

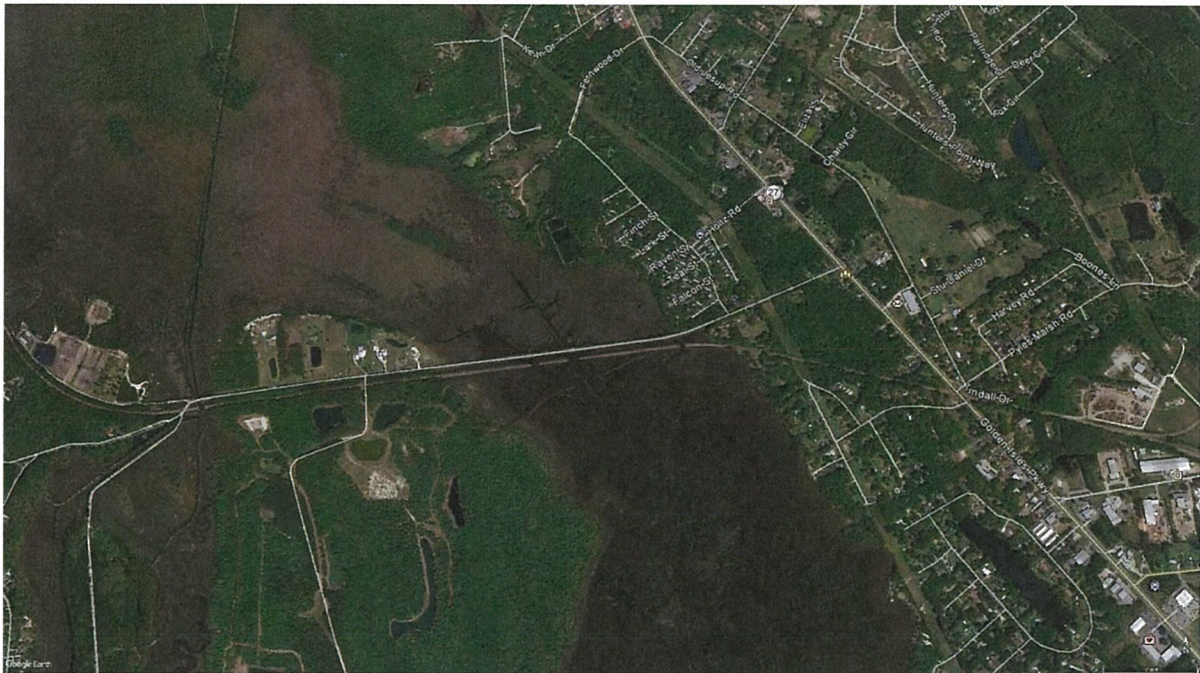
OAK GROVE CAUSWAY CULVERT REPLACEMENT

PROPOSED COASTAL
MARSHLANDS PROTECTION ACT PERMIT

NOVEMBER 17, 2017

APPLICANT:

GLYNN COUNTY DEPARTMENT OF PUBLIC
WORKS



RLC

**RESOURCE+LAND
CONSULTANTS**

41 Park of Commerce Way, Suite 303 / Savannah, GA 31405
phone 912.443.5896 fax 912.443.5898

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Attachments:

- A: State of Georgia Revocable License Request
- B: Quit-Claim Deeds
- C: Permit Drawings
- D: Adjacent Landowners
- E: Zoning Request
- F: Photographs

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1.0 Introduction

Glynn County Public Works Department (Applicant) is seeking authorization under the Coastal Marshlands Protection Act of 1970 (CMPA) to conduct maintenance and improvements to existing culverts at two locations on Oak Grove Island Road, over Cowpen Creek, near Brunswick, Glynn County, Georgia.

The proposed project includes the installation of temporary coffer dams, the removal and replacement of sheet pile headwalls, lining of existing pipes with new pipes, installation of new tide gates, and addition of rip-rap to minimize erosion. As proposed, the project would result in the alteration of 1,540 ft² (0.03-acre) of tidal waters. The Applicant is requesting authorization of the project as a minor alteration as defined at O.C.G.A. § 12-5-282(9), and per procedures stated at 12-5-283(d).

2.0 Existing Conditions

The project area is located where Oak Grove Island Road crosses Cowpen Creek, approximately 0.7 miles west of G.A. 341 (31.245313, -81.559782). The project locations consist of existing asphalt road with steep grassed road shoulders with tidal marsh on each side. The east and west culvert locations consist of two (2) 48" Reinforced Concrete Pipes (RCP) each with sheet pile headwalls with concrete caps at the upstream and downstream ends of the pipes. Tide gates are located on the downstream end of the pipes. Scattered rip-rap is located at the pipes below the waterline, and along portions of the bank. The jurisdiction limits shown on the permit drawings represents the high tide line.

3.0 Marshlands Component

The marshland component of the project consists of the replacement of the existing downstream headwalls, replacement of the tide gates, lining of the existing pipes, and placement of additional rip-rap stabilization (please refer to project exhibits found at Attachment C). Prior to commencing this work, temporary sheet pile coffer dams must be installed to allow work below the waterline. The existing pipes will be lined with 42" high-density polyethylene pipes (HDPE) and the void between the old RCP and new HDPE liners will be injected with low-density cellular grout mixture. A new 42" aluminum flag gate will be installed on the downstream end of the new HDPE pipe, which will extend slightly beyond the new downstream headwall. The upstream headwalls have eroded areas behind the walls on the upland side. The upstream headwalls will remain in place and the voids will be repaired by excavating compromised materials from behind the walls, and then pumping a 24" thick low slump concrete slurry down to the bottom of the existing gravel base. The work associated with the repair of the upstream headwalls is located outside of CMPA jurisdiction. The downstream headwalls are compromised and are need of total replacement. Prior to removal of the existing damaged downstream headwalls, a new sheet pile headwall with concrete cap must be constructed a maximum of 5' seaward of the existing wall. Once constructed, the old headwall

will be removed, and the area between the old wall and new wall will be filled with a clay-sand mixture topped with filter fabric. Additional rip-rap for erosion protection will be installed at both the upstream and downstream ends of the pipes, at approximately a 2:1 slope. Upon completion, the temporary coffer dams will be removed. All disturbed areas will be restored and proper erosion control measures will be employed to minimize erosion into state waters.

As proposed, the improvements associated with the western set of pipes would result in the impact to 247 ft² of tidal waters associated with the new sheet pile wall and backfill and 546 ft² of rip-rap. The improvements associated with the eastern set of pipes would result in the impact to 325 ft² of tidal waters associated with the new sheet pile wall and backfill and 422 ft² of rip-rap.

4.0 Upland Component

The proposed project consists of the maintenance and repair of a drainage structure associated with a public road system. The marshland component, being a culvert replacement, wall construction and associated rip-rap stabilization for a linear transportation project, does not provide access to coastal marshlands. Therefore, there is no upland component associated with the project that would serve or augment the marshland component as defined under the Rules of Georgia Department of Natural Resources, Coastal Resources Division Chapter 391-2-3.02(2)(q).

5.0 Alternatives Considered

The purpose and location of the culverts is to provide drainage of Cow Pen Creek under Oak Grove Island Road. The project purpose cannot be satisfied through non-marsh alternatives. To minimize the effect of the project on coastal marshlands, the Applicant has chosen the least environmentally damaging alternative to satisfy the project purpose. The Applicant considered replacing the existing culverts with new culverts and constructing new head walls on both the upstream and downstream locations. However, fully excavating and replacing the culverts and headwalls would require significant interruption of traffic on the only road that services Oak Grove and Hermitage Islands, and significant disturbance to tidal waters. The applicant has chosen to line the existing pipes, repair the headwalls on the north (upstream) side of the road in their existing footprint, and construct new headwalls on the south (downstream) side of the road where the damage to existing walls is more severe.

6.0 Commercial Bait Shrimp, Oyster, and Crabbing Areas

The proposed project is not located in a designated bait shrimp zone according to Georgia Department of Natural Resources *Commercial and Recreational Bait Shrimp Zones, Coastal Georgia* map. The project area is also not listed on the *Georgia Harvester Reported Crabbing Areas* list.

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7.0 Impaired Waters

The subject waterway is not listed on the U.S. Environmental Protection Agency 303(d) list for impaired water bodies.

8.0 Supplemental Information

This additional information is provided for compliance with Coastal Marshlands Protection Act of 1970 information requirements:

OCGA 12-5-286. Permits to fill, drain, etc., marshlands.

(b) Each application for such permit shall be, properly executed, filed with the department on forms as prescribed by the department, and shall include:

(1) *The name and address of the Applicant-*

Glynn County Public Works Department
Attn: Mr. Dave Austin
4145 Norwich Street Ext.
Brunswick, Ga 31520

(2) *A plan or drawing showing the Applicant's proposal and the manner or method by which such proposal shall be accomplished. Such plan shall identify the coastal marshlands affected-* Please refer to attached drawings produced by EMC Engineering Services Inc. titled ***Oak Grove Island Road Culvert Pipe Rehabilitation***, Sheets 1 through 4, dated June, 2017 (Attachment C). The work will be accomplished by equipment placed in upland non-jurisdictional area. No construction equipment will be placed in vegetated marshlands.

(3) *A plat of the area in which the proposed work will take place-* Attachment C contains a drawing produced by EMC Engineering Services, Inc. titled ***Oak Grove Island Road Culvert Pipe Rehabilitation***, dated June, 2017

(4) *A copy of the deed or other instrument under which the Applicant claims title to the property or, if the Applicant is not the owner, then a copy of the deed or other instrument under which the owner claims title together with written permission from the owner to carry out the project on his land. In lieu of a deed or other instrument referred to in this paragraph, the committee may accept some other reasonable evidence of ownership of the property in question or other lawful authority to make use of the property; The committee will not adjudicate title disputes concerning the property which is the subject of the application; provided, however, the committee may decline to process an application when submitted documents show*

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conflicting deeds- Quit-Claim Deeds for subject property are included in Attachment B.

(5) **A list of all adjoining landowners together with such owners' addresses, provided that if the names or addresses of adjoining landowners cannot be determined, the Applicant shall file in lieu thereof a sworn affidavit that a diligent search, including, without limitation, a search of the records for the county tax assessor's office, has been made but that the Applicant was not able to ascertain the names or addresses, as the case may be, of adjoining landowners-** Adjacent landowner information is provided in Attachment D.

(6) **A letter from the local governing authority of the political subdivision in which the property is located, stating that the Applicant's proposal is not in violation of any zoning law;** A request has been sent to the Glynn County Community Development Department, Planning and Zoning Division (Attachment E).

(7) **A non-refundable application fee to be set by the board in an amount necessary to defray the administrative cost of issuing such permit. Renewal fees shall be equal to application fees, which shall not exceed \$1,000.00 for any one proposal and shall be paid to the department.** An application fee in the amount of \$500.00 has been included with this application.

(8) **A description from the Applicant of alternative sites and why they are not feasible and a discussion of why the permit should be granted-** The purpose and location of the culverts is to provide drainage of Cow Pen Creek under Oak Grove Island Road. The project purpose cannot be satisfied through non-marsh alternatives. To minimize the effect of the project on coastal marshlands, the Applicant has chosen the least environmentally damaging alternative to satisfy the project purpose. The Applicant considered replacing the existing culverts with new culverts and replacing all headwalls. However, fully excavating and replacing the culverts and headwalls would require significant interruption of traffic on the only road that services Oak Grove and Hermitage Islands, and significant disturbance to tidal waters. The applicant has chosen to line the existing pipes, repair the headwalls on the north (upstream) side of the road in their existing footprint, and construct new headwalls on the south (downstream) side of the road where the damage to existing walls is more severe.

(9) **A statement from the Applicant that he has made inquiry to the appropriate authorities that the proposed project is not over a landfill or hazardous waste site and that the site is otherwise suitable for the proposed project-** A review of the Hazardous Site Index for Glynn County,

Georgia indicates that the subject property does not contain hazardous waste sites or landfills.

(10) A copy of the water quality certification issued by the department if required for the proposed project- Water Quality Certification in accordance with Section 401 of the Clean Water Act was issued in accordance with the procedures of the USACE Nationwide Permit Program. A copy of this application along with a *Georgia Department of Natural Resources Notification Form For Use of Nationwide Permits in Georgia That Do Not Require Pre-Construction Notification to the U.S. Army Corps of Engineers* has been sent to their attention.

(11) Certification by the Applicant of adherence to soil and erosion control responsibilities if required for the proposed project- The project will conform to all required building, land disturbing, and stormwater management permits as required by Glynn County, Georgia.

(12) Such additional information as is required by the committee to properly evaluate the application- This application has been prepared with consideration for the interests of the general public of the State of Georgia as defined in OCGA 12-5-286(g):

OCGA 12-5-286. Permits to fill, drain, etc. marshlands.

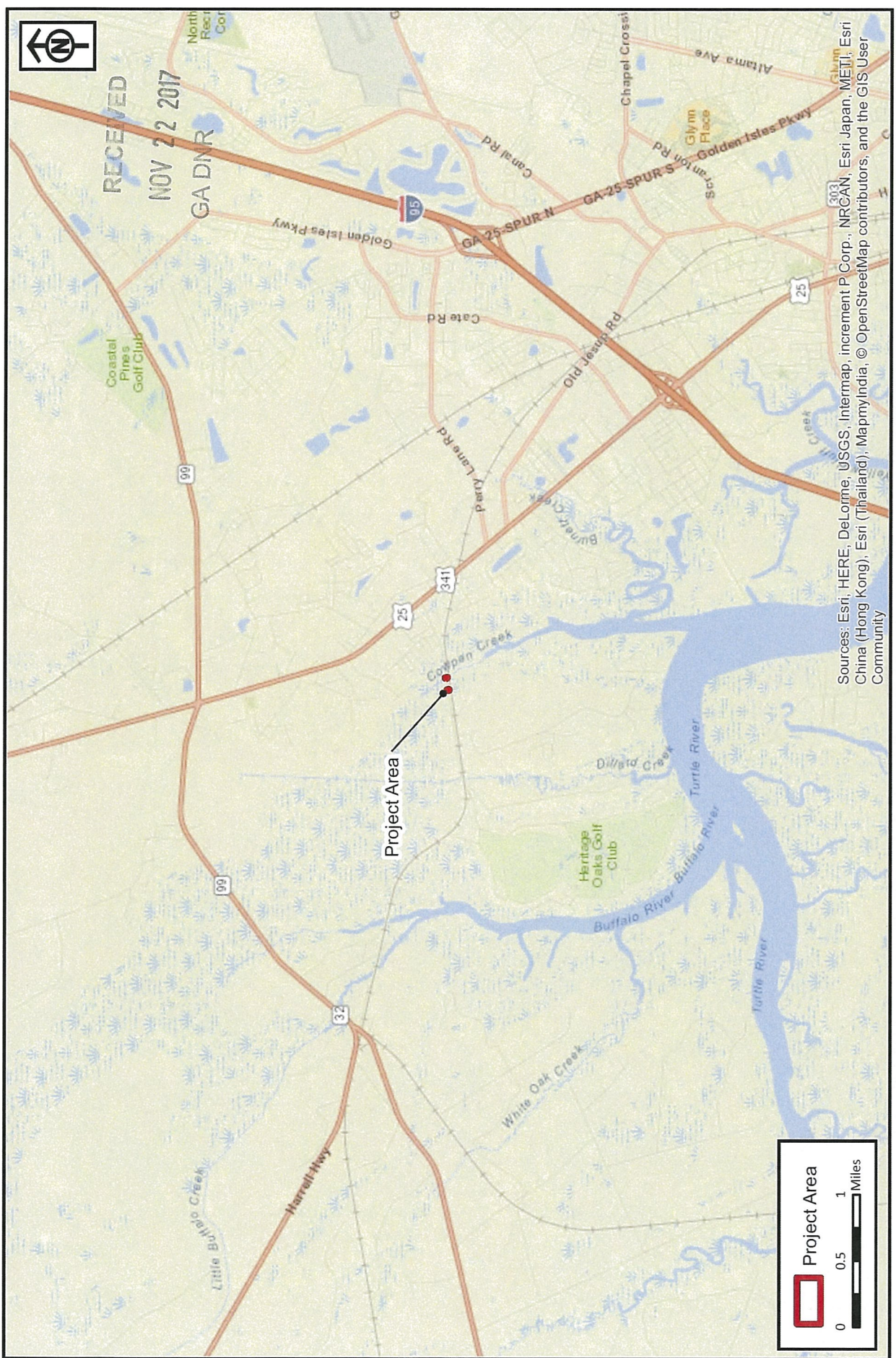
(g) In passing upon the application for permit, the committee shall consider the public interest, which, for purposes of this part shall be deemed to be the following considerations:

(1) Whether or not unreasonably harmful obstruction to or alteration of the natural flow of navigational water within the affected area will arise as a result of the proposal- The proposed project consists of the maintenance and repair of existing culverts under a county road. The proposed work will not result in any additional obstruction or alteration of navigational water.

(2) Whether or not unreasonably harmful or increased erosion, shoaling of channels, or stagnant areas of water will be created- The replacement of existing culverts and the installation of additional rip-rap will reduce erosion at the project location. The culvert improvements will not cause shoaling of channels, nor create stagnant areas.

(3) Whether or not the granting of a permit and the completion of the Applicant's proposal will unreasonably interfere with the conservation of fish, shrimp, oysters, crabs, clams, or other marine life, or wildlife, or other resources, including but not limited to water and oxygen supply- The proposed structures

will not interfere with the conservation of fish, shrimp, oysters, crabs, clams, or other marine life, or wildlife, or other resources, nor affect water and oxygen supply. Culvert pipe rehabilitation at the Cowpen Creek crossing will maintain the existing levels of marine life in the area, and will not alter water or oxygen supply.



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Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Project Area

0 0.5 1 Miles

RLC Project No.:	17-182
Figure No.:	1
Prepared By:	GH
Sketch Date:	7/14/2017
Map Scale:	1 inch = 1 miles

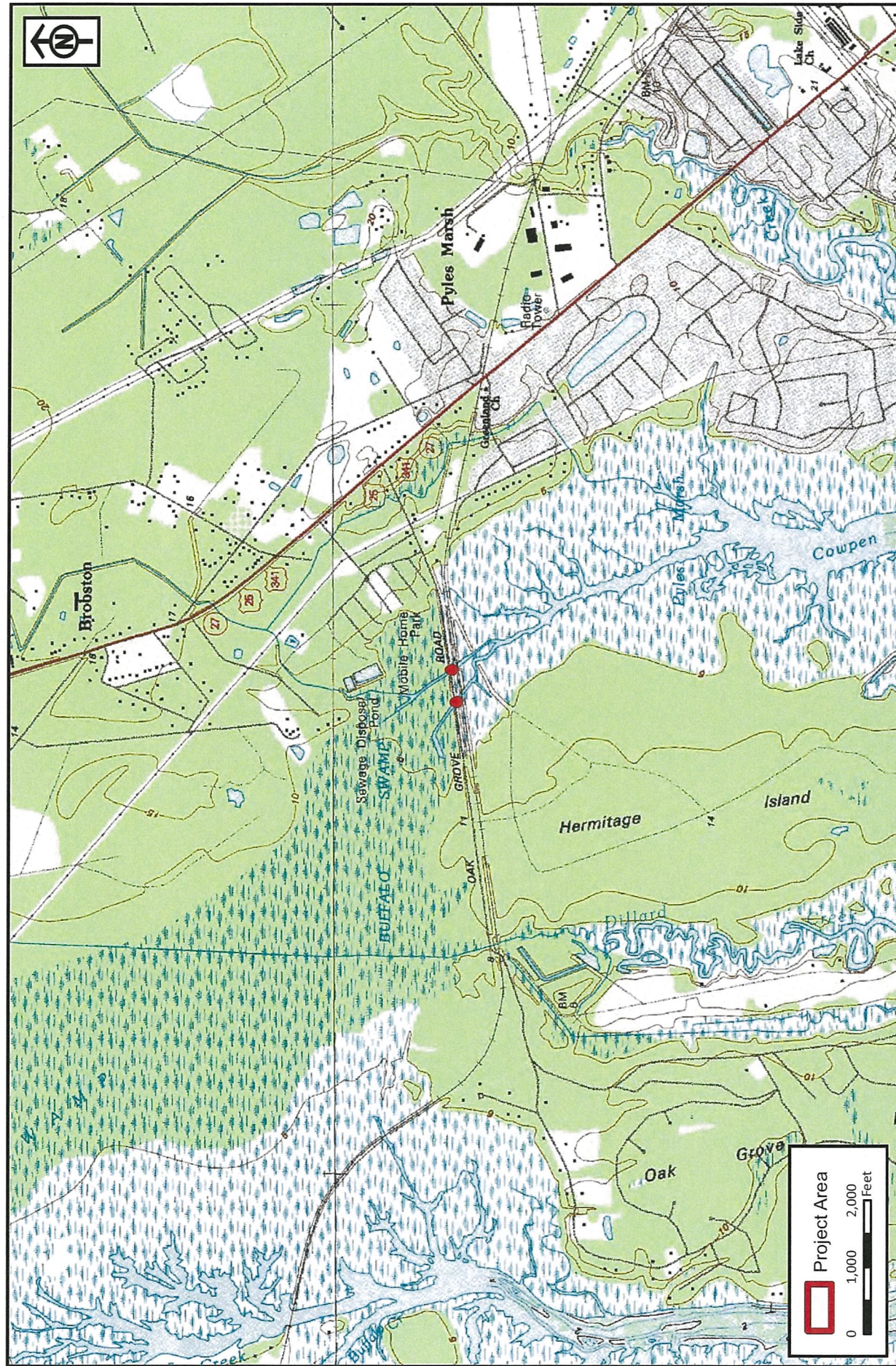
Oak Grove Causeway
Glynn County, Georgia

Project Location Map
Prepared For: Mobley

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Savannah, Georgia 31405
912.443.5896 www.rlandc.com



RLC Project No.:	17-182
Figure No.:	2
Prepared By:	GH
Sketch Date:	7/14/2017
Map Scale:	1 inch = 2,000 feet

Oak Grove Causeway
 Glynn County, Georgia

USGS Topographic Map 22 2017
 Prepared For: Mobley, GA DNR

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Oak Grove Causeway
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1999 Color-Infrared Imagery
 Prepared For: Mobley

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RLC Project No.:	17-182
Figure No.:	6
Prepared By:	GH
Sketch Date:	7/14/2017
Map Scale:	1 inch = 300 feet



A Golden Past.
A Shining Future.

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COMMUNITY DEVELOPMENT DEPARTMENT
1725 Reynolds Street, Suite 200, Brunswick, GA 31520
Phone: 912-554-7428/e-Fax: 1-888-252-3726

ZONING CERTIFICATION LETTER

October 19, 2017

Mr. Karl Burgess
GA DNR CRD
1 Conservation Way, Suite 300
Brunswick, GA 31520

RE: Oak Grove Road Culvert Replacement, Brunswick, GA

Dear Mr. Burgess:

This letter and the signed attached plans, *Oak Grove Island Road Culvert Pope Rehabilitation, June 2017*, confirm that the proposed project does not conflict with the current Glynn County zoning ordinance.

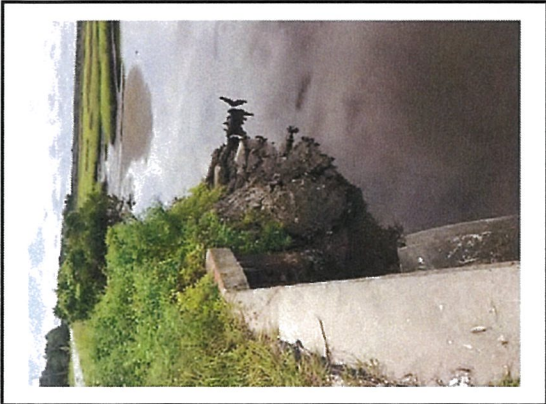
Sincerely,

Pamela Thompson
Director, Community Development

Attachment: Proposed Plan, Oak Grove Island Road Culvert Pope Rehabilitation,
June 2017

Phone: 912-554-7400
Fax: 912-554-7596
www.glynncounty.org

The Glynn County Planning Department makes every effort to provide the most accurate interpretation possible based on the information available. This letter addresses zoning only; other codes and ordinances may apply. No warranties, expressed or implied, are provided for the information herein, its use or interpretation. This letter does not guarantee approval of a specific project or application.



East Culvert: North side looking west



East Culvert: South side looking west



West Culvert: North side looking west



East Culvert: North side looking east



East Culvert: South side looking east



West Culvert: North side looking east

RLC Project No.:	17-182
Figure No.:	7
Prepared By:	GH
Photo Date:	7/20/2017
Exhibit Date:	7/24/2017

Oak Grove Causeway

Glynn County, Georgia

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Site Photographs
Prepared For: Glynn County
Board of Commissioners

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West Culvert: South side looking west



West Culvert: South side looking east



West Culvert: Concrete Wall Damages



West Culvert: Concrete Wall Damages

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RLC Project No.:	17-182
Figure No.:	8
Prepared By:	GH
Photo Date:	7/20/2017
Exhibit Date:	7/24/2017

Oak Grove Causeway
Glynn County, Georgia

Site Photographs
Prepared For: Glynn County Board of Commissioners

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CONSULTANTS
11 Park of Commerce Way, Ste. 203
Savannah, Georgia 31102
912-431-5076 www.rlc.com