

Prepared by  
The Louisiana Department of Transportation and Development,  
Environmental Section 28 Cultural Resources Staff

Prepared for  
The Louisiana Historic Bridge Programmatic Agreement  
Signatory, Concurring and Consulting Parties

This report is prepared in accordance with Stipulation XI of the Programmatic Agreement among the Federal Highway Administration, the Louisiana Department of Transportation and Development, the Advisory Council on Historic Preservation, and the Louisiana State Historic Preservation Officer regarding Management of Historic Bridges in Louisiana, executed on September 21, 2015, herein after referred to as the PA. The report accounts for activities involving historic bridges covered under the PA for the State of Louisiana fiscal year from **July 1, 2019 to June 30, 2020**; herein after referred to as 2019-2020. The report is organized as follows:

- Section 1. Stipulation V.B. 4 & V.B.5 -Inventory Updates and Revisions
- Section 2. Stipulation VII- Treatment of Louisiana Historic Bridges
- Section 3. Stipulation VI.B.3 - Master Structure File
- Section 4. Stipulation VII - Marketing
- Section 5. Stipulation IX. Stewardship, Public Outreach, Education and Funding
- Section 6. Emergency Situations
- Section 7. Recommendations for Improvements/Scheduling Changes/Problems Encountered/Disputes

### **Section 1. Stipulation V.B.4 & V.B.5 – Inventory Updates and Revisions**

LADOTD Bridge design and Environmental sections, in conjunction with Mead and Hunt, are working on a historic bridge inventory and context for bridges built between 1971 and 1985. Stipulation V.B.4 and V.B.5 (Inventory Updates and Revisions) of the PA required LADOTD to complete eligibility determinations for bridges built from 1971 to 1985 that are not addressed by the Advisory Council on Historic Preservation's *Program Comment for Common Post-1945 Concrete Steel Bridges*.

Tasks completed to date:

- Conducted public outreach to identify bridges with potential significance in 1971-85 study period
- Prepared draft historic context (DOTD has reviewed and will be submitted to agencies soon)
- Conducted application of the National Register Criteria for Evaluation for bridges to identify bridges with potential for National Register significance and recommendations for field survey (DOTD has reviewed and will be submitted to agencies soon)

### **Section 2. Stipulation VII- Treatment of Louisiana Historic Bridges**

SECTION 106 PROGRAMMATIC AGREEMENT OF TREATMENT OF LOUISIANA HISTORIC BRIDGES  
ANNUAL REPORT 2019/2020

Four projects involving seven historic bridges included in the PA were initiated or in process in 2019-2020 (see table below).

<b>Bridge Name / Recall No.</b>	<b>Route / Parish</b>	<b>Preservation Category</b>	<b>Project No.</b>	<b>Summary</b>
US 71 ICG Railroad Bridge Recall No. 014400	US 71/Caddo	Priority	H.014361	Bridge was damaged by a derailment on April 24, 2020 (see section 5 below). EE was approved on May 8, 2020. No Adverse Effect letter concurred by SHPO on June 30, 2020.
Calcasieu River (Moss Bluff) Recall No. 031736	US 171/Calcasieu	Priority	H.010000	Currently processing NEPA document for cleaning, painting, concrete and miscellaneous repairs.
Jimmy Davis Bridge Recall No. 012750	LA 511/Bossier	Candidate	H.013538	Rehabilitation plans under review. Proposed rehabilitation will be reviewed per PA stipulations.
West Middle Pearl River Bridge Recall No. 058720	US 90/St. Tammany	Non-Priority	H.000284	Bridge will be marketed upon completion of NEPA.
Middle Middle Pearl River Bridge Recall No. 058730	US 90/St. Tammany	Non-Priority	H.000284	Bridge will be marketed upon completion of NEPA.
East Middle Pearl River Bridge Recall No. 058740	US 90/St. Tammany	Candidate	H.000284	Bridge Will be marketed upon completion of NEPA.
West Pearl River Bridge Recall No. 058710	US 90/St. Tammany	Candidate	H.000284	Bridge Will be marketed upon completion of NEPA.

**Section 3. Stipulation VI.B.3 - Master Structure File / BrM**

LADOTD’s project tracking system PS reflects HBI status in project title and preservation category on all projects involving preservation priority, preservation candidate, and non-priority bridges. LADOTD has incorporated data into its BrM database which replaced the Master Structure File database.

**Section 4. Stipulation VII.-Marketing**

LADOTD marketed the Union Pacific Railroad Overpass Bridge near Bonita and is in the process of marketing the Caddo Lake Bridge in 2019-2020 (see table below).

<b>Bridge Name / Recall No.</b>	<b>Route / Parish</b>	<b>Preservation Category</b>	<b>Project No.</b>	<b>Summary</b>
Union Pacific Railroad Overpass near Bonita Bridge/Recall No. 023620	US 165/Morehouse	Candidate	H.000665	Marketing completed May 27, 2020.
Caddo Lake Bridge/Recall No. 013970	LA 1/ Caddo	Non-priority	H.001166	CE was approved in September of 2019. Marketing for the bridge is still in process as information regarding the cost of lead paint abatement has not been submitted.

**Section 5. Stipulation IX. Stewardship, Public Outreach, Education and Funding**

Stipulation IX (1).

LADOTD continues to maintain and update two websites devoted to Louisiana Historic Bridges. One website is general information on historic bridges and project updates including the PA and project documents. The other website solely devoted to historic bridge marketing.

Stipulation IX (Education).

LADOTD staff had two historic bridge training classes planned for May 27<sup>th</sup> and 28<sup>th</sup> 2020, but these were postponed until July 27<sup>th</sup> and 28<sup>th</sup> 2020 due to the Coronavirus pandemic.

Stipulation IX (6) Funding.

One project involving a Preservation Priority or Preservation Candidate bridge was authorized for construction this fiscal year. The rehabilitation of the Bayou Teche Bridge (H.011485, Recall # 008570),

located on LA 366-1 in Breaux Bridge, St. Martin Parish, was let in March 2020 at the cost of \$4,834,935. DOTD anticipates fulfilling the HBI Preservation Priority funding commitment in SFY 2020-2021.

### Section 6. Emergency Situations for Historic Bridges

There was one emergency situation involving a PA bridge in the 2019-2020 fiscal year. Project H.014361 carried out emergency repair work on the US 71 ICG Railroad Bridge, Recall #014400 and Structure #04090530908941, (Latitude 32.512557, Longitude -93.744350) in Shreveport, Caddo Parish. On April 24, 2020, a train derailed under the Spring St (US 71) Bridge damaging part of the substructure. Damage included severe deformation of two primary support columns as well as damage to cross-bracing supports. The bridge was closed immediately. Repair work included stabilizing the structure; the full repair of the damaged substructure (cross-beam); installation of a concrete footing and a crash wall on the substructure to protect the bridge from the trains; installation of the new steel substructure elements, and possible temporary shoring details should they be required. Specifically, the longitudinal sway bracing has been replaced in kind with new steel, plates, and hex head bolts at Bent 2 of the bridge. Bent 3, the one that was most damaged, was not be replaced in kind, but rather removed and replaced with a new crash wall (to prevent future accidents such as this) that integrates bridge supports within the concrete of the crash wall. There is not enough room between the railroad tracks and the crash wall to put Bent 3 back in place in addition. In summary, the cross bracing between Bents 2 and 3 were replaced in kind. The cross bracing between the columns on Bent 3 were integrated within the crash wall. All work was within the existing right-of-way (ROW).



*Left and Right: Photos of the damage done to Bent 3 of the project bridge by the train derailment.*

The US 71 ICG RR Bridge is a Preservation Priority bridge per the 2013 Historic Bridge Inventory, was built in 1937, and is a Steel I-Beam bridge. It was determined eligible for the National Register of Historic Places (NRHP) under Criterion A for its funding through the US Works Program Grade Crossing program during the Depression-era to provide safe railroad-highway crossings. Because the bridge is a Preservation Priority bridge, it also has its own management plan. In this plan, the main character defining feature that is described is the superstructure of the bridge as this represents its at grade crossing. The superstructure sits on 10 I-beam supports, which are supported by steel interior cross beam bents and bracing, two of which were damaged by the train derailment (Bents 2 and 3). These interior cross beam bents and bracing, along with the concrete end posts and the handrail, are pointed out as other historic materials on the bridge, but with only the superstructure being defined as the main character defining feature of the bridge. As stated above, the majority of the proposed activities for this bridge are included under Attachment 5 of the Historic Bridge Programmatic Agreement (PA) and are not expected to alter the main character-defining feature of the historic fabric of the bridge – the superstructure.

The majority of this proposed work, like all preventative maintenance and rehabilitation activities for the bridge, is included under Attachment 5 of the Historic Bridge Programmatic Agreement (PA) as replacement of Bent 2 will be in kind. The removal of Bent 3 replacement with a modern concrete crash wall is not included under Attachment 5; however, as this is only one of 10 bents that make up the entirety of the substructure of this bridge and the majority of the bridge will retain its historic integrity, LADOTD determined that the main character defining feature of the bridge was not impacted, and there was not an adverse effect.

Per the Programmatic Agreement (PA) for the Management of Historic Bridges in Louisiana, when an emergency situation arises, LADOTD was required to contact the Louisiana State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation (ACHP) as soon as possible to notify of the damage and proposed repairs. The SHPO and ACHP were notified immediately on April 24 of the damage and were informed they would receive further info as it came in. An official No Adverse Effect Letter was sent to SHPO and ACHP on June 5, 2020. SHPO concurrence was received on June 30, 2020.

### **Section 7. Proposed recommendations for program improvement**

Section 830 of the Louisiana Standard Specifications for Roads and Bridges addresses construction requirements for Repair and Rehabilitation of existing bridges. LADOTD Bridge Design Section is currently developing proposed modifications to Section 830, which will include modifications to its Structural Concrete Patching provisions. Such concrete patching modifications will include provisions for matching the color and texture of surrounding concrete, submitting patch material samples for verification, providing for pressure washing when needed, and adding patch-compatible rust inhibiting compound to cleaned rebar. As required by specific project needs, such as historic bridges, bridges with high visibility, or other needs, the Engineer of Record will callout such requirements in the plans by using plan notes and requiring conformance to specific provisions of Section 830.

The DOTD Bridge Design and Evaluation Manual will also be modified (initially by Bridge Design Technical Memorandum) to provide policies and guidance to design engineers for the evaluation of existing concrete. The evaluation will be used to determine the appropriate repair solution for the plans (such as crack repair, structural concrete patching, strengthening, replacement, etc.). An example of such policies and guidance will be giving consideration to using sacrificial anode installation for patching as a means of preventing patch failure when contamination is the root cause of the concrete deficiency.

