

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope	PID	107714	Project Name	LOR IR 0090 10.76
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Project Overview

Scope Project Mgr.	Mark Strohm	Initial Scope Meeting Date	7/19/2022
Design Project Mgr.	Karla R Bohmer	Scope Version	First Revision
In-House Designer	Design-Build Consultant		
Environmental Mgr.	Levi B Wingler		
Letting Type	ODOT Let	File Date	2/19/2024
Design Responsibility	Consultant Not Yet Selected	Federal Aid Number	E200155
Primary Work Cat.	Roadway Major Rehab	PDP Path	Path 3

Existing See Narrative for existing plans
Plans

Project Description

Design Build - Major Rehab with Complete Pavement Replacement and Lane Addition to convert from a 4 lane facility to a 6 lane facility. See narrative for schedule of 2-step Technically Responsive Low-Bid ATC Process.

OTP Booth to IR 90 will remain a 4 Lane facility.

12.042 (IR 90 / SR 2 split) to 13.17 (west of SR57) / 13.57 (east of SR57) to 18. 61 (French Creek Bridge) will be made 6 lane facility. No widening to occur between 10.76 (OTP booth) to 12.042 (IR 90 / SR 2 split)

Resurfacing from slm 13.17 to 13.57.

Pavement Replacement on SR 2 from Murray Ridge Rd bridge to IR 90. Depending on the final design of the IR 90 / SR 2 interchange, widening may need to occur.

Bridge Maintenance

Purpose & Need

Logical termini and project limits for this project were selected based on pavement condition. This project is a result of this ongoing pavement rating. This project was selected as a Major Rehabilitation of the Pavement and is C.O. funded to replace the pavement per the project limits in the project description. This project will replace 7.45 miles of IR 90 in Lorain County and resurface 0.40 miles. This project will also replace approximately 0.52 miles of SR 2 from Murray Ridge Rd bridge to IR 90.

Widening to make 3 lanes in each direction is being done in order to alleviate congestion along this corridor. A traffic study indicated that the peak hour capacity warrants a third lane to be built in each direction and that the third lane in each direction will reduce congestion at peak times.

Check with Charlie about signs to be replaced (replace all?)	Complete?
	<input checked="" type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

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Project Scope

PID

107714

Project Name

LOR IR 0090 10.76

Lighting

1.2.C.G

	CRS	Description
1	LOR-IR90-(10.76-13.171)	Turnpike Plaza Approach: No Work SR 2 Interchange: Replace existing partial interchange lighting with complete interchange lighting. At the SR 2 split, relocate the existing power service away from the private resident drive. Have both the power service and LCC easily accessible for maintenance. Look for flatter foreslopes and the ability for maintenance to park next to the LCC not near guardrail. If located along I-90, ensure power service and LCC is at least 30' away from the EOP.
2	LOR-IR90-(13.171-13.57)	SR 57 Interchange: Complete interchange lighting present (installed 2016). Work may be required for the median towers east of SR 57 to accommodate earthwork for widened pavement.
3	LOR-IR90-(13.57-18.611)	SR 254 Interchange: Install complete interchange lighting.
4	ALL LOCATIONS	Provide LED luminaires. 120/240 Volt circuits. 3 conductors (Line-Line) w/ ground. 2400volt cable. Voltage drop permitting, use #6 AWG duct cable/distribution cable. Ground mounted Lighting Control Center w/ concrete work pad.
5		If the LCC is behind a ditch, provide a 10' conduit in the ditch to allow the maintenance to traverse.
6		Provide minimum 15' clearance w/ overhead electric lines. Offset conventional poles 8' from the edge of the paved shoulder.
7		Conventional luminaires should be located 3'-5' outside of the edge of pavement for the ease of maintenance, not having to take a lane to maintain. Do not locate pole foundations in the ditch. Do not locate high mast Lighting near residential areas.
8		Per TEM Table 1197-12, if lighting is placed along the SR within the Incorporated Municipality, they are responsible for the maintenance and electric costs. So, if Sheffield is incorporated, separate the circuits along I-90 (ODOT) and SR 254 (Sheffield).
9		Provide 24" pull boxes for more than 2 entrances into the PB. Provide a pullbox in between long circuit runs, 490' max spacing. For directional bores under the roadway, Provide a PB At both sides.

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Bridge *2.5.D.A-C, 2.7.F.A-C, 3.3.I.A-B, 3.8.B, 4.3.C*

Bridge 1	Bridge Location	LOR-IR-90-11.530R	Preliminary Cost Estimate	\$1,400,000.00
	Treatment Types	NA: 700 - Protective Coating, NA: 501 - Approach Slab Replacement, NA: 342 - Substructure Sealing, NA: 320 - Pier Repair, NA: 300 - Abutment Repair, NA: 135 - Deck Replacement		
	Existing Bridge Information	NA: 300 - Abutment Repair		
	Alignment	Use Existing	Designer to verify	Curb Present No
	Profile	Use Existing	Designer to verify	Cut Trees Yes
	Floodplain Coord.	Select...		R/W Req'd No
	OHWM Determ.	N/A		Survey Req'd Yes
	MOT Type	Barrier		Soil Borings Req'd No
				Utility Relocation Req'd Yes
				Hydraulic Analysis Req'd No
	Existing		Structure Type Study Req'd No	
General Appraisal*	7		Driveway Accommodations Req'd No	
Sufficiency Rating	091.7		Addendum Sheet for Structure Yes	
Year Built	1974		Eligible for National Historic Register No	
Structure Type*	Steel continuous/Stringer/Multi-beam or Girder	Proposed		
Structure File No.*	4704371	→		
Feature Intersected	OVER LOR-54-0514 TH-54	→	Same	
Design Loading	HS20-44 & Alt. Military Load	→	New - per BDM + 60 psf FWS	
Number of Spans	3	→	Same	
Out↔Out Width*	42	ft →	43'-10" ft	
Bridge Railing Type	32" Defl Type Para (NJ Shape)	→	42" Single Slope Barrier	
Curb↔Curb Width	40.5	ft →	Same ft	
Overall Length	122	ft →	Same ft	
Approach Slab Len	0	ft	25 feet	
Vertical Clearance		ft →	No lower than exist (14'-7") ft	
Horiz. Clearance		ft →	Same ft	
Wearing Surf Type	Polyester	→	Monolithic Concrete	
Wearing Surf Thick	4	in →	1 in	

Proposed Bridge Work (What & Why)

Deck replacement with substructure repairs. See separate written scope for detailed information.

Clear and grub vegetation at bridge.

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Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge 2	Bridge Location	LOR-IR-90-11.530L	Preliminary Cost Estimate	\$1,500,000.00	
	Treatment Types	NA: 501 - Approach Slab Replacement, NA: 342 - Substructure Sealing, NA: 320 - Pier Repair, NA: 300 - Abutment Repair, NA: 135 - Deck Replacement, NA: 700 - Protective Coating			
	Existing Bridge Information	NA: 135 - Deck Replacement			
	Alignment	Use Existing	Designer to verify	Curb Present	No
	Profile	Use Existing	Designer to verify	Cut Trees	Yes
	Floodplain Coord.	Select...		R/W Req'd	No
	OHWM Determ.	N/A		Survey Req'd	Yes
	MOT Type	Barrier		Soil Borings Req'd	No
				Utility Relocation Req'd	Yes
				Hydraulic Analysis Req'd	No
			Structure Type Study Req'd	No	
General Appraisal*	Existing		Driveway Accomodations Req'd	No	
Sufficiency Rating	7		Addendum Sheet for Structure	Yes	
Year Built	095.6		Eligible for National Historic Register	No	
	1974				
Structure Type*	Steel continuous/Stringer/Multi-beam or Girder		Proposed		
Structure File No.*	4704398	→			
Feature Intersected	OVER LOR-54-0514 TH-54	→	Same		
Design Loading	HS20-44 & Alt. Military Load	→	New - per BDM + 60 psf FWS		
Number of Spans	3	→	Same		
Out↔Out Width*	44	ft →	43'-10"	ft	
Bridge Railing Type	32" Defl Type Para (NJ Shape)	→	42" Single Slope Barrier		
Curb↔Curb Width	40	ft →	Same	ft	
Overall Length	129	ft →	Same	ft	
Approach Slab Len	0	ft	25 feet		
Vertical Clearance		ft →	No lower than exist (14'-7")	ft	
Horiz. Clearance		ft →	Same	ft	
Wearing Surf Type	Polyester	→	Monolithic Concrete		
Wearing Surf Thick	4	in →	1	in	

Proposed Bridge Work (What & Why)

Deck replacement with substructure repairs. See separate written scope for detailed information.

Clear and grub vegetation at bridge.

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Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge 3	Bridge Location	LOR-IR-90-11.730	Preliminary Cost Estimate	\$0.00
	Treatment Types	No Work		
	Existing Bridge Information			
	Alignment	Select...	<i>Comment</i>	Curb Present Y/N...
	Profile	Select...		Cut Trees Y/N...
	Floodplain Coord.	Select...		R/W Req'd Y/N...
	OHWM Determ.	Select...		Survey Req'd Y/N...
	MOT Type	Select...		Soil Borings Req'd Y/N...
				Utility Relocation Req'd Y/N...
				Hydraulic Analysis Req'd Y/N...
			Structure Type Study Req'd Y/N...	
General Appraisal*	Existing		Driveway Accomodations Req'd Y/N...	
Sufficiency Rating	9		Addendum Sheet for Structure Y/N...	
Year Built	096.3		Eligible for National Historic Register Y/N...	
	1974			
Structure Type*	Steel continuous/Stringer/Multi-beam or Girder	Proposed		
Structure File No.*	4704401	→		
Feature Intersected	OVER LOR-002-1169R	→		
Design Loading	HL93	→		
Number of Spans	3	→		
Out↔Out Width*	44	ft →		ft
Bridge Railing Type	36" Defl Type Para (NJ Shape)	→		
Curb↔Curb Width	41	ft →		ft
Overall Length	227	ft →		ft
Approach Slab Len	30	ft		
Vertical Clearance		ft →		ft
Horiz. Clearance		ft →		ft
Wearing Surf Type	Super Plasticized	→		
Wearing Surf Thick	1	in →		in

Proposed Bridge Work (What & Why)

No Work

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Bridge 4	Bridge Location	LOR-IR-90-12.400L	Preliminary Cost Estimate	\$69,000.00
	Treatment Types	NA: 912 - Railing Repair, NA: 140 - Deck Sealing - Gravity Fed Resin		
	Existing Bridge Information			
	Alignment	Use Existing	<i>Comment</i>	Curb Present No
	Profile	Use Existing		Cut Trees Yes
	Floodplain Coord.	Select...		R/W Req'd No
	OHWM Determ.	N/A		Survey Req'd No
	MOT Type	Barrier		Soil Borings Req'd no
				Utility Relocation Req'd No
				Hydraulic Analysis Req'd No
	Existing		Structure Type Study Req'd no	
General Appraisal*	9		Driveway Accomodations Req'd No	
Sufficiency Rating	090.9		Addendum Sheet for Structure Yes	
Year Built	1967		Eligible for National Historic Register No	
Structure Type*	Steel continuous/Stringer/Multi-beam or Girder		Proposed	
Structure File No.*	4704355	→		
Feature Intersected	OVER LAKE AVE CH-204	→	Same	
Design Loading	HS25 or greater	→	Same	
Number of Spans	3	→	Same	
Out↔Out Width*	63	ft →	Same ft	
Bridge Railing Type	42" Defl Type Para (Single Slope)	→	Same	
Curb↔Curb Width	60	ft →	Same ft	
Overall Length	166.6	ft →	Same ft	
Approach Slab Len	25	ft	Same	
Vertical Clearance		ft →	Same ft	
Horiz. Clearance		ft →	Same ft	
Wearing Surf Type	Super Plasticized	→	Same	
Wearing Surf Thick	1	in →	Same in	

Proposed Bridge Work (What & Why)

Seal bridge deck and app slab with GFR.

Remove existing coatings and re-seal inside and top face of concrete parapets with epoxy-urethane (App slabs parapets also)

Repair the horizontally cracked tops of parapets. Seal repaired areas with epoxy-urethane.

Clear and grub vegetation at bridge.

All BTAs Type 1 except inside trailing end has "T-Type" hole pattern drilled in for Type 2

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Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge 5	Bridge Location	LOR-IR-90-12.410R	Preliminary Cost Estimate	\$60,500.00
	Treatment Types	NA: 912 - Railing Repair, NA: 140 - Deck Sealing - Gravity Fed Resin		
	Existing Bridge Information			
	Alignment	Use Existing	<i>Comment</i>	Curb Present No
	Profile	Use Existing		Cut Trees Yes
	Floodplain Coord.	Select...		R/W Req'd No
	OHWM Determ.	N/A		Survey Req'd No
	MOT Type	Barrier		Soil Borings Req'd no
				Utility Relocation Req'd No
				Hydraulic Analysis Req'd No
	Existing		Structure Type Study Req'd no	
General Appraisal*	9		Driveway Accomodations Req'd No	
Sufficiency Rating	090.9		Addendum Sheet for Structure Yes	
Year Built	1967		Eligible for National Historic Register No	
Structure Type*	Steel continuous/Stringer/Multi-beam or Girder		Proposed	
Structure File No.*	4704444	→		
Feature Intersected	OVER LAKE AVE CH-204	→	Same	
Design Loading	HS25 or greater	→	Same	
Number of Spans	3	→	Same	
Out↔Out Width*	63	ft →	Same ft	
Bridge Railing Type	42" Defl Type Para (Single Slope)	→	Same	
Curb↔Curb Width	60	ft →	Same ft	
Overall Length	163	ft →	Same ft	
Approach Slab Len	25	ft	Same	
Vertical Clearance		ft →	Same ft	
Horiz. Clearance		ft →	Same ft	
Wearing Surf Type	Super Plasticized	→	Same	
Wearing Surf Thick	1	in →	Same in	

Proposed Bridge Work (What & Why)

Seal bridge deck and app slab with GFR.

Remove existing coatings and re-seal inside and top face of concrete parapets with epoxy-urethane (App slabs parapets also)

Repair the horizontally cracked tops of parapets. Seal repaired areas with epoxy-urethane.

Clear and grub vegetation at bridge.

All BTAs Type 1 except inside trailing end has "T-Type" hole pattern drilled in for Type 2

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Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge 6	Bridge Location	LOR-IR-90-12.530L	Preliminary Cost Estimate	\$51,000.00
	Treatment Types	NA: 912 - Railing Repair, NA: 140 - Deck Sealing - Gravity Fed Resin		
	Existing Bridge Information			
	Alignment	Use Existing	<i>Comment</i>	Curb Present No
	Profile	Use Existing		Cut Trees Yes
	Floodplain Coord.	Select...		R/W Req'd No
	OHWM Determ.	N/A		Survey Req'd No
	MOT Type	Barrier		Soil Borings Req'd no
				Utility Relocation Req'd No
				Hydraulic Analysis Req'd No
	Existing		Structure Type Study Req'd no	
General Appraisal*	9		Driveway Accommodations Req'd No	
Sufficiency Rating	087.7		Addendum Sheet for Structure Yes	
Year Built	2009		Eligible for National Historic Register No	
Structure Type*	Steel continuous/Stringer/Multi-beam or Girder		Proposed	
Structure File No.*	4704487	→		
Feature Intersected	OVER CSX RR	→	Same	
Design Loading	HS25 or greater	→	Same	
Number of Spans	3	→	Same	
Out↔Out Width*	63	ft →	Same ft	
Bridge Railing Type	42" Defl Type Para (Single Slope)	→	Same	
Curb↔Curb Width	60	ft →	Same ft	
Overall Length	145	ft →	Same ft	
Approach Slab Len	25	ft	Same	
Vertical Clearance		ft →	Same ft	
Horiz. Clearance		ft →	Same ft	
Wearing Surf Type	Super Plasticized	→	Same	
Wearing Surf Thick	1	in →	Same in	

Proposed Bridge Work (What & Why)

Seal bridge deck and app slab with GFR.

Remove existing coatings and re-seal inside and top face of concrete parapets with epoxy-urethane (App slabs parapets also)

Repair the horizontally cracked tops of parapets. Seal repaired areas with epoxy-urethane.

Clear and grub vegetation at bridge.

All BTAs are Type 1 or continuous concrete parapet wall

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Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge 7	Bridge Location	LOR-IR-90-12.530R	Preliminary Cost Estimate	\$51,000.00
	Treatment Types	NA: 912 - Railing Repair, NA: 140 - Deck Sealing - Gravity Fed Resin		
	Existing Bridge Information			
	Alignment	Use Existing	<i>Comment</i>	Curb Present No
	Profile	Use Existing		Cut Trees Yes
	Floodplain Coord.	Select...		R/W Req'd No
	OHWM Determ.	N/A		Survey Req'd No
	MOT Type	Barrier		Soil Borings Req'd no
				Utility Relocation Req'd No
				Hydraulic Analysis Req'd No
	Existing		Structure Type Study Req'd no	
General Appraisal*	9		Driveway Accommodations Req'd No	
Sufficiency Rating	087.7		Addendum Sheet for Structure Yes	
Year Built	2009		Eligible for National Historic Register No	
Structure Type*	Steel continuous/Stringer/Multi-beam or Girder		Proposed	
Structure File No.*	4704517	→		
Feature Intersected	OVER CSX RR	→	Same	
Design Loading	HS25 or greater	→	Same	
Number of Spans	3	→	Same	
Out↔Out Width*	63	ft →	Same ft	
Bridge Railing Type	42" Defl Type Para (Single Slope)	→	Same	
Curb↔Curb Width	60	ft →	Same ft	
Overall Length	145	ft →	Same ft	
Approach Slab Len	25	ft	Same	
Vertical Clearance		ft →	Same ft	
Horiz. Clearance		ft →	Same ft	
Wearing Surf Type	Super Plasticized	→	Same	
Wearing Surf Thick	1	in →	Same in	

Proposed Bridge Work (What & Why)

Seal bridge deck and app slab with GFR.

Remove existing coatings and re-seal inside and top face of concrete parapets with epoxy-urethane (App slabs parapets also)

Repair the horizontally cracked tops of parapets. Seal repaired areas with epoxy-urethane.

Clear and grub vegetation at bridge.

All BTAs Type 1 except inside trailing end has "T-Type" hole pattern drilled in for Type 2

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Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge 8	Bridge Location	LOR-IR-90-13.190L	Preliminary Cost Estimate	\$16,000.00
	Treatment Types	Deck Sealing with SRS		
	Existing Bridge Information			
	Alignment	Use Existing	<i>Comment</i>	Curb Present No
	Profile	Use Existing		Cut Trees No
	Floodplain Coord.	Select...		R/W Req'd No
	OHWM Determ.	N/A		Survey Req'd No
	MOT Type	Barrier		Soil Borings Req'd no
				Utility Relocation Req'd No
				Hydraulic Analysis Req'd No
	Existing		Structure Type Study Req'd no	
General Appraisal*	9		Driveway Accomodations Req'd No	
Sufficiency Rating	091.5		Addendum Sheet for Structure Yes	
Year Built	2018		Eligible for National Historic Register No	
Structure Type*	stressed concrete continuous/Stringer/Multi-beam or Girder		Proposed	
Structure File No.*	4710001	→		
Feature Intersected	Over Lor 057 19.16	→	Same	
Design Loading	HL93	→	Same	
Number of Spans	2	→	Same	
Out↔Out Width*	63.4	ft →	Same ft	
Bridge Railing Type	42" Defl Type Para (Single Slope)	→	Same	
Curb↔Curb Width	60	ft →	Same ft	
Overall Length	182	ft →	Same ft	
Approach Slab Len	30	ft	Same	
Vertical Clearance		ft →	Same ft	
Horiz. Clearance		ft →	Same ft	
Wearing Surf Type	Super Plasticized	→	Same	
Wearing Surf Thick	1	in →	Same in	

Proposed Bridge Work (What & Why)

Seal bridge deck and app slab with SRS.

BTAs - Leading Ends - Type 1; Trailing End Outside - Type 2; Trailing End Inside - None

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge 9	Bridge Location	LOR-IR-90-13.210R	Preliminary Cost Estimate	\$16,000.00
	Treatment Types	Deck Sealing with SRS		
	Existing Bridge Information			
	Alignment	Use Existing	<i>Comment</i>	Curb Present No
	Profile	Use Existing		Cut Trees No
	Floodplain Coord.	Select...		R/W Req'd No
	OHWM Determ.	N/A		Survey Req'd No
	MOT Type	Barrier		Soil Borings Req'd no
				Utility Relocation Req'd No
				Hydraulic Analysis Req'd No
	Existing		Structure Type Study Req'd no	
General Appraisal*	9		Driveway Accomodations Req'd No	
Sufficiency Rating	091.1		Addendum Sheet for Structure Yes	
Year Built	2017		Eligible for National Historic Register No	
Structure Type*	stressed concrete continuous/Stringer/Multi-beam or Gi		Proposed	
Structure File No.*	4710000	→		
Feature Intersected	SR 57	→	Same	
Design Loading	HL93	→	Same	
Number of Spans	2	→	Same	
Out↔Out Width*	63.4	ft →	Same ft	
Bridge Railing Type	42" Defl Type Para (Single Slope)	→	Same	
Curb↔Curb Width	60	ft →	Same ft	
Overall Length	182	ft →	Same ft	
Approach Slab Len	30	ft	Same	
Vertical Clearance		ft →	Same ft	
Horiz. Clearance		ft →	Same ft	
Wearing Surf Type	Super Plasticized	→	Same	
Wearing Surf Thick	1	in →	Same in	

Proposed Bridge Work (What & Why)

Seal bridge deck and app slab with SRS.

BTAs - Leading Ends - Type 1; Trailing End Outside - Type 2; Trailing End Inside - Type 1

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Bridge #	Bridge Location	LOR-IR-90-13.540L	Preliminary Cost Estimate	\$11,000.00
	Treatment Types	Deck Sealing with SRS		
	Existing Bridge Information			
	Alignment	Use Existing	<i>Comment</i>	Curb Present No
	Profile	Use Existing		Cut Trees No
	Floodplain Coord.	Select...		R/W Req'd No
	OHWM Determ.	N/A		Survey Req'd No
	MOT Type	Barrier		Soil Borings Req'd no
				Utility Relocation Req'd No
				Hydraulic Analysis Req'd No
	Existing		Structure Type Study Req'd no	
General Appraisal*	9		Driveway Accomodations Req'd No	
Sufficiency Rating	090.1		Addendum Sheet for Structure Yes	
Year Built	2017		Eligible for National Historic Register No	
Structure Type*	Prestressed concrete/Stringer/Multi-beam or Girder		Proposed	
Structure File No.*	4710002	→		
Feature Intersected	OVER W.RIVER ROAD (CR20)	→	Same	
Design Loading	HL93	→	Same	
Number of Spans	1	→	Same	
Out↔Out Width*	71.4	ft →	Same ft	
Bridge Railing Type	Reinf Conc Parapet	→	Same	
Curb↔Curb Width	68	ft →	Same ft	
Overall Length	98	ft →	Same ft	
Approach Slab Len	30	ft	Same	
Vertical Clearance		ft →	Same ft	
Horiz. Clearance		ft →	Same ft	
Wearing Surf Type	Super Plasticized	→	Same	
Wearing Surf Thick	1	in →	Same in	

Proposed Bridge Work (What & Why)

Seal bridge deck and app slab with SRS.

BTAs - Leading Ends - Type 1; Trailing End Outside - Type 2; Trailing End Inside - Type 1

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Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge #	Bridge Location	LOR-IR-90-13.550R	Preliminary Cost Estimate	\$11,000.00
	Treatment Types	Deck Sealing with SRS		
	Existing Bridge Information			
	Alignment	Use Existing	<i>Comment</i>	Curb Present No
	Profile	Use Existing		Cut Trees No
	Floodplain Coord.	Select...		R/W Req'd No
	OHWM Determ.	N/A		Survey Req'd No
	MOT Type	Barrier		Soil Borings Req'd no
				Utility Relocation Req'd No
				Hydraulic Analysis Req'd No
				Structure Type Study Req'd no
	General Appraisal*	Existing 9		Driveway Accomodations Req'd No
	Sufficiency Rating	095.6		Addendum Sheet for Structure Yes
	Year Built	2018		Eligible for National Historic Register No
	Structure Type*	Prestressed concrete/Stringer/Multi-beam or Girder		Proposed
	Structure File No.*	4710003	→	
	Feature Intersected	Over W. River Rd. CR20	→	Same
	Design Loading	HL93	→	Same
	Number of Spans	1	→	Same
	Out↔Out Width*	73.3	ft →	Same ft
	Bridge Railing Type	42" Defl Type Para (Single Slope)	→	Same
	Curb↔Curb Width	70	ft →	Same ft
	Overall Length	98.1	ft →	Same ft
	Approach Slab Len	30	ft	Same
	Vertical Clearance		ft →	Same ft
	Horiz. Clearance		ft →	Same ft
	Wearing Surf Type	Super Plasticized	→	Same
	Wearing Surf Thick	1	in →	Same in

Proposed Bridge Work (What & Why)

Seal bridge deck and app slab with SRS.

BTAs - Leading Ends - Type 1; Trailing End Outside - Type 2; Trailing End Inside - 5 hole pattern for Type 1

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Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge #	Bridge Location	LOR-IR-90-14.270L	Preliminary Cost Estimate	\$87,000.00
	Treatment Types	NA: 131 - Deck Patching - Concrete, NA: 140 - Deck Sealing - Gravity Fed Resin, NA: 912 - Railing Repair		
	Existing Bridge Information			
	Alignment	Use Existing	Comment	Curb Present No
	Profile	Use Existing		Cut Trees No
	Floodplain Coord.	In-House		R/W Req'd No
	OHWM Determ.	In-House		Survey Req'd No
	MOT Type	Barrier		Soil Borings Req'd no
				Utility Relocation Req'd No
				Hydraulic Analysis Req'd No
				Structure Type Study Req'd no
	General Appraisal*	Existing 9		Driveway Accomodations Req'd No
	Sufficiency Rating	092.4		Addendum Sheet for Structure Yes
	Year Built	2013		Eligible for National Historic Register No
	Structure Type*	stressed concrete continuous/Stringer/Multi-beam or Girder		Proposed
	Structure File No.*	4704665	→	
	Feature Intersected	OVER BLACK RIVER/PARK RD	→	Same
	Design Loading	HL93	→	Same
	Number of Spans	3	→	Same
	Out↔Out Width*	67	ft →	Same ft
	Bridge Railing Type	42" Defl Type Para (Single Slope)	→	Same
	Curb↔Curb Width	64	ft →	Same ft
	Overall Length	363	ft →	Same ft
	Approach Slab Len	25	ft	Same
	Vertical Clearance		ft →	Same ft
	Horiz. Clearance		ft →	Same ft
	Wearing Surf Type	Super Plasticized	→	Same
	Wearing Surf Thick	1	in →	Same in

Proposed Bridge Work (What & Why)

Seal bridge deck and app slab with GFR.

Remove existing coatings and re-seal inside and top face of concrete parapets with epoxy-urethane (App slabs parapets also)

Repair the horizontally cracked tops of parapets. Seal repaired areas with epoxy-urethane.

Patching Concrete Bridge Deck - Rear Lt app slab

BTAs: Leading Inside - Type 1, Outside - Conc barrier; Trailing Ends - Type 2

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge #	Bridge Location	LOR-IR-90-14.280R	Preliminary Cost Estimate	\$74,000.00
	Treatment Types	NA: 912 - Railing Repair, NA: 140 - Deck Sealing - Gravity Fed Resin		
	Existing Bridge Information			
	Alignment	Use Existing	<i>Comment</i>	Curb Present No
	Profile	Use Existing		Cut Trees No
	Floodplain Coord.	In-House		R/W Req'd No
	OHWM Determ.	In-House		Survey Req'd No
	MOT Type	Barrier		Soil Borings Req'd no
				Utility Relocation Req'd No
				Hydraulic Analysis Req'd No
				Structure Type Study Req'd no
	General Appraisal*	Existing 9		Driveway Accommodations Req'd No
	Sufficiency Rating	094.4		Addendum Sheet for Structure Yes
	Year Built	2013		Eligible for National Historic Register No
	Structure Type*	stressed concrete continuous/Stringer/Multi-beam or Gi		Proposed
	Structure File No.*	4704703	→	
	Feature Intersected	OVER BLACK RIVER/PARK RD	→	Same
	Design Loading	HL93	→	Same
	Number of Spans	3	→	Same
	Out↔Out Width*	67	ft →	Same ft
	Bridge Railing Type	42" Defl Type Para (Single Slope)	→	Same
	Curb↔Curb Width	64	ft →	Same ft
	Overall Length	363	ft →	Same ft
	Approach Slab Len	25	ft	Same
	Vertical Clearance		ft →	Same ft
	Horiz. Clearance		ft →	Same ft
	Wearing Surf Type	Super Plasticized	→	Same
	Wearing Surf Thick	1	in →	Same in

Proposed Bridge Work (What & Why)

Seal bridge deck and app slab with GFR.

Remove existing coatings and re-seal inside and top face of concrete parapets with epoxy-urethane (App slabs parapets also)

Repair the horizontally cracked tops of parapets. Seal repaired areas with epoxy-urethane.

BTAs - Leading Ends - Type 1; Trailing End Outside - conc barrier; Trailing End Inside - Looks like holes for Type 1 and Type 2 BTAs

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge #	Bridge Location	LOR-IR-90-14.440L	Preliminary Cost Estimate	\$38,000.00
	Treatment Types	NA: 140 - Deck Sealing - Gravity Fed Resin, NA: 912 - Railing Repair		
	Existing Bridge Information			
	Alignment	Use Existing	<i>Comment</i>	Curb Present No
	Profile	Use Existing		Cut Trees No
	Floodplain Coord.	In-House		R/W Req'd No
	OHWM Determ.	In-House		Survey Req'd No
	MOT Type	Barrier		Soil Borings Req'd no
				Utility Relocation Req'd No
				Hydraulic Analysis Req'd No
				Structure Type Study Req'd no
	General Appraisal*	Existing 9		Driveway Accomodations Req'd No
	Sufficiency Rating	094.0		Addendum Sheet for Structure Yes
	Year Built	2013		Eligible for National Historic Register No
	Structure Type*	Steel continuous/Stringer/Multi-beam or Girder		Proposed
	Structure File No.*	4704738	→	
	Feature Intersected	OVER FORD ROAD TH-108	→	Same
	Design Loading	HL93	→	Same
	Number of Spans	3	→	Same
	Out↔Out Width*	65	ft →	Same ft
	Bridge Railing Type	42" Defl Type Para (Single Slope)	→	Same
	Curb↔Curb Width	62	ft →	Same ft
	Overall Length	151.5	ft →	Same ft
	Approach Slab Len	25	ft	Same
	Vertical Clearance		ft →	Same ft
	Horiz. Clearance		ft →	Same ft
	Wearing Surf Type	Super Plasticized	→	Same
	Wearing Surf Thick	1	in →	Same in

Proposed Bridge Work (What & Why)

Seal bridge deck and app slab with GFR.

Remove existing coatings and re-seal inside and top face of concrete parapets with epoxy-urethane (App slabs parapets also)

Repair the horizontally cracked tops of parapets. Seal repaired areas with epoxy-urethane.

BTAs - Leading Ends - Type 1; Trailing End Outside - Conc Barrier; Trailing End Inside - Type 2

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge #	Bridge Location	LOR-IR-90-14.440R	Preliminary Cost Estimate	\$52,000.00
	Treatment Types	NA: 912 - Railing Repair, NA: 140 - Deck Sealing - Gravity Fed Resin		
	Existing Bridge Information			
	Alignment	Use Existing	<i>Comment</i>	Curb Present No
	Profile	Use Existing		Cut Trees No
	Floodplain Coord.	In-House		R/W Req'd No
	OHWM Determ.	In-House		Survey Req'd No
	MOT Type	Barrier		Soil Borings Req'd no
				Utility Relocation Req'd No
				Hydraulic Analysis Req'd No
	Existing		Structure Type Study Req'd no	
General Appraisal*	9		Driveway Accomodations Req'd No	
Sufficiency Rating	091.5		Addendum Sheet for Structure Yes	
Year Built	2013		Eligible for National Historic Register No	
Structure Type*	Steel continuous/Stringer/Multi-beam or Girder		Proposed	
Structure File No.*	4704754	→		
Feature Intersected	OVER FORD ROAD TH-108	→	Same	
Design Loading	HL93	→	Same	
Number of Spans	3	→	Same	
Out↔Out Width*	65	ft →	Same ft	
Bridge Railing Type	42" Defl Type Para (Single Slope)	→	Same	
Curb↔Curb Width	62	ft →	Same ft	
Overall Length	179	ft →	Same ft	
Approach Slab Len	25	ft	Same	
Vertical Clearance		ft →	Same ft	
Horiz. Clearance		ft →	Same ft	
Wearing Surf Type	Super Plasticized	→	Same	
Wearing Surf Thick	1	in →	Same in	

Proposed Bridge Work (What & Why)

Seal bridge deck and app slab with GFR.

Remove existing coatings and re-seal inside and top face of concrete parapets with epoxy-urethane (App slabs parapets also)

Repair the horizontally cracked tops of parapets. Seal repaired areas with epoxy-urethane.

BTAs - Leading Inside End - Type 1; Outside - Conc Barrier; Trailing End Outside - Conc barrier; Trailing End Inside - holes for type 1 and type 2 BTA

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge #	Bridge Location	LOR-MR-17-.000	Preliminary Cost Estimate	\$0.00
	Treatment Types	No Work		
	Existing Bridge Information			
	Alignment	Select...	<i>Comment</i>	Curb Present Y/N...
	Profile	Select...		Cut Trees Y/N...
	Floodplain Coord.	Select...		R/W Req'd Y/N...
	OHWB Determ.	Select...		Survey Req'd Y/N...
	MOT Type	Select...		Soil Borings Req'd Y/N...
				Utility Relocation Req'd Y/N...
				Hydraulic Analysis Req'd Y/N...
	Existing		Structure Type Study Req'd Y/N...	
General Appraisal*	9		Driveway Accomodations Req'd Y/N...	
Sufficiency Rating	076.2		Addendum Sheet for Structure Y/N...	
Year Built	2011		Eligible for National Historic Register Y/N...	
Structure Type*	Steel continuous/Stringer/Multi-beam or Girder		Proposed	
Structure File No.*	4704789	→		
Feature Intersected	OVER LOR-90-14.78	→		
Design Loading	HL93	→		
Number of Spans	4	→		
Out↔Out Width*	42	ft →	ft	
Bridge Railing Type	Reinf Conc Parapet	→		
Curb↔Curb Width	30	ft →	ft	
Overall Length	308.9	ft →	ft	
Approach Slab Len	25	ft		
Vertical Clearance		ft →	ft	
Horiz. Clearance		ft →	ft	
Wearing Surf Type	Super Plasticized	→		
Wearing Surf Thick	1	in →	in	

Proposed Bridge Work (What & Why)

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge #	Bridge Location	LOR-SR-254-1.900	Preliminary Cost Estimate	\$90,000.00
	Treatment Types	VPF		
	Existing Bridge Information			
	Alignment	Use Existing	<i>Comment</i>	Curb Present
	Profile	Use Existing		Maybe
	Floodplain Coord.	Select...		Cut Trees
	OHWM Determ.	N/A		No
	MOT Type	Drums		R/W Req'd
				No
				Survey Req'd
			No	
			Soil Borings Req'd	
			No	
			Utility Relocation Req'd	
			No	
			Hydraulic Analysis Req'd	
			No	
			Structure Type Study Req'd	
			No	
General Appraisal*	Existing		Driveway Accomodations Req'd	
Sufficiency Rating	7		No	
Year Built	093.6		Addendum Sheet for Structure	
	1970		Yes	
			Eligible for National Historic Register	
			No	
Structure Type*	Steel continuous/Stringer/Multi-beam or Girder		Proposed	
Structure File No.*	4706277	→		
Feature Intersected	OVER LOR-090-1565	→	Same	
Design Loading	HS20-44 & Alt. Military Load	→	Same	
Number of Spans	4	→	Same	
Out↔Out Width*	91	ft →	Same	
Bridge Railing Type	36" Defl Type Para (NJ Shape)	→	Same	
Curb↔Curb Width	88	ft →	Same	
Overall Length	304	ft →	Same	
Approach Slab Len	25	ft	ft	
Vertical Clearance		ft →	Same	
Horiz. Clearance		ft →	Same	
Wearing Surf Type	Super Plasticized	→	Same	
Wearing Surf Thick	1	in →	Same	

Proposed Bridge Work (What & Why)

Install Vandal Protection Fence

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge #	Bridge Location	LOR-IR-90-16.580	Preliminary Cost Estimate	\$172,000.00
	Treatment Types	Culvert Invert repair		
	Existing Bridge Information			
	Alignment	Use Existing	<i>Comment</i>	Curb Present No
	Profile	Use Existing		Cut Trees Yes
	Floodplain Coord.	Dsgn Consultant		R/W Req'd No
	OHWM Determ.	Dsgn Consultant		Survey Req'd No
	MOT Type	Barrier		Soil Borings Req'd no
				Utility Relocation Req'd No
				Hydraulic Analysis Req'd Yes
				Structure Type Study Req'd no
	General Appraisal*	Existing 6		Driveway Accomodations Req'd No
	Sufficiency Rating	076.7		Addendum Sheet for Structure Yes
	Year Built	1970		Eligible for National Historic Register No
	Structure Type*	Steel/Culvert (includes frame culverts)		
	Structure File No.*	4704800	→	Proposed
	Feature Intersected	JUNGBLUTH DITCH	→	Same
	Design Loading	HS20-44 & Alt. Military Load	→	Same
	Number of Spans	1	→	Same
	Out↔Out Width*	0	ft →	Same ft
	Bridge Railing Type	None	→	Same
	Curb↔Curb Width	0	ft →	Same ft
	Overall Length	28	ft →	Same ft
	Approach Slab Len	0	ft	Same
	Vertical Clearance		ft →	Same ft
	Horiz. Clearance		ft →	Same ft
	Wearing Surf Type	Not Applicable	→	Same
	Wearing Surf Thick	0	in →	Same in

Proposed Bridge Work (What & Why)

Field pave concrete invert full length. Height up 1.5 ft on walls plus (24 estimate) discrete repairs to CMP above that.

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge #	Bridge Location	LOR-SR-301-23.480	Preliminary Cost Estimate	\$0.00
	Treatment Types	No Work		
	Existing Bridge Information			
	Alignment	Select...	<i>Comment</i>	Curb Present Y/N...
	Profile	Select...		Cut Trees Y/N...
	Floodplain Coord.	Select...		R/W Req'd Y/N...
	OHWB Determ.	Select...		Survey Req'd Y/N...
	MOT Type	Select...		Soil Borings Req'd Y/N...
				Utility Relocation Req'd Y/N...
				Hydraulic Analysis Req'd Y/N...
	Existing		Structure Type Study Req'd Y/N...	
General Appraisal*	9		Driveway Accomodations Req'd Y/N...	
Sufficiency Rating	075.4		Addendum Sheet for Structure Y/N...	
Year Built	2013		Eligible for National Historic Register Y/N...	
Structure Type*	stressed concrete continuous/Stringer/Multi-beam or Gi		Proposed	
Structure File No.*	4706730	→		
Feature Intersected	OVER IR LOR-90-1700	→		
Design Loading	HL93	→		
Number of Spans	4	→		
Out↔Out Width*	42	ft →	ft	
Bridge Railing Type	42" Defl Type Para (Single Slope)	→		
Curb↔Curb Width	30	ft →	ft	
Overall Length	385.3	ft →	ft	
Approach Slab Len	25	ft		
Vertical Clearance		ft →	ft	
Horiz. Clearance		ft →	ft	
Wearing Surf Type	Super Plasticized	→		
Wearing Surf Thick	1	in →	in	

Proposed Bridge Work (What & Why)

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Bridge #	Bridge Location	LOR-MR-22-.000	Preliminary Cost Estimate	\$0.00
	Treatment Types	No Work		
	Existing Bridge Information			
	Alignment	Select...	<i>Comment</i>	Curb Present Y/N...
	Profile	Select...		Cut Trees Y/N...
	Floodplain Coord.	Select...		R/W Req'd Y/N...
	OHWB Determ.	Select...		Survey Req'd Y/N...
	MOT Type	Select...		Soil Borings Req'd Y/N...
				Utility Relocation Req'd Y/N...
				Hydraulic Analysis Req'd Y/N...
			Structure Type Study Req'd Y/N...	
General Appraisal*	Existing		Proposed	
	9		Driveway Accomodations Req'd	Y/N...
Sufficiency Rating	078.4		Addendum Sheet for Structure	Y/N...
Year Built	2015		Eligible for National Historic Register	Y/N...
Structure Type*	Steel continuous/Stringer/Multi-beam or Girder			
Structure File No.*	4704835	→		
Feature Intersected	OVER LOR-090 -1753	→		
Design Loading	HS20-44 & Alt. Military Load	→		
Number of Spans	4	→		
Out↔Out Width*	36	ft →		ft
Bridge Railing Type	Other	→		
Curb↔Curb Width	24	ft →		ft
Overall Length	315	ft →		ft
Approach Slab Len	25	ft		
Vertical Clearance		ft →		ft
Horiz. Clearance		ft →		ft
Wearing Surf Type	Super Plasticized	→		
Wearing Surf Thick	1	in →		in

Proposed Bridge Work (What & Why)

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope		PID	107714	Project Name	LOR IR 0090 10.76
Bridge #	Bridge Location	LOR-IR-90-17.860		Preliminary Cost Estimate	\$0.00
	Treatment Types	No Work			
	Existing Bridge Information				
	Alignment	Select...		Comment	Curb Present Y/N...
	Profile	Select...			Cut Trees Y/N...
	Floodplain Coord.	Select...			R/W Req'd Y/N...
	OHWL Determ.	Select...			Survey Req'd Y/N...
	MOT Type	Select...			Soil Borings Req'd Y/N...
					Utility Relocation Req'd Y/N...
					Hydraulic Analysis Req'd Y/N...
				Structure Type Study Req'd Y/N...	
General Appraisal*	Existing				Driveway Accomodations Req'd Y/N...
Sufficiency Rating	5				Addendum Sheet for Structure Y/N...
Year Built	077.8				Eligible for National Historic Register Y/N...
	1970				
Structure Type*	Steel continuous/Stringer/Multi-beam or Girder			Proposed	
Structure File No.*	4704924		→		
Feature Intersected	OVER N/S RR		→		
Design Loading	HS20		→		
Number of Spans	3		→		
Out↔Out Width*	42		ft →		ft
Bridge Railing Type	Reinf Conc Safe Curb & Para w Alum Rai		→		
Curb↔Curb Width	38		ft →		ft
Overall Length	163		ft →		ft
Approach Slab Len	25		ft		
Vertical Clearance			ft →		ft
Horiz. Clearance			ft →		ft
Wearing Surf Type	Polyester		→		
Wearing Surf Thick	4		in →		in

Proposed Bridge Work (What & Why)

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope		PID	107714	Project Name	LOR IR 0090 10.76
Bridge #	Bridge Location	LOR-IR-90-17.870		Preliminary Cost Estimate	\$0.00
	Treatment Types	No Work			
	Existing Bridge Information				
	Alignment	Select...		Comment	Curb Present Y/N...
	Profile	Select...			Cut Trees Y/N...
	Floodplain Coord.	Select...			R/W Req'd Y/N...
	OHWL Determ.	Select...			Survey Req'd Y/N...
	MOT Type	Select...			Soil Borings Req'd Y/N...
					Utility Relocation Req'd Y/N...
					Hydraulic Analysis Req'd Y/N...
	Existing			Structure Type Study Req'd Y/N...	
General Appraisal*	5			Driveway Accomodations Req'd Y/N...	
Sufficiency Rating	077.8			Addendum Sheet for Structure Y/N...	
Year Built	1970			Eligible for National Historic Register Y/N...	
Structure Type*	Steel continuous/Stringer/Multi-beam or Girder			Proposed	
Structure File No.*	4704894	→			
Feature Intersected	OVER N/S RR	→			
Design Loading	HS20-44 & Alt. Military Load	→			
Number of Spans	3	→			
Out↔Out Width*	42	ft →			ft
Bridge Railing Type	Deep Beam Rail w Tube Backup	→			
Curb↔Curb Width	38.5	ft →			ft
Overall Length	154	ft →			ft
Approach Slab Len	25	ft			
Vertical Clearance		ft →			ft
Horiz. Clearance		ft →			ft
Wearing Surf Type	Polyester	→			
Wearing Surf Thick	4	in →			in

Proposed Bridge Work (What & Why)

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope		PID	107714	Project Name	LOR IR 0090 10.76	
Bridge #	Bridge Location	LOR-IR-90-18.150		Preliminary Cost Estimate	\$140,000.00	
	Treatment Types	Culvert Invert repair				
	Existing Bridge Information					
	Alignment	Use Existing		Comment	Curb Present	No
	Profile	Use Existing			Cut Trees	Yes
	Floodplain Coord.	Dsgn Consultant			R/W Req'd	No
	OHWM Determ.	Dsgn Consultant			Survey Req'd	No
	MOT Type	Barrier			Soil Borings Req'd	no
					Utility Relocation Req'd	No
					Hydraulic Analysis Req'd	Yes
	Existing			Structure Type Study Req'd	no	
General Appraisal*	6			Driveway Accomodations Req'd	No	
Sufficiency Rating	076.7			Addendum Sheet for Structure	Yes	
Year Built	1970			Eligible for National Historic Register	No	
Structure Type*	Steel/Culvert (includes frame culverts)			Proposed		
Structure File No.*	4704967	→				
Feature Intersected	KLEIN MAIN	→		Same		
Design Loading	HS20-44 & Alt. Military Load	→		Same		
Number of Spans	1	→		Same		
Out↔Out Width*	0	ft →		Same	ft	
Bridge Railing Type	None	→		Same		
Curb↔Curb Width	0	ft →		Same	ft	
Overall Length	12	ft →		Same	ft	
Approach Slab Len	0	ft		Same		
Vertical Clearance		ft →		Same	ft	
Horiz. Clearance		ft →		Same	ft	
Wearing Surf Type	Not Applicable	→		Same		
Wearing Surf Thick	0	in →		Same	in	

Proposed Bridge Work (What & Why)

Field pave concrete invert full length. Height up 2.0 ft on walls plus (12 -estimate) discrete repairs to CMP above that. Repair concrete headwall deterioration at Fwd Rt.

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope		PID	107714	Project Name	LOR IR 0090 10.76	
Bridge #	Bridge Location	LOR-IR-90-18.610L		Preliminary Cost Estimate	\$14,000.00	
	Treatment Types	NA: 142 - Deck Sealing - Silane SRS				
	Existing Bridge Information					
			<i>Comment</i>		Curb Present	No
	Alignment	Use Existing			Cut Trees	Yes
	Profile	Use Existing			R/W Req'd	No
	Floodplain Coord.	Select...			Survey Req'd	No
	OHWL Determ.	Select...			Soil Borings Req'd	no
	MOT Type	Barrier			Utility Relocation Req'd	No
					Hydraulic Analysis Req'd	No
	Existing			Structure Type Study Req'd	no	
General Appraisal*	7			Driveway Accomodations Req'd	No	
Sufficiency Rating	095.4			Addendum Sheet for Structure	Yes	
Year Built	1970			Eligible for National Historic Register	No	
Structure Type*	Concrete continuous/Slab			Proposed		
Structure File No.*	4704959	→				
Feature Intersected	FRENCH CREEK	→		Same		
Design Loading	HS25 or greater	→		Same		
Number of Spans	3	→		Same		
Out↔Out Width*	90.5	ft →		Same	ft	
Bridge Railing Type	42" Defl Type Para (NJ Shape)	→		Same		
Curb↔Curb Width	87	ft →		Same	ft	
Overall Length	105	ft →		Same	ft	
Approach Slab Len	25	ft		Same		
Vertical Clearance		ft →		Same	ft	
Horiz. Clearance		ft →		Same	ft	
Wearing Surf Type	Super Plasticized	→		Same		
Wearing Surf Thick	1	in →		Same	in	

Proposed Bridge Work (What & Why)

Seal deck and approach slabs with SRS

BTAs - Leading Ends - Type 1; Trailing End Outside - Type 2; Trailing End Inside - None

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope		PID	107714	Project Name	LOR IR 0090 10.76	
Bridge #	Bridge Location	LOR-IR-90-18.610R		Preliminary Cost Estimate	\$11,000.00	
	Treatment Types	NA: 142 - Deck Sealing - Silane SRS				
	Existing Bridge Information					
	Alignment	Use Existing		<i>Comment</i>	Curb Present	No
	Profile	Use Existing			Cut Trees	Yes
	Floodplain Coord.	Select...			R/W Req'd	No
	OHWM Determ.	Select...			Survey Req'd	No
	MOT Type	Barrier			Soil Borings Req'd	no
					Utility Relocation Req'd	No
					Hydraulic Analysis Req'd	No
	Existing			Structure Type Study Req'd	no	
General Appraisal*	7			Driveway Accomodations Req'd	No	
Sufficiency Rating	093.5			Addendum Sheet for Structure	Yes	
Year Built	1970			Eligible for National Historic Register	No	
Structure Type*	Concrete continuous/Slab			Proposed		
Structure File No.*	4704983	→				
Feature Intersected	FRENCH CREEK	→		Same		
Design Loading	HS25 or greater	→		Same		
Number of Spans	3	→		Same		
Out↔Out Width*	75.5	ft →		Same	ft	
Bridge Railing Type	42" Defl Type Para (NJ Shape)	→		Same		
Curb↔Curb Width	72.5	ft →		Same	ft	
Overall Length	105	ft →		Same	ft	
Approach Slab Len	25	ft		Same		
Vertical Clearance		ft →		Same	ft	
Horiz. Clearance		ft →		Same	ft	
Wearing Surf Type	Super Plasticized	→		Same		
Wearing Surf Thick	1	in →		Same	in	

Proposed Bridge Work (What & Why)

Seal deck and approach slabs with SRS

BTAs - Leading Ends - Type 1; Trailing End Outside - Type 2; Trailing End Inside - None

Project Scope

PID 107714 Project Name LOR IR 0090 10.76

Drainage 1.2.C.G

Drainage

Replace all storm sewer and replace underdrains.
 Verify any culvert work that needs done. - See attached culvert work sheets at the end of this scope form.
 Post construction BMPs needed on OTP connector and on IR 90. Treatment to be approx 20% of area + 10 acres for bioretention cells on OTP connector. ODOT to maintain BMPs due to maintenace agreements with cities along IR 90
 Underdrains along entire project
 Verify CB spacing and placement. Due to removing mounded median, proposed CB locations may not be in same location as existing CB.
 CFN 1987722, LOR-2-10.682, 12" HDPE storm sewer, GA=6. Due to a recent remote inspection, replace conduit due to pipe deflection.

Geotechnical 1.2.C.B, 2.3.H.C, 2.5.E, 2.7.D-E, 3.3.K.A

Geotech Site 1 of 1

CRS	LOR-90-10.76	R/W Required	No
Proposed Work	Pavement	Survey Required	Yes
	Replacement / Widening	Soil Borings Required	Yes
Geohazard Type		Utility Relocation Required	Maybe
MOT Type	Select...	Driveway Accomodation Required	No
Description of Work	<p><i>Geotechnical exploration needed to determine need for global stabilization and pavement design. Geotechnical investigation to be included with the design-build contract. Geotechnical deliverables to be completed by 6/1/2023 through the 5/9/2022 programmatic geotech consultant (S&ME)</i></p> <p><i>Geotechnical exploration also needed for noise barrier foundation locations.</i></p>		
Comments			

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Pavement Overview 2.3.B.A-J, 2.7.A.A-L, 3.3.A.A-J

Alignment Use Existing 2.3.B.C, 2.7.A.F, 3.3.A.E
Explain Design Build Team to verify the existing alignment meets interstate standards

Profile Use Existing 2.3.B.C, 2.7.A.F, 3.3.A.E
Explain Design Build Team to verify the existing profile meets interstate standards

	Describe	
2.3.B.H Driveway Accommodations	No	
Adjust Castings to Grade	Yes	Castings to be replaced

Pavement 2.7.G.C

Pavement Segment 1	CRS LOR-IR90-(10.76-13.171)		Vibratory Roller Permitted	Yes	
	MOT Barrier	Existing	Proposed	Use Simplified Pav't Design	No
	Mainline Treatment Type	Composite →	Asphalt	Pav't Cores Required	Yes
	Shoulder Treatment Type	Asphalt →	Asphalt	Pav't Cores Taken	Yes
	Paved Shoulder Width	10' out, 5' in →	10' out, 12' in	Survey Required	Yes
	Lane Width	12 →	12 ft	R/W Required	No
	Cross Slope	varies →	0.0156 ft/ft	Curbs Present	No
	Proposed Grading Type			Safety Edge	No
	Proposed Pav't Treatment		100 - New Flexible Pavement		
	Comments	<p>Mainline cross slope shall be 0.0156 ft/ft in non-superelevated sections. Follow design standards for graded shoulder width, shoulder cross slopes, superelevation, etc. Existing median is 84 ft wide. C.O. still needs to do the life cycle cost analysis for the pavement replacement and approve the pavement design.</p> <p>Verify emergency u-turn locations and reconstruct u-turn locations</p> <p>Mounded median to be removed and normal median cross section to be installed due to widening into the median and C.O. recommendation to not have mounded medians any longer (no longer standard design). The turnpike connector section will not be widened and there will not be mound removal in that area.</p> <p>Planning study being done to evaluate the lane configuration at the SR 2 / IR 90 interchange.</p> <p>RM project will need to be completed prior to the major rehab project.</p> <p>SR 57 ramp pavement - reconstructed full depth with PID 82645</p>			

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Pavement Segment 2

CRS	LOR-IR90-(13.171-13.57)			Vibratory Roller Permitted	Yes
MOT	Select...	Existing	Proposed	Use Simplified Pav't Design	No
	Mainline Treatment Type	Asphalt →	Asphalt	Pav't Cores Required	Yes
	Shoulder Treatment Type	Asphalt →	Asphalt	Pav't Cores Taken	Yes
	Paved Shoulder Width	12' out, 12' in →	same ft	Survey Required	Yes
	Lane Width	12 →	12 ft	R/W Required	No
	Cross Slope	varies →	0.0156 ft/ft	Curbs Present	No
	Proposed Grading Type			Safety Edge	No
	Proposed Pav't Treatment	60 - AC Overlay with Repairs			
Comments	<p><i>Resurface with maintaining the existing cross slope.</i></p> <p><i>RM project will need to be completed prior to the major rehab project.</i></p> <p><i>Between SR 57 bridge and West River bridge</i></p>				

Pavement Segment 3

CRS	LOR-IR90-(13.57-18.611)			Vibratory Roller Permitted	Yes
MOT	Select...	Existing	Proposed	Use Simplified Pav't Design	No
	Mainline Treatment Type	Composite →	Asphalt	Pav't Cores Required	Yes
	Shoulder Treatment Type	Asphalt →	Asphalt	Pav't Cores Taken	Yes
	Paved Shoulder Width	10' out, 5' in →	10' out, 12' in ft	Survey Required	Yes
	Lane Width	12 →	12 ft	R/W Required	No
	Cross Slope	varies →	0.0156 ft/ft	Curbs Present	No
	Proposed Grading Type			Safety Edge	No
	Proposed Pav't Treatment	100 - New Flexible Pavement			
Comments	<p><i>Mainline cross slope shall be 0.0156 ft/ft in non-superelevated sections. Follow design standards for graded shoulder width, shoulder cross slopes, superelevation, etc. Existing median width varies along routes. C.O. still needs to do the life cycle cost analysis for the pavement replacement and approve the pavement design.</i></p> <p><i>SR 254 interchange to be reconstructed with this project. Full depth concrete to be used for ramp pavements. 10" Reinforced concrete pavement for ramps</i></p> <p><i>Mounded median to be removed and normal median cross section to be installed due to widening into the median and C.O. recommendation to not have mounded medians any longer (no longer a standard design).</i></p> <p><i>Planning study being done to evaluate potential need to widen SR 254 interchange ramps.</i></p> <p><i>RM project will need to be completed prior to the major rehab project.</i></p>				

Barrier Required?

Barrier 1 of 1

CRS	LOR-90	MOT Type	Barrier	Speed Limit	70	R/W	No
	Barrier Inside Face to Face Width		ft.	Repl. Guardrail	Yes	Survey	Yes
Desc.	Replace all guardrail along project. Verify Length of Need for guardrail runs			Repl. End Term.	Yes	Soil Borings	No
	Install median cable barrier due to widening.			Include BTAs	Yes	Utility Reloc.	No
	Guardrail needed at objects in clear zone.						
	Noise wall shall be installed on the project. Locations will be selected based on noise study.						
	Include quantity of R/W Fence to be repaired and replaced if some small sections are damaged.			Clearzone	No	Legislation	No

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope	PID	107714	Project Name	LOR IR 0090 10.76
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Safety Crash Analysis 1.2.C.G, 1.3.B, 2.7.G.D, 2.1.A.D

Do the project limits include:		Crash Analysis Years:	2017-2020
High priority (red) location(s)	Yes	Fatal Crash Frequency	0.06 crashes/yr/mi
Low priority (blue) location(s)	Yes	Total Crash Frequency	17 crashes/mi/yr
Crash pattern(s) of interest	Yes	Injury Crash Frequency	4.18 crashes/mi/yr

Ranking Urban Freeway: #949 SLM 18.82-18.92 (Blue), #1023 SLM 13.162-13.262 (Blue), #1262 SLM 19.34-19.44 (Blue), #1270 SLM 12.16-12.26 (Blue), #1271 SLM 13.1-13.2 (Blue), #1325 SLM 16.33-16.43 (Red), #1691 SLM 12.35-12.45 (Blue), #1703 SLM 18.28-18.38 (Blue), #2290 SLM 16.93-17.03 (Blue)

Crashes From 2017-2020, there were 571 crashes along I-90 (SLM 10.76 - 18.61) and SR 2 (SLM 10.71 - 11.23): 2 fatal, 140 injury, and 429 PDO. There were 204 rear end, 151 sideswipe-passing, 91 fixed object, 59 animal, 36 other object, 9 other non-collision, 5 head on, 5 parked vehicle, 5 overturning, and 3 backing, and 3 pedestrian crashes. 74% occurred on dry pavement, 19% on wet, and 7% snow/ice/slush/sand/other. 24 crashes had alcohol and/or drugs suspected.

Over representation of rear-end and sideswipe crashes that indicates congestion issues.

Countermeasures A TSMO Study, including crash data review, was completed the end of October 2021 by HDR Engineering and recommended the following: Freeway Service Patrol, Dynamic Message Signs (DMS), and 6-lane widening.

Only Applicable if (A) is YES	The project location does not have a documented safety priority or crash pattern.	-
	The High Priority SIP Map location(s) are addressed by this project with the above proposed countermeasures.	*See Below
	The countermeasures necessary to address the High Priority SIP Map locations are not practical and/or cost effective. Describe why the countermeasures are not practical and/or cost effective (may include but not limited to financial, R/W, env., etc.) in the box below.	-
	Supplemental safety funding was requested and denied to implement the proposed countermeasures with the project.	-
	It is not practical to implement the proposed countermeasures with this project. The safety countermeasures have been given to the DSRT for follow-up as a potential standalone project.	-
	This project is an ODOT Let Local Project. It is not practical to implement the potential countermeasures into the project. The local agency has been made aware of the possibility to request funding for a separate safety project.	-
	This project is an ODOT Let Local Project. The local agency declined to implement proposed safety countermeasures.	-

Additional Supporting Info NOACA has approved the widening recommendation to make this route a 6 lane facility.

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope

PID **107714** Project Name **LOR IR 0090 10.76**

Traffic Control 1.2.C.E, 2.3.E.C-D, 2.7.A.P, 2.7.G.F, 2.7.K, 3.3.D.A-C, 4.2.B.A-E

Rumbles Stripping	Long Line Pavement Marking Type	Recessed Wet Reflective	Lane Separator	No
	Auxiliary Pavement Marking Type	Thermoplastic	Delineators	No
	Bridge Deck Marking Type	Epoxy	Replace RPMs	Yes
	Edge Line Rumble Stripes	No	Blue RPMs for Fire Hydrants	Maybe
	Rumble Strips	Yes	Permanent Traffic Count Station	No
	Centerline Rumble Stripes	No	Air Speed Zone Markings	No
	Transverse Rumble Strips	Yes	Loop Detectors	No

Bridge Deck Marking will be epoxy wet reflective.

Outside shoulder rumble strips to be offset 3' from the edge line. If inside shoulder width increased to 10', also offset rumble strips 3' from inside edge line

New overhead sign trusses required due to widening pavement. Could possibly re-use extrusheet signs based on condition and age.

Replace the transverse rumble strips at the OTP WB connector. These will need to be maintained during construction as well.

Tree cutting to be performed prior to sign replacement.

Cable rail to be installed due to removing the existing mounded median and widening to inside.

Evaluate need for outside shoulder signs to be placed on cantilever supports.

Digital Message Sign boards 2WB, 1EB to be included. Locations will be determined during design

Maintenance of Traffic (MOT) 2.7.J.A-D, 3.3.B.F, 3.3.C, 3.3.E

MOT Item 1 of 9	MOT Type	Lane Restriction	Feature	Reconstruction / Widening	Coordination Needed	Yes
	CRS	LOR-90	Duration	(Days)	Municipality	
	Disincentive	Lane Closure		(Amt.)	Work Zone Speed Zone	Yes
	MOT Exception	Maybe		(Desc.)	Permitted Lane Closure	Yes
					LEO No. of Hours	
	Conflict	Description	Route	Dates to Avoid		

TSMO study completed prior to scoping this project. 2 - 11' lanes in each direction shall be maintained except OTP connector where 1 lane in each direction shall be maintained. Adhere to permitted lane closure charts during construction. MOT transition areas at the beginning and end of the project shall be resurfaced. An allowance for pavement repairs shall be included. MOTAA with multiple alternatives required per roadway engineering

MOT Item 2 of 9	MOT Type	Barrier	Feature	Reconstruction	Coordination Needed	No
	CRS	SR 254 Ramps	Duration	(Days)	Municipality	
	Disincentive	None		(Amt.)	Work Zone Speed Zone	Yes
	MOT Exception	Maybe		(Desc.)	Permitted Lane Closure	Yes
					LEO No. of Hours	
	Conflict	Description	Route	Dates to Avoid		

Maintain one lane of traffic on each of the SR 254 interchange ramps during construction in order to avoid detouring ramp traffic. These ramps will be constructed part width using full depth concrete. Due to proposed drop off, portable barrier to be used along ramps during construction. Short term closures will be permitted if needed, see separate detour MOT sections for specific detour routes.

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

MOT Item 3 of 9	MOT Type	Lane Restriction	Feature	Vandal Fence	Coordination Needed	No
	CRS	SR 254 Mainline	Duration	(Days)	Municipality	
	Disincentive	None	(Amt.)	Work Zone Speed Zone	Maybe	
	MOT Exception	No	(Desc.)	Permitted Lane Closure	No	
	Conflict	Description		Route	Dates to Avoid	
Comments	While vandal protection fence is installed on the SR 254 over IR 90 bridge, the outside lane in each direction will be closed. Traffic shall be moved to adjacent lanes in each direction. One direction can be closed at a time to minimize the effect on traffic in this area.					

MOT Item 4 of 9	MOT Type	Detour	Feature	Reconstruction	Coordination Needed	Yes
	CRS	IR 90 WB Connector	Duration	90 (Days)	Municipality	
	Disincentive	Road Closure	(Amt.)	Work Zone Speed Zone	Yes	
	MOT Exception	Yes	Long Term closure of system ramp	(Desc.)	Permitted Lane Closure	Yes
	Conflict	Description		Route	Dates to Avoid	
Comments	<p>Detour IR 90 WB connector to turnpike while work is being performed on SR 2 EB under IR 90 due to not being able to maintain 2 lanes of traffic. The proposed detour will be SR 57 SB to the Turnpike. This closure shall be for 90 days to complete work. MOTEC was approved with the following information provided:</p> <p>Per MOTEC Request: A Work Zone Queue Detection Warning System has been requested in order to mitigate queueing, this is in accordance with TEM Section 642-57. Please ensure that the plans include Plan Note 642-32 Approved Maintenance of Traffic (MOT) Policy and Plan Note 642-57 Work Zone Queue Detection Warning System.</p> <p>Notifications During Closure Required A designated on-site point of contact should communicate with the TMC as the status of the closure changes.</p> <p>Contact the TMC: If the closure is postponed or cancelled At the time the closure is implemented At the time the closure is removed and all lanes restored If the closure will not be opening on time</p>					

MOT Item 5 of 9	MOT Type	Detour	Feature	Reconstruction	Coordination Needed	Yes
	CRS	Murray Ridge Rd	Duration	60 (Days)	Municipality	
	Disincentive	Road Closure	(Amt.)	Work Zone Speed Zone	No	
	MOT Exception	No	(Desc.)	Permitted Lane Closure	No	
	Conflict	Description		Route	Dates to Avoid	
Comments	Murray Ridge Rd will be detoured during reconstruction of IR 90 / SR 2 overhead in order to avoid conflict with motorists using Murray Ridge Rd. Proposed Detour is: SR 113 to West Ridge Rd to Middle Ridge Rd to North Ridge Rd to Lake Ave. This will be the detour for both directions.					

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

MOT Item 6 of 9	MOT Type	Detour	Feature	LOR-90 EB to SR 254 exit ramp	Coordination Needed	Yes
	CRS	SR 254 ramps	Duration	14 (Days)	Municipality	Elyria/Sheffield / Avon
	Disincentive	Road Closure	\$500/hr	(Amt.)	Work Zone Speed Zone	Yes
	MOT Exception	No		(Desc.)	Permitted Lane Closure	Yes
					LEO No. of Hours	
	Conflict	Description	Route	Dates to Avoid		
Comments	Proposed detour: Continue on IR 90 EB, flip at SR 611, take IR 90 WB back to SR 254 interchange.					

MOT Item 7 of 9	MOT Type	Detour	Feature	SR 254 to IR 90 EB entrance ramp	Coordination Needed	Yes
	CRS	SR 254 ramps	Duration	14 (Days)	Municipality	Elyria/Sheffield / Avon
	Disincentive	Road Closure	\$500/hr	(Amt.)	Work Zone Speed Zone	Yes
	MOT Exception	No		(Desc.)	Permitted Lane Closure	Yes
					LEO No. of Hours	
	Conflict	Description	Route	Dates to Avoid		
Comments	Proposed detour: Continue on SR 254 EB, take SR 611 WB to IR 90 interchange					

MOT Item 8 of 9	MOT Type	Detour	Feature	LOR-90 WB to SR 254 exit ramp	Coordination Needed	Yes
	CRS	SR 254 ramps	Duration	14 (Days)	Municipality	Elyria/Sheffield / Avon
	Disincentive	Road Closure	\$500/hr	(Amt.)	Work Zone Speed Zone	Yes
	MOT Exception	No		(Desc.)	Permitted Lane Closure	Yes
					LEO No. of Hours	
	Conflict	Description	Route	Dates to Avoid		
Comments	Proposed detour: Continue on IR 90 WB, flip at SR 57 interchange, take IR 90 EB to SR 254 interchange					

MOT Item 9 of 9	MOT Type	Detour	Feature	SR 254 to IR 90 WB entrance ramp	Coordination Needed	Yes
	CRS	SR 254 ramps	Duration	14 (Days)	Municipality	Elyria/Sheffield / Avon
	Disincentive	Road Closure	\$500/hr	(Amt.)	Work Zone Speed Zone	Yes
	MOT Exception	No		(Desc.)	Permitted Lane Closure	Yes
					LEO No. of Hours	
	Conflict	Description	Route	Dates to Avoid		
Comments	Proposed detour: Take SR 254 to SR 57 SB, enter IR 90 WB from SR 57 interchange					

Design Designation		Opening Year:			Design Year:			Traffic	
CRS	Speed Limit	Opening ADT	Design ADT	DHV	% K	% D	% T24	% TD	Forecast
SR 2, SLM 10.71-11.23	65	56000	61000	6,100	10	52	8	6	Cert Traf
IR 90, SLM 10.76-11.97	65	16500	21000	1,900	9	54	35	30	Cert Traf
IR 90, SLM 11.97-13.22	65	72000	82000	8,200	10	52	14	13	Cert Traf
IR 90, SLM 13.22-15.65	65	64500	73500	7,400	10	54	15	13	Cert Traf
IR 90, SLM 15.65-18.61	65	69000	78500	7,900	10	52	14	11	Cert Traf

Project Classification			
CRS	Federal Aid System	Functional Classification	Urbanized Area
LOR-90-10.76 to 17.84	Interstate	Freeway / Expressway	Lorain-Elyria
LOR-90-17.84 to 18.61	Interstate	Freeway / Expressway	Cleveland

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Environmental

	Environ. Category	Code	Responsibility																		
	C2	I	<i>In-House</i>	LOR-90																	
	Environmental PM	T	<i>OES Task Order</i>																		
	WINGLER, LEVI B	C	<i>Consultant Services</i>																		
		-	<i>Not Applicable</i>																		
Cultural	Section 106 - Scoping Request Form (*) 2.2.B			I																	
	Phase 1 Hist./Arch. Survey Rpt. (If Auth.) 2.2.I, 3.7.A																				
	Phase 1 Arch. Survey Report (If Auth.) 3.1.A.B, 3.7.A																				
Forms	Determination Request Form																				
	Individual Section 4(f) Eval. 2.2.F, 3.1.C																				
	Section 6(f) Documentation																				
Ecology	Ecological Exempt Form (*) 2.2.C																				
	Level 1 Ecological Survey Reports			I																	
	UNIONID Mussel Survey Report 3.1.Q																				
Waterway Permits	Sole Source Aquifer Coordination																				
	Farmland Conversion Impact Rating Form 3.1.E																				
	Permit Determination Request Package 3.1.M.A-B			I																	
	Concp. Stream/Wetland Mitg. Rpts. 3.1.N, 3.7.B-D																				
	Section 404/401 Applications																				
	USACE Pre-Constr. Notification (PCN) Applications			I																	
	Ohio EPA Isol. Wetland Permit Pre-Act. Notif. (PAN)																				
	Coastguard Section 9 Application																				
	ACOE Section 10 Permit																				
	Floodplain Permit Application																				
Site	Floodplain Coordination																				
	Coastal Waterway Permit																				
	Regulated Mat. Review (RMR) (*) 2.2.D, 3.1.D, 3.1.O			I																	
Air	Phase 1 Env. Site Assess. Rpt. (If Auth.) 2.2.I, 3.7.A																				
	Asbestos Survey/Inspection																				
	Ozone Analysis 3.1.P																				
Noise	MSAT Analysis			I																	
	PM 2.5 Analysis			I																	
	Traffic Noise Analysis Report 2.2.G			I																	
Public	Noise Barrier Public Involvement Summary 2.2.H			I																	
	Public Involvement Plan 1.4.A, 2.1.A.J																				
	Public Meeting Activities 2.6.A			I																	
	Public Announce. (webpage, article, news release)			I																	
	Underserved Population Outreach 2.2.E, 3.1.G																				

Any Known Env. Concerns (ex. historic properties on Nat. Reg., wetlands, underground storage tanks, stream reloc.)

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope	PID	107714	Project Name	LOR IR 0090 10.76
Right-of-Way				
1.2.C.F, 2.3.H.E-F, 2.4.B, 2.7.A.O, 2.7.H.B, 3.1.K, 3.3.A.K, 3.4.A-C, 4.3.B				

R/W Site 1 of 1	Feature CRS	LOR-90		
	Feature Type	Pavement Widening / Reconstruction / Culvert Work		
	R/W Type	Permanent		
	Known Relocations?	No		
	Access Modification Req'd?	Y/N...		
	Estimated No. of Parcels	N/A		
	Land Use			
			Responsibility	
			Titles	Dsgn Consultant
			Appraisal	Dsgn Consultant
		Appraisal Review	Dsgn Consultant	
		R/W Acquisition Services	Dsgn Consultant 4.1.A	
		R/W Acquisition Cost Est.	Dsgn Consultant 3.4.B.H	
		R/W Plans	Dsgn Consultant	
Comments	No R/W anticipated with this project with the exception of any culvert replacements that may require work outside of the existing LA R/W			
Reason for Additional R/W				

Survey	2.3.A, 3.4.C.D
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Survey Site 1 of 1	CRS	LOR-90	Asset Type	Pavement Widening / Reconstruction	Surveyor	Programmatic (Sept 2022)	
	Mapping				Count		Responsibility
		Type 'A' Control Monument	2.3.A.A.1	18	Monuments	Programmatic Cons	
		Type 'B' Control Monument	2.3.A.A.2		Monuments	Select...	
		Mon. Recovery for Existing CL and R/W	2.3.A.B.1	8	Miles	Programmatic Cons	
		Monument Recovery for Property Lines	2.3.A.B.2		Owners	Select...	
		Stake/Flag R/W for Acquisition	-		Owners	Select...	
		Pin New R/W Following Construction	3.4.C.D		Owners	Select...	
		Base Mapping (and Field Verify)	2.3.A.C	1	Tenths of a Mile	Programmatic Cons	
		Est. Prop. Lines, Tax ID, Owners on Map	2.3.A.F		Owners	Select...	
Property Owner Notification		2.3.A.G		Owners	Select...		
Soil Boring Staking	-		Borings	Select...			
Intersects	Select...	2.3.A.E		Tenths of a Mile	Select...		
Topo			Length				
Topo for	Select...	2.3.A.D	Width	Tenths of a Mile	Select...		

Comments	Survey deliverables to be obtained from September, 2021 programmatic consultant. Survey for 4 bridge rehabilitations over roadway included in survey as well.
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OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope

PID **107714**

Project Name **LOR IR 0090 10.76**

Utilities 1.2.C.B, 2.3.G.A-B, 2.4.C, 2.7.C.A-D, 2.7.H.C, 3.3.J.A-D, 3.8.C, 4.3.D

Utilities 1 of 1

Location **LOR-90**
 Asset **Pavement Replacement**

	Name of Utility	Location/Description	Buried	Aerial	SUE Needed?	R/W Needed?
Power	Ohio Edison Transmission		No	Yes	No	No
Power	Ohio Edison		No	Yes	No	No
Power	Cleveland Electric Illuminating (CEI)		No	Yes	No	No
Phone	Lumen		Maybe	Maybe	Maybe	No
Phone	Charter		Maybe	Maybe	Maybe	No
Gas	Columbia Gas of Ohio		Yes	No	Yes	No
Cable	Charter		Yes	No	Yes	No
Water	Village of Sheffield		Yes	No	Yes	No
Water	Rural Lorain County Water		Yes	No	Yes	No
Water	City of Elyria		Yes	No	Yes	No
Comm.	Windstream		Yes	No	Yes	No

Comments

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Coordination

Coord.	2.7.G.A, 4.2.D.B FAA	Yes	2.3.E.C, 2.3.H.F, 2.7.F.C, 2.7.G.E, 3.1.L, 4.2.D.A Railroad	Yes
	Detour	Yes	Floodplain	Yes
			Bike Route or Trail within Project Limits	No
Comments	Coordination needed with NOACA. Air Quality Conformance Consent Legislation needed for Elyria, Avon, and Sheffield. Local Detour Maintenance Agreement needed for Murray Ridge Rd			

Project Schedule

	Date			Date
Field Review Date	7/11/2022	Stage 2 Plans - Complete	-	
Initial Scope Meeting Date	7/19/2022	Preliminary R/W Plans - Submit		
Initial Project Scope Complete	8/31/2022	Final R/W Plans - Submit		
Programmatic Date	5/9/2022	R/W Authorized		
Feasibility Study Complete		Stage 3 Plans - Complete	-	
Preferred Alternative Approval		Environmental Doc. Approved		10/1/2023
Feasibility Study Approved		District R/W Certification	-	
Survey Deliverables Complete		R/W Acquisition Complete		
Begin In-House Detailed Design	-	Tracings Complete	-	
Preliminary Engineering Study - Submit				
NEPA Start Date		Plan Package Received in C.O.		2/19/2024
Authorized Design Consultant	-	Sale Date		7/1/2024
Stage 1 Plans - Complete	-	Award Date		7/1/2024
Waterway Permit Determination - Submit		Estimated Begin Construction		3/25/2025
404/401 Permits		Estimated End Construction		7/1/2027

Comments *This is the draft scope. The final scope for this design build project will be put together by the design section.*

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope PID **107714** Project Name **LOR IR 0090 10.76**

Funding *1.1.A, 1.5.B, 2.4.A-B, 2.7.H.A-C, 3.8.A-C, 4.3.A-D*

Split / Priority	Name	Plan Split Code	Funding Source Source 1		Funding Source Source 2		Cost
			%	Fund	%	Fund	
1 / 1	CO CO Contr 01	01/IMS/PV	10	4PS7	90	4PF7	\$8,400,000.00
	<i>Descr: Pavement Replacement on IR-90. District Allocation</i>						
2 / 1	CO CO Contr 02	01/IMS/PV	10	4RA7	90	4RC7	\$69,000,000.00
	<i>Descr: Pavement Replacement on IR-90. Major Rehab funding</i>						
3 / 3	CO CO Contr 03	02/IMS/PV	10	4PS7	90	4PF7	\$500,000.00
	<i>Descr: Resurfacing portion of IR-90</i>						
4 / 1	CO CO Contr 04	03/IMS/BR	10	4PS7	90	4PF7	\$1,800,000.00
	<i>Descr: Bridge deck replacements - This plan split will be removed and a total of \$2.9million will be moved into major rehab funding once a cost estimate increase is submitted to C.O for approval for additional major rehab funding</i>						
5 / 5	CO CO Contr 05	04/SAE/OT	100	4SN7			\$800,000.00
	<i>Descr: Safety Funding for Digital Message Signs (DMS)</i>						

Preliminary Engineering Estimate	\$15,632.00
Preliminary Engineering - Geotech	\$339,917.00
Preliminary Engineering - Noise Wall Study	\$111,787.00
Preliminary Engineering - Survey	\$162,471.00
Detailed Design Estimate - Major Funds	\$4,949,000.00
Detailed Design Estimate - District Funds - Resurfacing	\$51,000.00
Detailed Design Estimate - District Funds - Bridge	\$300,000.00
Construction Estimate	\$80,500,000.00

A revised cost estimate will be submitted to C.O as a request for additional major rehab funding

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope

PID

107714

Project
Name

LOR IR 0090 10.76

Field Review

Attendees

Mike S., Jake V., Karla B., Adam M., Luke W., Scott O., Sarah H.,
Bill W., Steve J., Mark S

Date

7/11/2022

Notes

Notes section containing a large empty area for recording details.

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope

PID

107714

Project
Name

LOR IR 0090 10.76

Narrative

Document the decision process here. Why were certain treatments chosen? What was left out and why?

See Ground penetrating Radar report which shows average thickness of asphalt on top of the 9" reinforced concrete pavement. Asphalt thickness varies quite a bit from 4" to 6.5". Also see pavement coring report for additional information.

Project History:

Project 730457 LOR-90-9.48 to 12.31 New Construction

Project 650524 LOR-90-11.90 to 13.20 New Construction

Project 160576, PID 83449 LOR-90-13.20 New Construction

Project 660173 LOR-90-13.01 to 17.40 New Construction

Project 660781 LOR-90-17.21 to 19.94 New Construction

Project 003015, PID 17891 LOR-90-10.76 Design Build

Misc Bridge rehab/replacement projects

PID 77447 LOR-90-12.4 3" 2 course overlay on SR 2

PID 25732 LOR-2-10.33 Full depth asphalt replacement with bridge replacement work on SR 2

Milestone	Date
*Begin DB Scope/Plan Review (allows 5 weeks of ODOT review and 2 weeks to revise)	Tuesday, November 7, 2023
*Plan Package Due to Office of Estimating (approx)	Tuesday, December 12, 2023
SOQ Phase	
Industry Outreach Meeting (Optional)	Thursday, November 30, 2023
Advertise RFQ	Thursday, December 14, 2023
Pre-SOQ Meeting (Optional)	Thursday, December 28, 2023
Deadline to submit RFQ questions	Thursday, December 28, 2023
ODOT will respond to RFQ questions	Thursday, January 4, 2024
SOQ submission	Thursday, January 11, 2024
First Day for individual Reviews	Sunday, January 14, 2024
Last Day for Individual Reviews	Sunday, January 28, 2024
1st SOQ Scoring meeting	Monday, January 29, 2024
2nd SOQ Scoring meeting	Tuesday, January 30, 2024
3rd SOQ Scoring meeting (if needed)	Wednesday, January 31, 2024
Present to Executive Committee	Tuesday, February 6, 2024
Evaluation and recommendations complete	Thursday, February 8, 2024
Announce Shortlist	Tuesday, February 13, 2024
Shortlisted Teams must respond to advancing	Thursday, February 15, 2024
RFP/Tech Proposal Phase	
Request for Proposal Release	Tuesday, February 20, 2024
1st One-on-One ATC Meeting	Tuesday, March 12, 2024
2nd One-on-One ATC Meeting	Tuesday, March 26, 2024
3rd One-on-One ATC Meeting	N/A
Last day for ODOT to respond to ATC	Friday, April 5, 2024
PTI Information Submission	Thursday, May 9, 2024
PTI Meeting Date	Thursday, May 16, 2024
*Last day submitting questions/comments on Scope	Thursday, May 23, 2024
*Last recommended day for Addendum	Thursday, May 30, 2024
Final Tech Proposals & Price Due:	Thursday, June 13, 2024
Tech Proposal Scoring Complete	Monday, June 17, 2024
Scores Announced	Monday, July 1, 2024
Anticipated Award Date	Friday, July 12, 2024

OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope

PID

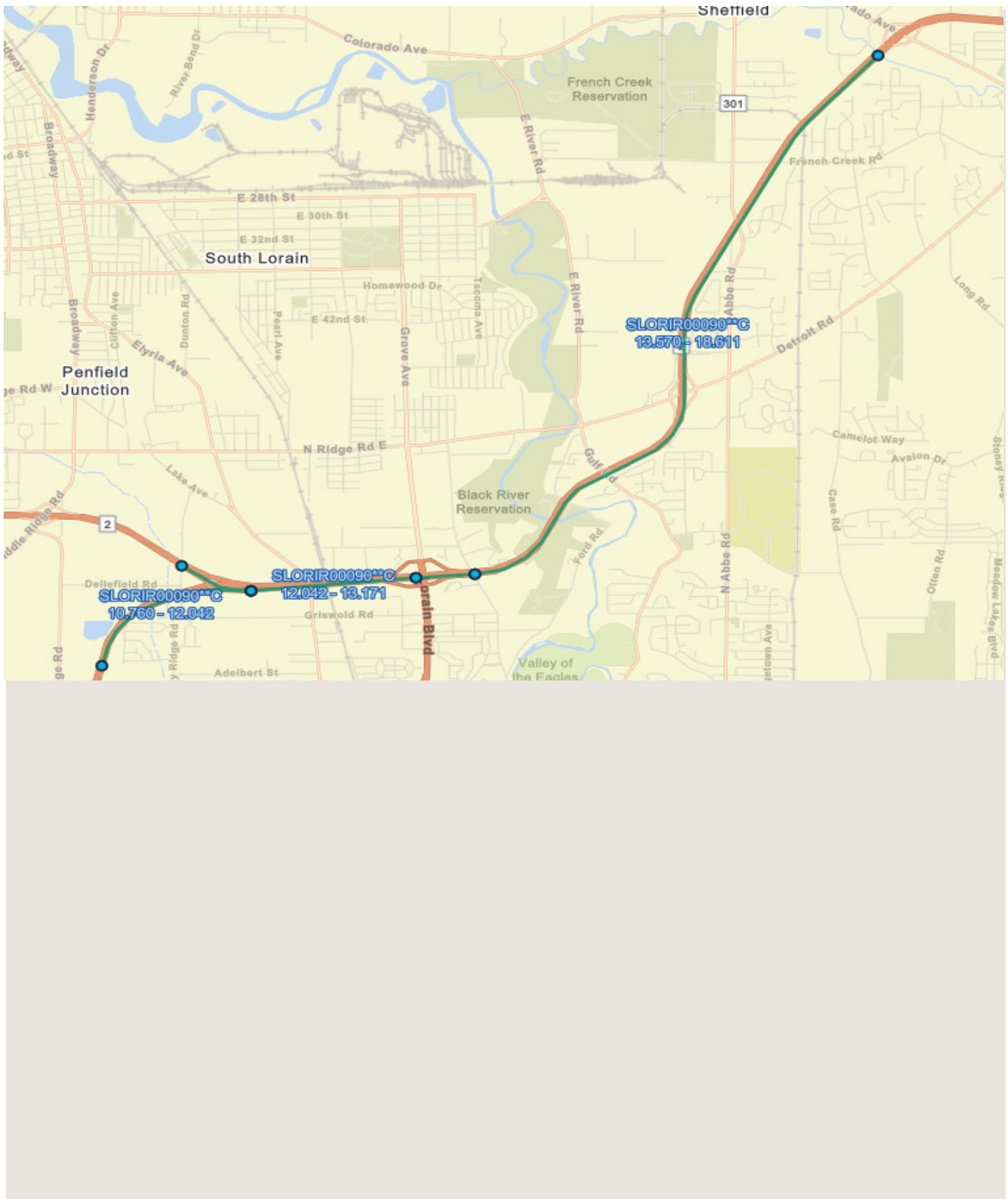
107714

Project Name

LOR IR 0090 10.76

Map

See the project overview map below.



OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT THREE

Project Scope

PID

107714

Project Name

LOR IR 0090 10.76

Signatures and Attendance			Approval		Field Visit	Scope Meeting	
			Approve	Disapprove	7/11/2022	7/19/2022	
		Signature	Date				
Work Plan Coord.	Mike Schafrath	Mike Schafrath	10/18/2022	X		-	-
ELLIS Coordinator	Jerry Schlett	jerry schlett	10/18/2022	x		-	-
Environmental PM	Levi B Wingler	Levi Wingler	10/18/2022	x		-	-
Bridge Engineer	Kent Kapustar	Kent A Kapustar	10/14/22	X		-	-
Planning Engineer	Scott Ockunzzi	<i>Scott R Ockunzzi</i>	10/14/2022	X		-	-
Design PM	Karla R Bohmer	Karla Bohmer	10/18/22	X		-	-
Roadway Engineer	Charlie Laughrey	Charlie Laughrey	10/17/22	x		-	-
Traffic Engineer	Julie Cichello	Julie Cichello	10/14/2022	X		-	-
Survey Op. Mgr.	Scott Hawkins	Scott Hawkins	10/19/2022	x		-	-
Utility Coordinator	John Schafrath	John Schafrath	10-18-22	X		-	-
Real Estate Admin.	Brad Corder	B. Corder	10/18/22	X		-	-
Design Engineer	Dustin Vousden	Dustin J. Vousden	10/21/2022	X		-	-
Constr. Area Eng.	Luke T Wysocki	Luke T. Wysocki	10/17/2022	X		-	-
Constr. Engineer	Mike Fair	Mike Fair	10/18/2022	X		-	-
Cap. Prog. Admin.	Matt Walter	Matt Walter	10/17/2022	X		-	-
Rdwy. Serv. Mgr.	Kimberly Conklin					-	-
Hwy. Mgt. Admin.	Eric Sheppard	Eric Sheppard	10.19.2022	X		-	-
County Manager	Steve Jacobcik	Steven Jacobcik	10/18/2022	X		-	-
Attendee	Mark Strohm	N/A	N/A	N/A	N/A	-	-

PID 107714 LOR-90-10.76
Bridge Planning Level Estimate

	Bridge	Deck Sealing Cost	Parapet Re-Sealing	Parapet cracking repair	Other	Bridge Total
1	LOR-90-1157L	\$ -	\$ -	\$ -	\$ 1,500,000.00	\$ 1,500,000.00
2	LOR-90-1157R	\$ -	\$ -	\$ -	\$ 1,400,000.00	\$ 1,400,000.00
3	LOR-90-1178L	\$ -	\$ -	\$ -	\$ -	\$ -
4	LOR-90-1244L	\$ 19,500.00	\$ 11,500.00	\$ 38,000.00	\$ -	\$ 69,000.00
5	LOR-90-1244R	\$ 18,700.00	\$ 11,300.00	\$ 30,500.00	\$ -	\$ 60,500.00
6	LOR-90-1256L	\$ 17,500.00	\$ 10,500.00	\$ 23,000.00	\$ -	\$ 51,000.00
7	LOR-90-1256R	\$ 17,500.00	\$ 10,500.00	\$ 23,000.00	\$ -	\$ 51,000.00
8	LOR-90-1320L	\$ 16,000.00	\$ -	\$ -	\$ -	\$ 16,000.00
9	LOR-90-1320R	\$ 16,000.00	\$ -	\$ -	\$ -	\$ 16,000.00
10	LOR-90-1355L	\$ 11,000.00	\$ -	\$ -	\$ -	\$ 11,000.00
11	LOR-90-1355R	\$ 11,000.00	\$ -	\$ -	\$ -	\$ 11,000.00
12	LOR-90-1426L	\$ 39,800.00	\$ 22,200.00	\$ 15,000.00	\$ 10,000.00	\$ 87,000.00
13	LOR-90-1426R	\$ 39,800.00	\$ 22,200.00	\$ 12,000.00	\$ -	\$ 74,000.00
14	LOR-90-1443L	\$ 18,700.00	\$ 10,000.00	\$ 9,300.00	\$ -	\$ 38,000.00
15	LOR-90-1443R	\$ 21,300.00	\$ 11,500.00	\$ 19,200.00	\$ -	\$ 52,000.00
16	LOR-90-1478	\$ -	\$ -	\$ -	\$ -	\$ -
17	LOR-90-1658	\$ -	\$ -	\$ -	\$ 172,000.00	\$ 172,000.00
18	LOR-90-1753	\$ -	\$ -	\$ -	\$ -	\$ -
19	LOR-90-1785R	\$ -	\$ -	\$ -	\$ -	\$ -
20	LOR-90-1785L	\$ -	\$ -	\$ -	\$ -	\$ -
21	LOR-90-1815	\$ -	\$ -	\$ -	\$ 140,000.00	\$ 140,000.00
22	LOR-90-1861L	\$ 14,000.00	\$ -	\$ -	\$ -	\$ 14,000.00
23	LOR-90-1861R	\$ 11,000.00	\$ -	\$ -	\$ -	\$ 11,000.00
24	LOR-254-0191	\$ -	\$ -	\$ -	\$ 90,000.00	\$ 90,000.00
25	LOR-301-2349	\$ -	\$ -	\$ -	\$ -	\$ -
	Total Estimate	\$ 271,800.00	\$ 109,700.00	\$ 170,000.00	\$ 3,312,000.00	\$ 3,863,500.00

Date: 7/15/22

LOR-90-10.76
PID: 107714

Bridge No.

over Murray Ridge
LOR-90-1157L

SFN: 4704398

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert Invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repalred	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

Relative Condition		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge cladding installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening-Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligibility for Funds	
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less
No	

Categories Applied		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
114	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light Installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert Invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Minor Rehabilitation		Comments
122	Culvert Linear Repair	Replace Deck on Existing Beams w/ new Composite deck - See separate scope
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Miscellaneous Costs		Comments
12	Bridge Analysis	FILE
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

General Comments:
 Planning Cost as: use \$150/SF (historic) X 1.40 (Inf) = \$210/SF \$
 Part of D/B Project: \$210/SF X 5676 SF ≈ \$1.2M + 300k misc = 1.5 mil
 Bridge Work Estimate:
 \$1,500,000

Date: 7/15/22 PID: 107714 Bridge No. LOR-90-1157 R over Murray Ridge SFN: 4704371

LOR-90-10,76

over Murray Ridge

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert Invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repalred	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Reactive Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge cladding installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening-Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	Replace Deck on Ex. Beams w/ new Comp. deck - see separate scope.
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

Comments	
No Work	
To Be Determined	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Eligible for BIF Funds		Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less	
	- Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less	
No	- Deck Summary Rating of 4 or less	

Misc Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

Categories Approved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Planning cost of \$210/SF
 51249FX \$210/SF ~ 1.1M + \$300K = \$1.4M
 Misc

Bridge Work Estimate
 \$1,400,000

PID 107714
LOR-90-10.76
Design/Build Scope
For
Bridge Nos. LOR-90-1157L (SFN 4704398) & LOR-90-1157R (SFN 4704371)
07/15/2022

Existing Bridge Information: SFN: 4704398- 11.57L

Year Built: 1974
General Appraisal: 7
Sufficiency Rating: 92.3
Length: 129'
Width: 40.5' (Inside of parapet to Inside of parapet)

Current bridge is a three-span continuous steel beam bridge with integral abutments over Murray Ridge Road.

Current bridge has a concrete deck with asphalt wearing surface and concrete parapets.

Existing approach slabs are 25' long. Originally constructed part width.

Current deck is straight with a superelevation.

Current bridge is on a tangent alignment with 21° 56' 10" L.F. skew.

Current bridge was designed for HS20 and Alternate Interstate Loading.

Overhead clearance over Murray Ridge Road is 20'.

Current bridge plans can be found under construction project # 730457.

Proposed Bridge Information:

Remove the existing bridge deck and integral blocks; parapets; and approach slabs. Remove existing deck scuppers.

Salvage the beams, piers and abutments.

Provide new reinforced concrete deck matching existing f/f of parapet width (40'-6" +/-). Deck design to conform to Bridge Design Manual (BDM) section 309.3.

Provide a deck haunch at least 1.0 inches thick over existing beam moment and splice plates.

Superstructure to remain integral with the substructure.

Provide new 42" single slope parapets per current standards. (Presently SCD SBR-1-20) Seal the deck and parapets with epoxy-urethane in accordance with the current BDM.

Add shear studs to beams to make new deck composite.

Retrofit beam moment plates over piers in accordance with BDM section 404.1.2.4.a. No Remaining Fatigue Life Analysis is to be performed.

Paint existing structural steel. Finish coat color to be in conformance with CMS. Color to match right bridge

Provide analysis and load rating of bridge superstructure in accordance with the current Bridge Design Manual. Include a 60 psf future wearing surface per BDM.

Evaluate the deck drainage. Eliminate scuppers if possible. Provide drainage facilities immediately off of the bridge if scuppers are not required. Install scuppers if needed.

Remove bearing fixity at the piers and replace all bearings. Install new elastomeric bearings/stainless steel/Teflon materials, if needed.

Reuse the existing abutments. Install new integral superstructure blocks on existing seats. Preserve the existing #6 integral bars sticking up from abutment into the superstructure integral block.

Sound the abutments; patch as needed.

Refurbish/strengthen the wingwalls as needed to provide lateral seismic restraint; or provide a new abutment keyway for seismic loading.

Remove existing coatings from the abutment surfaces and re-seal the abutments with epoxy-urethane.

Sound the pier caps and columns; patch as needed.

Remove existing coatings from the pier surfaces and re-seal the piers with epoxy-urethane.

Evaluate the pier caps and columns for additional shear strength and seismic loading, if additional strength is needed, include the additional amount in the plan to be provided by fiber wrap. Provide protective fiber wrap layer on pier columns at minimum.

Install new full-width approach slabs, minimum length of 25 feet.

No asphalt wearing surface on new deck and approach slabs.

Closely match vertical and horizontal alignments of the roadway. Maintain minimum vertical clearance with Murray Ridge below bridge (20.0 feet). Provide minimum haunch thickness specified for deck design. (Need to coordinate vertical alignment with proposed roadway Bridge deck has break on high-side outside shoulder - what is the roadway doing?)

Existing Bridge Information: SFN: 4704371-11.57 R

Year Built: 1974

General Appraisal: 7

Sufficiency Rating: 93.6

Length: 122'

Width: 40.5' (Inside of parapet to Inside of parapet)

Current bridge is a three-span continuous steel beam bridge with integral abutments over Murray Ridge Road.

Current bridge has a concrete deck with asphalt wearing surface and concrete parapets.

Existing approach slabs are 25' long. Originally constructed part width.

Current bridge deck is superelevated on curved alignment with a degree of curvature of 1° 28'.

Beams are tangent. Substructure has a 19° 36' 46" L.F. skew with respect to the local tangent.

Current bridge was designed for HS20 and Alternate Interstate Loading.

Overhead clearance over Murray Ridge Road is 14'-7".

Current bridge plans can be found under construction project # 730457.

Proposed Bridge Information:

Remove the existing bridge deck and parapets along with the approach slabs. Remove existing deck scuppers.

Salvage the beams, piers and abutments.

Provide new reinforced concrete deck matching existing f/f of parapet width (40'-6" +/-). Deck design to conform to Bridge Design Manual (BDM) section 309.3.

Provide a deck haunch at least 1.0 inches thick over existing beam moment and splice plates.

Superstructure to remain integral with the substructure.
Provide new 42" single slope parapets per current standards. (Presently SCD SBR-1-20) Seal the deck and parapets in accordance with the current BDM.
Add shear studs to beams to make new deck composite.
Retrofit beam moment plates over piers in accordance with BDM section 404.1.2.4.a. No Remaining Fatigue Life Analysis is to be performed.
Paint existing structural steel. Finish coat color to be in conformance with CMS. Color to match left bridge.
Provide analysis and load rating of bridge superstructure in accordance with the current Bridge Design Manual. Include a 60 psf future wearing surface per BDM.
Evaluate the deck drainage. Eliminate scuppers if possible. Provide drainage facilities immediately off of the bridge if scuppers are not required. Install scuppers if needed.
Remove bearing fixity at the piers and replace all bearings. Install new elastomeric bearings/stainless steel/Teflon materials, if needed.

Reuse the existing abutments. Install new integral superstructure blocks on existing seats. Preserve the existing #6 integral bars sticking up from abutment into the superstructure integral block.
Sound the abutments; patch as needed.
Refurbish/strengthen the wingwalls as needed to provide lateral seismic restraint; or provide a new abutment keyway for seismic loading.
Remove existing coatings from the abutment surfaces and re-seal the abutments with epoxy-urethane.

Sound the pier caps and columns; patch as needed.
Remove existing coatings from the pier surfaces and re-seal the piers with epoxy-urethane.
Evaluate the pier caps and columns for additional shear strength and seismic loading, if additional strength is needed, include the additional amount in the plan to be provided by fiber wrap. Provide protective fiber wrap layer on pier columns at minimum.

Install new full-width approach slabs, minimum length of 25 feet.
No asphalt wearing surface on new deck and approach slabs.
Closely match the horizontal and vertical alignments of the roadway. (Minimum vertical clearance over Murray Ridge Road is currently 14'-7"). Provide minimum haunch thickness specified for deck design. (What are roadway specs approaching this fully superelevated bridge?)

Date: 6/16/22
8/24/20

LOR-90-10.76
PID: 107714

Bridge No. LOR-90-1178 L

SFN: 47 04401

Preventive Maintenance	Comments
61 Bridge railing upgrade/repair	
87 Channel clean out	
81 Channel drift removal	
143 Culvert Extension/Non-Bridge	
120 Culvert Invert repair	
144 Culvert Repair/Non-Bridge	
47 Deck and abutment seat cleaning	
46 Deck cathodic protection installation	
40 Deck overlay (concrete)	
43 Deck overlay (epoxy)	
44 Deck overlay (other)	
50 Deck patching (asphalt)	
49 Deck patching (concrete)	
51 Deck Sealing	
28 Drainage system cleaned/repared	
48 Expansion joint repair/replacement	
23 Fatigue retrofit	
20 Painting structural steel	
24 Pin and Hanger retrofit	
103 Pressure relief joint installation	
Raising Bridge	
83 Scour prevention and correction	
60 Sidewalk repair/replacement	
82 Slope repair & protection installation	
52 Spall Removal	
21 Spot painting structural steel	
88 Substructure Sealing	

Reactive Maintenance	Comments
29 Backwall replacement/repair	
25 Bearing reset/replaced	
27 Bridge diaphragm installation	
9 Collision damage	
10 Concrete patching (non-deck)	
42 Deck overlay (asphalt w waterproofing)	
41 Deck overlay (asphaltic concrete)	
50 Deck patching (asphalt)	
49 Deck patching (concrete)	
48 Expansion joint repair/replacement	
6 Graffiti removal	
14 Heat Straightening-Under-Bridge Hit	
26 Overhead concrete spall removal	
15 Raising Bridge	

Comments
No Work
To Be Determined

Eligible for BRIFunds	Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less
No	

Categories Improved	Comments
General	
Deck	
Wearing Surface	
Paint	
Not Applicable	

Minor Rehabilitation	Comments
86 Abutment replacement/repair	
119 Approach (other)	
102 Approach railing repair	
101 Approach roadway profile correction	
100 Approach slab replacement/repair	
63 Bridge light installation/repair	
61 Bridge railing upgrade/repair	
10 Concrete patching (non-deck)	
139 Culvert (other)	
120 Culvert Invert repair	
159 Culvert Other/Non-Bridge	
20 Deck patching (asphalt)	
49 Deck patching (concrete)	
59 Deck surface	
62 Fence installation/repair	
80 Foundation stabilization	
8 Movable bridge (repair)	
20 Painting structural steel	
85 Pier replacement/repair	
84 Pile encasement	
103 Pressure relief joint installation	
Raising Bridge	
60 Sidewalk repair/replacement	
82 Slope repair & protection	
22 Structure steel repair	
99 Substructure (other)	
39 Superstructure (other)	

Major Rehabilitation	Comments
122 Culvert Linear Repair	
141 Culvert Replace/Non-Bridge	
4 Deck replacement	
20 Painting structural steel	
89 Semi-Integral Abutment Conversion	
13 Structure Removal	
22 Structure steel repair	
121 Tunnel liner installation	

New Construction	Comments
142 Culvert New/Non-Bridge	
5 Structure widening	
1 Structure (new)	
2 Structure (replacement)	
3 Superstructure replacement	

Misc Bridge Costs	Comments
12 Bridge Analysis	
11 Bridge Inspection (Consultant)	
45 Deck Skid Resistance Retrofit	
Major Rehab (Use only for BMS Conv)	
7 Movable Bridge (Fix Costs)	
Unknown (Only w/BMS Conversion)	mainly vertical Cle below (16'-0")

General Comments

No Work - New Bridge 84591 2019
 PED
 \$0

Date: 7/15/22
~~8/24/20~~

LOR-90-10.76
PID: 107714

Bridge No. LOR-90-1244L

SFN: 47 4355

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert Invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

512 - Treating Bridge Decks w/ GFR (incl. App. Slab)
Est. Cost $9.04/sy \times 1.20 = 10.85 \rightarrow$ use $\$13/yd^2$
2021
 $\$13/sy \times [10,496 ft^2 + 2x25'x60']/9 = \$19,500$

512 - Remove Coatings & re-seal inside face of top - include App slabs
Removal of Coatings $21.79 \times 1.20 = \$28$
New Seal (Epoxy-Urethane) $20.65 \times 26 = \$54/sy$
 $216' \times 2' \times 4.42' / 9 \times \$54/sy = \$11,500$

$\$19.5k$
 $+11.5k$
 $=\$31k$

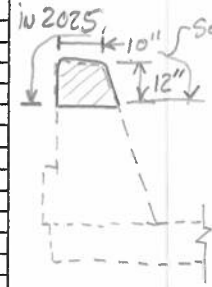
Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Repair the horizontally cracked tops of parapets. Seal repaired areas w/ Epoxy-Urethane. Per 100077 bids use $\$190/ft$

in 2025
Sealings
Est Length of horiz [Cracking]:
Exterior: 164' (Full width)
Interior: 30'
Misc: $\frac{6}{200}$

$200LF \times \$190/LF = \$38,000$

(Inc App slab parapet as-were) Parapet
(Include some replacement repair - likely not needed)
(There may be some sealing overlap w/ rest of)



Reactive Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge diaphragm installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening - Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel Liner Installation	

Comments	
No Work	
To Be Determined	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Eligible for BRIFunds		Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less	
No		

Misc Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

Categories/Improved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

General Comments	
Rebuilt 2009 - All existing BTAs Type 1 except inside trailing end hrs "T"-type hole pattern drilled (Type 2)	
Bridge Work Estimate	
\\$15,000 \\$69,000	

Date: 7/15/22 ~~8/24/20~~ PID: LOR-90-10.76 107714 Bridge No. LOR-90-1244 R SFN: 4704444

18.7K
11.3K
30.0K

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert Invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

512 - Treating Bridge Decks w/ GFR (inc. App. Slabs)
 $\$13/\text{yd}^2 \times [10,269^{\text{sf}} + 2 \times 25' \times 60'] = 9$
 $= \$18,700$

512 - Remove Conting. & re-seal inside face & top - inc. App. Slabs
 $212' \times 2' \times 4.42'/9 \times \$54/\text{sf} = \$11,300$

Reactive Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge diaphragm installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening - Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligible for BRIFunds		Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less	
No		

Categories/Approved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Repair the horizontally cracked tops of parapets. Seal repaired areas w/ epoxy urethane. (Inc. App. Slab transition parapet)

Est Cracking length:
 Exterior: $\$243 + 50\% \text{sp}1 + \text{RA} \text{sp} = 152'$
 Interior: 0
 Misc: 8'
 160'

160 ft x \$190/lf = \$30,500

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Misc Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

General Comments: Rebuilt 2009 - All Existing BTAs Type 1 except inside trailing end hrs "T" type hole pattern drilled. (Type 2)

Bridge Work Estimate: ~~\$15,000~~ \$60,500

Date: 7/15/2022 ~~8/24/2020~~ PID: LOR-90-10.76 Bridge No. LOR-90-1256 L (over CSX) SFN: 4704487

Preventive Maintenance	Comments
61 Bridge railing upgrade/repair	<p>512 - Treatig Bridge Decks w/ GFR (inc. App Slabs)</p> <p>$\\$13/yd^2 \times [9,139 SF + 2 \times 25' \times 60'] \div 9 = \\$17,500$</p> <p>512 - Remove Coatings & reveal inside Face & top - inc. App Slabs</p> <p>$195' \times 2 \times 4.42/9 \times \\$54/sy = \\$10,500$</p>
87 Channel clean out	
81 Channel drift removal	
143 Culvert Extension/Non-Bridge	
120 Culvert Invert repair	
144 Culvert Repair/Non-Bridge	
47 Deck and abutment seat cleaning	
46 Deck cathodic protection installation	
40 Deck overlay (concrete)	
43 Deck overlay (epoxy)	
44 Deck overlay (other)	
50 Deck patching (asphalt)	
49 Deck patching (concrete)	
51 Deck Sealing	
28 Drainage system cleaned/repared	
48 Expansion joint repair/replacement	
23 Fatigue retrofit	
20 Painting structural steel	
24 Pin and Hanger retrofit	
103 Pressure relief joint installation	
Raising Bridge	
83 Scour prevention and correction	
60 Sidewalk repair/replacement	
82 Slope repair & protection installation	
52 Spall Removal	
21 Spot painting structural steel	
88 Substructure Sealing	

\$17.5K
\$10.5K
\$28K

Minor Rehabilitation	Comments
86 Abutment replacement/repair	<p>Repair the horizontally cracked tops of Parapets. Seal repaired areas w/ epoxy-urethane. (Inc App. Slab ^{parapet}) as-needed</p> <p>Estimated Cracking length:</p> <p>Exterior: $144 \times 75\% = 108'$</p> <p>Interior: $0'$</p> <p>Misc.: $12'$</p> <p style="text-align: right;">120'</p> <p>$120' \times \\$190/LF = \\$23,000$</p>
119 Approach (other)	
102 Approach railing repair	
101 Approach roadway profile correction	
100 Approach slab replacement/repair	
63 Bridge light installation/repair	
61 Bridge railing upgrade/repair	
10 Concrete patching (non-deck)	
139 Culvert (other)	
120 Culvert invert repair	
159 Culvert Other/Non-Bridge	
20 Deck patching (asphalt)	
49 Deck patching (concrete)	
59 Deck surface	
62 Fence installation/repair	
80 Foundation stabilization	
8 Movable bridge (repair)	
20 Painting structural steel	
85 Pier replacement/repair	
84 Pile encasement	
103 Pressure relief joint installation	
Raising Bridge	
60 Sidewalk repair/replacement	
82 Slope repair & protection	
22 Structure steel repair	
99 Substructure (other)	
39 Superstructure (other)	

Reactive Maintenance	Comments
29 Backwall replacement/repair	
25 Bearing reset/replaced	
27 Bridge diaphragm installation	
9 Collision damage	
10 Concrete patching (non-deck)	
42 Deck overlay (asphalt w waterproofing)	
41 Deck overlay (asphaltic concrete)	
50 Deck patching (asphalt)	
49 Deck patching (concrete)	
48 Expansion joint repair/replacement	
6 Graffiti removal	
14 Heat Straightening-Under-Bridge Hit	
26 Overhead concrete spall removal	
15 Raising Bridge	

Major Rehabilitation	Comments
122 Culvert Linear Repair	
141 Culvert Replace/Non-Bridge	
4 Deck replacement	
20 Painting structural steel	
89 Semi-Integral Abutment Conversion	
13 Structure Removal	
22 Structure steel repair	
121 Tunnel liner installation	

Comments
No Work
To Be Determined

New Construction	Comments
142 Culvert New/Non-Bridge	
5 Structure widening	
1 Structure (new)	
2 Structure (replacement)	
3 Superstructure replacement	

Eligible for BRIFunds	Comments
Yes	<ul style="list-style-type: none"> - Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less
No	

Misc Bridge Costs	Comments
12 Bridge Analysis	
11 Bridge Inspection (Consultant)	
45 Deck Skid Resistance Retrofit	
Major Rehab (Use only for BMS Conv)	
7 Movable Bridge (Fix Costs)	
Unknown (Only w/BMS Conversion)	

Categories Improved	Comments
General	
Deck	
Wearing Surface	
Paint	
Not Applicable	

General Comments

Built 2009 - All BTAs are Type I or Continuous Conc. Parapet

Bridge Work Estimate

~~\$13,000~~ - \$51,000

Date: ~~8/29/2020~~ 7/15/2022 PID: 107714 Bridge No. LOR-90-10.76 (over CSX) SFN: 4704517

Preventive Maintenance	Comments
61 Bridge railing upgrade/repair	512 - Treating BRIDGE Decks w/ GFR (Inc. App Slabs)
87 Channel clean out	
81 Channel drift removal	
143 Culvert Extension/Non-Bridge	
120 Culvert Invert repair	
144 Culvert Repair/Non-Bridge	
47 Deck and abutment seat cleaning	
46 Deck cathodic protection installation	
40 Deck overlay (concrete)	
43 Deck overlay (epoxy)	
44 Deck overlay (other)	512 - Remove coatings & reseal inside face & top of parapets - inc. App. Slabs
50 Deck patching (asphalt)	
49 Deck patching (concrete)	
51 Deck Sealing	
28 Drainage system cleaned/repared	
48 Expansion joint repair/replacement	
23 Fatigue retrofit	
20 Painting structural steel	
24 Pin and Hanger retrofit	
103 Pressure relief joint installation	
Raising Bridge	195' x 2 x 4.42' / 9 x \$5 1/4 = \$10,500
83 Scour prevention and correction	
60 Sidewalk repair/replacement	
82 Slope repair & protection installation	
52 Spall Removal	
21 Spot painting structural steel	
88 Substructure Sealing	

Reactive Maintenance	Comments
29 Backwall replacement/repair	
25 Bearing reset/replaced	
27 Bridge diaphragm installation	
9 Collision damage	
10 Concrete patching (non-deck)	
42 Deck overlay (asphalt w waterproofing)	
41 Deck overlay (asphaltic concrete)	
50 Deck patching (asphalt)	
49 Deck patching (concrete)	
48 Expansion joint repair/replacement	
6 Graffiti removal	
14 Heat Straightening - Under-Bridge Hit	
26 Overhead concrete spall removal	
15 Raising Bridge	

Comments
No Work
To Be Determined

Eligible for BRAs	Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less
No	

Categories/Improved	Comments
General	
Deck	
Wearing Surface	
Paint	
Not Applicable	

Minor Rehabilitation	Comments
86 Abutment replacement/repair	
114 Approach (other)	
102 Approach railing repair	
101 Approach roadway profile correction	
100 Approach slab replacement/repair	
63 Bridge light installation/repair	
61 Bridge railing upgrade/repair	
10 Concrete patching (non-deck)	
139 Culvert (other)	
120 Culvert invert repair	
159 Culvert Other/Non-Bridge	
20 Deck patching (asphalt)	
49 Deck patching (concrete)	
59 Deck surface	
62 Fence installation/repair	
80 Foundation stabilization	
8 Movable bridge (repair)	
20 Painting structural steel	
85 Pier replacement/repair	
84 Pile encasement	
103 Pressure relief joint installation	
Raising Bridge	
60 Sidewalk repair/replacement	
82 Slope repair & protection	
22 Structure steel repair	
99 Substructure (other)	
39 Superstructure (other)	

Major Rehabilitation	Comments
122 Culvert Linear Repair	
141 Culvert Replace/Non-Bridge	
4 Deck replacement	
20 Painting structural steel	
89 Semi-Integral Abutment Conversion	
13 Structure Removal	
22 Structure steel repair	
121 Tunnel liner installation	

New Construction	Comments
142 Culvert New/Non-Bridge	
5 Structure widening	
1 Structure (new)	
2 Structure (replacement)	
3 Superstructure replacement	

Misc Bridge Costs	Comments
12 Bridge Analysis	
11 Bridge Inspection (Consultant)	
45 Deck Skid Resistance Retrofit	
Major Rehab (Use only for BMS Conv)	
7 Movable Bridge (Fix Costs)	
Unknown (Only w/BMS Conversion)	

General Comments:
 Built 2009 - All BRAs Type I except inside trailing curb has "T-Type Bolt pattern drilled (Type 2)

Bridge Work Estimate:
~~\$13,000~~ - \$51,000

\$17.5K
 \$10.5K
 \$28K

\$23K

Repair the horizontally circled tops of Parapets. Seal repaired areas w/ epoxy-urethane, (Inc. App. Slab parapet as wood)

Estimated Cracking Lengths
 Exterior: 105'
 Interior: 8'
 Misc.: 15'

120'
 120' x \$190/LF = \$23,000

Date: 6/16/21
8/24/20
PID: LOR-90-10.76
107714
Bridge No. LOR-90-1320L
SFN: 4710000

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert Invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

512-Seal Bridge Deck w/ SRS (inc. Slabs) App
 $\$7.30/sy \times 1.20 = \$8.75/sy \times [115395F +$
 (2021) $\frac{115395}{102025} \times 2 \times 30' \times 69'] \div 9$
 $= \$16,000$

#16K

Reactive Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge diaphragm Installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening-Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligible for BRIFunds	
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less
No	

Categories/Approved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert Invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

MISC Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

BTAs - Leaning Ends - Type 1
 (MGS) Trailway outside - Type 2
 Trailway inside - Type 1

General Comments	
No Work - Built 2017 or 2018 -	One of four bridges that will be 8 Yes old at time of count (2025). Built Seal until 10 yrs old.
Bridge Work Estimate	
\$16,000	Assume minimal deck & seal w/ SRS

Date: 6/16/21 8/24/20 PID: LOR-90-10.76 107714 Bridge No. LOR-90-1320 R SFN: 4710001

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert Invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

S12 - Sealing Bridge Decks w/ SRS
(Deck & App)
\$8.75/sy x [(11539 SF + 2X30'X69')] = 9
= \$16,000

\$16K

Reactive Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge cladding installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening-Under-Bridge Hlt	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligible for BRIFunds	
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less
No	

Categories Improved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
114	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert Invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Misc Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

BTAS - Loading Ends Type 1
(MGS) Trailing Ends - Outside - Type 2
Trailing End - Inside - None

General Comments	
<p>No Work - Built 2018 2017 or 2018 seal w/ SRS (does have standing water) created reallt app slab</p>	
Bridge Work Estimate	
\$16,000	

Date: 6/16/2022 8/24/2020 PID: LOR-90-10.76 107714 Bridge No. LOR-90-1355 L SFN: 4710002

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	512 - Seal Deck & App Slabs w/ SRS
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	\$8.75/SY x (6997SF + 2x30'x69') ÷ 9
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	= \$11,000
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

\$11K

Reactive Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge diaphragm installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening-Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligible for BRIFunds		Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less	
No		

Categories Improved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Misc Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

BTAG - Loring EUDs - Type 1
(MGS) Trailing EUD Outside (Type 2)
Trailing EUD Inside - Type 1

General Comments	
No Work - Built 2017/2018	Deck good - Seal w/ SRS
Bridge Work Estimate	
\$11,000	No extra MOT

Date: 6/16/2022
 8/24/2020
 PID: LOR-90-10.76
 107714
 Bridge No. LOR-90-1355R
 SFN: 471 0003

\$11K

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	512 - Seal Deck & App. Slabs w/ SRS \$8.75/sf x [719]sf + 2x30'x69' = 9 = \$11,000
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert Invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

Relative Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge diaphragm installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening-Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligible for BRIFunds	
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less
No	

Categories Improved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert Invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Substructure (other)	

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Misc Bridge Costs		Comments
12	Bridge Analysis	BTAS - Loading EVDS - Type 1 mbs) Trailing EVDs - Outside Type 2 Trailing EVD - Inside ; ; pattern - Type 1
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

General Comments	
Network - Built 2017/2018	Deck good Seal w/ SRS 6750 SF
Bridge Work Estimate	
\$11,000	

Date: 7/15/2022 ~~8/24/20~~ PID: LOR-90-10.76 107714 Bridge No. LOR-90-1426L over Black River / Park Rd SFN: 4704665

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	512 - Treating Bridge Decks w/ GFR (inc. App. Slabs) \$13/yd x [24,327sf + 2x25'x64'] = 9 = \$39,800
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	512 - Treating Bridge Decks w/ GFR (inc. App. Slabs) (418'x2x4.42'/9) x \$54/sy = \$22,200
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

\$39.8k
\$22.2k
\$62.0

Reactive Maintenance		Comments
29	Backwall replacement/repair	519 - Patching Conc. Bridge Deck (PN512 - Type A) - Rear Lt. App Slab 24'x5'/9 = 1454 x (\$600/sy x 1.20) = \$10,000
25	Bearing reset/replaced	
27	Bridge diaphragm installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening - Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

\$10k

Comments	
No Work	
To Be Determined	

Eligible for Bids		Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less	
No		

Categories/Approved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	Repair the horizontally cracked tops of Parapets. Seal repaired areas w/ epoxy-wethane. (inc. App Slabs as needed) Estimated Cracking Lengths Exterior: 15' (Sp. 2, P1) Interior: 8'(EA) + 30' ova = 38' Misc.: 27' <small>Pike Trail</small> 80' 80' x \$190/lf = \$15,000
114	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert Invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Misc Bridge Costs		Comments
12	Bridge Analysis	BTAs - Leading Inside - Type 1 / Outside - Conc. Barrier Trailing ovs - Type 2
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

General Comments	
Built 2013 - Moderate Scaling Failure } Repair minor Horizontal Parapet Top Cracking	
Bridge Work Estimate	
\$35,000 \$87,000	

Date: 7/15/2022 ~~8/24/20~~ PID: LOR-90-10.76 107714 Bridge No. LOR-90-1426R over Black River/Park Rd SFN: 47 04703

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

512-Treating Concrete Bridge Decks w/ GFR (inc. App. Slabs).
 $\$13/\text{yd}^2 \times [24,327 \text{ SF} + 2 \times 25' \times 64'] \div 9 = \$39,800$
 512-Remove coatings & reuse inside face & top - inc. App. Slabs
 $(418' \times 2 \times 4.42' / 9) \times \$54/\text{sq yd} = \$22,200$

\$39.8
\$22.2
\$62.0

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Repair the horizontally-cracked tops of parapets. Seal repair areas w/ epoxy-urethane. (inc. App. Slabs as needed)
 Estimated Cracking heights:
 Exterior: Full App. Slab at 2'
 Interior: 40' over P1
 Misc.: 18'
 60'
 60' x \$190/LF = \$12,000

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Misc Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

BTAS - Leaning Ends - Type 1
 Trailing - outside - Barrier
 Inside - Looks like holes for Type 1 & Type 2

Reactive Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge diaphragm installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening - Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligible for BRIFunds		Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less	
No		

Categories Improved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

General Comments	
Built 2013 - Moderate Sealing Failure Minor Horizontal Parapet Top Cracking } Repair	
Bridge Work Estimate	
\$35,000 \$74,000	

LOR-90-10.76

over Ford Rd.

Date: ~~8/24/20~~

PID: 107714

Bridge No. LOR-90-1443L

SFN: 4704738

\$18.7K
+100K
28.7K

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert Invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

512 - Treating Concrete Bridge Decks w/
GFR (inc. App Slabs)
 $\$13/\text{yd}^2 \times [9848_{\text{SF}} + 2 \times 25' \times 62'] \div 9 =$
 $= \$18,700$

512 - Remove coatings & rescale inside
face & top - including App Slabs
 $(192.5' + 182.5') \times 4.42' / 9 \times \$54 / \text{SF} =$
 $\$10,000$

Reactive Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge diaphragm installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening - Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligible for BRIFunds		Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less	
No		

Categories Approved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert Invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Repair the horizontally-cracked tops of
parapets. Seal repaired areas w/ epoxy-
urethane. (Inc. app. slabs a.s. needed)

Estimated cracking lengths:
Exterior: 0
Interior: $\frac{1}{4} \times 50' \times 2 \times 50' = 50'$
Misc.: 0
50'

50' x \$190/SF = \$9,300

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Misc Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

BTAs - LEADING ENDS - Type 1
Trailing - outside - Conc. Barrier
inside - Type 2

General Comments	
- Exterior Parapet has moderate/heavy sealing failure Built 2013 + NOTE Cracked up asphalt curbs beyond App Slabs	

Bridge Work Estimate	
\$17,000	\$38,000

Date: 8/24/20 PID: 107714 Bridge No. LOR-90-1443R over Ford Rd. SFN: 47 04754

Preventive Maintenance	Comments
61 Bridge railing upgrade/repair	512 - Treating Concrete Bridge Decks w/ GFR (inc. App Slabs) \$19K
87 Channel clean out	
81 Channel drift removal	
143 Culvert Extension/Non-Bridge	
120 Culvert invert repair	
144 Culvert Repair/Non-Bridge	
47 Deck and abutment seat cleaning	
46 Deck cathodic protection installation	
40 Deck overlay (concrete)	
43 Deck overlay (epoxy)	
44 Deck overlay (other)	512 - Remove coatings & reseal inside face & top - inc. App slabs \$21,300 \$13/yd ² x [11,636SF + 2 x 25' x 62'] ÷ 9 = \$21,300 [211' + 220'] x 4.42/9 x \$54/SY = \$11,500
50 Deck patching (asphalt)	
49 Deck patching (concrete)	
51 Deck Sealing	
28 Drainage system cleaned/repared	
48 Expansion joint repair/replacement	
23 Fatigue retrofit	
20 Painting structural steel	
24 Pin and Hanger retrofit	
103 Pressure relief joint installation	
Raising Bridge	
83 Scour prevention and correction	
60 Sidewalk repair/replacement	
82 Slope repair & protection installation	
52 Spall Removal	
21 Spot painting structural steel	
88 Substructure Sealing	

Minor Rehabilitation	Comments
86 Abutment replacement/repair	Repair the horizontally-cracked tops of parapets. Seal repaired areas w/ epoxy-urethane. (Inc. App. Slab wall & transition as-needed)
119 Approach (other)	
102 Approach railing repair	
101 Approach roadway profile correction	
100 Approach slab replacement/repair	
63 Bridge light installation/repair	
61 Bridge railing upgrade/repair	
10 Concrete patching (non-deck)	
139 Culvert (other)	
120 Culvert invert repair	
159 Culvert Other/Non-Bridge	Estimated cracking length: Exterior: sp 193 50' x 2 x 1/2" = 50' ± Interior: sp 193 50' x 2 x 1/2" = 50' ± Misc.: 0 100' 100' x \$190/LF = \$19,200
20 Deck patching (asphalt)	
49 Deck patching (concrete)	
59 Deck surface	
62 Fence installation/repair	
80 Foundation stabilization	
8 Movable bridge (repair)	
20 Painting structural steel	
85 Pier replacement/repair	
84 Pile encasement	
103 Pressure relief joint installation	
Raising Bridge	
60 Sidewalk repair/replacement	
82 Slope repair & protection	
22 Structure steel repair	
99 Substructure (other)	
39 Superstructure (other)	

Reactive Maintenance	Comments
29 Backwall replacement/repair	
25 Bearing reset/replaced	
27 Bridge diaphragm installation	
9 Collision damage	
10 Concrete patching (non-deck)	
42 Deck overlay (asphalt w waterproofing)	
41 Deck overlay (asphaltic concrete)	
50 Deck patching (asphalt)	
49 Deck patching (concrete)	
48 Expansion joint repair/replacement	
6 Graffiti removal	
14 Heat Straightening - Under-Bridge Hit	
26 Overhead concrete spall removal	
15 Raising Bridge	

Major Rehabilitation	Comments
122 Culvert Linear Repair	
141 Culvert Replace/Non-Bridge	
4 Deck replacement	
20 Painting structural steel	
89 Semi-Integral Abutment Conversion	
13 Structure Removal	
22 Structure steel repair	
121 Tunnel liner installation	

Comments
No Work
To Be Determined

New Construction	Comments
142 Culvert New/Non-Bridge	
5 Structure widening	
1 Structure (new)	
2 Structure (replacement)	
3 Superstructure replacement	

Eligible for BRIFunds	Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less
No	

Misc Bridge Costs	Comments
12 Bridge Analysis	BTAs - Leading Ends - inside - Type 1 Outside - Conc. Barrier Trailing Ends - outside - Conc. Barrier inside - holes for Type 1 & Type 2
11 Bridge Inspection (Consultant)	
45 Deck Skid Resistance Retrofit	
Major Rehab (Use only for BMS Conv)	
7 Movable Bridge (Fix Costs)	
Unknown (Only w/ BMS Conversion)	

Categories/Improved	Comments
General	
Deck	
Wearing Surface	
Paint	
Not Applicable	

General Comments
Ext. Parapet has moderate/heavy sealing failure
Built 2013-
Bridge Work Estimate
\$17,000 \$52,000

Date: 6/16/22 8/24/20 LOR-90-10.76 PID: 107714 Bridge No. LOR-90-1478 SFN: 4704789

Preventive Maintenance	Comments
61 Bridge railing upgrade/repair	
87 Channel clean out	
81 Channel drift removal	
143 Culvert Extension/Non-Bridge	
120 Culvert Invert repair	
144 Culvert Repair/Non-Bridge	
47 Deck and abutment seat cleaning	
46 Deck cathodic protection installation	
40 Deck overlay (concrete)	
43 Deck overlay (epoxy)	
44 Deck overlay (other)	
50 Deck patching (asphalt)	
49 Deck patching (concrete)	
51 Deck Sealing	
28 Drainage system cleaned/repared	
48 Expansion joint repair/replacement	
23 Fatigue retrofit	
20 Painting structural steel	
24 Pin and Hanger retrofit	
103 Pressure relief joint installation	
Raising Bridge	
83 Scour prevention and correction	
60 Sidewalk repair/replacement	
82 Slope repair & protection installation	
52 Spall Removal	
21 Spot painting structural steel	
88 Substructure Sealing	

Reactive Maintenance	Comments
29 Backwall replacement/repair	
25 Bearing reset/replaced	
27 Bridge diaphragm installation	
9 Collision damage	
10 Concrete patching (non-deck)	
42 Deck overlay (asphalt w waterproofing)	
41 Deck overlay (asphaltic concrete)	
50 Deck patching (asphalt)	
49 Deck patching (concrete)	
48 Expansion joint repair/replacement	
6 Graffiti removal	
14 Heat Straightening-Under-Bridge Hit	
26 Overhead concrete spall removal	
15 Raising Bridge	

Comments
No Work
To Be Determined

Eligible for BR Funds	Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less
No	

Categories Improved	Comments
General	
Deck	
Wearing Surface	
Paint	
Not Applicable	

Minor Rehabilitation	Comments
86 Abutment replacement/repair	
119 Approach (other)	
102 Approach railing repair	
101 Approach roadway profile correction	
100 Approach slab replacement/repair	
63 Bridge light installation/repair	
61 Bridge railing upgrade/repair	
10 Concrete patching (non-deck)	
139 Culvert (other)	
120 Culvert Invert repair	
159 Culvert Other/Non-Bridge	
20 Deck patching (asphalt)	
49 Deck patching (concrete)	
59 Deck surface	
62 Fence installation/repair	
80 Foundation stabilization	
8 Movable bridge (repair)	
20 Painting structural steel	
85 Pier replacement/repair	
84 Pile encasement	
103 Pressure relief joint installation	
Raising Bridge	
60 Sidewalk repair/replacement	
82 Slope repair & protection	
22 Structure steel repair	
99 Substructure (other)	
39 Superstructure (other)	

Major Rehabilitation	Comments
122 Culvert Linear Repair	
141 Culvert Replace/Non-Bridge	
4 Deck replacement	
20 Painting structural steel	
89 Semi-Integral Abutment Conversion	
13 Structure Removal	
22 Structure steel repair	
121 Tunnel liner installation	

New Construction	Comments
142 Culvert New/Non-Bridge	
5 Structure widening	
1 Structure (new)	
2 Structure (replacement)	
3 Superstructure replacement	

MISC Bridge Costs	Comments
12 Bridge Analysis	
11 Bridge Inspection (Consultant)	
45 Deck Skid Resistance Retrofit	
Major Rehab (Use only for BMS Conv)	
7 Movable Bridge (Fix Costs)	
Unknown (Only w/BMS Conversion)	

Maintain Vert. Clearance, if possible (17'-4")

General Comments
No Work - Built 2011 - This is an overhang bridge Rated "9"
Bridge Work Estimate
\$0

Rw 7/11/22
Date: ~~8/24/20~~

LOR-90-10.76
PID: 107714

Bridge No. LOR-90-1658
Jungebuth Ditch

SFN: 47 04800

Preventive Maintenance	Comments
61 Bridge railing upgrade/repair	
87 Channel clean out	
81 Channel drift removal	
143 Culvert Extension/Non-Bridge	
120 Culvert Invert repair	
144 Culvert Repair/Non-Bridge	
47 Deck and abutment seat cleaning	
46 Deck cathodic protection installation	
40 Deck overlay (concrete)	
43 Deck overlay (epoxy)	
44 Deck overlay (other)	
50 Deck patching (asphalt)	
49 Deck patching (concrete)	
51 Deck Sealing	
28 Drainage system cleaned/repared	
48 Expansion joint repair/replacement	
23 Fatigue retrofit	
20 Painting structural steel	
24 Pin and Hanger retrofit	
103 Pressure relief joint installation	
Raising Bridge	
83 Scour prevention and correction	
60 Sidewalk repair/replacement	
82 Slope repair & protection installation	
52 Spall Removal	
21 Spot painting structural steel	
88 Substructure Sealing	

\$ 172K

Reactive Maintenance	Comments
29 Backwall replacement/repair	
25 Bearing reset/replaced	
27 Bridge diaphragm Installation	
9 Collision damage	
10 Concrete patching (non-deck)	
42 Deck overlay (asphalt w waterproofing)	
41 Deck overlay (asphaltic concrete)	
50 Deck patching (asphalt)	
49 Deck patching (concrete)	
48 Expansion joint repair/replacement	
6 Graffiti removal	
14 Heat Straightening - Under-Bridge Hit	
26 Overhead concrete spall removal	
15 Raising Bridge	

Comments
No Work
To Be Determined

Eligible for BRIFunds	Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less
No	

Categories Improved	Comments
General	
Deck	
Wearing Surface	
Paint	
Not Applicable	

Minor Rehabilitation	Comments
86 Abutment replacement/repair	
119 Approach (other)	
102 Approach railing repair	
101 Approach roadway profile correction	
100 Approach slab replacement/repair	
63 Bridge light installation/repair	
61 Bridge railing upgrade/repair	
10 Concrete patching (non-deck)	
139 Culvert (other)	
120 Culvert Invert repair	
159 Culvert Other/Non-Bridge	
20 Deck patching (asphalt)	
49 Deck patching (concrete)	
59 Deck surface	
62 Fence installation/repair	
80 Foundation stabilization	
8 Movable bridge (repair)	
20 Painting structural steel	
85 Pier replacement/repair	
84 Pile encasement	
103 Pressure relief joint installation	
Raising Bridge	
60 Sidewalk repair/replacement	
82 Slope repair & protection	
22 Structure steel repair	
99 Substructure (other)	
39 Superstructure (other)	

Concrete Invert
14'-3" x 8'-11" x 286ft
(apply conc. field paving 1.5' up walls)
286' x \$600 / ft = \$171,600 + Discrete Repairs (say 24 crd.)
use \$172,000

R.F. 2021-79759 LOR-10-6.73 Lining
Infl
(\$169,560 - 90,000) / 162' = \$500/ft x 20% = \$100/ft

Major Rehabilitation	Comments
122 Culvert Linear Repair	
141 Culvert Replace/Non-Bridge	
4 Deck replacement	
20 Painting structural steel	
89 Semi-Integral Abutment Conversion	
13 Structure Removal	
22 Structure steel repair	
121 Tunnel liner installation	

New Construction	Comments
142 Culvert New/Non-Bridge	
5 Structure widening	
1 Structure (new)	
2 Structure (replacement)	
3 Superstructure replacement	

Misc Bridge Costs	Comments
12 Bridge Analysis	
11 Bridge Inspection (Consultant)	
45 Deck Skid Resistance Retrofit	
Major Rehab (Use only for BMS Conv)	
7 Movable Bridge (Fix Costs)	
Unknown (Only w/BMS Conversion)	

Address Roadway above per plan Paving

General Comments
Culvert rated "6" w/Problems
Bridge Work Estimate
\$ 172,000

Date: 6/16/22
8/24/20

LOR-90-10.76
PID: 107714

French Creek Rd over
Bridge No. LOR-90-1753

SFN: 4704835

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

Reactive Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge diaphragm installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening-Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligible for BRIFunds	
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less
No	

Categories Improved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
114	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Misc Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

MAINTAIN Veet Clearance (16.5')

General Comments

No Work - Built 2015 - overhead bridge

Bridge Work Estimate

\$0

Date: 6/16/22
8/24/20
PID: LOR-90-10.76 107714
Bridge No. LOR-90-1785 R
SFN: 47 04924

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert Invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

Reactive Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge diaphragm installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening-Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligible for BIR Funds	
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less
No	

Categories Improved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Misc Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

General Comments: No Work - Being replaced under PFD 90942 (2022)

Bridge Work Estimate: \$0

Date: 6/16/22
8/24/20

LOR-90-10.76
PID: 107714

Bridge No. LOR-90-1785L

SFN: 4704894

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert Invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

Reactive Differences		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge diaphragm installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening-Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligible for Shortcuts	
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less
No	

Categories Improved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Misc Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

General Comments	
No Work - Being Replaced under PID 9 0942 (2022)	
Bridge Work Estimate	
\$0	

REV 7/11/22
Date: 8/24/20

LOR-90-10.76
PID: 107714

Bridge No. LOR-90-1815 over Klamath

SFN: 4704967

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

Reactive Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge diaphragm installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening-Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligible for Bids		Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less	
No		

Categories Impoved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Concrete Invert
12' x 230' long
(apply conc. field paving ~ 4' up wall)
230' x \$600/ft = \$138,000
use \$140,000 (inc. 12± discrete repairs)
Repair Fwd Rt. Head wall deterioration @ pipe
(Ref. cost used for LOR-90-1658)

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Misc Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

Address Roadway Above per Pavement Plan

General Comments	
I field reviewed this in 2020 (?) but have no notes culvert - rated "6"	
Bridge Work Estimate	
\$140,000	

Date: 6/16/22
8/21/20 PID: LOR-90-10.76 107714 Bridge No. LOR-90-1861 L SFN: 4704959

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert Invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

512 - Seal Deck & App Slabs w/ SRS
 $\$8.75/sy \times [9503\text{sq} + 25'(87+90)] = 9$
 $1548sy \times 8.75/sy = \$14,000$

\$14

Corrective Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge diaphragm installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening-Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligible for Bypass		Comments
Yes	<ul style="list-style-type: none"> - Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less 	
No		

Categories Improved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert Invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

BTAs - LEADING EDS - Type 1
 Trailing EDS - Top Outside - Type 2
 Inside - None

Misc Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

(Few minor pothole issues per 2021 report - NO fix)
 I site visited, but have NO notes

General Comments	
No Work - rated "7" good	Sealed in 2018 under PID 79762 follow rehab work - Reseal w/

Bridge Work Estimate	
\$14,000	SRS considering somewhat recent survey - does have cracks

Date: 6/16/22
8/24/20
PID: LOR-90-10.76
107714
Bridge No. LOR-90-1861 R
SFN: 4704983

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	572-Seal Deck & App Slabs w/ SRS \$8.75/sy x [7928SF + 25'(72'+75')] ÷ 9 = \$11,000
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert Invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

Reactive Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge diaphragm installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening-Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligible for BRIFunds	
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less
No	

Categories Improved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert Invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	BTAS - LEADING ENDS - Type 1 Trailing ENDS - Outside - Type 2 Inside - None
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Misc Bridge Costs		Comments
12	Bridge Analysis	Few minor parapet issues per 2021 report - No fix I site visited, but have NO notes (2020±)
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

General Comments
No Work - rated "7" - good condition - Sealed in 2018 under PID 79762 (other rehab work too)

Bridge Work Estimate
\$11,000
Reseal w/ SRS considering recent sealing, deck cracks & staining; water

Date: 6/16/22

PID: 107714

Bridge No.

(Cover IR 90)
LOR-254-0191

SFN: 4706277

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

Reactive Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge diaphragm installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening - Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Comments	
No Work	
To Be Determined	

Eligible for BRIFunds		Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less	
No		

Categories Improved		Comments
General		
Deck		
Wearing Surface		
Paint		
Not Applicable		

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert invert repair	
159	Culvert Other/Non-Bridge	
20	Deck patching (asphalt)	
49	Deck patching (concrete)	
59	Deck surface	
62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Add 6" ^{stitch} VPF retrofit to existing 36" BR-1
Parapet (built SCD BR-1 (01-06-99))
\$135/A x 2 x 300' = \$81,000

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Misc Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

Maintain (or improve) vertical clearance
under bridge (14.92')

General Comments	
Overhead Bridge reduce in 2003 rated "7". For deck issues, do not address in this mainline project	
Bridge Work Estimate	
\$81,000 + 9,000 (Traffic Control) = \$90,000	

Date: 6/16/24 LOR-90-10.76 PID: 107714 Bridge No. LOR-301-2349 SFN: 4706730

over IR 90

Preventive Maintenance		Comments
61	Bridge railing upgrade/repair	
87	Channel clean out	
81	Channel drift removal	
143	Culvert Extension/Non-Bridge	
120	Culvert Invert repair	
144	Culvert Repair/Non-Bridge	
47	Deck and abutment seat cleaning	
46	Deck cathodic protection installation	
40	Deck overlay (concrete)	
43	Deck overlay (epoxy)	
44	Deck overlay (other)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
51	Deck Sealing	
28	Drainage system cleaned/repared	
48	Expansion Joint repair/replacement	
23	Fatigue retrofit	
20	Painting structural steel	
24	Pin and Hanger retrofit	
103	Pressure relief joint installation	
	Raising Bridge	
83	Scour prevention and correction	
60	Sidewalk repair/replacement	
82	Slope repair & protection installation	
52	Spall Removal	
21	Spot painting structural steel	
88	Substructure Sealing	

Reactive Maintenance		Comments
29	Backwall replacement/repair	
25	Bearing reset/replaced	
27	Bridge cladding installation	
9	Collision damage	
10	Concrete patching (non-deck)	
42	Deck overlay (asphalt w waterproofing)	
41	Deck overlay (asphaltic concrete)	
50	Deck patching (asphalt)	
49	Deck patching (concrete)	
48	Expansion joint repair/replacement	
6	Graffiti removal	
14	Heat Straightening-Under-Bridge Hit	
26	Overhead concrete spall removal	
15	Raising Bridge	

Status		Comments
	No Work	
	To Be Determined	

Eligible for BRIDIS		Comments
Yes	- Reconstruction SD/FO cannot be 0 & Suff Rating 50% or less - Rehabilitation SD/FO cannot be 0 & Suff Rating 80% or less - Deck Summary Rating of 4 or less	
No		

Categories/Approved		Comments
	General	
	Deck	
	Wearing Surface	
	Paint	
	Not Applicable	

Minor Rehabilitation		Comments
86	Abutment replacement/repair	
119	Approach (other)	
102	Approach railing repair	
101	Approach roadway profile correction	
100	Approach slab replacement/repair	
63	Bridge light installation/repair	
61	Bridge railing upgrade/repair	
10	Concrete patching (non-deck)	
139	Culvert (other)	
120	Culvert Invert repair	
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20	Deck patching (asphalt)	
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62	Fence installation/repair	
80	Foundation stabilization	
8	Movable bridge (repair)	
20	Painting structural steel	
85	Pier replacement/repair	
84	Pile encasement	
103	Pressure relief joint installation	
	Raising Bridge	
60	Sidewalk repair/replacement	
82	Slope repair & protection	
22	Structure steel repair	
99	Substructure (other)	
39	Superstructure (other)	

Major Rehabilitation		Comments
122	Culvert Linear Repair	
141	Culvert Replace/Non-Bridge	
4	Deck replacement	
20	Painting structural steel	
89	Semi-Integral Abutment Conversion	
13	Structure Removal	
22	Structure steel repair	
121	Tunnel liner installation	

New Construction		Comments
142	Culvert New/Non-Bridge	
5	Structure widening	
1	Structure (new)	
2	Structure (replacement)	
3	Superstructure replacement	

Misc Bridge Costs		Comments
12	Bridge Analysis	
11	Bridge Inspection (Consultant)	
45	Deck Skid Resistance Retrofit	
	Major Rehab (Use only for BMS Conv)	
7	Movable Bridge (Fix Costs)	
	Unknown (Only w/BMS Conversion)	

Minimum Clearance below bridge = 17.35'
Prefer to maintain, but don't have to.

General Comments	
No Work - Overhead bridge built 2013, rated "9". No noticeable deficiencies	
Bridge Work Estimate	
\$0	

Conduit Summary



This report displays District 3 conduits and their latest inspection.
Report generated: 2022-06-30 03:47:26, 172000

Conduit File Number (CFN)	CRS	CTL Begin Number	STL Begin Number	Broken Back	Conduit Shape	Conduit Material	Span (Inches)	Rise (Inches)	Length (Feet)	Inlet End Treatment	Outlet End Treatment	Max Height of Cover (Feet)	Inventory Comments	Conduit Material Condition	Conduit Alignment	Conduit Shape Rating	Seam or Joint	Stab	Abutments	Headwall	End Structure	Channel Alignment	Channel Protection	Conduit Watertight	Scour	Pavement	Guardrail	Embankment	General Appraisal	Inspection Comments	Inspection Date	Created User (Inspection)	Inspection Action Item	Recommendations for Project	Work for Los Angeles	Cost Estimate
1864081	LOR-90-12-958	12.958	145.477	No	Circular	Plain or Reinforced G	36		250	Full Height Con	Full Height Concr	8	Outlet is just about buried. Needs ditched some day.	8	7	7					8	8	7	7	7	7	8	8	7	2017-11-21	gbonafe	Install Hydratite seal at the first joint from the inlet end. Place dump rock at the outlet		\$	5,000.00	
1867615	LOR-90-13-189	13.189		Yes	Circular	Plain or Reinforced G	12		120	Catch Basin	Half Height Concr	6	Moved dot to this location. May have been updated during construction of new ramps.	7	8	7					7	8	7	6	8	8	7	7	7	2021-09-24	dmorlock1	Replace CMP broken back portion.		\$	100,000.00	
1867656	LOR-90-13-243	13.243	145.763	No	Circular	Plain or Reinforced G	15		115	Catch Basin	Catch Basin	5	New section of plastic to original concrete joint is pathetic for contractor work. Team mayhem "Jones and white" 6 should have caught that.	8	8	8					8	7	7	7	8	7	8	8	2021-09-24	dmorlock1	No work		\$	-		
1873048	LOR-90-13-255	13.255	145.775	Yes	Circular	Plain or Reinforced G	15		133	Catch Basin	Half Height Concr	6	Plastic to concrete joint outside road at basin is horrible. Pipe was jettied but camera shows calcium all throughout. 7 Video in the O-Drive.	7	7	7					7	8	8	7	8	8	7	7	2021-09-24	dmorlock1	Replace first section of pipe from the inlet CB due to misalignment. Replace the corroded CMP broken back.		\$	100,000.00		
1873051	LOR-90-13-455	13.455	145.975	Yes	Circular	Plain or Reinforced G	15		35	Catch Basin	None	7	Basin in gore outlets over hill north inlets in median, runs on a south eastern skew to smaller basin in eb on ramp then goes over the hill to the ditch below.	7	7	7					7	7	8	5	7	8	7	7	2021-10-20	dmorlock1	Replace the CMP broken back portion only.	Los Angeles to V-jet to break up Tuft	\$	75,000.00		
1873052	LOR-90-13-480	13.480	146.02	No	Circular	Plain or Reinforced G	15		112	Catch Basin	Unknown	7	Had emergency repair done to it to fix the bottom of conduit. Very nice job. Could use some dump rock at outlet.	8	7	7					8	7	7	7	7	8	7	7	2021-09-23	dmorlock1	Adjust CB in the pavement. Replace the CMP broken back portion.		\$	100,000.00		
1829951	LOR-90-13-522	13.522	146.042	No	Circular	Corrugated Metal - S	108		342	Half Height Con	Half Height Concr	20	Remote push camera was performed from median catch basin to outlet due to large rut in the embankment on outlet end. Rut is not caused by conduit. Minor misalignment at joints exposing black sealer but no signs of infiltration. Hairline cracking in the conduit that is under the roadway. Conduit and end structures looks good. Culvert appears to be functioning as designed. 5 Video is on O-Drive	8	8	7	7				7	7	7	6	7	8	7	7	2021-06-11	dmorlock1	Place dump rock at the outlet		\$	25,000.00		
1873008	LOR-90-14-099	14.099	146.639	Yes	Circular	Plain or Reinforced G	18		250	Catch Basin	Unknown	8	Changed footage to 250. Goes from eb basin to median basin then over the hill to the north. Embankment is steep and my back is hurt today so I won't go down for fear of not getting back up. No pics of outlet at this time. Also had plastic added to median both ways. Concrete under roadways though.	5	8	5					7	9	8	9	9	8	8	6	2022-05-09	cpenix1 & CAL	Replace conduit due to numerous cracking in the RCP pipe and the large gaps with several joints. Replace the CMP broken back as well.		\$	200,000.00		
1873009	LOR-90-14-138	14.138	146.658	No	Circular	Plain or Reinforced G	18		226	Catch Basin	Half Height Concr	8	Has plastic added to conduit in median both sides. Concrete under roadway.	7	7	7					7	8	7	8	8	7	7	8	7	2021-09-20	odotonline dmorlock1	No work		\$	-	
1974912	LOR-90-14-355	14.355		No	Circular	Polyvinyl Chloride	36		220	Half Height Con	Half Height Concr	25	Conduit was converted to plastic when the bridge was replaced.	9	8	7	8				7	8	8	7	7	8	9	8	7	2018-06-19	wcontrer1	No work		\$	-	
1873010	LOR-90-14-314	14.314	146.835	Yes	Circular	Corrugated Plastic - S	15		188	Catch Basin	Unknown	6	Changed to plastic when bridge was replaced. Has some silt built up that could be jettied out.	8	8	7	7				8	8	8	7	7	7	7	7	2021-08-02	odotonline dmorlock1	Replace CMP broken back prtion at the outlet.		\$	100,000.00		
1873011	LOR-90-14-418	14.418		Yes	Circular	Corrugated Plastic - S	15		198	Catch Basin	Unknown	6	Conduit was changed to plastic when road and bridge were redone. Pipe is a little egg shaped.	8	8	7	7				8	8	8	7	7	7	7	7	2021-08-02	odotonline dmorlock1	Replace CMP broken back portion.		\$	100,000.00		
1873012	LOR-90-14-471	14.471	146.991	No	Circular	Corrugated Plastic - S	24		114	Catch Basin	Half Height Concr	10	Conduit was changed to plastic when road and bridge were redone. Pipe is a little egg shaped.	7	7	6	7				8	8	7	8	8	7	7	8	2021-09-20	odotonline dmorlock1	Replace at least 40' of deflected HDPE pipe measured from the median inlet to the north.		\$	100,000.00		
1873013	LOR-90-15-138	15.138	147.658	No	Circular	Plain or Reinforced G	15		104	Catch Basin	Unknown	1	Trap was blocking outlet that was removed during inspection. It appears that mortar is coming through joints 2 and 3 from inlet. Water flow is good but ponding at the outlet end of conduit. Needs ditching at outlet. Holds water about half full.	8	7	7					7	9	8	7	9	8	8	7	2022-05-09	cpenix1	Hydratite Seal on the first 2 joints from the inlet catch basin. Hydratite Seal on the first joint from the outlet end.		\$	15,000.00		
1873014	LOR-90-15-175	15.175	147.695	No	Elliptical - Horizont	Plain or Reinforced G	52	35	440	Half Height Con	Half Height Concr	5	Changed dimensions to 52 inch by 35 inch elliptical. Cb in w ramp ditch outlets in median cb then flows east 10 through a large pipe to manhole before 254 overpass. Found this looking for another. Got it loaded with pics and inspected. Looks like a section of plastic was added at the inlet basin at some point.	7	7	7					7	7	7	4	8	7	8	7	2021-09-20	odotonline dmorlock1	No work		\$	-		
1873015	LOR-90-15-452	15.452	147.973	No	Circular	Plain or Reinforced G	24		150	Catch Basin	Catch Basin	10	Through a large pipe to manhole before 254 overpass. Found this looking for another. Got it loaded with pics and inspected. Looks like a section of plastic was added at the inlet basin at some point.	8	7	7					8	7	7	7	8	6	7	7	2021-09-23	dmorlock1	Repair inlet & outlet CB that is missing mortar & bricks.		\$	5,000.00		
1867604	LOR-90-15-550	15.550	148.07	No	Circular	Plain or Reinforced G	15		120	Catch Basin	Catch Basin	10	Through a large pipe to manhole before 254 overpass. Found this looking for another. Got it loaded with pics and inspected. Looks like a section of plastic was added at the inlet basin at some point.	8	7	7					8	7	7	8	9	7	8	7	2021-09-23	dmorlock1	No work		\$	-		
1873017	LOR-90-15-741	15.741	148.261	No	Circular	Plain or Reinforced G	33		140	Catch Basin	Manhole	6	15 inch from median to edge of rd. 33 inch under road to manhole in gore.	8	8	8					8	8	7	8	9	7	8	8	2021-10-20	dmorlock1	At the gore, in between the catch basin and the manhole, there is a non-standard conduit (using glow blades as a sub top). I recommend removing the catch basin and remove/replace the conduit between the CB and the Mh. Recommend remove/rebuild Mh as an access chamber with a grates inlet. Manhole has deteriorating mortar with water infiltration. Median inlet CB has 12" conduit, outlet conduit at manhole measures 33".		\$	150,000.00		
1825124	LOR-90-15-925	15.925		No	Circular	Plain or Reinforced G	15		126	Unknown	Unknown	1	culvert good \ needs ditched \ ditch is on 8 outside of r/w	8	8	8					8	8	8	4	8	8	7	7	2016-03-18	COLLECTOR@D31_AG	No work		\$	-		
1825125	LOR-90-16-146	16.146	148.666	No	Circular	Plain or Reinforced G	15		126	Unknown	Unknown	1	culvert good \ needs ditched \ ditch is on 8 outside of r/w	8	8	8					8	8	8	4	8	8	8	7	2016-03-18	COLLECTOR@D31_AG	At the outlet end, repair first joint due to separation. Either pour masonry collar or install Hydratite seal.		\$	10,000.00		
1990146	LOR-90-16-245	16.245			Circular	Plain or Reinforced G	15		125			1	culvert good \ needs ditched \ ditch is on 8 outside of r/w	8	8	7					8	8	8	4	8	8	7	7	2016-03-18	COLLECTOR@D31_AG	Repair inlet CB that has missing mortar. At the outlet, reset the last section of conduit that is misaligned.		\$	5,000.00		
1825126	LOR-90-16-782	16.782	149.303	No	Circular	Plain or Reinforced G	15		120	Unknown	Unknown	1	culvert good \ needs ditched \ ditch is on 8 outside of r/w	8	8	7					8	8	8	4	8	8	7	7	2016-03-18	COLLECTOR@D31_AG	Repair the conduit's joint separation that has a sinkhole at the surface approx 12' from the WB EOP.		\$	20,000.00		
1873018	LOR-90-16-933	16.933	149.453	No	Circular	Plain or Reinforced G	15		80	Catch Basin	None	6	Raining too hard, I can come back another day to get pictures of all these from inside the pipe when its dry enough for pad outside the truck. For now its just my eyes in the hole. Rise is 34 and span is 52 so I changed that. Changed to half height headwalls. Holds water due to cattails at outlet. Otherwise nice shape.	7	7	7					8	7	7	6	7	7	8	7	2021-09-22	odotonline dmorlock1	No work		\$	-		
1873019	LOR-90-16-953	16.953	149.474	No	Elliptical - Horizont	Plain or Reinforced G	52	34	214	Half Height Con	Half Height Concr	4	Outlet busted by mowers. Not much blockage and no headwall. Too much rain for pad outside truck. Inside of pipe is decent.	7	7	7					8	7	8	6	7	7	8	7	2021-09-22	odotonline dmorlock1	Hydratite seal first joint from the median CB towards the inlet CB.		\$	5,000.00		
1873021	LOR-90-17-08	17.08		No	Elliptical - Horizont	Plain or Reinforced G	48	74	194	Full HW	Full HW	1	Outlet is chewed up by mowers. Has a little blockage between outlet and ditchline but doesn't really impede the flow.	8	8	7					8	7	7	6	8	7	8	7	2021-09-22	odotonline dmorlock1	No work		\$	-		
1873022	LOR-90-17-274	17.274	149.794	No	Circular	Plain or Reinforced G	15		88	Catch Basin	None	6	Raining too hard for pad out of the truck. Outlet is open but no headwall. No scour either.	8	7	7					8	8	7	6	7	7	7	7	2021-09-22	odotonline dmorlock1	No work		\$	-		
1873024	LOR-90-17-412	17.412	149.932	No	Circular	Plain or Reinforced G	15		88	Catch Basin	None	8	Raining too hard for pad out of the truck. Outlet is open but no headwall. No scour either.	8	7	7					8	8	7	7	7	7	8	7	2021-09-22	odotonline dmorlock1	No work		\$	-		
1873023	LOR-90-17-433	17.433	149.954	No	Elliptical - Horizont	Plain or Reinforced G	105	68	281	Full Height Con	Full Height Concr	6	Looks like plastic extension was added to outlet with dump rock protection.	7	6	6					8	8	8	7	9	6	8	8	2022-05-16	cpenix1	Few (6 or 7) areas where concrete has spalled the size of a half dollar joint sealer is deteriorating and starting to fall. A few joints have 2 inch gaps. 3rd joint from outlet has a 3 inch gap. There is no signs of infiltration. Sediment build up throughout some areas up to 6 inches with wood hung up. Inlet channel partially has left side of 6 wing wall before going into conduit.		\$	15,000.00		
1873025	LOR-90-17-483	17.483	150.003	No	Circular	Plain or Reinforced G	15		88	Catch Basin	Stone	5	Conduit runs parallel to mainline, no CFN assigned.	8	7	7					8	8	7	7	7	7	8	7	2021-09-22	odotonline dmorlock1	No work		\$	-		
LOR-90-17-60		17.6											Pipe has maybe a foot of silt in the bottom. Everything above the silt looked great, under the silt felt solid. Did not see any holes forming from material rusting out. New bridges going in in this area. Everything looks good in and around pipe.	7	8	7					7	7	5	7	7	8	6	7	2021-08-04	odotonline dmorlock1	No work		\$	-		
1873026	LOR-90-17-826	17.826	150.346	No	Circular	Corrugated Metal - S	84		294	Half Height Con	Half Height Concr	35	Bridge replacements and asphalt going in 7 this location at this time. Pipe looks good.	7	8	7					7	7	6	6	7	6	7	6	2021-09-23	dmorlock1	Line or rehab corroding CMP pipe that has section loss.		\$	400,000.00		
1873028	LOR-90-17-901	17.901	150.421	No	Circular	Plain or Reinforced G	33		302	None	None	20	Remote inspection in O drive. Conduit is misaligned but the joints do not have infiltration. Conduit is working as designed. No corrective work needed.	8	7	7					7	6	6	6	7	6	7	6	2022-05-16	cpenix1 & CAL	No work		\$	-		
1873030	LOR-90-18-151	18.151	150.671	No	Circular	Plain or Reinforced G	15		97	Catch Basin	Stone	7	Has plastic extensions at inlet and outlet, concrete under the road. Outlets past right of way fence. Needs ditching to drain all 6 water out. Holds about 6 inches or more. Pipe looks good.	7	6	6					7	7	6	7	7	6	7	7	2022-05-16	cpenix1 & CAL	No work		\$	-		
1873031	LOR-90-18-295	18.295	150.815	No	Circular	Plain or Reinforced G	21		139	Catch Basin	None	6	Has plastic extensions at inlet and outlet, concrete under the road. Outlets past right of way fence. Needs ditching to drain all 6 water out. Holds about 6 inches or more. Pipe looks good.	7	7	7					7	8	7	5	8	6	8	7	2021-09-21	odotonline dmorlock1	No work		\$	-		

Conduit Summary



This report displays District 3 conduits and their latest inspection.
 Report generated: 2022-06-30 03:47:26.172000

Conduit File Number (CFN)	CRS	CTL Begin Number	STL Begin Number	Broken Back	Conduit Shape	Conduit Material	Span (feet)	Rise (feet)	Length (feet)	Inlet End Treatment	Outlet End Treatment	Max Height of Cover (feet)	Inventory Comments	Conduit Material Condition	Conduit Alignment	Conduit Shape Rating	Seam or joints	Stab	Abutments	Headwalls	End Structure	Channel Alignment	Channel Protection	Conduit Waterway	Scour	Pavement	Guardrail	Embankment	General Appraisal	Inspection Comments	Inspection Date	Created User (Inspection)	Inspection Action Item	Recommendation for Project	Work for Lorain County	Cost Estimate																												
1987603 LOR-47023-0-05					circular	RCP	36		100	Manhole	Half HW		10 Manhole in gore where all pipes connect.	8	8		8				7	8	7	7	6	7	7		7	8	Located at the SR 254 WB exit ramp. Down tree partially blocking inlet. Small amount of sediment build up though out conduit. Minor misalignment of joints with no evidence of infiltration. Photos placed on inventory and was accidentally on last 7 inspection.				Inlet MH is the same as CFN 1873017 outlet MH. Recommend remove/rebuild MH as an access chamber with a grated inlet.	\$	10,000.00																											
1872953 LOR-2-10.598 1987722 LOR-2-10.669		10.598 10.669		No Yes	circular circular	RCP plastic	96 12		236	Half HW 40 CB	Half HW CB	6																									No work No work	Remove tree at the inlet end	\$ \$	- -																								
1990193 LOR-2-10.682		10.682		No	circular	plastic	12		42	CB	CB	7																								No work		\$	-																									
1990194 LOR-2-10.732		10.732		No	circular	plastic	15		45	CB	CB	5																								No work		\$	-																									
1872956 LOR-2-10.852		10.852		No	circular	RCP	36		82	Half HW	Half HW	8																								No work		\$	-																									
1872955 LOR-2-10.858		10.858		No	circular	RCP	36		92																										No work		\$	-																										
																																																															TOTAL = \$	2,465,000.00