

CESAS Supporting Documentation

Walthour Road Improvements Chatham County, Georgia

Introduction:

The Chatham County Department of Engineering (applicant) is proposing to improve Walthour Road on Wilmington Island, Chatham County, Georgia. The proposed project will provide structural stability to the road causeway which is eroding because of Betz Creek and other tidal influences. The project will also add pedestrian access along the roadway. The project is a public safety and public improvements project and is in the public interest of the residents of Chatham County. The project corridor extends along Walthour Road approximately 800 feet southeast from Betz Creek.

Existing Site Conditions:

A wetland delineation of the project corridor was completed in 2019 and verified by the United States Army Corps of Engineers (USACE) in a letter dated April 1, 2020 (Regulatory Division SAS-2010-00129) and the Georgia Department of Natural Resources – Coastal Resources Division (CRD) in a letter dated December 5, 2019. The wetland verification from CRD has expired, and the flags have been re-established for inspection. Existing habitats within the project corridor consist of existing roadway/shoulder and jurisdictional marshland.

Existing Roadway/Shoulder:

The northern project terminus consists of Betz Creek and the bridge over Betz Creek. The bridge spans from upland north of the creek to the existing upland road causeway south of the creek. The existing causeway is only 35 – 45 feet wide. The existing travel surface is 20 feet wide and consists of two 10-foot wide asphalt lanes. Road shoulders on each side of the travel surface are minimal, insufficient, unsafe for the roadway, and drop vertically in places to the marsh elevation below. The existing road shoulders are vegetated with bahia grass (*Paspalum notatum*), Bermuda grass (*Cynodon dactylon*), and St. Augustine grass (*Stenotaphrum secundatum*) adjacent to the road with live oak (*Quercus virginiana*), palmetto (*Sabal palmetto*), and yaupon holly (*Ilex vomitoria*) located further from the road and adjacent to the marsh.

Jurisdictional Marshland:

The jurisdictional area within the project corridor consists of Betz Creek and its adjacent saltwater marshes. The open water portion of Betz Creek, from vegetation to vegetation, is approximately 45 feet wide at the project site. Vegetation within the marsh adjacent to Betz Creek consists of cordgrass (*Spartina alterniflora*), sea oxeye (*Borrchia frutescens*), and salt grass (*Distichlis spicata*).

Proposed Site Plan:

The applicant is proposing road stabilization and pedestrian improvements along the existing road causeway. On the west side of the causeway, there is significant erosion along the shoulder where Betz Creek turns and borders the road for approximately 200 feet. To combat the problem and to support a new sidewalk along the roadway, a cast-in-place retaining wall will be installed along the bend in Betz Creek, and the shoulder will be backfilled. On the channelward side of the wall, rip-rap will be placed to provide wall protection against the tides and current. North and south of the wall, road shoulder improvements require some marsh fill. The existing sidewalk along Walthour Road to the north that terminates at the Betz Creek Bridge will be extended along the west side of the causeway within the project corridor. The sidewalk will be five feet wide. On the east side of the road where erosion is not as significant, a revetment mat will be placed on the shoulder and tie into the marsh elevation at the toe of slope. The revetment mat is a system of concrete squares where vegetation can still grow through. Other improvements include mill and inlay of the existing travel lanes, installation of curb and gutter to repair pavement collapse, installation of guardrails for safety, and drainage improvements including construction of an outfall with rip-rap apron into the marsh on the west side of the road. Project-related impacts include:

- 4,017 s.f. (0.092 ac.) of revetment mat along the toe of the road shoulder
- 2,723 s.f. (0.063 acre) of new rip-rap within jurisdiction
- 5,280 s.f. (0.121 acre) of retaining wall and backfill in jurisdiction
- 1,221 s.f. (0.028 acre) of temporary disturbance during construction

13,241 s.f. (0.304 acre) Total

This is a public safety project as it provides an improved and safer roadway for residents of Chatham County. The project as proposed will result in a minimal impact to coastal marshlands, and will provide an overriding public benefit. Therefore, the project is not contrary to the public interest.

Project Need and Purpose

The need and purpose of this project is two-fold: to improve the structural stability and reliability of the road structure and to improve the overall safety for motorists and pedestrians. The road consists of an earthen causeway subject to tide water influences on both sides. Throughout the alignment, the road shoulder averages only eight to nine feet wide with approximately four feet of elevation drop from the travel surface to the marsh. There is also very little or no flat shoulder to accommodate wayward cars. At only one to two feet from the travel lanes, the shoulder starts sloping sharply down to the marsh. This is a very unsafe condition. The most severe safety concern is on the western side where Betz Creek bends to the south and fronts the roadway for approximately 200 feet. The current velocity in this natural bend of the river has eroded the shoulder over the years. Today, there is only five feet of road shoulder width in this location and six feet of vertical drop from the road into the marsh. Along the eastern shoulder, erosion is not as severe, but there are still issues in places including collapsed pavement and erosion at the toe of the slope. The site plan will fix bank erosion by placing a revetment mat on the shoulder and tying in to the ground elevation in the marsh.

The proposed project is also needed to enhance pedestrian facilities along this section of roadway. There is an existing sidewalk along the western side of Walthour Road north of Betz Creek that previously terminated north of the bridge. In 2015, Chatham County replaced the old bridge and incorporated a sidewalk extension as part of the design knowing that further sidewalk extension down the Walthour Road causeway would occur in the future. The proposed project will do just that. This area of Chatham County is heavily populated, and pedestrian and cyclist recreation is prevalent; however, there is no safe place for pedestrians to travel within the project corridor. The proposed project will provide a safe sidewalk along the Walthour Road causeway.

Alternatives Analysis

The proposed project consists of improving an existing public roadway in coastal Chatham County in order to structurally repair the road and protect it for many years to come. Therefore, alternative sites for this project do not exist.

A "do nothing" alternative was first evaluated. If no shoulder improvements or bank stabilization activities are completed, the road will deteriorate over the coming years and eventually pose a significant threat to public safety. Due to the location of the road, failing pavement or road shoulders could lead to a fatal car crash. There are no guardrails or barriers along the road to protect wayward cars from leaving the causeway and ending up in the marsh or the river. Doing nothing for the pedestrian access along the road could also cause a potentially catastrophic accident. Because the "do nothing" alternative would not repair the roadway, would not protect the roadway, and would not fix the safety concerns, this alternative is not feasible.

The only other alternative to the project is widening the road by adding dirt along the slopes. This alternative, would fill more marsh than the proposed alternative. The preferred alternative utilizes a retaining wall to reduce fill material while still allowing enough shoulder for motorist safety and to accommodate a sidewalk. Rip-rap is required to stabilize the wall and further stabilize the bank, but this would not cause the loss of aquatic area. The only fill material required for the project is just north and south of the wall, but the applicant reduced the required fill by using 2:1 side slopes. On the east side of the road, the applicant chose to install a concrete revetment mat along the road shoulder to stabilize the

slope. The mat must extend slightly into the marsh in order to prevent tidal undercutting, especially during storm events. Only a minor amount of disturbance is required for installation of the mats, and vegetation will be able to protrude through the mats in the future. This technique was chosen instead of rip-rap or shoulder fill which would extend further into the marsh and increase the impact acreage. Although there will be a minor amount of jurisdictional impact, the project will result in an over-riding benefit to the public by providing a safer and stronger public roadway.

Threatened and Endangered Species

Betz Creek could support west Indian manatees (*Trichechus manatus*) from the spring through the fall, but all project related impacts are limited to vegetated marshlands and existing roadway. No impacts are proposed to Betz Creek, but should any waterborne construction equipment be used during construction, the contractor will abide by Standard Manatee Conditions provided by the USACE Savannah District. Vegetated marsh may support eastern black rail (*Laterallus jamaicensis*), but the proposed impacts will occur immediately adjacent to (within 10 – 20 feet of) a major public roadway that is heavily traveled every day. It is highly unlikely that the eastern black rail would live immediately adjacent to a maintained roadway, and marsh impacts related to road shoulder improvements will not affect this species. Wood storks (*Mycteria americana*) are also known to forage in coastal wetlands and open water, but the densely vegetated marsh habitat abutting the roadway is highly unlikely to support foraging habits, and the project will not affect this species. No other suitable habitat is present for other protected species, and it was determined that the proposed project would have no effect on any listed species for Chatham County.

Essential Fish Habitat

Projects proposing impacts to tidal waters must be evaluated with respect to Essential Fish Habitat (EFH) as required by the Magnuson-Stevens Fishery Conservation and Management Act. The proposed project, being located in tidal waters, has the potential to impact the estuarine marsh, which is identified as essential fish habitat by the South Atlantic Fishery Management Council. The project involves repairing and improving an existing roadway. Any fill material or other impact will be adjacent to the existing road causeway within vegetated marsh. A minimal amount of rip-rap is required near Betz Creek; however, this will not result in a degradation to EFH. The minor loss of aquatic area is better for the environment than a car potentially wrecking into the marsh and will not significantly affect EFH for managed species.

Impaired Waters

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

Upland Component

The upland component of the project is the existing roadway. Proposed activities within the upland of the project include repaving the existing road, installing revetment matting, guardrails, a sidewalk, and curb and gutter. All components of the project are integral to the safety and stability of the roadway.

Section 404 Mitigation (USACE)

According to the SOP Worksheets, 0.72 saltwater wetland credits are required to offset the 0.121 acre of marsh fill. All temporary construction easement areas in the marsh will revegetate quickly after completion of the project, so no mitigation is proposed for these areas. Also, no mitigation is proposed for the minor amount of revetment matting since vegetation will be allowed to grow through the matting, and no mitigation is proposed for the placement of rip-rap as a soil stabilization measure. Upon issuance of the Nationwide Permit, and prior to initiation of impacts, the applicant will withdraw 0.72 credits from an appropriate mitigation bank and will provide the USACE with a proper receipt.

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-*
Chatham County
Ms. Suzanne Cooler – County Engineer
P.O. Box 8161
Savannah, Georgia 31412
- (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 -* See attached drawings
- (3) A plat of the area in which the proposed work will take place-* Attached is a copy of the wetland plat with the project boundary and surveyed CMPA line shown.
- (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 conflicting deeds-*

Attached is documentation supporting Chatham County ownership of Walthour Road. This documentation was provided for CMPA Permit #660 for the replacement of the Betz Creek bridge and was accepted by CRD as proof of ownership. The first three pages of the attachment are an excerpt from the GENERAL HIGHWAY MAP CHATHAM COUNTY GEORGIA prepared by the Georgia Department of Transportation (DOT). This is an official map produced by DOT that depicts federal, state, and county owned roadways. It shows Walthour Road as County Road 148 which proves that Chatham County owns the road right-of-way and has the right to perform the work proposed in this application.

Following the General Highway Map is a cover letter and report from DOT to Chatham County dated May 3, 2011 concerning Chatham County bridge structures. The cover letter outlines the objectives of the report and advises on safety precautions. The purpose of the letter is to address Chatham County owned bridges – one of which is the Betz Creek bridge. The letter also states, “This report briefly advises you (Pete Liakakis – Chairman, Chatham County Board of Commissioners) of the condition of your (Chatham County-owned) bridge structures...” The attached DOT report specifically lists Walthour Road over Betz Creek as County Road 148 and details the condition of the bridge and what measures should be taken to improve it. The letter along with the report is the State of Georgia’s (e.g. DOT’s) acknowledgement that Chatham County owns Walthour Road. This DOT documentation is proof that the County holds ownership of the project area and is entitled to perform the activities proposed in this permit application.

- (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 of 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-*

Michael Loy Philips, Et. Al.
419 Walthour Road
Savannah, GA 31410

Virgil Boddiford
420 Walthour Road
Savannah, GA 31410

(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 violate of any zoning law – see attached*

(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. The applicant shall supply the fee as determined by DNR.*

(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-* See above project description. The project is a public safety improvements project and provides an overriding public benefit.

(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 Chatham 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-* The project will be authorized under Nationwide Permit 14 which has been certified by EPD for Water Quality Certification. No individual certification is required.

(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 land disturbing and stormwater management permits as required by Chatham 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).

(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 will not alter natural flow of navigable waters nor will it obstruct public navigation. The proposed bridge will be of similar dimensions and elevation as the existing bridge and will not provide any further obstruction or alteration of navigable water flow.

(2) *Whether or not unreasonably harmful or increased erosion, shoaling of channels, or stagnant areas of water will be created-* The proposed project will not increase erosion, shoaling of channels, or create stagnant areas of water.

(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 project 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.



**CHATHAM COUNTY DEPARTMENT OF BUILDING
SAFETY & REGULATORY SERVICES**

1117 Eisenhower, Savannah, GA 31406
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912-201-4300 – Fax 912-201-4301



Gregori S. Anderson, CBO
Director

Clifford Bascombe, CBO, CFM
Assistant Director

July 28, 2021

Mr. Brandon W. Wall
Sligh Environmental Consultants, Inc.
31 Park of Commerce Way
Suite 200B
Savannah, GA 31405

Sent via email: b_wall@slighec.com

RE: Walthour Road Improvements CMPA Permit

Dear Mr. Wall:

The above referenced improvement does not violate any provisions within the Chatham County Zoning Ordinance.

If there are any questions, contact this office at (912) 201-4320.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gregori S. Anderson".

Gregori S. Anderson, CBO
Interim Zoning Administrator

GSA/jb

Attachment