



Missouri Department of Transportation

STRUCTURAL REHABILITATION CHECKLIST

Bridge No.: **A6500**

Job No.: **JSL0084**

Route: **I-70**

Over: **Mississippi River**

County: **St. Louis City**

Date of Field Check: **8/25, 8/26, 8/28, 9/22 2025**

*** Please include photographs for all items that apply. ***

1

OVERLAY

* Type of existing overlay: None Asphalt Low Slump Silica Fume Latex Epoxy Other: _____

* Verify Overlay Thickness with Core: Yes No

* Existing overlay thickness: **2; .25** "

* Year overlay was applied: **2010; 2021**

* % of overlay repaired or patched: **0** %

* Replace overlay: Yes No

* Notes: **Existing Latex overlay (2") on spans 10-12 both directions.**

Existing Epoxy overlay (.25") on span 1 of westbound lanes

Picture #

2A

DECK REPAIRS

(Deck repair quantities are required even if a Deck Test request has been ordered for this structure.)

* Half-sole repairs: **100** sq. ft.
(round up to the nearest 50 sq. ft.)

* Full depth repairs: **0** sq. ft.
(round up to the nearest 50 sq. ft.)

* Existing deck repair (patching): **25** sq. ft.
(round up to the nearest 25 sq. ft.)

* Slab edge repairs: _____ lin. ft.
(covers the outer 4" of the slab edge)

* Superstructure repair (Unformed): _____ sq. ft.
(covers the remaining slab cantilever beyond the outer 4")

* Clean & epoxy coat slab edge: _____ lin. ft.
(in lieu of edge repairs)

* Cantilever replacement: _____ lin. ft.

* Total surface hydro demolition of bridge deck: Yes No
(half-sole, full depth and exist. deck repair quantities still required)

* Full deck replacement (redeck): Yes No Optional

* Deck repairs with voided tube replacement: Yes No
(minimum of 10% of half-sole repair quantity)
_____ sq. ft.

* Superstructure replacement: Yes No Optional

* Full bridge replacement: Yes No Optional
(Deck repair quantities required for cost comparison of alternatives)

* How were the quantities obtained? Visual Bridge Inspection Report Sounded Other _____

* Notes: _____

Picture #

DECK REPAIRS CONT.

*** ISSUES / PROBLEMS WITH PRECAST PRESTRESSED DECK PANELS**

Spans	Location in Span						Deterioration		Describe
	At Panel Jt.	Btwn (mid) Panel Jt.	End	Mid	End	Type	Amount		
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	sq. ft.	_____
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	sq. ft.	_____
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	sq. ft.	_____
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	sq. ft.	_____
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	sq. ft.	_____
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	sq. ft.	_____

* Notes: _____

(Deterioration may include water saturation, efflorescence, rust staining, cracking, spalling, exposed steel, disintegration of panel edges at joints, etc. Typically observed at or near panel joints. The location and "Type" of deterioration should be recorded.)

Picture #

APPROACH SLABS

- * Is there a bridge approach slab in place? Yes No * Type: Concrete Asphalt Other _____
- * Is there rdwy. approach pavement in place? Yes No * Type: Concrete Asphalt Other _____
- * Is the approach slab sinking at the end bent? N/A Yes No _____
- * Are repairs needed to the bridge approach slab driving surface? Yes No _____
(Typically a roadway item but will be reported to District on the Bridge Memorandum.)
- * Full replacement of bridge approach slab? Yes No _____

* Notes: _____

Picture #

4

SLAB DRAINS

* Is the drainage system working adequately? Yes No

* Recommendations: _____

* Notes: _____

Picture #

5

CURBS & RAILS

* Existing curb (left side): Safety Barrier Curb Curb/parapet Blockouts Thrie Beam Baluster Steel Channel
 Other _____ Handrail Fence _____

* Does curb need repair Yes No

* Curb repair _____ lin. ft.

* Remove hand rail Yes No

* Add curb blockout Yes No

* Existing curb (right side): Safety Barrier Curb Curb/parapet Blockouts Thrie Beam Baluster Steel Channel
 Other _____ Handrail Fence _____

* Does curb need repair Yes No

* Curb repair _____ lin. ft.

* Remove hand rail Yes No

* Add curb blockout Yes No

* Existing median curb: Type: **Concrete** Width _____ " Height _____ "

* Does curb need repair Yes No

* Curb repair **20** lin. ft.

* Approach rail attachment: None Not attached 4 Hole 5 Hole Turn-down Other _____

* If the existing handrails will be removed, does the local maintenance supervisor wish to keep them? Yes No

Storage address: location: _____

address: _____

city: _____ state: _____ zip: _____

* Notes: _____

Picture #

6

EXPANSION DEVICES

Bent	Type	Recommendations	Gap Left	Gap Right	Temperature & Other Info
2	Flat Plate	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	"	2 3/16 "	67F, Sunny
5	Flat Plate, Atlas	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	"	3 5/8; 5.5 "	67F, Sunny
10	Elastomeric	USE-IN-PLACE <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input checked="" type="checkbox"/>	"	2.5 "	67F, Sunny
13	Elastomeric	USE-IN-PLACE <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input checked="" type="checkbox"/>	"	3 "	
17	Elastomeric	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	"	"	
23	Elastomeric	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	"	"	

* Notes: Replace flat plate with Waboflex joint. Pier 10 and 13 replace elastomeric with finger joint (similar to A1850).

Pier 17 - replace elastomeric joint with finger joint. Blast and recoat under joints per specifications.

Picture #

7

BEARINGS

Bent	Coating	Recommendations	Notes (indicate which bearings at each bent)
2	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Sole plate and anchor bolts
5	CLEAN & OVERCOAT <input checked="" type="checkbox"/> <input type="checkbox"/> BLAST CLEAN & RECOAT <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Sole plate and anchor bolts
10	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	USE-IN-PLACE <input checked="" type="checkbox"/> REPAIR <input type="checkbox"/> RESET <input type="checkbox"/> REPLACE <input type="checkbox"/>	
13	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
17	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
23	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Only west side

* Notes:

Picture # (Provide Pictures of Each Bearing)

8

COATING SYSTEM (PAINT)

* Existing coating system: _____ System H green gray other **Brown**

* Date last coated: **2013** * Is existing coating peeling? Yes (Overcoat is not an option) No

* Coating recommendation: Blast clean & recoat all steel Clean & overcoat all steel
 Blast clean & recoat only at joint locations Blast & recoat at joint locations and clean & overcoat all other steel

Note: Pull-off test required for overcoat (Calcium Sulfonate) option. Bridge Division will request pull-off tests.

* Notes: **Paint Facia Girders in Main Span (10, 11, 12). Paint Floor Beams up to first stiffener (5-10 Ft) of Main Span (10, 11, 12). Paint Facia girders in spans 13-22. Repaint River Guage**

Picture #

SUPERSTRUCTURE REPAIRS (Repairs needed not previously stated.)

Concrete Slab Superstructure or Girder: (above the bearings)
 (Example: Deck solid slabs, voided slabs, box girders,
 deck girders & prestressed girders)

Chip and seal girder ends. Span 4 girder 10: epoxy inject 10'
Span 4 girder 11: epoxy inject 2' crack. 200SF concrete repair at
girder encasement delaminations

Steel: (Example: Beams, stringers, girders, diaphragms, cross-frames, misc. steel)

Member (Check all that apply) (Attach pictures)

Describe & Locate

_____	<input type="checkbox"/>	Section Loss	_____ %	<input type="checkbox"/>	Cracks	_____ in.	_____
_____	<input type="checkbox"/>	Section Loss	_____ %	<input type="checkbox"/>	Cracks	_____ in.	_____
_____	<input type="checkbox"/>	Section Loss	_____ %	<input type="checkbox"/>	Cracks	_____ in.	_____
_____	<input type="checkbox"/>	Section Loss	_____ %	<input type="checkbox"/>	Cracks	_____ in.	_____

Notes: **Clean and Seal with Concrete Protection. Coat 10' of girder ends under joints at Bents 2, 5.**

Add Fire Protection System on cables.

Picture #

SUBSTRUCTURE REPAIR

Bent	Formed Repair	Unformed Repair	Seal Concrete Beam Cap Bts.	Coat Exposed Pile @ Int. Pile Cap Bts.	Describe (Beam, Backwall, Wing, etc.)
at Joint	_____ sq. ft.	_____ sq. ft.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	At Bents 2, 5, 10, 13, 17, and 23
_____	_____ sq. ft.	_____ sq. ft.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
_____	_____ sq. ft.	_____ sq. ft.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
_____	_____ sq. ft.	_____ sq. ft.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
_____	_____ sq. ft.	_____ sq. ft.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____

* Does the structure need graffiti protection? No Bottom 8' of Concrete End Bents Other _____

* **Notes:** **Seal substructure at sign mount through half of the outer column - Pier 5, 13. Seal all substructure at Pier 2.**
Pier 2, 3, 4: epoxy inject at several locations (50LF)

Picture #

11

SIGNS, SIGNALS &/OR LIGHTING ATTACHED TO STRUCTURE

* Are there signs attached directly to this structure? Yes No quantity _____ location _____

* Describe proposed work to be done to signs. **Replace all roadside signs due to reflectivity**

* Are there signals attached directly to this structure? Yes No quantity _____ location _____

* Describe proposed work to be done to signals. _____

* Is there aviation lighting attached to this structure? Yes No N/A Red 0 Green _____
qnty. qnty.

* Is there navigational lighting attached to this structure? Yes No N/A Red _____ Green _____
qnty. qnty.

* Is there roadway lighting attached to this structure? Yes No N/A

* Describe proposed work to be done to lighting. **Replace SE tower control box contents. New navigation lighting fixtures. Replace Aviaion Control Board on IL side (needs red, has white). Make weep holes in shields. Change fixtures to flood light LED - verify vibration rating for bridge. 480V system, 1000 watt bulbs for asthetic lights. Replace navigation placards.**

* Notes: _____

Picture #

12

UTILITIES ATTACHED TO STRUCTURE

Type	Qty.	Size	Owner	Condition
<input checked="" type="checkbox"/> Conduit <input type="checkbox"/> Pipeline <input type="checkbox"/> Other	4		Unknown Electric	<input type="checkbox"/> Repaint <input type="checkbox"/> Repair <input type="checkbox"/> Replace <input type="checkbox"/> Remove
<input type="checkbox"/> Conduit <input type="checkbox"/> Pipeline <input type="checkbox"/> Other				<input type="checkbox"/> Repaint <input type="checkbox"/> Repair <input type="checkbox"/> Replace <input type="checkbox"/> Remove
<input type="checkbox"/> Conduit <input type="checkbox"/> Pipeline <input type="checkbox"/> Other				<input type="checkbox"/> Repaint <input type="checkbox"/> Repair <input type="checkbox"/> Replace <input type="checkbox"/> Remove
<input type="checkbox"/> Conduit <input type="checkbox"/> Pipeline <input type="checkbox"/> Other				<input type="checkbox"/> Repaint <input type="checkbox"/> Repair <input type="checkbox"/> Replace <input type="checkbox"/> Remove

* Notes: **Highway lighting is attached to barriers on spans 13, 14, and 15. City paid for aesthetic tower lights. Dry standpipe for emergency water supply attached to pier 22 column 1 and hydrant attached to Pier 18 Column 1 - WB Side. DMS Attached to Pier 19.**

Picture #

13

CATHODIC PROTECTION SYSTEM

* Is there a cathodic system on this structure? Yes No Remove Do not alter Abandon in place (grooved system)

* Is it on and working? Yes No Unknown _____

* Notes: _____

Picture #

14

CHANNEL ALIGNMENT, SLOPE PROTECTION & SCOUR

* Is channel aligned to bridge opening? Yes No Describe _____

* Is drift a continual problem? Yes No Describe & Locate _____

* Is erosion a problem? Yes No Describe & Locate _____

* Describe slope protection in place. _____

Scour	At Footing	At Piling	Depth	Bent	Recommendation
	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____

* Describe needed work. **Clear brush and trees under and 20' outside bridge limits.**

Picture #

15

TRAFFIC LANES

* Number of lanes striped: on structure 4 under structure 10

* Shoulder width: None on structure 10' 10' under structure _____
(left) (right) (left) (right)

* Sidewalk widths: on structure _____ under structure _____
(left) (right) (left) (right)

* Median width: on structure 16' with barrier in ctr under structure _____

* Proposed improvements for lanes/shoulders/sidewalks: _____

Picture #

16

GENERAL AREA CONDITIONS

* Primary area: Commercial Industrial Residential Agricultural Military Other _____

* Posted speed limit on structure: 55 mph

* Posted load on structure: _____ tons @ _____ mph NA

Single Unit: _____ tons @ _____ mph NA

Semi (tractor/trailer): _____ tons @ _____ mph NA

* Are both signs in place?

Yes No

* Do pedestrians and/or bicyclists regularly use this structure? Yes No Undetermined

* Notes: _____

Picture #

17

MAINTENANCE

* What work has been done to this structure that may not be reflected on existing bridge plans? _____

Picture #

18

ADDITIONAL FIELD NOTES

NW quad needs rock flume, re-grading, and guardrail.

Clear vegetation under bridge.

Be aware of utility cables at expansion joints.

Picture #

19

STAGING / DETOUR

* **Traffic Control:** Close structure Stage construction on structure Cross over traffic to adjacent structure Detour
 Other option _____

* **Define probable detour route.** _____

20


PERSONS ASSISTING WITH CHECKLIST

Name	<u>Joseph Molinaro</u>	Title	<u>District Bridge Engineer</u>	Ph.	<u>(-314) -220 - 6577</u>
Name	<u>Kate Marshall</u>	Title	<u>Asst. District Bridge Engineer</u>	Ph.	<u>(314) 795 - 8206</u>
Name	<u>Clyde Dunker</u>	Title	<u>Intermediate Bridge Inspector</u>	Ph.	<u>(314) 683 - 8494</u>
Name	<u>Jacob Schmidt</u>	Title	<u>Senior Bridge Inspector</u>	Ph.	<u>(573) 258 - 2691</u>
Name	_____	Title	_____	Ph.	<u>() -</u>

21

REQUIRED SIGNATURES

I have reviewed the information on this checklist and believe it to be as accurate as possible.

Name	_____	Date	_____
	<i>Transportation Project Manager</i>		
Name		Date	<u>2-3-2026</u>
	<i>District Bridge Engineer</i>		

The structural rehabilitation checklist indicates how the bridge is functioning and aging.

All deterioration should be noted, even if it is known that the work will not be completed under the proposed project.

Send **NEW** Structural Rehabilitation Checklist by email
 To: "Bridge Survey Processor"
 Cc: Structural Project Manager or Structural Resource Manager

Deck



A6500 08/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
TRANSVERSE CRACK IN
DRIVING SURFACE
NEAR PIER



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
PATCHES WEST BOUND LANE SPAN 12

Deck



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
WEST BOUND LANE RIGHT
SHOULDER FIRE DAMAGE
(CAR) SPAN 12



A6500 10/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
UNEVEN APPROACH
PAVEMENT WEST END
EAST BOUND LANE

Deck

A6500

08/27/2025

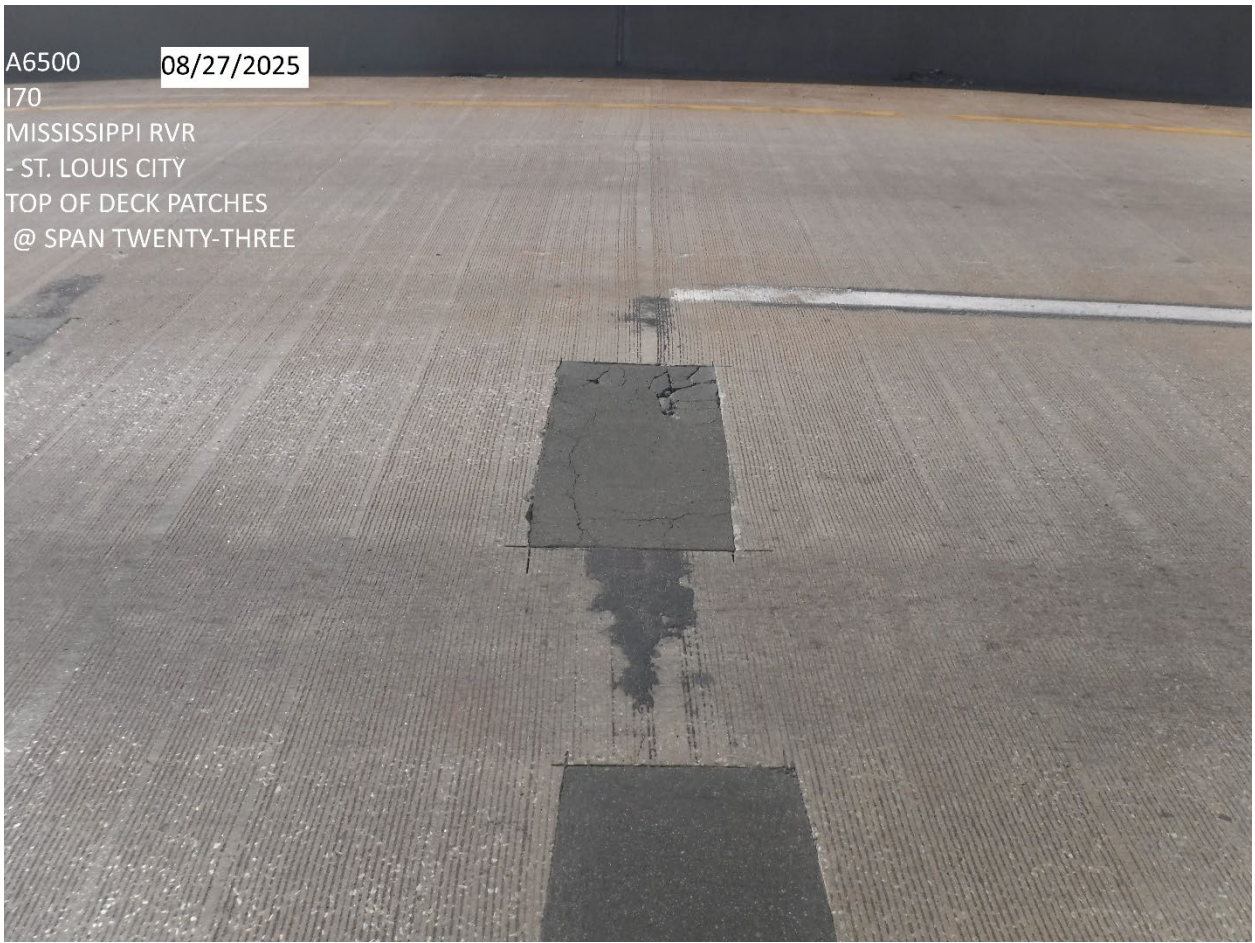
I70

MISSISSIPPI RVR

- ST. LOUIS CITY

TOP OF DECK PATCHES

@ SPAN TWENTY-THREE



A6500

08/27/2025

I70

MISSISSIPPI RVR

- ST. LOUIS CITY

TOP OF DECK PATCHES

@ SPAN TWENTY-THREE

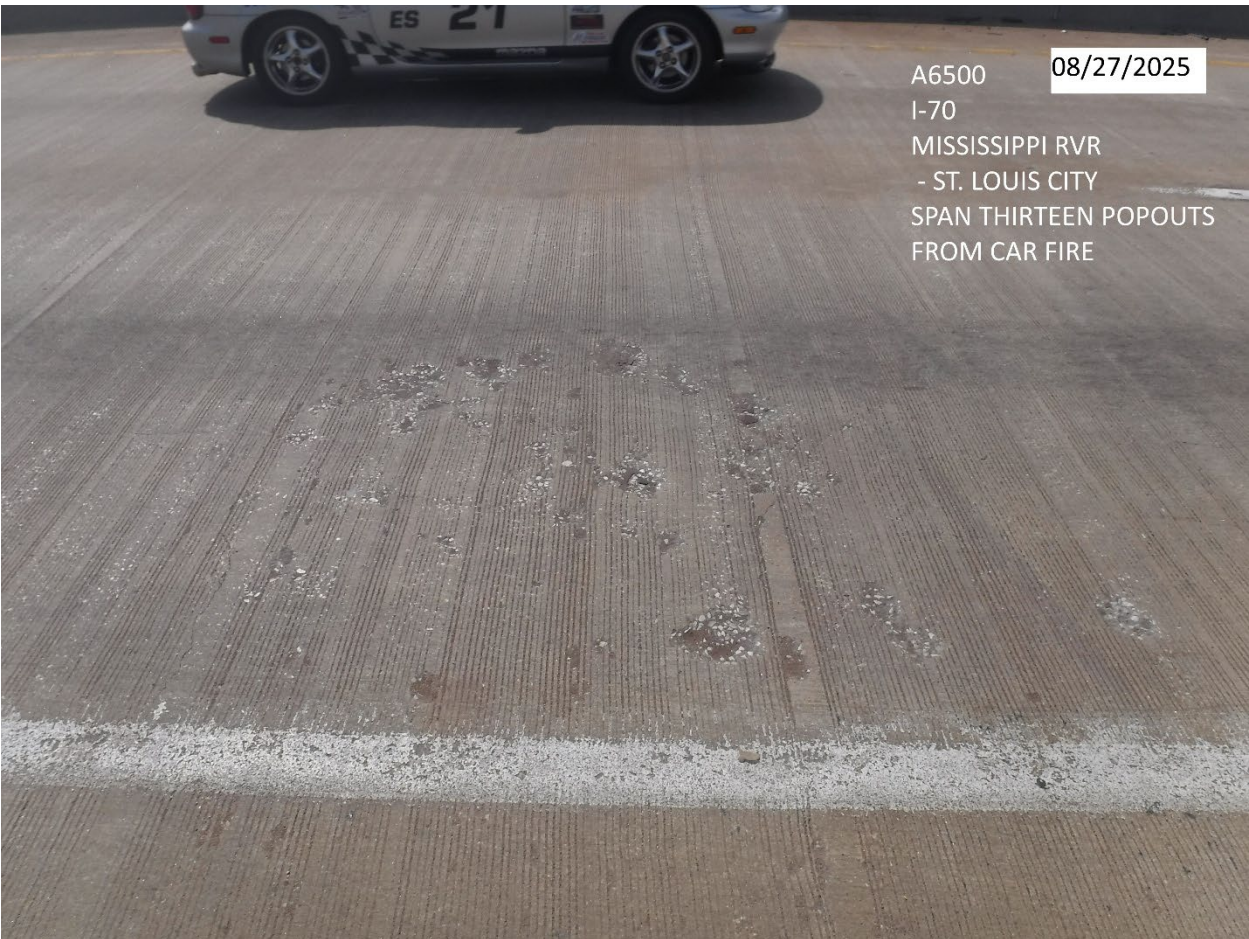


Deck



A6500
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
TOP OF DECK PATCHES
@ SPAN TWENTY-ONE

08/27/2025



A6500
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN THIRTEEN POPOUTS
FROM CAR FIRE

08/27/2025

Deck

A6500

08/27/2025

I-70

MISSISSIPPI RVR

- ST. LOUIS CITY

EIGHT FEET X TWELVE FEET

PATCH SPAN ELEVEN



A6500

08/27/2025

I-70

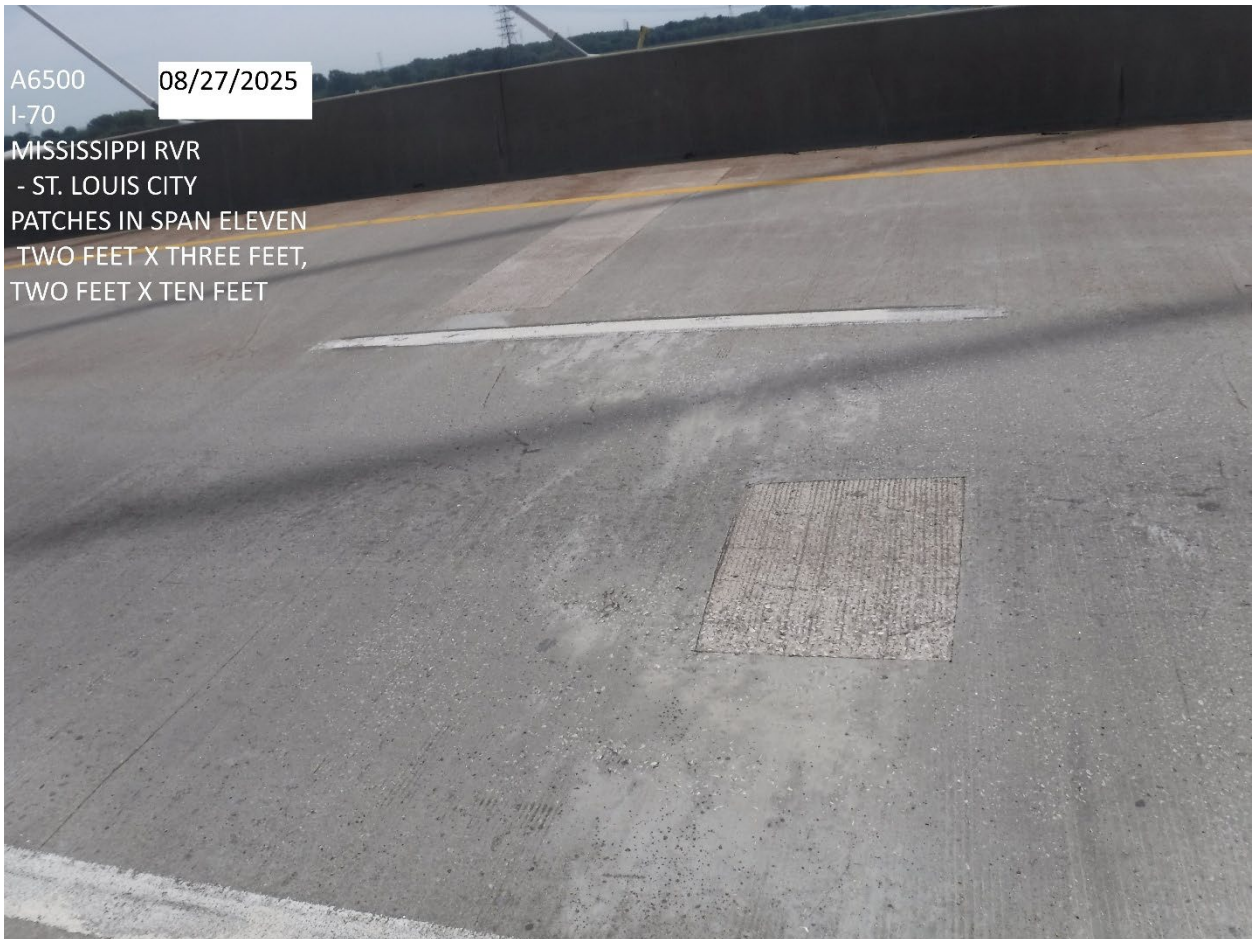
MISSISSIPPI RVR

- ST. LOUIS CITY

PATCHES IN SPAN ELEVEN

TWO FEET X THREE FEET,

TWO FEET X TEN FEET



Deck



Deck



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
EAST END BIRD NESTS



A6500 09/22/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
BIRD NESTS BENT TWELVE

Deck

A6500

08/28/2025

I70

MISSISSIPPI RVR - ST. LOUIS CITY

PATCHES WEST BOUND LANE SPAN 12



Deck



A6500

08/28/2025

I70

MISSISSIPPI RVR - ST. LOUIS CITY

PATCHES WEST BOUND LANE SPAN 12

Deck



A6500

08/28/2025

I70

MISSISSIPPI RVR - ST. LOUIS CITY

PATCHES WEST BOUND LANE SPAN 12

Deck

A3583 10/03/2025
IS70E
CST S 5TH ST
- ST. CHARLES COUNTY
EAST PAVEMENT/APPROACH JOINT



Deck

A3583 10/03/2025
IS70E
CST S 5TH ST
- ST. CHARLES COUNTY
EAST APPROACH



Deck

A3583

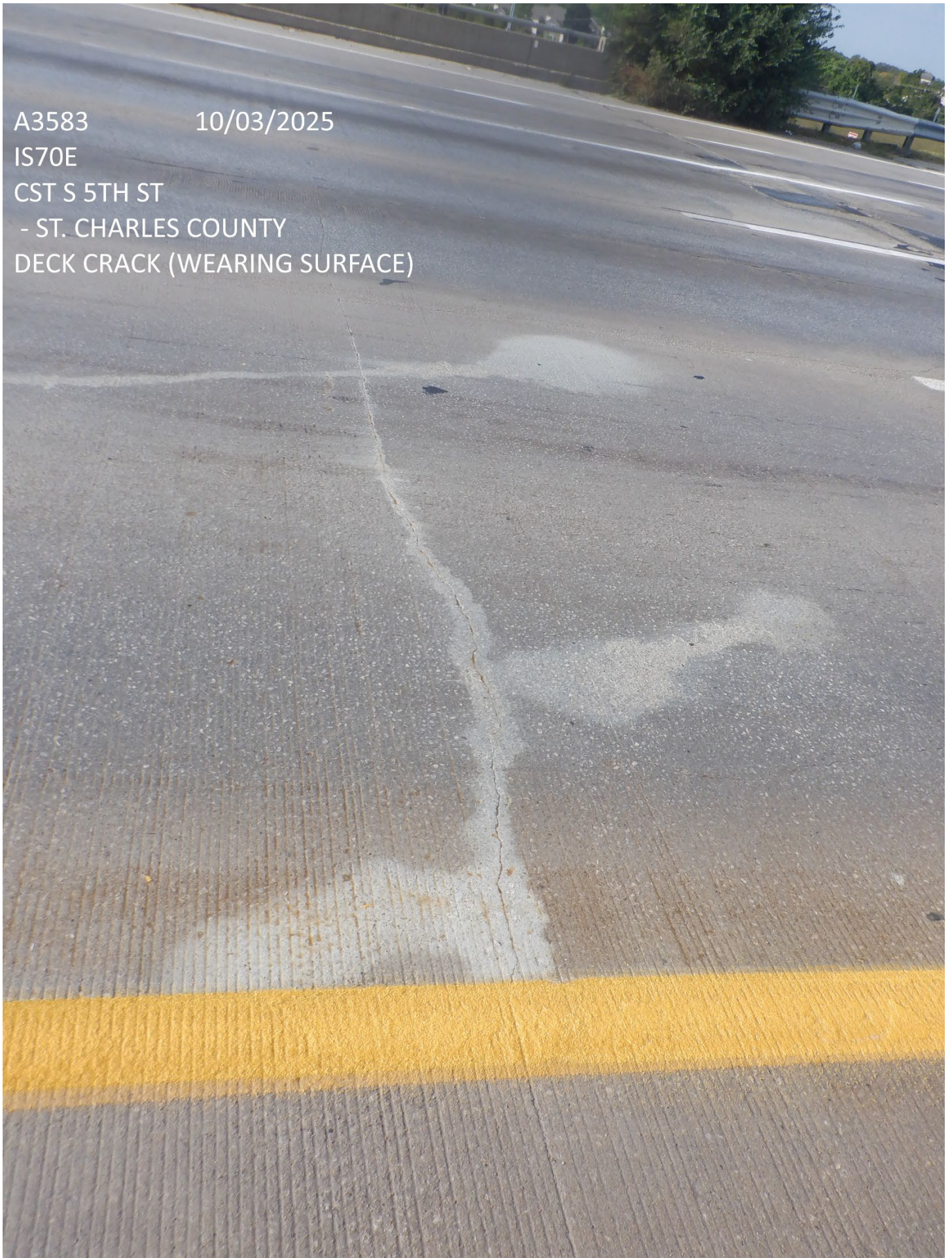
10/03/2025

IS70E

CST S 5TH ST

- ST. CHARLES COUNTY

DECK CRACK (WEARING SURFACE)



Barrier

A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
MEDIAN BARRIER
DETERIORATION



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
MEDIAN BARRIER
DETERIORATION

Barrier



A6500 08/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
LOOSE UTILITY
CONNECTION
SOUTH FACE



A6500 08/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
SIGN BROKEN OFF @
PIER 13 SOUTH FACE

Barrier

A6500 08/28/2025
170
MISSISSIPPI RVR - ST. LOUIS CITY
WOOD IN NORTH BARRIER



Barrier



Barrier



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
SPAN 10 NORTH BARRIER
DETERIORATION



A6500 08/27/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
BAR WALL VERTICAL
CRACK SPAN TWENTY-ONE

Joints

A6500 8-25-2025
I-70 / Mississippi Rvr
St. Louis City
EB Pier 2 Expansion Jt



Joints



Joints



A6500 8-25-2025
I-70 / Mississippi Rvr
St. Louis City
EB Pier 5 Expansion Jt

Joints



A6500 8-25-2025
I-70 / Mississippi Rvr
St. Louis City
EB Pier 5 Expansion Jt Gap



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
PIER FIVE EXPOSED
JOINT GAP IN LANE

Joints

A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SOUTH END @ PIER TWO



Joints

A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SOUTH END @ PIER TWO



Joints

A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SOUTH END @ PIER
TWO RUSTY CABLE ENDS



Joints



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
JOINT @ PIER FIVE SOUTH END

Joints



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
JOINT @ PIER FIVE SOUTH END

Joints



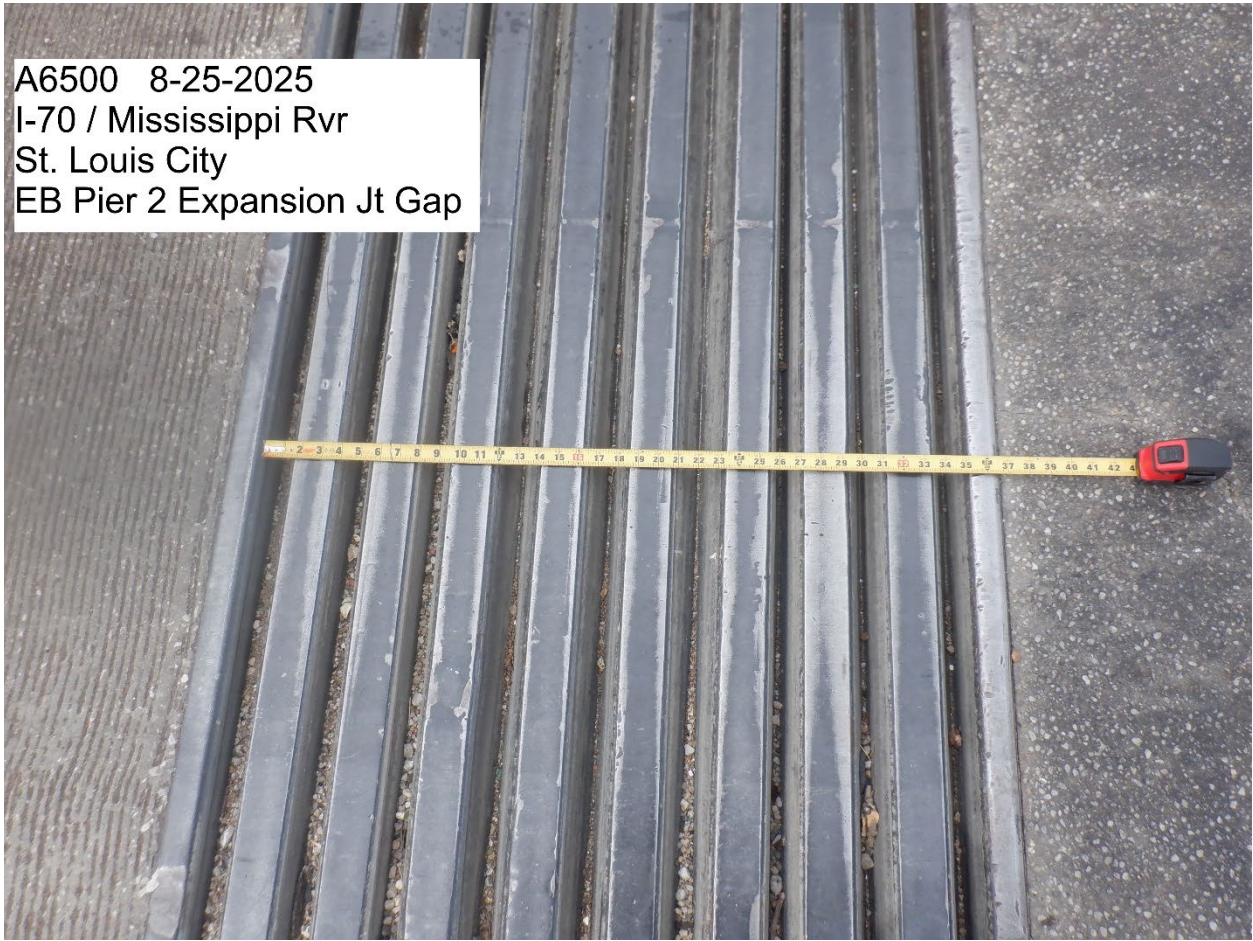
A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
JOINT @ PIER FIVE SOUTH END



A6500 8-25-2025
I-70 / Mississippi Rvr
St. Louis City
EB Pier 10 Expansion Jt

Joints

A6500 8-25-2025
I-70 / Mississippi Rvr
St. Louis City
EB Pier 2 Expansion Jt Gap



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
PIER TEN EXPANSION
JOINT EAST BOUND



Joints



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
PIER TEN EXPANSION
JOINT EAST BOUND



A6500 8-26-2025
I-70 / Mississippi Rvr
St. Louis City
EB Pier 13 Expansion Jt

Joints



A6500 8-26-2025
I-70 / Mississippi Rvr
St. Louis City
EB Pier 13 Expansion Jt Gap

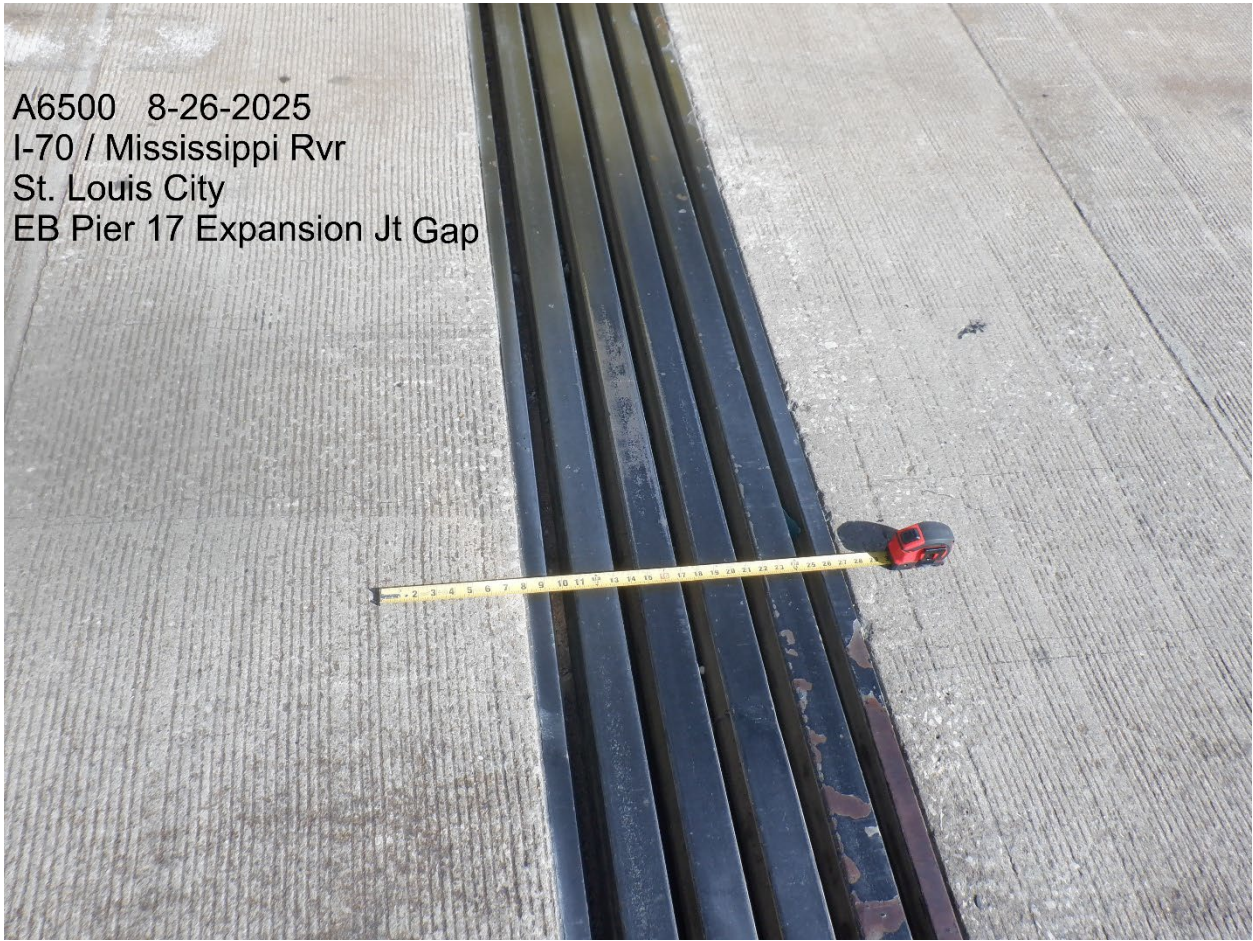
Joints



A6500 8-26-2025
I-70 OVER MISSISSIPPI RVR
ST. LOUIS CITY
GAP BETWEEN SPANS AT PIER 21
SOUTH END

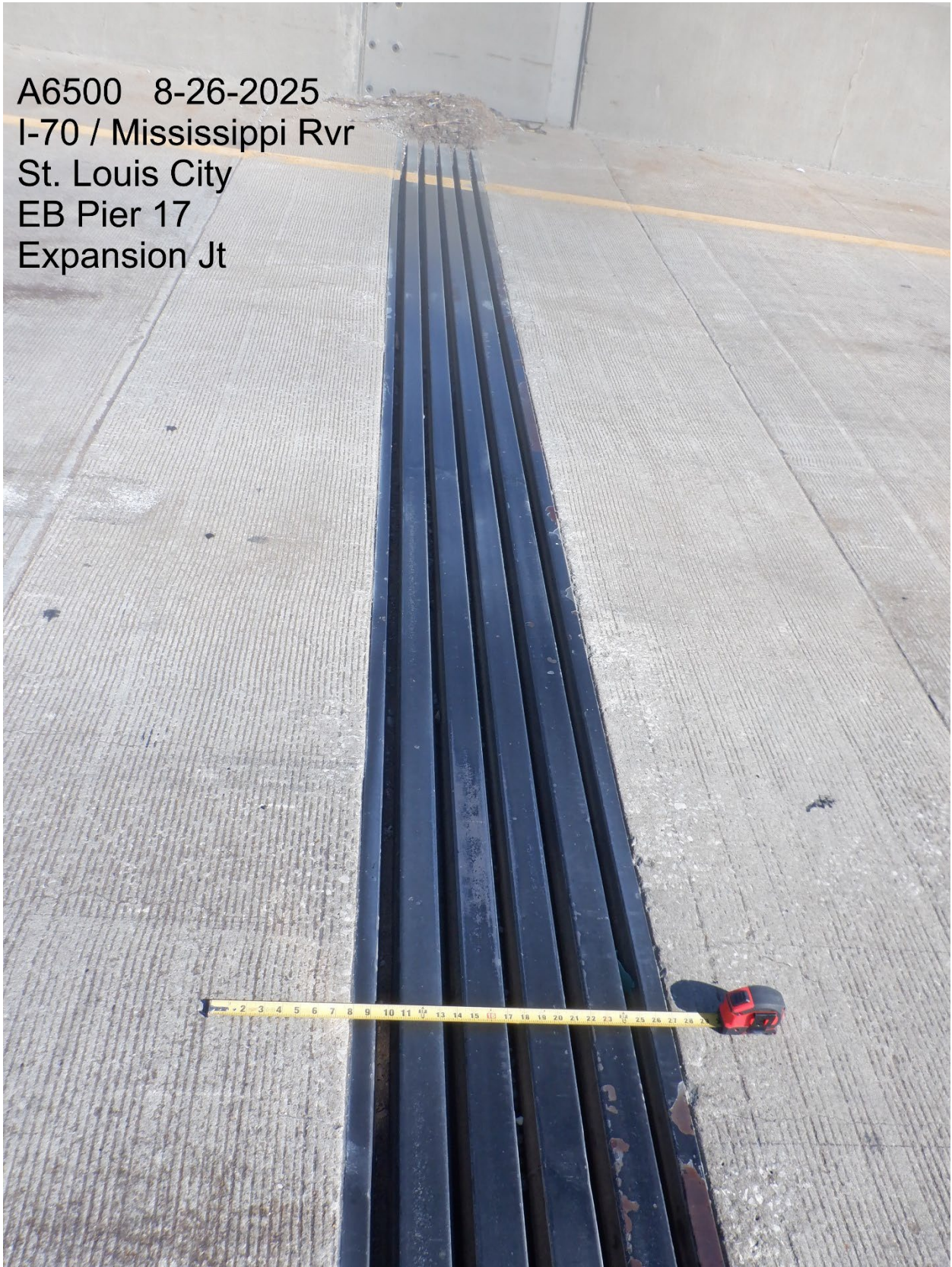
Joints

A6500 8-26-2025
I-70 / Mississippi Rvr
St. Louis City
EB Pier 17 Expansion Jt Gap



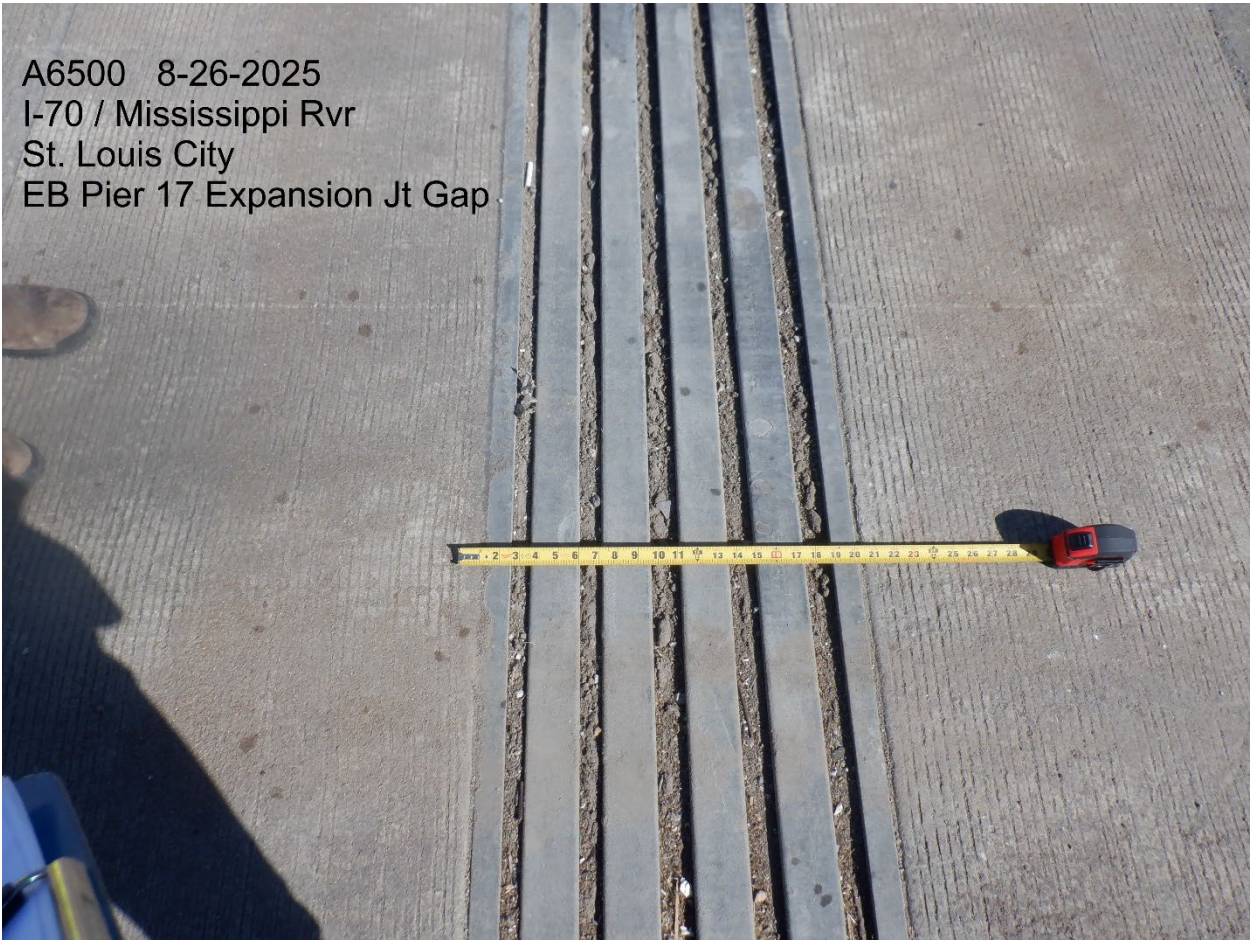
Joints

A6500 8-26-2025
I-70 / Mississippi Rvr
St. Louis City
EB Pier 17
Expansion Jt



Joints

A6500 8-26-2025
I-70 / Mississippi Rvr
St. Louis City
EB Pier 17 Expansion Jt Gap



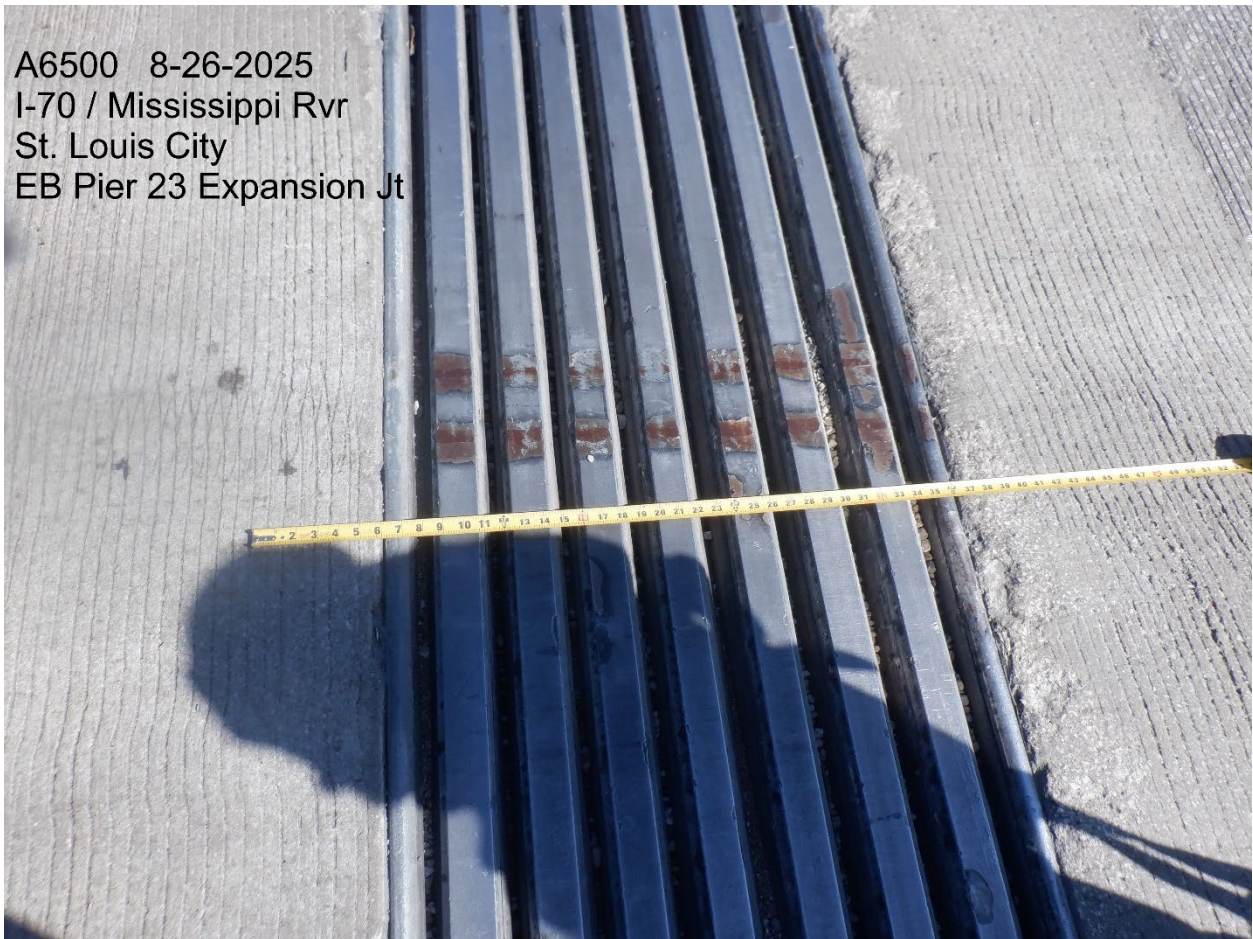
A6500 08/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
PIER SOUTH END
OF EXPOSED JOINT



Joints



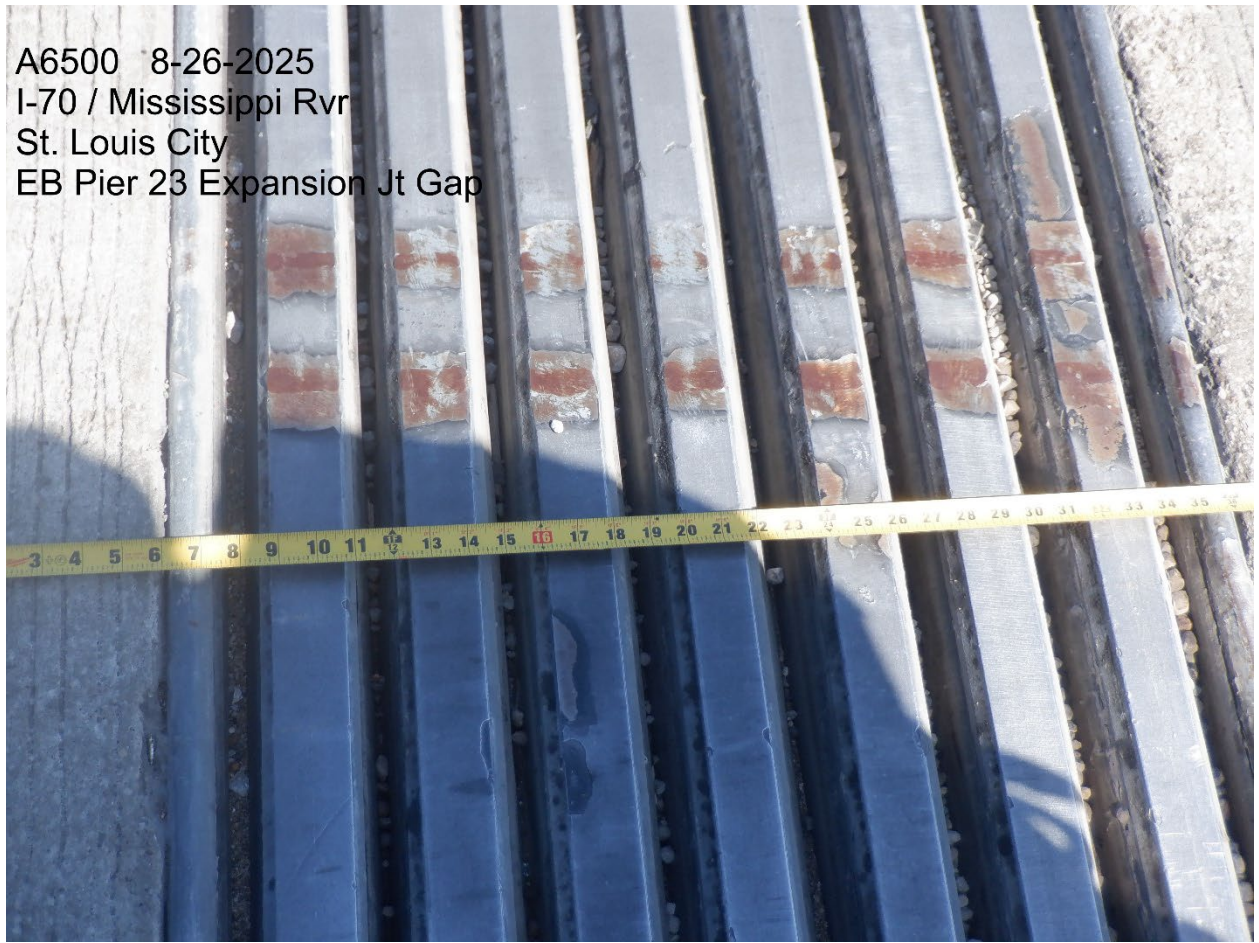
A6500 08/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
PIER SOUTH END
OF EXPOSED JOINT



A6500 8-26-2025
I-70 / Mississippi Rvr
St. Louis City
EB Pier 23 Expansion Jt

Joints

A6500 8-26-2025
I-70 / Mississippi Rvr
St. Louis City
EB Pier 23 Expansion Jt Gap

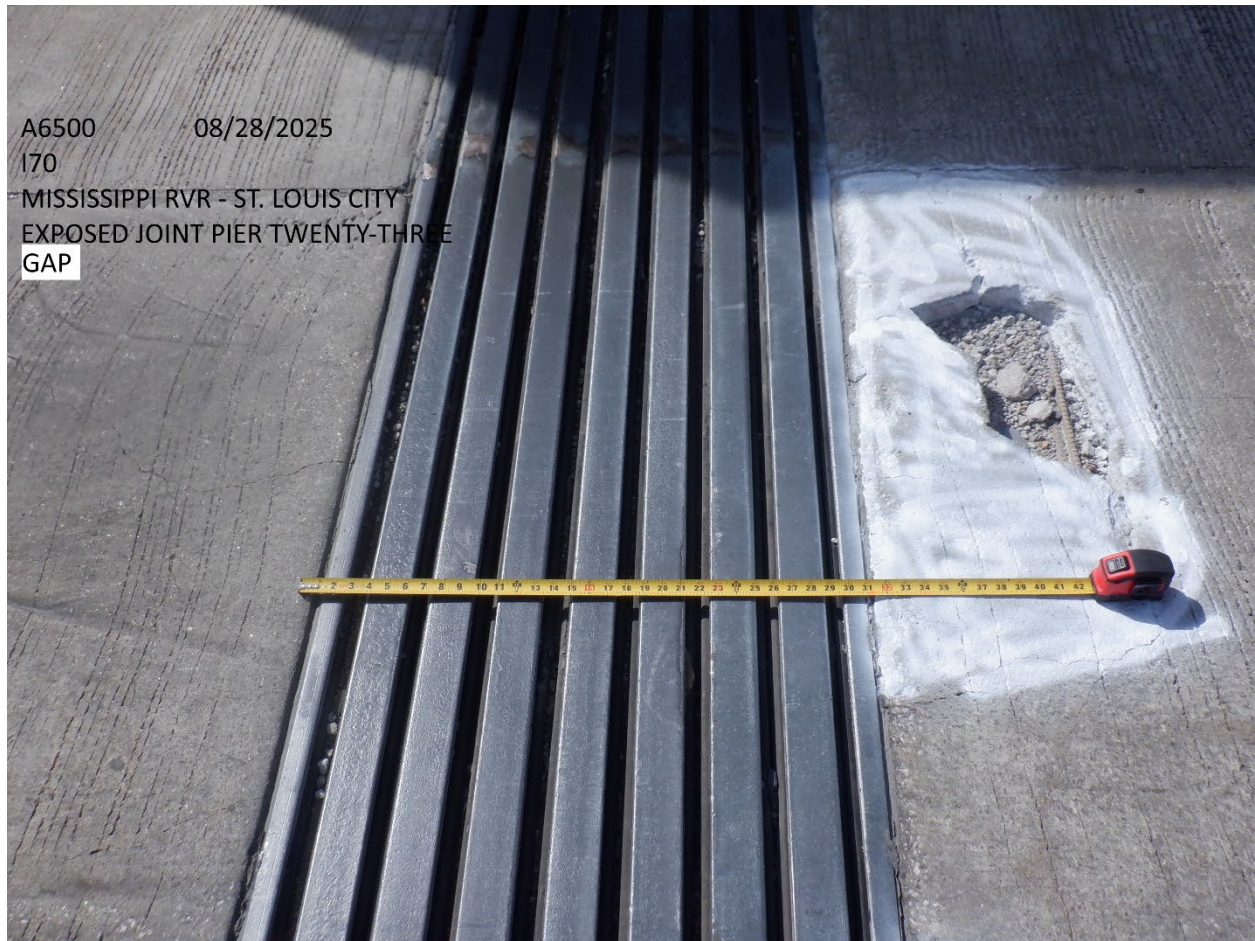


Joints

A6500 8-26-2025
I-70 / Mississippi Rvr
St. Louis City
EB Pier 23 Expansion Jt



Joints



A6500 08/28/2025
170
MISSISSIPPI RVR - ST. LOUIS CITY
EXPOSED JOINT PIER TWENTY-THREE
GAP

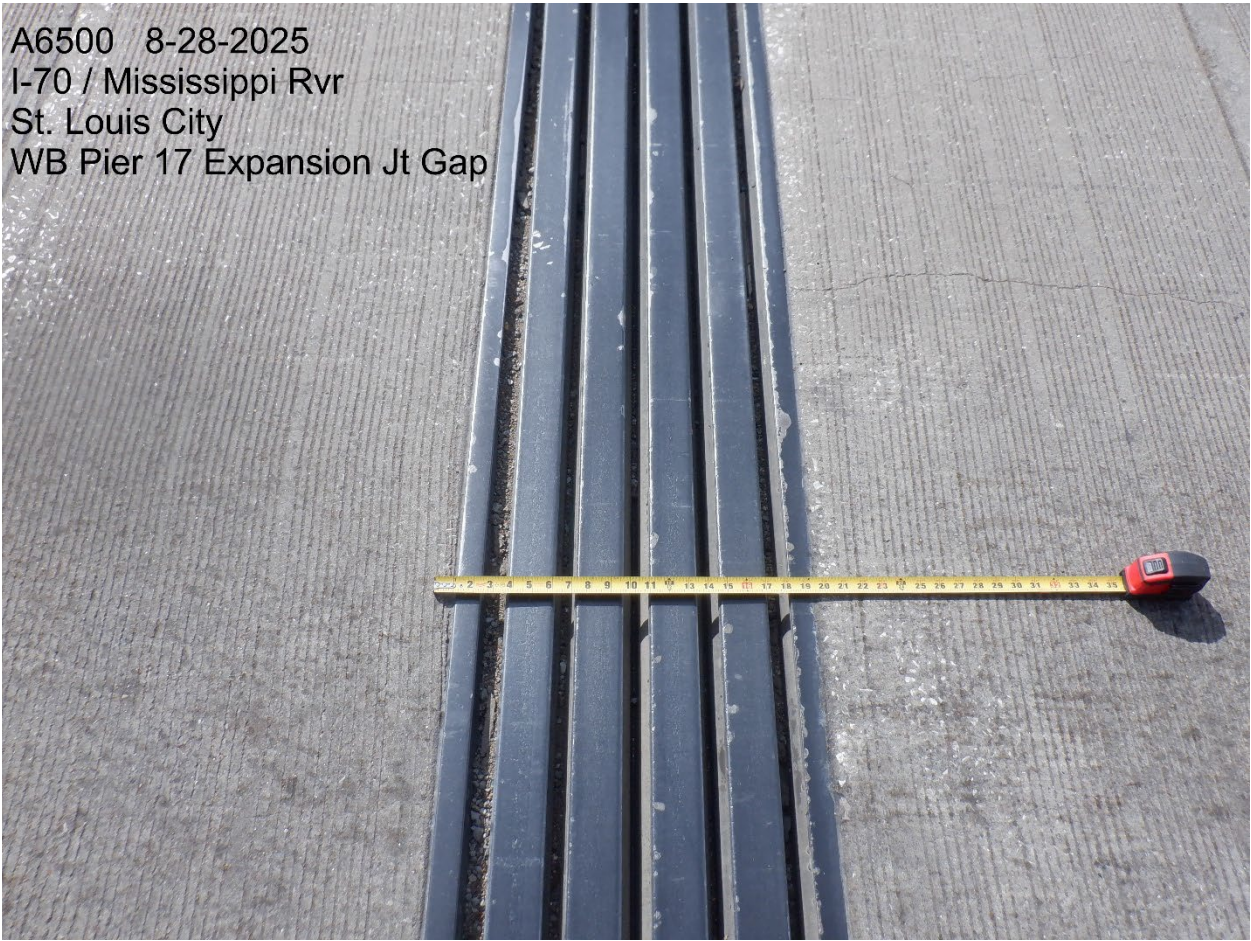
Joints



A6500 8-28-2025
I-70 / Mississippi Rvr
St. Louis City
WB Pier 17 Expansion Jt

Joints

A6500 8-28-2025
I-70 / Mississippi Rvr
St. Louis City
WB Pier 17 Expansion Jt Gap



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
CONCRETE @ EXPOSED JOINT
BENT 17 IN GOOD CONDITION

Joints



A6500 08/28/2025
170
MISSISSIPPI RVR - ST. LOUIS CITY
WEST BOUND PIER 13 EXPOSED
JOINT REPAIRS



A6500 08/28/2025
170
MISSISSIPPI RVR - ST. LOUIS CITY
WEST BOUND PIER 13 EXPOSED JOINT
REPAIRS

Joints



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
UNDERSIDE OF JOINT @ PIER 13



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
UTILITY @ PIER 13 WEST BOUND LANE

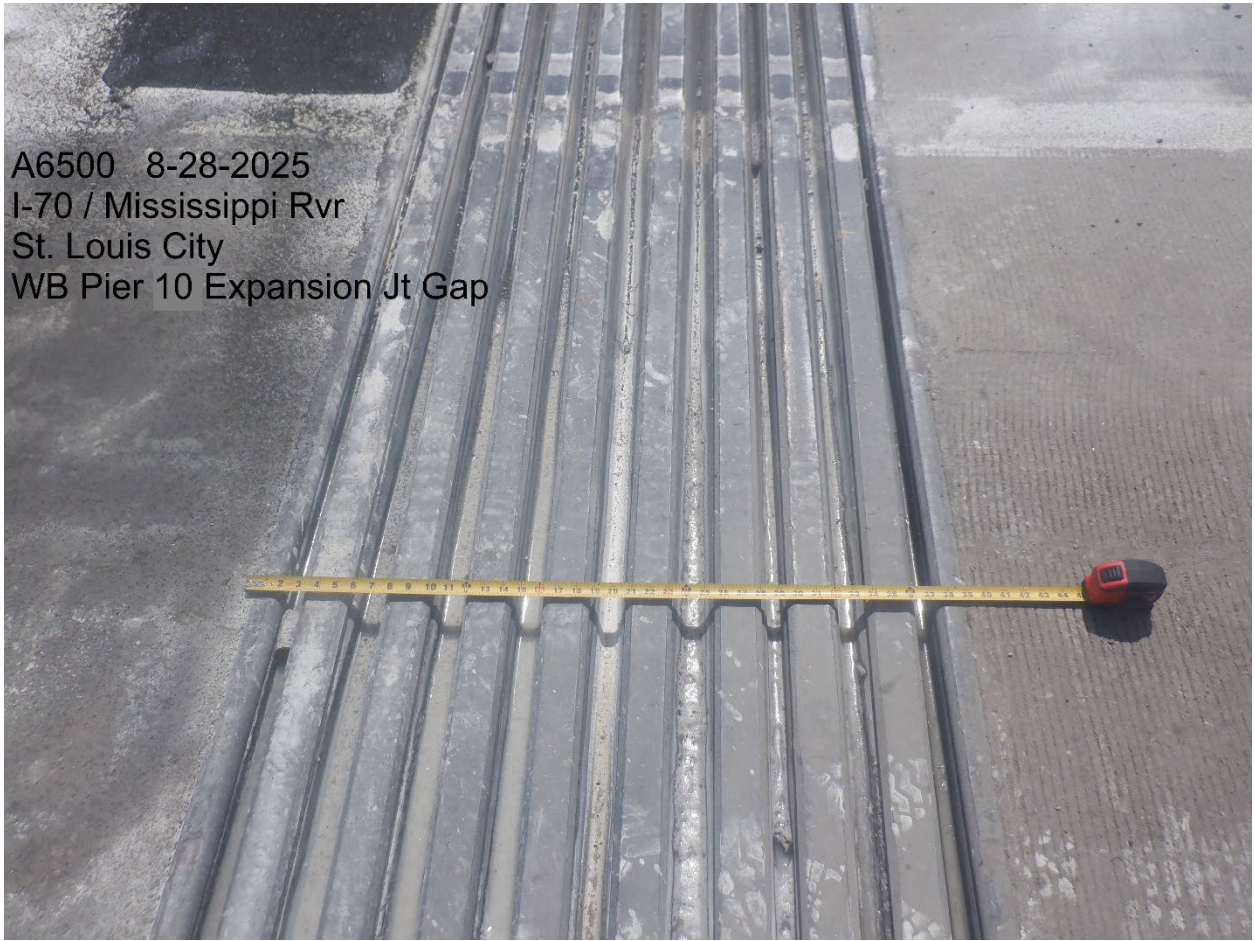
Joints



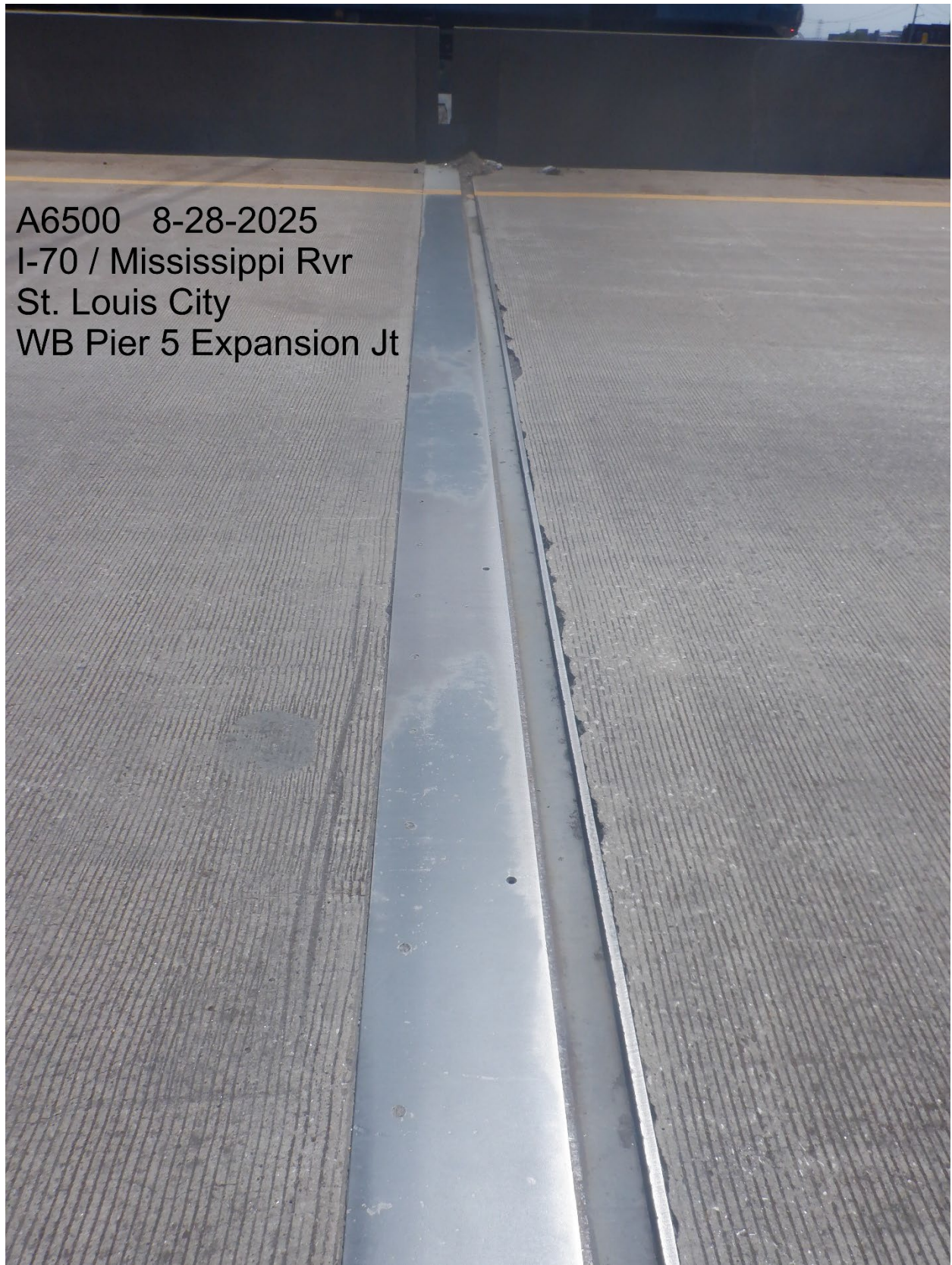
A6500 8-28-2025
I-70 / Mississippi Rvr
St. Louis City
WB Pier 10 Expansion Jt

Joints

A6500 8-28-2025
I-70 / Mississippi Rvr
St. Louis City
WB Pier 10 Expansion Jt Gap



Joints



A6500 8-28-2025
I-70 / Mississippi Rvr
St. Louis City
WB Pier 5 Expansion Jt

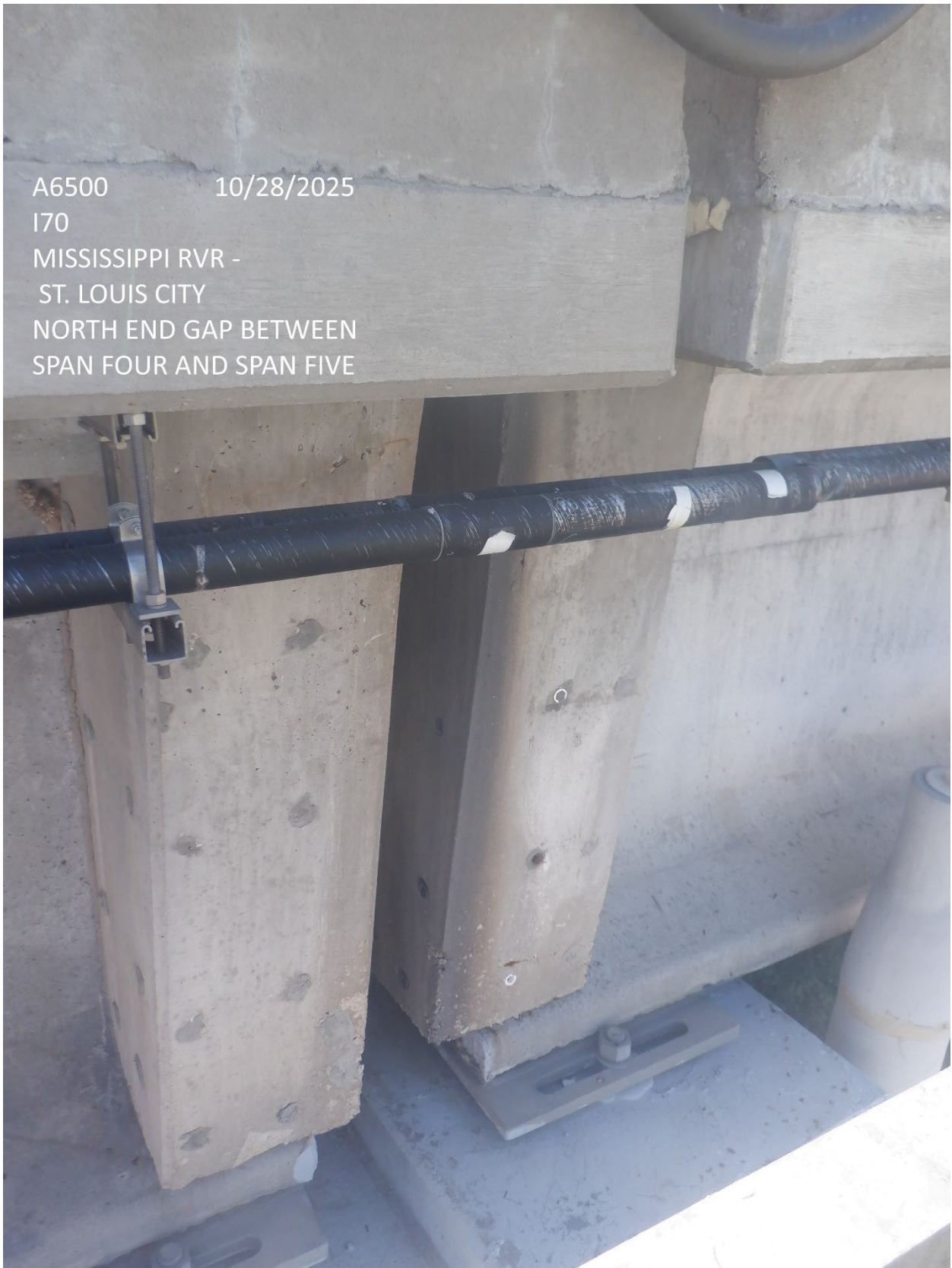
Joints



A6500 10/28/2025
170
MISSISSIPPI RVR -
ST. LOUIS CITY
PIER FIVE UTILITY
CROSSING JOINT

Joints

A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
NORTH END GAP BETWEEN
SPAN FOUR AND SPAN FIVE



Joints



A6500 10/28/2025
170
MISSISSIPPI RVR -
ST. LOUIS CITY
UTILITY ATTACHMENTS
@ JOINT UNDER BRIDGE
PIER FIVE

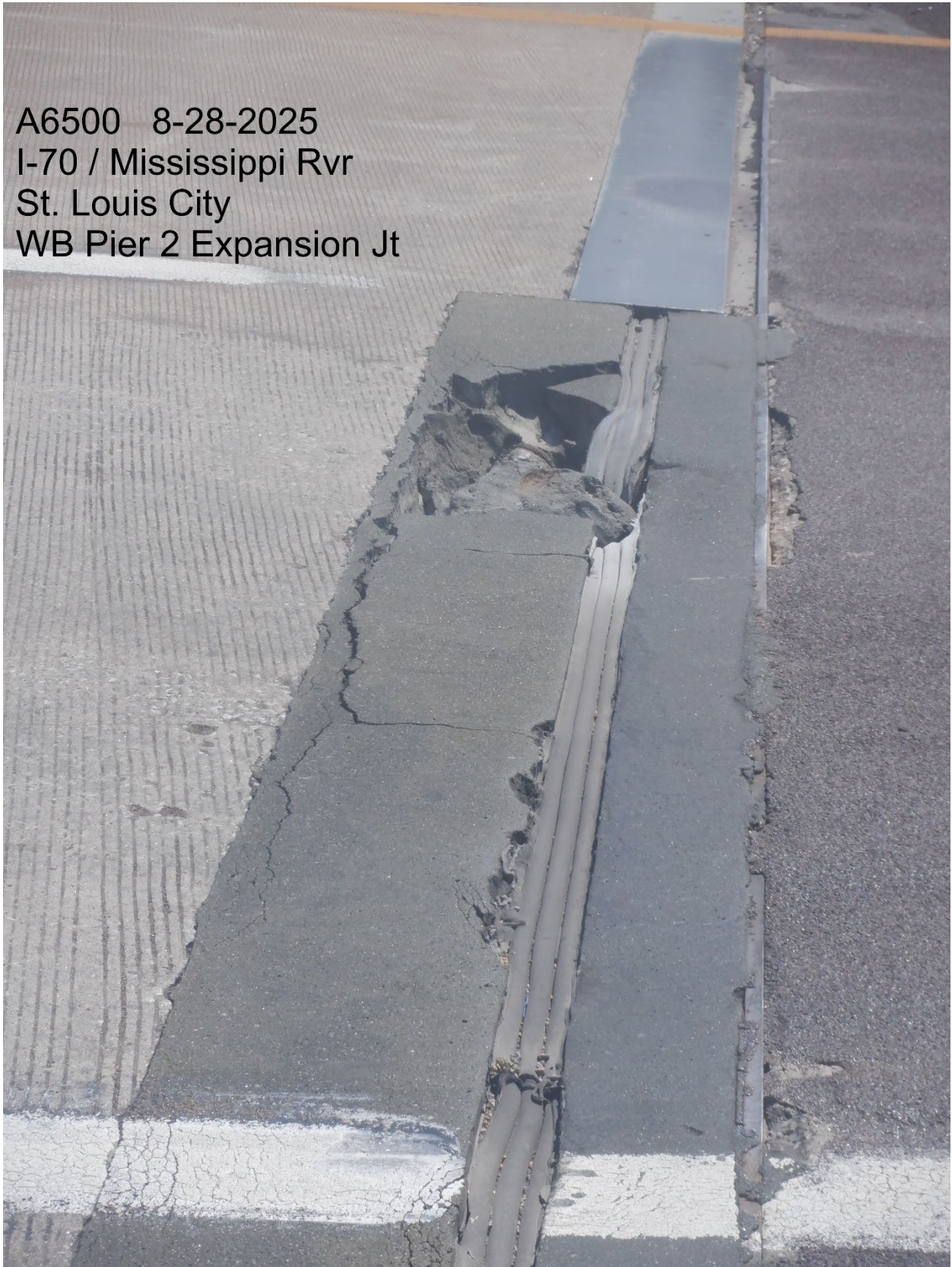
Joints



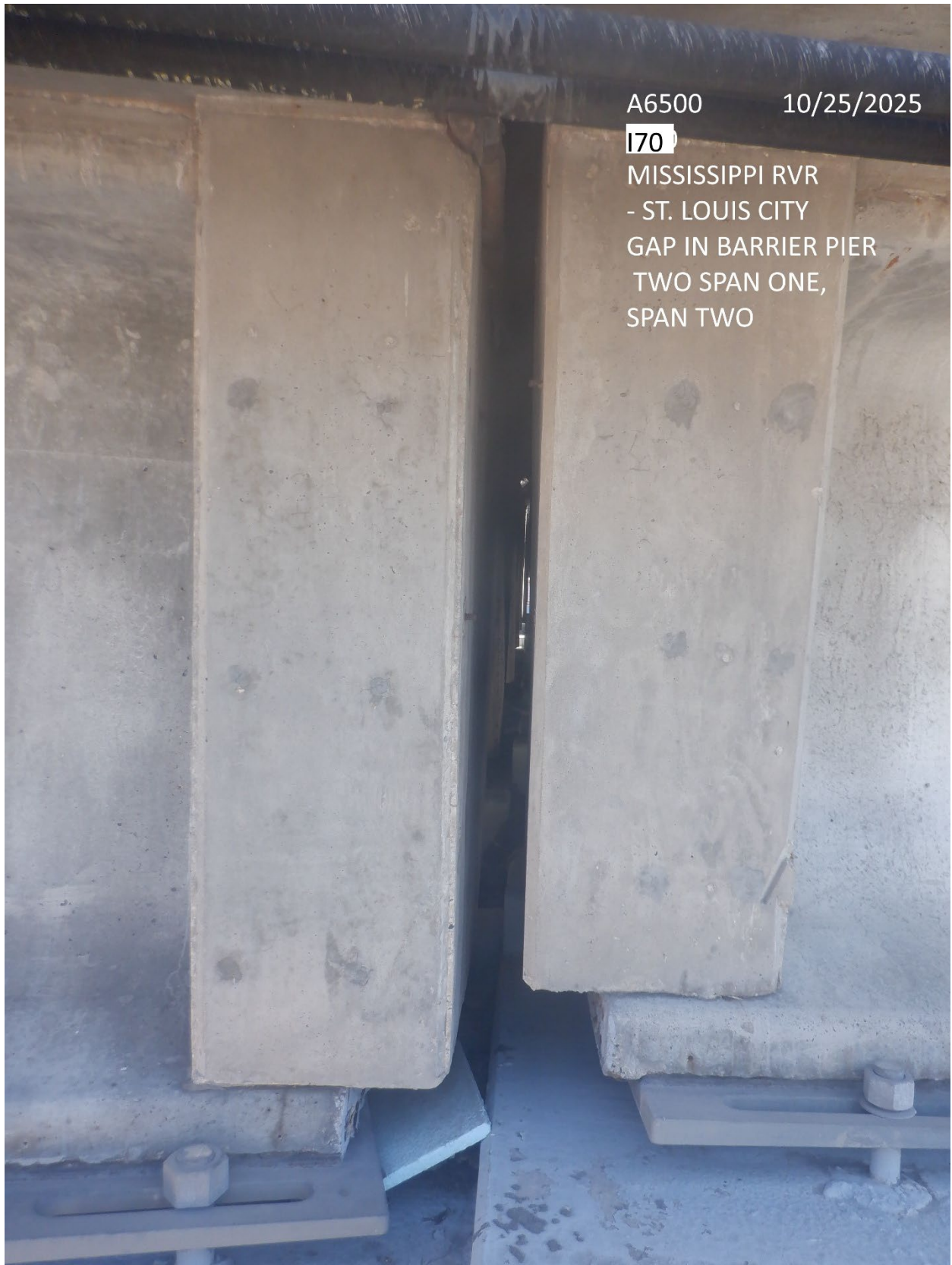
A6500 8-28-2025
I-70 / Mississippi Rvr
St. Louis City
WB Pier 2 Expansion Jt

Joints

A6500 8-28-2025
I-70 / Mississippi Rvr
St. Louis City
WB Pier 2 Expansion Jt



Joints



A6500

10/25/2025

170

MISSISSIPPI RVR
- ST. LOUIS CITY
GAP IN BARRIER PIER
TWO SPAN ONE,
SPAN TWO

Joints



A4729 09/04/2025
CSTSALT RIVER RDE
MO 79
- ST. CHARLES COUNTY
EAST EXPOSED JOINT

Joints

A4729 09/04/2025
CSTSALT RIVER RDE
MO 79
- ST. CHARLES COUNTY
WEST EXPOSED JOINT



Joints



A6500 08/26/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
BAY FIVE BOTTOM
OF EXPOSED JOINT



A6500 08/27/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
JOINT TWO LARGE
SPALL CENTER LANE

Joints

A3583 10/03/2025
IS70E
CST S 5TH ST
- ST. CHARLES COUNTY
WEST DECK/APPROACH JOINT



Joints



A6500 09/22/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
BOTTOM OF MODULAR JOINT
AT PIER TEN LOOKING SOUTH



A6500 09/22/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
BOTTOM OF FINGER JOINT
@ PIER TEN POUNDING
(BEARING PADS KEEP FALLING OUT)

Joints



A6500 09/22/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
BOTTOM OF FINGER JOINT
@ PIER TEN POUNDING
(BEARING PADS KEEP FALLING OUT)

Superstructure



Superstructure



Superstructure

A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPALL/DELAMINATION @
ENCASEMENT PIER TWO



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
GIRDER NINE SPAN TWO
@ PIER TWO IN
BOTTOM FLANGE

Superstructure



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
GIRDER NINE SPAN TWO
@ PIER TWO IN
BOTTOM FLANGE

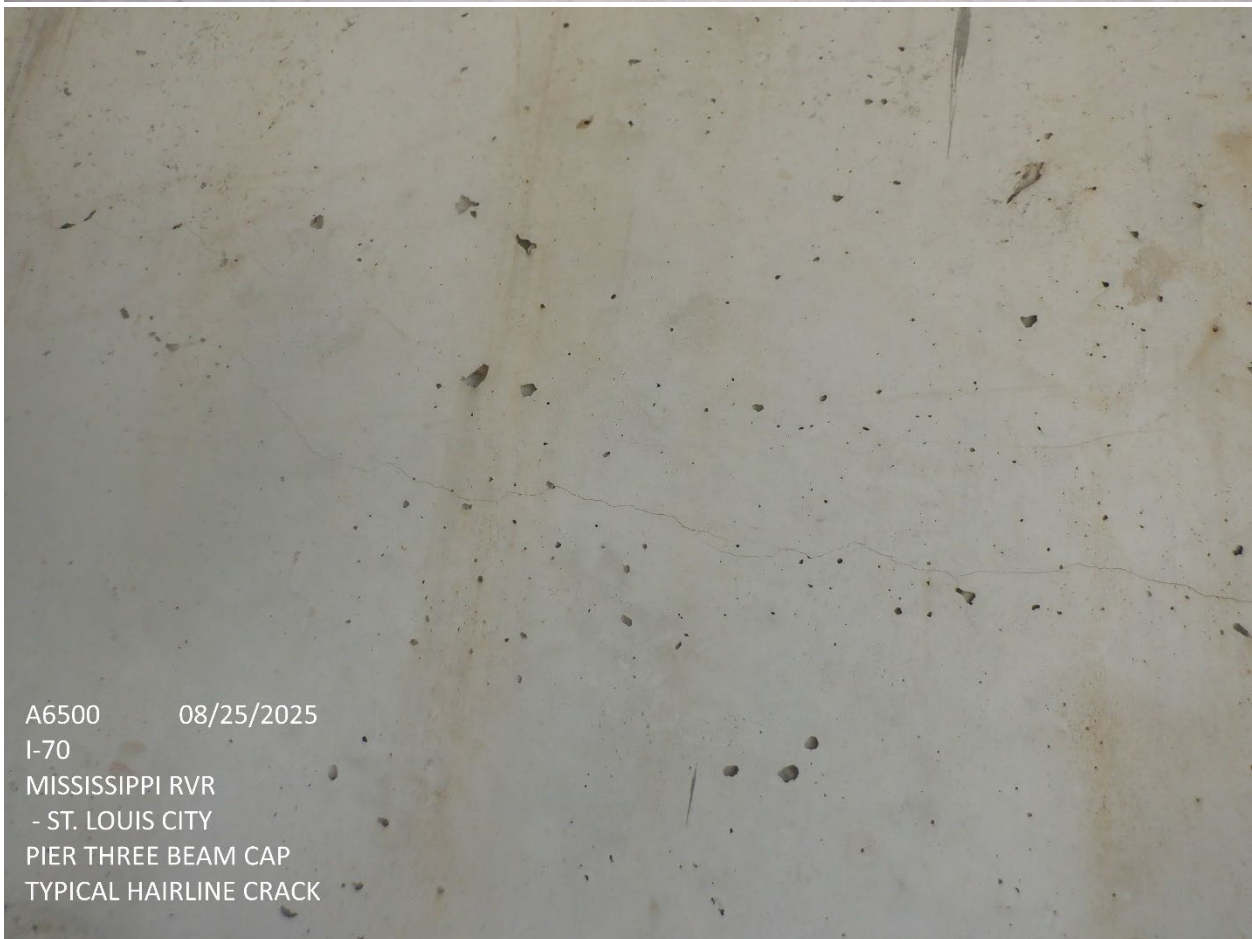


A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN TWO @ PIER THREE
- GIRDER TWELVE SPALL
IN TOP FLANGE

Superstructure



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN TWO @ PIER THREE
- GIRDER TEN HAIRLINE
CRACK IN WEB



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
PIER THREE BEAM CAP
TYPICAL HAIRLINE CRACK

Superstructure

A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
PIER THREE SOUTH FACE
VERTICAL CRACK IN BEAM CAP



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
TYPICAL CRACK @ PIER FOUR
ENCASEMENT



Superstructure



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN FOUR GIRDER TEN
TOP FLANGE CRACK
WITH/EFFLORESCENCE

Superstructure



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN FOUR GIRDER
TEN TOP FLANGE CRACK
WITH EFFLORESCENCE



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN FOUR GIRDER TEN
EAST FACE CRACK
@ ENCASEMENT

Superstructure



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
PIER FIVE BACK OF ENCASEMENT
IN SPAN FIVE VERTICAL CRACK



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN FOUR @ PIER FIVE
GIRDER TEN TOP FLANGE
CRACK W/EFFLORESCENCE

Superstructure



Superstructure



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
CHIPPED AREA @ GIRDER
END SPAN FOUR @ PIER FIVE



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN FIVE PIER FIVE
ENCASEMENT CRACK,
RUST @ GIRDER END

Superstructure



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN FIVE PIER FIVE
ENCASEMENT CRACK,
RUST @ GIRDER END



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN FIVE PIER FIVE
ENCASEMENT CRACK,
RUST @ GIRDER END

Superstructure



A6500 08/25/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
PIER 10 CHIPPED GIRDSERS



A6500 08/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
PIER 10 ENCASEMENT

Superstructure



A6500 08/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
PIER 10 ENCASEMENT

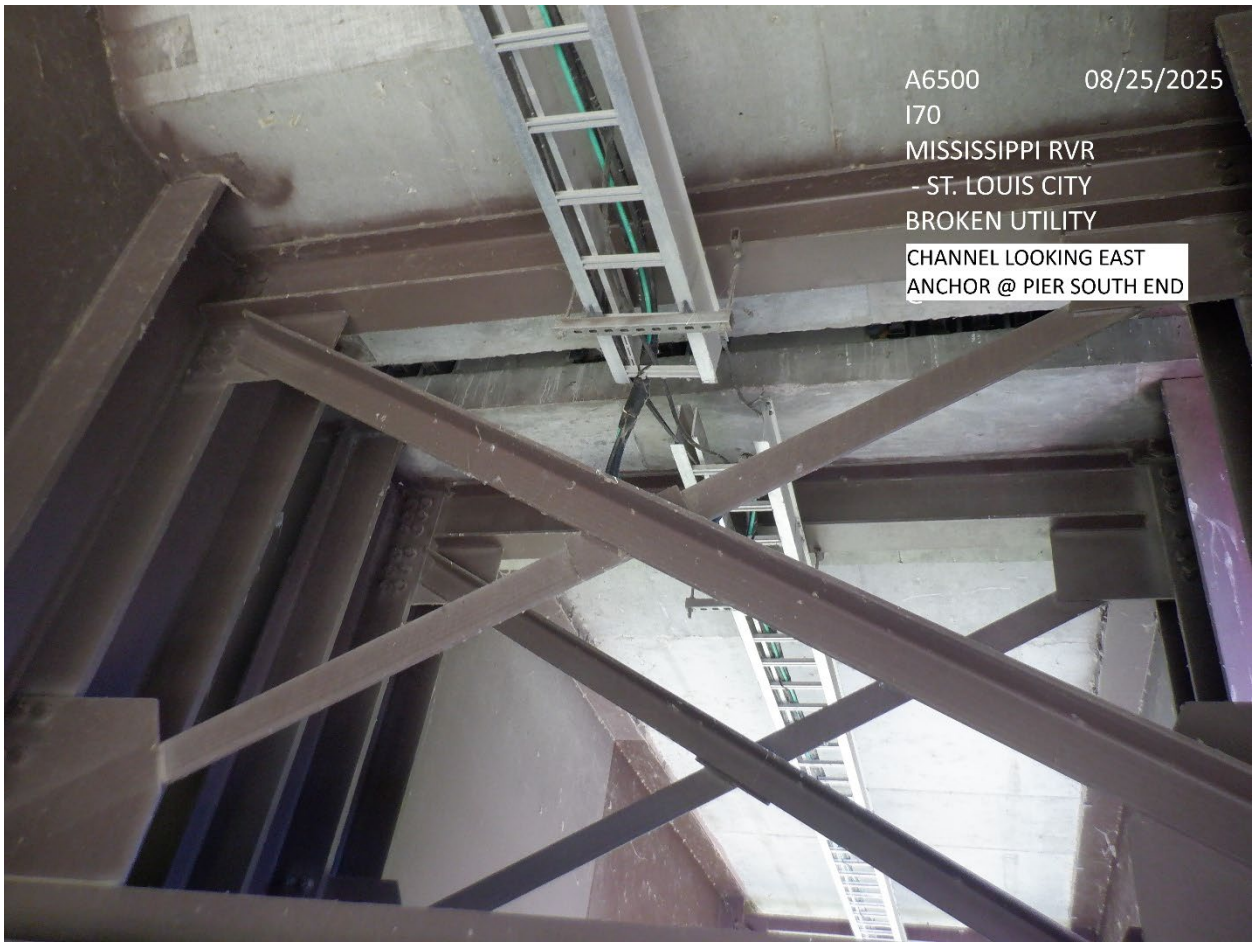


A6500 08/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
PIER 10 BEARING

Superstructure



Superstructure



A6500 08/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
BROKEN UTILITY
CHANNEL LOOKING EAST
ANCHOR @ PIER SOUTH END



A6500 08/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
WEST SIDE OF
PIER 21 EAST BOUND

Superstructure



A6500 08/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
BEARING @ PIER 21



A6500 08/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
RUSTING BEARING
CHANNEL @ PIER SOUTH END

Superstructure



A6500 08/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
RUSTING BEARING
PLATE @ PIER SOUTH END



A6500 08/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
PIER PAINT PEELING
ON BEARINGS

Superstructure



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
SOLE PLATE RUSTY @ PIER
TWENTY-THREE WEST SIDE



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
FINE CRACK EAST FACE @ PIER 17

Superstructure



Superstructure



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
PAINT PEELING EAST SIDE OF PIER 13



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
GENERAL BEARINGS PIER 13

Superstructure



Superstructure



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
CABLES @ PIN PIER 13

Superstructure



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
SEAL PEELING ON PIER 10 CAP

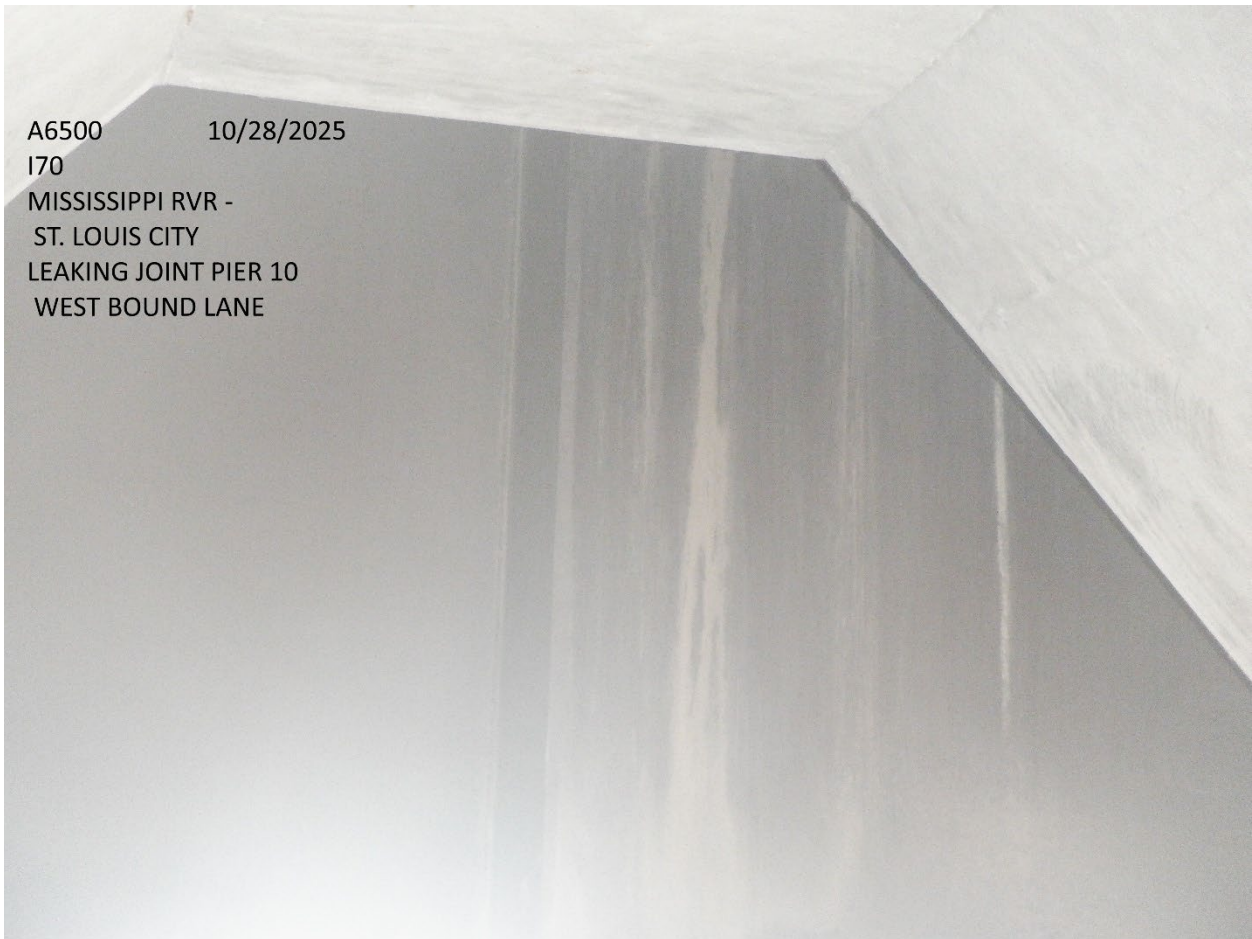


A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
PIER 10 CHIPPED GIRDER ENDS

Superstructure



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
PIER 10 CHIPPED GIRDER ENDS



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
LEAKING JOINT PIER 10
WEST BOUND LANE

Superstructure



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
KEEPER BROKEN 2ND
BEARING FROM NORTH
@ PIER 10

Superstructure



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
SOLE PLATE HITTING CONCRETE
2ND BEARING FROM NORTH
@ PIER 10

Superstructure



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
PIER FIVE GIRDER END
RUSTY WEST BOUND LANE



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
PIER FIVE GIRDER END
RUSTY WEST BOUND LANE

Superstructure



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
PIER FIVE RUST @
SOLE PLATE WELD



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
PIER FIVE RUST @
SOLE PLATE WELD

Superstructure



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
WEST FACE
RUST ON SOLE PLATE
@ PIER FIVE



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
PIER FIVE WEST FACE CRACK
IN ENCASMENT

Superstructure



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
PIER FIVE WEST FACE
RUSTY SOLE PLATE WELD



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
PIER FIVE WEST FACE CRACK
IN TOP FLANGE GIRDER TWO

Superstructure



A6500 10/28/2025
170
MISSISSIPPI RVR -
ST. LOUIS CITY
PIER FIVE WEST FACE CRACK
IN TOP FLANGE GIRDER TWO



A6500 10/28/2025
170
MISSISSIPPI RVR -
ST. LOUIS CITY
PIER FIVE WEST FACE RUST
FROM ENCASEMENT ON GIRDER

Superstructure



A6500 10/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
BEARING @ PIER TWO



A6500 10/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
RUSTY GIRDER ENDS
@ PIER TWO

Superstructure



A6500 10/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
DIAGONAL CRACK IN
GIRDER ONE SPAN
ONE WITH/EFFLORESCENCE



A6500 10/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
GIRDER 10 ENCASEMENT
DELAMINATION @
ABUTMENT ONE

Superstructure

A6500 10/25/2025

I70

MISSISSIPPI RVR

- ST. LOUIS CITY

LOOSE DIAPHRAGM

BRACKET SPAN ONE

GIRDER TEN



A6500 10/25/2025

I70

MISSISSIPPI RVR

- ST. LOUIS CITY

LOOSE DIAPHRAGM

BRACKET SPAN ONE

GIRDER TEN

Superstructure



A6500 10/25/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
GIRDER SIX COLUMN
DAMAGE @
BOTTOM OF GIRDER



A6500 08/26/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
GIRDER EIGHTSOLE PLATE
WELD WITH LIGHT RUST

Superstructure



A6500 08/26/2025
170
MISSISSIPPI RVR
- ST. LOUIS CITY
GIRDER SEVEN BEARING



A6500 08/26/2025
170
MISSISSIPPI RVR
- ST. LOUIS CITY
BOTTOM OF GIRDER
SIX - PAINT PEELING

Superstructure



Superstructure



Superstructure

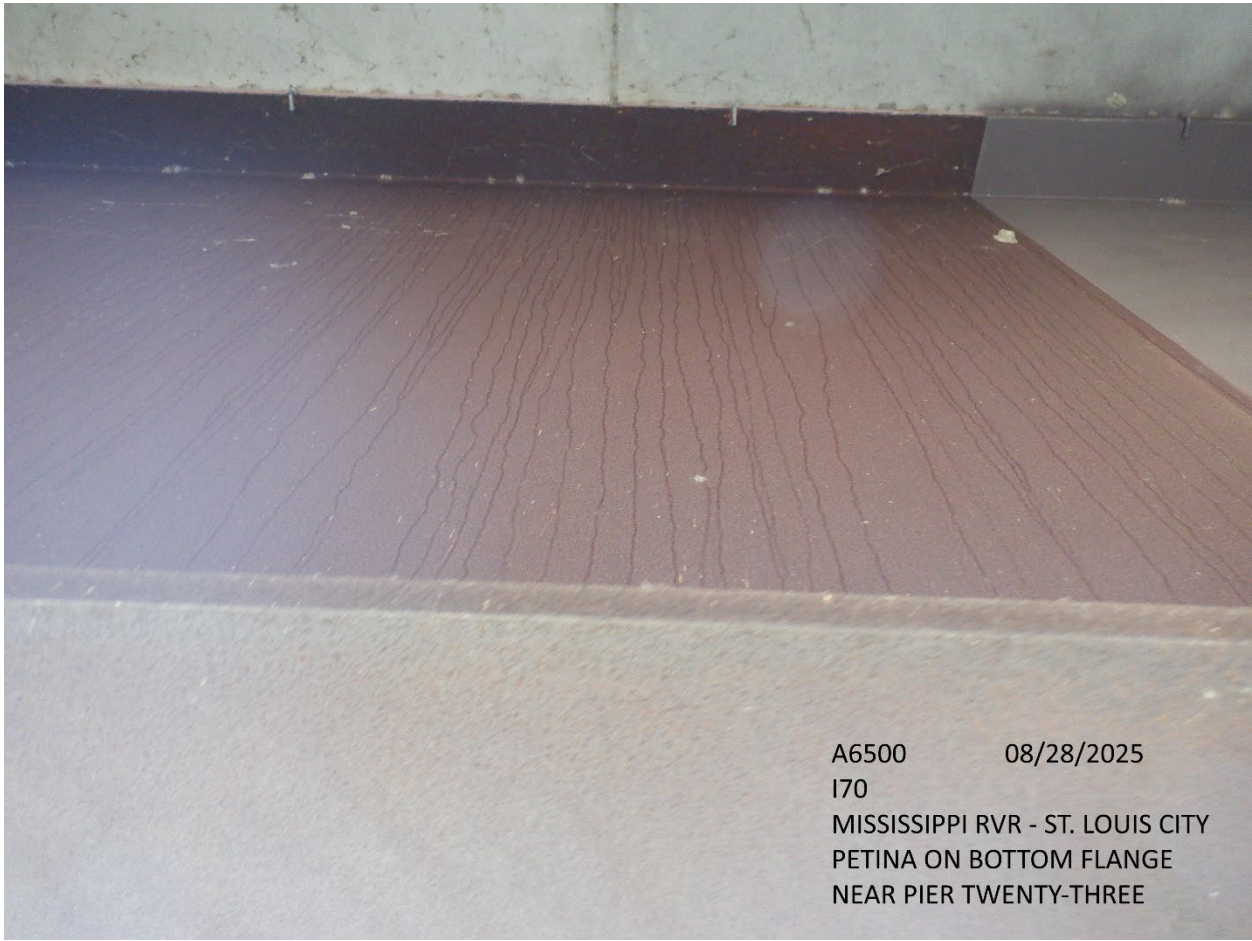


A6500 09/22/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
BENT TWELVE RIGHT BEARING



A6500 09/22/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
BENT ELEVEN RIGHT BEARING

Weathering Steel Petina



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
PETINA ON BOTTOM FLANGE
NEAR PIER TWENTY-THREE



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
PETINA ON BOTTOM FLANGE
NEAR PIER TWENTY-THREE

Weathering Steel Petina

A6500

08/28/2025

170

MISSISSIPPI RVR - ST. LOUIS CITY

PETINA ON BOTTOM FLANGE

NEAR PIER TWENTY-THREE



Weathering Steel Petina



Weathering Steel Petina



A6500 08/28/2025
170
MISSISSIPPI RVR - ST. LOUIS CITY
PETINA BOTTOM OF WEB PIER 17



A6500 08/28/2025
170
MISSISSIPPI RVR - ST. LOUIS CITY
PIER 17 WEST SIDE PETINA ON
NORTH GIRDER FACING WEST

Weathering Steel Petina



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
BOTTOM FLANGE PETINA SPAN 12



A6500 09/22/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN ELEVEN RIGHT
GIRDER RUST-TYPICAL

Weathering Steel Petina



A6500 09/22/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN ELEVEN MID
SPAN SPLICE PLATES

STU



A6500 09/22/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN TEN RIGHT STU



A6500 09/22/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN TEN RIGHT STU

STU



A6500 09/22/2025
170
MISSISSIPPI RVR - ST. LOUIS CITY
SPAN ELEVEN RIGHT STU



A6500 09/22/2025
170
MISSISSIPPI RVR - ST. LOUIS CITY
SPAN ELEVEN RIGHT STU

STU



A6500 09/22/2025
170
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN ELEVEN RIGHT
STU BENT TWELVE



A6500 09/22/2025
170
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN ELEVEN RIGHT
STU BENT TWELVE

STU



A6500 09/22/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
BENT TWELVE RIGHT
STU BENT TWELVE



A6500 09/22/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN TWELVE DRAIN SAG

STU



A6500 09/22/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN TEN LEFT STU



A6500 09/22/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN TEN LEFT STU

STU



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN ELEVEN LEFT STU



A6500 09/22/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN ELEVEN LEFT STU

STU



A6500 09/22/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN ELEVEN LEFT STU



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN ELEVEN STU

STU



A6500
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN TWELVE STU

09/22/2025



A6500
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SPAN TWELVE STU

09/22/2025

Piers to Seal at Sign Trusses



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
CAP AT PIER SIX OVERHEAD
SIGN MOUNT

Piers to Seal at Sign Trusses



A6500 08/28/2025
170
MISSISSIPPI RVR - ST. LOUIS CITY
PIER 13 PAINT NEEDED

Piers to Seal at Sign Trusses



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
SIGN TRUSS MOUNT
WEST BOUND LANE

Lighting and Navigation

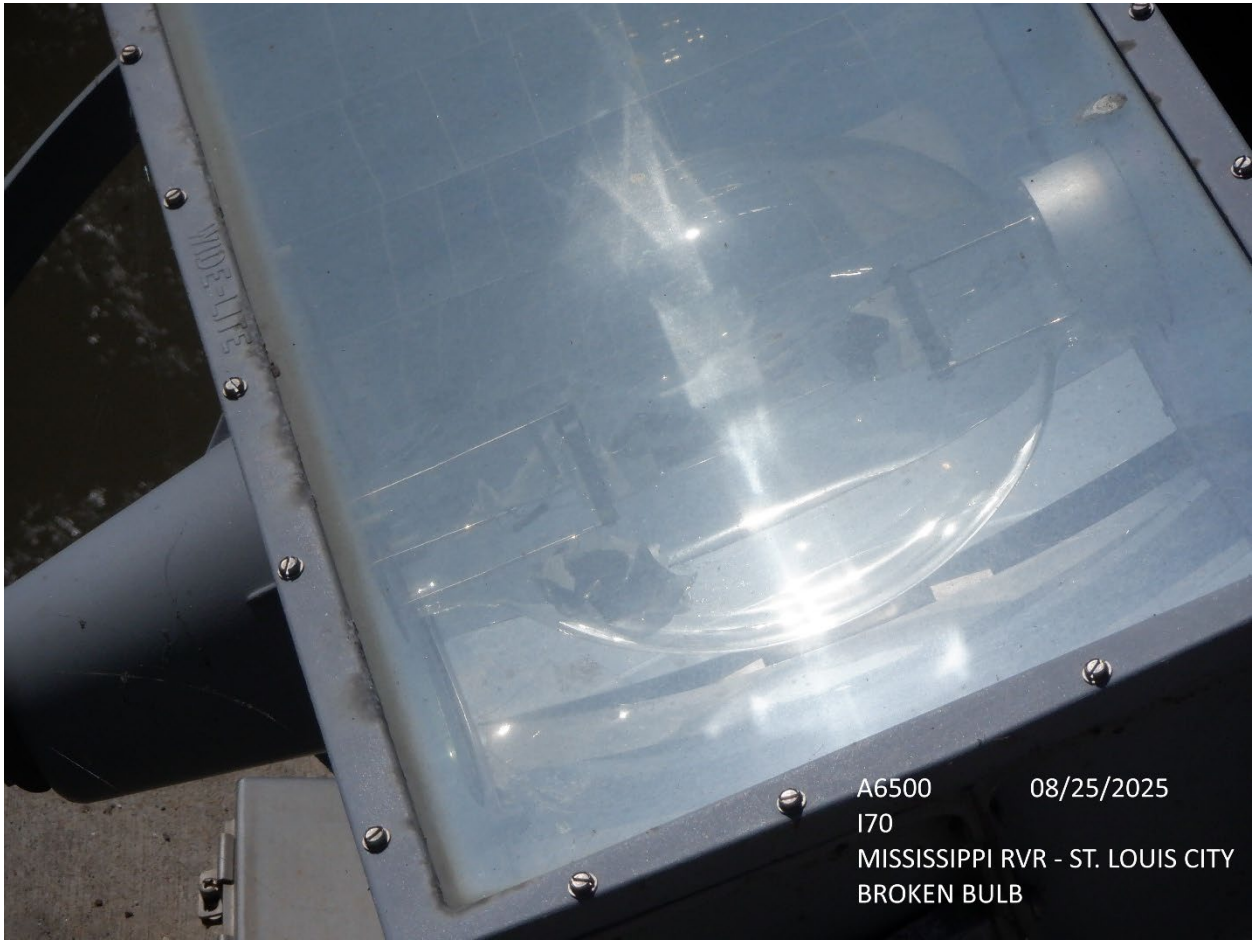


A6500 08/25/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
LED TIED INTO PREVIOUS SYSTEM



A6500 08/25/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
BULB LIGHTS FOR CABLES

Lighting and Navigation



A6500 08/25/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
BROKEN BULB

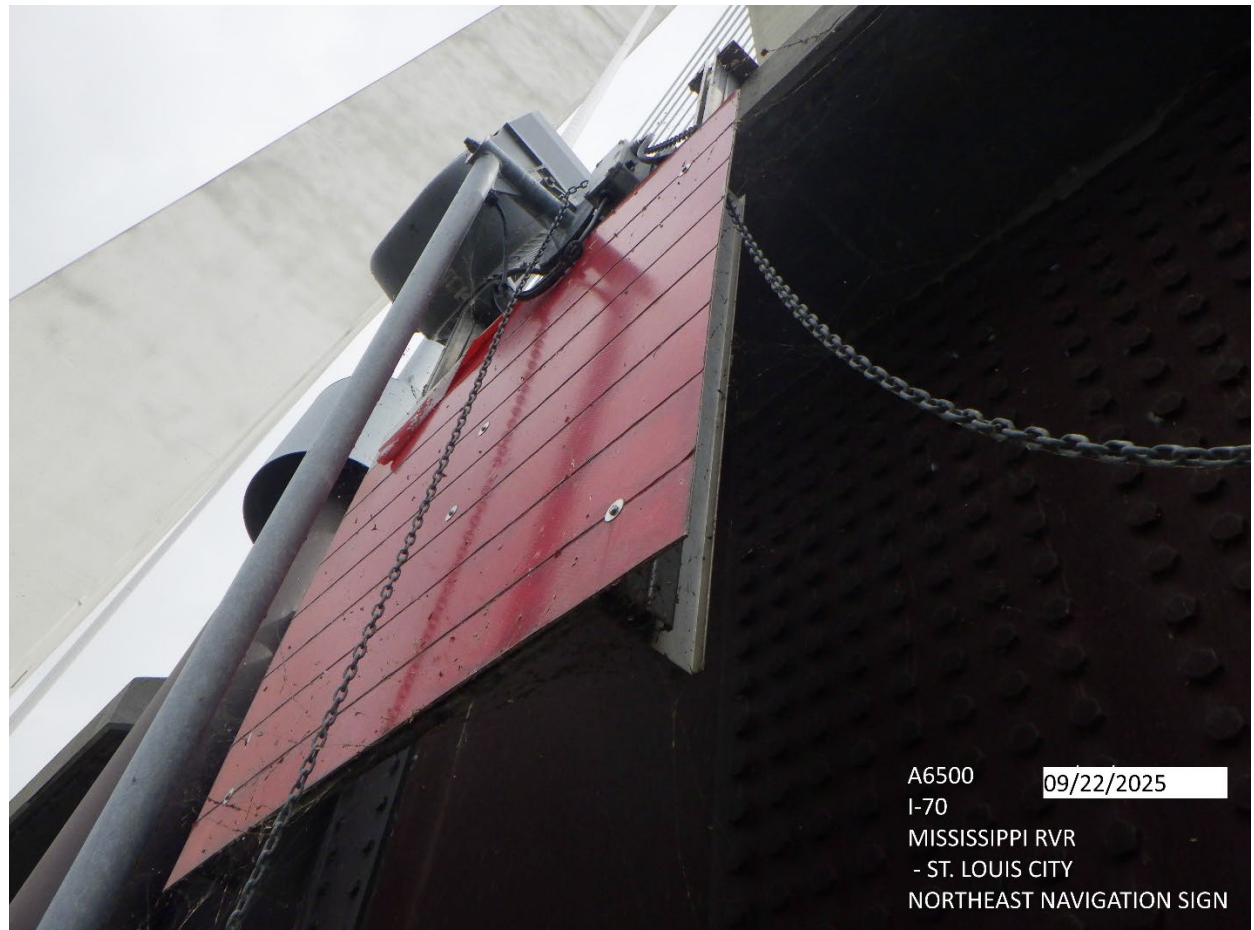


A6500 08/25/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
BROKEN BULB

Lighting and Navigation



A6500 08/25/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
DIRECTIONAL LIGHT



A6500 09/22/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
NORTHEAST NAVIGATION SIGN

Lighting and Navigation



A6500 09/22/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
RED NAVIGATION PEELING



A6500 09/22/2025
I70
MISSISSIPPI RVR
- ST. LOUIS CITY
NAVIGATION PLACARD
PEELING (GREEN)

Lighting and Navigation



A6500 10/25/2025

I70

MISSISSIPPI RVR - ST. LOUIS CITY
UTILITIES NORTH SIDE FACING
EAST @ PIER TWO

Northwest Slope Erosion



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
WASHOUT @ NORTHWEST
QUADRANT

Northwest Slope Erosion



Northwest Slope Erosion



A650 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
WASHOUT @ NORTHWEST
QUADRANT

Northwest Slope Erosion

A4729 09/04/2025
CSTSALT RIVER RDE
MO 79
- ST. CHARLES COUNTY
VOID @ NORTHWEST QUADRANT



Northwest Slope Erosion



A6500 08/27/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
NORTHWEST BANK EROSION
TWO FEET UNDERMINING



A6500 08/27/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
TWO POINT FIVE FEET DEEP
NORTHWEST BANK EROSION

Vegetation



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
VEGATATION UNDER BRIDGE ILLINOIS SIDE



A6500 08/28/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
VEGATATION UNDER BRIDGE

Vegetation



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
VEGETATION PIER FIVE



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
VAGRANTS NEAR PIER FIVE

Other Pictures

A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
SIGN W/SPIDER CRACKING
EAST BOUND @ WEST END
(SPAN TWO)



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
MISSING BOLT @ LANE ENDS
SIGN EAST BOUND SPAN TWO



Other Pictures



A6500 08/25/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
EAST BOUND CABLES
WEST SIDE OF MISSOURI PIER



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
VAGRANTS NEAR PIER FIVE

Other Pictures



A6500 10/28/2025
I70
MISSISSIPPI RVR -
ST. LOUIS CITY
LIGHT POLE OPEN NEAR
PIER TWO WEST BOUND LANE

Other Pictures



A6500 10/25/2025

I70

MISSISSIPPI RVR - ST. LOUIS CITY
LIGHT POLE OPEN NEAR PIER
TWO WEST BOUND LANE

Other Pictures



A6500 10/25/2025

I70

MISSISSIPPI RVR

- ST. LOUIS CITY

LIGHT POLE COVER MISSING

WEST BOUND LANE NEAR

PIER TWO

Other Pictures

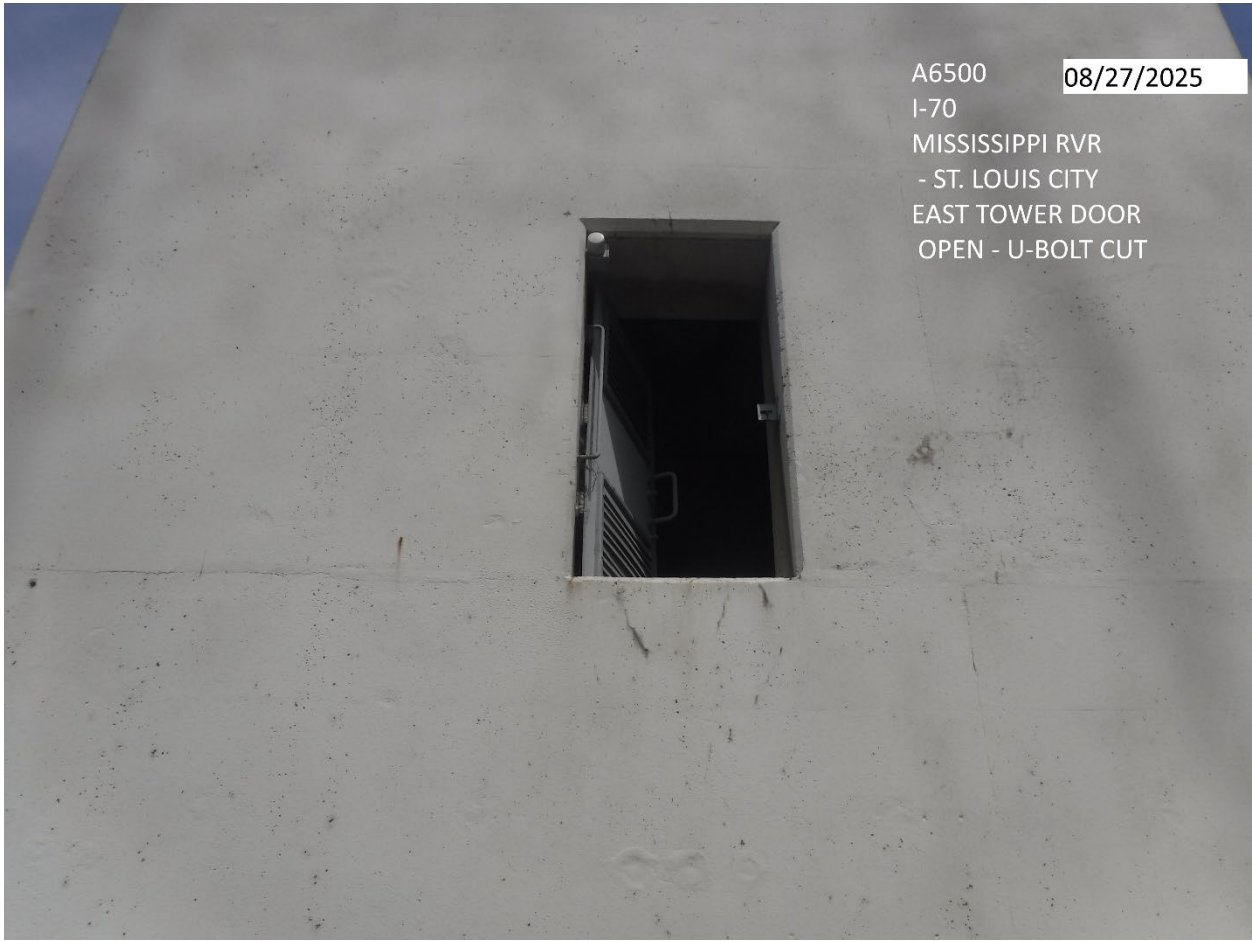


A6500 10/25/2025

170)

MISSISSIPPI RVR
- ST. LOUIS CITY
LIGHT POLE COVER
MISSING WEST BOUND
LAND NEAR PIER TWO

Other Pictures



A6500
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
EAST TOWER DOOR
OPEN - U-BOLT CUT

08/27/2025



A6500 09/22/2025
I70
MISSISSIPPI RVR - ST. LOUIS CITY
SPAN TWELVE BOLT MISSING RIGHT GIRDER
15 FLOOR BEAMS FROM BENT THIRTEEN

Other Pictures

A6500 09/22/2025
I-70
MISSISSIPPI RVR
- ST. LOUIS CITY
NORTHWEST CABLES
BOTTOM CAP LEAKING
@ FIVE AND SIX





Stay Cable Protection

December 4, 2020



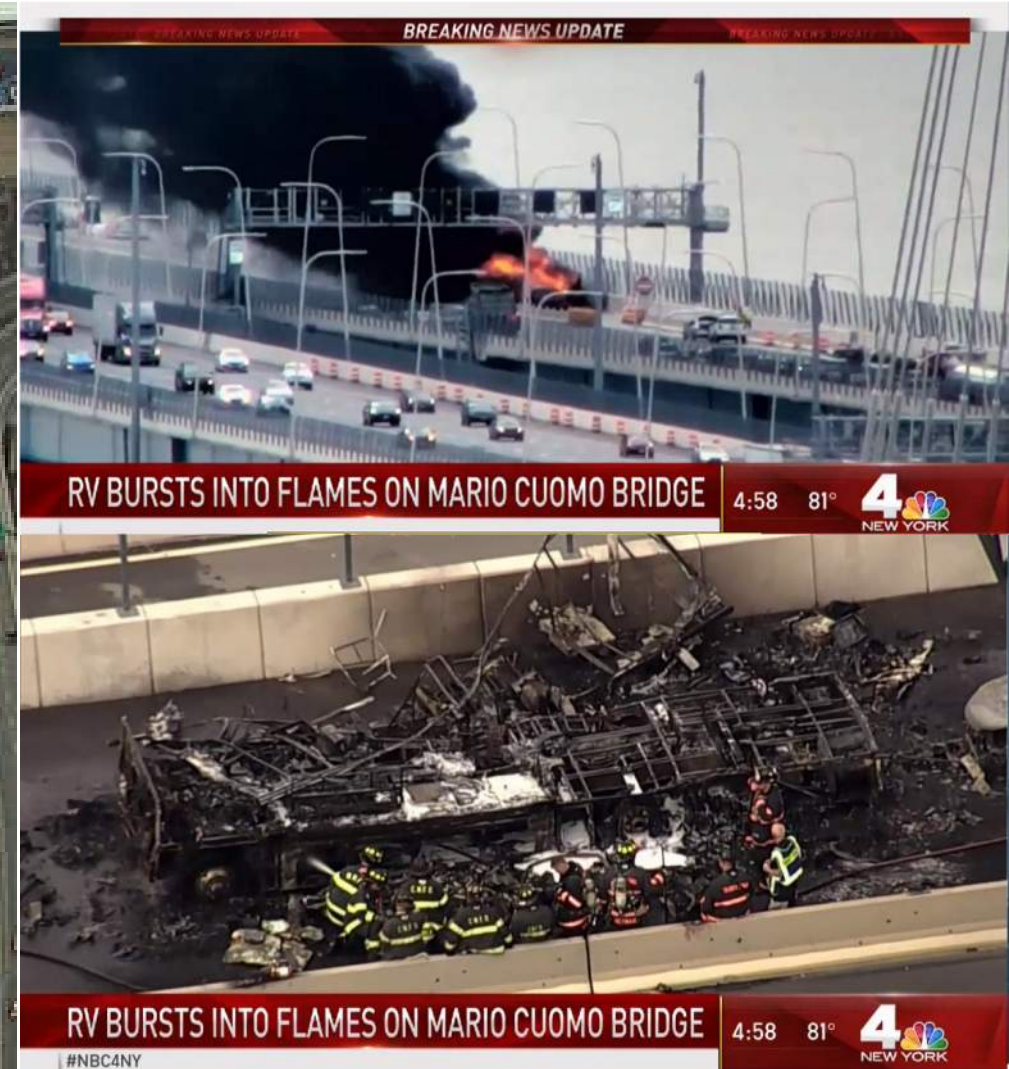
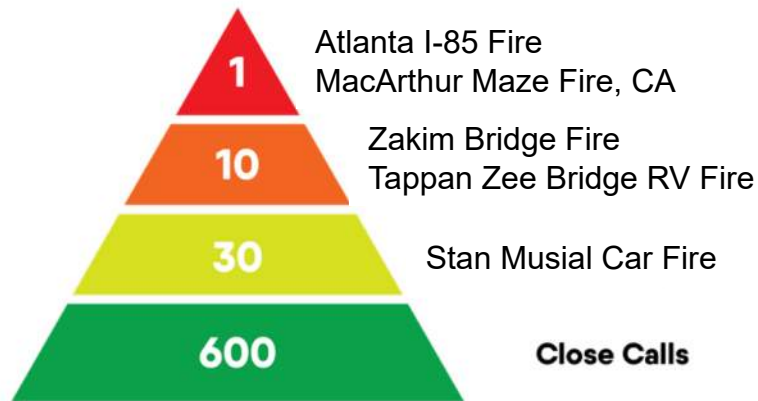
Stay Cable Protection

- Agenda
 - Fire Protection
 - Enhanced Anti Vandalism
 - Approximate Costs



Recent Bridge Fires

- I-70 Stan Musial Bridge
- I-93 Zakim Bridge
- I-87/287 Tappan Zee Bridge

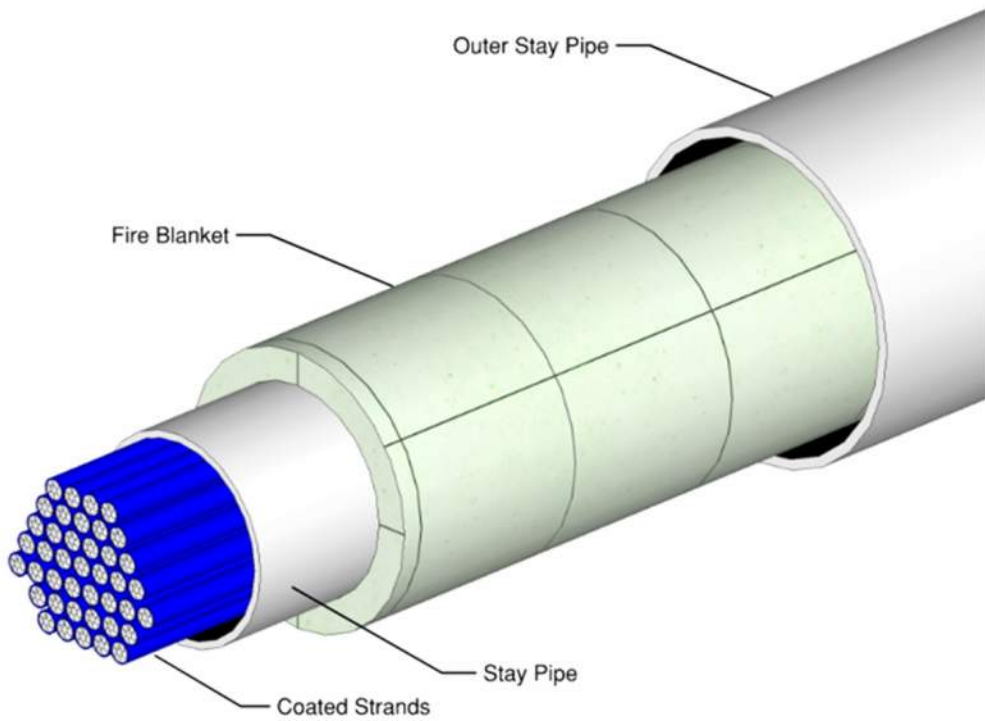


Stay Cable – Fire Protection

- Fire Protection
 - Prior to 2012 – No Mention of Fire Protection in PTI Recommendations
 - Fire Protection added in 6th edition – if required by the Owner
 - Since 2012 Stay Cable Fire Protection has been required for the follow Bridges
 - Tappan Zee
 - Gerald Desmond
 - Transbay Bus Ramp
 - K-Bridge
 - Harbor Bridge
 - Champlain Bridge
 - Gordie Howe

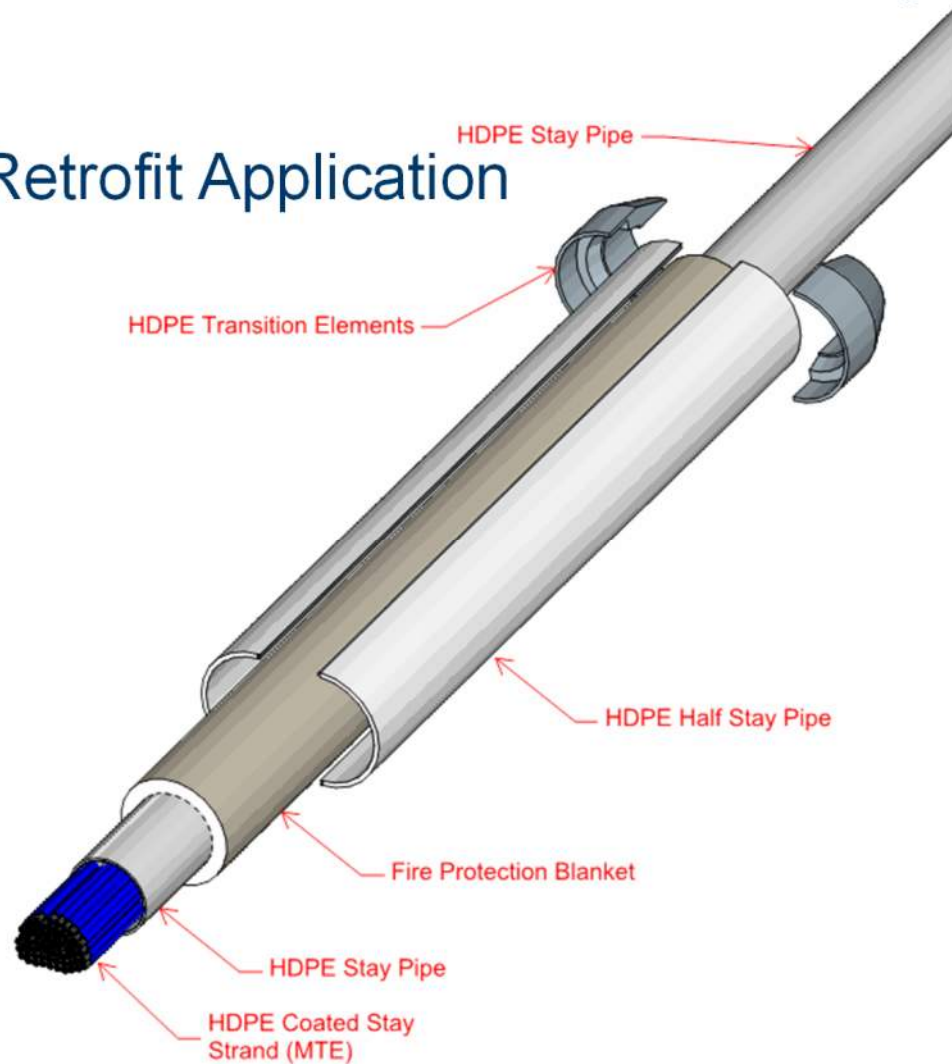


Fire Blanket – New Construction



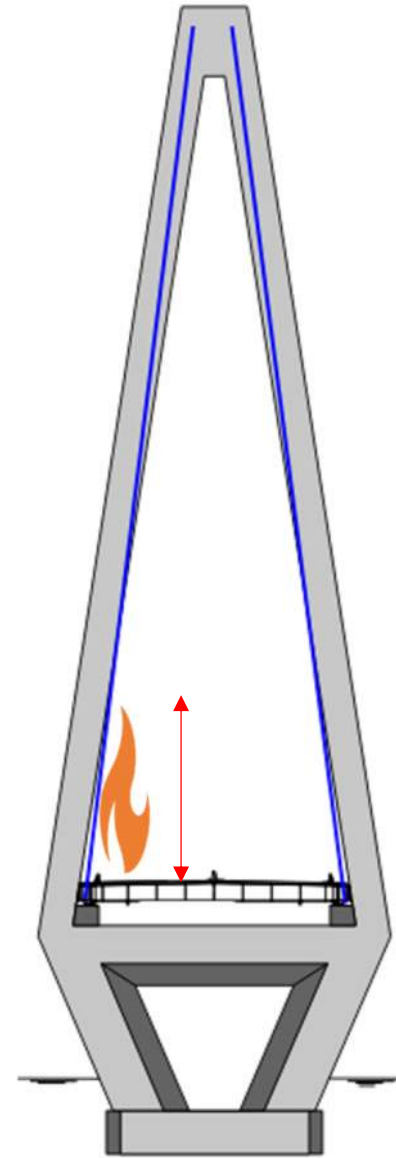
Fire Blanket - Retrofit Application

- Retrofit Application



Design Considerations

- How High
 - Fire Source
 - Size of Fire Plume
 - Stay Geometry
 - 35ft to 50ft above the deck
- How Long
 - Fire Duration
 - Emergency Response Time
 - 30 minutes(PTI) to 60 minutes



Design Considerations

- Impact to Existing Stays & Structure

- System Weight

Stay Pipe OD mm	Lbs/ft
160	9.4
180	11.4
200	12.3
225	12.6
250	14.6

- Wind Effects

Stay Pipe OD mm	Outer Pipe OD mm
160	250
180	280
200	315
225	315
250	355

- Compatibility with Existing Structure

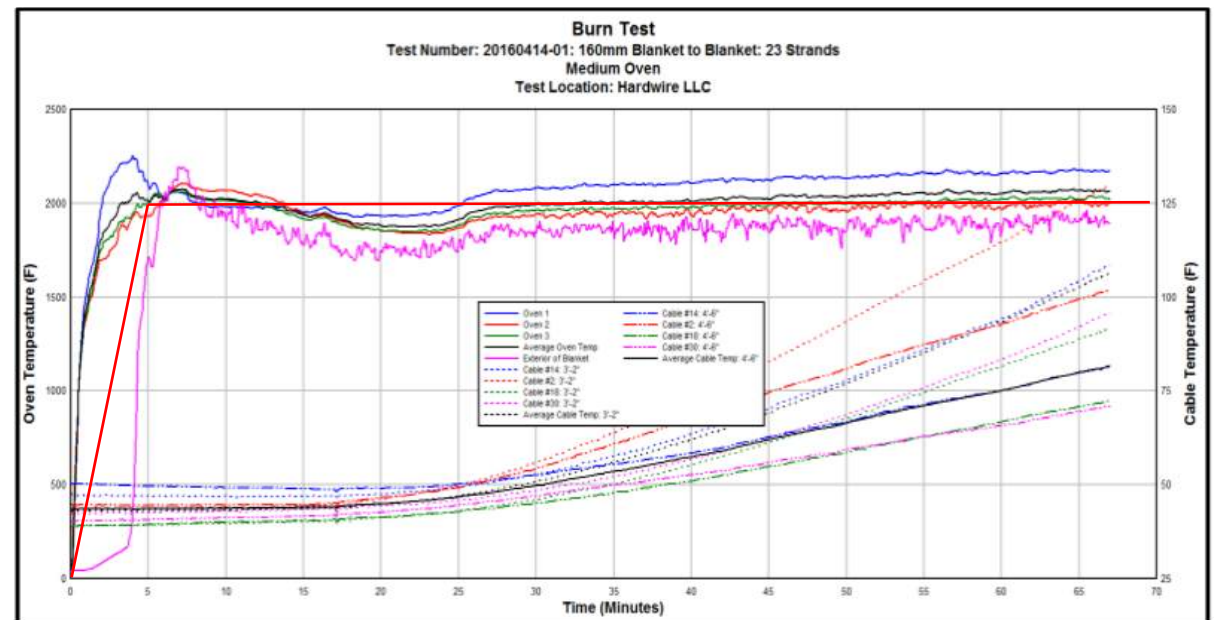
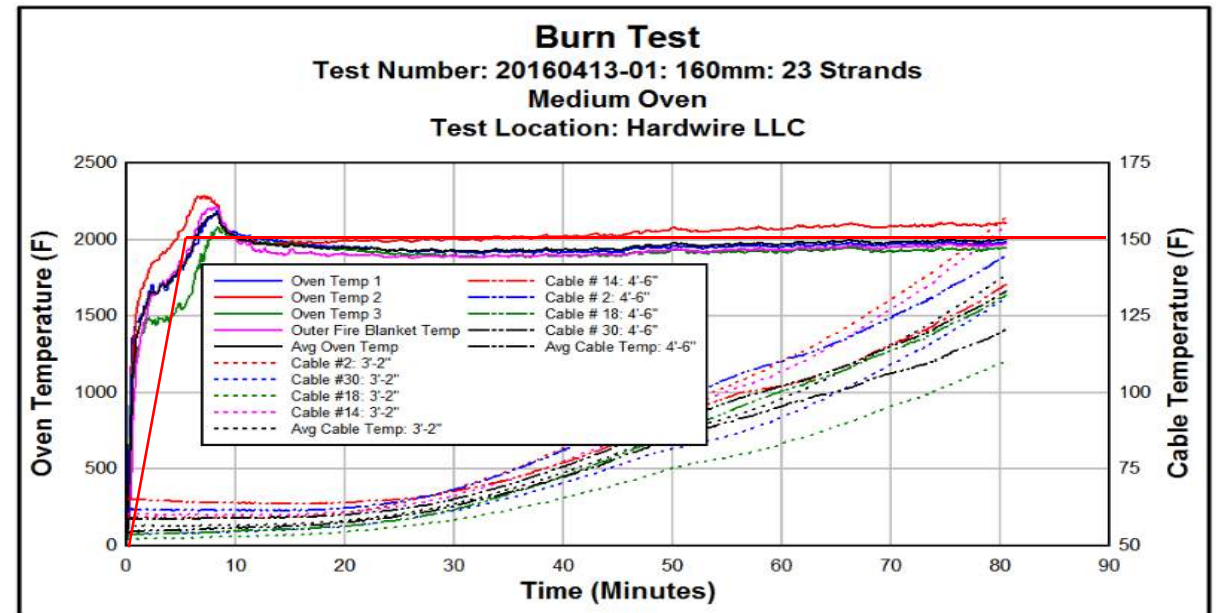
- Performance of Stays & Damping Systems

- Accommodate Ambient movement

- Tested & Proven System

Burn Tests

- Test Criteria
 - UL 1709 Temperature Curve
 - Furnace Temp 1,100C (2,012 F)
 - Max Strand Temp 300C (572F)
 - Duration
 - Owner Specified
 - PTI - 30 min

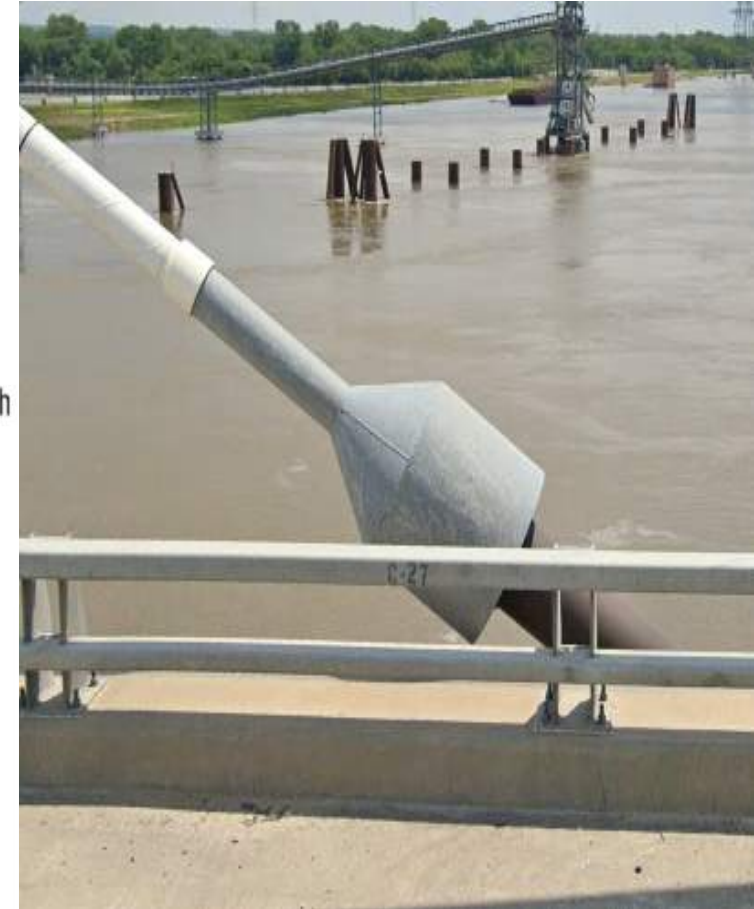
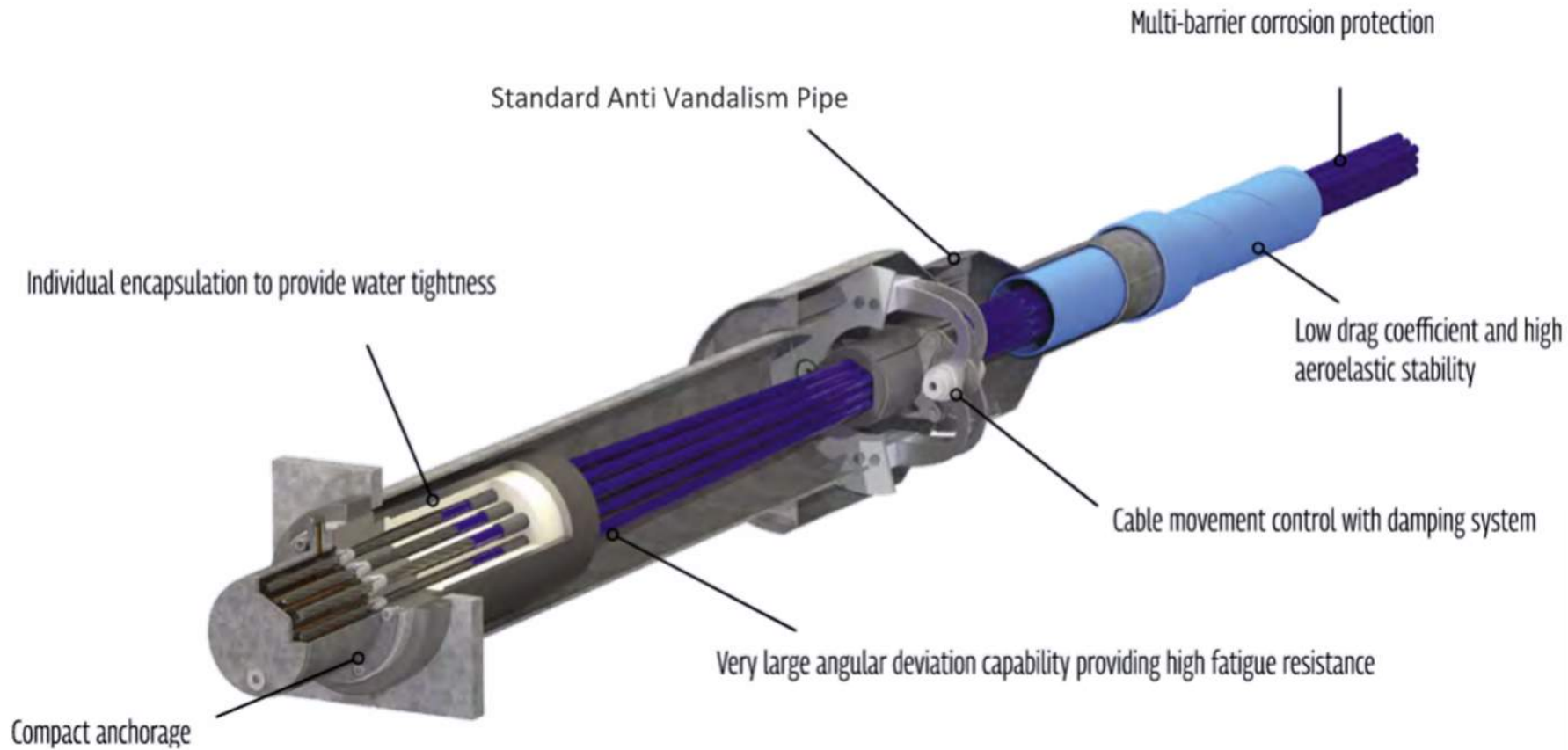


Stay Cable Protection

- Agenda
 - Fire Protection
 - Enhanced Anti Vandalism
 - Approximate Costs



Standard Anti-Vandalism Pipe



Stay Cable Protection - Physical Threats

Vandalism & Accidental Damage

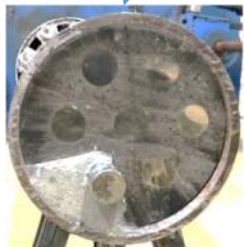
- Effective low tech way of inflicting damage to cables to create disproportionate collapse of structure

Description	Grouted Tendons	Grouted Strand	Strand in Stay Pipe
Time (m:s)	4:30	4:58	2:06
Members Cut	6.125/7 (87.5%)	198/217 (91.2%)	217/217 (100%)

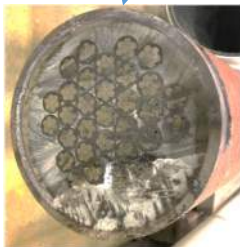
Estimated Weight / ft

Stay Pipe OD mm	Lbs/ft
160	33
180	38
200	42
225	47
250	52

Grouted Tendons



Grouted Strand



Strand in Stay Pipe

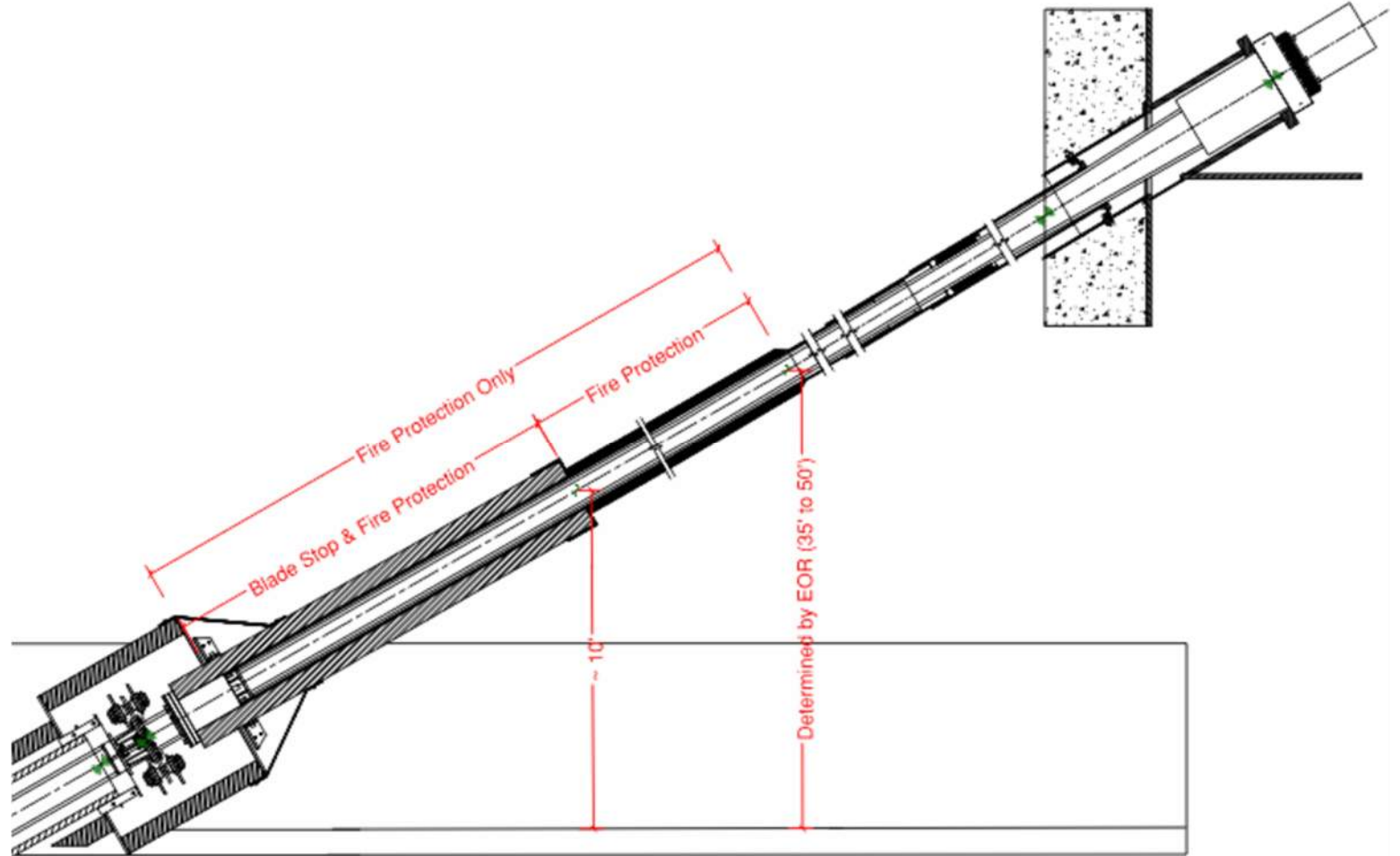


Stay Protection –Retrofit Options

1. Fire Protection Only
2. Blade Stop up to ~10'
3. Blade Stop + Fire Protection

Approximate Costs

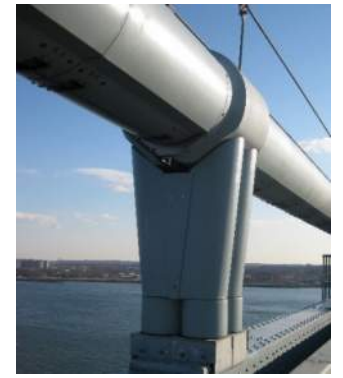
- Fire Protection ~\$315 / ft
- Blade Stop ~ \$750 / ft



Cable Supported Bridges – Cable Protection System

Bridges Protected

- New York Bridge (2007)
- New York Bridge (2009/2010)
- New York Bridge (2010)
- New York Bridge (2010)
- New York Bridge(2010)
- Pennsylvania Bridge(2012)
- Pennsylvania Bridge (2012)
- Massachusetts Bridge(2012)
- Maryland Bridge(2015)
- California Bridge (2018)
- New York Bridge (2019)
- California Bridge (2020)





QUESTIONS?

Thank you for your time