



Environmental Section
PO Box 94245 | Baton Rouge, LA 70804-9245
ph: 225-242-4502 | fx: 225-242-4500

Bobby Jindal, Governor
Sherri H. LeBas, P.E., Secretary

October 1, 2015

STATE PROJECT NOS: H.000284 / H.000286
FEDERAL AID PROJECT NO: H000284 / H.000286
NAME: US 90 PEARL RIVER BRIDGES
STRUCTURE NUMBER: 62520060800001 (EAST PEARL RIVER BRIDGE)
RECALL NO.: 058750
ROUTE: US 90
JOINT STATE PROJECT

Ms. Katherine Blount
State Historic Preservation Officer
Mississippi Department of Archives & History
P.O. Box 571
Jackson, MS 39205-0571

SUBJECT: Initiate Multi-State Section 106 Process

Dear Ms. Blount:

The Louisiana Department of Transportation and Development (LADOTD), in cooperation with the Federal Highway Administration (FHWA), is proposing to replace/rehabilitated five bridges along the US 90 corridor in St. Tammany Parish, Louisiana and Hancock County, Mississippi (see attached map). The proposed project will be environmentally processed as an Environmental Assessment (EA) and is anticipated to require right-of-way. All five bridges have been determined eligible for inclusion on the National Register of Historic Places (NRHP). The East Pearl River Bridge (Str. No. 62520060800001) spans the state of Louisiana and Mississippi and will require Section 106 coordination with both State Historic Preservation Officers.

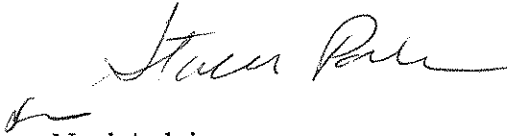
At this time, we would like to invite Mississippi SHPO to participate in a meeting to discuss how the joint state Section 106 process will proceed. An invitation to participate in a teleconference will be sent within the next couple of weeks.

If you have any questions, please contact Stacie Palmer at (225) 242-4517 or Stacie.palmer@la.gov.

STATE PROJECT NOS: H.000284 / H.000286
FEDERAL AID PROJECT NO: H000284 / H.000286
NAME: US 90 PEARL RIVER BRIDGES
STRUCTURE NUMBER: 62520060800001 (EAST PEARL RIVER BRIDGE)
RECALL NO.: 058750
ROUTE: US 90
JOINT STATE PROJECT

Page 2 of 2

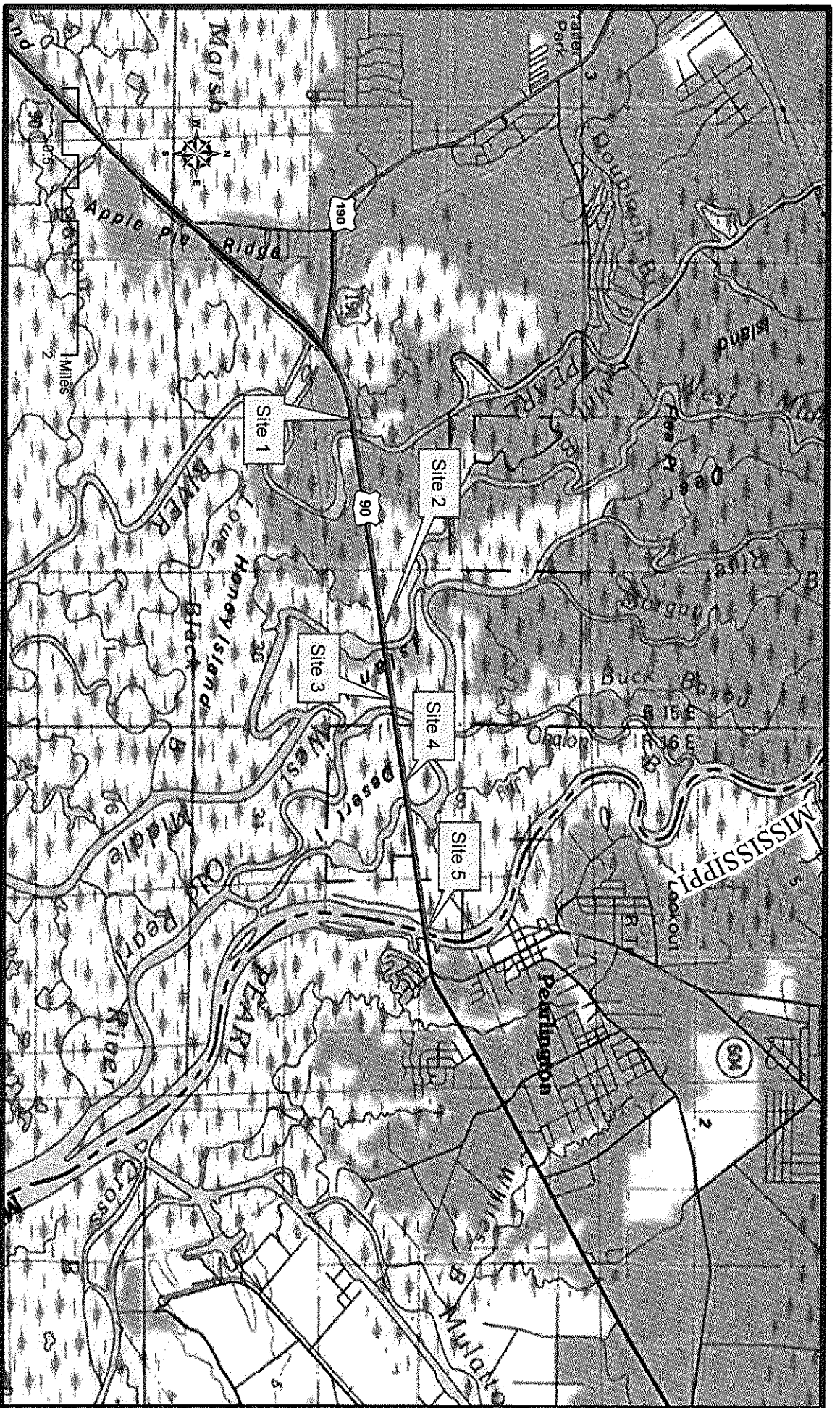
Sincerely,



Noel Ardoin
Environmental Engineer Administrator

Sp NA/sp

cc: SHPO File
FHWA
Kim Thurman (MDOT)
Robert Mahoney (FHWA, Louisiana)
Claiborne Barnwell (FHWA, Mississippi)
Phillip E. Boggan (LA SHPO)



PROJECT AREA MAP

State Project No.: H.000284 / H.000286

Federal Project No.: H000284 / H000286

Name: US 90: Pearl River Bridges

Route: US 90

Parish: St. Tammany

Map Reference: Rigolets 7.5' USGS





Environmental Section
PO Box 94245 | Baton Rouge, LA 70804-9245
ph: 225-242-4502 | fx: 225-242-4500

Bobby Jindal, Governor
Sherri H. LeBas, P.E., Secretary

October 1, 2015

STATE PROJECT NOS: H.000284 / H.000286
FEDERAL AID PROJECT NO: H000284 / H.000286
NAME: US 90 PEARL RIVER BRIDGES
STRUCTURE NUMBER: 62520060800001 (EAST PEARL RIVER BRIDGE)
RECALL NO.: 058750
ROUTE: US 90
JOINT STATE PROJECT

Mr. Phillip E. Boggan
Deputy Assistant Secretary
Louisiana Office of Cultural Development
P.O. Box 44247
Baton Rouge, LA 70804-44247

SUBJECT: Initiate Multi-State Section 106 Process

Dear Mr Boggan:

The Louisiana Department of Transportation and Development (LADOTD), in cooperation with the Federal Highway Administration (FHWA), is proposing to replace/rehabilitated five bridges along the US 90 corridor in St. Tammany Parish, Louisiana and Hancock County, Mississippi (see attached map). The proposed project will be environmentally processed as and Environmental Assessment (EA) and is anticipated to required right-of-way. All five bridges have been determined eligible for inclusion on the National Register of Historic Places (NRHP). The East Pearl River Bridge (Str. No. 62520060800001) spans the state of Louisiana and Mississippi and will require Section 106 coordination with both State Historic Preservation Officers.

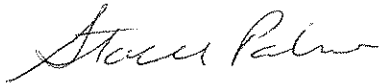
At this time, we would like to invite Louisiana SHPO to participate in a meeting to discuss how the joint state Section 106 process will proceed. An invitation to participate in a teleconference will be sent within the next couple of weeks.

If you have any questions, please contact Stacie Palmer at (225) 242-4517 or Stacie.palmer@la.gov.

STATE PROJECT NOS: H.000284 / H.000286
FEDERAL AID PROJECT NO: H000284 / H.000286
NAME: US 90 PEARL RIVER BRIDGES
STRUCTURE NUMBER: 62520060800001 (EAST PEARL RIVER BRIDGE)
RECALL NO.: 058750
ROUTE: US 90
JOINT STATE PROJECT

Page 2 of 2

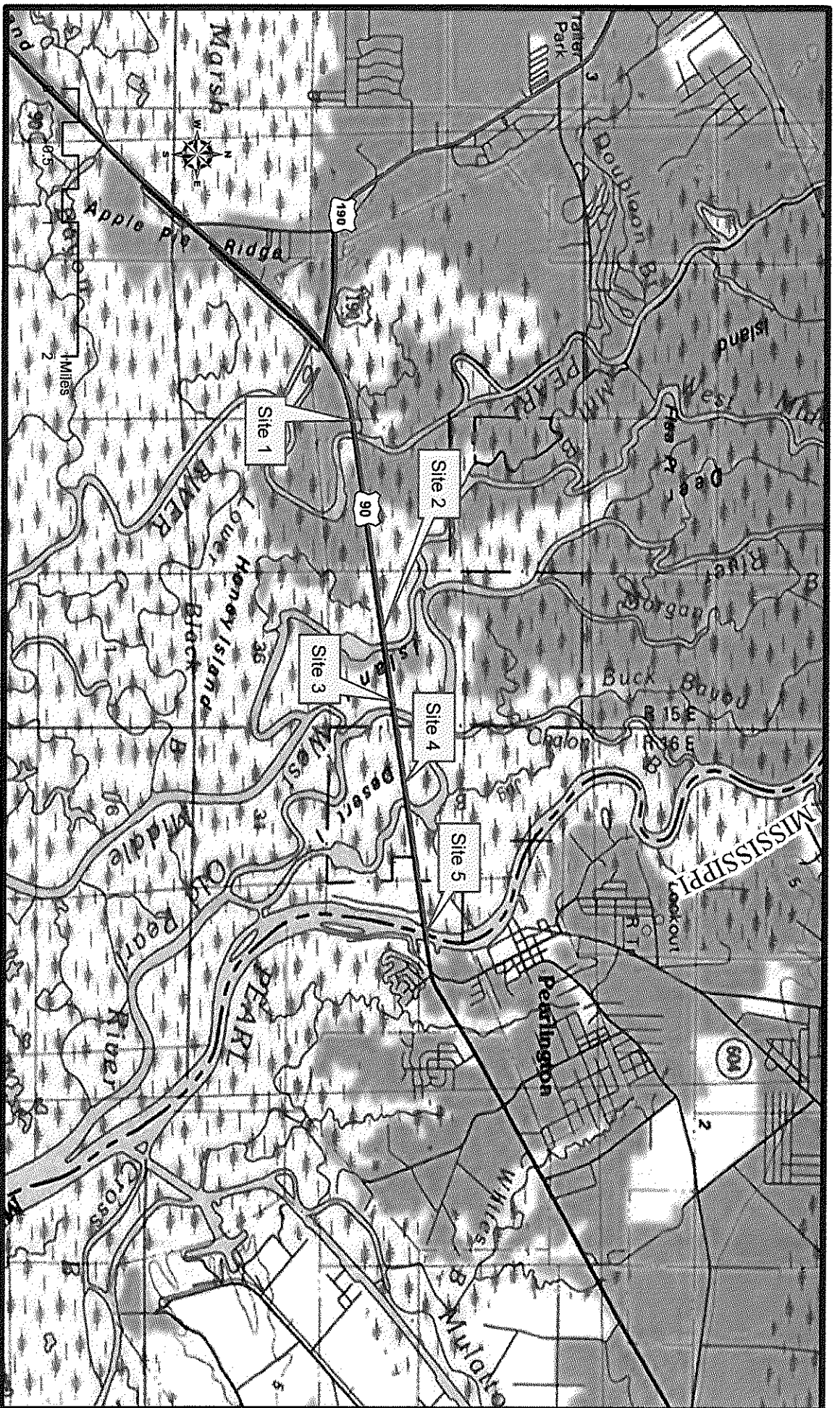
Sincerely,



L Noel Ardoin
Environmental Engineer Administrator

NA/sp

cc: SHPO File
FHWA
Kim Thurman (MDOT)
Robert Mahoney (FHWA, Louisiana)
Claiborne Barnwell (FHWA, Mississippi)
Katherine Blount (MS SHPO)



PROJECT AREA MAP

State Project No.: H.000284 / H.000286

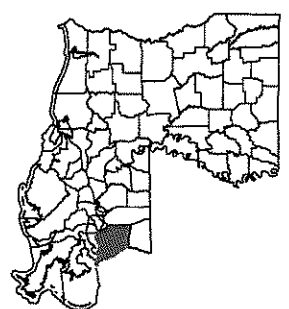
Federal Project No.: H000284 / H000286

Name: US 90: Pearl River Bridges

Route: US 90

Parish: St. Tammany

Map Reference: Rigolets 7.5' USGS





HISTORIC PRESERVATION
Jim Woodrick, director
PO Box 571, Jackson, MS 39205-0571
601-576-6940 • Fax 601-576-6955
mdah.state.ms.us

September 28, 2016

Ms. Stacie Palmer
Louisiana Department of Transportation and Development
1201 Capitol Access Road
Baton Rouge, LA 70802

RE: Proposed U.S. 90 Pearl River bridge replacement project (H000284)
Archaeology and Standing Structure Field Methodology, MDAH Project
Log # 09-026-16 and Proposed Area of Potential Effects (APE), MDAH Project
Log # 09-027-16, Hancock County

Dear Ms. Palmer:

We have reviewed the proposed survey methodology and APE, received on September 6, 2016, for the above referenced undertaking, pursuant to our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. After reviewing the information provided, we accept the proposed APE. Regarding methodology, we accept the proposal with the following condition for linear resources: We would like any substantial feature on a 47+ year old linear resource segment to be recorded, regardless of age. This helps address issues regarding integrity, association, and feeling with respect to the entire resource, not just a segment. The description of modern features can be very brief, but should include UTM coordinates.

If you need further information, please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Williamson".

Greg Williamson
Review and Compliance Officer

FOR: Katie Blount
State Historic Preservation Officer

C: Kim Thurman, MDOT



Environmental Section

P.O. Box 94245 | Baton Rouge, LA 70804-9245
phone: 225-242-4502 | fax: 225-242-4500

John Bel Edwards, Governor
Shawn D. Wilson, Ph.D., Secretary

January 25, 2017

STATE PROJECT NO. H.000284
FEDERAL AID PROJECT NO. H000284
NAME: US 90 PEARL RIVER BRIDGES
ROUTE: US 90
BRIDGES: WEST MIDDLE PEARL RIVER & MIDDLE MIDDLE PEARL RIVER
PARISH: ST. TAMMANY

SUBJECT: HISTORIC BRIDGE REPLACEMENT - SOLICITATION OF VIEWS

On January 15, 2014, a Solicitation of Views letter was sent regarding the US 90 Pearl River Bridges Project (State Project Nos. H.000284 & H.000286, Federal Aid Project Nos. H000284 and H000286) describing the proposed replacement / rehabilitation of five bridges on US 90, located in St. Tammany Parish Louisiana and Hancock County Mississippi. An Environmental Assessment is being prepared for the proposed project. All five bridges (West Pearl River [Str. No. 62520060705291], West Middle Pearl River [Str. No. 62520060706701], Middle Middle Pearl River [Str. No. 62520060707111], East Middle Pearl River [Str. No. 62520060707701], and East Pearl River [Str. No. 6250060800001]) had been previously determined eligible for the National Register of Historic Places (NRHP). This Solicitation of Views letter is being sent for comment on two of the historic bridges, the West Middle Pearl River and Middle Middle Pearl River that are proposed for replacement.

We have attached a map showing the general location of the proposed project, affecting the West Middle Pearl River Bridge (Str. No. 62520060706701/ Recall No. 058720) and the Middle Middle Pearl River Bridge (Str. No. 62520060707111/ Recall No. 058730) along with a preliminary project description.

It is requested that you review the attached information and furnish us with your views and comments by **March 20, 2017**. Replies should be addressed to LADOTD; Section 28; Environmental Engineer Administrator; P.O. Box 94245; Baton Rouge, Louisiana 70804-9245. Please reference the State Project Number (H.000284) and bridge recall numbers 058720 and 058730 in your reply.

If you have any questions or require additional information, please contact Ms. Stacie Palmer at (225) 242-4517.

Sincerely,


for Noel Ardoin
Environmental Engineer Administrator

Attachments

NA/sp

cc: District 62 Administrator
District 62 Traffic Operations Engineer

PRELIMINARY PROJECT DESCRIPTION

STATE PROJECT NO. H.000284

FEDERAL AID PROJECT NO. H000284

NAME: US 90 PEARL RIVER BRIDGES

BRIDGES: WEST MIDDLE PEARL RIVER & MIDDLE MIDDLE PEARL RIVER

ROUTE: US 90

PARISH: ST. TAMMANY

The Louisiana Department of Transportation and Development (LADOTD), using federal funds, is proposing to replace the West Middle Pearl River Bridge (Str. No. 62520060706701/ Recall No. 058720) and the Middle Middle Pearl River Bridge (Str. No. 62520060707111/ Recall No. 058730) located on US 90 in St. Tammany Parish (see attached map). The structures have a sufficiency rating of less than 50; therefore qualifying them for federal bridge replacement/rehabilitation funds.

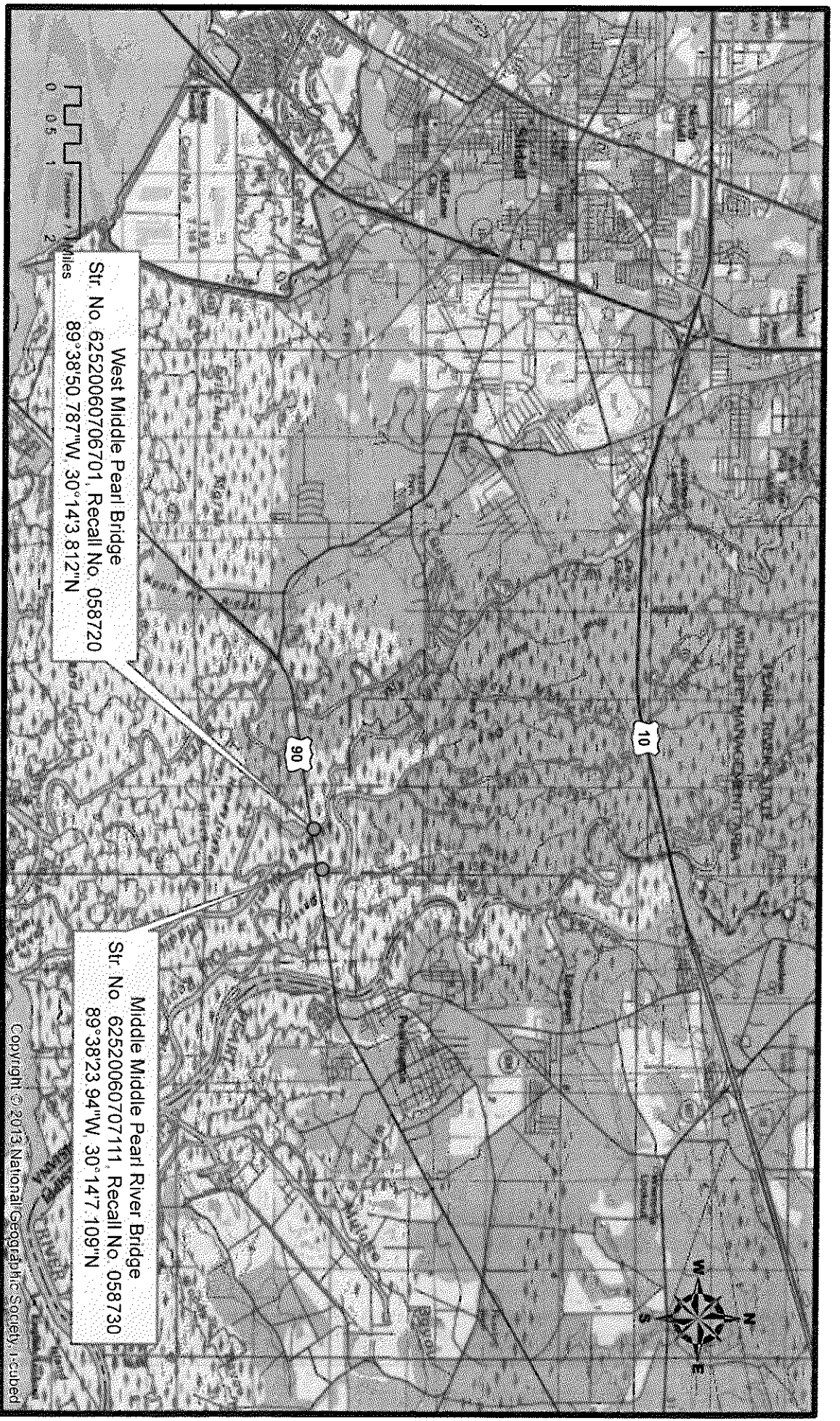
LADOTD is conducting an Environmental Assessment study for the proposed undertaking to replace/rehabilitate the five bridges referenced in this cover letter.

The West Middle Pearl River and Middle Middle River Pearl Bridges, built in 1933, are Warren Polygonal Pony steel truss bridges with reinforced concrete deck girder approaches. The bridges are considered eligible for the National Register of Historic Places (NRHP) under Criterion A as an integral part of the Rigolets to Pearlington shortcut between Louisiana and the Mississippi Gulf Coast. The bridges are also considered eligible under Criterion C as the earliest examples of this type in the state's system.

LADOTD, in conjunction with the Federal Highway Administration (FHWA), and the Louisiana State Historic Preservation Office (SHPO), completed a Historic Bridge Inventory Study of pre-1971 structures in Louisiana. On September 21, 2015, a Section 106 Programmatic Agreement (PA) for treatment of historic bridges was executed among the SHPO, FHWA, the Advisory Council on Historic Preservation (ACHP), and LADOTD. Under this PA, NRHP eligible bridges were categorized as Preservation Priority, Preservation Candidate, or Non-Priority bridges. The West Middle Pearl River and the Middle Middle Pearl River Bridges are categorized as a Non-Priority bridges because they are not an ideal candidates for long-term preservation. Stipulations under the PA for non-priority bridges include notification of the proposed replacement via this solicitation of views letter with a 45-day response period. In addition, as part of an effort to encourage relocation and adaptive reuse of the bridges, LADOTD will market the bridges for a period of 90 days, which would take place after the approval of the environmental document.

For further information on Louisiana historic bridges, the PA, and historic bridge marketing visit:

http://wwwapps.dotd.la.gov/administration/public_info/projects/home.aspx?key=48



PROJECT AREA MAP

State Project No.: H.000284

Federal Project No.: H000284

Name: US 90: Pearl River Bridges

Route: US 90

St. Tammany Parish

Map Reference: Rigolets & English Lookout 7.5' USGS





BILLY NUNGESSER
LIEUTENANT GOVERNOR

State of Louisiana
OFFICE OF THE LIEUTENANT GOVERNOR
DEPARTMENT OF CULTURE, RECREATION & TOURISM
OFFICE OF CULTURAL DEVELOPMENT

BILL CODY
DEPUTY SECRETARY

September 27, 2017

Noel Ardoin
Environmental Engineer Administrator
Environmental Section
LA DOTD
P O Box 94245
Baton Rouge, La 70804

Re: State Project No.: H.000284
Name: US 90 Pearl River Bridges (HBI)
Route: US 90
Structure #/Recall #: 62520060705291/058710 & 6250060707701/058740
West Pearl River Bridge & East Middle Pearl River Bridge (Preservation Candidates)
Parish: St. Tammany

Dear Ms. Ardoin:

Thank you for your letter of August 2, 2017, notifying our office that LADOTD in conjunction with the Federal Highway Administration is recommending replacement of the above-referenced bridges. As you are aware, these bridges serve as an important connector for U.S. 90 over the Pearl River along with three other bridges in close proximity. Two of the four bridges have been determined non-priority bridges (which will be replaced without consultation as determined by the Bridge PA) and one additional bridge is a border bridge. The two bridges referenced above are candidate bridges that are now also being considered for replacement. We are concerned that all of these bridges will be lost. Of the two bridges addressed in your letter, we would like to focus on the East Middle Pearl River Bridge. We have no issue with DOTD/FHWA replacing the West Pearl River Bridge.

A meeting with your staff would be appreciated to discuss the alternative analysis and other information provided for the East Middle Pearl River Bridge. We would like clarification, to understand why it is not prudent & feasible to retain and maintain this bridge in some form, per alternatives provided.

Please contact Nicole Hobson-Morris in our Division of Historic Preservation at 225-342-8172 or by email at nmorris@crt.la.gov to set up a meeting and/or with questions.

Sincerely,

A handwritten signature in blue ink that reads "Kristin P. Sanders".

Kristin Sanders,
Deputy State Historic Preservation Officer



Environmental Section

PO Box 94245 | Baton Rouge, LA 70804-9245
Phone: 225-242-4502 | Fax: 225-242-4500

John Bel Edwards, Governor
Shawn D. Wilson, Ph.D., Secretary

August 2, 2017

STATE PROJECT NO: H.000284

F.A.P. NO: H000284

NAME: US 90 PEARL RIVER BRIDGES (HBI)

ROUTE: US 90

STRUCTURE NOS / RECALL NOS: 62520060705291/058710 & 6250060707701/058740

PARISH: ST. TAMMANY

Ms. Kristin Sanders
Deputy State Historic Preservation Officer
Office of Cultural Development
Louisiana Department of Culture, Recreation and Tourism
P.O. Box 44247, Capitol Station
Baton Rouge, LA 70804

SUBJECT: Section 106 Programmatic Agreement for Treatment of Louisiana Historic Bridges (HBPA)
Preservation Candidate Bridge Alternative Analysis and Recommendation

Dear Ms. Sanders:

Enclosed for your review and comment is the completed Alternatives Analysis Forms and supporting documentation, prepared by the Louisiana Department of Transportation and Development (LADOTD).

US 90 Pearl River Bridges (Recall Nos. 058710 and 058740) are included in the HBPA, executed September 21, 2015, and are determined to be Preservation Candidate Bridges. In accordance with the HBPA, Attachment 4B, alternative analyses have been completed.

Based on the results of the attached analyses for the bridges, LADOTD, in conjunction with the Federal Highway Administration (FHWA), recommends replacement of the bridges. We request your concurrence. Per the HBPA-VII (C)(3), page 12, should the State Historic Preservation Officer (SHPO) concur with the recommendation, the bridge will be marketed for relocation after completion of the National Environmental Policy Act (NEPA) process. If you have any questions or comments regarding this project, please do not hesitate to contact Stacie Palmer at 225-242-457 or stacie.palmer@la.gov.

Sincerely,

 Noel Ardoin
Environmental Engineer Administrator

Enclosures

 NA/sp

cc: SHPO File

FHWA

Catherine Mastin via email catherine.mastin@la.gov



BILLY NUNGESSER
LIEUTENANT GOVERNOR

State of Louisiana
OFFICE OF THE LIEUTENANT GOVERNOR
DEPARTMENT OF CULTURE, RECREATION & TOURISM
OFFICE OF CULTURAL DEVELOPMENT

BILL CODY
DEPUTY SECRETARY

September 27, 2017

Noel Ardoin
Environmental Engineer Administrator
Environmental Section
LA DOTD
P O Box 94245
Baton Rouge, La 70804

Re: State Project No.: H.000284
Name: US 90 Pearl River Bridges (HBI)
Route: US 90
Structure #/Recall #: 62520060705291/058710 & 6250060707701/058740
West Pearl River Bridge & East Middle Pearl River Bridge (Preservation Candidates)
Parish: St. Tammany

Dear Ms. Ardoin:

Thank you for your letter of August 2, 2017, notifying our office that LADOTD in conjunction with the Federal Highway Administration is recommending replacement of the above-referenced bridges. As you are aware, these bridges serve as an important connector for U.S. 90 over the Pearl River along with three other bridges in close proximity. Two of the four bridges have been determined non-priority bridges (which will be replaced without consultation as determined by the Bridge PA) and one additional bridge is a border bridge. The two bridges referenced above are candidate bridges that are now also being considered for replacement. We are concerned that all of these bridges will be lost. Of the two bridges addressed in your letter, we would like to focus on the East Middle Pearl River Bridge. We have no issue with DOTD/FHWA replacing the West Pearl River Bridge.

A meeting with your staff would be appreciated to discuss the alternative analysis and other information provided for the East Middle Pearl River Bridge. We would like clarification, to understand why it is not prudent & feasible to retain and maintain this bridge in some form, per alternatives provided.

Please contact Nicole Hobson-Morris in our Division of Historic Preservation at 225-342-8172 or by email at nmorris@crt.la.gov to set up a meeting and/or with questions.

Sincerely,

A handwritten signature in blue ink that reads "Kristin Sanders".

Kristin Sanders,
Deputy State Historic Preservation Officer



Environmental Section

PO Box 94245 | Baton Rouge, LA 70804-9245
Phone: 225-242-4502 | Fax: 225-242-4500

John Bel Edwards, Governor
Shawn D. Wilson, Ph.D., Secretary

August 2, 2017

STATE PROJECT NO: H.000284

F.A.P. NO: H000284

NAME: US 90 PEARL RIVER BRIDGES (HBI)

ROUTE: US 90

STRUCTURE NOS / RECALL NOS: 62520060705291/058710 & 6250060707701/058740

PARISH: ST. TAMMANY

Ms. Kristin Sanders
Deputy State Historic Preservation Officer
Office of Cultural Development
Louisiana Department of Culture, Recreation and Tourism
P.O. Box 44247, Capitol Station
Baton Rouge, LA 70804

SUBJECT: Section 106 Programmatic Agreement for Treatment of Louisiana Historic Bridges (HBPA)
Preservation Candidate Bridge Alternative Analysis and Recommendation

Dear Ms. Sanders:

Enclosed for your review and comment is the completed Alternatives Analysis Forms and supporting documentation, prepared by the Louisiana Department of Transportation and Development (LADOTD).

US 90 Pearl River Bridges (Recall Nos. 058710 and 058740) are included in the HBPA, executed September 21, 2015, and are determined to be Preservation Candidate Bridges. In accordance with the HBPA, Attachment 4B, alternative analyses have been completed.

Based on the results of the attached analyses for the bridges, LADOTD, in conjunction with the Federal Highway Administration (FHWA), recommends replacement of the bridges. We request your concurrence. Per the HBPA-VII (C)(3), page 12, should the State Historic Preservation Officer (SHPO) concur with the recommendation, the bridge will be marketed for relocation after completion of the National Environmental Policy Act (NEPA) process. If you have any questions or comments regarding this project, please do not hesitate to contact Stacie Palmer at 225-242-457 or stacie.palmer@la.gov.

Sincerely,

 Noel Ardoin
Environmental Engineer Administrator

Enclosures

 NA/sp

cc: SHPO File

FHWA

Catherine Mastin via email catherine.mastin@la.gov



BILLY NUNGESSER
LIEUTENANT GOVERNOR

State of Louisiana
OFFICE OF THE LIEUTENANT GOVERNOR
DEPARTMENT OF CULTURE, RECREATION & TOURISM
OFFICE OF CULTURAL DEVELOPMENT

BILL CODY
DEPUTY SECRETARY

September 27, 2017

Noel Ardoin
Environmental Engineer Administrator
Environmental Section
LA DOTD
P O Box 94245
Baton Rouge, La 70804

Re: State Project No.: H.000284
Name: US 90 Pearl River Bridges (HBI)
Route: US 90
Structure #/Recall #: 62520060705291/058710 & 6250060707701/058740
West Pearl River Bridge & East Middle Pearl River Bridge (Preservation Candidates)
Parish: St. Tammany

Dear Ms. Ardoin:

Thank you for your letter of August 2, 2017, notifying our office that LADOTD in conjunction with the Federal Highway Administration is recommending replacement of the above-referenced bridges. As you are aware, these bridges serve as an important connector for U.S. 90 over the Pearl River along with three other bridges in close proximity. Two of the four bridges have been determined non-priority bridges (which will be replaced without consultation as determined by the Bridge PA) and one additional bridge is a border bridge. The two bridges referenced above are candidate bridges that are now also being considered for replacement. We are concerned that all of these bridges will be lost. Of the two bridges addressed in your letter, we would like to focus on the East Middle Pearl River Bridge. We have no issue with DOTD/FHWA replacing the West Pearl River Bridge.

A meeting with your staff would be appreciated to discuss the alternative analysis and other information provided for the East Middle Pearl River Bridge. We would like clarification, to understand why it is not prudent & feasible to retain and maintain this bridge in some form, per alternatives provided.

Please contact Nicole Hobson-Morris in our Division of Historic Preservation at 225-342-8172 or by email at nmorris@crt.la.gov to set up a meeting and/or with questions.

Sincerely,

A handwritten signature in blue ink that reads "Kristin P. Sanders".

Kristin Sanders,
Deputy State Historic Preservation Officer

DRAFT MEETING MINUTES
SECTION 106 MEETING AT LADOTD HEADQUARTERS
NOVEMBER 14, 2017
CONTRACT NO. 4400005579
H.000284 US 90 Pearl River Bridges (HBI)
ROUTE US 90
ST. TAMMANY PARISH

The meeting was requested by the Louisiana SHPO to review the findings of the Section 106 evaluation associated with the existing US 90 bridge crossing of the East Middle Pearl River. The existing 2-lane US90 Bridge over East Middle Pearl River was constructed in 1933. The existing Pony Truss structure is classified as a Preservation Candidate in the Programmatic Agreement (PA) regarding management of historic bridges in Louisiana.

The environmental assessment document considers replacement alternatives as well as rehabilitation alternatives which leave the existing structure in place functioning either as the US 90 main line 2-lane bridge, or as a one-way couplet pair of bridges, with a new 1-way bridge constructed parallel to the existing bridge.

Under the rehabilitation alternative in which the bridge continues to operate as a 2-lane span, the bridge will be functionally obsolete as the rehabilitation would not address current design guidance for shoulder width, and the span would also be structurally deficient as it would not meet requirements for current design loading.

As a one-way couplet pair, the shoulder deficiency would be mitigated, but the bridge would continue to be posted for its loading deficiency.

The attached Section 106 matrix was prepared in conformance with PA guidance. The proposed alternative recommends replacement of the existing span with a new structure meeting current design guidance.

The SHPO, represented by Nicole Hobson-Morris, Executive Director of the Division of Historic Preservation, requested clarification of the costs as shown in the matrix. Cindy Rich (NSI) indicated that the rehab costs shown in the matrix reflect a rehab providing a 20-year life as required in the PA. The proposed repairs do not upgrade the bridge loading. The discussion which followed:

- Confirmed that repairs to the bridge that brought the bridge into structural compliance would so degrade the historic contributing elements that the bridge may no longer be considered historic. Also, costs for this type of upgrade were not presented in the matrix.
- Confirmed that upgrading the bridge structure would also require repairs to the bridge foundation not accounted for in the costs as shown in the matrix.

Purpose and Need factors contributing to the decision to replace the bridge include:

- Neither the Rehab alternative nor the Couplet alternative would meet the Purpose and Need as the repaired bridge in both situations would remain as the only load posted bridge within the US 90 corridor under study.
- The requirement that US 90 route under study in the Environmental Assessment be able to function as an evacuation route.

- The requirement that US 90 route under study in the Environmental Assessment be able to serve temporarily as a bypass of I-10.

Nicole agreed the SHPO would support the replacement alternative. The Section 106 matrix will be modified to clarify the cost limitations as discussed above as well as the Purpose and Need justification for the bridge replacement.

A question was addressed to Nicole regarding whether there was a specific percentage of structure replacement that would void the historic integrity of a bridge. Nicole indicated that the focus should be on potential affects to elements contributing to the historic designation, rather than on specific rehab costs or the structure replacement percentage.

Attachments: LADOTD sign-in
Neel-Schaffer, Inc. Sign-in
Copy of Section 106 Matrix (revised to reflect meeting findings)



Department of Transportation and
Development
Office of Engineering
PO Box 94245
Baton Rouge, LA 70804-9245

John Bel Edwards, Governor
Shawn D. Wilson, Ph.D., Secretary

November 14, 2017

Meeting Sign-In

State Project No. H.000284
US 90 Bridges
St. Tammany Parish
US 90

Subject: LASHPO Consultation - EMPRB

Attendees

Name	Representing	Phone	E-Mail
Cathy Mastin	DOTD - 34	225-379-1652	Catheremastin@la.gov
Arturo Aguirre	FHWA - LA	226-757-7611	arturo.aguirre@dot.gov
Jerry Pitts	FHWA - LA	225-757-7618	Jerry.Pitts@dot.gov
BOB MAHONEY	FHWA - LA	225-757-7624	robert-mahoney@dot.gov
Mark Bucia	DOTD - 25	225-379-1076	mark.bucia@la.gov
Ryan Reviere	DOTD - 24	225-379-1071	ryan.reviere@la.gov
PAUL VAUGHT	DOTD BRIDGE	225-379-1816	paul.vaughtiii@la.gov
Andrew Michael	DOTD Bridge Design	225-371-1062	Andrew.Michael@la.gov
Nicole Hobson-Morris	SHPO	225 342.8172	nmorris@crt.la.gov
Berry Brubaker	NSI	985-674-9821	berry.brubaker@nsi.com
Cindy Rich	NSI	601-948-3071	cindy.rich@nsi.com
Stacie Palmer	DOTD	225-242-4517	Stacie.Palmer@la.gov
Carney Cox	DOTD	225-242-4520	Carney.Cox@la.gov

ATTENDANCE RECORD
SECTION 106 MEETING AT LDOTD HEADQUARTERS
NOVEMBER 14, 2017
CONTRACT NO. 4400005579
H.000284 US 90 Pearl River Bridges (HBI)
ROUTE US 90
ST. TAMMANY PARISH

Name	Initial	Representing	Phone	Email
Robert Mahoney	RMA	LA FHWA	(225) 757-7624	Robert.Mahoney@fhwa.dot.gov
Scott Nelson		LA FHWA	(225) 757-7624	Scott.Nelson@fhwa.dot.gov
Claiborne Barnwell		MS FHWA	(601) 965-4217	claiborne.barnwell@dot.gov
Ronnie Broadbent		LADOTD	(225)-379-1727	Ronald.Broadbent@LA.GOV
Stacie Palmer		LADOTD Environmental	(225) 242-4517	stacie.palmer@la.gov
Jan Grenfel		LADOTD Environmental	(225) 242-4509	jan.grenfell@la.gov
Catherine Mastin	CM	LADOTD		Catherine.Mastin@LA.GOV
Chad Wallace		MDOT Environmental	(601) 359-7920	rcwallace@mdot.ms.gov
Kim Thurman		MDOT Environmental	(601) 359-1475	kthurman@mdot.ms.gov
John Underwood		MDOT Environmental		junderwood@mdot.ms.gov
Nicole Hobson-Morris		LA Department of Culture, Recreation, and Tourism	(225) 342-8172	nhmorris@crt.la.gov
Dr. Charles "Chip" McGimsey		LA Department of Culture, Recreation, and Tourism	(225) 219-4598	cmcgimsey@crt.la.gov
Mike Verando		LA Department of Culture, Recreation, and Tourism		mvarnado@crt.la.gov
Katie Blount		MS Department of Archives and History	(601) 576-6850	archaeology@mdah.state.ms.us
Greg Williamson		MS Department of Archives and History	(601) 576-6538	gwill@mdah.state.ms.us
Barry Brupbacher	BB	Neel-Schaffer	(985) 674-9820	barry.brupbacher@neel-schaffer.com
Tonya Smith		Neel-Schaffer	(225) 719-3771	tonya.smith@neel-schaffer.com
Cindy Rich	CR	Neel-Schaffer	(601) 948-3071	cindy.rich@neel-schaffer.com
Keith Carr		Neel-Schaffer	(601) 948-3071	keith.carr@neel-schaffer.com
Rhonda Smith		Earth Search, Inc.	(504) 947-0737	rlsmith@earth-search.com
Arturo Aguirre	AA	LA - FHWA	(225) 757-7611	arturo.aguirre@dot.gov
Jerry Pitts	JP	LA - FHWA	(225) 757-7618	Jerry.Pitts@dot.gov
Mark Bucui	MB	LADOTD	225-379-1076	mark.bucui@la.gov
Ryan Reviere	RR	LA DOTD	225-379-1071	ryan.reviere@la.gov
PAUL VAUGHT	PV	LA DOTD BRIDGE	225-379-1816	paul.vaughtiii@la.gov
Andrew Michael	AM	LA DOTD Bridge Design	225-379-1062	Andrew.Michael@la.gov

EAST MIDDLE PEARL RIVER – REHABILITATION ANALYSIS
PREPARED BY NEEL-SCHAFER INC.
FIXED SPAN ENGINEER FOR US 90 BRIDGES TEAM

Current Bridge Status	
Deficiency	Comments
Load posted 15T-25T	Structurally Deficient for current design and state legal loads
Shoulder width: 2'	8' required shoulder width
Existing Low Chord Elevation: 11.37 NAVD88	Required Flood Elevation: 13.31 NAVD88

Guidelines followed for rehabilitation can be found in *LADOTD Bridge Design and Evaluation Manual – Chapter 6: Design Policy for Bridge Rehabilitation/Repair Projects* as well as *AASHTO Manual for Bridge Evaluation 2nd Edition*.

The US90 Bridge over East Middle Pearl River is classified as a Preservation Candidate in the Programmatic Agreement regarding management of historic bridges in Louisiana. The structure is 582 feet long and consists of 12 reinforced concrete deck girder approach spans and 3 steel pony truss spans across the river. As such, a determination of the feasibility to rehabilitate this structure is to be made during the environmental process. Information available to use as a basis for this determination is limited to the most recent load rating and inspection reports. Among the many findings in these documents, the pony truss spans control the load rating of the overall bridge and the inspection report indicates that there is moderate to major pack rust at all lower chord gusset plate connections with 20% to 30% section loss in the gusset plates, 15% to 20% section loss in the chord members and 15% to 30% section loss in the floor beams. All these tension members are considered to be fracture critical components. It is also noted that the upper chord has pack rust with 15% section loss at all panel point locations.

Based on the inspection report, in order for the service life of the East Middle Pearl River Bridge to be extended another 20 years as stated in the Programmatic agreement, rehabilitation to address panel point pack rust and member section loss would most likely require partial truss disassembly and at a minimum, member replacement of the lower chords, gussets, floor beams and stringers. These operations are extensive and costly and will require the bridge to be closed during rehabilitation. In order to replace these members, the existing concrete deck will have to be removed and a temporary piling support system installed to support the partially disassembled truss while the members are being replaced. It is estimated that the lower chords, gussets, floor beams and stringers constitute at least 50% of the overall truss.

A determination of the load rating capacity of the final rehabilitated structure would require an in-depth field inspection and subsequent load rating analysis study. Replacement of the chords, gussets, floor beams and stringers with section properties similar to the original members will produce a bridge rating

approximately equal to the original rating when the bridge was constructed in 1933. Thus, even the rehabilitated bridge will still have to be posted for a reduced capacity compared to current standard highway loading and also, the horizontal bridge width (24 feet) would not meet the minimum requirements for a Rural Arterial (RA-2) roadway classification established for this study. In order for the bridge to be rehabilitated to support current standard highway loading, all truss members will most likely have to be replaced with similar but with either heavier or stronger section properties than the original members.

EAST MIDDLE PEARL RIVER BRIDGE RENOVATION COST

Work Item	Bridge Length	Bridge Width	Additional Width	Unit Cost	Cost
Temp. Pile Support, Replace Bottom Chords & Verticals on Trusses, Floorbeams & Stringers	246	N.A.	N.A.	\$4,500.00	\$1,107,000.00
Existing Deck Demo	246	24	N.A.	\$25.00	\$147,600.00
Remove Existing Stringers & Floorbeams	246	24	N.A.	\$45.00	\$265,680.00
Riprap Channel (5 feet thick, 2 tons per CY)	246	24	40	\$50.00	\$145,777.78
Contingency Factor					1.3
Total Bridge Rehab. Cost = \$2,165,875					
Includes Installation of Temp. Support Structure On Piling To Support Existing Truss In Order To Replace Bottom Chords, Verticals, Floorbeams, Stringers & Deck: Also Includes Riprap Bank To Bank For Scour					

East Middle Pearl River
Section 106 Computations Matrix
December 1, 2017

Alternative R-1 Rehabilitation			Location	Offset	Required ROW (acres)	ROW Cost	Cost					Potential Wetlands Acreage Affected
							Bridge Cost	Roadway Cost	Design Cost	D&C Cost	Utility Cost	
Rehabilitation			Existing	0	0	\$ -	2,200,000	\$ 75,000	\$ 227,500	\$ 2,502,500	\$ -	
Permanent fixed, new construction						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Temporary, fixed new construction			South	48.5'	0	\$ -	\$ 878,000	\$ 410,000	\$ 25,760	\$ 1,313,760	\$ 68,400	3.8
Permanent movable, new construction						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Temporary, movable new construction						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Demo Existing Bridge						\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total					0	\$ -				\$ 3,816,260	\$ 68,400	3.8
Road W	Bridge	Road E										
600	600	600	Permanent Temporary (ft)									

The rehab costs above reflect a rehab providing a 20-year life as required in the PA. The proposed repairs do not upgrade the bridge loading. Repairs to the bridge that would bring the bridge into structural compliance would so degrade the historic contributing elements that the bridge may no longer be considered historic. Costs for this type of upgrade are not presented. Upgrading the bridge structure would also require repairs to the bridge foundation not accounted for in the costs.

East Middle Pearl River
Section 106 Computations Matrix
December 1, 2017

Alternative R-2				Required ROW (acres)	ROW Cost	Cost					Potential Wetlands Acreage Affected			
Rehabilitation for use in One-Way Pair (Add New Parallel Couplet at MHW)						Bridge Cost	Roadway Cost	Design Cost	D&C Cost	Utility Cost				
Rehabilitation				Existing			\$ -	\$ 2,200,000	\$ 75,000	\$ 227,500	\$ 2,502,500	\$ -		
Permanent fixed, new construction				South	52.5'		\$ -	\$ 3,350,000	\$ 467,000	\$ 381,700	\$ 4,198,700	\$ 96,330	5.1	
Temporary, fixed new construction						0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Permanent movable, new construction							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Temporary, movable new construction							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Demo Existing Bridge						0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Road W Bridge Road E 900 1185 450 Permanent (ft) Temporary						0	\$ -				\$ 6,701,200	\$ 96,330	5.1	

The rehab costs above reflect a rehab providing a 20-year life as required in the PA. The proposed repairs do not upgrade the bridge loading. Repairs to the bridge that would bring the bridge into structural compliance would so degrade the historic contributing elements that the bridge may no longer be considered historic. Costs for this type of upgrade are not presented. Upgrading the bridge structure would also require repairs to the bridge foundation not accounted for in the costs.

East Middle Pearl River
Section 106 Computations Matrix
December 1, 2017

Alternative R-3				Location	Offset	Required ROW (acres)	ROW Cost	Cost					Potential Wetlands Acreage Affected
Bypass and Adaptive Reuse for Non-Vehicular Use on site and New Bridge								Bridge Cost	Roadway Cost	Design Cost	D&C Cost	Utility Cost	
Rehabilitation						0	\$ -	2,200,000	\$ 50,000	\$ 225,000	\$ 2,475,000	\$ -	
Permanent fixed, new construction				South	52.5	0	\$ -	\$ 4,670,000	\$ 700,000	\$ 537,000	\$ 5,907,000	\$ 96,330	5.1
Temporary, fixed new construction							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Permanent movable, new construction							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Temporary, movable new construction							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Demo Existing Bridge						0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0
Total						0	\$ -				\$ 8,382,000	\$ 96,330	5.1
Road W 900	Bridge 1185	Road E 450	Permanent (ft)										

Alternative F-3				Required ROW (acres)	ROW Cost	Cost					Potential Wetlands Acreage Affected		
New Fixed Span Structure On Offset Alignment Using Surge plus wave plus 1' Clearance						Bridge Cost	Roadway Cost	Design Cost	D&C Cost	Utility Cost			
Location				Offset									
Rehabilitation						\$ -	\$ -	\$ -	\$ -	\$ -			
Permanent fixed, new construction				North	52.5'	0	\$ -	\$ 4,670,000	\$ 700,000	\$ 537,000	\$ 5,907,000	\$ 96,330	5.1
Temporary, fixed new construction							\$ -			\$ -	\$ -	\$ -	
Permanent movable, new construction							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Temporary, movable new construction							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Demo Existing Bridge						0	\$ -	\$ 500,000	\$ 245,000	\$ -	\$ 745,000	\$ -	
Total						0	\$ -				\$ 6,652,000	\$ 96,330	5.1
Road W 900	Bridge 1185	Road E 450	Permanent (ft) Temporary (ft)										

East Middle Pearl River
Section 106 Computations Matrix
December 1, 2017

Alternative F-4 New Fixed Span Structure On Existing Alignment Using Surge plus wave plus 1' Clearance				Location	Offset	Required ROW (acres)	ROW Cost	Cost					Potential Wetlands Acreage Affected	
								Bridge Cost	Roadway Cost	Design Cost	D&C Cost	Utility Cost		
Rehabilitation							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Permanent fixed, new construction				Existing		0	\$ -	\$ 4,670,000	\$ 420,000	\$ 509,000	\$ 5,599,000	\$ -	3.6	
Temporary, fixed new construction				North	52.5'		\$ -	\$ 878,000	\$ 475,000	\$ 27,060	\$ 1,380,060	\$ 70,490	2.5	
Permanent movable, new construction							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Temporary, movable new construction							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Demo Existing Bridge						0	\$ -	\$ 500,000	\$ 168,000	\$ -	\$ 668,000	\$ -		
Total						0	\$ -					\$ 7,647,060	\$ 70,490	6.1
Road W	Bridge	Road E												
320	1185	350	Permanent (ft)											
700	600	700	Temporary (ft)											

East Middle Pearl River
Section 106 Alternatives Analysis Matrix
December 1, 2017

Project Purpose and Need

The purposes of the proposed action, which have been approved by FHWA, are:

- o To maintain a system link to provide a diversion route in the event of an incident on I-10.
- o To improve the structural integrity and functionality of the bridges.
- o To support hurricane evacuations.

Alternatives	Meets Project Purpose and Need?	Design and Construction Cost	ROW Amount and Cost	Total Cost	Utility Costs	Other Factors	Prudent and Feasible?
Alternative R-1 Rehabilitation	No	\$ 3,816,260	0 acres \$0.00	\$ 3,816,260	\$ 68,400	Because the rehabilitation of the existing bridge cannot be performed under traffic, this alternative would require the construction of a temporary by-pass bridge meeting navigation requirements. The existing bridge does not meet current geometric design criteria for shoulder width (existing 2', required 8'). These geometric deficiencies cannot be addressed during rehabilitation. The existing bridge is posted for load deficiencies. Based on the most recent load rating and inspection reports, the pony truss spans control the load rating of the overall bridge, and there is moderate to major pack rust at all lower chord gusset plate connections with 20% to 30% section loss in the gusset plates, 15% to 20% section loss in the chord members, and 15% to 30% section loss in the floor beams. All these tension members are considered to be fracture critical components. It is also noted that the upper chord has pack rust with 15% section loss at all panel point locations. Rehabilitation to address panel point pack rust and member section loss would most likely require partial truss disassembly and at a minimum, member replacement of the lower chords, gussets, floor beams and stringers. In order to replace these members, the existing concrete deck will have to be removed and a temporary piling support system installed to support the partially disassembled truss while the members are being replaced. It is estimated that the lower chords, gussets, floor beams and stringers constitute at least 50% of the overall truss. Although the replacements could be made to match the existing materials, the loss of at least 50% of the historic materials could constitute a major or extensive alteration that could lead to the overall loss of historic integrity, thereby rendering the bridge ineligible for the NRHP. In addition, replacement of the chords, gussets, floor beams and stringers with section properties similar to the original members will produce a bridge rating approximately equal to the original rating when the bridge was constructed in 1933. Thus, even the rehabilitated bridge will still have to be posted for a reduced capacity compared to current standard highway loading. In order for the bridge to be rehabilitated to support current standard highway loading, all truss members will most likely have to be replaced with similar but with either heavier or stronger section properties than the original members. No additional ROW would be required. Issues associated with temporary bypass construction: AT&T long-haul fiber optic cable located on both sides of US 90. Overhead electrical lines located on south side of US 90. Rehabilitation and construction activities could impact approximately 3.8 acres of wetlands based on initial screening results. Additional environmental impacts are anticipated to the 100-year floodplain, the LA coastal zone, endangered species, and EFH.	The alternative is not prudent and feasible because it cannot be completed in accordance with sound engineering principles and practices. These include the "Other Factors" previously noted, USCG permit requirements, LADOTD floodplain guidance, and the roadway and bridge design criteria prepared for this project. In addition, this alternative does not meet the project purpose and need as the rehabilitated bridge would remain as the only load posted bridge within the US 90 corridor under study and would thus not be able to function as an evacuation route or temporary bypass of I-10.

East Middle Pearl River
Section 106 Alternatives Analysis Matrix
December 1, 2017

Alternatives	Meets Project Purpose and Need?	Design and Construction Cost	ROW Amount and Cost	Total Cost	Utility Costs	Other Factors	Prudent and Feasible?
Alternative R-2 Rehabilitation for use in One-Way Pair (Add New Parallel Couplet at MHW)	No	\$ 6,701,200	0 acres \$0.00	\$ 6,701,200	\$ 96,330	Because the rehabilitation of the existing bridge cannot be performed under traffic, this alternative would require the construction of a temporary by-pass bridge meeting navigation requirements. The existing bridge is posted for load deficiencies. Based on the most recent load rating and inspection reports, the pony truss spans control the load rating of the overall bridge, and there is moderate to major pack rust at all lower chord gusset plate connections with 20% to 30% section loss in the gusset plates, 15% to 20% section loss in the chord members, and 15% to 30% section loss in the floor beams. All these tension members are considered to be fracture critical components. It is also noted that the upper chord has pack rust with 15% section loss at all panel point locations. Rehabilitation to address panel point pack rust and member section loss would most likely require partial truss disassembly and at a minimum, member replacement of the lower chords, gussets, floor beams and stringers. In order to replace these members, the existing concrete deck will have to be removed and a temporary piling support system installed to support the partially disassembled truss while the members are being replaced. It is estimated that the lower chords, gussets, floor beams and stringers constitute at least 50% of the overall truss. Although the replacements could be made to match the existing materials, the loss of at least 50% of the historic materials could constitute a major or extensive alteration that could lead to the overall loss of historic integrity, thereby rendering the bridge ineligible for the NRHP. In addition, replacement of the chords, gussets, floor beams and stringers with section properties similar to the original members will produce a bridge rating approximately equal to the original rating when the bridge was constructed in 1933. Thus, even the rehabilitated bridge will still have to be posted for a reduced capacity compared to current standard highway loading. In order for the bridge to be rehabilitated to support current standard highway loading, all truss members will most likely have to be replaced with similar but with either heavier or stronger section properties than the original members. No additional ROW would be required. Issues associated with parallel couplet construction: AT&T long-haul fiber optic cable located on both sides of US 90. Overhead electrical lines located on south side of US 90. Rehabilitation and construction activities could impact approximately 5.1 acres of wetlands based on initial screening results. Additional environmental impacts are anticipated to the 100-year floodplain, the LA coastal zone, endangered species, and EFH.	The alternative is not prudent and feasible because it cannot be completed in accordance with sound engineering principles and practices. These include the "Other Factors" previously noted, USCG permit requirements, LADOTD floodplain guidance, and the roadway and bridge design criteria prepared for this project. In addition, this alternative does not meet the project purpose and need as the rehabilitated bridge would remain as the only load posted bridge within the US 90 corridor under study and would thus not be able to function as an evacuation route or temporary bypass of I-10.

East Middle Pearl River
Section 106 Alternatives Analysis Matrix
December 1, 2017

Alternatives	Meets Project Purpose and Need?	Design and Construction Cost	ROW Amount and Cost	Total Cost	Utility Costs	Other Factors	Prudent and Feasible?
Alternative R-3 Bypass and Adaptive Reuse for Non-Vehicular Use Onsite and New Bridge This alternative includes the construction a new fixed span on offset alignment at MHW.	Yes	\$ 8,382,000	0 acres \$0.00	\$ 8,382,000	\$ 96,330	There are three possible adaptive reuse scenarios: 1 - Maintaining the bridge as a pedestrian - bicycle only facility. There are significant O&M challenges associated with maintaining a large structure such as the East Middle Pearl River pony truss span structure for only bicycle and pedestrian facilities. For the bridge to be maintained as a pedestrian and bicycle facility a local government or nonprofit agency with substantial financial resources would have to accept O&M responsibility. 2 - Use of a portion of the existing structure as a recreation pier. After Hurricane Katrina, a portion of the remnant bridge spans from the I-10 crossing of Lake Pontchartrain were incorporated into a fishing pier that is operated by St. Tammany Parish. St. Tammany Parish will be contacted regarding any interest they may have in the use of the existing span of the US 90 East Middle Pearl River bridge for recreation purposes. 3 - Reuse of the existing spans by placement in other streams or channels. First, a candidate stream would have to be identified either by proximity local governments or by LADOTD . If a candidate stream could be identified, there would be considerable technical challenges and cost associated with the relocation of the existing spans. Relocation by barge would be the only option. No additional ROW would be required. Issues associated with new bridge construction: AT&T long-haul fiber optic cable located on both sides of US 90. Overhead electrical lines located on south side of US 90. Construction activities could impact approximately 5.1 acres of wetlands based on initial screening results. Additional environmental impacts are anticipated to the 100-year floodplain, the LA coastal zone, endangered species, and EFH.	Scenario 1 is not prudent because there is a lack of need for a pedestrian-bicycle facility in this location. Scenario 2 is feasible if St. Tammany Parish is interested in a portion of the bridge remaining for a fishing pier. Scenario 3 is feasible, although it may not be prudent to incur the additional cost of relocating the existing span. All three scenarios are dependent on an entity willing to take ownership and responsibility for the bridge.

East Middle Pearl River
Section 106 Alternatives Analysis Matrix
December 1, 2017

Alternatives	Meets Project Purpose and Need?	Design and Construction Cost	ROW Amount and Cost	Total Cost	Utility Costs	Other Factors	Prudent and Feasible?
Alternative F-3 Replacement New Fixed Span Structure On Offset Alignment Using Surge plus wave plus 1' Clearance	Yes	\$6,652,000	0 acres \$0.00	\$ 6,652,000	\$ 96,330	No additional ROW would be required; however, it should be noted that all lands outside of LADOTD ROW surrounding the East Middle are part of the Pearl River WMA. AT&T long-haul fiber optic cable located on both sides of US 90. Overhead electrical lines located on south side of US 90. Construction activities could impact approximately 5.1 acres of wetlands based on initial screening results. Additional environmental impacts are anticipated to the 100-year floodplain, the LA coastal zone, endangered species, and EFH. In order to obtain a USACE permit, the LADOTD must demonstrate that it has chosen the least damaging practicable alternative. Connectivity with East Pearl Alternatives: The East Middle Pearl upstream alternative utilizing the surge clearance returns to the existing US 90 alignment east of the point that the Long Span East Pearl alternative departs from the existing US 90 alignment to the south. This poses a geometric conflict between the two alternatives and as such combining these two alternatives is problematic. F-3 is preferable over F-1 because the distance is longer between two vertical curves. There is no conflict if the upstream storm surge alternative is utilized in conjunction with the Mid Level East Pearl alternatives.	This alternative is prudent and feasible because it meets the project purpose and need, but it does not meet the Secretary's Standards.
Alternatives	Meets Project Purpose and Need?	Design and Construction Cost	ROW Amount and Cost	Total Cost	Utility Costs	Other Factors	Prudent and Feasible?
Alternative F-4 Replacement New Fixed Span Structure On Existing Alignment Using Surge plus wave plus 1' as Clearance.	Yes	\$7,647,060	0 acres \$0.00	\$ 7,647,060	\$ 70,490	Preservation standards, specifically the Secretary of the Interior's Standards for the Treatment of Historic Properties, cannot be met with this alternative. No additional ROW would be required; however, it should be noted that all lands outside of LADOTD ROW surrounding the East Middle are part of the Pearl River WMA. AT&T long-haul fiber optic cable located on both sides of US 90. Overhead electrical lines located on south side of US 90. Construction activities could impact approximately 6.1 acres of wetlands based on initial screening results. Additional environmental impacts are anticipated to the 100-year floodplain, the LA coastal zone, endangered species, and EFH. In order to obtain a USACE permit, the LADOTD must demonstrate that it has chosen the least damaging practicable alternative. Connectivity with East Pearl Alternatives: The East Middle Pearl on existing alignment alternative utilizing the surge clearance is geometrically compatible with both the Long Span East Pearl alternative and the Mid Level East Pearl alternatives.	This alternative is prudent and feasible because it meets the project purpose and need, but it does not meet the Secretary's Standards.



Office of Engineering
Environmental Section
PO Box 94245 | Baton Rouge, LA 70804-9245
ph: 225-242-4502 fx: 225-242-4500

John Bel Edwards, Governor
Shawn D. Wilson, Ph.D., Secretary

May 21, 2019

STATE PROJECT NO: H.000284
F.A.P. NO: H000284
NAME: US 90 PEARL RIVER BRIDGES (HBI)
ROUTE: US 90
STRUCTURE NO / RECALL NO: 6250060707701 / 058740
PARISH: ST. TAMMANY

Ms. Kristin Sanders
State Historic Preservation Officer
Louisiana Office of Cultural Development
P.O. Box 44247
Baton Rouge, LA 70804-44247

VIA E-MAIL TO: Section 106@crt.state.la.us

SUBJECT: REVISED – Section 106 Programmatic Agreement for the Treatment of Louisiana Historic Bridges (HBPA) Preservation Candidate Bridge East Middle Pearl

Dear Ms. Sanders:

On August 2, 2017, the Louisiana Department of Transportation and Development (LDAOTD) submitted the alternative analysis for two preservation candidate bridges, the East Middle Pearl River Bridge and the West Pearl River Bridge (see attached letter). Your response letter, dated September 27, 2018 (see attached letter), requested a meeting to discuss the alternative analysis for the East Middle Pearl River Bridge. On November 14, 2017 a meeting between LASHPO, LADOTD, the Federal Highway Administration (FHWA), and project consultant Neele Schaffer was held at LADOTD headquarters (see attached meeting minutes) to review the alternative analysis and provide clarification on the documentation for the East Middle Pearl River Bridge. Considerations of the purpose and need include the project corridor to function as an evacuation route and to serve temporarily as a bypass for I-10.

Consensus was reached that the repairs to the bridge that would bring the bridge into structural compliance would degrade the historic contributing elements that the bridge would no longer retain its historic integrity. It was also discussed that the alternative analysis cost did not include the cost for repairs to the bridge foundation. In addition, neither rehabilitation nor the couplet alternative would meet the purpose and need as the repairs in both situations would leave the East Middle Pearl Bridge as the only load posted bridge within the US 90 corridor under study. At the request of Nicole Hobson-

STATE PROJECT NO: H.000284
F.A.P. NO: H000284
NAME: US 90 PEARL RIVER BRIDGES (HBI)
ROUTE: US 90
STRUCTURE NO / RECALL NO: 6250060707701 / 058740
PARISH: ST. TAMMANY
Page 2

Morris the alternative Matrix has been modified to clarify the cost as well as the purpose and need justification for the bridge replacement.

The Federal Highway Administration (FHWA) and LADOTD in consultation with your office recommends replacement of the bridges. We request your concurrence. Per the HBPA-VII (C)(3), page 12, should the State Historic Preservation Officer (SHPO) concur with the recommendation, the bridge will be marketed for relocation after completion of the National Environmental Policy Act (NEPA) process. If you have any questions or comments regarding this project, please do not hesitate to contact Stacie Palmer at 225-242-457 or stacie.palmer@la.gov.

Sincerely,



 Noel Ardoin
Environmental Engineer Administrator

Enclosures



NA/sp

cc: SHPO File

FHWA

Catherine Mastin via email catherine.mastin@la.gov



Environmental Section

PO Box 94245 | Baton Rouge, LA 70804-9245
Phone: 225-242-4502 | Fax: 225-242-4500

John Bel Edwards, Governor
Shawn D. Wilson, Ph.D., Secretary

August 2, 2017

STATE PROJECT NO: H.000284

F.A.P. NO: H000284

NAME: US 90 PEARL RIVER BRIDGES (HBI)

ROUTE: US 90

STRUCTURE NOS / RECALL NOS: 62520060705291/058710 & 6250060707701/058740

PARISH: ST. TAMMANY

Ms. Kristin Sanders
Deputy State Historic Preservation Officer
Office of Cultural Development
Louisiana Department of Culture, Recreation and Tourism
P.O. Box 44247, Capitol Station
Baton Rouge, LA 70804

SUBJECT: Section 106 Programmatic Agreement for Treatment of Louisiana Historic Bridges (HBPA)
Preservation Candidate Bridge Alternative Analysis and Recommendation

Dear Ms. Sanders:

Enclosed for your review and comment is the completed Alternatives Analysis Forms and supporting documentation, prepared by the Louisiana Department of Transportation and Development (LADOTD).

US 90 Pearl River Bridges (Recall Nos. 058710 and 058740) are included in the HBPA, executed September 21, 2015, and are determined to be Preservation Candidate Bridges. In accordance with the HBPA, Attachment 4B, alternative analyses have been completed.

Based on the results of the attached analyses for the bridges, LADOTD, in conjunction with the Federal Highway Administration (FHWA), recommends replacement of the bridges. We request your concurrence. Per the HBPA-VII (C)(3), page 12, should the State Historic Preservation Officer (SHPO) concur with the recommendation, the bridge will be marketed for relocation after completion of the National Environmental Policy Act (NEPA) process. If you have any questions or comments regarding this project, please do not hesitate to contact Stacie Palmer at 225-242-457 or stacie.palmer@la.gov.

Sincerely,

 Noel Ardoin
Environmental Engineer Administrator

Enclosures

NA/sp

cc: SHPO File

FHWA

Catherine Mastin via email catherine.mastin@la.gov



BILLY NUNGESSER
LIEUTENANT GOVERNOR

State of Louisiana
OFFICE OF THE LIEUTENANT GOVERNOR
DEPARTMENT OF CULTURE, RECREATION & TOURISM
OFFICE OF CULTURAL DEVELOPMENT

BILL CODY
DEPUTY SECRETARY

September 27, 2017

Noel Ardoin
Environmental Engineer Administrator
Environmental Section
LA DOTD
P O Box 94245
Baton Rouge, La 70804

Re: State Project No.: H.000284
Name: US 90 Pearl River Bridges (HBI)
Route: US 90
Structure #/Recall #: 62520060705291/058710 & 6250060707701/058740
West Pearl River Bridge & East Middle Pearl River Bridge (Preservation Candidates)
Parish: St. Tammany

Dear Ms. Ardoin:

Thank you for your letter of August 2, 2017, notifying our office that LADOTD in conjunction with the Federal Highway Administration is recommending replacement of the above-referenced bridges. As you are aware, these bridges serve as an important connector for U.S. 90 over the Pearl River along with three other bridges in close proximity. Two of the four bridges have been determined non-priority bridges (which will be replaced without consultation as determined by the Bridge PA) and one additional bridge is a border bridge. The two bridges referenced above are candidate bridges that are now also being considered for replacement. We are concerned that all of these bridges will be lost. Of the two bridges addressed in your letter, we would like to focus on the East Middle Pearl River Bridge. We have no issue with DOTD/FHWA replacing the West Pearl River Bridge.

A meeting with your staff would be appreciated to discuss the alternative analysis and other information provided for the East Middle Pearl River Bridge. We would like clarification, to understand why it is not prudent & feasible to retain and maintain this bridge in some form, per alternatives provided.

Please contact Nicole Hobson-Morris in our Division of Historic Preservation at 225-342-8172 or by email at nmorris@crt.la.gov to set up a meeting and/or with questions.

Sincerely,

A handwritten signature in blue ink that reads "Kristin Sanders".

Kristin Sanders,
Deputy State Historic Preservation Officer

DRAFT MEETING MINUTES
SECTION 106 MEETING AT LADOTD HEADQUARTERS
NOVEMBER 14, 2017
CONTRACT NO. 4400005579
H.000284 US 90 Pearl River Bridges (HBI)
ROUTE US 90
ST. TAMMANY PARISH

The meeting was requested by the Louisiana SHPO to review the findings of the Section 106 evaluation associated with the existing US 90 bridge crossing of the East Middle Pearl River. The existing 2-lane US90 Bridge over East Middle Pearl River was constructed in 1933. The existing Pony Truss structure is classified as a Preservation Candidate in the Programmatic Agreement (PA) regarding management of historic bridges in Louisiana.

The environmental assessment document considers replacement alternatives as well as rehabilitation alternatives which leave the existing structure in place functioning either as the US 90 main line 2-lane bridge, or as a one-way couplet pair of bridges, with a new 1-way bridge constructed parallel to the existing bridge.

Under the rehabilitation alternative in which the bridge continues to operate as a 2-lane span, the bridge will be functionally obsolete as the rehabilitation would not address current design guidance for shoulder width, and the span would also be structurally deficient as it would not meet requirements for current design loading.

As a one-way couplet pair, the shoulder deficiency would be mitigated, but the bridge would continue to be posted for its loading deficiency.

The attached Section 106 matrix was prepared in conformance with PA guidance. The proposed alternative recommends replacement of the existing span with a new structure meeting current design guidance.

The SHPO, represented by Nicole Hobson-Morris, Executive Director of the Division of Historic Preservation, requested clarification of the costs as shown in the matrix. Cindy Rich (NSI) indicated that the rehab costs shown in the matrix reflect a rehab providing a 20-year life as required in the PA. The proposed repairs do not upgrade the bridge loading. The discussion which followed:

- Confirmed that repairs to the bridge that brought the bridge into structural compliance would so degrade the historic contributing elements that the bridge may no longer be considered historic. Also, costs for this type of upgrade were not presented in the matrix.
- Confirmed that upgrading the bridge structure would also require repairs to the bridge foundation not accounted for in the costs as shown in the matrix.

Purpose and Need factors contributing to the decision to replace the bridge include:

- Neither the Rehab alternative nor the Couplet alternative would meet the Purpose and Need as the repaired bridge in both situations would remain as the only load posted bridge within the US 90 corridor under study.
- The requirement that US 90 route under study in the Environmental Assessment be able to function as an evacuation route.

- The requirement that US 90 route under study in the Environmental Assessment be able to serve temporarily as a bypass of I-10.

Nicole agreed the SHPO would support the replacement alternative. The Section 106 matrix will be modified to clarify the cost limitations as discussed above as well as the Purpose and Need justification for the bridge replacement.

A question was addressed to Nicole regarding whether there was a specific percentage of structure replacement that would void the historic integrity of a bridge. Nicole indicated that the focus should be on potential affects to elements contributing to the historic designation, rather than on specific rehab costs or the structure replacement percentage.

Attachments: LADOTD sign-in
Neel-Schaffer, Inc. Sign-in
Copy of Section 106 Matrix (revised to reflect meeting findings)



Department of Transportation and
Development
Office of Engineering
PO Box 94245
Baton Rouge, LA 70804-9245

John Bel Edwards, Governor
Shawn D. Wilson, Ph.D., Secretary

November 14, 2017

Meeting Sign-In

State Project No. H.000284
US 90 Bridges
St. Tammany Parish
US 90

Subject: LASHPO Consultation - EMPRB

Attendees

Name	Representing	Phone	E-Mail
Cathy Mastin	DOTD - 34	225-379-1652	Catheremastin@la.gov
Arturo Aguirre	FHWA - LA	226-757-7611	arturo.aguirre@dot.gov
Jerry Pitts	FHWA - LA	225-757-7618	Jerry.Pitts@dot.gov
BOB MAHONEY	FHWA - LA	225-757-7624	robert-mahoney@dot.gov
Mark Bucia	DOTD - 25	225-379-1076	mark.bucia@la.gov
Ryan Reviere	DOTD - 24	225-379-1071	ryan.reviere@la.gov
PAUL VAUGHT	DOTD BRIDGE	225-379-1816	paul.vaughtiii@la.gov
Andrew Michael	DOTD Bridge Design	225-371-1062	Andrew.Michael@la.gov
Nicole Hobson-Morris	SHPO	225 342.8172	nmorris@crt.la.gov
Berry Brubaker	NSI	985-674-9821	berry.brubaker@nsi.com
Cindy Rich	NSI	601-948-3071	cindy.rich@nsi.com
Stacie Palmer	DOTD	225-242-4517	Stacie.Palmer@la.gov
Carney Cox	DOTD	225-242-4520	Carney.Cox@la.gov

ATTENDANCE RECORD
SECTION 106 MEETING AT LDOTD HEADQUARTERS
NOVEMBER 14, 2017
CONTRACT NO. 4400005579
H.000284 US 90 Pearl River Bridges (HBI)
ROUTE US 90
ST. TAMMANY PARISH

Name	Initial	Representing	Phone	Email
Robert Mahoney	RMA	LA FHWA	(225) 757-7624	Robert.Mahoney@fhwa.dot.gov
Scott Nelson		LA FHWA	(225) 757-7624	Scott.Nelson@fhwa.dot.gov
Claiborne Barnwell		MS FHWA	(601) 965-4217	claiborne.barnwell@dot.gov
Ronnie Broadbent		LADOTD	(225)-379-1727	Ronald.Broadbent@LA.GOV
Stacie Palmer		LADOTD Environmental	(225) 242-4517	stacie.palmer@la.gov
Jan Grenfel		LADOTD Environmental	(225) 242-4509	jan.grenfell@la.gov
Catherine Mastin	CM	LADOTD		Catherine.Mastin@LA.GOV
Chad Wallace		MDOT Environmental	(601) 359-7920	rcwallace@mdot.ms.gov
Kim Thurman		MDOT Environmental	(601) 359-1475	kthurman@mdot.ms.gov
John Underwood		MDOT Environmental		junderwood@mdot.ms.gov
Nicole Hobson-Morris		LA Department of Culture, Recreation, and Tourism	(225) 342-8172	nhmorris@crt.la.gov
Dr. Charles "Chip" McGimsey		LA Department of Culture, Recreation, and Tourism	(225) 219-4598	cmcgimsey@crt.la.gov
Mike Verando		LA Department of Culture, Recreation, and Tourism		mvarnado@crt.la.gov
Katie Blount		MS Department of Archives and History	(601) 576-6850	archaeology@mdah.state.ms.us
Greg Williamson		MS Department of Archives and History	(601) 576-6538	gwill@mdah.state.ms.us
Barry Brupbacher	BB	Neel-Schaffer	(985) 674-9820	barry.brupbacher@neel-schaffer.com
Tonya Smith		Neel-Schaffer	(225) 719-3771	tonya.smith@neel-schaffer.com
Cindy Rich	CR	Neel-Schaffer	(601) 948-3071	cindy.rich@neel-schaffer.com
Keith Carr		Neel-Schaffer	(601) 948-3071	keith.carr@neel-schaffer.com
Rhonda Smith		Earth Search, Inc.	(504) 947-0737	rlsmith@earth-search.com
Arturo Aguirre	AA	LA - FHWA	(225) 757-7611	arturo.aguirre@dot.gov
Jerry Pitts	JP	LA - FHWA	(225) 757-7618	Jerry.Pitts@dot.gov
Mark Bucui	MB	LADOTD	225-379-1076	mark.bucui@la.gov
Ryan Reviere	RR	LA DOTD	225-379-1071	ryan.reviere@la.gov
PAUL VAUGHT	PV	LA DOTD BRIDGE	225-379-1816	paul.vaughtiii@la.gov
Andrew Michael	AM	LA DOTD Bridge Design	225-379-1062	Andrew.Michael@la.gov

EAST MIDDLE PEARL RIVER – REHABILITATION ANALYSIS
PREPARED BY NEEL-SCHAFER INC.
FIXED SPAN ENGINEER FOR US 90 BRIDGES TEAM

Current Bridge Status	
Deficiency	Comments
Load posted 15T-25T	Structurally Deficient for current design and state legal loads
Shoulder width: 2'	8' required shoulder width
Existing Low Chord Elevation: 11.37 NAVD88	Required Flood Elevation: 13.31 NAVD88

Guidelines followed for rehabilitation can be found in *LADOTD Bridge Design and Evaluation Manual – Chapter 6: Design Policy for Bridge Rehabilitation/Repair Projects* as well as *AASHTO Manual for Bridge Evaluation 2nd Edition*.

The US90 Bridge over East Middle Pearl River is classified as a Preservation Candidate in the Programmatic Agreement regarding management of historic bridges in Louisiana. The structure is 582 feet long and consists of 12 reinforced concrete deck girder approach spans and 3 steel pony truss spans across the river. As such, a determination of the feasibility to rehabilitate this structure is to be made during the environmental process. Information available to use as a basis for this determination is limited to the most recent load rating and inspection reports. Among the many findings in these documents, the pony truss spans control the load rating of the overall bridge and the inspection report indicates that there is moderate to major pack rust at all lower chord gusset plate connections with 20% to 30% section loss in the gusset plates, 15% to 20% section loss in the chord members and 15% to 30% section loss in the floor beams. All these tension members are considered to be fracture critical components. It is also noted that the upper chord has pack rust with 15% section loss at all panel point locations.

Based on the inspection report, in order for the service life of the East Middle Pearl River Bridge to be extended another 20 years as stated in the Programmatic agreement, rehabilitation to address panel point pack rust and member section loss would most likely require partial truss disassembly and at a minimum, member replacement of the lower chords, gussets, floor beams and stringers. These operations are extensive and costly and will require the bridge to be closed during rehabilitation. In order to replace these members, the existing concrete deck will have to be removed and a temporary piling support system installed to support the partially disassembled truss while the members are being replaced. It is estimated that the lower chords, gussets, floor beams and stringers constitute at least 50% of the overall truss.

A determination of the load rating capacity of the final rehabilitated structure would require an in-depth field inspection and subsequent load rating analysis study. Replacement of the chords, gussets, floor beams and stringers with section properties similar to the original members will produce a bridge rating

approximately equal to the original rating when the bridge was constructed in 1933. Thus, even the rehabilitated bridge will still have to be posted for a reduced capacity compared to current standard highway loading and also, the horizontal bridge width (24 feet) would not meet the minimum requirements for a Rural Arterial (RA-2) roadway classification established for this study. In order for the bridge to be rehabilitated to support current standard highway loading, all truss members will most likely have to be replaced with similar but with either heavier or stronger section properties than the original members.

EAST MIDDLE PEARL RIVER BRIDGE RENOVATION COST

Work Item	Bridge Length	Bridge Width	Additional Width	Unit Cost	Cost
Temp. Pile Support, Replace Bottom Chords & Verticals on Trusses, Floorbeams & Stringers	246	N.A.	N.A.	\$4,500.00	\$1,107,000.00
Existing Deck Demo	246	24	N.A.	\$25.00	\$147,600.00
Remove Existing Stringers & Floorbeams	246	24	N.A.	\$45.00	\$265,680.00
Riprap Channel (5 feet thick, 2 tons per CY)	246	24	40	\$50.00	\$145,777.78
Contingency Factor					1.3
Total Bridge Rehab. Cost = \$2,165,875					
Includes Installation of Temp. Support Structure On Piling To Support Existing Truss In Order To Replace Bottom Chords, Verticals, Floorbeams, Stringers & Deck: Also Includes Riprap Bank To Bank For Scour					

East Middle Pearl River
Section 106 Computations Matrix
December 1, 2017

Alternative R-1 Rehabilitation	Location	Offset	Required ROW (acres)	ROW Cost	Cost					Potential Wetlands Acreage Affected
					Bridge Cost	Roadway Cost	Design Cost	D&C Cost	Utility Cost	
Rehabilitation	Existing	0	0	\$ -	2,200,000	\$ 75,000	\$ 227,500	\$ 2,502,500	\$ -	
Permanent fixed, new construction				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Temporary, fixed new construction	South	48.5'	0	\$ -	\$ 878,000	\$ 410,000	\$ 25,760	\$ 1,313,760	\$ 68,400	3.8
Permanent movable, new construction				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Temporary, movable new construction				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Demo Existing Bridge				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total			0	\$ -				\$ 3,816,260	\$ 68,400	3.8
Road W Bridge Road E 600 600 600 Permanent Temporary (ft)										

The rehab costs above reflect a rehab providing a 20-year life as required in the PA. The proposed repairs do not upgrade the bridge loading. Repairs to the bridge that would bring the bridge into structural compliance would so degrade the historic contributing elements that the bridge may no longer be considered historic. Costs for this type of upgrade are not presented. Upgrading the bridge structure would also require repairs to the bridge foundation not accounted for in the costs.

East Middle Pearl River
Section 106 Computations Matrix
December 1, 2017

Alternative R-2				Required ROW (acres)	ROW Cost	Cost					Potential Wetlands Acreage Affected			
Rehabilitation for use in One-Way Pair (Add New Parallel Couplet at MHW)						Bridge Cost	Roadway Cost	Design Cost	D&C Cost	Utility Cost				
Rehabilitation				Existing			\$ -	\$ 2,200,000	\$ 75,000	\$ 227,500	\$ 2,502,500	\$ -		
Permanent fixed, new construction				South	52.5'		\$ -	\$ 3,350,000	\$ 467,000	\$ 381,700	\$ 4,198,700	\$ 96,330	5.1	
Temporary, fixed new construction						0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Permanent movable, new construction							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Temporary, movable new construction							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Demo Existing Bridge						0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
Road W Bridge Road E 900 1185 450 Permanent (ft) Temporary						0	\$ -				\$ 6,701,200	\$ 96,330	5.1	

The rehab costs above reflect a rehab providing a 20-year life as required in the PA. The proposed repairs do not upgrade the bridge loading. Repairs to the bridge that would bring the bridge into structural compliance would so degrade the historic contributing elements that the bridge may no longer be considered historic. Costs for this type of upgrade are not presented. Upgrading the bridge structure would also require repairs to the bridge foundation not accounted for in the costs.

East Middle Pearl River
Section 106 Computations Matrix
December 1, 2017

Alternative R-3 Bypass and Adaptive Reuse for Non-Vehicular Use on site and New Bridge	Location	Offset	Required ROW (acres)	ROW Cost	Cost					Potential Wetlands Acreage Affected
					Bridge Cost	Roadway Cost	Design Cost	D&C Cost	Utility Cost	
Rehabilitation			0	\$ -	2,200,000	\$ 50,000	\$ 225,000	\$ 2,475,000	\$ -	
Permanent fixed, new construction	South	52.5	0	\$ -	\$ 4,670,000	\$ 700,000	\$ 537,000	\$ 5,907,000	\$ 96,330	5.1
Temporary, fixed new construction				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Permanent movable, new construction				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Temporary, movable new construction				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Demo Existing Bridge			0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0.0
Total			0	\$ -				\$ 8,382,000	\$ 96,330	5.1
Road W 900 Bridge 1185 Road E 450 Permanent (ft)										

Alternative F-3 New Fixed Span Structure On Offset Alignment Using Surge plus wave plus 1' Clearance	Location	Offset	Required ROW (acres)	ROW Cost	Cost					Potential Wetlands Acreage Affected
					Bridge Cost	Roadway Cost	Design Cost	D&C Cost	Utility Cost	
Rehabilitation				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Permanent fixed, new construction	North	52.5'	0	\$ -	\$ 4,670,000	\$ 700,000	\$ 537,000	\$ 5,907,000	\$ 96,330	5.1
Temporary, fixed new construction				\$ -			\$ -	\$ -	\$ -	
Permanent movable, new construction				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Temporary, movable new construction				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Demo Existing Bridge			0	\$ -	\$ 500,000	\$ 245,000	\$ -	\$ 745,000	\$ -	
Total			0	\$ -				\$ 6,652,000	\$ 96,330	5.1
Road W 900 Bridge 1185 Road E 450 Permanent (ft) Temporary (ft)										

East Middle Pearl River
Section 106 Computations Matrix
December 1, 2017

Alternative F-4 New Fixed Span Structure On Existing Alignment Using Surge plus wave plus 1' Clearance				Location	Offset	Required ROW (acres)	ROW Cost	Cost					Potential Wetlands Acreage Affected
								Bridge Cost	Roadway Cost	Design Cost	D&C Cost	Utility Cost	
Rehabilitation							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Permanent fixed, new construction				Existing		0	\$ -	\$ 4,670,000	\$ 420,000	\$ 509,000	\$ 5,599,000	\$ -	3.6
Temporary, fixed new construction				North	52.5'		\$ -	\$ 878,000	\$ 475,000	\$ 27,060	\$ 1,380,060	\$ 70,490	2.5
Permanent movable, new construction							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Temporary, movable new construction							\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Demo Existing Bridge						0	\$ -	\$ 500,000	\$ 168,000	\$ -	\$ 668,000	\$ -	
Total						0	\$ -				\$ 7,647,060	\$ 70,490	6.1
Road W	Bridge	Road E											
320	1185	350	Permanent (ft)										
700	600	700	Temporary (ft)										

East Middle Pearl River
Section 106 Alternatives Analysis Matrix
December 1, 2017

Project Purpose and Need

The purposes of the proposed action, which have been approved by FHWA, are:

- o To maintain a system link to provide a diversion route in the event of an incident on I-10.
- o To improve the structural integrity and functionality of the bridges.
- o To support hurricane evacuations.

Alternatives	Meets Project Purpose and Need?	Design and Construction Cost	ROW Amount and Cost	Total Cost	Utility Costs	Other Factors	Prudent and Feasible?
Alternative R-1 Rehabilitation	No	\$ 3,816,260	0 acres \$0.00	\$ 3,816,260	\$ 68,400	Because the rehabilitation of the existing bridge cannot be performed under traffic, this alternative would require the construction of a temporary by-pass bridge meeting navigation requirements. The existing bridge does not meet current geometric design criteria for shoulder width (existing 2', required 8'). These geometric deficiencies cannot be addressed during rehabilitation. The existing bridge is posted for load deficiencies. Based on the most recent load rating and inspection reports, the pony truss spans control the load rating of the overall bridge, and there is moderate to major pack rust at all lower chord gusset plate connections with 20% to 30% section loss in the gusset plates, 15% to 20% section loss in the chord members, and 15% to 30% section loss in the floor beams. All these tension members are considered to be fracture critical components. It is also noted that the upper chord has pack rust with 15% section loss at all panel point locations. Rehabilitation to address panel point pack rust and member section loss would most likely require partial truss disassembly and at a minimum, member replacement of the lower chords, gussets, floor beams and stringers. In order to replace these members, the existing concrete deck will have to be removed and a temporary piling support system installed to support the partially disassembled truss while the members are being replaced. It is estimated that the lower chords, gussets, floor beams and stringers constitute at least 50% of the overall truss. Although the replacements could be made to match the existing materials, the loss of at least 50% of the historic materials could constitute a major or extensive alteration that could lead to the overall loss of historic integrity, thereby rendering the bridge ineligible for the NRHP. In addition, replacement of the chords, gussets, floor beams and stringers with section properties similar to the original members will produce a bridge rating approximately equal to the original rating when the bridge was constructed in 1933. Thus, even the rehabilitated bridge will still have to be posted for a reduced capacity compared to current standard highway loading. In order for the bridge to be rehabilitated to support current standard highway loading, all truss members will most likely have to be replaced with similar but with either heavier or stronger section properties than the original members. No additional ROW would be required. Issues associated with temporary bypass construction: AT&T long-haul fiber optic cable located on both sides of US 90. Overhead electrical lines located on south side of US 90. Rehabilitation and construction activities could impact approximately 3.8 acres of wetlands based on initial screening results. Additional environmental impacts are anticipated to the 100-year floodplain, the LA coastal zone, endangered species, and EFH.	The alternative is not prudent and feasible because it cannot be completed in accordance with sound engineering principles and practices. These include the "Other Factors" previously noted, USCG permit requirements, LADOTD floodplain guidance, and the roadway and bridge design criteria prepared for this project. In addition, this alternative does not meet the project purpose and need as the rehabilitated bridge would remain as the only load posted bridge within the US 90 corridor under study and would thus not be able to function as an evacuation route or temporary bypass of I-10.

East Middle Pearl River
Section 106 Alternatives Analysis Matrix
December 1, 2017

Alternatives	Meets Project Purpose and Need?	Design and Construction Cost	ROW Amount and Cost	Total Cost	Utility Costs	Other Factors	Prudent and Feasible?
Alternative R-2 Rehabilitation for use in One-Way Pair (Add New Parallel Couplet at MHW)	No	\$ 6,701,200	0 acres \$0.00	\$ 6,701,200	\$ 96,330	Because the rehabilitation of the existing bridge cannot be performed under traffic, this alternative would require the construction of a temporary by-pass bridge meeting navigation requirements. The existing bridge is posted for load deficiencies. Based on the most recent load rating and inspection reports, the pony truss spans control the load rating of the overall bridge, and there is moderate to major pack rust at all lower chord gusset plate connections with 20% to 30% section loss in the gusset plates, 15% to 20% section loss in the chord members, and 15% to 30% section loss in the floor beams. All these tension members are considered to be fracture critical components. It is also noted that the upper chord has pack rust with 15% section loss at all panel point locations. Rehabilitation to address panel point pack rust and member section loss would most likely require partial truss disassembly and at a minimum, member replacement of the lower chords, gussets, floor beams and stringers. In order to replace these members, the existing concrete deck will have to be removed and a temporary piling support system installed to support the partially disassembled truss while the members are being replaced. It is estimated that the lower chords, gussets, floor beams and stringers constitute at least 50% of the overall truss. Although the replacements could be made to match the existing materials, the loss of at least 50% of the historic materials could constitute a major or extensive alteration that could lead to the overall loss of historic integrity, thereby rendering the bridge ineligible for the NRHP. In addition, replacement of the chords, gussets, floor beams and stringers with section properties similar to the original members will produce a bridge rating approximately equal to the original rating when the bridge was constructed in 1933. Thus, even the rehabilitated bridge will still have to be posted for a reduced capacity compared to current standard highway loading. In order for the bridge to be rehabilitated to support current standard highway loading, all truss members will most likely have to be replaced with similar but with either heavier or stronger section properties than the original members. No additional ROW would be required. Issues associated with parallel couplet construction: AT&T long-haul fiber optic cable located on both sides of US 90. Overhead electrical lines located on south side of US 90. Rehabilitation and construction activities could impact approximately 5.1 acres of wetlands based on initial screening results. Additional environmental impacts are anticipated to the 100-year floodplain, the LA coastal zone, endangered species, and EFH.	The alternative is not prudent and feasible because it cannot be completed in accordance with sound engineering principles and practices. These include the "Other Factors" previously noted, USCG permit requirements, LADOTD floodplain guidance, and the roadway and bridge design criteria prepared for this project. In addition, this alternative does not meet the project purpose and need as the rehabilitated bridge would remain as the only load posted bridge within the US 90 corridor under study and would thus not be able to function as an evacuation route or temporary bypass of I-10.

East Middle Pearl River
Section 106 Alternatives Analysis Matrix
December 1, 2017

Alternatives	Meets Project Purpose and Need?	Design and Construction Cost	ROW Amount and Cost	Total Cost	Utility Costs	Other Factors	Prudent and Feasible?
Alternative R-3 Bypass and Adaptive Reuse for Non-Vehicular Use Onsite and New Bridge This alternative includes the construction a new fixed span on offset alignment at MHW.	Yes	\$ 8,382,000	0 acres \$0.00	\$ 8,382,000	\$ 96,330	There are three possible adaptive reuse scenarios: 1 - Maintaining the bridge as a pedestrian - bicycle only facility. There are significant O&M challenges associated with maintaining a large structure such as the East Middle Pearl River pony truss span structure for only bicycle and pedestrian facilities. For the bridge to be maintained as a pedestrian and bicycle facility a local government or nonprofit agency with substantial financial resources would have to accept O&M responsibility. 2 - Use of a portion of the existing structure as a recreation pier. After Hurricane Katrina, a portion of the remnant bridge spans from the I-10 crossing of Lake Pontchartrain were incorporated into a fishing pier that is operated by St. Tammany Parish. St. Tammany Parish will be contacted regarding any interest they may have in the use of the existing span of the US 90 East Middle Pearl River bridge for recreation purposes. 3 - Reuse of the existing spans by placement in other streams or channels. First, a candidate stream would have to be identified either by proximity local governments or by LADOTD . If a candidate stream could be identified, there would be considerable technical challenges and cost associated with the relocation of the existing spans. Relocation by barge would be the only option. No additional ROW would be required. Issues associated with new bridge construction: AT&T long-haul fiber optic cable located on both sides of US 90. Overhead electrical lines located on south side of US 90. Construction activities could impact approximately 5.1 acres of wetlands based on initial screening results. Additional environmental impacts are anticipated to the 100-year floodplain, the LA coastal zone, endangered species, and EFH.	Scenario 1 is not prudent because there is a lack of need for a pedestrian-bicycle facility in this location. Scenario 2 is feasible if St. Tammany Parish is interested in a portion of the bridge remaining for a fishing pier. Scenario 3 is feasible, although it may not be prudent to incur the additional cost of relocating the existing span. All three scenarios are dependent on an entity willing to take ownership and responsibility for the bridge.

East Middle Pearl River
Section 106 Alternatives Analysis Matrix
December 1, 2017

Alternatives	Meets Project Purpose and Need?	Design and Construction Cost	ROW Amount and Cost	Total Cost	Utility Costs	Other Factors	Prudent and Feasible?
Alternative F-3 Replacement New Fixed Span Structure On Offset Alignment Using Surge plus wave plus 1' Clearance	Yes	\$6,652,000	0 acres \$0.00	\$ 6,652,000	\$ 96,330	No additional ROW would be required; however, it should be noted that all lands outside of LADOTD ROW surrounding the East Middle are part of the Pearl River WMA. AT&T long-haul fiber optic cable located on both sides of US 90. Overhead electrical lines located on south side of US 90. Construction activities could impact approximately 5.1 acres of wetlands based on initial screening results. Additional environmental impacts are anticipated to the 100-year floodplain, the LA coastal zone, endangered species, and EFH. In order to obtain a USACE permit, the LADOTD must demonstrate that it has chosen the least damaging practicable alternative. Connectivity with East Pearl Alternatives: The East Middle Pearl upstream alternative utilizing the surge clearance returns to the existing US 90 alignment east of the point that the Long Span East Pearl alternative departs from the existing US 90 alignment to the south. This poses a geometric conflict between the two alternatives and as such combining these two alternatives is problematic. F-3 is preferable over F-1 because the distance is longer between two vertical curves. There is no conflict if the upstream storm surge alternative is utilized in conjunction with the Mid Level East Pearl alternatives.	This alternative is prudent and feasible because it meets the project purpose and need, but it does not meet the Secretary's Standards.
Alternatives	Meets Project Purpose and Need?	Design and Construction Cost	ROW Amount and Cost	Total Cost	Utility Costs	Other Factors	Prudent and Feasible?
Alternative F-4 Replacement New Fixed Span Structure On Existing Alignment Using Surge plus wave plus 1' as Clearance.	Yes	\$7,647,060	0 acres \$0.00	\$ 7,647,060	\$ 70,490	Preservation standards, specifically the Secretary of the Interior's Standards for the Treatment of Historic Properties, cannot be met with this alternative. No additional ROW would be required; however, it should be noted that all lands outside of LADOTD ROW surrounding the East Middle are part of the Pearl River WMA. AT&T long-haul fiber optic cable located on both sides of US 90. Overhead electrical lines located on south side of US 90. Construction activities could impact approximately 6.1 acres of wetlands based on initial screening results. Additional environmental impacts are anticipated to the 100-year floodplain, the LA coastal zone, endangered species, and EFH. In order to obtain a USACE permit, the LADOTD must demonstrate that it has chosen the least damaging practicable alternative. Connectivity with East Pearl Alternatives: The East Middle Pearl on existing alignment alternative utilizing the surge clearance is geometrically compatible with both the Long Span East Pearl alternative and the Mid Level East Pearl alternatives.	This alternative is prudent and feasible because it meets the project purpose and need, but it does not meet the Secretary's Standards.



BILLY NUNGESSER
LIEUTENANT GOVERNOR

State of Louisiana
OFFICE OF THE LIEUTENANT GOVERNOR
DEPARTMENT OF CULTURE, RECREATION & TOURISM
OFFICE OF CULTURAL DEVELOPMENT

RICHARD H. HARTLEY
DEPUTY SECRETARY

KRISTIN P. SANDERS
ASSISTANT SECRETARY

June 20, 2019

Noel Ardoin
Environmental Engineer Administrator
Louisiana Department of Transportation and Development
Environmental Section
PO Box 94245
Baton Rouge, LA 70804

**Re: Section 106 Programmatic Agreement for the Treatment of Louisiana Historic Bridges
(HBPA) Preservation Candidate Bridge East Middle Pearl**

Ms. Ardoin:

Thank you for your letter dated May 21, 2019 requesting concurrence on your recommendation to replace the East Middle Pearl River Bridge, a preservation candidate bridge, and to market the bridge as per the HBPA-VII (C) (3), page 12. We concur with the recommendation based on the additional information provided to our office at the November 17th meeting referenced in your letter, and included in the updated alternative analyses matrix.

If you have questions, please contact Andrea McCarthy at 225-342-8164 or by email at amccarthy@crt.la.gov.

Sincerely,

A handwritten signature in blue ink that reads "Kristin P. Sanders".

Kristin Sanders
State Historic Preservation Officer

Catherine Mastin

From: Stacie Palmer
Sent: Friday, August 28, 2020 9:37 AM
To: Catherine Mastin
Subject: FW: H.000284/H.000286 - CRS Report for US 90 Pearl River Bridges, St. Tammany Parish, Hancock County - Requested by Choctaw Nation of Oklahoma

Please forward to NSI.

From: Michelle Hanks
Sent: Tuesday, August 25, 2020 3:09 PM
To: Stacie Palmer <Stacie.Palmer@LA.GOV>
Subject: FW: H.000284/H.000286 - CRS Report for US 90 Pearl River Bridges, St. Tammany Parish, Hancock County - Requested by Choctaw Nation of Oklahoma

Stacie,

For your records, please see Lindsey's email below.

Michelle Whipp Hanks, B.A., M.A.
Environmental Impact Manager I
Tel: (225) 242-4514
Email: Michelle.Hanks@la.gov

From: Heisler, Lynn (FHWA) [<mailto:lynn.heisler@dot.gov>]
Sent: Tuesday, August 25, 2020 3:07 PM
To: Michelle Hanks <Michelle.Hanks@LA.GOV>
Subject: FW: H.000284/H.000286 - CRS Report for US 90 Pearl River Bridges, St. Tammany Parish, Hancock County - Requested by Choctaw Nation of Oklahoma

EXTERNAL EMAIL: Please do not click on links or attachments unless you know the content is safe.

FYI--

Lynn M. Heisler
Department of Transportation
Environmental Protection Specialist
FHWA-LA
[225-757-7607](tel:225-757-7607) Work
[225-757-7601](tel:225-757-7601) Fax
Lynn.Heisler@dot.gov
5304 Flanders Drive, Suite A
Baton Rouge, LA 70808

From: Lindsey Bilyeu <lbilyeu@choctawnation.com>

Sent: Tuesday, August 25, 2020 1:02 PM

To: Heisler, Lynn (FHWA) <lynn.heisler@dot.gov>

Subject: RE: H.000284/H.000286 - CRS Report for US 90 Pearl River Bridges, St. Tammany Parish, Hancock County - Requested by Choctaw Nation of Oklahoma

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Ms. Heisler,

Thank you for providing the requested correspondence for the above referenced project. The Choctaw Nation Historic Preservation Department concurs with the finding of "no adverse effect". However, we ask that work be stopped and our office contacted immediately in the event that Native American artifacts or human remains are encountered.

If you have any questions, please contact me.

Thank you,

Lindsey D Bilyeu, MS
Senior Compliance Review Officer
Historic Preservation Department
Choctaw Nation of Oklahoma
P.O. Box 1210, Durant, OK 74702
Desk Phone: 580-924-8280 ext. 2631
Cell Phone: 580-740-9624

From: Heisler, Lynn (FHWA) <lynn.heisler@dot.gov>

Sent: Thursday, August 20, 2020 11:14 AM

To: Lindsey Bilyeu <lbilyeu@choctawnation.com>

Subject: FW: H.000284/H.000286 - CRS Report for US 90 Pearl River Bridges, St. Tammany Parish, Hancock County - Requested by Choctaw Nation of Oklahoma

Halito: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Lindsey,

Please see the updated link in email below, per your request.

Sincerely,

Lynn

Lynn M. Heisler
Department of Transportation
Environmental Protection Specialist
FHWA-LA
[225-757-7607](tel:225-757-7607) Work
[225-757-7601](tel:225-757-7601) Fax

MEMORANDUM OF AGREEMENT
AMONG THE
FEDERAL HIGHWAY ADMINISTRATION (FHWA),
THE LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
(LADOTD),
THE MISSISSIPPI DEPARTMENT OF TRANSPORTATION (MDOT),
THE LOUISIANA STATE HISTORIC PRESERVATION OFFICER (LA SHPO)
THE MISSISSIPPI STATE HISTORIC PRESERVATION OFFICER (MS SHPO),
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION (ACHP)
REGARDING
US 90: PEARL RIVER BRIDGES REPLACEMENT (STATE PROJECT NUMBERS (SPN)
H.000284/H.000286, and FEDERAL HIGHWAY ADMINISTRATION PROJECT NUMBERS
(FPN) H000284/H000286),
LOCATED IN
ST. TAMMANY PARISH, LOUISIANA AND HANCOCK COUNTY, MISSISSIPPI

WHEREAS, the U.S. Transportation, Federal Highway Administration (FHWA) administers the Federal Aid Highway Program in Louisiana and Mississippi authorized by 23 United States Code (U.S.C.) 101 et seq. through the LADOTD and MDOTD (23 U.S.C. 315); and

WHEREAS, the undertaking consists of removal and replacement on alignment of five (5) bridges on US 90 in Louisiana, including one Louisiana - Mississippi border bridge; and

WHEREAS, the bridges under the referenced project numbers (SPN H.000284/H.000286, FPN H000284/H000286) are as follows:

- Site 1: West Pearl River Bridge: Movable Lift Span, built in 1933
Structure No. 62520060705291, Recall No. 058710 (Project No. H.000284)
- Site 2: West Middle Pearl River Bridge, Pony Truss, built in 1933
Structure No. 62520060706701, Recall No. 058720 (Project No. H.000284)
- Site 3: Middle Middle Pearl River Bridge, Pony Truss, built in 1933
Structure No. 62520060707111, Recall No. 058730 (Project No. H.000284)
- Site 4: East Middle Pearl River Bridge: Pony truss built in 1933
Structure No. 62520060707701, Recall No. 058740 (Project No. H.000284)
- Site 5: East Pearl River Boarder Bridge, Movable Swing Span, built in 1933
Structure No. 62520060800001, Recall No. 058750 (Project No. H.000286)

WHEREAS, LADOTD and MDOT intend the Undertaking to be constructed in segments as funding becomes available; and

WHEREAS, the removal of the four closed bridges in Louisiana is required for delivery of project, and has independent utility by eliminating potential of collapse and obstruction of waterways.

WHEREAS, the four bridges in Louisiana have been closed to vehicular traffic since May 2022 due to poor condition; and

WHEREAS, FHWA has defined the undertaking and Area of Potential Effects (APE) is described in Attachment 1; and

WHEREAS, FHWA has determined that the undertaking will have an adverse effect the five bridge that are determined eligible for the the National Register of Historic Places, and has consulted with the LA SHPO and MS SHPO pursuant to 36 CFR Part 800, the regulations implementing Section

106 of the National Historic Preservation Act (54 U.S.C. § 306108); and

WHEREAS, two previously recorded Linear Resources within the Mississippi APE. Route US 90 (Trinomial 22Ha0171), constructed in 1933 along with the East Pearl River Bridge, has been determined eligible for the NRHP. However, the proposed project will not change the location of the route and is not an adverse effect to the resource. State Highway 604 (Trinomial 22Ha784), constructed in the late 1940s to early 1950s, is determined to be ineligible for the NRHP; and

WHEREAS, FHWA has consulted with Virle Reid regarding the effects of the undertaking on historic properties and has invited them to sign this MOA as a concurring party; and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1), FHWA has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with specified documentation, and the ACHP has chosen not to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

Commented [SP1]: Sent request to FHWA 2/4

WHEREAS, FHWA under the authority of 23 U.S.C. §101 *et seq.*, implements the Federal-aid Highway Program (Program) in the states of Louisiana and Mississippi by funding and approving state and locally sponsored transportation projects that are administered by the LADOTD and MDOT; and

WHEREAS, the four bridges within Louisiana (West Pearl River Bridge, West Middle Pearl River Bridge, Middle Middle Pearl River Bridge and East Pearl River Bridge) are covered under the Section 106 Programmatic Agreement for the Treatment of Louisiana Historic Bridges (HBPA) executed in 2015; and

WHEREAS, the four Louisiana HBPA bridges have undergone the required HBPA 106 stipulations for mitigation of adverse effect, including marketing and can be replaced; and

WHEREAS, the East Pearl River Boarder Bridge, located on the Louisiana-Mississippi state line, is a not part of the HBPA and subject to a standard Section 106 process; and

WHEREAS, FHWA, in consultation with MS SHPO, LADOTD and MDOT, has determined that NRHP-listed building, 5098 State Route (SR) 604, Pearlinton, MS, is outside of the APE for the East Pearl River Bridge and will not be affected by the proposed project; and

WHEREAS, LADOTD and MDOT will carry out vibration monitoring at 5098 SR 604 regardless of the structure being outside of the defined monitoring zone for historic structures per LADOTD 2018 standard specifications (Appendix 2).

WHEREAS, in accordance with 36CFR Section 800.6(a)(1), FHWA has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with the specified documentation and the ACHP has chosen not to/to participate in the consultation pursuant to 36CFR Section 800.6(1)(iii); and

Commented [SP2]: Should have ACHP response by Feb 28

WHEREAS, this Memorandum of Agreement (MOA or Agreement) is prepared pursuant to 36

99 CFR §800.6; and
100
101 **NOW, THEREFORE,** FHWA and LA SHPO; MS SHPO; LADOTD and MDOT agree that the
102 undertaking shall be implemented in accordance with the following stipulations in order to take into
103 account the effect of the undertaking on historic properties.

STIPULATIONS

FHWA shall ensure that the following measures are carried out:

I. HISTORIC AMERICAN ENGINEERING RECORDATION (HAER)

- a) FHWA shall ensure that HAER documentation of the East Pearl River Bridge is completed and accepted by National Park Service (NPS) prior to the demolition of the Bridge. LADOTD will provide the NPS with one original set of HAER documentation. LADOTD will provide LA SHPO and MS SHPO with the following items:
- b) One copy of the full-size original drawings, one set of original negative contact prints, and one copy of the Written Historical and Descriptive Data report.
- c) One bound photocopied set of reduced original drawings, contact prints, and Written Historical and Descriptive Data report.
- d) Two digital copies of the original drawings, photos (in TIFF format), and Written Historical and Descriptive Data report.

II. DURATION

This MOA will expire if its terms are not carried out within ten (10) years from the date of its execution. Prior to such time, FHWA may consult with the other signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation IV below.

III. DISPUTE RESOLUTION

Should any signatory or concurring party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, FHWA shall consult with such party to resolve the objection. If FHWA determines that such objection cannot be resolved, FHWA will:

Forward all documentation relevant to the dispute, including the FHWA's proposed resolution, to the ACHP. The ACHP shall provide FHWA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, FHWA shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. FHWA will then proceed according to its final decision.

If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, FHWA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, FHWA shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA, and provide them and the ACHP with a copy of such written response.

FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

IV. AMENDMENTS

This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

V. TERMINATION

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other signatories to attempt to develop an amendment per Stipulation IV, above. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories.

Once the MOA is terminated, and prior to work continuing on the undertaking, FHWA must either (a) execute an MOA pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. FHWA shall notify the signatories as to the course of action it will pursue.

Execution of this MOA by the FHWA and LA SHPO and MS SHPO and implementation of its terms evidence that FHWA has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

SIGNATORIES:

Federal Highway Administration (Louisiana Division)

By: _____ Date: _____
Melinda Roberson, Division Administrator

Federal Highway Administration (Mississippi Division)

By: _____ Date: _____
Jeff Schmidt, Division Administrator

Louisiana Department of Transportation and Development

By: _____ Date: _____
Glenn Ledet, Secretary

Mississippi Department of Transportation

By: _____ Date: _____
Brad White, Executive Director

Louisiana State Historic Preservation Officer

By: _____ Date: _____
Carrie Broussard, Interim SHPO

Mississippi State Historic Preservation Officer

By: _____ Date: _____
Katherine Blount, SHPO

Advisory Council of Historic Preservation (ACHP)

By: _____ Date: _____
Reid Nelson, ACHP Executive Director

CONCURING PARTIES

Property Owner

By: _____ Date: _____
Virle Read