-24			
	Andrew Burgess, P.Eng. & Joel Ziegler CET			
	Sounding hammer, measuring equipment, GP	'S		
	Sunny			
_	23			
Special Notes: Culvert is in poor condition, showing no signs of structural distress.				
Overall Inspection S	ummary			
BCI: 54 Next Inspection: 31-Jul-26 Additional Investigation Required: Priority:				
Additional Investigation C	Cost:			
Rehabilitation Needs:	Replace			
Rehabilitation Timing:	1 to 5 vears			
Total Rehabilitation Budget Costings: \$196,000.00 Engineering Fee: \$23.520				
Historical Data				
Year Built:	0 C	ontract Number When Bu	ilt:	
Latest Biennial Inspection		atest Specialized Inspecti	on:	
Latest Structure Rating:		atest Structure Condition		
RehabHistory:				
Regional Priority Number	:	Programmed Work Year:		
NatureOfProgramWork:	•		r	

Description: Inlet: Severe spalling and disintegration.



Description: Outlet: Severe spalling and disintegration.



Description: Outlet: Medium to wide cracking with leachate staining throughout.



Description: Barrel: Severe spalling and disintegration.



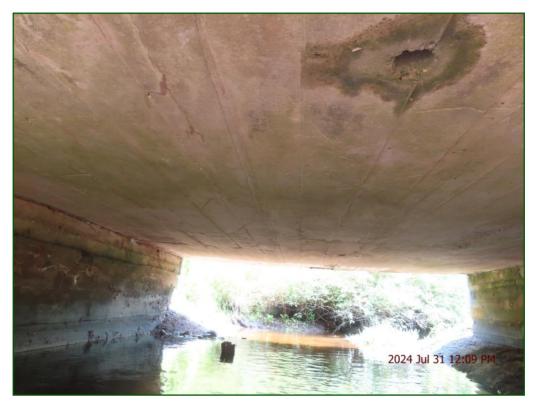
Description: Barrel: Medium to wide cracking with leachate staining throughout.



Description: Barrel: Severe spalling and disintegration (undermining).



Description: Barrel: View from west.



Description: Embankments: Minor erosion on north-east quadrant.



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Element Group:	Culvert (overall)	Site Number:	N-188	
Element Name:	All Elements	Width:	5	m
Element type:		Height:	0	m
Sub-element:		Length:	4.1	m
Material:	Cast-in-place Concrete	Count:	0	
Location:		Total Quantity:	26	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:	Load carrying capacity	Maintenance Type:		
Maint needs:		Maint. Time Period:		

Condition Data (sqm):

Exec: 0 Good: 0 Fair: 0 Poor: 26

Rehab Needs:	Replace with Culvert (concrete)	Unit Cost:	\$5600 / sq.m
Rehab time period:	1 - 5 Years	Estimated Cost:	\$196,000
Quantity:	35 sq.m		

General Comments:



Element Inspection				
Element Group:	Decks	Site Number:	N-188	-
Element Name:	Wearing surface	Width:	5	m
Element type:		Height:		m
Sub-element:		Length:	5.3	m
Material:	Gravel	Count:		
Location:	Over Barrel	Total Quantity:	26	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	26 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			1	
General Comments:				
	1000			

Element Group:	Culverts	Site Number:	N-188	
Element Name:	Inlet Components	Width:	4.1	m
Element type:		Height:	1.2	m
Sub-element:		Length:		m
Material:	Cast-in-place Concrete	Count:	1	-
Location:	East	Total Quantity:	3	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	0 Fair: 1 Poor: 2			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		

General Comments:

Severe spalling and disintegration.



Element Group: Element Name:	Culverts Outlet Components	Site Number: Width:	N-188 m
Element type: Sub-element: Material: Location: Environment:	Cast-in-place Concrete West Moderate	Height: Length: Count: Total Quantity: Not inspected:	1.2 m m 1 m 1 8 sqm
Perform. deficiencies: Maint needs: Condition Data (sqm):	None	Maintenance Type: Maint. Time Period:	
Rehab Needs: Rehab time period: Quantity:	4 Fair: 2 Poor: 2	Unit Cost: Estimated Cost:	

General Comments:

Severe spalling and disintegration. Medium to wide cracking with leachate staining throughout.



Element Group:	Culverts	Site Number:	N-188
Element Name:	Barrels	Width:	4.1 m
Element type:		Height:	0.8 m
Sub-element:		Length:	5 m
Material:	Cast-in-place Concrete	Count:	1
Location:		Total Quantity:	28 sqm
Environment:	Benian	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: 0 Good:	18 Fair: 6 Poor: 4		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			

General Comments:

Severe spalling and disintegration. Medium to wide cracking with leachate staining throughout. Severe spalling and disintegration (undermining).



Element Group:	Embankments and Streams	Site Number:	N-188	
Element Name:	Streams & waterways	Width:	m	
Element type:		Height:	m	
Sub-element:		Length:	m	
Material:		Count:	1	
Location:		Total Quantity:	1	
Environment:		Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data: Exec: Good:	1 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				
General Comments:				
				_
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Element Inspection			
Element Group:	Foundations	Site Number:	N-188
Element Name:	Foundation (below ground)	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	2
Location:		Total Quantity:	2
Environment:	Benian	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: 0 Good:	2 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			
No signs of settlement.			

Element Group:	Signs	Site Number:	N-188	
Element Name:	Signs	Width:		m
Element type:		Height:		m
Sub-element:		Length:		m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Rehab Needs: Rehab time period: Quantity: General Comments:	4 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:		
			V _Z ×	

Element Group:	Barriers	Site Number:	N-188
Element Name:	Railing systems	Width:	0 m
Element type:	Flexi beam with timber posts	Height:	0.6 m
Sub-element:		Length:	5.3 m
Material:	Steel	Count:	1
Location:		Total Quantity:	5 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: Good:	5 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:	

General Comments:



Element Group:	Embankments & Streams	Site Number:	N-188	
Element Name:	Embankments	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:		Not inspected:		
Perform. deficiencies:	None	Maintenance Type:	Routine	
Maint needs:	Erosion control	Maint. Time Period:	1 Year	
Condition Data (each): Exec: Good:	3 Fair: 1 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended	Estimated Cost:		

General Comments:

Steep embankments recommend approach protection. Minor erosion on north-east quadrant.



OSIM Biennial Inspection Report



Site Number:
N-068

Concession 3, Lot 63/64



North Elevation



Inventory Data				
Structure Name:	Concession 3, Lot 63/64	Site Number:	N-068	
District:	Concession 3, Lot 63 & 64	Road Name:	63 Rd	
County:	Grey County	Owner:	West Grev	
Township:		Skew:	0	
Bridge or Culvert:	Bridge	AADT:	250	
Structure Type:	Concrete Rigid Frame	Overall Struct. Width:	9.8 m	
Number of Spans:	1	Roadway Width:	8.5 m	
Direction of Structure:	East-West	Total Deck Length:	12.2 m	
GPS Coordinates (Degr	·	Span (s):	10.7 m	
Lati REVIEWED	tude: 43.997648	Total Deck Area:	120 sq.m	
Lon	gitude: -80.817814	Current Load Limit:	0	
Inspection Data				
Date of Inspection:	31-Jul-24			
Name of Inspector:	Andrew Burgess, P.Eng. & Joel Ziegler CET			
Equipment Used:	Sounding hammer, measuring equipment, GPS			
Weather Conditions:	er Conditions: Sunny			
Temperature:	23			
Special Notes: Bridge is in good condition, showing no signs of structural distress.				
Overall Inspection S	Summary			
Additional Investigation Required: Additional Investigation Cost: Rehabilitation Needs: Rehabilitation Timing: Total Rehabilitation Budget Costings: Engineering Fee:				
Year Built:	TOGO	Contract Number When Bu		
Latest Structure Pating	Copicing 6: 1, 2022	atest Specialized Inspecti atest Structure Condition:		
Latest Structure Rating:	74.8	alest Structure Condition:		
RehabHistory:		_ ,		
Regional Priority Numbe NatureOfProgramWork:	r:	Programmed Work Year:		

Description: Soffit (int): Light to medium longitudinal cracking with leachate staining.



Description: Railing system: Moderate impact damage on south-east corner.



Description: Deck top: Minor abrasions throughout.



Description: Curbs: Severe delamination throughout.



Element Group:	Abutments	Site Number:	N-068	
Element Name:	Walls	Width:	9.8	m
Element type:	Legs of a rigid frame	Height:	4.25	m
Sub-element:		Length:		m
Material:	Cast-in-place Concrete	Count:	2	-
Location:		Total Quantity:	83	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	83 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		
General Comments:				



Element Inspection					
Element Group:	Abutments	Site Number:	N-068		
Element Name:	Wingwalls	Width:	m		
Element type:		Height:	4.25 m		
Sub-element:		Length:	6.1 m		
Material:	Cast-in-place Concrete	Count:	4		
Location:		Total Quantity:	104 sqm		
Environment:	Moderate	Not inspected:			
Perform. deficiencies:	None	Maintenance Type:			
Maint needs:		Maint. Time Period:			
Rehab time period: Quantity:		Estimated Cost:			
General Comments:					

Element Inspection Element Group: Decks Site Number: N-068 **Element Name:** Width: Drainage system Element type: Height: m Sub-element: Length: m Material: Steel Count: 4 Location: **Total Quantity:** each **Environment:** Severe Not inspected: Maintenance Type: Perform, deficiencies: None Maint. Time Period: Maint needs: Condition Data (each): Exec: 0 Poor: 0 Good: 4 Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:** Quantity: **General Comments:**

Element Group:	Decks	Site Number:	N-068
Element Name:	Soffit - thick slab	Width:	7.8 m
Element type:		Height:	m
Sub-element:	Interior	Length:	10.7 m
Material:	Cast-in-place Concrete	Count:	1
Location:		Total Quantity:	84 sqm
Environment:	Benign	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: 0 Good:	83 Fair: 1 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:		Estimated Cost:	

General Comments:

Light to medium longitudinal cracking with leachate staining.



Element Group:	Decks	Site Number:	N-068
Element Name:	Soffit - thick slab	Width:	1 m
Element type:		Height:	0.4 m
Sub-element:	Exterior	Length:	10.7 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	30 sqm
Environment:	Moderate	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec:	30 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	
Quantity:			
General Comments:			
		2024	Jul 31 10:02 AM

Element Inspection			
Element Group:	Foundations	Site Number:	N-068
Element Name:	Foundation (below ground)	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	2
Location:		Total Quantity:	2
Environment:		Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec:	2 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments: No signs of settlement.			

Element Group:	Approaches	Site Number:	N-068	
Element Name:	Wearing surface	Width:	8.5 m	
Element type:		Height:	m	
Sub-element:		Length:	5 m	
Material:	Gravel	Count:	2	
Location:		Total Quantity:	85 sqm	
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good: Rehab Needs: Rehab time period: Quantity:	85 Fair: 0 Pool	Unit Cost: Estimated Cost:		
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Element Group:	Approaches	Site Number:	N-068
Element Name:	Approach slab	Width:	9.8 m
Element type:		Height:	m
Sub-element:		Length:	5 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	98
Environment:	Moderate	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: 0 Good:	94 Fair: 4 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			
No signs of settlement.			



Element Inspection			
Element Group:	Approaches	Site Number:	N-068
Element Name:	Curbs	Width:	0.3 m
Element type:		Height:	0.3 m
Sub-element:		Length:	5 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	20 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period: Quantity:		Unit Cost: Estimated Cost:	
General Comments:	<u>'</u>		

Element Group:	Approaches	Site Number:	N-068	
Element Name:	Barrier/Parapet walls	Width:		m
Element type:	pariner, anaper mane	Height:		m
Sub-element:	Interior	Length:		m
Material:	Cast-in-place Concrete	Count:	4	
Location:	End posts	Total Quantity:		sqm
Environment:	Severe	Not inspected:		Sqiii
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Rehab time period: Quantity:	,	Estimated Cost:		
_				
General Comments:				
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Element Group: Element Name: Element type: Sub-element: Material:	Approaches Barrier/Parapet walls Exterior Cast-in-place Concrete	Site Number: Width: Height: Length: Count:	M-068 m 1.1 m 5 m
Location: Environment:	End posts Moderate	Total Quantity: Not inspected:	22 sqm
Perform. deficiencies: Maint needs: Condition Data (sqm):	None	Maintenance Type: Maint. Time Period:	
Exec: 0 Good:	22 Fair: 0 Poor: 0		
Rehab Needs: Rehab time period: Quantity: General Comments:		Unit Cost: Estimated Cost:	



Element Group: Element Name: Element type: Sub-element: Material:	Railing system	Site Number: Width: Height: Length:	M-068 m 1.1 m 12.2 m
Location: Environment:	Severe	Count: Total Quantity: Not inspected:	24
Perform. deficiencies: Maint needs:	None Barrier/railing system repair	Maintenance Type: Maint. Time Period:	Structural 2 Year
Condition Data: Exec: 0 Good: Rehab Needs: Rehab time period: Quantity:	22 Fair: 2 Poor: 0	Unit Cost: Estimated Cost:	

General Comments:

Moderate impact damage on south-east corner.



Element Group:	Decks	Site Number:	N-068	•
Element Name:	Deck top (with thick slab)	Width:	9.8	m
Element type:		Height:		m
Sub-element:		Length:	12.2	m
Material:	Cast-in-place Concrete	Count:		
Location:		Total Quantity:	120	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	120 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		

General Comments:

Minor abrasions throughout.



-			
Element Group:	Embankments and Streams	Site Number:	N-068
Element Name:	Streams & waterways	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	1
Location:		Total Quantity:	1
Environment:		Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: 0 Good:	1 Fair: 0 Poor:	0	
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			
			Shi St. II. The

Element Inspection			
Element Group:	Embankments and Streams	Site Number:	N-068
Element Name:	Embankments	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	4
Location:		Total Quantity:	4 each
Environment:		Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period:		Unit Cost:	
Condition Data (each): Exec: O Good:	4 Fair: 0 Poor:	0	
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			
	ommend approach protection.		

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Element Group:	Sidewalks/curbs	Site Number:	N-068	
Element Name:	Curbs	Width:	0.5	m
Element type:		Height:	0.3	m
Sub-element:		Length:	12.2	m
Material:		Count:	2	
Location:		Total Quantity:	24	m
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: Good:	21 Fair: 2 Poor: 1			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		
General Comments:				

General Comments.

Severe delamination throughout.



Element Inspection			
Element Group:	Signs	Site Number:	N-068
Element Name:	Signs	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	4
Location:		Total Quantity:	4 each
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (each): Exec: 0 Good: Rehab Needs:	4 Fair: 0 F	Poor: 0 Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			,
General Comments:			
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OSIM Biennial Inspection Report





Concession 17/18, Lot 1



North Elevation



Inventory Data				
Structure Name:	Concession 17/18, Lot 1	Site Number:	N-050	
District:	Concession 17 & 18, Lot 1	Road Name:	Concession Road 18 Extensio	
County:	Grey County	Owner:	West Grev	
Township:		Skew:	0	
Bridge or Culvert:	Bridge	AADT:	150	
Structure Type:	Concrete Deck w/ Steel Beams	Overall Struct. Width:	10.2 m	
Number of Spans:	1	Roadway Width:	8.8 m	
Direction of Structure:	East-West	Total Deck Length:	19.4 m	
GPS Coordinates (Degr	ees)	Span (s):	18.3 m	
Latin REVIEWED	tude: 44.112918	Total Deck Area:	198 sq.m	
	gitude: -81.017045	Current Load Limit:	0	
Inspection Data				
Date of Inspection:	30-Jul-24			
	Andrew Burgess, P.Eng. & Joel Ziegler CET			
	Sounding hammer, measuring equipment, GF	PS		
Weather Conditions:	Cloudy			
Temperature:	23			
Special Notes:	Bridge is in good condition, showing no signs	of structural distress.		
ļ				
Overall Inspection S	Summary			
Additional Investigation Required: Additional Investigation Cost: Rehabilitation Needs: Rehabilitation Timing:				
Total Rehabilitation Budg	get Costings:	Engineering Fee:		
Historical Data				
Year Built: Latest Biennial Inspectio Latest Structure Rating: RehabHistory:	n: September 6, 2022	contract Number When Bu atest Specialized Inspecti atest Structure Condition	on:	
Regional Priority Number NatureOfProgramWork:	r: F	Programmed Work Year:		

Description: Approach Curbs: Light delamination throughout.



Description: Curbs: Light delamination throughout.



Description: Curbs: Light to medium cracking with leachate staining throughout.



Description: Wearing Surface: Shallow pothole.



Description: Soffit (int): Shallow delamination throughout.



Description: Soffit (int): Light to medium crack with leachate staining.



Element Group:	Approaches	Site Number:	N-050
Element Name:	Wearing surface	Width:	8.8 m
Element type:		Height:	0 m
Sub-element:		Length:	4.5 m
Material:	Asphalt	Count:	2
Location:		Total Quantity:	79 sqm
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: 0 Good:	79 Fair : 0 Poor : 0		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:	None Recommended	Estimated Cost:	



Element Group:	Approaches	Site Number:	N-050	
Element Name:	Curbs	Width:	0.8	m
Element type:		Height:	0.25	m
Sub-element:		Length:	4.5	m
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:	18	m
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: 0 Good:	16 Fair: 2 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0			

General Comments:

Light delamination throughout.



Element Inspection			
Element Group: Element Name: Element type: Sub-element: Material: Location: Environment:	Approaches Approach slabs Cast-in-place Concrete Moderate	Site Number: Width: Height: Length: Count: Total Quantity: Not inspected:	N-050 8.8 m 0 m 4.5 m 2 79 sqm
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: 0 Good: Rehab Needs: Rehab time period: Quantity:	79 Fair: 0 Poor: None Recommended	Unit Cost: Estimated Cost:	
General Comments:			



Element Group:	Approaches Barrier/Parapet walls	Site Number: Width:	N-050	m
Element type: Sub-element: Material:	Cast-in-place Concrete	Height: Length: Count:	0.85	m m
Location: Environment:	End posts	Total Quantity: Not inspected:	14	sqm
Perform. deficiencies: Maint needs:		Maintenance Type: Maint. Time Period:		
Condition Data (sqm): Exec: Good:	14 Fair: 0 Poor: 0			
Rehab Needs: Rehab time period: Quantity:	None Recommended	Unit Cost: Estimated Cost:		



Element Group:	Decks	Site Number:	N-050
Element Name:	Deck top (with thin slab)	Width:	8.8 m
Element type:		Height:	0 m
Sub-element:		Length:	19.4 m
Material:	Cast-in-place Concrete	Count:	0
Location:		Total Quantity:	171 sqm
Environment:	Moderate	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: 0 Good:	170 Fair: 1 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:	None Recommended	Estimated Cost:	
Quantity:	U		



Element Group:	Sidewalks/ curbs	Site Number:	N-050	
Element Name:	Curbs	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	19.4	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	39	m
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: Good:	35 Fair : 4 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0		r	

General Comments:

Light delamination throughout. Light to medium cracking with leachate staining throughout.



Element Group:	Accessories	Site Number:	N-050	
Element Name:	Signs	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	6	
Location:		Total Quantity:	6	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: 0 Good:	6 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0		,	
General Comments:				





Element Group:	Embankments & Streams	Site Number:	N-050	
Element Name:	Embankments	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:		Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: 0 Good:	4 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended	Estimated Cost:		
General Comments:	, -			



Element Group:	Abutments Wingwalls	Site Number: Width:	N-050	m
Element type: Sub-element:		Height:	2	m
Material:	Cast-in-place Concrete	Length: Count:	4	m
Environment:	Moderate	Total Quantity: Not inspected:	40	sqm
Perform. deficiencies: Maint needs:		Maintenance Type: Maint. Time Period:		
Condition Data (sqm): Exec: O Good:	40 Fair: 0 Poor: 0			
Rehab Needs: Rehab time period: Quantity:	None Recommended	Unit Cost: Estimated Cost:		



Element Group: Element Name: Element type: Sub-element: Material: Location: Environment: Perform. deficiencies: Maint needs:	Decks Soffit - thin slab Exterior Moderate	Site Number: Width: Height: Length: Count: Total Quantity: Not inspected: Maintenance Type: Maint. Time Period:	N-050 0.4 0.3 19.4 2 27	m m m
Condition Data (sqm): Exec: 0 Good: Rehab Needs: Rehab time period: Quantity:	Poor: 0 None Recommended	Unit Cost: Estimated Cost:		



Element Group:	Abutments	Site Number:	N-050
Element Name:	Walls	Width:	10 m
Element type:		Height:	2.95 m
Sub-element:		Length:	0 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	59 sqm
Environment:	Benign	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	59 Fair : 0 Poor : 0		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:	



Element Group:	Beams/Main Longitudinal Elements	Site Number:	N-050	
Element Name:	Diaphragms	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Cast-in-place Concrete	Count:	8	
Location:		Total Quantity:	8	each
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	8 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:		
General Comments:				





Element Group: Element Name:	Abutments Bearings (elastomeric)	Site Number: Width:	N-050 m
Element type: Sub-element:		Height: Length:	0 m
Material: Location:	Elastomeric	Count:	10
Environment:	Benian	Total Quantity: Not inspected:	each
Perform. deficiencies: Maint needs:		Maintenance Type: Maint. Time Period:	
Condition Data (each): Exec: O Good:	10 Fair: 0 Poor: 0		
Rehab Needs: Rehab time period: Quantity:	None Recommended	Unit Cost: Estimated Cost:	



Element Inspection			
Element Group: Element Name: Element type: Sub-element: Material: Location: Environment: Perform. deficiencies: Maint needs:	Decks Drainage system Steel Severe	Site Number: Width: Height: Length: Count: Total Quantity: Not inspected: Maintenance Type: Maint. Time Period:	N-050 m 0 m 0 m 8 each
Condition Data (each): Exec: 0 Good: Rehab Needs: Rehab time period: Quantity: General Comments:	8 Fair: 0 Poor: 0 None Recommended 0	Unit Cost: Estimated Cost:	

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Element Group:	Foundations	Site Number:	N-050	
Element Name:	Foundation (below ground level)	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	2	
Location:		Total Quantity:	2	each
Environment:		Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	2 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:		

General Comments:

No signs of settlement.



Element Group:	Decks	Site Number:	N-050
Element Name:	Wearing surface	Width:	8.8 m
Element type:		Height:	0 m
Sub-element:		Length:	19.4 m
Material:	Asphalt	Count:	0
Location:		Total Quantity:	171 sqm
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	169 Fair: 1 Poor: 1		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:	None Recommended 0	Estimated Cost:	

General Comments:

Shallow pothole.



Element Group:	Barriers	Site Number:	N-050	
Element Name:	Railing systems	Width:	0	m
Element type:	Post and rail	Height:	0	m
Sub-element:		Length:	19.4	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	39	m
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: 0 Good:	39 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	None Recommended	Estimated Cost:		



Element Inspection				
Element Group:	Embankments & Streams	Site Number:	N-050	
Element Name:	Streams and Waterways	Width:	0 m	
Element type:		Height:	0 m	
Sub-element:		Length:	0 m	
Material:		Count:	1	
Location:		Total Quantity:	1 each	
Environment:		Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: 0 Good:	1 Fair: 0 Poor:	_		-
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0			
General Comments:				
) <u> </u>			

Element Group:	Decks	Site Number:	N-050	
Element Name:	Soffit - thick slab	Width:	9.4	m
Element type:		Height:	0	m
Sub-element:	Interior	Length:	19.4	m
Material:	Cast-in-place Concrete	Count:	0	
Location:		Total Quantity:	182	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	179 Fair: 3 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0			

General Comments:

Quantity:

Shallow delamination throughout. Light to medium crack with leachate staining.



Element Group:	Beams/Main Longitudinal Elements	Site Number:	N-050
Element Name:	Girders (steel)	Width:	0.3 m
Element type:		Height:	0.85 m
Sub-element:		Length:	19.4 m
Material:	Steel	Count:	5
Location:		Total Quantity:	254 sqm
Environment:	Benign	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: 0 Good:	254 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:	None Recommended	Estimated Cost:	
Quantity:	0		-

General Comments:

Quantity:

Areas of coating breakdown, not critical.



Element Group:	Beams/Main Longitudinal Elements	Site Number:	N-050	
Element Name:	Diaphragms	Width:	0.05	m
Element type:		Height:	0.4	m
Sub-element:		Length:	2.2	m
Material:	Steel	Count:	8	
Location:		Total Quantity:	8	each
Environment:	Benign	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	8 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0			



OSIM Biennial Inspection Report



Site Number:
G-045

Concession 2 & 3N, Lot 33, Northline Rd Bridge



South Elevation



Inventory Data				
Structure Name:	Concession 2 & 3N, Lot 33, Northline Rd B	Site Number:	G-045	
District:		Road Name:	North Line	
County:	Grey County	Owner:	West Grey	
Township:	West Grey	Skew:	0	
Bridge or Culvert:	Bridge	AADT:	100	
Structure Type:	Concrete Deck w/ Steel Beams	Overall Struct. Width:	7.8 m	
Number of Spans:	1	Roadway Width:	7.8 m	
Direction of Structure:	East-West	Total Deck Length:	13.4 m	
GPS Coordinates (Degre	ees)	Span (s):	12 m	
Latit	ude: 44.215510	Total Deck Area:	105 sq.m	
General Long	jitude: -80.689125	Current Load Limit:	0	
Inspection Data				
Date of Inspection:	11-Jun-24			
	A. Burgess P.Eng. & J. Ziegler CET			
	Sounding hammer, measuring equipment, GPS	S		
	Sunny	-		
_				
	Bridge is in good condition, showing no signs o	of structural distress.		
Enage to in good containon, showing no signs of structural distress.				
Overall Inspection S	ummary			
Additional Investigation Required: Additional Investigation Cost: Rehabilitation Needs: Rehabilitation Timing: Total Rehabilitation Budget Costings: Historical Data				
Voor Builte	4000	ontract Number When Bu	:14.	
Year Built: Latest Biennial Inspection		ontract Number when Bu Itest Specialized Inspecti		
Latest Structure Rating:		itest Specialized Inspecti itest Structure Condition:		
RehabHistory:	75 La	acot of acture contaition.		
-		regrammed Week Ver-		
Regional Priority Number NatureOfProgramWork:		rogrammed Work Year:		

Description: Wingwalls: Light to medium horizontal cracking with leachate staining.



Description: Approach Wearing surface: Light tranverse cracking on east approach.



Description: Diaphragms: Impact damage.



Element Group:	Abutments	Site Number:	G-045	
Element Name:	Abutment walls	Width:	7.8	m
Element type:		Height:	2.1	m
Sub-element:		Length:	0	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	33	sqm
Environment:	Benign	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	33 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0			
General Comments:				



Element Group: Element Name:	Abutments Wingwalls	Site Number: Width:	G-045 m	
Element type:		Height:	2.76 m	
Sub-element:		Length:	2.43 m	
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:	13 sqm	
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good: 12 Fair: 1 Poor: 0				
Rehab Needs:		Unit Cost:		
Rehab time period:	0	Estimated Cost:		

General Comments:

Light to medium horizontal cracking with leachate staining.



Element Group:	Abutments	Site Number:	G-045		
Element Name:	Ballast walls	Width:	7.8	m	
Element type:		Height:	0.66	m	
Sub-element:		Length:	0	m	
Material:	Cast-in-place Concrete	Count:	2		
Location:		Total Quantity:	10	sqm	
Environment:	Benian	Not inspected:			
Perform. deficiencies:		Maintenance Type:			
Maint needs:		Maint. Time Period:			
Condition Data (sqm): Exec: O Good: 10 Poor: 0					
Rehab Needs:		Unit Cost:			
Rehab time period:		Estimated Cost:			
Quantity:	0		,		
General Comments:					



ziemeni Inspection					
Element Group:	Abutments	Site Number:	G-045		
Element Name:	Bearings (elastomeric)	Width:		m	
Element type:		Height:		m	
Sub-element:		Length:	0	m	
Material:	Elastomeric	Count:	8		
Location:		Total Quantity:	8	each	
Environment:	Benian	Not inspected:			
Perform. deficiencies:		Maintenance Type:			
Maint needs:		Maint. Time Period:			
Condition Data (each): Exec: 0 Good: 8 Fair: 0 Poor: 0					
Rehab Needs:		Unit Cost:			
Rehab time period:		Estimated Cost:			
Quantity:	0		,		
General Comments:					
,					



dement Inspection					
Element Group:	Accessories (Attachments and Signs)	Site Number:	G-045		
Element Name:	Signs	Width:		m	
Element type:		Height:		m	
Sub-element:		Length:	0	m	
Material:	Steel	Count:	8		
Location:		Total Quantity:	8	each	
Environment:	Severe	Not inspected:			
Perform. deficiencies:		Maintenance Type:			
Maint needs:		Maint. Time Period:			
Condition Data (each): Exec: Good:	8 Fair: 0 Poor: 0				
Exec: 0 Good:	8 Fair: 0 Poor: 0				
Rehab Needs:		Unit Cost:			
Rehab time period:		Estimated Cost:			
Quantity:	0				
General Comments:					
Eight (8) hazard signs.					



Element Group:	Approaches	Site Number:	G-045	
Element Name:	Approach slabs	Width:	6.7	m
Element type:		Height:		m
Sub-element:		Length:	6.1	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	82	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	82 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	
General Comments:				



Element Group:	Approaches	Site Number:	G-045	
Element Name:	Wearing surface	Width:	6.7	m
Element type:		Height:		m
Sub-element:		Length:	6.1	m
Material:	Asphalt	Count:	2	-
Location:		Total Quantity:	82	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	82 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		•	

General Comments:

Light tranverse cracking on east approach.



Element Group:	Barriers	Site Number:	G-045	
Element Name:	Railing Systems	Width:		m
Element type:	Flexi beam with steel posts	Height:	1	m
Sub-element:		Length:	48	m
Material:	Steel	Count:	2	
Location:		Total Quantity:	96	m
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: 0 Good:	96 Fair: 0 Poor: 0	_		
Exec: 0 Good:	96 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	
General Comments:				



Element Inspection			
Element Group:	Beams/Main Longitudinal Elements	Site Number:	G-045
Element Name:	Girders (steel)	Width:	0.25 m
Element type:		Height:	0.66 m
Sub-element:		Length:	13.4 m
Material:	Steel	Count:	4
Location:		Total Quantity:	111 sqm
Environment:	Benign	Not inspected:	
Perform, deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period: Quantity: General Comments:	0	Unit Cost: Estimated Cost:	

Element Group:	Beams/Main Longitudinal Elements	Site Number:	G-045	
Element Name:	Diaphragms	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Steel	Count:	6	
Location:		Total Quantity:	6	each
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: 0 Good:	5 Fair: 1 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	0	Estimated Cost:		
Consuel Comments				

General Comments:

Impact damage.



Element Group:	Coatings	Site Number:	G-045		
Element Name:	Structural steel (coating)	Width:	0.25 m		
Element type:		Height:	0.66 m		
Sub-element:		Length:	13.4 m		
Material:		Count:	4		
Location:		Total Quantity:	111 sqm		
Environment:	Moderate	Not inspected:			
Perform. deficiencies:		Maintenance Type:			
Maint needs:		Maint. Time Period:			
Condition Data (sqm): Exec: O Good: 111 Fair: O Poor: O					
Rehab Needs:		Unit Cost:			
Rehab time period: Quantity:	0	Estimated Cost:		Ī	
Conoral Commenter					

General Comments:



метет Інгресион				
Element Group:	Decks	Site Number:	G-045	
Element Name:	Deck top (with thin slab)	Width:	7.8	m
Element type:		Height:		m
Sub-element:		Length:	13.4	m
Material:	Cast-in-place Concrete	Count:	1	-
Location:		Total Quantity:	105	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	105 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	
General Comments:				



Element type: Sub-element: Exterior Length: Cast-in-place Concrete Count: Location: Environment: Moderate Moderate Maintenance Type: Maint needs: Maint. Time Period: Condition Data (sqm):	-				_
Element type: Sub-element: Exterior Length: Length: 13.4 m Cast-in-place Concrete Location: Total Quantity: Sub-element: Count: Perform. deficiencies: Maint needs: Maint needs: Condition Data (sqm): Exec: Rehab Needs: Rehab time period: Quantity: O Height: 0.31 m Maint needs: Total Quantity: Not inspected: Maintenance Type: Maint. Time Period: Unit Cost: Estimated Cost: Quantity: O	Element Group:	Decks	Site Number:	G-045	
Sub-element: Material: Cast-in-place Concrete Count: Total Quantity: Superior: Moderate Not inspected: Maintenance Type: Maint needs: Maint. Time Period: Condition Data (sqm): Exec: Good: Rehab Needs: Rehab time period: Quantity: Unit Cost: Estimated Cost: Quantity:	Element Name:	Soffit - thin slab	Width:	1 m	
Material: Cast-in-place Concrete Count: Total Quantity: Not inspected: Perform. deficiencies: Maint needs: Maint needs: Condition Data (sqm): Exec: Rehab Needs: Rehab time period: Quantity: O Condition: Cast-in-place Concrete Count: And And And And And And And An	Element type:		Height:	0.31 m	
Material: Cast-in-place Concrete Count: 2 Location: Total Quantity: 35 sqm Not inspected: Not inspected: Perform. deficiencies: Maintenance Type: Maint needs: Maint. Time Period: Condition Data (sqm): Exec: 0 Good: 35 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Estimated Cost: Quantity: 0	Sub-element:	Exterior	Length:	13.4 m	
Location: Environment: Moderate Not inspected: Perform. deficiencies: Maint needs: Maint. Time Period: Condition Data (sqm): Exec: Quantity: Rehab Needs: Rehab time period: Quantity: Quantity: Total Quantity: Maint needs: Maintenance Type: Maint. Time Period: Unit Cost: Estimated Cost: Quantity: O	Material:	Cast-in-place Concrete	Count:	2	
Environment:	Location:		Total Quantity:		
Maint needs: Maint. Time Period: Condition Data (sqm): Exec: 0 Good: 35 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity: 0	Environment:	Moderate			
Condition Data (sqm): Exec: 0 Good: 35 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity: 0	Perform. deficiencies:		Maintenance Type:		
Rehab Needs: Rehab time period: Quantity: Unit Cost: Estimated Cost:	Maint needs:				
	Rehab Needs: Rehab time period: Quantity:				
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Element Group:	Decks	Site Number:	G-045	
Element Name:	Soffit - thin slab	Width:	5.8	m
Element type:		Height:		m
Sub-element:	Interior	Length:	13.4	m
Material:	Cast-in-place Concrete	Count:	1	
Location:		Total Quantity:	78	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good: Rehab Needs:	78 Fair: 0 Poor: 0	Unit Cost:		
Rehab time period:	0	Estimated Cost:		
Quantity:	0			
General Comments:				
			lun 11,01:33 l	DM.

Element Group:	Decks	Site Number:	G-045	
Element Name:	Wearing Surface	Width:	6.7	m
Element type:		Height:	0	m
Sub-element:		Length:	13.4	m
Material:	Asphalt	Count:	1	
Location:		Total Quantity:	90	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	90 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	
General Comments:				



Element Group:	Embankments & Streams	Site Number:	G-045	
Element Name:	Embankments	Width:		m
Element type:		Height:		m
Sub-element:		Length:	0	m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	4 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		-	
		2024	0)/. 00 00 11 01 59	

Element Inspection				
Element Group:	Embankments & Streams	Site Number:	G-045	
Element Name:	Streams and Waterways	Width:		m
Element type:		Height:		m
Sub-element:		Length:	0	m
Material:		Count:	1	
Location:		Total Quantity:	1	each
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	1 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0			
General Comments:				



Element Inspection			
Element Group:	Foundations	Site Number:	G-045
Element Name:	Foundation (below ground level)	Width:	m
Element type:		Height:	m
Sub-element:		Length:	0 m
Material:	Cast-in-place Concrete	Count:	
Location:		Total Quantity:	each
Environment:	Benian	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (each): Exec: Good:	0 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:	0		,
General Comments: No signs of settlement.			

Element Group:	Joints	Site Number:	G-045	
Element Name:	Armouring/retaining devices	Width:		m
Element type:		Height:		m
Sub-element:		Length:	6.7	m
Material:	Steel	Count:	2	
Location:		Total Quantity:	13	m
Environment:	Severe	Not inspected:	✓	
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m):				
Exec: Good:	13 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0			
General Comments:				
Paved over.				



Element Inspection			
Element Group: Element Name: Element type: Sub-element: Material: Location: Environment: Perform. deficiencies: Maint needs:	Joints Concrete end dams Cast-in-place Concrete Severe	Site Number: Width: Height: Length: Count: Total Quantity: Not inspected: Maintenance Type: Maint. Time Period:	G-045 6.7 m 0 m 0 sqm
Condition Data (sqm): Exec: 0 Good: Rehab Needs: Rehab time period: Quantity: General Comments: Paved over.	0 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	

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Element Inspection			
Element Group:	Joints	Site Number:	G-045
Element Name:	Seals (paved over)	Width:	0 m
Element type:		Height:	0 m
Sub-element:		Length:	6.7 m
Material:	Rubber	Count:	2
Location:		Total Quantity:	2 each
Environment:	Severe	Not inspected:	√
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period: Quantity:	2 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	
General Comments:			
Paved over.			



OSIM Biennial Inspection Report



Site Number:
B-012

Concession 1W, Lot 6 & 7 Bridge



South Elevation



Inventory Data					
Structure Name:	Concession 1W, Lot 6 & 7 Bridge	Site Number:	B-012		
District:		Road Name:	Welbeck Road		
County:	Grey County	Owner:	West Grey		
Township:	West Grey	Skew:	0		
Bridge or Culvert:	Bridge	AADT:	450		
Structure Type:	Concrete Rigid Frame	Overall Struct. Width:	9.1 m		
Number of Spans:	1	Roadway Width:	8.5 m		
Direction of Structure:	East-West	Total Deck Length:	8.8 m		
GPS Coordinates (Degre	ees)	Span (s):	7.6 m		
Latit General	ude: 44.278719	Total Deck Area:	80 sq.m		
	gitude: -80.858556	Current Load Limit:	0		
Inspection Data					
Date of Inspection:	13-Jun-24				
	A. Burgess P.Eng. & J. Ziegler CET				
	Sounding hammer, measuring equipment, GP	PS			
-	Cloudy				
Temperature:	20				
Special Notes:	Bridge is in good condition, showing no signs	of structural distress.			
J.					
Overall Inspection S	ummary				
Additional Investigation Required: Additional Investigation Cost: Rehabilitation Needs: Rehabilitation Timing: Total Rehabilitation Budget Costings: Investigation Investigation Investigation Cost: Engineering Fee:					
Historical Data					
Year Built: Latest Biennial Inspection Latest Structure Rating: RehabHistory:	n: March 27, 2023	ontract Number When Bu atest Specialized Inspecti atest Structure Condition	on:		
Regional Priority Number NatureOfProgramWork:	: F	Programmed Work Year:			

Description: Approach Wearing Surface: Shallow potholes throughout.



Description: Railing Systems: Recommend to mount flexi beam to face of parapet wall.



Description: Railing Systems: Severe rot throughout.



Description: Soffit (int): Shallow delaminations throughout.



Description: Wearing Surface: Wearing surface does not extend to curbline.



Description: Embankments: Minor erosion at NE quadrant.



Element Group:	Abutments	Site Number:	B-012
Element Name:	Abutment walls	Width:	9.1 m
Element type:		Height:	1.1 m
Sub-element:		Length:	0 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	20 sqm
Environment:	Benian	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: 0 Good:	20 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:	0		

General Comments:



Element Group:	Abutments	Site Number:	B-012
Element Name:	Wingwalls	Width:	0 m
Element type:		Height:	0.79 m
Sub-element:		Length:	2.2 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	6 sqm
Environment:	Moderate	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	6 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:	0		

General Comments:



Element Group:	Accessories (Attachments and Signs)	Site Number:	B-012	
Element Name:	Signs	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:	Steel	Count:	4	
Location:		Total Quantity:	4	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0		,	
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tement Inspection			
Element Group:	Approaches	Site Number:	B-012
Element Name:	Curbs	Width:	0.95 m
Element type:		Height:	0.25 m
Sub-element:		Length:	2.2 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	11 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: 0 Good:	11 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:	0		
General Comments:			
r			



Element Group:	Approaches	Site Number:	B-012	
Element Name:	Wearing surface	Width:	8.47 m	
Element type:		Height:	0 m	
Sub-element:		Length:	2.2 m	
Material:	Asphalt	Count:	2	
Location:		Total Quantity:	37 sqm	
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good: Rehab Needs: Rehab time period:	35 Fair: 1 Poor: 1	Unit Cost: Estimated Cost:		
Quantity:	0			
General Comments:				
Shallow potholes throughout	out			1
			San Wald	Ī
		-		
			August 1	
33				
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		2024	Jun 13 01:12 PM	

Barriers	Site Number:	B-012	
Barrier/Parapet Walls	Width:	0	m
Parapet wall w/ a double railing	Height:	0.9	m
	Length:	8.8	m
Cast-in-place Concrete	Count:	2	-
	Total Quantity:	-	sqm
Severe	Not inspected:		
	Maintenance Type:		
	Maint. Time Period:		
32 Fair: 0 Poor: 0	1		
	Unit Cost:		
	Estimated Cost:		
0			
	Barrier/Parapet Walls Parapet wall w/ a double railing Cast-in-place Concrete Severe 32 Fair: 0 Poor: 0	Barrier/Parapet Walls Parapet wall w/ a double railing Length: Cast-in-place Concrete Count: Total Quantity: Not inspected: Maintenance Type: Maint. Time Period: Unit Cost: Estimated Cost:	Barrier/Parapet Walls Parapet wall w/ a double railing Length: Cast-in-place Concrete Count: Total Quantity: Severe Maintenance Type: Maint. Time Period: Unit Cost: Estimated Cost:



Element Group: Element Name: Element type: Sub-element:	Railing Systems Flexi beam with timber posts	Site Number: Width: Height:	B-012 m			
Material:	Steel	Length:	9 m			
Location: Environment:	Severe	Count: Total Quantity: Not inspected:	36 m			
Perform. deficiencies: Maint needs:		Maintenance Type: Maint. Time Period:				
Condition Data (m): Exec: 0 Good: 34 Fair: 1 Poor: 1						
Rehab Needs: Rehab time period: Quantity:	0	Unit Cost: Estimated Cost:				

General Comments:

Recommend to mount flexi beam to face of parapet wall. Severe rot throughout.



Вистени Тизресион			
Element Group:	Decks	Site Number:	B-012
Element Name:	Deck top (with thick slab)	Width:	9.1 m
Element type:		Height:	0 m
Sub-element:		Length:	8.8 m
Material:	Cast-in-place Concrete	Count:	1
Location:		Total Quantity:	80 sqm
Environment:	Moderate	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: 0 Good:	80 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:	0		
General Comments:			

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Element Inspection Element Group: Decks Site Number: B-012 **Element Name:** Width: 0 Drainage System m Element type: Height: 0 m Sub-element: Length: 0 m Material: Steel Count: 2 Location: 2 **Total Quantity:** each **Environment:** Severe Not inspected: Maintenance Type: Perform, deficiencies: Maint needs: Maint. Time Period: Condition Data (each): Exec: 0 Poor: 0 Good: 0 Fair: 2 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:**

General Comments:

Quantity:

Medium corrosion.

0



Liement Inspection				
Element Inspection Element Group: Element Name: Element type: Sub-element: Material: Location: Environment: Perform. deficiencies: Maint needs:	Decks Soffit - thick slab Exterior Cast-in-place Concrete Moderate	Site Number: Width: Height: Length: Count: Total Quantity: Not inspected: Maintenance Type: Maint. Time Period:	B-012 1 7.62 2 30	m m m
Condition Data (sqm): Exec: O Good:	30 Fair: 0 Poor: 0			
Rehab Needs: Rehab time period: Quantity: General Comments:	0	Unit Cost: Estimated Cost:		

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Element Inspection			
Element Group:	Decks	Site Number:	B-012
Element Name:	Soffit - thick slab	Width:	7.1 m
Element type:		Height:	0 m
Sub-element:	Interior	Length:	7.62 m
Material:	Cast-in-place Concrete	Count:	1
Location:		Total Quantity:	54 sqm
Environment:	Benian	Not inspected:	
Perform. deficiencies:		Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs:		Unit Cost:	
Rehab time period:			
-	0	Estimated Cost:	
Quantity:	0		
General Comments:			
Shallow delaminations th	roughout.		
		Mary Williams	William St.



Element Group:	Decks	Site Number:	B-012	
Element Name:	Wearing Surface	Width:	8.47	m
Element type:		Height:	0	m
Sub-element:		Length:	8.8	m
Material:	Asphalt	Count:	1	
Location:		Total Quantity:	75	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:	Structural	
Maint needs:	Asphalt Repairs	Maint. Time Period:	2 Year	
Condition Data (sqm): Exec: Good:	75 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:	0	Estimated Cost:		

General Comments:

Ponding on deck in previous inspection. Wearing surface does not extend to curbline.



Minor erosion at NE quadrant.

Element Group:	Embankments & Streams	Site Number:	B-012	
-				
Element Name:	Embankments	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:	Moderate	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	3 Fair: 1 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0			
General Comments:				



Element Group:	Embankments & Streams	Site Number:	B-012	
Element Name:	Streams and Waterways	Width:	0	m
Element type:		Height:	0	m
Sub-element:		Length:	0	m
Material:		Count:	1	
Location:		Total Quantity:		each
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good: Rehab Needs:	1 Fair: 0 Poor: 0	Unit Cost:		
Rehab time period:				
Quantity:	0	Estimated Cost:		
General Comments:				

Element Inspection				
Element Group:	Foundations	Site Number:	B-012	
Element Name:	Foundation (below ground level)	Width:		m
Element type:		Height:		m
Sub-element:		Length:		m
Material:	Cast-in-place Concrete	Count:		
Location:		Total Quantity:		each
Environment:	Benian	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	0 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:	0			
General Comments:				

Element Group:	Sidewalks/ curbs	Site Number:	B-012	
Element Name:	Curbs	Width:	0.95	m
Element type:		Height:	0.25	m
Sub-element:		Length:	8.8	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	21	m
Environment:	Severe	Not inspected:		
Perform. deficiencies:		Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: Good:	21 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:	0	Estimated Cost:		
Quantity: General Comments:	0			



OSIM Biennial Inspection Report



Site Number:
N-066

Concession 5/6, Lot 19



South Elevation



Inventory Data				
Structure Name:	Concession 5/6. Lot 19	Site Number:	N-066	
District:	Concession 5 & 6, Lot 19	Road Name:	Concession Rd 6	
County:	Grey County	Owner:	West Grev	
Township:		Skew:	0	
Bridge or Culvert:	Bridge	AADT:	150	
Structure Type:	Concrete Rigid Frame	Overall Struct. Width:	8.4 m	
Number of Spans:	2	Roadway Width:	7.3 m	
Direction of Structure:	East-West	Total Deck Length:	39.1 m	
GPS Coordinates (Degre	ees)	Span (s):	18.5, 18.5 m	
Latit REVIEWED	ude: 44.01581	Total Deck Area:	328 sq.m	
	gitude: -80.898696	Current Load Limit:	0	
Inspection Data				
Date of Inspection:	31-Jul-24			
	Andrew Burgess, P.Eng. & Joel Ziegler CET	·		
Equipment Used:	Sounding hammer, measuring equipment, GP	S		
Weather Conditions: Sunny				
Temperature:	23			
Special Notes:	Bridge is in good condition, showing no signs	of structural distress.		
Overall Inspection S	ummary			
Additional Investigation F Additional Investigation C Rehabilitation Needs:			riority:	
Rehabilitation Timing:				
Total Rehabilitation Budg	et Costings:	Engineering Fee:		
Historical Data				
Year Built: Latest Biennial Inspection Latest Structure Rating: RehabHistory:	n: September 6, 2022	ontract Number When Bu atest Specialized Inspecti atest Structure Condition	on:	
Regional Priority Number NatureOfProgramWork:	:	Programmed Work Year:		

Description: Soffit (int): Various hairline cracks with wetness staining.



Description: Approach curbs: Shallow delamination throughout.



Description: Deck top: Minor abrasions throughout.



Description: Curbs: Shallow delaminations throughout.



Description: Shafts/Columns/Pile Bents: Medium to wide cracking with leachate staining.



Element Group:	Abutments	Site Number:	N-066
Element Name:	Walls	Width:	8.4 m
Element type:	Legs of a rigid frame	Height:	3.4 m
Sub-element:		Length:	m
Material:	Cast-in-place Concrete	Count:	2
_ocation:		Total Quantity:	57 sqm
Environment:	Benign	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs:		Unit Cost:	
		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
Quantity: General Comments:			
-			
-			
-			



Element Group:	Abutments	Site Number:	N-066	
Element Name:	Wingwalls	Width:		m
Element type:		Height:	4.7	m
Sub-element:		Length:	5.4	m
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:	102	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: Good:	102 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		
General Comments:				



Element Inspection Element Group: Decks Site Number: N-066 **Element Name:** Drainage system Width: Element type: Height: m Sub-element: Length: m Material: Steel Count: 6 Location: 6 **Total Quantity:** each **Environment:** Severe Not inspected: Maintenance Type: Perform. deficiencies: None

Condition Data (each):

Maint needs:

Exec: 0 Good: 6 Fair: 0 Poor: 0

Rehab Needs:	Unit Cost:	
Rehab time period:	Estimated Cost:	
Quantity:		

Maint. Time Period:

General Comments:



Element Group:	Decks	Site Number:	N-066	
Element Name:	Soffit - thick slab	Width:	6.4	m
Element type:		Height:		m
Sub-element:	Interior	Length:	37.5	m
Material:	Cast-in-place Concrete	Count:		
Location:		Total Quantity:	240	sqm
Environment:	Benian	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	240 Fair : 0 Poor : 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		

General Comments:

Various hairline cracks with wetness staining.



Element Name: Element type: Sub-element: Exterior Length: Cast-in-place Concrete Count: Location: Environment: Moderate Not inspected: Maintenance Type: Maint needs: Condition Data (sqm):	Element Name: Soffit - thick slab Width: 1 m Element type:	Element Name: Soffit - thick slab Width: 1 m Element type:				
Element type: Sub-element: Exterior Length: Cast-in-place Concrete Count: Location: Total Quantity: Moderate Not inspected: Perform. deficiencies: Maint needs: Maint. Time Period: Rehab Needs: Rehab Needs: Quantity: Unit Cost: Estimated Cost: Quantity:	Element type: Sub-element: Exterior Length: Gast-in-place Concrete Count: Location: Total Quantity: Moderate Not inspected: Perform. deficiencies: Maint needs: Maint needs: Condition Data (sqm): Exec: Good: Rehab Needs: Rehab time period: Quantity: Unit Cost: Estimated Cost: Quantity:	Element type: Sub-element: Exterior Length: Gast-in-place Concrete Count: Location: Total Quantity: Moderate Not inspected: Perform. deficiencies: Maint needs: Maint needs: Condition Data (sqm): Exec: Good: Rehab Needs: Rehab time period: Quantity: Unit Cost: Estimated Cost: Quantity:	Element Group:	Decks	Site Number:	N-066
Sub-element: Material: Cast-in-place Concrete Count: Total Quantity: Not inspected: None Maintenance Type: Maint needs: Maint. Time Period: Rehab Needs: Rehab time period: Quantity: Unit Cost: Estimated Cost: Quantity:	Sub-element: Material: Cast-in-place Concrete Count: I total Quantity: Not inspected: Maintenance Type: Maint needs: Maint. Time Period: Rehab Needs: Rehab time period: Quantity: Unit Cost: Estimated Cost: Quantity: Length: 37.5 M Aint. Time Period: Unit Cost: Estimated Cost: Estimated Cost: Perior: Aint. Time Period: Unit Cost: Estimated Cost: Perior: Aint. Time Period: Condition Data (sqm): Exec: Quantity:	Sub-element: Material: Cast-in-place Concrete Count: I total Quantity: Not inspected: Maintenance Type: Maint needs: Maint. Time Period: Rehab Needs: Rehab time period: Quantity: Unit Cost: Estimated Cost: Quantity: Length: 37.5 M Aint. Time Period: Unit Cost: Estimated Cost: Estimated Cost: Perior: Aint. Time Period: Unit Cost: Estimated Cost: Perior: Aint. Time Period: Condition Data (sqm): Exec: Quantity:		Soffit - thick slab	Width:	1 m
Material: Cast-in-place Concrete Count: Total Quantity: Not inspected: Perform. deficiencies: Maint needs: Maint needs: Condition Data (sqm): Exec: Rehab Needs: Rehab Needs: Rehab time period: Quantity: Material: Count: And Data (sqm): Condition Data (sqm): Exec: Rehab Needs: Rehab time period: Quantity: Condition Data (sqm): Estimated Cost: Condition Data (sqm): Enterior	Material: Cast-in-place Concrete Count: Total Quantity: Not inspected: Perform. deficiencies: Maint needs: Maint needs: Condition Data (sqm): Exec: Rehab Needs: Rehab time period: Quantity: Cast-in-place Concrete Count: Addition Data (sqm): Condition Data (sqm): Exec: Condition Data (sqm	Material: Cast-in-place Concrete Count: Total Quantity: Not inspected: Perform. deficiencies: Maint needs: Maint needs: Condition Data (sqm): Exec: Rehab Needs: Rehab time period: Quantity: Cast-in-place Concrete Count: Addition Data (sqm): Condition Data (sqm): Exec: Condition Data (sqm			Height:	0.9 m
Location: Total Quantity: 142 sqm Moderate Not inspected: Perform. deficiencies: None Maint needs: Condition Data (sqm): Exec: 0 Good: 142 Fair: 0 Poor: 0 Rehab Needs: Rehab time period: Quantity:	Location: Environment: Moderate Not inspected: Perform. deficiencies: Maint needs: Condition Data (sqm): Exec: Quantity: Rehab Needs: Rehab time period: Quantity: Total Quantity: Maintenance Type: Maint. Time Period: Unit Cost: Estimated Cost: Quantity:	Location: Environment: Moderate Not inspected: Perform. deficiencies: Maint needs: Condition Data (sqm): Exec: Rehab Needs: Rehab time period: Quantity: Codation: Total Quantity: Maintenance Type: Maint. Time Period: Unit Cost: Estimated Cost: Quantity:			Length:	37.5 m
Environment: Moderate	Environment: Moderate Not inspected: Perform. deficiencies: None Maintenance Type: Maint needs: Maint. Time Period: Condition Data (sqm): Exec: 0 Good: 142 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity:	Environment: Moderate	Material:	Cast-in-place Concrete	Count:	2
Perform. deficiencies: None Maintenance Type: Maint needs: Maint. Time Period: Condition Data (sqm): Exec: O Good: 142 Fair: O Poor: O Rehab Needs: Unit Cost: Estimated Cost: Quantity:	Perform. deficiencies: None Maintenance Type: Maint needs: Maint. Time Period: Condition Data (sqm): Exec: 0 Good: 142 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Estimated Cost: Quantity:	Perform. deficiencies: None Maintenance Type: Maint needs: Maint. Time Period: Condition Data (sqm): Exec: 0 Good: 142 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Estimated Cost: Quantity:	Location:		Total Quantity:	142 sqm
Maint needs: Condition Data (sqm): Exec: 0 Good: 142 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity:	Maint needs: Condition Data (sqm): Exec: 0 Good: 142 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity:	Maint needs: Condition Data (sqm): Exec: 0 Good: 142 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity:	Environment:	Moderate	Not inspected:	
Condition Data (sqm): Exec: 0 Good: 142 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity:	Condition Data (sqm): Exec: 0 Good: 142 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity:	Condition Data (sqm): Exec: 0 Good: 142 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity:	Perform. deficiencies:	None	Maintenance Type:	
Rehab Needs: Rehab time period: Quantity: Unit Cost: Estimated Cost:	Exec: 0 Good: 142 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity:	Exec: 0 Good: 142 Fair: 0 Poor: 0 Rehab Needs: Unit Cost: Rehab time period: Estimated Cost: Quantity:	Maint needs:		Maint. Time Period:	
· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		Rehab time period:			
			General Comments:			

Element Inspection			
Element Group:	Foundations	Site Number:	N-066
Element Name:	Foundation (below ground)	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	3
Location:		Total Quantity:	3
Environment:		Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data:			
Exec: Good:	3 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			

Element Group:	Approaches	Site Number:	N-066
Element Name:	Wearing surface	Width:	7.3 m
Element type:		Height:	m
Sub-element:		Length:	5.4 m
Material:	Gravel	Count:	2
Location:		Total Quantity:	79 sqm
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: 0 Good: Rehab Needs:	79 Fair : 0 Poor : 0	Unit Cost:	
Rehab time period:			
Quantity:		Estimated Cost:	
General Comments:			
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No signs of settlement.

Approaches	Site Number:	N-066	
Approach slab	Width:	8.4	m
	Height:		m
	Length:	5.4	m
Cast-in-place Concrete	Count:	2	
	Total Quantity:	91	
Moderate	Not inspected:		
None	Maintenance Type:		
	Maint. Time Period:		
89 Fair: 2 Poor: 0	_		
109 Fail. 12 FOOI. 10			
169 Fall. 12 FOOI. 10	Unit Cost:		
	Approach slab Cast-in-place Concrete Moderate None	Approach slab Width: Height: Length: Cast-in-place Concrete Count: Total Quantity: Not inspected: None Maintenance Type: Maint. Time Period:	Approach slab Height: Length: Cast-in-place Concrete Count: Total Quantity: Not inspected: None Maintenance Type: Maint. Time Period:



Element Group:	Approaches	Site Number:	N-066
Element Name:	Curbs	Width:	0.5 m
Element type:		Height:	0.25 m
Sub-element:		Length:	5.4 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	22 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: 0 Good:	22 Fair : 0 Poor : 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			

General Comments:

Shallow delamination throughout.



Element Group:	Approaches	Site Number:	N-066
Element Name:	Barrier/Parapet walls	Width:	0 m
Element type:		Height:	0.76 m
Sub-element:	Interior	Length:	5.4 m
Material:	Cast-in-place Concrete	Count:	4
Location:	End posts	Total Quantity:	16 sqm
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	16 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			



El		0': N I		
Element Group:	Approaches	Site Number:	N-066	
Element Name:	Barrier/Parapet walls	Width:		m
Element type:		Height:	0.76	m
Sub-element:	Exterior	Length:	5.4	m
Material:	Cast-in-place Concrete	Count:	4	
Location:	End posts	Total Quantity:	16	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	16 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				
General Comments:				



Element Group:	Barriers	Site Number:	N-066
Element Name:	Railing system	Width:	m
Element type:	Post and rail	Height:	0.76 m
Sub-element:		Length:	39.1 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	78
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: Good:	78 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			



Element Group:	Decks	Site Number:	N-066
Element Name:	Deck top (with thick slab)	Width:	8.4 m
Element type:		Height:	m
Sub-element:		Length:	39.1 m
Material:	Cast-in-place Concrete	Count:	
Location:		Total Quantity:	328 sqm
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	328 Fair : 0 Poor : 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			

General Comments:

Minor abrasions throughout.



Element Inspection				
Element Group:	Embankments and Streams	Site Number:	N-066	
Element Name:	Streams & waterways	Width:		m
Element type:		Height:		m
Sub-element:		Length:		m
Material:		Count:	1	
Location:		Total Quantity:	1	
Environment:		Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Exec: 0 Good: Rehab Needs:	1 Fair: 0 Poor: 0	Unit Cost:	_	
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				
General Comments:				



Element Group:	Embankments and Streams	Site Number:	N-066	
Element Name:	Embankments	Width:		m
Element type:		Height:		m
Sub-element:		Length:		m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:		Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: Good:	4 Fair: 0 Poor: 0	_		
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				
General Comments:				
		2024	Jul 31 10 46 A	M

Element Group:	Sidewalks/curbs	Site Number:	N-066	
Element Name:	Curbs	Width:	0.5	m
Element type:		Height:	0.25	m
Sub-element:		Length:	39.1	m
Material:		Count:	2	
Location:		Total Quantity:	78	m
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (m): Exec: 0 Good:	78 Fair: 0 Poor: 0			
Rehab Needs: Rehab time period: Quantity:		Unit Cost: Estimated Cost:		

General Comments:

Shallow delaminations throughout.



Element Inspection				
Element Group:	Signs	Site Number:	N-066	
Element Name:	Signs	Width:		m
Element type:		Height:		m
Sub-element:		Length:		m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Rehab Needs:	4 Fair: 0 Poor: 0	Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				
General Comments:				

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Element Group:	Piers	Site Number:	N-066	
Element Name:	Shafts/Columns/Pile Bents	Width:	8.4	m
Element type:		Height:	3.6	m
Sub-element:		Length:	0.76	m
Material:	Cast-in-place Concrete	Count:	0	
Location:		Total Quantity:	66	sqm
Environment:	Benian	Not inspected:		•
Perform, deficiencies:		Maintenance Type:		
		•		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good:	63 Fair: 2 Poor: 1			
Rehab Needs:		Unit Cost:		
Rehab time period:	None Recommended	Estimated Cost:		
Quantity:	0			

General Comments:

Medium to wide cracking with leachate staining coming from rehabed location.



OSIM Biennial Inspection Report



Site Number:

Garafraxa Street Culvert, Durham



East Elevation



Inventory Data				
Structure Name:	Garafraxa Street Culvert, Durham	Site Number:	D-001	
District:	Garafaxa Street (Hwv 6)	Road Name:	HWY 6	
County:	Grey County	Owner:	West Grey	
Township:		Skew:	0	
Bridge or Culvert:	Bridge	AADT:	4300	
Structure Type:	Concrete Rigid Frame	Overall Struct. Width:	18.1 m	
Number of Spans:	1	Roadway Width:	14.6 m	
Direction of Structure:	North-South	Total Deck Length:	17.3 m	
GPS Coordinates (Degre	ees)	Span (s):	16 m	
Latit	ude: 44.177048	Total Deck Area:	313 sq.m	
Long	gitude: -80.818907	Current Load Limit:	0	
Inspection Data				
Date of Inspection:	25-Mav-23			
	Andrew Burgess, P.Eng. & Joel Ziegler CET			
	Sounding hammer, measuring equipment, GP	'S		
Weather Conditions:	Sunny			
Temperature:	13			
	Bridge Culvert is in condition, showing no sign	ns of structural distress.		
ļ				
Overall Inspection S	ummary			
Additional Investigation Required: Additional Investigation Cost: Rehabilitation Needs: Rehabilitation Timing: Total Rehabilitation Budget Costings: Engineering Fee: Historical Data				
Year Built:	1960 C	ontract Number When Bu	ilt:	
Latest Biennial Inspection		atest Specialized Inspecti		
Latest Structure Rating:	10007 = 0, = 0=0	atest Structure Condition:		
RehabHistory:	Į.		r	
Regional Priority Number	: F	Programmed Work Year:		
NatureOfProgramWork:	-	-		

Description: Soffit (int): Patch work appears dry and sound.



Description: Soffit (ext): Light cracking with leachate staining throughout.



Element Group:	Abutments	Site Number:	D-001
Element Name:	Walls	Width:	18.1 m
Element type:	Leas of a rigid frame	Height:	3.9 m
Sub-element:		Length:	m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	141 sqm
Environment:	Benian	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm):		_	
Exec: 0 Good:	141 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			



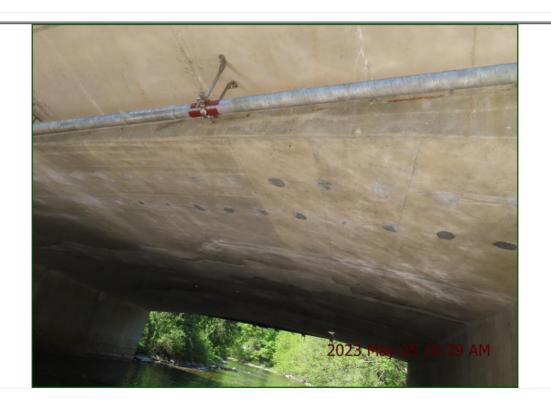
Element Group:	Abutments	Site Number:	D-001
Element Name:	Wingwalls	Width:	m
Element type:		Height:	4 m
Sub-element:		Length:	6.7 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	107 sqm
Environment:	Moderate	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: Good:	107 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:		Estimated Cost:	
General Comments:			



Element Group:	Decks	Site Number:	D-001	
Element Name:	Soffit - thick slab	Width:	10.1	m
Element type:		Height:		m
Sub-element:	Interior	Length:	16	m
Material:	Cast-in-place Concrete	Count:	1	
Location:		Total Quantity:	162	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good: 162 Fair: 0 Poor: 0				
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		

General Comments:

Patch work appears dry and sound.



Element Group:	Decks	Site Number:	D-001	
Element Name:	Soffit - thick slab	Width:	1 m	
Element type:		Height:	0.5 m	
Sub-element:	Exterior	Length:	16 m	
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	48 sqm	
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 0 Good: 48 Fair: 0 Poor: 0				
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		

General Comments:

Light cracking with leachate staining throughout.



Element Inspection			
Element Group:	Foundations	Site Number:	D-001
Element Name:	Foundation (below ground)	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	2
Location:		Total Quantity:	2
Environment:		Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data:			
Exec: 0 Good:	2 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments: No signs of settlement			

потем и порестои					
Element Group:	Retaining Walls	Site Number:	D-001		
Element Name:	Walls	Width:	5	m	
Element type:		Height:	1.5	m	
Sub-element:		Length:	,	m	
Material:		Count:	1		
Location:		Total Quantity:	8	sqm	
Environment:	Moderate	Not inspected:			
Perform. deficiencies:	None	Maintenance Type:			
Maint needs:		Maint. Time Period:			
Exec: 0 Good: 8 Fair: 0 Poor: 0					
Rehab Needs:	<u> </u>	Unit Cost:			
Rehab time period:		Estimated Cost:			
Quantity:	J				
General Comments:					
			504 OL 18 2 18 6 2 1 0	Construit &	



Element Inspection Element Group: Site Number: D-001 Approaches **Element Name:** Width: Wearing surface 14.6 Element type: Height: m Sub-element: Length: 10 m Material: Asphalt 2 Count: Location: 292 **Total Quantity:** sqm **Environment:** Severe Not inspected: Perform, deficiencies: None **Maintenance Type:** Maint needs: Maint. Time Period: Condition Data (sqm): **Exec:** 292 Poor: 0 Good: Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:** Quantity: **General Comments:** 2023 May 25 10:49 AM

Element Group:	Approaches	Site Number:	D-001	
•			B-001	
Element Name:	Approach slab	Width:	18.1 m	
Element type:		Height:	m	
Sub-element:		Length:	10 m	
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	362	
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data: Exec: 362 Good: 0 Poor: 0				
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity				

General Comments:

No signs of settlement.



Element Group:	Approaches	Site Number:	D-001
Element Name:	Sidewalk	Width:	1.5 m
Element type:		Height:	0.15 m
Sub-element:		Length:	10 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	40
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: 40 Good:	0 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			



Element Inspection Element Group: Site Number: D-001 Approaches **Element Name:** Width: Drainage system Element type: Height: m Sub-element: Length: m Material: Steel 4 Count: Location: **Total Quantity:** each **Environment:** Severe Not inspected: Perform, deficiencies: None **Maintenance Type:** Maint needs: Maint. Time Period: Condition Data (each): Exec: 4 Poor: 0 Good: Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: **Estimated Cost:** Quantity: **General Comments:**

Element Group:	Approaches	Site Number:	D-001
Element Name:	Barrier/Parapet walls	Width:	0 m
Element type:		Height:	0.72 m
Sub-element:	Interior	Length:	10 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	29 sqm
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: 29 Good:	O Fair: O Poor: O		
Rehab Needs:		Unit Cost:	
Rehab time period: Quantity:		Estimated Cost:	



Element Group:	Approaches	Site Number:	D-001	
Element Name:	Barrier/Parapet walls	Width:		m
Element type:		Height:	0.72	m
Sub-element:	Exterior	Length:	10	m
Material:	Cast-in-place Concrete	Count:	4	
Location:		Total Quantity:	29	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 29 Good:	0 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		



Element Group:	Approaches	Site Number:	D-001
Element Name:	Railing system	Width:	m
Element type:		Height:	0.72 m
Sub-element:		Length:	10 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	40
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: 40 Good:	0 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity: General Comments:			



Element Group:	Barriers	Site Number:	D-001	
Element Name:	Barrier/Parapet walls	Width:	0	m
Element type:		Height:	0.72	m
Sub-element:	Interior	Length:	17.3	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	25	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 25 Good:	0 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:				
General Comments:				

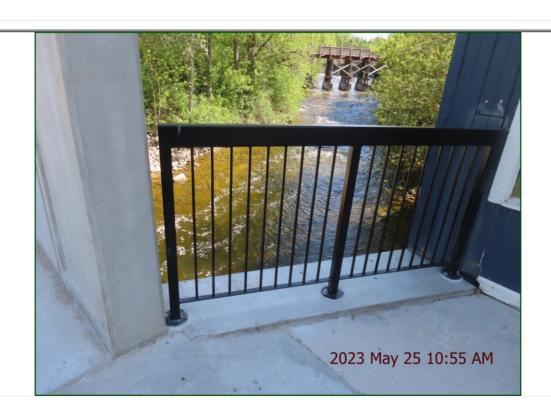




Element Group:	Barriers	Site Number:	D-001	
Element Name:	Barrier/Parapet walls	Width:		m
Element type:		Height:	0.72	m
Sub-element:	Exterior	Length:	17.3	m
Material:	Cast-in-place Concrete	Count:	2	
Location:		Total Quantity:	25	sqm
Environment:	Moderate	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm): Exec: 25 Good:	0 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period: Quantity:		Estimated Cost:		
Company Community				



Element Group:	Barriers	Site Number:	D-001
Element Name:	Railing system	Width:	m
Element type:		Height:	0.72 m
Sub-element:		Length:	17.3 m
Material:	Cast-in-place Concrete	Count:	2
Location:		Total Quantity:	35
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data: Exec: 35 Good:	0 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			



Element Group:	Barriers	Site Number:	D-001
Element Name:	Hand railings	Width:	m
Element type:		Height:	m
Sub-element:		Length:	17.3 m
Material:	Steel	Count:	2
Location:		Total Quantity:	35 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (m): Exec: 35 Good:	0 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			



diemem Inspection			
Element Group:	Decks	Site Number:	D-001
Element Name:	Deck top (with thick slab)	Width:	18.1 m
Element type:		Height:	m
Sub-element:		Length:	17.3 m
Material:	Cast-in-place Concrete	Count:	
Location:		Total Quantity:	313 sqm
Environment:	Moderate	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Condition Data (sqm): Exec: 313 Good:	0 Fair: 0 Poor: 0		
Rehab Needs:		Unit Cost:	
Rehab time period:		Estimated Cost:	
Quantity:			
General Comments:			

2023 May 25 10:54 AM

Element Group:	Decks	Site Number:	D-001	
Element Name:	Wearing surface	Width:	14.6	m
Element type:		Height:		m
Sub-element:		Length:	17.3	m
Material:	Asphalt	Count:	i i	
Location:		Total Quantity:	253	sqm
Environment:	Severe	Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (sqm):				
Exec: 253 Good:	0 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			,	
General Comments:				



Element Group:	Embankments and Streams	Site Number:	D-001
Element Name:	Streams & waterways	Width:	m
Element type:		Height:	m
Sub-element:		Length:	m
Material:		Count:	1
Location:		Total Quantity:	1
Environment:		Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period: Quantity: General Comments:	1 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	

Element Group:	Embankments and Streams	Site Number:	D-001	
Element Name:	Embankments	Width:		m
Element type:		Height:		m
Sub-element:		Length:		m
Material:		Count:	4	
Location:		Total Quantity:	4	each
Environment:		Not inspected:		
Perform. deficiencies:	None	Maintenance Type:		
Maint needs:		Maint. Time Period:		
Condition Data (each): Exec: 4 Good:	0 Fair: 0 Poor: 0			
Rehab Needs:		Unit Cost:		
Rehab time period:		Estimated Cost:		
Quantity:			,	
General Comments:				



Element Group:	Sidewalks/curbs	Site Number:	D-001			
Element Name:	Sidewalk	Width:	1.5 m			
Element type:		Height:	0.15 m			
Sub-element:		Length:	17.3 m			
Material:		Count:	2			
Location:		Total Quantity:	35			
Environment:	Severe	Not inspected:				
Perform. deficiencies:	None	Maintenance Type:				
Maint needs:		Maint. Time Period:				
Condition Data:		_				
Exec: 35 Good: 0 Fair: 0 Poor: 0						
Rehab Needs:		Unit Cost:				
Rehab time period:		Estimated Cost:				
Quantity:			•			



Element Inspection Element Group: Site Number: D-001 Approaches **Element Name:** Curbs Width: 0.15 Element type: Height: 0.15 m Sub-element: Length: 10 m Material: Cast-in-place Concrete Count: 2 Location: 20 **Total Quantity: Environment:** Severe Not inspected: Perform, deficiencies: **Maintenance Type:** Maint. Time Period: Maint needs: Condition Data (m): Exec: 20 Poor: 0 Good: Fair: 0 Rehab Needs: **Unit Cost:** Rehab time period: None Recommended **Estimated Cost:** 0 Quantity: **General Comments:**



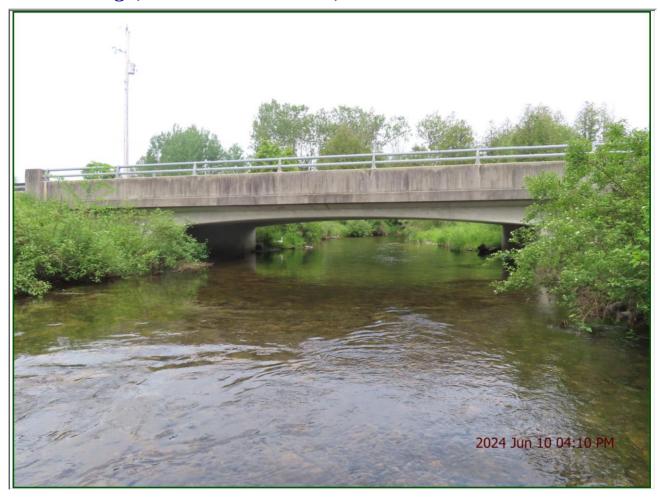
OSIM Biennial Inspection Report



Site Number:

B-023

Herd Bridge, Concession 1 SDR, Lot 40/41



West Elevation



Inventory Data				
Structure Name:	Herd Bridge, Concession 1 SDR, Lot 40/41	Site Number:	B-023	
District:	Concession 1S, Lot 40 & 41	Road Name:	Allen Park Road	
County:	Grey County	Owner:	West Grev	
Township:		Skew:	0	
Bridge or Culvert:	Bridge	AADT:	0	
Structure Type:	Concrete Rigid Frame	Overall Struct. Width:	9.9 m	
Number of Spans:	1	Roadway Width:	6.5 m	
Direction of Structure:	North-South	Total Deck Length:	13.5 m	
GPS Coordinates (Degr	ees)	Span (s):	12.5 m	
Latit REVIEWED	tude: 44.160373	Total Deck Area:	134 sq.m	
	gitude: -80.928306	Current Load Limit:	0	
Inspection Data				
Date of Inspection:	10-Jun-24			
· ·	Andrew Burgess, P.Eng. & Joel Ziegler CET			
	Sounding hammer, measuring equipment, GP	3		
Weather Conditions: Cloudy				
Temperature:	Total Transfer of the Control of the			
_	Bridge is in good condition, showing no signs of	of structural distress.		
ļ				
Overall Inspection S	Summary			
Additional Investigation Required: Additional Investigation Cost: Rehabilitation Needs: Rehabilitation Timing: Total Rehabilitation Budget Costings: Engineering Fee: Historical Data				
Year Built:	1988 Co	ontract Number When Bu	ilt:	
Latest Biennial Inspectio		test Specialized Inspecti		
Latest Structure Rating: 75 Latest Structure Condition:				
RehabHistory:				
Regional Priority Number	r: P	rogrammed Work Year:		
NatureOfProgramWork:				

Description: Wingwalls: Medium to wide cracking with leachate staining.



Description: Barrier/Parapet walls: Light localized map cracking at connection to guide rail.



Element Group:	Approaches	Site Number:	B-023		
Element Name:	Approach slab	Width:	9.9 m		
Element type:		Height:	m		
Sub-element:		Length:	5 m		
Material:	Cast-in-place Concrete	Count:	2		
Location:		Total Quantity:	99		
Environment:	Moderate	Not inspected:			
Perform. deficiencies:	None	Maintenance Type:			
Maint needs:		Maint. Time Period:			
Condition Data: Exec: 0 Good: 99 Fair: 0 Poor: 0					
Rehab Needs:		Unit Cost:			
Rehab time period: Quantity:		Estimated Cost:			

General Comments:

No signs of settlement.



-			
Element Group:	Approaches	Site Number:	B-023
Element Name:	Curbs	Width:	0.55 m
Element type:		Height:	0.2 m
Sub-element:		Length:	5 m
Material:	Cast-in-place Concrete	Count:	4
Location:		Total Quantity:	20 m
Environment:	Severe	Not inspected:	
Perform. deficiencies:	None	Maintenance Type:	
Maint needs:		Maint. Time Period:	
Rehab Needs: Rehab time period: Quantity: General Comments:	20 Fair: 0 Poor: 0	Unit Cost: Estimated Cost:	