

#### GEORGIA DEPARTMENT OF TRANSPORTATION

One Georgia Center, 600 West Peachtree Street, NW Atlanta, Georgia 30308 Telephone: (404) 631-1000

October 15, 2012

Dr. David Crass, Director,
Deputy State Historic Preservation Officer
Historic Preservation Division/DNR
254 Washington Street, SW
Ground Level
Atlanta, GA 30334

RE: Projects CSBRG-0007-00(959)(960), Irwin County, P.I. #s 0007959 and 0007960; HP #110214-004
Section 106 Compliance - Federal Highway Administration
Assessment of Effects and Memorandum of Agreement

Dear Dr. Crass:

Projects CSBRG-0007-00(959)(960), Irwin County consists of the proposed replacement of the paired bridges on CR 252 over the Willacoochee River and the Willacoochee River Overflow, two miles northeast of the town of Ocilla. Please find enclosed the Section 106 documentation for GDOT Bridges 155-0031-0 and 155-0032-0, National Register eligible historic properties located within the proposed projects' area of potential effects (APE).

The enclosed documentation was prepared for use by Summer Ciomek of New South Associates, Inc. of Stone Mountain, Georgia, in compliance with Section 106 of the National Historic Preservation Act of 1966 and subsequent amendments. The documentation consists of the Assessment of Effects and copies of the Georgia Historic Bridge Survey (GHBS) forms for the resources. The Survey Report was previously submitted to your office, to the Federal Highway Administration (FHWA) and to all other consulting parties in the Section 106 process for these projects. In compliance with 36 CFR 800.4(c)(2), the aforementioned properties were considered eligible National Register properties by the FHWA and the SHPO.

A determination of Adverse Effect has been made for GDOT Bridges 155-0031-0 and 155-0032-0. Also enclosed is a draft Memorandum of Agreement (MOA) for the adversely affected GDOT Bridges 155-0031-0 and 155-0032-0. Please review the draft MOA at this time and provide comments on or concurrence with the proposed stipulations. Upon completion of coordination with the Advisory Council on Historic Preservation, a final draft of the MOA will be submitted to your office for review and signature.

A copy of the enclosed documentation has been forwarded to the FHWA and to all other consulting parties. Please notify this office of the scheduled consultation date, if any, with the

FHWA to discuss these projects. Please respond to this documentation within thirty (30) days of receiving this information.

If additional information is required, please contact Chad Carlson (404-631-1406 or <a href="mailto:ccarlson@dot.ga.gov">ccarlson@dot.ga.gov</a>) or Sandy Lawrence (404-631-1150 or slawrence@dot.ga.gov) of the Office of Environmental Services. We appreciate your assistance in this matter.

Sincerely,

Glenn Bowman, P.E.

Dlu Somm

State Environmental Administrator

GB/cbc Enclosure

cc: Rodney N. Barry, P.E., FHWA, w/attachment (Attn: Michele Palicka) Southern Georgia Regional Commission, w/attachment Dennis Carter, GDOT NEPA

#### MEMORANDUM OF AGREEMENT BETWEEN

# FEDERAL HIGHWAY ADMINISTRATION GEORGIA DEPARTMENT OF TRANSPORTATION AND

# GEORGIA DEPARTMENT OF NATURAL RESOURCES HISTORIC PRESERVATION DIVISION FOR

GDOT PROJECTS CSBRG-0007-00(959) AND CSBRG-0007-00(960)
IRWIN COUNTY, GEORGIA
PI# 0007959 and PI# 0007960

WHEREAS, the Federal Highway Administration (FHWA) has determined that Georgia Department of Transportation (GDOT) Projects CSBRG-0007-00(959) and CSBRG-0007-00(960), PI# 0007959 and PI# 0007960, Irwin County, Georgia, will have an effect upon two properties eligible for inclusion in the National Register of Historic Places (NRHP), and has consulted with the Georgia State Historic Preservation Officer (SHPO) and Southern Georgia Regional Commission pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470F); [and Section 110(f) of the same Act (16 U.S.C. 470h-2(f)] and,

WHEREAS, the proposed projects would replace the narrow and structurally deficient bridges on CR 252 over the Willacoochee River (Structure ID 155-0032-0) and Willacoochee River Overflow (Structure ID 155-0031-0), approximately two miles northeast of Ocilla, Georgia. Two 11-foot travel lanes with five-foot shoulders will taper down to the existing 9.5-foot travel lanes in order to tie-in to the existing roadway. Approximately 566 feet of guardrail will be used at the proposed bridge over Willacoochee River (155-0032-0 location), and 460 feet of guardrail will be used at the proposed overflow bridge (155-0031-0 location). The proposed projects will be approximately 0.26 mile and 0.18 mile in length, respectively. Both bridges have an existing right-of-way (ROW) of 80 feet. The proposed ROWs would vary between 80 and 150 feet; and,

WHEREAS, two NRHP eligible properties were identified in the projects' area of potential effects; and,

WHEREAS, an Assessment of Effects was completed on May 4, 2012 for these resources with findings of Adverse Effect for the CR 252 Bridge over the Willacoochee River Overflow (Structure ID 155-0031-0) and the CR 252 Bridge over the Willacoochee River (Structure ID 155-0032-0); and,

WHEREAS, if GDOT Projects CSBRG-0007-00(959) and CSBRG-0007-00(960), PI# 0007959 and PI# 0007960 are not implemented within seven (7) years of this agreement's ratification, this agreement shall be considered null and void, and the FHWA, if it chooses to continue with the undertaking, shall reconsider the terms of this agreement; and,

WHEREAS, if the SHPO should object within thirty (30) days to any plans provided for review pursuant to this Memorandum of Agreement (MOA), the FHWA shall consult with the SHPO to resolve the objection. If the FHWA determines that the objection cannot be resolved, the FHWA shall request further comments or recommendations of the Advisory Council on Historic Preservation (Council) concerning the dispute pursuant to 36 CFR Part 800. Any Council comment provided in response to such a request will be taken into account by the FHWA in accordance with 36 CFR Part 800 with reference only to the subject of the dispute. The FHWA's responsibility to carry out all actions under this MOA that are not the subject of the dispute will remain unchanged; and,

GDOT Projects CSBRG-0007-00(959) and CSBRG-0007-00(960) PI# 0007959 and PI# 0007960 Irwin County
Memorandum of Agreement
Page 2 of 2

NOW, THEREFORE, the FHWA and the SHPO agree that the undertaking shall be implemented in accordance with the following stipulation in order to take into account the effect of the undertaking on the historic properties.

#### STIPULATION

The FHWA will ensure that representative views depicting the existing bridges will be recorded in high resolution 10 mega pixel digital photography. The accompanying documentation will be completed per the standards previously agreed upon between GDOT and SHPO in the Permanent Archival Record manual and per the GDOT Standards for Digital Photography. The photography, recorded on an archivally stable DVD, and accompanying documentation will be submitted to the SHPO for acceptance and retention.

Execution of this MOA by the FHWA and the SHPO, its subsequent filing with the Council, and implementation of its terms, is evidence that the FHWA has afforded the Council an opportunity to comment on GDOT Projects CSBRG-0007-00(959) and CSBRG-0007-00(960), PI# 0007959 and PI# 0007960, Irwin County, Georgia, and their effects on historic properties, and that the FHWA has taken into account the effects of the undertaking on historic properties.

FED	DERAL HIGHWAY ADMINISTRATION		
BY:	Rodney N. Barry, P.E., Division Administrator	_DATE:_	300000
	DRGIA STATE HISTORIC PRESERVATION OFFICER	Action on Millionical	
BY:	David Crass, Division Director, Deputy SHPO	DATE:_	
GEC	DRGIA DEPARTMENT OF TRANSPORTATION		
BY:	Glenn Bowman, P.E. State Environmental Administrator	DATE:	10/11/12

#### ASSESSMENT OF EFFECTS

# GDOT PROJECT CSBRG-0007-00(959) and CSBRG-0007-00(960), IRWIN COUNTY

P.I. # 0007959 and P.I. #0007960

HP #110214-004

#### FINDING OF ADVERSE EFFECT TO

CR 252 Bridge over Willacoochee River Overflow (Structure ID 155-0031-0) CR 252 Bridge over the Willacoochee River (Structure ID 155-0032-0)

#### October 9, 2012

This document has been produced for use in compliance with Section 106 of the National Historic Preservation Act of 1966 and subsequent amendments.

This document also serves in compliance with commitments attendant to the "Nationwide Programmatic 4(f) Statement for Historic Bridges" approved July 1983 by the Federal Highway Administration and the U.S. Department of Transportation pursuant to 23 U.S.C. Section 138.

#### INTRODUCTION

This document has been prepared for use in completion of applicable Section 106 procedures in compliance with the National Historic Preservation Act (NHPA) of 1966 and subsequent amendments. The documentation has been developed in accordance with the <u>GDOT/FHWA Cultural Resource Survey Guidelines</u> and 36 CFR Part 800. As such, this document assesses the effects to historic properties identified within the area of potential effects (APE) of GDOT Project CSBRG-0007-00(959) and CSBRG-0007-00(960), Irwin County.

The design of the proposed project was developed by GDOT engineering personnel who, as a standard procedure, include environmental parameters as a part of the initial investigations prior to laying out a proposed design. Basic data of the project area that was gathered and studied included aerial photography, topographic maps, traffic (existing and projected), previous studies, wetland inventory maps, soil survey maps, flood plain maps, and Georgia Department of Natural Resources' historic resource survey maps.

This data was used to delineate wetland or hydric soil boundaries, flood plains, parks and recreational facilities, known or suspected historic properties and archaeological sites, existing rights-of-way, possible UST/landfill/hazardous waste sites, and areas of possible endangered species habitat on the aerial photography prior to laying out an alignment. In addition, other "controls" such as churches, cemeteries, schools, hospitals, and any other noise sensitive areas were also identified.

Only at this point was the proposed alignment developed with every attempt being made to avoid sensitive ecological, historic and archaeological areas. In the event that avoidance was not possible, every attempt was made to minimize harm to such resources. The proposed alignment, once laid out, was then field checked and additional refinements were made to further minimize harm to both the natural and built environment.

#### NEED AND PURPOSE

Projects CSBRG-0007-00(959) and CSBRG-0007-00(960) will replace the paired bridges on CR 252 over the Willacoochee River and the Willacoochee River Overflow, two miles northeast of the town of Ocilla in Irwin County. This project is included in the current FY 2012-2015 State Transportation Improvement Program. This section of CR 252 is a two-lane road, a school route, and classified as a rural major collector with a posted speed limit of 55 mph. This is not a designated truck route or a bicycle route.

Project CSBRG-0007-00(959) proposes replacing the bridge (Structure ID 155-0032-0) over the Willacoochee River. Structure ID 155-0032-0 was built in 1954 with 14- to 15-foot spans of 4'3-inch wide by 8-inch deep concrete panels on concrete caps with timber piles and is posted from nine to 15 tons with a 43.57 sufficiency rating. Physical deficiencies with the bridge include exposed aggregate, misalignment of several spans, and spalls in many of the concrete panels, exposing reinforcing steel. Bents 2, 4, and 10 have crutch bents and bents 3 and 5 have a

pile with 80-percent section loss. Replacement of the structurally deficient bridge is recommended.

Project CSBRG-0007-00(960) proposes replacing the bridge (Structure ID 155-0031-0) over the Willacoochee River Overflow. Structure ID 155-0031-0 was built in 1954 with 14- to 15-foot spans of 4'3-inch wide by 8-inch deep concrete panels on concrete caps with timber piles and is posted from nine to 15 tons with a 16.62 sufficiency rating. Physical deficiencies with the bridge include exposed aggregate, misalignment of several spans, and spalls in many of the concrete panels, exposing reinforcing steel. Bents 2, 4, and 10 have crutch bents and bents 3 and 5 have a pile with 80-percent section loss. Replacement of this structurally deficient bridge is recommended.

The annual average daily traffic (AADT) on CR 252 was 525 in the year 2006, which is a Level of Service (LOS) A. The year 2013 AADT is expected to be 600, which represents LOS A. The projected traffic for the year 2033 is 775 AADT, which also represents a LOS A. LOS A, B, or C is considered to be acceptable traffic conditions. Eight-and-a-half percent (8.5%) of the traffic volume is truck traffic.

Irwin County's population grew by 14.8 percent between 1990 and 2000 to a total population of 9,931. The project is located in Census Tract 9502, which had a minority population of 35.6% in the year 2000. By comparison, in the year 2000, Irwin County had an overall minority population of 28 percent and the statewide average was 34.9 percent (the United States Census defines a minority as Black/African American, Hispanic/Latino, Asian/Pacific Islander, or American Indian/Alaska Native). The United States Census bureau estimated that 17.8 percent of Irwin County residents lived below the poverty level in 1999, compared to a statewide average of 13 percent.

Accident data was collected for the years 2004, 2005, and 2006. There were no accidents on this stretch of roadway for the time period from 2004 to 2005. In 2006 there was one accident, which caused the accident rate for this road segment to be well above the statewide average. The statewide average accident rate in 2006 for a rural major collector was 203 accidents per MVMT, compared to an observed accident rate along this section of 1,034 accidents per MVMT. The accident was a non-fatal, off-roadway crash.

Replacing this bridge will bring it up to current design standards and, in doing so, will improve the operation and safety of this road.

#### DESCRIPTION OF THE UNDERTAKING

GDOT Projects CSBRG-0007-00(959) and CSBRG-0007-00(960) are federally funded. Therefore, Section 106 compliance is being processed through the Federal Highway Administration.

The proposed projects would replace the narrow and structurally deficient bridges on CR 252 over the Willacoochee River (Structure ID 155-0032-0) and Willacoochee River Overflow (Structure ID 155-0031-0), approximately two miles northeast of Ocilla, Georgia (Figure 1).

Two 11-foot travel lanes with five foot shoulders will taper down to the existing 9.5-foot travel lanes in order to tie-in to the existing roadway. Approximately 566 feet of guardrail will be used at the proposed bridge over Willacoochee River (155-0032-0 location), and 460 feet of guardrail will be used at the proposed overflow bridge (155-0031-0 location). The proposed projects will be approximately 0.26 mile and 0.18 mile in length, respectively. Both bridges have an existing right-of-way (ROW) of 80 feet. The proposed ROWs would vary between 80 and 150 feet.

As defined in 36 CFR 800.16(d), the APE of an undertaking is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist." Based on this definition, the nature and scope of the undertaking, the guidance in the <u>GDOT/FHWA Cultural Resource Survey Guidelines</u> and past experience with similar projects, the APE was defined, in consultation with the Georgia SHPO, as the project view shed and the proposed right-of-way of the proposed project, within which all construction and ground-disturbing activity would be confined (Figure 1). No potential for indirect effects is anticipated by implementation of the proposed project.

#### IDENTIFICATION OF HISTORIC PROPERTIES AND PUBLIC INVOLVEMENT

Existing information on previously identified historic properties was checked to determine if any are located within the APE of this undertaking. This review included National Register-listed properties, proposed National Register nominations, National Historic Landmarks, and the updated Georgia Historic Bridge Survey (GHBS). The Department of Natural Resources (DNR) Irwin County survey dated 1980 and Georgia's Natural, Archaeological, and Historic Resources GIS (GNARGHIS) database were consulted. The state archaeological site files at the University of Georgia and existing survey reports were consulted to locate previously identified archaeological sites within the APE. Also topographic maps and aerial photography were reviewed to identify areas of high archaeological site potential within the APE.

Following the review of existing information on previously identified historic properties, potential consulting parties in the Section 106 process were identified. In addition to the Georgia SHPO, other potential consulting parties were identified based on the nature of the undertaking and the guidance in the GDOT/FHWA Cultural Resource Survey Guidelines. potential consulting parties invited to participate in the Section 106 process were the Irwin County Library, Southern Georgia Regional Commission, and the Irwin County Commission. Also, on behalf of the FHWA, in keeping with a government-to-government relationship and in compliance with 36 CFR 800, applicable federally recognized tribal governments were invited to participate in the Section 106 process. In accordance with 36 CFR 800.2, these consulting parties were informed of our efforts to locate previously identified historic properties and the results of those efforts and were asked to provide information on any unidentified National Register-listed or potentially eligible historic properties located within the proposed project's APE by a Notification dated February 11, 2011 (Appendix A). The Department also requested available information on past, present, and future local developments or zoning plans that could result in indirect or cumulative impacts to historic properties. A response was received from the Georgia SHPO and the Southern Georgia Regional Commission by letters dated February 16, 2011 and March 8, 2011, respectively (Appendix A).

After reviewing any additional information received from consulting parties, field surveys and background research were conducted within the APE of the proposed project to identify any historic properties or archaeological sites eligible for listing in the National Register. The results of the field surveys and background research were summarized in a Survey Report and an Archaeological Assessment. Those reports were provided to all consulting parties participating in the Section 106 process for review and comment.

As a result of these identification efforts, two National Register-eligible historic properties were identified within the proposed project's APE (Figure 1). These historic properties are the bridges to be replaced, namely, GDOT Structure IDs 155-0031-0 and 155-0032-0. No National Register listed or eligible archaeological sites were identified. The historic properties Survey Report was submitted to the SHPO and FHWA on April 15, 2011. The Archaeological Assessment was submitted to the SHPO and FHWA on May 2, 2011. In accordance with 36 CFR 800.4(c)(2), these historic properties were considered eligible for listing in the National Register by the FHWA and the SHPO.

Pursuant to 23 CFR 771.111, various public involvement efforts have been undertaken by the Department from the earliest stages of project planning. These public involvement efforts included sending out early coordination letters and conducting a detour meeting. The meeting, held on July 26, 2011, had six attendees, two of which were county officials. There were no comments from the public concerning the proposed project.

#### DESCRIPTION OF HISTORIC PROPERTIES

# CR 252 Bridge over the Willacoochee River Overflow (Structure ID 155-0031-0)

The CR 252 Bridge over the Willacoochee River Overflow (Structure ID 155-0031-0) is a precast reinforced-concrete slab bridge that carries CR 252 over the Willacoochee River Overflow, approximately two miles northeast of the town of Ocilla (Figure 1). The bridge is one of two nearly identical structures in close proximity on the road. The three-span bridge was built in 1954 and is an early and complete example of the design with Brown railings, tie bolts at five-foot centers, and timber pile and concrete cap bents. The Brown railings were cast integrally with the exterior slab panels for added strength and safety in the event of a crash (Appendix B). It is paired with CR 252 Bridge over the Willacoochee River (Structure ID 155-0032-0).

This property was evaluated for eligibility for listing in the National Register under Criterion C. The property possesses a state level of significance in the area of transportation. The bridge is one in a series of standard precast slab designs that the state highway department used in the early 1950s to facilitate quick and inexpensive construction of modular bridges on secondary highways. While the design was a common bridge type, there are only approximately 20 pre-1956 examples remaining in the state. The bridge is an excellent example of its type, retains a high level of integrity, and is unique due to its pairing with a longer example, which demonstrates the economy of this design.

The eligible National Register boundary of the property includes the 1954 bridge structure. All significant and character-defining features of the property are included in this boundary.

#### CR 252 Bridge over the Willacoochee River (Structure ID 155-0032-0)

The CR 252 Bridge over the Willacoochee River (Structure ID 155-0032-0) is a precast reinforced-concrete slab bridge that carries CR 252 over the Willacoochee River, approximately two miles northeast of the town of Ocilla (Figure 1). The bridge is one of two nearly identical structures in close proximity on the road. The 14-span bridge was built in 1954 and is an early and complete example of the design with Brown railings, tie bolts at five-foot centers, and timber pile and concrete cap bents. The bridge is one in a series of standard precast slab designs that the state highway department used in the early 1950s to facilitate quick and inexpensive construction of modular bridges on secondary highways. This bridge is standard design number 3546 from 1952. The Brown railings were cast integrally with the exterior slab panels for added strength and safety in the event of a crash (Appendix B). It is paired with CR 252 Bridge over the Willacoochee River Overflow (Structure ID 155-0031-0).

This property was evaluated for eligibility for listing in the National Register under Criterion C. The property possesses a state level of significance in the area of transportation. The bridge is one in a series of standard precast slab designs that the state highway department used in the early 1950s to facilitate quick and inexpensive construction of modular bridges on secondary highways. While the design was a common bridge type, there are only approximately 20 pre-1956 examples remaining in the state. The bridge is an excellent example of its type, retains a high level of integrity, and is unique due to its pairing with a shorter example, which demonstrates the economy of this design.

The eligible National Register boundary of the property includes the 1954 bridge structure. All significant and character-defining features of the property are included in this boundary.

#### ASSESSMENT OF EFFECTS

#### CR 252 Bridge over the Willacoochee River Overflow (Structure ID 155-0031-0)

A finding of an Adverse Effect is anticipated for the Structure ID 155-0031-0. In the area of the resource, project implementation would replace the current bridge with a Type II PSC Beam Span bridge. Constructed from reinforced concrete, the proposed bridge would consist of a single span and would be 60 feet long and 30 feet wide. The travel lanes are 11-feet wide, tapering to 9.5-feet to tie into the existing road.

Physical destruction of or damage to all or part of the property would occur. Project implementation would result in the physical destruction of the bridge since the entire structure would be replaced, resulting in a finding of Adverse Effect.

#### CR 252 Bridge over the Willacoochee River (Structure ID 155-0032-0)

A finding of an Adverse Effect is anticipated for the Structure ID 155-0032-0. In the area of the resource, project implementation would replace the current bridge with a Type I MOD PSC Beam Span bridge. Constructed from reinforced concrete, the proposed bridge would consist of

seven, 45-foot long spans and would be a total of 315 feet long and 30 feet wide. The travel lanes are 11-feet wide, tapering to 9.5-feet to tie into the existing road.

Physical destruction of or damage to all or part of the property would occur. Project implementation would result in the physical destruction of the bridge since the entire structure would be replaced, resulting in a finding of Adverse Effect.

#### SUMMARY

Implementation of the proposed project would result in a finding of Adverse Effect for CR 252 Bridge over the Willacoochee River Overflow (Structure ID 155-0031-0) and CR 252 Bridge over the Willacoochee River (Structure ID 155-0032-0).

#### ALTERNATIVES TO AVOID ADVERSE EFFECT

The following alternatives were considered to avoid impacts to the historic bridges:

- 1. No-Build (Do Nothing)
- 2. Building two new structures on new location north west of the existing alignment.
- 3. Rehabilitation Without Affecting the Historic Integrity of the Bridges

The following findings were made as a result of the evaluation of avoidance alternatives:

#### 1. No-Build Alternative

The No-Build or Do Nothing alternative has been studied. Adopting this alternative would not be feasible and prudent because it would ignore the basic transportation need. This alternative would not address the need and/or purpose of the proposed project and is contradictory to the stated mission of GDOT and FHWA to improve the safety of the traveling public. The bridges over the Willacoochee River and Overflow are of substandard width and possess marginal structural integrity and, therefore, pose a safety hazard to the traveling public. The No-Build Alternative would allow the existing bridges to continue to deteriorate and create a further hazard to motorists.

# 2. Build a New Bridge on a New Alignment

The second alternative considered would shift the roadway alignment and construct the proposed structure northwest of the existing structures. Implementing this alternative would not be feasible and prudent because it would extend the project limits considerably. The project limits would have to be expanded to include the entire area from just west of the Willacoochee Overflow bridge and extend east past the Willacoochee River bridge. New bridges along a relocated route to northwest of the existing road could address safety concerns, but is complicated by the historic bridge in this area and the acquisition of property. A shift to the north would impact an additional 1.25 acres of wetland. Also a shift to the north could possibly displace one residence. If

the project is shifted on new alignment northwest of the existing alignment, an estimated additional two acres of right-of way would be required.

# 3. Rehabilitation Without Affecting the Historic Integrity of the Bridges

This alternative would involve not only repairing the existing structures but also removing the railings in order to widen the bridge slab and substructure. This alternative is not feasible and prudent because, while this would add more width to the lanes on the bridges making them safer for the traveling public, it would not preserve the integrity of the bridges as historic resources and the effect would remain adverse to the bridge structures.

Additionally, the construction practices used to build the bridges would make it difficult to connect successfully the new slabs and piers. The condition of the existing internal bridge steel is unknown; analysis would require the removal of the existing slab piers. If the steel is badly deteriorated, new concrete will not bond successfully. The management plans for each bridge are in Appendix B of this report.

#### PROPOSED MITIGATION

Planning to minimize harm was taken into consideration to the extent possible during project development. Those measures were discussed in the previous section and included shifting the roadway on a new alignment and an evaluation of the existing structure for possible rehabilitation and reuse.

The following mitigation measure is proposed for discussion at consultation between the FHWA and the SHPO:

1) The FHWA will ensure that representative views depicting the existing bridges will be recorded in high resolution 10 mega pixel digital photography. The accompanying documentation will be completed per the standards previously agreed upon between GDOT and SHPO in the Permanent Archival Record manual and per the GDOT Standards for Digital Photography. The photography, recorded on an archivally stable DVD, and accompanying documentation will be submitted to the SHPO for acceptance and retention.

APPENDICES

# APPENDIX A

# NOTIFICATION

AND

EARLY CONSULTATION CORRESPONDENCE



# GEORGIA DEPARTMENT OF TRANSPORTATION

One Georgia Center, 600 West Peachtree Street, NW Atlanta, Georgia 30308 Telephone: (404) 631-1000

#### NOTIFICATION

# Initiation of Section 106 Process for GDOT Projects CSBRG-0007-00(959) and CSBRG-0007-00(960), Irwin County P.I. # 0007959 and P.I. # 0007960 February 11, 2011

The Georgia Department of Transportation (Department) is in the beginning stages of project development for these proposed transportation projects. In compliance with Section 106 of the National Historic Preservation Act, the Department has determined that because of the nature and the scope of these undertakings, the proposed projects have the potential to cause effects to historic properties if any such properties exist in the project areas. The Department is attempting to identify historic properties already listed in the National Register of Historic Places (NRHP) and any properties not already listed that would be considered eligible for listing that are located within the geographic area of potential effects (APE) of the proposed projects.

The proposed projects would replace the narrow and structurally deficient bridges on CR 252 over the Willacoochee River (Structure ID 155-0032-0) and Willacoochee River Overflow (Structure ID 155-0031-0), approximately two miles northeast of Ocilla, Georgia (see attached location map). Two 11-foot travel lanes with five foot shoulders will taper down to the existing 9.5 foot travel lanes in order to tie-in to the existing roadway. Approximately 566 feet of guardrail will be used at the proposed bridge over Willacoochee River (155-0032-0 location), and 460 feet of guardrail will be used at the proposed overflow bridge (155-0031-0 location). The proposed projects will be approximately 0.26 mile and 0.18 mile in length, respectively. Both bridges have an existing right-of-way (ROW) of 80 feet. The proposed ROWs would vary between 80 and 150 feet.

Because of the nature and scope of the undertaking, the APE is limited to the proposed ROW and viewshed of the proposed projects, within which all construction and ground disturbing activity would be confined (see attached location map). No potential for indirect effects outside of the proposed ROW and viewshed exists.

Section 106 of the National Historic Preservation Act requires the Federal Highway Administration and the Department, in consultation with the Georgia State Historic Preservation Officer (SHPO), to identify potential consulting parties and to invite them to participate in the Section 106 process. This Notification letter is one of several methods the Department uses to encourage public participation in this process and it serves as your invitation to participate as a consulting party in the Section 106 process for these projects.

A written request to become a consulting party for cultural resources for these projects should be directed to:

National Historic Preservation Act, the Department will assess project effects to any identified historic properties as preliminary project plans become available, endeavor to minimize harm to all identified historic properties and produce an Assessment of Effects report. This document will be provided to all consulting parties for comment when completed. The Department also wishes to know of any past, present or future local developments or zoning plans that may result in indirect or cumulative impacts to archaeological sites and historic structures as they relate to the proposed projects.

Individuals and organizations that do not wish to become a consulting party, but would still like to comment on the proposed projects will also have that opportunity throughout the plan development process. Historic resource concerns can be addressed to Summer Ciomek (770-498-4155 ext. 125 or sciomek@newsouthassoc.com); archaeological resource concerns, including cemetery and other human burials, can be addressed to Jim Pomfret (404-631-1256 or jpomfret@dot.ga.gov) of this office. Questions concerning general design or location issues may be addressed to Sandy Griffin (229-386-3618 or sgriffin@dot.ga.gov) of the Department's Tifton (District Four) Office.



#### MEMORANDUM:

Date:

March 8, 2011

To:

Summer Ciomek

New South Associates

From:

Michael V. Jacobs

Preservation Planner

Re:

Initiation of Section 106 Process for GDOT Projects CSBRG-007-00(959)

and CSBRG-007-00(960)

Irwin County

P.I. #0007959 and P.I. #0007960

Based upon the information contained in this office and a site visit, there are no historic properties (other than the bridges themselves) within the A.P.E. of this project. Please note that there appeared to possibly be a few old wooden bridge supports to the south of the Willacoochee River Overflow Bridge. I also heard the sound of what appeared to be a dam somewhere to the south of the Willacoochee River Bridge.

Thank you for the opportunity to comment on these and other project(s) and please contact me should you have any questions.

#### APPENDIX B

# GEORGIA HISTORIC BRIDGE SURVEY (GHBS) MANGEMENT PLANS

FOR

**GDOT BRIDGE 155-0031-0** 

AND

**GDOT BRIDGE 155-0032-0** 

# Georgia Department of Transportation

7/23/2012

#### BRIDGE # 155-0031-0

NO ATTACHMENT

NO ATTACHMENT

#### Section I A - B

#### I. GENERAL INFORMATION

#### A. LOCATION/IDENTIFICATION

Serial Number: 155-0031-0

Location ID: 155-01533F-002.67E

Municipality:

County: IRVVIN

45

District: 4

Feature Carried/Feature

FAS 1533 OVER WILLACOOCHEE RIVER OVERFLOW

Owner: COUNTY

Location: APP 2 MI NE OF OCILLA

#### B. STRUCTURAL INFORMATION

Main Span

SLAB

Design:

PRECAST (HARRY BROWN)

Material: REINFORCED CONCRETE

Year Built: 1954

Years

Total Number of

Overall

Total of Type in Pre-1966 State

Total Eligible: 0

Description of Superstructure: Consists of a concrete deck slab.

Description of Substructure:

Consists of timber pile bents with concrete caps and spill through abutments.

Georgia Department of Transportation

BRIDGE # 155-0031-0

7/23/2012

Section I C - F

C. CLASSIFICATION OF SERVICE

Type Service on

Open, Posted, or Closed: P - Posted for load

On National Highway System: No

Number of Lanes 2

Roadway Functional Classification: Rural Major Collector (FAL) Direction of Traffic: Two-way traffic

ADT: 450

100

Date ADT: 2010

D. GEOMETRIC INFORMATION

Bridge Roadway Width (c to c): 22 ft.

Approach Travelway Width: 18 ft.

Total Horizontal Clearance: 22 ft.

Deck Width, Out to Out: 24

Approach Roadway Shoulder Width Left:

5.7 ft

Forward 5.9 ft

Approach Roadway Shoulder Width Right:

5.4 ft

Forward 5.8 ft

Is Bridge Roadway as Wide or Wider Than Approaches? Yes. Bridge is 4 ft. wider than approaches.

Sidewalk Width Left: 0 ft.

Sidewalk Width Right: 0 ft

Vertical Clearance on Bridge: 99 ft. 99 in.

Crash Data:

For Underpasses Only:

Type Service Under: WATERWAY

# of Lanes Under:

Total Horizontal Clearance: Left 0 ft.

Right 99.9 ft.

Vertical Clearance: 00 ft. 00 in.

#### E. SAFETY FEATURES

Bridge Railing: Meets standards from date of construction.

Transition Railing: Required, but none provided.

Approach Guide Rail: Required, but none provided.

#### F. HYDRAULICS

Waterway Adequacy: 5-Somewhat better than minimum adequacy to tolerate being left in place as-is.

Scour Critical: Unknown foundation. Negligible scour present.

Channel Condition: No noticeable deficiencies.

### **Maine Department of Transportation** Historic Bridge Management Plan

BRIDGE # 155-0031-0

7/23/ 2012

Section I G, Section II and Section III

#### G. BIMS SUFFICIENCY and LOAD RATING

Date of BIMS Report: August 2011

Sufficiency Rating: 25.97

Structural Evaluation: 4-Meets minimum tolerable limits to be left in place as-is

Superstructure Condition: 4-Poor

Deck Condition: 4-Poor

Substructure Condition: 4-Poor

Load Rating:

Type: HS loading

Inventory: 16

Operating: 26

Summary of Structural Deficiencies:

-Deck has minor transverse cracking, minor map cracking and light scaling.

-Slab underside has heavy spalling throughout, with exposed reinforcing steel.

-Substructure has general deterioration throughout due to age, weathering, and splitting of timber.

-The concrete has moderate cracking and bent #3 has shifted out of plumb. The superstructure has lost over 3.5" of bearing due to this condition.

(Ref. 2011 bridge inspection report)

Reasons for Low Sufficiency Rating:

-Deck, superstructure and substructure are in poor condition.

-Low Inventory rating.

-According to federal guidelines, structural evaluation is considered intolerable.

-According to federal guidelines, deck geometry is considered minimum tolerable.

-According to federal guidelines, roadway width is too narrow for ADT.

#### II. CONFORMANCE WITH STANDARDS

	Actual	Required	Adequate
Inventory Load Rating (Tons)	16	36 (1)	N
Bridge Roadway Width	22 ft	22 (2)	Υ
Number of Lanes	2		Υ
Alignment/Sight Distance		ě	Υ
Geometric Adequacy	u	-	Υ

#### Conformance Comments:

(1) Bridge not on state route, HS20 inventory rating is required.

(2) AASHTO "A Policy on Geometric Design of Highways and Streets," 5th Ed., 2004, p. 426-427.

#### PROJECT PLANNING 111.

Is Bridge in 6 Yr. Work Plan?: Yes

Proposed project Number: CSBRG-0007-00(960)

Year of Plan: 2/1/1901

Project #: Unknown

P.I. Number: 0007960

Plan Comments:

Georgia Department of Transportation Historic Bridge Management Plan

BRIDGE # 155-0031-0

7/23/2012

Section IV

IV. HISTORICAL SIGNIFICANCE

Total of Type in Pre-1966 State

Total Eligible: 0

Historical

Average

Summary of Significance:

The FAS 1533 over Little Bushy Creek bridge is technologically significant because it is an early and complete example of the precast slab bridges with Brown railings designed and built by the Georgia State Highway Department beginning in the early 1950s. It is noteworthy for its completeness and pairing with another longer 14-span example of the same bridge type (155-0032-0). Together the two bridges demonstrate the economy of the modular design which was used for both short and long bridges on secondary roads in rural parts of the state's coastal regions. The two bridges are among the earliest and best preserved examples in the southwest part of Georgia. This bridge is the shorter, the 3-span example. The significant features of the bridge are the individual cast members and the method that they are

Proximity to Identified Cultural Resources:

Historic Sites: No additional historic sites.

Archaeological Resources: No eligible archaeological resources.

Wetlands:

Bridge spans over a wetland. Any widening of the bridge or approaches will directly

impact the wetlands. NWI map is available.

Other 4(f) Resources: None

### Georgia Department of Transportation Historic Bridge Management Plan

BRIDGE # 155-0031-0

7/23/2012

Section V and Section VI

## V. SUMMARY OF PRESERVATION POTENTIAL

Is it prudent and feasible to preserve bridge for its current usage? No

Does the bridge have any preservation potential, including alternate use? No

Summary of Preservation Potential:

Based on current guidelines, the bridge width is adequate. The deck, superstructure and substructure condition is poor, with deterioration and spalling. The HS (highway semi trailer truck) Inventory rating is unacceptable, and the bridge currently requires posting at 9 Tons. While this roadway has a low ADT (Average Daily Traffic), the load limits restrict truck and school bus traffic from utilizing the structure, including heavier emergency vehicles.

Additional timber piles have been added to substructure; however, repairs of this nature are not to be considered a long term solution due to the shallow nature of these foundations and load paths inconsistent with the original design. Due to the initial low design loading of this structure and the current legal truck weights, no repairs to the structural elements are considered practical to increase the load carrying capacity of this structure.

The bridge is determined not to have preservation potential for continued use as a highway structure due to the existing conditions and load carrying capacity.

No build: The no-build alternative would not meet the mobility needs of the community due to the restrictive load posting.

Rehab without adverse effect: Rehabilitation to increase the load carrying capacity of the structure is not possible without replacing the members of historical significance.

Bypass/historic bridge left in place: If left in place, the timber piles would deteriorate to the point that the bridge would fail. The resulting debris in the waterway would increase stream velocities which would be detrimental to the replacement structure.

Other: No other options were considered.

# VI. PRESERVATION RECOMMENDATION

GDOT Bridge #155-0031-0 has been determined not to possess preservation potential and is recommended for replacement.

Committee Recommendation:

GDOT Bridge #155-0031-0 has been recommended for replacement. Mitigation, in the form of archival-stable digital photography, will be completed prior to the Let of the project.

Date/Committee:

7/23/2012: Summer Ciomek and Julie Coco of New South Associates, Inc.; Meredith Trudeau of CDM Smith; GDOT State Bridge Engineer Ben Rabun; and GDOT Historians, Sandy Lawrence and Chad Carlson

# Georgia Department of Transportation

7/23/2012

#### BRIDGE # 155-0032-0

NO ATTACHMENT NO ATTACHMENT

Section I A - B

#### I. GENERAL INFORMATION

#### A. LOCATION/IDENTIFICATION

Serial Number: 155-0032-0

Location ID: 155-01533F-002.84E

Municipality:

County: IRWIN

District: 4

Feature Carried/Feature

FAS 1533 OVER WILLACOOCHEE RIVER

Owner: COUNTY

Location: APP 2 MI NE OF OCILLA

#### **B. STRUCTURAL INFORMATION**

Main Span

SLAB

Design:

PRECAST (HARRY BROWN)

Material: REINFORCED CONCRETE

Year Built: 1954

Years

Total Number of

14

Overall

210

Total of Type in Pre-1966 State

0

Total Eligible: 0

Description of Superstructure: Consists of a concrete deck slab.

Description of Substructure:

Consists of timber pile bents with concrete caps and spill through abutments.

Georgia Department of Transportation

BRIDGE # 155-0032-0

7/23/2012

Section I C - F

C. CLASSIFICATION OF SERVICE

Type Service on

Number of Lanes

1

Open, Posted, or Closed: P - Posted for load

On National Highway System: No

Roadway Functional Classification: Rural Major Collector (FAL)

2

Direction of

Two-way traffic

ADT: 450

%

0.0

Date ADT: 2010

D. GEOMETRIC INFORMATION

Bridge Roadway Width (c to

22 ft

Approach Travelway

18 ft

Total Horizontal

22 ft

Deck Width, Out to

24

Approach Roadway Shoulder Width Left:

7.9 ft

Forward 7.4 ft

Approach Roadway Shoulder Width Right:

7.7 ft

Forward 7.3 ft

Is Bridge Roadway as Wide or Wider Than

Yes. Bridge is 4' wider than approaches. Sidewalk Width

Sidewalk Width

ft

Vertical Clearance on

99 ft. 99 in.

Crash Data:

For Underpasses

Type Service

WATERWAY

# of Lanes

Total Horizontal Clearance:

0 ft

Right 99.9 ft.

Vertical Clearance

00 ft. 00 in.

#### E. SAFETY FEATURES

Bridge Railing: Meets standards from date of construction.

Transition Railing: Required, but none provided.

Approach Guide

Required, but none provided.

#### F. HYDRAULICS

Waterway Adequacy: 5-Somewhat better than minimum adequacy to tolerate being left in place as-is

Scour Critical: Unknown Foundation. Slight scour present.

Channel Condition: Bank protection eroding, debris restricting.

#### M aine Department of Transportation Historic Bridge Management Plan

BRIDGE # 155-0032-0

7/23/ 2012

#### Section I G, Section II and Section III

#### G. BIMS SUFFICIENCY and LOAD RATING

Date of BIMS

August 2010

Sufficiency

19.95

Structural

2-Intolerable

Superstructure

5-Fair

Deck Condition: 5-Fair

Substructure

5-Fair

Load Rating:

HS loading

Inventory: 15

Operating: 14

Summary of Structural Deficiencies:

-The concrete deck panels are sagging in the middle and are out of alignment. Some panels have shifted 2.5".

-Slab underside has moderate spalls with exposed reinforcing steel throughout the structure.

-Concrete bent caps have moderate flexural cracking. Several crutch bents have been installed to replace deteriorated timber piles. Several of the remaining load carrying piles are in serious condition with severe decay. (Ref. 8/2011 bridge inspection report)

Reasons for Low Sufficiency Rating:

-Deck, superstructure and substructure in fair condition.

-Low Inventory rating.

-According to federal guidelines, structural evaluation is considered intolerable.

-According to federal guidelines, deck geometry is considered minimum tolerable.

-According to federal guidelines, roadway width is too narrow for ADT.

#### II. CONFORMANCE WITH STANDARDS

	Actual	Required	Adequate
Load Rating (Inventory)	15	36 (1)	N
Bridge Roadway Width	22 ft	22 (2)	Υ
Number of Lanes	2		Υ
Alignment/Sight Distance		/ <del>=</del>	Υ
Geometric Adequacy	m	· ·	Υ

#### Conformance Comments:

(1) Bridge not on state route, HS20 inventory rating is required.

(2) Georgia DOT TOPPS 4265-9, 1b.

#### PROJECT PLANNING

Is Bridge in 6 Yr. Work

Proposed project

CSBRG-0007-00(959)

Year of

2/1/1901

Project #: UNKNOWN

P.I.

0007959

Plan Comments:

Maine Department of Transportation Historic Bridge Management Plan

BRIDGE # 155-0032-0

7/23/2012

Section IV

IV. HISTORICAL SIGNIFICANCE

Total of Type in Pre-1966 State

0

Total Eligible: 0

Historical

Average

Summary of Significance:

The FAS 1533 over Willacoochee River bridge is technologically significant because it is an early and complete example of the precast slab bridges with Brown railings designed and built by the Georgia State Highway Department beginning in the early 1950s. It was chosen because of its completeness and pairing with another longer 14-span example of the same bridge type (155-0032-0). Together the two bridges demonstrate the economy of the modular design which was used for both short and long bridges on secondary roads in rural parts of the state's coastal regions. The two bridges are among the earliest and best preserved examples in the southwest part of Georgia. This bridge is the longer, the 14-span example.

Each span is 15'-long and composed of six precast concrete slab panels approximately 8" thick. The panels are joined by tie bars extending through the slabs and bolted together from the outside curbs so as to squeeze the entire deck together. The bolts are placed on 5' centers. The two outside panels have integral 24" high railings. The significant features of the bridge are the individual cast members and the method that they are joined into a unit. The substructure is not noteworthy.

Proximity to Identified Cultural Resources:

Historic Sites:

No additional historic sites.

Archaeological Resources: No eligible archaeological sites.

Wetlands:

Bridge spans over a wetland. Any widening of the bridge or approaches will directly

impact the wetlands. NWI map is available.

Other 4(f) Resources: None

# Maine Department of Transportation Historic Bridge Management Plan

BRIDGE # 155-0032-0

7/23/2012

Section V and Section VI

# V. SUMMARY OF PRESERVATION POTENTIAL

Is it prudent and feasible to preserve bridge for its current usage? No

Does the bridge have any preservation potential, including alternate use? No

Summary of Preservation Potential:

Based on current guidelines, the bridge width is adequate. The deck, superstructure and substructure condition is poor, with deterioration and spalling. The HS (highway semi trailer truck) Inventory rating is unacceptable and the bridge currently requires posting at 9 Tons. While this roadway has a low ADT (Average Daily Traffic), the load limits restrict truck and school bus traffic from utilizing the structure; including heavier emergency vehicles.

Additional timber piles have been added to substructure; however, repairs of this nature are not to be considered a long term solution due to the shallow nature of these foundations and load paths inconsistent with the original design. Due to the initial low design loading of this structure and the current legal truck weights, no repairs to the structural elements are considered practical to increase the load carrying capacity of this structure.

The bridge is determined not to have preservation potential for continued use as a highway structure due to the existing conditions and load carrying capacity.

No build: The no-build alternative would not meet the mobility needs of the community due to the restrictive load posting.

Rehab without adverse effect: Rehabilitation to increase the load carrying capacity of the structure is not possible without replacing the members of historical significance.

Bypass/historic bridge left in place: If left in place, the timber piles would deteriorate to the point that the bridge would fail. The resulting debris in the waterway would increase stream velocities which would be detrimental to the replacement structure.

Other:

# VI. PRESERVATION RECOMMENDATION

GDOT Bridge #155-0032-0 has been determined not to possess preservation potential and is recommended for replacement.

Committee Recommendation:

GDOT Bridge #155-0032-0 has been recommended for replacement. Mitigation, in the form of archival-stable digital photography, will be completed prior to the Let of the project.

Date/Committee:

7/23/2012: Summer Ciomek and Julie Coco of New South Associates, Inc., Meredith Trudeau of CDM Smith, GDOT State Bridge Engineer Ben Rabun, and GDOT Historians, Sandy Lawrence and Chad Carlson